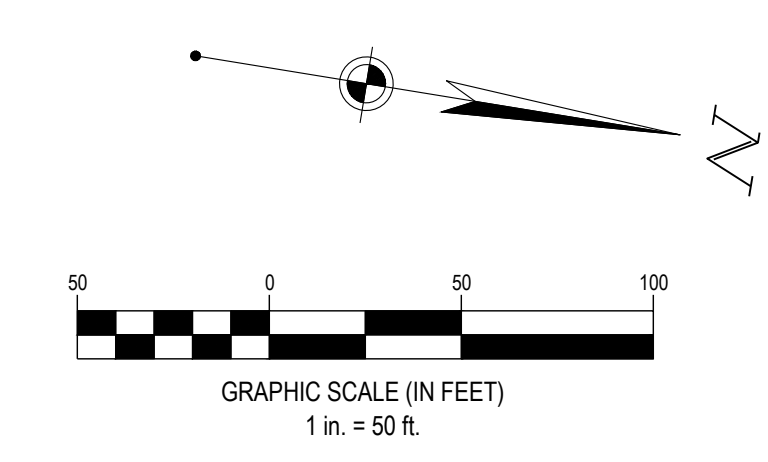
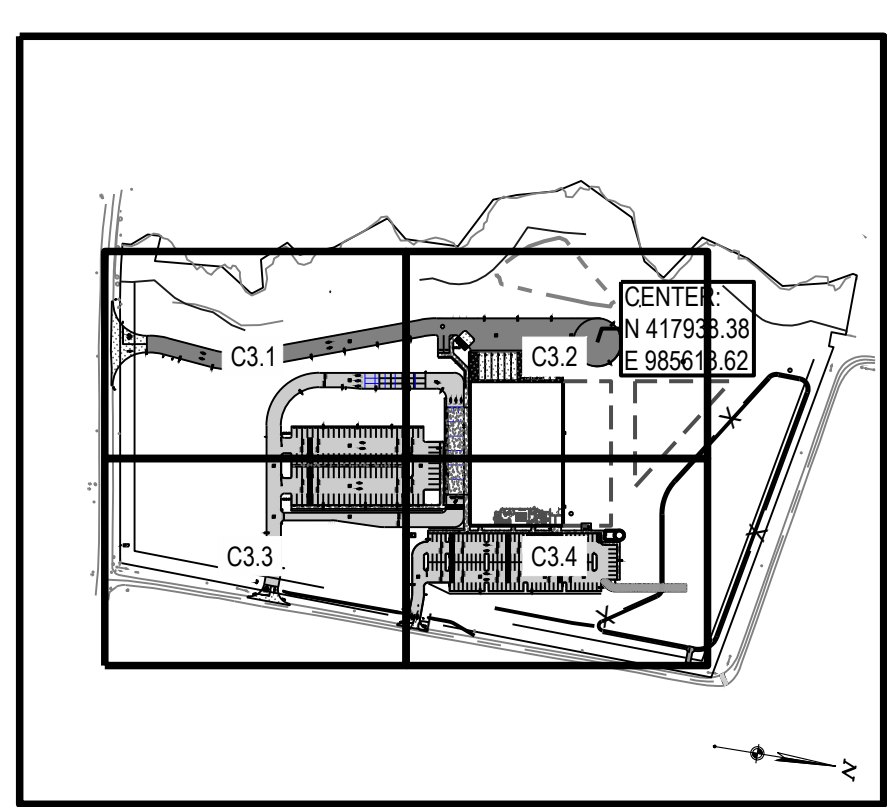
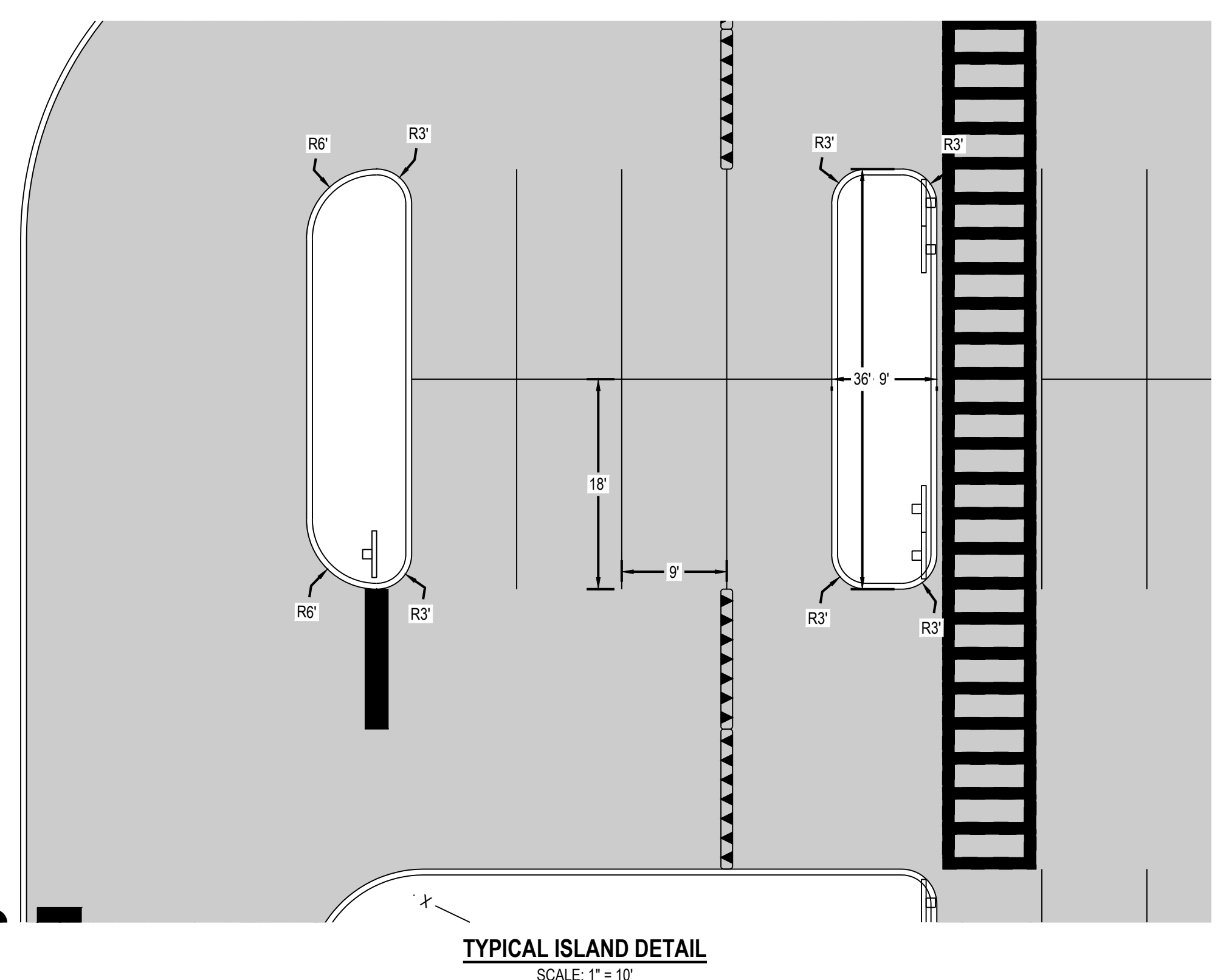
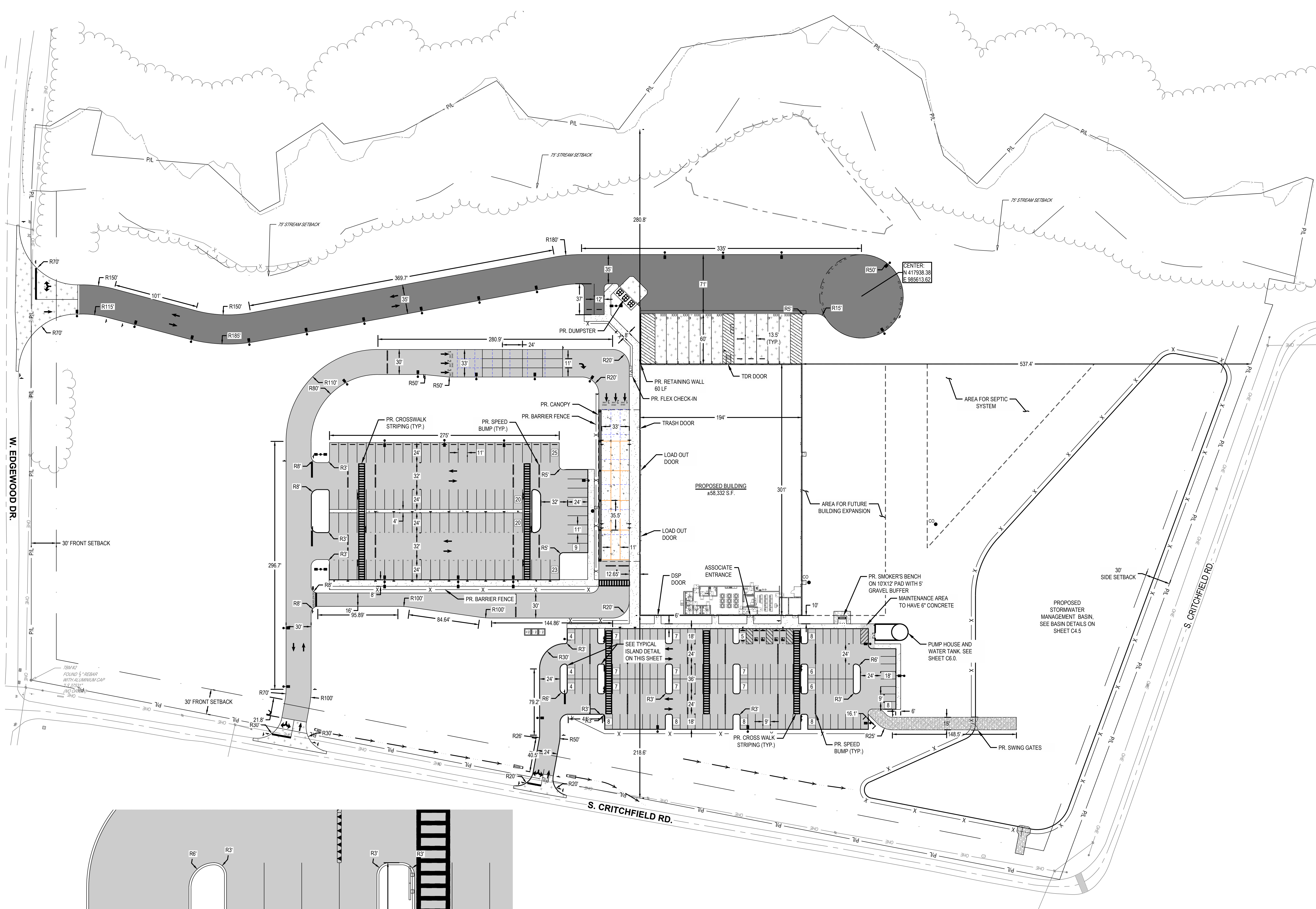


SITE LEGEND	
EXISTING	
REFER TO SHEET C1.1 FOR EXISTING FEATURES LEGEND	
PROPOSED	
	LIGHT DUTY ASPHALT PAVEMENT
	HEAVY DUTY ASPHALT PAVEMENT
	LIGHT DUTY CONCRETE PAVEMENT
	HEAVY DUTY CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	GRAVEL
	PROPERTY LINE
	BUILDING
	CONCRETE CURB
	PAVEMENT WALK
	6' PEDESTRIAN BARRIER FENCE
	PARKING SPACE COUNT
	SIGN
	PARKING BLOCK
	LIGHT POLE

REFER TO SHEET C1.1 FOR GENERAL SITE NOTES
 REFER TO SHEETS C3.1 - C3.4 FOR ENLARGED SITE PLANS



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

AMBROSE PROPERTY GROUP

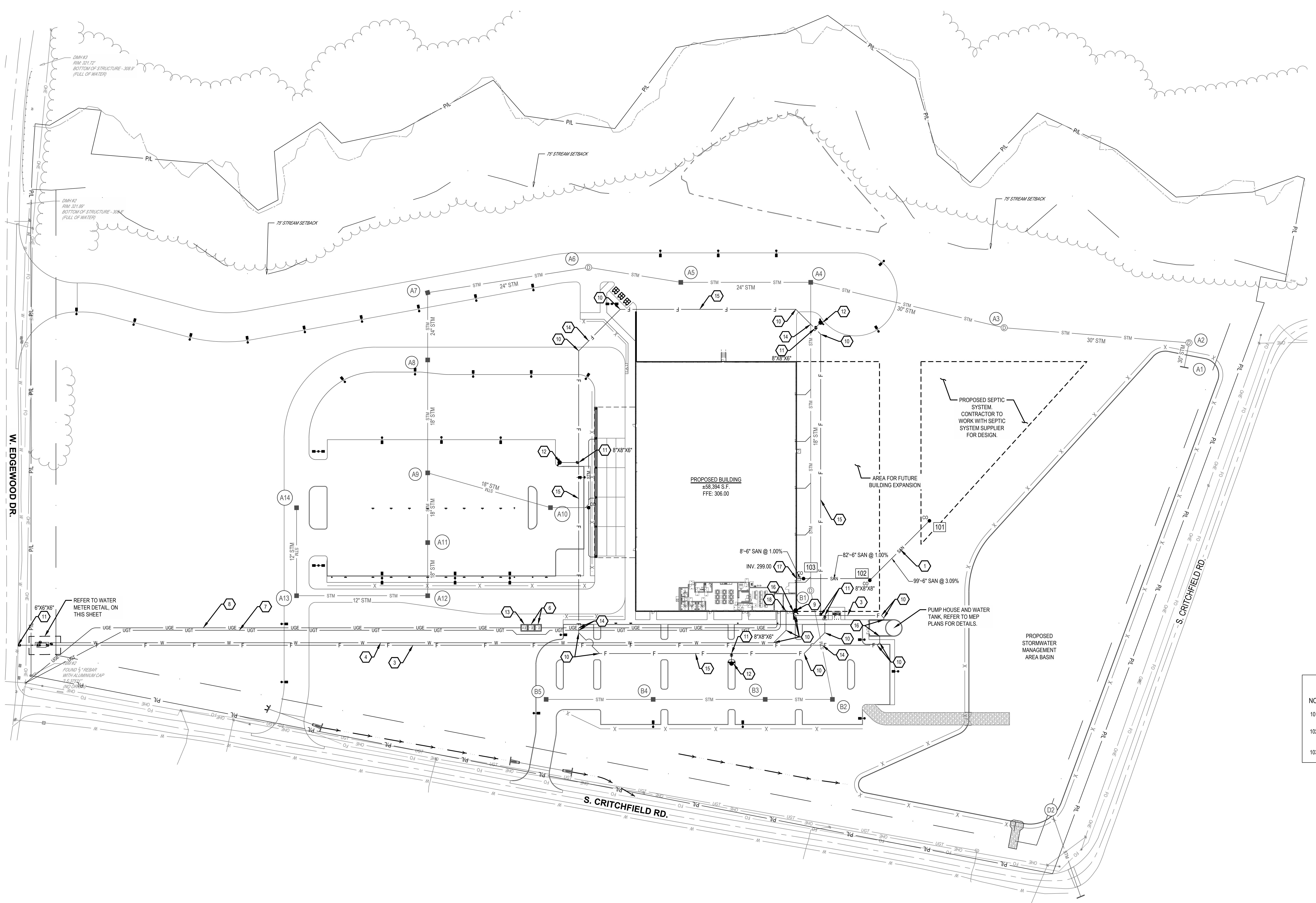
PROJECT PENINSULA
 WEDGEWOOD DR.,
 PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

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 Project Number: 763838
 Scale: AS SHOWN
 Drawn By: QSS
 Checked By: CG
 Date: 04/24/2025
 Issue: FOR PERMIT

Drawing Title:
OVERALL SITE PLAN

C3.0



UTILITY LEGEND

EXISTING
REFER TO SURVEY FOR EXISTING FEATURES LEGEND

PROPOSED

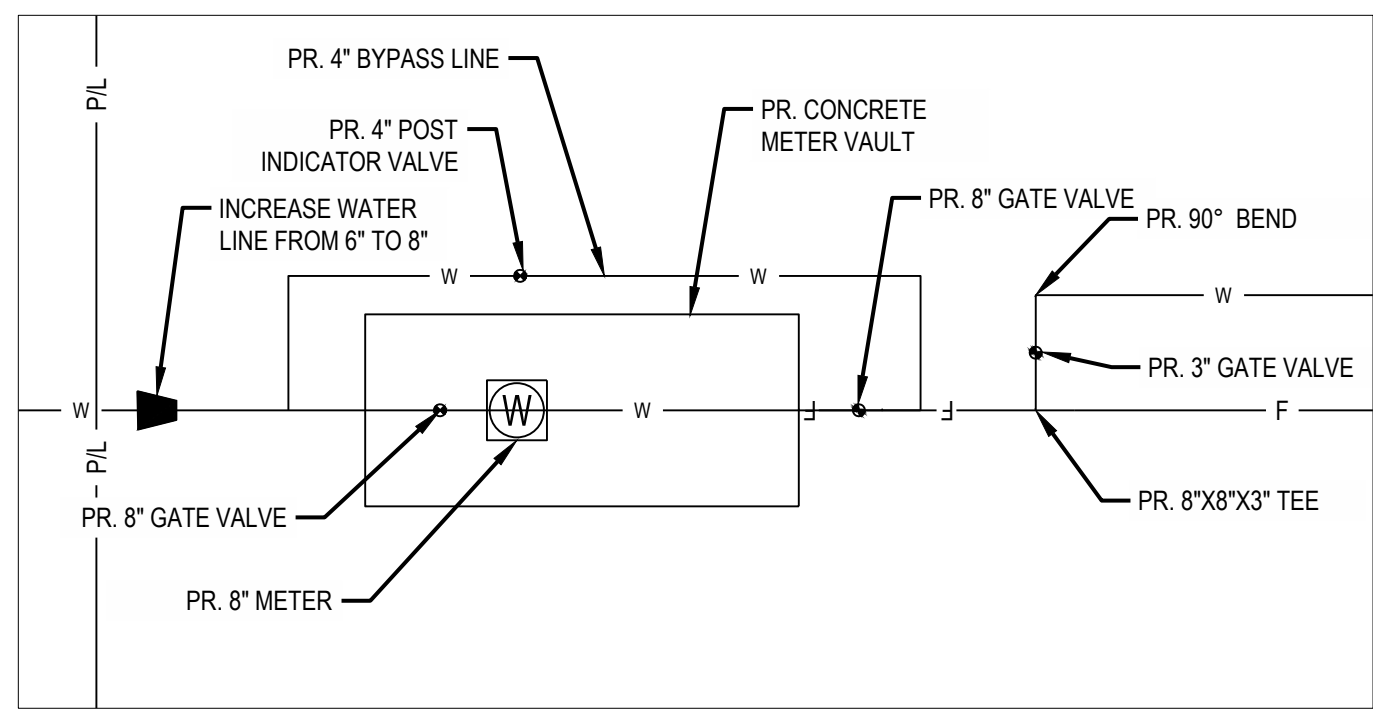
- BUILDING
- CONCRETE CURB
- PAVEMENT WALK
- STORM SEWER LINE
- SANITARY SEWER LINE
- DOMESTIC WATER SERVICE LINE
- GAS SERVICE LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- FIRE LINE
- CATCH BASIN
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- CURB INLET
- CLEANOUT
- DOWNSPOUT
- ELECTRICAL TRANSFORMER PAD
- ELECTRICAL SWITCHGEAR PAD
- FIRE HYDRANT
- WATER VALVE
- FIRE DEPARTMENT CONNECTION

REFER TO SHEET C1.1 FOR GENERAL UTILITY NOTES
REFER TO SHEET C1.1 FOR UTILITY DETAILS

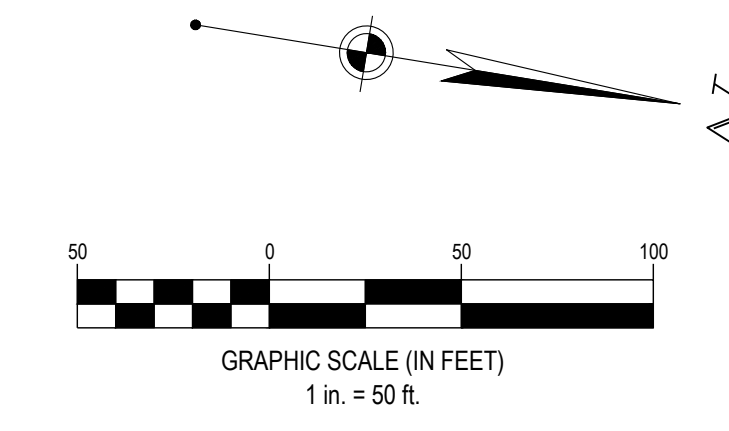
- CODED NOTES:**
- PROPOSED 6" SANITARY SERVICE.
 - PROPOSED 6" FIRE LOOP. SHOWN FOR REFERENCE ONLY. FINAL DESIGN TO BE COORDINATED WITH FIRE PROTECTION ENGINEER.
 - PROPOSED 8" FIRE WATER SERVICE. SHOWN FOR REFERENCE ONLY. FINAL DESIGN TO BE COORDINATED WITH FIRE PROTECTION ENGINEER.
 - PROPOSED 3" DOMESTIC WATER SERVICE.
 - PROPOSED WATER METER VAULT WITH 6" METER PER CITY OF PORT ANGELES (COPA) MASTER WATER METER STANDARD DETAIL. CONTRACTOR MUST SUBMIT SHOP DRAWING TO COPA PRIOR TO ORDERING.
 - PROPOSED ELECTRICAL TRANSFORMER.
 - PROPOSED UNDERGROUND ELECTRICAL SERVICE.
 - PROPOSED COMMUNICATION SERVICE. CONTRACTOR TO PROVIDE 4-4" CONDUITS.
 - PROPOSED FIRE DEPARTMENT CONNECTION.
 - PROPOSED 45" BEND.
 - PROPOSED TEE AND GATE VALVE. SEE PLAN FOR SIZE.
 - PROPOSED FIRE HYDRANT ASSEMBLY WITH 6" SERVICE LINE AND 6" GATE VALVE. MATERIALS AND INSTALLATION PER CITY OF PORT ANGELES STANDARDS.
 - PROPOSED ELECTRICAL SWITCHGEAR.
 - PROPOSED UTILITY CROSSING. MAINTAIN 18" VERTICAL SEPARATION BETWEEN UTILITIES.
 - PROPOSED 12" FIRE LOOP.
 - PROPOSED FIRE SERVICE CONNECTION. COORDINATE WITH MEP PLANS.
 - PROPOSED SANITARY CONNECTION. COORDINATE WITH MEP PLANS.
 - PROPOSED DOMESTIC WATER CONNECTION. COORDINATE WITH ARCHITECTURAL AND MEP PLANS.

SANITARY SEWER STRUCTURE SCHEDULE

NO.	STRUCTURE	RIM	INVERT
101	6" CO	298.15	295.05 (6") SE
102	6" CO	302.80	298.10 (6") S 298.10 (6") NW
103	6" CO	305.87	296.92 (6") N 296.92 (6") S



WATER METER DETAIL
SCALE: 1"=5'



WASHINGTON

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AMBROSE PROPERTY GROUP

PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

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Project Number: 763838
Scale: AS SHOWN
Drawn By: QSS
Checked By: CG
Date: 04/24/2025
Issue: FOR PERMIT

Drawing Title:
UTILITY PLAN

C6.0

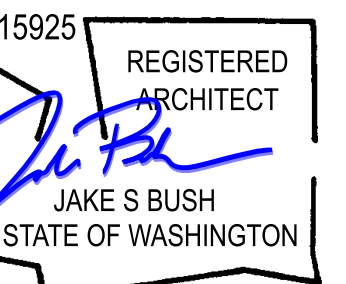
PROJECT PENINSULA

W. EDGEWOOD DR. & S. CRITCHFEILD RD, PORT ANGELES, WA 98363

ARCHITECT
OF
RECORD

Jacob S. Bush

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Phone: 330.695.9600 Fax: 330.208.4826



4.25.2025 Exp: 4.10.2026

SHEET INDEX

THESE DOCUMENTS ARE
CONFIDENTIAL

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PHONE: 614.942.3565

NUMBER	NAME	PERMIT SET
GENERAL		
G0.01	COVER SHEET	04.25.2025
G0.02	NOTES, ABBREVIATIONS, SYMBOLS AND RESPONSIBILITY MATRIX	04.25.2025
G1.00	CODE ANALYSIS AND LIFE SAFETY PLAN	04.25.2025
G1.01	OFFICE CORE LIFE SAFETY PLAN	04.25.2025
G1.02	ACCESSIBILITY STANDARDS	04.25.2025
G1.10	BUILDING SIGNAGE AND GRAPHICS	04.25.2025
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A0.04	CEILING GRID SEISMIC DETAILS	04.25.2025
A1.01	OVERALL FLOOR PLAN	04.25.2025
A1.02	ENLARGED OFFICE AND INTERIOR SIGNAGE PLANS	04.25.2025
A1.03	FINISH PLAN AND SCHEDULE	04.25.2025
A1.04	OFFICE FURNITURE PLAN	04.25.2025
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A1.51	OVERALL REFLECTED CEILING PLAN	04.25.2025
A1.52	OFFICE REFLECTED CEILING PLAN	04.25.2025
A1.61	OVERALL ROOF PLAN	04.25.2025
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A4.01	INTERIOR ELEVATIONS	04.25.2025
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A6.01	DOOR TYPES, SCHEDULES, AND DETAILS	04.25.2025
A6.02	DOOR DETAILS	04.25.2025
A8.01	LAUNCH PAD CANOPY PLANS	04.25.2025
A8.02	LAUNCH PAD CANOPY SECTION & DETAILS	04.25.2025
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S0.21	TYPICAL INTERIOR LIGHT GAGE STEEL DETAILS	04.25.2025
S1.00	FOUNDATION PLAN	04.25.2025
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P1.02	OVERALL PLUMBING PLAN - ROOF	04.25.2025
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P3.02	ENLARGED WASTE PLAN	04.25.2025
P3.10	ENLARGED WATER PLAN	04.25.2025
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E2.02	OVERALL LIGHTING PHOTOMETRICS PLAN	04.25.2025
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E3.02	ENLARGED LIGHTING PLANS	04.25.2025
E4.01	ELECTRICAL DETAILS	04.25.2025
E4.02	ELECTRICAL DETAILS	04.25.2025
E4.03	ELECTRICAL DETAILS	04.25.2025
E5.01	ELECTRICAL SCHEDULES	04.25.2025
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E6.01	ELECTRICAL ONE-LINE DIAGRAM	04.25.2025
E7.01	LIGHTNING PROTECTION DIAGRAM	04.25.2025
E8.01	ELECTRICAL ENERGY FORMS	04.25.2025
E8.02	ELECTRICAL ENERGY FORMS	04.25.2025
ES1.01	ELECTRICAL SITE PLAN	04.25.2025
ES1.02	ELECTRICAL SITE PHOTOMETRIC PLAN	04.25.2025

DESIGN STANDARDS

PROJECT DESCRIPTION

NEW CONCRETE WALL PANEL SINGLE STORY FULLY SPRINKLERED BUILDING (S-1 OCC.), DRIVE THROUGH VAN LOADING CANOPY (S-2 OCC.) WITH SUPPORT OFFICE AREA (B OCC.), BREAK ROOM (A-2 OCC.), AND TRAINING ROOM (A-3 OCC.).

THE FACILITY IS DESIGNED TO PROVIDE LAST MILE DELIVERY OF BOTH PARCEL VOLUME AND HEAVY/BULKY PACKAGES DIRECTLY TO THE TENANTS CUSTOMERS.

1. PACKAGES ARE RECEIVED AT THE INBOUND DOCKS VIA S3 TRAILERS FOR LIVE UNLOADING. PACKAGES ARRIVING AT THIS FACILITY ARE PREPACKAGED IN CARDBOARD BOXES AND LABELED FOR SHIPPING WITHIN LOCAL NEIGHBORHOODS AND AREA SURROUNDING THE FACILITY.

2. INBOUND TRAILERS ARE UNLOADED IN AN AREA ADJACENT TO THE DOOR DOORS. PARCEL SIZED PACKAGES WILL BE SORTED VIA FIXED SINGLE LEVEL CONVEYANCE. WHILE HEAVY/BULKY ITEMS WILL BE SORTED TO DELIVERY ROUTES IN THE OUTBOUND AREA ADJACENT TO THE INBOUND DOORS. ITEMS ARE PUT INTO BINS AND ROLLED ONTO SMALLER MOBILE CARTS. THESE CARTS ARE ROLLED INTO THE LOADING AREA, FROM WHICH THE PACKAGES ARE LOADED INTO VANS OR CONTRACT DRIVERS PERSONAL VEHICLES FOR FINAL DELIVERY. THE CARTS ARE APPROXIMATELY 42" LONG, 36" WIDE AND 79" TALL. THE LOCATION OF THE CARTS CAN BE SEEN ON THE PLAN. SHELVING SHOWN PROVIDES STORAGE UP TO 7'-0" NOMINAL HEIGHT ON SOLID SHELF. STORAGE SHELF MAX 5'-0" PRODUCT SITS ON 5'-0" HIGH SHELF. SHELVING SHOWN FOR EGRESS PURPOSES. SUBMITTAL BY THIRD PARTY. THERE IS NO HIGH BAY RACKING/HIGH PILED STORAGE AT THIS FACILITY.

3. PARCEL VOLUME DELIVERY WILL BE GROUND LOADED INTO VANS AND/OR CONTRACT DRIVERS PERSONAL VEHICLES IN CYCLES. IN OUTDOOR COVERED LOADING AREAS. HEAVY/BULKY ITEMS WILL BE LOADED INTO BOX TRUCKS VIA DOCK DOORS.

THIS FACILITY IS STAFFED WITH FULL-TIME SITE LEADERSHIP PERSONNEL AND PART-TIME EMPLOYEES WHO WORK UP TO 30 HRS WEEKLY. EMPLOYEES ARE ON SITE FOR INDUCT, SORT AND STAGING ACTIVITIES IN ONE TO FIVE-HOUR SHIFTS, THE MAJORITY OF WHICH OCCUR BETWEEN 9:30AM AND 2:00PM. FOR FULLY OPERATIONAL SITES, THERE ARE MORE THAN TEN UNIQUE SHIFT OPTIONS CORRESPONDING TO THE NUMBER OF OPERATIONAL CYCLES. OF THE TOTAL HEADCOUNT AT THIS LOCATION, APPROXIMATELY 5% ARE FULL-TIME MANAGERS AND THE REMAINING 95% ARE PART-TIME EMPLOYEES.

MATERIAL HANDLING EQUIPMENT - ICD

THIS DRAWING PACKAGE IS BUILT UPON THE MATERIAL HANDLING EQUIPMENT COMPOSITE PLAN.

CURRENT ICD DOCUMENT RECEIVED: 02/17/2025
CURRENT SPECIFICATIONS: G-0070 SPECIFICATIONS

SHOP DRAWINGS

REFER TO SPECIFICATIONS FOR ALL REQUIRED SHOP DRAWINGS

DEFERRED SUBMITTALS

THE FOLLOWING ITEMS ARE CONSIDERED TO BE DEFERRED SUBMITTALS PER SECTION 107.3.4.1 OF THE BUILDING CODE. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

1. AUTOMATIC FIRE SPRINKLER SYSTEM (DESIGN BUILD)
2. FIRE ALARM SYSTEM (DESIGN BUILD)
3. SIGNAGE PERMIT (DESIGN BUILD)
4. TENANT MATERIAL HANDLING EQUIPMENT (DESIGN BUILD)

BID ALTERNATES

ALTERNATE J: LOW-CARBON CONCRETE & ASPHALT.
-ALTERNATE 1A: REVISED ASPHALT SPECIFICATION FOR LOW-CARBON ASPHALT. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.

-ALTERNATE 1B: REVISED SITE CONCRETE SPECIFICATION FOR LOW-CARBON CONCRETE. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.

-ALTERNATE 1C: REVISED CONCRETE WALL PANEL TO BE LOW-CARBON CONCRETE. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

-ALTERNATE 1D: REVISED BUILDING SITE-CAST CONCRETE TO BE LOW-CARBON CONCRETE. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

PROJECT VICINITY MAP



AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFEILD RD, PORT ANGELES, WA 98363

Revisions / Submissions

ID	Description	Date
PERMIT SET		04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: SW / CB
Checked By: DZ
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
COVER SHEET

G0.01

CODE BASIS OF DESIGN

2021 WSCB (WASHINGTON STATE BUILDING CODE)
2021 WSEB (WASHINGTON STATE ENERGY CODE)
2021 WSCF (WASHINGTON STATE FIRE CODE)
2021 WSMC (WASHINGTON STATE MECHANICAL CODE)
2021 WSPC (WASHINGTON STATE PLUMBING CODE)
2020 WASHINGTON STATE ELECTRICAL CODE
2017 ICC A117.1 (ACCESSIBILITY CODE)

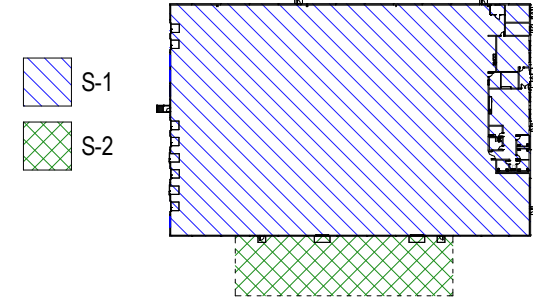
SPECIAL INSPECTIONS AND TESTS

- SPECIAL INSPECTIONS ARE REQUIRED ON NEW CONSTRUCTION AS REQUIRED BY CHAPTER 17 OF THE 2021 WSCB (WASHINGTON STATE BUILDING CODE).
- REQUIRED SPECIAL INSPECTIONS SHALL BE PERFORMED BY A TESTING AGENCY APPROVED BY AHJ.

CODE - BUILDING INFORMATION

CONSTRUCTION TYPE:
III, FULLY SPRINKLERED (SECTION 602.2)

BUILDING HEIGHT:
ALLOWED: 75'-0" (TABLE 504.3)
PROVIDED: 31'-0" (1 STORY)
24'-0" MIN DECK HEIGHT



BUILDING AREA (SECTION 506)
ALLOWED: UNLIMITED - NO MORE THAN ONE STORY ABOVE GRADE PLANE, YARD WIDTH GREATER THAN 8 FT ON ALL SIDES AND COMPLIANT USES. (SECTION 507.4)

SPACE	AREA	GROUP	USE GROUP NAME	OCCUPANCY	SEPARATION TYPE	SPRINKLER SYSTEM
BUILDING	58,332.14 SF	S-1	MODERATE-HAZARD STORAGE	S-1	NON-SEPARATED	ESFR SPRINKLER SYSTEM
CANOPY	9,010.19 SF	S-2	LOW-HAZARD STORAGE	S-2	MIXED USE	NOTE 1

NOTE: 1. FIRE SUPPRESSION IS A DEFERRED DESIGN. REFER TO FP1.01 FOR ADDITIONAL INFORMATION & FOR INSTANCES WHEN AN AHJ MIGHT REQUIRE SUPPRESSION AT THE CANOPY.

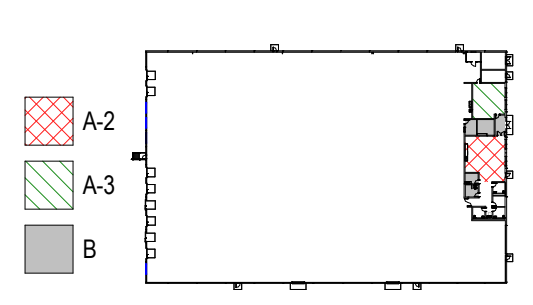
BUILDING AREA SUMMARY:

TOTAL BUILDING GROSS SQUARE FOOTAGE: 58,332 SF
TOTAL BUILDING NET SQUARE FOOTAGE: 57,408 SF

ACCESSORY AREA USE:
MAXIMUM ALLOWABLE ACCESSORY USE: 10% (PER SECTION 508.2.3)

AREA SCHEDULE (ACCESSORY USE)

USE GROUP	ALLOWABLE AREA	ACTUAL AREA	PERC OF USE
A-2	<9,500 SF	1,174 SF	2.01%
A-3	<9,500 SF	799 SF	1.30%
B	<23,000 SF	793 SF	1.29%
ACCESORY	2,886 SF	2,886 SF	4.61%
TOTAL AREA	58,332 SF	100.00%	



OCCUPANT LOAD

(CHAPTER 10 MEANS OF EGRESS, SECTION 1004 OCCUPANT LOAD, TABLE 1004.5)

DESIGN OCCUPANT LOAD SCHEDULE

SPACE	BUILDING GROUP	USE	FLOOR FACTOR	METHOD	TOTAL
ASSEMBLY (UNCONCENTRATED) (TABLES & CHAIRS) A-2			15	NSF	79
BREAK AREA	A-2				79
A-2					79
EDUCATIONAL CLASSROOM A-3					38
TRAINING	A-3				38
A-3					38
BUSINESS AREAS B					2
ENTRY	B				2
LACTATION	B				1
MULTI-FAITH SUITE	B				1
OFFICE	B				1
B					5
BUSINESS AREAS, CONCENTRATED B					5
LOCKERS	B				5
B					10
ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM S-1					2
FIRE ELEC	S-1				2
WAREHOUSES S-1					2
RR CORE	S-1				2
WAREHOUSE AREA	S-1				109
S-1					111
TOTAL BUILDING OCCUPANT LOAD					113
					240

EGRESS COMPONENTS:

NUMBER OF EXITS	WIDTH FACTOR (INCHES)	CLEAR WIDTH (INCHES)	OCCUPANT LOAD
2	0.2	45.00 in	240

NUMBER OF EXITS PROVIDED	NOM WIDTH (INCHES)	CLEAR WIDTH PROVIDED (INCHES)	TOTAL WIDTHS PROVIDED	OCCUPANT LOAD PROVIDED
6	36 in	32 in	192 in	960
1	42 in	38 in	38 in	190
1	72 in	65 in	65 in	325
8			295 in	1,475

EXIT FROM BREAKROOM AND TRAINING ROOM:

EGRESS THROUGH ADJOINING SPACES (PER 1016.2)
EGRESS THROUGH INTERVENING ROOM OR SPACE IS ALLOWED WHEN SPACES ARE ACCESSORY TO ONE ANOTHER.

PATH OF TRAVEL DISTANCES

EXIT LENGTH OF TRAVEL: (TABLE 1017.2)

S-1 400' MAX. (SECTION 1017.2.2) - CONDITIONS:

- THE PORTION OF THE BUILDING CLASSIFIED AS GROUP F-1 OR S-1 IS LIMITED TO ONE STORY IN HEIGHT.
- THE MINIMUM HEIGHT FROM THE FINISHED FLOOR TO THE BOTTOM OF THE CEILING OR ROOF SLAB OR DECK IS 24 FEET (7315 MM).
- THE BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1.

- S-2 300' MAX.
B 300' MAX. (ACCESSORY USE)
A-2 250' MAX. (ACCESSORY USE)
A-3 250' MAX. (ACCESSORY USE)

PATH ID	EGRESS TRAVEL DISTANCE		COMMON PATH OF TRAVEL DISTANCE		USE GROUP
	ACTUAL	ALLOWABLE	ACTUAL	ALLOWABLE	
1A	163'-1"	400'-0"	0'	100'-0"	S-1
1B	189'-4"	400'-0"	0'	100'-0"	S-1
1C	197'-10"	300'-0"	0'	100'-0"	S-1, S-2
1D	205'-0"	300'-0"	0'	100'-0"	S-1, S-2

ENERGY CODE BASIS OF DESIGN

CLIMATE ZONE: 4C (WSEC C301.1)

REQUIRED - OPAQUE THERMAL ENVELOPE (WSEC TABLE 402.1.3 & 402.1.4):

ROOF: OPVAQUE WALL (CONDITIONED): PERIMETER SLAB EDGE INSULATION: SOLID DOOR (SWINGING): OVERHEAD DOOR: REQUIRED - BUILDING ENVELOPE FENESTRATION (WSEC TABLE 402.4): GLAZING: GLAZED DOOR:

PROVIDED - OPAQUE THERMAL ENVELOPE:

PERIMETER SLAB EDGE INSULATION: OPVAQUE WALL (CONDITIONED): SOLID DOOR (SWINGING): OVERHEAD DOOR: PROVIDED - BUILDING ENVELOPE FENESTRATION: SHGC=0.33 (MIN), U-VALUE=0.34 (MIN), U=60 (MIN)

FIRE PROTECTION SYSTEM (SECTION 903)

THIS BUILDING HAS BEEN DESIGNED WITH AN ESFR FIRE PROTECTION SYSTEM DUE TO THE FOLLOWING:
• THE MATERIALS BEING STORED: THERE IS A POTENTIAL FOR STORAGE OF GROUP A EXPANDED AND UNEXPANDED PLASTICS, REQUIRING A HIGHER LEVEL OF PROTECTION PER NFPA 13 (2016 ED.), SECTION 15.4.
• THE HEIGHT OF THE STORAGE IS BELOW 12 FEET. THEREFORE, THE CASE PRESENTED IS NOT CLASSIFIED AS HIGH-RISE STORAGE PER NFPA 13 (2016 ED.), SECTION 3.3.1.16.

INCLUDED SYSTEMS

- FIRE PROTECTION SYSTEM - YES, APPROVED FIRE SUPPRESSION SYSTEM PER SECTION 903
- ALARMS - YES, APPROVED FIRE ALARM SYSTEM PER SECTION 907/NFPA 72
- AUTOMATIC FIRE DETECTION SYSTEM - YES, APPROVED FIRE DETECTION SYSTEM PER SECTION 907 & NFPA 72
- SMOKE CONTROL SYSTEM - NA
- SUPERVISION - YES, BY APPROVED SUPERVISING AGENCY (SECTION 901.6)

FIRE ALARM & FIRE PROTECTION NOTES:

- FIRE SUPPRESSION SYSTEM - REFER TO FIRE PROTECTION DRAWINGS
 - FIRE ALARM SYSTEM - REFER TO FIRE ALARM DRAWINGS
 - AUTOMATIC FIRE DETECTION SYSTEM - REFER TO FIRE DETECTION DRAWINGS WITH TENANT AND AHJ/FIRE OFFICIAL.
 - MANUAL PULL STATION PROVIDED AT ALL AGGRESS DOORS
- FIRE EXTINGUISHERS - PORTABLE FIRE EXTINGUISHERS ARE PROVIDED AS REQUIRED BY SECTION 906.1. REFER TO PLAN BELOW FOR GENERAL LAYOUT FOR REFERENCE. REFER TO FIRE PROTECTION DRAWINGS FOR FIRE SIZE, TYPE AND LOCATION.

EXIT DOORS

- EXIT DOORS SHALL BE OPENABLE FROM THE EGRESS SIDE WITHOUT SPECIAL KNOWLEDGE, EFFORT OR THE USE OF A SPECIAL KEY OR LATCH
- EXIT DOORS SHALL SWING IN THE DIRECTION OF TRAVEL WHEN SERVING AN OCCUPANT LOAD OF 50 OR MORE. UNLATCHING FORCE OF PANIC HARDWARE SHALL NOT EXCEED 15 POUNDS WHEN APPLIED IN THE DIRECTION OF TRAVEL.
- CORRIDORS SHALL BE MAINTAINED WITH A MINIMUM CLEAR WIDTH OF 44" AND 7'-6" MINIMUM HEIGHT, OR AS REQUIRED BY AHJ.
- EXIT DOORS SHALL BE A MINIMUM OF 32" CLEAR WIDTH & MAXIMUM 48" WIDE LEAF. MINIMUM 6'-8" DOOR HEIGHT. DOORS IN ANY POSITION SHALL NOT REDUCE THE REQUIRED CORRIDOR WIDTH BY MORE THAN HALF.
- EXTERIOR LANDINGS AT ALL EXIT DOORS SHALL BE LEVEL WITH A SLOPE OF 2% MAX.

EXIT SIGNAGE

- MAIN EXIT DOORS WITHOUT PANIC HARDWARE SHALL HAVE A SIGN WITH LETTERS ON A CONTRASTING BACKGROUND STATING "THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED." VERIFY WITH JURISDICTION PRECISE WORDING.
- TACTILE EXIT SIGNAGE SHALL BE REQUIRED. REFER TO SIGNAGE DRAWINGS FOR DETAILS AND SPECIFICATIONS.
A. EACH GRADE-LEVEL EXTERIOR EXIT DOOR SHALL BE IDENTIFIED BY A TACTILE SIGN WITH THE WORD "EXIT".
B. EXIT DOOR THAT LEADS DIRECTLY TO A GRADE-LEVEL EXTERIOR EXIT BY MEANS OF A STAIRWAY OR RAMP SHALL BE IDENTIFIED BY A TACTILE SIGN WITH THE FOLLOWING WORDS, "EXIT STAIR DOWN", "EXIT RAMP DOWN", "EXIT STAIR UP", OR "EXIT RAMP UP".
C. EACH EXIT DOOR THAT LEADS DIRECTLY TO A GRADE-LEVEL EXTERIOR EXIT BY MEANS OF AN EXIT ENCLOSURE OR AN EXIT PASSAGEWAY SHALL BE IDENTIFIED BY A TACTILE EXIT SIGN WITH THE WORDS, "EXIT ROUTE".
D. EACH EXIT ACCESS DOOR FROM AN INTERIOR ROOM, OR AREA TO A CORRIDOR OR HALLWAY THAT IS REQUIRED TO HAVE A VISUAL EXIT SIGN, SHALL BE IDENTIFIED BY A TACTILE EXIT SIGN WITH THE WORDS, "EXIT ROUTE".
- SIGNAGE SHALL BE LOCATED AT LATCH SIDE OF SINGLE DOOR AND RIGHT SIDE OF DOUBLE DOORS FROM DIRECTION OF EGRESS.
- SIGNAGE AND TACTILE FLOOR DESIGNATIONS SHALL BE LOCATED AT EACH STAIR IDENTIFYING EACH STAIR BY NAME OR NUMBER.
- FOR A-2 AND A-3 OCCUPANCIES PROVIDE SIGNAGE POSTING THE ROOM CAPACITY.
SIGNAGE AND TACTILE SIGNAGE SHALL BE PROVIDED AT EACH EXIT DOOR WITH DELAYED EGRESS LOCK, AND SHALL BE LOCATED ABOVE AND WITHIN 12" OF DOOR EXIT HARDWARE.
A. FOR DOORS THAT SWING IN THE DIRECTION OF EGRESS, THE SIGN SHALL READ "KEEP PUSHING. THIS DOOR WILL OPEN IN 15 SECONDS. ALARM WILL SOUND."
B. FOR DOORS IN THE OPPOSITE DIRECTION OF EGRESS, THE SIGN SHALL READ "KEEP PULLING. THIS DOOR WILL OPEN IN 15 SECONDS. ALARM WILL SOUND."
- SIGNAGE AND TACTILE SIGNAGE SHALL BE LOCATED AT EACH EXIT SERVING A REQUIRED ACCESSIBLE SPACE. SIGNAGE SHALL BE INSTALLED INDICATING THE LOCATION OF ACCESSIBLE MEANS OF EGRESS.
- EXITS IN EXCESS OF THOSE REQUIRED BY THE CODE WITHOUT A RAMP AND MORE THAN 24" ABOVE GRADE SHALL HAVE SIGNS "EXIT STAIR DOWN".
- EXIT SIGNAGE SHALL BE INTERNALLY ILLUMINATED AT ALL TIMES WITH EMERGENCY ELECTRICAL BACK-UP POWER.
- EXIT SIGN ILLUMINATION SHALL NOT BE LESS THAN 5 FOOT CANDLES EXIT SIGNS SHALL HAVE TWO POWER SOURCES, ONE FROM THE PREMISES WIRING SYSTEM, THE OTHER FROM BATTERIES.
- FINAL PLACEMENT OF EXIT SIGNS IS SUBJECT TO APPROVAL AND MODIFICATION OF THE FIRE DEPARTMENT FIELD INSPECTOR.
- GC, WITH FIRE MARSHAL'S DIRECTION, WILL DETERMINE IF ANY ADDITIONAL LIGHTED EMERGENCY EXIT SIGNAGE IS NEEDED. GC TO INSTALL IF ADDITIONAL SIGNAGE IS REQUIRED.

EXIT ILLUMINATION

MEANS OF EGRESS SHALL BE ILLUMINATED AT ANY TIME THE BUILDING IS OCCUPIED WITH LIGHT HAVING AN INTENSITY OF NOT LESS THAN ONE FOOT CANDLE AT WALKING SURFACE LEVEL. EXIT ILLUMINATION FIXTURES SHALL BE ON A SEPARATE NIGHT LIGHT CIRCUIT WITH BATTERY BACK-UP EXIT ILLUMINATION SHALL BE PROVIDED FOR NOT LESS THAN 90 MINUTES VIA STORAGE BATTERIES, OR ON-SITE GENERATOR.

PUMPHOUSE CODE SUMMARY:

SUMMARY:
BUILDING IS A PUMP HOUSE TO SUPPORT THE FIRE SUPPRESSION SYSTEM FOR THE PROJECT SITE.

OCCUPANCY TYPE:
UTILITY AND MISCELLANEOUS GROUP U

CONSTRUCTION TYPE:
III, FULLY SPRINKLERED (SECTION 602.2)

BUILDING HEIGHT:
ALLOWED: 75'-0" (TABLE 504.3)
PROVIDED: 13'-4" (1 STORY)

BUILDING AREA (SECTION 506)
ALLOWED: 34,000 SF
PROVIDED: 492 SF

EXITING:
REQUIRED: (1) EXIT
PROVIDED: (1) EXIT

STRUCTURAL SYSTEM:
LOAD BEARING CONCRETE WALL PANELS
METAL ROOF DECK
WALLS ARE NON-RATED

EXTERIOR FINISHES:
CONCRETE WALL PANELS WITH TEXTURED COATING

INTERIOR FINISHES:
CONCRETE FLOOR SLAB

INTERIOR WALL AND CEILING FINISHES

SECTIONS 803 AND 804 2021 WSCB

INTERIOR WALL AND CEILING FINISH MATERIAL

CLASS	FINISH MATERIAL	SMOKE-DEVELOPED INDEX
CLASS A	FLAME SPREAD INDEX 0-25; SMOKE-DEVELOPED INDEX 0-450	0-450
CLASS B	FLAME SPREAD INDEX 26-75; SMOKE-DEVELOPED INDEX 0-450	0-450
CLASS C	FLAME SPREAD INDEX 76-200; SMOKE-DEVELOPED INDEX 0-450	0-450

TABLE 803.13 2021 WSCB

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY		CORRIDOR AND ENCLOSURE FOR EXIT ACCESS, STAIRWAYS AND RAMP		ROOMS AND ENCLOSED SPACES	
CLASS	FINISH MATERIAL	FINISH MATERIAL	FINISH MATERIAL	FINISH MATERIAL	FINISH MATERIAL
A-2	A-2	B	B	C	C
A-3	A-3	B	B	C	C
B	B	C	C	C	C
S	C	C	C	C	C

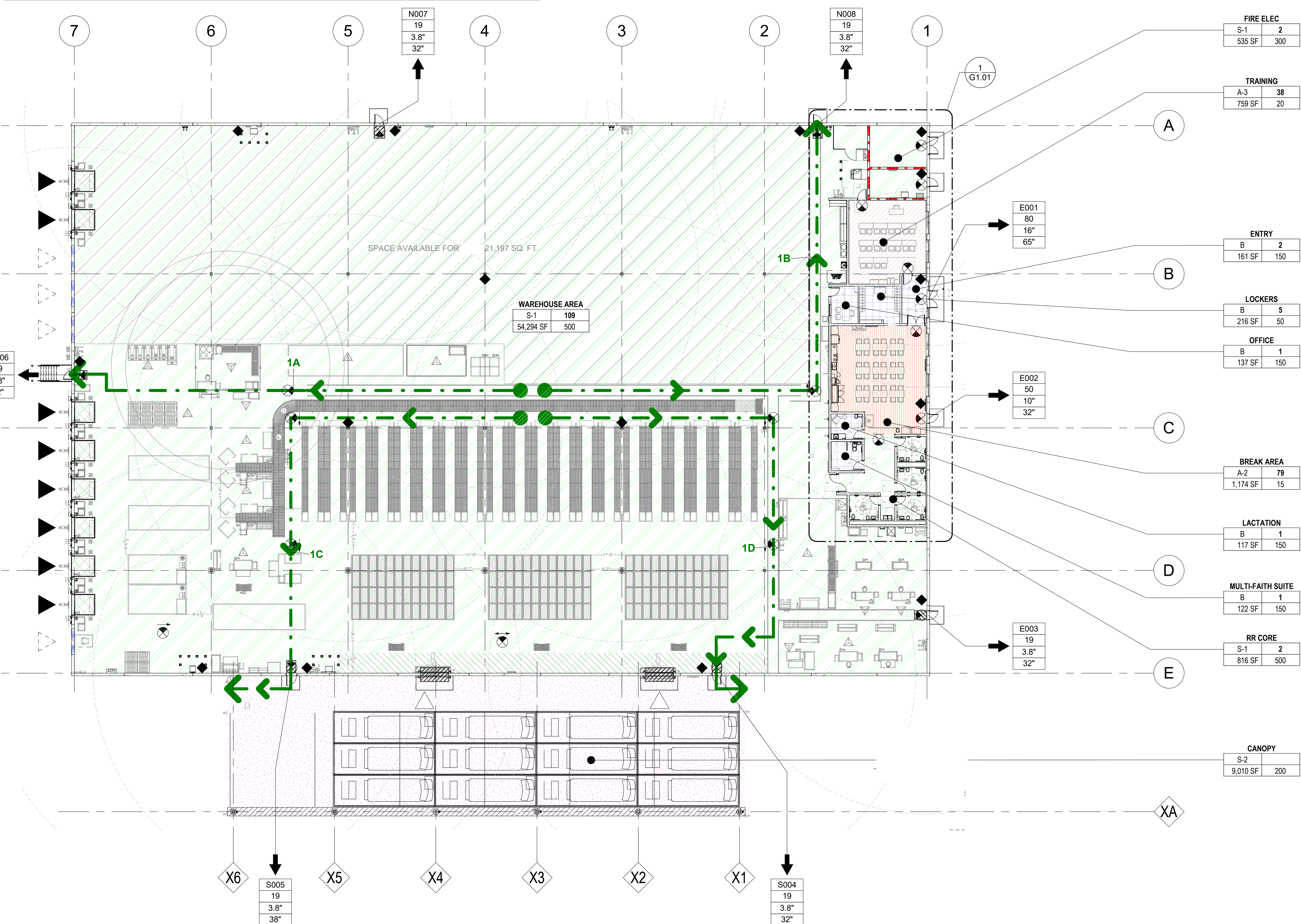
SECTION 804

INTERIOR FLOOR FINISH REQUIREMENTS	
CLASS	TEST
II	DOC FF-1
II	DOC FF-1
II	DOC FF-1

NOTES:
1. IN OTHER THAN GROUP I-3 OCCUPANCIES IN BUILDINGS LESS THAN THREE STORIES ABOVE GRADE PLANE, CLASS B INTERIOR FINISH FOR NON-SPRINKLERED BUILDINGS AND CLASS C INTERIOR FINISH FOR SPRINKLERED BUILDINGS SHALL BE PERMITTED IN INTERIOR EXIT STAIRWAYS AND RAMP.
2. REQUIREMENTS FOR ROOMS AND ENCLOSED SPACES SHALL BE BASED UPON SPACES ENCLOSED BY PARTITIONS. WHERE A FIRE RESISTANCE RATING IS REQUIRED FOR STRUCTURAL ELEMENTS, THE ENCLLOSING PARTITIONS SHALL EXTEND FROM THE FLOOR TO THE CEILING. PARTITIONS THAT DO NOT COMPLY WITH THIS SHALL BE CONSIDERED ENCLLOSING SPACES AND THE ROOMS OR SPACES ON BOTH SIDES SHALL BE CONSIDERED ONE. IN DETERMINING THE APPLICABLE REQUIREMENTS FOR ROOMS AND ENCLOSED SPACES, THE SPECIFIC OCCUPANCY THEREOF SHALL BE THE GOVERNING FACTOR REGARDLESS OF THE GROUP CLASSIFICATION OF THE BUILDING OR STRUCTURE.

PLUMBING FIXTURE REQUIREMENTS

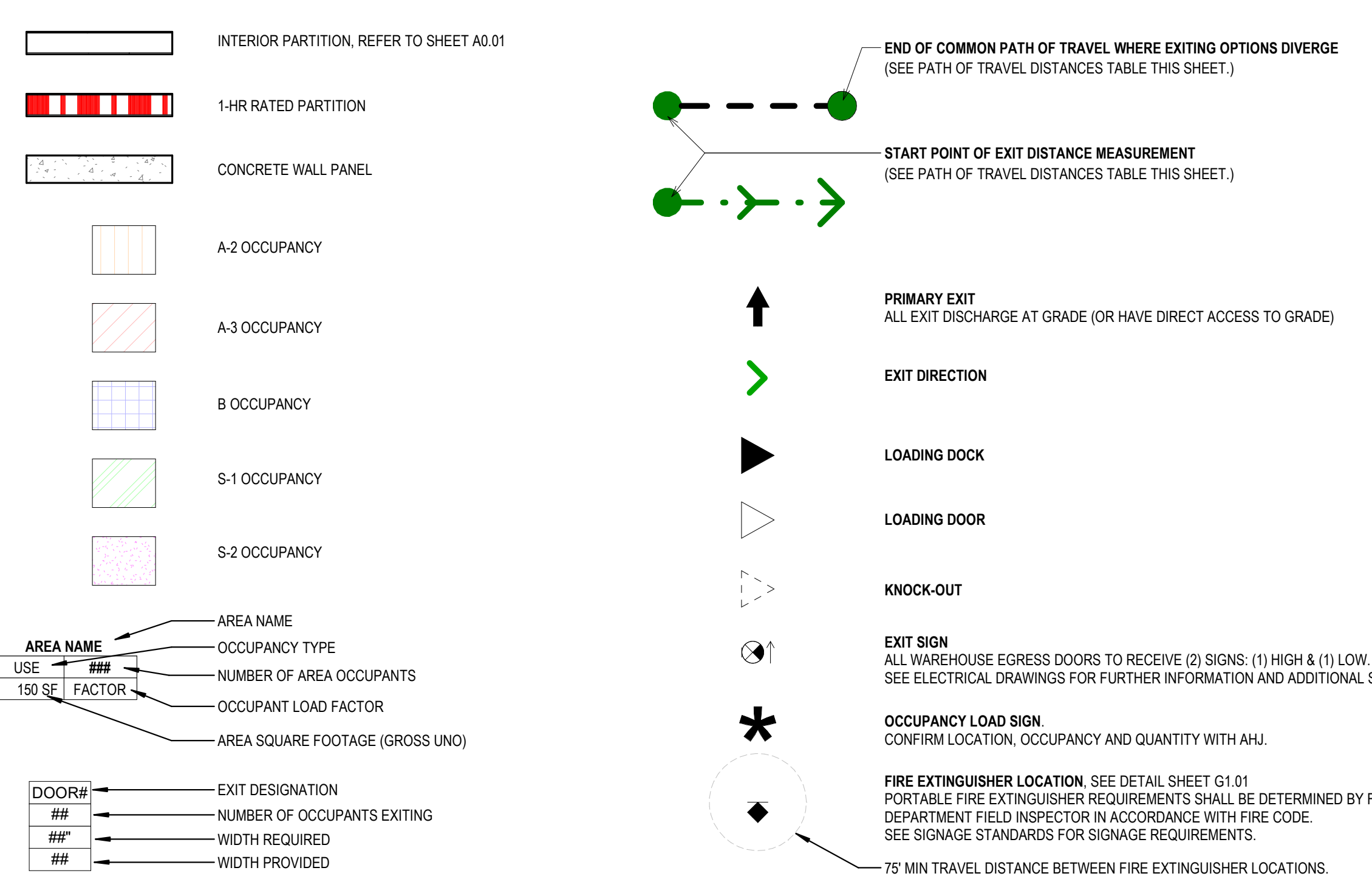
OCCUPANCY	LOAD	RATIO	WATER CLOSETS/URINALS			LAVATORIES			DRINKING FOUNTAIN
			MALE (50%)	FEMALE (50%)	SINGLE OCCUPANCY	MALE (50%)	FEMALE (50%)	SINGLE OCCUPANCY	
BUSINESS (B)	10	1 PER 25 FOR THE FIRST 50	(5) 2 REQ	(5) 2 REQ		1 PER 40 FOR THE FIRST 80	(5) 125 REQ	(5) 125 REQ	1 PER 150 FOR THE FIRST 30 (0.07 REQ)
WAREHOUSE (S-1)	113	1 PER 100	(5) 57 REQ	(5) 57 REQ	OCCUPANT LOADS OF 15 OR LESS CAN BE SERVED WITH ONE RESTROOM	1 PER 100	(5) 57 REQ	(5) 57 REQ	1 PER 150 FOR THE FIRST 30 (0.15 REQ)
ASSEMBLY (A-2)	79	M: 1 FOR 75 F: 1 FOR 75	(4) 53 REQ	(4) 53 REQ	WITH ONE RESTROOM	1 FOR 200	(4) 2 REQ	(4) 2 REQ	1 PER 150 FOR THE FIRST 30 (0.53 REQ)
ASSEMBLY (A-3)	38	M: 1 FOR 125 F: 1 FOR 65	(1) 119 REQ	(1) 119 REQ		1 FOR 200	(1) 119 REQ	(1) 119 REQ	1 PER 150 FOR THE FIRST 30 (0.25 REQ)
SUBTOTALS	240		1.4	1.59			0.99	0.99	1.6
TOTAL REQUIRED			2	2			1	1	2
TOTAL PROVIDED			-	-	4 UNISEX		-	-	4



CODE ANALYSIS AND LIFE SAFETY PLAN

Scale: 3/64" = 1'-0"

LEGEND



ACCESSIBLE TOILET STALL REQUIREMENTS

TOTAL STALLS PER ROOM PROVIDED:				REQUIRED:
ROOM #	QTY	ADA	DESCRIPTION	1 ACCESSIBLE STALL PER ROOM
SINGLE USER RESTROOM	108	1	TOILET, ADA	
SINGLE USER RESTROOM	109	1	TOILET, ADA	
SINGLE USER RESTROOM	110	1	TOILET, ADA	
SINGLE USER RESTROOM	111	1	TOILET, ADA	

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20115925 REGISTERED ARCHITECT
Jacob S. Bush
STATE OF WASHINGTON
4.25.2025 Exp: 4.10.2026

AMBROSE PROPERTY GROUP
PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD., PORT ANGELES, WA 98563

Revisions / Submissions

ID	Description	Date
1	PERMIT SET	04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: SW / CB
Checked By: GJB / DZ
Date: 04.25.2025
Issue: PERMIT SET
Sheet Title:
CODE ANALYSIS AND LIFE SAFETY PLAN

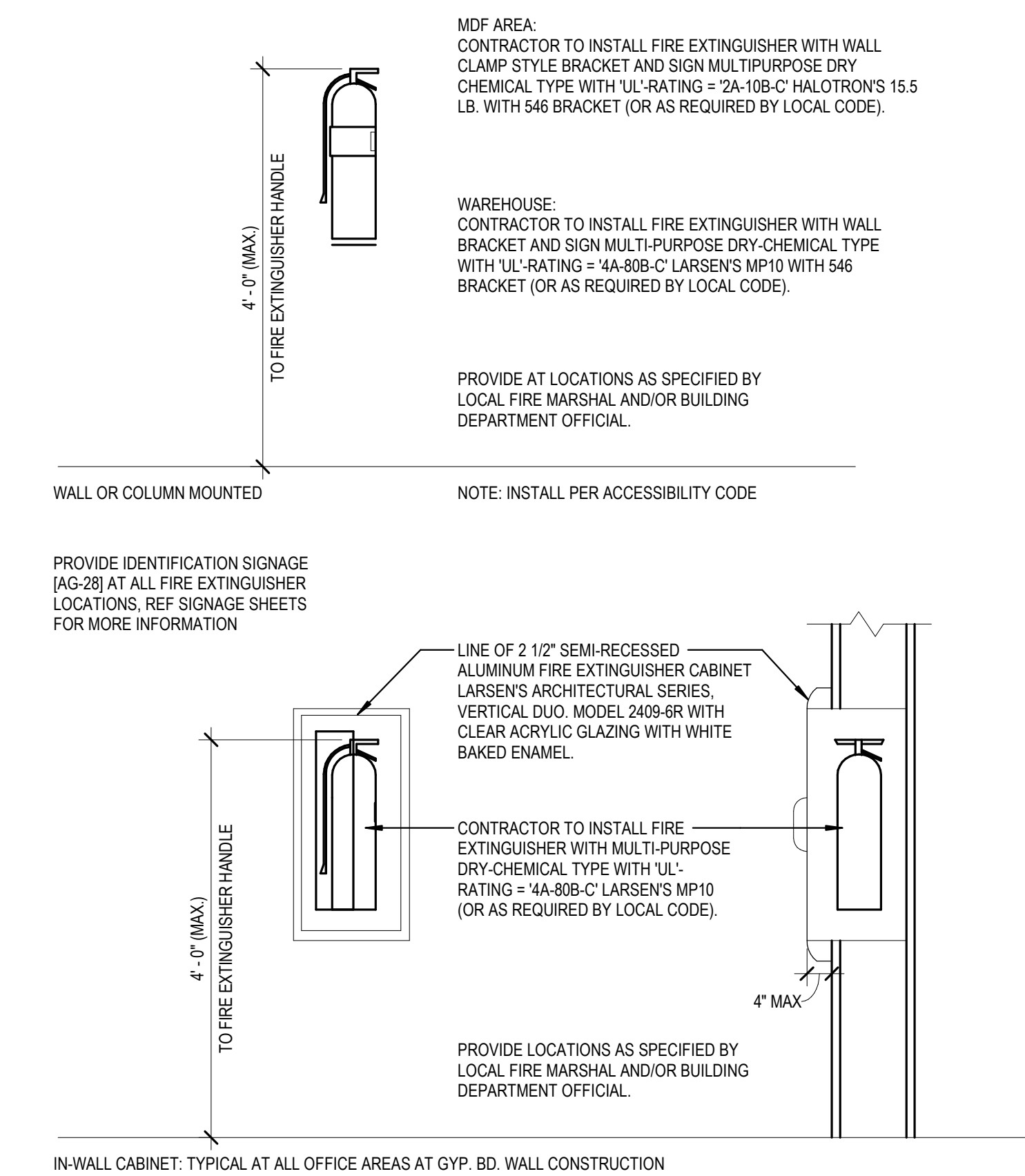
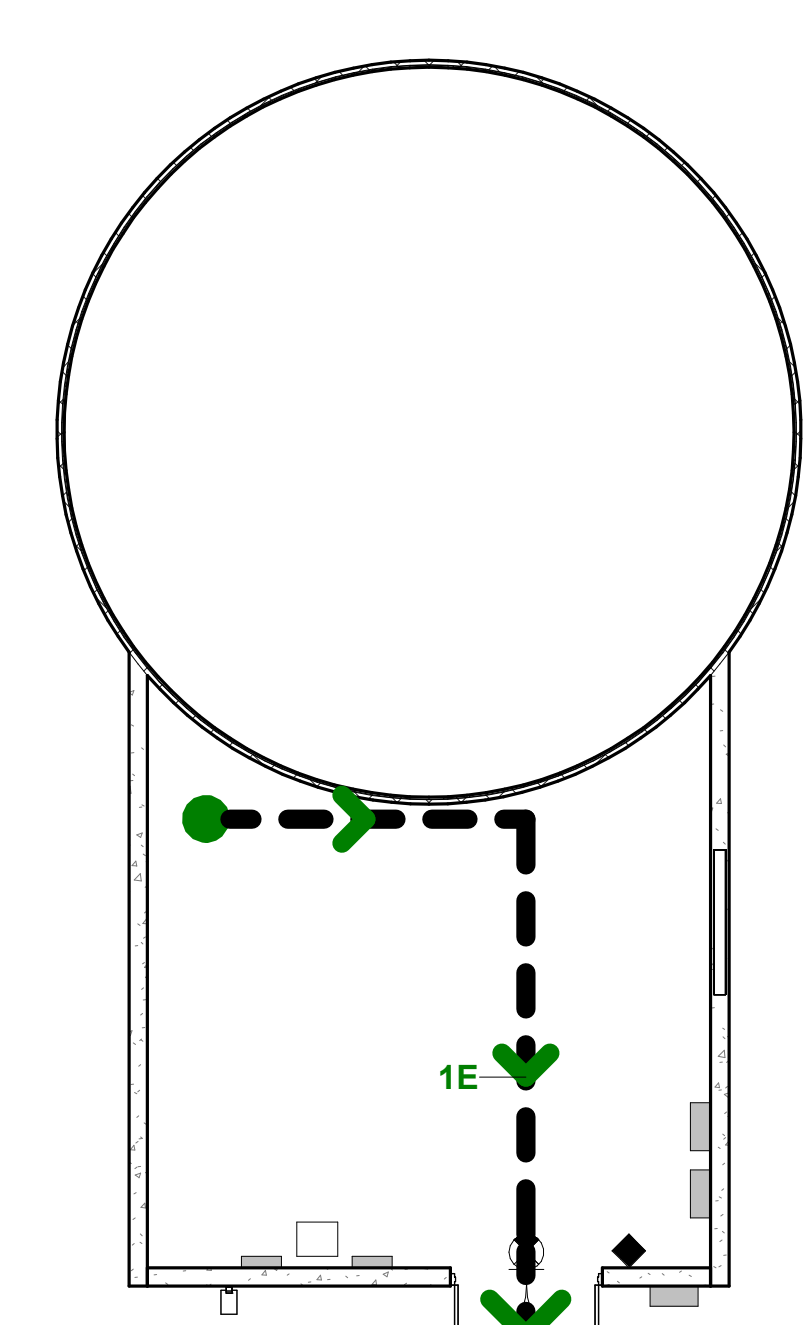
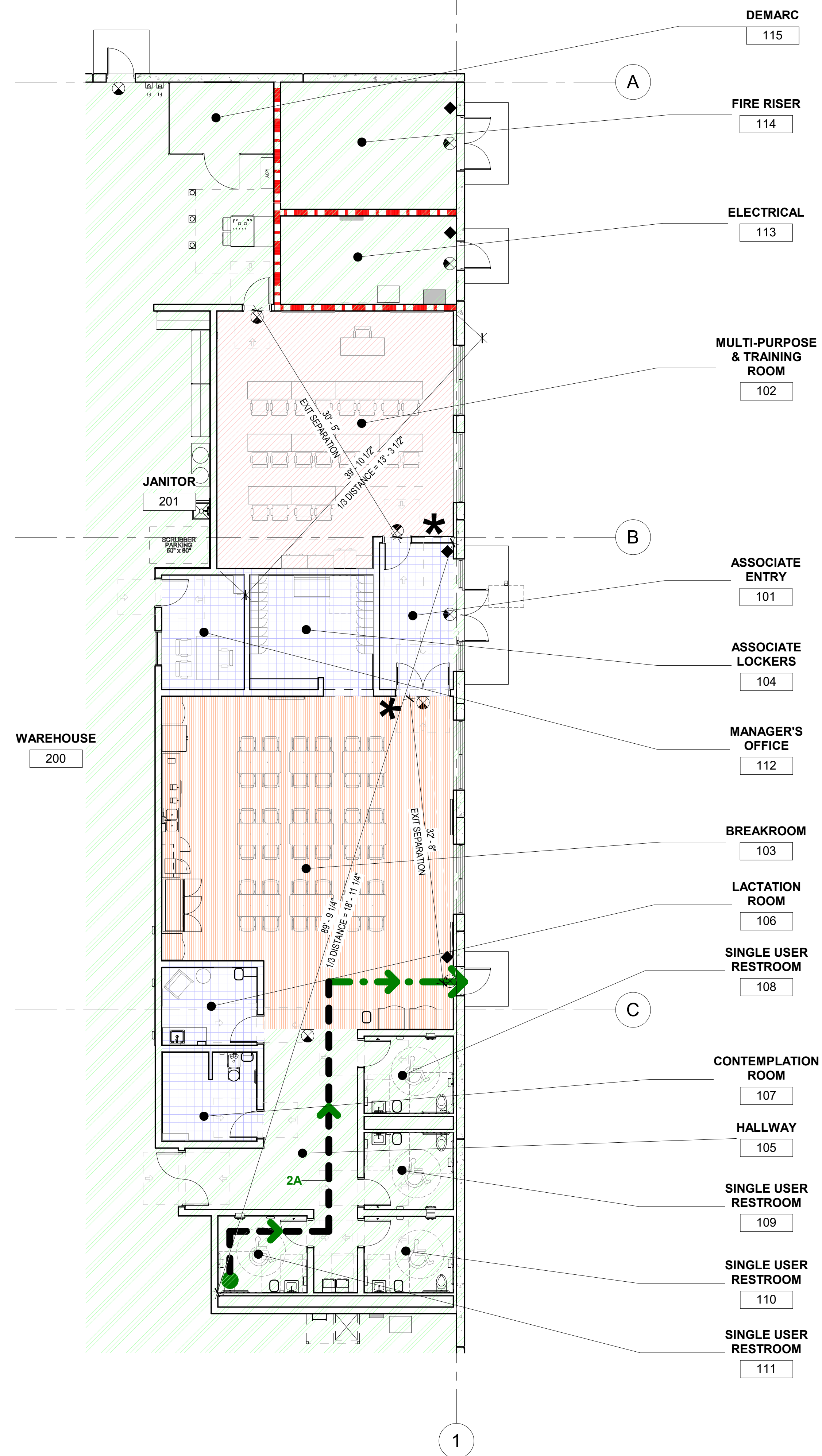
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LEGEND

	INTERIOR PARTITION, REFER TO SHEET A0.01		END OF COMMON PATH OF TRAVEL WHERE EXITING OPTIONS DIVERGE (SEE PATH OF TRAVEL DISTANCES TABLE THIS SHEET.)
	1-HR RATED PARTITION		START POINT OF EXIT DISTANCE MEASUREMENT (SEE PATH OF TRAVEL DISTANCES TABLE THIS SHEET.)
	CONCRETE WALL PANEL		PRIMARY EXIT ALL EXIT DISCHARGE AT GRADE (OR HAVE DIRECT ACCESS TO GRADE)
	A-2 OCCUPANCY		EXIT DIRECTION
	A-3 OCCUPANCY		LOADING DOCK
	B OCCUPANCY		LOADING DOOR
	S-1 OCCUPANCY		KNOCK-OUT
	S-2 OCCUPANCY		EXIT SIGN ALL WAREHOUSE EGRESS DOORS TO RECEIVE (2) SIGNS: (1) HIGH & (1) LOW. SEE ELECTRICAL DRAWINGS FOR FURTHER INFORMATION AND ADDITIONAL SIGNS.
	OCCUPANCY LOAD SIGN CONFIRM LOCATION, OCCUPANCY AND QUANTITY WITH AHJ.		FIRE EXTINGUISHER LOCATION. SEE DETAIL SHEET G1.01 PORTABLE FIRE EXTINGUISHER REQUIREMENTS SHALL BE DETERMINED BY FIRE DEPARTMENT FIELD INSPECTOR IN ACCORDANCE WITH FIRE CODE. SEE SIGNAGE STANDARDS FOR SIGNAGE REQUIREMENTS.
	AREA NAME		
	USE		
	AREA NAME USE 150 SF FACTOR		
	AREA NAME OCCUPANCY TYPE NUMBER OF AREA OCCUPANTS OCCUPANT LOAD FACTOR AREA SQUARE FOOTAGE (GROSS UNO)		
	DOOR# EXIT DESIGNATION NUMBER OF OCCUPANTS EXITING WIDTH REQUIRED WIDTH PROVIDED		

PATH OF TRAVEL DISTANCES

PATH ID	EGRESS TRAVEL DISTANCE		COMMON PATH OF TRAVEL DISTANCE		USE GROUP
	ACTUAL	ALLOWABLE	ACTUAL	ALLOWABLE	
1E	34' - 10"	250' - 0"	34' - 10"	100' - 0"	S-1
2A	60' - 11"	250' - 0"	45' - 5"	75' - 0"	S-1, A-2



ICC A117.1 2017 ACCESSIBILITY NOTES

- THIS PROJECT MUST COMPLY WITH THE REQUIREMENTS OF THE 2017 ICC A117.1.
- THE JURISDICTIONS HAVING AUTHORITY WILL NOT REVIEW THE PROJECT DOCUMENTS OR CONSTRUCTION FOR CONFORMANCE WITH THE 2017 ICC A117.1. COMPLIANCE WITH THE ACCESSIBILITY CODE IS THE RESPONSIBILITY OF THE ENTIRE PROJECT TEAM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM COMPLIANCE PRIOR TO INSTALLATION OF FINISHED PRODUCTS. IF THERE ARE QUESTIONS REGARDING COMPLIANCE, DO NOT PROCEED WITH THE WORK, REQUEST CLARIFICATION FROM THE ARCHITECT AND AFTER RECEIPT OF RESPONSE, WORK MAY COMMENCE.
- CHANGES IN LEVEL ON ACCESSIBLE ROUTES, CHANGES IN LEVEL OF 1/4 INCH MAXIMUM IN HEIGHT SHALL BE PERMITTED TO BE VERTICAL. (SECTION 303.2) CHANGES IN LEVEL GREATER THAN 1/4 INCH IN HEIGHT AND NOT MORE THAN 1/2 INCH MAXIMUM IN HEIGHT SHALL BE REVEALED WITH A SLOPE NOT STEEPER THAN 1:2. (SECTION 303.3) CHANGES IN LEVEL GREATER THAN 1/2 INCH IN HEIGHT SHALL BE BY A RAMP COMPLYING WITH SECTION 405 OR A CURB RAMP COMPLYING WITH SECTION 406. (SECTION 303.4) AS APPLIES BASED ON RELATIVE LOCATION.
- DOOR HARDWARE ON ACCESSIBLE DOORS, HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERABLE PARTS ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE. THE OPERATIONAL FORCE TO RETRACT LATCHES OR DISENGAUGE DEVICES THAT HOLD THE DOOR OR GATE IN A CLOSED POSITION SHALL BE AS FOLLOWS: 1) HARDWARE OPERATION BY A FORWARD, PUSHING OR PULLING MOTION: 15 POUNDS MAXIMUM. 2) HARDWARE OPERATION BY A ROTATIONAL MOTION: 28 INCH POUNDS MAXIMUM. (SECTION 404.2.6) OPERABLE PARTS OF SUCH HARDWARE SHALL BE 34 INCHES MINIMUM AND 48" MAXIMUM ABOVE THE FLOOR. (SECTION 404.2.6.1) FIRE DOORS AND GATES REQUIRED TO BE EQUIPPED WITH PANIC HARDWARE, BREAK AWAY FEATURES OR OTHER FACTORS REQUIRING HIGHER OPERATIONAL FORCE FOR SAFETY REASONS SHALL HAVE THE MINIMUM OPERATIONAL FORCE ALLOWABLE IN SCOPING PROVISIONS ADOPTED BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY. FOR OTHER DOORS OR GATES THE FORCE FOR PUSHING OR PULLING OPEN DOORS OR GATES SHALL BE 5 LBS MAXIMUM.
- DOOR CLOSERS ON ACCESSIBLE DOORS, DOOR AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR OR GATE TO AN OPEN POSITION OF 12 DEGREES SHALL BE 5 SECONDS MINIMUM. (SECTION 404.2.7.1)
- DOOR SURFACE OF ACCESSIBLE DOORS, DOOR SURFACES AND GATE WITHIN 10 INCHES OF THE FLOOR, MEASURED VERTICALLY, SHALL BE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR OR GATE. DOOR AND GATE HARDWARE OR ANY OTHER OBSTRUCTION OR PROTRUSION SHALL NOT BE MOUNTED IN NOR EXTEND INTO THE AREA WITHIN 10 INCHES OF THE FLOOR. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN SUCH SURFACE SHALL BE WITHIN 1/16 INCH OF THE SAME PLANE AS THE OTHER CAVITIES CREATED BY ADDED KICK PLATES SHALL BE CAPPED. (SECTION 404.2.8)
- VISION LITES IN ACCESSIBLE DOORS, DOORS, GATES AND SIDELITES ADJACENT TO DOORS OR GATES CONTAINING ONE OR MORE GLAZING PANELS THAT PERMIT VIEWING THROUGH THE PANELS SHALL HAVE THE BOTTOM OF AT LEAST ONE PANEL ON EITHER THE DOOR, GATE OR AN ADJACENT SIDELITE 43 INCHES MAXIMUM ABOVE THE FLOOR. (SECTION 404.2.10)
- EXPOSED PIPES AND SURFACES AT ACCESSIBLE SINKS, WATER SUPPLY AND DRAINPIES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES AND SINKS. (SECTION 606.6)
- GRAB BAR CROSS SECTION: GRAB BARS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF 1.14 INCH MINIMUM AND 2 INCHES MAXIMUM. (SECTION 609.2.1) GRAB BARS WITH A NONCIRCULAR CROSS SECTION SHALL HAVE A CROSS SECTION DIMENSION OF 2 INCHES MAXIMUM, AND A PERIMETER DIMENSION OF 4 INCHES MINIMUM AND 4.8 INCHES MAXIMUM. (SECTION 609.2.2)
- GRAB BAR SPACING: THE SPACE BETWEEN THE WALL AND THE GRAB BAR SHALL BE 1-1/2 INCHES MINIMUM. THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS BELOW AND AT THE ENDS OF THE GRAB BAR SHALL BE 1-1/2 INCHES MINIMUM. THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS ABOVE THE GRAB BAR SHALL BE 12 INCHES MINIMUM. (SECTION 609.3)
- GRAB BAR STRUCTURAL STRENGTH: ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHERE A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER MOUNTING DEVICE, OR SUPPORTING STRUCTURE. (SECTION 609.8)
- PARALLEL APPROACH TO COUNTER: A PORTION OF THE PUBLIC USE SIDE OF THE COUNTER SURFACE 36 INCHES MINIMUM IN LENGTH AND 28 INCHES MINIMUM TO 36 INCHES MAXIMUM IN HEIGHT ABOVE THE FLOOR SHALL BE PROVIDED. WHERE THE COUNTER SURFACE IS LESS THAN 36 INCHES IN LENGTH, THE ENTIRE COUNTER SURFACE SHALL BE 28 INCHES MINIMUM TO 36 INCHES MAXIMUM IN HEIGHT ABOVE THE FLOOR. A CLEAR FLOOR SPACE, POSITIONED FOR A PARALLEL APPROACH ADJACENT TO THE ACCESSIBLE COUNTER SHALL BE PROVIDED THE SPACE BETWEEN THE ACCESSIBLE COUNTER AND ANY PROJECTING OBJECTS ABOVE THE ACCESSIBLE COUNTER SHALL BE 12 INCHES MINIMUM. (SECTION 904.3.2)
- FORWARD APPROACH TO COUNTER: A PORTION OF THE PUBLIC USE SIDE OF THE COUNTER SURFACE 30 INCHES (760 MM) MINIMUM IN LENGTH AND 36 INCHES (915 MM) MAXIMUM IN HEIGHT ABOVE THE FLOOR SHALL BE PROVIDED. A CLEAR FLOOR SPACE, POSITIONED FOR A FORWARD APPROACH TO THE ACCESSIBLE COUNTER SHALL BE PROVIDED. KNEE AND TOE CLEARANCE COMPLYING WITH SECTION 306 SHALL BE PROVIDED UNDER THE ACCESSIBLE COUNTER THE SPACE BETWEEN THE ACCESSIBLE COUNTER AND ANY PROJECTING OBJECTS ABOVE THE ACCESSIBLE COUNTER SHALL BE 12 INCHES MINIMUM. (SECTION 904.3.3)
- CARPET: CARPET OR CARPET TILE SHALL BE SECURELY ATTACHED AND SHALL HAVE A FIRM CUSHION, PAD OR BACKING OR NO CUSHION OR PAD. CARPET OR CARPET TILE SHALL HAVE A LEVEL LOOP, TEXTURED LOOP, LEVEL CUT PILE, OR LEVEL CUT/NO CUT PILE TEXTURE. PILE HEIGHT SHALL BE 1/2" MAXIMUM. EXPOSED EDGES OF CARPET SHALL BE FASTENED TO THE FLOOR OR GROUND SURFACES AND SHALL HAVE TRIM ALONG THE ENTIRE LENGTH OF THE EXPOSED EDGE. CARPET EDGE TRIM SHALL COMPLY WITH SECTION 303. (SECTION 302.2)
- ACCESSIBLE DOORS SHALL MEET ALL OF THE APPLICABLE REQUIREMENTS OF SECTION 404 FOR DOOR MANEUVERING SPACE, DOOR HARDWARE, DOOR CLOSERS AND DOOR OPENING FORCE.

TACTILE SIGN REQUIREMENTS - NOTES

- THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE THE STANDARD USED TO IDENTIFY FACILITIES THAT ARE ACCESSIBLE TO AND USABLE BY PHYSICALLY DISABLED PERSONS AS SET FORTH IN THE ACCESSIBILITY CODE NOTED ON THE CODE ANALYSIS SHEET AND AS SPECIFICALLY REQUIRED IN THIS SECTION.
- REQUIRED ACCESSIBLE ELEMENTS SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AT THE FOLLOWING LOCATIONS:
 - ACCESSIBLE ENTRANCES WHERE NOT ALL ENTRANCES ARE ACCESSIBLE. A TACTILE SIGN STATING "EXIT" AND COMPLYING WITH THE ACCESSIBILITY CODE NOTED ON THE COVER SHEET SHALL BE PROVIDED ADJACENT TO EACH DOOR TO AN EXIT PASSAGEWAY AND THE EXIT DISCHARGE REEF DOOR SCHEDULE FOR LOCATIONS.
 - ACCESSIBLE ROOMS WHERE MULTIPLE SINGLE-USER TOILETS ARE CLUSTERED AT A SINGLE LOCATION.
 - UNISEX TOILET AND BATHING ROOMS.
 - DIRECTIONAL SIGNAGE INDICATING THE ROUTE TO THE NEAREST LIKE ACCESSIBLE ELEMENT SHALL BE PROVIDED AT EACH SEPARATE-SEX TOILET INDICATING THE LOCATION OF THE NEAREST UNISEX TOILET.
- CHARACTERS SHALL CONFORM TO THE FOLLOWING:
 - CHARACTERS, SYMBOLS AND PICTOGRAMS SHALL CONTRAST THEIR FIELDS AND HAVE A NON-GLARE FINISH. CONTRAST CAN BE ACHIEVED WITH EITHER A LIGHT PICTOGRAM ON A DARK FIELD OR A DARK PICTOGRAM ON A LIGHT FIELD.
 - WHEN PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES, RAISED LETTERS SHALL BE ACCOMPANIED BY BRAILLE.
 - LETTERS AND NUMBERS ON SIGNS SHALL BE RAISED 1/32" MINIMUM AND SHALL BE SANS-SERIF UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 BRAILLE.
 - CONTRACTED GRADE 2 BRAILLE SHALL BE USED. DOTS SHALL BE 0.090" (2.3 MM) TO 0.100" (2.5 MM) ON CENTER IN EACH CELL WITH 0.241" (6.1 MM) TO 0.300" (7.6 MM) SPACE BETWEEN CELLS. DOTS SHALL BE RAISED A MINIMUM OF 0.025" (0.6 MM) TO 0.037" (0.9 MM) ABOVE THE BACKGROUND.
 - FOR CHARACTER SIZE, THE UPPERCASE LETTER "O" SHALL BE USED TO DETERMINE THE ALLOWABLE WIDTH OF ALL CHARACTERS OF A FONT. THE WIDTH OF THE UPPERCASE LETTER "O" OF THE FONT SHALL BE 80 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE "T" OF THE FONT. CHARACTER HEIGHT MEASURED FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8" (16 MM) MINIMUM AND 2 INCHES (51 MM) MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER "T".
 - PICTORIAL SYMBOL SIGNS (PICTOGRAMS) SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE A MINIMUM OF 6" IN HEIGHT.
- SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE INCLUDING DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18 INCHES (457 MM) MINIMUM BY 18 INCHES (457 MM) MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION. EXCEPTION: SIGNS WITH TACTILE CHARACTERS SHALL BE PERMITTED ON THE PUSH SIDE OF DOORS WITH CLOSERS AND WITHOUT HOLD-OPEN DEVICES.
- MOUNTING HEIGHT SHALL BE LOCATED 48 INCHES (1220 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASE OF THE LOWEST BRAILLE CELLS AND 90 INCHES (2286 MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE HIGHEST TACTILE CHARACTER.

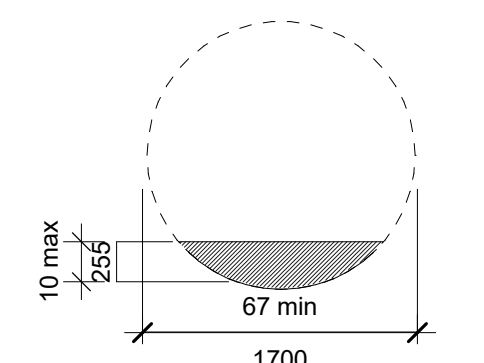


FIGURE 304.3.1.1 CIRCULAR TURNING SPACE - NEW BUILDINGS SIZE AND OVERLAP

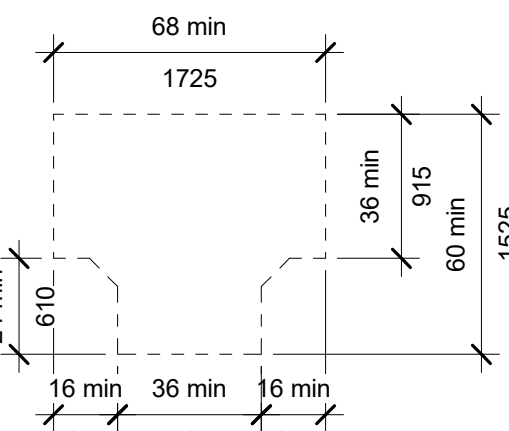


FIGURE 304.3.2.1 (B) T-SHAPED TURNING SPACE NEW BUILDINGS - OPTION 2

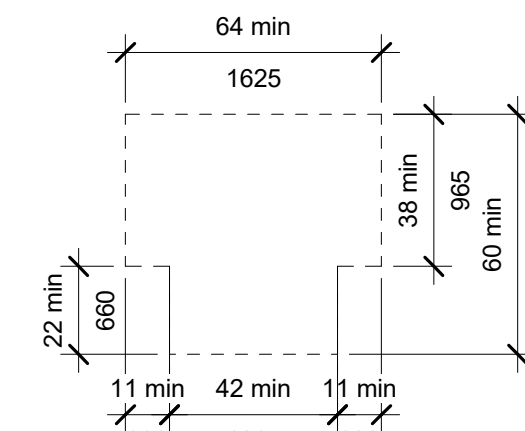


FIGURE 304.3.2.1 (C) T-SHAPED TURNING SPACE NEW BUILDINGS - OPTION 3

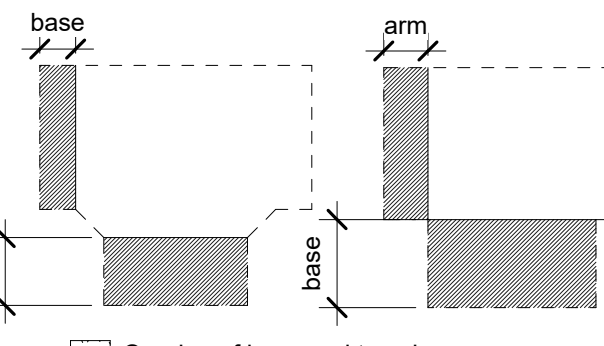
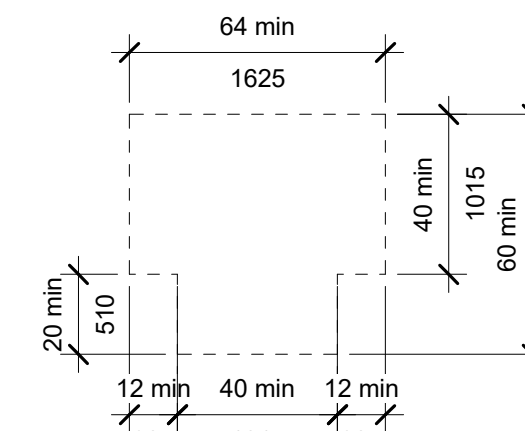
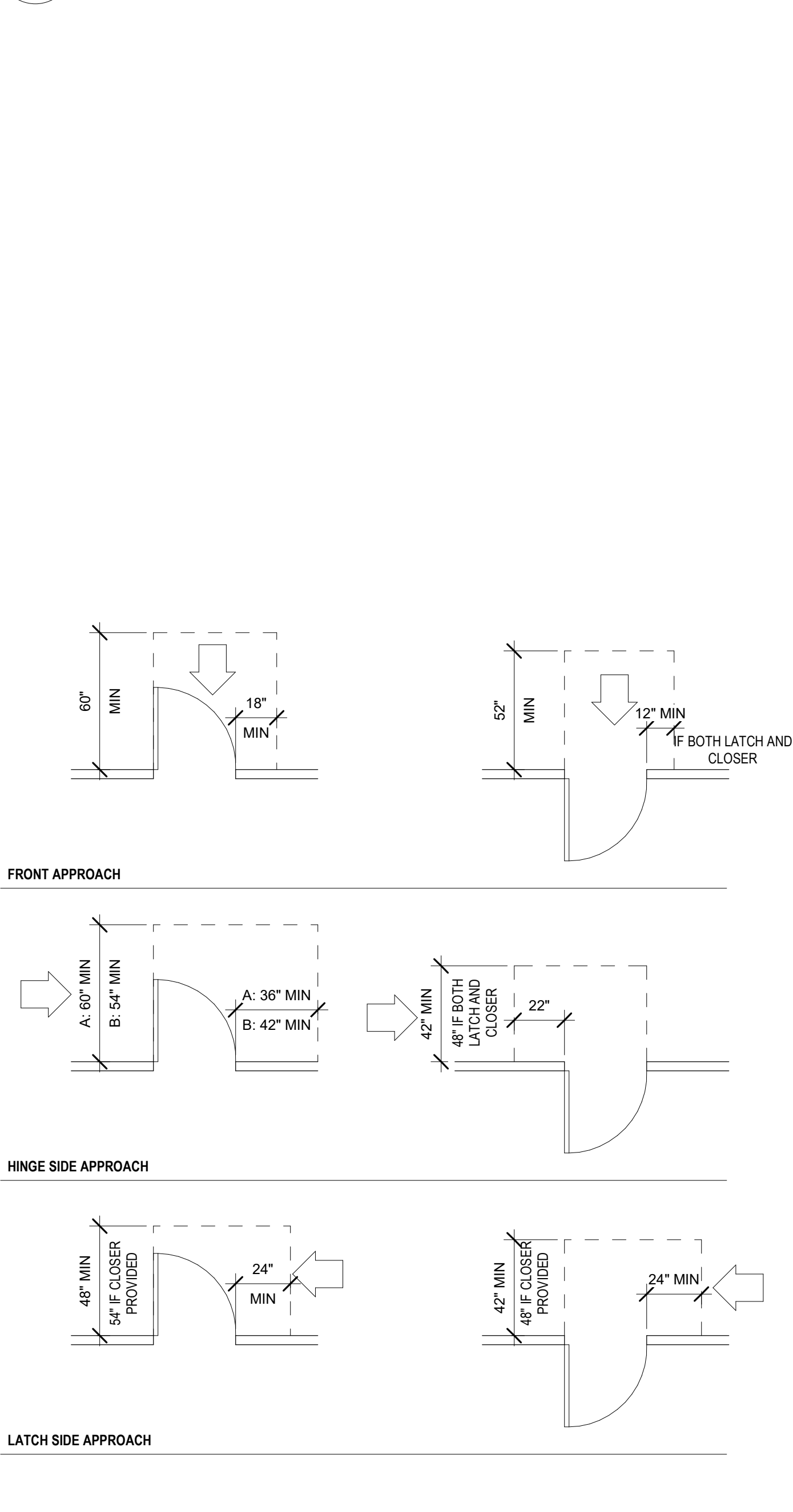
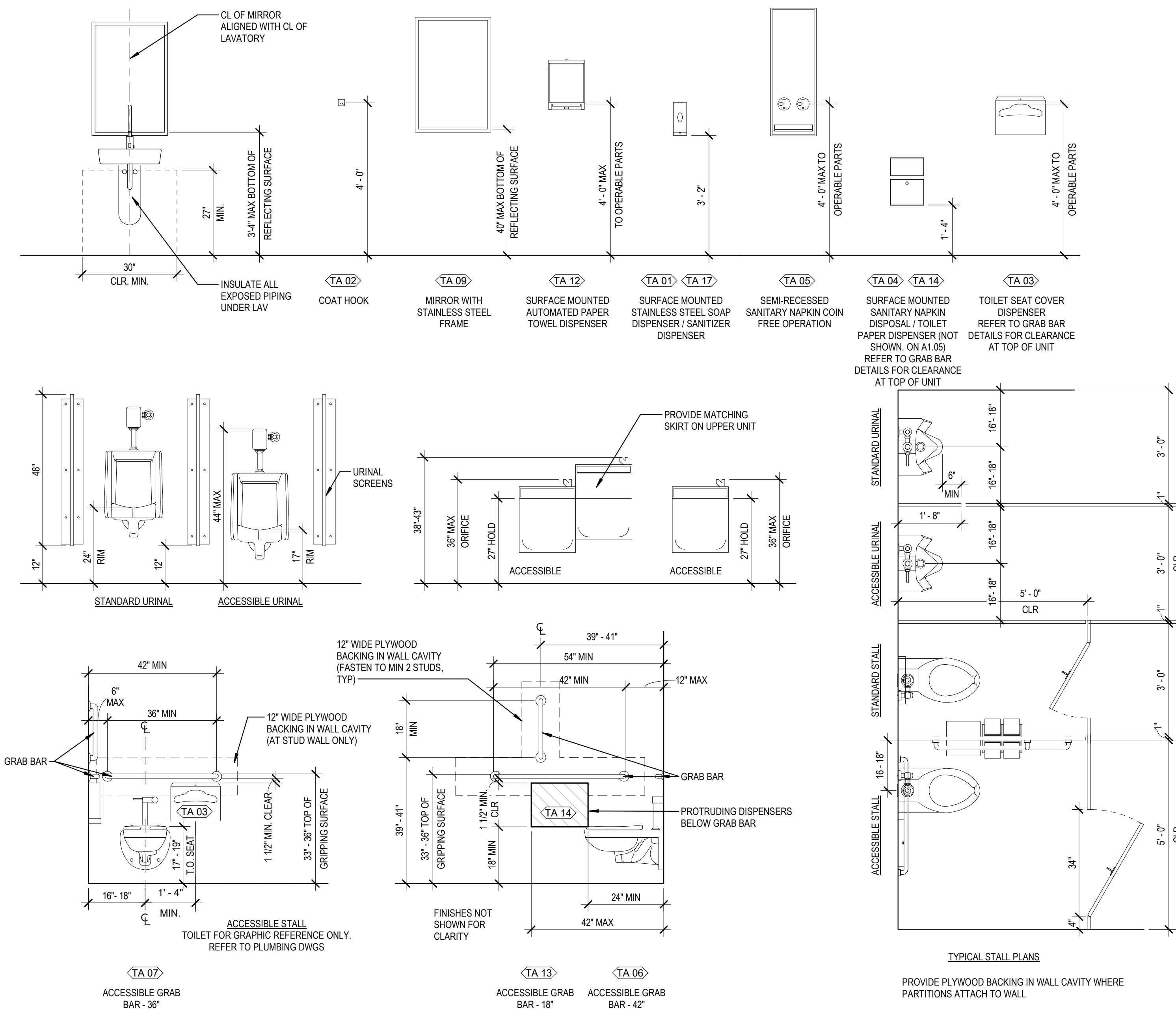


FIGURE 305.3.1 SIZE OF CLEAR FLOOR SPACE - NEW BUILDINGS

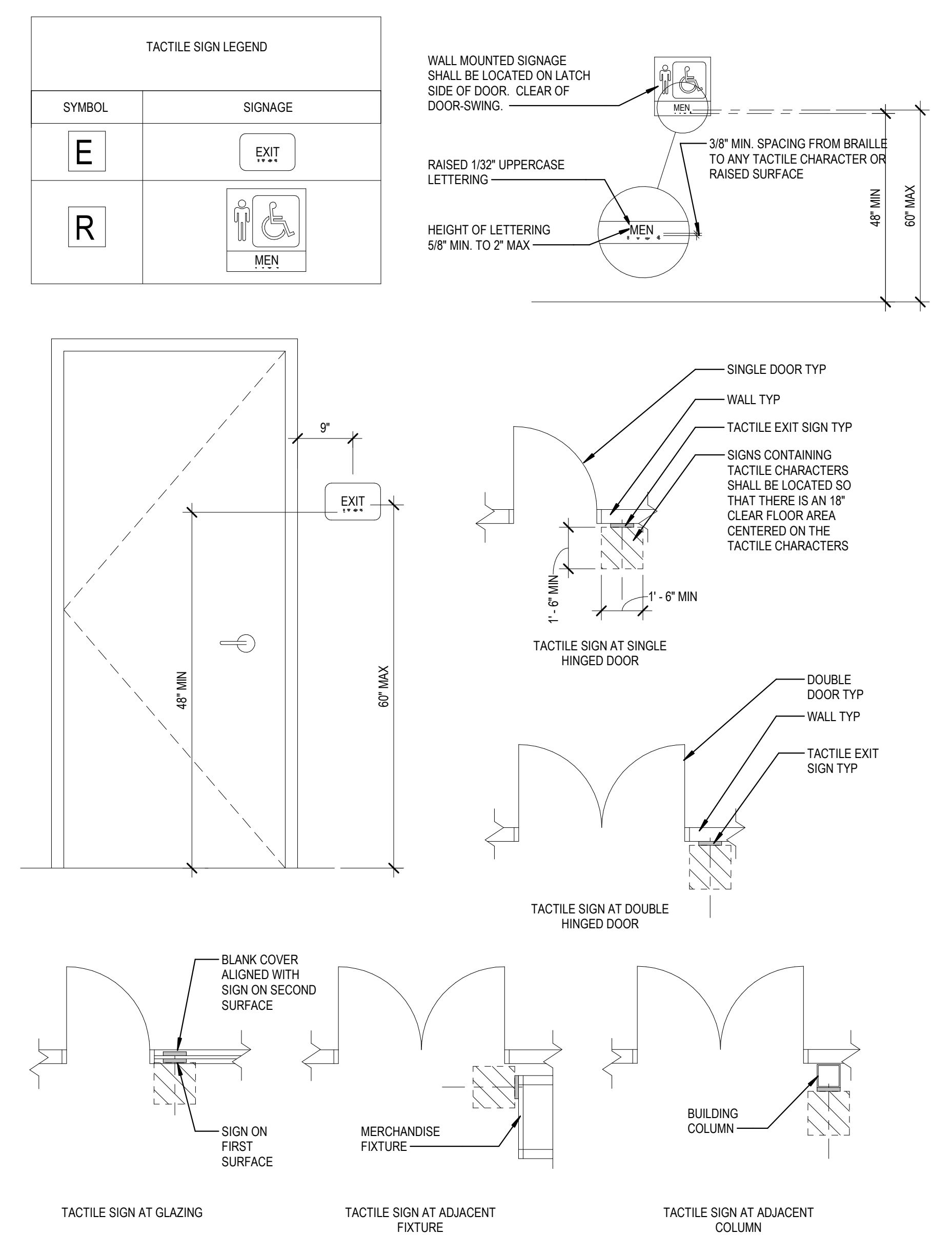
4 2017 ICC A117.1 FLOOR CLEARANCES



3 ACCESSIBLE DOOR CLEARANCES
G1.02 Scale: 1/4" = 1'-0"



2 TYPICAL FIXTURE ELEVATIONS AND CLEARANCES
G1.02 Scale: 1/2" = 1'-0"



1 TACTILE SIGN REQUIREMENTS
G1.02 Scale: 3/4" = 1'-0"

Revisions / Submissions		
ID	Description	Date
1	PERMIT SET	04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: SW / CB
Checked By: DZ
Date: 04.25.2025
Issue: PERMIT SET

SIGNAGE COLOR LEGEND

COLOR NAME	COLOR	GLOSS VINYL	REFLECTIVE VINYL	PAINT
C1 WHITE		SCOTCHCAL WHITE 230-20	SCOTCHCAL 280-WHITE 280-10	GLOSS WHITE TWO PART CATALYST HARDENED ACRYLIC ENAMEL
C2 BLACK		SCOTCHCAL BLACK 230-22 (PANTONE BLACK C)	SCOTCHCAL 280-BK 280-85	
C2B SQUID INK BLACK		SQUID INK BLACK 230-22 (PANTONE 432C)		ACRYLIC PUSH-THRU GRAPHICS, WOPAQUE SQUID INK
C3 YELLOW		TENANT YELLOW (PANTONE 137 U, PANTONE 1375 C)		
C4 GRAY		SCOTCHCAL MEDIUM GRAY 230-31		SATIN FINISH TWO PART CATALYST HARDENED ACRYLIC ENAMEL
C5 RED		SCOTCHCAL RED 230-33 (PANTONE 4852X)		
C6 BLUE		SCOTCHCAL COBAL BLUE (PANTONE 288C)	SCOTCHCAL BLUE 230-75	
C7 TEAL BLUE		TENANT BLUE 2727C (PANTONE 279U)		
C8 ACCESSIBLE BLUE		SCOTCHCAL ACCESSIBLE BLUE (PANTONE 299C)		
C9 GREEN		GREEN (PANTONE 348C)		
C10 MUSTER BLUE		MUSTER BLUE (PANTONE 300C)		
C11 ORANGE		ORANGE (PANTONE 165C)		
C12 PURPLE		PURPLE (PANTONE 267C)		
C13 MUSTER RED		MUSTER RED (PANTONE 185C)		
C14 MUSTER YELLOW		MUSTER YELLOW (PANTONE 116C)		

SAFETY COLOR LEGEND

COLOR NAME	COLOR	GLOSS VINYL	REFLECTIVE VINYL	PAINT
SAFETY RED		PMS 186C		(PT-4)
SAFETY ORANGE		PMS 151C		
SAFETY YELLOW		PMS 109C		(PT-3)
SAFETY GREEN		PMS 335C		

VINYL GRAPHICS GENERAL NOTES

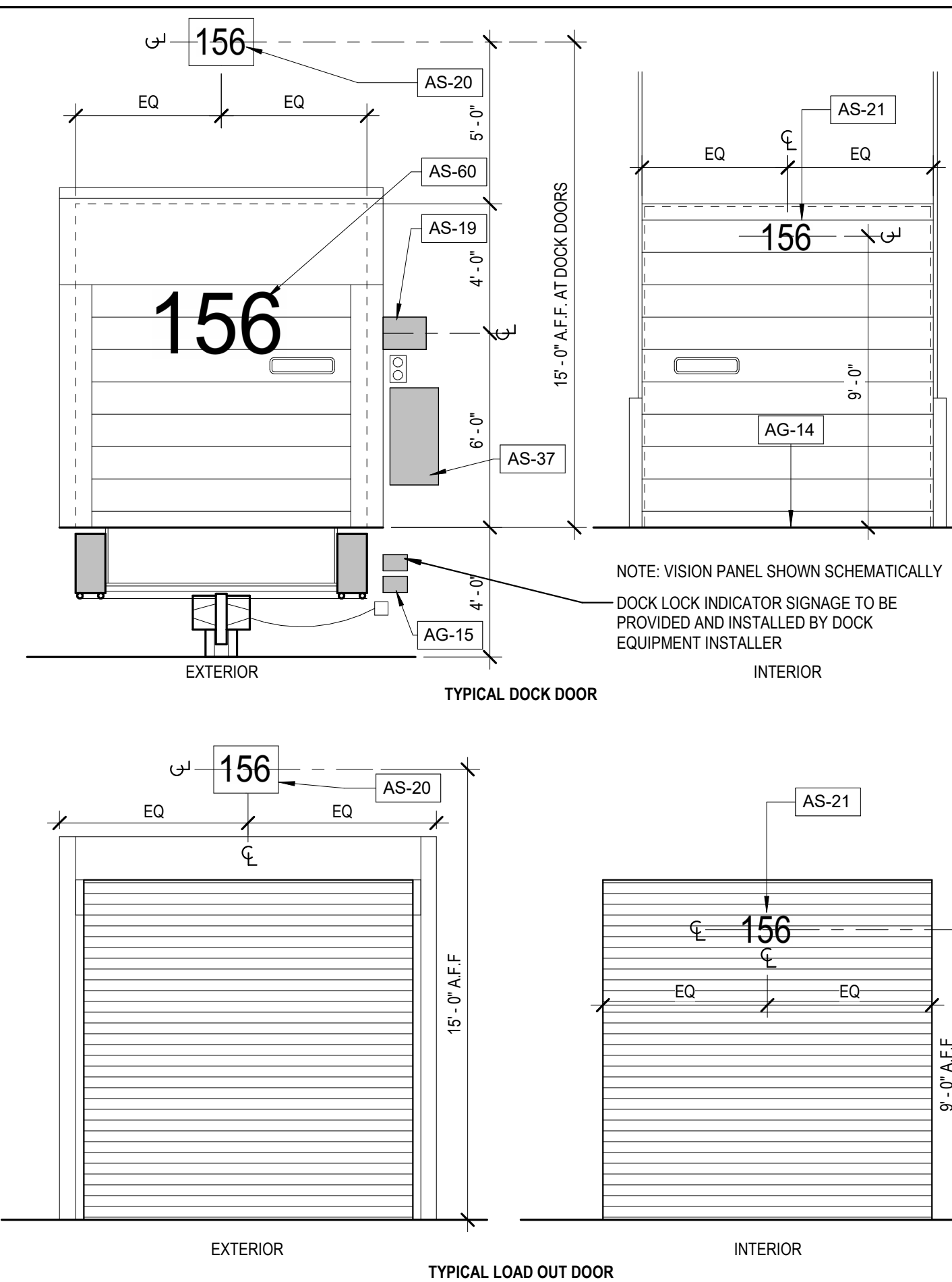
DOOR SIGNS: REFER TO DOOR SIGN PLACEMENT DETAIL ON THIS SHEET FOR MOUNTING HEIGHTS.

DESCRIPTION: CUSTOM CUT VINYL GRAPHICS, ATTACHED TO FIRST SURFACE OF EXTERIOR GLASS.

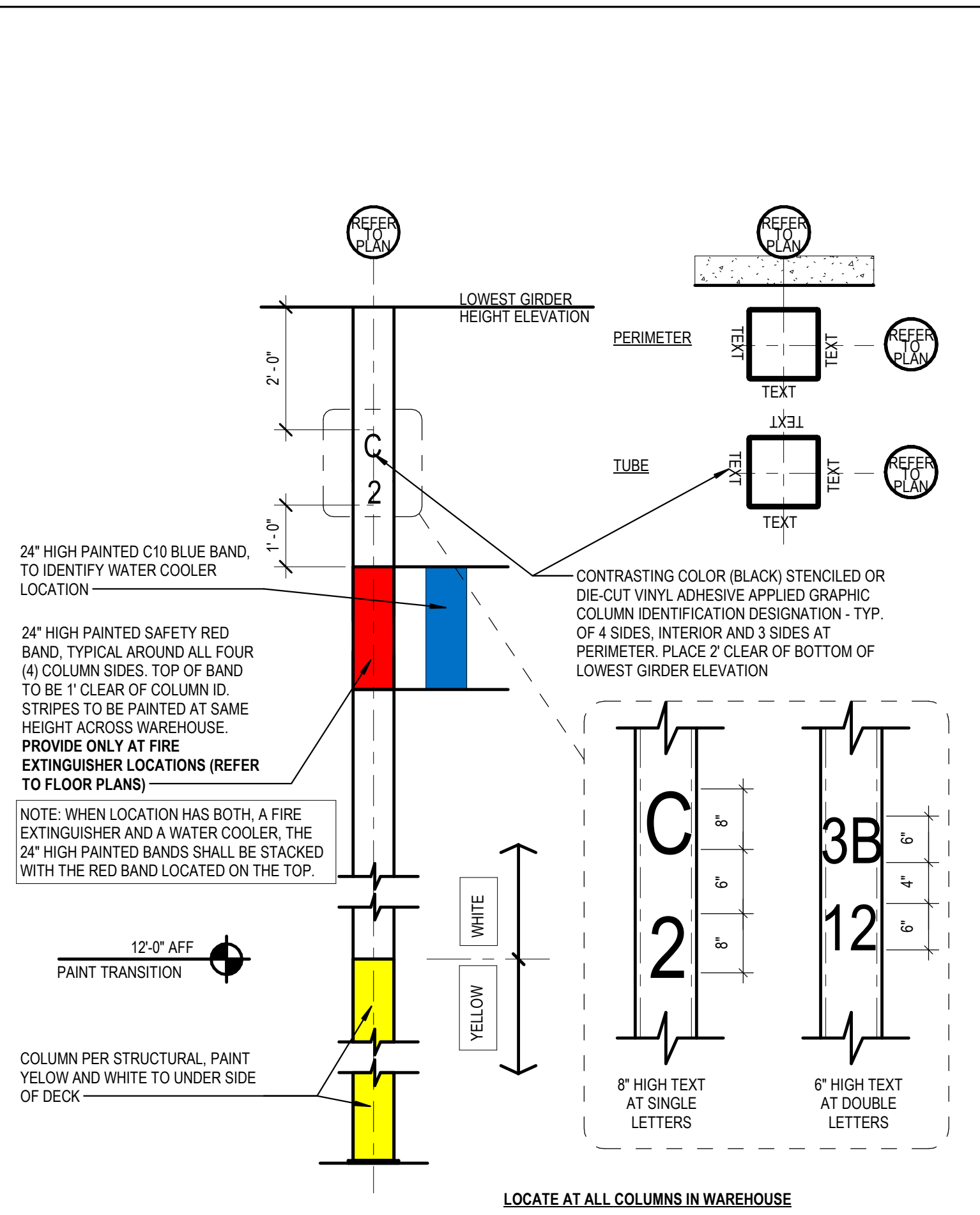
GRAPHICS AND TYPOGRAPHY: SIGN GRAPHICS ARE HEAVY DUTY 3M VINYL. LOGO IS A HIGH RESOLUTION DIGITAL PRINT ON PERMANENT ADHESIVE PRESSURE SENSITIVE VINYL. SUBSTRATE WITH LUSTER OVER LAMINATE, CUT TO SHAPE FROM VECTOR FILE. COPY IS MATTED WHITE VINYL.

INSTALLATION: LOCATIONS ARE GENERALLY NOTED ON THE ATTACHED LOCATION PLANS. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL INSTALLATION CONDITIONS PRIOR TO FABRICATION. THE INSTALLATION METHODS AND DETAILS FOR EACH LOCATION SHALL BE ILLUSTRATED IN THE SUBMITTED SHOP DRAWINGS. FINAL LOCATION WILL BE APPROVED ON SITE BY THE TENANT REPRESENTATIVE.

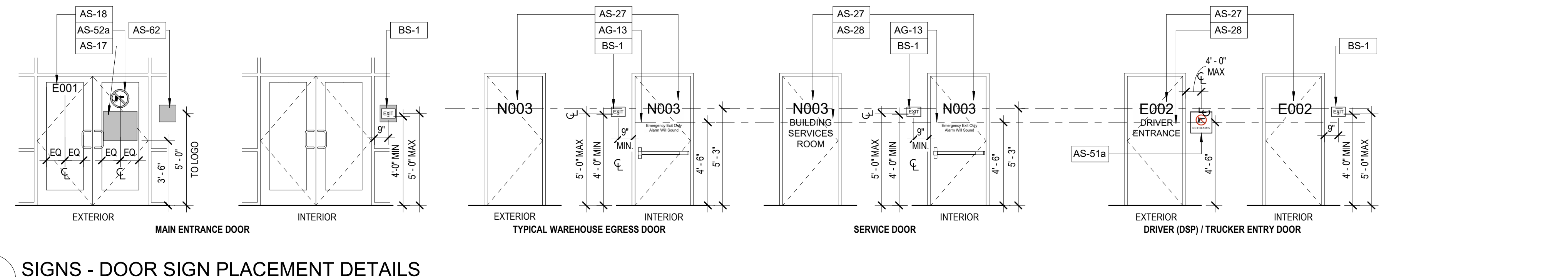
SUBMITTALS: SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION.



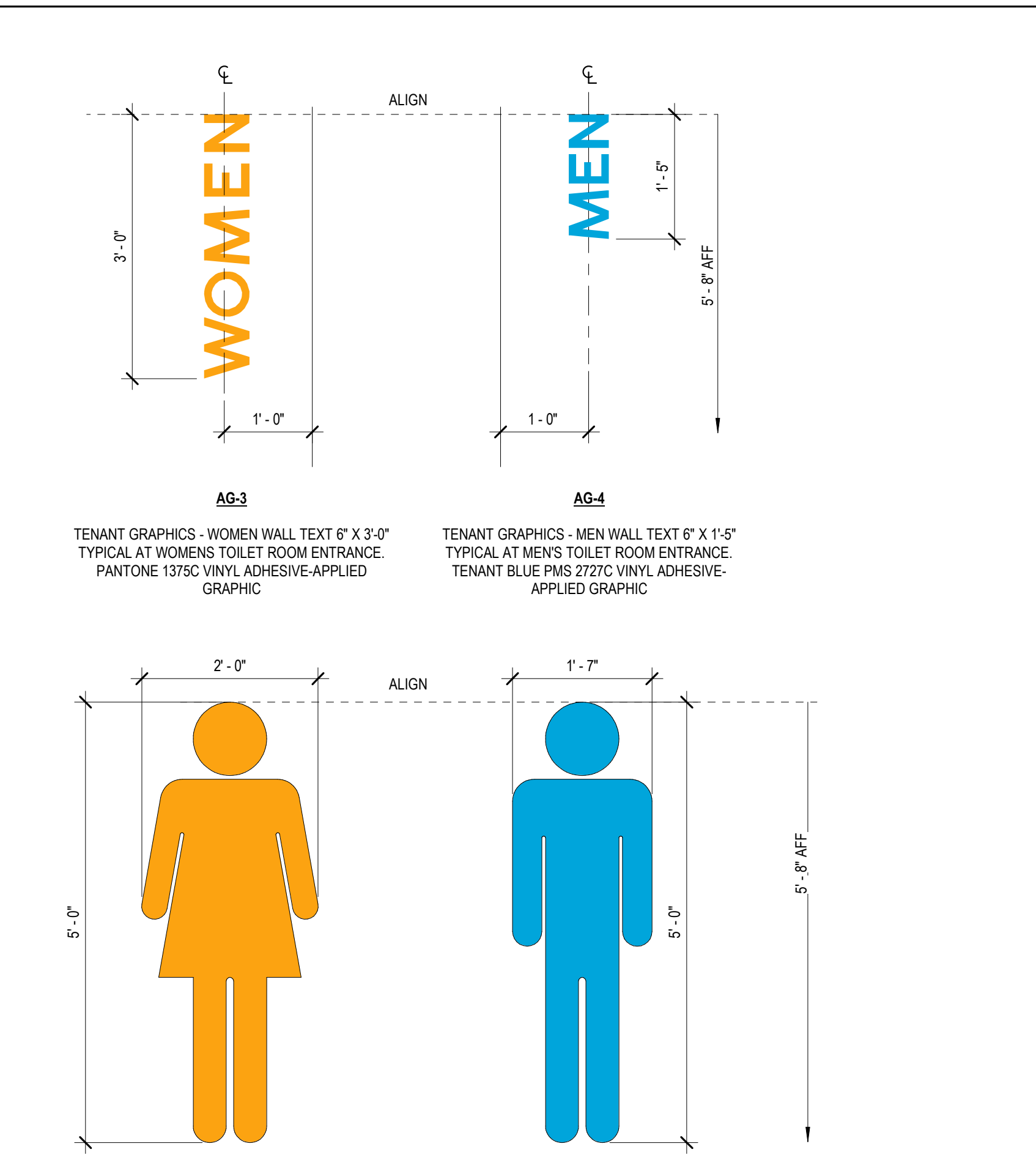
8 DOOR SIGNAGE PLACEMENT DETAILS
G1.10 Scale: 1/4" = 1'-0"



7 COLUMN ID DETAIL
G1.10 Scale: 1/2" = 1'-0"

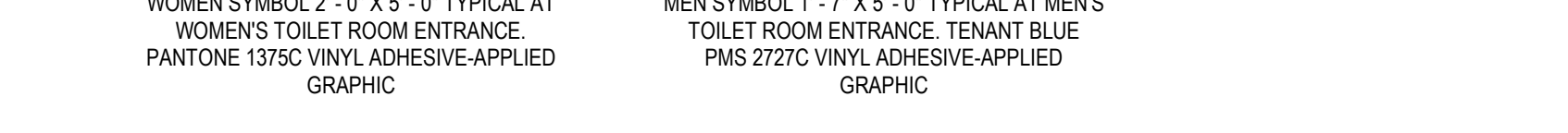


4 SIGNS - DOOR SIGN PLACEMENT DETAILS
G1.10 Scale: 1/4" = 1'-0"

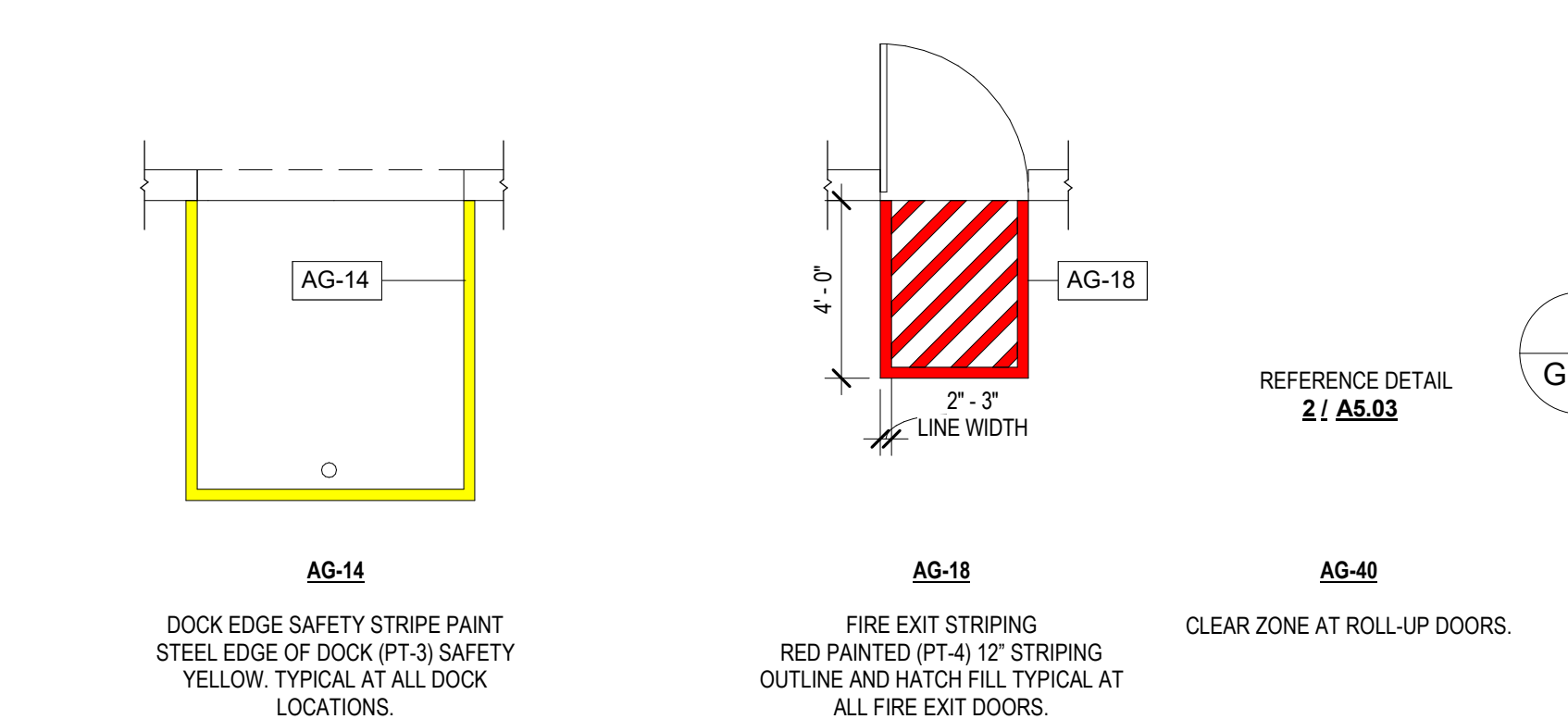


AG-3 TENANT GRAPHICS - WOMEN WALL TEXT 6" X 3'-0" TYPICAL AT WOMENS TOILET ROOM ENTRANCE. PANTONE 1375C VINYL ADHESIVE-APPLIED GRAPHIC

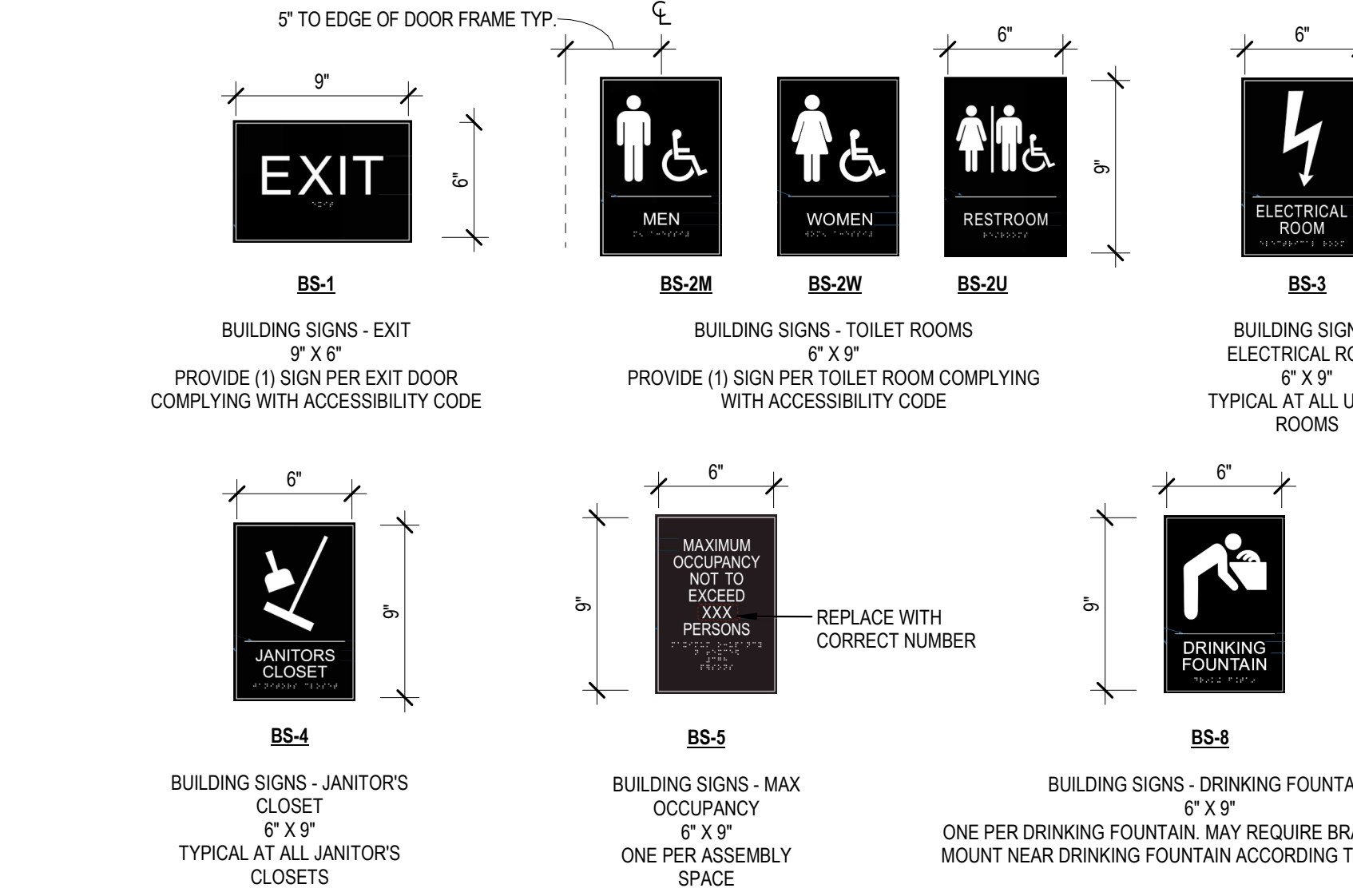
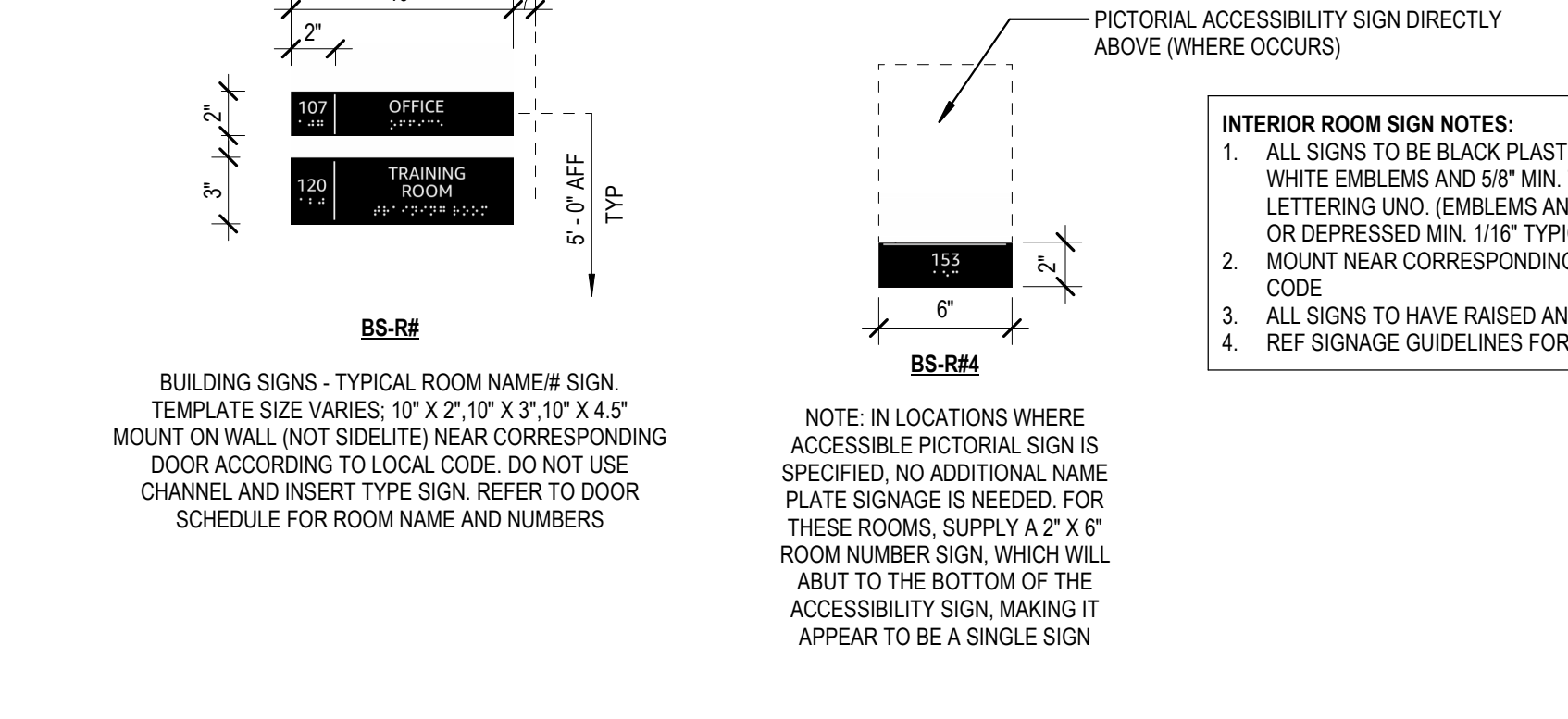
AG-4 TENANT GRAPHICS - MEN WALL TEXT 6" X 1'-5" TYPICAL AT MENS TOILET ROOM ENTRANCE. TENANT BLUE PMS 2727C VINYL ADHESIVE-APPLIED GRAPHIC



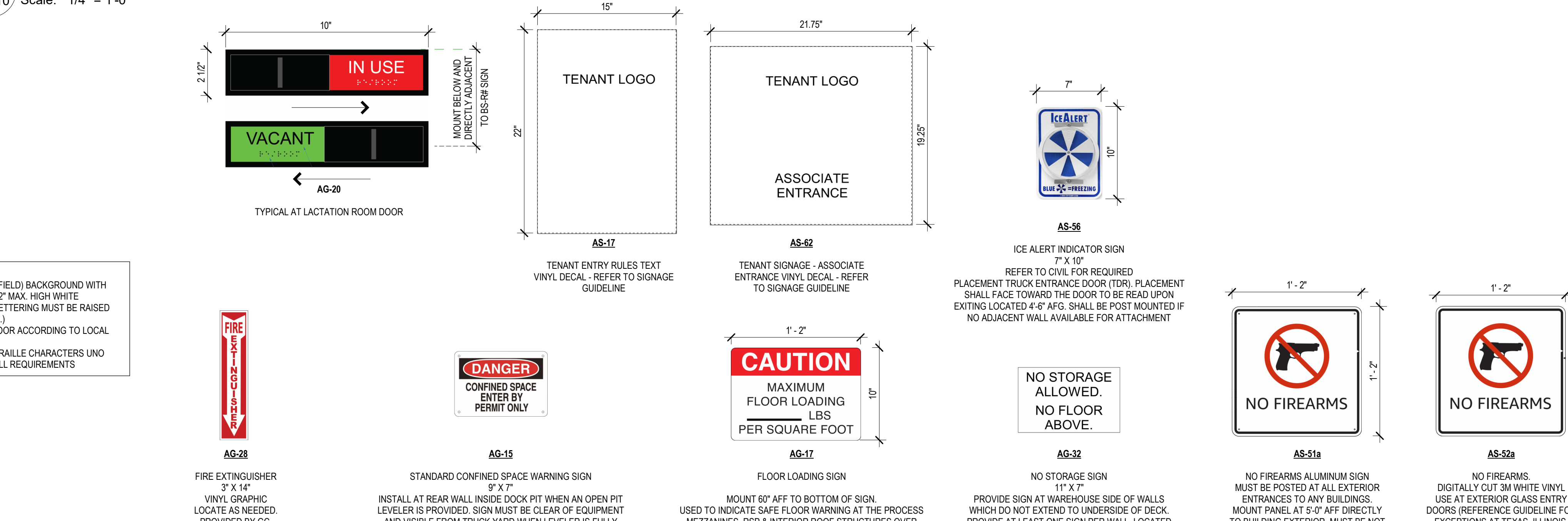
6 SIGNAGE GRAPHICS
G1.10 Scale: 3/4" = 1'-0"



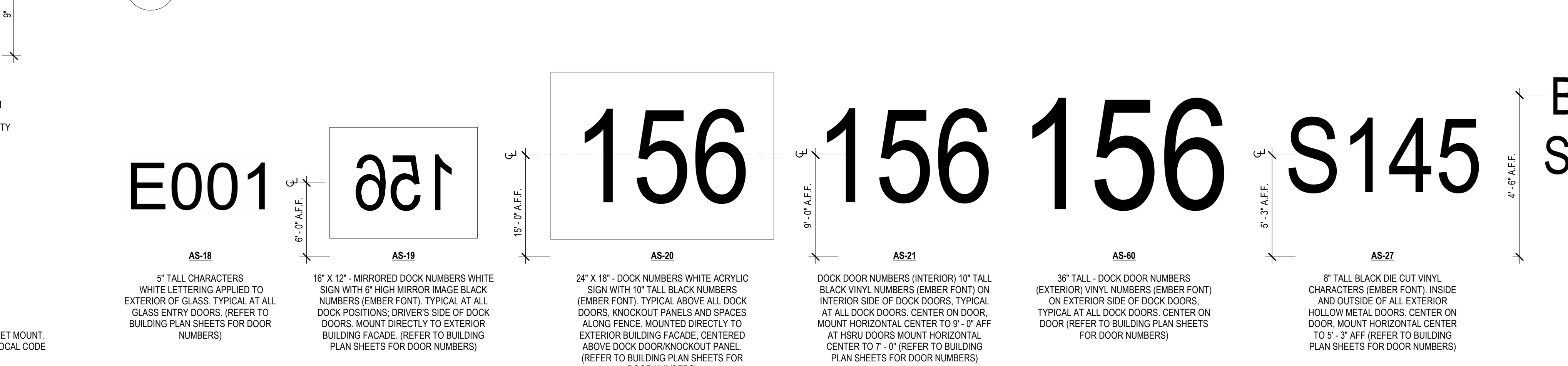
5 FLOOR STRIPING
G1.10 Scale: 1/4" = 1'-0"



2 SIGNS - INTERIOR ROOM SIGNS
G1.10 Scale: 1 1/2" = 1'-0"



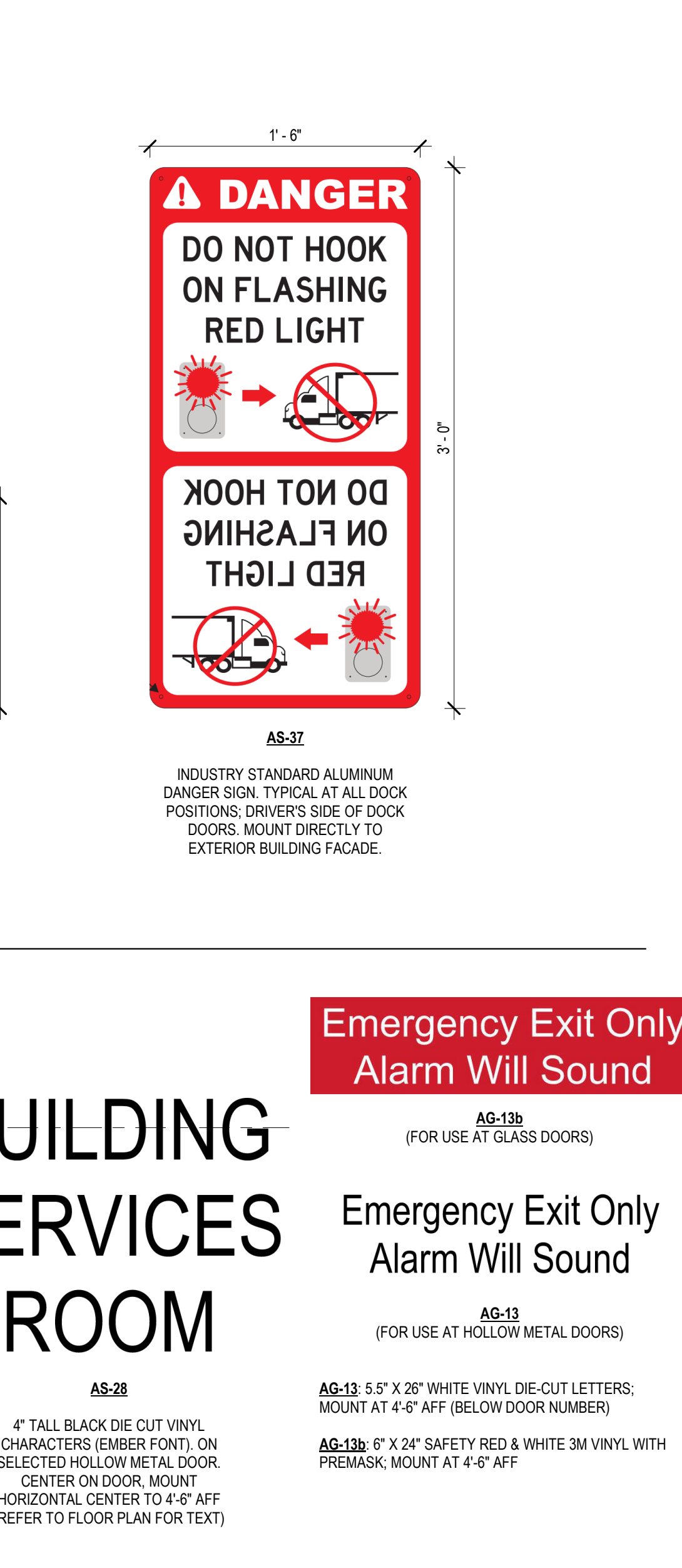
3 SIGNS - TENANT SIGNS
G1.10 Scale: 1 1/2" = 1'-0"



1 SIGNS - VINYL LETTERING
G1.10 Scale: 1 1/2" = 1'-0"

SIGNAGE GENERAL NOTES

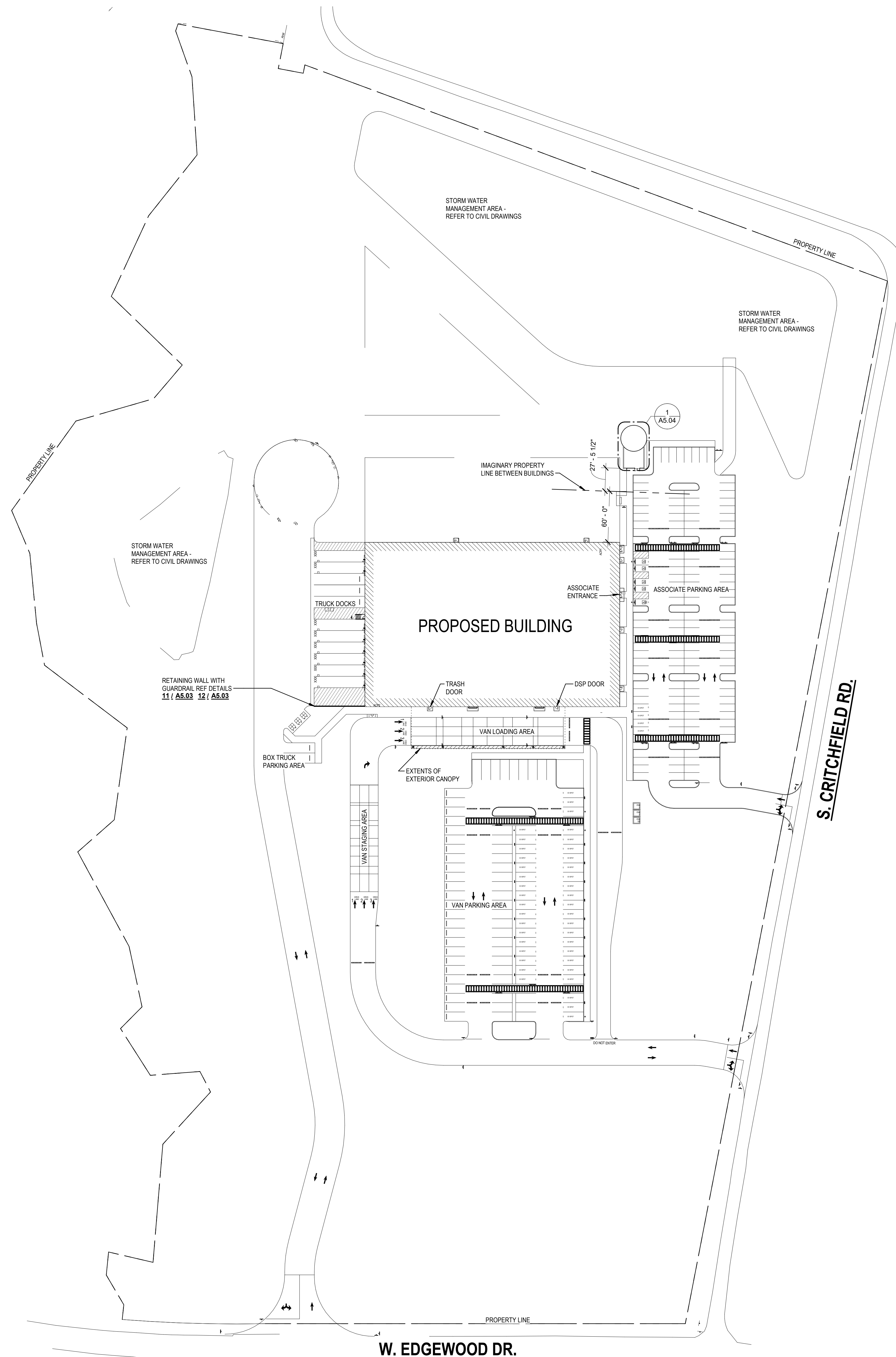
- REFER TO SEPARATE CIVIL DRAWINGS FOR EXTERIOR SIGNAGE AND PAVEMENT MARKINGS.
- FINAL QUANTITIES OF SIGNAGE SHALL BE COORDINATED AND VERIFIED IN FIELD.
- ADDITIONAL SIGNAGE NOT SHOWN ON GRAPHICS PLAN MAY BE REQUIRED PER LOCAL CODE AND/OR AHJ. SUB-CONTRACTOR SHALL COORDINATE WITH LOCAL AHJ AND PROVIDE AS REQUIRED.
- MOUNT SIGNAGE ACCORDING TO LOCAL CODES.
- TYPICAL SIGN FONT IS SET IN TENANT'S EMBER.
- ALL TEXT AND GRAPHICS SHALL BE WHITE IF THEY ARE TO BE PLACED ON A RED BACKGROUND.
- UNLESS NOTED OTHERWISE, ALL SIGNAGE AND GRAPHICS ARE TO BE PROVIDED AND INSTALLED BY GC.
- ALL PERMANENT SIGNAGE TO ACCESSIBLE AREAS TO HAVE RAISED BRAILLE CHARACTERS PER ACCESSIBILITY CODE.
- REFER TO DOOR SCHEDULE FOR DOOR SIGNAGE REQUIRED TEXT.
- ALL SIGNS ARE SHOWN FOR REFERENCE ONLY. REFER TO MOST CURRENT GSF SIGNAGE GUIDELINE FOR FULL SIGNAGE PACKAGE AND CRITERIA.
- REFER TO SPECS FOR FLOOR MARKINGS REQUIRED AT ELECTRICAL EQUIPMENT.



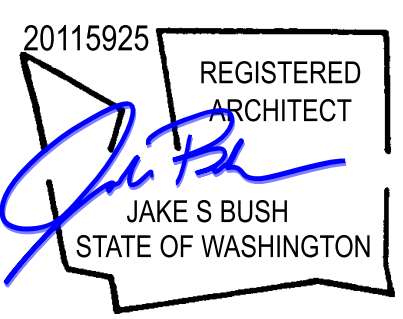
BUILDING SERVICES ROOM
G1.10 Scale: 1 1/2" = 1'-0"

SITE PLAN SHEET NOTES

1. REFER TO CIVIL DRAWINGS FOR NEW SITE SIGNAGE.
2. REFER TO CIVIL DRAWINGS FOR NEW PARKING STALL DIMENSIONS AND SIZES.
3. REFER TO CIVIL DRAWINGS FOR FULL SITE SCOPE OF WORK.
4. MAIL BOX PROVIDED AND INSTALLED BY G.C. SALSBUURY 4350 (MAILBOX), 4385 (IN-GROUND MOUNTED PEDESTAL), BLACK, INCLUDE FLAG, NEWSPAPER HOLDER, & NON-LOCKING THUMB LATCH. LOCATION TO BE COORDINATED WITH LOCAL USPS AND WITH TENANT CM.



***THIS SITE PLAN FOR REFERENCE ONLY. REFER TO SEPARATE CIVIL DRAWING OR SITE WORK PACKAGE ***



4.25.2025 Exp: 4.10.2026

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD., PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
	PERMIT SET	04.25.2025

Project number:	763838-02
Scale:	AS NOTED
Drawn By:	SW / CB
Checked By:	DZ
Date:	04.25.2025
Issue:	PERMIT SET

Sheet Title:
ARCHITECTURAL SITE PLAN

INTERIOR WALL TYPE PARTITIONS

PARTITION CODE (M.F.)	STUD SIZE	STUD SPACING	FINISH SIDES		PARTITION WIDTH	FIRE RATING INFORMATION			COMMENTS
			SIDE 1 (TAG SIDE)	SIDE 2		FIRE RATING	FIRE TEST DESIGN NUMBER	STC	
A6	8"	16" O.C.	5/8" GYP. BD (1 LAYER)	5/8" GYP. BD (1 LAYER)	7' 1/4"				
A8	8"	16" O.C.	5/8" GYP. BD (1 LAYER)	5/8" GYP. BD (1 LAYER)	9' 1/4"				
AB.1	8"	16" O.C.	5/8" TYPE 'X' GYP. BD (1 LAYER)	5/8" TYPE 'X' GYP. BD (1 LAYER)	9' 1/4"	1 HR	UL U419		
C3	3.5/8"	16" O.C.	5/8" WATER RESISTANT GYP. BD (1 LAYER)	5/8" GYP. BD (1 LAYER)	4' 7/8"				WATER RESISTANT GYP. BD. ON SIDES WITH PLUMBING FIXTURES, AND AS INDICATED IN SHEET NOTE 1
C6	8"	16" O.C.	5/8" WATER RESISTANT GYP. BD (1 LAYER)	5/8" GYP. BD (1 LAYER)	9' 1/4"				WATER RESISTANT GYP. BD. ON SIDES WITH PLUMBING FIXTURES, AND AS INDICATED IN SHEET NOTE 1
D3	3.5/8"	16" O.C.	5/8" WATER RESISTANT GYP. BD (1 LAYER)	N/A	4' 1/4"				WATER RESISTANT GYP. BD. ON SIDES WITH PLUMBING FIXTURES, AND AS INDICATED IN SHEET NOTE 1
E8	8"	16" O.C.	5/8" GYP. BD (2 LAYERS)	5/8" GYP. BD (1 LAYER)	9' 7/8"			45-49	
F3	3.5/8"	16" O.C.	5/8" GYP. BD (1 LAYER)	N/A	4' 1/4"				

NOTES:
 1. REFER TO G0.02 FOR WALL TAG LEGEND.
 2. REFER TO FLOOR PLANS FOR EXTENTS OF WALL INSULATION.
 3. REFER TO S0.20 'STEEL STUD SIZE' CHART FOR MINIMUM GAUGE.

SHEET NOTES

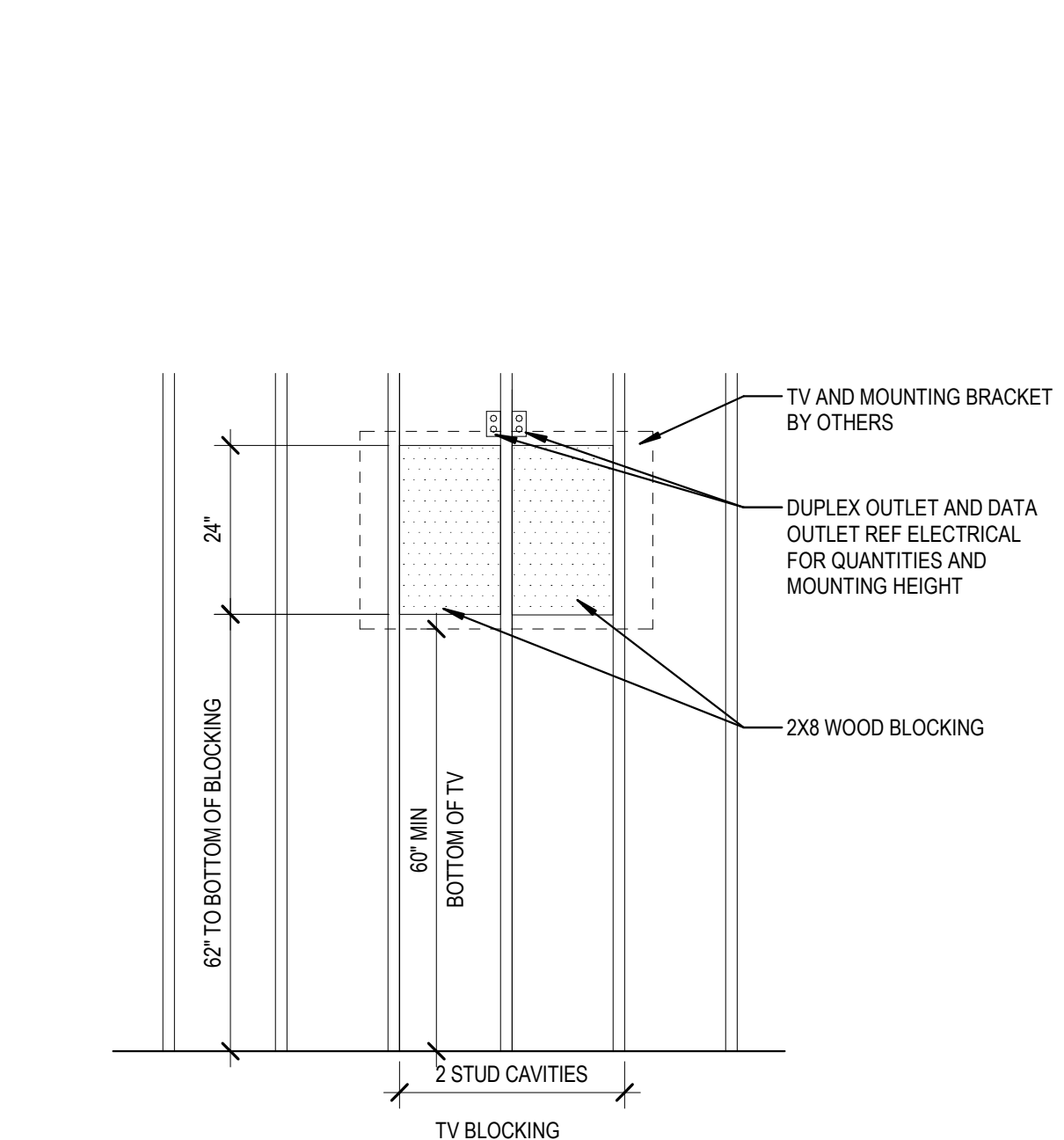
- ALL WALLS THAT EXTEND TO THE UNDERSIDE OF DECK OR STRUCTURE ABOVE SHALL ALLOW FOR DEFLECTION IN THE VERTICAL DIRECTION. REFERENCE PARTITION DETAILS SHEET.
- PROVIDE DIAGONAL BRACING AT CORNERS ABOVE CEILING FOR PARTIAL HEIGHT PARTITIONS AS REQUIRED TO STABILIZE PARTITIONS. REFERENCE CEILING JOIST PLAN.
- PROVIDE HORIZONTAL CONSTRUCTION STRAP BRIDGING AT 1/3 POINTS OR SPACES 8'-0" VERTICALLY IN WALLS THAT ARE FULLY SHEATHED. PROVIDED BRIDGING AT 32" OC SPACED VERTICALLY FOR PORTION OF WALL WHERE IT IS NOT FULLY SHEATHED.
- PROVIDE AND INSTALL FIRE RETARDANT TREATED WOOD BLOCKING IN WALL TO SUPPORT SHELVEING, CABINERY/MILLWORK, AND EQUIPMENT. REFERENCE SPECS, DETAILS, AND PLANS. ANCHOR WOOD BLOCKING TO METAL STUD FRAMING W/ #12 TEK SCREWS AT 16" OC MAX. STAGGER FASTENERS WHEN BLOCKING IS WIDER THAN 6" NOMINAL. REFERENCE SPECIFICATIONS FOR ADDITIONAL STUD REQUIREMENTS AT MILLWORK AND WALL HUNG FIXTURE LOCATIONS. THE GC SHALL PROVIDE ALL NECESSARY WOOD BLOCKING FOR ALL TRADES.
- PROVIDE FIRE BLOCKING AT FLOOR AND ROOF LEVELS. CONCEALED SPACES BETWEEN STAIRWAY STRINGERS, PENETRATIONS IN FLOOR, CEILING ASSEMBLIES AND OTHER LOCATIONS AS REQUIRED BY CODE.
- ALL GYPSUM BOARD JOINTS, NAIL/SCREW HEADS, CUTS, ETC. SHALL BE TAPED AND SANDED TO A LEVEL 4 FINISH PRIOR TO RECEIVING FINISHES. REFERENCE SPECIFICATIONS, UNO.
- BASE SHEATHING MATERIAL IS 5/8" GYPSUM BOARD, UNO.
- METAL STUDS ARE SPACED AT 16" OC MAX. UNO.
- MOISTURE-RESISTANT GYPSUM WALL BOARD TO BE INSTALLED ON PARTITIONS WITH ENCLOSED PLUMBING, BOTH SIDES. WALLS RECEIVING PORCELAIN OR CERAMIC TILE OR FRP. ENTIRE WALL SHALL RECEIVE MOISTURE-RESISTANT GYPSUM WALL BOARD.
- AT ALL EXTERIOR CONCRETE WALL PANELS TO RECEIVE FURRING, PROVIDE AND INSTALL VAPOR BARRIER, PLACED BETWEEN CONCRETE AND STUD WALL AND/OR FURRING CONSTRUCTION. TAPE ALL JOINTS AND GAPS.
- WHEN BUILDING ANY NEW FIRE RATED PARTITIONS, ENSURE ALL PENETRATIONS AND JOINTS ARE SEALED IN ACCORDANCE WITH SPECIFICATIONS.
- PROVIDE CONTROL JOINTS IN GYPSUM BOARD FRAMED ASSEMBLIES AT 30'-0" OC MAX.
- HOLD ALL SUBSTRATE 1/2" ABOVE CONCRETE TO AVOID WICKING ACTION, UNO.
- REFER TO STRUCTURAL DRAWINGS FOR STEEL STUD SIZING AND LIMITING HEIGHTS.

ARCHITECT OF RECORD
 Jacob S. Bush

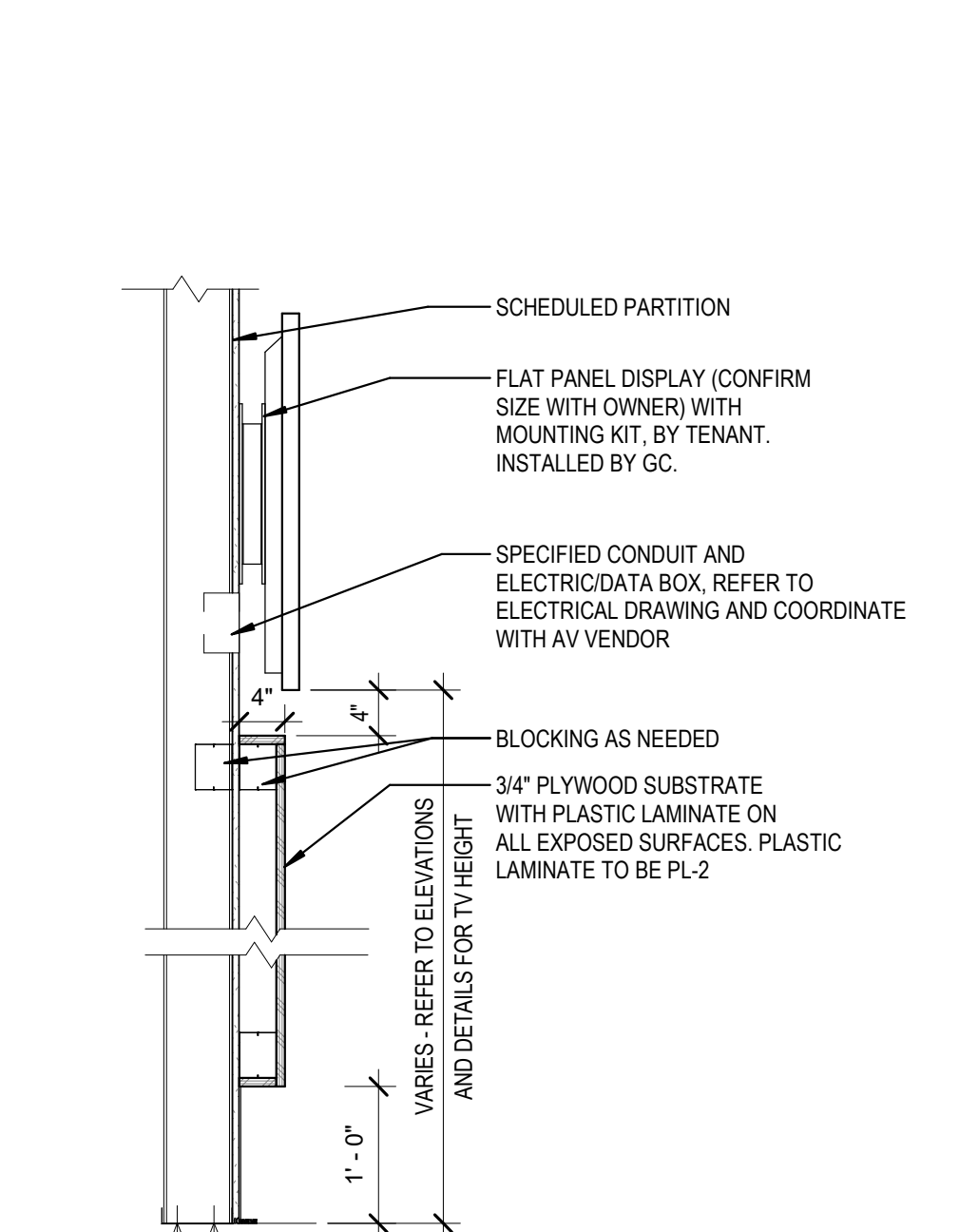
175 Mountain View Ave., Suite 400
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20115925 REGISTERED ARCHITECT
 JAKE S BUSH
 STATE OF WASHINGTON

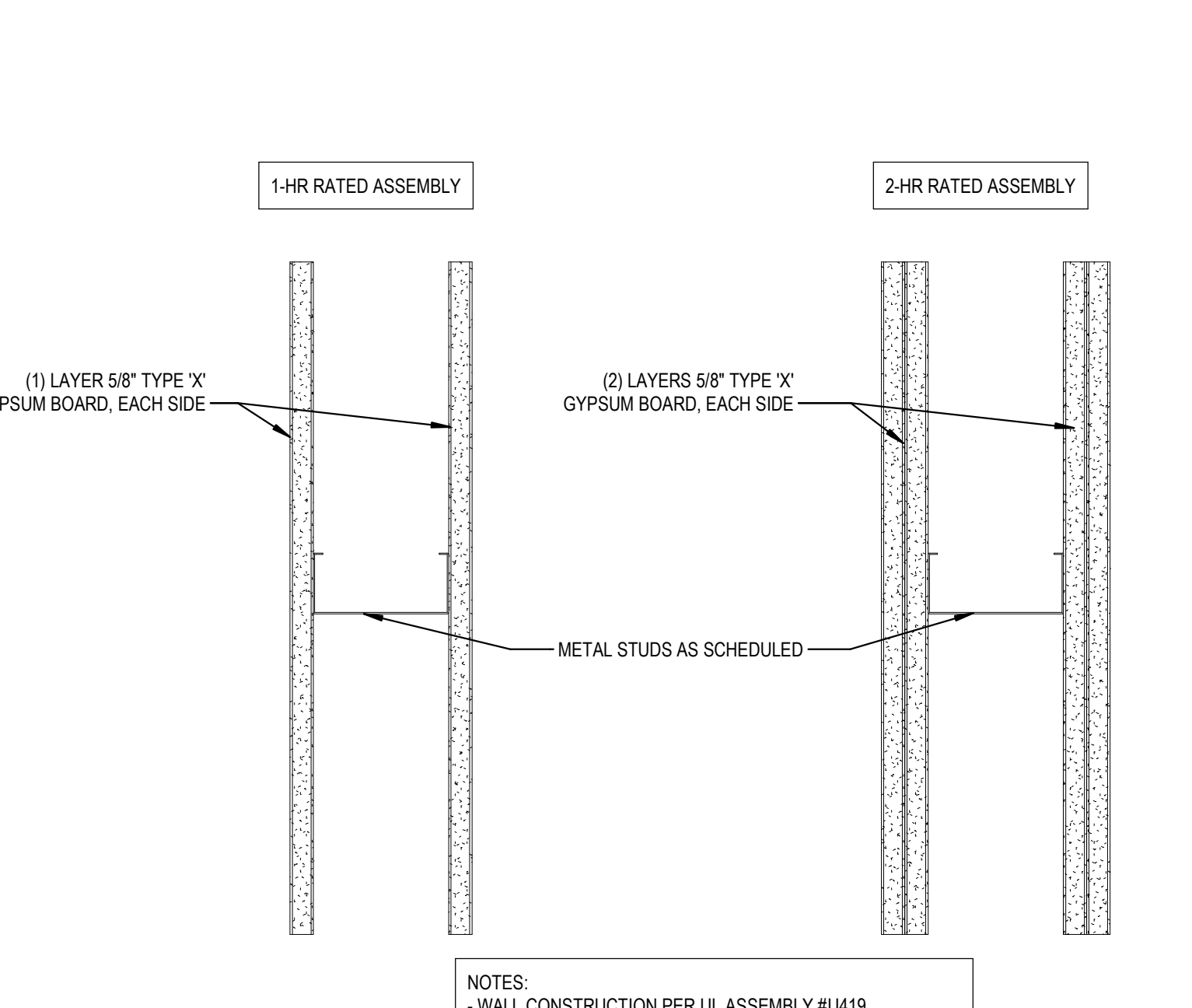
4.25.2025 Exp: 4.10.2026



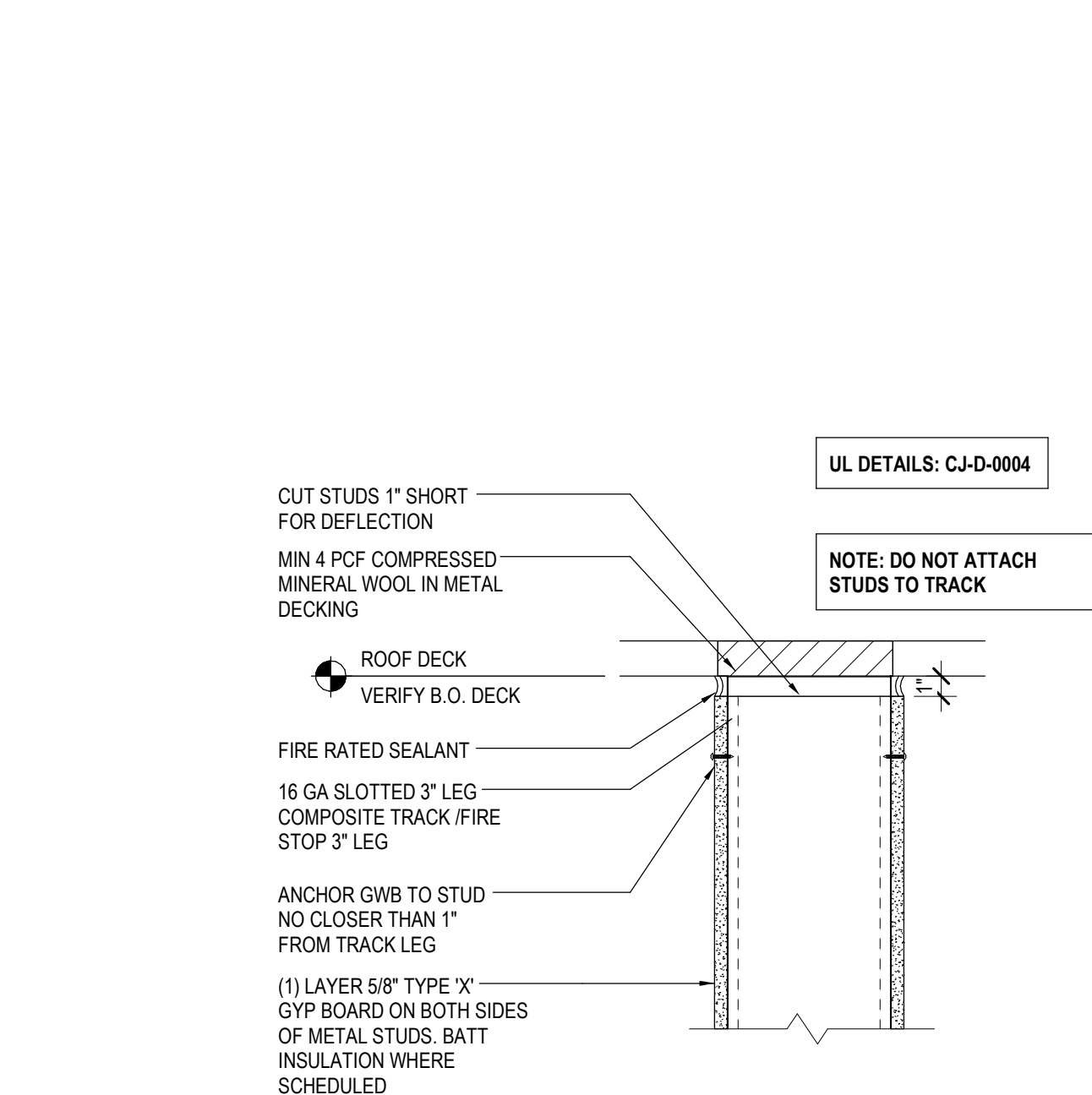
13 BLOCKING ELEVATION - TRAINING ROOM
 A0.01 Scale: 1/2" = 1'-0"



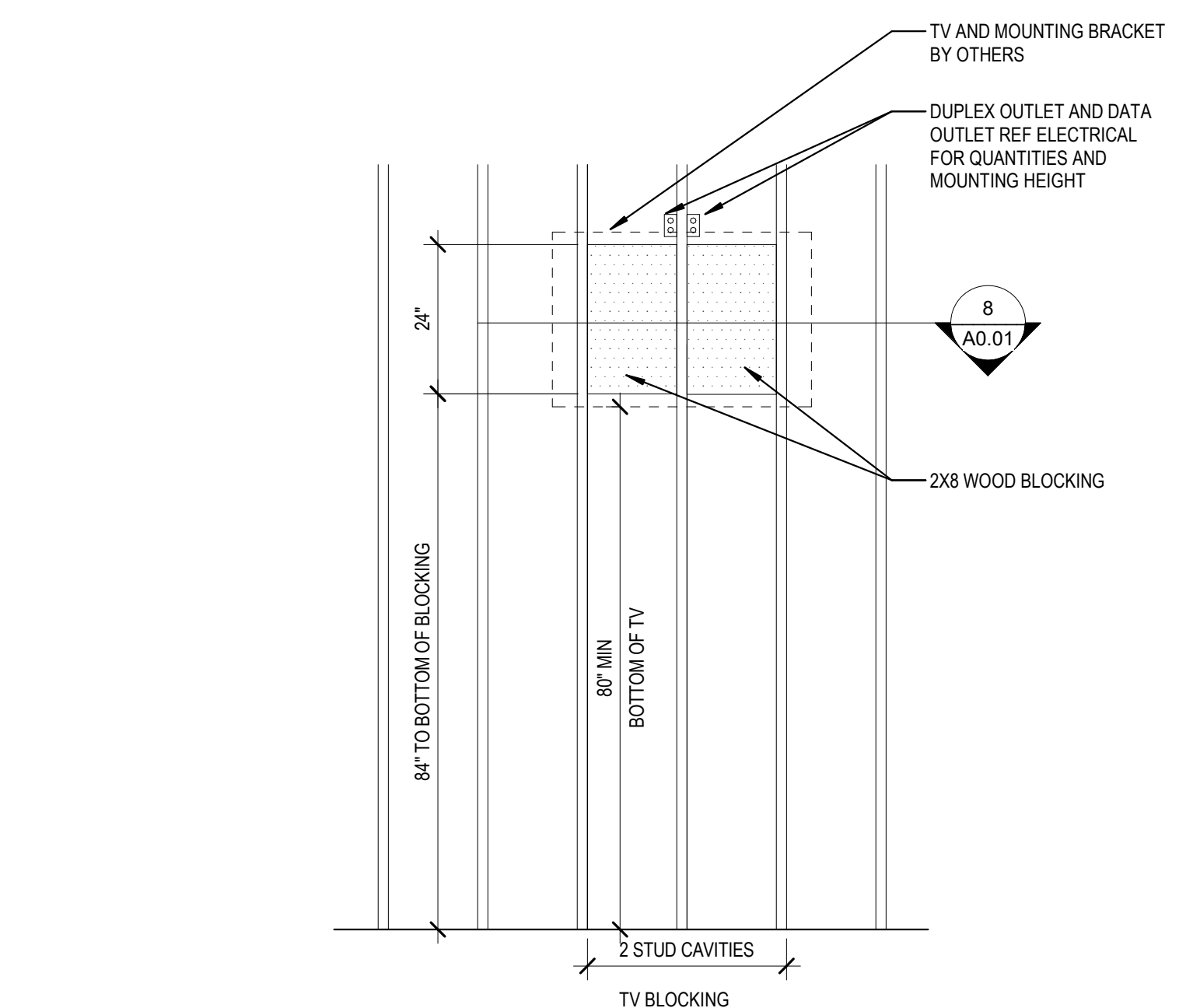
12 CANE DETECTION AT DISPLAY
 A0.01 Scale: 3/4" = 1'-0"



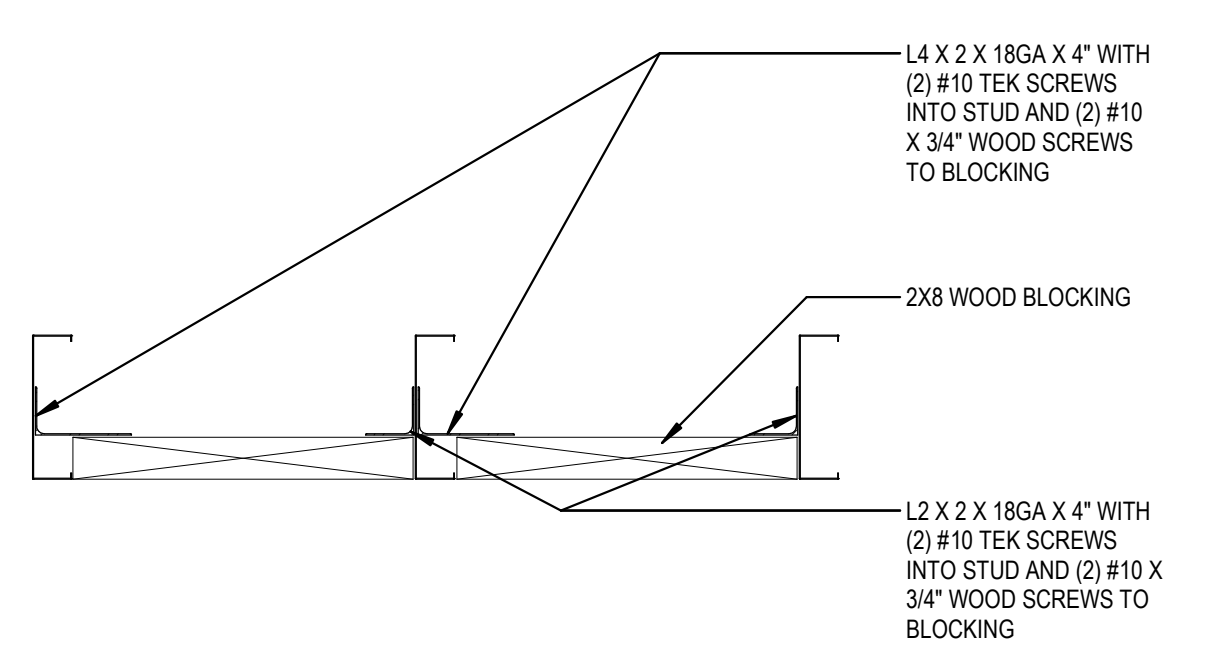
11 TYPICAL RATED PARTITION ASSEMBLIES
 A0.01 Scale: 3" = 1'-0"



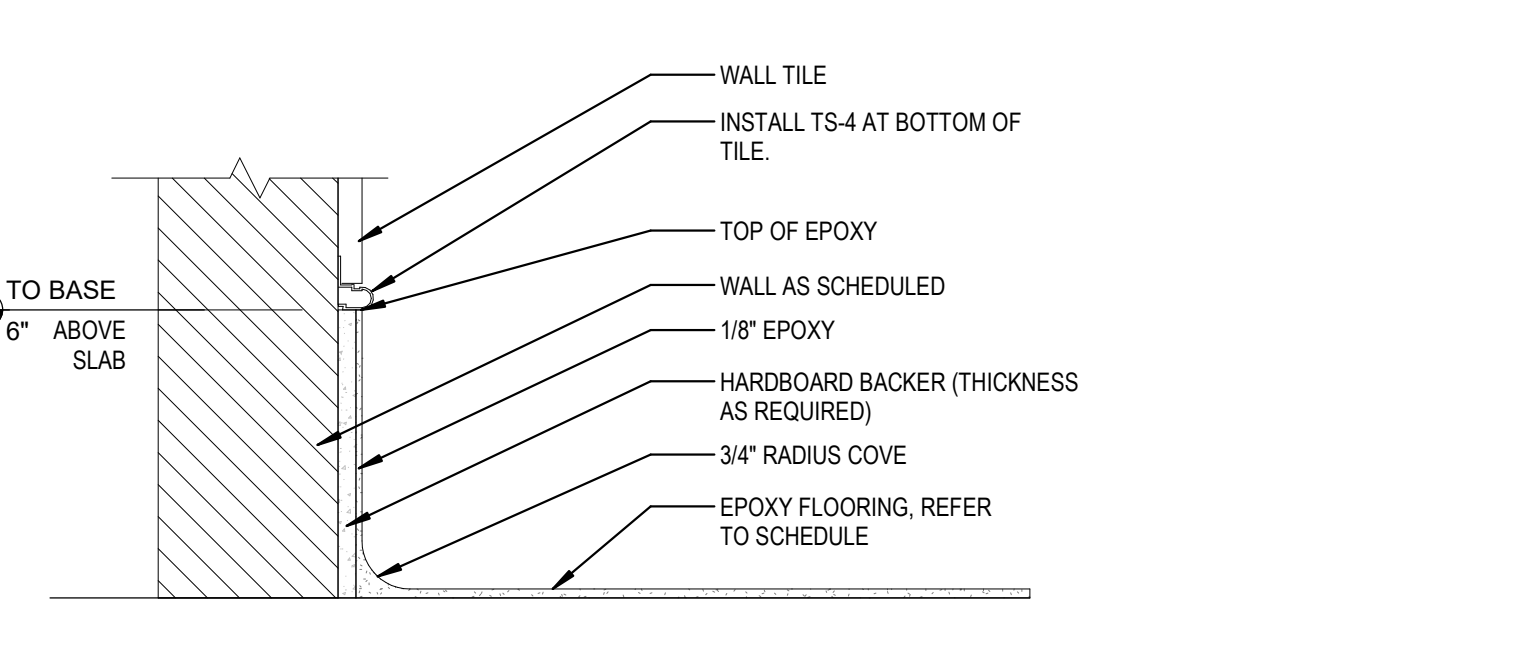
10 TO DECK 1-HR RATED
 A0.01 Scale: 1 1/2" = 1'-0"



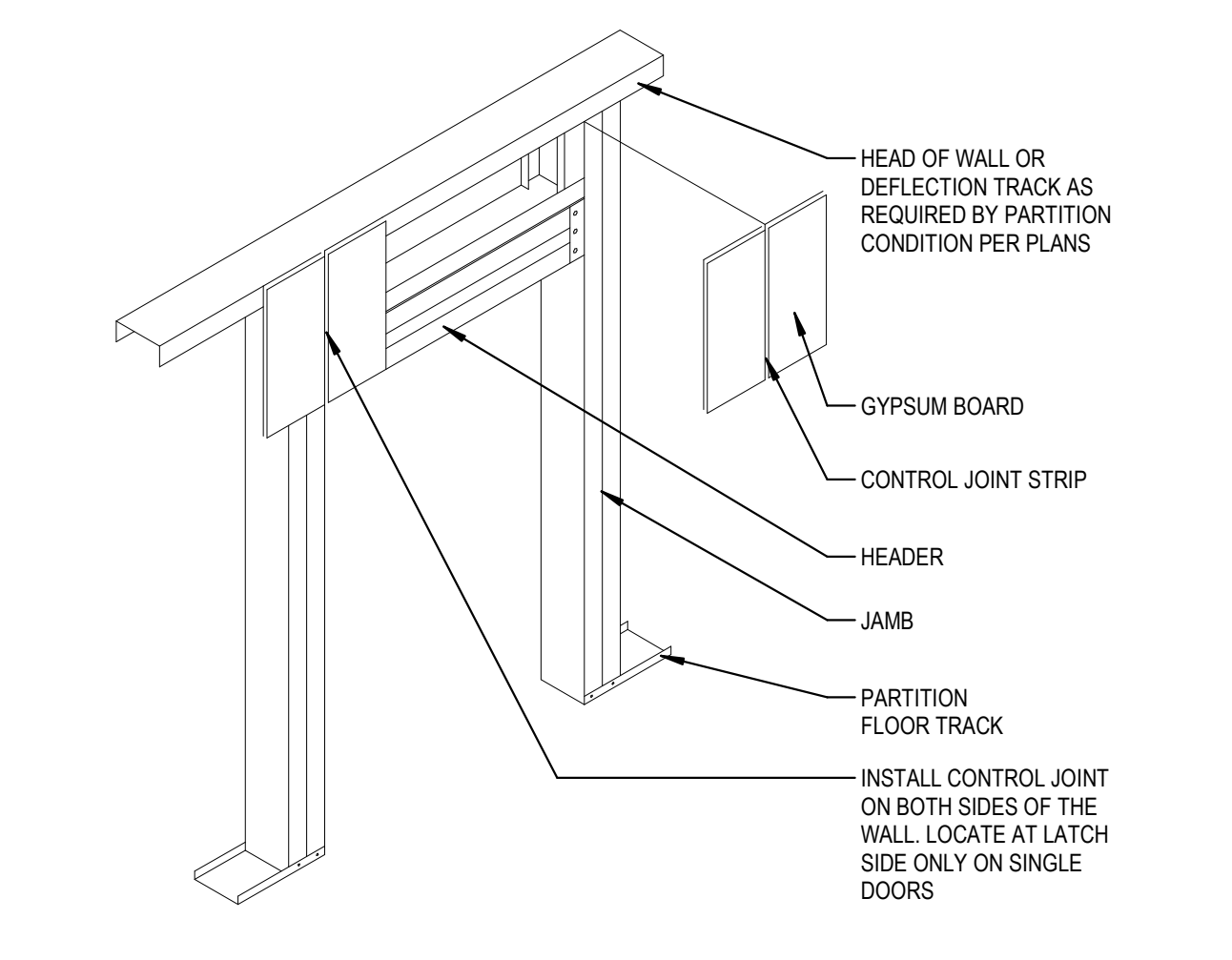
9 BLOCKING ELEVATION
 A0.01 Scale: 1/2" = 1'-0"



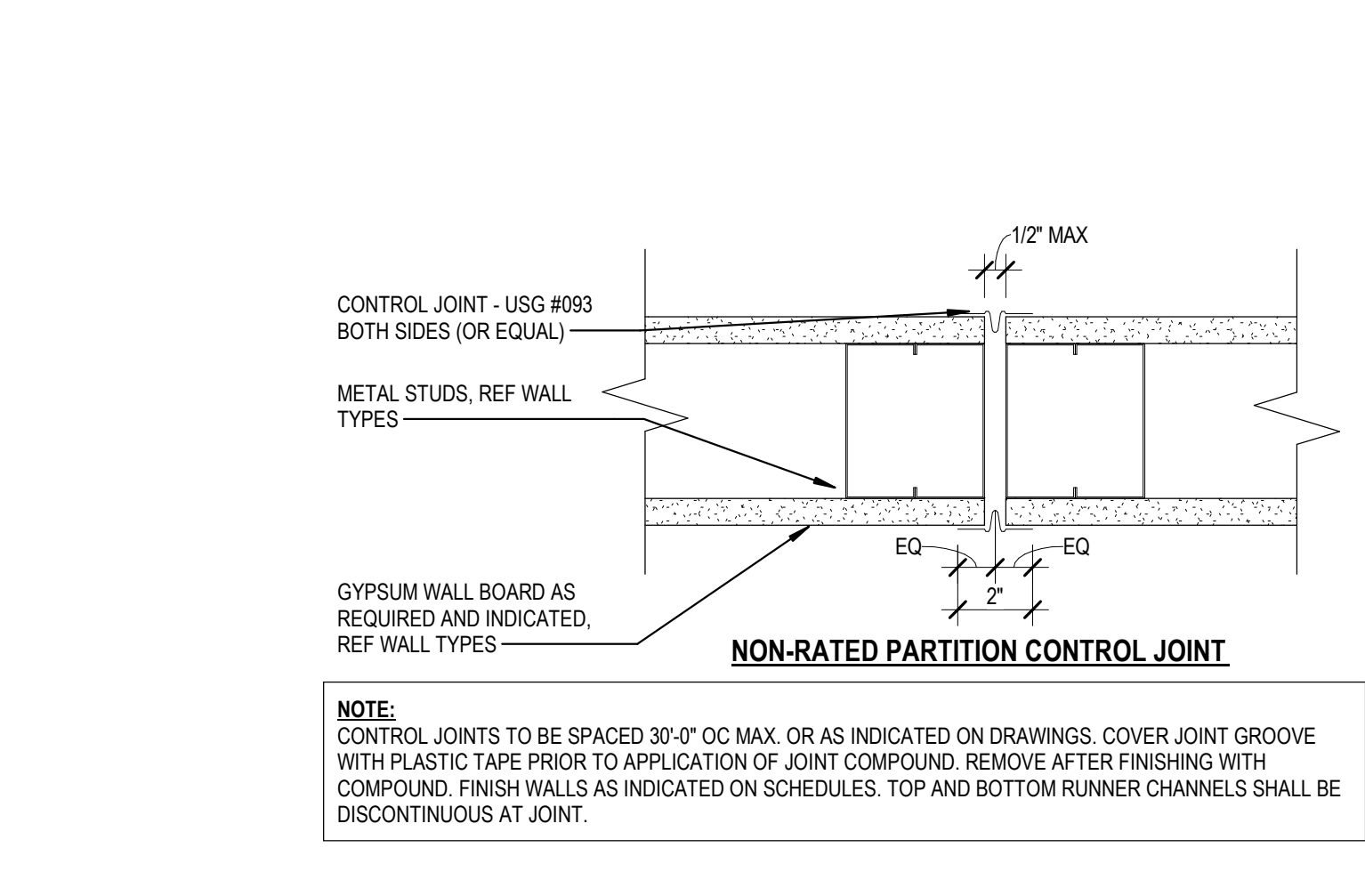
8 BLOCKING PLAN
 A0.01 Scale: 1 1/2" = 1'-0"



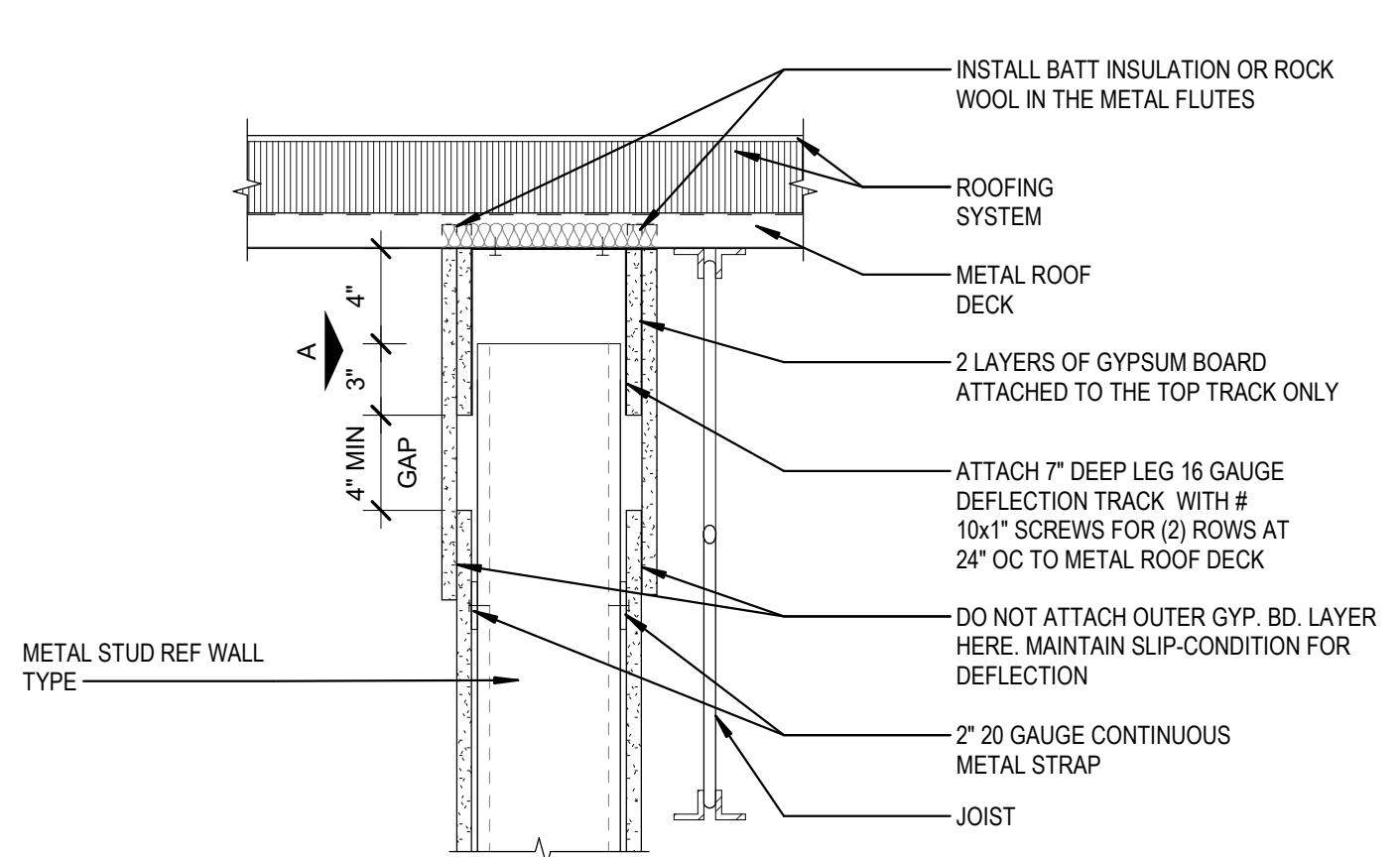
7 EPOXY BASE DETAILS W/ TILE ABOVE
 A0.01 Scale: 3" = 1'-0"



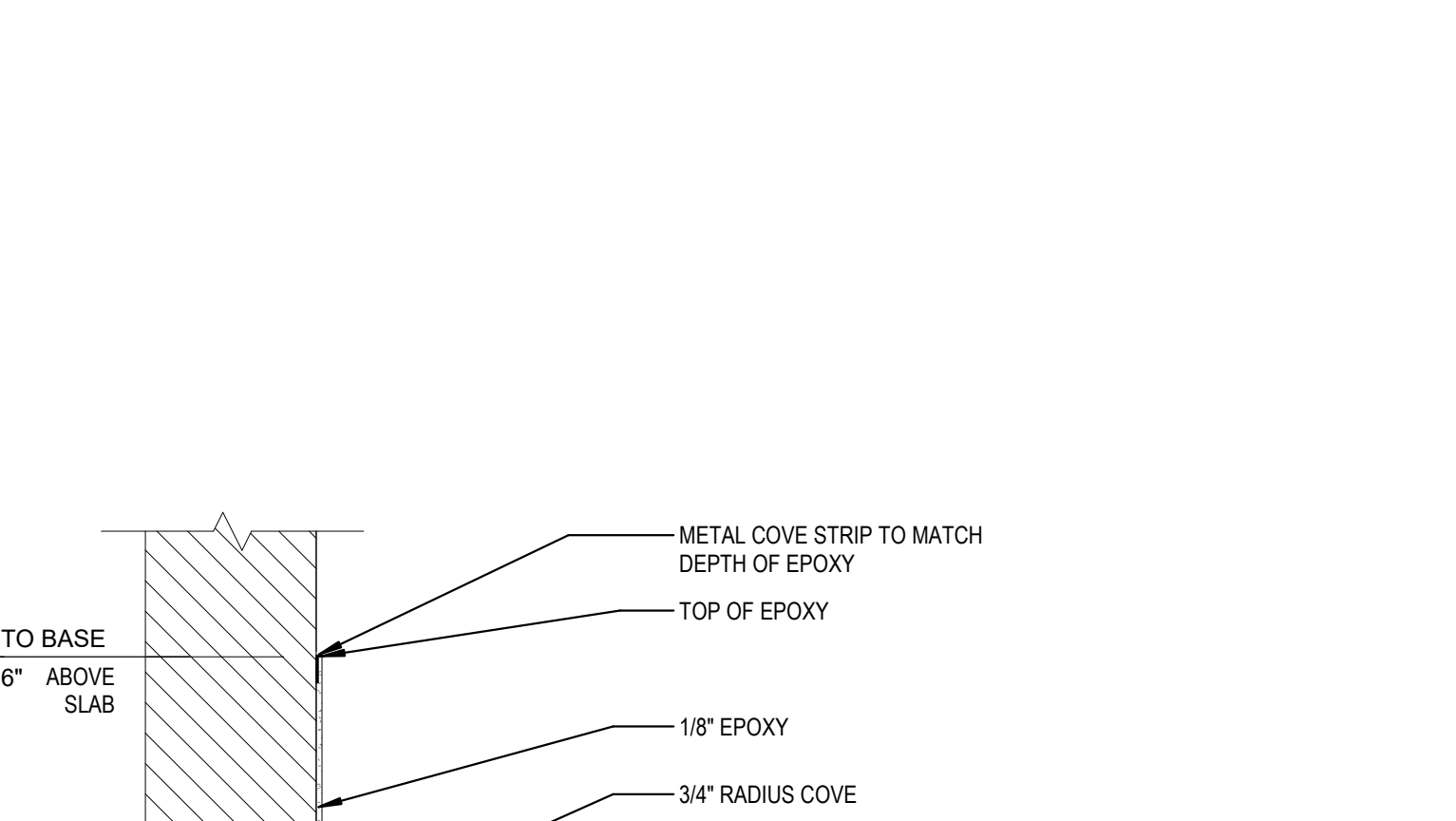
6 CONTROL JOINT AT DOOR
 A0.01 Scale: 12" = 1'-0"



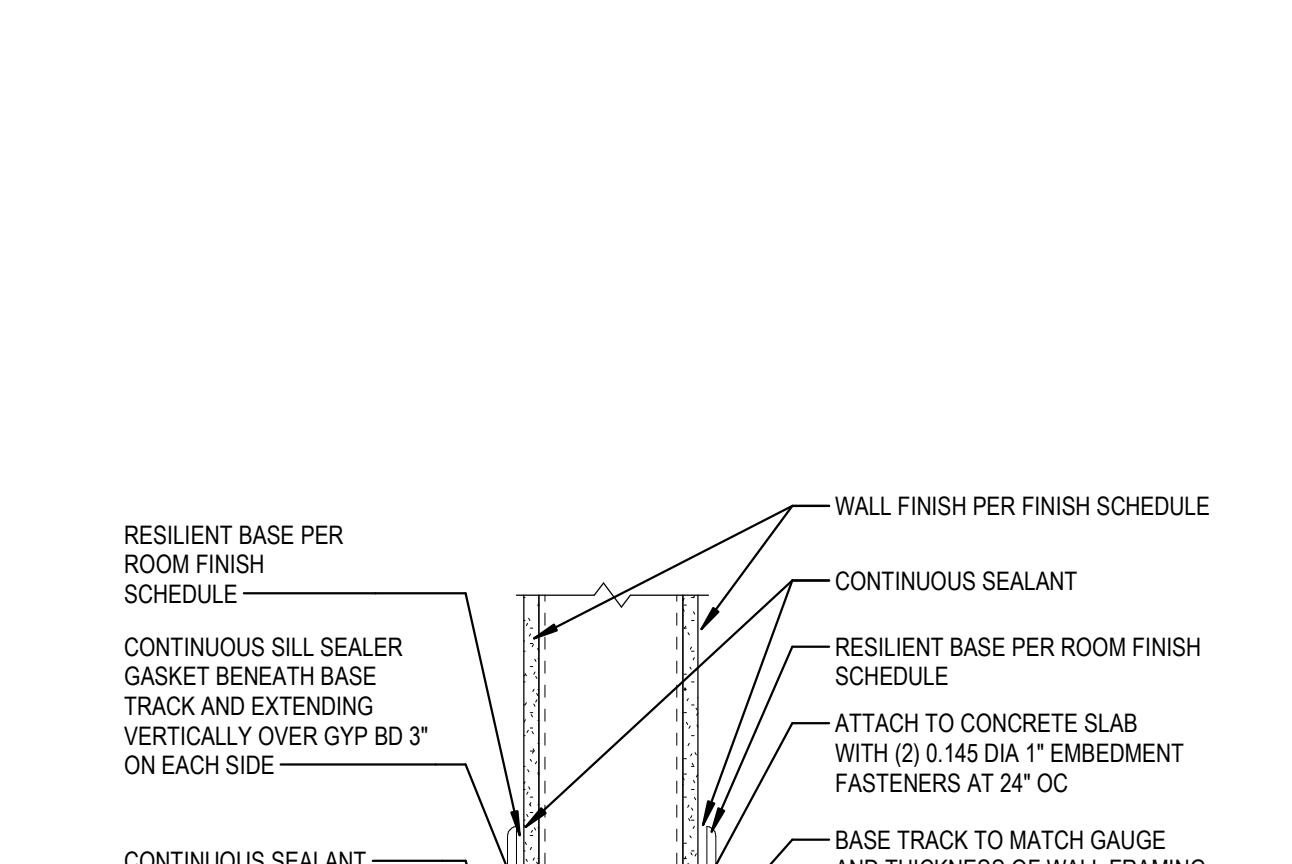
5 GYP. BOARD CONTROL JOINTS
 A0.01 Scale: 3" = 1'-0"



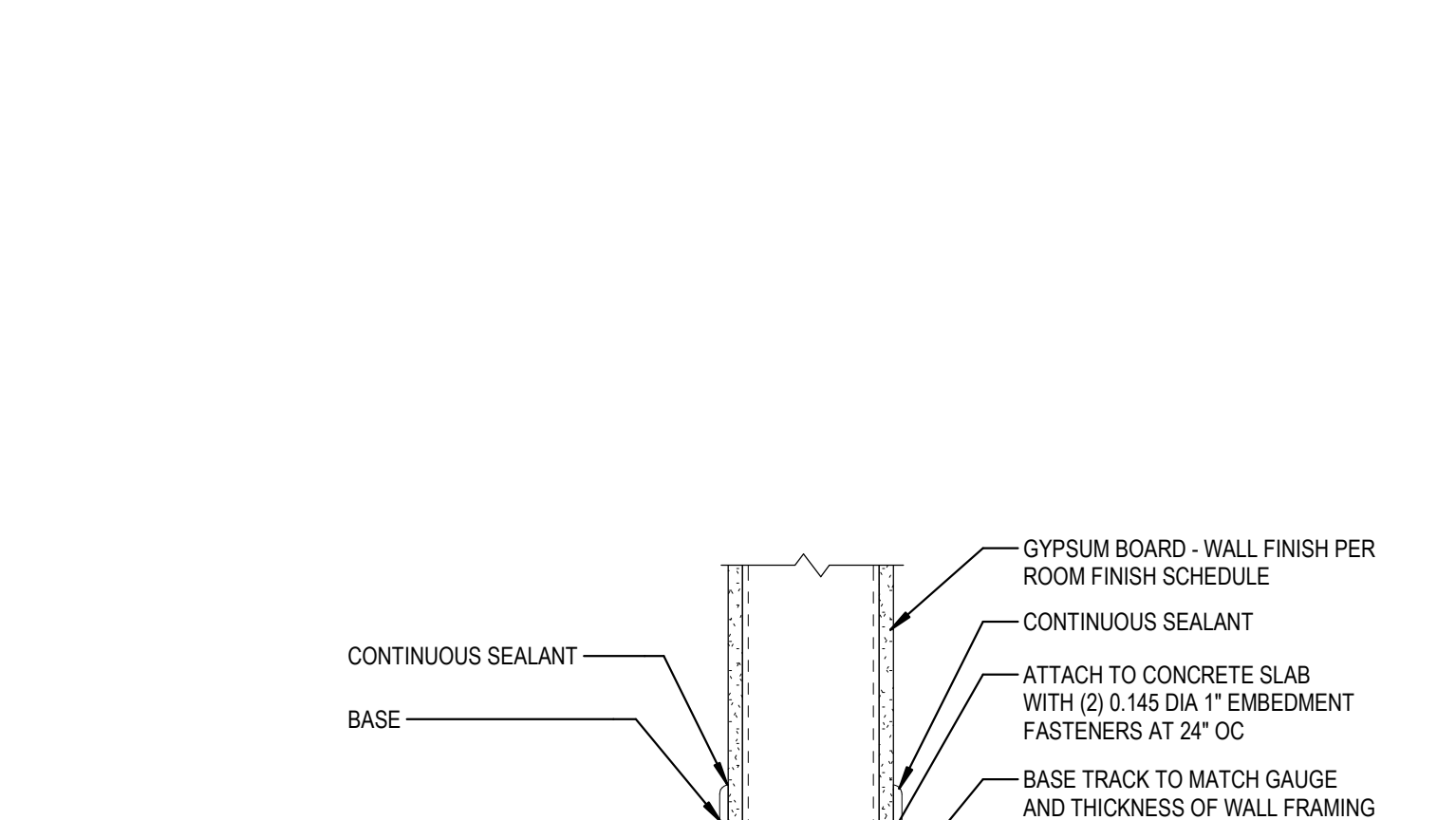
4 PARTITION ATTACHMENT - METAL DECK - NON FIRE RATED
 A0.01 Scale: 1 1/2" = 1'-0"



3 EPOXY BASE DETAIL W/O TILE
 A0.01 Scale: 3" = 1'-0"



2 TYPICAL WALL BASE AT WET ROOM
 A0.01 Scale: 1 1/2" = 1'-0"



1 TYPICAL WALL BASE
 A0.01 Scale: 1 1/2" = 1'-0"

AMBROSE PROPERTY GROUP

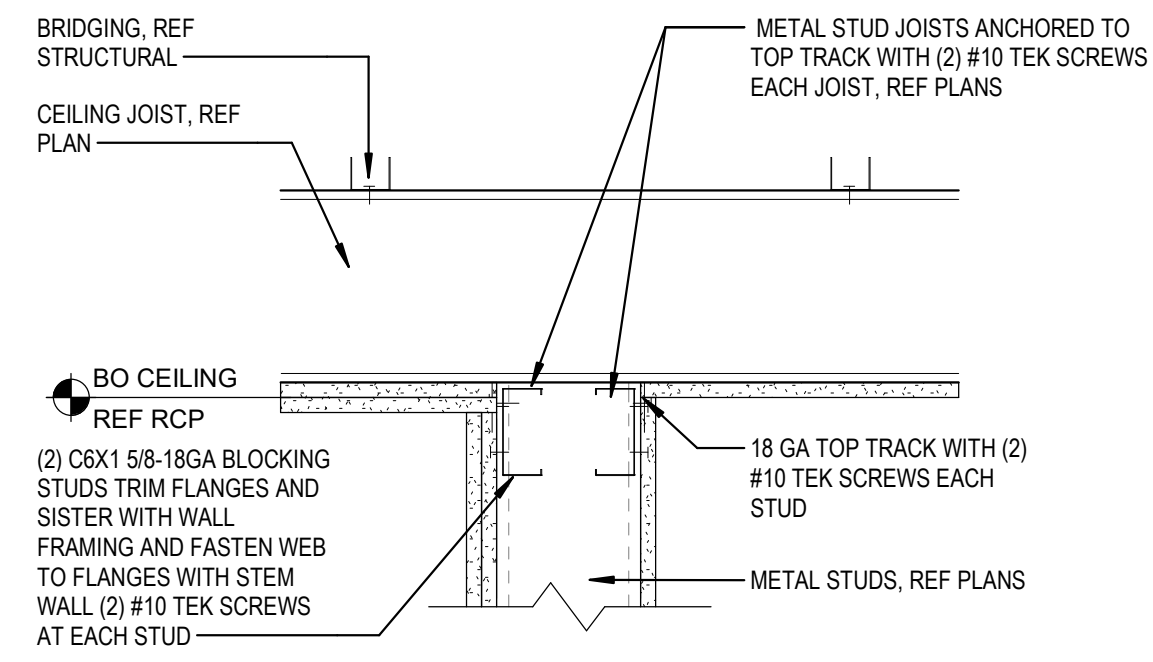
PROJECT PENINSULA
 W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

Revisions / Submissions
 ID Description Date
 PERMIT SET 04.25.2025

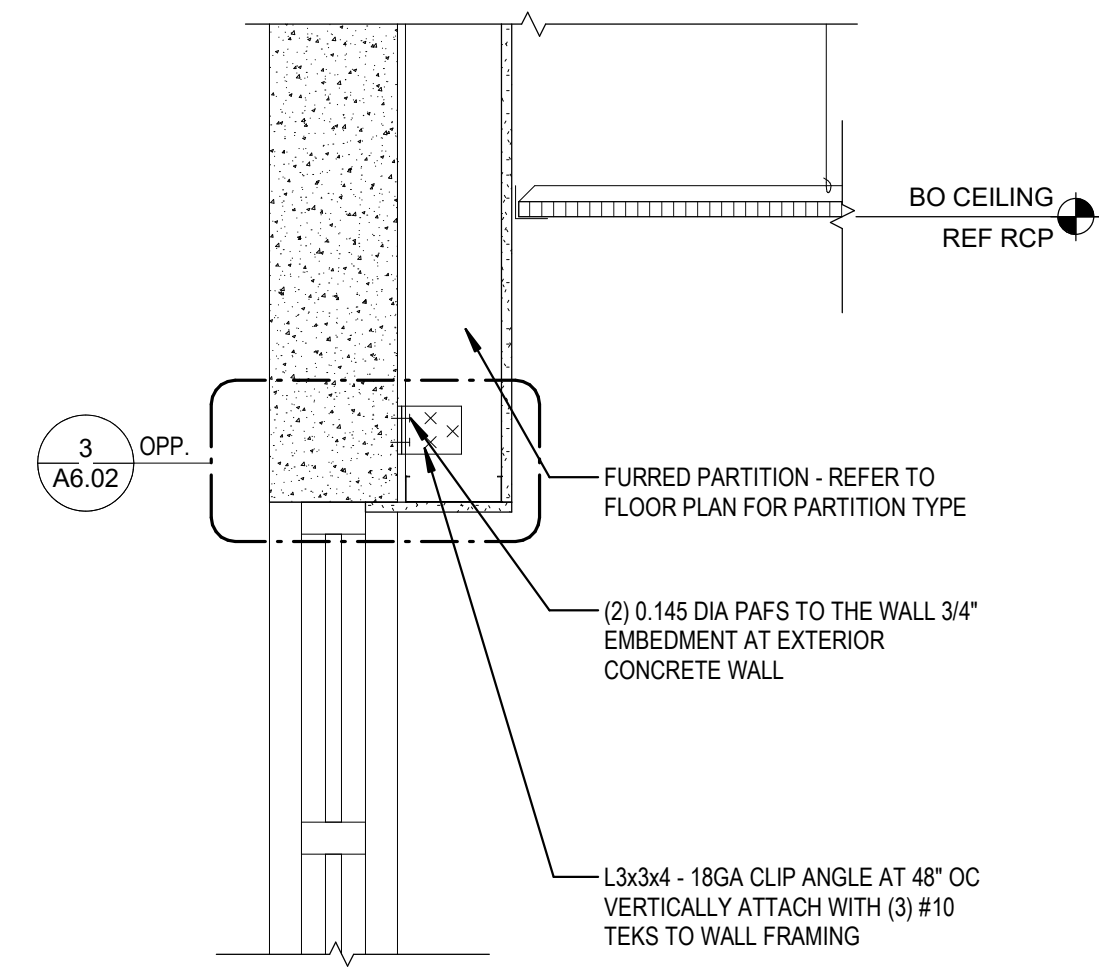
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 Project number: 763838-02
 Scale: AS NOTED
 Drawn By: SW / CB
 Checked By: DZ
 Date: 04.25.2025
 Issue: PERMIT SET

Sheet Title:
WALL/PARTITION TYPES & DETAILS

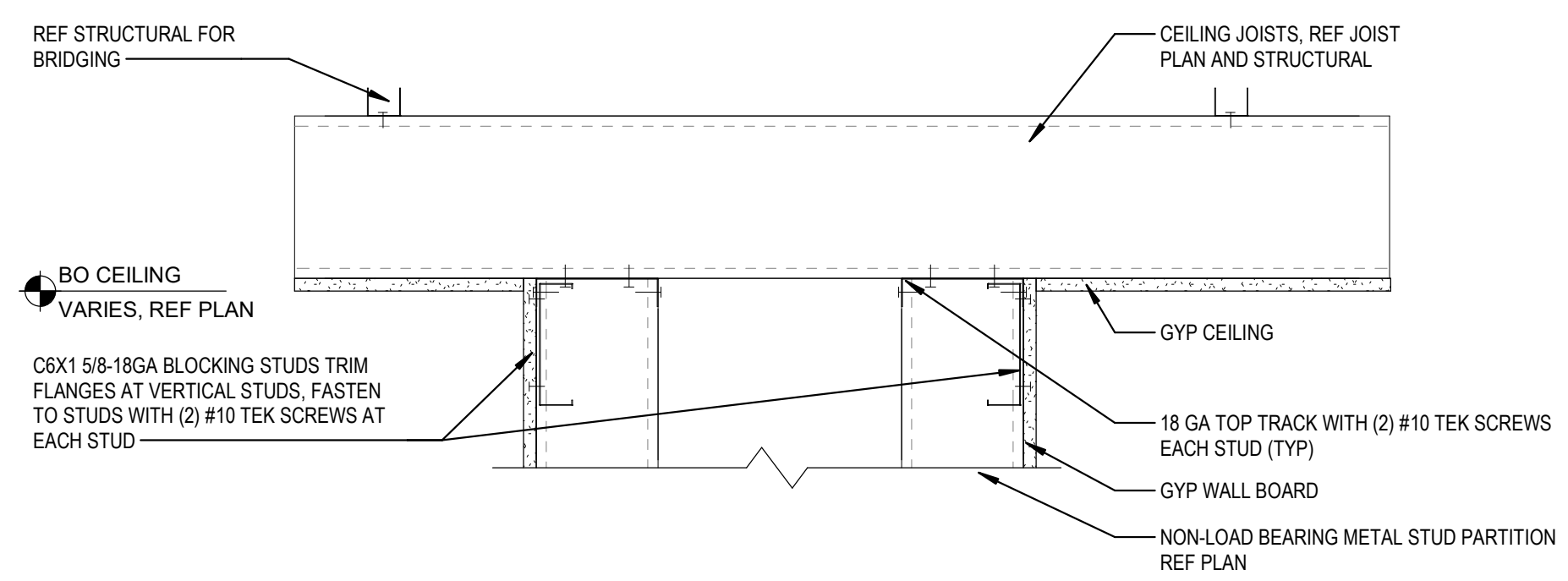
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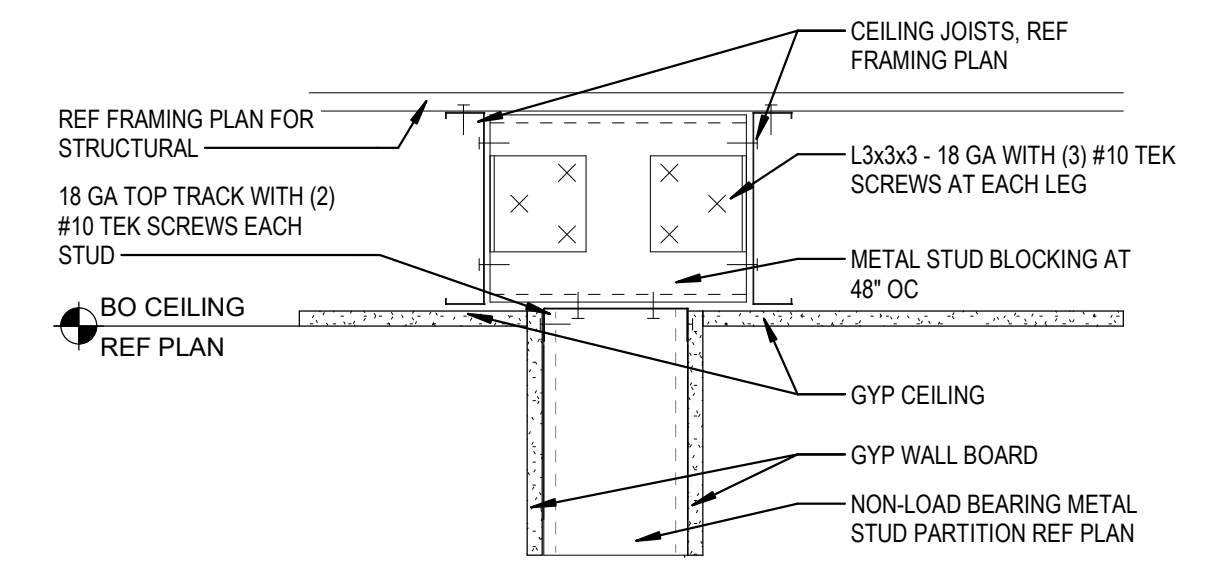
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A0.03 / Scale: 1 1/2" = 1'-0"



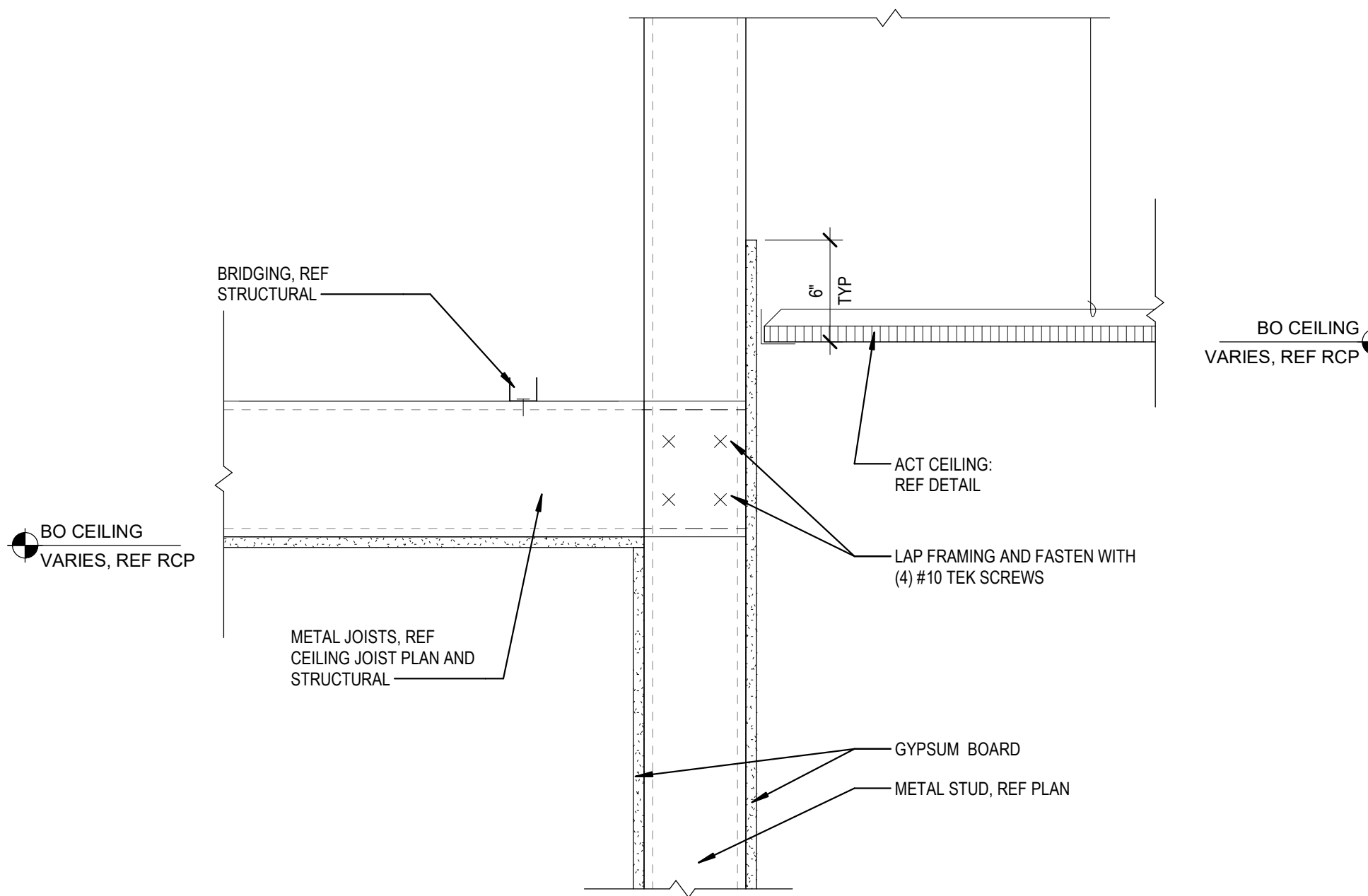
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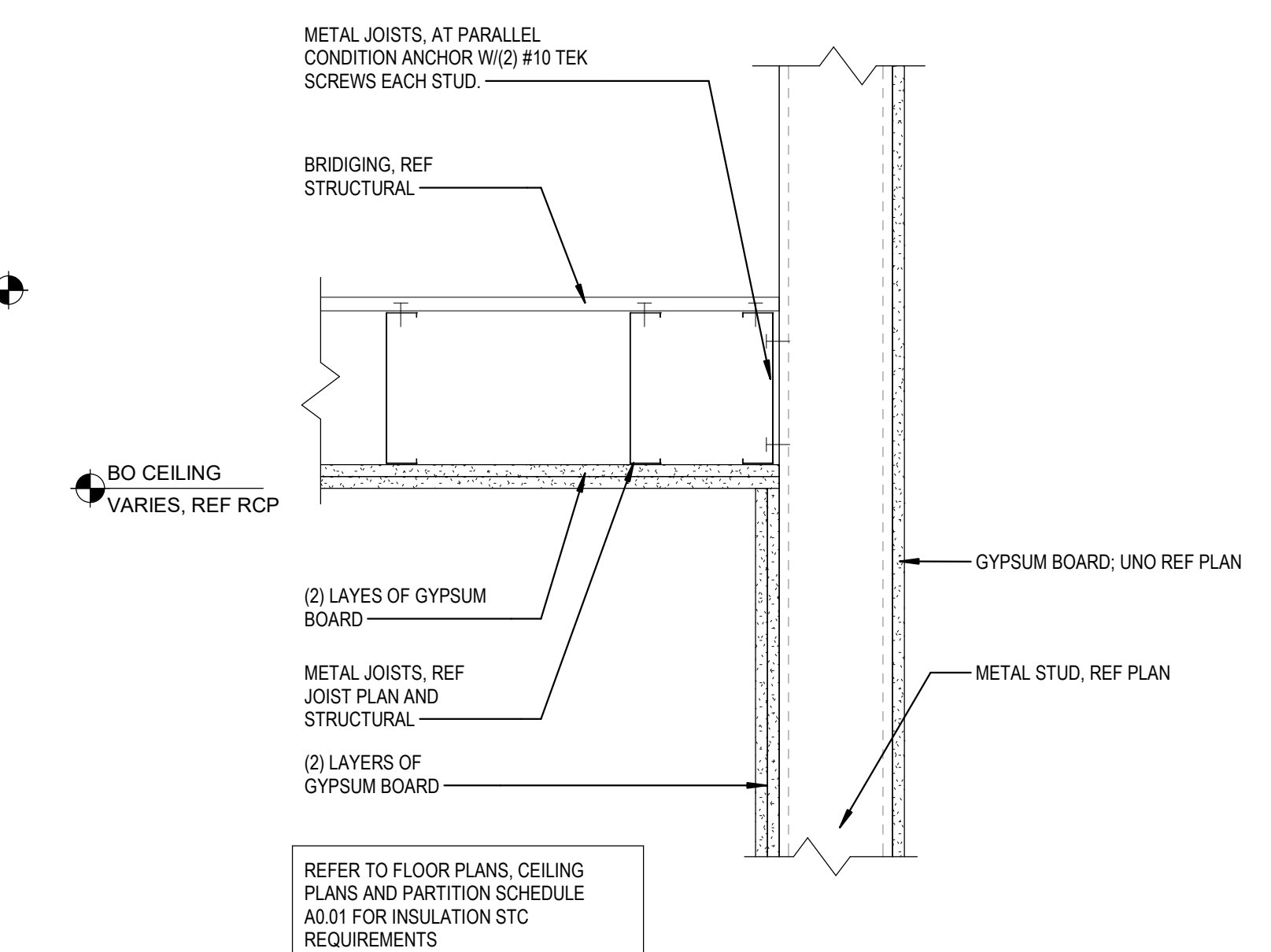
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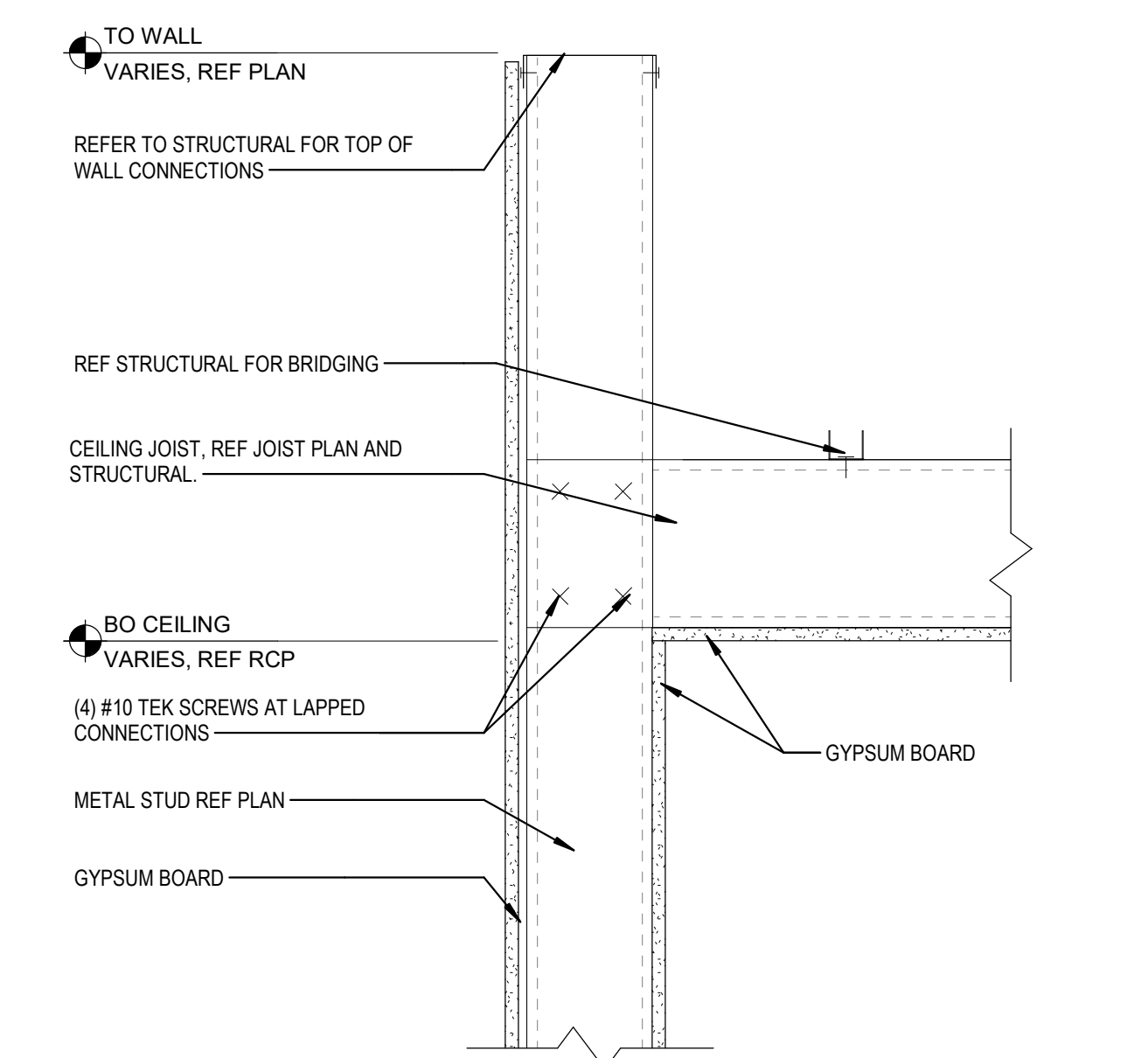
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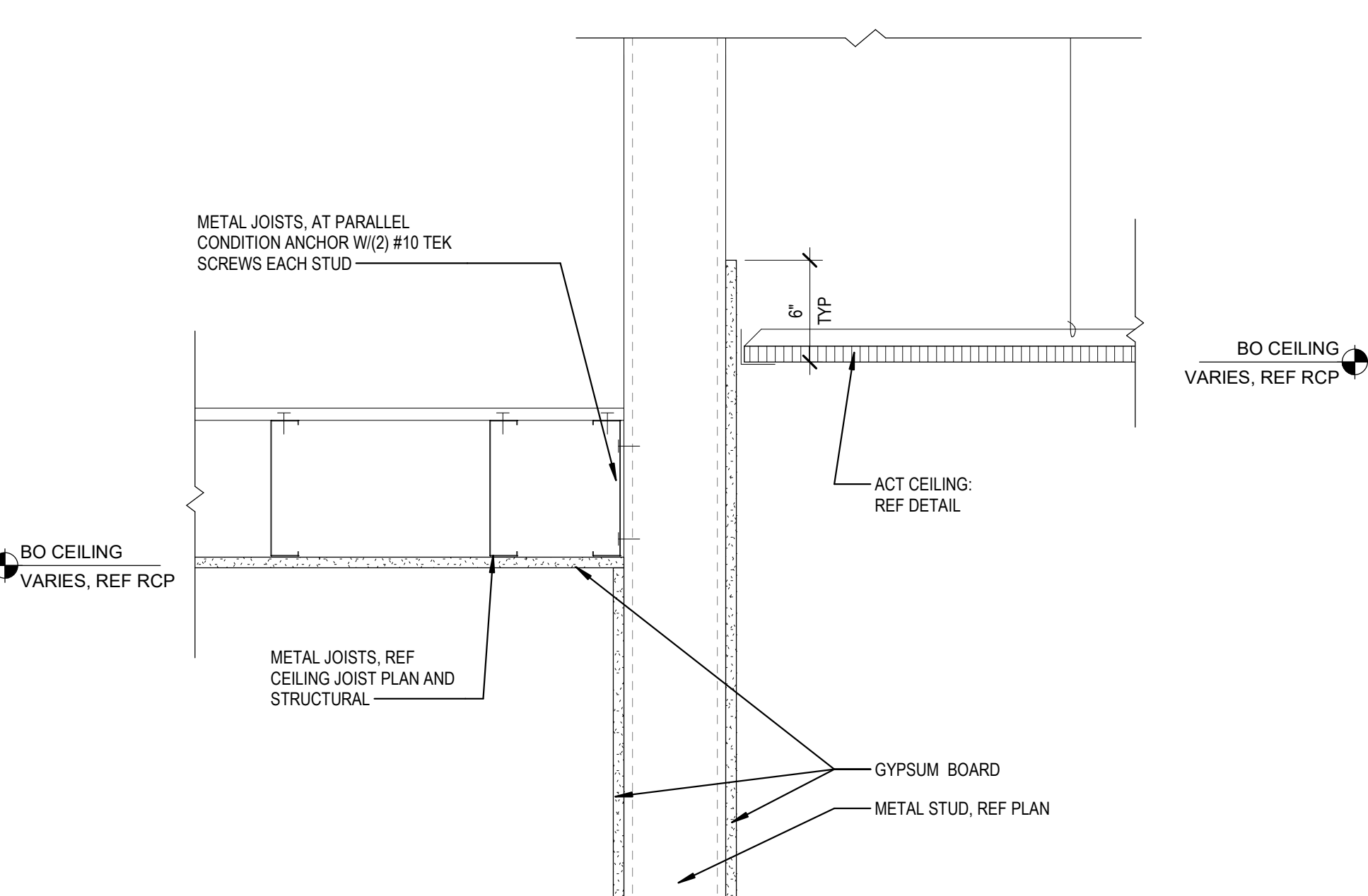
8 JOISTS PERPENDICULAR - CEILING TRANSITION
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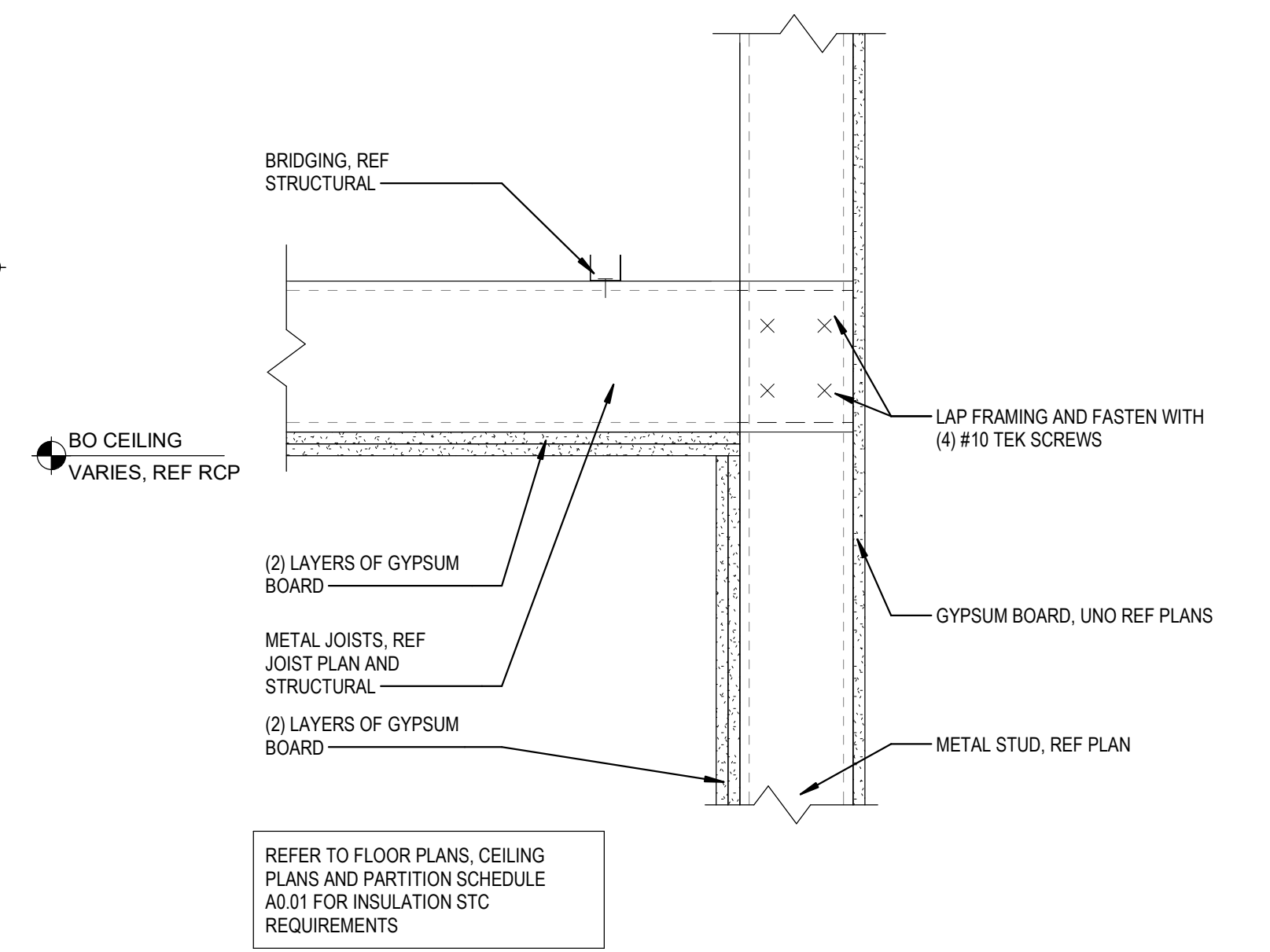
7 JOISTS PARALLEL - SOUND ATTENUATING WALL AND CEILING
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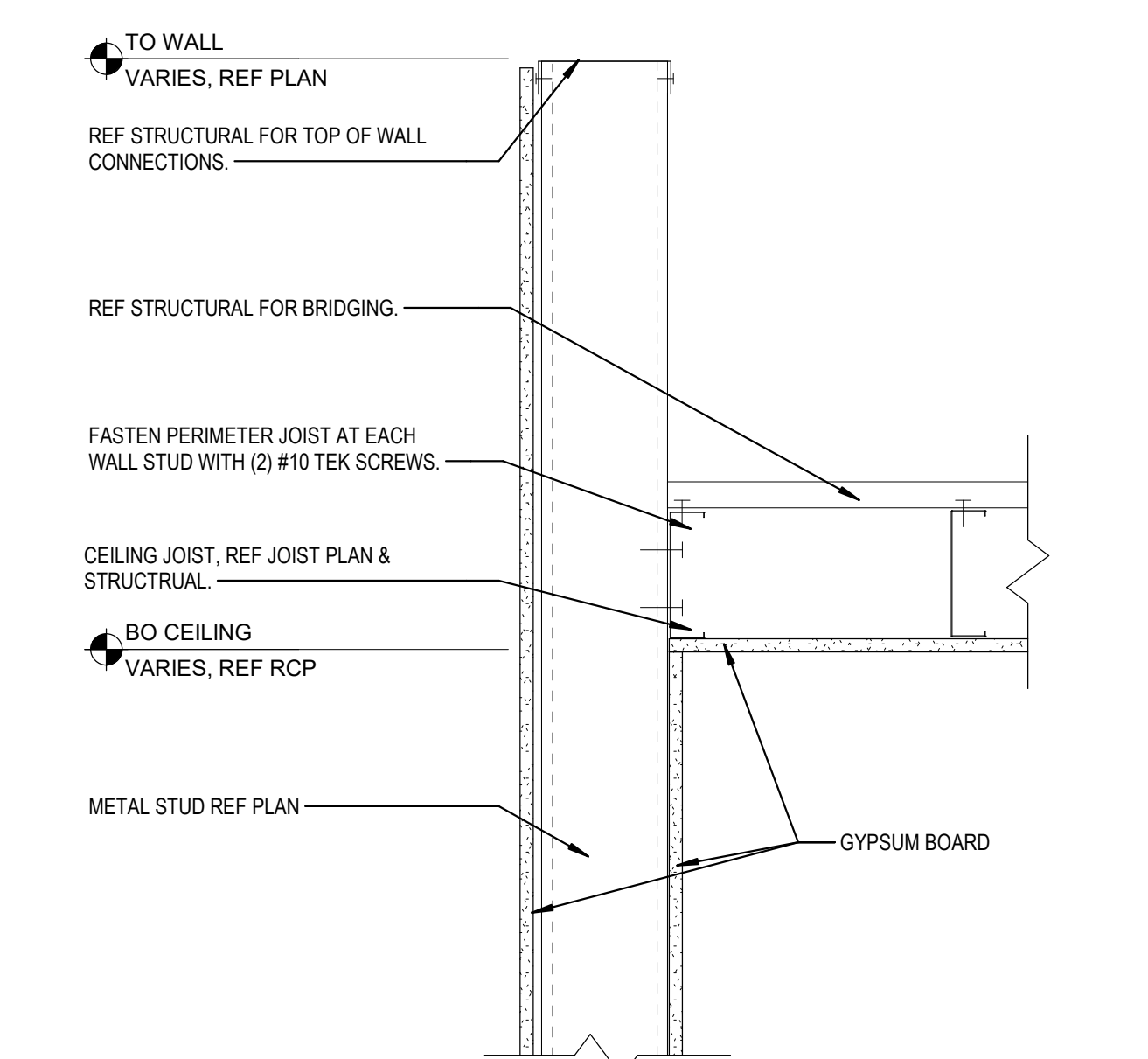
6 JOISTS PERPENDICULAR - GYP CEILING
A0.03 / Scale: 1 1/2" = 1'-0"



4 JOISTS PARALLEL - CEILING TRANSITION
A0.03 / Scale: 1 1/2" = 1'-0"



3 JOISTS PERPENDICULAR - SOUND ATTENUATING WALL AND CEILING
A0.03 / Scale: 1 1/2" = 1'-0"



2 JOISTS PARALLEL - GYP CEILING
A0.03 / Scale: 1 1/2" = 1'-0"

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
	PERMIT SET	04.25.2025

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Sheet Title:
CEILING DETAILS

THIS DOCUMENT PROVIDES THE IBC-REFERENCED STANDARDS FOR THE INSTALLATION OF SUSPENSION SYSTEMS FOR ACOUSTICAL LAY-IN CEILINGS. INCORPORATION OF THIS DOCUMENT WILL PROVIDE A MORE UNIFORM STANDARD FOR INSTALLATION AND INSPECTION. THIS DOCUMENT IS DESIGNED TO ACCOMPLISH THE INTENT OF THE INTERNATIONAL BUILDING CODE (IBC) WITH REGARD TO THE REQUIREMENTS FOR SEISMIC DESIGN CATEGORY D, E, AND F FOR SUSPENDED CEILINGS AND RELATED ITEMS. UNLESS SUPPORTED BY ENGINEERING, THE SUSPENSION SYSTEM SHALL BE INSTALLED PER THE REQUIREMENTS FOR SEISMIC DESIGN CATEGORY (SDC), E AND F PER THE IBC. MANUFACTURERS' RECOMMENDATIONS SHOULD BE FOLLOWED.

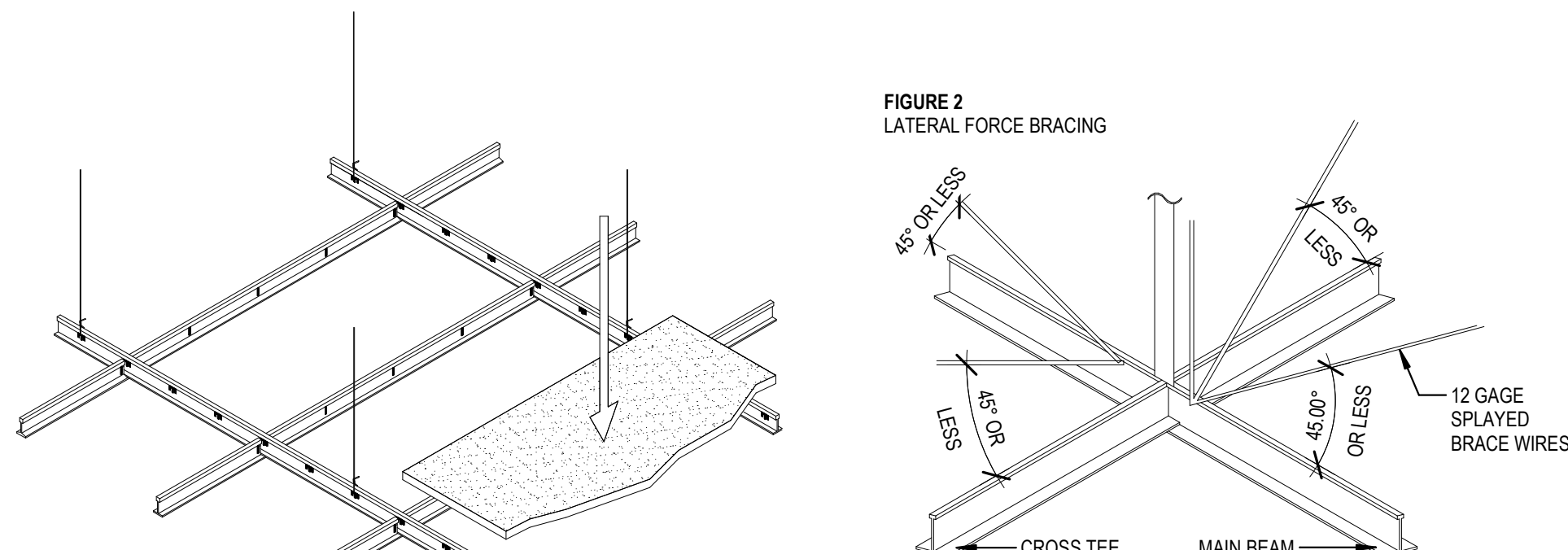


FIGURE 2
LATERAL FORCE BRACING

FIGURE 3
MAXIMUM RECOMMENDED LENGTHS FOR VERTICAL STRUTS

EMT CONDUIT	
1/2" EMT conduit	up to 2' - 8"
3/4" EMT conduit	up to 4' - 4"
1" EMT conduit	up to 6' - 7"
1 1/4" EMT conduit	up to 10' - 5"
1 1/2" EMT conduit	up to 12' - 11"
2" EMT conduit	up to 18' - 4"
METAL STUDS	
Single 3-5/8" metal stud (20 gauge)	up to 9' - 6"
Back-to-back 2-1/2" metal stud (20 gauge)	up to 16' - 6"
Back-to-back 3-5/8" metal stud (20 gauge)	up to 24' - 0"

NOTE: PLENUM AREAS GREATER THAN 15'-0" WILL REQUIRE ENGINEERING CALCULATIONS.

GENERAL RECOMMENDATIONS

- REFERENCED SOURCES PER HIERARCHY: 2021 IBC (INTERNATIONAL BUILDING CODE), AMERICAN SOCIETY OF TESTING MATERIALS (ASTM C 635, ASTM C 638), AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE 7-16) AND CEILING AND INTERIOR SYSTEMS CONSTRUCTION ASSOCIATION (CISCA)
- PARTITIONS THAT ARE TIED TO THE CEILING AND ALL PARTITIONS GREATER THAN 8FT IN HEIGHT SHALL BE Laterally braced to the structure. BRACING SHALL BE INDEPENDENT OF THE CEILING BRACING SYSTEM. SOURCE: CISCA ZONES 3-4
- FOR FURTHER INFORMATION ON BRACING OF NON-LOAD BEARING PARTITIONS REFER TO NWCB TECHNICAL DOCUMENT #201.
- ALL MAIN BEAMS ARE TO BE HEAVY DUTY (HD). SOURCE: ASCE 7-16 ITEM 9.6.2.6.2.2 ITEM a
- ALL CROSS TEES SHALL BE CAPABLE OF CARRYING THE DESIGN LOAD WITHOUT EXCEEDING DEFLECTION EQUAL TO 1/380 OF ITS SPAN. SOURCE: CISCA ZONES 3-4
- THESE RECOMMENDATIONS ARE INTENDED FOR SUSPENDED CEILING INCLUDING GRID, PANEL OR TILE, LIGHT FIXTURES AND AIR TERMINALS WEIGHING NO MORE THAN 4 POUNDS PER SQUARE FOOT. SOURCE: ASCE 7-16 ITEM 9.6.2.6.1
- ALL WIRE TIES ARE TO BE THREE TIGHT TURNS AROUND ITSELF WITHIN THREE INCHES. TWELVE GAUGE HANGER WIRE SPACED 4 FOOT ON CENTER (FIGURE 1). SOURCE: ASTM C 638 ITEM 2.3.4
- CHANGES IN CEILING PLANES WILL REQUIRE POSITIVE BRACING. SOURCES ASCE 7-16 SECTION 9.6.2.6.2.2 ITEM f

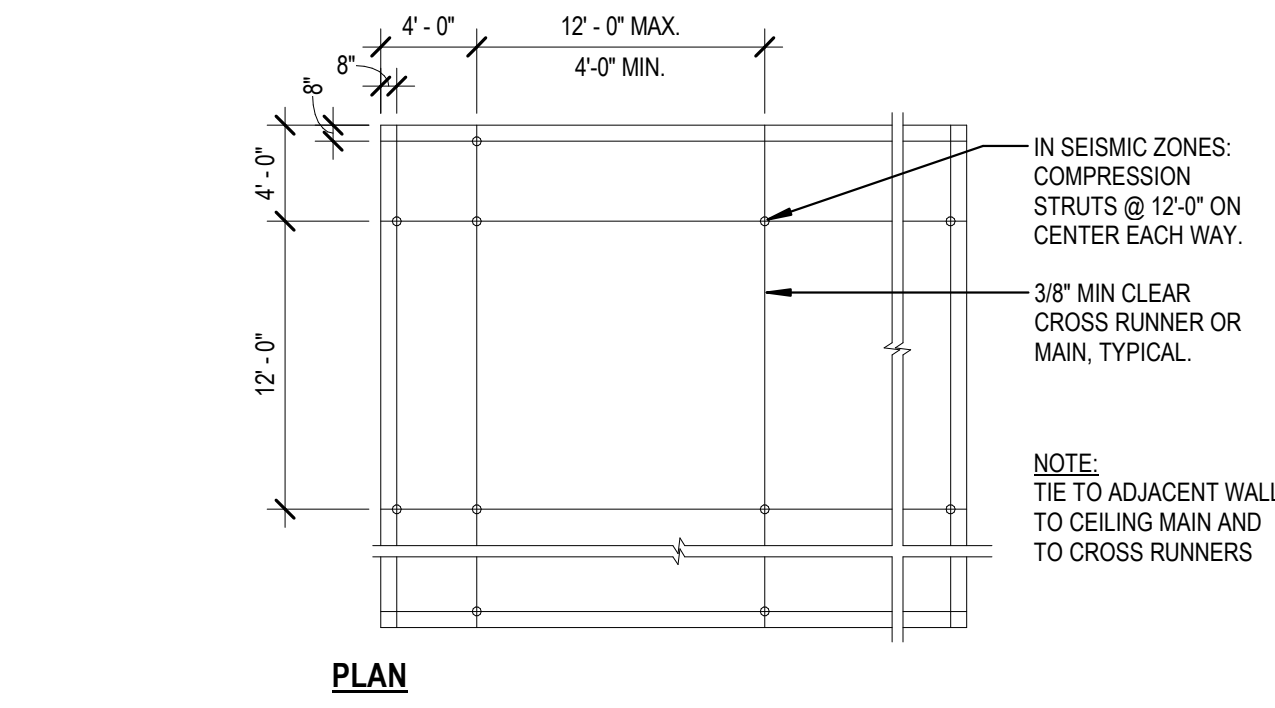
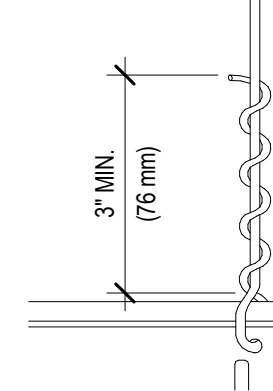
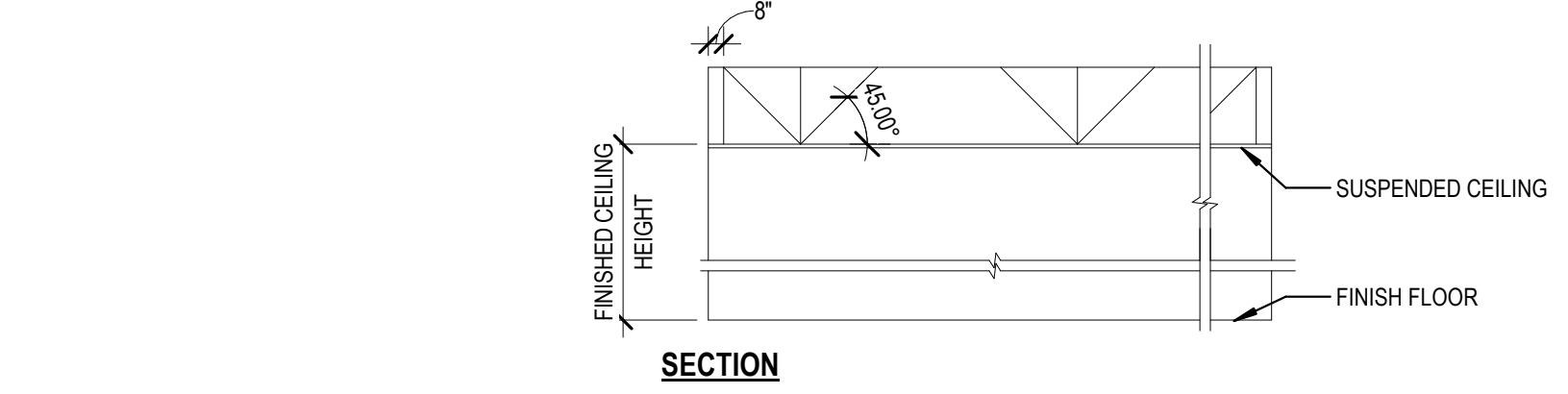


FIGURE 4A
ATTACHED WALL MOLDING REQUIREMENTS

FIGURE 4b
UNATTACHED WALL MOLDING REQUIREMENTS



SUSPENDED CEILING BRACING

COMPRESSIONS STRUT (METAL STUD OR EMT CONDUIT) @ 12' ON CENTER EACH WAY IN THE FIELD AND 6" MAXIMUM FROM WALL EDGES. STRUTS TO BE TIGHT TO CEILING GRID AND STRUCTURE ABOVE. LOCATE STRUTS ON MAIN RUNNERS. REF. FIGURE 3 FOR STRUT TYPES AND LENGTHS. REF. SUSPENDED CEILING BRACING PLAN FOR SPACING OF COMPRESSIONS STRUTS.

T-BAR VERTICAL SUSPENSION WIRES #12 WIRE @ 4' - 0" ON CENTER EACH WAY. LOCATE ON MAIN RUNNERS. ALSO, LOCATE 9" OFF OF EACH WALL FOR BOTH MAIN AND CROSS RUNNERS.

AT SEISMIC STRUT LOCATIONS (#12 WIRES SECURED WITHIN 2" OF CROSS RUNNER INTERSECTIONS AND SPAYED 90° @ 45° ANGLE MAXIMUM FROM PLANE OF CEILING.

T-BAR SYSTEM CROSS RUNNER
T-BAR SYSTEM MAIN RUNNER

NOTE: SCREW ALL LIGHT FIXTURES TO T-BAR. PROVIDE #12 SLACK WIRE ATTACHED TO EACH FIXTURE AT TWO OPPOSING CORNERS

CEILING BRACING (T-BAR)

COMPRESSION STRUT (METAL STUD OR EMT CONDUIT) @ 12' ON CENTER EACH WAY IN THE FIELD AND 6" MAXIMUM FROM WALL EDGES. STRUTS TO BE TIGHT TO CEILING GRID AND STRUCTURE ABOVE. LOCATE STRUTS ON MAIN RUNNERS. REF. FIGURE 3 FOR STRUT TYPES AND LENGTHS. REF. SUSPENDED CEILING BRACING PLAN FOR SPACING OF COMPRESSIONS STRUTS.

T-BAR VERTICAL SUSPENSION WIRES #12 WIRE @ 4' - 0" ON CENTER EACH WAY. LOCATE ON MAIN RUNNERS. ADDITIONALLY, LOCATE 9" OFF OF EACH WALL FOR BOTH MAIN AND CROSS RUNNERS.

AT SEISMIC STRUT LOCATIONS (#12 WIRES SECURED WITHIN 2" OF CROSS RUNNER INTERSECTIONS AND SPAYED 90° @ 45° ANGLE MAXIMUM FROM PLANE OF CEILING.

7/8" 20 GAUGE @ 16" ON CENTER CEILING SUPPORT SYSTEM CROSS RUNNER
1-1/2" 20 GAUGE @ 48" ON CENTER CEILING SUPPORT SYSTEM MAIN RUNNER

CEILING BRACING (GYP. BD)

LATERAL FORCE BRACING (FIGURES 2 AND 3)

- CEILING CONSTRUCTED OF LATH AND PLASTER OR GYPSUM BOARD, SCREW OR NAIL ATTACHED TO SUSPENDED MEMBERS THAT SUPPORT A CEILING ON ONE LEVEL EXTENDING FROM WALL TO WALL SHALL BE EXEMPT FROM THE LATERAL FORCE BRACING REQUIREMENTS. SOURCE: CISCA ZONES 3-4
- LATERAL FORCE BRACING IS THE USE OF VERTICAL STRUTS (COMPRESSION POST AND SPRAY WIRES) (SEE FIGURE 2).
- LATERAL FORCE BRACING IS REQUIRED FRO CEILINGS OVER 144 SQUARE FEET AND NOT REQUIRED FOR CEILINGS LESS THAN 144 SQUARE FEET PROVIDED THEY ARE SURROUNDED BY FOUR WALLS AND BRACED TO STRUCTURE.
- SEISMIC SPAY WIRE WRES ARE TO BE FOUR 12 GAUGE WIRES ATTACHED TO THE MAIN BEAM. WIRES ARE ARRIVED 90° FROM EACH OTHER AND AT AN ANGLE NOT EXCEEDING 45° FROM THE PLANE OF THE CEILING. SOURCE: CISCA SEISMIC ZONES 3-4
- "POWDER DRIVEN SHOT-IN-ANCHORS" WHEN USED FOR SEISMIC APPLICATIONS AS PART OF THE PRESCRIPTIVE PATH IN SEISMIC DESIGN CATEGORIES D, E, AND F SHALL HAVE AN ICC-ES APPROVAL FOR SEISMIC APPLICATIONS AND SHALL REQUIRED "SPECIAL INSPECTION" IRRESPECTIVE OF THE TYPE OF OCCUPANCY CATEGORY THE STRUCTURE IS IN. ANCHORS FOR KICKER WIRES (SPAYED WIRES INSTALLED FOR PURPOSES OTHER THAN SEISMIC RESTRAINT) ARE EXEMPT FROM REQUIREMENT.
- SPRAY WIRES ARE TO BE WITHIN 2 INCHES OF THE CONNECTION OF THE VERTICAL STRUT TO SUSPENDED CEILING. SOURCE: CISCA SEISMIC ZONES 3-4
- RIDGED BRACING MAY BE USED IN LIEU OF SPAY WIRE. SOURCE: ASCE SECTION 9.6.2.6.2.2
- CEILING WITH PLENUMS LESS THAN 12" TO STRUCTURE ARE NOT REQUIRED TO HAVE LATERAL FORCE BRACING.
- VERTICAL STRUTS MUST BE POSITIVELY ATTACHED TO THE SUSPENSION SYSTEM AND THE STRUCTURE ABOVE. SOURCE: CISCA 3-4
- THE VERTICAL STRUT MAY BE EMT CONDUIT, METAL STUDS OR A PROPRIETARY COMPRESSION POST (SEE FIGURE 3)

WALL MOLDINGS (FIGURES 4A AND 4b)

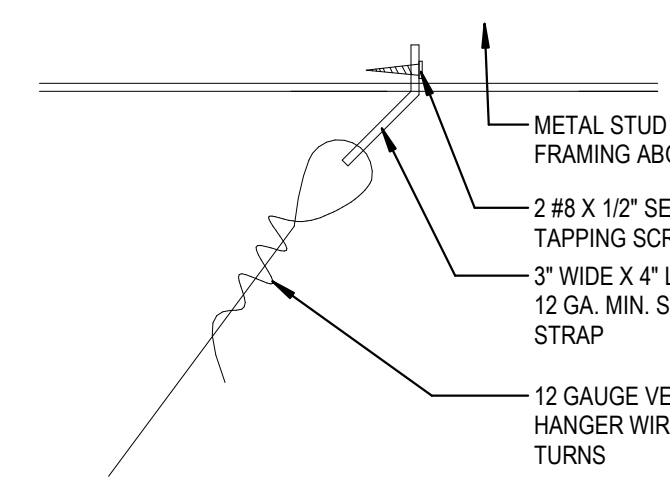
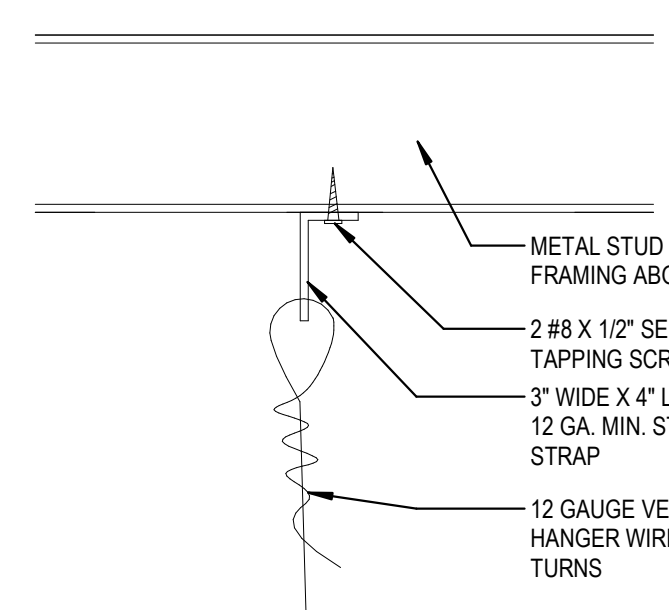
- WALL MOLDINGS (PERIMETER CLOSURE ANGLES ARE REQUIRED TO HAVE A HORIZONTAL FLANGE 2 INCHES WIDE. ONE END OF THE CEILING GRID SHALL BE ATTACHED TO THE WALL MOLDING, THE OTHER END SHALL HAVE A 3/4 INCH CLEARANCE FROM THE WALL AND FREE TO SLIDE. SOURCE: ASCE 7-16 SECTION 9.6.2.6.2.2 ITEM b.
- WHERE SUBSTANTIATING DOCUMENTATION HAS BEEN PROVIDED TO THE LOCAL JURISDICTION, PERIMETER CLIPS MAY BE USED TO SATISFY THE REQUIREMENTS OF THE 2-INCH CLOSURE ANGLE.
- THE GRID SHALL BE ATTACHED AT TWO ADJACENT WALLS (POP RIVETS OR APPROVED METHOD), SOFFITS EXTENDING TO A POINT AT LEAST LEVEL WITH THE BOTTOM PLANE OF THE GRID ARE INDEPENDENTLY SUPPORTED AND LATERALLY BRACED TO THE STRUCTURE ABOVE ARE DEEMED TO BE EQUIVALENT TO WALLS.
- THERE SHALL BE A MINIMUM 3/4 INCH CLEARANCE FROM THE END OF THE GRID SYSTEM AT UN-ATTACHED WALLS. SOURCE: ASCE 7-16 SECTION 9.6.2.6.2.2 ITEM b.

SPREADER BARS (FIGURES 4)

- SPREADER (SPACER) BARS SHALL BE USED TO PREVENT THE ENDS OF THE MAIN BEAMS AND CROSS TEES AT PERIMETER WALLS FROM SPREADING OPENING DURING A SEISMIC EVENT. PERIMETER WIRES SHALL NOT BE IN LIEU OF SPREADER BARS. SOURCE: CISCA SEISMIC ZONES 3-4
- SPREADER BARS ARE NOT REQUIRED AT PERIMETERS WHERE RUNNERS ARE ATTACHED DIRECTLY TO CLOSURE ANGLES.
- WIRE TYING IS AN ACCEPTABLE ALTERNATIVE TO SPREADER BARS.
- SPREADER BARS ARE NOT REQUIRED IF A 90° INTERSECTING CROSS OR MAIN IS WITHIN 8 INCHES OF THE PERIMETER WALL.
- WHERE SUBSTANTIATING DOCUMENTATION HAS BEEN PROVIDED TO THE LOCAL JURISDICTION, PERIMETER CLIPS MAY BE USED TO SATISFY THE REQUIREMENTS FOR SPREADER BARS.

SPRINKLERS

- FOR CEILING WITHOUT RIGID BRACING, SPRINKLER HEAD PENETRATIONS SHALL HAVE A 2 INCH OVERSIZE RING SLEEVE OR ADAPTER THROUGH THE CEILING TO ALLOW FREE MOVEMENT OF AT LEAST 1 INCH IN ALL HORIZONTAL DIRECTIONS. FLEXIBLE HEAD DESIGN CAN ACCOMMODATE 1 1/2 INCH FREE MOVEMENT SHALL BE PERMITTED AS AN ALTERNATE. SOURCE: ASCE 07-16 9.6.2.6.2.2 ITEM a



HANGER (SUSPENSION) WIRES (FIGURES 5a AND 5b)

- HANGER AND PERIMETER WIRES MUST BE PLUMB WITHIN 1/8 IN UNLESS (FIGURE 5a) SLOPING WIRES ARE PROVIDED (FIGURE 5b). SOURCE: ASTM C 638 SECTION 2.1.4
- HANGER WIRES SHALL BE 12 GAUGE AND SPACED 4 FEET ON CENTER OR 10 GAUGE SPACED 5 FEET ON CENTER. SOURCE: CISCA ZONES 3-4
- ANY CONNECTION DEVICE AT THE SUPPORTING CONSTRUCTION SHALL BE CAPABLE OF CARRYING NOT LESS THAN 100 POUNDS. SOURCE: CISCA ZONES 3-4
- POWDER DRIVEN SHOT-IN-ANCHORS ARE AN APPROVED METHOD OF ATTACHMENT FOR HANGER WIRES.
- TERMINALS ENDS OF EACH MAIN BEAM AND CROSS TEE MUST BE SUPPORTED WITHIN 8 INCHES OF EACH WALL WITH A PERIMETER WIRE (SEE FIGURE 4 & 8). SOURCE: CISCA ZONES 3-4
- WIRES SHALL NOT ATTACH TO OR BEND AROUND INTERFERING MATERIAL OR EQUIPMENT. A TRAPEZE OR EQUIVALENT DEVICE SHALL BE USED WHERE OBSTRUCTIONS PRECLUDE DIRECT SUSPENSION. TRAPEZE SUSPENSIONS SHALL BE A MINIMUM OF BACK-TO-BACK 1-1/4" COLD-ROLLED CHANNELS FOR SPANS EXCEEDING 48 INCHES. SOURCE: CISCA ZONES 3-4

ELECTRICAL FIXTURES

- LIGHT FIXTURES WEIGHING LESS THAN 10 POUNDS SHALL HAVE ONE 12 GAUGE HANGER WIRE CONNECTED FROM THE FIXTURE TO THE STRUCTURE ABOVE. THIS WIRE MAY BE SLACK. SOURCE: CISCA SEISMIC ZONES 3-4
- LIGHT FIXTURES WEIGHING MORE THAN 10 POUNDS AND LESS THAN 56 POUNDS SHALL HAVE TWO 12 GAUGE WIRES ATTACHED AT OPPOSING CORNERS OF THE LIGHT FIXTURE TO THE STRUCTURE ABOVE. THESE WIRES MUST BE TAUT. SOURCE: CISCA SEISMIC ZONES 3-4
- CEILING WITH PLENUMS LESS THAN 12" TO STRUCTURE ARE NOT REQUIRED TO HAVE LATERAL FORCE BRACING.
- LIGHT FIXTURES WEIGHING MORE THAN 56 POUNDS SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE. THESE WIRES MUST BE TAUT. SOURCE: CISCA SEISMIC ZONES 3-4
- PENDANT MOUNTED FIXTURES SHALL BE DIRECTLY SUPPORTED FROM STRUCTURE ABOVE USING A 9 GAUGE WIRE OR AN APPROVED ALTERNATE SUPPORT WITHOUT USING THE CEILING SUSPENSION SYSTEM FOR DIRECT SUPPORT. SOURCE: CISCA SEISMIC ZONES 3-4
- TANDEM FIXTURE MAY UTILIZE COMMON WIRES.

MECHANICAL SERVICES

- TERMINALS OR SERVICES WEIGHING 20 POUNDS BUT NOT MORE THAN 56 POUNDS MUST HAVE TWO 12 GAUGE WIRES CONNECTING THEM TO THE CEILING SYSTEM HANGERS OR THE STRUCTURE ABOVE. THESE WIRES MAY BE SLACK. SOURCE: CISCA SEISMIC ZONES 3-4
- TERMINALS OR SERVICES WEIGHING MORE THAN 56 POUNDS MUST BE INDEPENDENTLY SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE. THESE WIRES MUST BE TAUT. SOURCE: CISCA SEISMIC ZONES 3-4

SEISMIC SEPARATION JOINTS (FIGURE 7)

- FOR CEILING AREAS EXCEEDING 2,500 SQUARE FEET, A SEISMIC SEPARATION JOINT OR FULL HEIGHT WALL PARTITION THAT BREAKS THE CEILING SHALL BE PROVIDED UNLESS ANALYSES ARE PERFORMED OF THE CEILING'S BRACING SYSTEM, CLOSURE ANGLES AND PENETRATIONS TO PROVIDE SUFFICIENT CLEARANCE. SOURCE: ASCE 7-16 ITEM 9.6.2.6.2.2 ITEM d.
- THE LAYOUT AND LOCATION OF THE SEISMIC SEPARATION JOINT SHALL BE THE DESIGNER OF RECORD AND NOTED ON THE PLANS. IF A SEISMIC SEPARATION JOINT IS REQUIRED BY A PROPRIETARY JOINT, THE AMOUNT OF FREE MOVEMENT (GAP DESIGN) SHALL BE A MINIMUM OF 3/4 INCH.
- IN LIEU OF SEISMIC SEPARATION JOINTS, THE CEILING MAY BE DIVIDED INTO AREAS LESS THAN 2500 SQUARE FEET BY THE USE OF PARTITIONS OR SOFFITS AS FOLLOWS: PARTITIONS SHALL EXTEND A MINIMUM OF 6 INCHES ABOVE THE LEVEL OF THE PLANE OF THE GRID AND SHALL BE INDEPENDENTLY BRACED TO THE STRUCTURE ABOVE. SOFFITS SHALL EXTEND TO A POINT AT LEAST LEVEL WITH THE BOTTOM PLANE OF THE GRID AND SHALL BE INDEPENDENTLY SUPPORTED AND LATERALLY BRACED TO THE STRUCTURE ABOVE.
- OTHER THAN PARTITIONS AND SOFFITS, SEISMIC JOINTS MAY NOT BE USED AS PART OF A FIRE RATED CEILING ASSEMBLY UNLESS SUBSTANTIATING DOCUMENTATION IS PROVIDED.

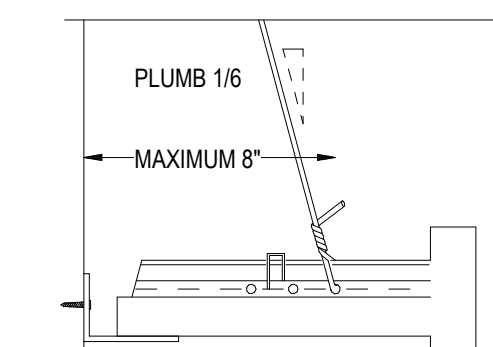


FIGURE 5a

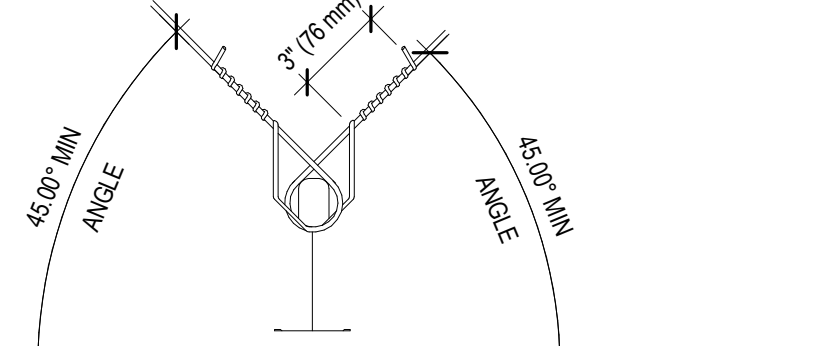


FIGURE 5b - COUNTER SLOPING

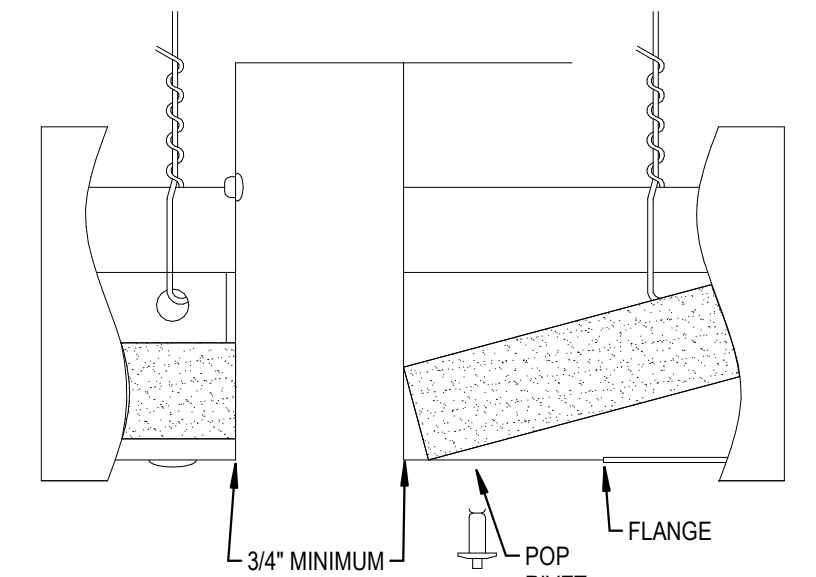


FIGURE 7

GLOSSARY FOR THIS DOCUMENT (REGIONAL TERMINOLOGY MAY VARY)

CROSS TEES THE CROSS MEMBERS THAT INTERLOCK WITHIN THE MAIN BEAMS, ALSO KNOWN AS CROSS RUNNERS OR CROSS T-BARS.	LATERAL FORCE BRACING THE BRACING METHOD USED TO PREVENT CEILING UPLIFT OR RESTRICT LATERAL MOVEMENT DURING A SEISMIC EVENT. LATERAL FORCE BRACING CONSIST OF VERTICAL STRUTS AND SPAY WIRES.	PERIMETER WIRES HANGER WIRES PLACED WITHIN EIGHT INCHES OF THE SURROUNDING WALLS.
DIFFUSER A CIRCULAR OR RECTANGULAR METAL GRILL USED FOR THE PASSAGE OF AIR FROM A DUCTED SYSTEM.	MAIN BEAM THE PRIMARY SUSPENSION MEMBER SUPPORTED BY HANGER WIRES, ALSO KNOWN AS THE MAIN RUNNER. CARRYING TEE, CARRYING RUNNER OR MAINS.	PLENUM THE SPACE ABOVE A VERTICAL STRUTS AND SPAYED CEILING.
ESSENTIAL SERVICE BUILDINGS ANY BUILDING DESIGNED TO BE USED BY PUBLIC AGENCIES AS A FIRE STATION, POLICE STATION, EMERGENCY OPERATIONS CENTER, STATE PATROL OFFICE, SHERIFF'S OFFICE, OR EMERGENCY COMMUNICATION DISPATCH CENTER.	MOLDING/CLOSURE ANGLE A LIGHT GAUGE METAL ANGLE OR CHANNEL FASTENED TO THE PERIMETER WALL OR PARTITION TO SUPPORT THE PERIMETER ENDS OF AN ACOUSTICAL CEILING GRID.	SLACK WIRE A 12 GAUGE WIRE THAT IS NOT TIGHT OR TAUT.
GRID THE MAIN BEAMS AND CROSS TEES OF THE SUSPENSION SYSTEM.	PERIMETER CLIPS PROPRIETARY ANGLE BRACKET ATTACHED DIRECTLY TO THE WALL MOLDING/CLOSURE ANGLE WHICH ALLOWS FOR 3/4" MOVEMENT IN THE EVENT OF SEISMIC ACTIVITY AND ELECTRICALS PROPERLY WITH ENDS OF GRID SYSTEM.	SPREADER OR SPACER BAR A BAR WITH NOTCHES TO PREVENT THE SUSPENSION SYSTEM FROM SEPARATING, ALSO CALLED A STABILIZER BAR.
HANGER WIRE 10 OR 12 GAUGE SOF ANNEALED WIRE USED AS PRIMARY SUPPORT FOR THE GRID SYSTEM. ALSO CALLED SUSPENSION WIRES.	VERTICAL STRUTS THE RIGID VERTICAL MEMBER USED IN LATERAL FORCE BRACING OF THE SUSPENSION SYSTEM. ALSO KNOWN AS A COMPRESSION POSTS, SEISMIC POSTS, SEISMIC STRUTS. COMMON MATERIALS ARE ELECTRICAL CONDUIT (EMT), METAL STUDS OR PROPRIETARY PRODUCTS.	

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4.25.2025 Exp. 4.10.2026

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Revisions / Submissions		
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Sheet Title:
CEILING GRID SEISMIC DETAILS

A0.04

LEGEND

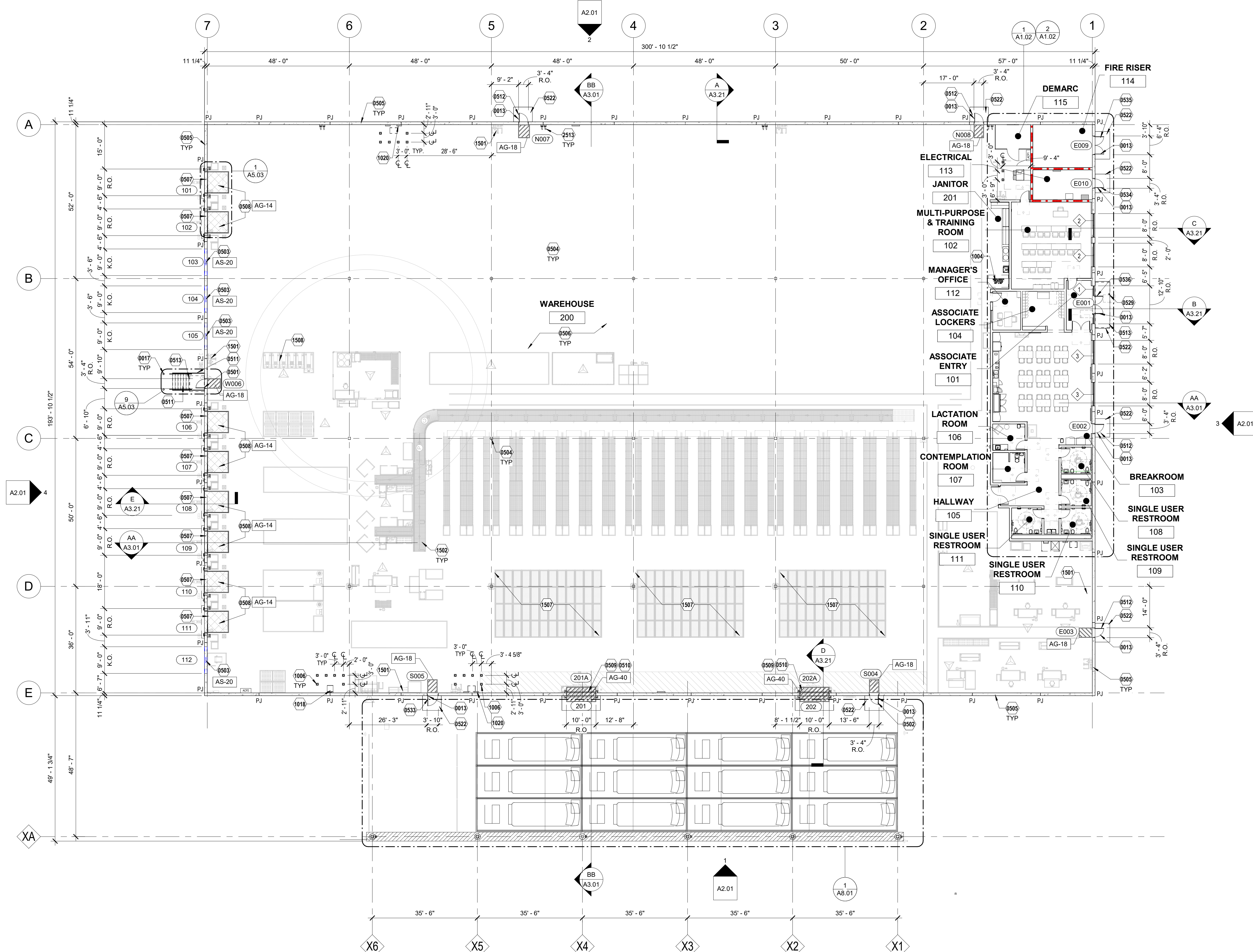
- XX --- COLUMN GRID ID
- XX --- CANOPY COLUMN GRID ID
- 101 --- DOOR MARK TAG
- X --- WINDOWSTOREFRONT TYPE TAG
- ? --- KEY NOTE
- TYP --- SIGNAGE TAG
- INTERIOR PARTITION, REFER TO SHEET A0.01
- 1-HR RATED PARTITION
- EXTERIOR WALL CONSTRUCTION

KEYNOTES

- 0013 ALL EXIT DOORS TO OPEN ONTO A LEVEL CONCRETE LANDING. REFER TO STRUCTURAL DRAWINGS AND CIVIL DRAWINGS FOR MORE INFORMATION.
- 0017 EXTERIOR BOLLARD. PAINT SAFETY YELLOW. REFER TO DETAIL 8/AS.03.
- 0501 TRUCKER (TR) ENTRY DOOR. FOR SIGNAGE REFER TO DETAIL 4/G1.10. AS-28 SIGN TO READ "TRUCKER'S ENTRANCE".
- 0502 DRIVER (DS) ENTRY DOOR. FOR SIGNAGE REFER TO DETAIL 4/G1.10. AS-28 SIGN TO READ "DRIVER'S ENTRANCE".
- 0503 KNOCK-OUT PANEL. MATCH DOCK DOOR SIZE.
- 0504 COLUMN PER STRUCTURAL. PAINT PER DETAIL 7/G1.10.
- 0505 CONCRETE PANEL. PAINT PER ELEVATIONS.
- 0506 REINFORCED CONCRETE SLAB WITH VAPOR BARRIER. TYP. REFER TO STRUCTURAL. UNDER-SLAB DRAINAGE PERIMETER & CROSS DRAINS REQUIRED PER GEOTECHNICAL REPORT.
- 0507 SECTIONAL OVERHEAD TRUCK DOCK DOOR (INSULATED) WITH BUMPERS AND DOCK SEAL. PRE-PRIMED. PAINT PER LEGEND. TYP. FOR SIGNAGE REFER TO 8/G1.10.
- 0508 PROVIDE HYDRAULIC LEVELER PER TENANT DESIGN CRITERIA. REFER TO SPECIFICATIONS.
- 0509 HIGH-SPEED FABRIC DOOR (INTERIOR MOUNT) AND OVERHEAD COILING DOOR (EXTERIOR MOUNT). INSULATED) WITH PAINTED CLEAR ZONE ON GROUND. VERIFY REQUIRED CLEARANCES WITH DOOR MANUFACTURER. DOORS MAY REQUIRE LEFT HAND DRIVE MECHANISMS. REFER TO DOOR SCHEDULE FOR MORE INFORMATION. FOR SIGNAGE REFER TO 8/G1.10.
- 0510 ADD VISUAL AND AUDIO ALARMS AT INTERIOR HIGH-SPEED ROLL UP DOORS THAT HAVE PEDESTRIAN TRAFFIC. REFER TO TELECOM AND SECURITY DRAWINGS, BY OTHERS.
- 0511 PRE-FAB METAL STAIR AT TRUCK COURT, GALVANIZED (NO PAINT).
- 0512 TYPICAL EGRESS DOOR. FOR SIGNAGE REFER TO DETAIL 4/G1.10.
- 0513 FABRIC AWNING OVERHEAD. AWNING TO EXTEND 1'-0" PAST THE OPENING ON EITHER SIDE. REFER TO SPECS FOR PRODUCT INFORMATION. REFER TO WALL SECTION FOR ADDITIONAL INFORMATION. COLOR TO MATCH SUNBRELLA "AZURE".
- 0522 PROVIDE DOOR STOOP. REFER TO STRUCTURAL DRAWINGS FOR MORE INFORMATION.
- 0529 ADA PUSH BUTTON. PEDESTAL LOCATION TO BE OUTSIDE DOOR SWING WITH 30" X 52" CLEAR SPACE. REFER TO DOOR HARDWARE AND SCHEDULE.
- 0533 TRASH DOOR. FOR SIGNAGE REFER TO DETAIL 4/G1.10. AS-28 SIGN TO READ "TRASH DOOR".
- 0534 ELECTRICAL ROOM DOOR. FOR SIGNAGE REFER TO DETAIL 4/G1.10. AS-28 SIGN TO READ "ELECTRICAL ROOM".
- 0535 FIRE RISER DOOR. FOR SIGNAGE REFER TO DETAIL 4/G1.10. AS-28 SIGN TO READ "FIRE RISER".
- 0536 MAIN ENTRANCE DOOR. FOR SIGNAGE REFER TO DETAIL 4/G1.10.
- 1004 SCRUBBER AREA. REFER TO ENLARGED OFFICE PLAN.
- 1006 INTERIOR BOLLARD. PAINT SAFETY YELLOW. REFER TO DETAIL 7/AS.03.
- 1018 0F OR ACP LOCATION. REFERENCE TELECOM AND ELECTRICAL DRAWINGS.
- 1100 ELECTRICAL EQUIPMENT WALL MOUNTED. REFER TO ELECTRICAL.
- 1501 WATER COOLER LOCATION. REFER TO PLUMBING AND ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- 1502 THIRD-PARTY VENDOR SUPPLIED CONVEYANCE. (30" A.F.F.)
- 1507 ROLLING CART STORAGE.
- 1508 PALLET JACK PARKING.
- 2513 PRIMARY AND OVERFLOW ROOF DRAIN LEADERS - REFER TO PLUMBING DRAWINGS. PROVIDE BENT PLATE PROTECTORS - SEE DETAIL 5/AS.03.

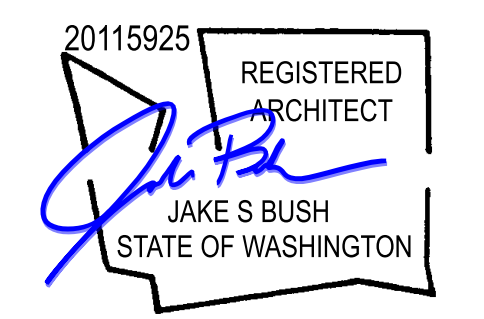
SHEET NOTES - FLOOR PLAN

- A. REFERENCE PARTITION DETAIL SHEETS FOR ADDITIONAL CONSTRUCTION INFORMATION.
- B. REFERENCE FURNITURE PLAN SHEET FOR EQUIPMENT SCHEDULES.
- C. REFERENCE STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- D. REFERENCE GENERAL SHEET AND SIGNAGE AND GRAPHICS SHEETS FOR ADDITIONAL SIGNAGE INFORMATION.
- E. REFERENCE FINISH PLAN AND SCHEDULE FOR INTERIOR FINISHES.
- F. REFERENCE DOOR TYPES AND SCHEDULES SHEET FOR ADDITIONAL INFORMATION.
- G. FOR ACCESSIBLE CLEARANCES NOT INDICATED, REFER TO NOTES AND DETAILS ON GENERAL SHEETS.
- H. LOCATE DOORS 4" OFF ADJACENT WALL BEHIND HINGE. UNO.
- I. DIMENSION SHOWN ON NEW WALLS TO FROM FACE OF STUDY MASONRY CONCRETE OR CENTERLINE OF GRID UNO.
- J. ALL GYP SURFACES, WALLS AND CEILING SHALL BE TAPED AND SANDED TO A LEVEL 4 FINISH PRIOR TO RECEIVING FINISHES. UNO.
- K. GC TO PROVIDE BLOCKING AS REQUIRED AT SINKS, EQUIPMENT, GRAB BARS, AND FIXTURES PER MANUFACTURER'S RECOMMENDATIONS.
- L. MOUNT ACCESSORIES IN COMPLIANCE WITH ACCESSIBILITY CODE REQUIREMENTS. REFER TO GENERAL INFORMATION AND SIGNAGE SHEETS.
- M. SEAL ALL PENETRATIONS AT EXTERIOR WALLS AND ROOF. REFERENCE SPECIFICATIONS.
- N. WALL HEIGHT IS NOTED ON PLAN. IF NO HEIGHT IS LISTED PARTITION SHALL BE 8" HIGHER THAN THE CEILING HEIGHT OF THE ROOMS THE PARTITIONS ABUT.
- O. INSTALL GYPSUM WALLBOARD CONTROL JOINTS EVERY 30'-0" PER PARTITION SHEET.
- P. REFERENCE STRUCTURAL PLANS FOR CONCRETE SLAB CONTROL JOINT INFORMATION.
- Q. REFERENCE EXTERIOR ELEVATION SHEET FOR EXTERIOR CONTROL JOINTS.
- R. REFERENCE SHEET AS.01 FOR PANEL JOINT DETAILS.
- S. REFER TO ENERGY CODE BASIS OF DESIGN ON CODE ANALYSIS SHEET FOR ANY REQUIRED INSULATION VALUES.



1 OVERALL FLOOR PLAN
A1.01 Scale: 1/16" = 1'-0"

ARCHITECT OF RECORD
Jacob S. Bush



4.25.2025 Exp. 4.10.2026

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

AMBROSE PROPERTY GROUP

Revisions / Submissions		
ID	Description	Date
1	PERMIT SET	04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: SW / CB
Checked By: DZ
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
OVERALL FLOOR PLAN

A1.01

SHEET NOTES - FLOOR PLAN

- A. REFERENCE PARTITION DETAIL SHEETS FOR ADDITIONAL CONSTRUCTION INFORMATION.
- B. REFERENCE FURNITURE PLAN SHEET FOR EQUIPMENT SCHEDULES.
- C. REFERENCE STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- D. REFERENCE GENERAL SHEET AND SIGNAGE AND GRAPHICS SHEETS FOR ADDITIONAL SIGNAGE INFORMATION.
- E. REFERENCE FINISH PLAN AND SCHEDULE FOR INTERIOR FINISHES.
- F. REFERENCE DOOR TYPES AND SCHEDULES SHEET FOR ADDITIONAL INFORMATION.
- G. FOR ACCESSIBLE CLEARANCES NOT INDICATED, REFER TO NOTES AND DETAILS ON GENERAL SHEETS.
- H. LOCATE DOORS 4" OFF ADJACENT WALL BEHIND HINGE, UNO.
- I. DIMENSION SHOWN ON NEW WALLS TO/FROM FACE OF STUD MASONRY/CONCRETE OR CENTERLINE OF GRID UNO.
- J. ALL GYP SURFACES, WALLS AND CEILING SHALL BE TAPED AND SANDED TO A LEVEL 4 FINISH PRIOR TO RECEIVING FINISHES, UNO.
- K. GC TO PROVIDE BLOCKING AS REQUIRED AT SINKS, EQUIPMENT, GRAB BARS, AND FIXTURES PER MANUFACTURER'S RECOMMENDATIONS.
- L. MOUNT ACCESSORIES IN COMPLIANCE WITH ACCESSIBILITY CODE REQUIREMENTS. REFER TO GENERAL INFORMATION AND SIGNAGE SHEETS.
- M. SEAL ALL PENETRATIONS AT EXTERIOR WALLS AND ROOF. REFERENCE SPECIFICATIONS.
- N. WALL HEIGHT IS NOTED ON PLAN, IF NO HEIGHT IS LISTED PARTITION SHALL BE 6" HIGHER THAN THE CEILING HEIGHT OF THE ROOMS THE PARTITIONS ABUT.
- O. INSTALL GYPSUM WALLBOARD CONTROL JOINTS EVERY 30'-0" PER PARTITION SHEET.
- P. REFERENCE STRUCTURAL PLANS FOR CONCRETE SLAB CONTROL JOINT INFORMATION.
- Q. REFERENCE EXTERIOR ELEVATION SHEET FOR EXTERIOR CONTROL JOINTS.
- R. REFERENCE SHEET A5.01 FOR PANEL JOINT DETAILS.
- S. REFER TO ENERGY CODE BASIS OF DESIGN ON CODE ANALYSIS SHEET FOR ANY REQUIRED INSULATION VALUES.

FLOOR PLAN CONSTRUCTION EXPECTATIONS

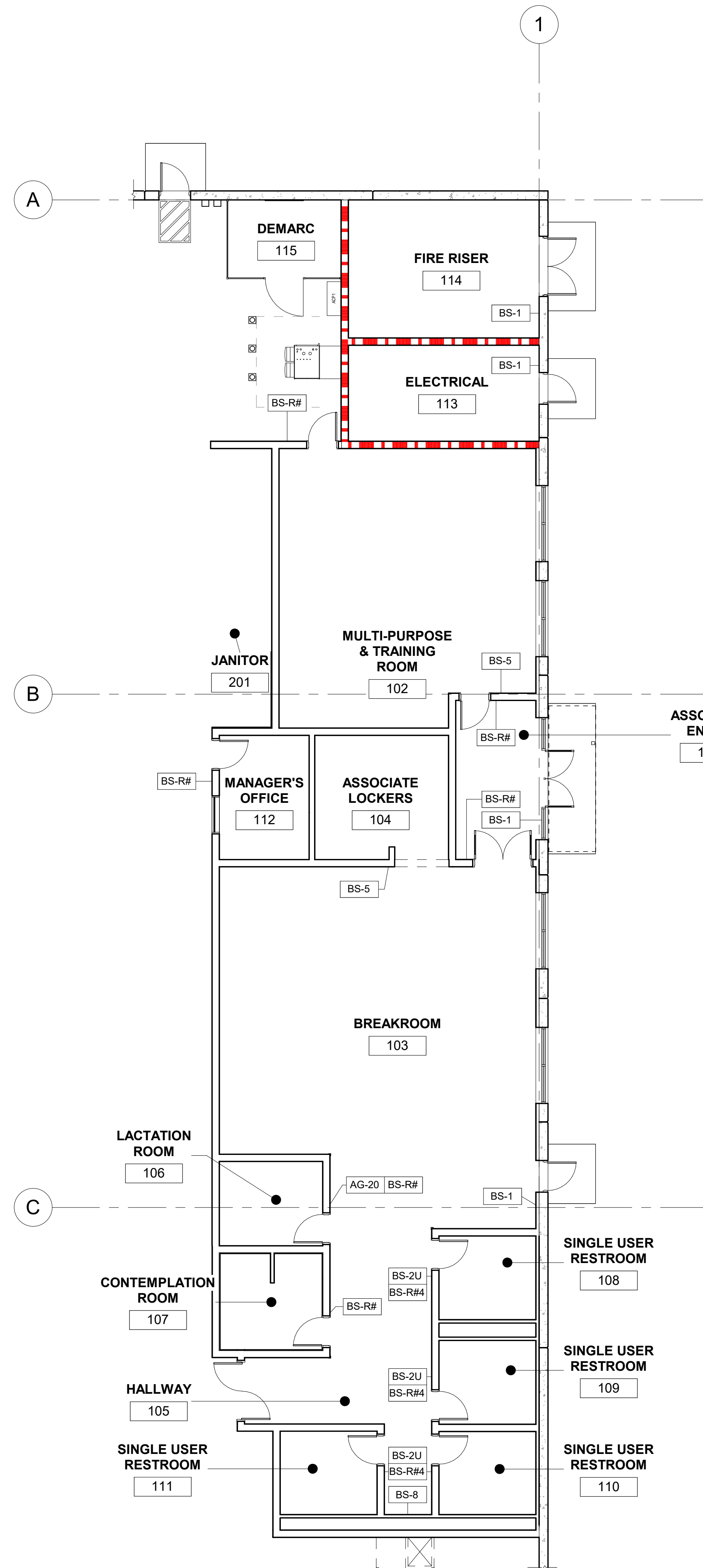
- A. GENERAL CONTRACTOR TO PROVIDE COMPLIANT FIRE EXTINGUISHERS IN OCCUPANCIES AND LOCATIONS AS REQUIRED PER THE INTERNATIONAL FIRE CODE. MOUNTING HEIGHTS TO MEET THE PROVISIONS OF ACCESSIBILITY CODE REQUIREMENTS. CABINET SHALL PROTRUDE NO MORE THAN 4" INTO WALKWAYS, CORRIDORS, PASSAGEWAYS, OR AISLES.
- B. ALL WORK SHALL BE ERRECTED AND INSTALLED PLUMB, LEVEL, SQUARE AND TRUE AND IN PROPER ALIGNMENT, UNLESS NOTED OTHERWISE.
- C. ALL EXPOSED GYPSUM BOARD EDGES TO HAVE VINYL OR METAL EDGE TRIM.
- D. ALL GYPSUM BOARD PARTITIONS SHALL BE TAPED AND SANDED SMOOTH WITH NO VISIBLE JOINTS, PROVIDED LEVEL 4 FINISH UNO.
- E. ALL DIMENSIONS ARE TO FACE OF FRAMING, UNLESS NOTED OTHERWISE.
 - a. DIMENSIONS NOTED "HOLD" MUST BE ACCURATELY MAINTAINED, AND SHALL NOT VARY MORE THAN +/- 1/8" WITHOUT WRITTEN INSTRUCTION FROM ARCHITECT.
 - b. "ALIGN" MEANS TO ACCURATELY LOCATE FINISH FACES IN THE SAME PLANE.
 - c. DIMENSIONS NOTED "CLEAR" ARE MINIMUM DIMENSIONS WHICH MUST BE MAINTAINED WITHOUT EXCEPTION.
 - d. DIMENSIONS MARKED +/- MEAN A VARIANCE NOT GREATER THAN 1 INCH. VERIFY DIMENSIONS EXCEEDING TOLERANCES WITH THE ARCHITECT.
- F. ALL DIMENSIONS TO THE EXTERIOR WINDOW WALL ARE TO THE FINISH FACE OF WALL BELOW SILL, UNO.
- G. MOISTURE-RESISTANT GYPSUM WALL BOARD TO BE INSTALLED ON PARTITIONS WITH ENCLOSED PLUMBING, BOTH SIDES. WALLS RECEIVING PORCELAIN OR CERAMIC TILE OR FRP. ENTIRE WALL SHALL RECEIVE MOISTURE-RESISTANT GYPSUM WALL BOARD.
- H. METAL STUDS AT PARTITIONS TO RECEIVE TILE ARE TO BE PER TILE MFR AND ACCESSIBILITY CODE TILE GUIDELINES. REFER TO FINISH PLANS FOR TILE LOCATIONS.
- I. THE CONTRACTOR SHALL ESTABLISH A SINGLE FLOOR ELEVATION THAT IS TO BE USED TO SET THE TOP OF ALL DOORS SUCH THAT THE TOP OF ALL DOORS OF THE SAME HEIGHT WILL ALIGN REGARDLESS OF VARIATIONS IN THE FLOOR SLAB OR FINISHED FLOOR THICKNESS.
- J. THERE SHALL BE NO EXPOSED PIPE, CONDUIT, DUCTS, VENTS, ETC. ALL SUCH LINES SHALL BE CONCEALED OR FURRED AND FINISHED, UNLESS OTHERWISE NOTED AS EXPOSED CONSTRUCTION ON THE DRAWINGS.
- K. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL BLOCKING FOR ALL WALL AND CEILING MOUNTED ITEMS, INCLUDING HARDWARE, LIGHT FIXTURES, GRAB BARS, CASEWORK, AND ALL OWNER PROVIDED ITEMS. PROVIDE SHEET METAL REINFORCING PER MFR STANDARDS OR 8" HORIZONTALLY MOUNTED STRIP OF 20 GA. GALVANIZED SHEET METAL CONCEALED IN PARTITIONS WHERE WALL OR CEILING MOUNTED ITEM IS INDICATED ON DRAWINGS. ALL CONCEALED LUMBER AND BLOCKING IS TO BE FIRE RETARDANT TREATED.

KEYNOTES

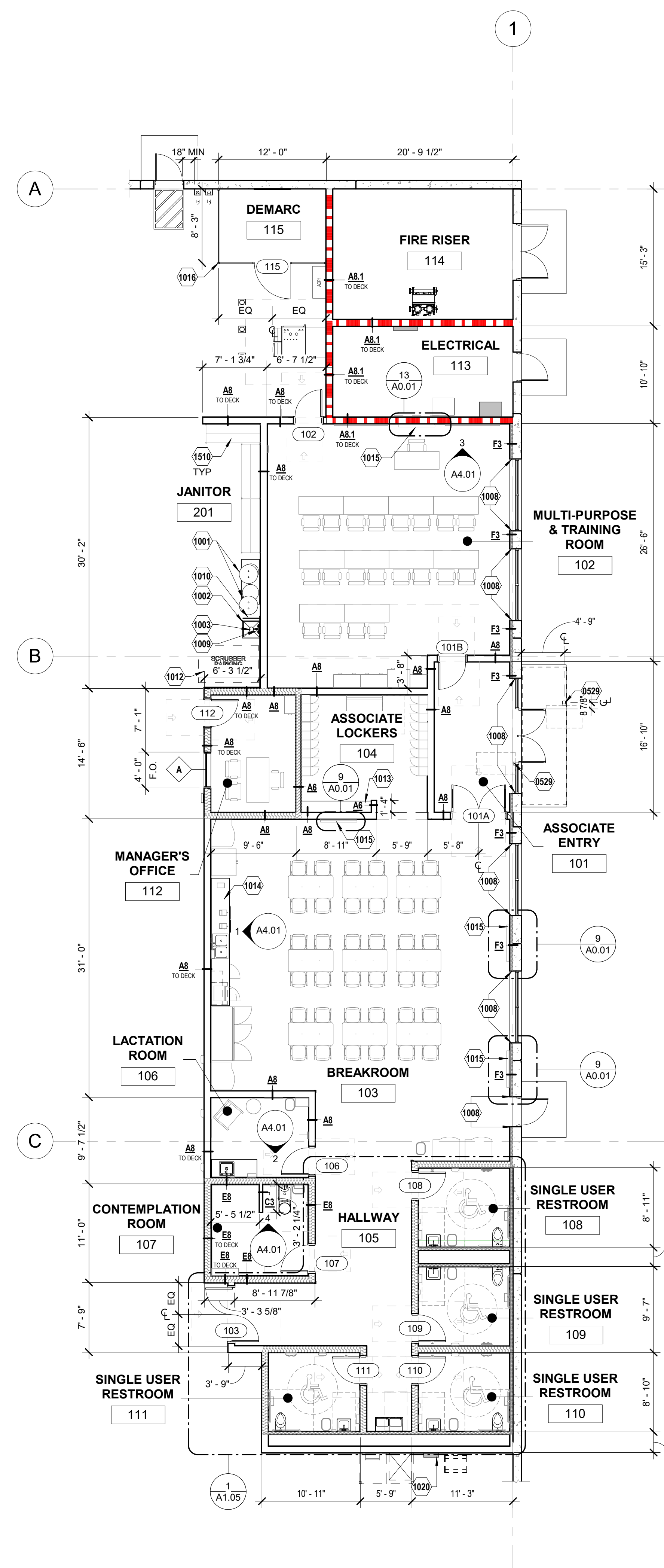
- 0529 ADA PUSH BUTTON, PEDESTAL LOCATION TO BE OUTSIDE DOOR SWING WITH 30" X 52" CLEAR SPACE. REFER TO DOOR HARDWARE AND SCHEDULE.
- 1001 ELECTRIC WATER HEATER, PROVIDE CONCRETE PAD FOR WATER HEATER AS REQUIRED. REFER TO PLUMBING FOR MORE INFORMATION.
- 1002 2" X 2" MOP SINK WITH FRP BEHIND UP TO 4'-0" A.F.F.
- 1003 PROVIDE 4" HOSE AT MOP SINK. THREADED FAUCET IS REQUIRED FOR HOSE CONNECTION. REFER TO PLUMBING FOR FIXTURE INFORMATION.
- 1008 RETURN GYP. BS FINISH TO DOOR/STOREFRONT FRAMING.
- 1009 HOSE CLAMP MOUNTED TO WALL ADJACENT TO MOP SINK AT 42" A.F.F. MATCH MOP SINK FAUCET HEIGHT.
- 1010 WET/DRY PARTITION. PARTITION MATERIAL AND TYPE TO MATCH RESTROOM PARTITION TYP. SIZE TO BE 2'-0" X 4'-0" A.F.F.
- 1012 80" X 80" AREA FOR SCRUBBER PARKING.
- 1013 FULLY BLOCK THIS WALL AT 40" A.F.F. TO RECEIVE COAT RACK. REFER TO DETAIL 8/AS.1.
- 1014 MILLWORK BY G.C. REFER TO ELEVATIONS & DETAILS FOR ADDITIONAL INFORMATION.
- 1015 55" WALL MOUNTED TV. REFER TO ELECTRICAL.
- 1016 12'-0" HIGH GATE & GATE BY GC. (NO CEILING) PROVIDE WIRECRAFTERS, STYLE 840 WOVEN WIRE PARTITIONS AND ENCLOSURES, FENCINGS AND DOOR, REF DOOR HARDWARE.
- 1020 ELECTRICAL EQUIPMENT WALL MOUNTED. REFER TO ELECTRICAL.
- 1510 SHELVING. REFER TO OFFICE FURNITURE PLAN.

LEGEND

- XX --- COLUMN GRID ID
 - (101) DOOR MARK TAG
 - X WINDOW/STOREFRONT TYPE TAG
 - TYP KEY NOTE
 - XX-## SIGNAGE TAG
 - INTERIOR PARTITION REFER TO SHEET A0.01
 - 1-HR RATED PARTITION
 - EXTERIOR WALL CONSTRUCTION
 - INSULATION REFER SPECS
- WALL TYPE ID
CORE THICKNESS (INCHES)
FIRE RATING (HOURS)
- WALL TYPE TAG, CODED
HEIGHT (WHERE HEIGHT IS NOT SPECIFICALLY CALLED OUT ON PLANS PARTITIONS SHALL BE 6" HIGHER THAN THE CEILING HEIGHT OF THE ROOMS THE PARTITIONS ABUT UNO WALLS, UNO EXPOSED TOP).



2 ENLARGED OFFICE SIGNAGE PLAN
A1.02 Scale: 1/8" = 1'-0"



1 ENLARGED OFFICE PLAN
A1.02 Scale: 1/8" = 1'-0"

Revisions / Submissions		
ID	Description	Date
1	PERMIT SET	04.25.2025

Project number:	763838-02
Scale:	AS NOTED
Drawn By:	SW / CB
Checked By:	DZ
Date:	04.25.2025
Issue:	PERMIT SET

Sheet Title:
**ENLARGED OFFICE
AND INTERIOR
SIGNAGE PLANS**

SHEET NOTES

- A. REFERENCE FINISH MATERIAL KEY FOR ADDITIONAL INFORMATION
- B. PROVIDE CONTINUOUS SEALANT BETWEEN MATERIAL TRANSITIONS. REFERENCE MANUFACTURER FOR TRANSITION STRIPS AS APPLICABLE
- C. PAINT ACCESS PANELS TO MATCH ADJACENT FINISHES. ONCE DRY CONFIRM THAT PAINT DOES NOT INHIBIT THE PROPER OPERATION OF ACCESS PANELS
- D. AT TILE FINISHES, COORDINATE BASE AND GROUT SPACING TO ELIMINATE CUT TILES
- E. PROVIDE CONTINUOUS ALUMINUM TRIM PIECE AT ALL UNFINISHED TILE EDGES AND CORNERS. REFERENCE MANUFACTURER SPECS
- F. PROVIDE WINDOW SHADES (HB-2) AT ALL EXTERIOR ALUMINUM STOREFRONT OPENINGS, U.N.O.
- G. PROVIDE WF-1 AT ALL STOREFRONT AND/OR WINDOWS UP TO 12' A.F.F.
- H. FLOOR MATERIAL TRANSITIONS AT DOOR OPENINGS ARE TO BE CENTERED BELOW THE DOOR IN THE CLOSED POSITION, U.N.O.
- I. PROVIDE 2 1/2" X 1/2" X 48" HIGH STAINLESS STEEL CORNER GUARDS AT ALL EXPOSED GYPSUM BOARD CORNERS. TYP. ALL CORNER GUARDS TO BE SET DIRECTLY ABOVE THE FLOOR BASE. PLACEMENTS IDENTIFIED ON PLAN
- J. AT GYPSUM BOARD WALLS FACING THE WAREHOUSE OR STORAGE AREAS PROVIDE LEVEL 4 DRYWALL FINISH WITH PT-1 PAINT.

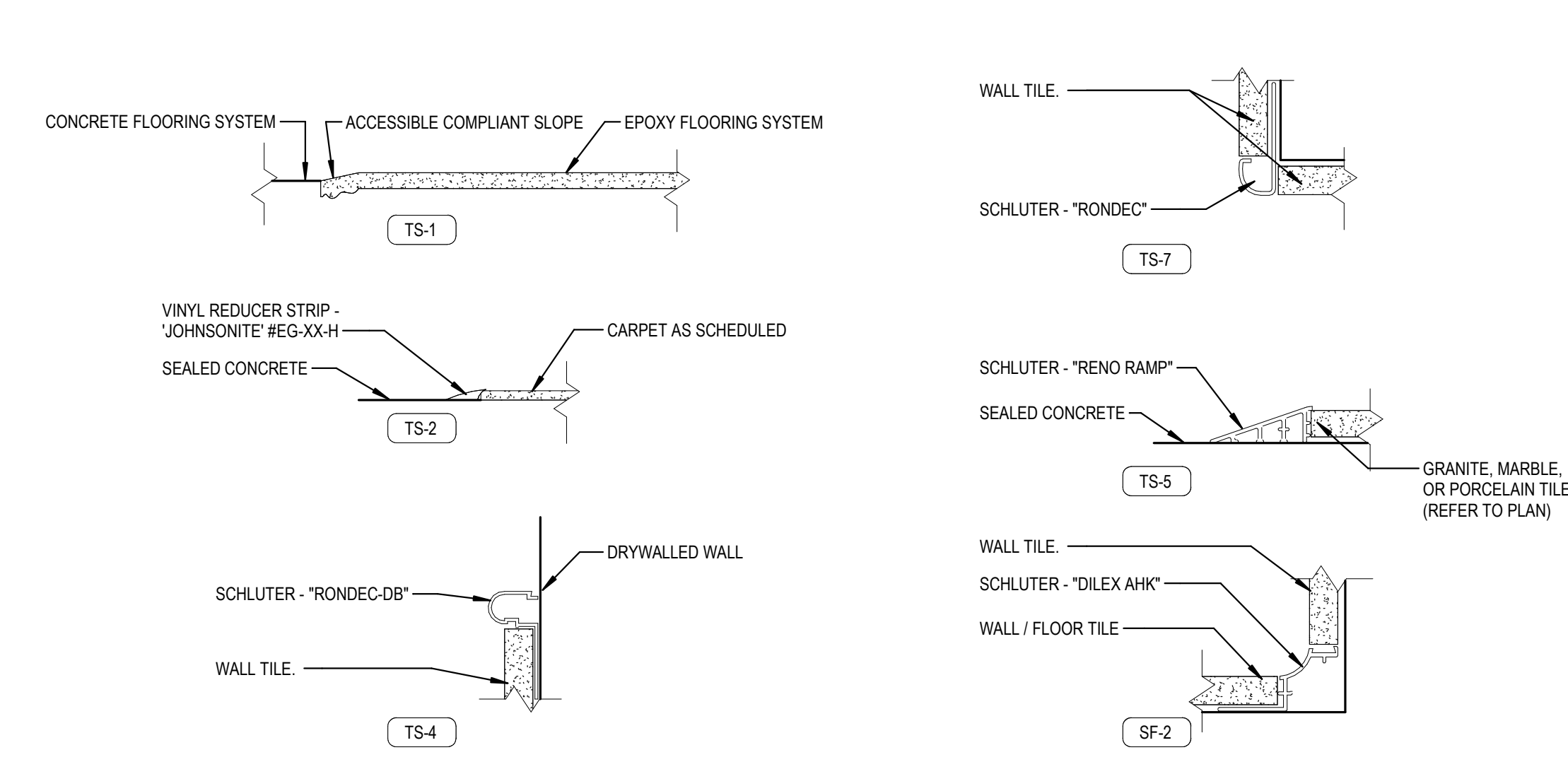
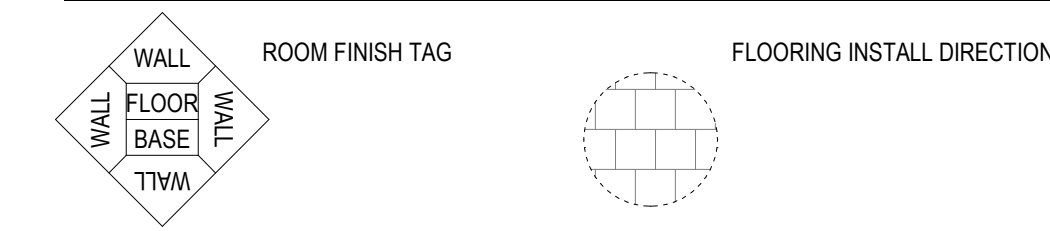
MATERIAL FINISH KEY NOTES

CODE	DESCRIPTION	FINISH NOTES
A	SHALL BE LOCATED ON DEMISING WALLS ONLY	
B	WAREHOUSE COLUMNS, SPRINKLER STAND PIPES, INTERIOR SIDE OF WAREHOUSE EXIT DOORS & FRAMES	
C	WAINSCOT IN TOILET ROOM VESTIBULE BEHIND DRINKING FOUNTAIN; REF SHEET A1.06 FOR RESTROOM ENTRY ELEVATION	
D	WAREHOUSE COLUMNS, BOLLARDS, GUARDS, RAILS, TOE PLATES, FIRE RISER PROTECTION	
E	WATER RESISTANT WHERE NOT PAINTED	
F	NOT USED	
G	WINDOW TREATMENTS TO MATCH FRAME COLOR	
H	AT SCRUBBER PARKING, FRP-1 OVER PLY-2 FROM 0'-0" TO 4'-0" A.F.F.	
J	ALL GYP. BD WALLS TO HAVE VINYL BASE U.N.O., INCLUDING IN THE WAREHOUSE. NO BASE AT EXPOSED CONCRETE WALLS	
K	REFERENCE TRANSITION DETAILS 2/A1.03	
L	PROVIDE ON INTERIOR SIDE OF ALL EXTERIOR GLAZING BELOW 12'-0" A.F.F. THROUGHOUT WAREHOUSE & OFFICE AREA	
N	REFERENCE SECTION 033060 - SPECIAL CONCRETE FLOOR FINISHES	
O	REFERENCE SECTION 033061 - SEALED CONCRETE FLOOR FINISHES	

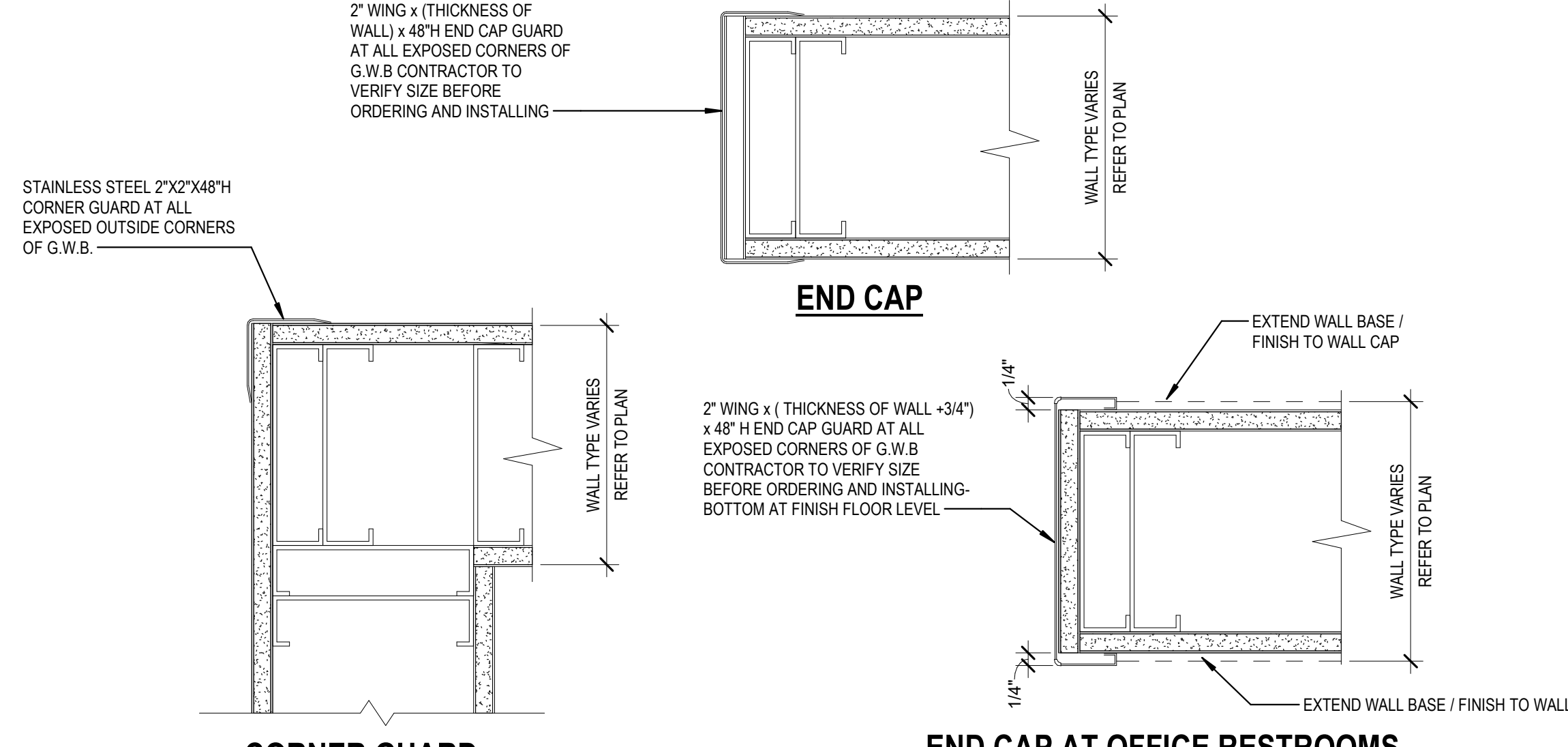
MATERIAL FINISH KEY

CODE	BASIS OF DESIGN	DESCRIPTION	FINISH NOTES
ACOUSTICAL CEILING TILE - ACT			
ACT-1	ARMSTRONG	SUSPENDED CEILING SYSTEM, 24" X 48"; CORTEGA MINABOARD #769; WHITE GRID AND TILE	
CARPET - CPT			
CPT-1	BENTLEY	18X36, STYLE: DRAMLIN #4DMT4, COLOR: FIGHT SONG #404322 WITH AFRIMA II HARDBACK BACKING, PATTERN: BRICK	
CPT-2	MATWORKS	18.5X18.5, STYLE: DIAMOND TILE, COLOR: CHARCOAL, PATTERN: RUNNING BOND	
CERAMIC TILE - CT			
CT-1	EMSER	4" X 10" WALL TILE FLEX, WHITE #56FLXWH410M, GROUT: MAPEI #47 CHARCOAL, MATTE FINISH, TILE PATTERN: RUNNING BOND	REFER TO ELEVATIONS
CT-3	EMSER	12" X 24" FLOOR TILE, STYLE: CITIZEN, COLOR: PUBLIC #28CTIPU1224M, GROUT: MAPEI #47, FINISH: MATTE, PATTERN: RUNNING BOND	
CT-4	EMSER	6" X 12" COVE BASE TILE, CITIZEN, PUBLIC #6NRCTIPU612CBM, MATTE	
EPOXY FLOOR COATING - EPX			
EPX-1	DUR-A-FLEX	DUR-A-QUARTZ SYSTEM, TOP COAT: 100% SOLIDS DUR-A-GLAZE TOP COAT #4 ARMOR TOP GLOSS W/ GRIT, COLOR: Q28-22	
EXTERIOR PAINT - EPT			
EPT-1	BENJAMIN MOORE	#2121-70 CHANTILLY LACE;	REFER TO EXTERIOR ELEVATION SHEET
EPT-2	SHERWIN WILLIAMS	#SW7650 'ELLIE GRAY';	REFER TO EXTERIOR ELEVATION SHEET
EPT-3		TENANT BLUE TO MATCH PANTONE 2727C	REFER TO EXTERIOR ELEVATION SHEET
FRP WALL PANEL - FRP			
FRP-1	CRANE	GLASSBORO, #85 WHITE, SMOOTH, INCLUDING ALL MOLDINGS & TRIM, CLASS A	C, H
GYPSUM BOARD - GYP			
GYP-1		5/8" GYPSUM BOARD, PAINTED PT-1	
INTERIOR PAINT - PT			
PT-1	BENJAMIN MOORE	#2121-70 CHANTILLY LACE; FINISH: EGGSHELL	GENERAL PARTITION WALL COLOR
PT-2	BENJAMIN MOORE	#2121-70 CHANTILLY LACE; TYPE: EPOXY, FINISH: SEMI-GLOSS	
PT-3	BENJAMIN MOORE	SAFETY YELLOW; TYPE: EPOXY, FINISH: SEMI-GLOSS	D
PT-4	BENJAMIN MOORE	SAFETY RED; TYPE: EPOXY, FINISH: SEMI-GLOSS	B
PT-5	SHERWIN WILLIAMS	SW 7757 HIGH REFLECTIVE WHITE; TYPE: EPOXY, FINISH: SEMI-GLOSS	D
PT-7	SHERWIN WILLIAMS	#SW7650 'ELLIE GRAY'; TYPE: EPOXY, FINISH: SEMI-GLOSS	
PT-8	SHERWIN WILLIAMS	#SW7650 'ELLIE GRAY'; FINISH: EGGSHELL	
PT-9	BENJAMIN MOORE	RGB 0, 168, 255 'TENANT BLUE'; FINISH: EGGSHELL	
PLASTIC LAMINATE - PL			
PL-1	WILSONART	#781K-12 'LANDMARK WOOD'; FINISH: SOFT GRAIN	
PL-2	FORMICA	#912-58 'STORM'; FINISH: MATTE	
PL-3	FORMICA	#7022-58 'NATURAL CANVAS'; FINISH: MATTE	
PLYWOOD - PLY			
PLY-1		1/4" PLYWOOD; REF SPECS	E
PLY-2		1/2" PLYWOOD; REF SPECS	E, H
PLY-3		3/4" PLYWOOD; REF SPECS	E
PLY-4		3/4" FIRE RETARDANT TREATED PLYWOOD	E
SEALED CONCRETE - SC			
SC-0		NO SEALANT, CLEAN, PATCH AND REPAIR	
SC-1		SEALED CONCRETE - DENSIFIER	N
SC-2		SEALED CONCRETE - SEALER	O
SOLID SURFACE COUNTERTOP - SS			
SS-1	CORIAN	COLOR - 'SILVER BIRCH'	
SS-2	CORIAN	COLOR - 'VENARD WHITE'	
SPECIAL FINISHES - SF			
SF-1		6" X 1/4" MDF, PAINTED PT-1, PATTERN: HORIZONTAL SHIPLAP	
SF-2	SCHLUTER	SCHLUTER-DILEX-AHK; SATIN ANODIZED	K
TRANSITION STRIPS - TS			
TS-1	JOHNSONITE	RBS-XV-C #20 'CHARCOAL' (REDUCERS); TRANSITION 1/8" THICK MATERIAL TO CONCRETE	K
TS-2	JOHNSONITE	EG-XX-H #20 'CHARCOAL' (EDGE GUARDS); SATIN ANODIZED ALUMINUM (AE), TRANSITION BETWEEN 5/16" MATERIAL TO CONCRETE	K
TS-4	SCHLUTER	RONDEC-06; TRANSITION BETWEEN WALL TILE AND GYP WALL IN SATIN ANODIZED ALUMINUM (AE) INCLUDE DILEX-AHK IN SAME COLOR AS REQUIRED FOR ALL CORNERS	K
TS-5	SCHLUTER	RENO-RAMP; TRANSITION BETWEEN CONCRETE AND FLOOR CERAMIC TILE IN SATIN ANODIZED ALUMINUM (AE)	K
TS-7	SCHLUTER	RONDEC; TRANSITION BETWEEN WALL TILES AT OUTSIDE CORNERS, IN SATIN ANODIZED ALUMINUM (AE)	K
VINYL BASE - VB			
VB-1	JOHNSONITE	4" COVE BASE #32 'PEBBLE', 1/8" THICKNESS	J
WINDOW FILM - WF			
WF-1	SOLYX	SOLYX SVR 8785, SAFETY SANDBLAST	L
WF-3	3M	3M, 7725-314 DUSTED CRYSTAL 'FROSTED' (OR EQUAL)	
WINDOW TREATMENT - HB			
HB-1	LEVOLOR	RIVIERA CLASSIC, METAL BLIND - 1" ALUMINUM, COLOR: 860 SEATTLE GRAY; INSET MOUNT, MANUAL OPERATION, CONTACT: HUNTERDOUGLASARCHITECTURAL.COM.800-727-8953	G, OCCURS WHERE NOTED ON PLANS
HB-2	LEVOLOR	SOLAR SHADES - STANDARD VALANCE, INSIDE MOUNT, 1% OPEN FABRIC, LIFT CONTROL - CORD LOOP OPERATION, COLOR: CHARCOAL GRAY, CONTACT: HUNTERDOUGLASARCHITECTURAL.COM.800-727-8953	

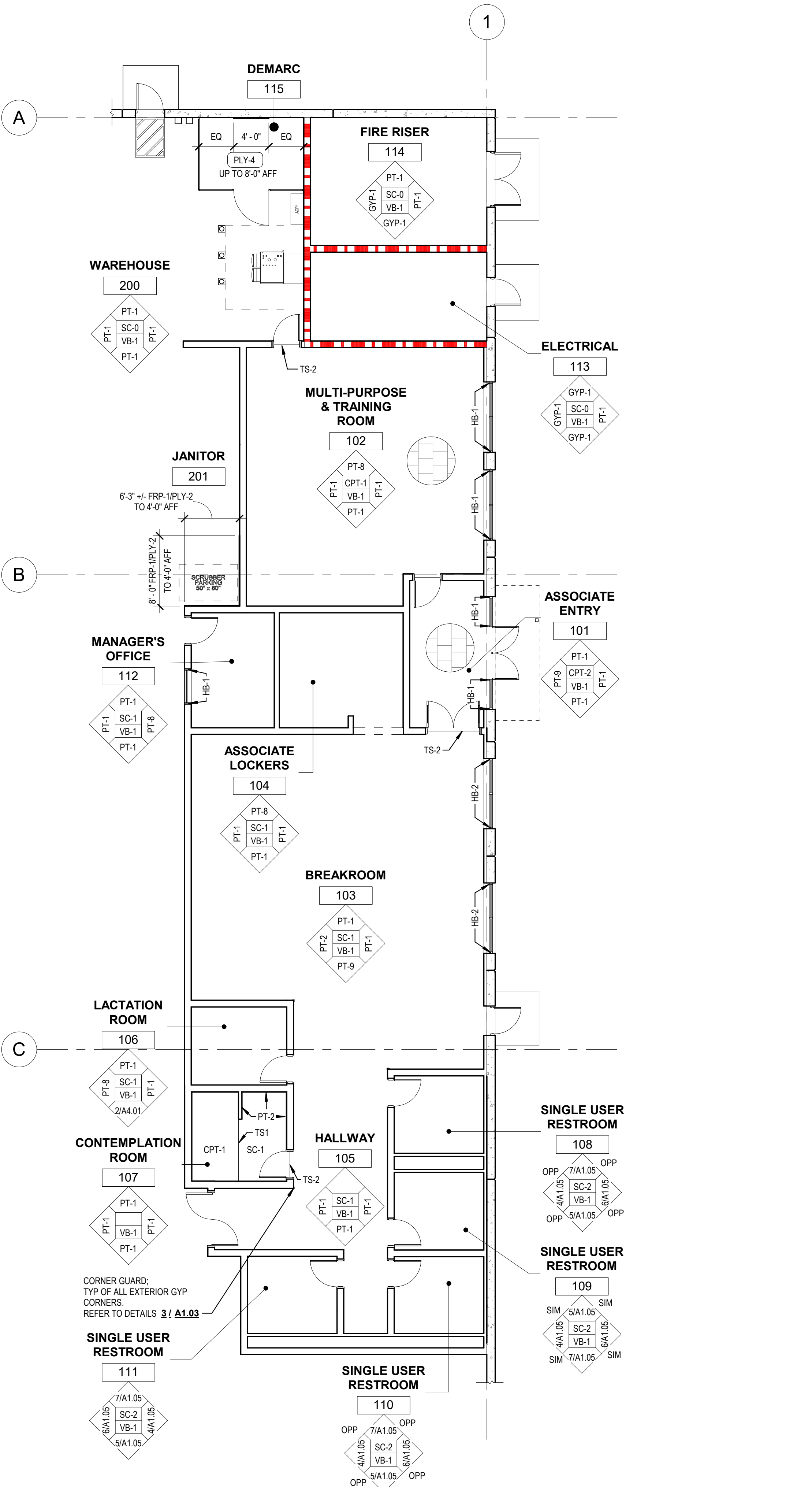
LEGEND



2 TYPICAL TRANSITION STRIP DETAILS
A1.03 Scale: 6" = 1'-0"



3 TYPICAL CORNER GUARD AND END CAP DETAILS
A1.03 Scale: 6" = 1'-0"



1 OFFICE FINISH PLAN
A1.03 Scale: 1/8" = 1'-0"

SHEET NOTES

A. REFERENCE EQUIPMENT SCHEDULES FOR ADDITIONAL INFORMATION.
B. REFERENCE EQUIPMENT DETAILS AND INTERIOR ELEVATION SHEETS FOR EQUIPMENT MOUNTING HEIGHTS AND GENERAL SHEETS FOR ACCESSIBILITY NOTES.

FURNITURE LEGEND

XX FURNITURE, FIXTURE, EQUIPMENT TAG

PLUMBING FIXTURE SCHEDULE

CODE	QTY	NOTE: GC TO FURNISH AND INSTALL ALL FIXTURES. REF MEP FOR FIXTURE INFORMATION	DESCRIPTION
P-1	4		WALL MOUNTED TOILET
P-3B	1		DRINKING FOUNTAIN (H/L/O PAIR)
P-4B	4		SINK (SINGLE USER RESTROOM)
P-5A	1		SINK (1 BASIN)
P-5B	1		SINK (2 BASIN)
P-6	1		SERVICE HOSE AND HOSE HOLDER, E.L. MUSTEE, MODEL, 65 700
P-7	1		W/DUINATE COMPACT
P-11	1		MCP BASIN

EQUIPMENT SCHEDULE

CODE	QTY	SUPPLIED BY	ITEM	COMMENTS
E-4A	4	TEN	WALL MOUNTED TV - 55"	REF BLOCKING ELEVATION
E-5	4	TEN	MICROWAVE	
E-6	1	TEN	ICE MACHINE	HOSHIZAKI DCM-500B_H
E-8	2	TEN	COFFEE MAKER	NEWCO LC22
E-9	1	TEN	SODA STREAM	
E-13	4	TEN	SNACK MACHINE - LARGE	
E-16	1	TEN	2.6 CUBIC FEET REFRIGERATOR	DANBY 2.6 CU FT, 18"W X 21"D X 27"H
E-18	1	TEN	WARDROBE LOCKER	BLACK WARDROBE LOCKER 12"W X 18"D X 76"H
E-19	3	TEN	BAKERS RACK	
E-20	3	TEN	TIME CLOCK	PLACE MIN (1) TIME CLOCK AT ACCESSIBLE HEIGHT
E-21	3	TEN	TRASH CAN	PROVIDE IN MIT AND WHERE NOTED
E-22	3	GC	PAPER TOWEL DISPENSER	GRAINGER ZKH5 ENMOTION
E-23	3	TEN	SOAP DISPENSER	GRAINGER IPKPS
E-26	1	TEN	REFRIGERATOR	
E-27	1	GC	ACCESSIBLE GRAB BAR - 18"	
E-28	3	TEN	WALL CLOCK	INFINITY INSTRUMENTS METRO WALL CLOCK (9" DIAMETER)

FURNITURE SCHEDULE

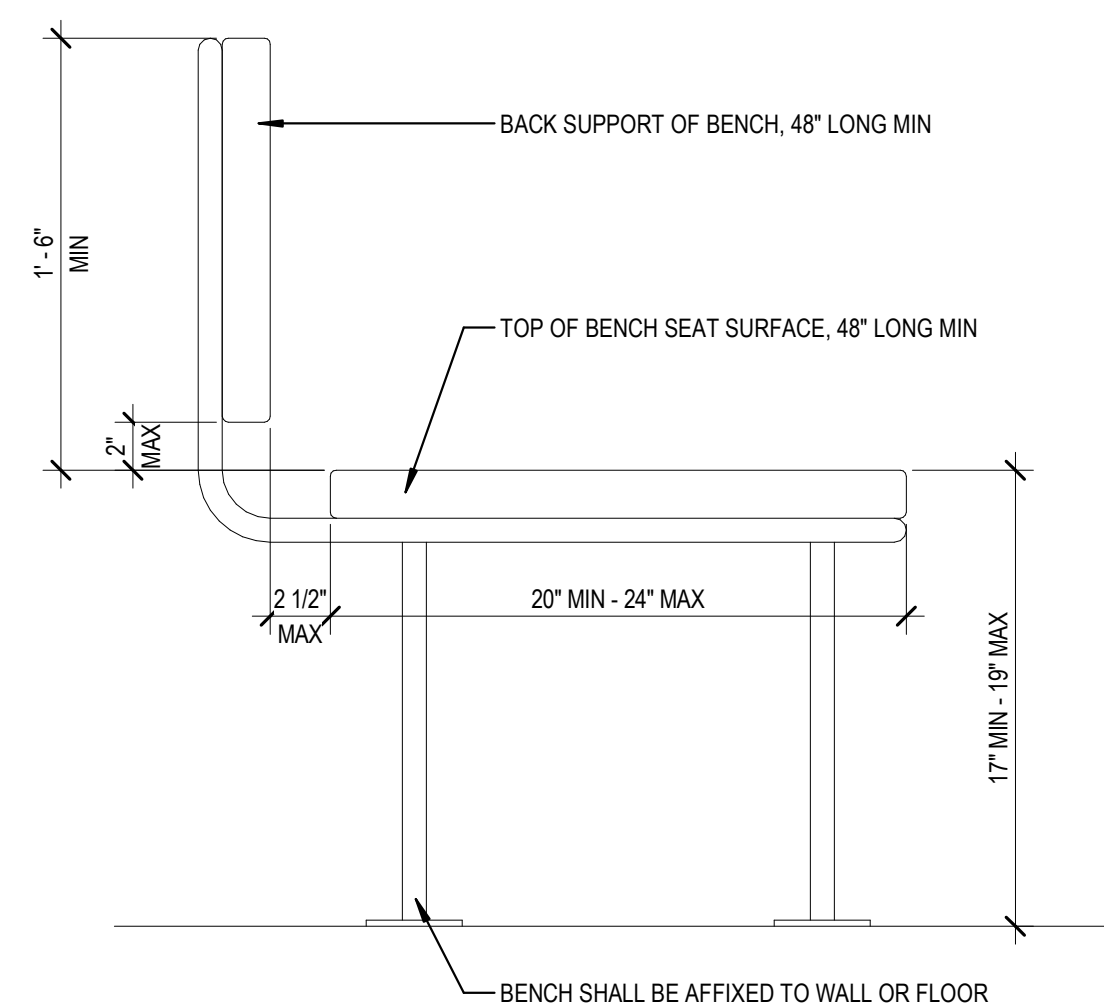
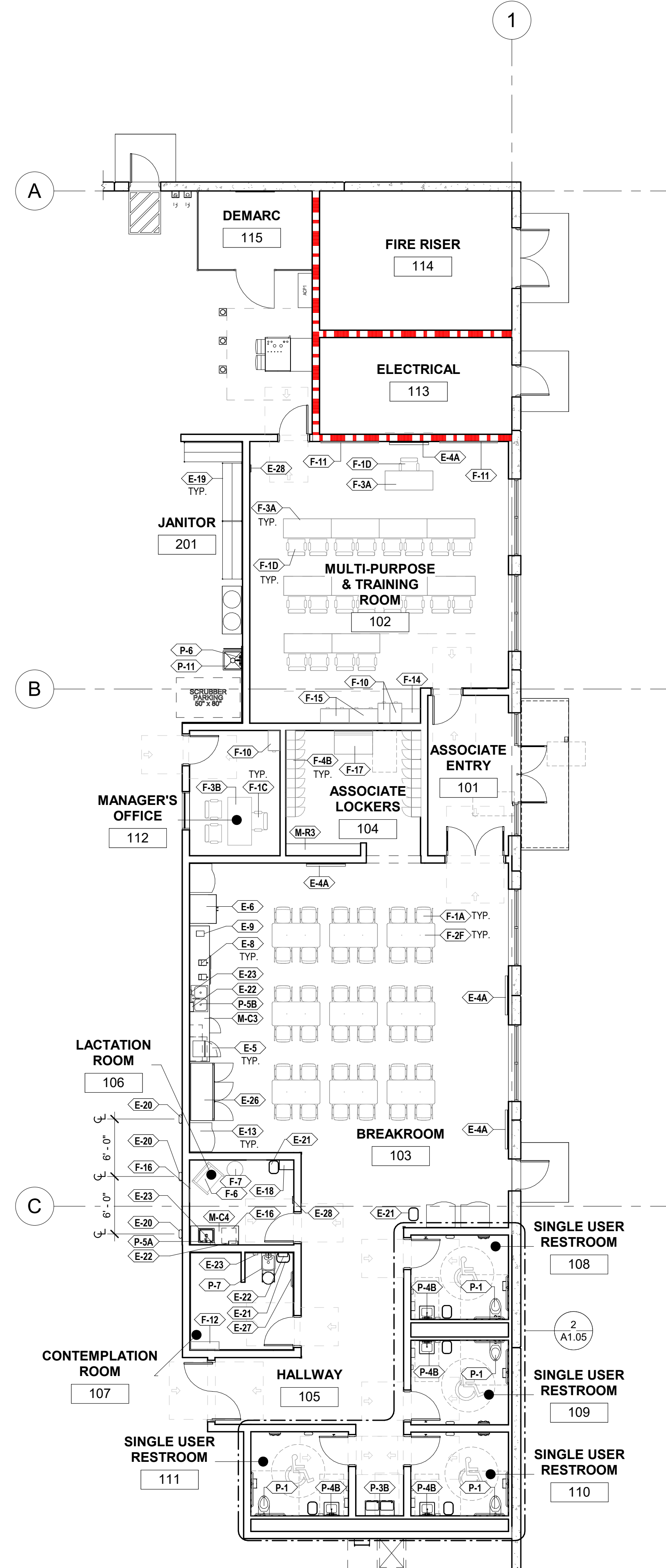
CODE	QTY	SUPPLIED BY	DESCRIPTION	COMMENTS
F-1A	36	TEN	CHAIR - BREAK ROOM	
F-1C	3	TEN	CHAIR - CONFERENCE	
F-1D	21	TEN	CHAIR - TRAINING	
F-2F	9	TEN	TABLE - BREAKROOM (30' x 60')	
F-3A	11	TEN	DESK - TRAINING	
F-3B	1	TEN	DESK - OFFICE	
F-4B	6	TEN	LOCKERS 3 WIDE X 6 TALL (12X12X12)	
F-6	1	TEN	CHAIR - LACTATION ROOM	
F-7	1	TEN	TABLE - LACTATION ROOM	
F-10	3	TEN	29" H FILE CABINET	
F-11	2	TEN	6W X 4H WHITE BOARD	
F-12	1	TEN	ABLUTION SHOE RACK	
F-14	1	TEN	UTILITY CART	
F-15	2	TEN	72" H CABINET	
F-16	2	TEN	FULL LENGTH MIRROR	
F-17	1	TEN	ACCESSIBLE BENCH; REF DETAIL THIS SHEET	

MILLWORK SCHEDULE

CODE	QTY	ITEM	COMMENTS
M-B4	1	PLASTIC LAMINATE PLUMBING GUARD (PL-1)	
M-B5	1	LACTATION ROOM BASE CABINET - ACCESSIBLE SINK	
M-B8	1	BASE CABINET	
M-BM	2	BASE CABINET - MICROWAVE	
M-C3	1	COUNTERTOP - BREAKROOM	WIDTH VARIES, REF PLANS
M-C4	1	COUNTERTOP - LACTATION ROOM	
M-B	1	BASE CABINET - DRAWER	
M-T	1	BASE CABINET - TRASH	
M-O2	1	OVERHEAD CABINET	
M-OM	1	OVERHEAD - MICROWAVE CABINET	
M-R3	1	COAT RACK	

MILLWORK NOTES

A. BASE CABINETS DEFAULT DEPTH TO BE 2'-0", UNO.
B. OVERHEAD CABINETS DEFAULT DEPTH TO BE 1'-4", UNO.
C. REFERENCE DETAILS ON SHEET A5-1



2 ACCESSIBLE BENCH SECTION
A1.04 Scale: 1 1/2" = 1'-0"

1 OFFICE FURNITURE PLAN
A1.04 Scale: 1/8" = 1'-0"

TOILET ACCESSORY SCHEDULE

CODE	QTY	DESCRIPTION	MODEL
TA 01	4	SOAP DISPENSER	GRAINGER 1PK98
TA 02	4	CLOTHES HOOK W/ BUMPER	BOBRICK B-212
TA 03	4	TOILET SEAT COVER DISPENSER	GRAINGER 22LC8
TA 04	4	SANITARY NAPKIN RECEPTACLE	GRAINGER 1E09
TA 05	4	SEMI-RECESSED SANITARY PRODUCT DISPENSER	BOBRICK B-47064C
TA 06	4	ACCESSIBLE GRAB BAR - 42"	B-6806 99X36
TA 07	4	ACCESSIBLE GRAB BAR - 36"	B-6806 99X36
TA 09	4	MIRROR	BOBRICK B-29018X36
TA 12	4	PAPER TOWEL DISPENSER	GRAINGER 2XLHS ENMOTION
TA 13	4	ACCESSIBLE VERT. GRAB BAR - 18"	BOBRICK B-6806 99X18
TA 14	4	TOILET PAPER DISPENSER	GRAINGER 1FC63
TA 16	4	TRASH CAN	GRAINGER 1971256, GRAY, PLASTIC
TA 17	4	SANITIZER DISPENSER	GRAINGER 1PK98
TA 18	4	SHARPS CONTAINER	

LEGEND

- 2x4 LENSED RECESSED LED TROFFER W/ SHALLOW HOUSING. DIAGONAL HATCH REPRESENTS EMERGENCY LIGHTING
- 2x4" ACOUSTIC CEILING (REFER TO RCP FOR HEIGHT)
- 5/8" GYPSUM BOARD CEILING OR SOFFIT (REFER TO RCP FOR HEIGHT)
- PROVIDE 6 1/4" SONORBAT INSULATION AT LOCATIONS SHOWN ON RCP
- LED DOWNLIGHT
- EMERGENCY EXIT SIGN (CENTERED ABOVE DOOR)
- 2x2 CEILING RETURN AIR GRILLE
- 2x2 SUPPLY AIR DIFFUSER
- 2x2 CEILING EXHAUST GRILLE
- 101) DOOR MARK TAG
- XX) FURNITURE, FIXTURE, EQUIPMENT TAG

RESTROOM SHEET NOTES

- A. REFERENCE PARTITION DETAIL SHEETS FOR ADDITIONAL CONSTRUCTION INFORMATION.
- B. REFERENCE FURNITURE PLAN SHEET FOR MILLWORK & PLUMBING SCHEDULES.
- C. REFERENCE STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- D. REFERENCE GENERAL SHEET AND SIGNAGE AND GRAPHICS SHEETS FOR ADDITIONAL SIGNAGE INFORMATION.
- E. REFERENCE FINISH PLAN AND SCHEDULE FOR INTERIOR FINISHES.
- F. REFERENCE DOOR TYPES AND SCHEDULES SHEET FOR ADDITIONAL INFORMATION.
- G. FOR ACCESSIBLE CLEARANCES NOT INDICATED, REFER TO NOTES AND DETAILS ON GENERAL SHEETS.
- H. GC TO PROVIDE BLOCKING AS REQUIRED AT SINKS, EQUIPMENT, GRAB BARS, AND FIXTURES PER MANUFACTURER'S RECOMMENDATIONS.
- I. MOUNT ACCESSORIES IN COMPLIANCE WITH LOCALLY ADOPTED ACCESSIBILITY CODE REQUIREMENTS. REFER TO GENERAL INFORMATION AND SIGNAGE SHEETS.
- J. INSTALL GYPSUM WALLBOARD CONTROL JOINTS EVERY 30" PER PARTITION SHEET.
- K. REFERENCE STRUCTURAL PLANS FOR CONCRETE SLAB CONTROL JOINT INFORMATION.
- L. REFERENCE EXTERIOR ELEVATION SHEET FOR EXTERIOR CONTROL JOINTS.
- M. REFERENCE SHEET G1.02 FOR ACCESSIBILITY CODE CLEARANCES.

RESTROOM GENERAL NOTES

- A. REFERENCE THIS SHEET FOR ACCESSORY SCHEDULE.
- B. REFERENCE GENERAL SHEETS AND RESTROOM DETAIL SHEET FOR TYPICAL MOUNTING DETAILS AND CLEARANCES THAT MAY NOT BE SHOWN.
- C. PROVIDE 5/8" WATER RESISTANT GYPSUM BOARD ON INSIDE FACE OF NEW RESTROOM WALLS AT PLUMBING FIXTURE LOCATIONS.
- D. RESTROOM SIGNS BY GC SHALL COMPLY WITH ADOPTED ACCESSIBILITY CODE AS REFERENCED ON CODE ANALYSIS SHEET. REFER ALSO TO GENERAL INFORMATION SHEETS.
- E. ALL RESTROOM ACCESSORIES AND PLUMBING FIXTURES SHALL BE MOUNTED IN ACCORDANCE WITH ADOPTED ACCESSIBILITY CODE. REFER ALSO TO GENERAL INFORMATION SHEETS.
- F. PROVIDE PROTECTIVE INSULATION WHICH SHALL COMPLY WITH ADOPTED ACCESSIBILITY CODE AT ALL ACCESSIBLE LAVATORIES WITH EXPOSED PIPING.
- G. WATER CLOSETS AND URINAL FLUSH CONTROLS SHALL COMPLY WITH ADOPTED ACCESSIBILITY CODE. CONTROLS FOR FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREAS AT HEIGHT INDICATED BY LOCALLY ADOPTED ACCESSIBILITY CODE.
- H. ACCESSIBLE URINALS SHALL BE WALL HUNG WITH AN ELONGATED RIM AT HEIGHT NOTED ON G1.02 DETAILS AND SHALL COMPLY WITH ADOPTED ACCESSIBILITY CODE.
- I. ACCESSIBLE TOILET STALL DOORS SHALL PROVIDE 32" CLEAR, UNOBSTRUCTED OPENING, SHALL BE SELF-CLOSING AND SHALL BE EQUIPPED WITH GRASPABLE PULL ON BOTH SIDES. STALLS SHALL COMPLY WITH ADOPTED ACCESSIBILITY CODE.
- J. G.C. TO COORDINATE WITH TENANT BEFORE PURCHASING ANY RESTROOM ACCESSORIES.

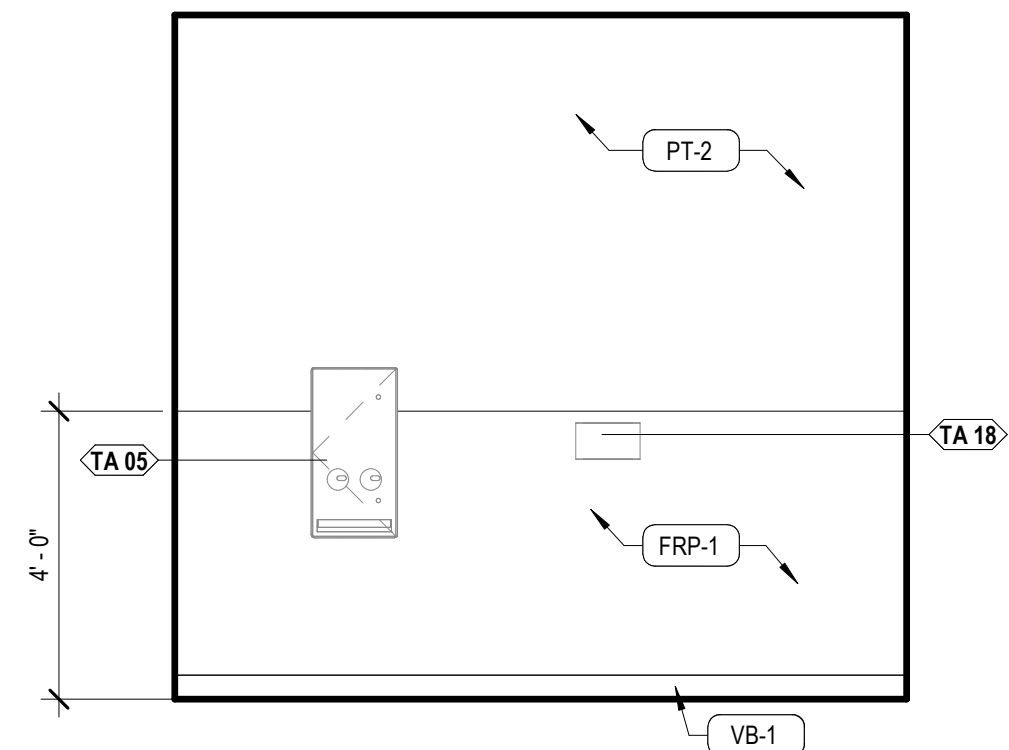
ARCHITECT
OF
RECORD

Jacob S. Bush

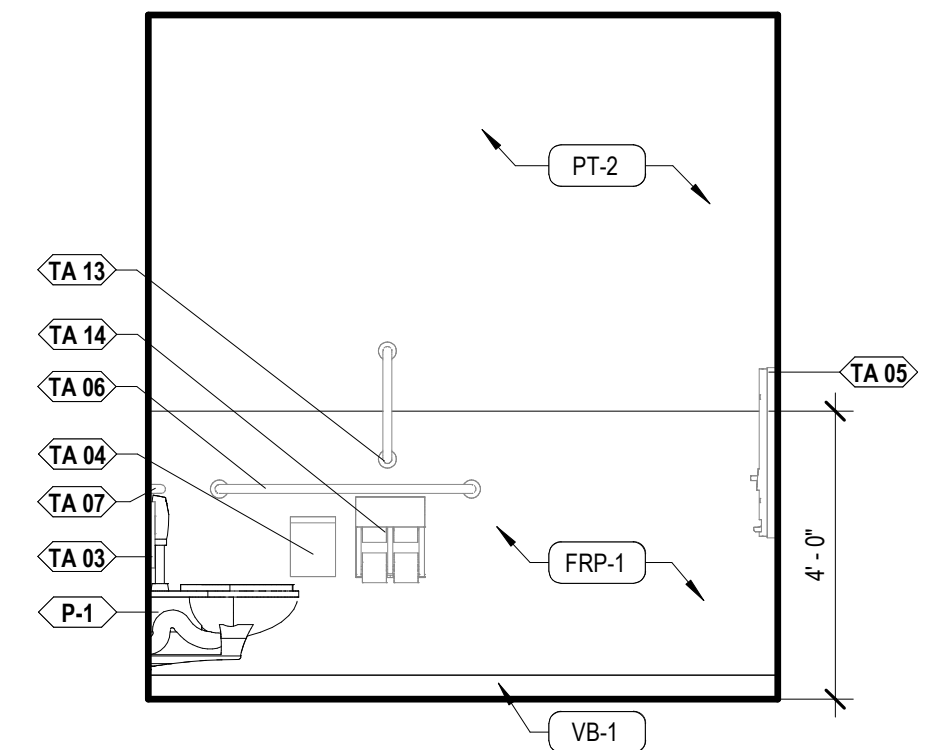
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20115925 REGISTERED ARCHITECT
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STATE OF WASHINGTON

4.25.2025 Exp: 4.10.2026



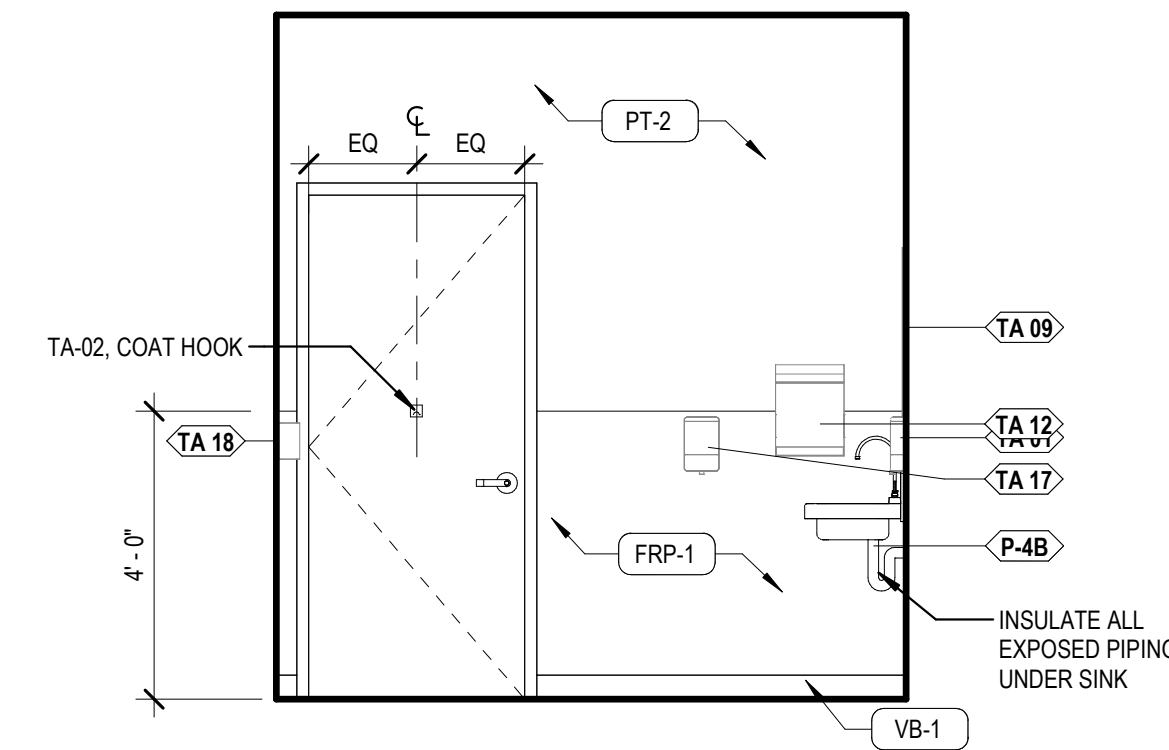
7 SINGLE USER RESTROOM ELEVATION
A1.05 Scale: 3/8" = 1'-0"



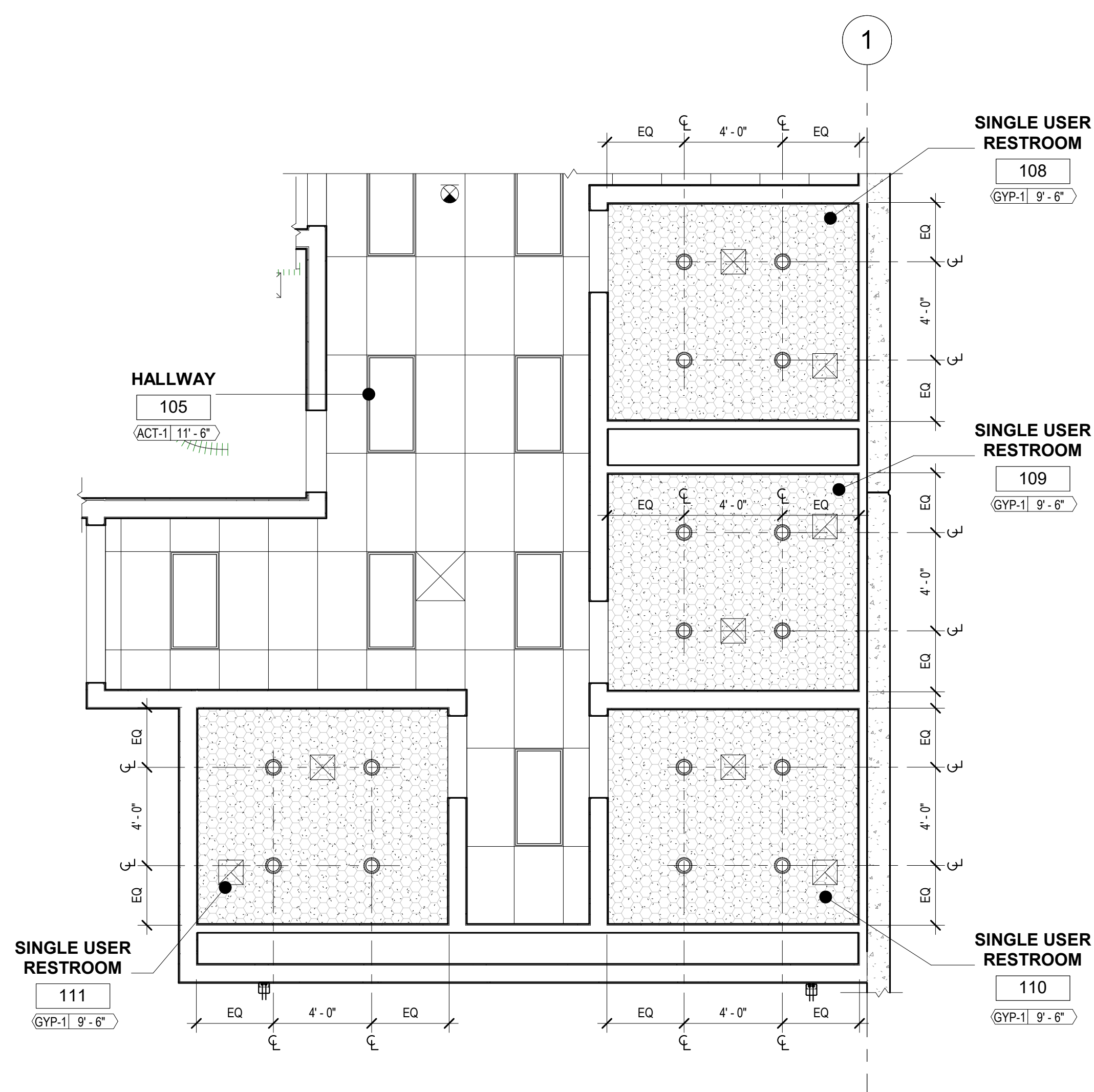
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A1.05 Scale: 3/8" = 1'-0"



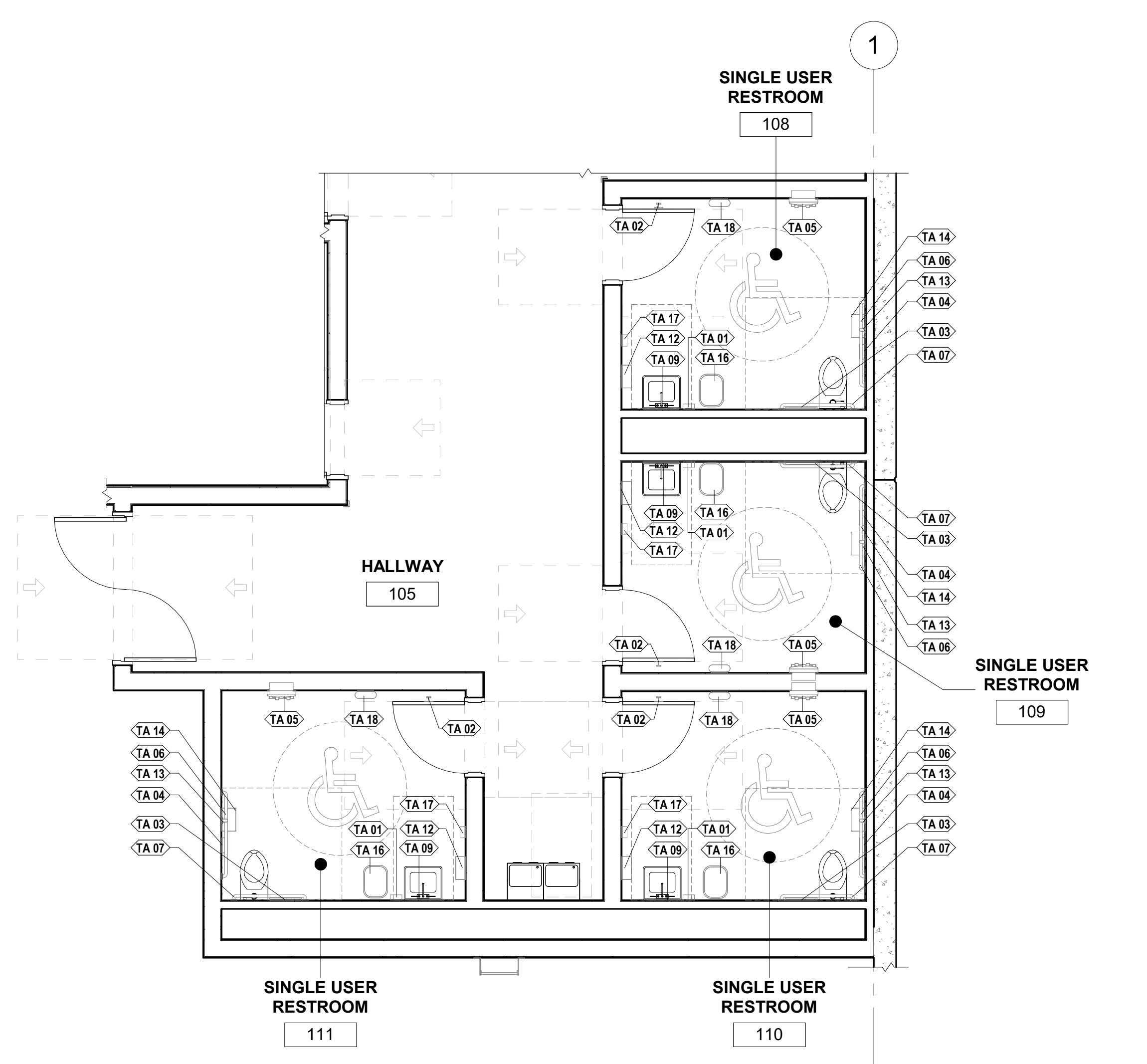
5 SINGLE USER RESTROOM ELEVATION
A1.05 Scale: 3/8" = 1'-0"



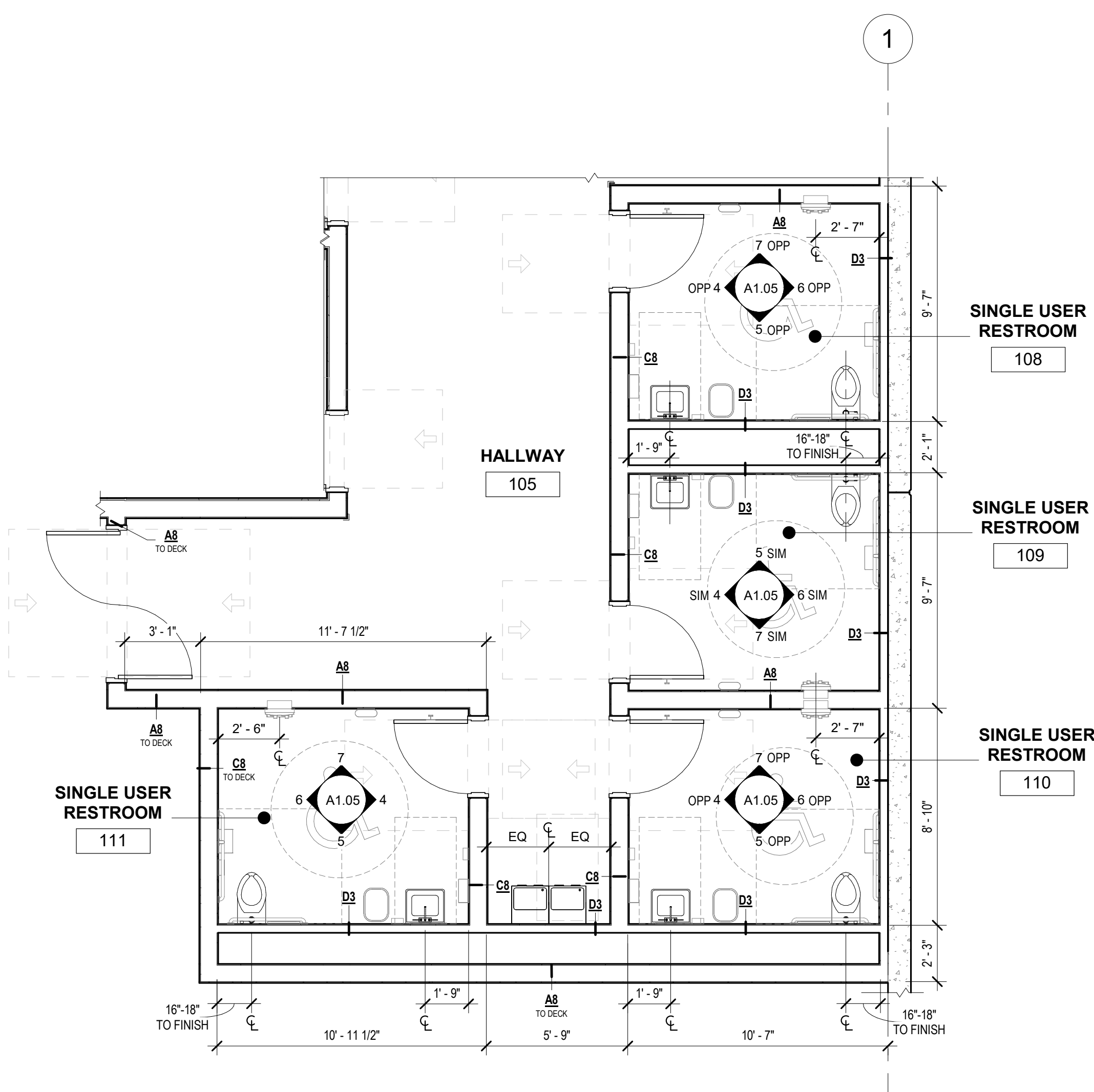
4 SINGLE USER RESTROOM ELEVATION
A1.05 Scale: 3/8" = 1'-0"



3 ENLARGED RESTROOM REFLECTED CEILING PLAN
A1.05 Scale: 1/4" = 1'-0"



2 ENLARGED RESTROOM ACCESSORIES PLAN
A1.05 Scale: 1/4" = 1'-0"



1 ENLARGED USER RESTROOM PLAN
A1.05 Scale: 1/4" = 1'-0"

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD., PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
PERMIT SET		04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: SW / CB
Checked By: DZ
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
ENLARGED RESTROOM PLANS

A1.05

STEEL FINISH NOTES

A. STEEL JOISTS ARE TO BE SHOP PRIMED MFR STANDARD GRAY. DO NOT GALVANIZE.
 B. UNDERSIDE OF METAL DECK TO BE SHOP PRIMED MFR STANDARD GRAY. DO NOT GALVANIZE.
 C. COLUMNS TO BE PAINTED PER DETAIL 7/01.10

LEGEND

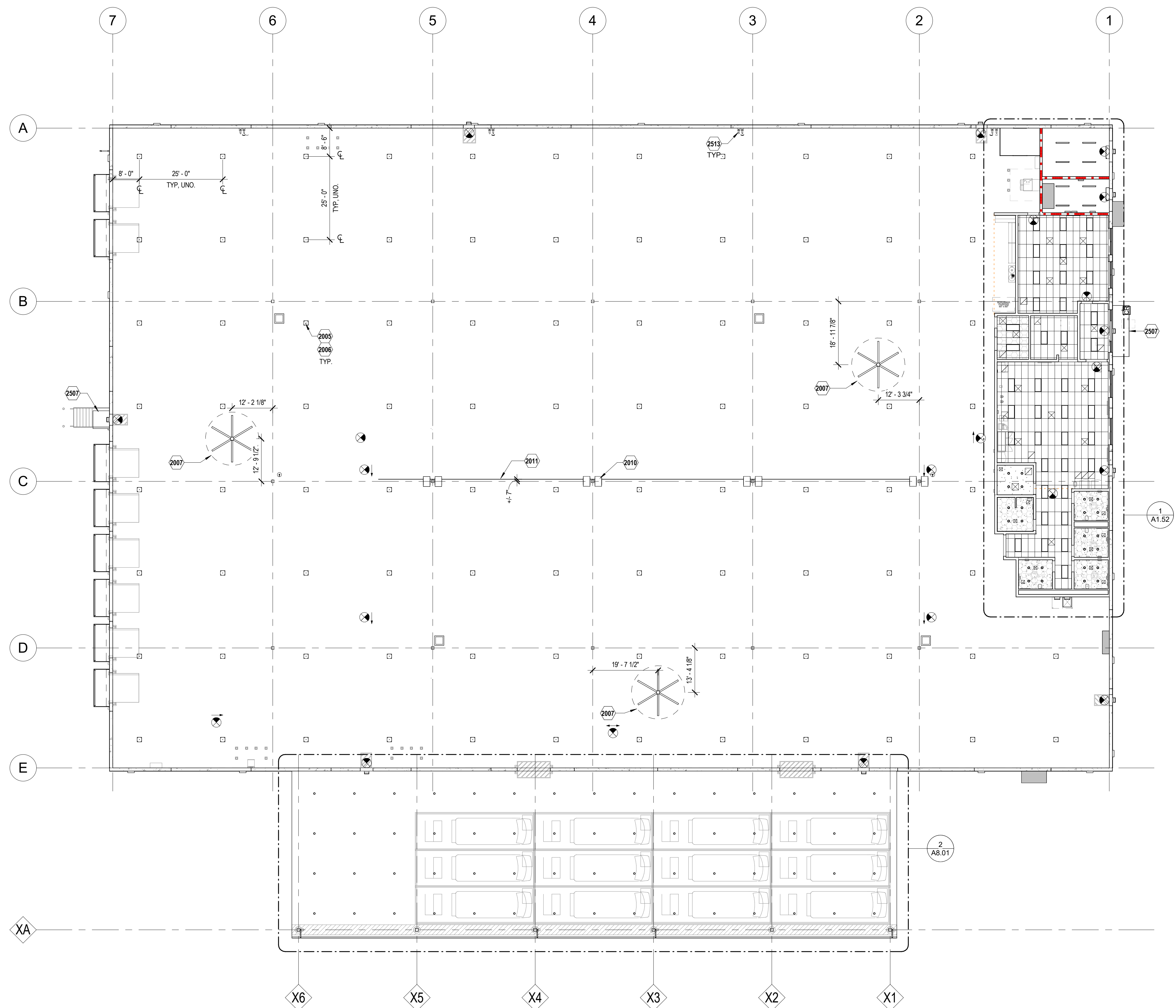
- 2x4 LENSED RECESSED LED TROFFER W/ SHALLOW HOUSING. DIAGONAL HATCH REPRESENTS EMERGENCY LIGHTING
- HIGH BAY LIGHTING FIXTURES. REFER TO ELECTRICAL DRAWINGS.
- LED DOWNLIGHT
- 4" LINEAR LED FLANGED EXTRUSION FIXTURE
- EMERGENCY EXIT SIGN (CENTERED ABOVE DOOR)
- 2x2 CEILING RETURN AIR GRILLE
- 2x4" ACOUSTIC CEILING (REFER TO RCP FOR HEIGHT)
- 5/8" GYPSUM BOARD CEILING OR SOFFIT (REFER TO RCP FOR HEIGHT)
- PROVIDE 6" 1/4" SONOBAT INSULATION AT LOCATIONS SHOWN ON RCP
- 2x2 SUPPLY AIR DIFFUSER
- 2x2 CEILING EXHAUST GRILLE

KEYNOTES

- 2005 HIGH BAY LIGHTING FIXTURES. REFER TO ELECTRICAL DRAWINGS.
- 2006 MOUNTING HEIGHT OF WAREHOUSE LIGHTS AT 20'-0" A.F.F. TYP.
- 2007 (PALS) HIGH VOLUME LOW SPEED FAN. FANS TO BE SUPPLIED AND MOUNTED BY FAN INSTALLER/VENDOR. REFER TO MECHANICAL, ELECTRICAL, AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION. COORDINATE FAN AND LIGHT PLACEMENT SO THAT NO LIGHTING OR OTHER OBJECTS ARE WITHIN 2'-0" OF FAN BLADE CIRCUMFERENCE.
- 2010 COLUMN-MTD FAN. FANS TO BE SUPPLIED AND MOUNTED BY GC. MOUNT FAN AS SHOWN AT 9'-0" AFF. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 2011 UNSTRUT AT 12'-0" AFF IN LOCATION AND LENGTH SHOWN FOR STOW-BY-LIGHT SYSTEM. REF ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- 2507 ENTRY CANOPY BELOW FABRIC AWNING, CENTERED OVER ROUGH OPENING EXTEND PAST OPENING 1'-6" EACH SIDE. ANCHORAGE AND VALIDATION BY MANUFACTURER.
- 2513 PRIMARY AND OVERFLOW ROOF DRAIN LEADERS - REFER TO PLUMBING DRAWINGS. PROVIDE BENT PLATE PROTECTORS - SEE DETAIL 5/AS.03.

SHEET NOTES

- A. ARCHITECTURAL REFLECTED CEILING PLAN IS FOR CEILING CONSTRUCTION AND LIGHTING LAYOUT ONLY. REFERENCE MEP AND SPECS FOR HVAC AND FIXTURE TYPES.
- B. GC, WITH FIRE MARSHAL'S DIRECTION, WILL DETERMINE IF ANY ADDITIONAL LIGHTED EMERGENCY EXIT SIGNAGE IS NEEDED. GC TO INSTALL IF ADDITIONAL SIGNAGE IS REQUIRED.
- C. GC TO COORDINATE WITH ALL OTHER TRADES TO MINIMIZE UTILITY CONFLICTS AND TO ENSURE COMPLIANCE WITH ALL FIRE MARSHAL REQUIREMENTS AND LIGHTING LEVEL REQUIREMENTS.
- D. REFER TO FLOOR PLANS FOR WALL CONSTRUCTION, DIMENSIONS, AND LOCATIONS.
- E. REFER TO CEILING DETAILS ON SHEET A1.03.
- F. ALL CEILING OPEN TO STRUCTURE TO REMAIN UNPAINTED, U.N.O.
- G. ALL UNDIMENSIONED ACT CEILING GRIDS SHOULD BE CENTERED IN ROOM, U.N.O.
- H. DIMENSIONS SHOWN TO FROM FINISH FACE OF WALLS OR CENTERLINE OF GRID U.N.O.
- I. ALL DIMENSIONS ARE TO CENTER OF LIGHT FIXTURE, U.N.O.
- J. FOR FRAMED CEILINGS. REFER TO JOIST PLANS FOR ADDITIONAL INFORMATION.
- K. PROVIDE ACCESS PANELS IN GYP CEILINGS AS REQUIRED TO ACCESS EQUIPMENT ABOVE. REFERENCE SPECS. PAINT ACCESS PANELS TO MATCH ADJACENT FINISHES. ONCE DRY, CONFIRM THAT PAINT DOES NOT INHIBIT THE PROPER OPERATION OF ACCESS PANELS.
- L. REFER TO PARTITION SHEET AND DETAILS FOR ADDITIONAL INFORMATION.
- M. DRYWALL TO EXTEND 6" ABOVE ACT CEILING U.N.O.
- N. NO PERMANENT SUSPENDED LOADS ARE TO BE SUPPORTED BY METAL DECK, UNLESS NOTED OTHERWISE, INCLUDING BUT NOT LIMITED TO EQUIPMENT, FIXTURES, ETC.



1 OVERALL REFLECTED CEILING PLAN
 A1.51 Scale: 1/16" = 1'-0"

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 JAKE S BUSH
 STATE OF WASHINGTON
 4.25.2025 Exp: 4.10.2026

AMBROSE PROPERTY GROUP
PROJECT PENINSULA
 W. EDGEWOOD DR. & S. CRITCHFIELD RD., PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
1	PERMIT SET	04.25.2025

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Sheet Title:
OVERALL REFLECTED CEILING PLAN

A1.51

SHEET NOTES

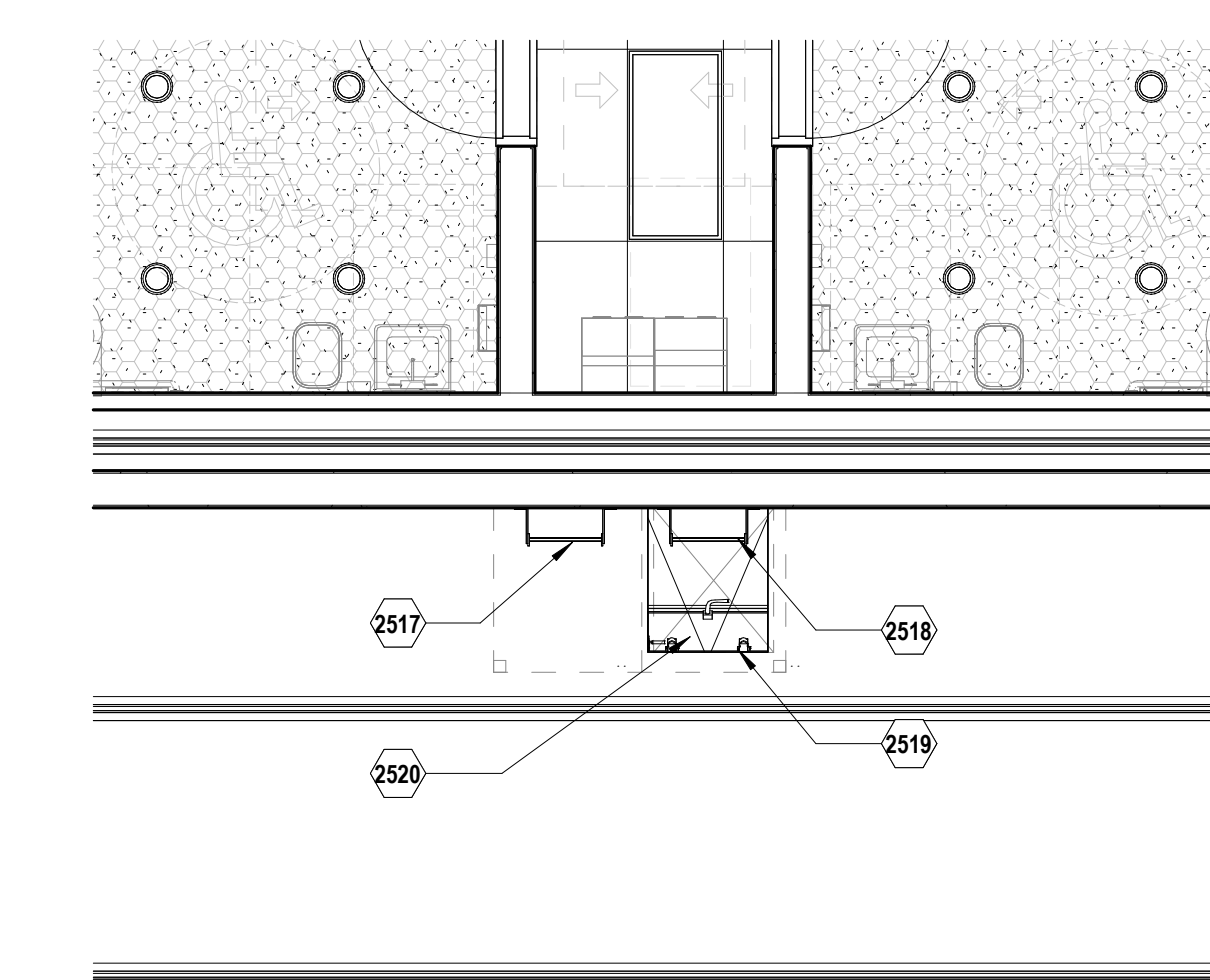
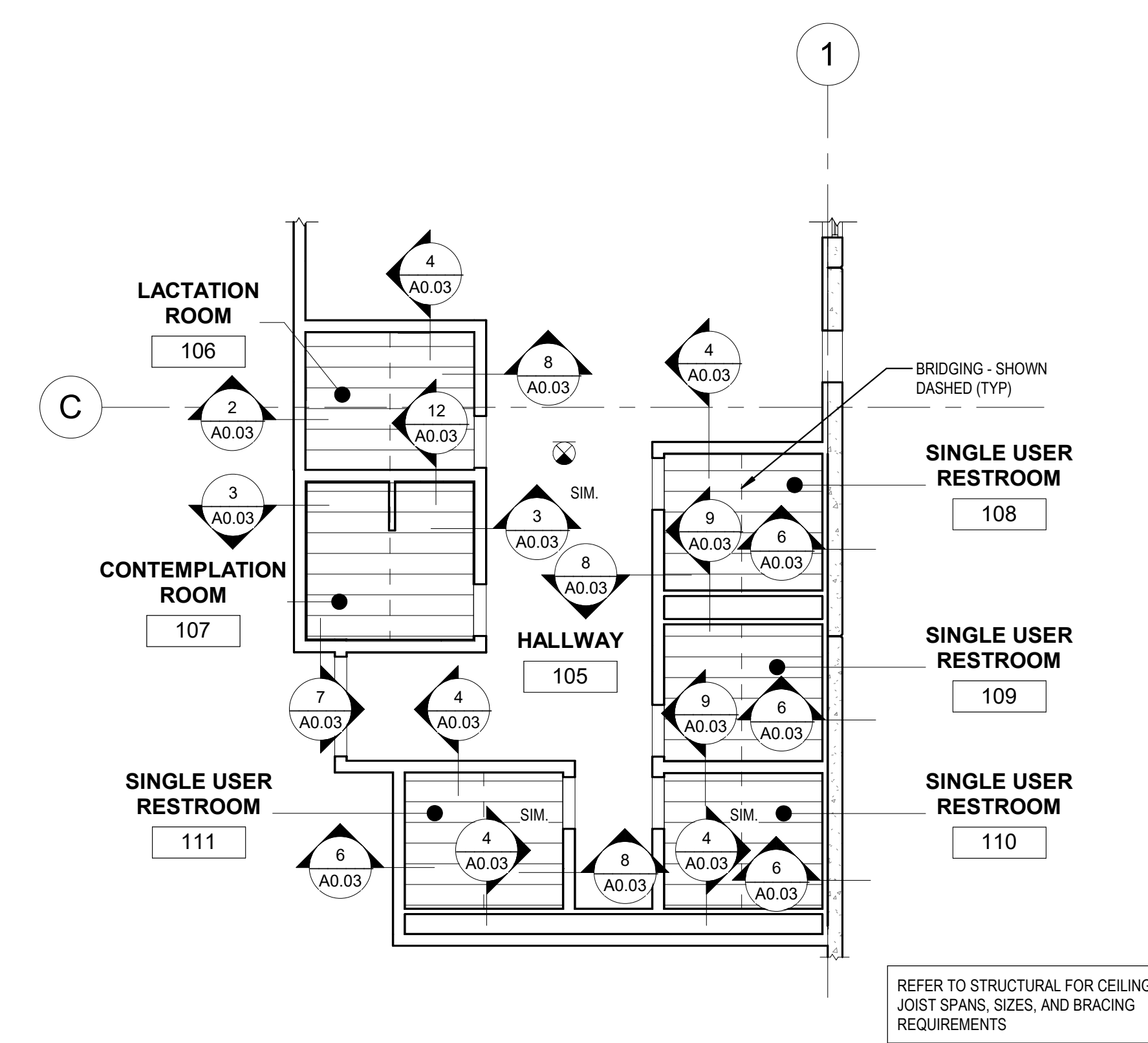
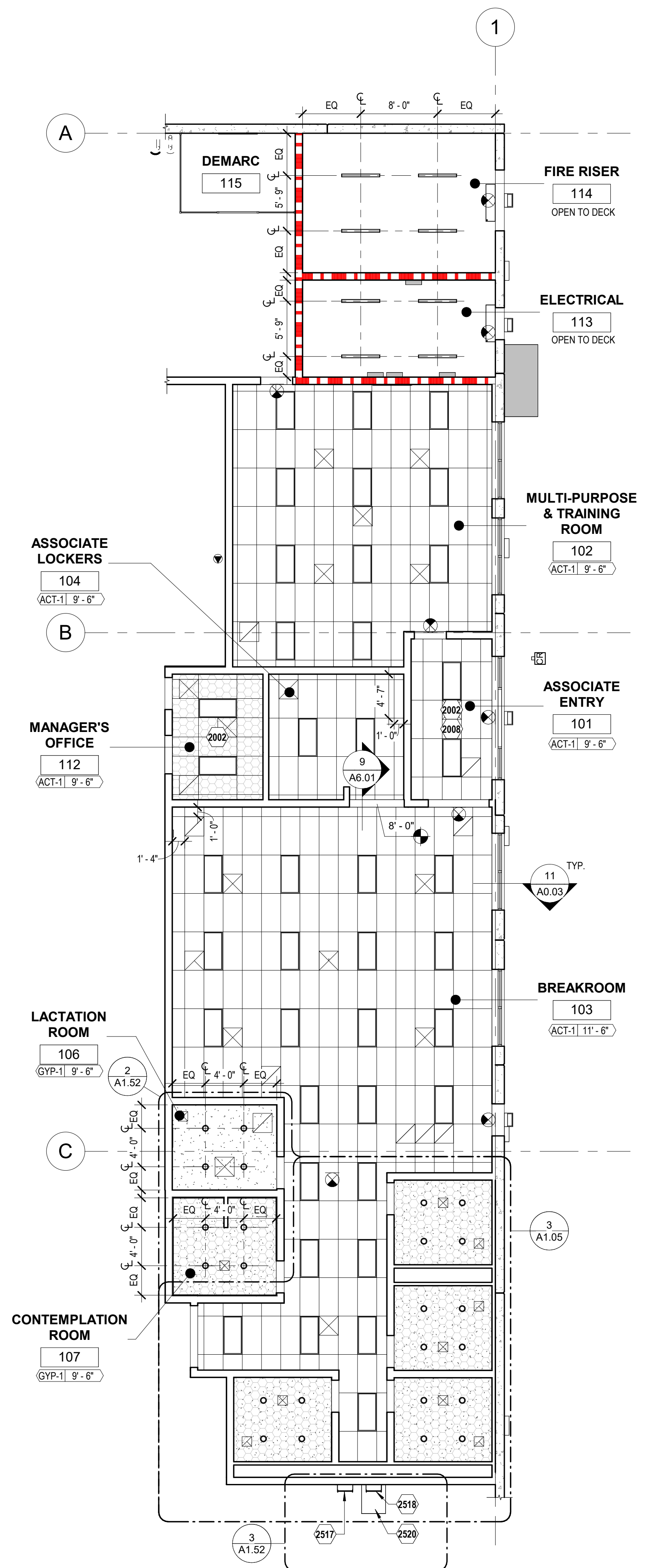
- ARCHITECTURAL REFLECTED CEILING PLAN IS FOR CEILING CONSTRUCTION AND LIGHTING LAYOUT ONLY. REFERENCE MEP AND SPECS FOR HVAC AND FIXTURE TYPES.
- GC, WITH FIRE MARSHAL'S DIRECTION, WILL DETERMINE IF ANY ADDITIONAL LIGHTED EMERGENCY EXIT SIGNAGE IS NEEDED. GC TO INSTALL IF ADDITIONAL SIGNAGE IS REQUIRED.
- GC TO COORDINATE WITH ALL OTHER TRADES TO MINIMIZE UTILITY CONFLICTS AND TO ENSURE COMPLIANCE WITH ALL FIRE MARSHAL REQUIREMENTS AND LIGHTING LEVEL REQUIREMENTS.
- REFER TO FLOOR PLANS FOR WALL CONSTRUCTION, DIMENSIONS, AND LOCATIONS.
- REFER TO CEILING DETAILS ON SHEET A0.03.
- ALL CEILING OPEN TO STRUCTURE TO REMAIN UNPAINTED, U.N.O.
- ALL UNDIMENSIONED ACT CEILING GRIDS SHOULD BE CENTERED IN ROOM, U.N.O.
- DIMENSIONS SHOWN TO FLOOR FINISH FACE OF WALLS OR CENTERLINE OF GRID U.N.O.
- ALL DIMENSIONS ARE TO CENTER OF LIGHT FIXTURE, U.N.O.
- FOR FRAMED CEILINGS, REFER TO JOIST PLANS FOR ADDITIONAL INFORMATION.
- PROVIDE ACCESS PANELS IN GYP CEILINGS AS REQUIRED TO ACCESS EQUIPMENT ABOVE. REFERENCE SPECS. PAINT ACCESS PANELS TO MATCH ADJACENT FINISHES. ONCE DRY, CONFIRM THAT PAINT DOES NOT INHIBIT THE PROPER OPERATION OF ACCESS PANELS.
- REFER TO PARTITION SHEET AND DETAILS FOR ADDITIONAL INFORMATION.
- DRYWALL TO EXTEND UP ABOVE ACT CEILING U.N.O.
- NO PERMANENT SUSPENDED LOADS ARE TO BE SUPPORTED BY METAL DECK, UNLESS NOTED OTHERWISE, INCLUDING BUT NOT LIMITED TO EQUIPMENT, FIXTURES, ETC.

KEYNOTES

- CEILING GRID & LIGHTING TO BE CENTERED IN NEW SPACE AS SHOWN.
- ADD ACT UPLIFT CLIPS.
- LOWER LADDER. REFER TO DETAIL 1/A5.01.
- UPPER LADDER. REFER TO DETAIL 1/A5.01.
- LADDER PLATFORM. REFER TO DETAIL 1/A5.01.
- ROOF HATCH. REFER TO DETAIL 2/A5.01 & ROOF PLAN.

LEGEND

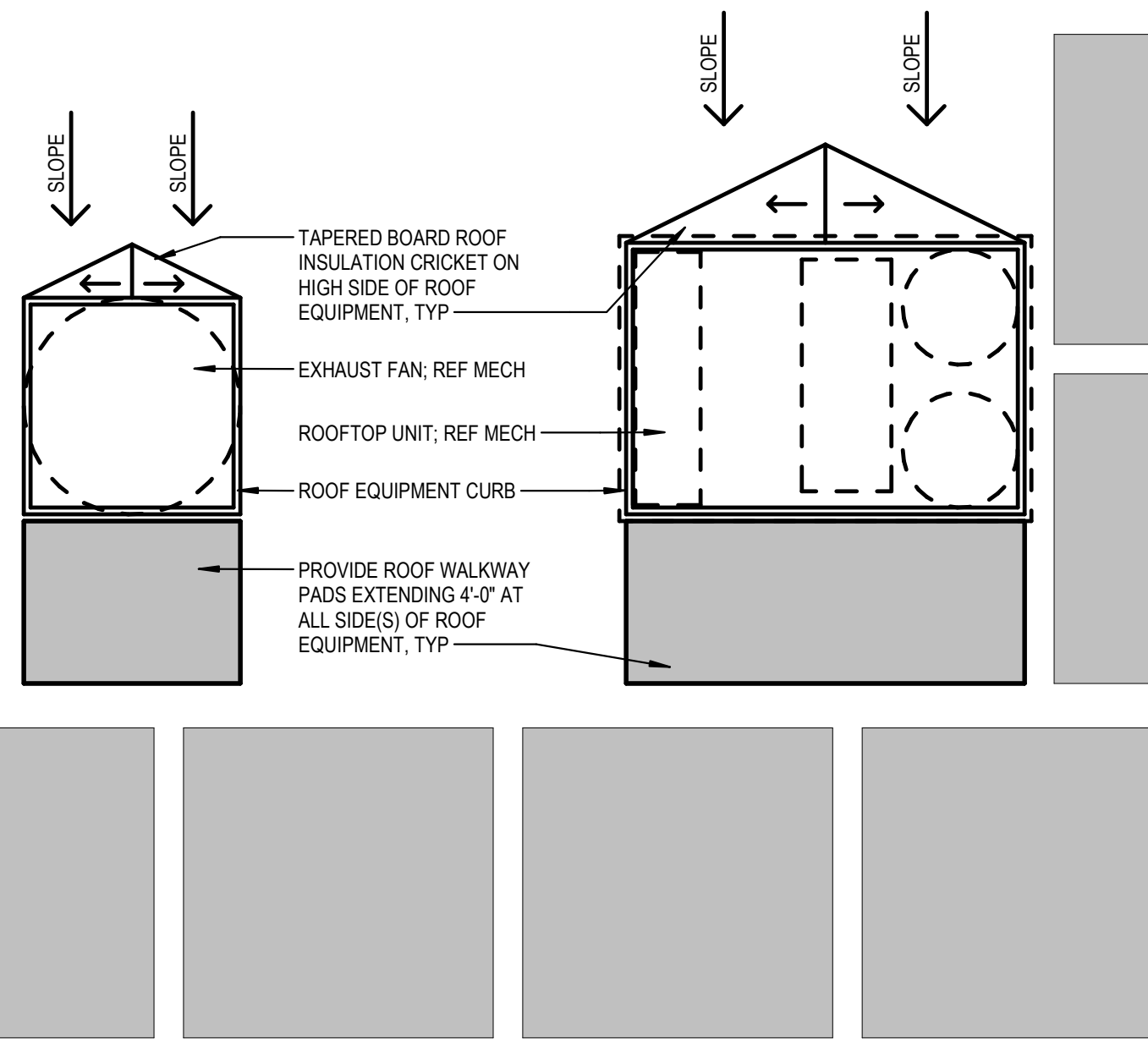
- | | | | |
|--|---|--|--|
| | 2x4 LENSED RECESSED LED TROFFER W/ SHALLOW HOUSING. DIAGONAL HATCH REPRESENTS EMERGENCY LIGHTING. | | 2x4 ACOUSTIC CEILING (REFER TO RCP FOR HEIGHT) |
| | HIGH BAY LIGHTING FIXTURES. REFER TO ELECTRICAL DRAWINGS. | | 5/8\"/> |
| | LED DOWNLIGHT | | PROVIDE 1\"/> |
| | 4\"/> | | 2x2 SUPPLY AIR DIFFUSER |
| | EMERGENCY EXIT SIGN (CENTERED ABOVE DOOR) | | 2x2 CEILING EXHAUST GRILLE |
| | 2x2 CEILING RETURN AIR GRILLE | | |



3 ENLARGED REFLECTED CEILING PLAN, LADDER
A1.52 / Scale: 1/4" = 1'-0"

2 CEILING JOIST PLAN
A1.52 / Scale: 1/8" = 1'-0"

1 OFFICE REFLECTED CEILING PLAN
A1.52 / Scale: 1/8" = 1'-0"



KEYNOTES

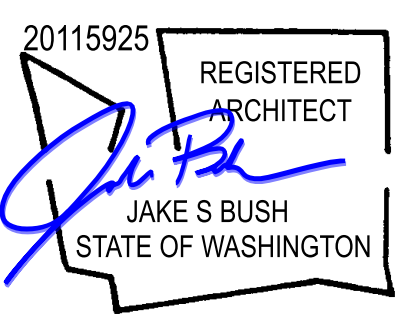
- 0518 DOCK SHELTER. INSTALL PER MANUFACTURER'S INSTRUCTIONS. REFER TO SPECS.
- 2502 ROOF HATCH WITH FALL PROTECTION - PROVIDE GUARDING ON ALL EXPOSED SIDES OF HATCH. REFER TO DETAIL 29A.01
- 2503 HVAC EQUIPMENT - REFER TO MEP DRAWINGS AND DETAIL 6/A5.01. PROVIDE CRICKET AND INSTALL PER MANUFACTURER'S INSTRUCTIONS. ELECTRICAL AND MECHANICAL UTILITIES ARE THROUGH THE EQUIPMENT BASE WITH NO SEPARATE PENETRATIONS. REFER TO STRUCTURAL DRAWINGS FOR SUPPORT FRAMING.
- 2504 TPO MEMBRANE ROOF SYSTEM OVER RIGID INSULATION ON A METAL DECK. REFER TO ENERGY CODE BASIS OF DESIGN ON SHEET G1.00 FOR INSULATION INFORMATION.
- 2505 ROOF DRAIN WITH INTERIOR DRAINAGE. CONNECT TO UNDERGROUND STORMWATER SYSTEM. REFER TO CIVIL, PLUMBING AND DETAIL 11/A5.01.
- 2506 TAPERED INSULATION ROOF CRICKET - SLOPE MIN 1/2"FT.
- 2507 ENTRY CANOPY BELOW FABRIC AWNING, CENTERED OVER ROUGH OPENING EXTEND PAST OPENING 1'-0" EACH SIDE. ANCHORAGE AND VALIDATION BY MANUFACTURER.
- 2508 OVERFLOW ROOF DRAIN. TO WALL NOZZLE (18" AFF) AND DAYLIGHT. REFER TO PLUMBING AND DETAIL 11/A5.01.
- 2509 SLOPE DIRECTION TYP
- 2510 WALKING PADS. REFER TO DETAIL 2/A1.61.
- 2512 ROOF PENETRATION. REFER TO MEP DRAWINGS AND DETAILS 3 AND 4/A5.01. PROVIDE FLASHING PER MANUFACTURER'S INSTRUCTIONS.
- 2515 PARAPET MOUNTED DAVIT CRANE. REFER TO SPECIFICATIONS FOR PRODUCT BASIS OF DESIGN. REFER TO STRUCTURAL DRAWINGS FOR FINAL MOUNT LOCATION.
- 2516 PARAPET STEP - REFERENCE DETAIL 7/A5.01.
- 2521 THROUGH-WALL OVERFLOW SCUPPER. REFER TO ELEVATIONS & DETAIL 14/A5.01.
- 2522 HEAT PUMP CONDENSING UNIT. REFER TO MECHANICAL DRAWINGS.

SHEET NOTES

- A. REFERENCE EXTERIOR DETAIL SHEET A5.01 FOR ROOFING DETAILS.
- B. REFERENCE STRUCTURAL FOR REINFORCEMENT AT EQUIPMENT.
- C. REFERENCE MEP FOR NEW EQUIPMENT AND PENETRATIONS.
- D. GC TO FIELD COORDINATE POSITIONING OF ROOF EQUIPMENT, OPENINGS, AND EQUIPMENT PLATFORMS WITH JOIST LOCATIONS AND MECHANICAL DRAWINGS.
- E. GC TO PROVIDE FLASHING/MOISTURE PENETRATION PROTECTION AT ALL ROOF PENETRATIONS.
- F. GC TO PROVIDE WALKWAY PADS AT EQUIPMENT. DO NOT INSTALL WALKWAY PADS UNTIL ROOF FLASHINGS ARE COMPLETE. WHERE PENETRATIONS CONFLICT WITH WALKWAY PADS, TRIM 4" FROM EDGE OF PENETRATION PRIOR TO PAD INSTALLATION.
- G. GC TO PROVIDE CRICKETS AS REQUIRED TO FORM POSITIVE DRAINAGE AWAY FROM CORNERS AND AROUND EQUIPMENT. MINIMUM FINISH SLOPE OF CRICKETS TO BE 1/2" PER 12".
- H. GC TO INSTALL ALL EQUIPMENT PLATFORMS, CURBS, AND RELATED OPENINGS FOR ALL EQUIPMENT AS REQUIRED BY MEPF AND OTHER TRADES. VERIFY EXACT SIZES AND LOCATIONS WITH ALL SUB CONTRACTORS. ALL EQUIPMENT SHALL BE CONSTRUCTED TO BE LEVEL AND PLUMB, NO SLOPING WITH THE SLOPE OF THE ROOF.

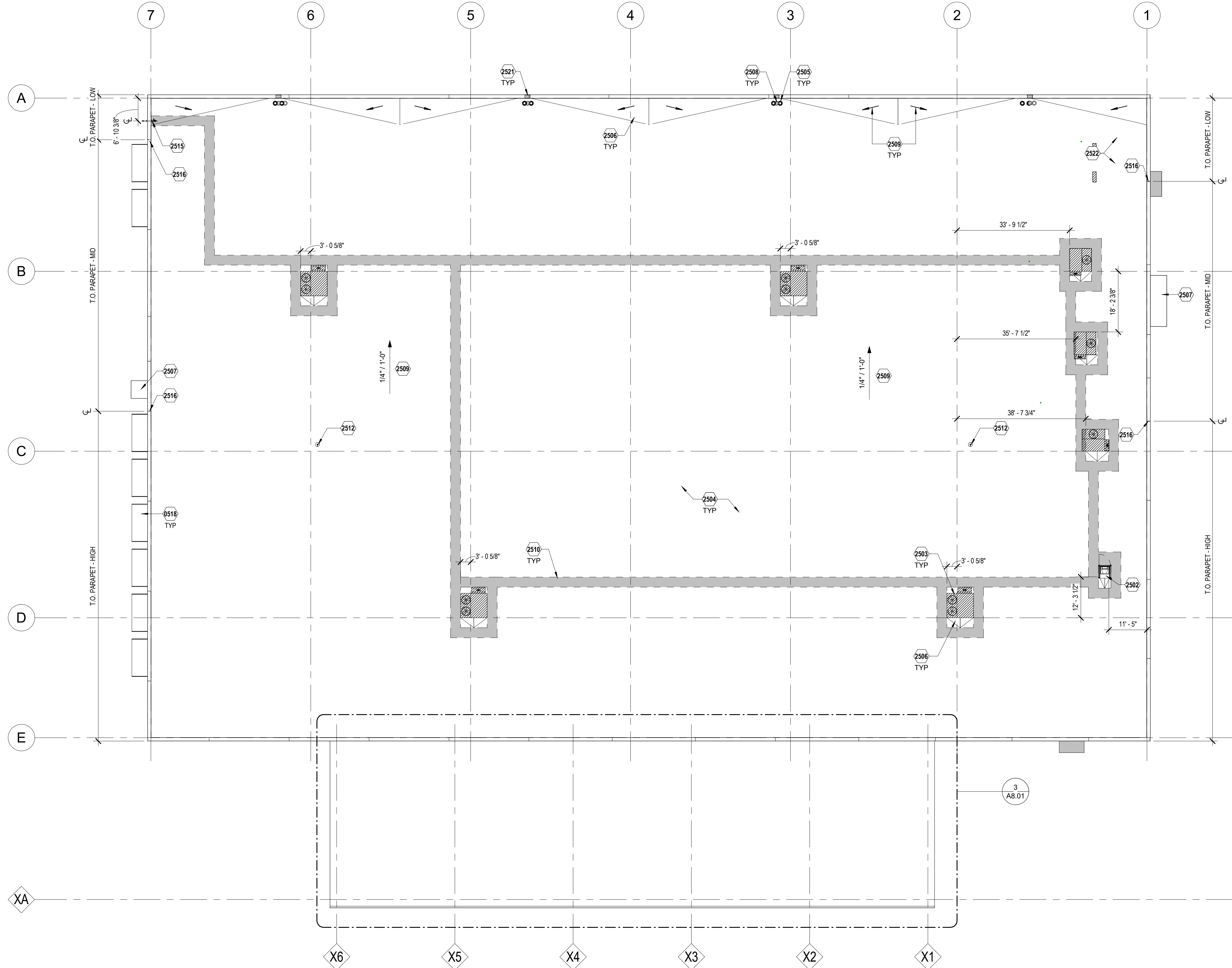
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4.25.2025 Exp: 4.10.2026

2 TYPICAL ROOF EQUIPMENT PLAN
A1.61 / Scale: 1/4" = 1'-0"



1 OVERALL ROOF PLAN
A1.61 / Scale: 1/16" = 1'-0"

AMBROSE PROPERTY GROUP

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Scale:	AS NOTED
Drawn By:	SW / CB
Checked By:	DZ
Date:	04.25.2025
Issue:	PERMIT SET

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Sheet Title:
OVERALL ROOF PLAN

A1.61

SHEET NOTES

- A. PROVIDE FLASHING/MOISTURE PENETRATION PROTECTION AT ALL PENETRATIONS.
- B. BRANDED BUILDING SIGNAGE IS NOT INCLUDED IN THE BUILDING PERMIT AND SHALL REQUIRE A SEPARATE PERMIT PRIOR TO INSTALLATION, U.N.O.
- C. ALL EMERGENCY LIGHTING AT DOORS TO BE CENTERED ABOVE DOOR U.N.O., REFERENCE ELECTRICAL DRAWINGS.
- D. REFER TO ELECTRICAL DRAWINGS FOR ALL LIGHTING LOCATIONS.
- E. REFER TO STRUCTURAL AND MECHANICAL FOR ADDITIONAL INFORMATION RELATED TO BUILDING OPENINGS.
- F. INSTALL JOINT SEALANT OVER EXPANSION JOINT FILLER AT ALL EXTERIOR WALL JOINTS AND AT ALL CUTS AND HOLES THROUGH WALLS. REFER TO SPECIFICATIONS.
- G. REFER TO STRUCTURAL FOR LOCATION OF GROUTED AREAS AT STRUCTURAL CONNECTION.
- H. PARAPET MEMBRANE FLASHING SHALL BE OF THE SAME MATERIAL AS SINGLE-PLY ROOFING MEMBRANE.
- I. REFER TO BUILDING SECTIONS AND DETAILS FOR ADDITIONAL INFORMATION.
- J. TIE ALL DOWNSPOUTS AT GRADE TO STORM DRAINS. REFER TO CANOPY PLAN, SECTIONS, AND CIVIL DRAWINGS.
- K. PAINT ALL BOLLARDS SAFETY YELLOW.
- L. REFER TO SPECIFICATIONS FOR SPECIFIC PAINT PRODUCTS REQUIRED.

CANOPY FINISH NOTES

- A. STEEL AND METAL DECK ARE TO BE SHOP PRIMED. DO NOT GALVANIZE. REFER TO SPEC 051010.
- B. TWO COATS PAINT TO FIELD APPLIED OVER ALL EXPOSED SHOP-PRIMED STRUCTURE AND METAL DECK, ALONG WITH ANY EXPOSED CONDUITS, PIPING, ETC. (REF SPEC 099000).
- C. CONCRETE SURROUND TO BE PAINTED SAFETY YELLOW. REFER TO SPEC 099000 FOR PRIMER & TOP COAT REQUIREMENTS.

EXTERIOR COLOR LEGEND

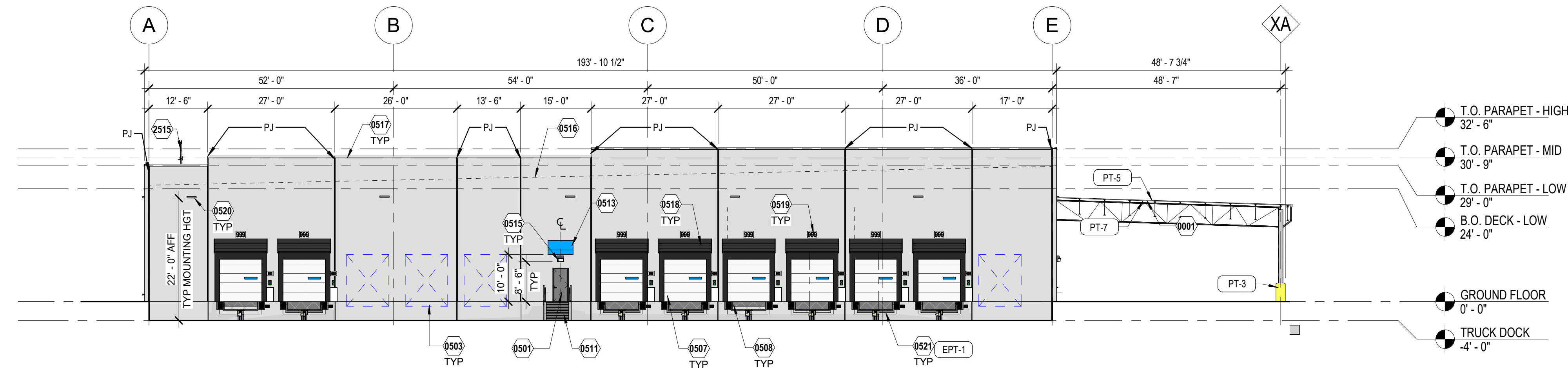
(TEXTURED FINISH AT CONCRETE WALL PANELS)

REFER TO FINISH SCHEDULE SHEET A1.03; REFER TO CANOPY FINISH NOTES FOR PAINT AT CANOPY

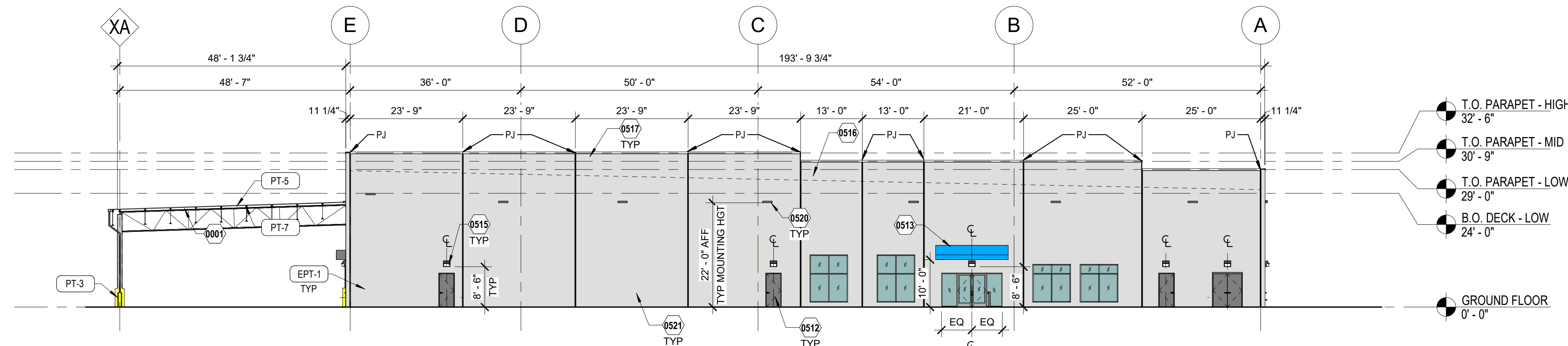
EPT-1	2121-70 - CHANTILLY LACE
EPT-2	SW7650 - ELLIE GRAY
EPT-3	TENANT BLUE TO MATCH PANTONE 2727C

KEYNOTES

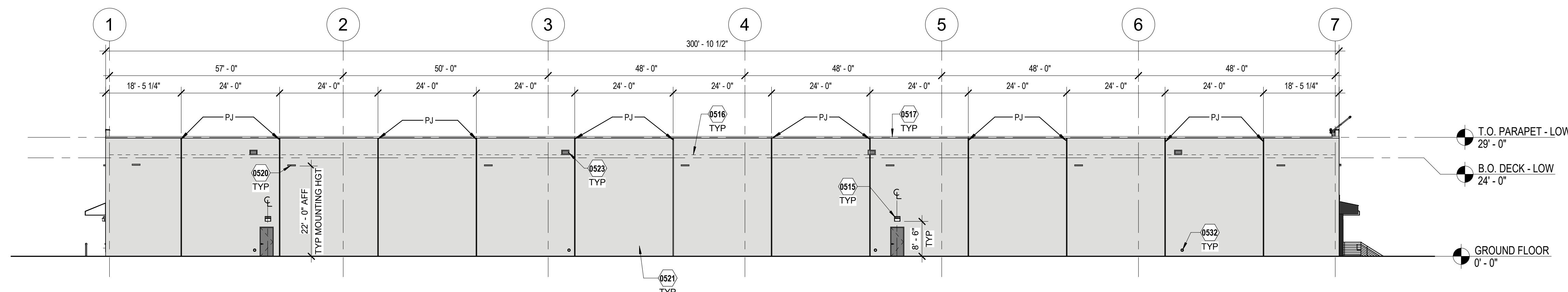
- 0001 LAUNCH PAD CANOPY (ABOVE); REFER TO SHEET A8.01.
- 0501 TRUCKER (TDR) ENTRY DOOR; FOR SIGNAGE REFER TO DETAIL 4/G1.10. AS-28 SIGN TO READ "TRUCKER'S ENTRANCE".
- 0502 DRIVER (DSP) ENTRY DOOR; FOR SIGNAGE REFER TO DETAIL 4/G1.10. AS-28 SIGN TO READ "DRIVER'S ENTRANCE".
- 0503 KNOCK-OUT PANEL; MATCH DOOR DOOR SIZE.
- 0507 SECTIONAL OVERHEAD TRUCK DOOR (INSULATED) WITH BUMPERS AND DOCK SEAL, PRE-PRIMED, PAINT PER LEGEND, TYP. FOR SIGNAGE REFER TO 8/G1.10.
- 0508 PROVIDE HYDRAULIC LEVELER PER TENANT DESIGN CRITERIA. REFER TO SPECIFICATIONS.
- 0509 HIGH-SPEED FABRIC DOOR (INTERIOR MOUNT) AND OVERHEAD COILING DOOR (EXTERIOR MOUNT, INSULATED) WITH PAINTED CLEAR ZONE ON GROUND, VERIFY REQUIRED CLEARANCES WITH DOOR MANUFACTURER. DOORS MAY REQUIRE LEFT HAND DRIVE MECHANISMS. REFER TO DOOR SCHEDULE FOR MORE INFORMATION. FOR SIGNAGE REFER TO 8/G1.10.
- 0511 PRE-FAB METAL STAIR AT TRUCK COURT, GALVANIZED (NO PAINT).
- 0512 TYPICAL EGRESS DOOR; FOR SIGNAGE REFER TO DETAIL 4/G1.10.
- 0513 FABRIC AWNING OVERHEAD; AWNING TO EXTEND 1'-0" PAST THE OPENING ON EITHER SIDE. REFER TO SPECS FOR PRODUCT INFORMATION. REFER TO WALL SECTION FOR ADDITIONAL INFORMATION. COLOR TO MATCH SUNBRELLA "AZURE".
- 0515 EXTERIOR EGRESS LIGHT ABOVE EXTERIOR DOOR; REFER TO MEP.
- 0516 ROOF LINE BEYOND GC TO MAINTAIN MIN 42" PARAPET FOR ROOF SAFETY.
- 0517 PREFINISHED METAL COPING OVER CONTINUOUS WOOD BLOCKING.
- 0518 DOCK SHELTER; INSTALL PER MANUFACTURER'S INSTRUCTIONS; REFER TO SPECS.
- 0519 DOCK NUMBER SIGNAGE AT ALL DOCK DOORS, U.N.O.; CENTER SIGNAGE ON DOCK DOOR; REFER TO G1.10 FOR MORE INFORMATION.
- 0520 WALL MOUNTED LIGHT FIXTURE; REFER TO ELECTRICAL DRAWINGS. CENTER LIGHT FIXTURE HORIZONTALLY IN PANEL, U.N.O.
- 0521 CONCRETE PANEL; PAINT; REFERENCE EXTERIOR COLOR LEGEND.
- 0523 THROUGH-WALL OVERFLOW SCUPPER; PAINT TO MATCH EXTERIOR WALL BEYOND; REFER TO DETAIL 14/A5.01.
- 0532 OVERFLOW ROOF DRAIN NOZZLE (DSN); HEIGHT TO BE 18", UNO, REF TO PLUMBING DRAWINGS.
- 2515 PARAPET-MOUNTED DAVIT CRANE; REFER TO SPECIFICATIONS FOR PRODUCT BASIS OF DESIGN. REFER TO STRUCTURAL DRAWINGS FOR FINAL MOUNT LOCATION.



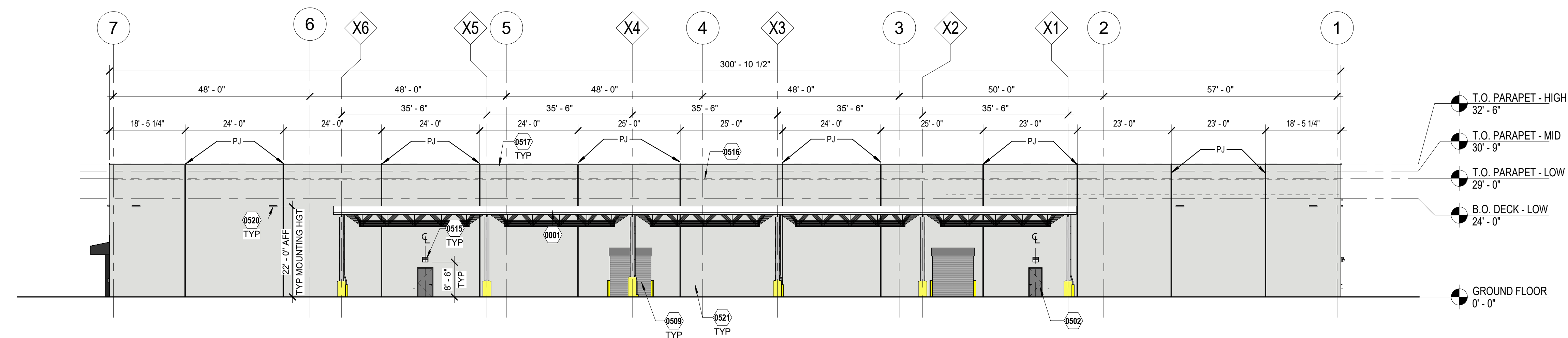
4 EAST ELEVATION
A2.01 Scale: 1/16" = 1'-0"



3 WEST ELEVATION
A2.01 Scale: 1/16" = 1'-0"



2 SOUTH ELEVATION
A2.01 Scale: 1/16" = 1'-0"



1 NORTH ELEVATION
A2.01 Scale: 1/16" = 1'-0"

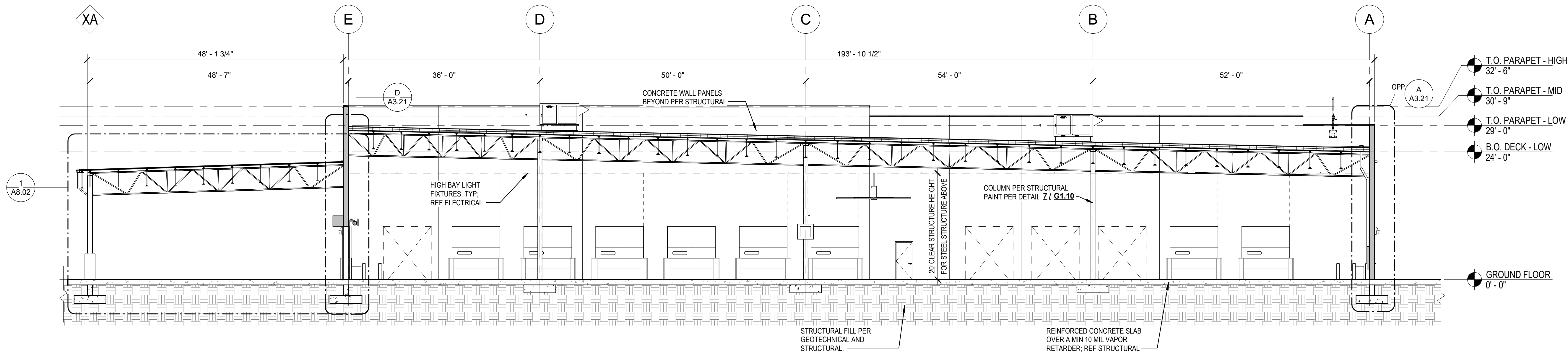
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Project number:	763838-02
Scale:	AS NOTED
Drawn By:	SW / CB
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Issue:	PERMIT SET

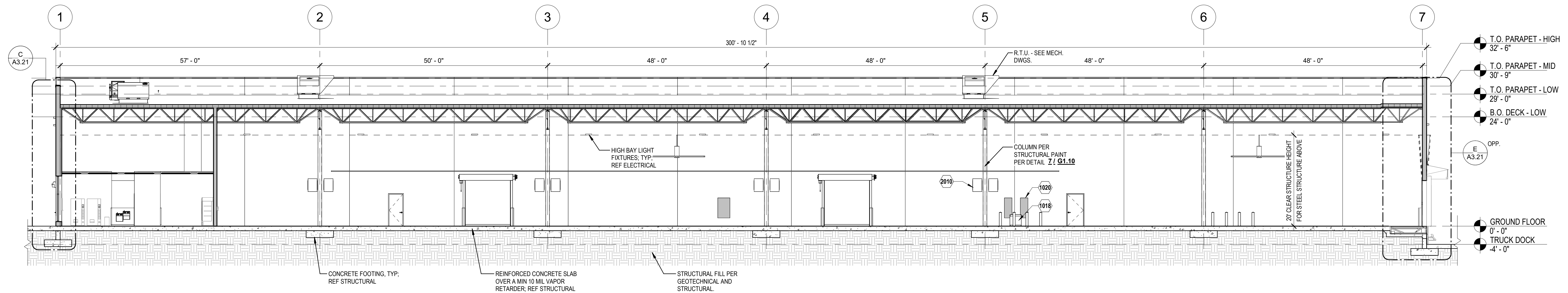
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Project number:	763838-02
Scale:	AS NOTED
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Date:	04.25.2025
Issue:	PERMIT SET

Sheet Title:
BUILDING SECTIONS



BB LONGITUDINAL BUILDING SECTION
A3.01 Scale: 3/32" = 1'-0"



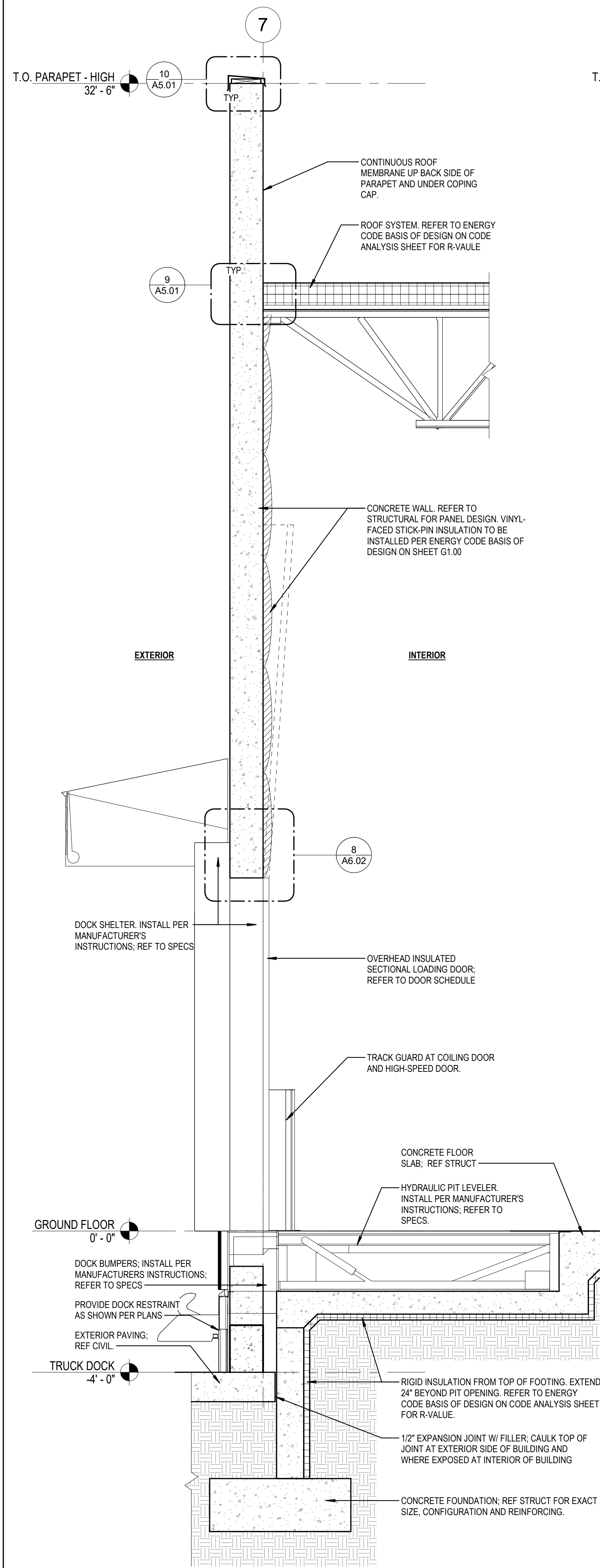
AA TRANSVERSE BUILDING SECTION
A3.01 Scale: 3/32" = 1'-0"

Revisions / Submissions		
ID	Description	Date
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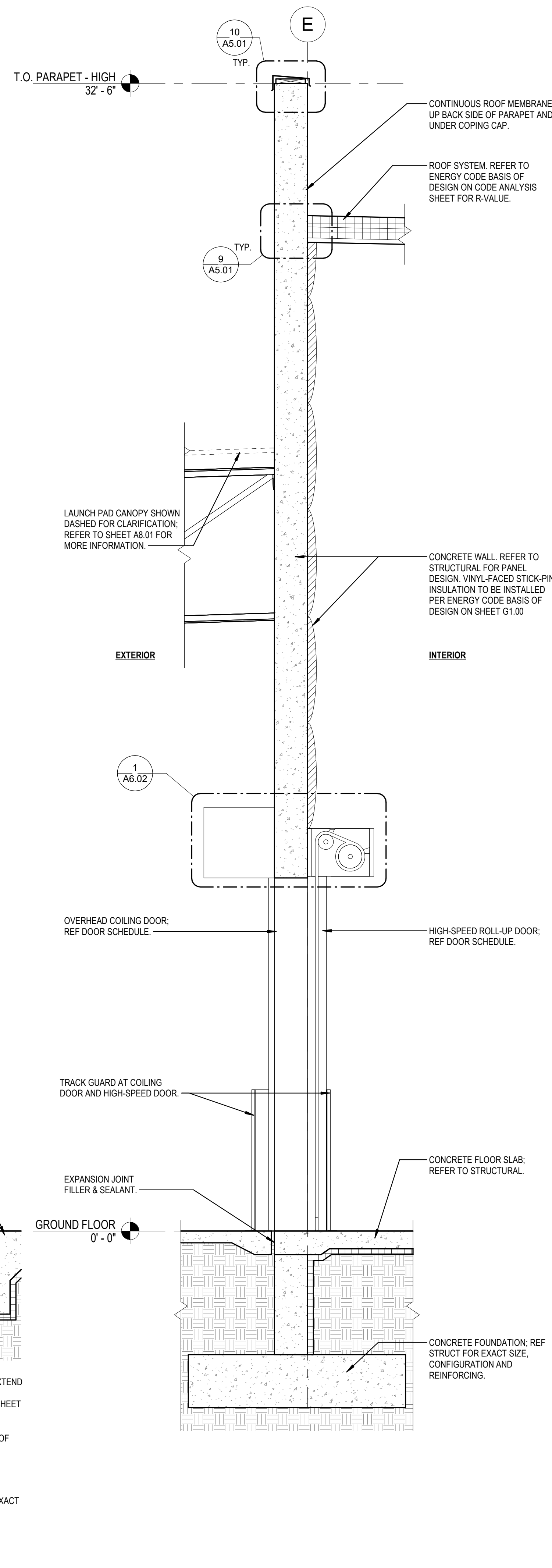
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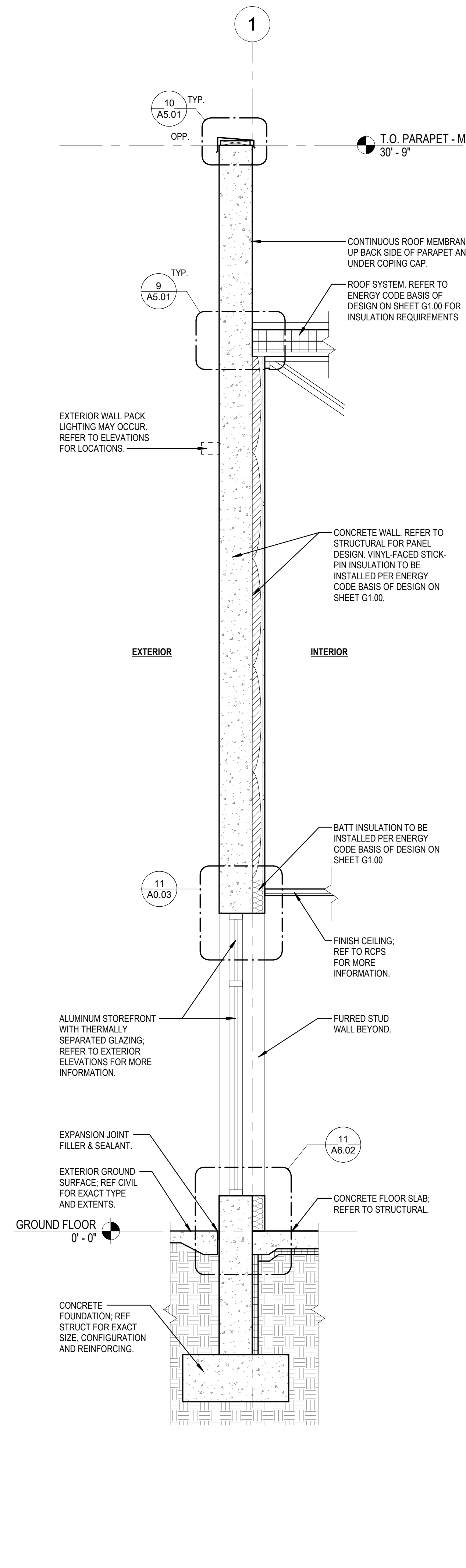
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WALL SECTIONS



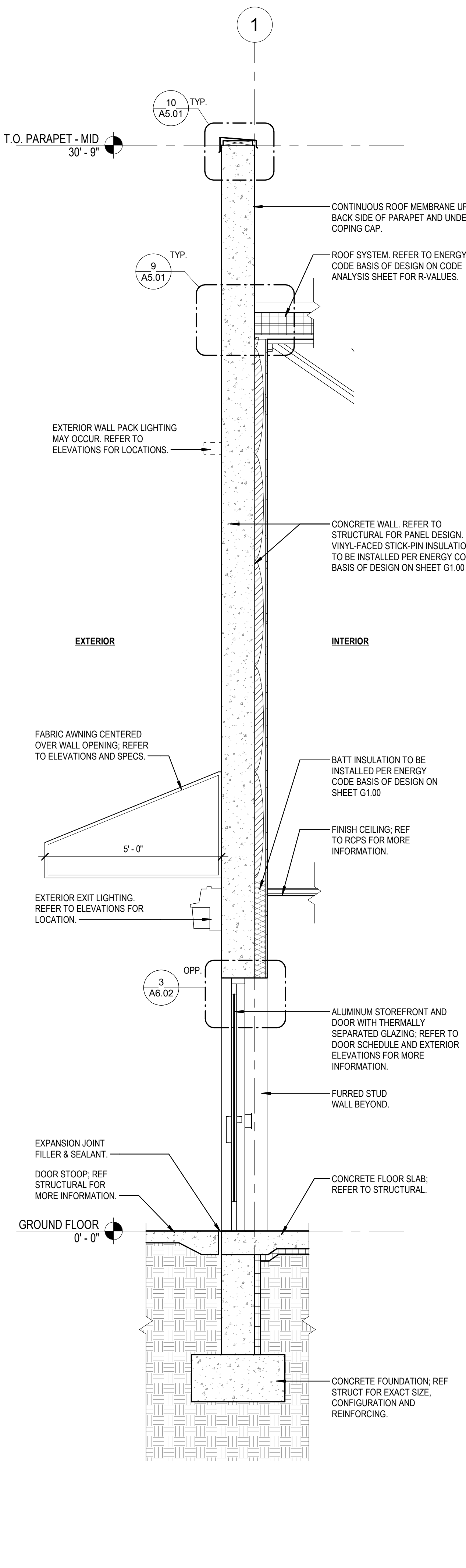
E SECTION AT DOCK DOORS
A3.21 Scale: 1/2" = 1'-0"



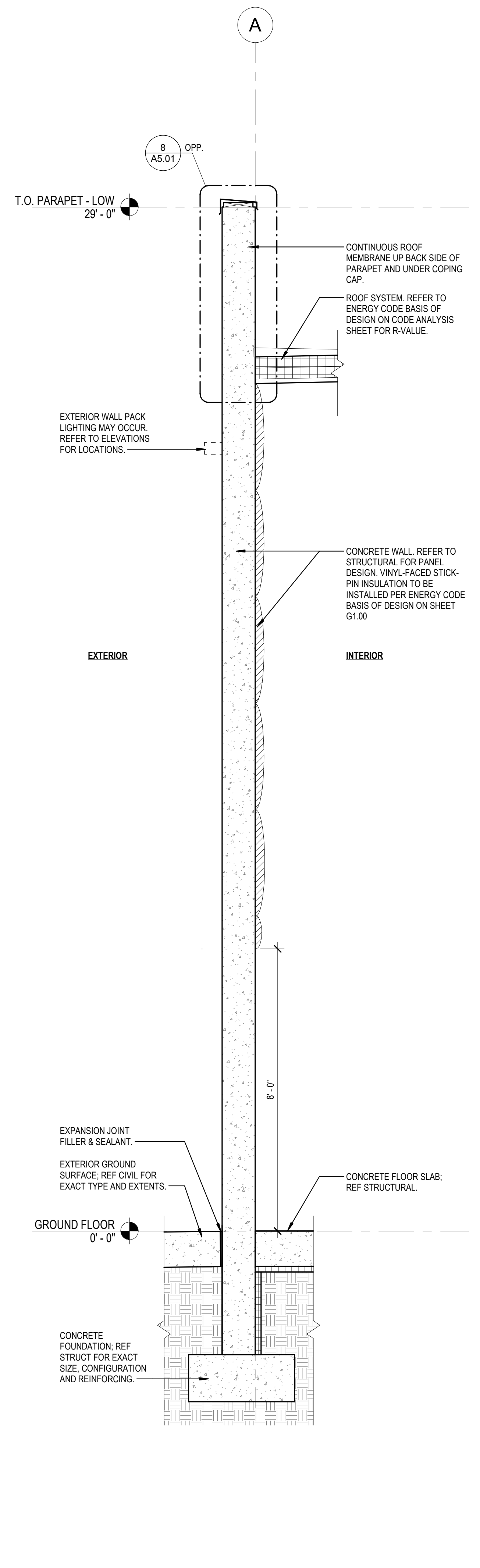
D SECTION AT LAUNCH PAD DOORS
A3.21 Scale: 1/2" = 1'-0"



C SECTION AT STOREFRONT
A3.21 Scale: 1/2" = 1'-0"



B SECTION AT ENTRY DOORS
A3.21 Scale: 1/2" = 1'-0"



A SECTION AT CONCRETE WALL
A3.21 Scale: 1/2" = 1'-0"

SHEET NOTES

1. REFERENCE FINISH PLANS AND SCHEDULES FOR FINISH INFORMATION.
2. REFERENCE PARTITION DETAIL SHEETS FOR PARTITION INFORMATION.
3. PROVIDE CONTROL JOINTS IN GYPSUM BOARD FRAMED ASSEMBLIES AT 30'-0" OC MAX.
4. REFERENCE MEP SHEETS FOR INFORMATION ON BUILDING SYSTEMS AND UTILITIES.
5. ELEVATIONS DO NOT SHOW ALL ELEMENTS OF CONSTRUCTION, REFER TO OTHER CONSTRUCTION DOCUMENTS FOR ADDITIONAL INFORMATION.
6. REFERENCES EQUIPMENT PLANS AND SCHEDULES FOR EQUIPMENT AND FURNITURE INFORMATION.

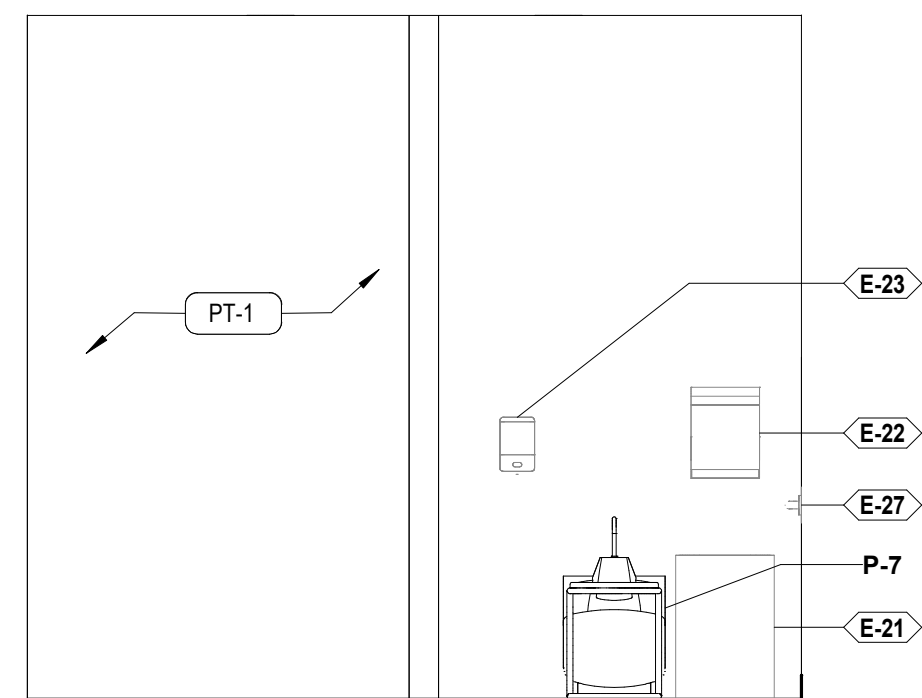
MILLWORK SCHEDULE

CODE	QTY	ITEM	COMMENTS
M-B4	1	PLASTIC LAMINATE PLUMBING GUARD (PL-1)	
M-B5	1	LACTATION ROOM BASE CABINET - ACCESSIBLE SINK	
M-B6	1	BASE CABINET	
M-BM	2	BASE CABINET - MICROWAVE	
M-C3	1	COUNTERTOP - BREAKROOM	WIDTH VARIES, REF PLANS
M-C4	1	COUNTERTOP - LACTATION ROOM	
M-IB	1	BASE CABINET - DRAWER	
M-IT	1	BASE CABINET - TRASH	
M-O2	1	OVERHEAD CABINET	
M-OM	1	OVERHEAD - MICROWAVE CABINET	
M-R3	1	COAT RACK	

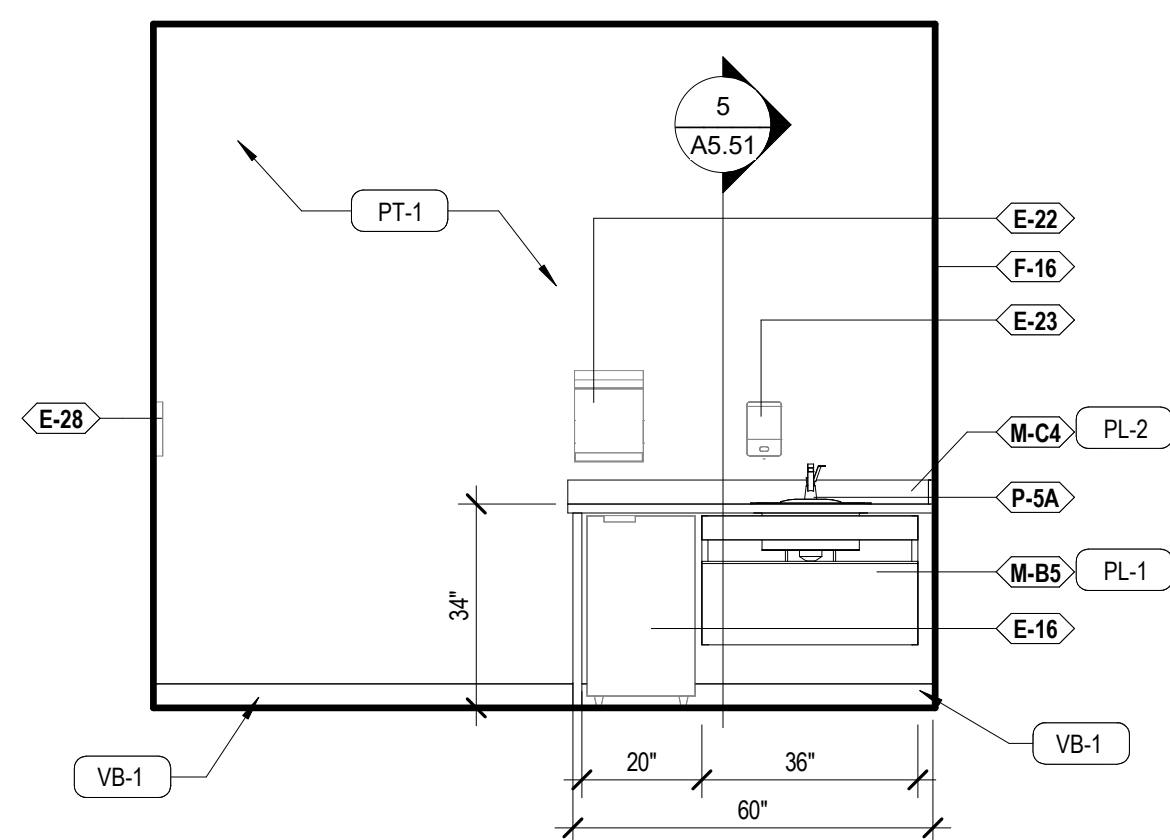
MILLWORK NOTES

- A. BASE CABINETS DEFAULT DEPTH TO BE 2'-0", UNO.
- B. OVERHEAD CABINETS DEFAULT DEPTH TO BE 1'-4", UNO.
- C. REFERENCE DETAILS ON SHEET A5.51

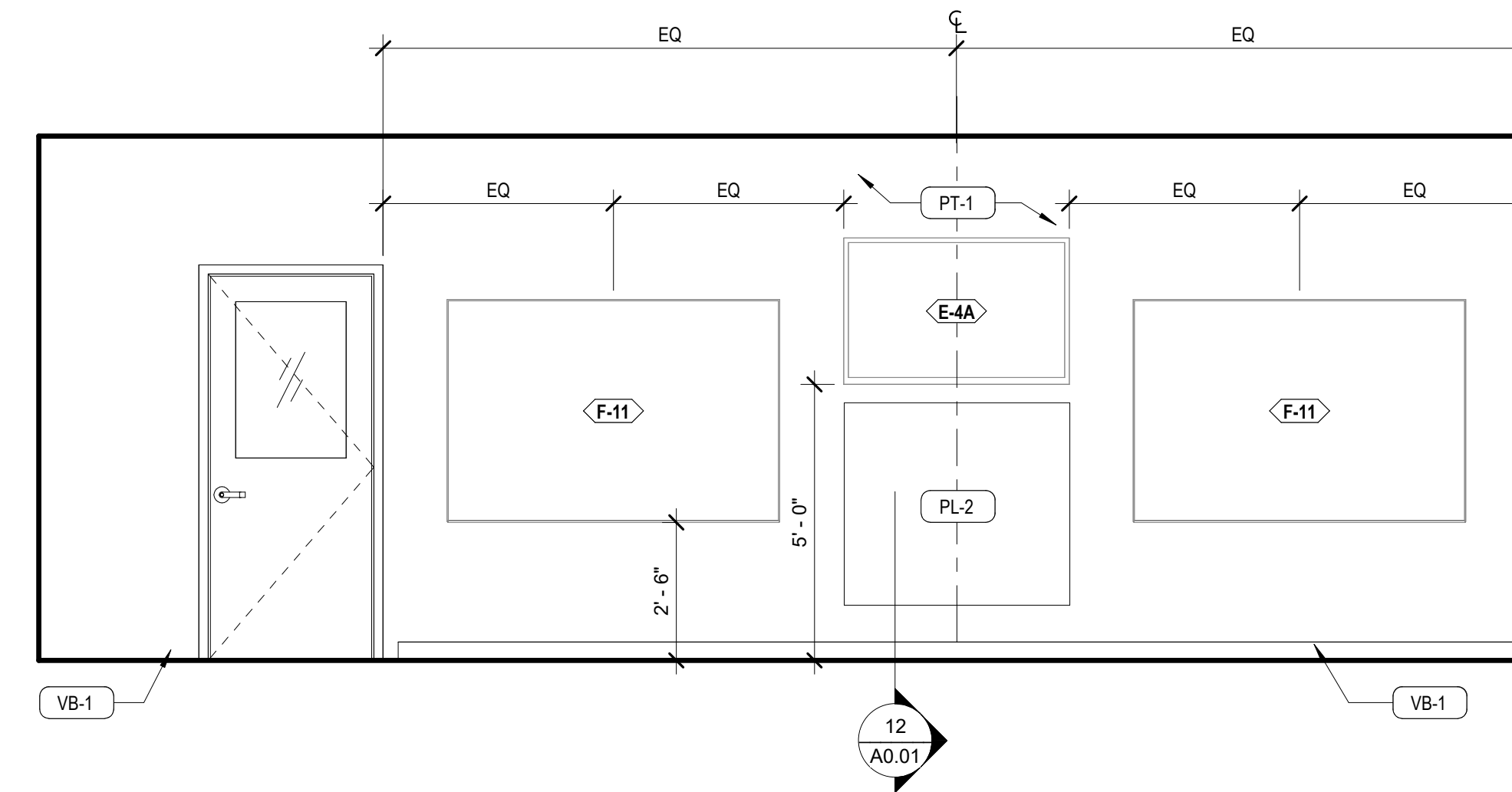
TYPICAL MICROWAVE NICHE FINISHES



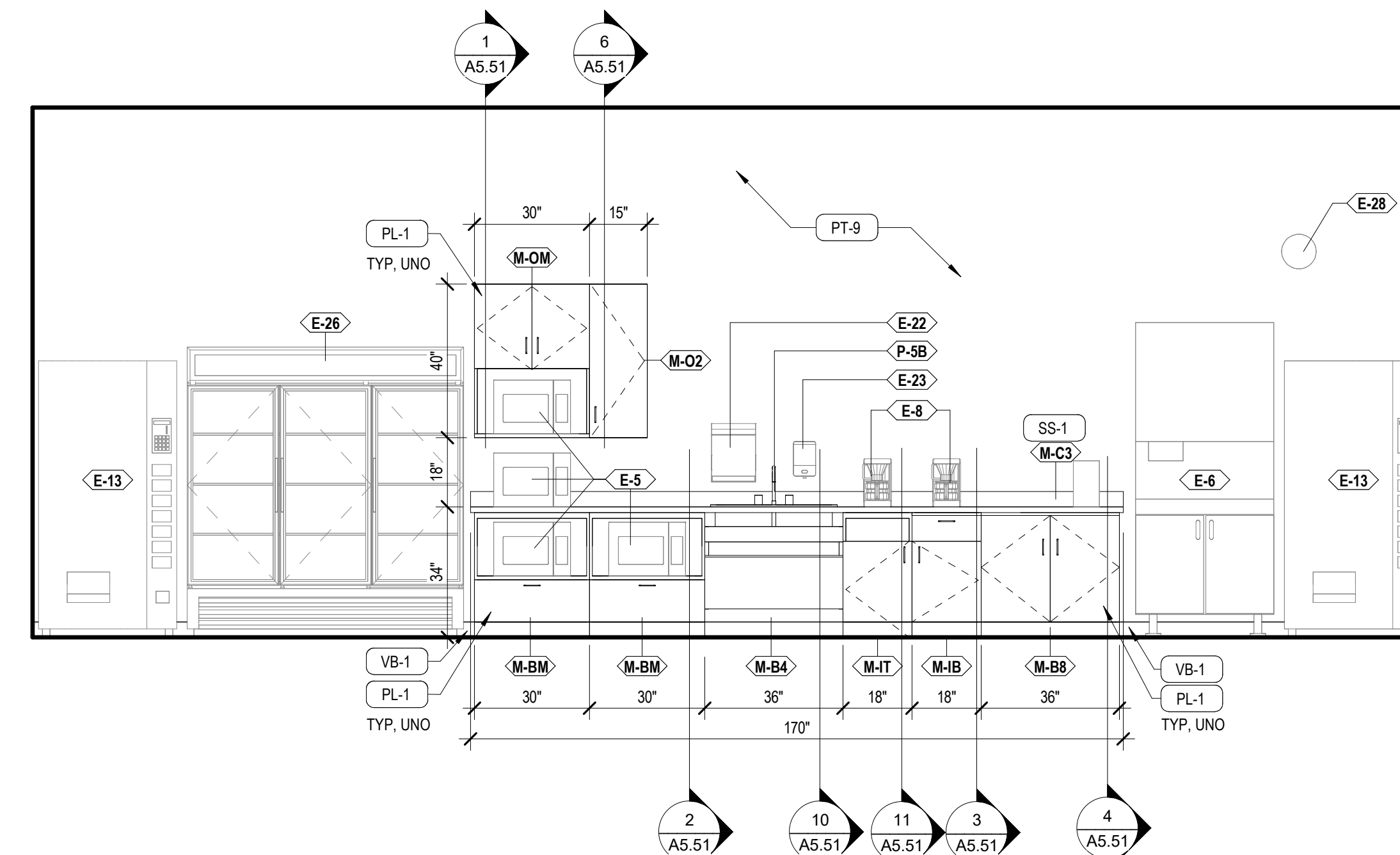
4 CONTEMPLATION ROOM ELEVATION
A4.01 Scale: 3/8" = 1'-0"



2 LACTATION ROOM ELEVATION
A4.01 Scale: 3/8" = 1'-0"

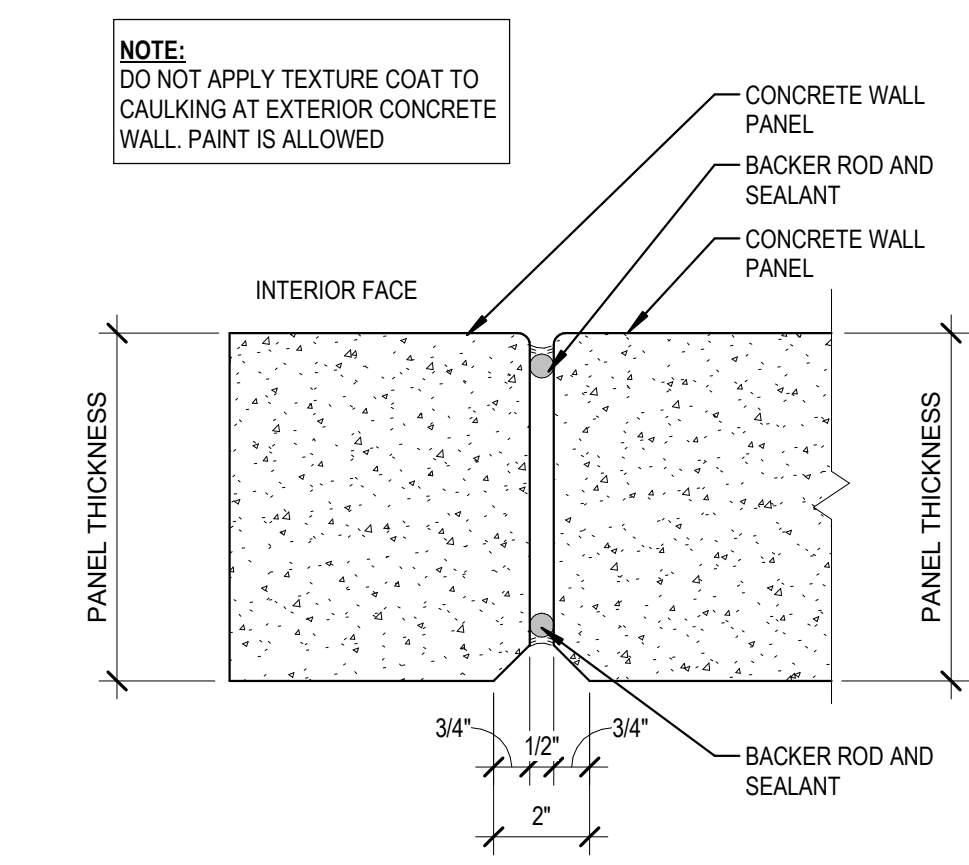


3 TRAINING ROOM ELEVATION
A4.01 Scale: 3/8" = 1'-0"

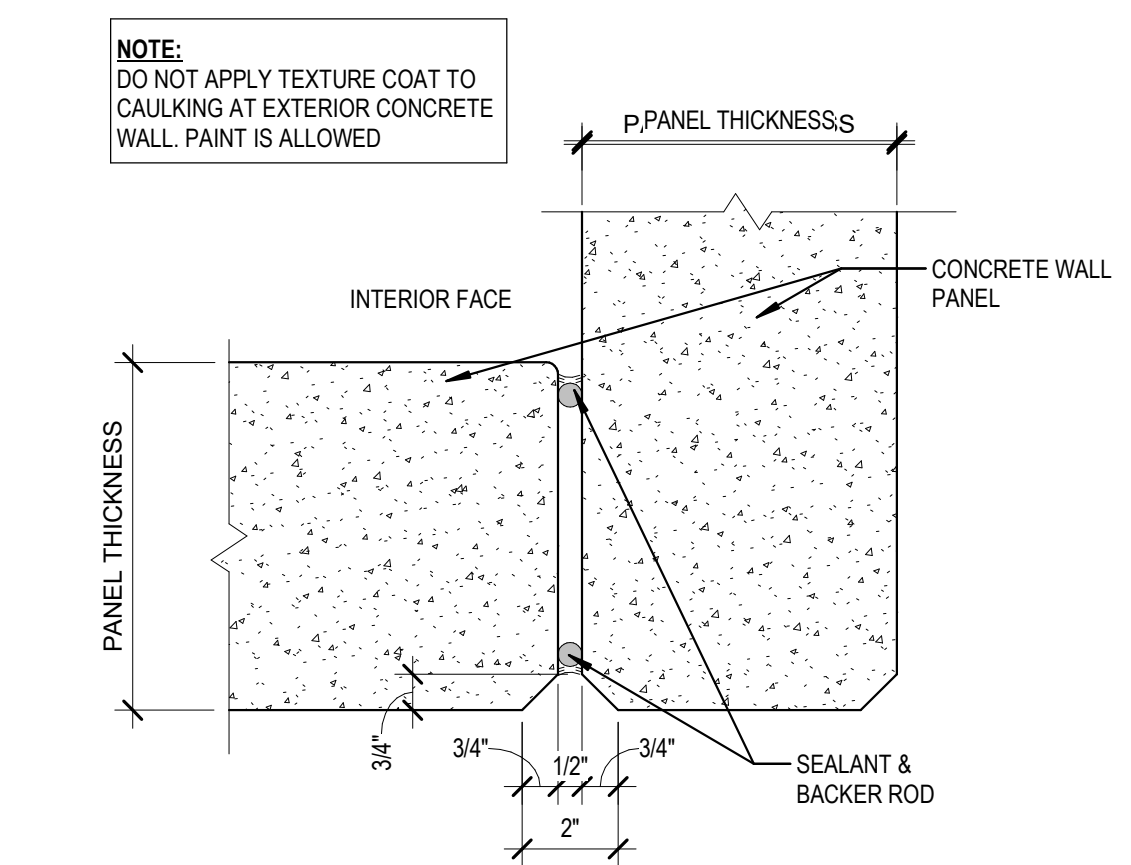


1 BREAK ROOM ELEVATION
A4.01 Scale: 3/8" = 1'-0"

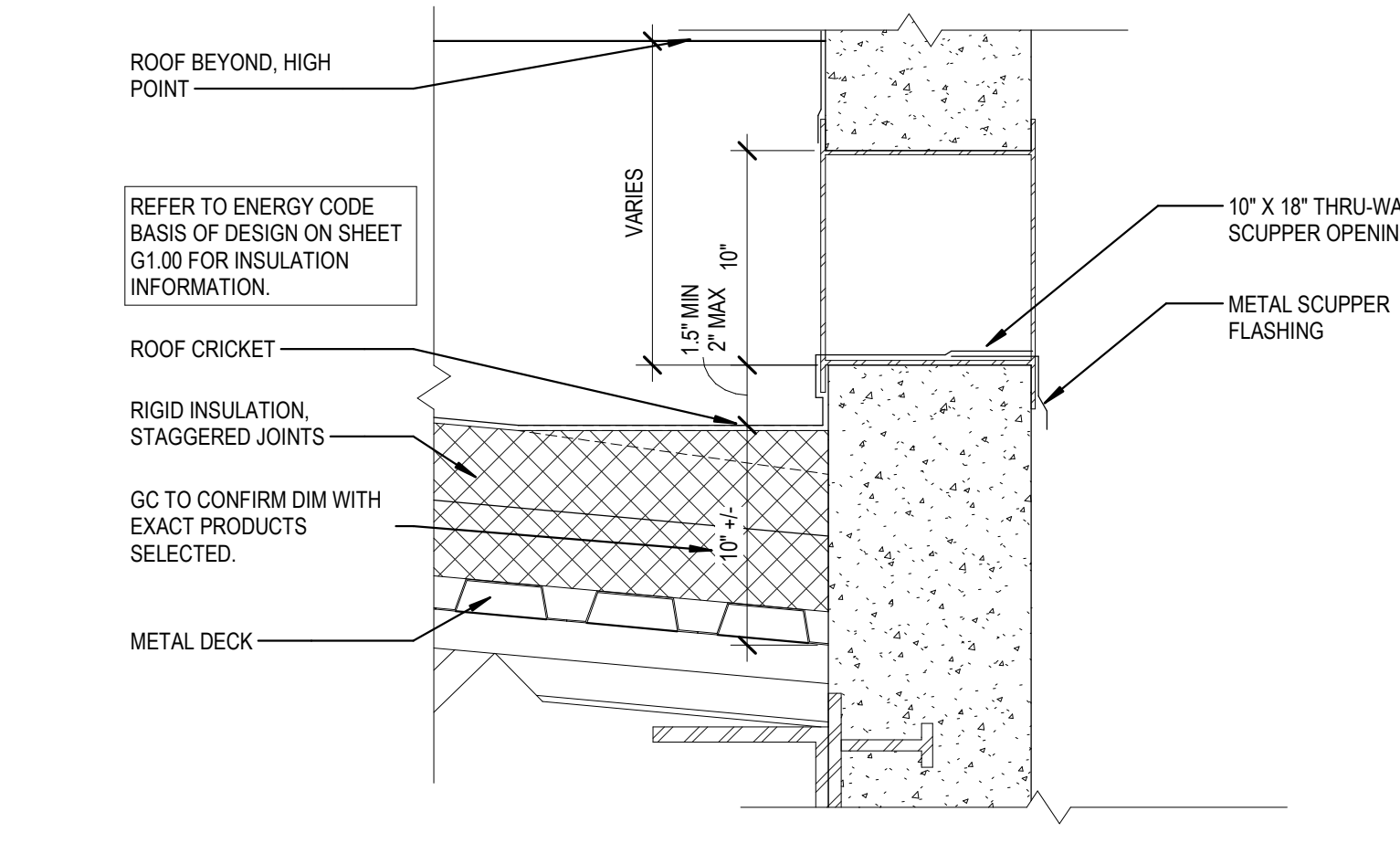
ID	Description	Date
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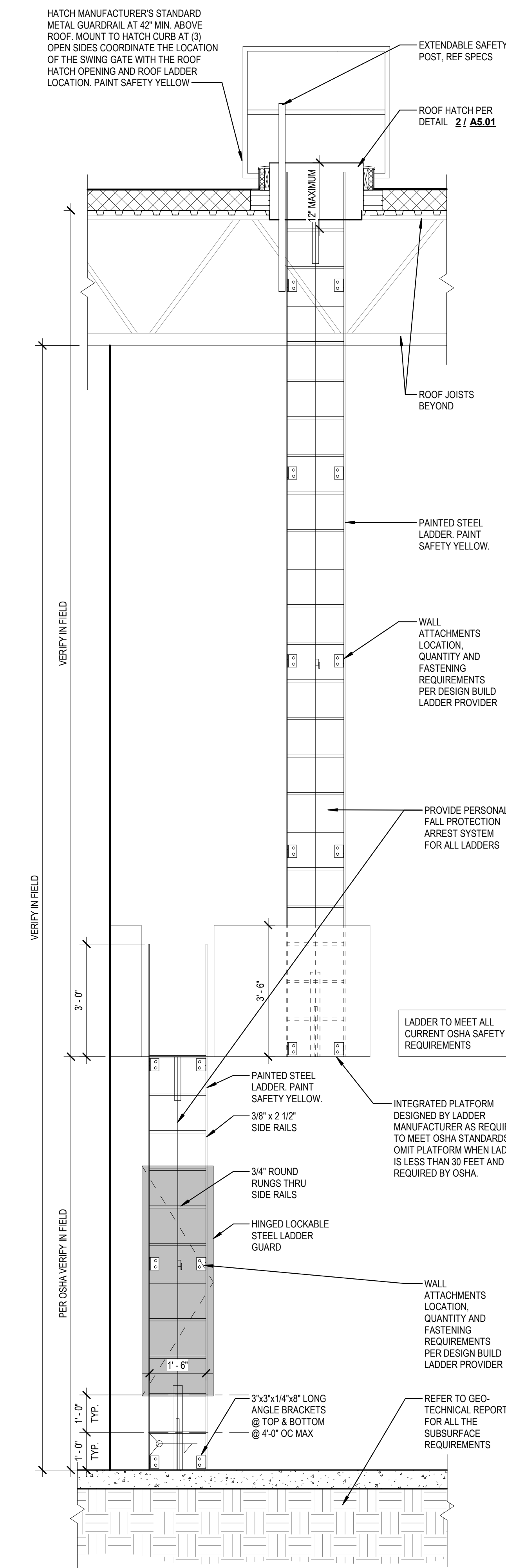
12 TYPICAL 2" PANEL JOINT
A5.01 Scale: 3" = 1'-0"



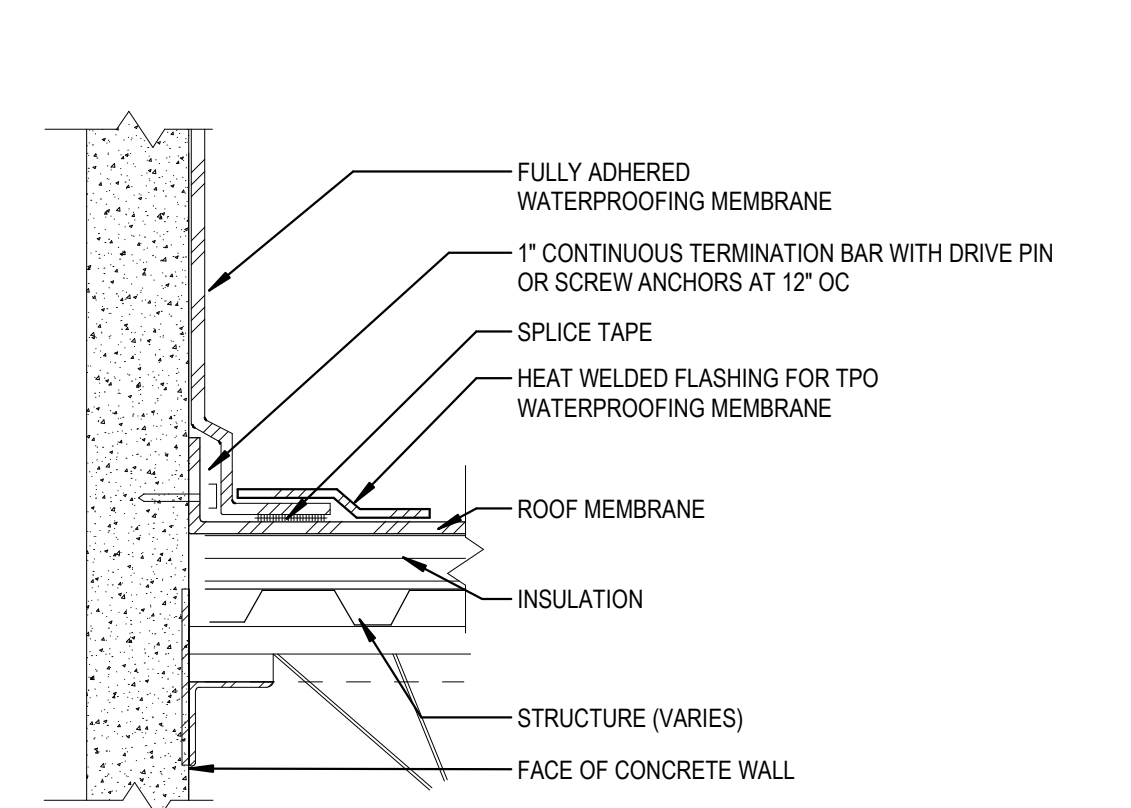
13 TYP. PANEL OUTSIDE CORNER JOINT 2"
A5.01 Scale: 3" = 1'-0"



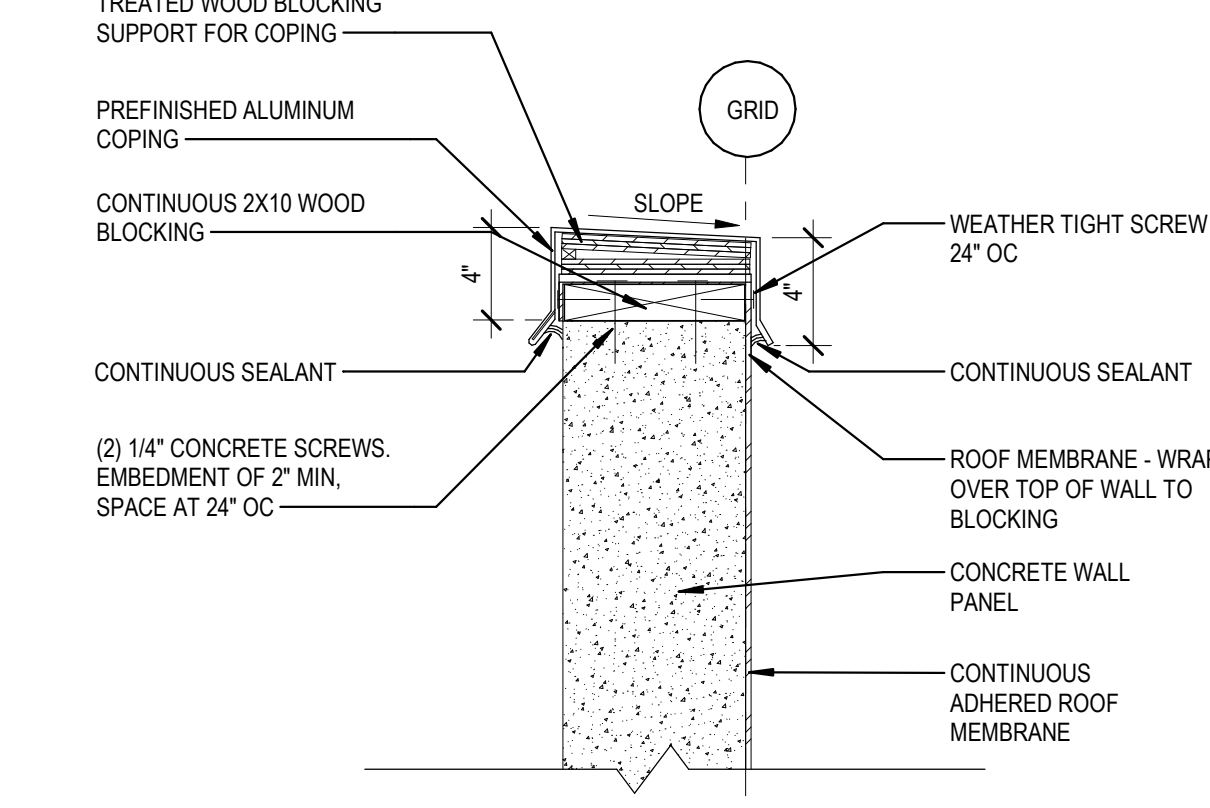
14 TYP. ROOF OVERFLOW SCUPPER - SECT
A5.01 Scale: 1 1/2" = 1'-0"



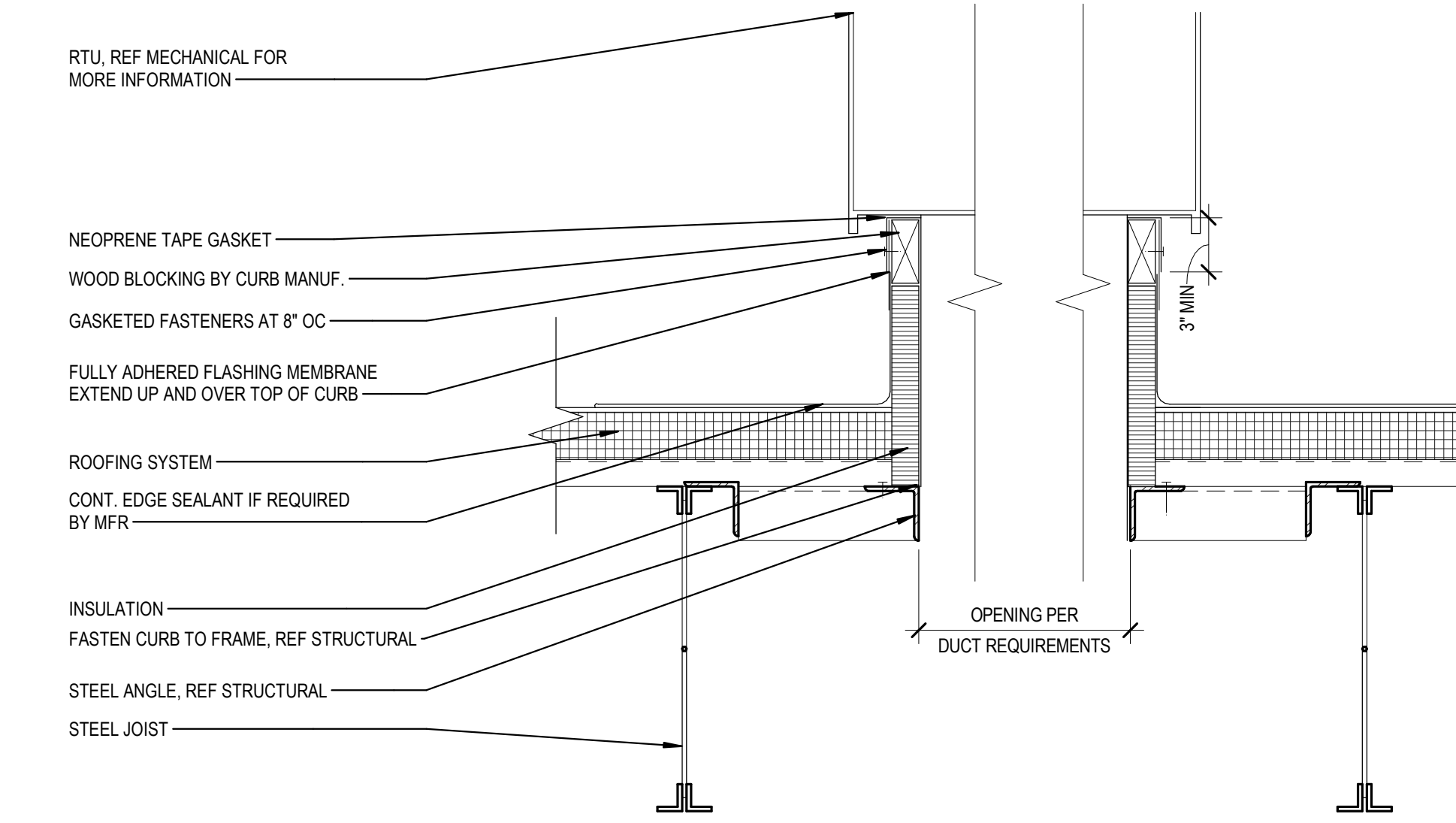
1 ROOF LADDER
A5.01 Scale: 1/2" = 1'-0"



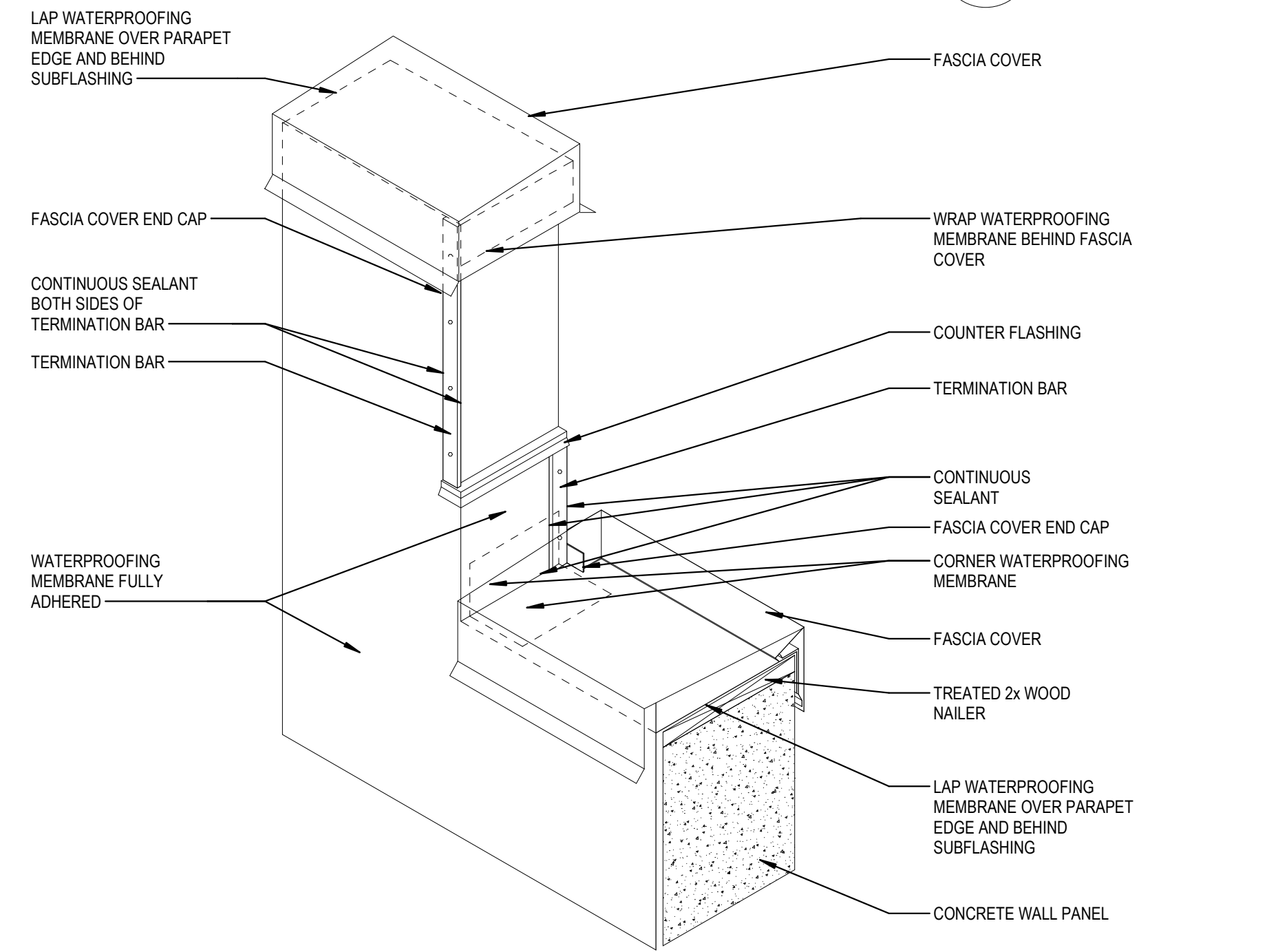
9 FLASHING MEMBRANE
A5.01 Scale: 1 1/2" = 1'-0"



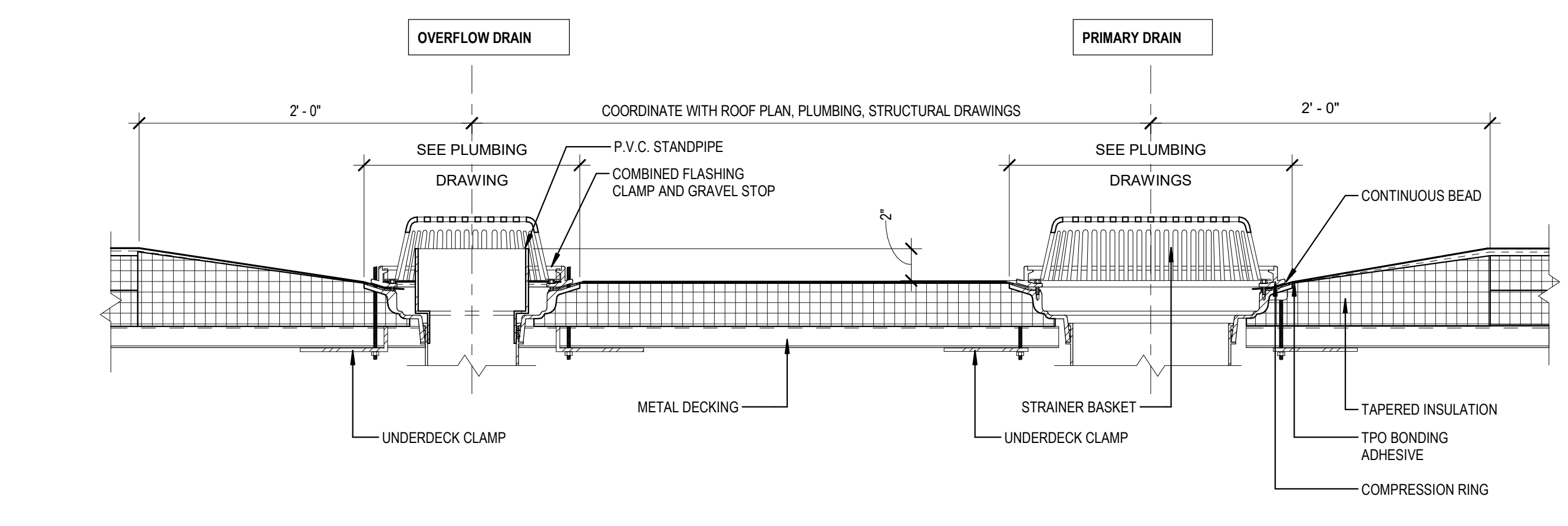
10 PARAPET CAP AT CONCRETE PANEL
A5.01 Scale: 1 1/2" = 1'-0"



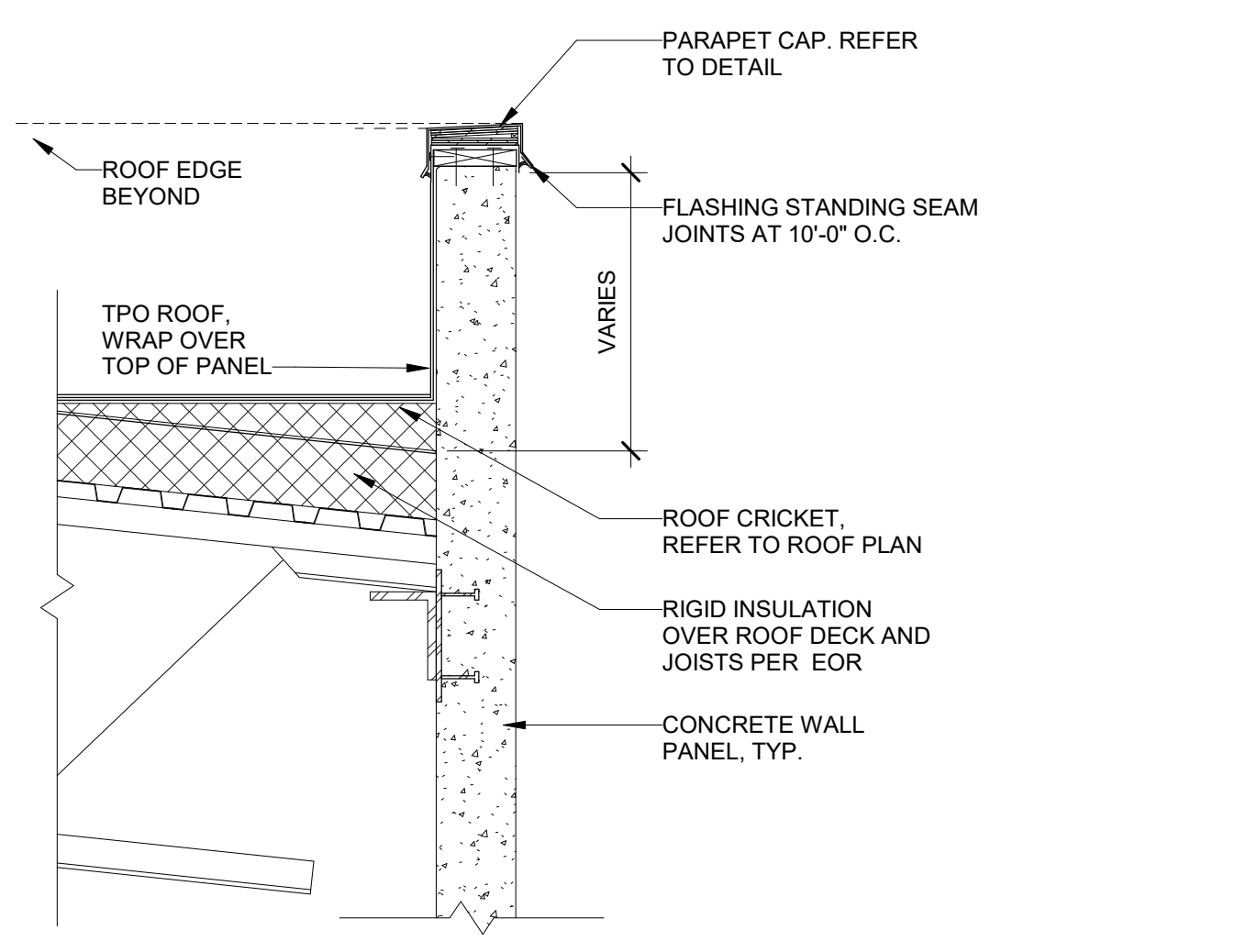
6 RTU/DHU DETAIL
A5.01 Scale: 1 1/2" = 1'-0"



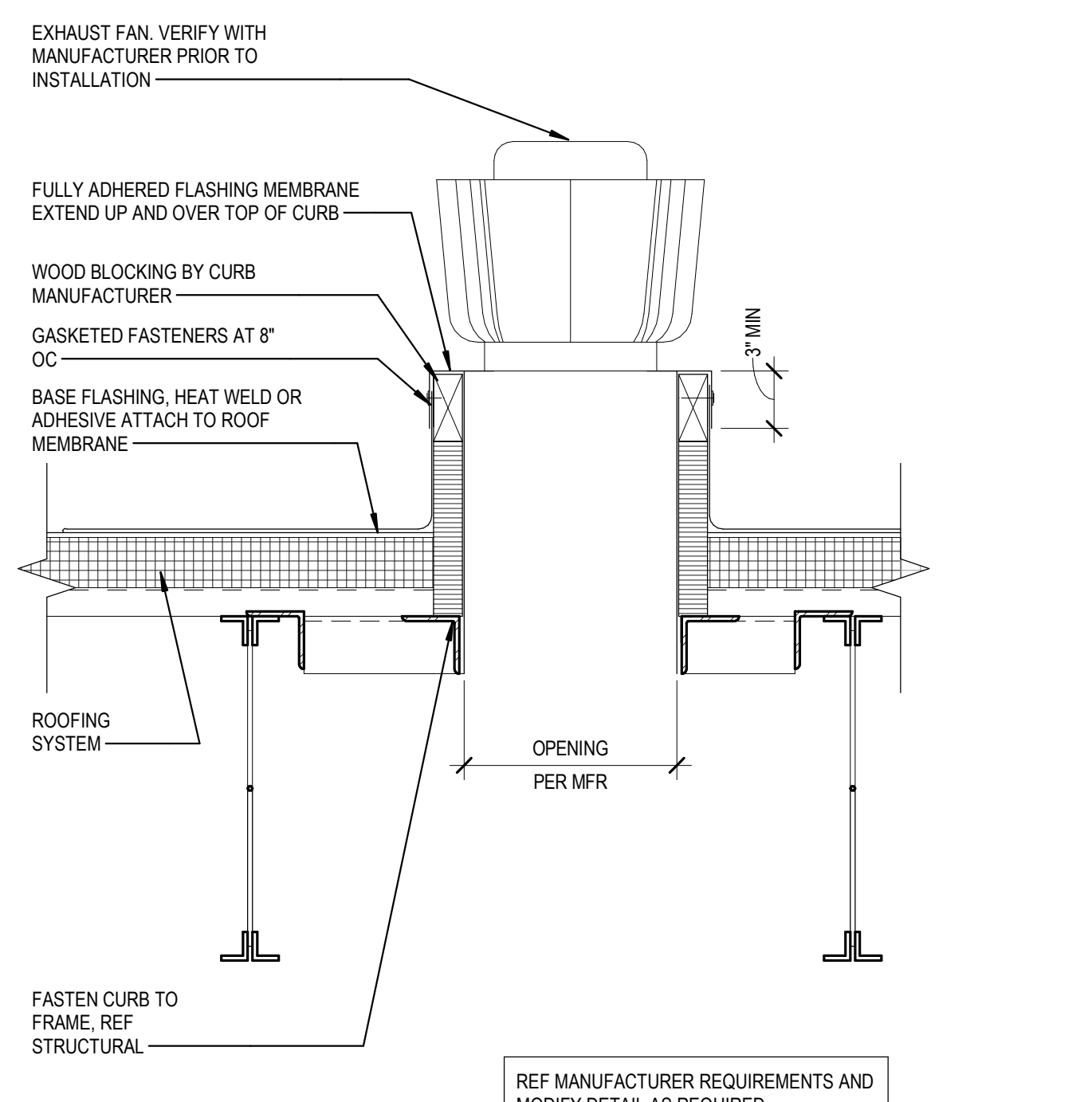
7 PARAPET STEP
A5.01 Scale: 1 1/2" = 1'-0"



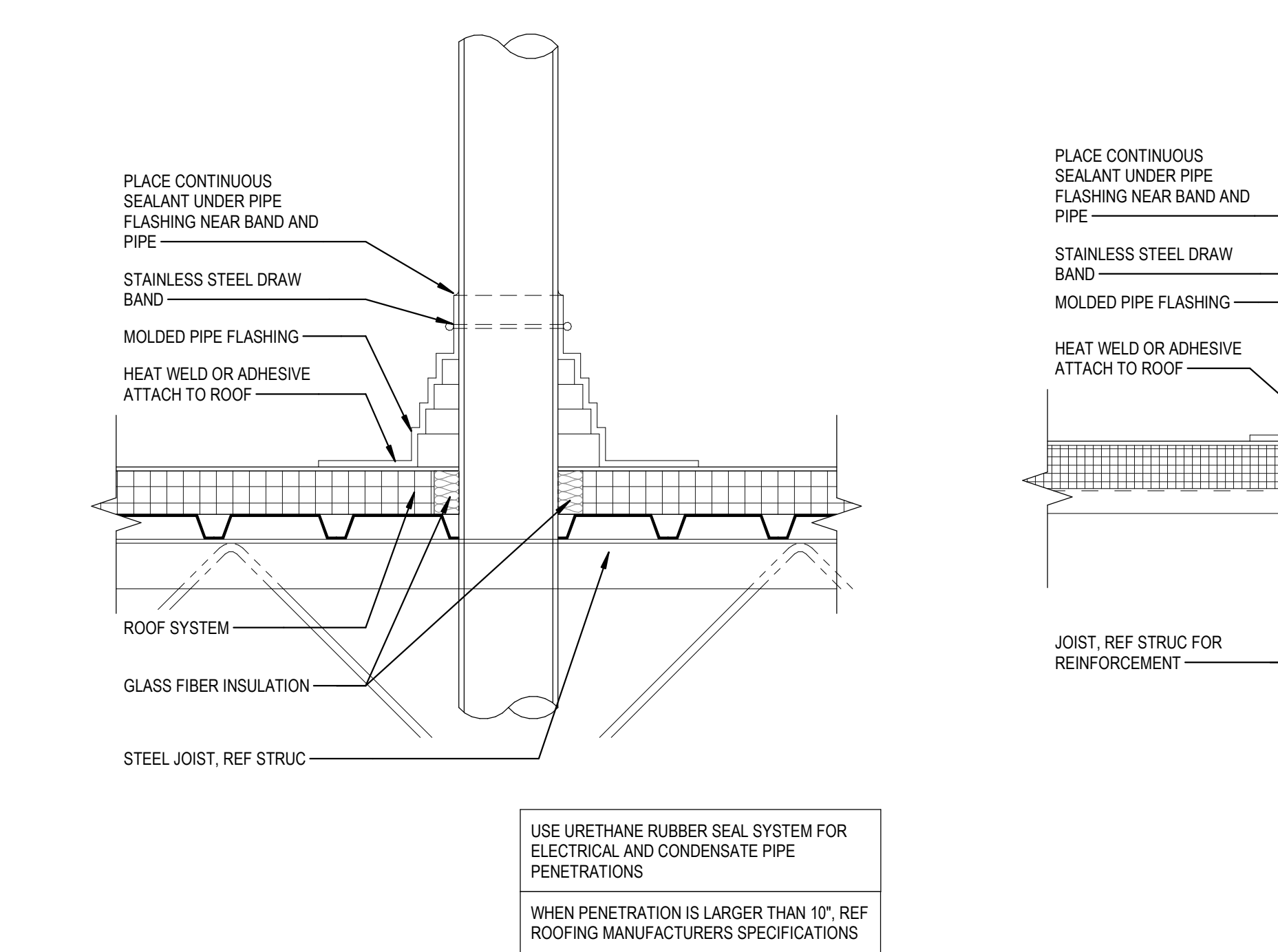
11 SECTION - ROOF DRAIN DETAIL
A5.01 Scale: 1 1/2" = 1'-0"



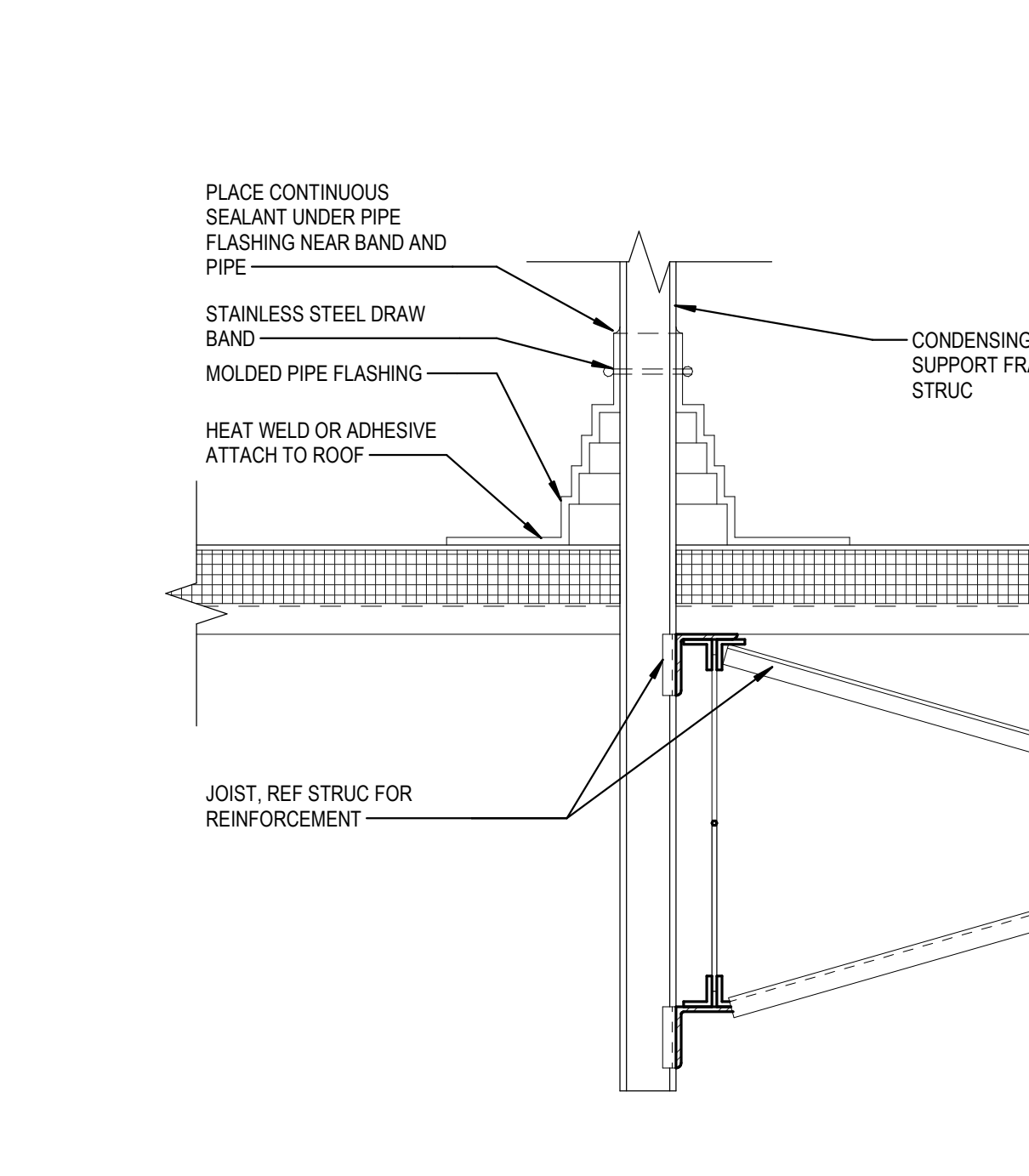
8 TYP. ROOF PARAPET
A5.01 Scale: 3/4" = 1'-0"



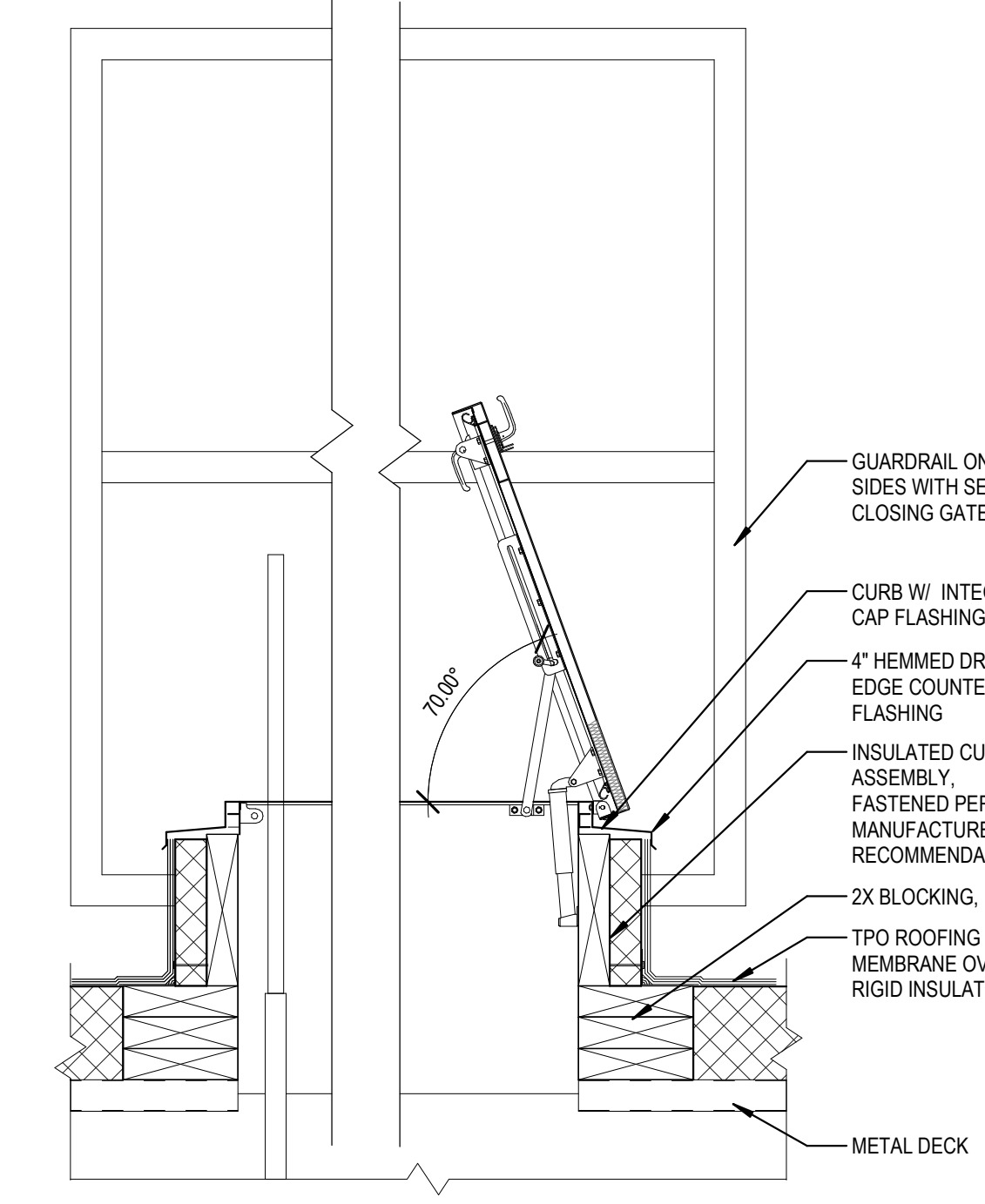
5 EXHAUST FAN DETAIL
A5.01 Scale: 1 1/2" = 1'-0"



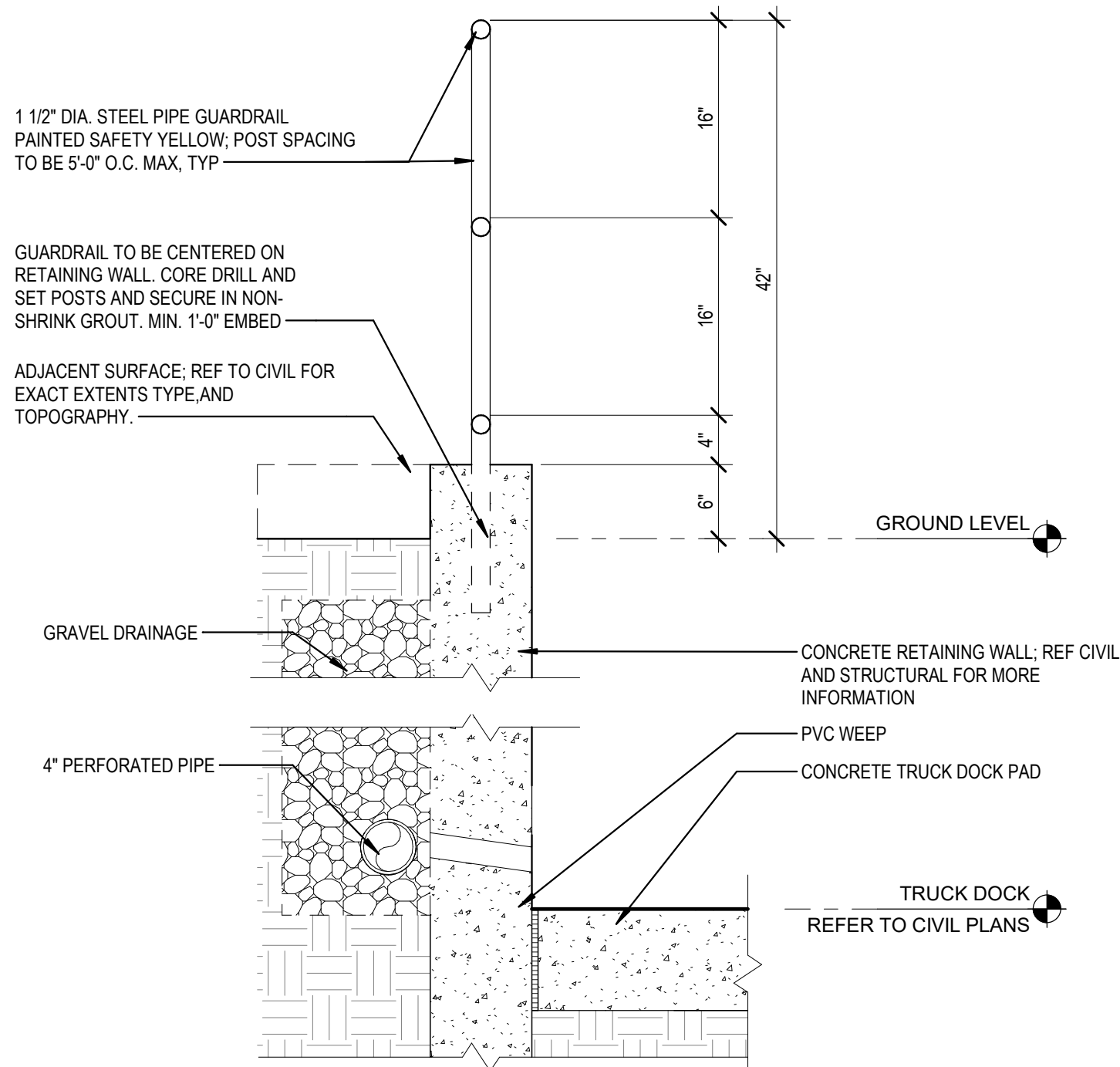
4 PLUMBING VENT
A5.01 Scale: 1 1/2" = 1'-0"



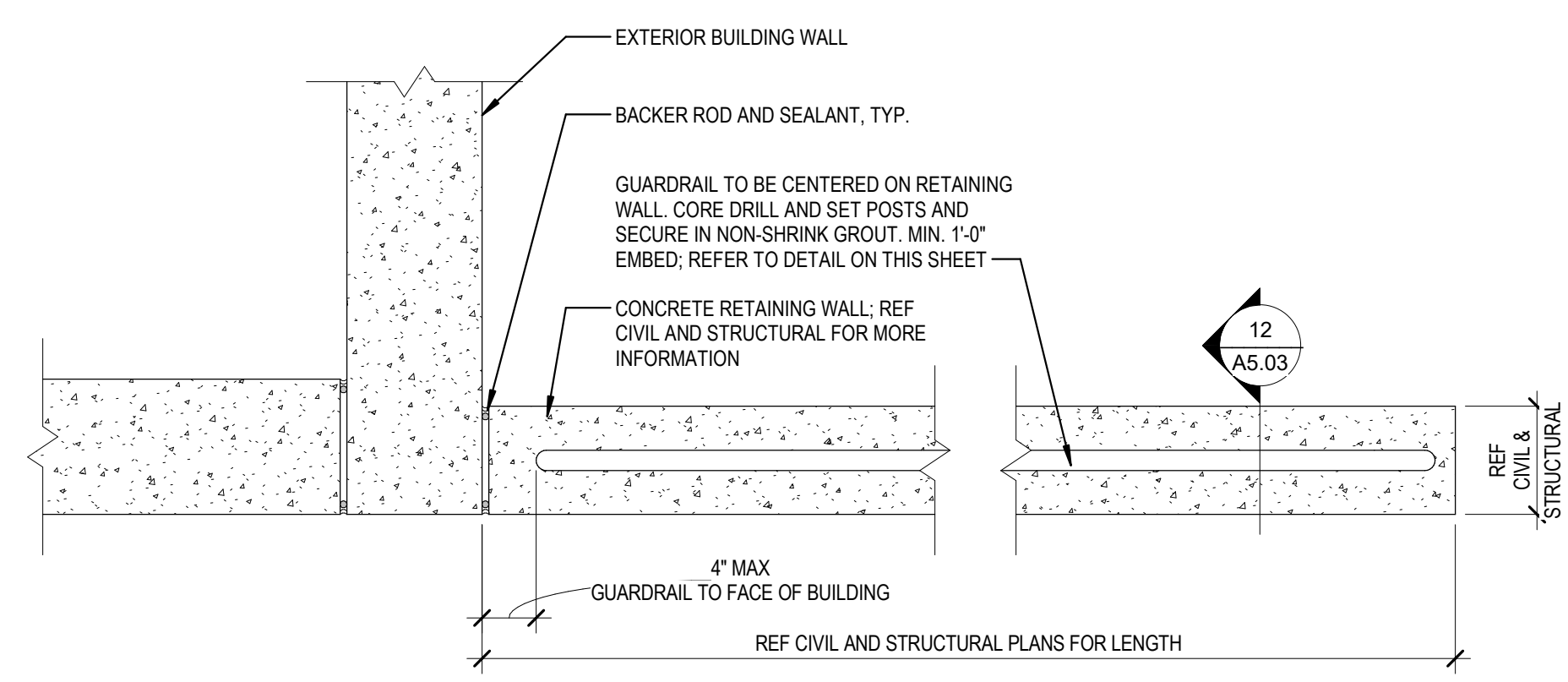
3 CONE FLASHING DETAIL
A5.01 Scale: 1 1/2" = 1'-0"



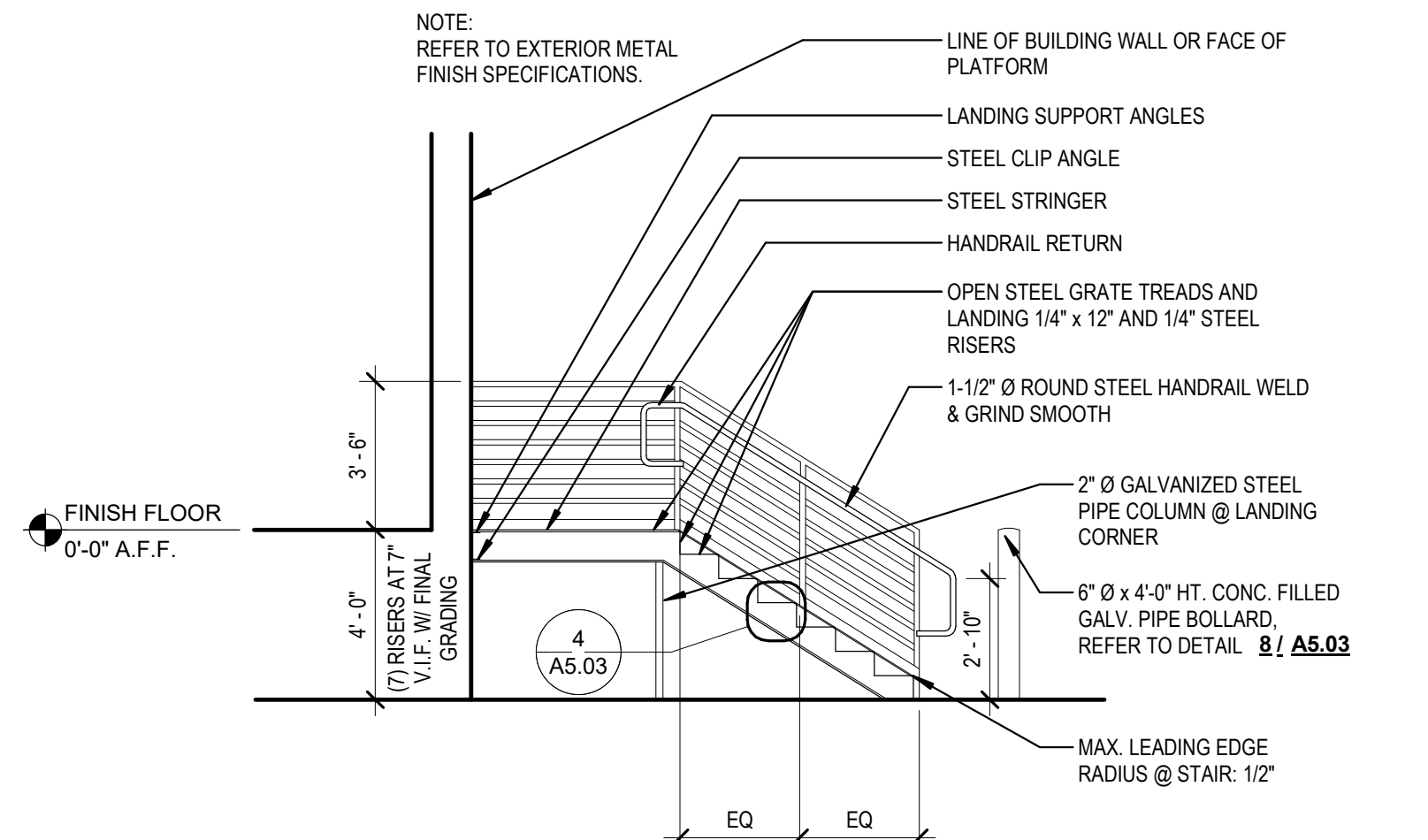
2 ROOF HATCH
A5.01 Scale: 1 1/2" = 1'-0"



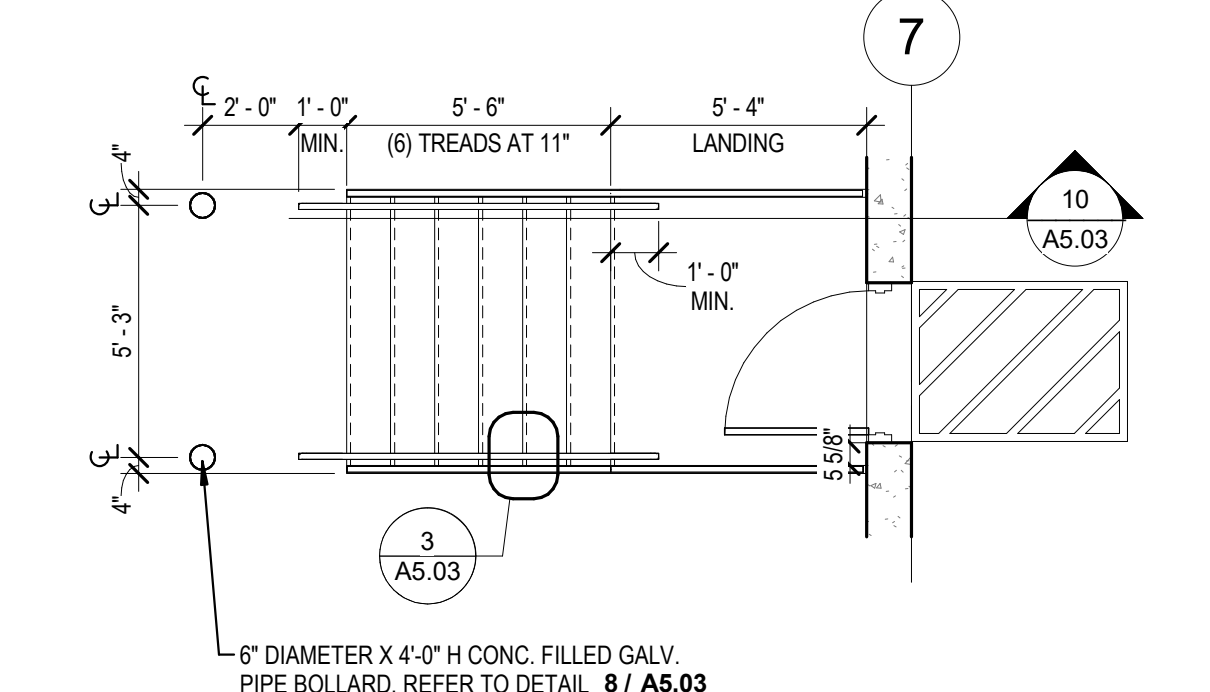
12 RETAINING WALL GUARDRAIL
A5.03 Scale: 1" = 1'-0"



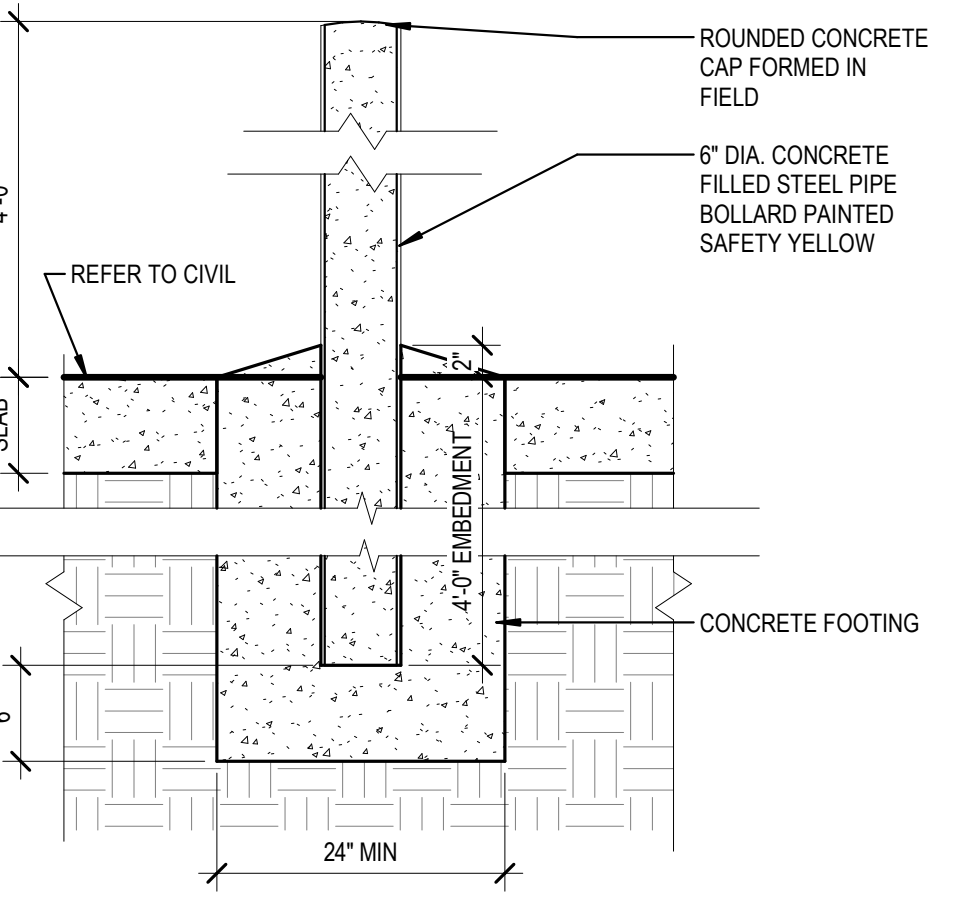
11 RETAINING WALL PLAN
A5.03 Scale: 1" = 1'-0"



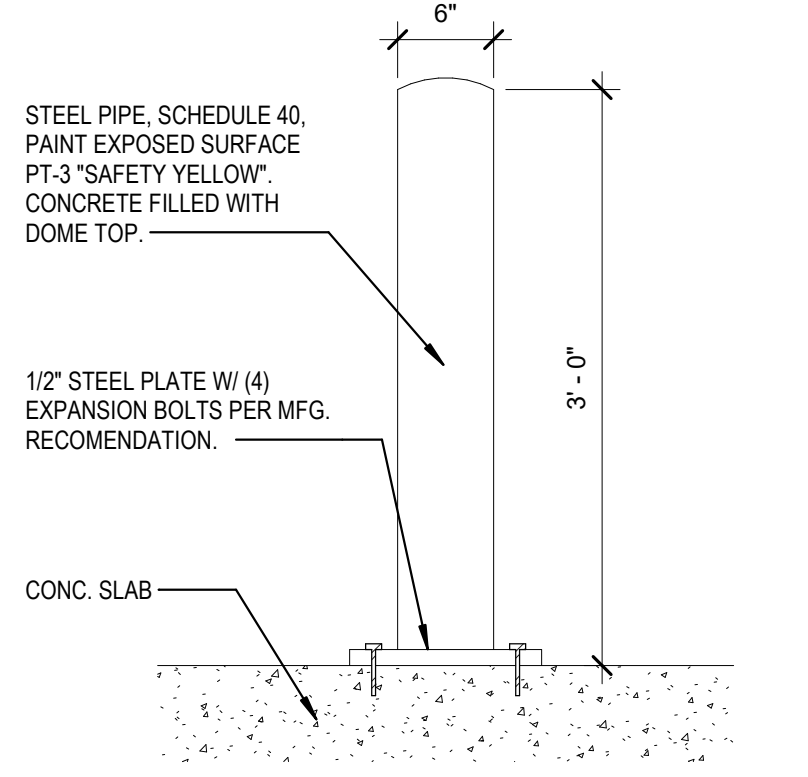
10 PRE-ENG METAL STAIR
A5.03 Scale: 1/4" = 1'-0"



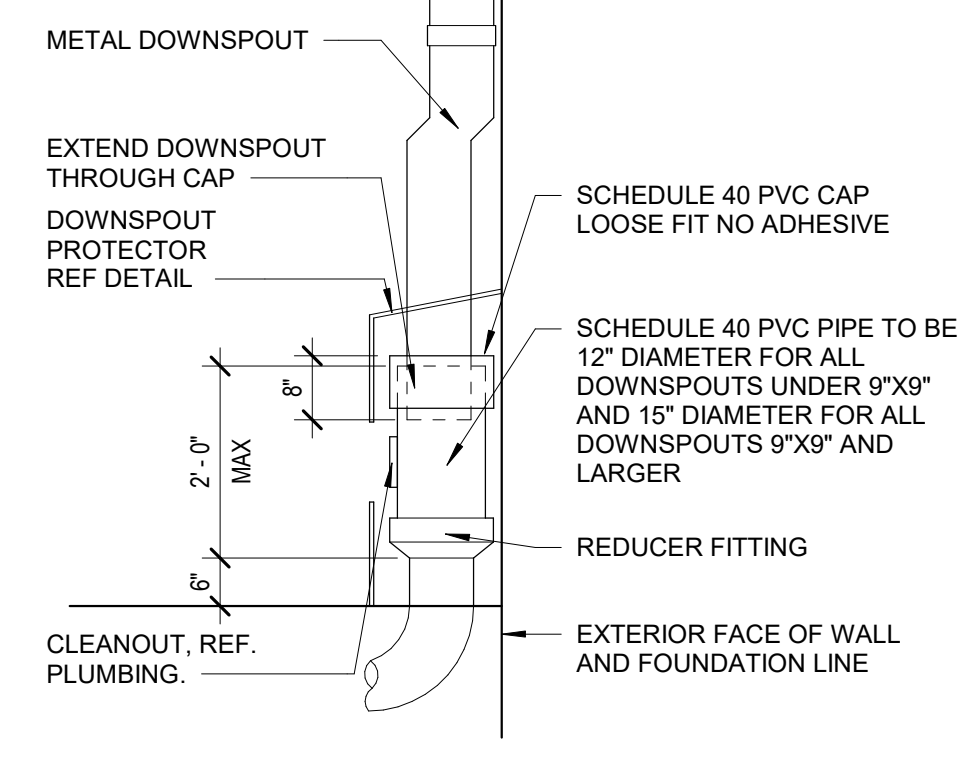
9 PRE-ENG METAL STAIR PLAN
A5.03 Scale: 1/4" = 1'-0"



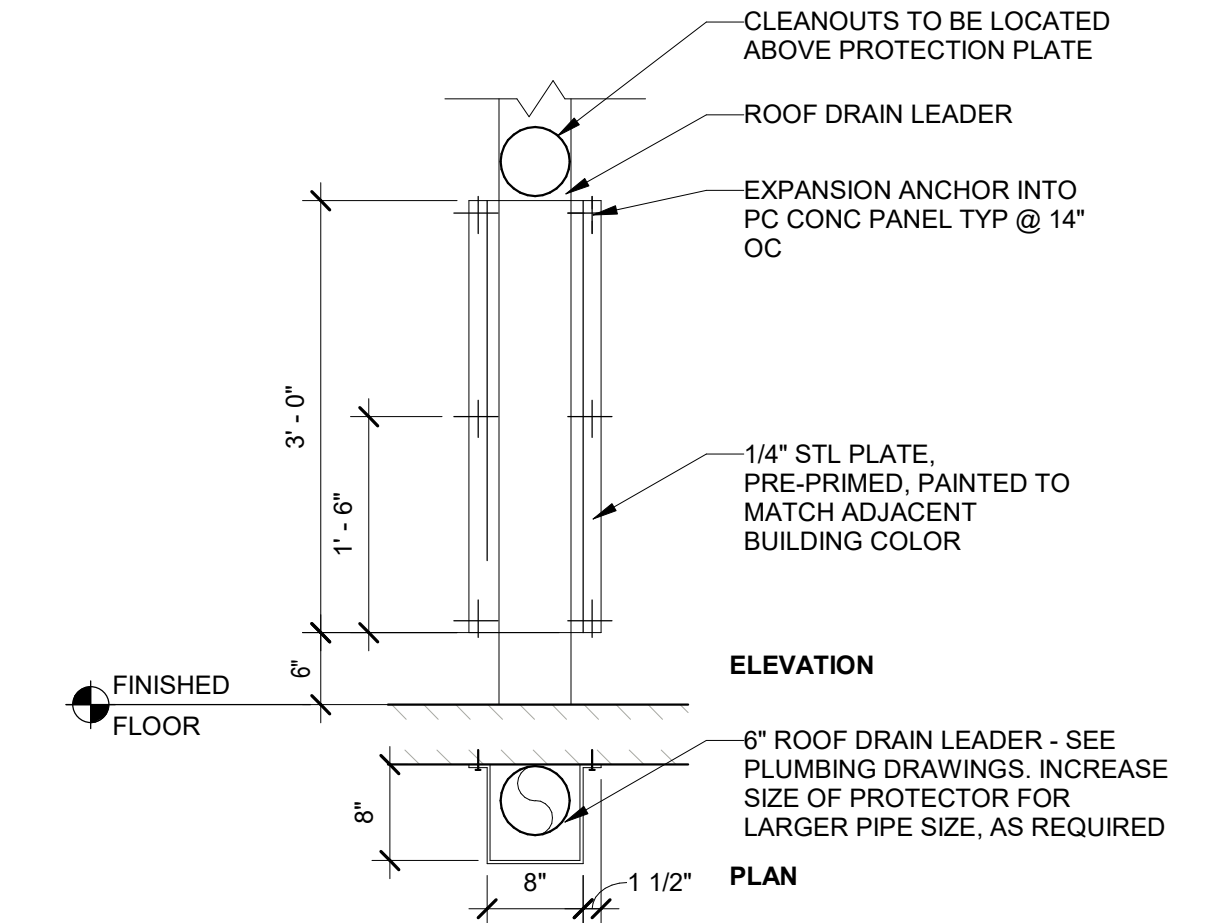
8 EXTERIOR PIPE BOLLARD DETAIL
A5.03 Scale: 1" = 1'-0"



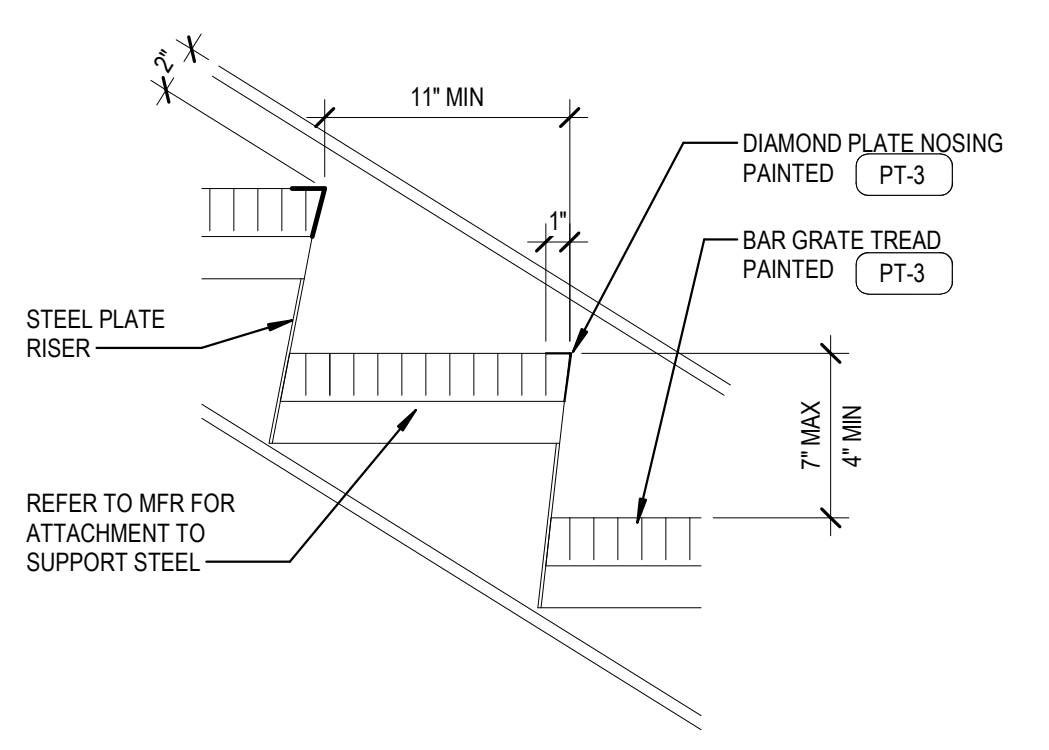
7 SURFACE BOLLARD
A5.03 Scale: 1" = 1'-0"



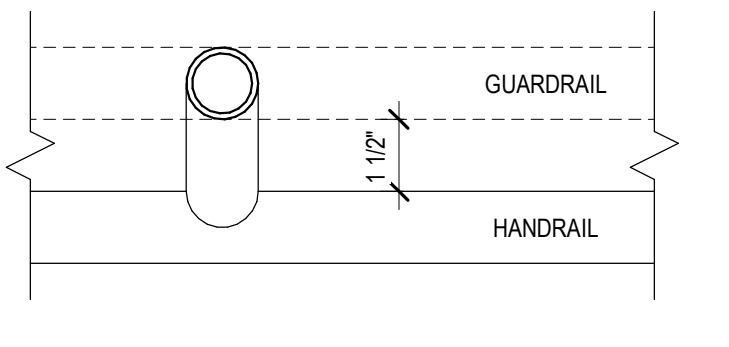
6 DOWNSPOUT COLLECTOR
A5.03 Scale: 1/2" = 1'-0"



5 ROOF DRAIN LEADER PROTECTOR
A5.03 Scale: 3/4" = 1'-0"

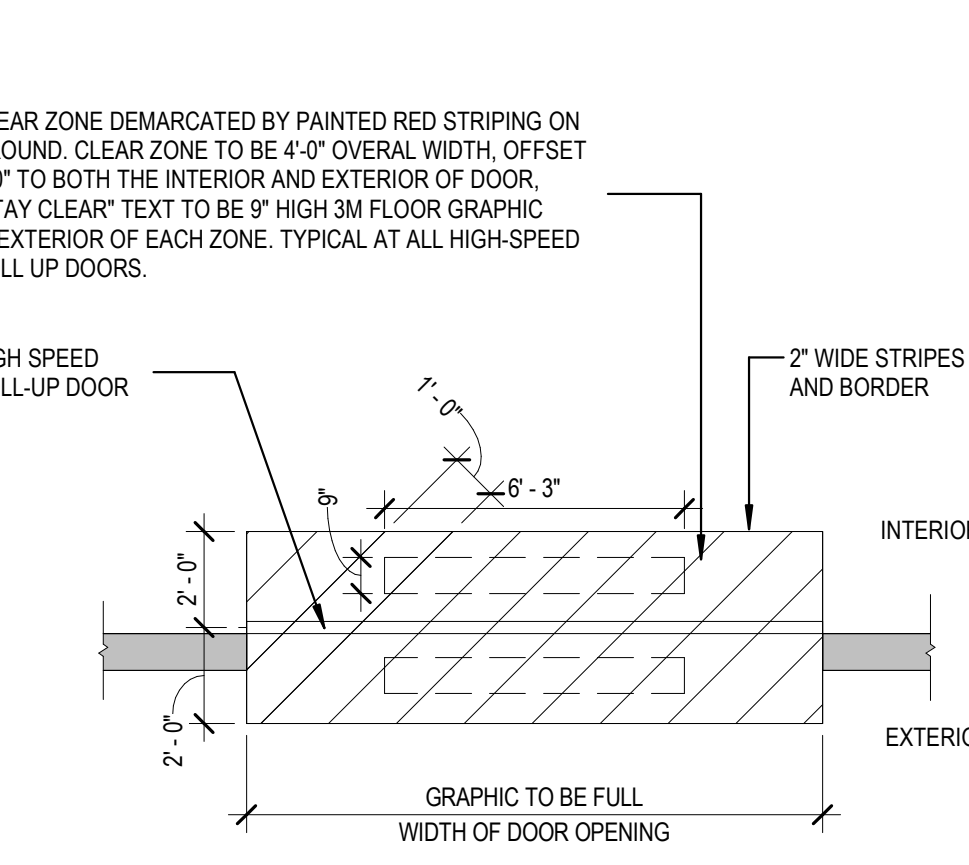


4 TREAD / RISER DETAIL
A5.03 Scale: 1 1/2" = 1'-0"

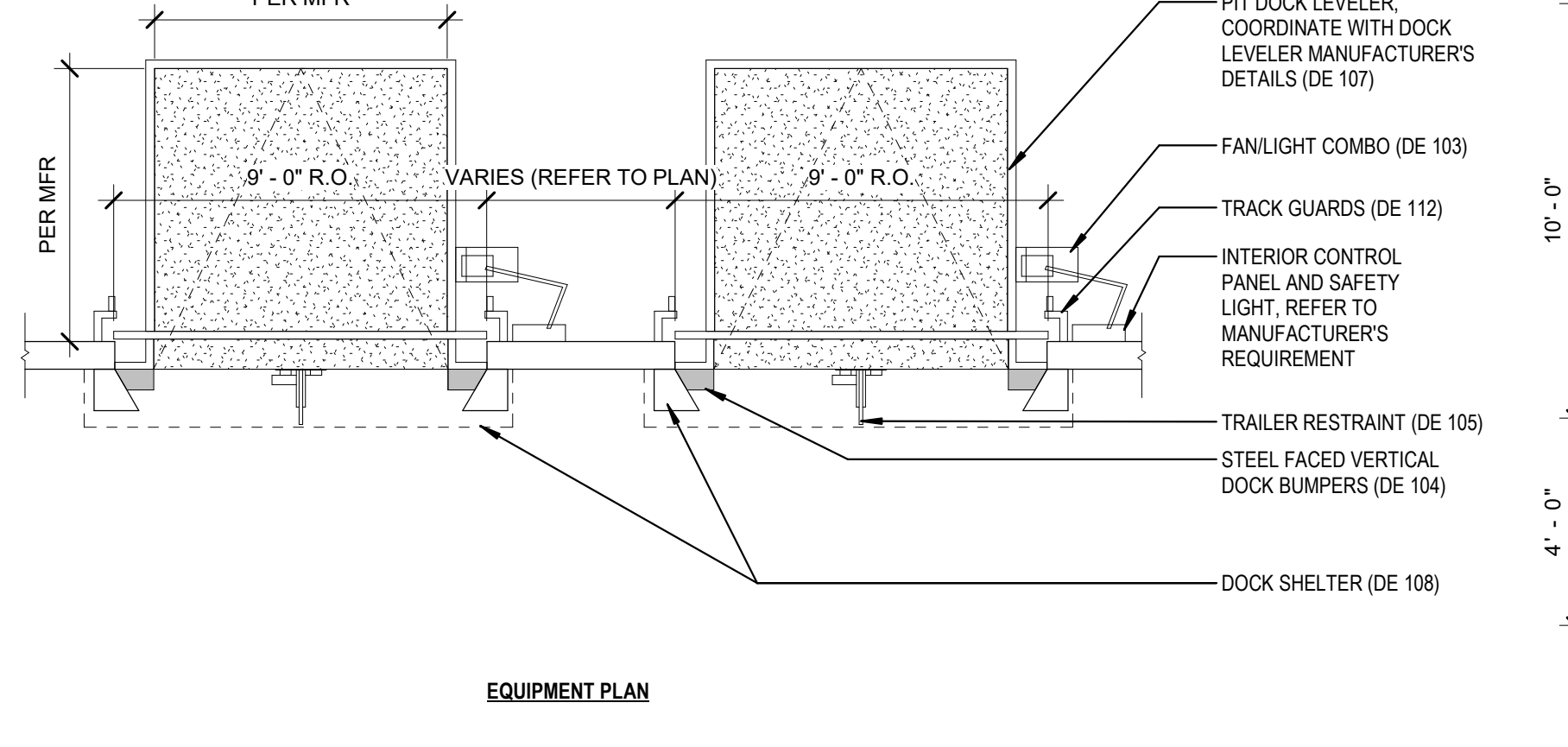


3 HANDRAIL DETAIL
A5.03 Scale: 3" = 1'-0"

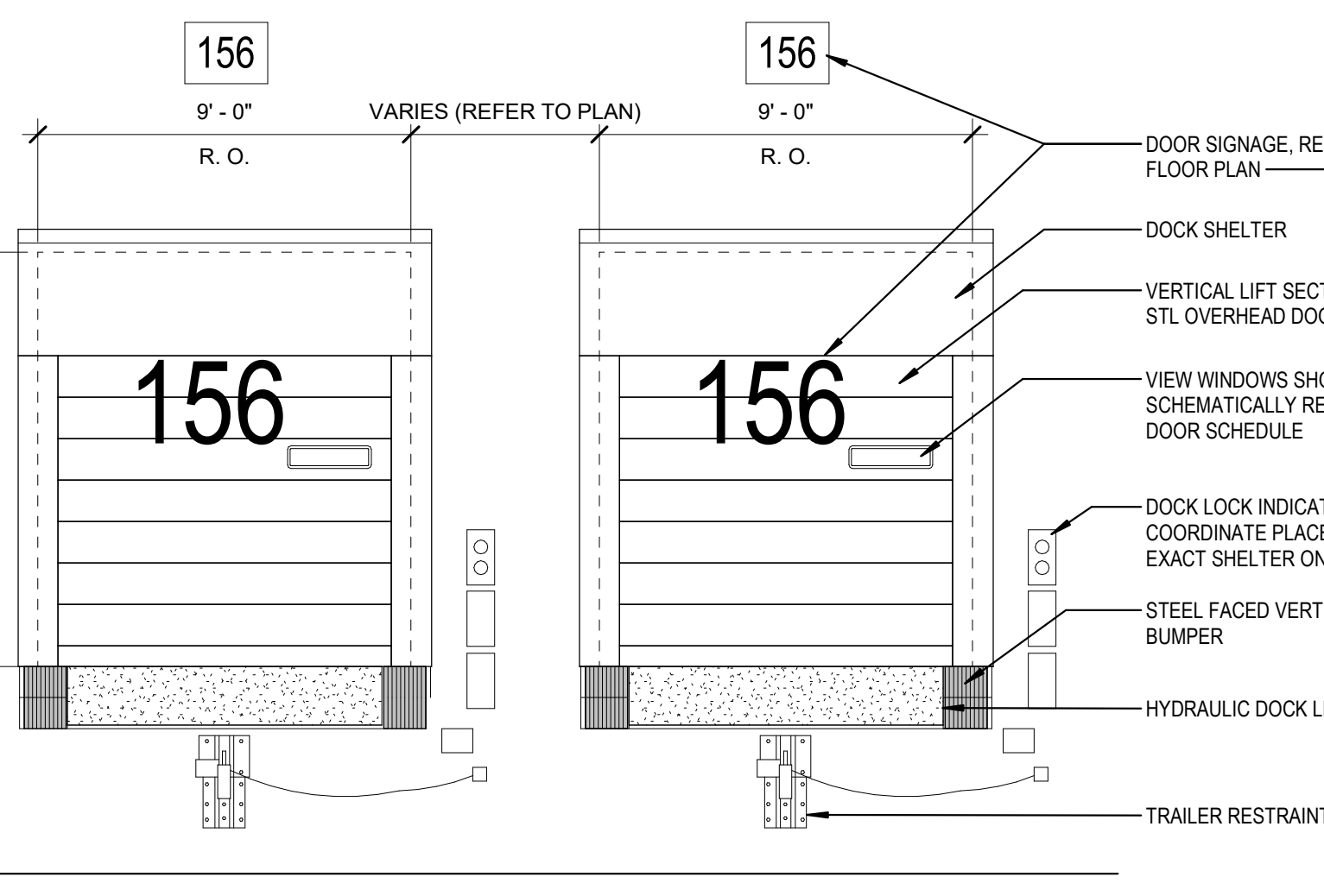
DOCK EQUIPMENT SCHEDULE		
CODE	ITEM	COMMENTS
DE 103	DOCK FAN LIGHT COMBO	REF SPECS
DE 104	DOCK BUMPER	REF SPECS
DE 105	TRAILER RESTRAINT	REF SPECS
DE 107	DOCK LEVELER	REF SPECS
DE 108	DOCK SHELTER	REF SPECS
DE 112	TRACK GUARD	REF SPECS



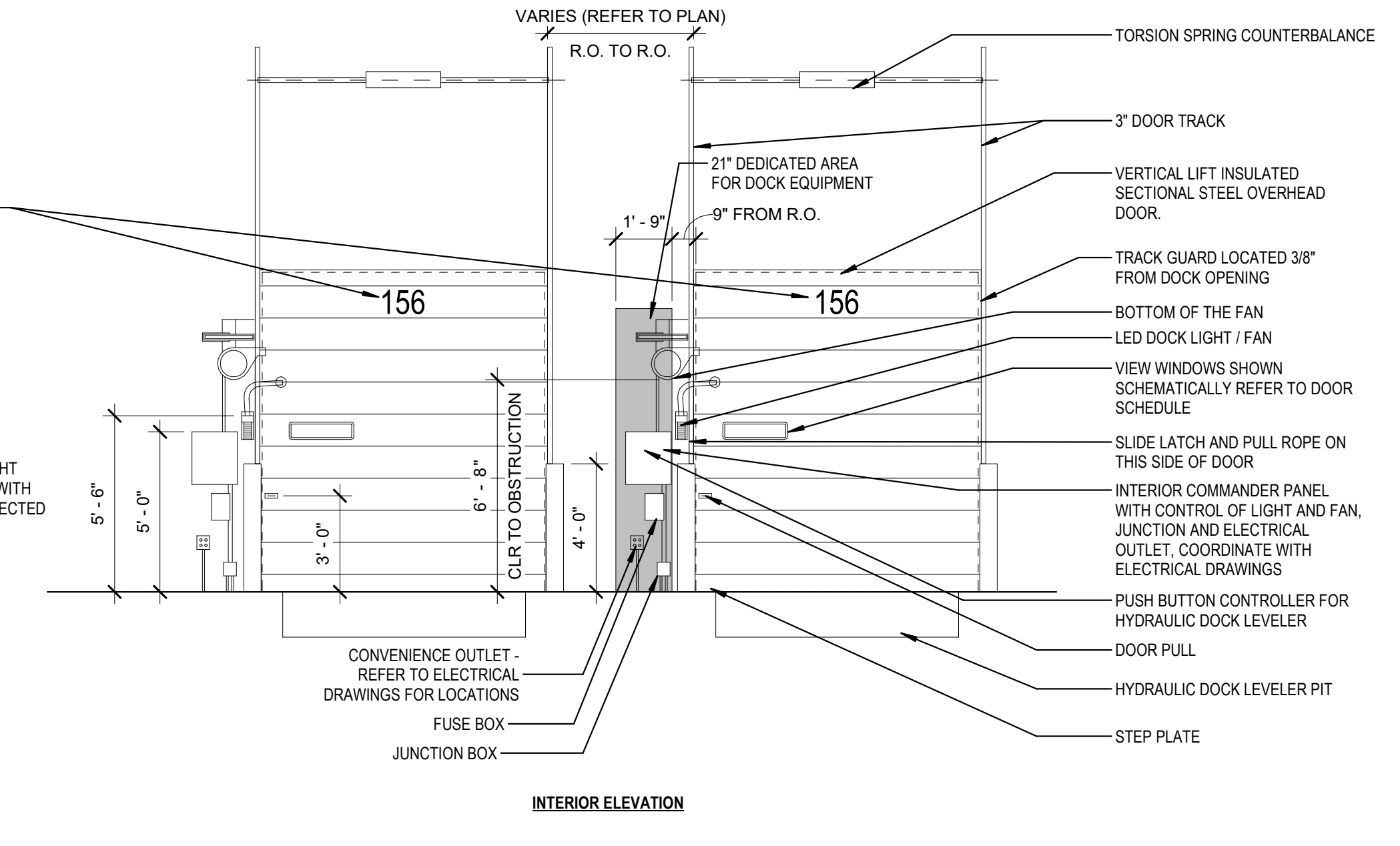
2 CLEAR ZONE (AG-40)
A5.03 Scale: 1/4" = 1'-0"



1 SECTIONAL DOOR AND RELATED EQUIPMENT
A5.03 Scale: 1/4" = 1'-0"



156 EXTERIOR ELEVATION
NOTE: REFER TO SIGNAGE STANDARDS FOR SIGNAGE REQUIREMENTS



156 INTERIOR ELEVATION

DOOR AND FRAME SCHEDULE - PUMPHOUSE															
DOOR NO.	ROOM NAME	DOOR				FRAME				DETAILS		HARDWARE SET #			
		WIDTH	HEIGHT	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH	HEAD	JAMB		SILL	FIRE RATING	COMMENTS
P100	PUMPHOUSE	6'-0"	7'-0"	BB	HOLLOW METAL	EPT-2	F2	HOLLOW METAL	EPT-2	10A6.01	13A6.01	1A6.01		REFERENCE A6.01 FOR DETAILS	S-07A

EXTERIOR COLOR LEGEND

(TEXTURED FINISH AT CONCRETE WALL PANELS)

EPT-1 SW 7063 - NEBULOUS WHITE

EPT-2 SW 7066 - GRAY MATTERS



3011 Roper Road, Suite 300
 Manufacturing, OH 45342
 Phone: 937.435.8504 Fax: 937.435.8506

20115925 REGISTERED ARCHITECT
 JAKE S BUSH
 STATE OF WASHINGTON

4.25.2025 Exp: 4.10.2026

AMBROSE PROPERTY GROUP

PROJECT OLYMPIC
 S AIRPORT RD.
 PORT ANGELES, WA 98363

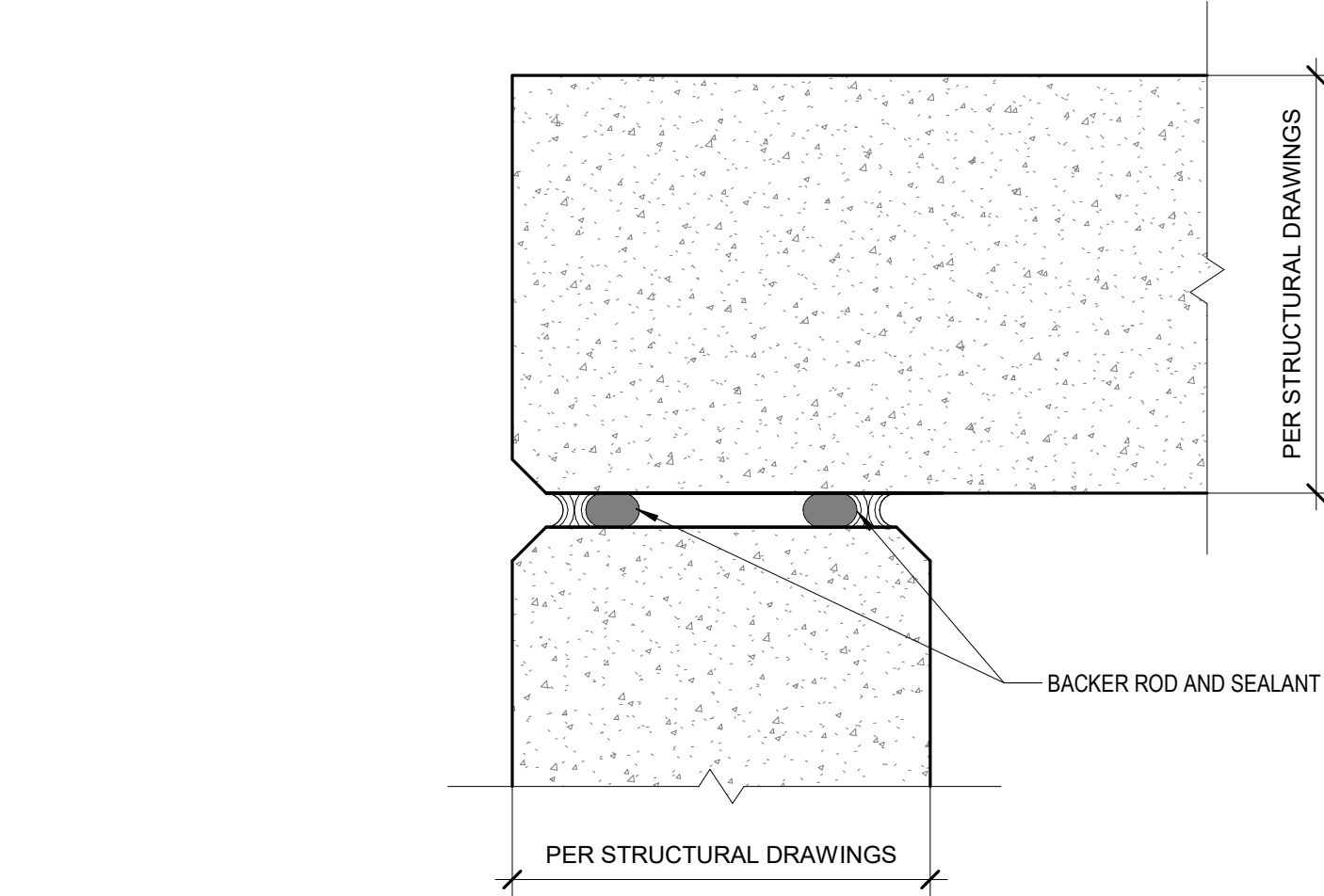
Revisions / Submissions

ID	Description	Date
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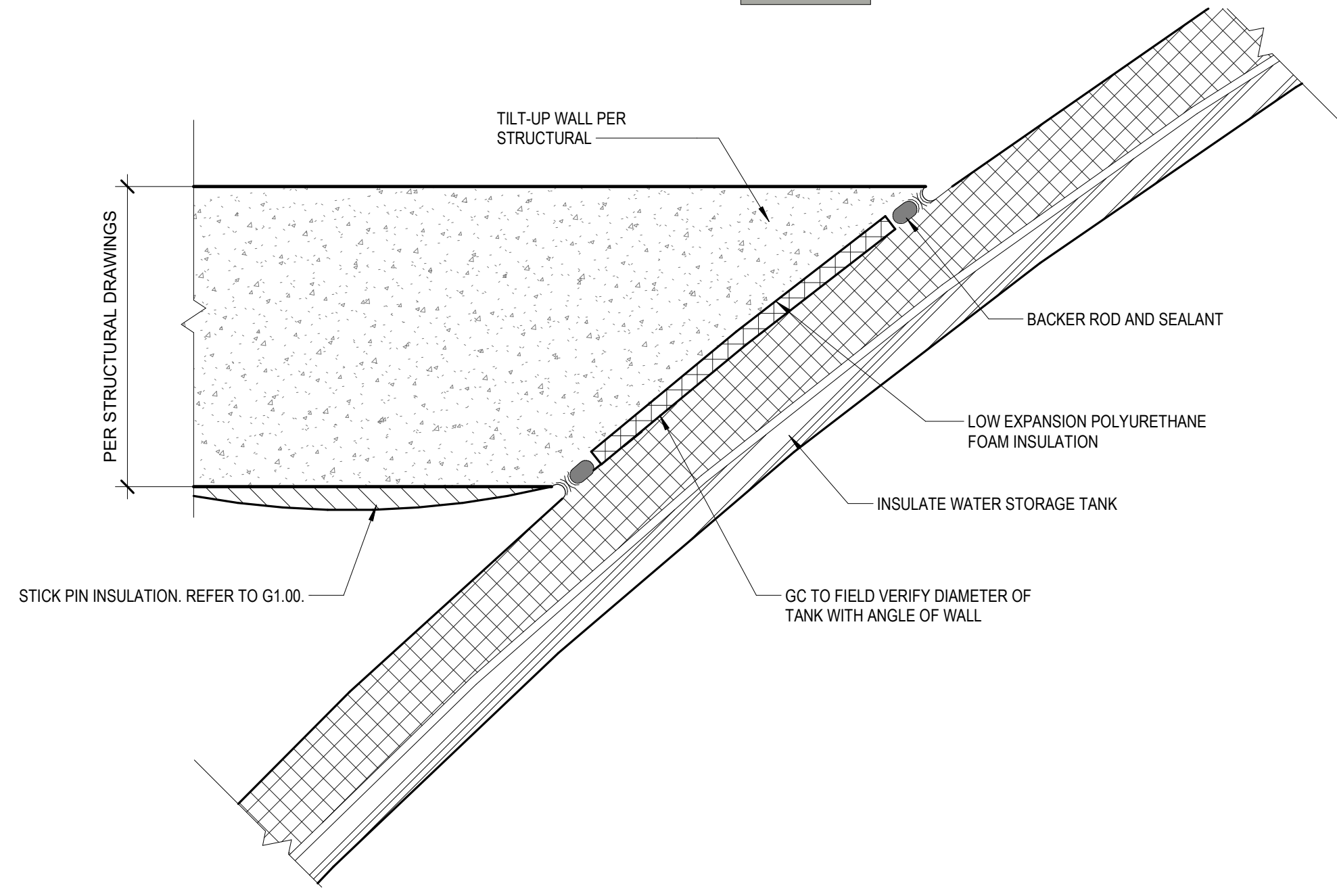
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 Project number: 763838-01
 Scale: AS NOTED
 Drawn By: SW
 Checked By: CR/TB
 Date: 04.25.2025
 Issue: PERMIT SET

Sheet Title:
PUMPHOUSE PLANS, ELEVATIONS, AND DETAILS

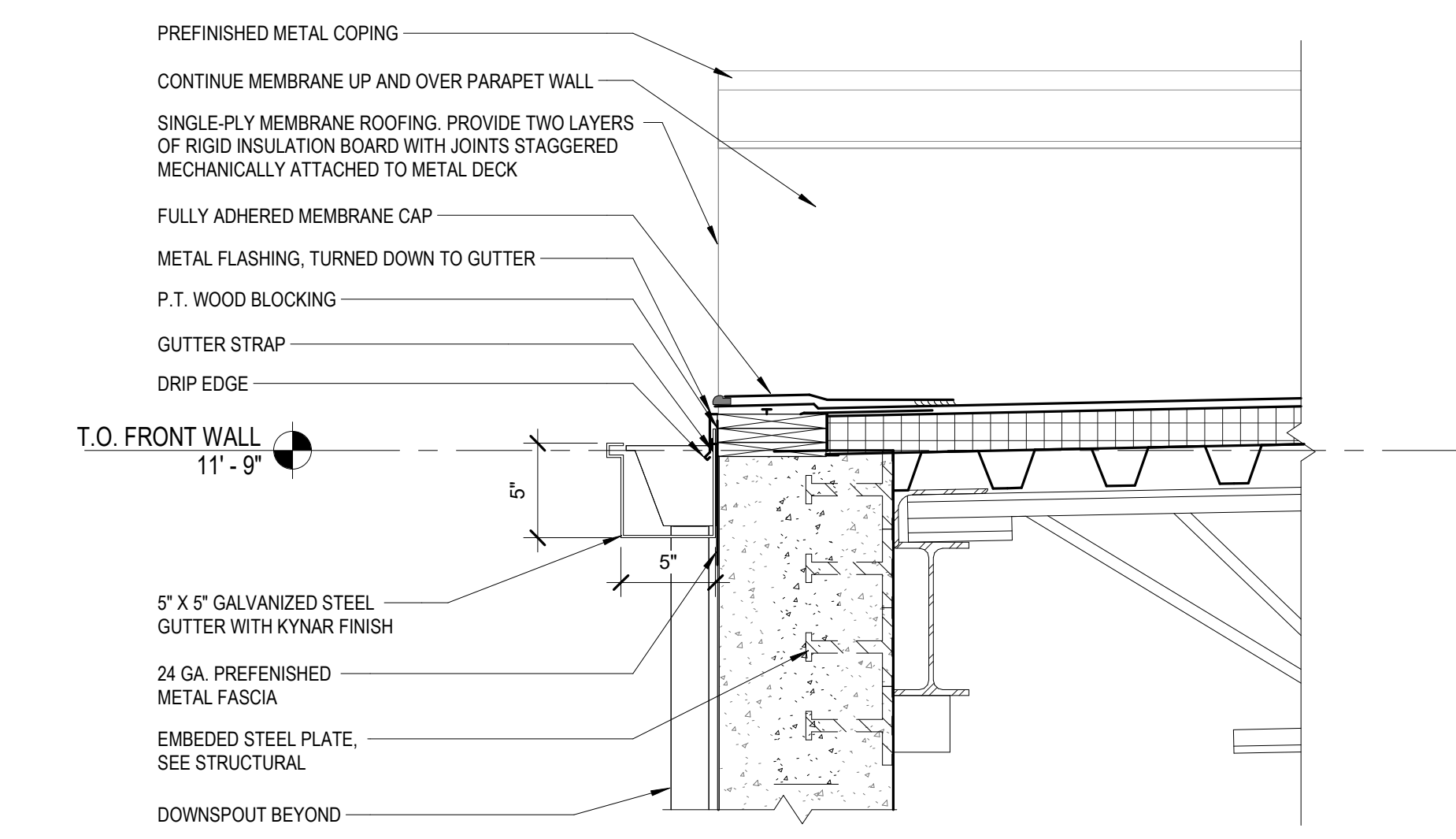
A5.04



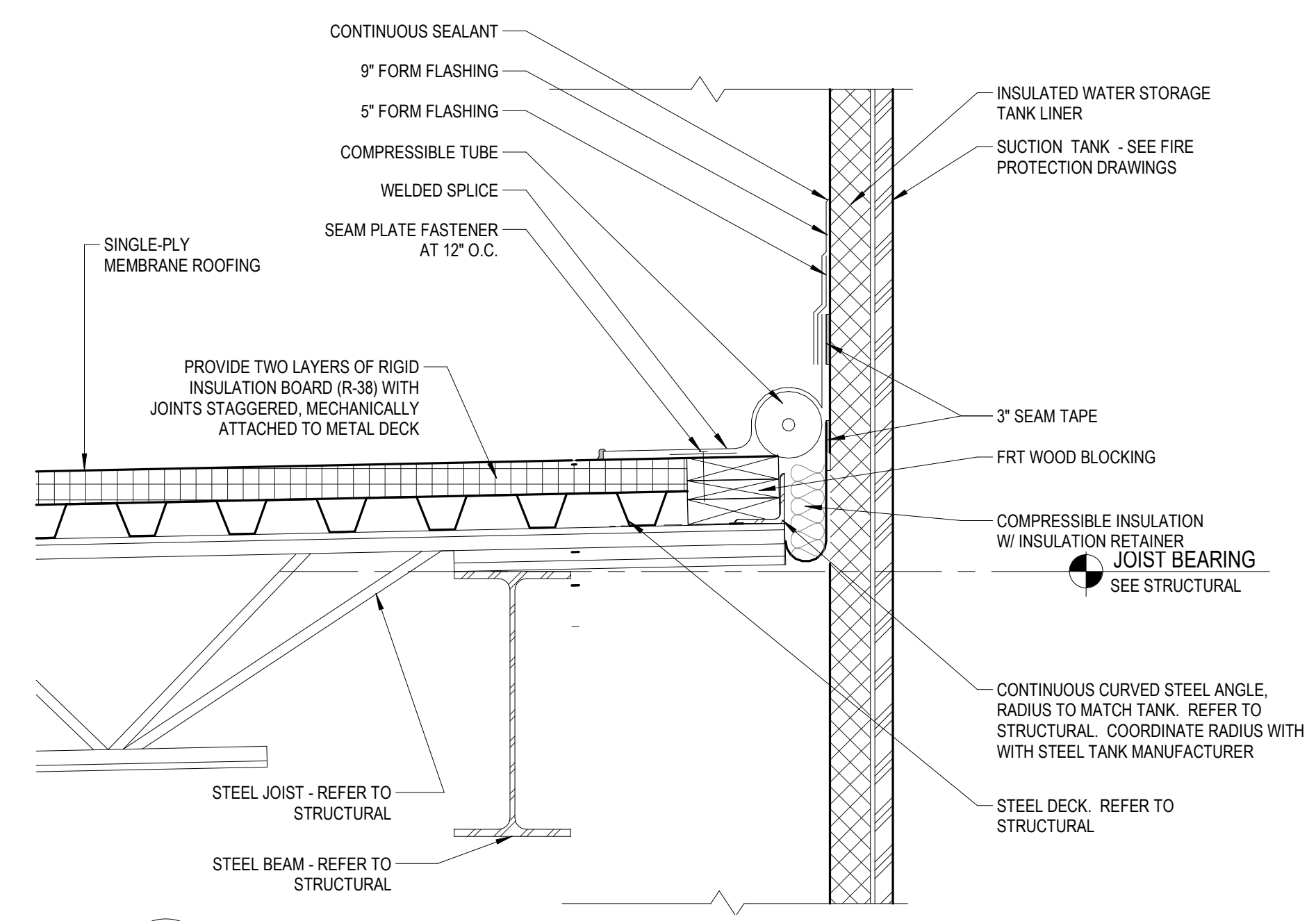
9 PUMPHOUSE PLAN DETAIL 2
 A5.04 Scale: 3" = 1'-0"



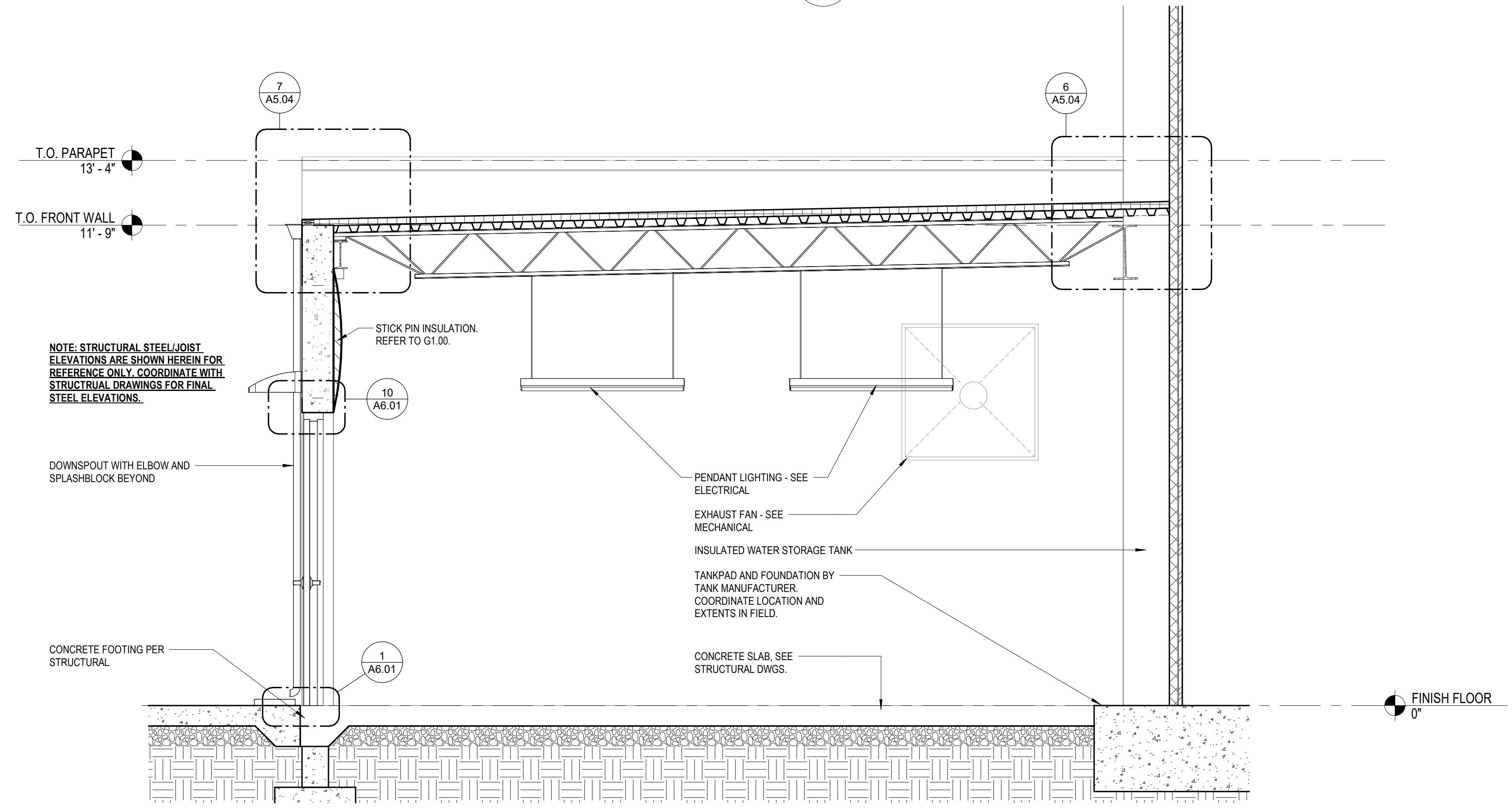
8 PUMPHOUSE PLAN DETAIL 1
 A5.04 Scale: 3" = 1'-0"



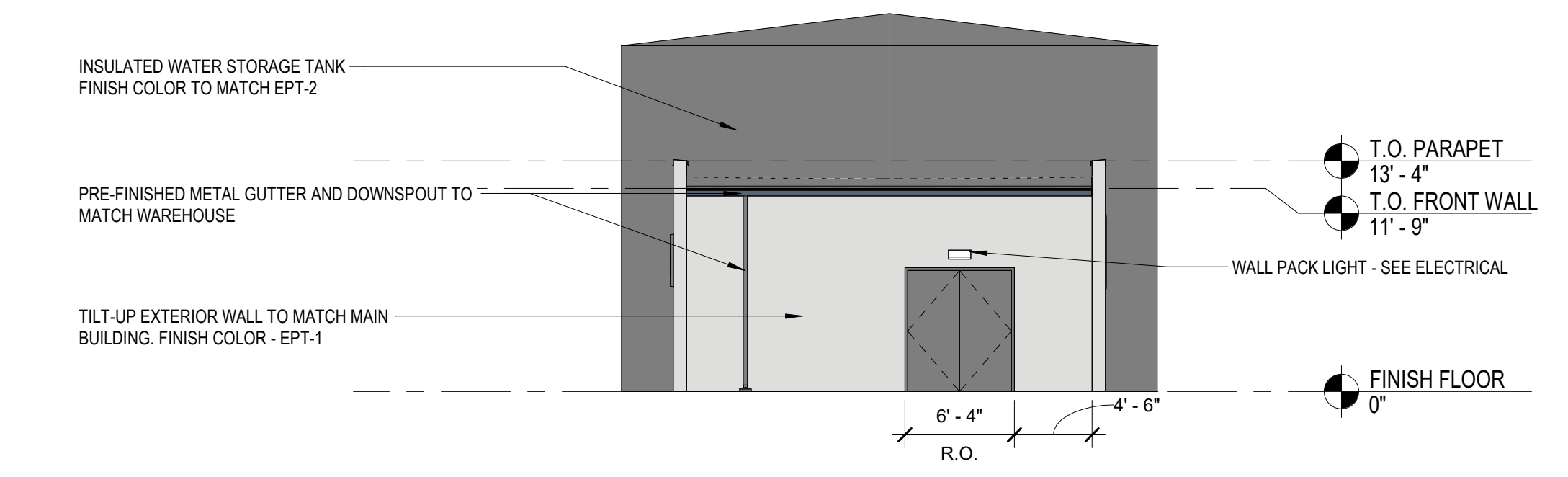
7 GUTTER DETAIL
 A5.04 Scale: 1 1/2" = 1'-0"



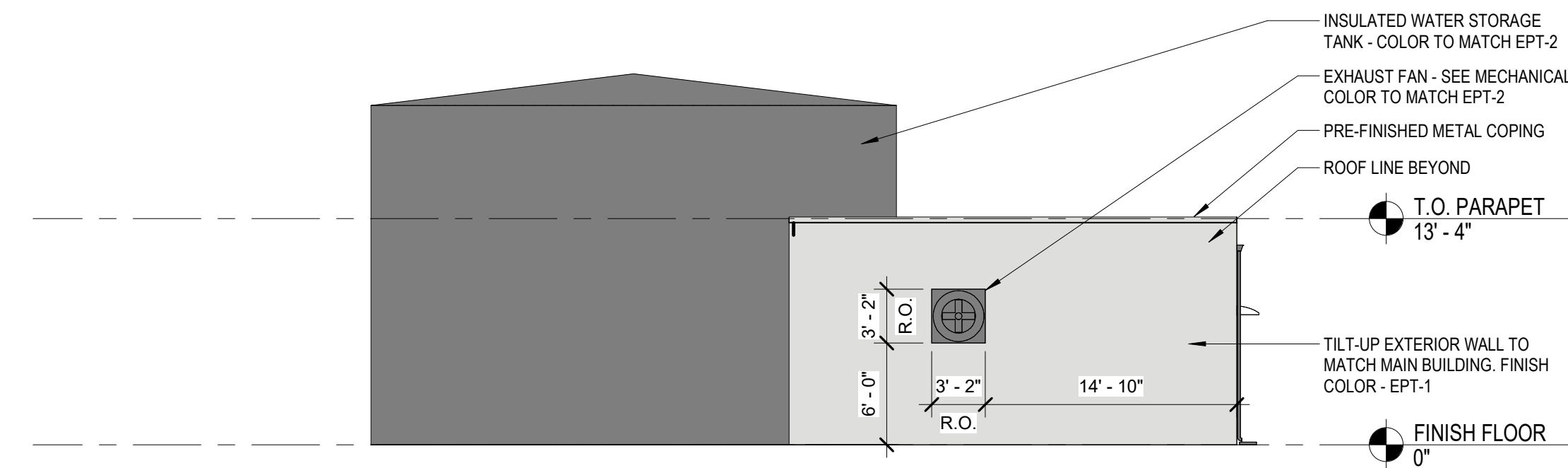
6 ROOF AT PUMPHOUSE AND TANK
 A5.04 Scale: 1 1/2" = 1'-0"



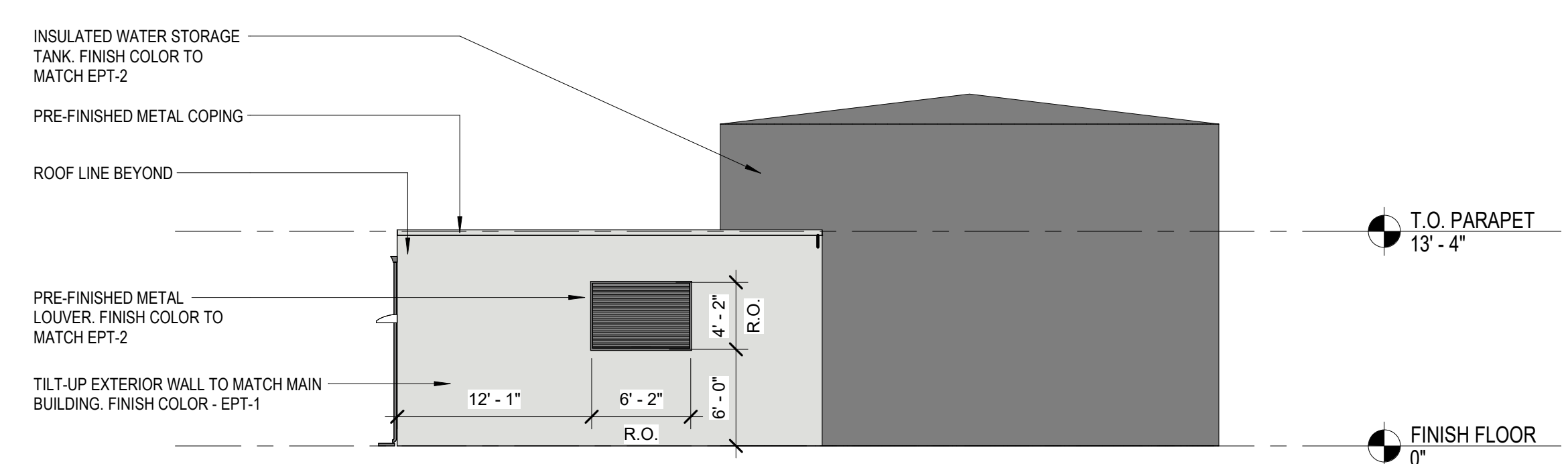
5 PARTIAL BUILDING SECTION - PUMPHOUSE
 A5.04 Scale: 1/2" = 1'-0"



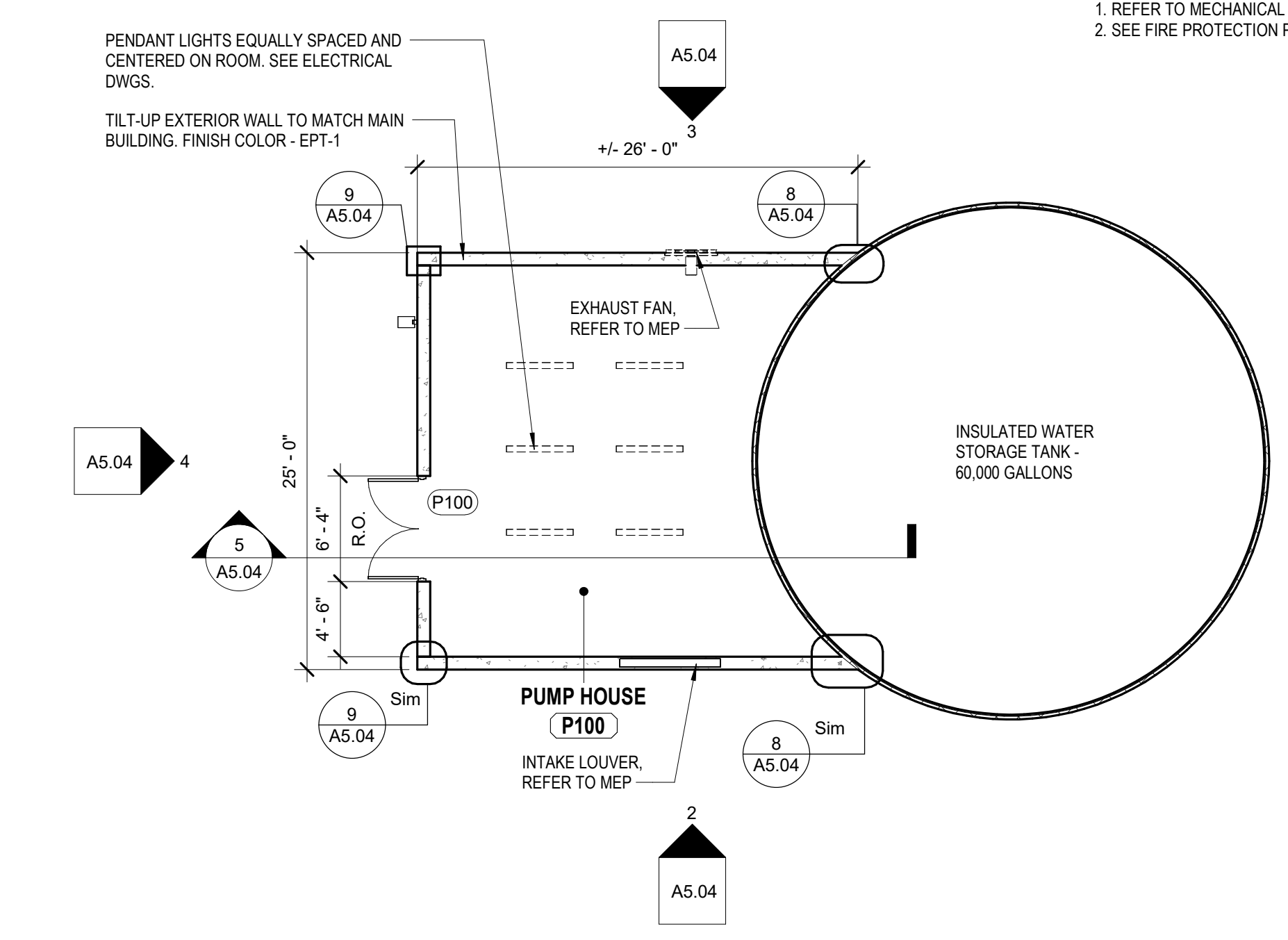
4 PUMPHOUSE - ELEVATION
 A5.04 Scale: 1/8" = 1'-0"



3 PUMPHOUSE - ELEVATION
 A5.04 Scale: 1/8" = 1'-0"



2 PUMPHOUSE - ELEVATION
 A5.04 Scale: 1/8" = 1'-0"



1 PUMPHOUSE - FLOOR PLAN
 A5.04 Scale: 1/8" = 1'-0"

NOTE:
 1. REFER TO MECHANICAL PLANS FOR LOUVER SIZE
 2. SEE FIRE PROTECTION PLANS FOR EQUIPMENT LAYOUT

SHEET NOTES

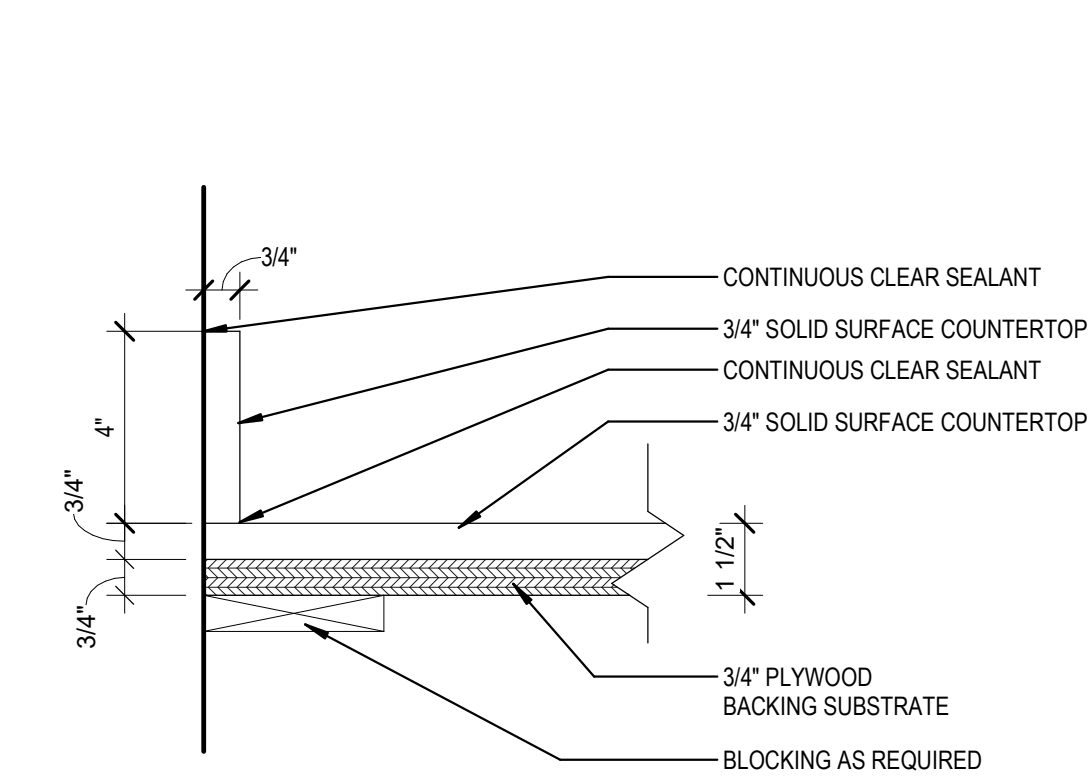
1. REFERENCE FINISH PLANS AND SCHEDULES FOR FINISH INFORMATION.
2. REFERENCE PARTITION DETAIL SHEETS FOR PARTITION INFORMATION.
3. PROVIDE CONTROL JOINTS IN GYPSUM BOARD FRAMED ASSEMBLIES AT 30'-0" OC MAX.
4. REFERENCE MEP SHEETS FOR INFORMATION ON BUILDING SYSTEMS AND UTILITIES.
5. ELEVATIONS DO NOT SHOW ALL ELEMENTS OF CONSTRUCTION, REFER TO OTHER CONSTRUCTION DOCUMENTS FOR ADDITIONAL INFORMATION.
6. REFERENCES EQUIPMENT PLANS AND SCHEDULES FOR EQUIPMENT AND FURNITURE INFORMATION.

MILLWORK SCHEDULE

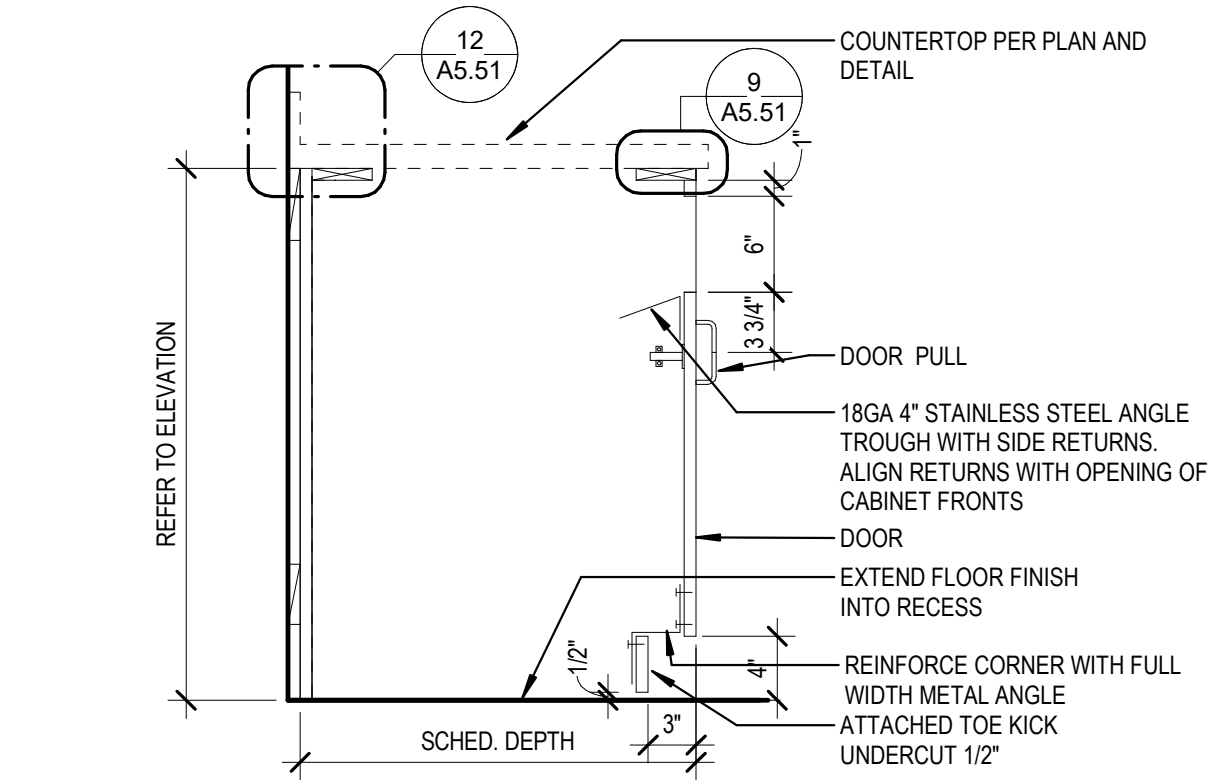
CODE	QTY	ITEM	COMMENTS
M-B4	1	PLASTIC LAMINATE PLUMBING GUARD (PL-1)	
M-B5	1	LACTATION ROOM BASE CABINET - ACCESSIBLE SINK	
M-B8	1	BASE CABINET	
M-BM	2	BASE CABINET - MICROWAVE	
M-C3	1	COUNTERTOP - BREAKROOM	WIDTH VARIES, REF PLANS
M-C4	1	COUNTERTOP - LACTATION ROOM	
M-IB	1	BASE CABINET - DRAWER	
M-IT	1	BASE CABINET - TRASH	
M-O2	1	OVERHEAD CABINET	
M-OM	1	OVERHEAD - MICROWAVE CABINET	
M-R3	1	COAT RACK	

MILLWORK NOTES

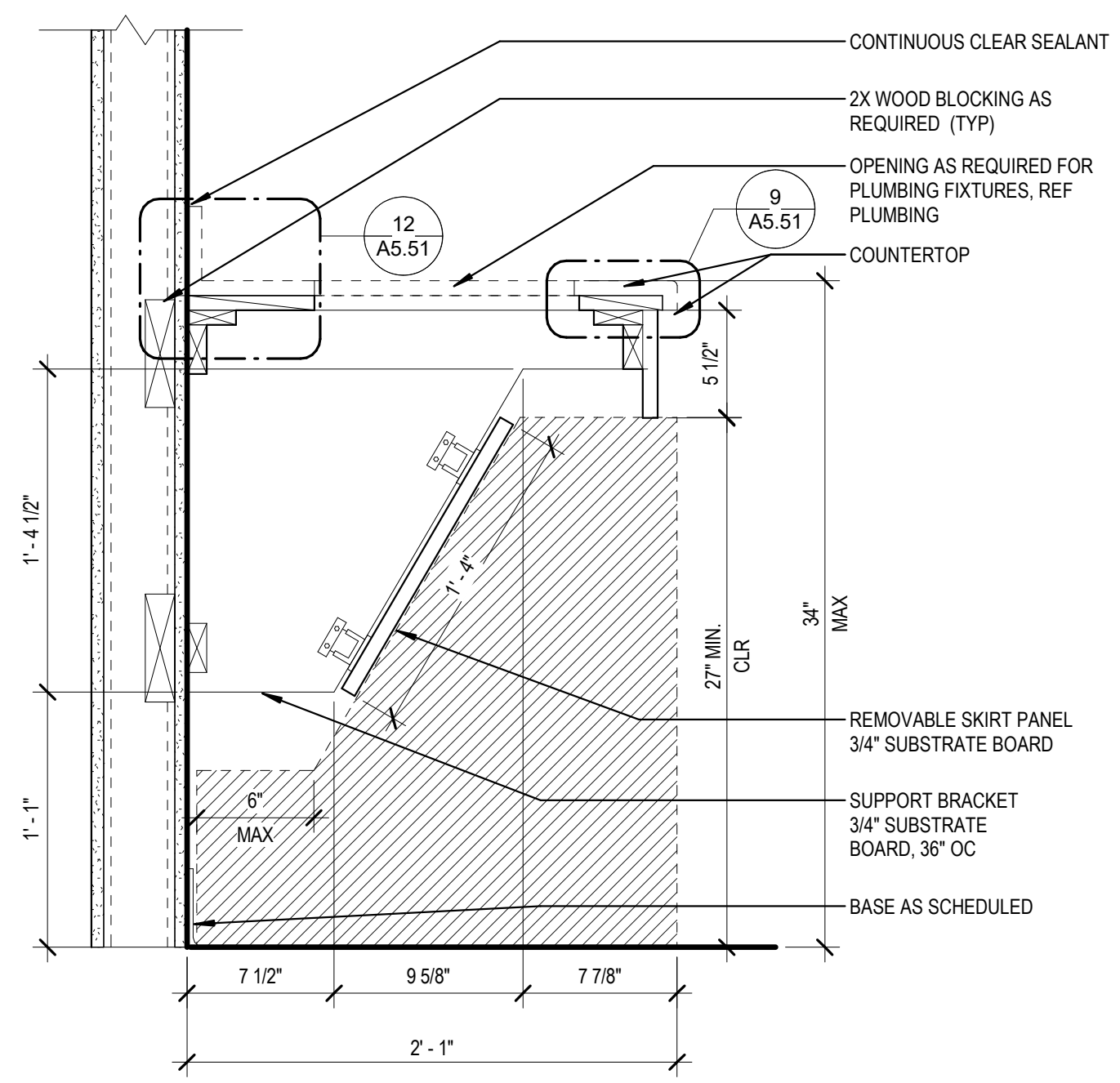
- A. BASE CABINETS DEFAULT DEPTH TO BE 2'-0" UNO.
- B. OVERHEAD CABINETS DEFAULT DEPTH TO BE 1'-4" UNO.



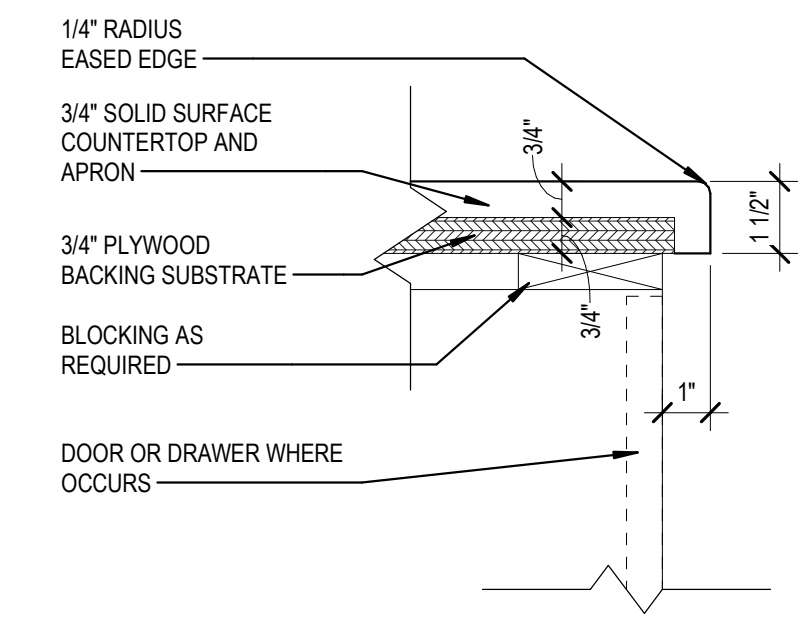
12 BACKSPASH DETAIL
A5.51 Scale: 3" = 1'-0"



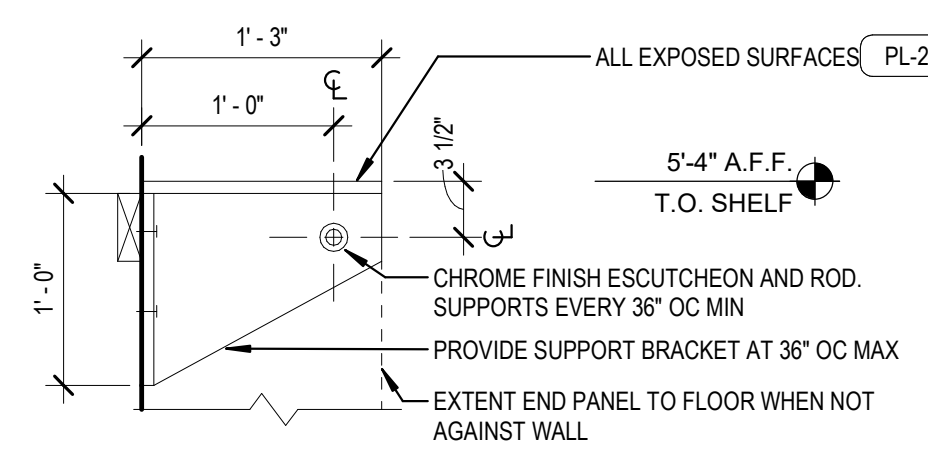
11 M-IT BASE CABINET - TRASH
A5.51 Scale: 1" = 1'-0"



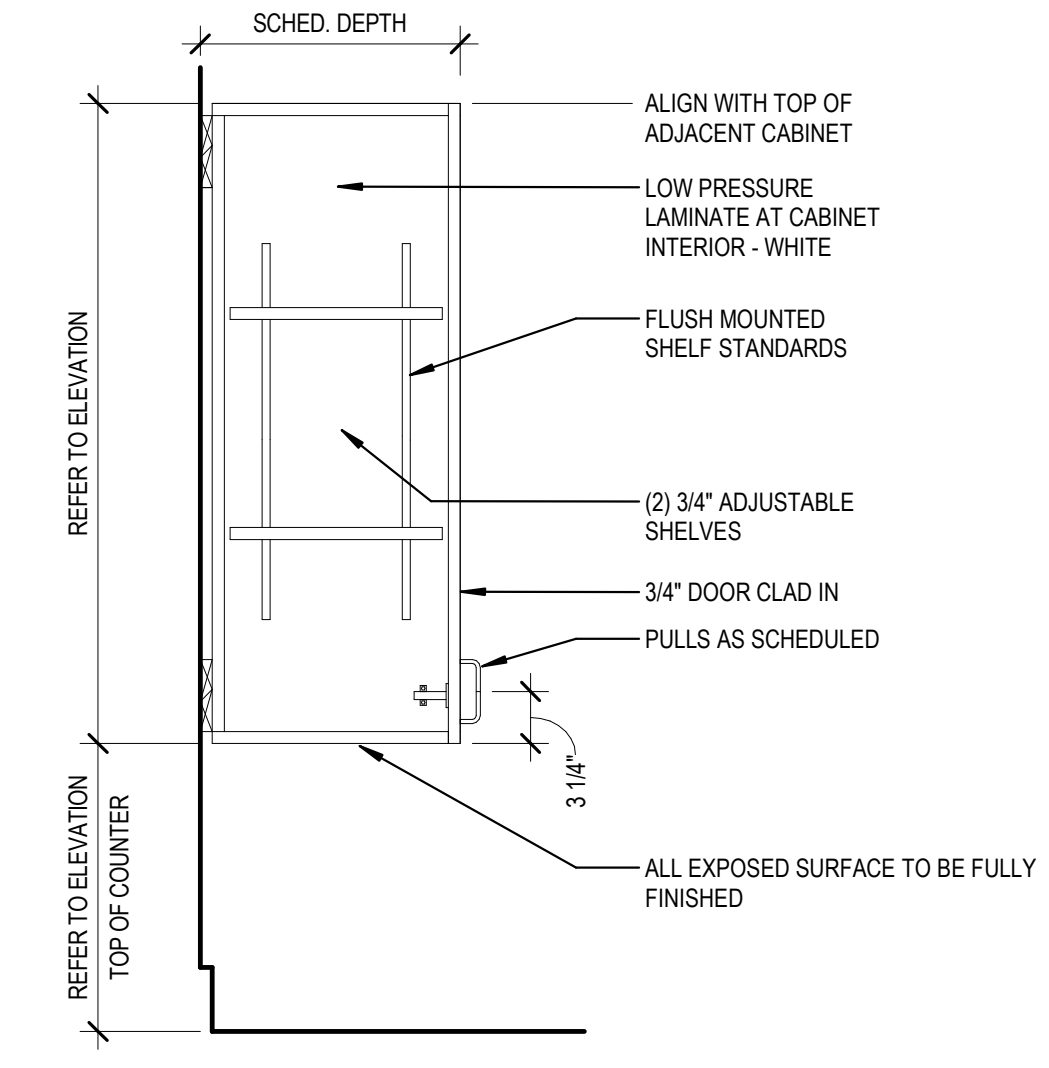
10 M-B4 BASE CABINET - ACCESSIBLE SINK, BREAKROOM
A5.51 Scale: 1 1/2" = 1'-0"



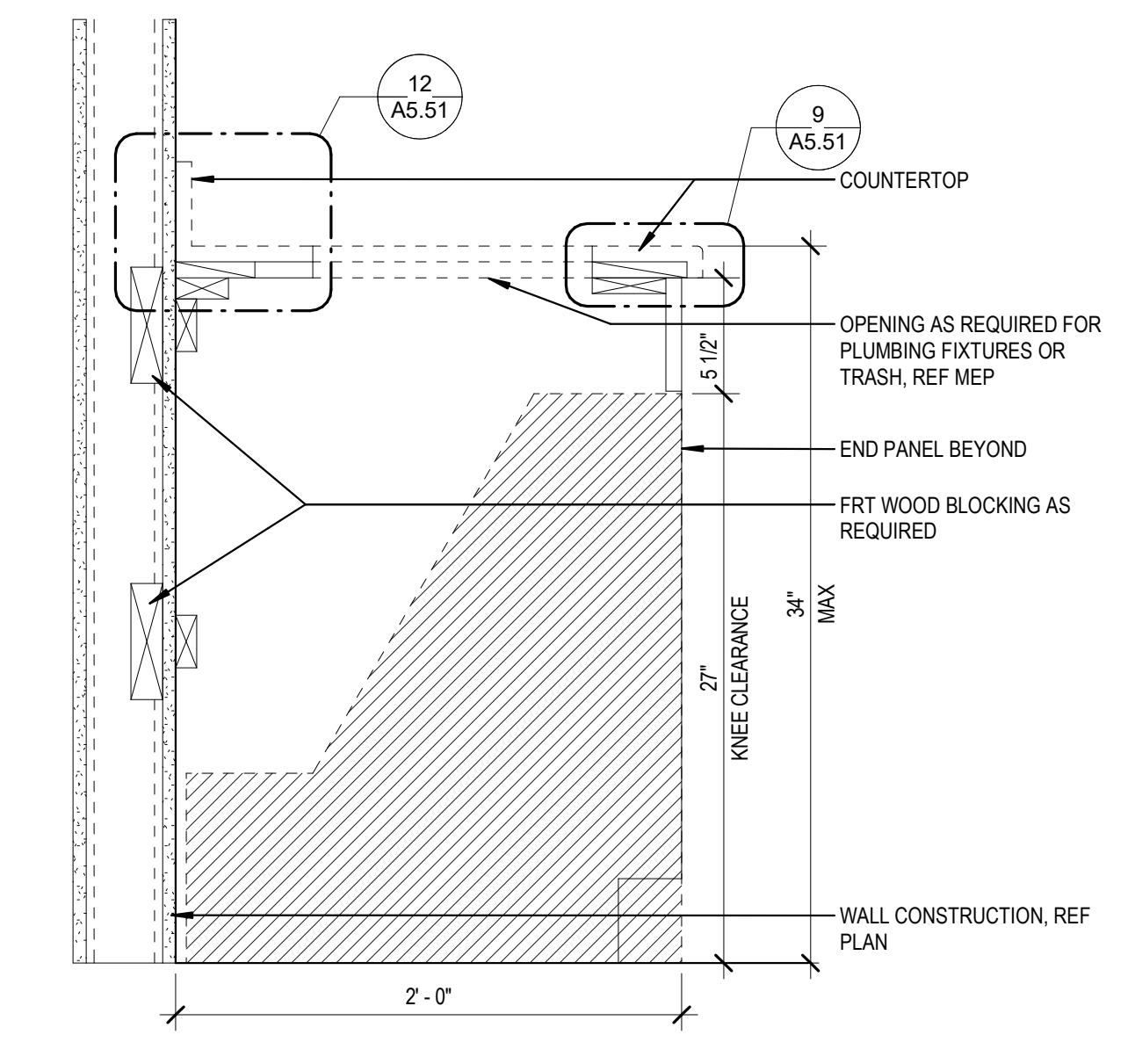
9 COUNTER EDGE DETAIL
A5.51 Scale: 3" = 1'-0"



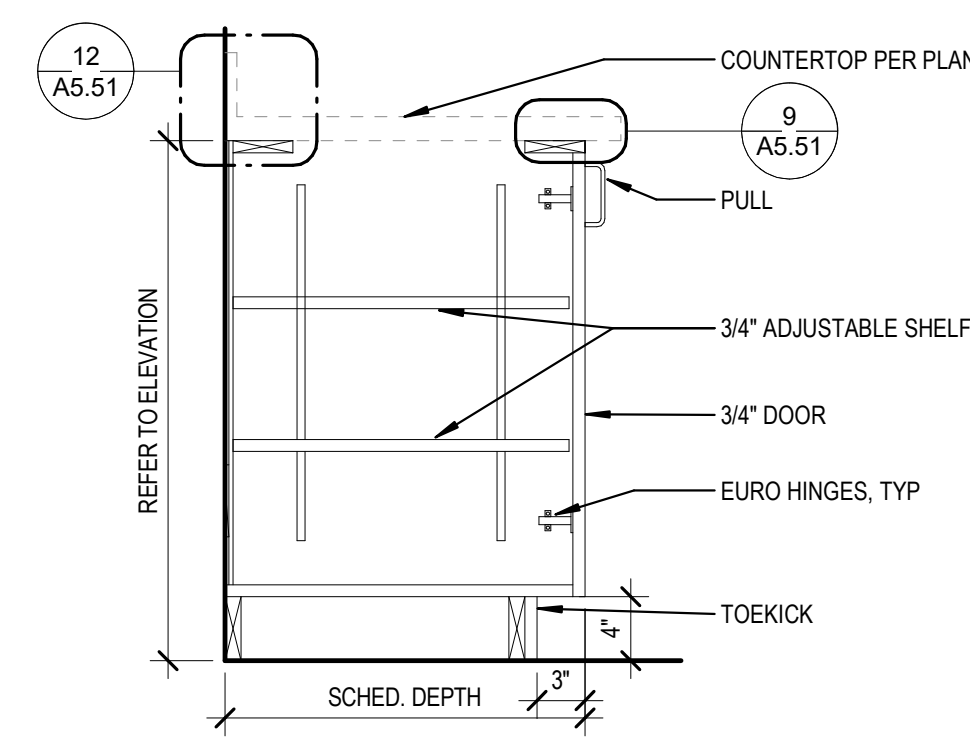
8 M-R3 COAT RACK
A5.51 Scale: 1" = 1'-0"



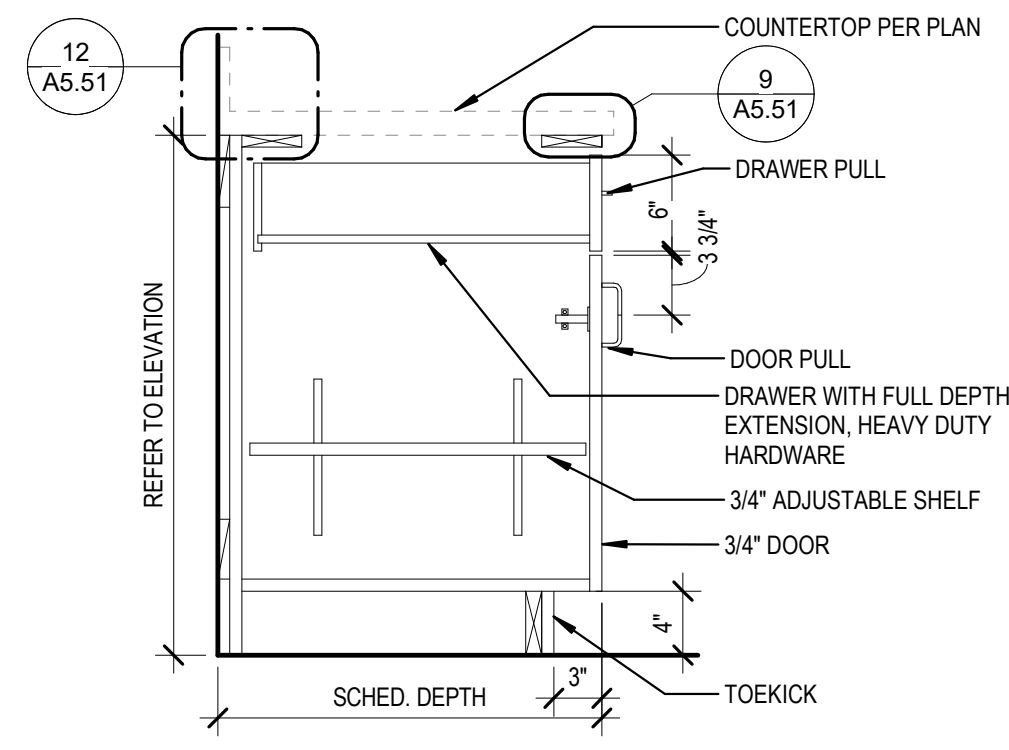
6 M-O2 OVERHEAD CABINET
A5.51 Scale: 1" = 1'-0"



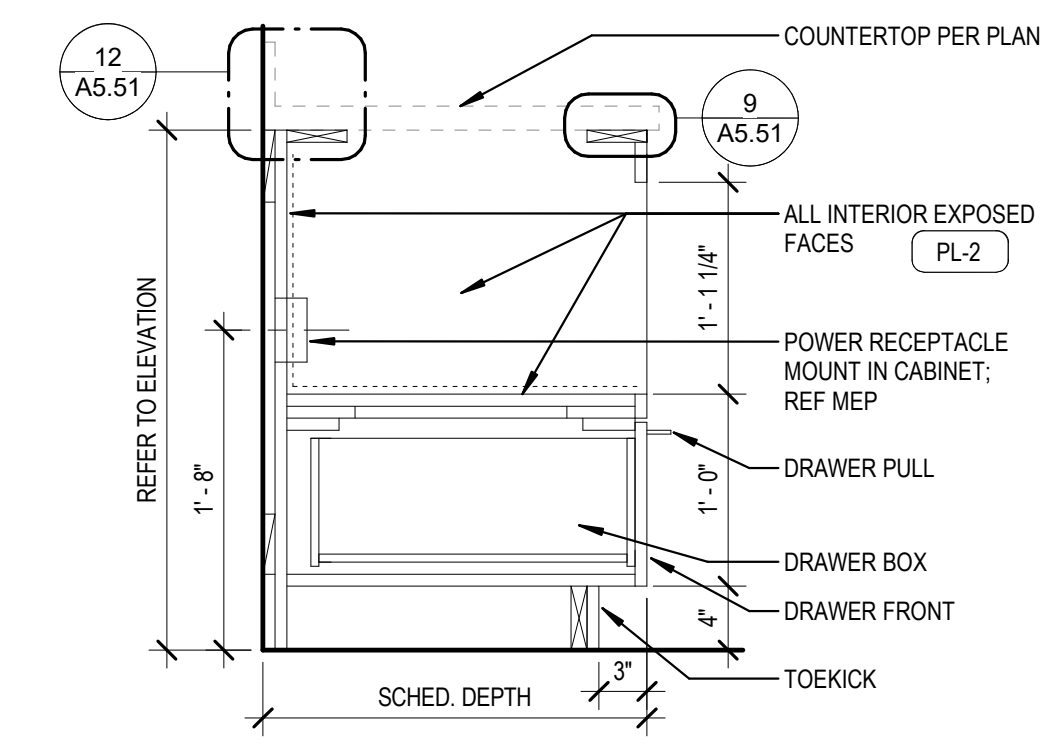
5 M-B5 BASE CABINET - ACCESSIBLE SINK, LACTATION ROOM
A5.51 Scale: 1 1/2" = 1'-0"



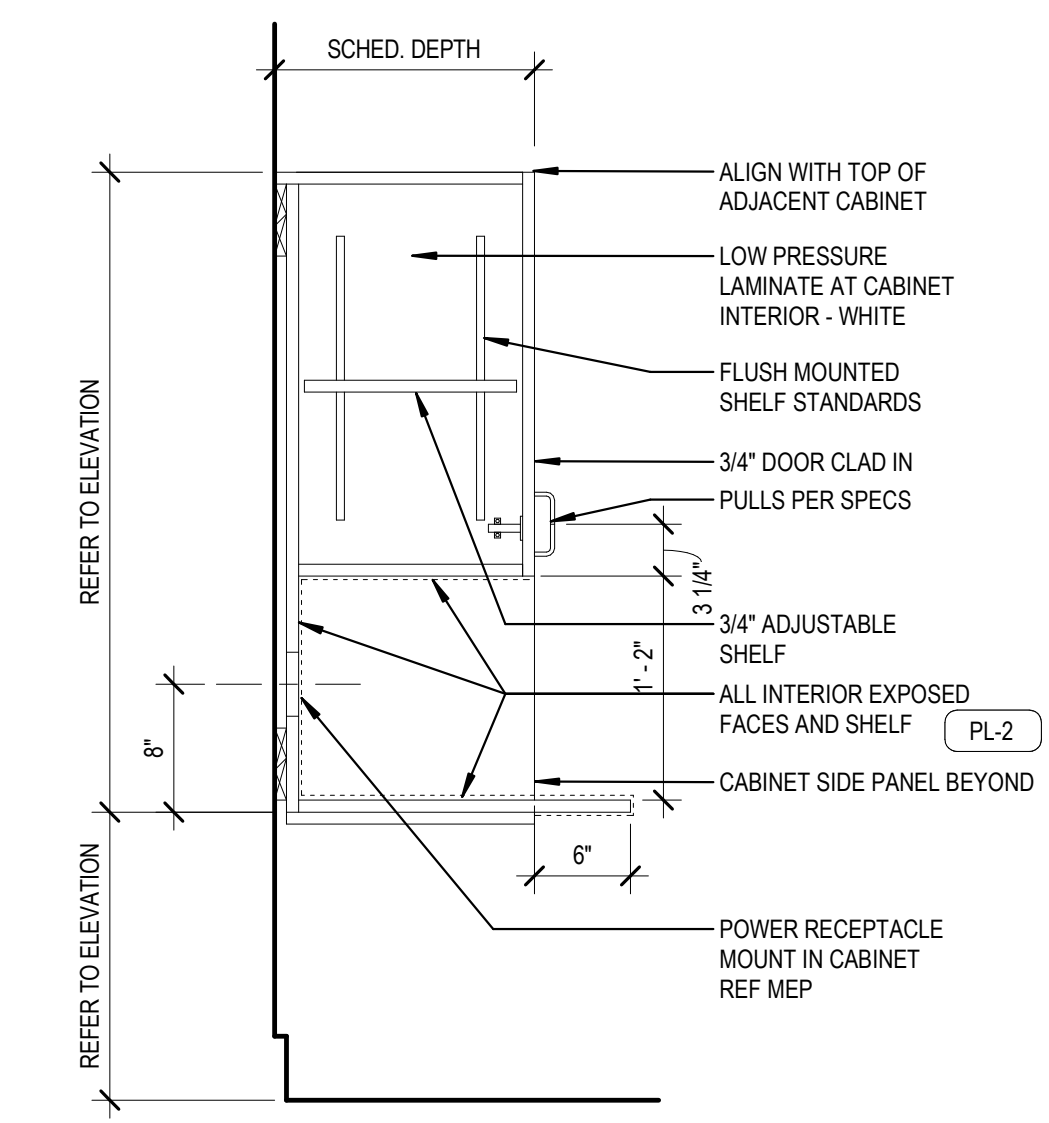
4 M-B8 BASE CABINET SECTION
A5.51 Scale: 1" = 1'-0"



3 TYPICAL BASE CABINET - DRAWER
A5.51 Scale: 1" = 1'-0"



2 M-BM BASE CABINET - MICROWAVE
A5.51 Scale: 1" = 1'-0"



1 M-OM OVERHEAD - MICROWAVE CABINET
A5.51 Scale: 1" = 1'-0"

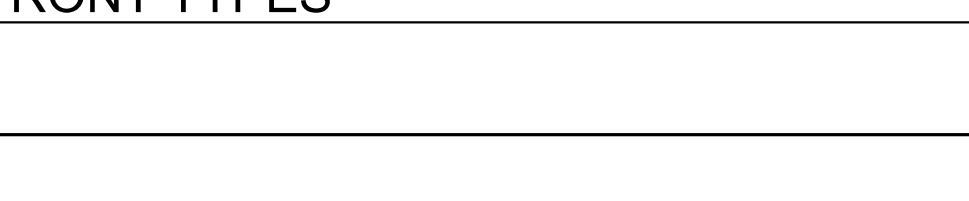
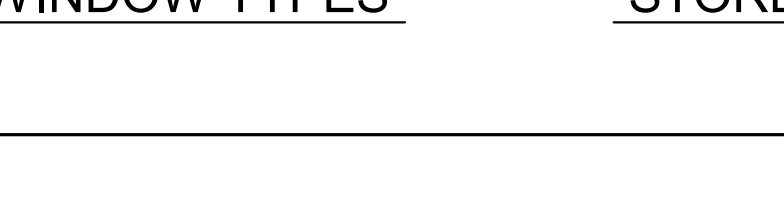
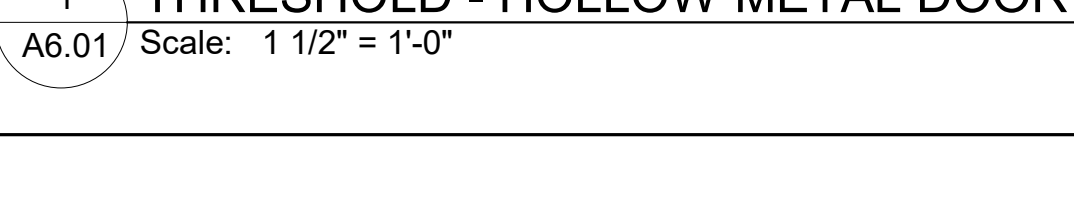
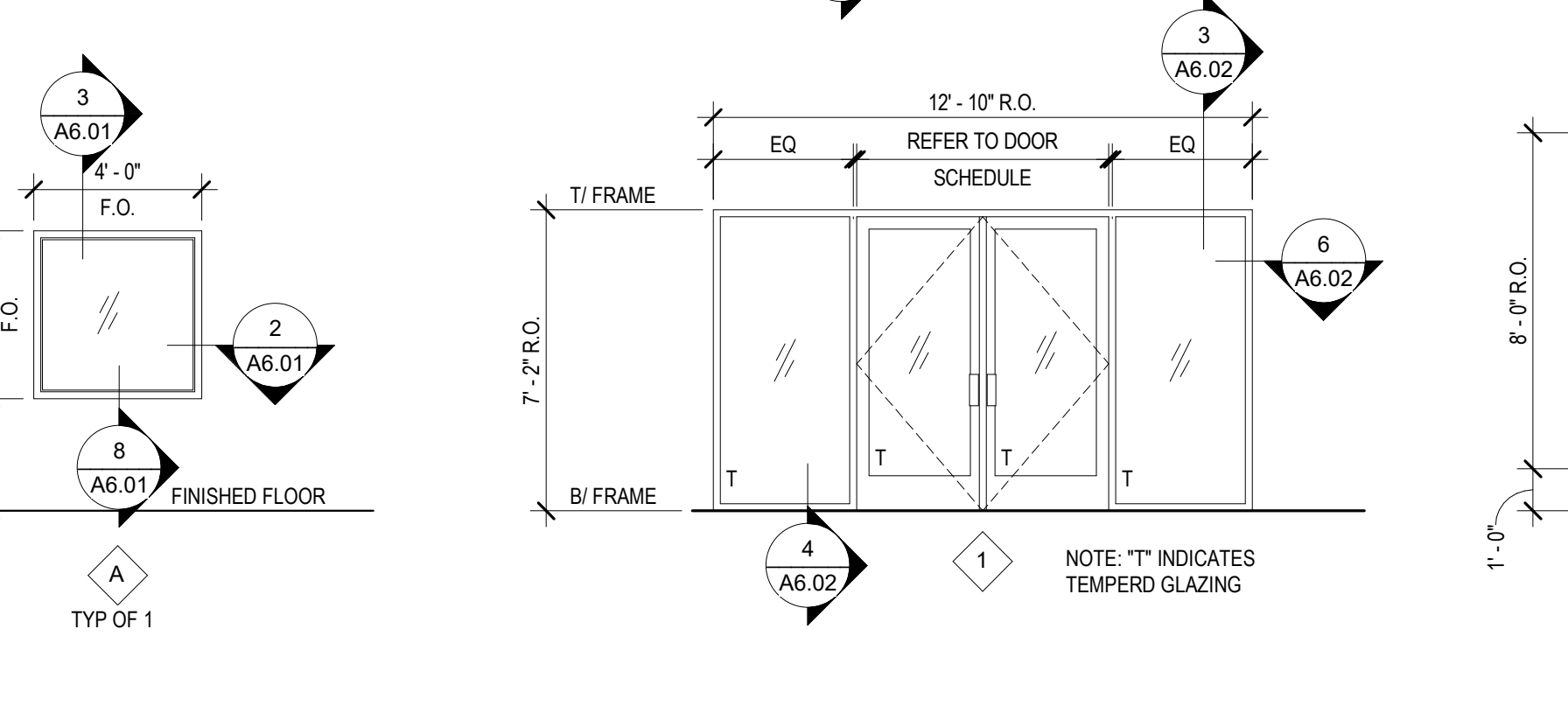
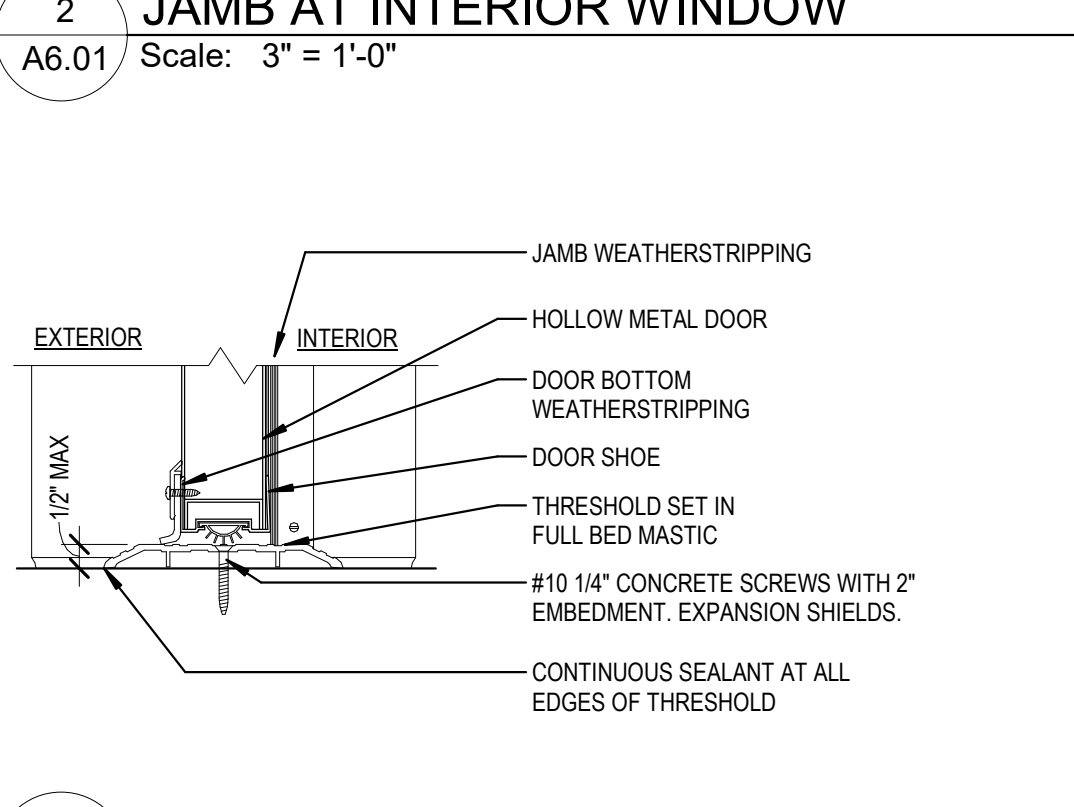
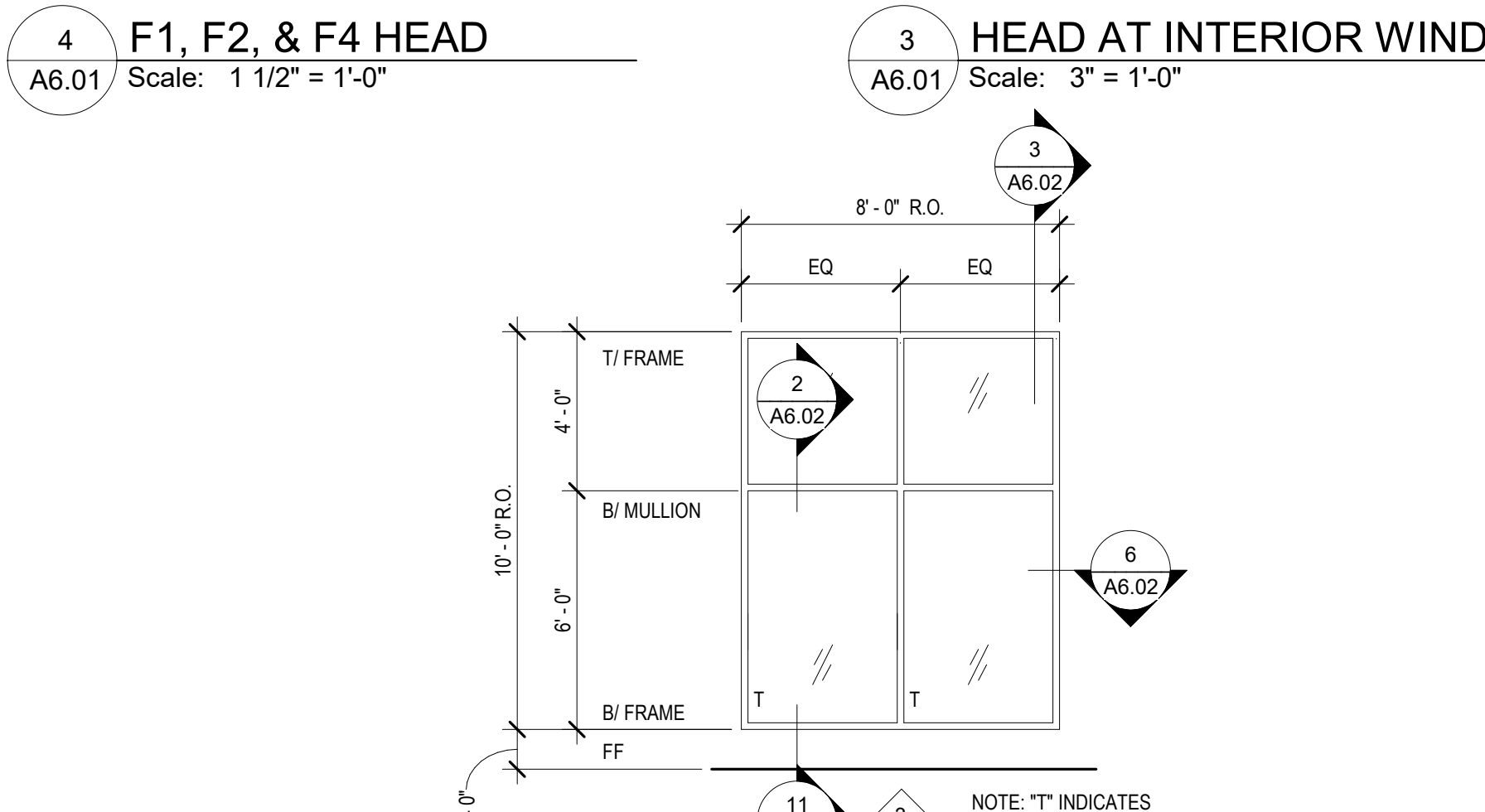
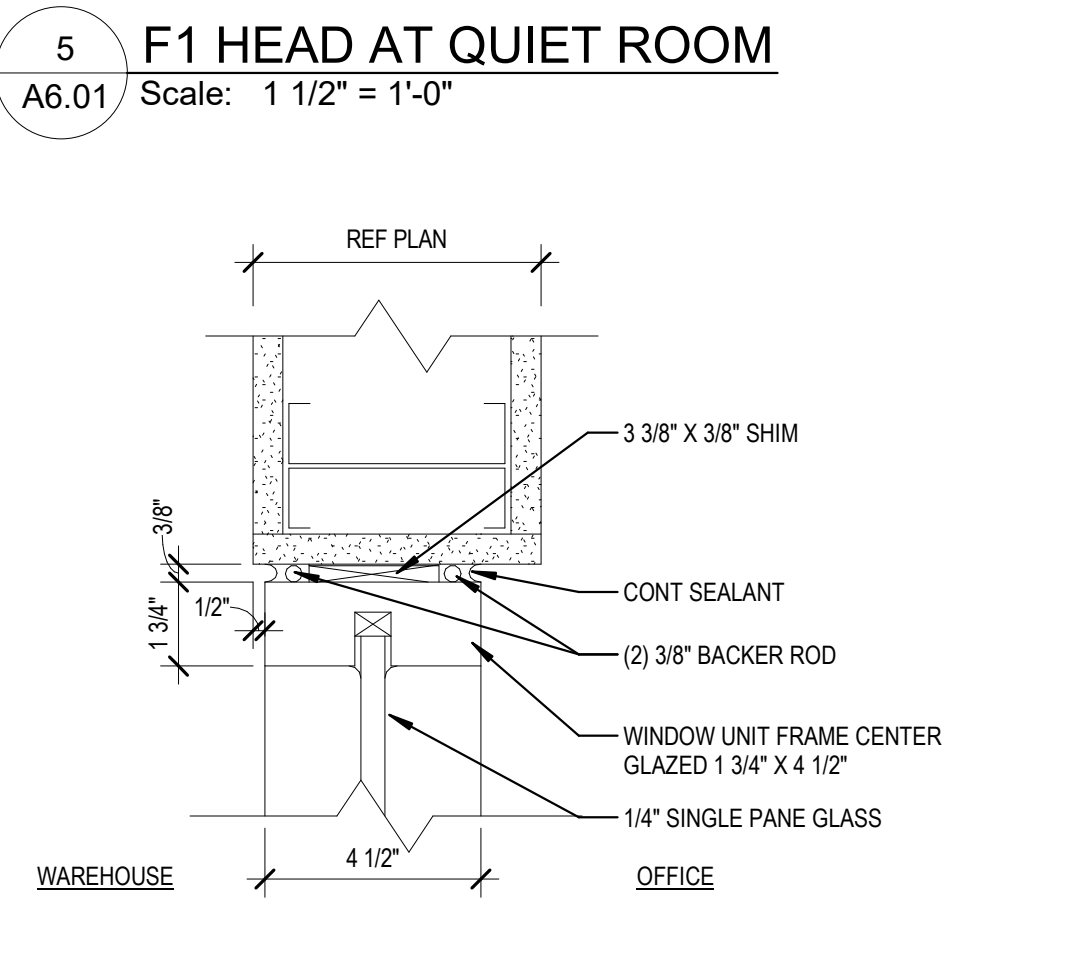
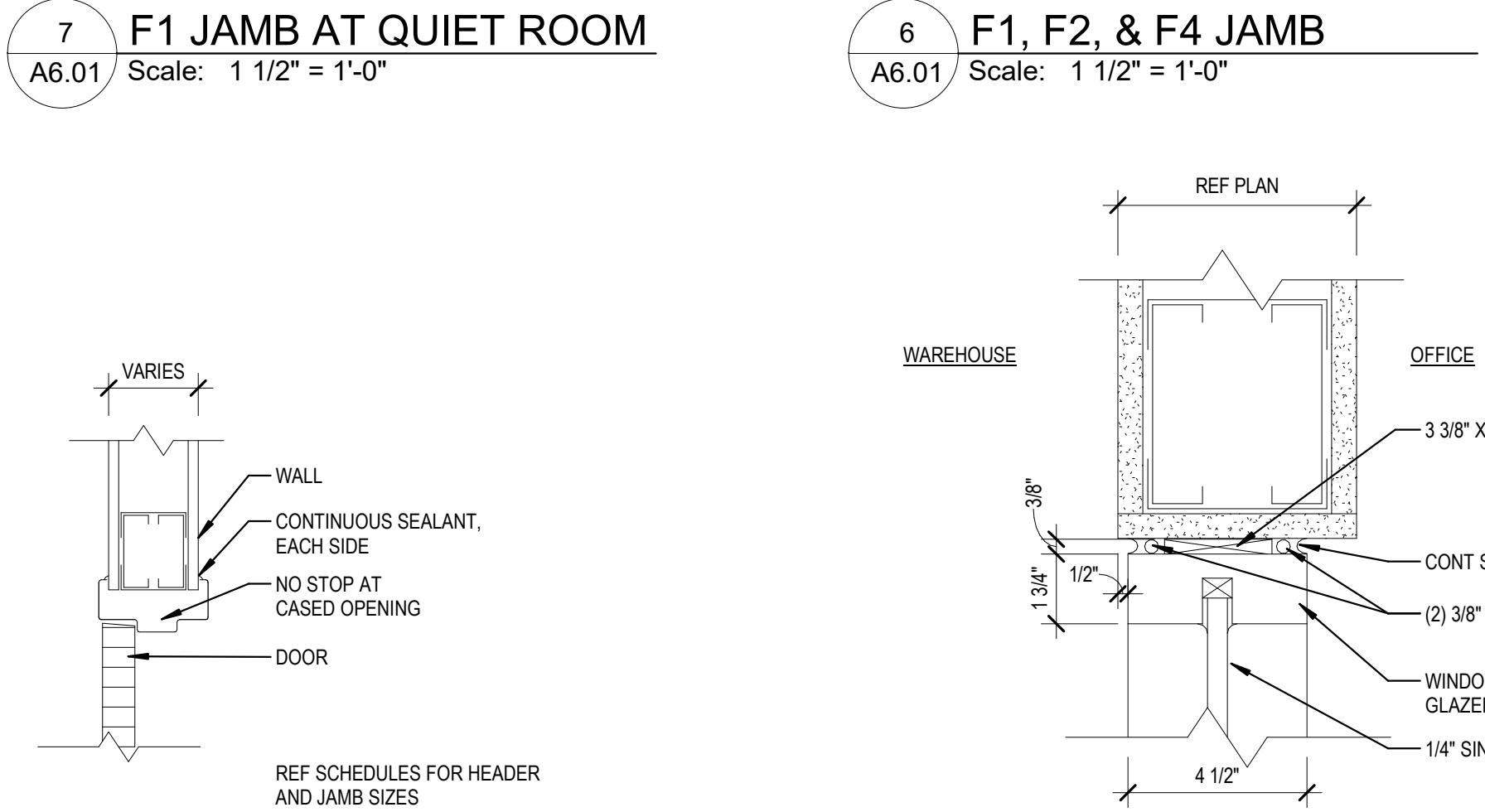
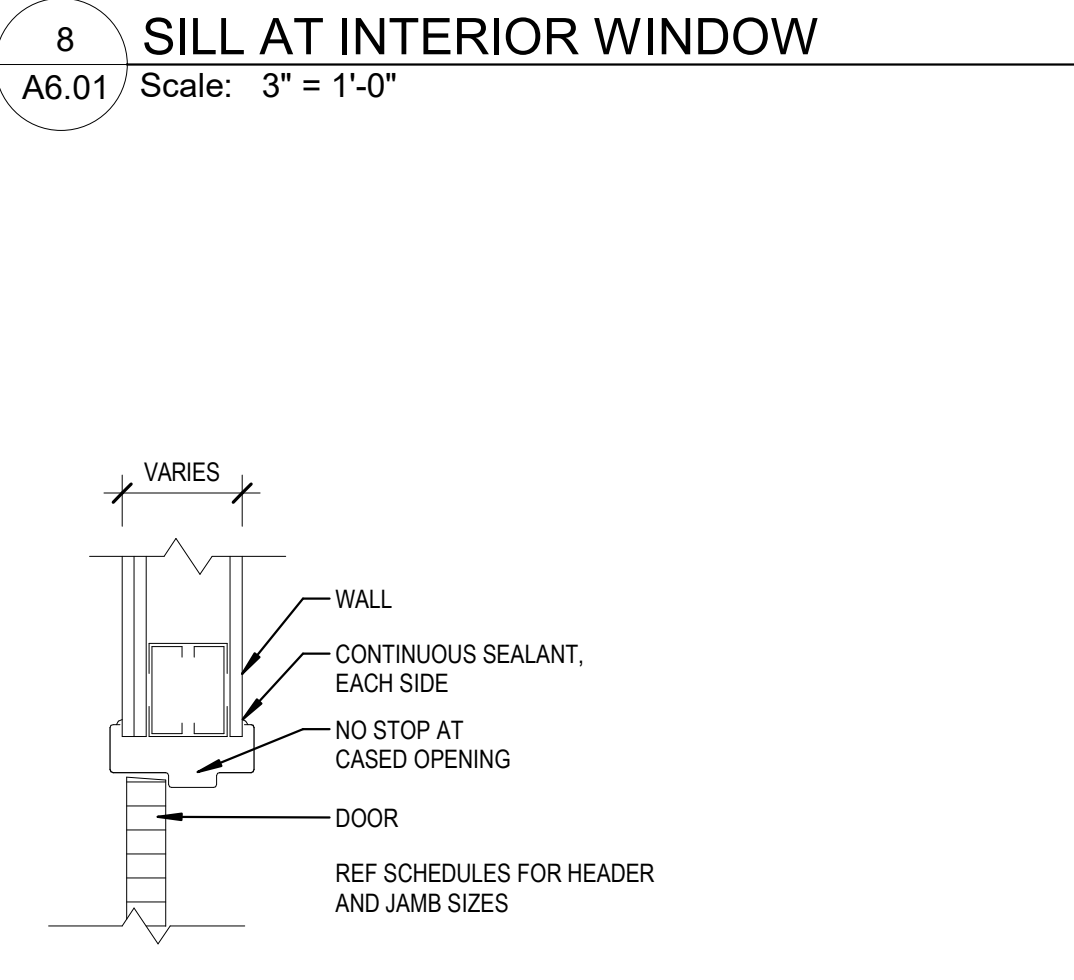
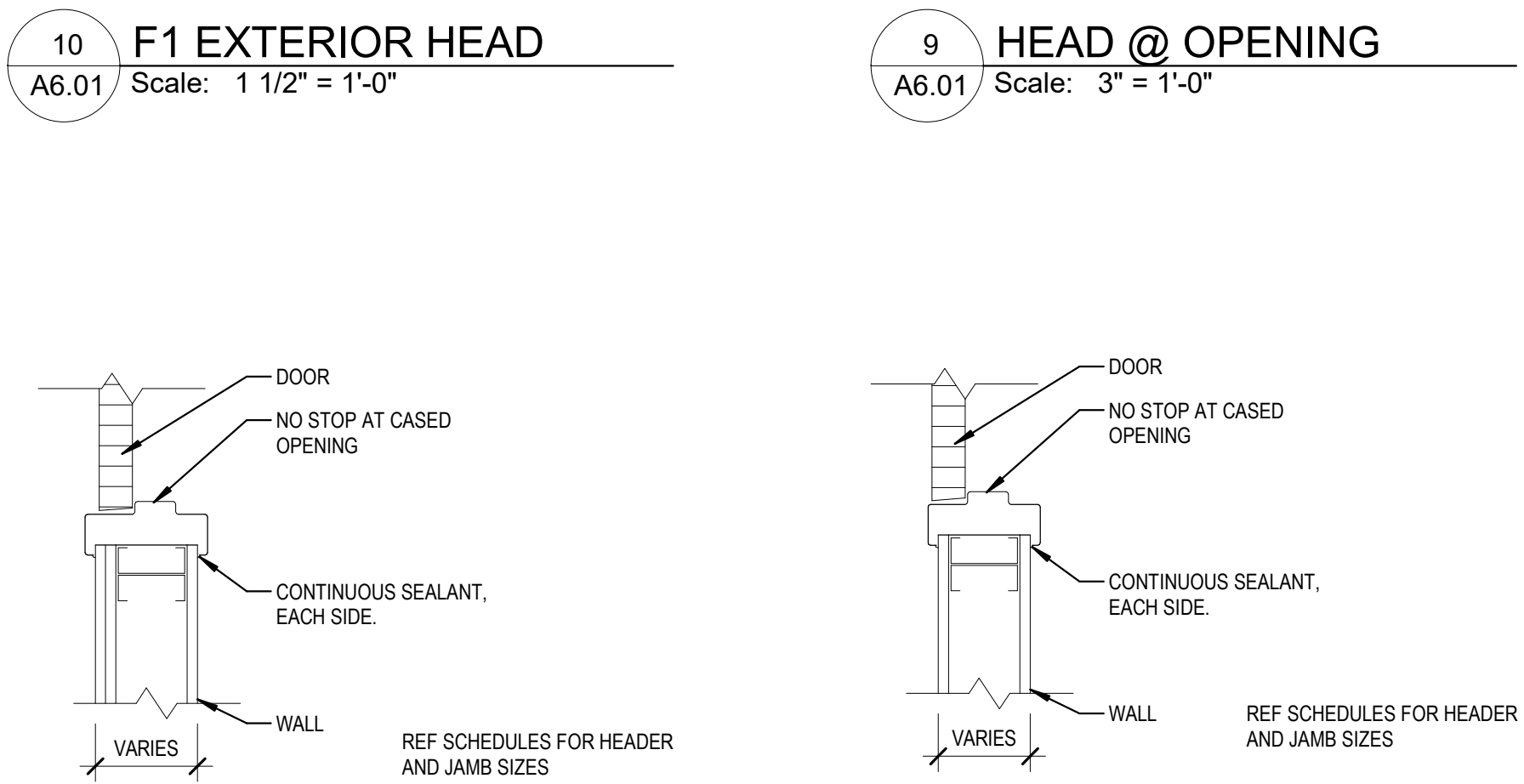
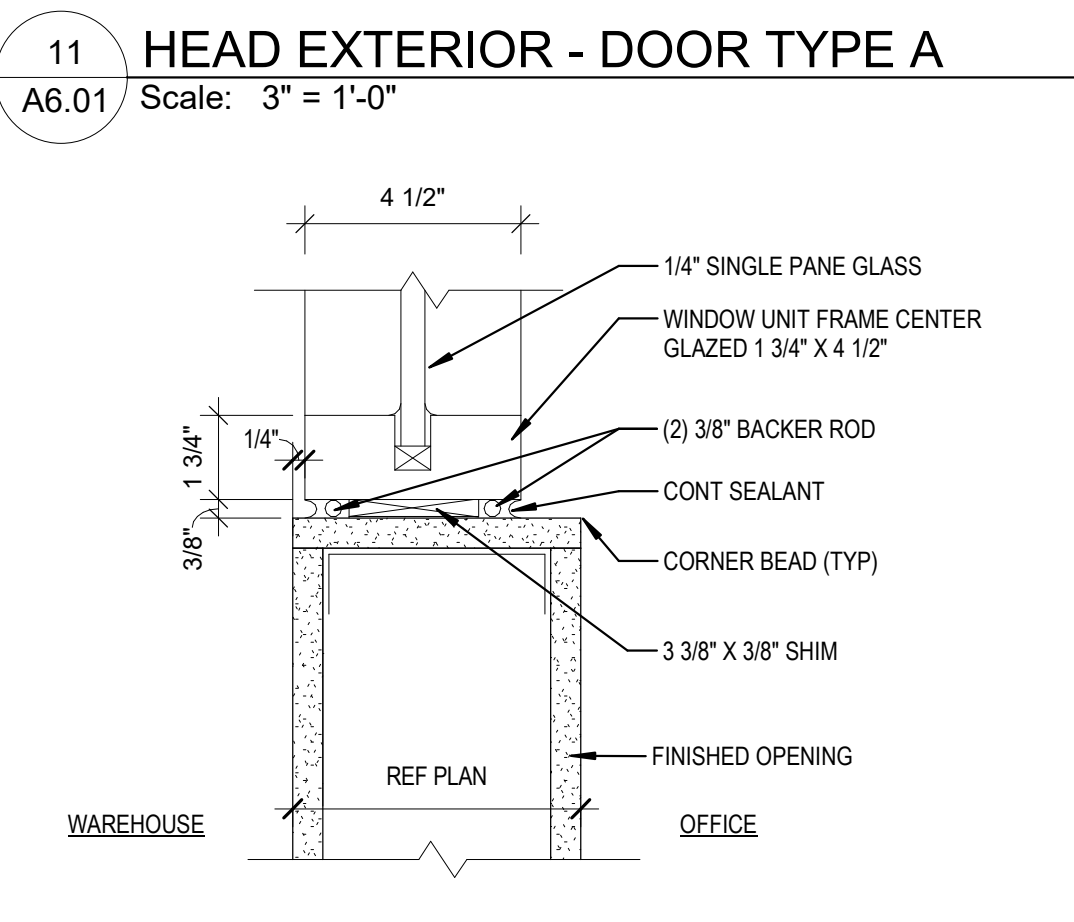
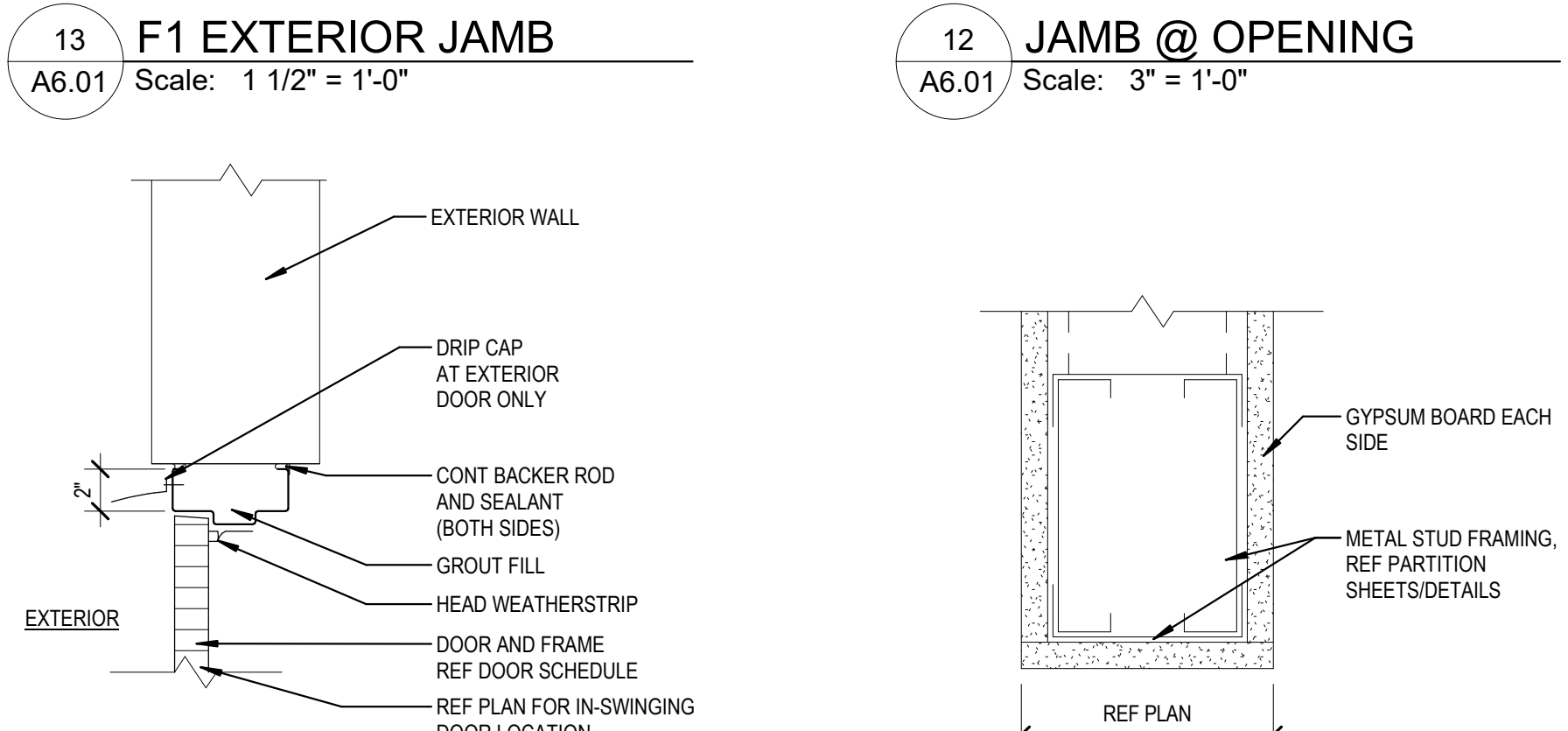
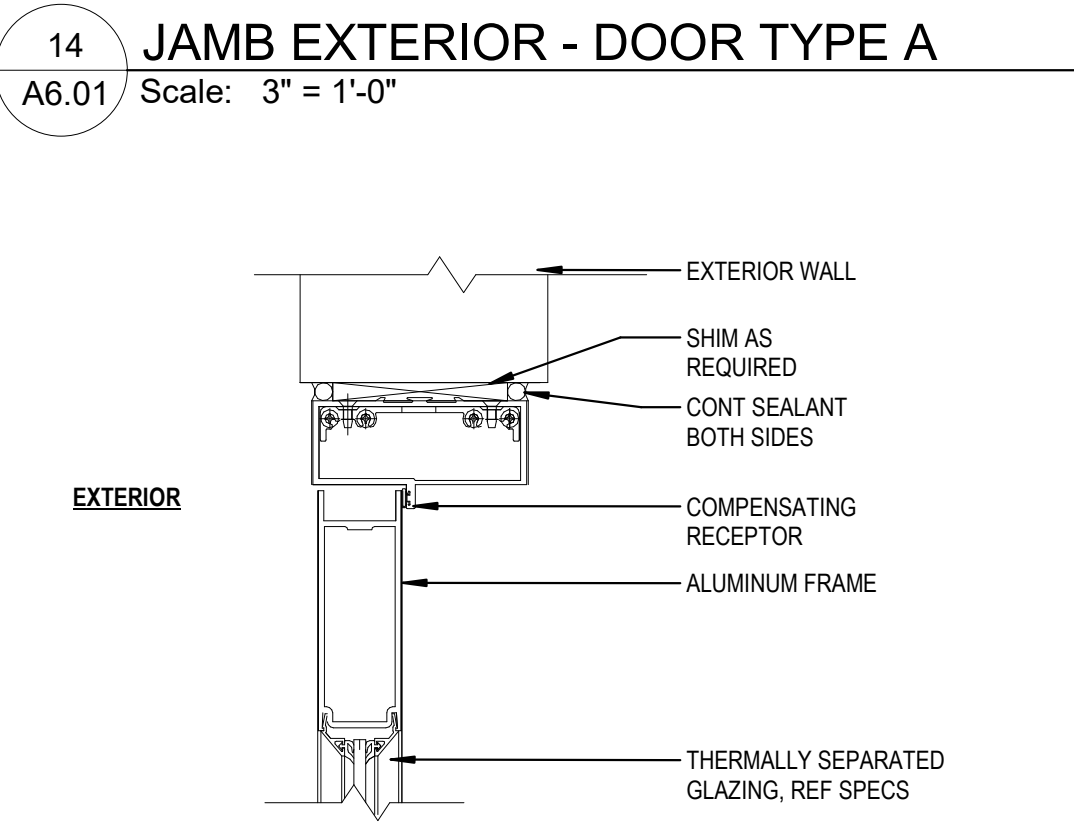
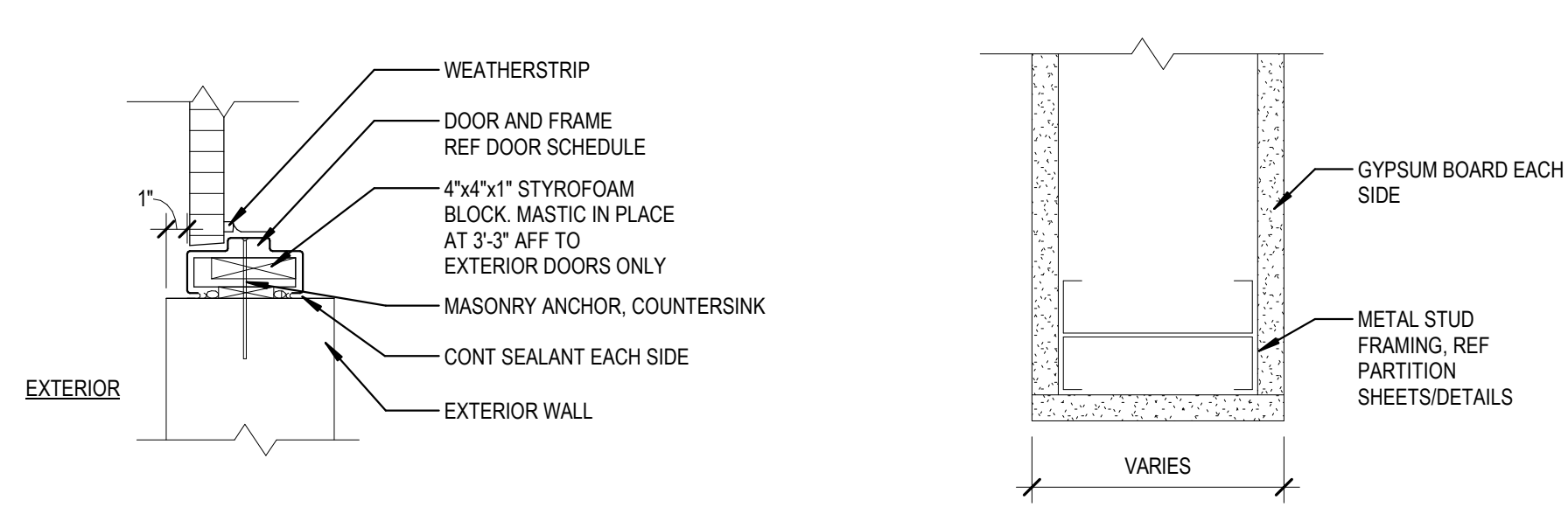
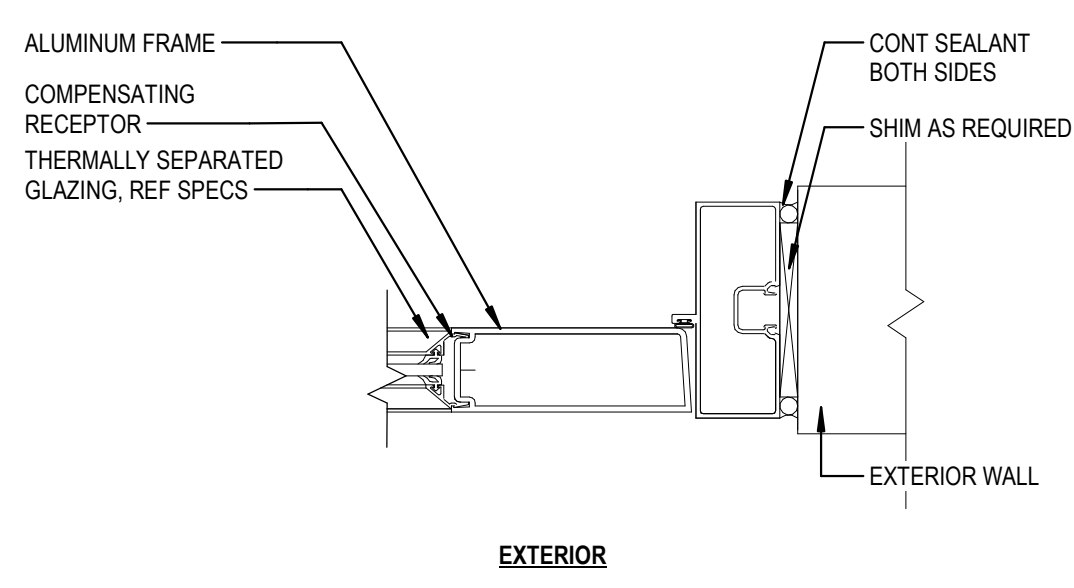
AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
	PERMIT SET	04.25.2025

Project number:	763838-02
Scale:	AS NOTED
Drawn By:	SW / CB
Checked By:	DZ
Date:	04.25.2025
Issue:	PERMIT SET

Sheet Title:
MILLWORK DETAILS



GENERAL DOOR NOTES

1. PROVIDE BEST 7 PIN FSIC GREEN METAL CONSTRUCTION CORES. PLASTIC CORES ARE NOT ALLOWED.
2. DOOR NUMBERING MUST BE FOLLOWED EXACTLY PER PLANS. ANY CONFLICTS SHOULD BE BROUGHT TO ARCHITECT'S OR TENANT CIMS ATTENTION.
3. ALL WOOD BLOCKINGS REQUIRED AT EXTERIOR WALL WINDOW DETAILS IS TO BE PRESSURE TREATED.
4. WITHIN TWO WEEKS OF CONTRACT AWARD, GC IS TO EVALUATE AND ORDER DOOR HARDWARE. COORDINATE WITH TENANT PROVIDED SECURITY PLAN AND CONSTRUCTION MANAGER FOR APPROVAL.
5. VERIFY DOOR OPENING SIZES AND REQUIREMENTS WITH DOOR AND FRAME MANUFACTURER.
6. MAXIMUM PULL FORCES FOR EXTERIOR DOORS TO BE 10 LBS AND MAXIMUM PULL FORCES FOR INTERIOR DOORS TO BE 5 LBS.
7. PROVIDE RUST INHIBITOR COATING AND STAINLESS STEEL SCREWS / FASTENERS ON ALL HARDWARE ITEMS AT EXTERIOR DOORS PER MANUFACTURER SPECS.
8. ALL ELECTRONIC HARDWARE SHALL BE COORDINATED WITH ELECTRICAL AND SECURITY CONTRACTORS.
9. ALL HOLLOW METAL DOORS TO BE 1-3/4" THICK EXTERIOR HOLLOW METAL DOORS TO BE INSULATED. REFER TO ENERGY CODE BASIS OF DESIGN ON SHEET G1.0 FOR INSULATION INFORMATION.
10. ALL EXTERIOR DOOR HARDWARE TO BE APPROVED IN WRITING PRIOR TO INSTALLATION.
11. ALL INTERIOR DOORS OPEN TO WAREHOUSE FLOOR TO BE 18 GA METAL THICKNESS MINIMUM WITH IMPACT RESISTANT GLAZING (IF GLAZING PRESENT).
12. DOOR GLAZING TYPE NOTES:
 A. 1" INSULATING GLAZING UNLESS NOTED OTHERWISE AT EXTERIOR DOORS.
 B. ALL GLAZING IN DOORS AND FRAMES TO BE 1" INSULATED IF IN EXTERIOR INSULATED WALL.
 C. REFERENCE SPECIFICATIONS FOR NON INSULATED INTERIOR LITES.

DOOR SCHEDULE NOTES

- | | |
|---|---|
| A | DOOR TO BE 1" UNDERCUT AT BOTTOM - NO LOUVERS ALLOWED |
| B | PREPARE FOR INSTALLATION OF DOCK LIGHT/FAN EQUIPMENT BUT DO NOT INSTALL |
| C | 16 GA MINIMUM THICKNESS METAL GLAZING TO BE IMPACT RESISTANCE RATED (IF APPLICABLE) |
| D | DOOR HAS CARD READER FOR ACCESS CONTROL. REFER TO SECURITY DRAWINGS (BY OTHERS) FOR MORE INFORMATION. |
| E | PAINT WAREHOUSE SIDE OF DOOR AND FRAME PT-4 (SAFETY RED) AND OTHER SIDE OF DOOR/FRAME PT-7 |
| F | PROVIDE WF-3 TO DOOR LITE |
| G | DOOR TO BE 1HR RATED |
| H | NO HARDWARE ON EXTERIOR |
| I | HARDWARE PER MANUFACTURER. REF PARTITION SHEETS/DETAILS |
| J | PROVIDE AUDIBLE AND VISUAL ALARMS. REFER TO ELECTRICAL |
| K | WHERE A SIGN CONTAINING RAISED CHARACTERS AND BRAILLE IS PROVIDED AT DOUBLE DOORS WITH (1) ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF |
| L | WHERE A SIGN CONTAINING RAISED CHARACTERS AND BRAILLE IS PROVIDED AT DOUBLE DOORS WITH (2) ACTIVE LEAVES, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR |
| M | ACCESSIBLE AUTOMATIC PUSH-BUTTON OPERATOR REQUIRED BOTH SIDES OF DOOR |
| N | DOOR HAS PANIC HARDWARE ON EGRESS SIDE |

DOOR ABBREVIATIONS

AL	ALUMINUM
AND.	ANODIZED ALUMINUM
CL	CHAIN LINK
CLR	CLEAR
EPT	EXTERIOR PAINT
FA	FABRIC
FF	FACTORY FINISH
HM	HOLLOW METAL
PT	PAIN
SF	STOREFRONT
STL	STEEL

NOTE:
 THE DOOR HARDWARE SETS IDENTIFIED HEREIN ARE LISTED IN SPECIFICATION SECTION 087100.

EXTERIOR DOOR AND FRAME SCHEDULE

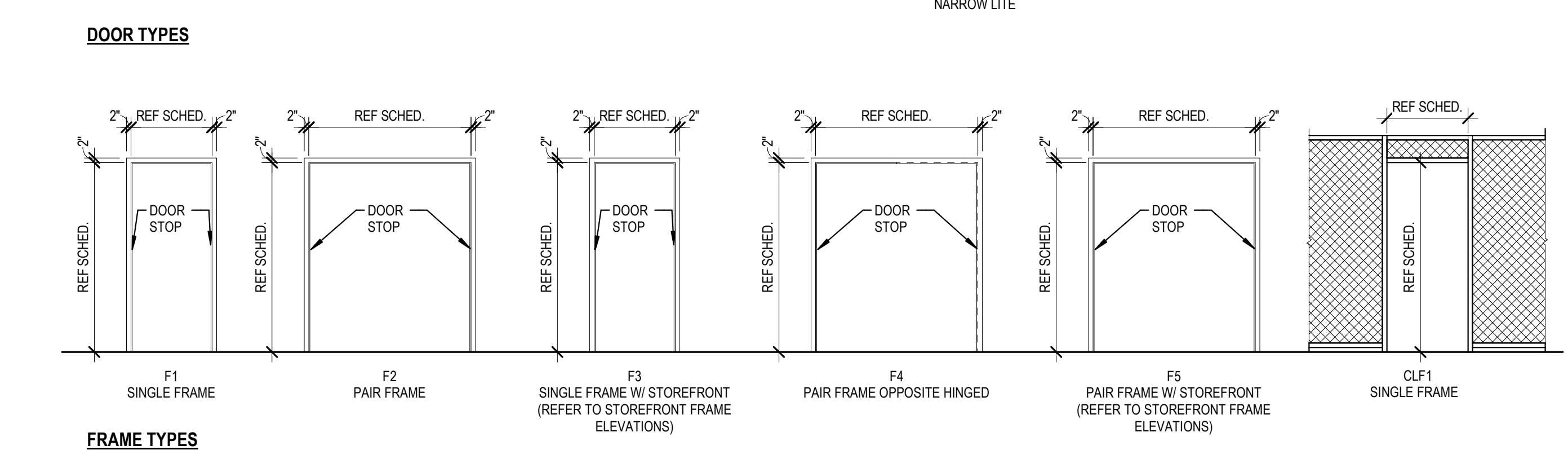
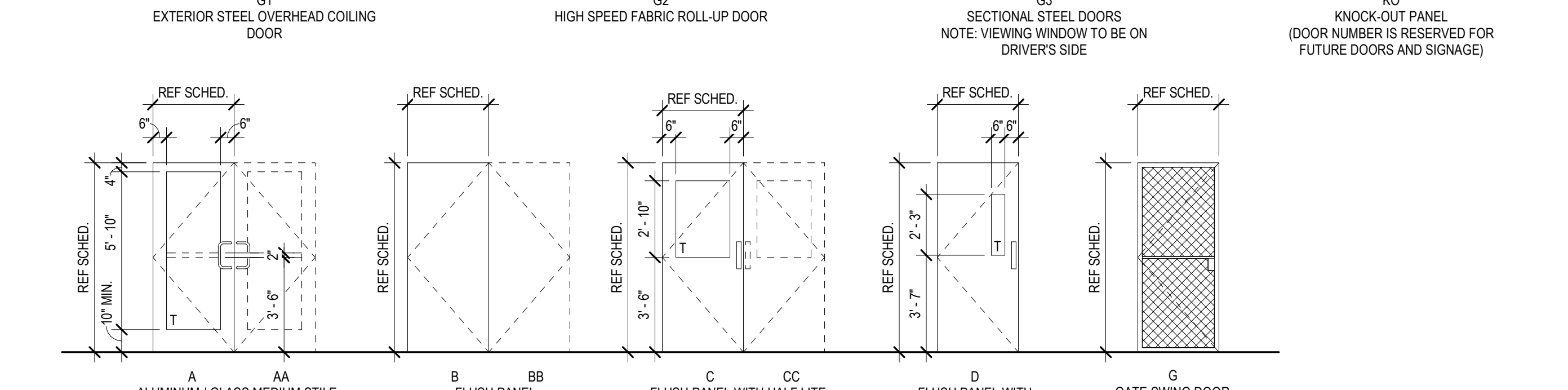
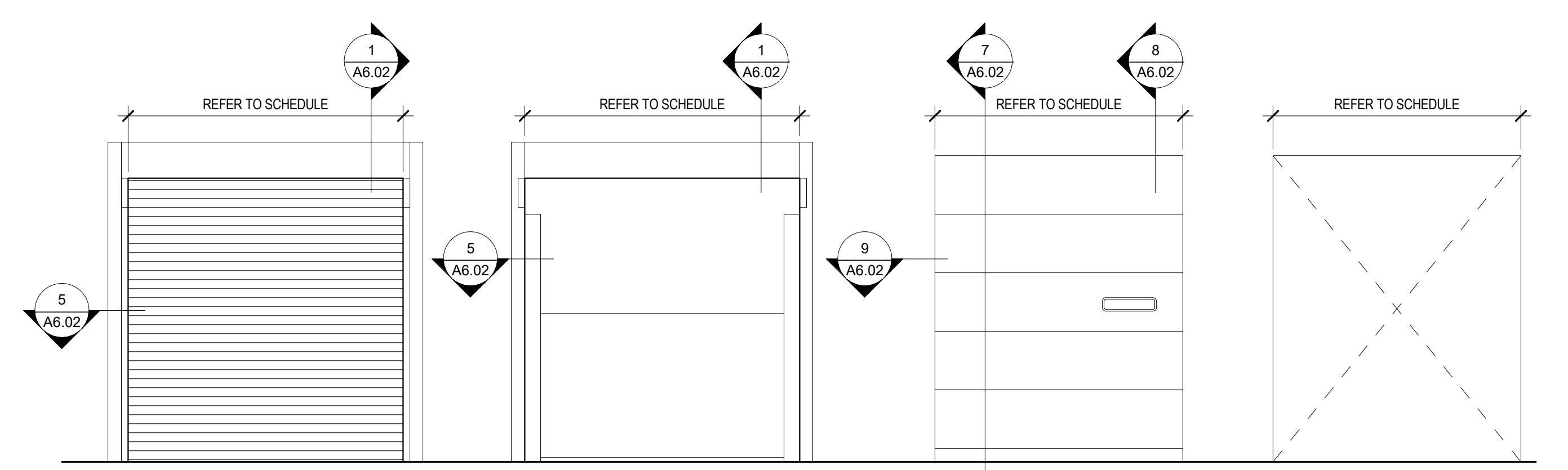
DOOR NO.	DOOR USE	DOOR			FRAME		DETAILS			FIRE RATING	HARDWARE SET	COMMENTS				
		WIDTH	HEIGHT	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH				HEAD	JAMB	SILL	
E001	ASSOCIATE ENTRY	6'-0"	7'-0"	AA	SF	AND./GLASS	F5	AL	AND.	11/A6.01	14/A6.01	1/A6.01 (3M)	-	-	S-02E	NOTES: L, M, N, D
E002	BREAKROOM EXIT	3'-0"	7'-0"	B	HM	EPT-2	F1	HM	EPT-2	10/A6.01	13/A6.01	1/A6.01	-	-	S-04	NOTES: E, H, N
E003	WAREHOUSE	3'-0"	7'-0"	B	HM	EPT-2	F1	HM	EPT-2	10/A6.01	13/A6.01	1/A6.01	-	-	S-05D	NOTES: E, H, N
S004	WAREHOUSE - DSP	3'-0"	7'-0"	B	HM	EPT-2	F1	HM	EPT-2	10/A6.01	13/A6.01	1/A6.01	-	-	S-05D	DSP DOOR. NOTE: E, N, D
S005	WAREHOUSE - TRASH	3'-0"	7'-0"	B	HM	EPT-2	F1	HM	EPT-2	10/A6.01	13/A6.01	1/A6.01	-	-	S-09C	TRASH DOOR. NOTE: E, N, D
W006	WAREHOUSE - TOR	3'-0"	7'-0"	B	HM	EPT-2	F1	HM	EPT-2	10/A6.01	13/A6.01	1/A6.01	-	-	S-05E	TOR DOOR. NOTES: E, N, D
N007	WAREHOUSE	3'-0"	7'-0"	B	HM	EPT-2	F1	HM	EPT-2	10/A6.01	13/A6.01	1/A6.01	-	-	S-04	NOTES: E, H, N
N008	WAREHOUSE	3'-0"	7'-0"	B	HM	EPT-2	F1	HM	EPT-2	10/A6.01	13/A6.01	1/A6.01	-	-	S-04	NOTES: E, H, N
E009	FIRE RISER	6'-0"	7'-0"	BB	HM	EPT-2	F2	HM	EPT-2	10/A6.01	13/A6.01	1/A6.01	-	-	S-07	NOTES: K
E010	ELECTRICAL ROOM	3'-0"	7'-0"	B	HM	EPT-2	F1	HM	EPT-2	10/A6.01	13/A6.01	1/A6.01	-	-	S-04D	NOTES: E, N

OVERHEAD DOOR AND FRAME SCHEDULE

DOOR NO.	DOOR USE	DOOR			FRAME		DETAILS			FIRE RATING	HARDWARE SET	COMMENTS				
		WIDTH	HEIGHT	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH				HEAD	JAMB	SILL	
101	WAREHOUSE (DOCK)	9'-0"	10'-0"	G3	STL	FF	-	STL	-	8/A6.02	9/A6.02	-	-	-	-	NOTE: I
102	WAREHOUSE (DOCK)	9'-0"	10'-0"	G3	STL	FF	-	STL	-	8/A6.02	9/A6.02	-	-	-	-	NOTE: I
103	WAREHOUSE (KNOCK-OUT)	9'-0"	10'-0"	KO	-	-	-	-	-	-	-	-	-	-	-	-
104	WAREHOUSE (KNOCK-OUT)	9'-0"	10'-0"	KO	-	-	-	-	-	-	-	-	-	-	-	-
105	WAREHOUSE (KNOCK-OUT)	9'-0"	10'-0"	KO	-	-	-	-	-	-	-	-	-	-	-	-
106	WAREHOUSE (DOCK)	9'-0"	10'-0"	G3	STL	FF	-	STL	-	8/A6.02	9/A6.02	-	-	-	-	NOTE: I
107	WAREHOUSE (DOCK)	9'-0"	10'-0"	G3	STL	FF	-	STL	-	8/A6.02	9/A6.02	-	-	-	-	NOTE: I
108	WAREHOUSE (DOCK)	9'-0"	10'-0"	G3	STL	FF	-	STL	-	8/A6.02	9/A6.02	-	-	-	-	NOTE: I
109	WAREHOUSE (DOCK)	9'-0"	10'-0"	G3	STL	FF	-	STL	-	8/A6.02	9/A6.02	-	-	-	-	NOTE: I
110	WAREHOUSE (DOCK)	9'-0"	10'-0"	G3	STL	FF	-	STL	-	8/A6.02	9/A6.02	-	-	-	-	NOTE: I
111	WAREHOUSE (DOCK)	9'-0"	10'-0"	G3	STL	FF	-	STL	-	8/A6.02	9/A6.02	-	-	-	-	NOTE: I
112	WAREHOUSE (KNOCK-OUT)	9'-0"	10'-0"	KO	-	-	-	-	-	-	-	-	-	-	-	-
201	WAREHOUSE (LOAD-OUT-C)	10'-0"	10'-0"	G1	STL	FF	-	STL	-	1/A6.02	5/A6.02	10/A6.02	-	-	-	NOTE: I, J
201A	WAREHOUSE (LOAD-OUT-HS)	10'-0"	10'-0"	G2	FA	FF	-	STL	-	1/A6.02	5/A6.02	10/A6.02	-	-	-	NOTE: I, J
202	WAREHOUSE (LOAD-OUT-C)	10'-0"	10'-0"	G1	STL	FF	-	STL	-	1/A6.02	5/A6.02	10/A6.02	-	-	-	NOTE: I, J
202A	WAREHOUSE (LOAD-OUT-HS)	10'-0"	10'-0"	G2	FA	FF	-	STL	-	1/A6.02	5/A6.02	10/A6.02	-	-	-	NOTE: I, J

INTERIOR DOOR AND FRAME SCHEDULE

DOOR NO.	DOOR USE	DOOR			FRAME		DETAILS			FIRE RATING	HARDWARE SET	COMMENTS					
		WIDTH	HEIGHT	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH				HEAD	JAMB	SILL		
101A	ASSOCIATE ENTRY	6'-0"	7'-0"	CC	HM	PT-7	F2	HM	PT-7	4/A6.01	6/A6.01	-	-	-	-	T1-01D	NOTES: C, L, N, D
101B	TRAINING & MULTI-PURPOSE	3'-0"	7'-0"	D	HM	PT-7	F1	HM	PT-7	4/A6.01	6/A6.01	-	-	-	-	T1-02B	NOTES: C, D, N
102	TRAINING & MULTI-PURPOSE	3'-0"	7'-0"	D	HM	PT-7	F1	HM	PT-7	4/A6.01	6/A6.01	-	-	-	-	T1-02B	NOTES: C, D, N
103	BREAKROOM	6'-0"	7'-0"	CC	HM	PT-7	F4	HM	PT-7	4/A6.01	6/A6.01	-	-	-	-	T1-14	NOTES: C
106	LACTATION ROOM	3'-0"	7'-0"	B	HM	PT-7	F1	HM	PT-7	4/A6.01	6/A6.01	-	-	-	-	T1-16A	NOTE: C
107	CONTEMPLATION ROOM	3'-0"	7'-0"	D	HM	PT-7	F1	HM	PT-7	5/A6.01	7/A6.01	-	-	-	-	T1-18	NOTE: F, A
108	SINGLE USER RESTROOM	3'-0"	7'-0"	B	HM	PT-7	F1	HM	PT-7	4/A6.01	6/A6.01	-	-	-	-	T1-16	NOTE: A
109	SINGLE USER RESTROOM	3'-0"	7'-0"	B	HM	PT-7	F1	HM	PT-7	4/A6.01	6/A6.01	-	-	-	-	T1-16	NOTE: A
110	SINGLE USER RESTROOM	3'-0"	7'-0"	B	HM	PT-7	F1	HM	PT-7	4/A6.01	6/A6.01	-	-	-	-	T1-16	NOTE: A
111	SINGLE USER RESTROOM	3'-0"	7'-0"	B	HM	PT-7	F1	HM	PT-7	4/A6.01	6/A6.01	-	-	-	-	T1-16	NOTE: A
112	MANAGER'S OFFICE	3'-0"	7'-0"	D	HM	PT-7	F1	HM	PT-7	4/A6.01	6/A6.01	-	-	-	-	T1-07	NOTE: C
115	DEMARC CAGE	4'-0"	8'-0"	G	CL	-	CL	-	-	-	-	-	-	-	-	T1-26A	BY GC



ARCHITECT OF RECORD
 Jacob S. Bush
 175 Morrison West Ave., Suite 400
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 Phone: 949.665.9600 Fax: 949.209.4826

20115925 REGISTERED ARCHITECT
 J. S. BUSH
 STATE OF WASHINGTON
 4.25.2025 Exp. 4.10.2026

AMBROSE PROPERTY GROUP
PROJECT PENINSULA
 W. EDGEWOOD DR. & S. CRITCHFIELD RD., PORT ANGELES, WA 98503

Revisions / Submissions		
ID	Description	Date
1	PERMIT SET	04.25.2025

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 Project number: 763838-02
 Scale: AS NOTED
 Drawn By: SW / CB
 Checked By: DZ
 Date: 04.25.2025
 Issue: PERMIT SET

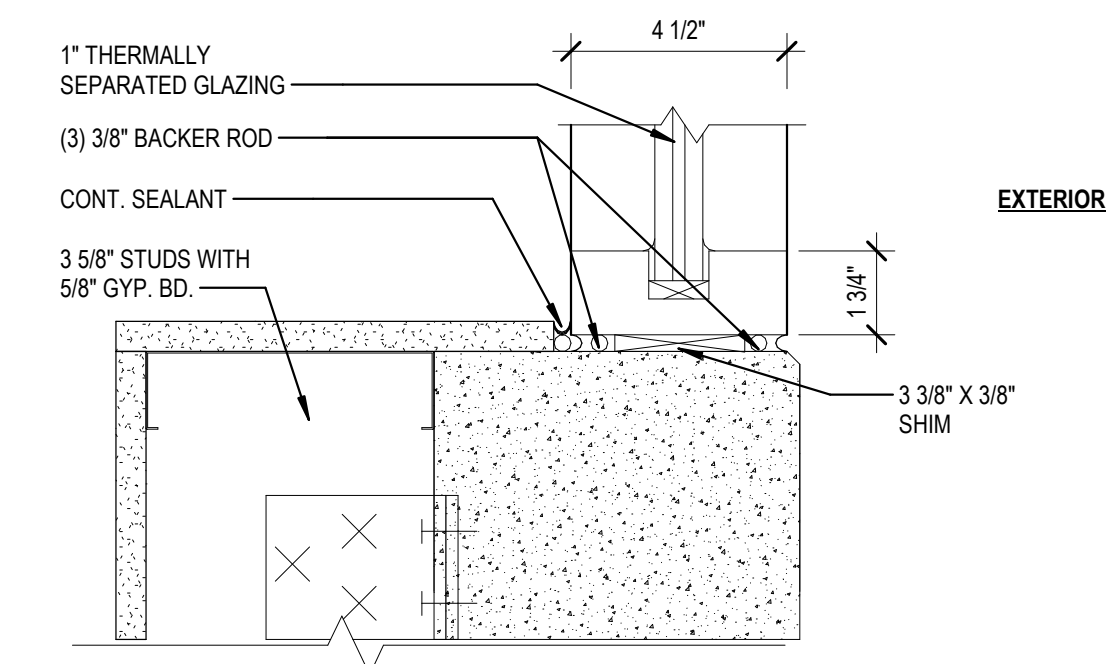
Sheet Title:
DOOR TYPES, SCHEDULES, AND DETAILS

A6.01

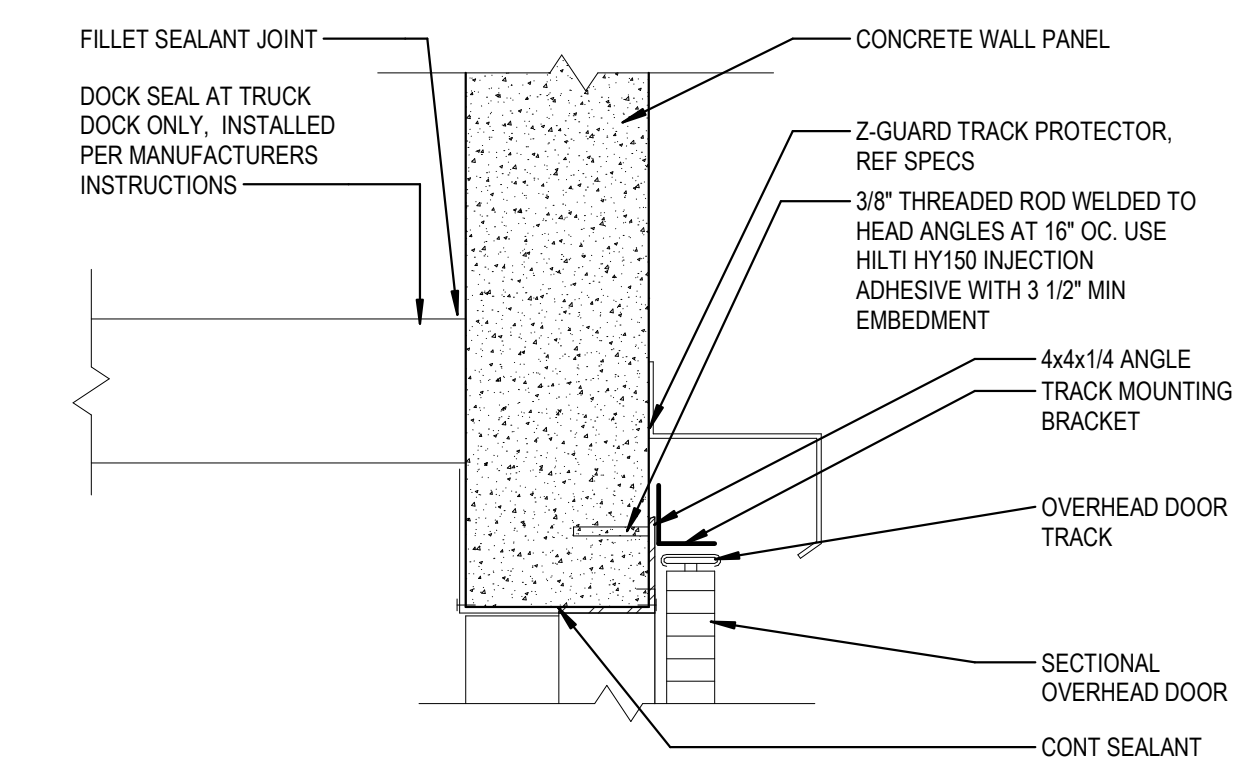
ID	Description	Date
PERMIT SET		04.25.2025

Project number:	763838-02
Scale:	AS NOTED
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Date:	04.25.2025
Issue:	PERMIT SET

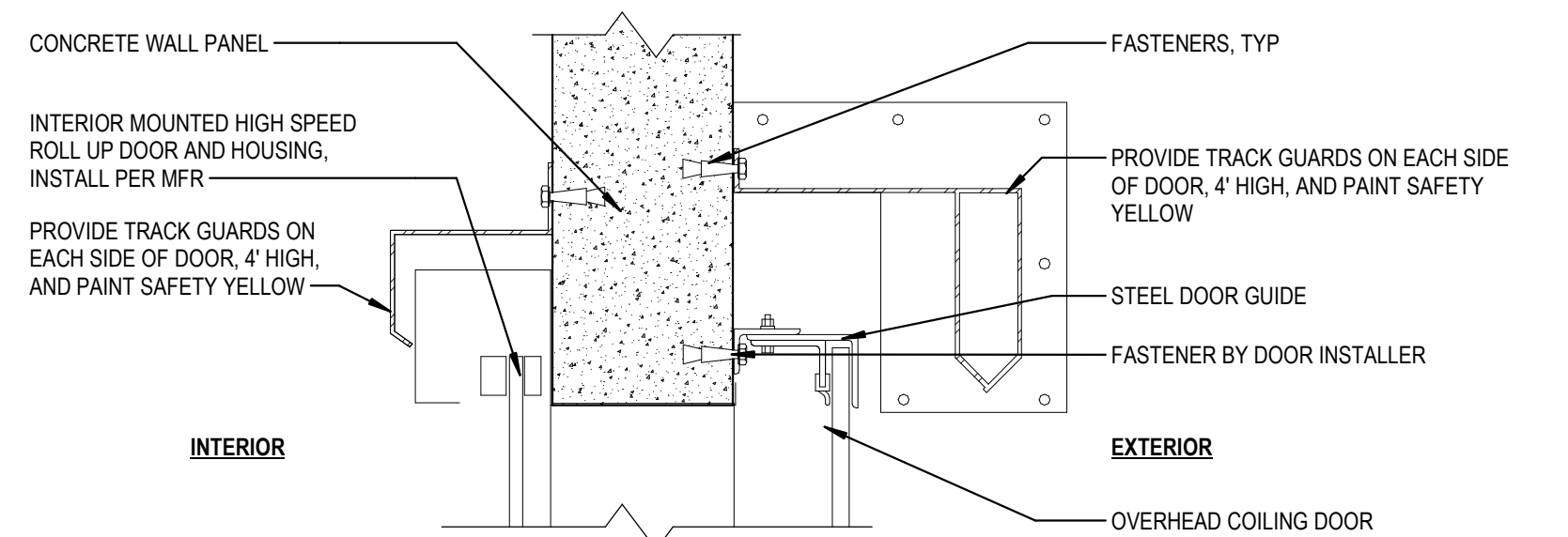
Sheet Title:
DOOR DETAILS



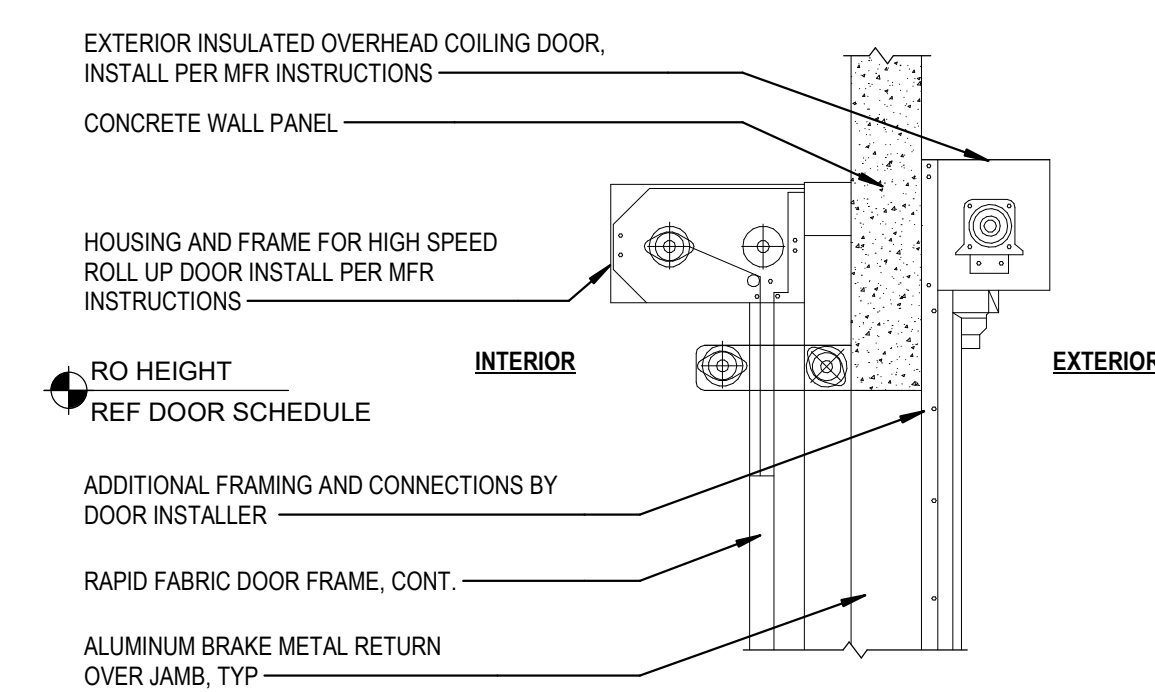
11 SILL AT EXTERIOR STOREFRONT
A6.02 Scale: 3" = 1'-0"



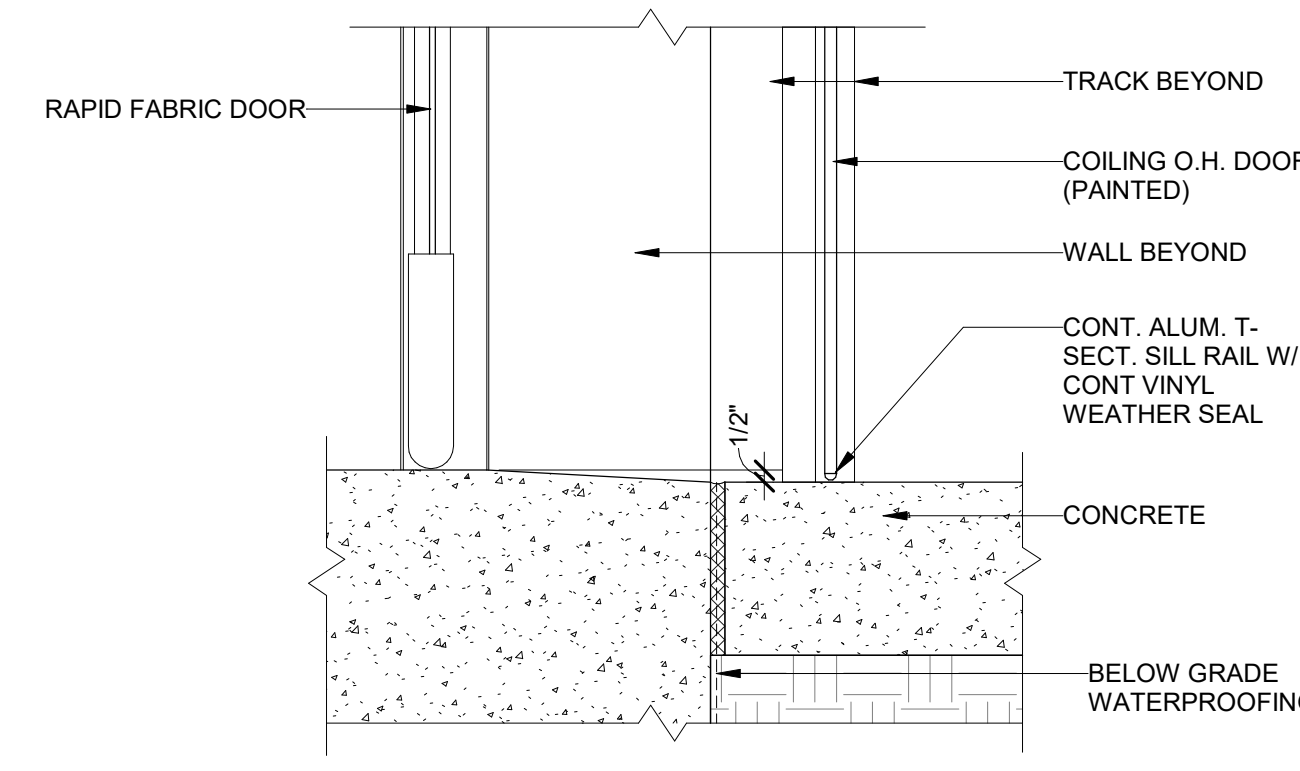
9 G3 DOOR JAMB
A6.02 Scale: 1 1/2" = 1'-0"



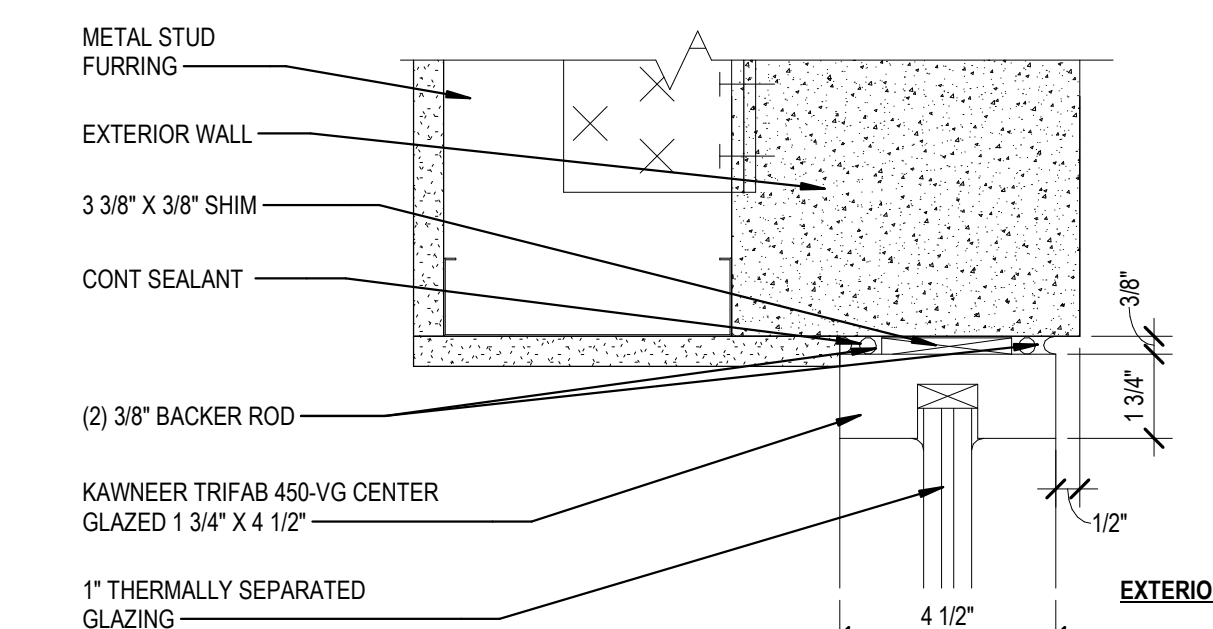
5 G1-G2 DOOR - JAMB
A6.02 Scale: 1 1/2" = 1'-0"



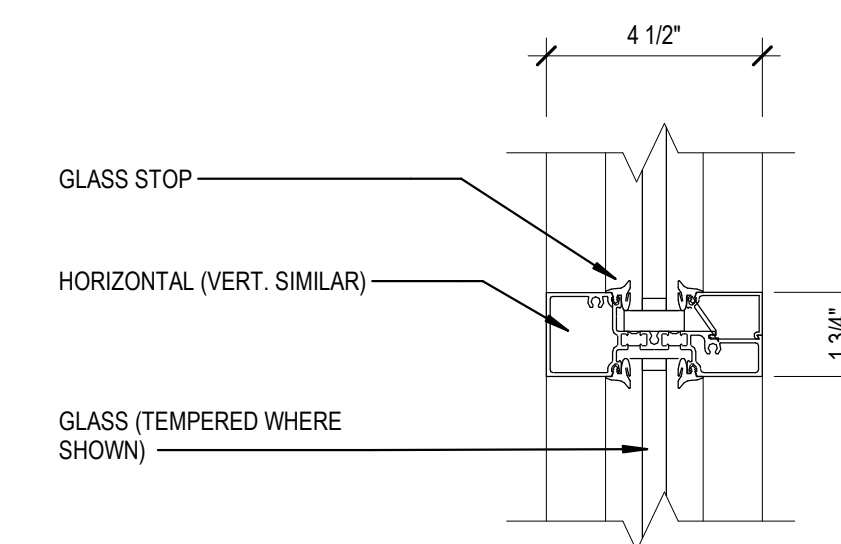
1 G1-G2 DOOR - HEAD
A6.02 Scale: 1/2" = 1'-0"



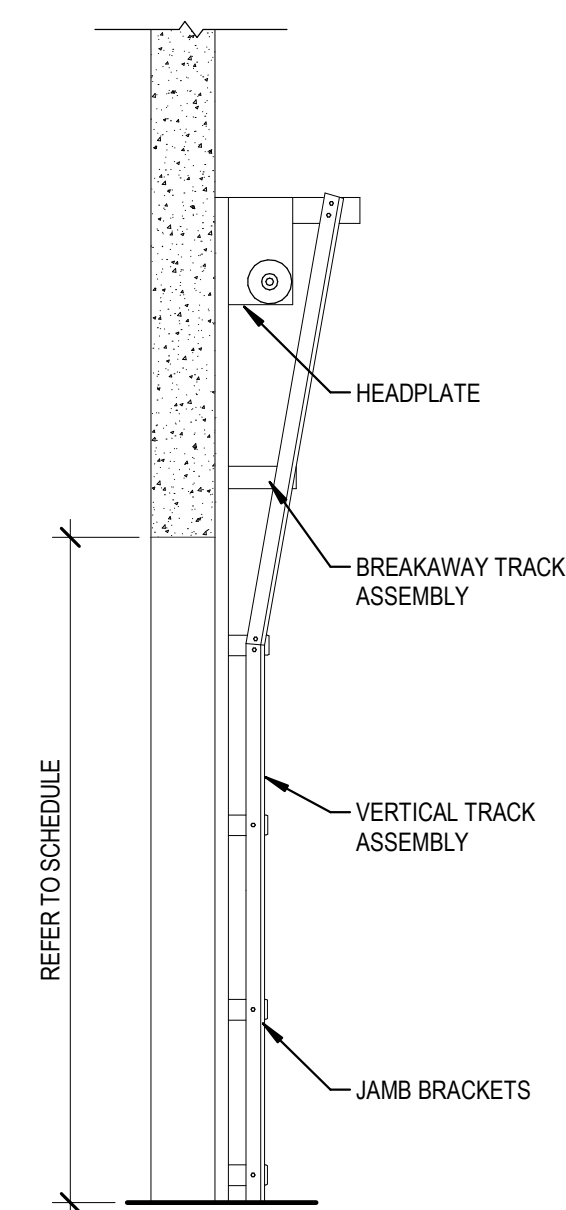
10 G1-G2 DOOR - SILL
A6.02 Scale: 1 1/2" = 1'-0"



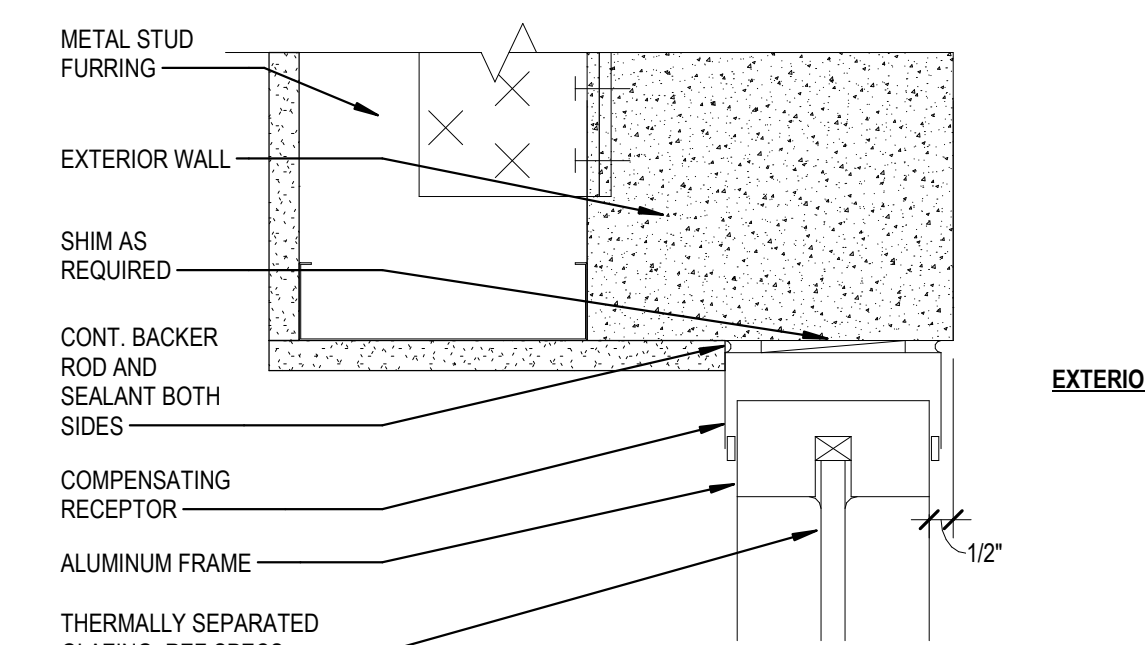
6 JAMB AT EXTERIOR STOREFRONT
A6.02 Scale: 3" = 1'-0"



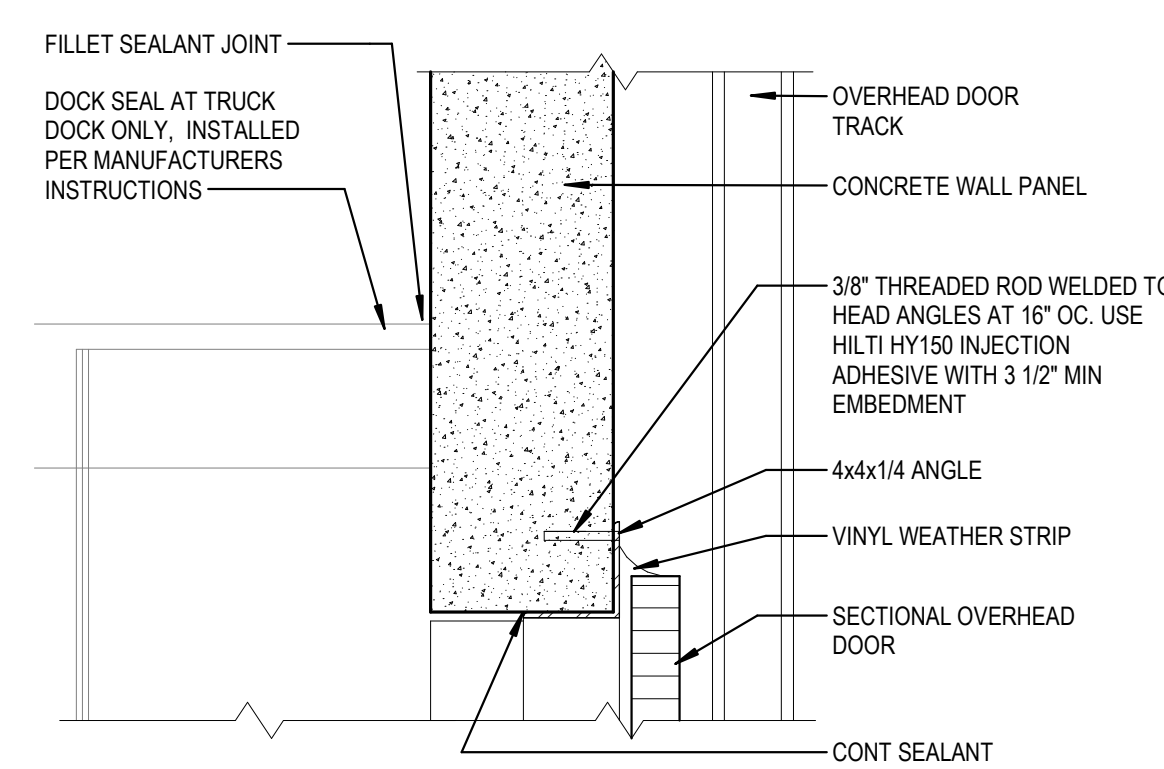
2 STOREFRONT MULLION
A6.02 Scale: 3" = 1'-0"



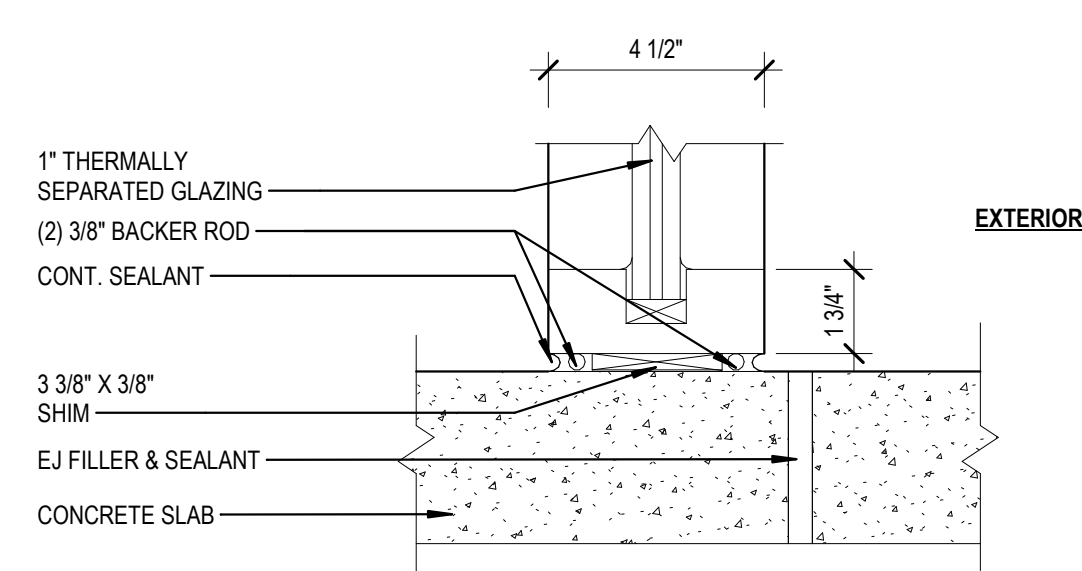
7 G3 DOOR - FULL VERTICAL TRACK
A6.02 Scale: 1/2" = 1'-0"



3 STOREFRONT HEAD EXTERIOR
A6.02 Scale: 3" = 1'-0"



8 G3 DOOR HEAD
A6.02 Scale: 1 1/2" = 1'-0"



4 SILL AT EXTERIOR STOREFRONT
A6.02 Scale: 3" = 1'-0"

ID	Description	Date
PERMIT SET		04.25.2025

Project number:	763838-02
Scale:	AS NOTED
Drawn By:	SW / CB
Checked By:	DZ
Date:	04.25.2025
Issue:	PERMIT SET

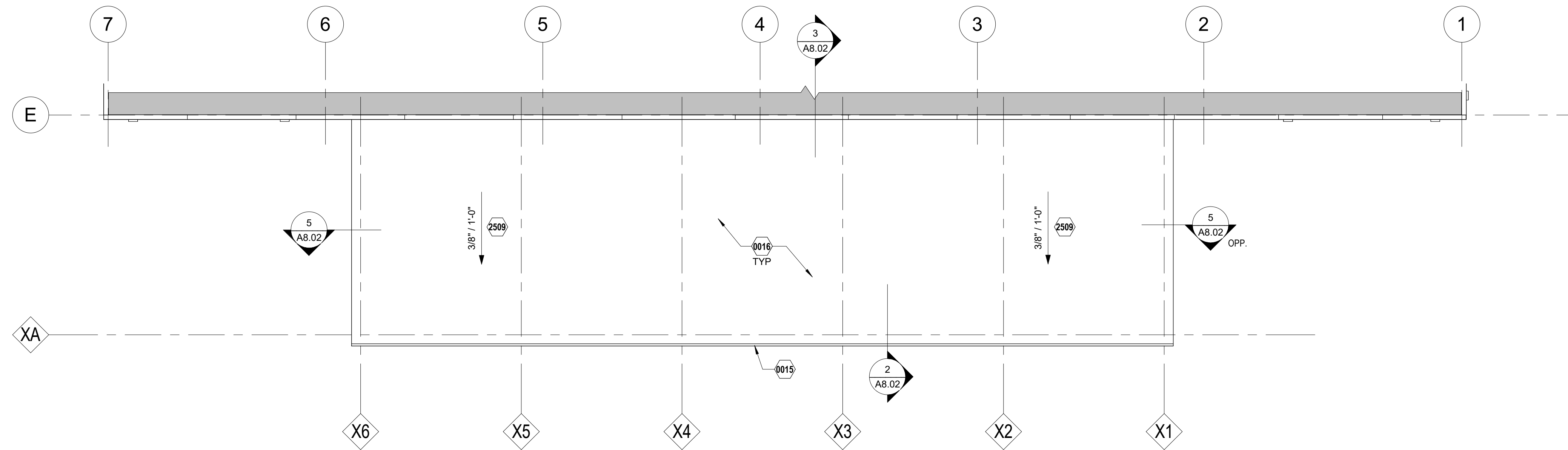
Sheet Title:
**LAUNCH PAD
CANOPY PLANS**

SHEET NOTES

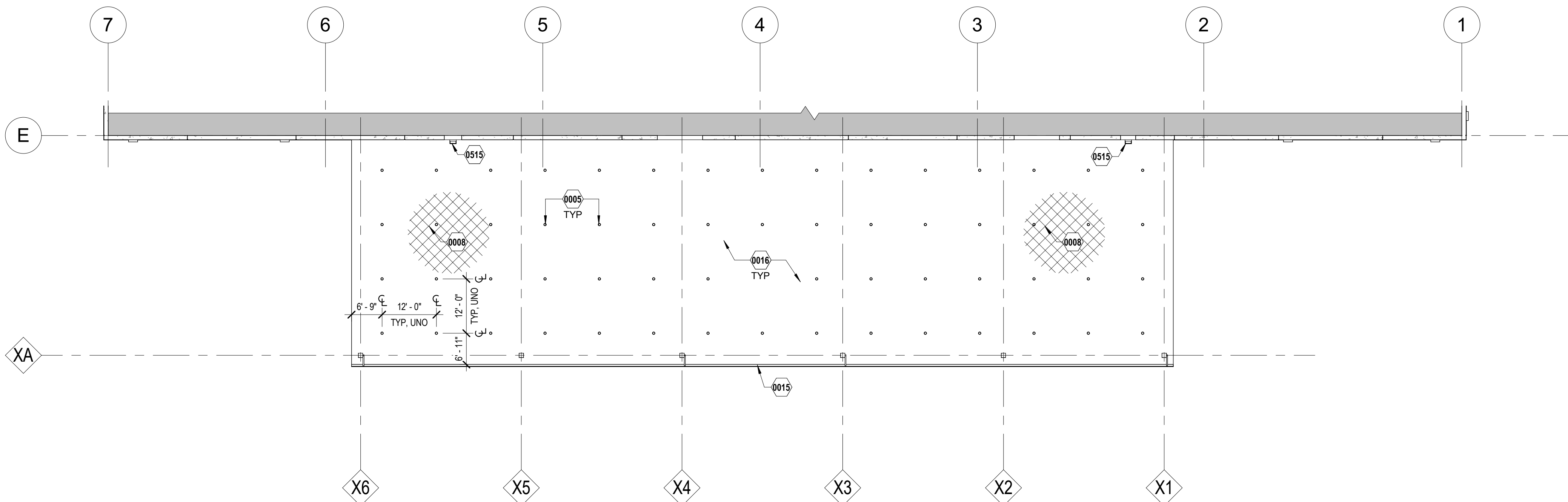
- REFER TO STRUCTURAL PLANS FOR ADDITIONAL INFORMATION.
- REFER TO MEP DRAWINGS FOR ADDITIONAL INFORMATION RELATED TO LIGHTING AND EQUIPMENT.
- ALL DOWNSPOUTS TO BE CONNECTED TO UNDERGROUND STORM SEWERS. REFER TO CIVIL DRAWINGS.
- REFER TO ELEVATIONS FOR CANOPY FINISHES.
- GC TO PROVIDE BIRD NETTING ON THE UNDERSIDE OF THE CANOPY. REF SPECS

KEYNOTES

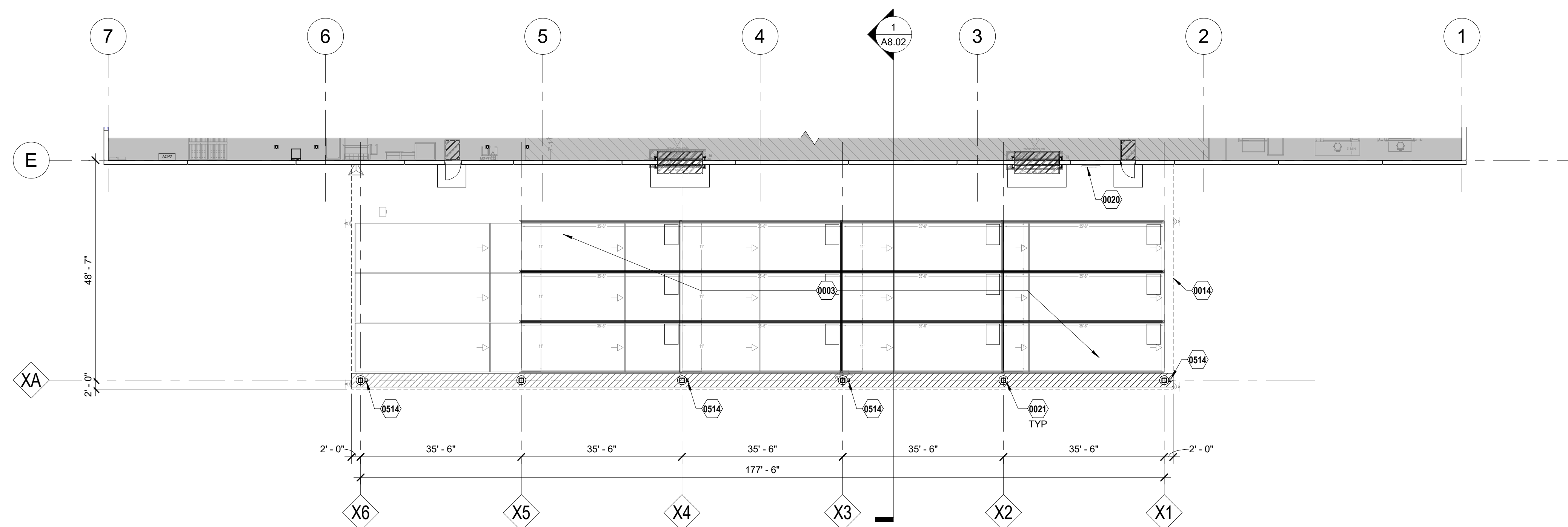
- 0003 VEHICLE LAUNCH PAD.
- 0005 CANOPY LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS.
- 0008 CONTINUOUS BIRD NETTING ON UNDERSIDE OF CANOPY. DO NOT BLOCK LIGHTS WITH NETTING. PROVIDE ZIPPERS AT ALL MAINTENANCE ACCESS POINTS. REFERENCE SPECS.
- 0014 EXTENTS OF EXTERIOR VAN LOADING CANOPY (ABOVE).
- 0015 CANOPY GUTTER. PREFINISHED. COLOR TO MATCH EPT-1. COORDINATE SIZE WITH CANOPY MANUFACTURER. REFERENCE DETAIL 2A8.02 AND 6A8.02.
- 0016 TPO ON RECOVERY BOARD OVER METAL DECK OVER STRUCTURAL FRAMING. REF CANOPY FINISH NOTES ON SHEET A2.01. REF STRUCTURAL DRAWINGS FOR MORE DETAIL.
- 0020 COUNT-DOWN CLOCK. TOP OF CLOCK TO BE MOUNTED 16'-0" AFF. REFER TO ELECTRICAL.
- 0021 POURED-IN-PLACE CONCRETE COLUMN SURROUND. PAINT SAFETY YELLOW. COORDINATE WITH STRUCTURAL DRAWINGS.
- 0514 BENT METAL PLATE DOWNSPOUT PROTECTOR WITH OPENING FOR CLEANOUT - COORDINATE WITH DOWNSPOUT INSTALLATION. SECURELY FASTEN PLATE TO COLUMN BASE AND SLAB. PAINT CAUTION YELLOW. REFER TO DETAIL 5A5.03 & 6A5.03.
- 0515 EXTERIOR EGRESS LIGHT ABOVE EXTERIOR DOOR. REFER TO MEP.
- 2509 SLOPE DIRECTION TYP.



3 LAUNCH PAD CANOPY ROOF PLAN
A8.01 Scale: 1/16" = 1'-0"



2 LAUNCH PAD CANOPY REFLECTED CEILING PLAN
A8.01 Scale: 1/16" = 1'-0"



1 LAUNCH PAD CANOPY PLAN
A8.01 Scale: 1/16" = 1'-0"

ID	Description	Date
1	PERMIT SET	04.25.2025

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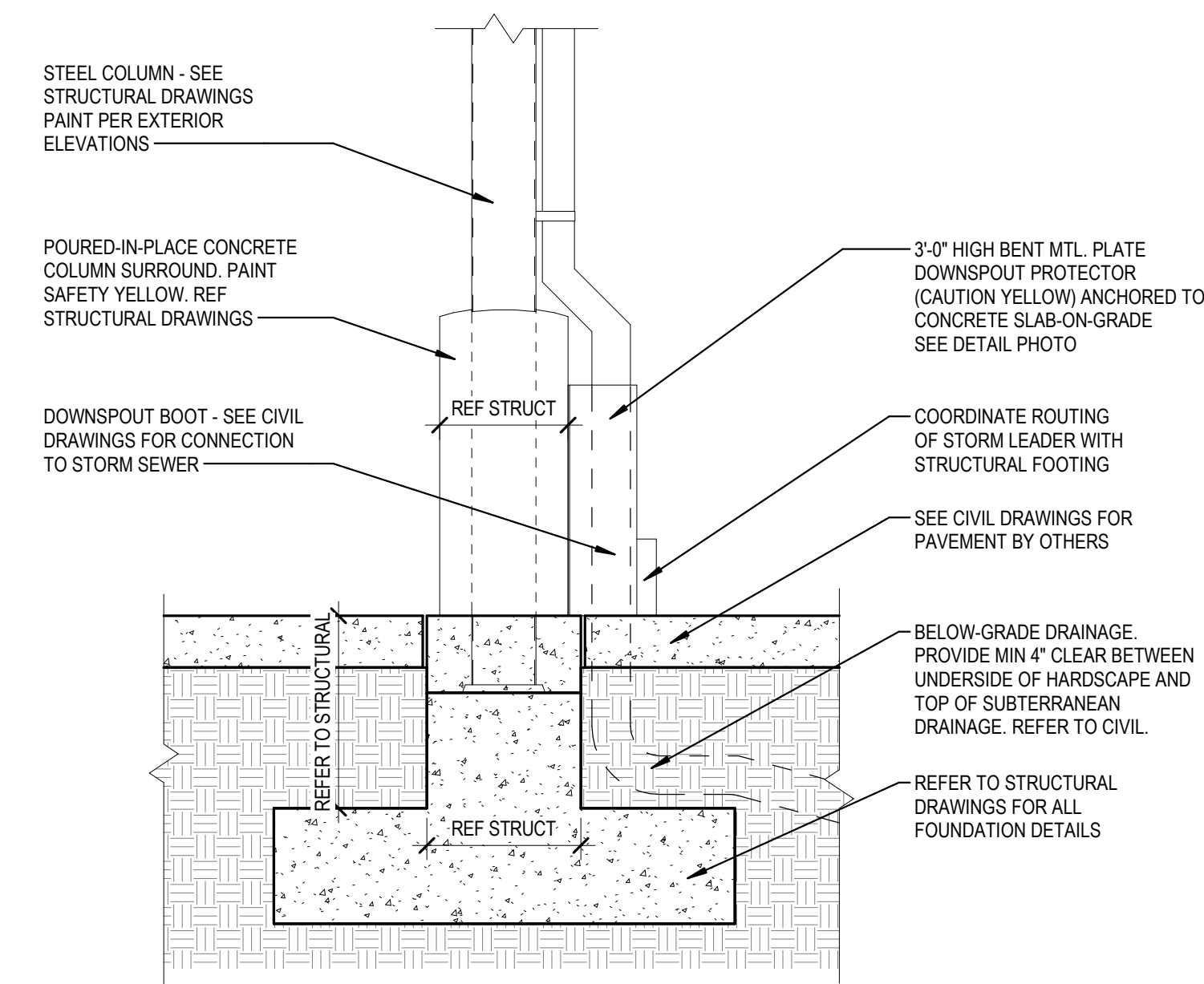
Project number:	763838-02
Scale:	AS NOTED
Drawn By:	SW / CB
Checked By:	DZ
Date:	04.25.2025
Issue:	PERMIT SET

Sheet Title:
**LAUNCH PAD
CANOPY SECTION &
DETAILS**

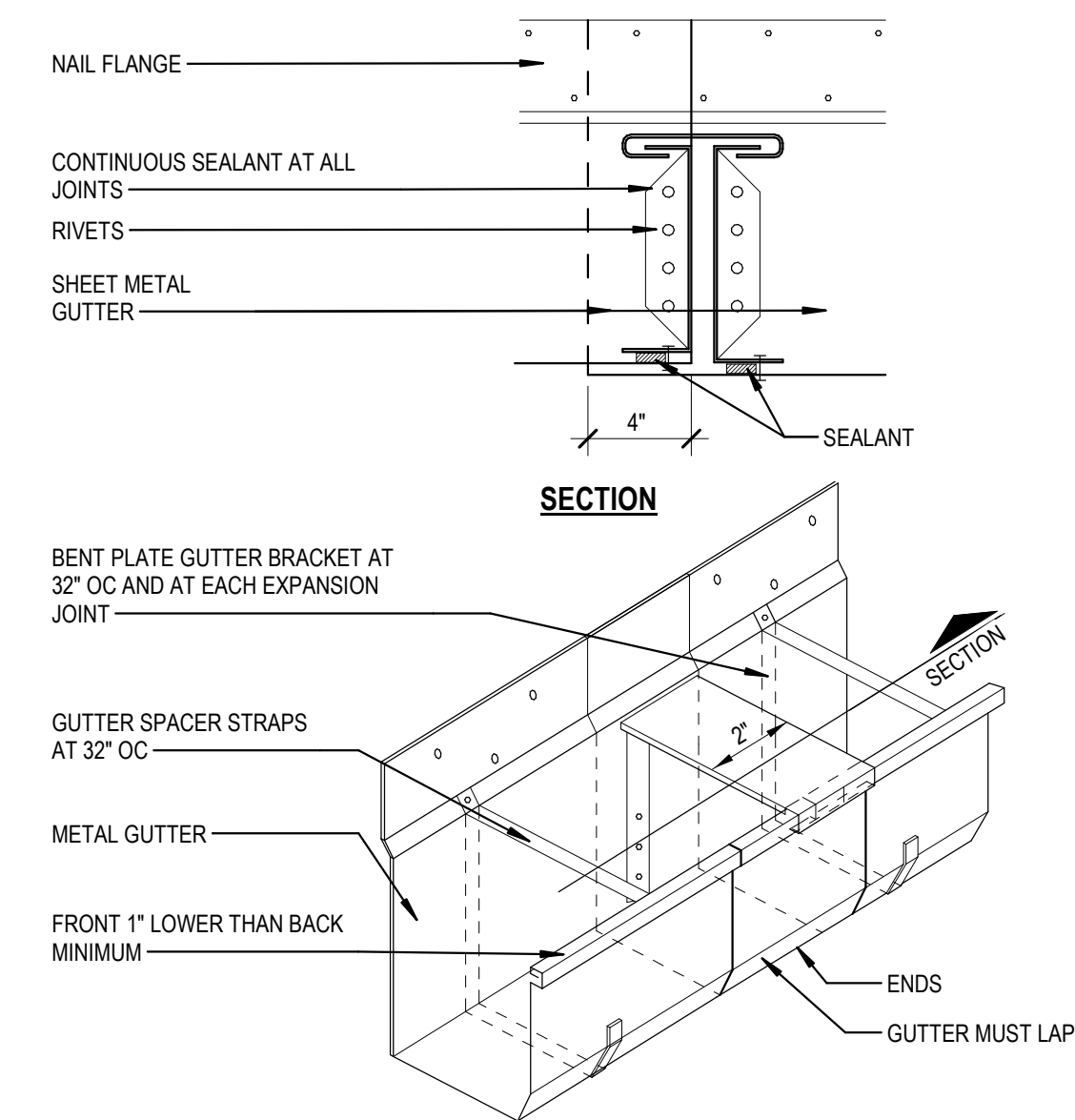


NOTE:
THIS PHOTO ILLUSTRATES PROPER
INSTALLATION/ROUTING OF CANOPY
DOWNSPOUTS, DOWNSPOUT PROTECTION AND
CLEANOUT LOCATION. (COLUMN BASE AND
GUARD SHALL BE PAINTED ALL CAUTION YELLOW)

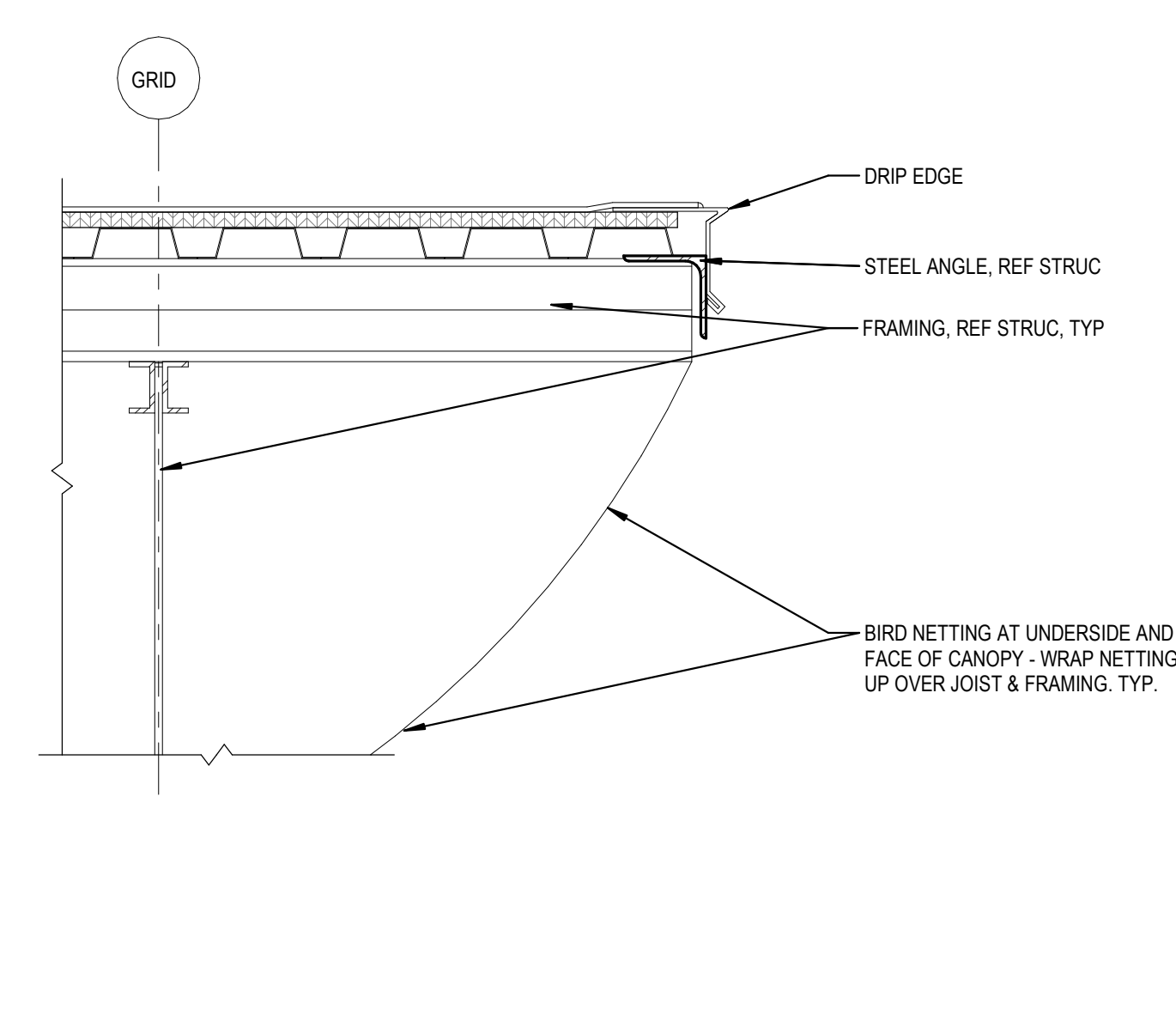
4 TYPICAL CANOPY COLUMN - REPRESENTATIVE PHOTO
A8.02 Scale: 12" = 1'-0"



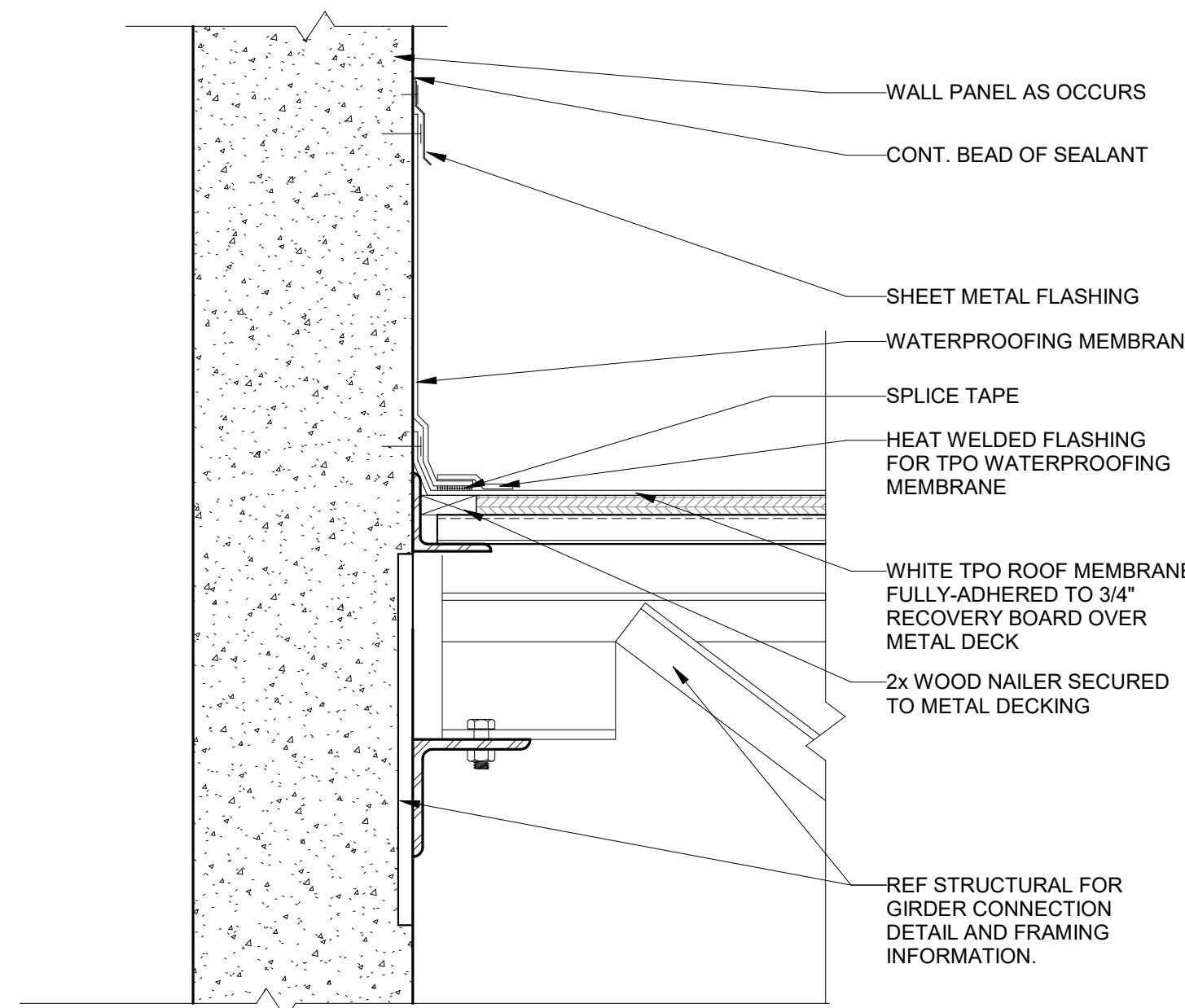
7 DOWNSPOUT DETAIL - SECTION
A8.02 Scale: 1/2" = 1'-0"



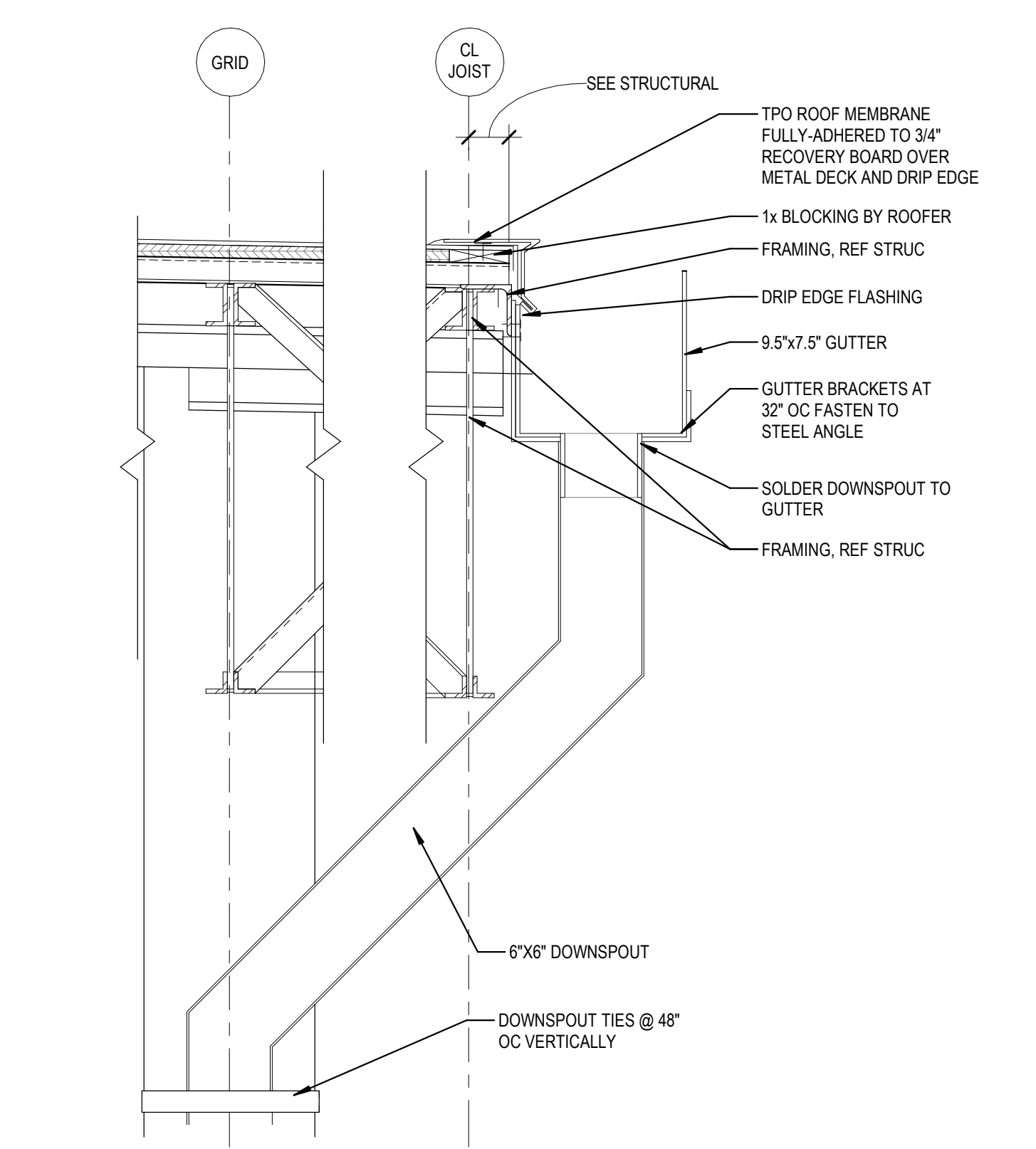
6 GUTTER EXPANSION JOINT
A8.02 Scale: 3" = 1'-0"



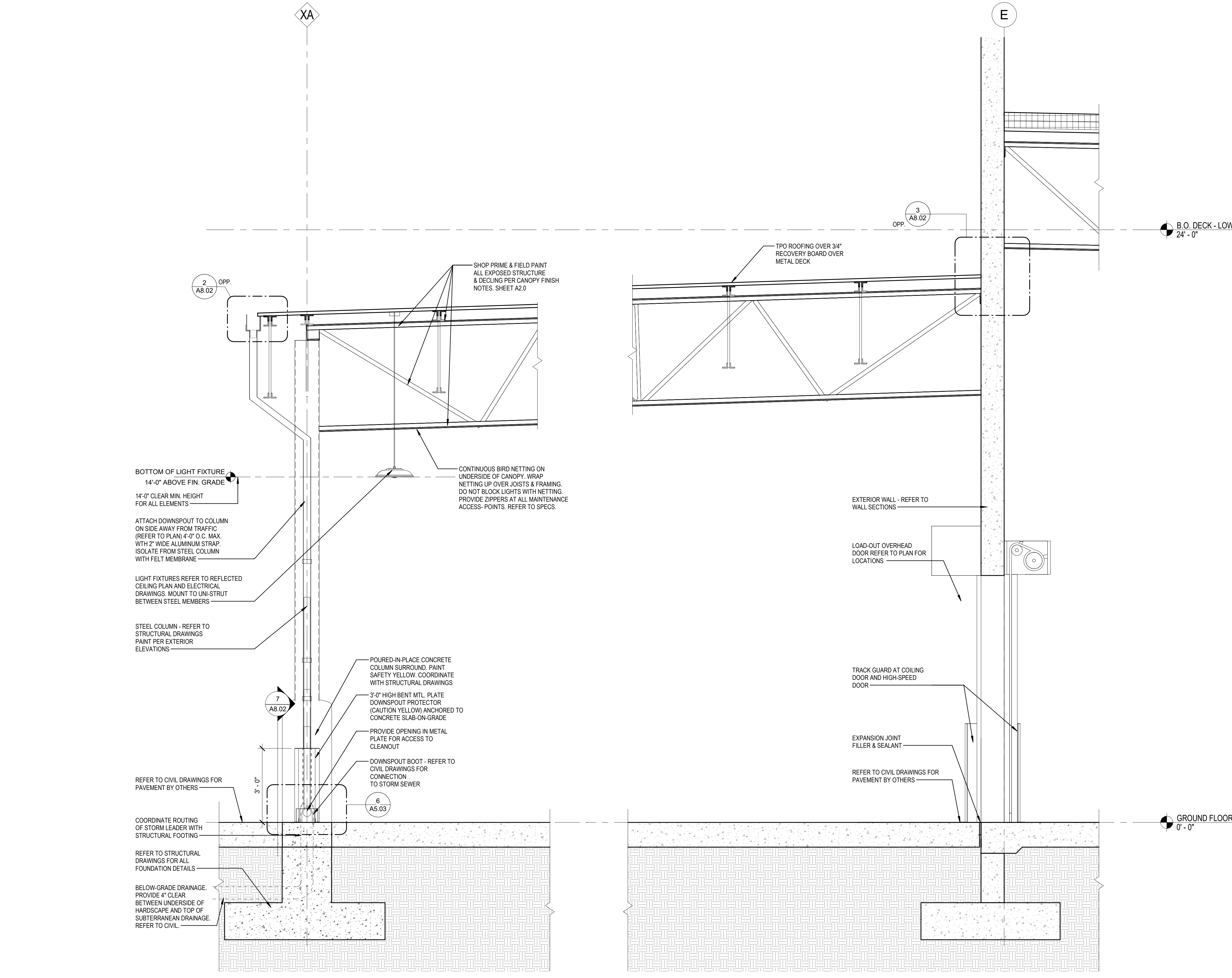
5 CANOPY RAKE - STEEL BEAM
A8.02 Scale: 1 1/2" = 1'-0"



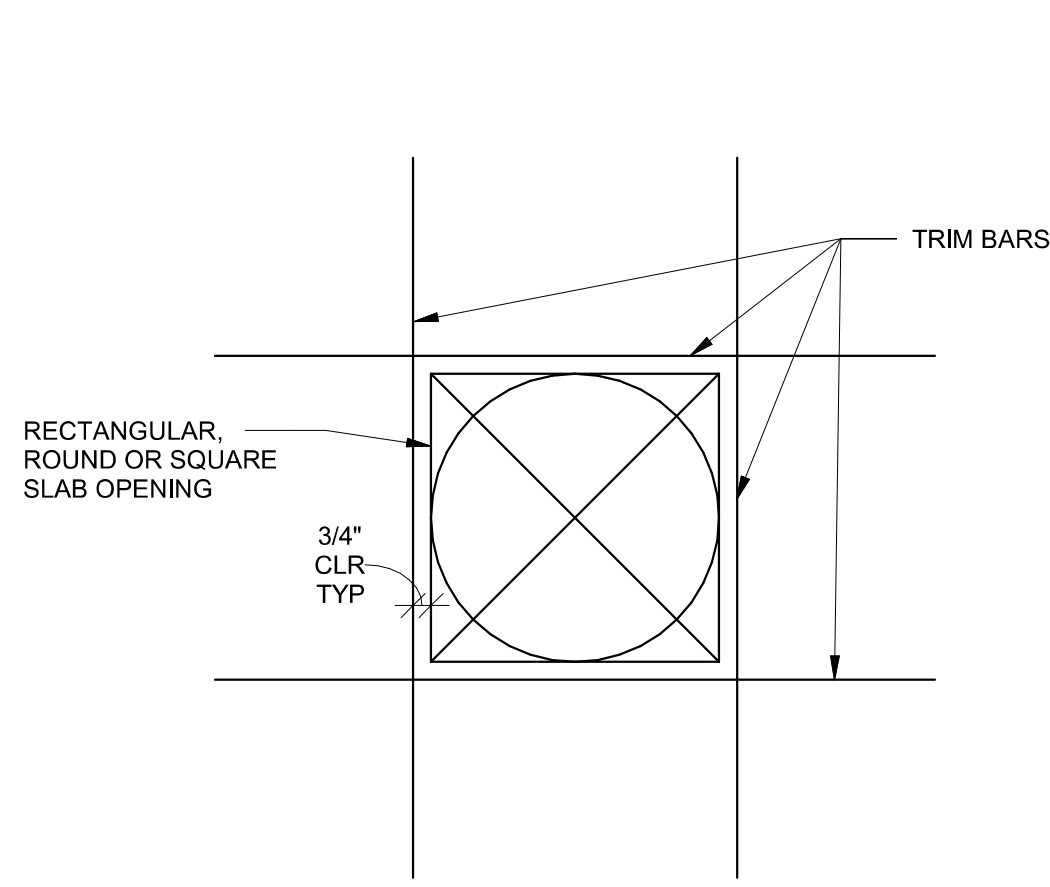
3 CANOPY HIGH EAVE - CONCRETE PANEL
A8.02 Scale: 1 1/2" = 1'-0"



2 CANOPY LOW EAVE
A8.02 Scale: 1 1/2" = 1'-0"

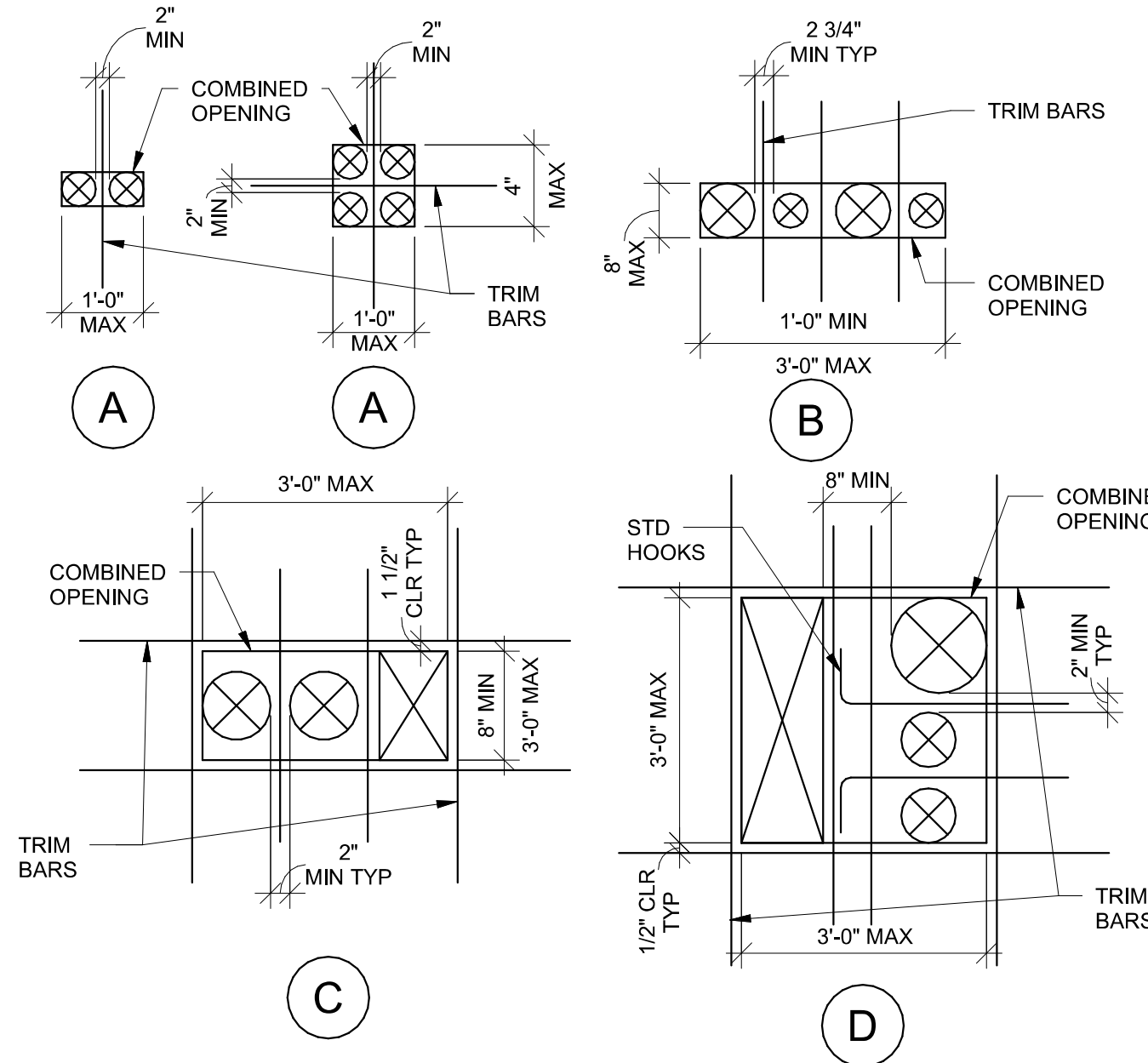


1 CANOPY SECTION
A8.02 Scale: 1/2" = 1'-0"



NOTES:
 1. THIS DIAGRAM IS FOR ISOLATED SLAB OPENINGS WHOSE LARGER DIMENSION IS BETWEEN 1'-0" AND 3'-0". NO TRIM BARS ARE REQUIRED FOR ISOLATED SLAB OPENINGS SMALLER THAN 1'-0". RE: PLANS FOR OPENINGS LARGER THAN 3'-0".
 2. PROVIDE (1) #5 TRIM BAR TOP AND BOTTOM ON EACH SIDE OF OPENING. BARS SHALL EXTEND 1'-0" PAST EDGES OF OPENING.
 3. DISPLACE SLAB PRINCIPAL REINFORCEMENT TO EACH SIDE OF OPENINGS. DO NOT CUT SLAB PRINCIPAL REINFORCEMENT.

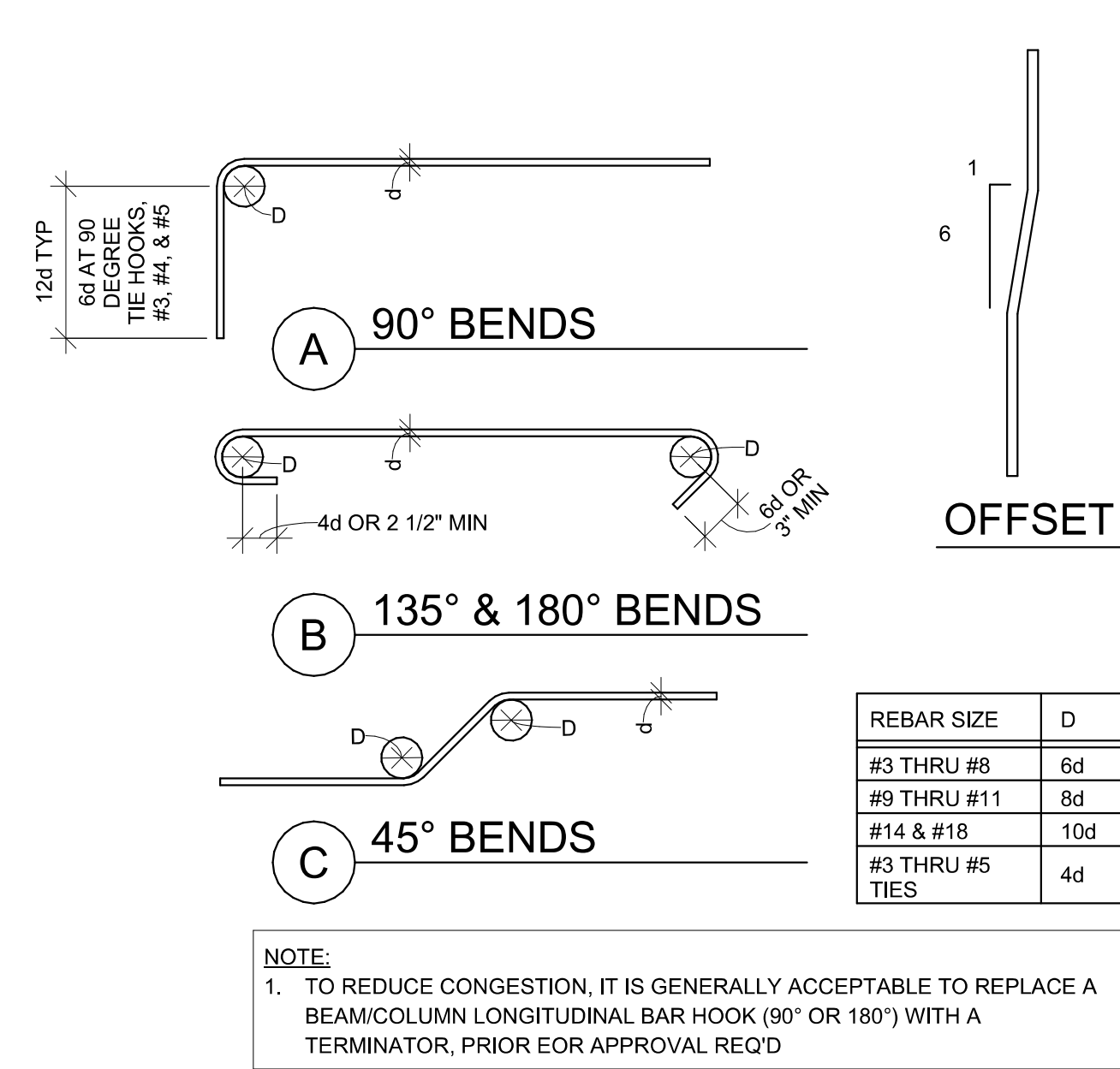
1 TRIM BARS FOR ISOLATED SLAB OPENINGS
 S0.10 1 1/2" = 1'-0"



2 TRIM BARS FOR MULTIPLE SLAB OPENINGS
 S0.10 1 1/2" = 1'-0"

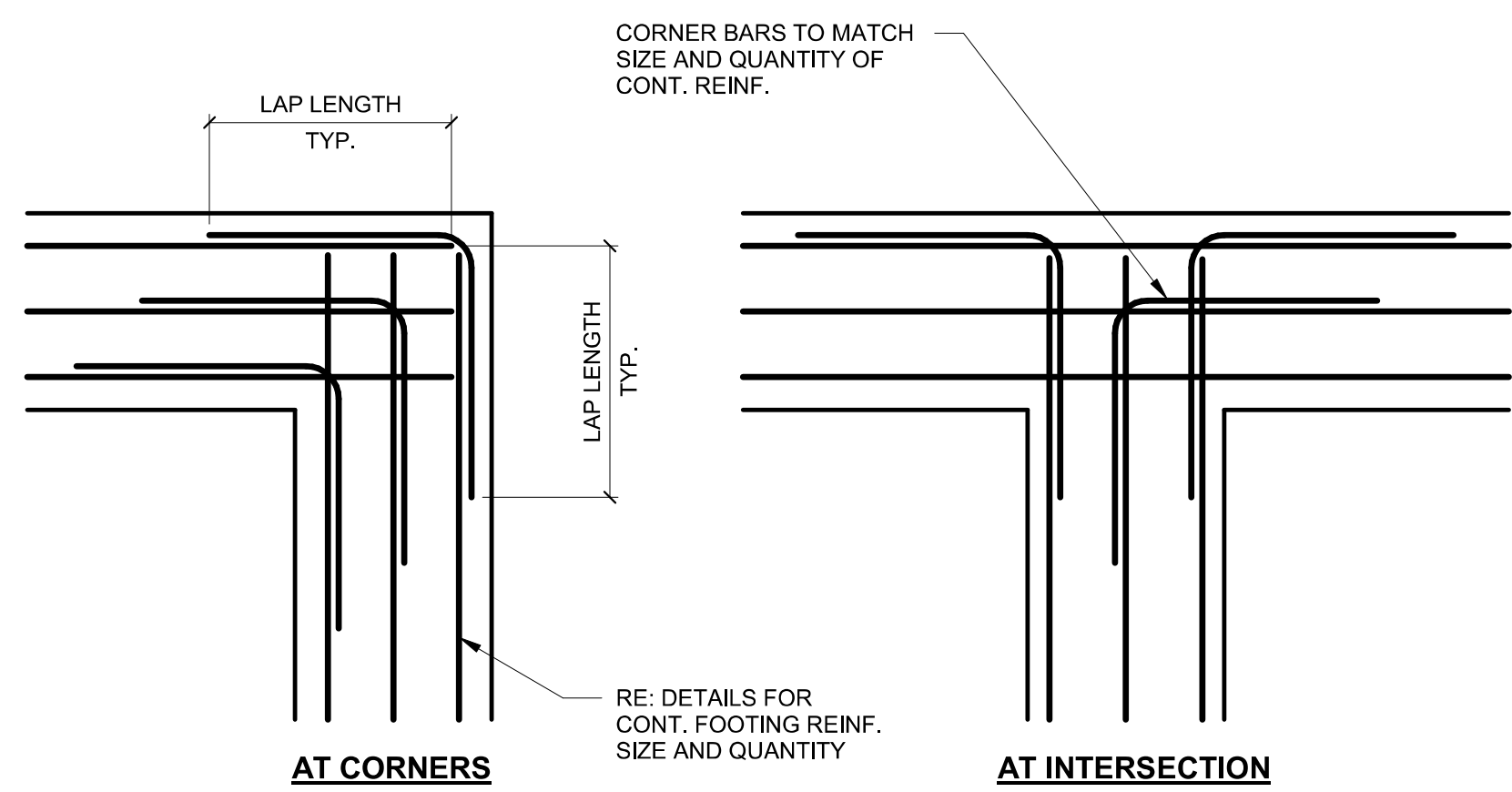
NOTES:
 1. SLAB OPENINGS WHICH ARE CLOSER TO ONE ANOTHER THAN THE DIAMETER OR SHORTER SIDE OF THE LARGER OF THE TWO ARE CONSIDERED TO FORM A COMBINED OPENING.
 2. THESE DIAGRAMS ARE FOR COMBINED OPENINGS WHOSE LARGER DIMENSIONS DOES NOT EXCEED 3'-0". RE: PLANS FOR OPENINGS LARGER THAN 3'-0".
 3. TRIM BAR EXTENSION PAST EDGES OF COMBINED OPENINGS SHALL BE 1'-0" FOR #4 BARS AND 1'-4" FOR #5 BARS.
 4. DISPLACED SLAB PRINCIPAL REINFORCEMENT TO EACH SIDE OF COMBINED OPENINGS OR PLACE BETWEEN INDIVIDUAL OPENINGS. DO NOT CUT SLAB PRINCIPAL REINFORCEMENT.
 5. TENDONS MAY PASS BETWEEN SLAB OPENINGS WHEN THE DISTANCE BETWEEN OPENINGS IS GREATER THAN OR EQUAL TO THE SLAB THICKNESS PLUS (N-1) TIMES 3 INCHES, WHERE 'N' IS THE NUMBER OF TENDONS IN A BUNDLE OR DUCT. TENDONS MUST FOLLOW A STRAIGHT ALIGNMENT (IN PLAN) THROUGH THE COMBINED OPENING AND FOR AT LEAST 24" ON EACH SIDE.
 6. SUBMIT SPECIAL SITUATIONS TO ENGINEER FOR REVIEW.
 7. RE: 1/ S0.10 FOR TRIM BARS AT ISOLATED OPENINGS.

TRIM BAR REQUIREMENTS:
 (A) IF THE COMBINED OPENING IS SMALLER THAN 1'-0", PROVIDE (1) #4 TOP AND BOTTOM BETWEEN OPENINGS.
 (B) IF THE LARGER DIMENSION OF A COMBINED OPENING EXCEEDS 1'-0" BUT THE SMALLER DIMENSION IS LESS THAN OR EQUAL TO 8", AND PROVIDED THE COMBINED OPENING IS ALIGNED WITH THE PRINCIPAL REINFORCEMENT, PROVIDE (1) #4 TOP AND BOTTOM BETWEEN OPENINGS.
 (C) IN ALL OTHER CASES WHERE OPENINGS ARE ARRANGED IN A SINGLE LINE PROVIDE (1) #4 TOP AND BOTTOM BETWEEN OPENINGS AND (1) #5 TOP AND BOTTOM AROUND PERIMETER OF COMBINED OPENING.
 (D) WHERE INDIVIDUAL OPENINGS OF A COMBINED OPENING FORM TWO OR MORE ROWS, THE ROWS SHALL BE SEPARATED BY AT LEAST 8" OF CONCRETE. PROVIDE (2) #4 TOP AND BOTTOM BETWEEN ROWS OF OPENINGS, (1) #4 TOP AND BOTTOM BETWEEN OPENINGS IN THE PERPENDICULAR DIRECTION, AND (1) #5 TOP AND BOTTOM AROUND PERIMETER OF COMBINED OPENING. PROVIDE STANDARD HOOKS WHERE BARS TERMINATE WITHIN THE COMBINED OPENING.



NOTE:
 1. TO REDUCE CONGESTION, IT IS GENERALLY ACCEPTABLE TO REPLACE A BEAM/COLUMN LONGITUDINAL BAR HOOK (90° OR 180°) WITH A TERMINATOR, PRIOR EOR APPROVAL REQ'D

3 TYPICAL REINFORCING BAR BENDS
 S0.10 1 1/2" = 1'-0"

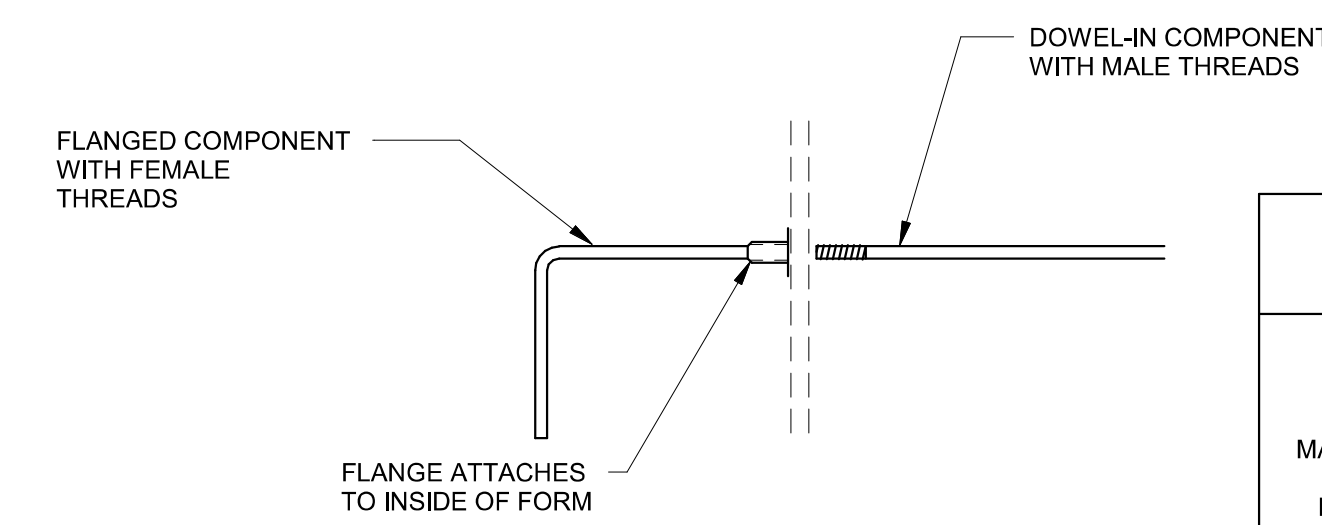


4 TYPICAL CORNER BAR DETAIL
 S0.10 3/4" = 1'-0"

BAR SIZE	CONCRETE REINFORCING LAP LENGTH SCHEDULE								
	STRUCTURAL ELEMENT MINIMUM COMPRESSIVE STRENGTH (F _c)								
	3000psi		4000psi		5000psi		7000psi		
	TOP BARS	OTHER	TOP BARS	OTHER	TOP BARS	OTHER	TOP BARS	OTHER	
#3	28"	22"	25"	19"	23"	18"	22"	17"	19"
#4	38"	29"	33"	25"	31"	24"	28"	23"	19"
#5	47"	36"	41"	31"	38"	30"	36"	31"	24"
#6	56"	43"	49"	37"	46"	35"	44"	34"	28"
#7	61"	48"	54"	41"	51"	39"	49"	37"	31"
#8	72"	56"	63"	49"	59"	46"	56"	44"	37"
#9	81"	63"	71"	56"	67"	53"	63"	51"	41"
#10	93"	72"	81"	62"	76"	59"	72"	56"	47"
	105"	81"	91"	70"	86"	68"	81"	63"	53"
	118"	91"	102"	79"	96"	74"	92"	71"	60"

NOTES:
 1. LAP LENGTH FOR TOP BARS SHALL BE USED WHEN MORE THAN 12 INCHES OF FRESH CONCRETE IS PLACED BELOW HORIZONTAL REINFORCEMENT.

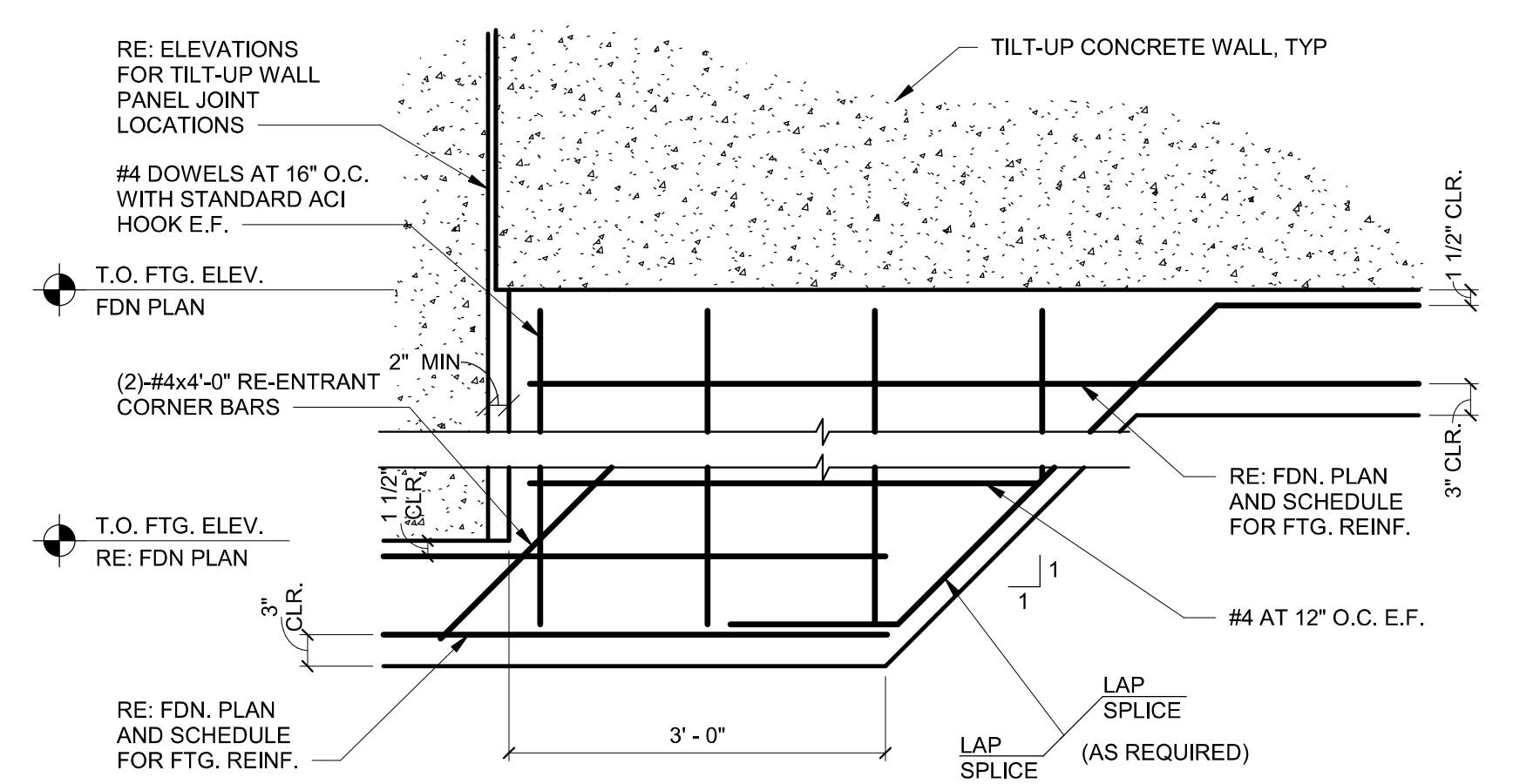
5 CONCRETE REINFORCING LAP SCHEDULE
 S0.10 3/4" = 1'-0"



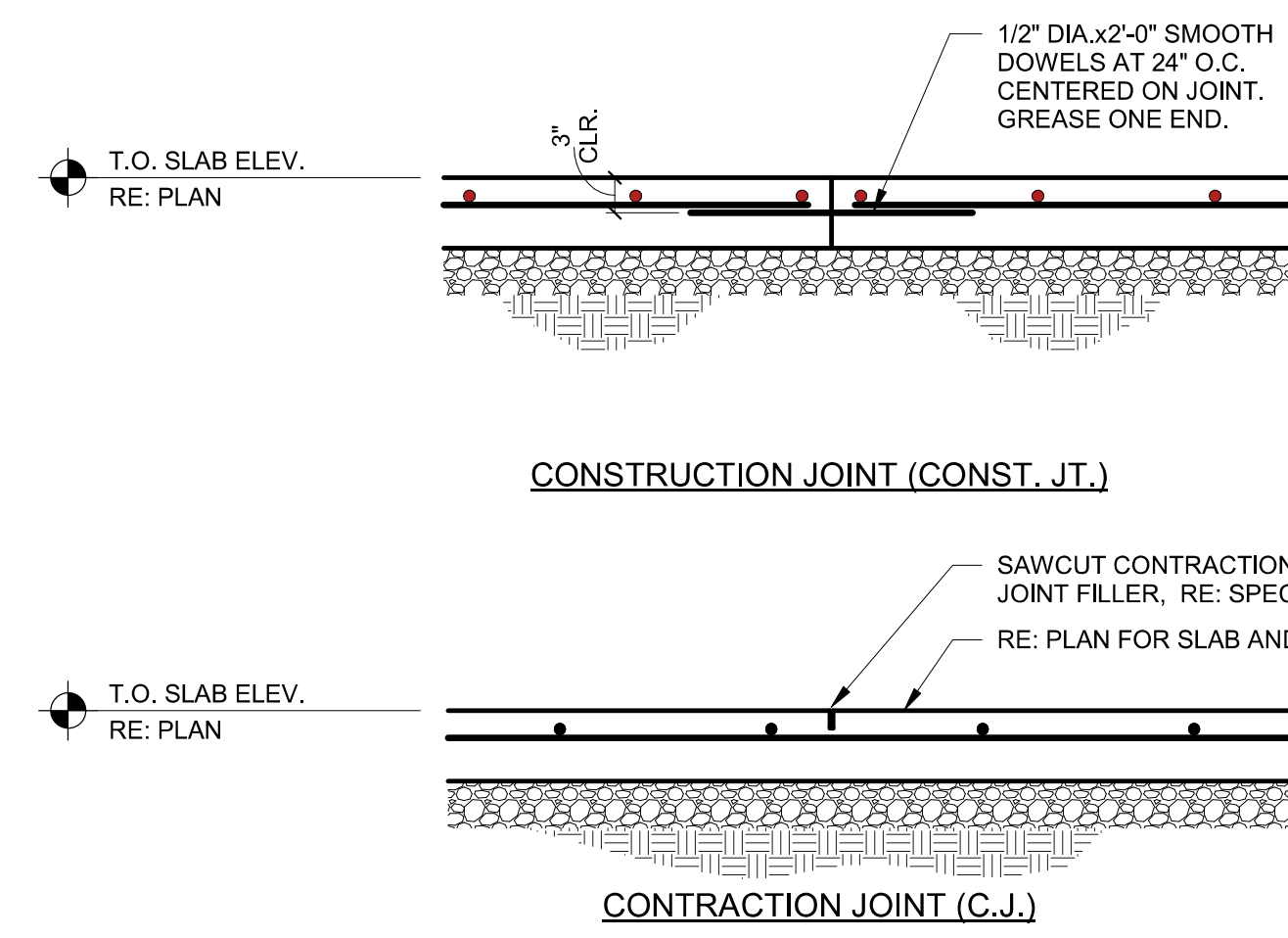
NOTES:
 1. AT THE CONTRACTORS OPTION THE TWO-PART DOWEL PRODUCTS LISTED AT RIGHT MAY BE USED TO REPLACE ORDINARY DOWELS SPECIFIED IN THE DRAWINGS
 2. FOLLOW MANUFACTURERS DIRECTIONS AND APPLICABLE ICBO REPORTS. SPECIAL INSPECTION IS REQUIRED
 3. TWO-PART DOWEL COMPONENTS MUST BE OF SPECIFIED LENGTH AFTER ASSEMBLY

MANUFACTURER & BRAND NAME	REQUIRED SIZE OF FABRICATED TWO-PART DOWEL COMPONENTS					
	SPECIFIED SIZE FOR REBAR					
	#4	#5	#6	#8	#10	#11
RICHMOND DOWEL BAR SUBSTITUTION	#4	#4	#5	#5	#6	#6
LENTON FORM SAVER	#4	#4	#5	#5	#6	#6
DAYTON-SUPERIOR D-50 DOWEL BAR REPLACEMENT	#4	#4	#5	#5	#6	#6

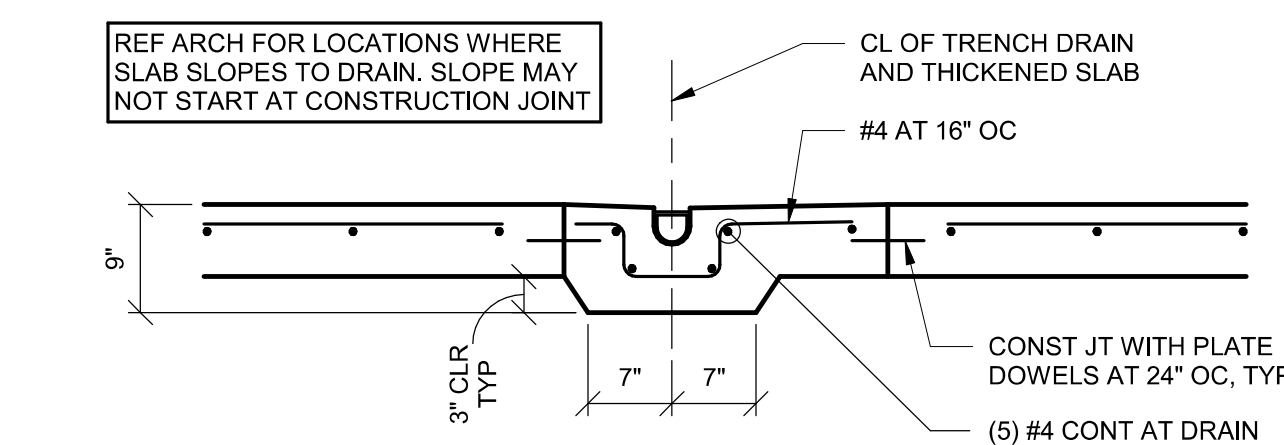
6 TWO PART DOWELS SYSTEM
 S0.10 1 1/2" = 1'-0"



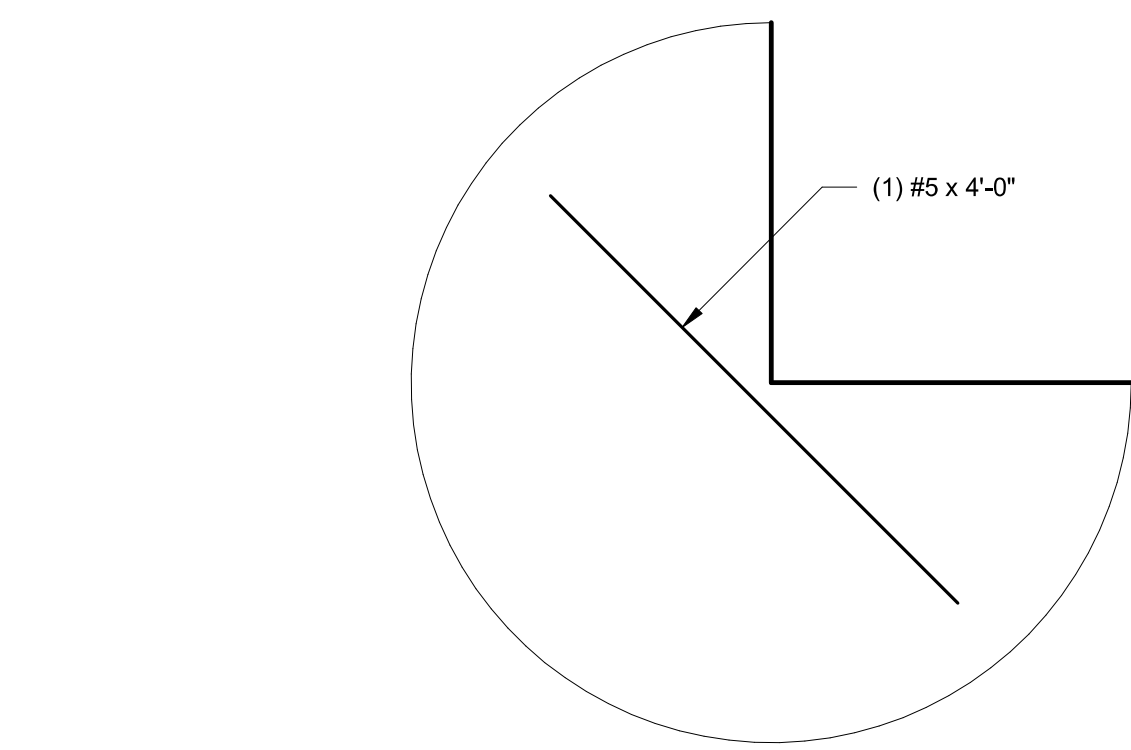
7 EXTERIOR WALL FOOTING STEP
 S0.10 3/4" = 1'-0"



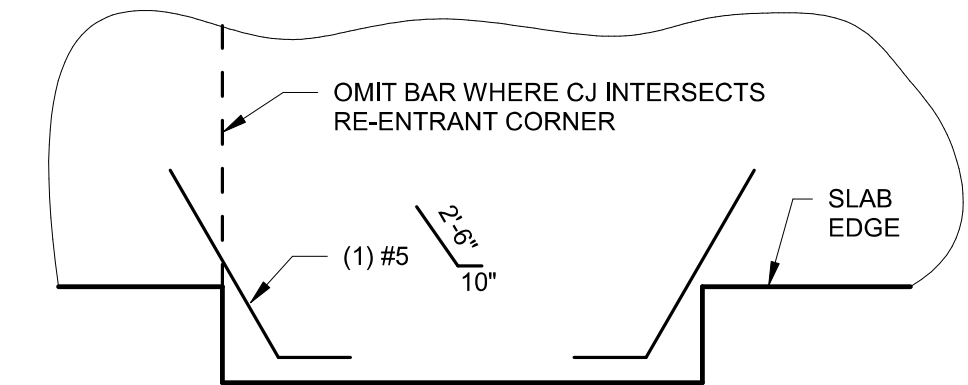
8 TYPICAL SLAB JOINT DETAILS
 S0.10 3/4" = 1'-0"



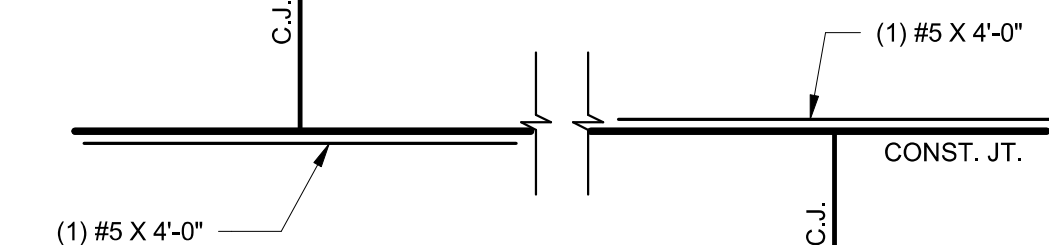
9 TRENCH DRAIN
 S0.10 3/4" = 1'-0"



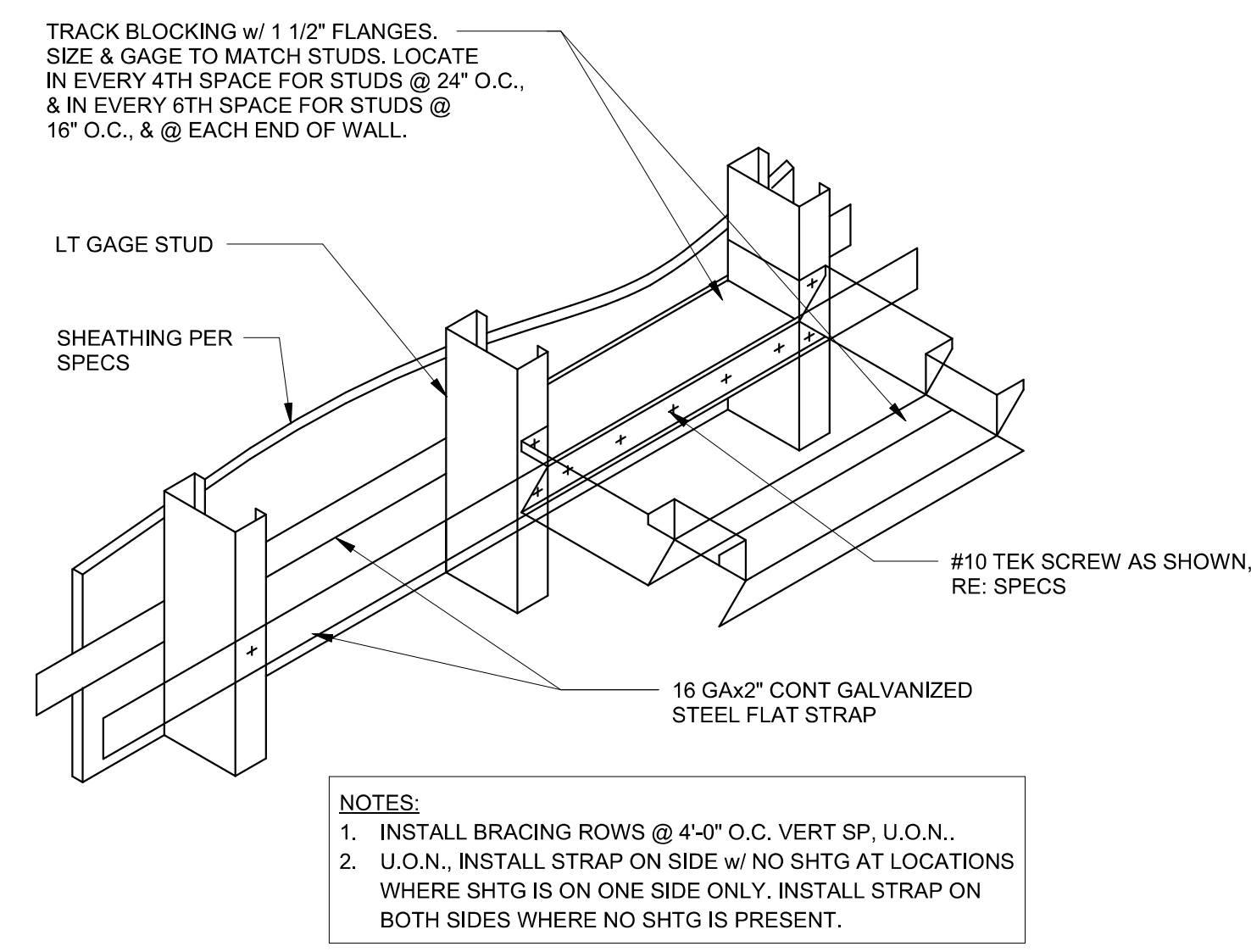
10A TYPICAL SLAB RE-ENTRANT CORNER REINFORCING
 S0.10 3/4" = 1'-0"



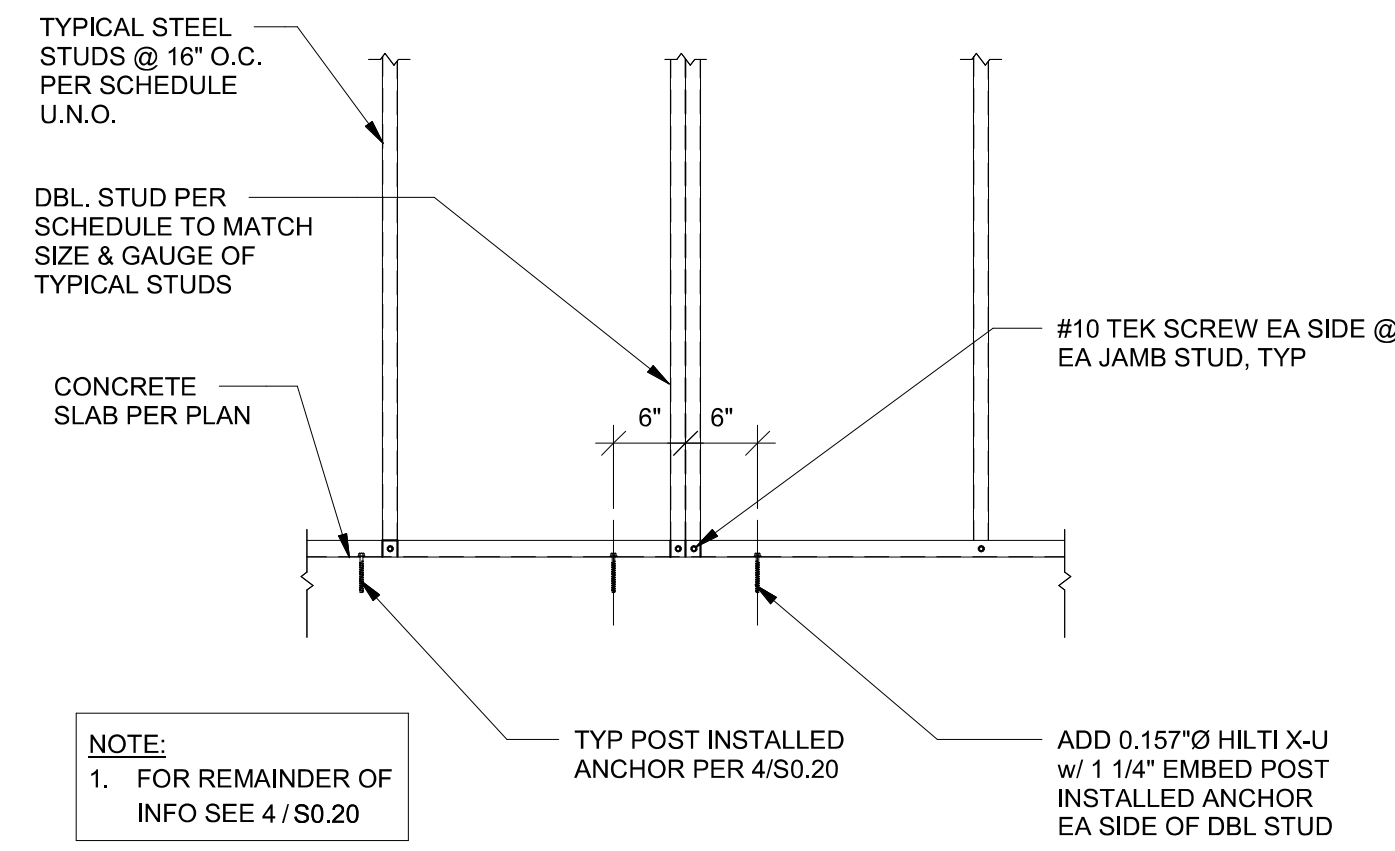
10B TYPICAL SLAB REINF AT DOOR OPNG
 S0.10 3/4" = 1'-0"



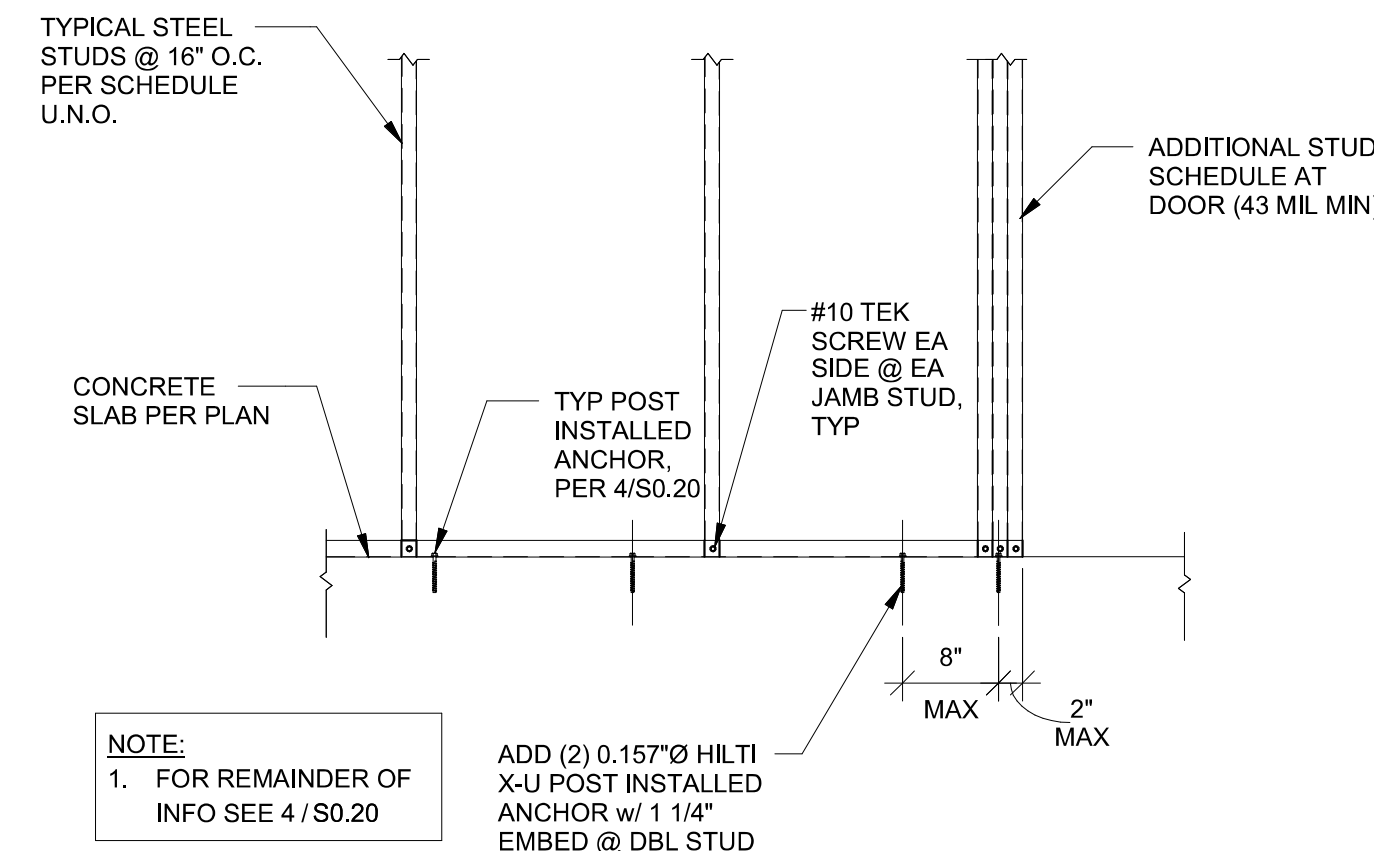
10C TYPICAL STAGGERED SLAB REINF AT DOCK WALL
 S0.10 3/4" = 1'-0"



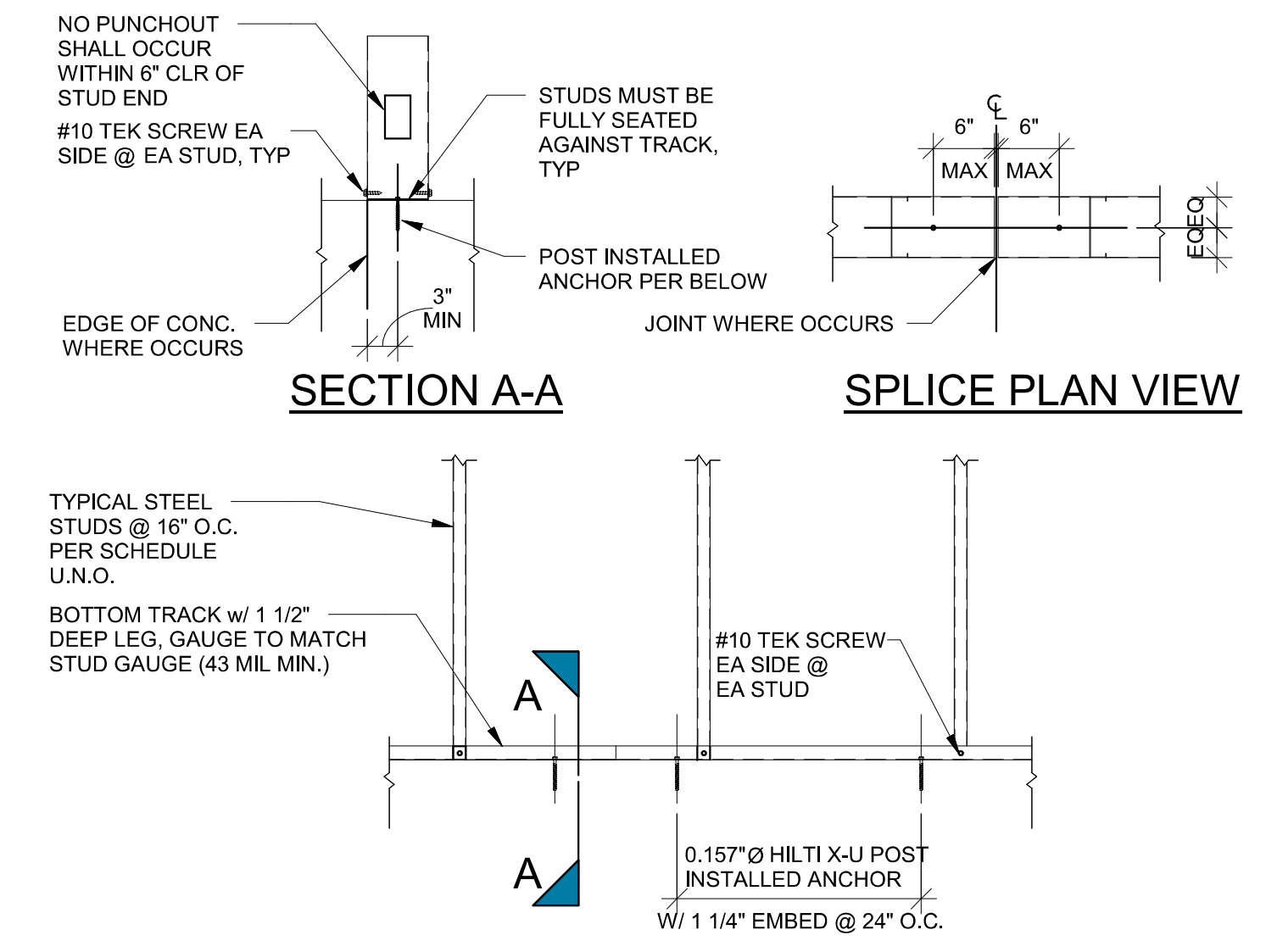
1 STUD WALL LATERAL BRACING LOCATIONS
S0.20 1 1/2" = 1'-0"



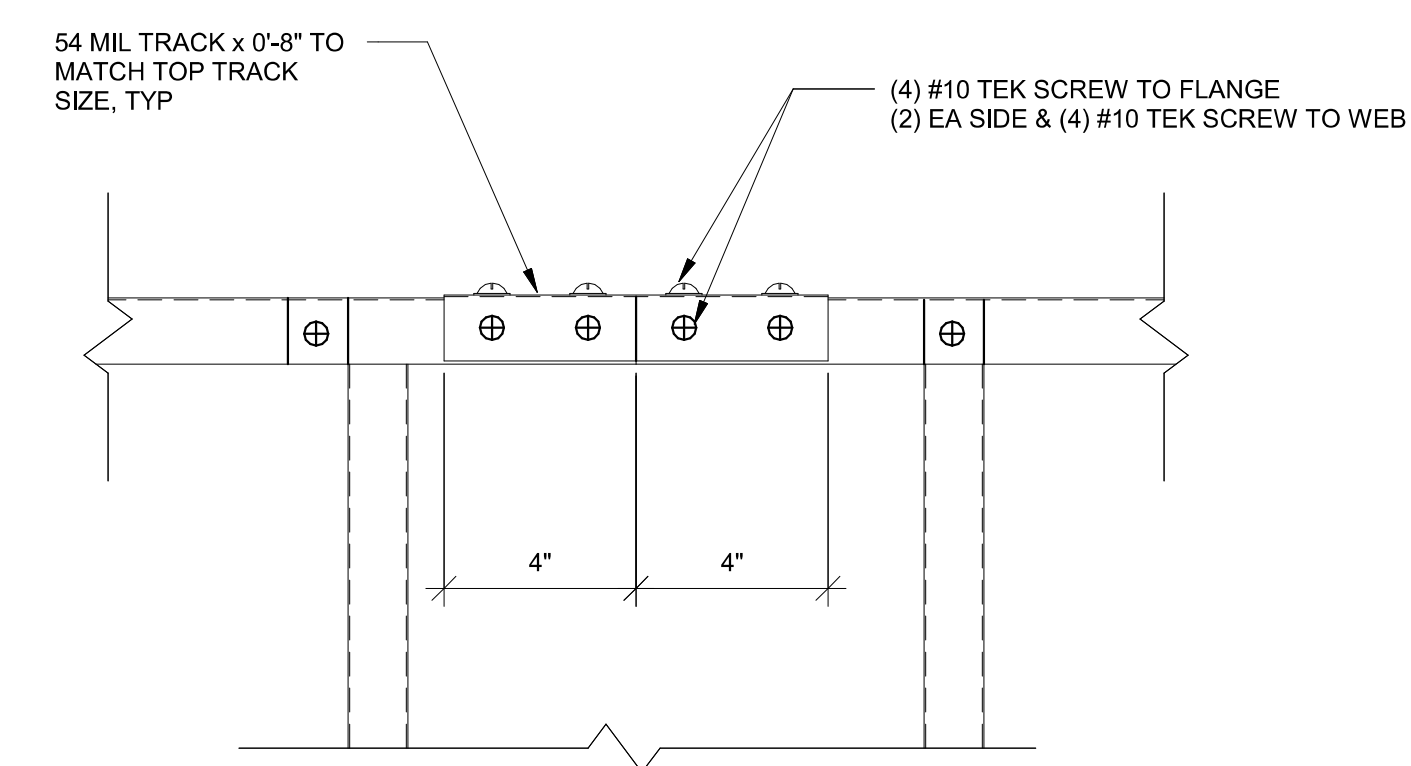
2 TYP BOTTOM TRACK ANCHORAGE @ WINDOW
S0.20 3/4" = 1'-0"



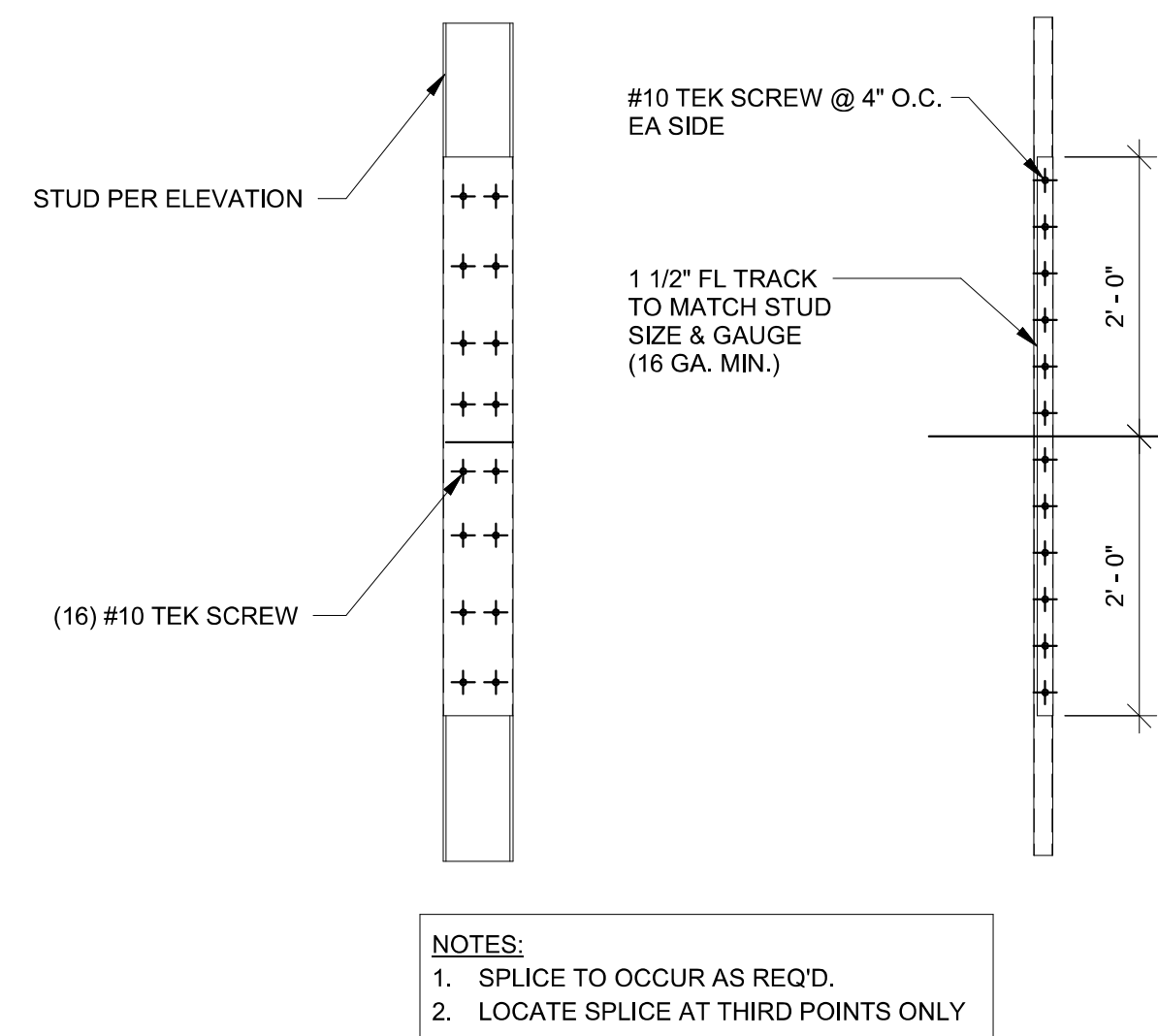
3 TYP @ DOOR BOTTOM TRACK ANCHORAGE
S0.20 3/4" = 1'-0"



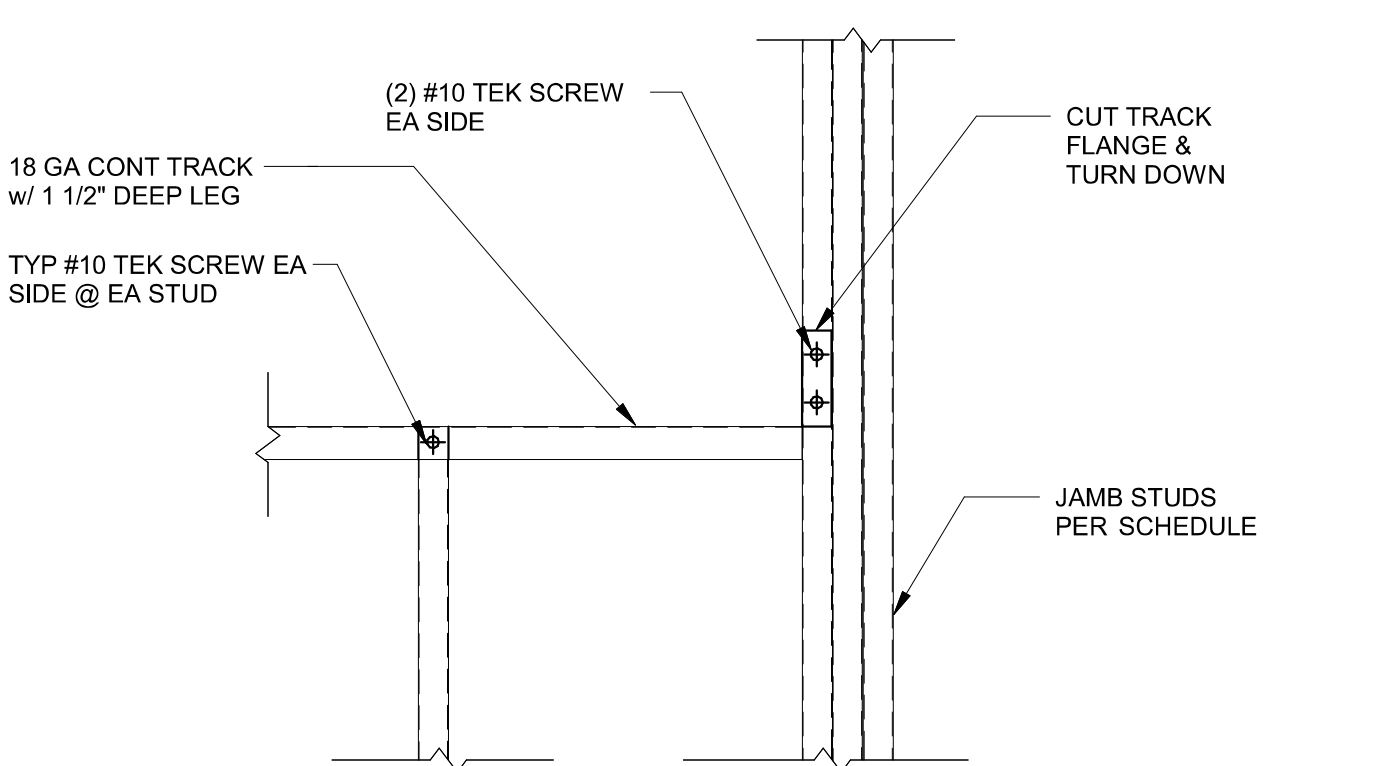
4 TYPICAL BOTTOM TRACK SPLICE & ANCHORAGE
S0.20 3/4" = 1'-0"



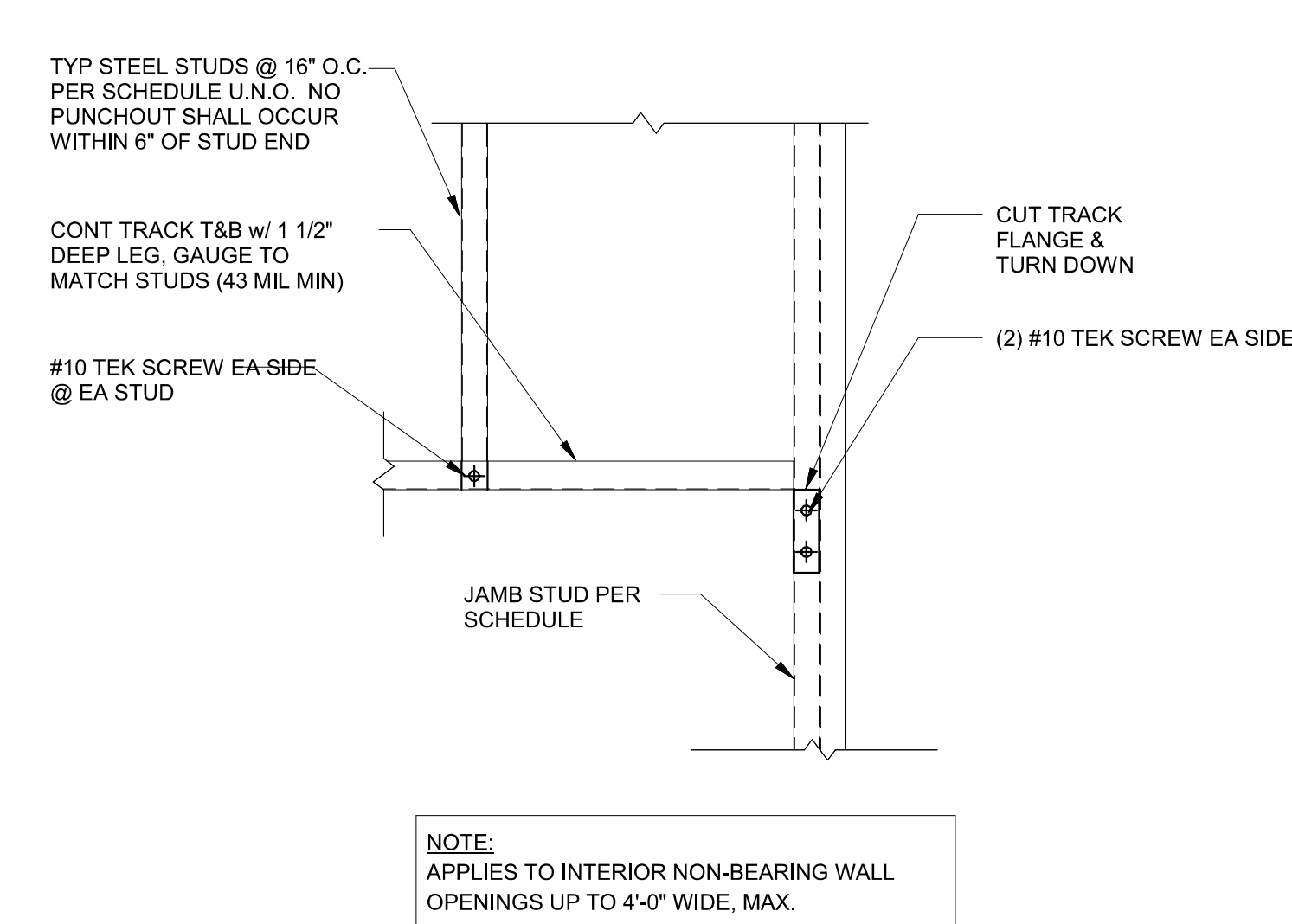
5 TYPICAL TOP TRACK SPLICE
S0.20 3" = 1'-0"



6 STUD SPLICE DETAIL
S0.20 3/4" = 1'-0"

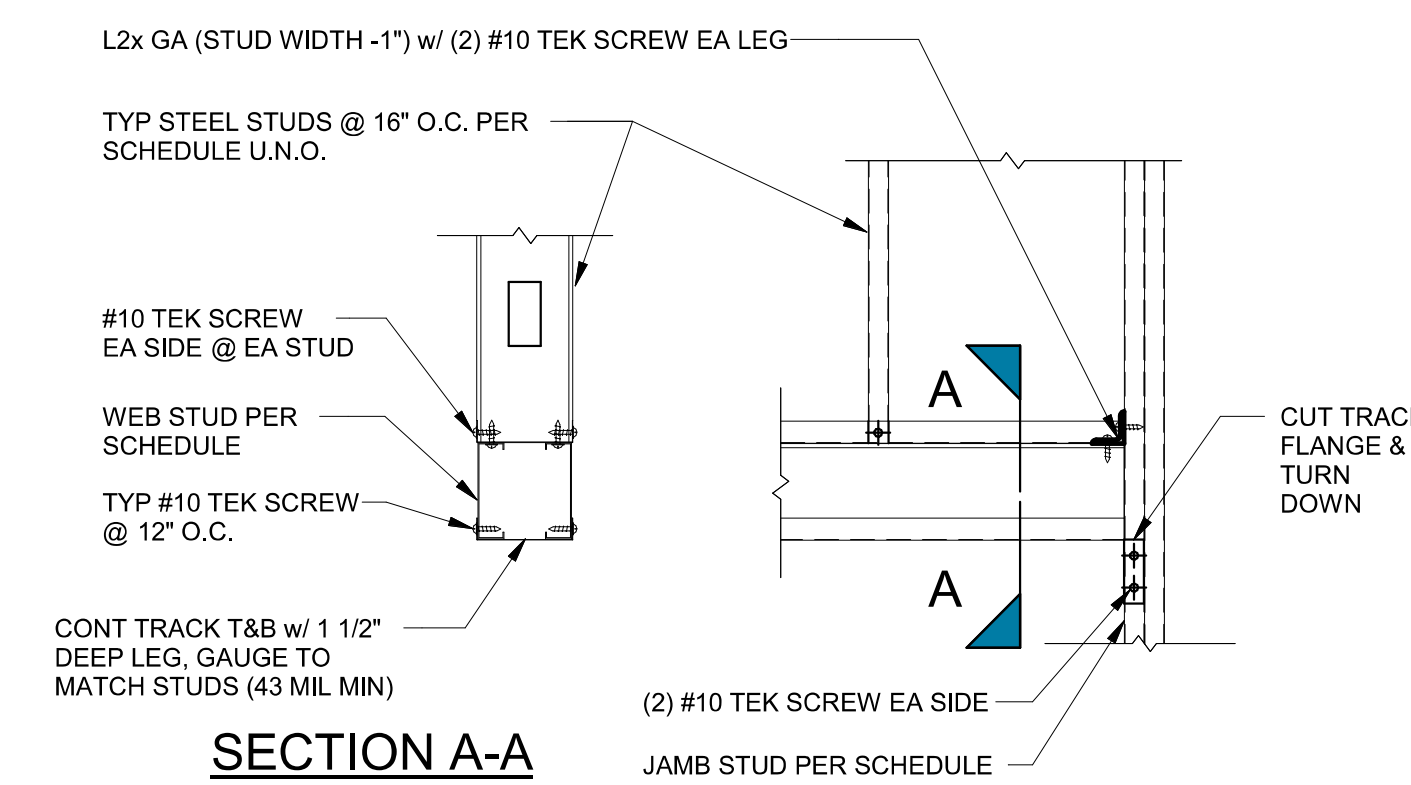


7 TYPICAL SILL CONNECTION
S0.20 1 1/2" = 1'-0"

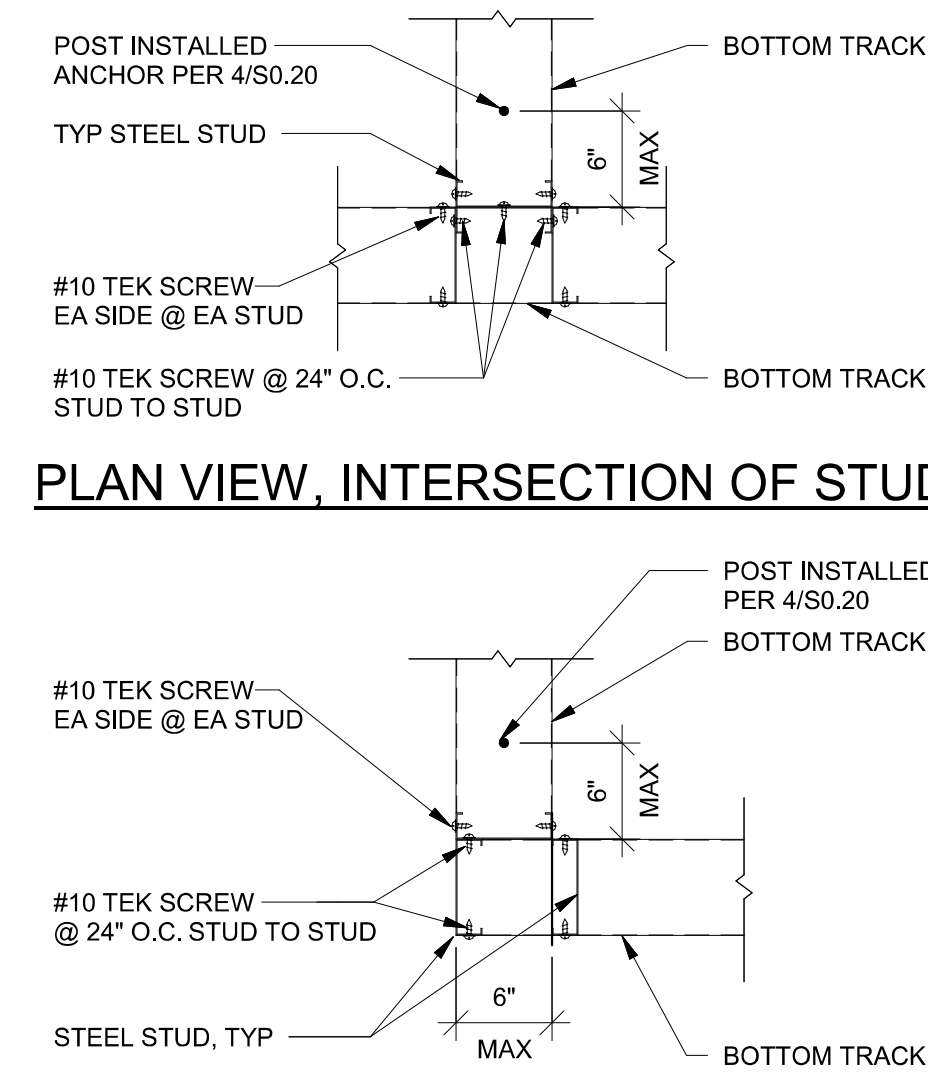


8 TYPICAL TRACK HEADER CONNECTION
S0.20 1 1/2" = 1'-0"

HEADER SCHEDULE	
OPENING SIZE (L)	WEB STUD
L < 6'-0"	(2) 362 S162-43
6'-0" < L ≤ 10'-0"	(2) 800 S162-43
10'-0" < L ≤ 12'-0"	(2) 1000 S162-54



9 TYPICAL BOX HEADER
S0.20 1" = 1'-0"



10 TYP. STUD FRAMING @ INTERSECTIONS
S0.20 1" = 1'-0"

GAUGE	MAXIMUM LENGTH (L)			
	6"	8"	10"	12"
20 (33 MIL)	8'-0"	9'-0"	--	--
18 (43 MIL)	10'-0"	11'-6"	13'-0"	--
16 (54 MIL)	12'-4"	15'-6"	18'-4"	20'-0"
14 (68 MIL)	13'-3"	16'-8"	20'-0"	23'-11"

- NOTES:
1. STEEL STUDS SHALL CONFORM TO ICC-ER #3064P OR APPROVED EQUAL.
2. MAXIMUM STUD LENGTH "L" SINGLE SPAN FOR STUDS @ 16" O.C.
3. STEEL STUDS SHALL HAVE 1 1/4" FLANGE MIN.
4. PROVIDE BRIDGING & BRACING AS REQUIRED.
5. JOIST SIZES IN TABLE ONLY APPLICABLE FOR INTERIOR CONDITIONS WITH TWO LAYERS OF 5/8" GYPSUM BOARD ON THE BOTTOM OF THE JOIST WITH ONE LAYER OF 3/4" PL'WOOD ON TOP OF THE JOIST. DESIGN LL = 20psf
6. RE: ARCHITECTURAL DRAWINGS FOR OTHER CONDITIONS.

GAUGE	MAXIMUM LENGTH (L)					
	3 5/8"	3 5/8"	4"	4"	6"	6"
20 (33 MIL)	NO BRACING	MIDSPAN BRACING	NO BRACING	MIDSPAN BRACING	NO BRACING	MIDSPAN BRACING
18 (43 MIL)	9'-5"	13'-2"	9'-8"	13'-8"	11'-0"	15'-10"
16 (54 MIL)	10'-5"	14'-4"	10'-8"	15'-0"	11'-11"	17'-0"

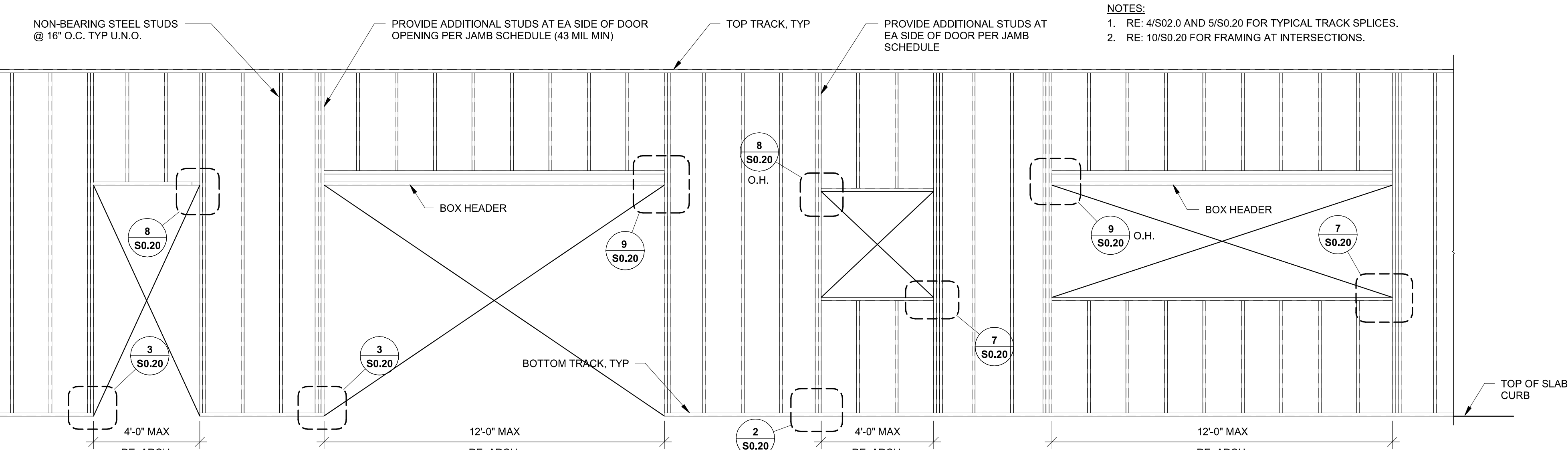
- NOTES:
1. STEEL STUDS SHALL CONFORM TO ICC-ER #3064P OR APPROVED EQUAL.
2. MAXIMUM STUD LENGTH "L" FOR STUDS @ 16" O.C.
3. STEEL STUDS SHALL HAVE 1 1/4" FLANGE MIN.
4. PROVIDE LATERAL BRACING AS REQUIRED.
5. JOIST SIZES IN TABLE ONLY APPLICABLE FOR INTERIOR CONDITIONS WITH ONE LAYER OF 5/8" GYPSUM BOARD.
6. RE: ARCHITECTURAL DRAWINGS FOR OTHER CONDITIONS.

GAUGE	MAXIMUM HEIGHT (H)			
	3 5/8"	4"	6"	8"
14 (68 MIL)	19'-9"	21'-3"	29'-9"	42'-0"
16 (54 MIL)	18'-6"	20'-0"	27'-9"	30'-0"
18 (43 MIL)	17'-3"	18'-9"	26'-0"	30'-0"
21 (33 MIL)	15'-9"	17'-0"	23'-6"	--

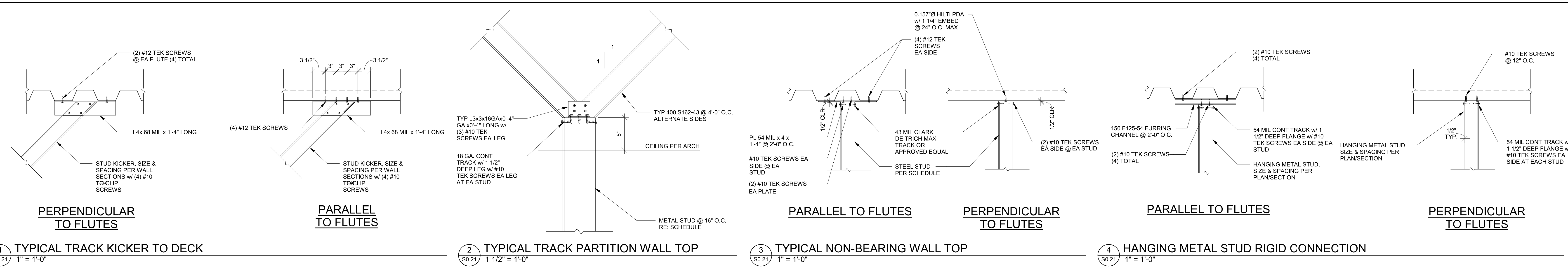
- NOTES:
1. STEEL STUDS SHALL CONFORM TO ICC-ER #3064P OR APPROVED EQUAL.
2. MAXIMUM STUD HEIGHT "H" FOR STUDS @ 16" O.C.
3. STEEL STUDS SHALL HAVE 1 1/4" FLANGE MIN.
4. PROVIDE BRIDGING PER 150.20 OR PER MANUFACTURER WHERE GYPSUM BOARD IS NOT APPLIED TO BOTH SURFACES.
5. RE: ARCHITECTURAL DRAWINGS FOR OTHER CONDITIONS.
6. RE: 650.20 FOR SPLICES.
7. RE: 150.20 FOR STUD BRACING.
8. RE: SHEET S0.21 FOR ADDITIONAL DETAILS.

JAMB SCHEDULE	
OPENING SIZE	# OF JAMB STUDS
4'-0" TO 6'-0"	2
6'-0" TO 10'-0"	2
10'-0" TO 12'-0"	3

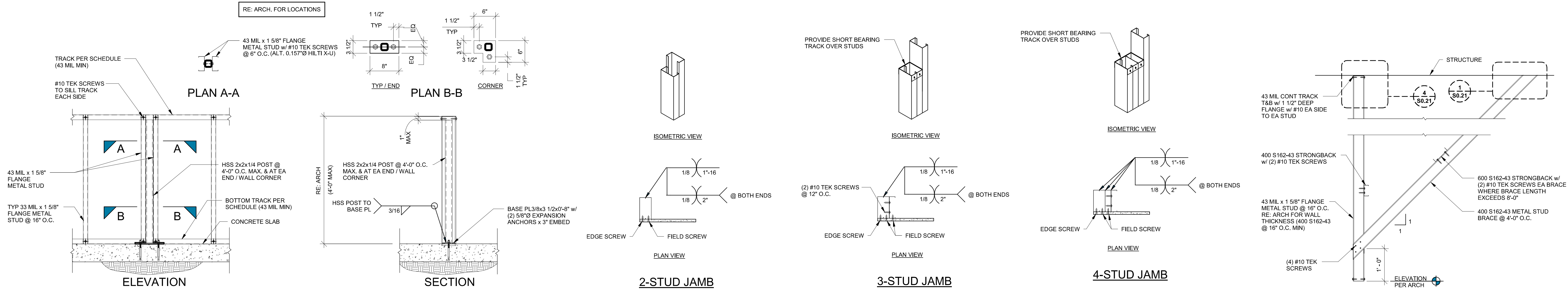
- NOTES:
1. JAMB STUDS TO MATCH SIZE & GAGE OF TYP STUDS
2. RE: 3/S0.20 FOR ADDITIONAL JAMB DETAILS



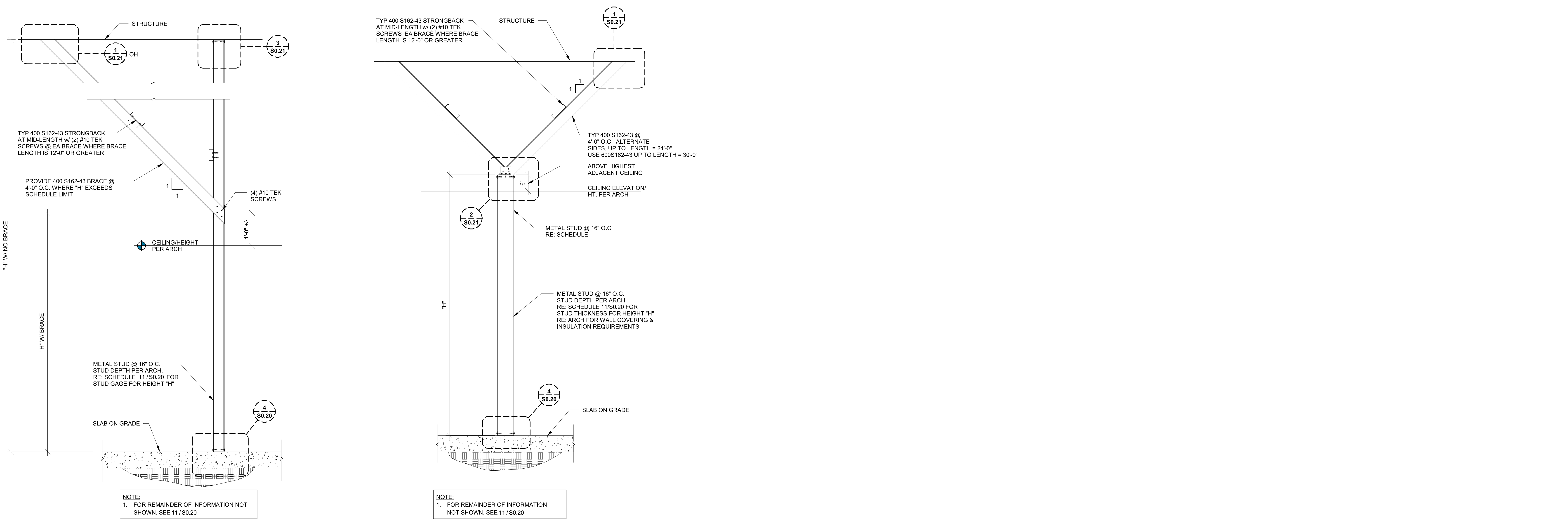
11 TYP NON-BEARING STUD WALL FRAMING
S0.20 3/8" = 1'-0"



1 TYPICAL TRACK KICKER TO DECK 1" = 1'-0"
 2 TYPICAL TRACK PARTITION WALL TOP 1 1/2" = 1'-0"
 3 TYPICAL NON-BEARING WALL TOP 1" = 1'-0"
 4 HANGING METAL STUD RIGID CONNECTION 1" = 1'-0"



5 TYPICAL INTERIOR LOW WALL 1" = 1'-0"
 6 TYPICAL TRACK HEADER CONNECTION 1" = 1'-0"
 7 TYPICAL HANGING WALL 3/4" = 1'-0"



8 TYPICAL FULL-HEIGHT PARTITION WALL 3/4" = 1'-0"
 9 TYPICAL PARTIAL HEIGHT PARTITION WALL 3/4" = 1'-0"

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD., PORT ANGELES, WA 98363

Revisions / Submissions

ID	Description	Date

Project number: 763838-02
 Scale: AS NOTED
 Drawn By: GH
 Checked By: KB/HR
 Date: 04.25.2025
 Issue: PERMIT SET

Sheet Title:
**TYPICAL INTERIOR
 LIGHT GAGE STEEL
 DETAILS**

S0.21

FOOTING SCHEDULE								
MARK	SIZE			BOTTOM REINFORCING		TOP REINFORCING		NOTES
	LENGTH	WIDTH	THICKNESS	LONGITUDINAL	TRANSVERSE	LONGITUDINAL	TRANSVERSE	
F1	7'-0"	7'-0"	2'-0"	7-#8	7-#8	---	---	1
F2	6'-0"	6'-0"	2'-0"	6-#8	6-#8	---	---	1
F3	8'-0"	8'-0"	2'-0"	8-#7	8-#7	8-#7	8-#7	1
F4	12'-0"	9'-0"	3'-0"	12-#8	9-#8	---	---	1, 3
F5	4'-0"	4'-0"	1'-0"	4-#5	4-#5	---	---	1

WALL FOOTING SCHEDULE							
MARK	SIZE		BOTTOM REINFORCING		TOP REINFORCING		NOTES
	WIDTH	THICKNESS	CONTINUOUS	TRANSVERSE	CONTINUOUS	TRANSVERSE	
WF1	3'-6"	1'-6"	4-#6	#6 AT 12" O.C.	---	---	1, 2
WF2	5'-0"	1'-6"	5-#6	#6 AT 12" O.C.	5-#6	#6 AT 12" O.C.	1, 2
WF4	3'-0"	1'-6"	3-#5	#5 AT 12" O.C.	---	---	1

- NOTES:
- TOP OF FOOTING ELEVATION (T.O.F. ELEV.) IS REFERENCED TO FINISHED FLOOR, RE: PLAN FOR ELEVATIONS.
 - STEP FOOTING PER 750.10 AS REQUIRED.
 - RE: PLAN FOR CENTERLINE OF FOOTING.

GENERAL NOTES

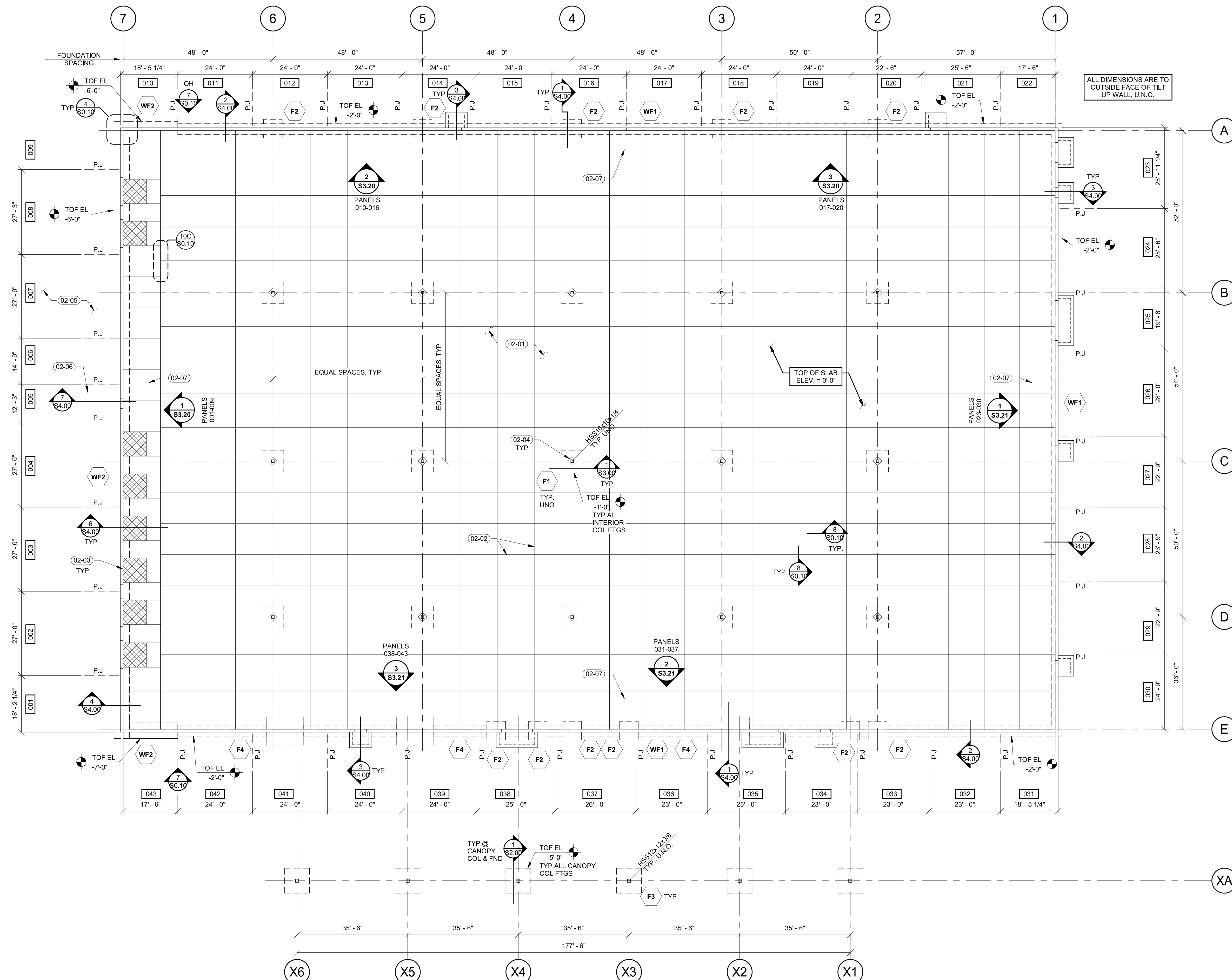
- FOR GENERAL STRUCTURAL NOTES RE: S0.00
- FOR TYPICAL STRUCTURAL DETAILS RE: S0.10
- LOCATE CL OF FOOTINGS AT CL OF COLUMNS AND/OR WALLS.
- U.N.O.
- RE: GENERAL STRUCTURAL NOTES FOR CONTROL/CONSTRUCTION JOINT REQUIREMENTS FOR SLAB ON GRADE.
- RE: TYPICAL DETAILS FOR REINFORCEMENT AT SLAB PENETRATION AND BLOCKOUTS.
- RE: 400.10 FOR TYPICAL REINFORCEMENT AT FOOTING CORNERS AND INTERSECTIONS.
- RE: TYPICAL DETAILS FOR REINFORCEMENT LAP SPLICE LENGTH.
- CHAIR SLAB REINFORCING AS REQ'D. LIFTING OF BARS WHILE PLACING OF CONC NOT ALLOWED.
- FOOTING ELEVATION CRITERIA PER STRUCTURAL DETAILS. RE: 9/54.00 COORDINATE W/ GRADING, UTILITIES & MEP. STEP FOOTING AS REQUIRED PER TYPICAL DETAILS. COORDINATE LOCATION OF FOOTING STEPS WITH TILT UP PANEL ELEVATIONS.
- RE: 8/54.00 FOR LIGHT POLE FOUNDATION DETAIL.

LEGEND

- FA FOOTING PER SCHEDULE
- WES COLUMN PER PLAN

KEYNOTES

- 6" CONCRETE SLAB-ON-GRADE W/ #3 @ 18" O.C. EA WAY. FOR SUB-BASE PREPARATION RE: GEOTECH REPORT.
- CONTROL/CONSTRUCTION JOINTS PER 8/50.10.
- DOCK LEVELER. RE: DETAIL 6/54.00.
- COLUMN BLOCK OUT PER DETAIL 1/53.00.
- REF CIVIL FOR TRUCK DOCK SLAB.
- PREFAB METAL STAIR. DESIGN BY STAIR FABRICATOR.
- POUR STRIP WITH REINF PER 2/54.00.



1 FOUNDATION PLAN
S1.00 1/16" = 1'-0"

ARCHITECT
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AMBROSE PROPERTY GROUP

PROJECT PENINSULA
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Revisions / Submissions

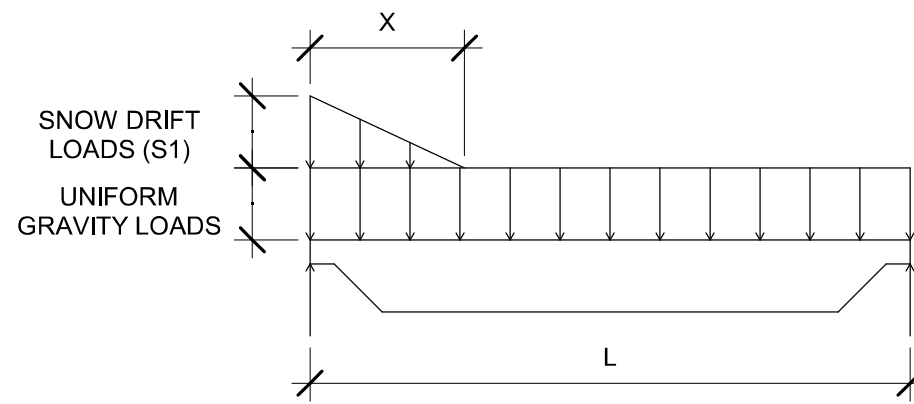
ID	Description	Date

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Project number: 763838-02
Scale: AS NOTED
Drawn By: GH
Checked By: KB/MG
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
FOUNDATION PLAN

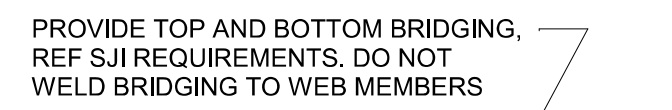
S1.00

JOIST SCHEDULE						SNOW DRIFT INFORMATION		NOTES
MARK	JOIST SIZE	TOTAL LOAD (DL + LL)	LIVE LOAD (LL)	TOTAL LOAD (DL + SL)	SNOW LOAD (SL)	S1 (PLF)	X (FT)	
J1	44LH	240	120	270	150	426	16'-6"	REF DIAGRAM #1
J1A	36LH	240	120	455	340	---	---	---
J2	26K	240	120	270	150	---	---	---
J2A	36LH	240	120	455	340	---	---	---
J3	28K	240	120	270	150	---	---	---
J3A	36LH	240	120	455	340	---	---	---
J4	44LH	240	120	270	150	426	16'-6"	REF DIAGRAM #1
J4A	40LH	240	120	455	340	---	---	---
J5	28K	186	106	239	159	---	---	---
J5A	28LH	186	106	536	456	---	---	---



JOIST DIAGRAM #1
SEE JOIST SCHEDULE FOR DETAILS

CONTRACTOR NOTE:
BRIDGING AND WEB MEMBERS ARE NOT DESIGNED FOR LOADS OTHER THAN AXIAL. NO ATTACHMENT OF ANY TYPE SHALL BE MADE TO BRIDGING OR JOIST WEB MEMBERS. ALL LOAD ATTACHMENT SHALL BE TO JOIST CHORDS ONLY. REF: ISS.10



JOIST MANUFACTURER TO PROVIDE WIND UPLIFT BRIDGING AT THE FIRST BOTTOM CHORD PANEL POINTS REF SJI REQUIREMENTS. DESIGN ALL JOISTS FOR A NET UPLIFT LOAD PER S0.00

TYPICAL JOIST BRIDGING DIAGRAM

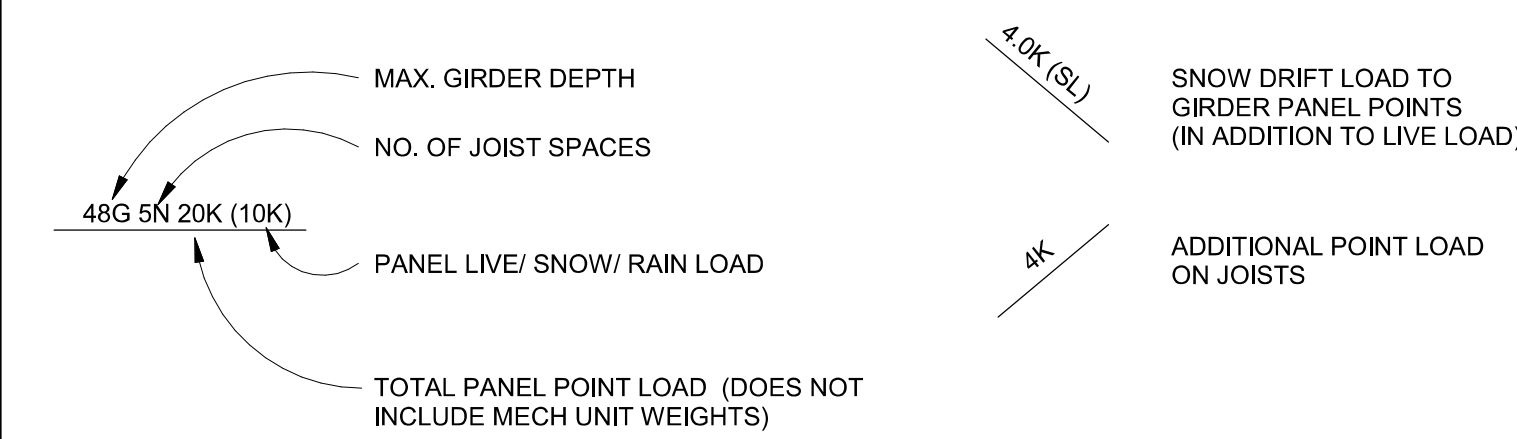
JOISTS AND JOIST GIRDERS

- JOISTS AND JOIST GIRDERS SHALL BE DESIGNED FOR THE UNIFORM LOAD CAPACITY (AS SPECIFIED IN THE SJI STANDARD LOAD TABLES) IN ADDITION TO CONCENTRATED LOADS SHOWN.
- UNIFORM GRAVITY LOADS ARE SHOWN FOR EACH JOIST IN THE JOIST SCHEDULE.
 - DEAD LOAD (DL)
 - LIVE LOAD OR SNOW LOAD (LL/S1)
 - SNOW DRIFT LOADS SHALL BE USED IN CONJUNCTION WITH DEAD AND SNOW LOADS ONLY (DL + SL)
- IN ADDITION TO THE LOADS SHOWN IN THE SCHEDULE, DESIGN JOISTS AND JOIST GIRDERS TO ACCOMMODATE RTU LOADS, FAN LOADS, OTHER HANGING LOADS, DRANLINES, SOFFIT LOADS, AND OTHER CONCENTRATED LOADS. ALL LOADS SHOWN ARE WORKING STRESS LOADS (ASD). APPLY LOAD FACTORS PER CODE.
- JOISTS SHALL BE DESIGNED FOR ANY STRESS REVERSAL DUE TO UNEVENLY DISTRIBUTED LOADING.
- ALL JOISTS SHALL HAVE 6" DEEP JOIST SEATS AND JOIST GIRDERS SHALL HAVE 7 1/2" DEEP SEAT, UNO.
- DESIGN JOISTS FOR AN ADDITIONAL DEAD LOAD OF 32 PLF AT 6" SPRINKLER LINES AND 51 PLF AT 8" LINES.
- JOIST SUPPLIER TO ACCOUNT FOR NET UPLIFT PRESSURES PER GENERAL NOTES ON SHEET S0.00 IN THEIR DESIGN.
- JOIST SUPPLIER TO PROVIDE TOP AND BOTTOM CHORD BRIDGING AS REQUIRED BY SJI. JOISTS ARE UNIFORMLY SPACED BETWEEN ADJACENT COLUMNS, BEAMS OR WALLS UNLESS NOTED OTHERWISE.
- JOISTS SHALL BE DESIGNED FOR A SEISMIC TOP CHORD TENSION OR COMPRESSION FORCE OF 7.1 KIPS

GENERAL NOTES

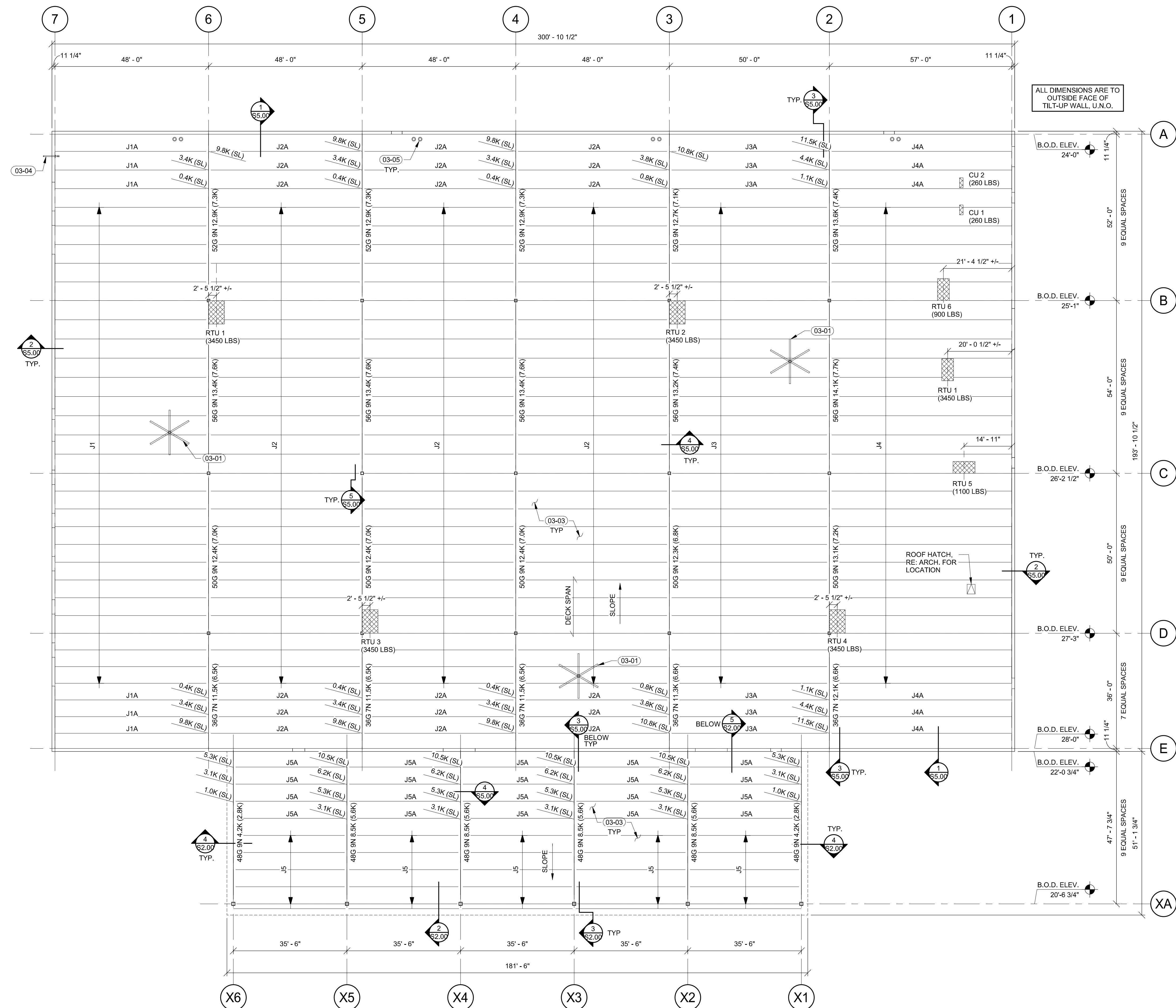
- FOR GENERAL STRUCTURAL NOTES RE: S0.00
- FOR TYPICAL STRUCTURAL DETAILS RE: S0.10
- RE: ARCHITECTURAL DRAWINGS FOR ELEVATIONS
- COORDINATE PERIMETER CONDITIONS WITH ARCHITECTURAL
- RE: DETAILS FOR ADDITIONAL AXIAL LOADS REQ'D FOR GIRDERS, JOISTS, AND JOIST SEATS
- CONTRACTOR TO COORDINATE AND CONFIRM MECH UNIT SIZE, LOCATION, & WEIGHTS. COORDINATE AND SUPPLY ALL REQUIRED LOADING TO THE JOIST SUPPLIER
- CONTRACTOR TO COORDINATE W/ JOIST SUPPLIER ALL PIPING 6" DIAMETER AND LARGER
- RE: S0.10 FOR ADDITIONAL FRAMING REQUIRED FOR MECH EQUIPMENT AND OPENINGS. RE: ARCH FOR LOCATIONS OF SKYLIGHTS, SMOKE VENTS, ETC.
- RE: ISS.10 FOR ADDITIONAL SUPPORT AT LOADS WEIGHING OVER 100 LBS.
- RE: PLAN FOR BOTTOM OF METAL DECK ELEVATIONS.

LEGEND



KEYNOTES

- HVLS FAN, TYP. JOIST MANUF SHALL DESIGN JOISTS FOR A 300 LB DEAD LOAD AT EACH FAN.
- MECHANICAL UNIT PER MEP. COORDINATE LOCATION AND FRAMING WITH MEP, DEVELOPER AND TENANT. RE: S0.10 FOR ATTACHMENT.
- 1 1/2" TYPE B WIDE RIB DECK. RE: S0.30 FOR DECK GAGE AND ATTACHMENT TO STEEL SUPPORTS.
- WALL MOUNTED DAVIT CRANE. REF ARCH AND SPECS. REF S0.50.00.
- INTERNAL ROOF DRAIN. PROVIDE FIELD FABRICATED FRAME AT ROOF PENETRATION. RE: S0.10 FOR DETAILS.



1 ROOF FRAMING PLAN
S1.10 1/16" = 1'-0"

ARCHITECT OF RECORD
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W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

Revisions / Submissions

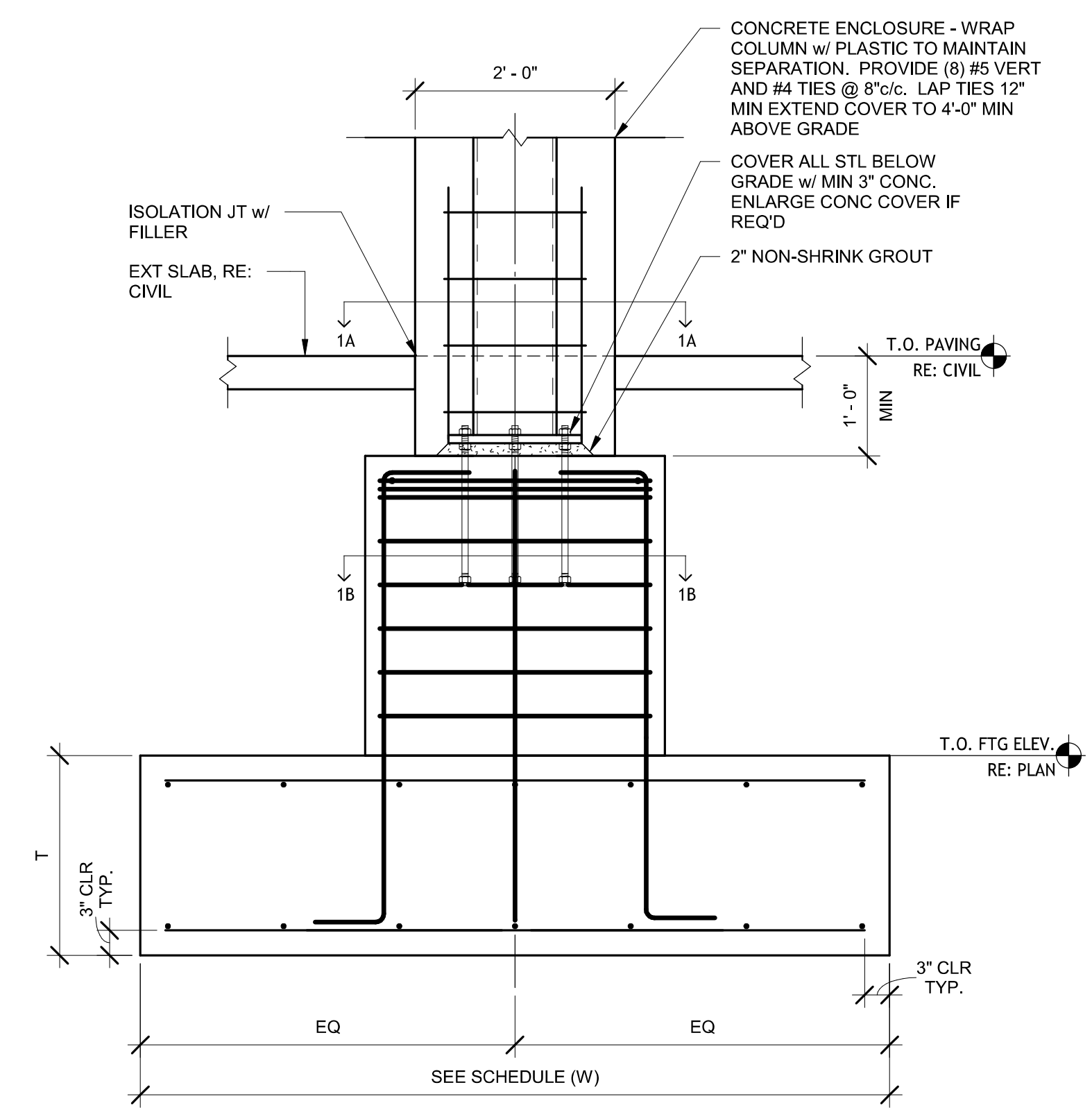
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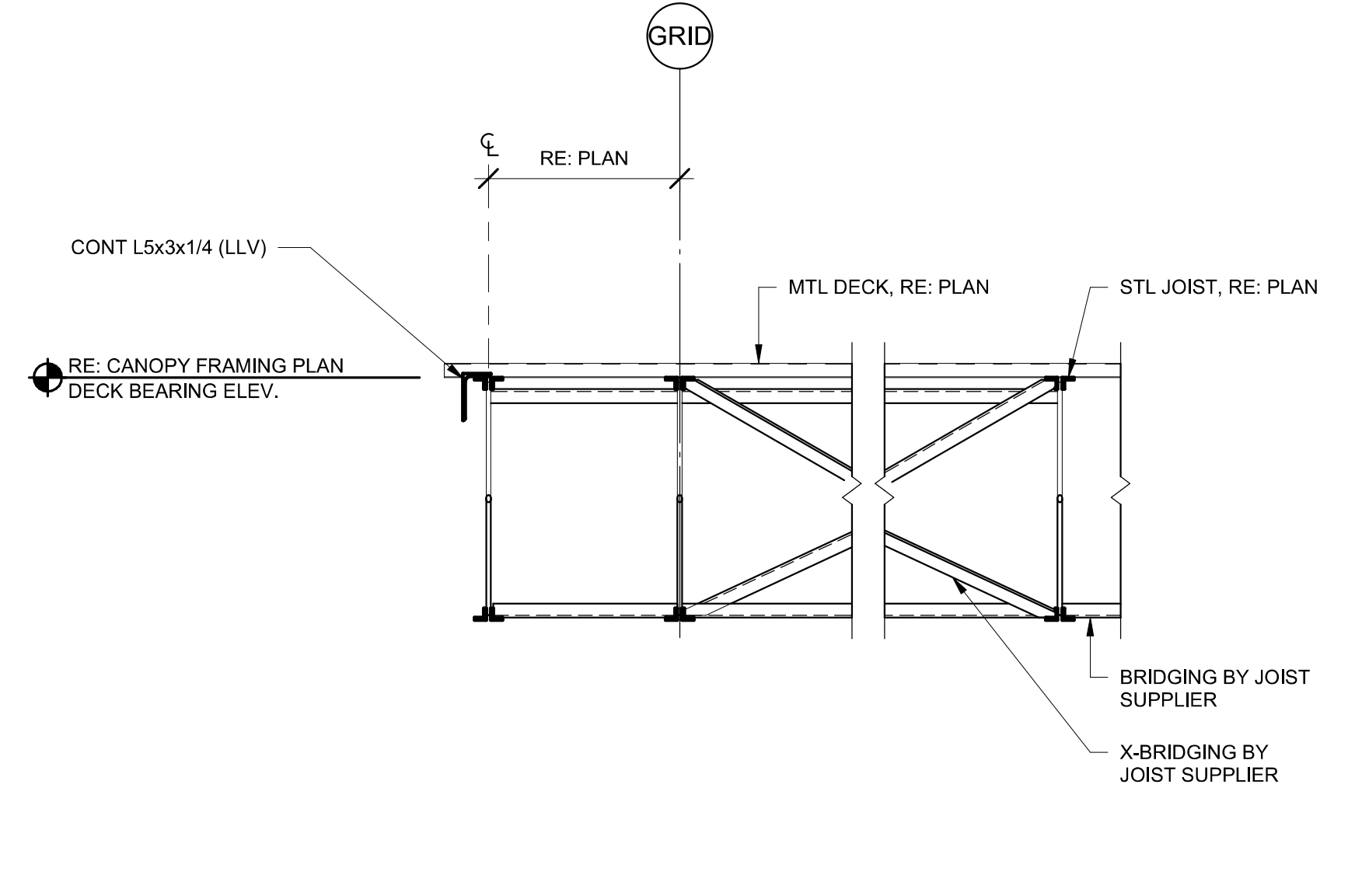
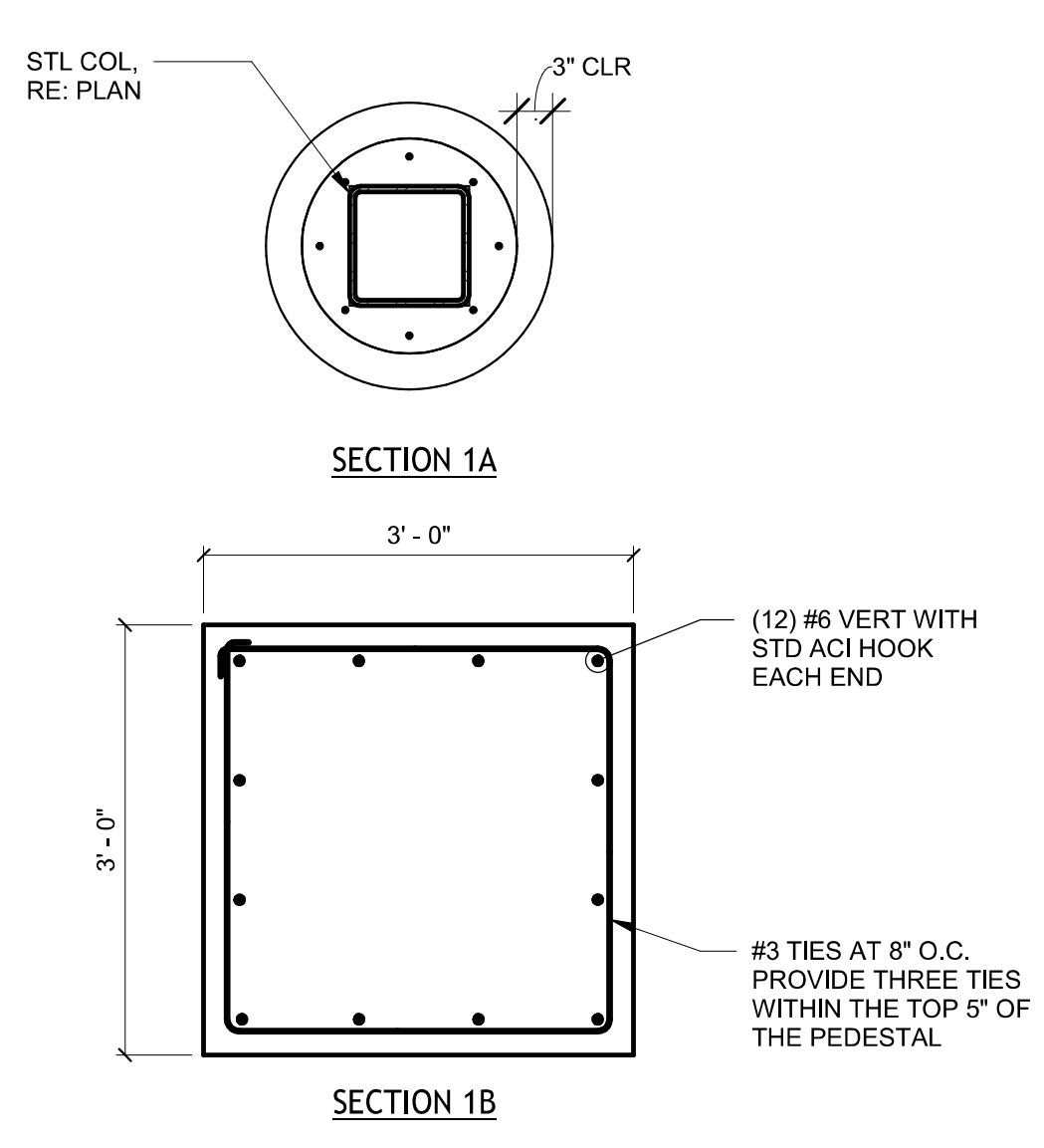
Project number: 763838-02
Scale: AS NOTED
Drawn By: GH
Checked By: KB/HR
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
ROOF FRAMING PLAN

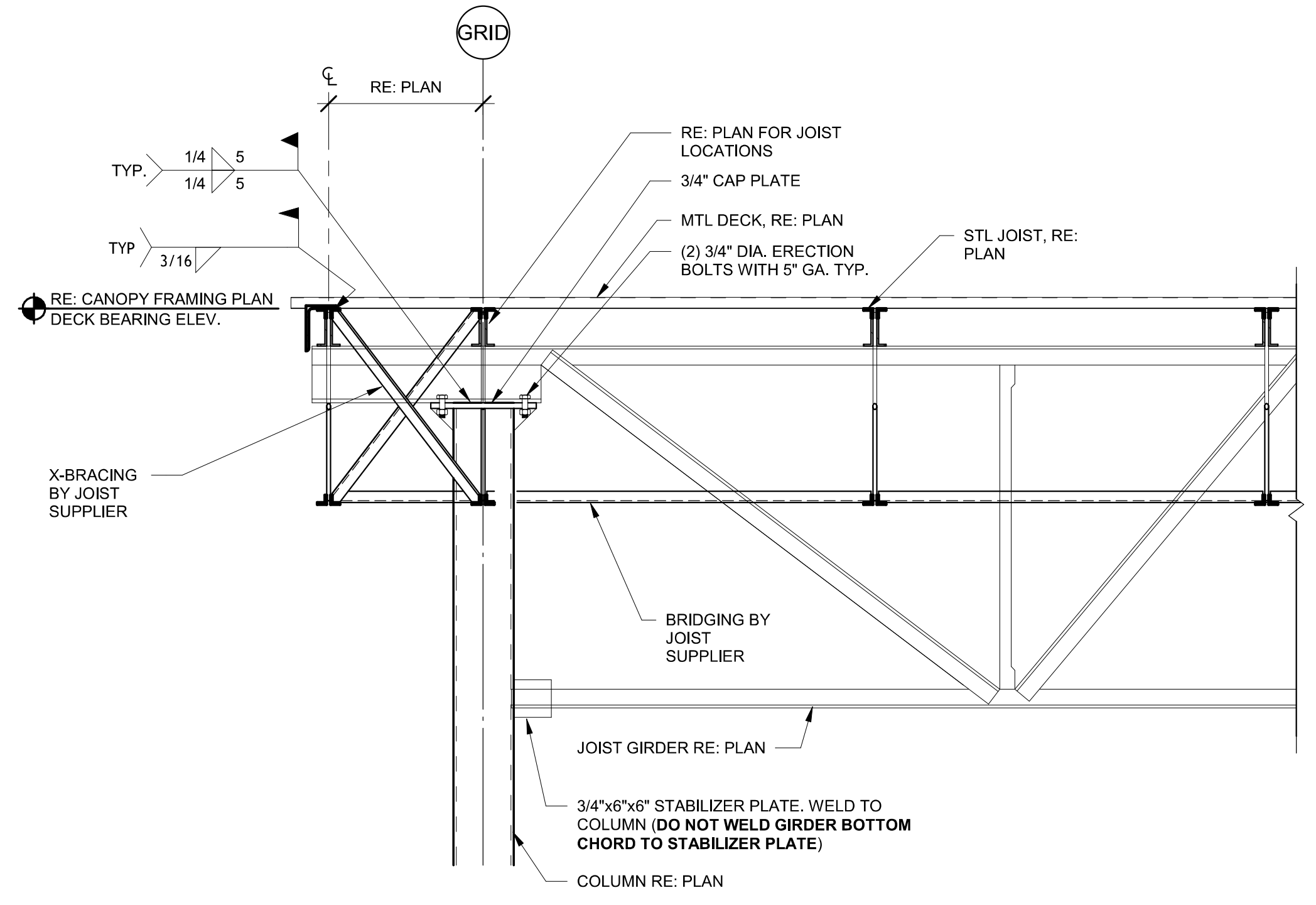
S1.10



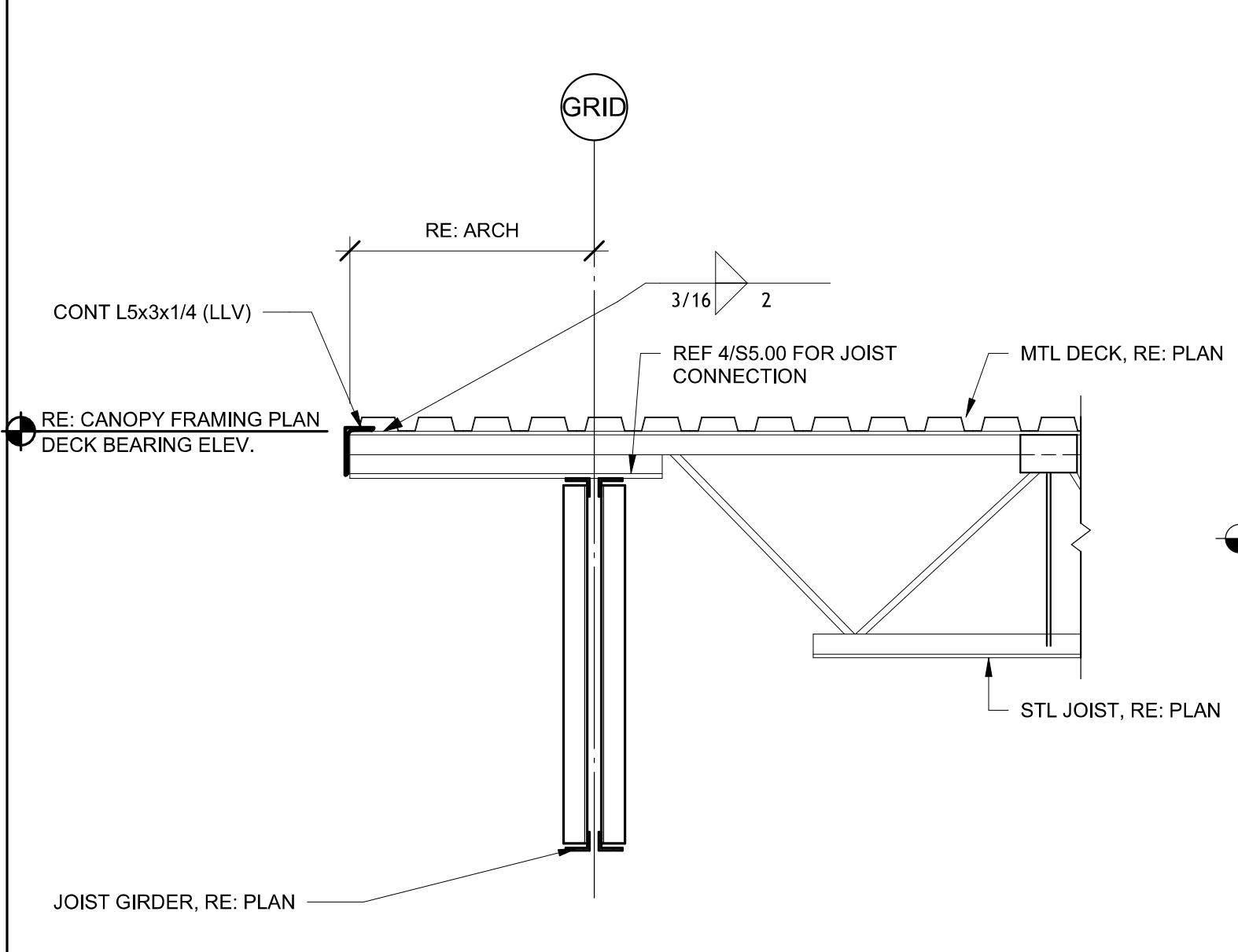
1 CANOPY FOOTING SECTION
S2.00 3/4" = 1'-0"



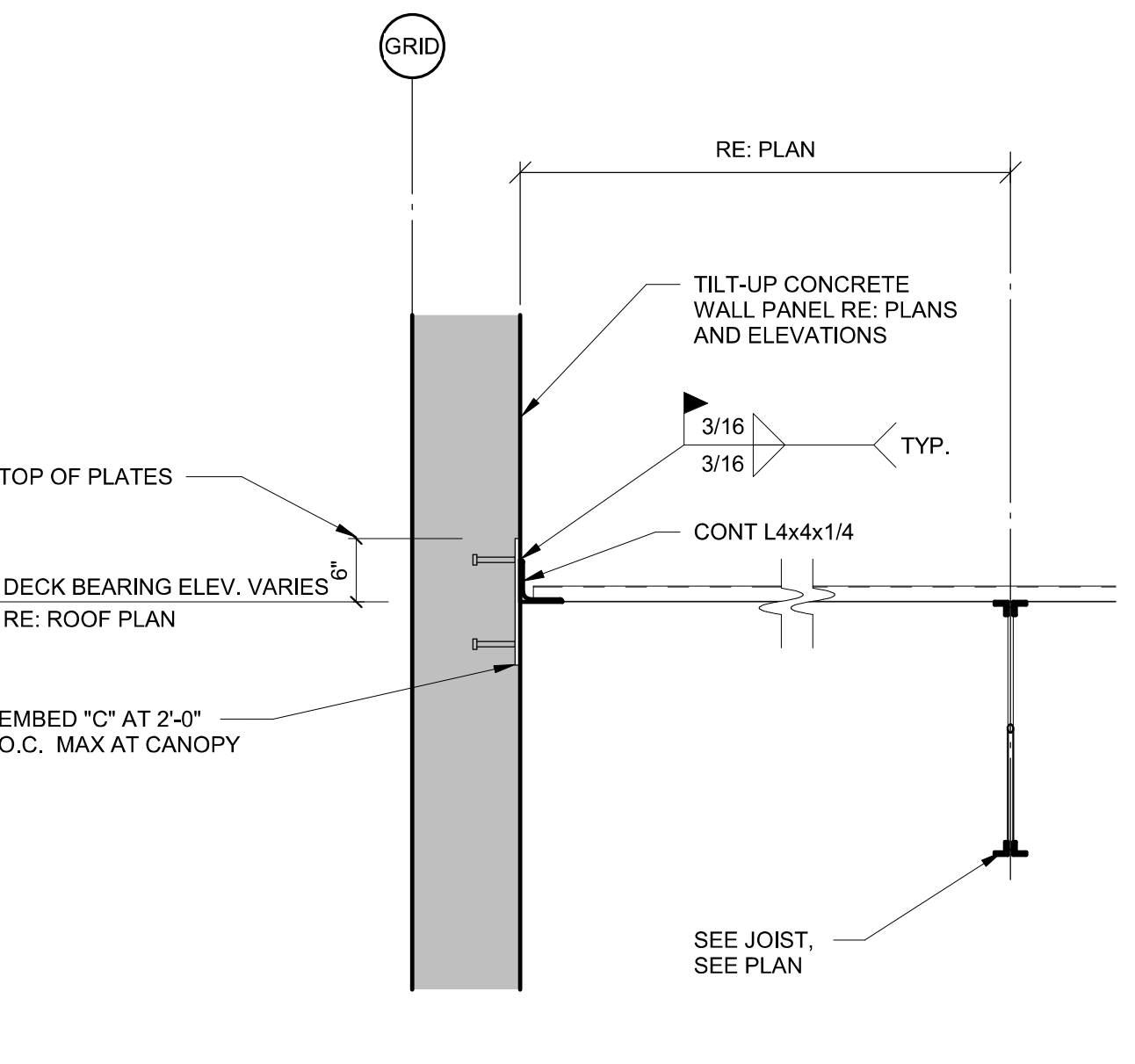
2 CANOPY FRAMING SECTION
S2.00 3/4" = 1'-0"



3 CANOPY FRAMING SECTION
S2.00 3/4" = 1'-0"



4 CANOPY FRAMING SECTION
S2.00 3/4" = 1'-0"

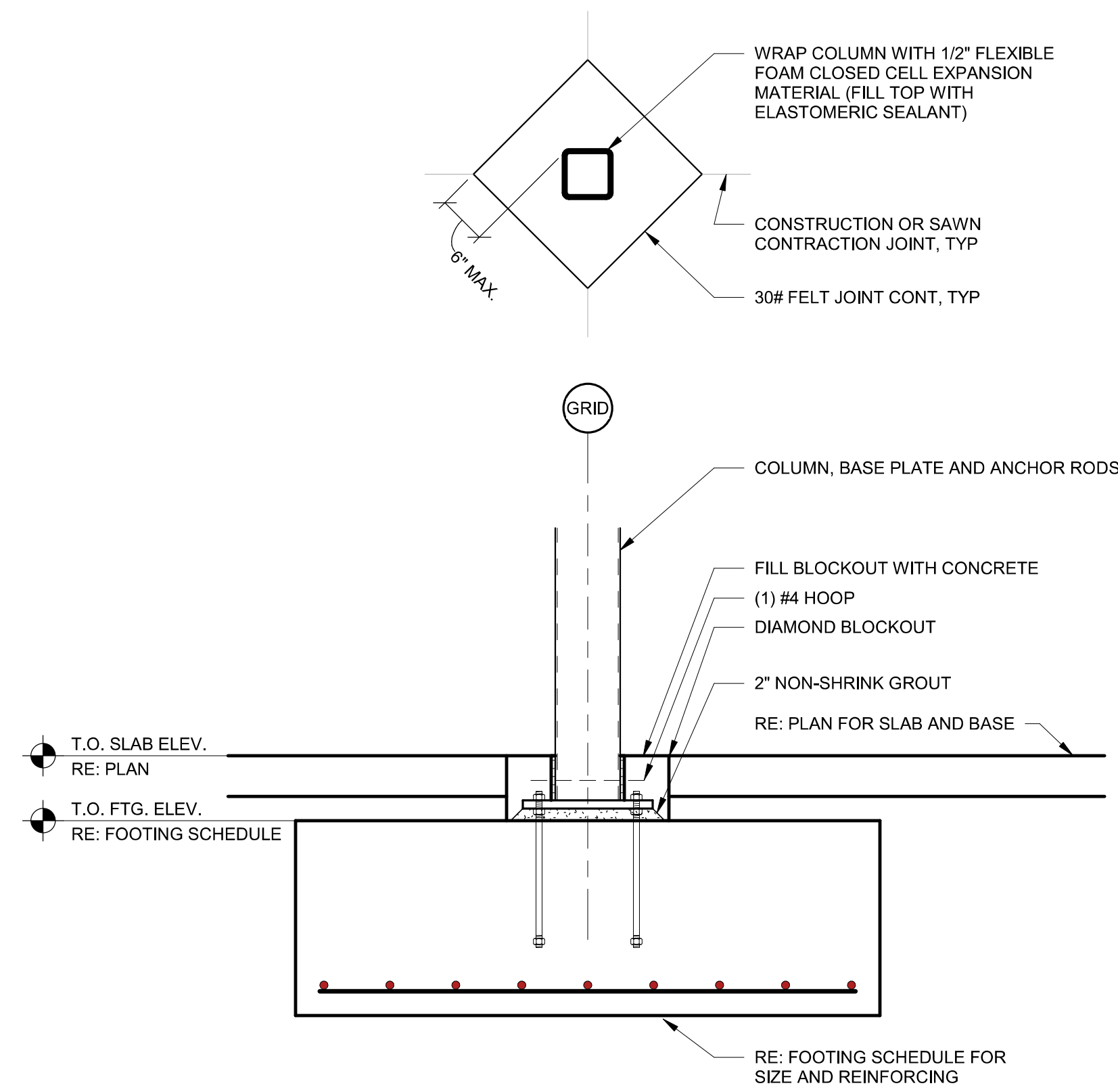


5 CANOPY SECTION AT WALL
S2.00 3/4" = 1'-0"

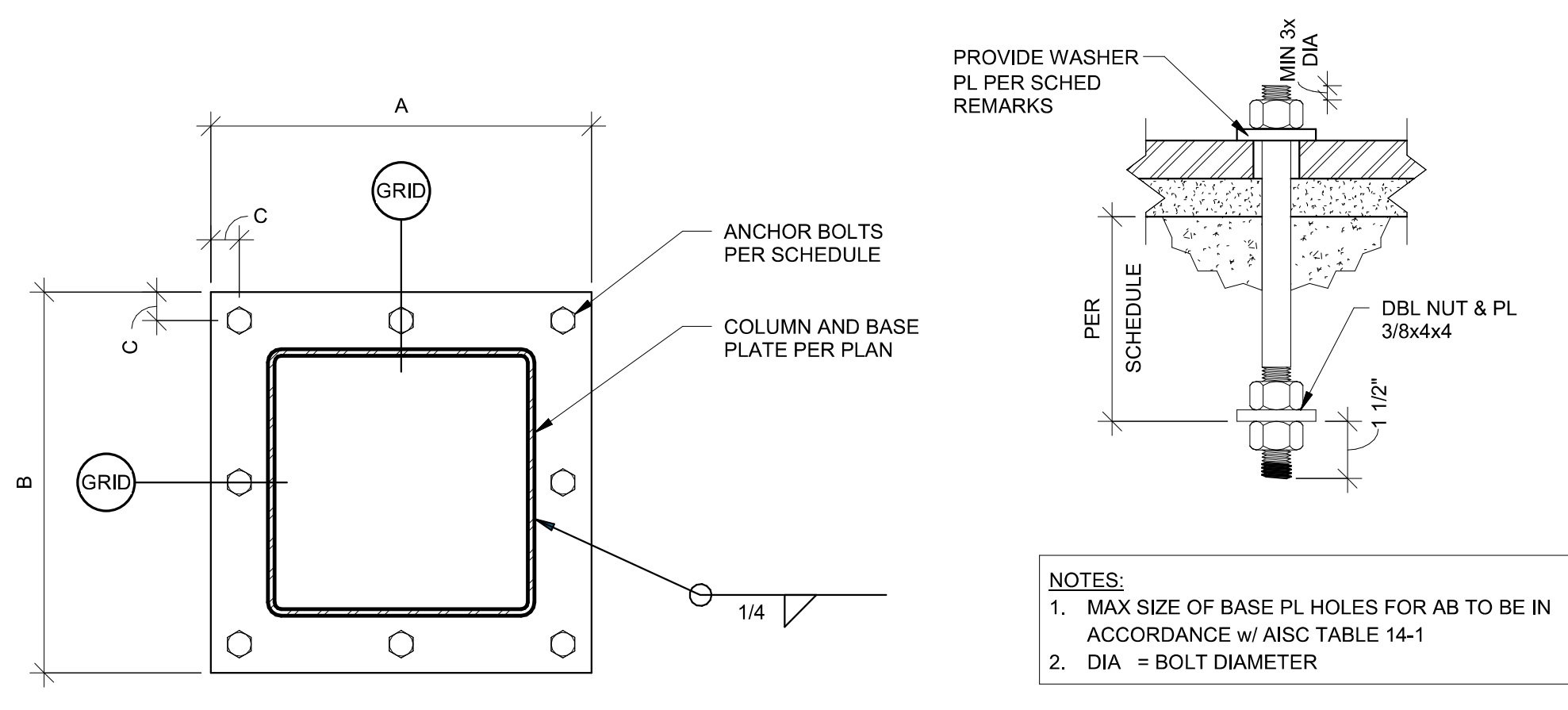
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Scale:	AS NOTED
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Checked By:	KB/HR
Date:	04.25.2025
Issue:	PERMIT SET

Sheet Title:
GENERAL SCHEDULES AND DETAILS

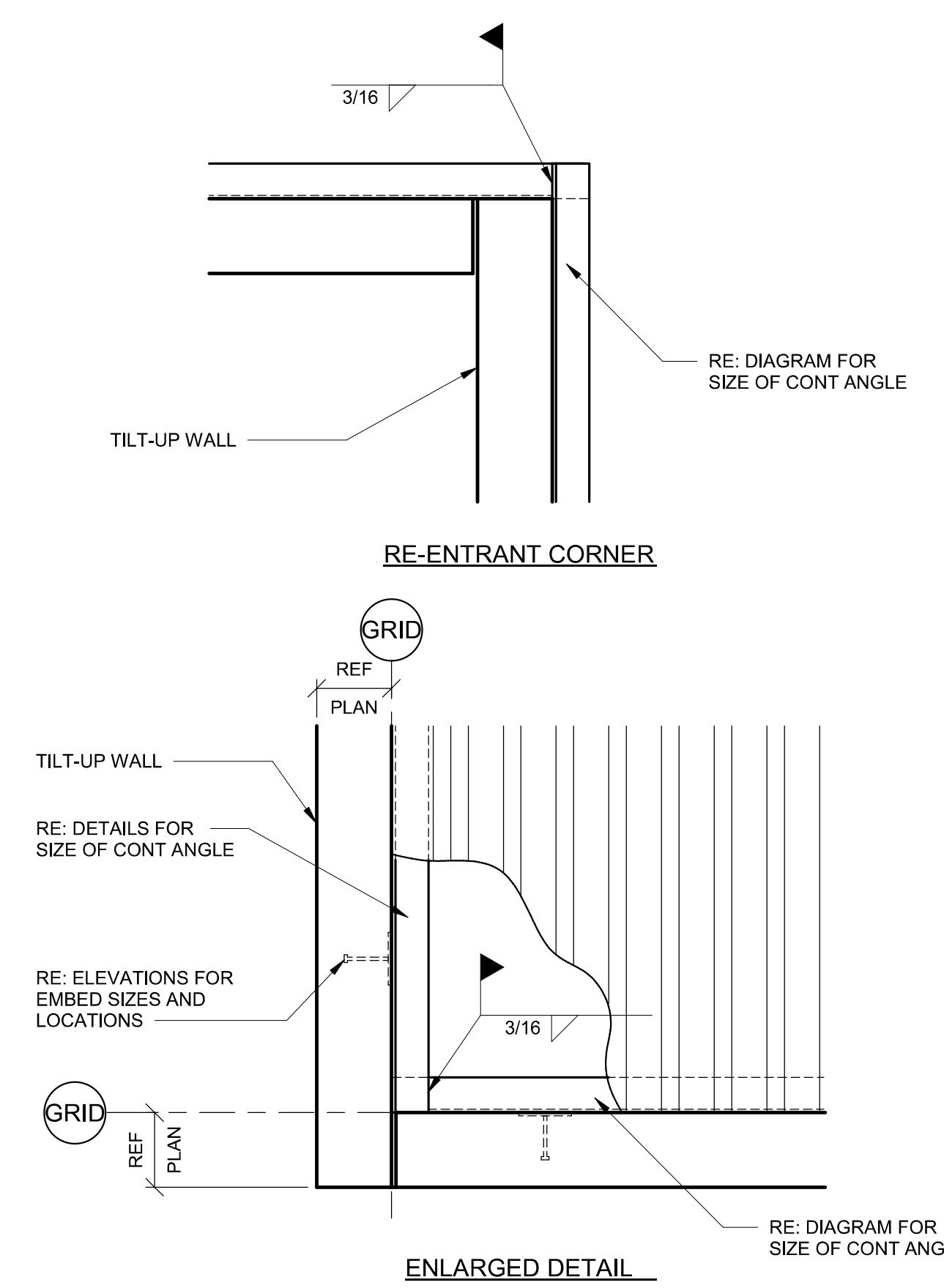


1 HSS COLUMN TO FOOTING
S3.00 NOT TO SCALE

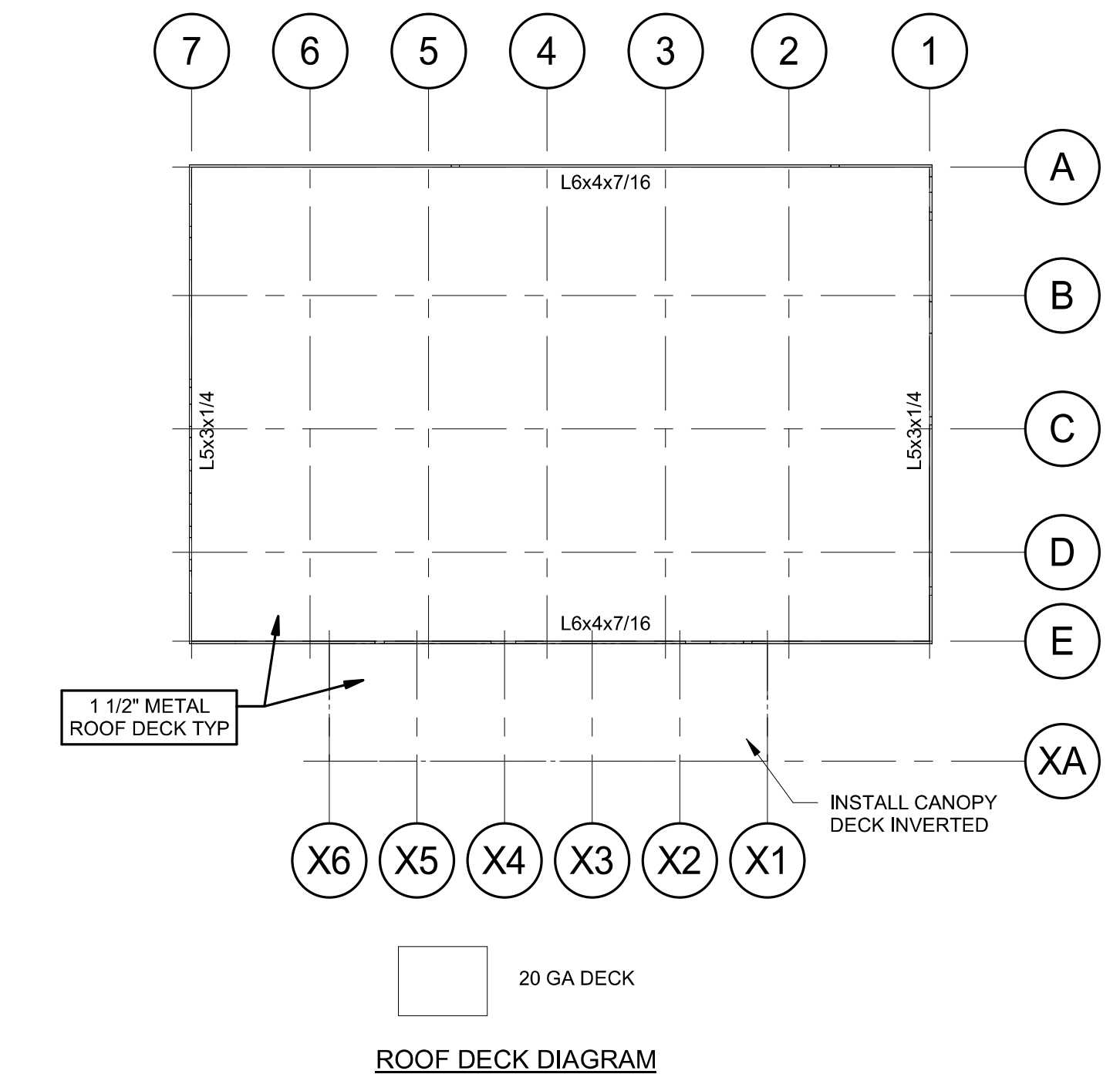
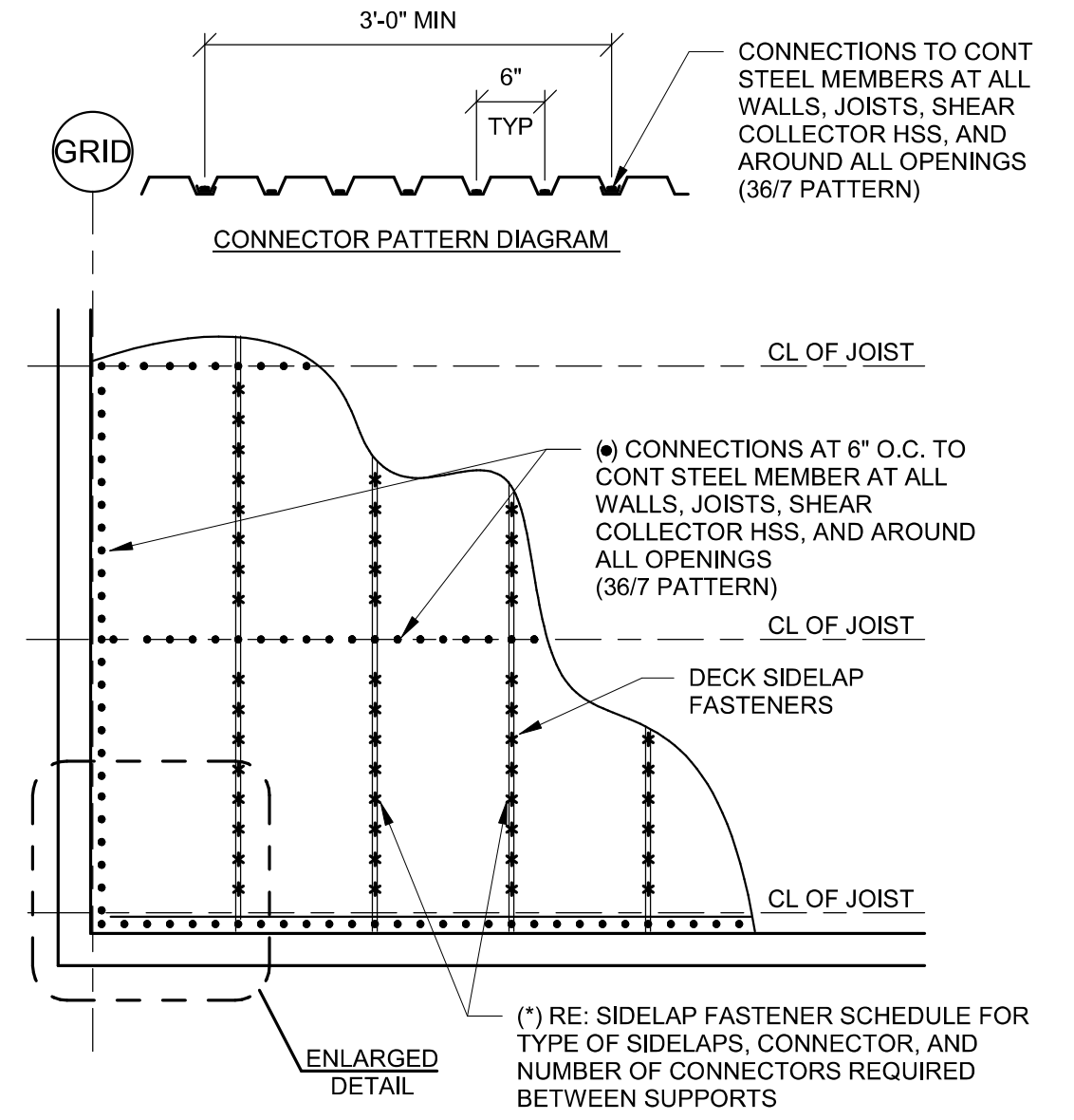


MARK	THICKNESS	BASE PLATE			NO.	ANCHOR BOLTS		REMARKS
		"A"	"B"	"C"		DIA.	EMBED	
HSS10x10x1/4	3/4"	18"	18"	1 1/2"	4	3/4"	1'-0"	BUILDING
HSS12x12x3/8	1 3/4"	24"	24"	3"	8	1 1/2"	1'-8"	CANOPY

2 BASE PLATE AND ANCHOR BOLT SCHEDULE
S3.00 12" = 1'-0"

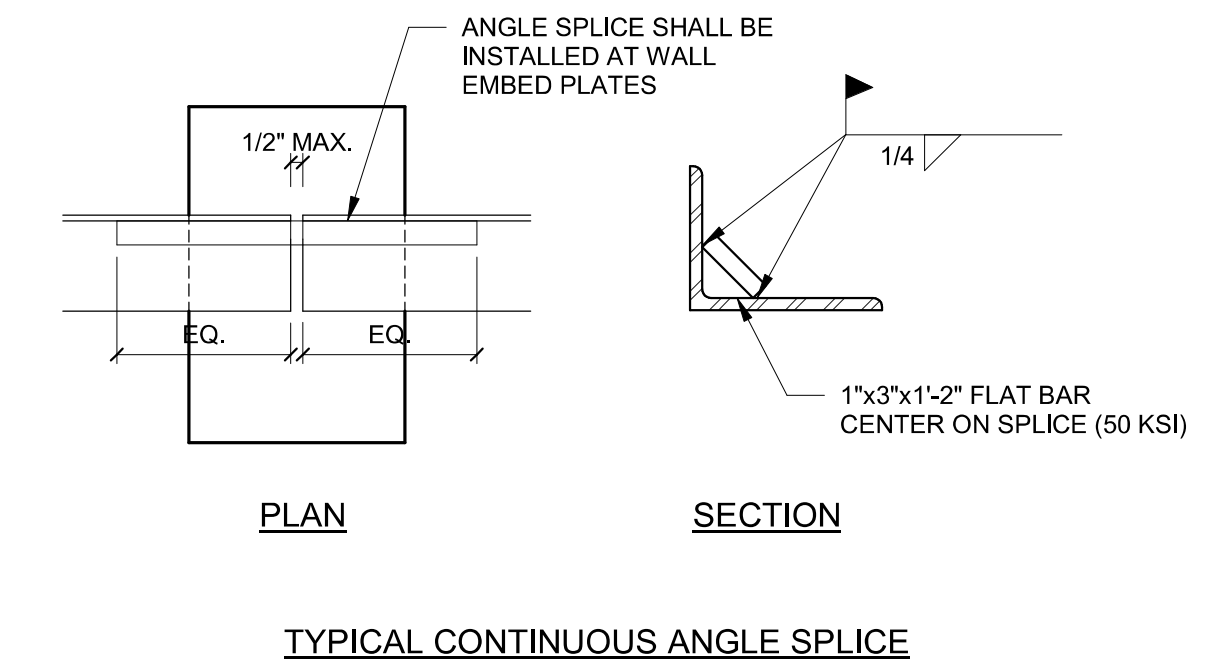


3 ROOF DIAPHRAGM CONNECTION DIAGRAM AND SCHEDULE
S3.00 NTS

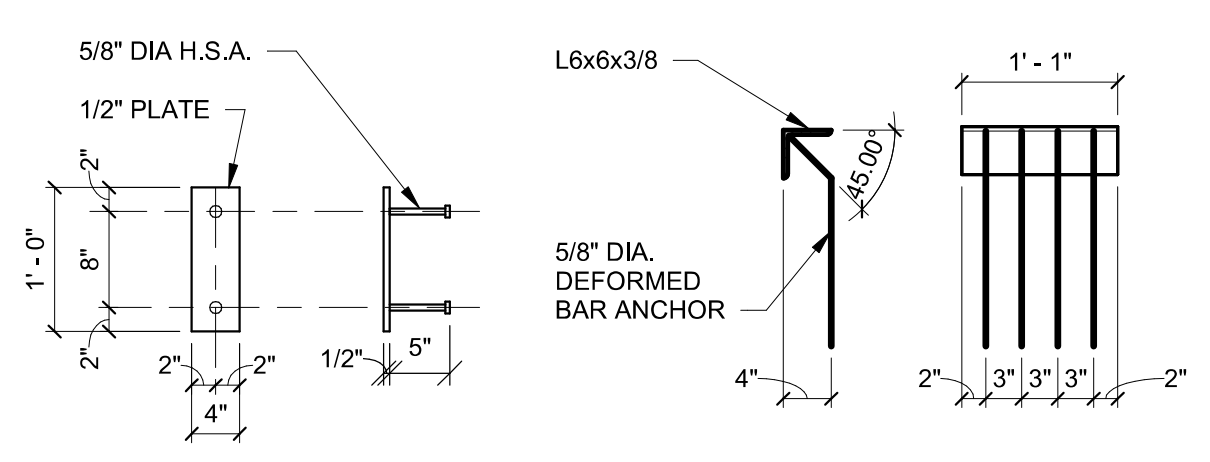


ROOF DECK FASTENER SCHEDULE			
(+) DECK TO CONTINUOUS STEEL MEMBER CONNECTOR TYPE (36/7 PATTERN)	(*) SIDE LAP CONNECTOR SPACING	SUITABLE BASE MATERIAL THICKNESS RANGE (IN)	REMARKS
5/8" VISIBLE DIAMETER PUDDLE WELDS	(5) AT (6) EQUAL SPACES	ALL THICKNESSES	BUILDING
POWDER ACTUATED HILTI X-HSN-24	(6) AT (7) EQUAL SPACES	1/8 TO 3/8 INCLUSIVE	BUILDING
4" HILTI S&MD 12-14 HWH #5 S5304 SELF-DRILLING METAL SCREWS	(3) AT (4) EQUAL SPACES	1/8 GA TO 1/4" INCLUSIVE	CANOPY

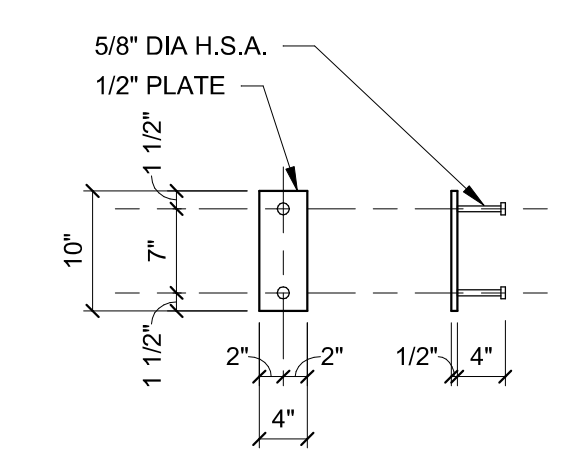
NOTES:
1. ALL SIDE LAP SCREWS SHALL BE #10-16 SELF-DRILLING SCREWS AT EQUAL SPACES.
2. INSTALL ALL DIAPHRAGM CHORD ANGLES LLH AND CONTINUOUS, RE: SPLICE DETAIL.
3. INSTALL CANOPY DECK INVERTED (36/6 PATTERN). CANOPY DECK SCREWS SHALL HAVE RUBBER WASHERS.



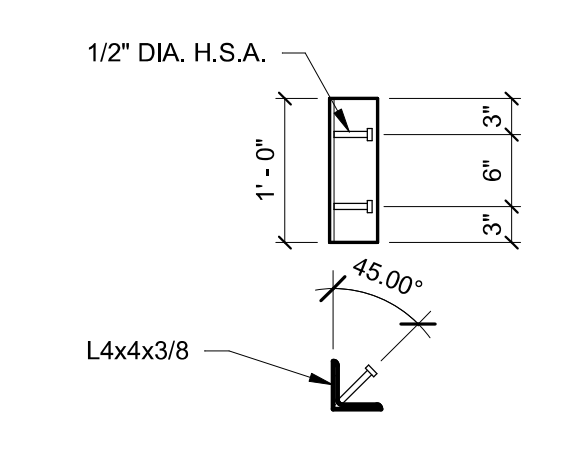
TYPICAL CONTINUOUS ANGLE SPLICE



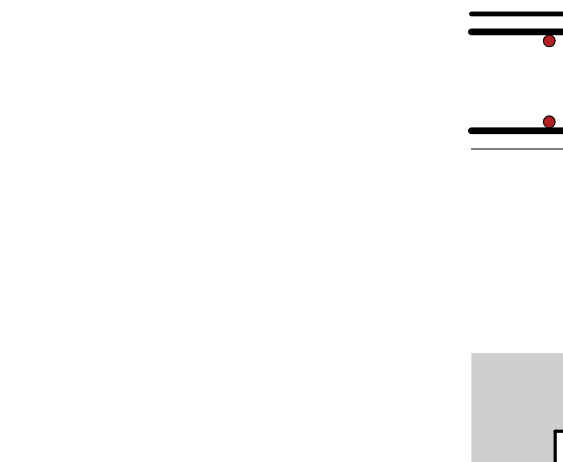
EMBED "A"
PL. 1/2"x4"x1'-1" WITH (4) 5/8" DIA. x24" D.B.A.
(2) 5/8" DIA. x5" H.S.A.



EMBED "B"
L6x6x3/8x1'-1" WITH (4) 5/8" DIA. x24" D.B.A.
FOR 10" TALL x7" DP. x1'-1" WIDE JOIST
GIRDER POCKET.



EMBED "C"
PL. 1/2"x4"x0'-10" WITH
(2) 5/8" DIA. x4" H.S.A.

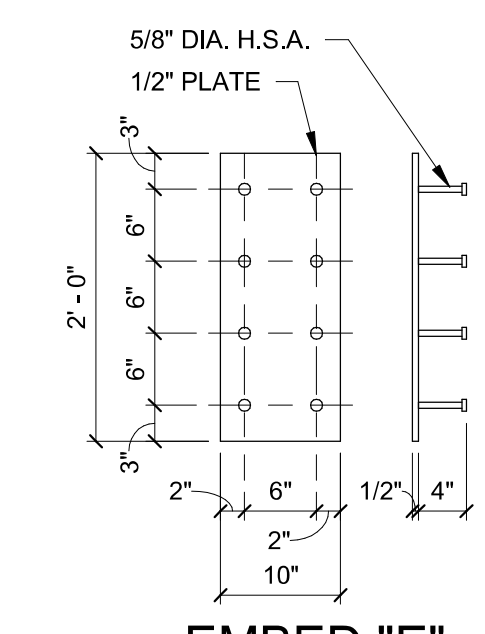


EMBED "D"
L4x4x3/8x1'-0" LONG WITH
(2) 1/2" DIA. x4" H.S.A.

3 EMBED DETAIL AT PANEL JOINT / EDGE
S3.10 3/4" = 1'-0"

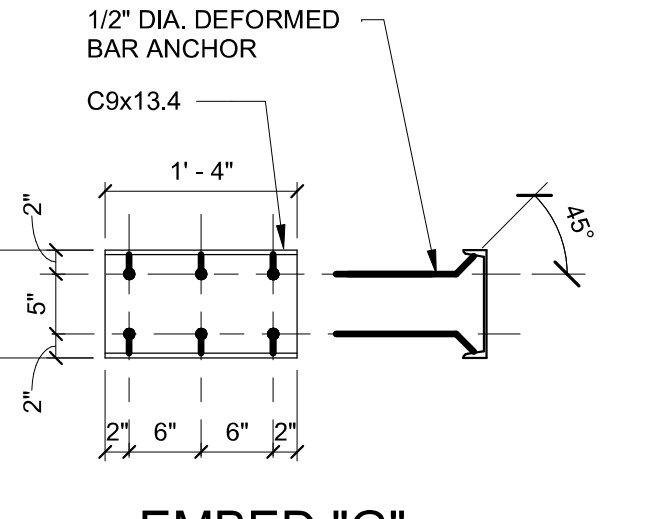
4 EMBED DETAIL AT PANEL JOINT / EDGE
S3.10 3/4" = 1'-0"

5 EMBED DETAIL AT PANEL JOINT / EDGE
S3.10 3/4" = 1'-0"

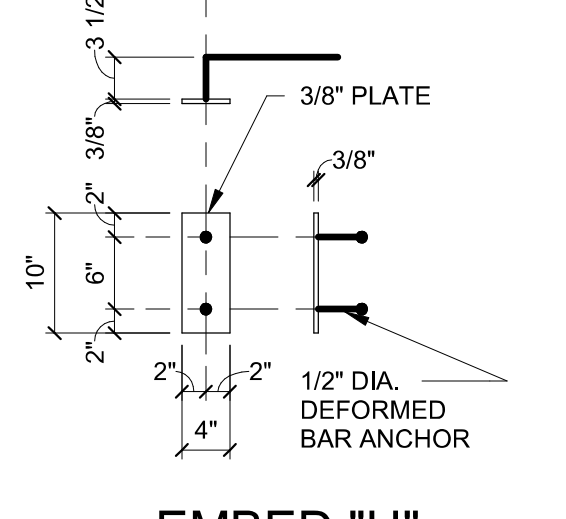


EMBED "E"
PL. 1/2"x10"x2'-0" WITH
(8) 5/8" DIA. x4" H.S.A.

EMBED "F"
NOT USED

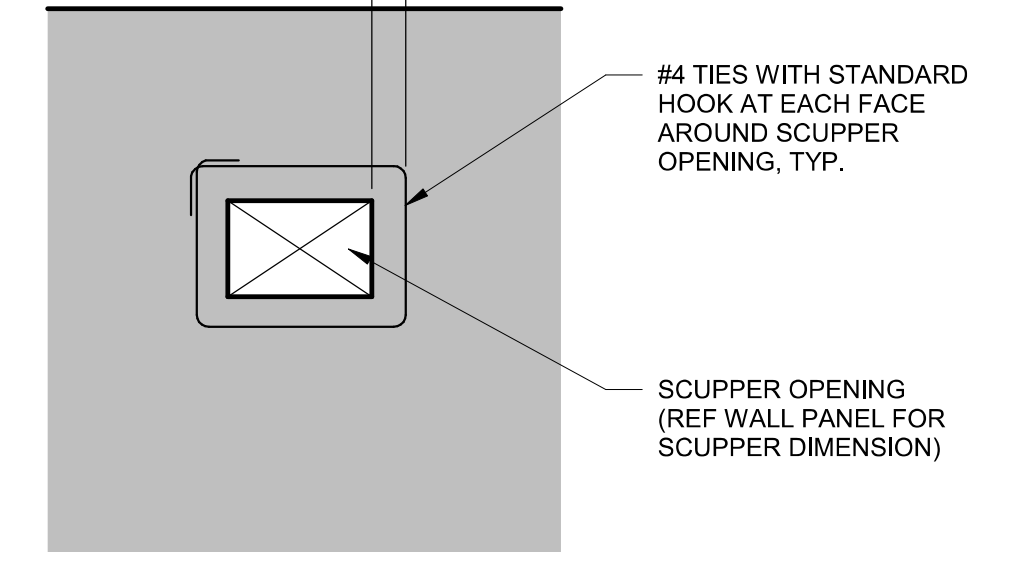


EMBED "G"
9 1/4" THICK PANEL
C9x13.4x1'-4" WITH (6)
1/2" DIA. x18" D.B.A.



EMBED "H"
PL. 3/8"x4"x0'-10" WITH
(2) 1/2" DIA. x18" D.B.A.

**2 REINFORCEMENT AROUND
SCUPPER OPENING**
S3.10 3/4" = 1'-0"



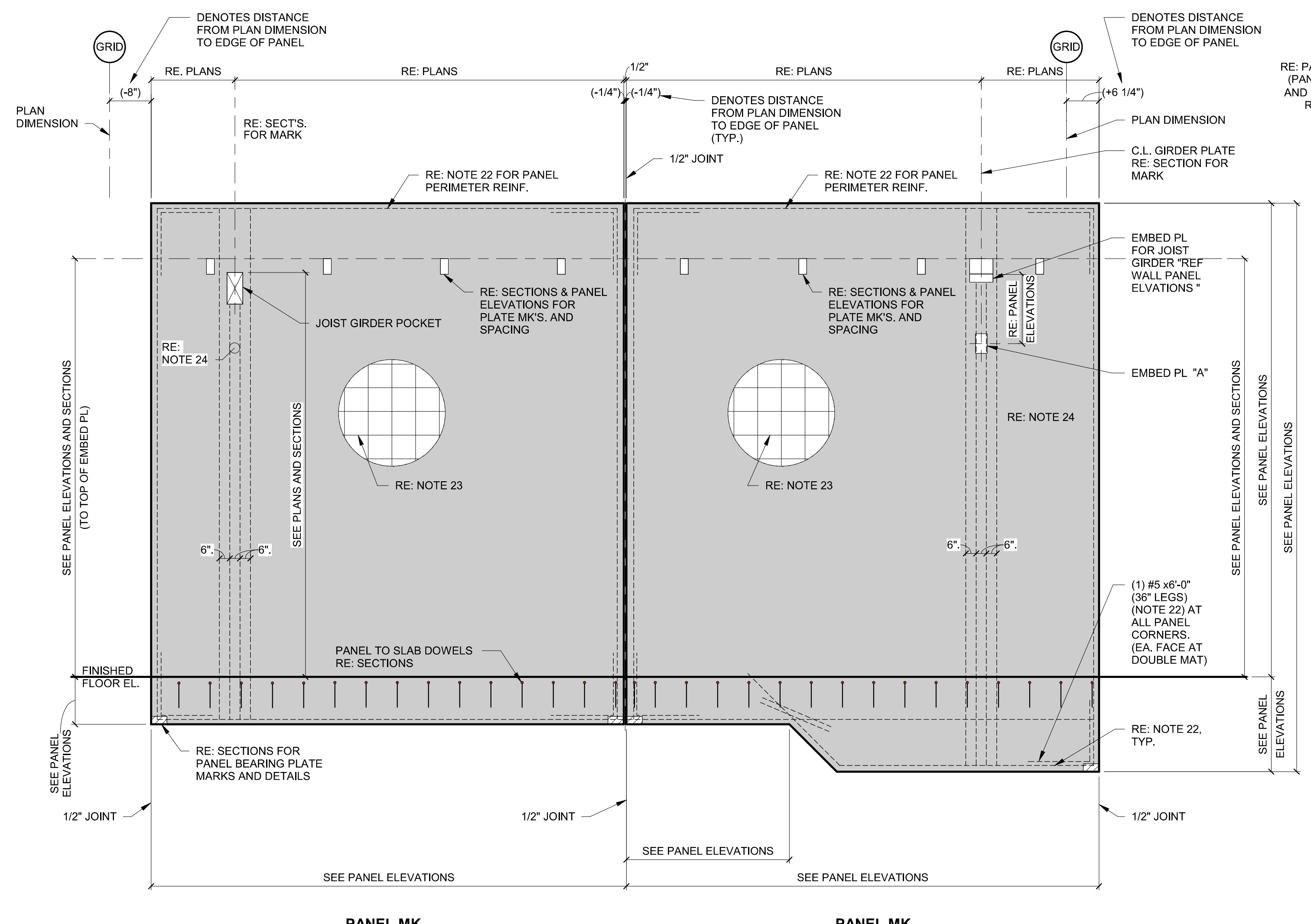
SITE CAST TILT-WALL NOTES:

- CONCRETE FOR WALL PANELS SHALL BE MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS. RE: GENERAL NOTES AND THE PROJECT SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
- ALL PANELS ARE VIEWED FROM INSIDE (UNLESS NOTED OTHERWISE) AND SHALL BE CAST WITH EXTERIOR FACE DOWN.
- RE: PANEL ELEVATIONS FOR PANEL THICKNESS.
- RE: ARCHITECTURAL DRAWINGS FOR EXTERIOR FINISH.
- RE: STRUCTURAL SECTIONS FOR DOWELS TO SLAB AND EMBEDDED POCKET AND PLATES FOR SUPPORT OF JOISTS, BEAMS, AND GIRDERS TO PANELS.
- ALL PLANS AND SECTIONS SHALL BE REVIEWED FOR REINFORCING AND EMBEDDED ITEMS NOT SHOWN ON THE PANEL ELEVATIONS.
- RE: ARCHITECTURAL DRAWINGS FOR CONNECTIONS OF WOOD, ETC. TO PANELS.
- RE: ARCH. AND MECHANICAL DRAWINGS FOR ADDITIONAL OPENINGS IN PANELS.
- PANELS SHALL NOT BE LIFTED UNTIL CONCRETE HAS ATTAINED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI. CONTRACTOR SHALL NOT SUPPORT CRANE LOADS TO SLAB ON GRADE UNLESS AUTHORIZED BY THE OWNER IN WRITING.
- THE CONTRACTOR SHALL PROVIDE DESIGN FOR THE LIFTING INSERTS AND ANY ADDITIONAL REINFORCING STEEL REQUIRED FOR LIFTING OPERATION. THE PANELS HAVE BEEN DESIGNED FOR GRAVITY, WIND AND SEISMIC CONDITIONS ONLY.
- THE CONTRACTOR SHALL EMPLOY THE SERVICE OF A LIFTING ACCESSORY SUPPLIER TO DESIGN AND SUPPLY ALL THE HARDWARE FOR LIFTING AND BRACING THE WALL PANELS.
- THE LIFTING ACCESSORY SUPPLIER SHALL COMPLETE SHOP DRAWINGS COVERING ERECTION PROCEDURES. ADDITIONAL REINFORCING AND TEMPORARY BRACING. THE SHOP DRAWINGS SHALL BE PREPARED AND SEALED BY A REGISTERED STRUCTURAL ENGINEER IN THE STATE OF WHERE THE PROJECT IS LOCATED.
- THE CONTRACTOR SHALL VERIFY ALL WALL PANEL ELEVATIONS FOR DIMENSIONS, OPENINGS, BEAM AND JOIST GIRDER POCKET LOCATIONS AND WELD PLATE LOCATIONS AND REPORT AND DISCREPANCIES TO THE STRUCTURAL ENGINEER BEFORE POURING ANY PANELS.
- EMBEDDED PLATES SHOWN ON TILT-WALL ELEVATIONS ARE FOR CONTRACTORS CONVENIENCE ONLY. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EMBEDDED PLATES, ETC. INDICATED ON THE STRUCTURAL PLANS AND/OR SECTIONS WHETHER SHOWN OR NOT ON PANEL ELEVATIONS.
- THE TILT-WALL ELEVATIONS MAY BE REPRODUCED FOR SHOP DRAWINGS USE AS LONG AS SEALS, COMPANY TITLE BLOCKS, ETC. ARE REMOVED. IN USING THESE DRAWINGS THE CONTRACTOR/FABRICATOR SHALL TAKE FULL RESPONSIBILITY FOR CORRECTNESS OF ALL DIMENSIONS, EMBEDDED ITEMS AND OPENINGS SHOWN. DO NOT SCALE TILT-WALL PANEL ELEVATIONS.
- CONTRACTOR SHALL FURNISH AND SUBMIT SHOP DRAWINGS FOR REVIEW BY THE ENGINEER ON THE FOLLOWING ITEMS:
 - REINFORCING STEEL
 - EMBEDDED ITEMS FOR PLACEMENT
 - PANEL LIFTING INSERTS
 - DETAILS FOR TILT-WALL PANELS
 - PROPOSED EMBEDDED CONDUIT PLACEMENT
- SYMBOLS AND ABBREVIATIONS:
 - N.S. --- NEAR SIDE
 - F.S. --- FAR SIDE
 - H.S.A. --- HEADED STUD ANCHOR
 - D.B.A. --- DEFORMED BAR ANCHOR
- TEMPORARY BRACING OF PANELS SHALL NOT BE REMOVED UNTIL AFTER THE PANEL POUR STRIP HAS BEEN POURED AND ROOF DIAPHRAGM CONSTRUCTION AND ALL CONNECTIONS HAVE BEEN COMPLETED.
- LIFTING INSERTS VISIBLE AFTER FINAL CONSTRUCTION SHALL BE PATCHED AND FINISHED TO MEET ARCHITECTS APPROVAL.
- ALL PANEL LEGS THAT ARE REMAINING AROUND THE SIDES OF OPENINGS ARE TO BE REINFORCED AS SHOWN BELOW. VERTICAL X PANEL HEIGHT AT EACH FACE OF PANEL WITH #4 TIES ARE 12" O.C. VERTICAL.

LEG WIDTH VERT. REINF. (11 1/4")

1'-8" TO 1'-11"	(3) #6 (EA. FACE)
2'-0" TO 2'-5"	(4) #7 (EA. FACE)
2'-8" TO 2'-11"	(5) #7 (EA. FACE)
3'-0" TO 4'-0"	(6) #7 (EA. FACE)
4'-1" TO 5'-0"	(10) #7 (EA. FACE)

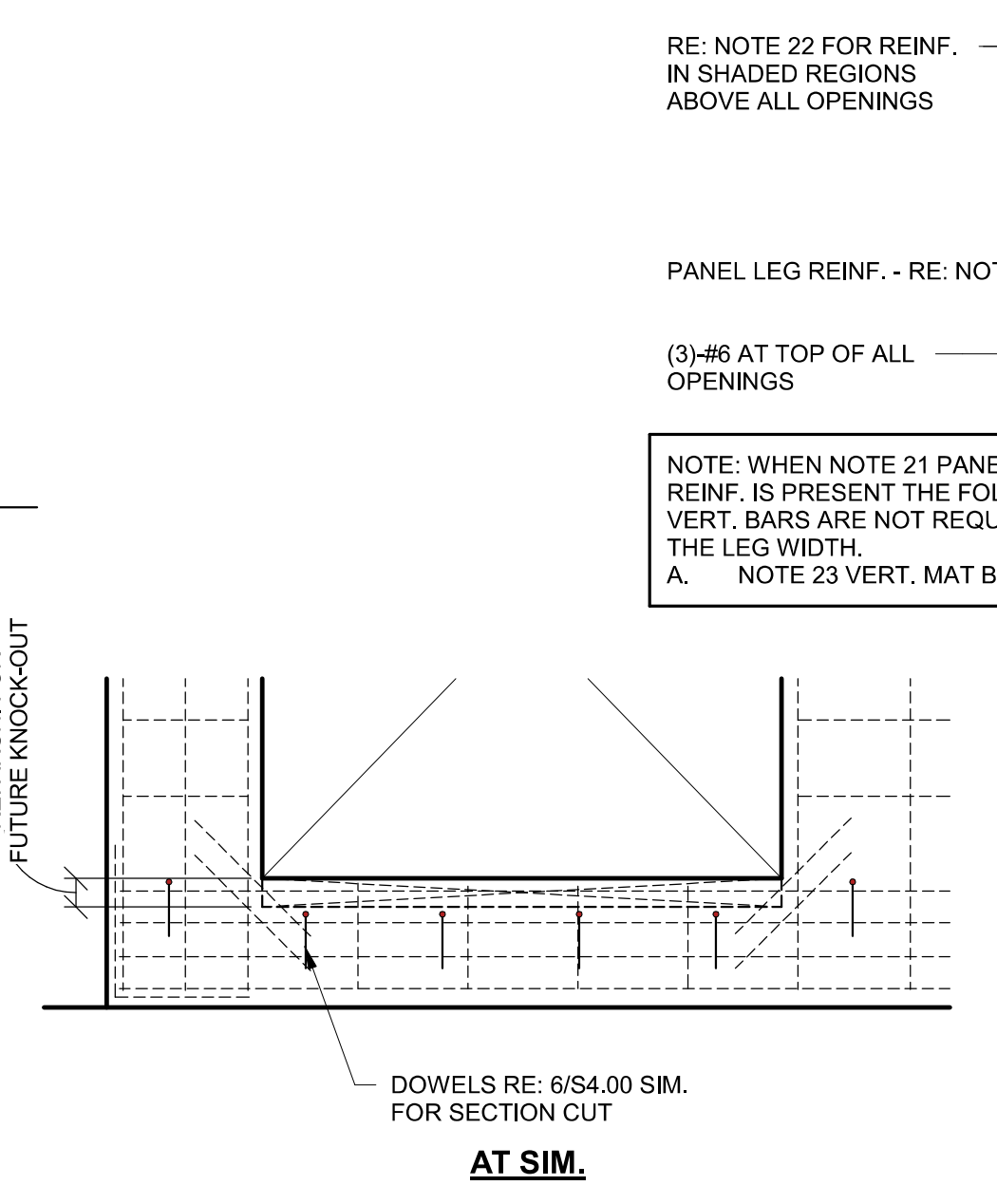
- REINFORCE ALL REGIONS ABOVE OPENINGS WITH:
 - #5 VERTICAL AT 6" O.C. (EA. FACE)
 - #4 HORIZONTAL TIE AT 6" O.C. (EA. FACE)
 - (4) #8 DIAGONAL BARS EA. WAY
- UNLESS OTHERWISE NOTED ON PANEL ELEVATIONS, PROVIDE (3) #6 CONTINUOUS AT BOTTOM OF PANEL, (2) #6 VERTICAL X PANEL HEIGHT. ON EACH END OF PANEL, (2) #6 CONTINUOUS AT TOP OF PANEL, AND (2) #6 x6'-0" (36" LEGS) AT ALL CORNERS OF PANEL. PROVIDE ONE BAR EA. FACE AT DOUBLE MAT REINF.
- MAT STEEL REINFORCING IS TO BE AS FOLLOWS:
 - 11 1/4" THICK PANELS --- #6 AT 12" O.C. VERTICAL BAR (EA. FACE)
 - RE: 45x60 FOR REINF. REQ'D AT DOCK WALL PANELS BELOW FFE.
 - 11 1/4" THICK PANELS --- #4 AT 12" O.C. HORIZONTAL BAR (EA. FACE)
 - UNLESS OTHERWISE NOTED ON PANEL ELEVATIONS, PROVIDE (4) #6 VERTICAL AT 6" O.C. CENTERED IN PANEL X PANEL HEIGHT AT ALL BEAMS/JOIST GIRDER LOCATIONS IN ADDITION TO TYPICAL PANEL REINFORCING.
 - AT ALL PANEL OPENINGS OR FUTURE KNOCK-OUT OPENINGS PROVIDE (2) #6 VERTICAL X PANEL HEIGHT AT EACH SIDE OF OPENING, (2) #6 X PANEL WIDTH AT TOP AND BOTTOM OF OPENING AND (2) #6 x5'-0" DIAG. AT EA. CORNER OF OPENING. PROVIDE ONE BAR EACH FACE AT DOUBLE MAT REINF.
 - RE: GENERAL NOTES SECTION, "CONCRETE", "REINFORCING STEEL", AND ANCHORS FOR ADDITIONAL SPECIFICATIONS EACH WALL PANEL SHALL BE SET ON MINIMUM OF (2) SETTING PADS, (1) PAD AT EACH END WHEN WALL PANEL ENDS RESTS ON TWO SPOT FOOTINGS. AT CONTINUOUS FOOTING LOCATIONS, EACH WALL PANEL SHALL BE SET ON MINIMUM OF (6) SETTING PADS, (1) PAD AT EACH END AND QUARTER POINTS OF PANEL.
 - GROUT SPACE BENEATH WALL PANELS FOR FULL BEARING THE SAME DAY WALL PANELS ARE SET. NON-SHRINK GROUT SHALL BE A NON-METALLIC, SHRINKAGE RESISTANT, PREMIXED, NON-CORROSIIVE, NON-STAINING PRODUCT CONTAINING PORTLAND CEMENT, SILICA SAND, SHRINKAGE COMPENSATING AGENTS, AND FLUIDITY IMPROVING COMPOUNDS. NON-SHRINK GROUT SHALL CONFORM TO CORPS OF ENGINEERS SPECIFICATION FOR NON-SHRINK GROUT, C-3-CRD-C321. 28-DAY COMPRESSIVE STRENGTH AS DETERMINED BY GROUT CUBE TESTS SHALL BE 5,000 PSI PACK SPACES UNDERNEATH LOAD-BEARING ELEMENTS WITH STIFF GROUT MATERIAL. TAMPING UNTIL VOIDS ARE COMPLETELY FILLED. PLACE GROUT TO FINISH SMOOTH, PLUMB, AND LEVEL WITH ADJACENT CONCRETE SURFACES ENSURING THAT ALL BEARING PLATES AND STEEL SHIMS ARE ENCASED.
 - TEMPORARY ERECTION BRACING OF PANELS SHALL BE LOCATED SUCH THAT NO INTERFERENCE OR INTERRUPTION WITH CONTINUOUS ROOF EDGE ANGLES IS REQUIRED.
 - PANELS DAMAGED DURING ERECTION SHALL BE REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER OF RECORD.



PANEL MK.

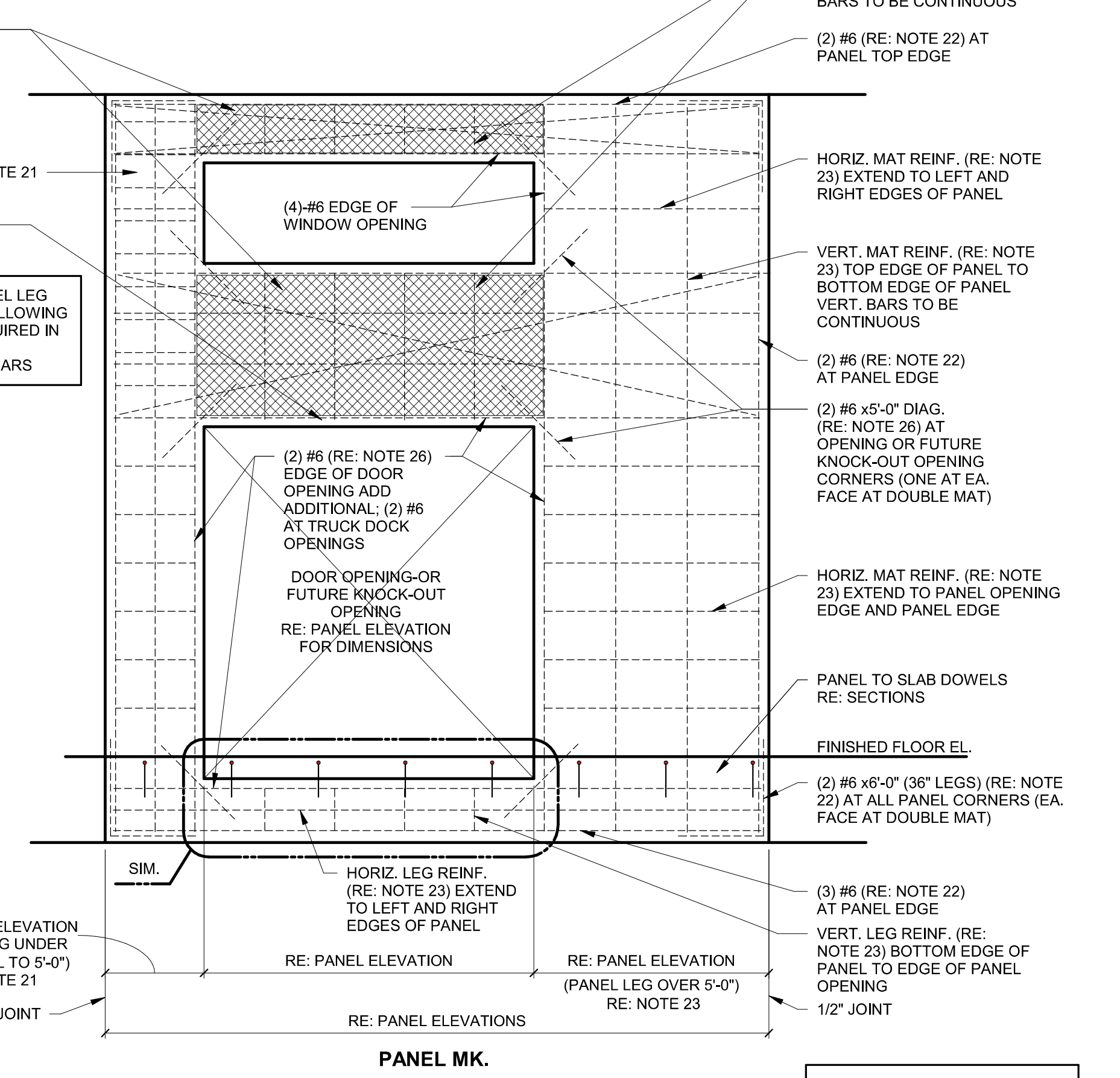
PANEL MK.

TYPICAL PANEL REINF. INFORMATION
NOTE: RE: PANEL ELEVATIONS FOR ANY ADDITIONAL OR REPLACEMENT REINFORCING

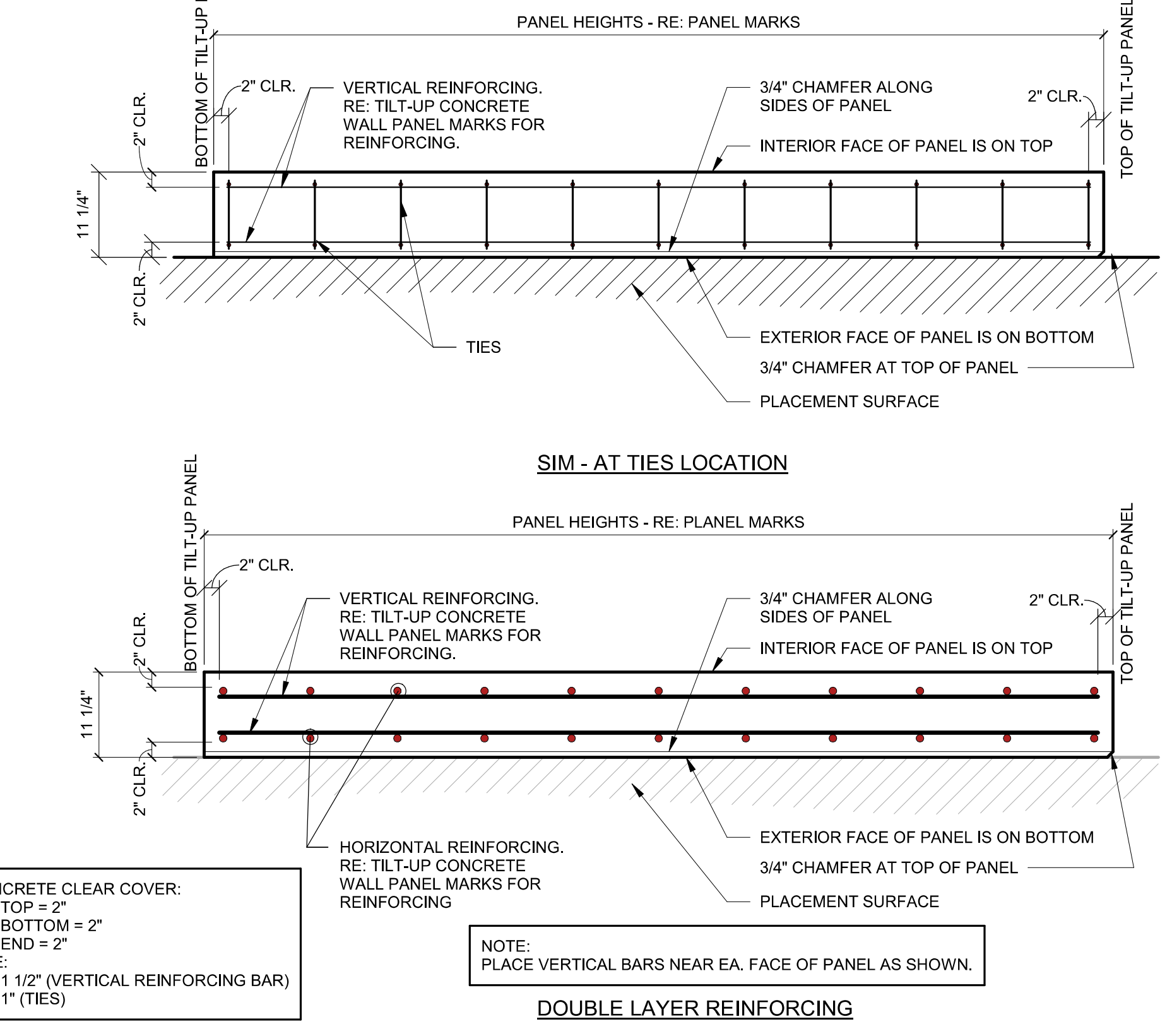


RE: NOTE 22 FOR REINF. IN SHADED REGIONS ABOVE ALL OPENINGS

NOTE: WHEN NOTE 21 PANEL LEG REINF. IS PRESENT THE FOLLOWING VERT. BARS ARE NOT REQUIRED IN THE LEG WIDTH.
A. NOTE 23 VERT. MAT BARS



TYPICAL PANEL REINF. INFORMATION AT PANELS WITH OPENINGS
NOTE: RE: PANEL ELEVATIONS FOR ANY ADDITIONAL OR REPLACEMENT REINFORCING



SIM - AT TIES LOCATION

DOUBLE LAYER REINFORCING

1 TYP. TILT-UP PANEL REINFORCEMENT DETAIL
S3.10 3/4" = 1'-0"

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

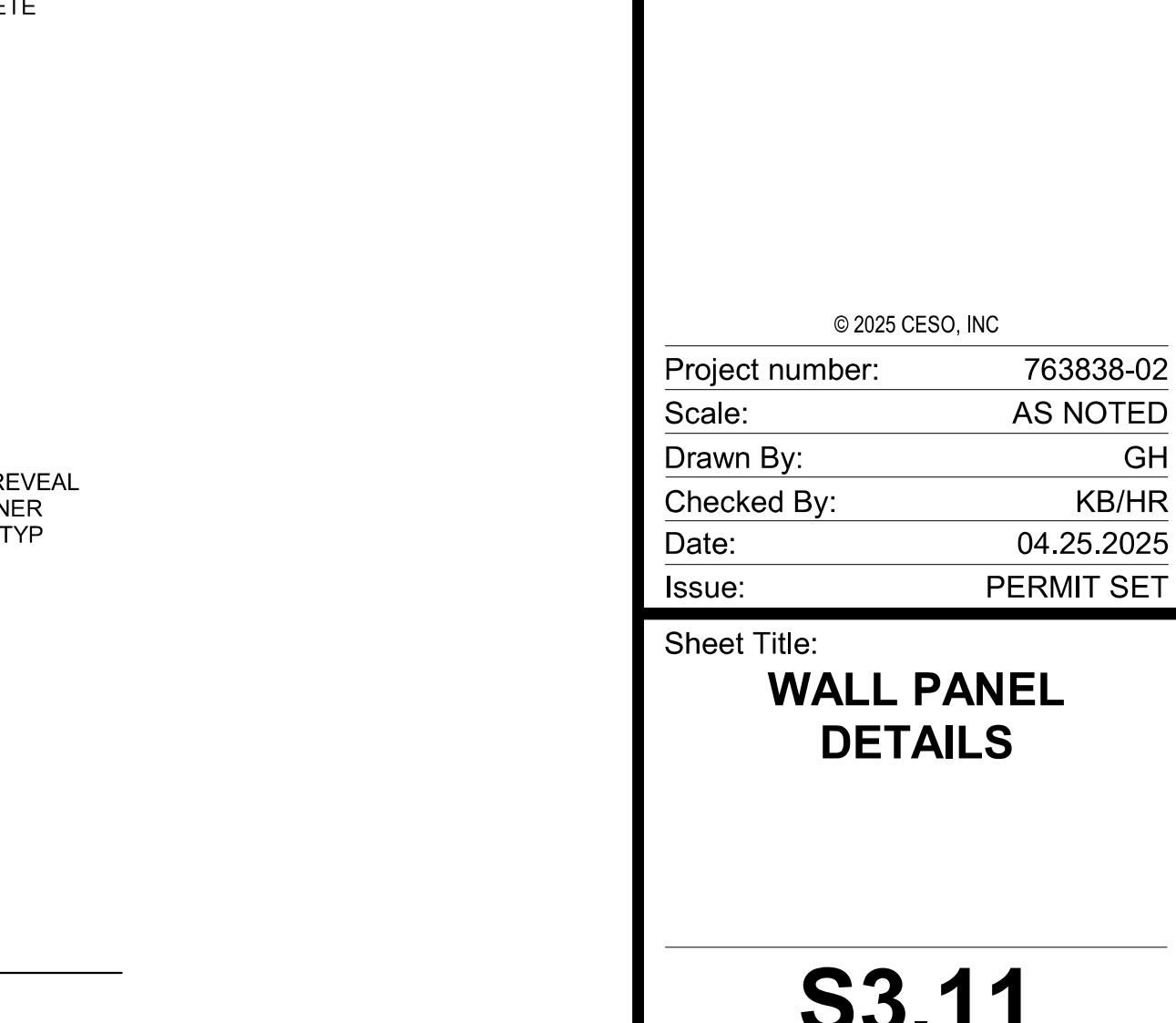
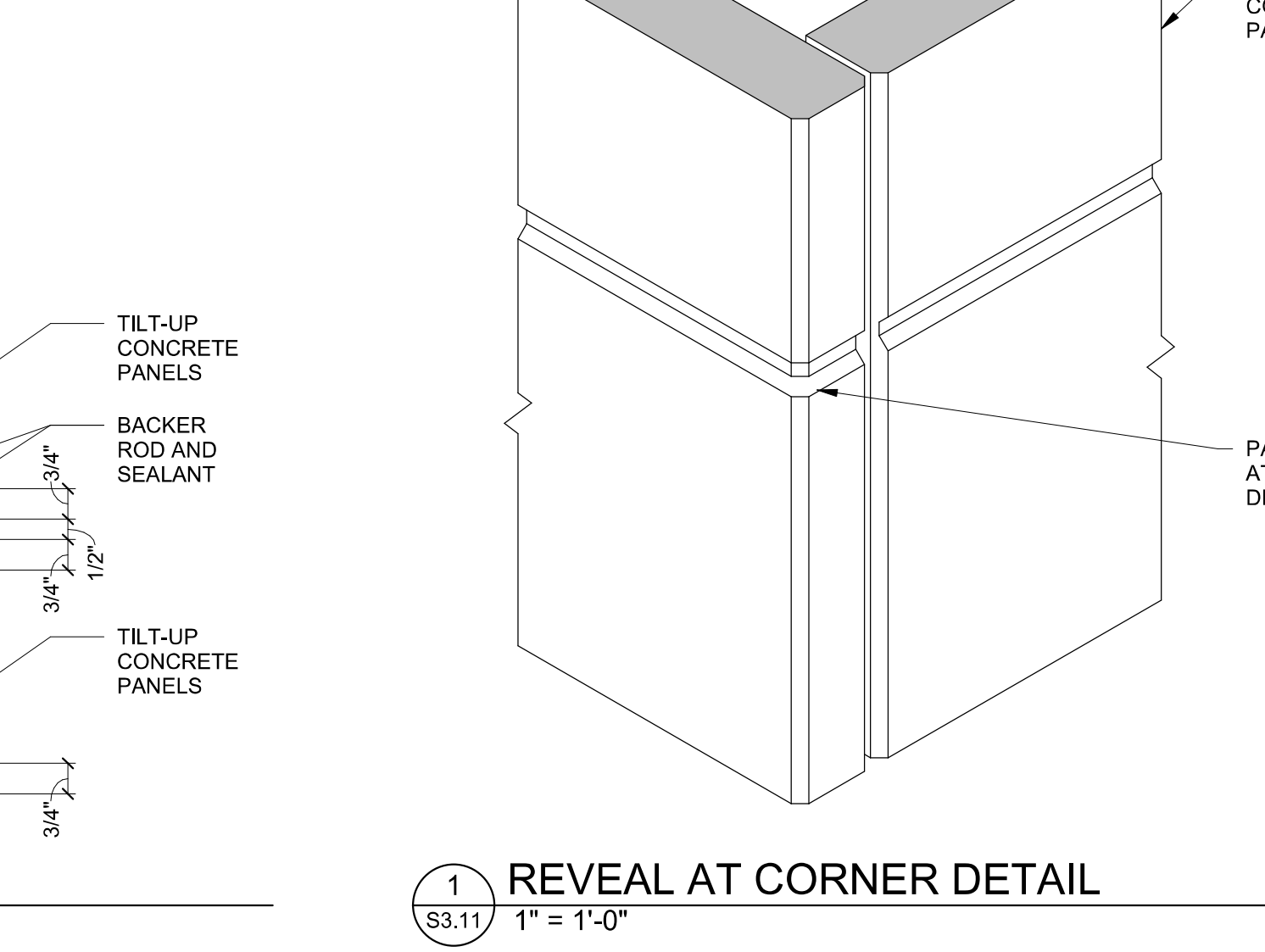
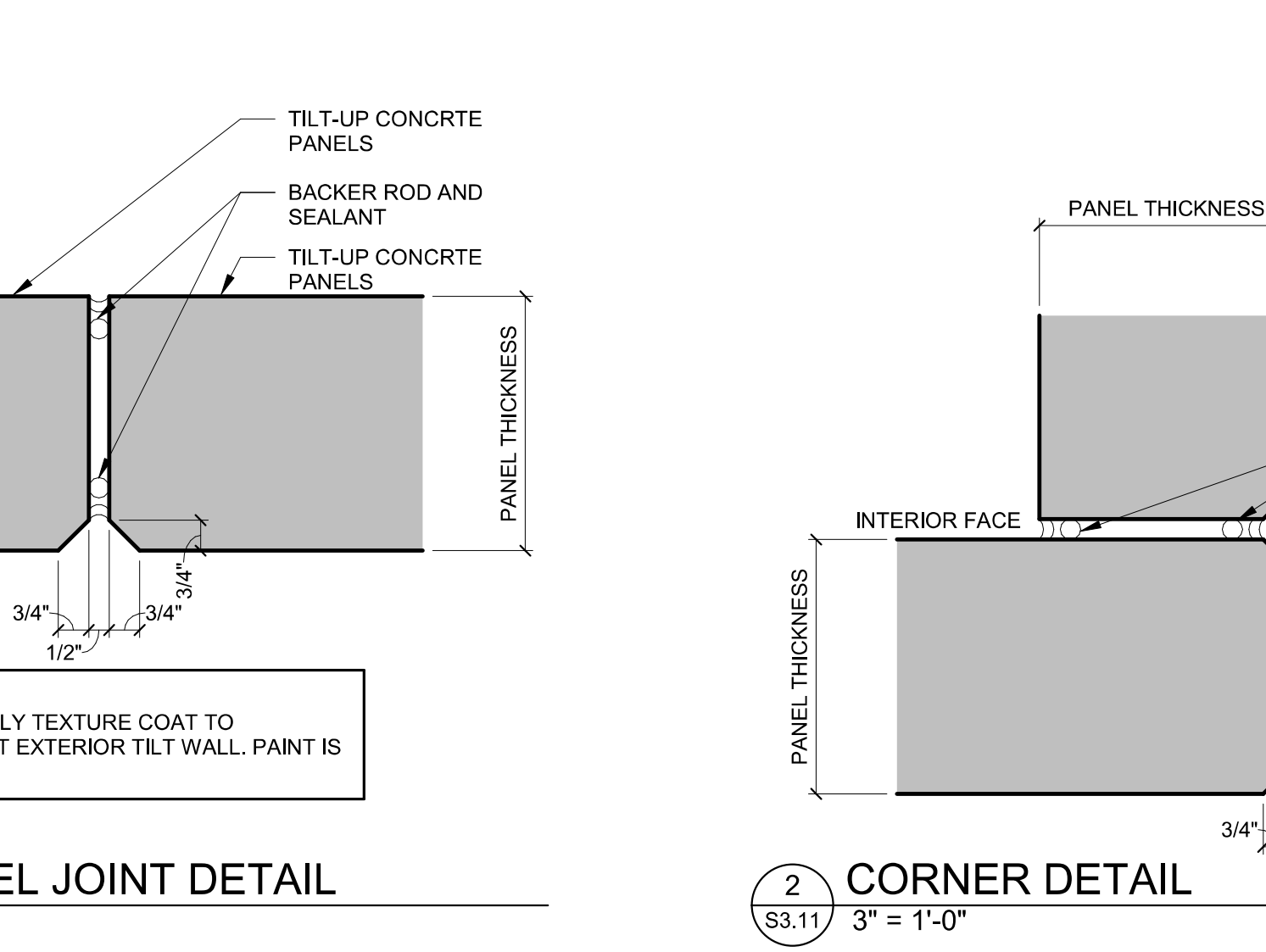
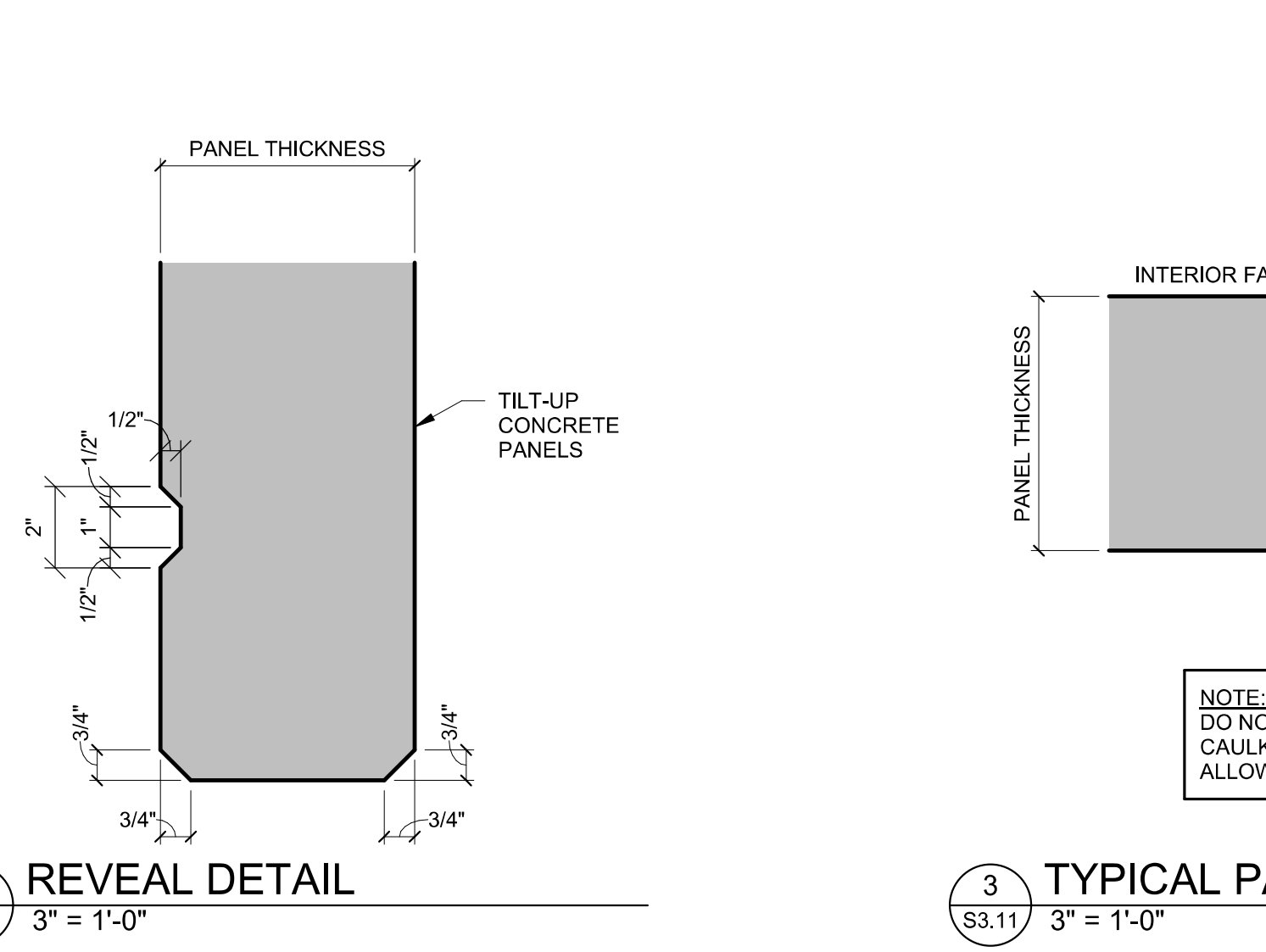
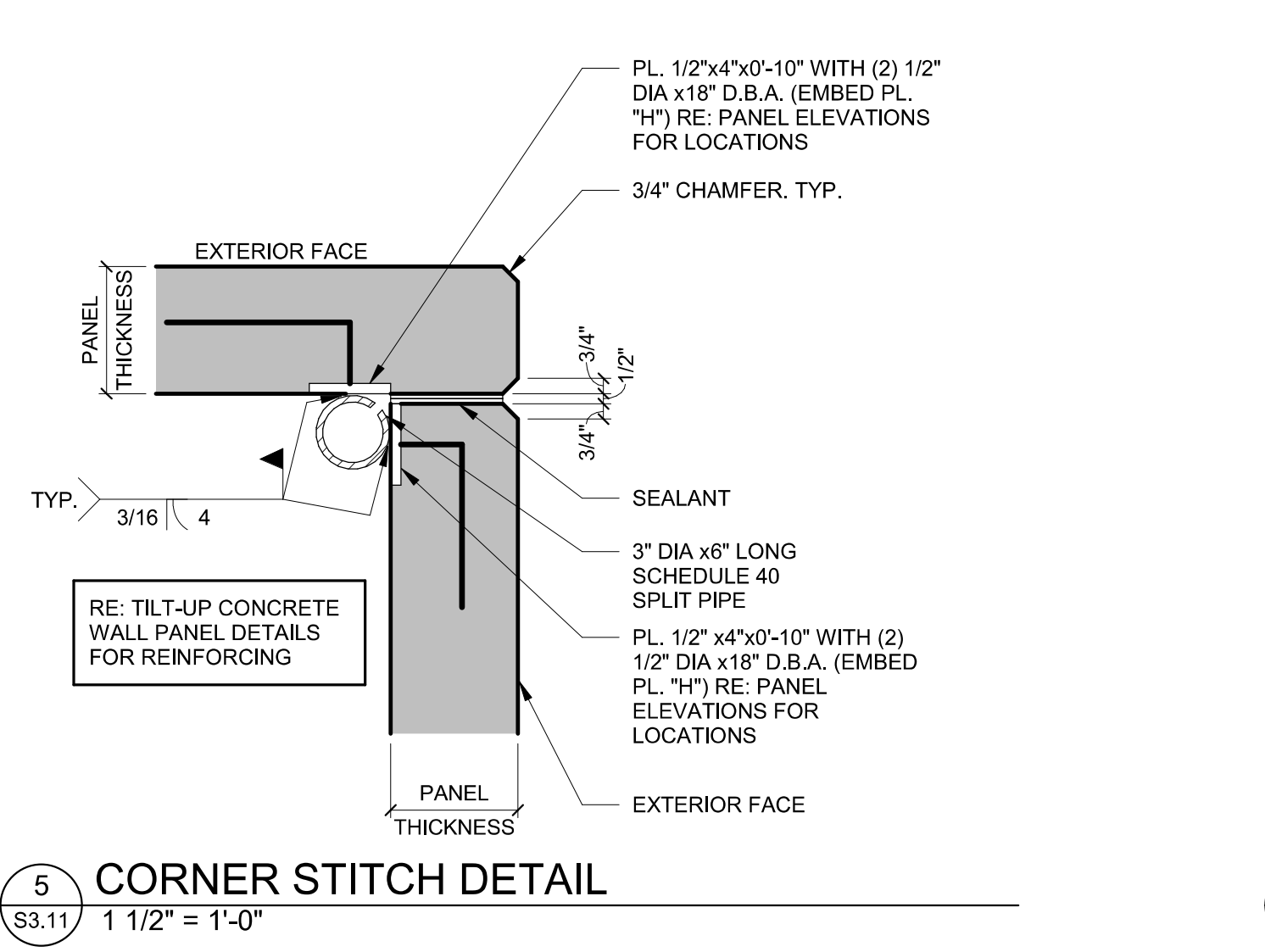
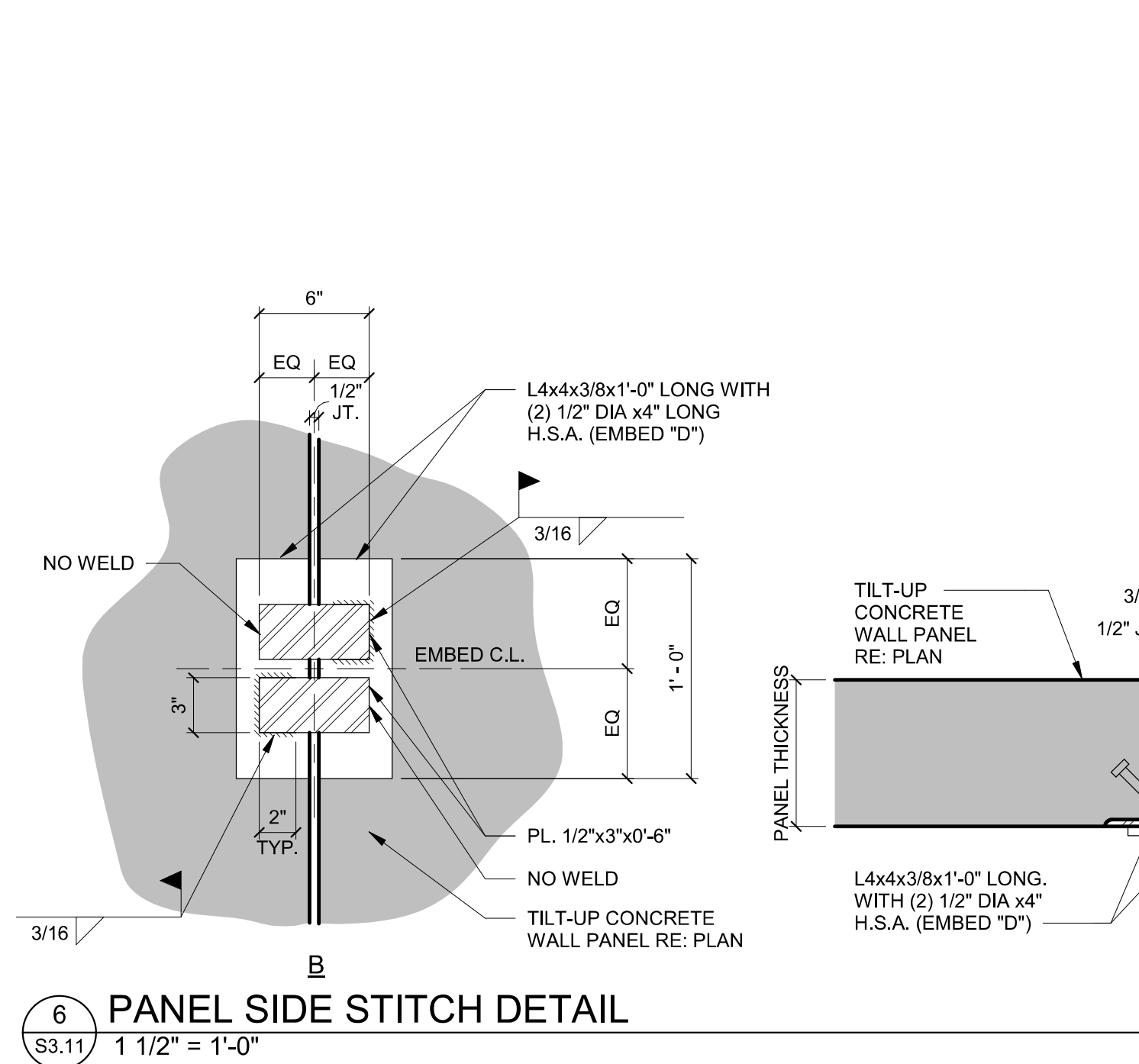
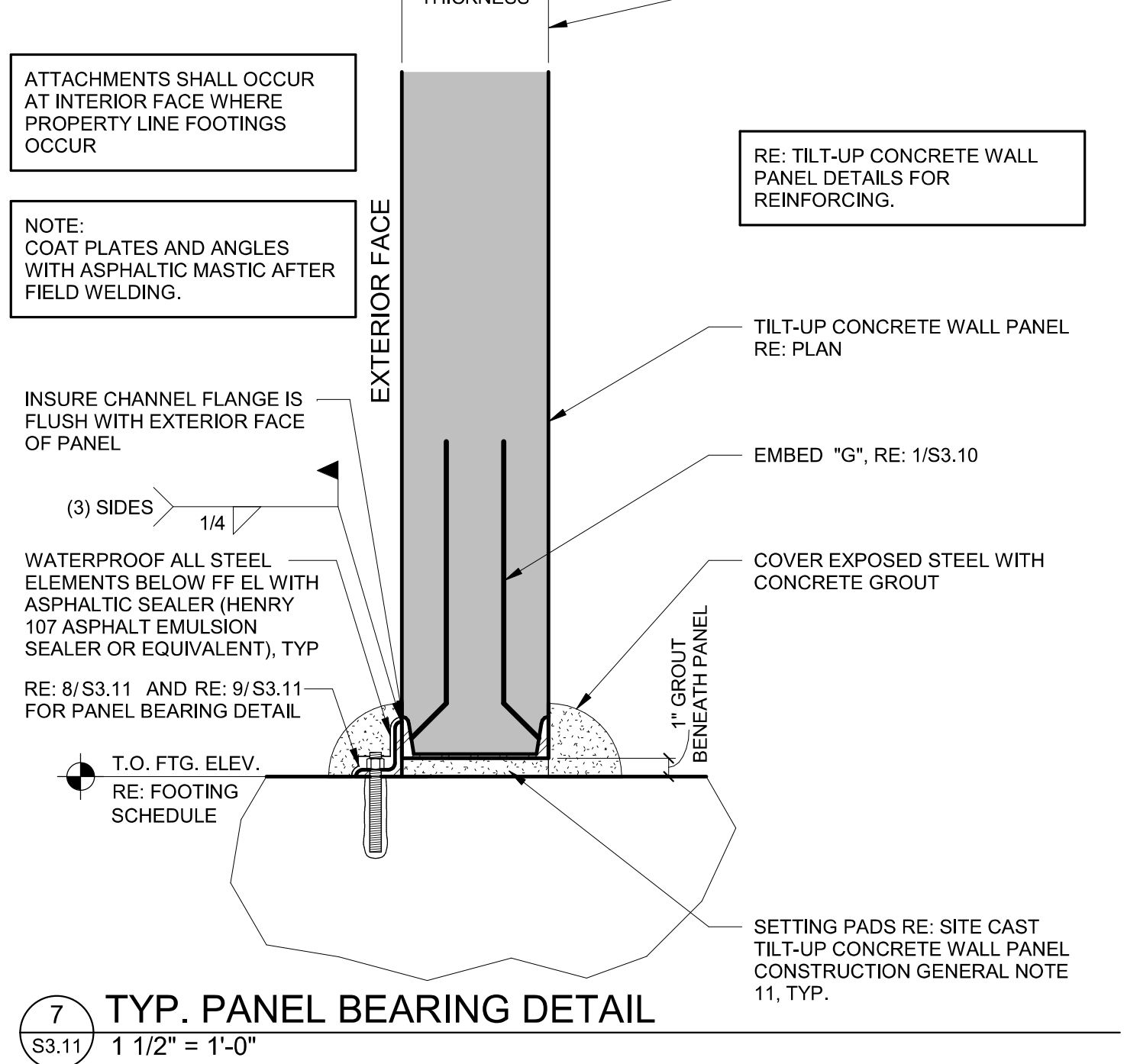
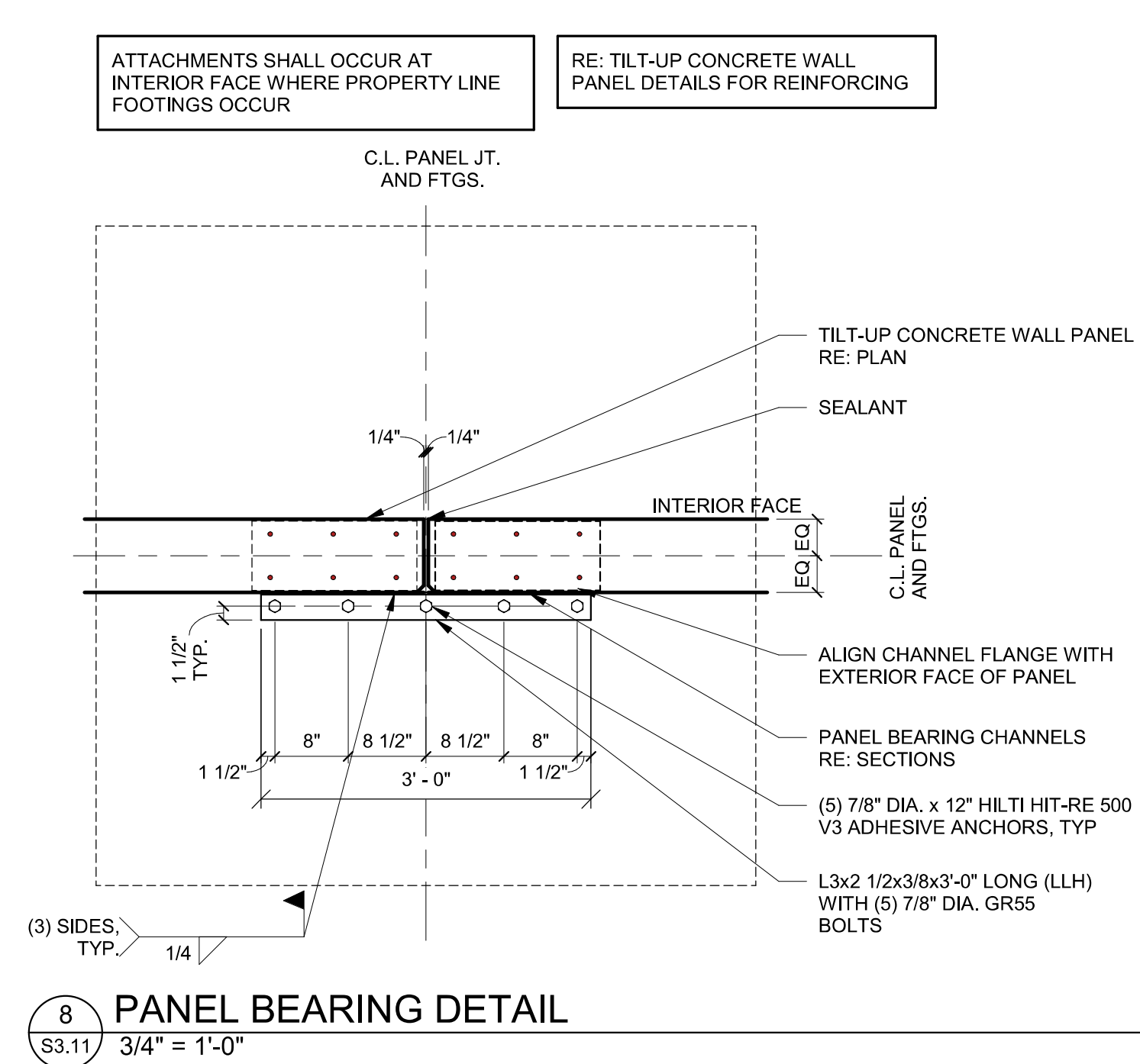
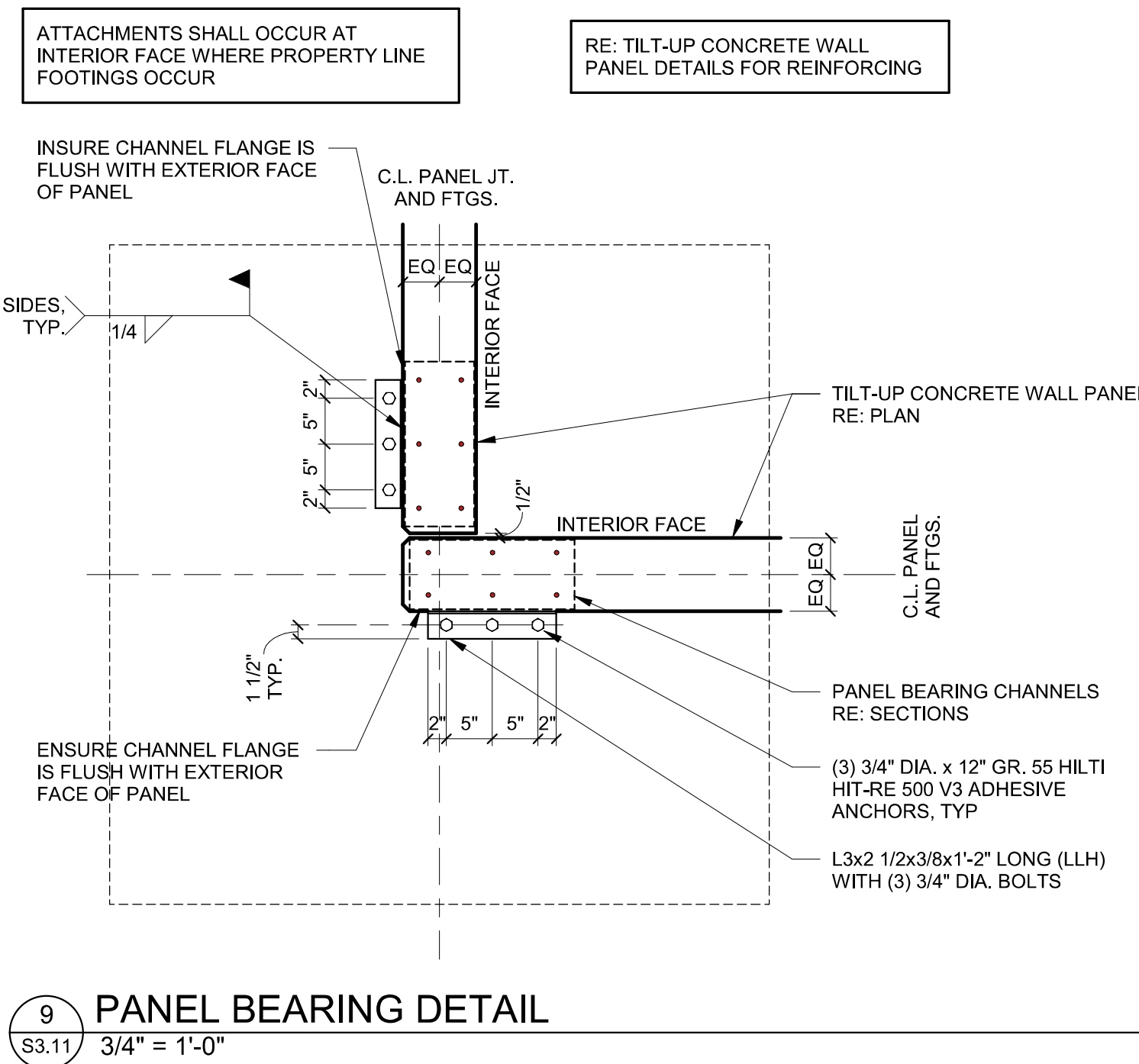
Revisions / Submissions		
ID	Description	Date

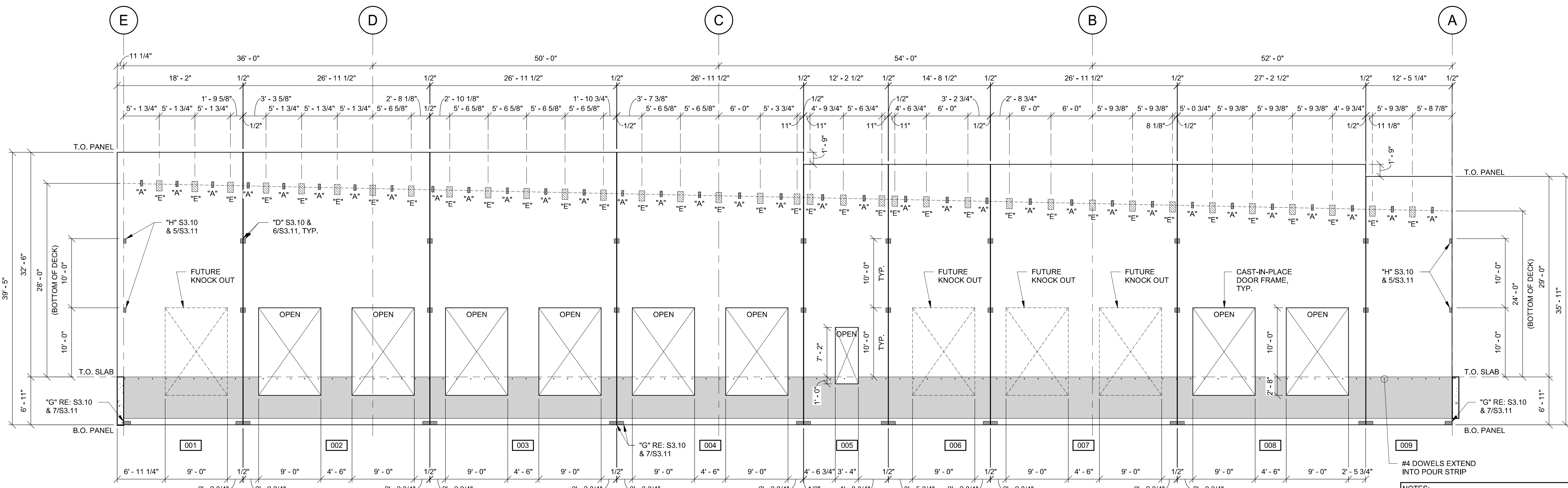
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Project number: 763838-02
Scale: AS NOTED
Drawn By: GH
Checked By: KB/HR
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title: **PANEL NOTES AND EMBEDS**

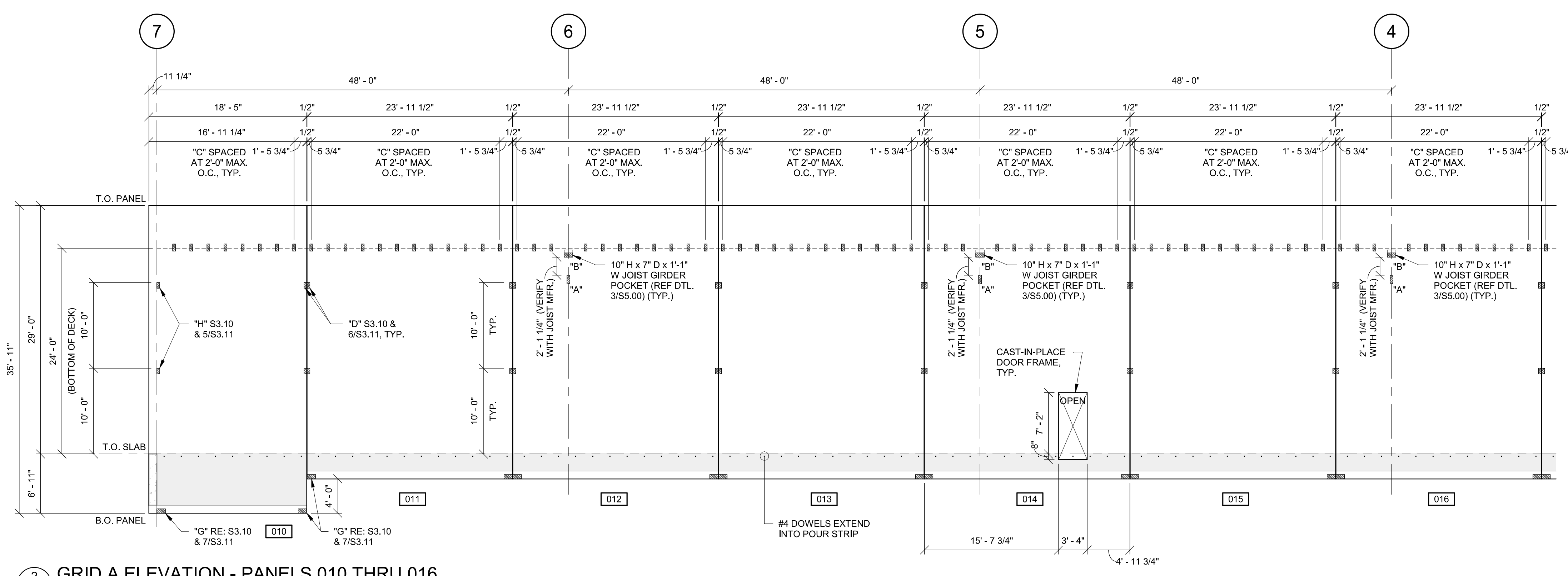
S3.10



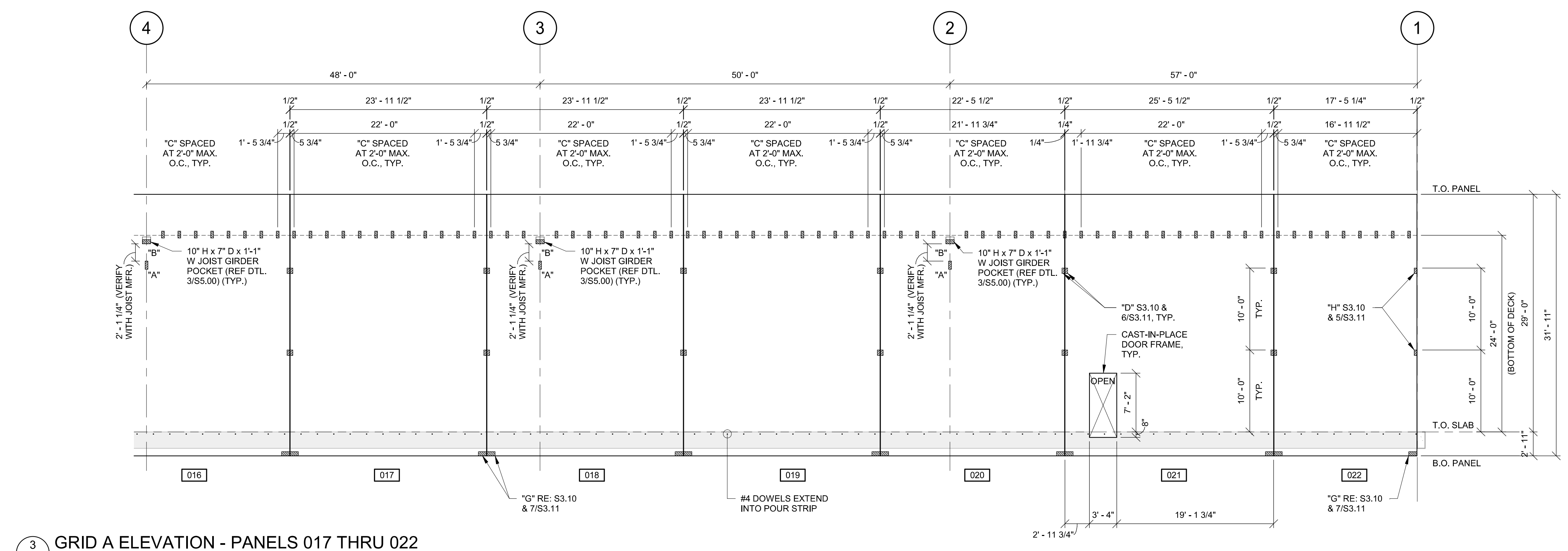


1 GRID 7 ELEVATION - PANELS 001 THRU 009
1/8" = 1'-0"

NOTES:
1. TRUCK DOCK LEVELER DEPTH (VERIFY WITH MANUFACTURER) + 1'-0" FOR FLOOR SLAB, TYP. U.N.O.



2 GRID A ELEVATION - PANELS 010 THRU 016
1/8" = 1'-0"



3 GRID A ELEVATION - PANELS 017 THRU 022
1/8" = 1'-0"

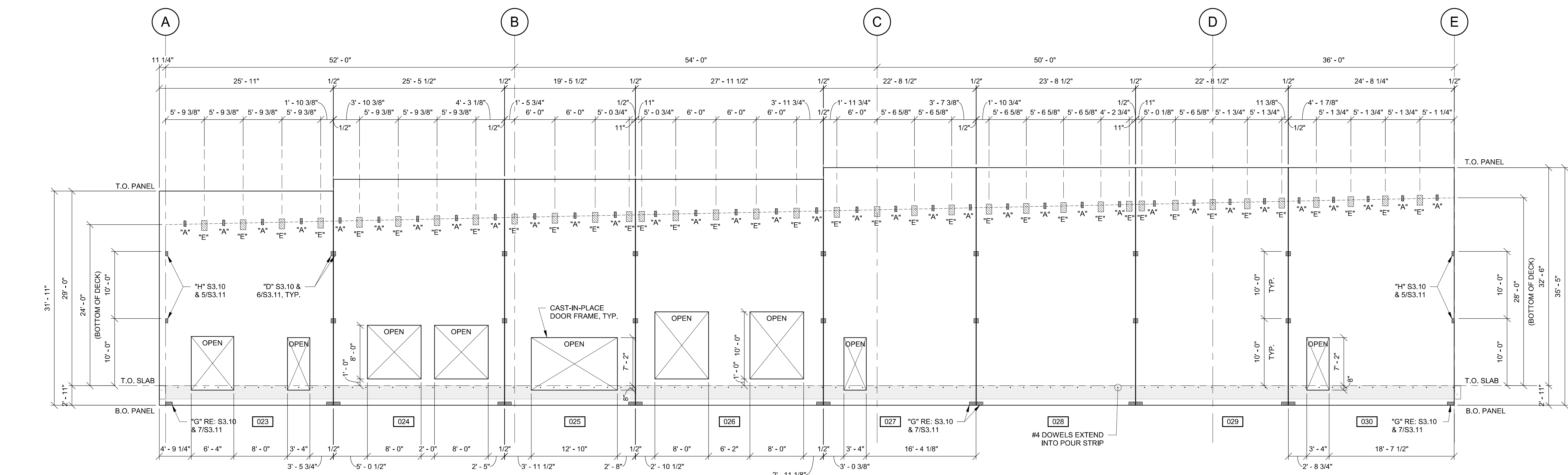
AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

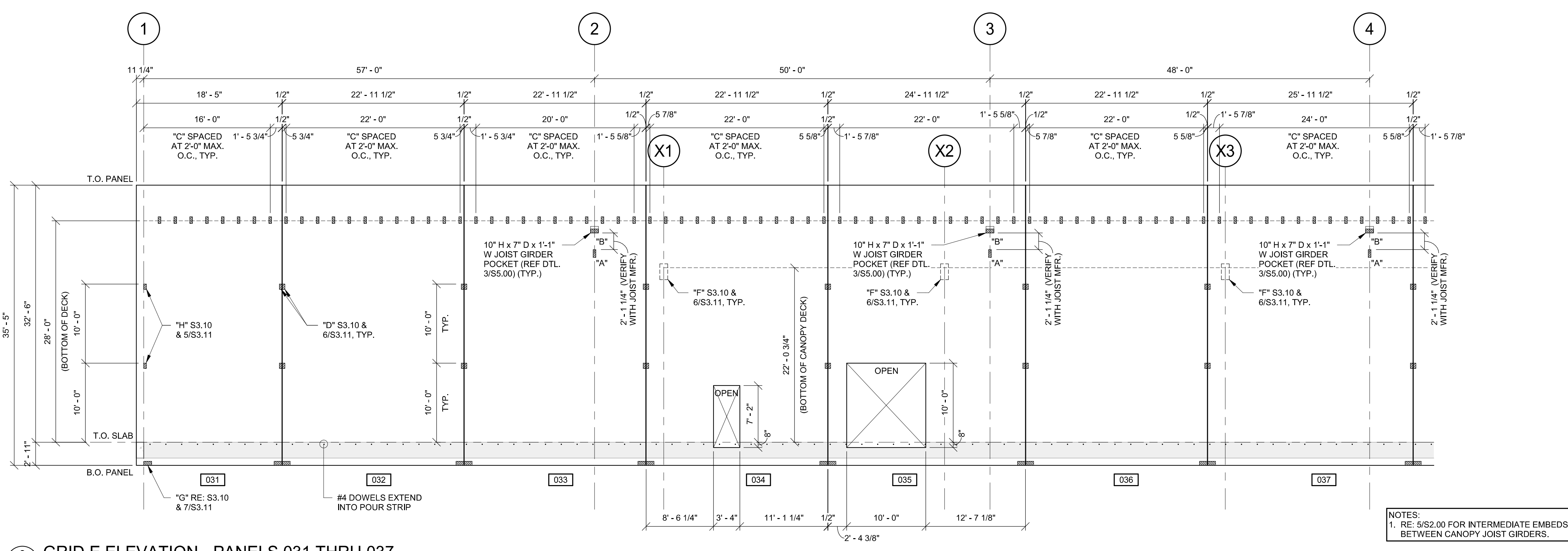
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Revisions / Submissions	
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Scale:	AS NOTED
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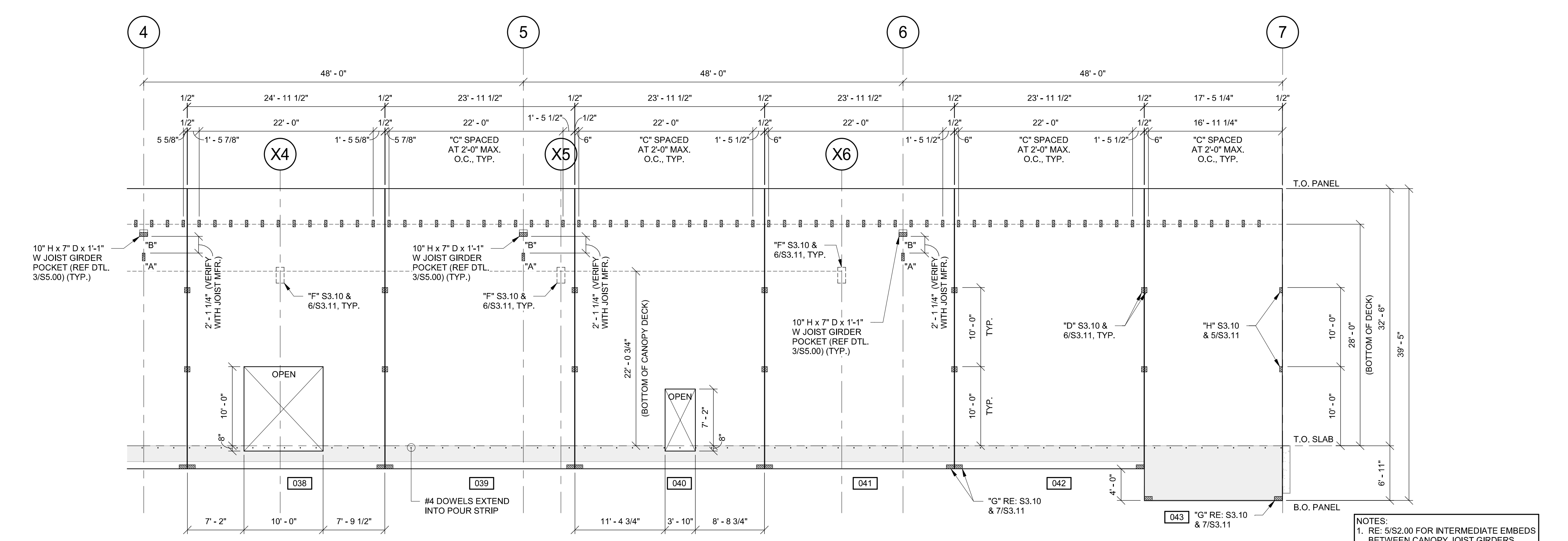
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EXTERIOR WALL ELEVATIONS



1 GRID 1 ELEVATION - PANELS 023 THRU 030
S3.21 1/8" = 1'-0"

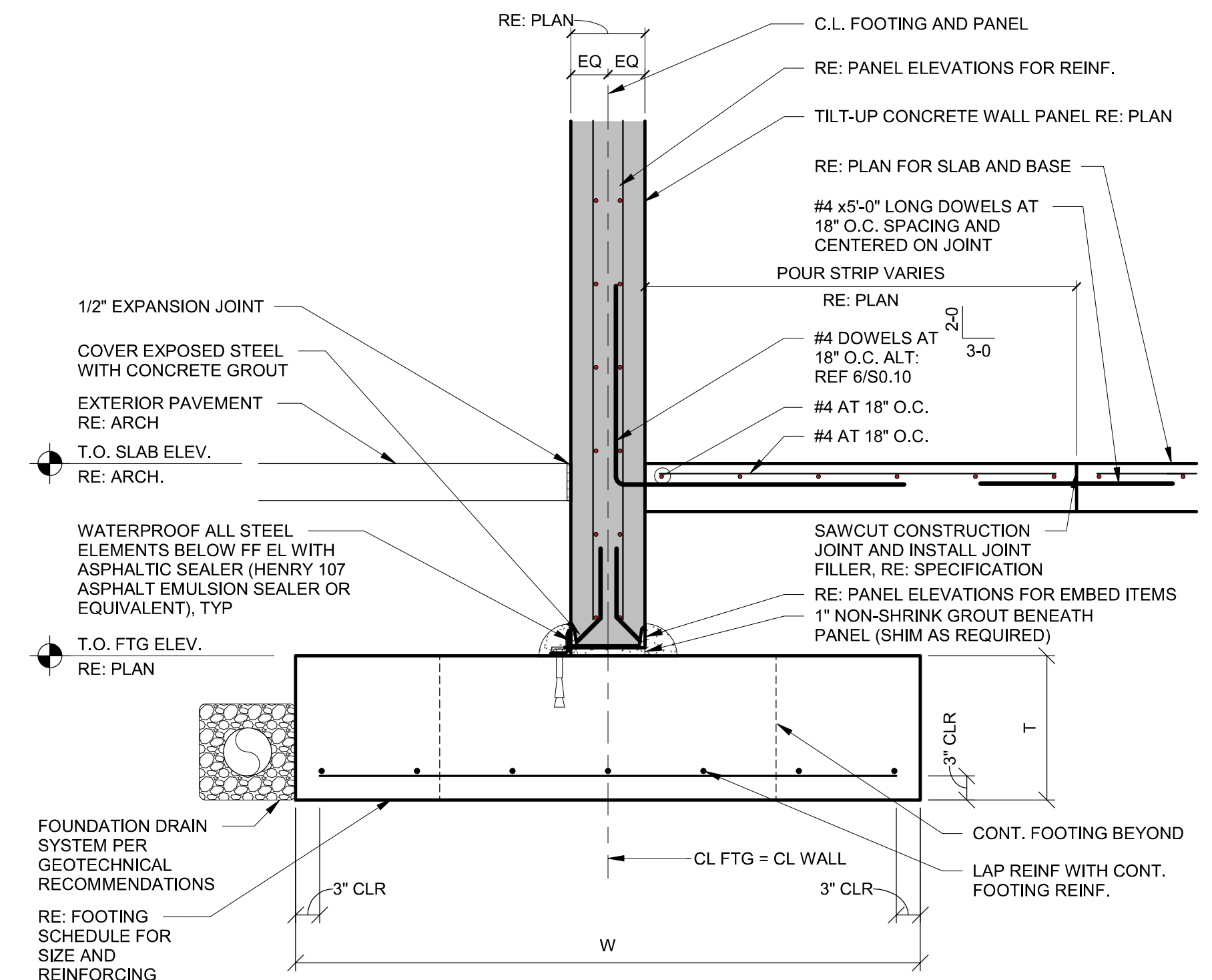


2 GRID E ELEVATION - PANELS 031 THRU 037
S3.21 1/8" = 1'-0"



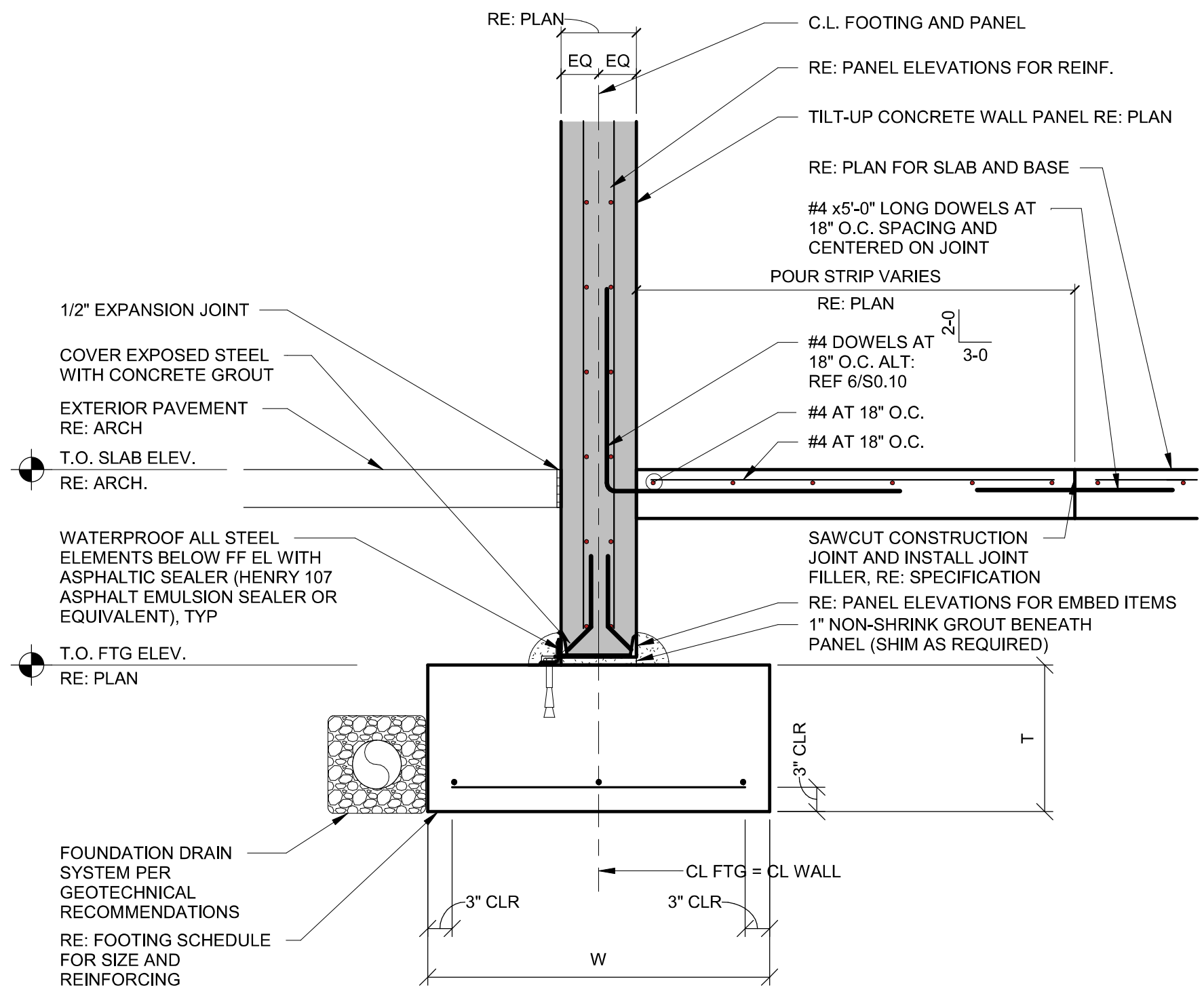
3 GRID E ELEVATION - PANELS 038 THRU 043
S3.21 1/8" = 1'-0"

NOTE: PROVIDE PADS FOR EACH PANEL (RE: TILT-UP CONCRETE WALL PANEL GENERAL NOTES FOR REQUIREMENTS)



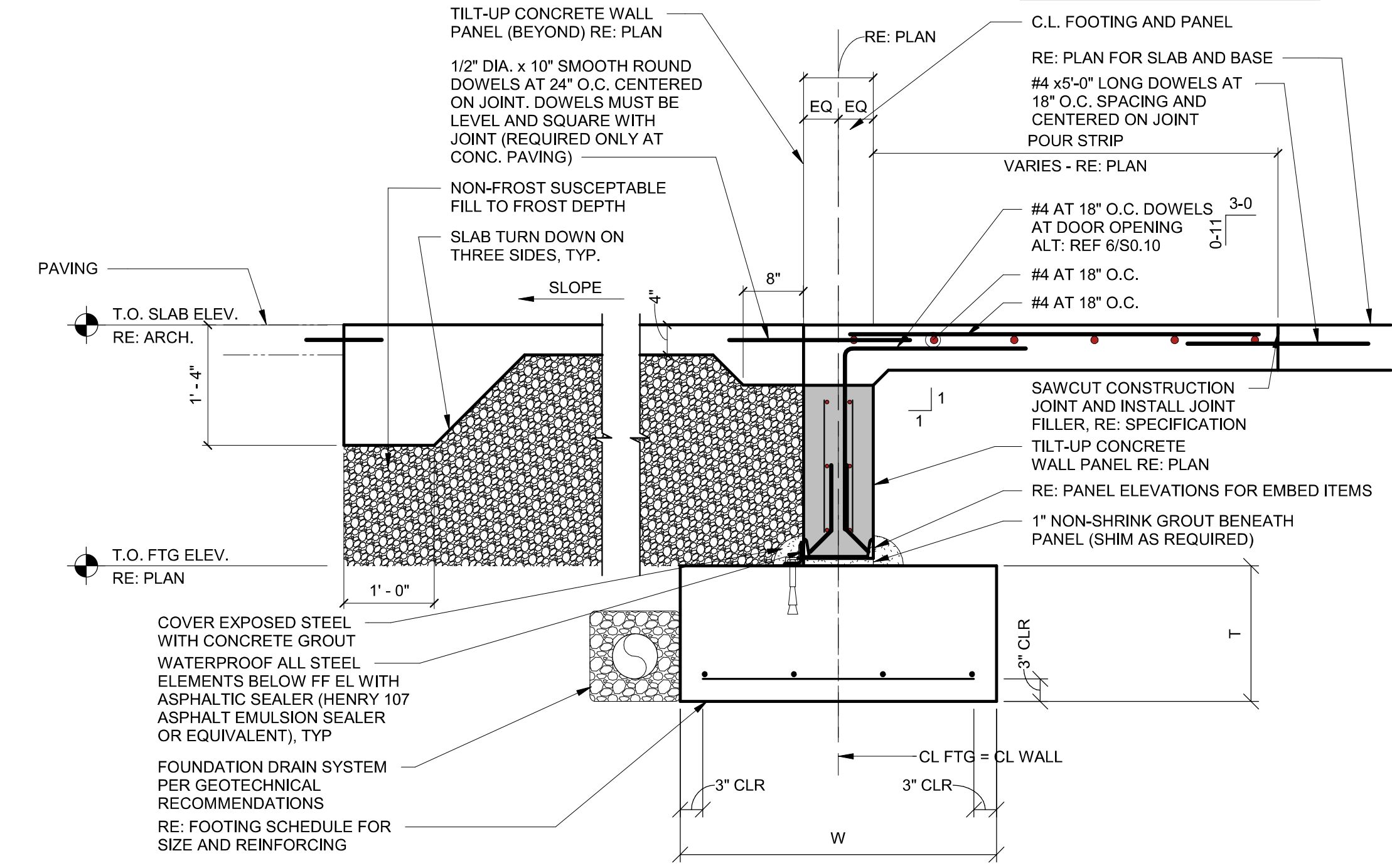
1 TILT-UP EXTERIOR WALL SPOT FOOTING
S4.00 3/4" = 1'-0"

NOTE: PROVIDE PADS FOR EACH PANEL (RE: TILT-UP CONCRETE WALL PANEL GENERAL NOTES FOR REQUIREMENTS)



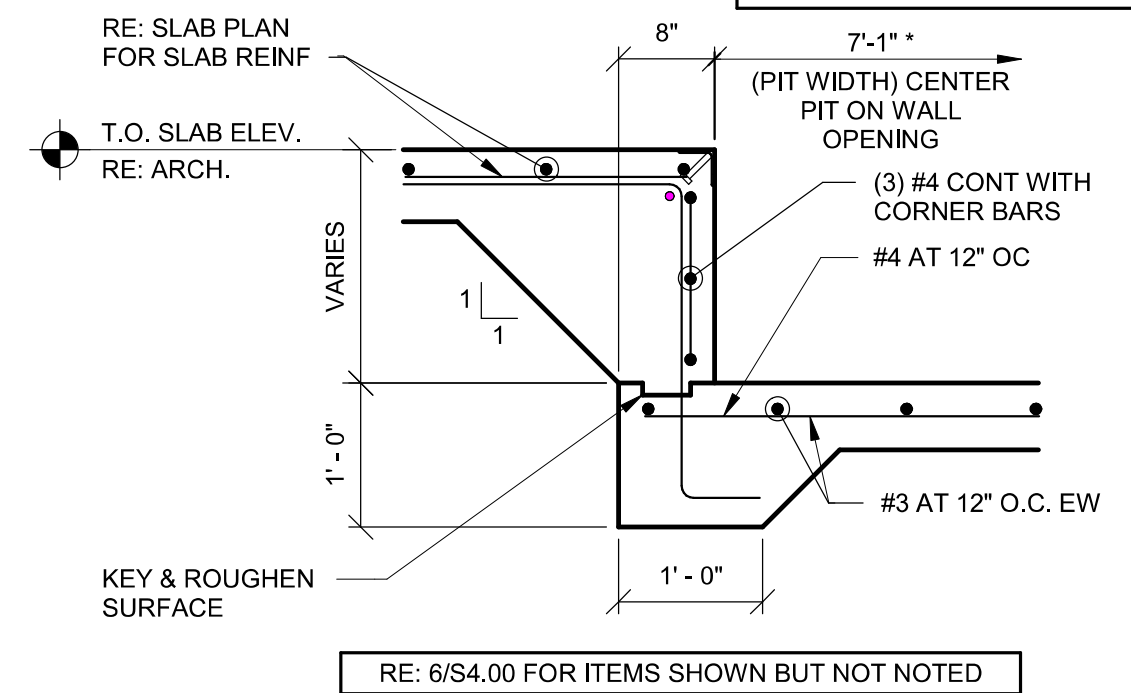
2 SECTION AT WALL BASE AT CONTINUOUS WALL FOOTING
S4.00 3/4" = 1'-0"

NOTE: PROVIDE SETTING PADS FOR EACH PANEL (RE: TILT-UP CONCRETE WALL PANEL GENERAL NOTES FOR REQUIREMENTS)



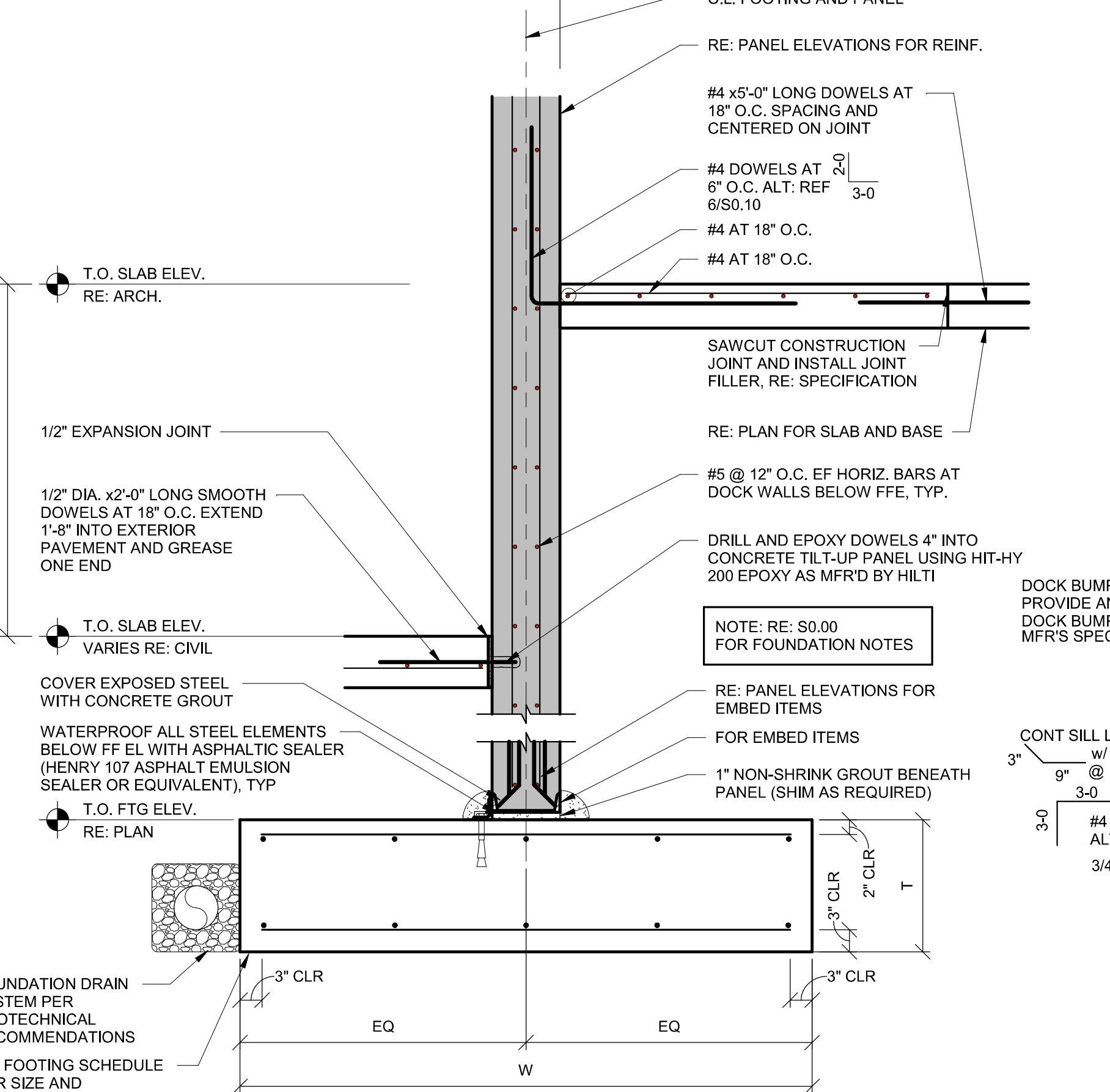
3 SLAB AT OPENING
S4.00 3/4" = 1'-0"

* VERIFY PIT WIDTH WITH DOCK LEVELER MANUFACTURER



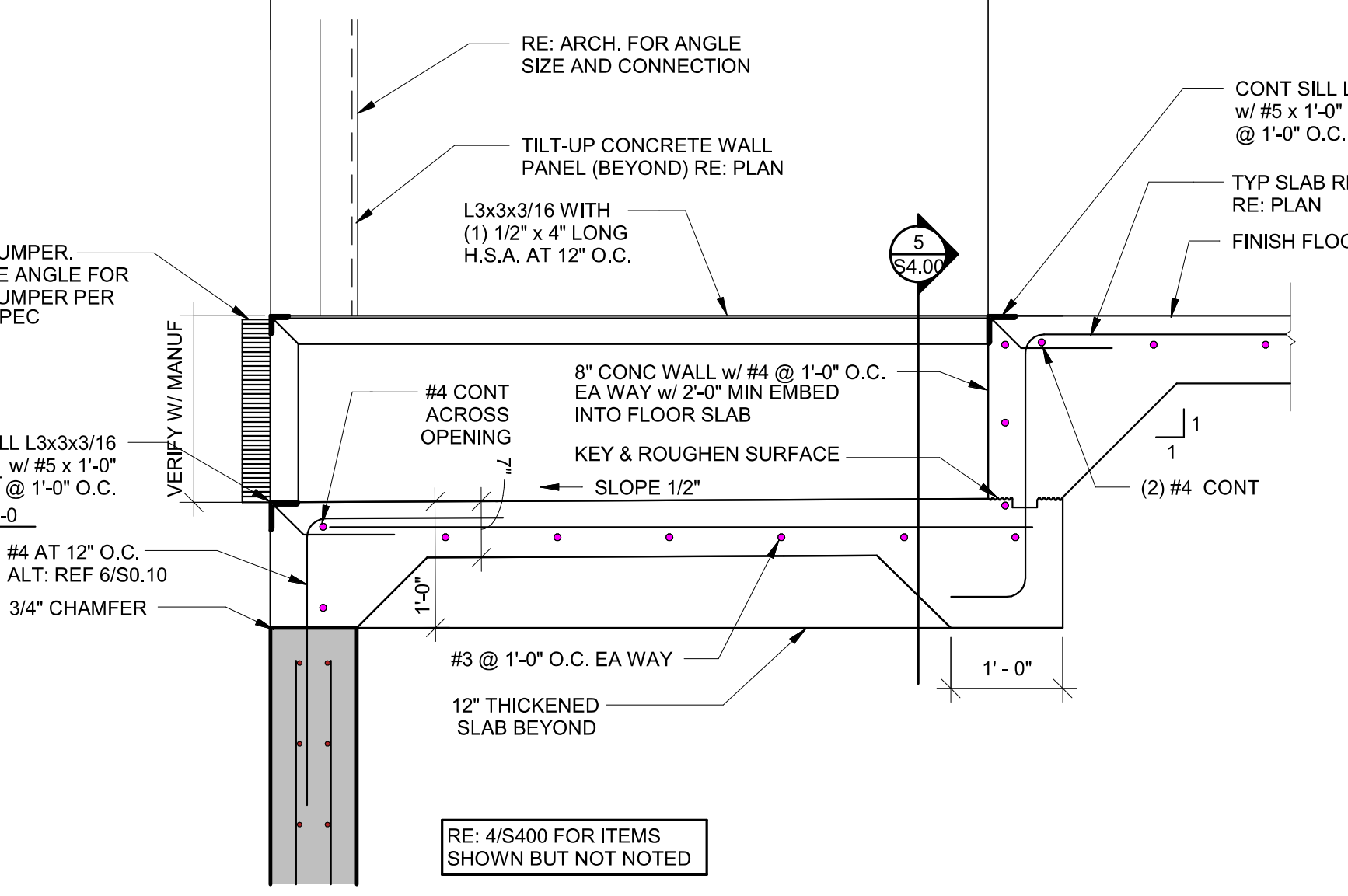
5 SIDE OF DOCK LEVELER
S4.00 3/4" = 1'-0"

NOTE: RE: S0.00 FOR FOUNDATION NOTES



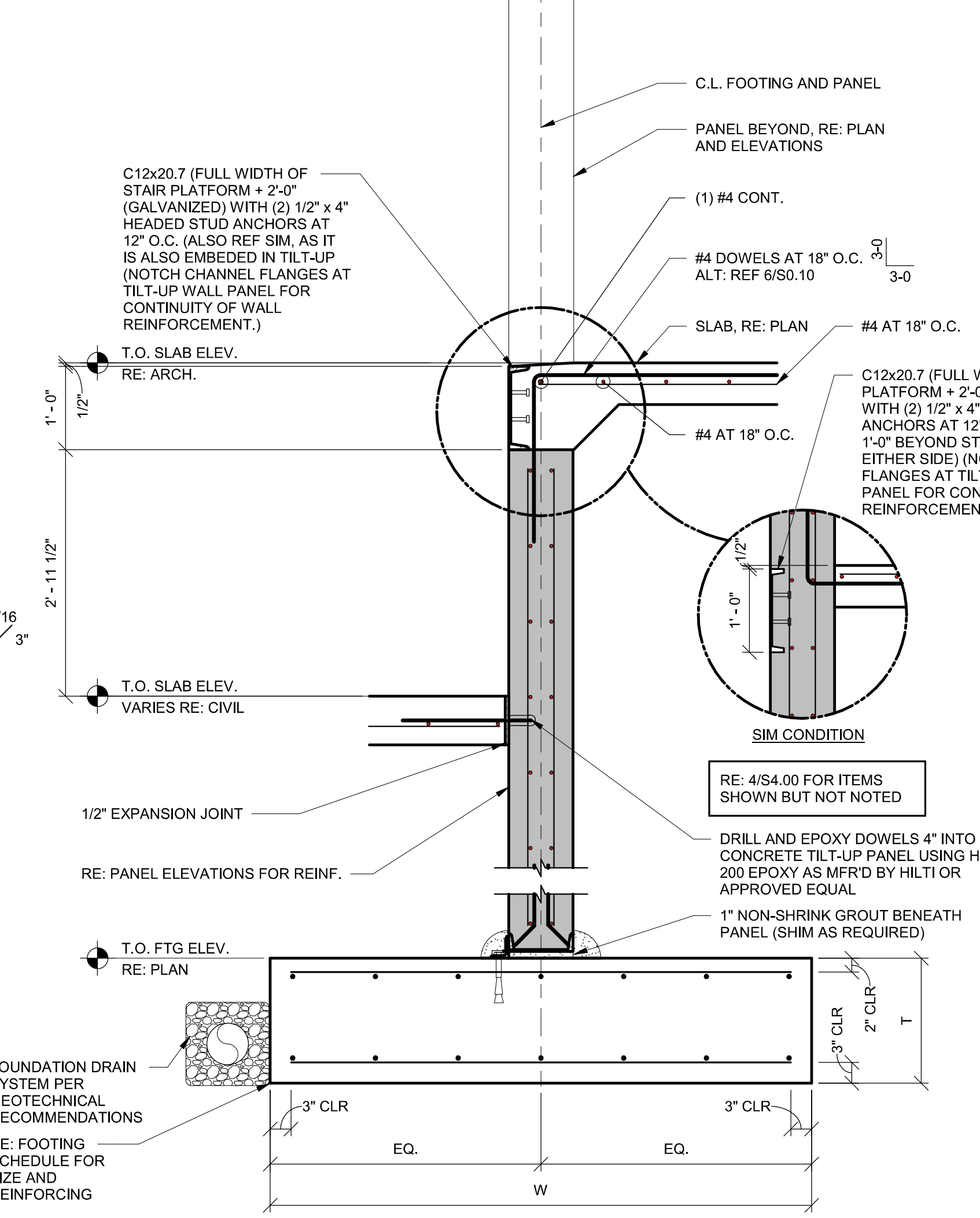
4 DOCK WALL FOOTING
S4.00 3/4" = 1'-0"

NOTE: RE: S4.00 FOR ITEMS SHOWN BUT NOT NOTED



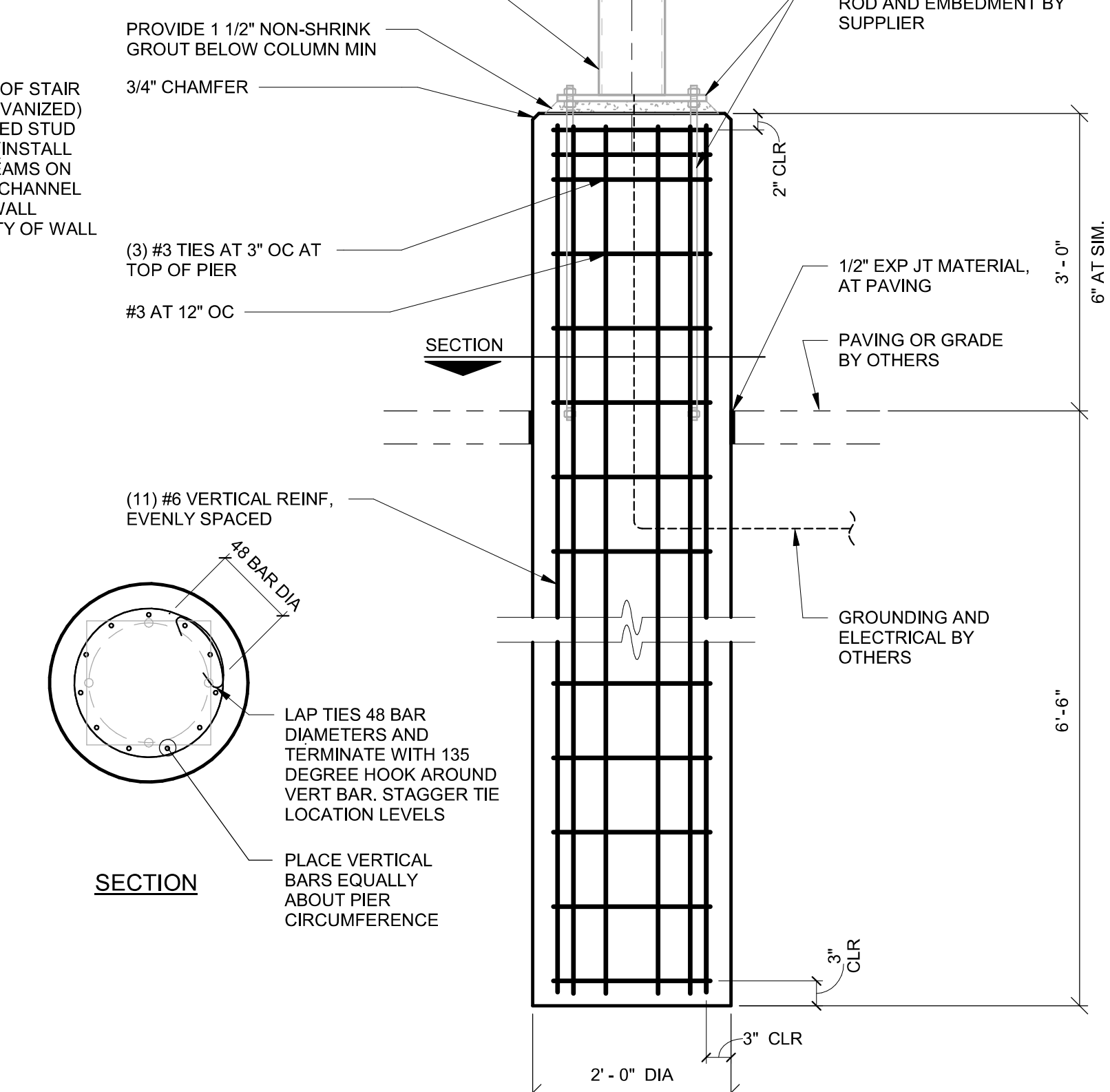
6 DOCK LEVELER SECTION
S4.00 3/4" = 1'-0"

NOTE: RE: 4/S4.00 FOR ITEMS SHOWN BUT NOT NOTED



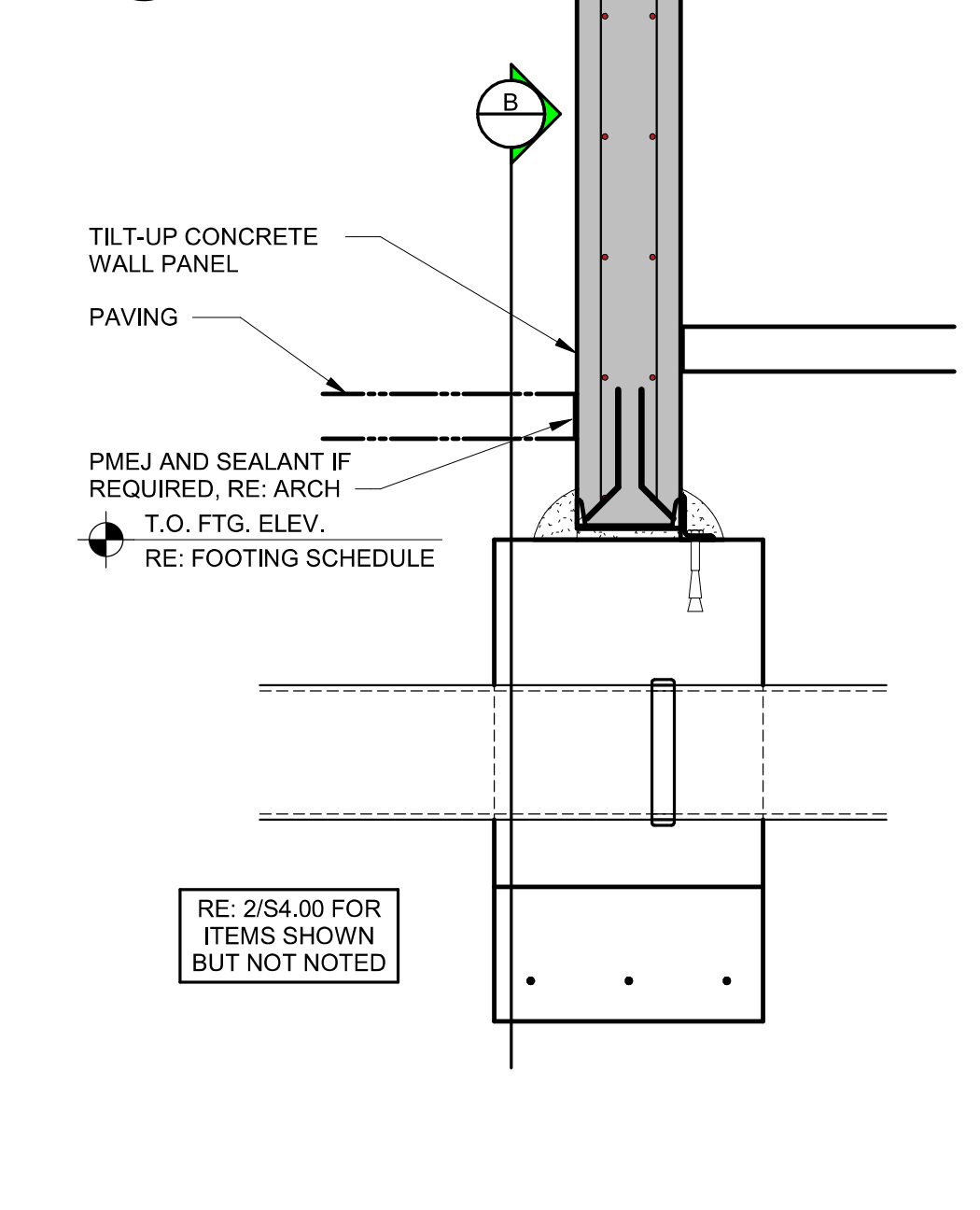
7 SECTION AT DOCK DOORS
S4.00 3/4" = 1'-0"

NOTE: RE: 4/S4.00 FOR ITEMS SHOWN BUT NOT NOTED

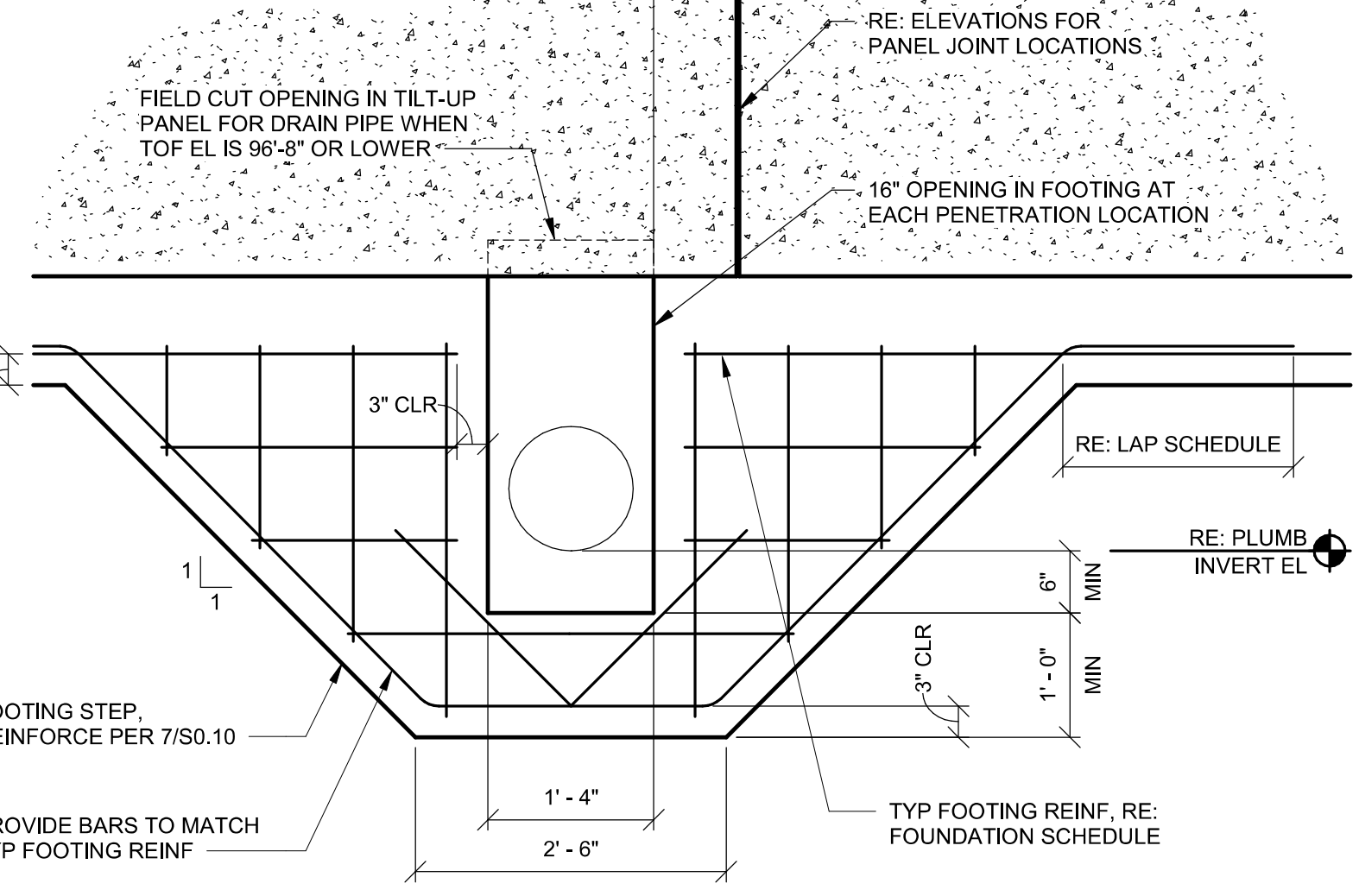


8 LIGHT POLE FOUNDATION
S4.00 3/4" = 1'-0"

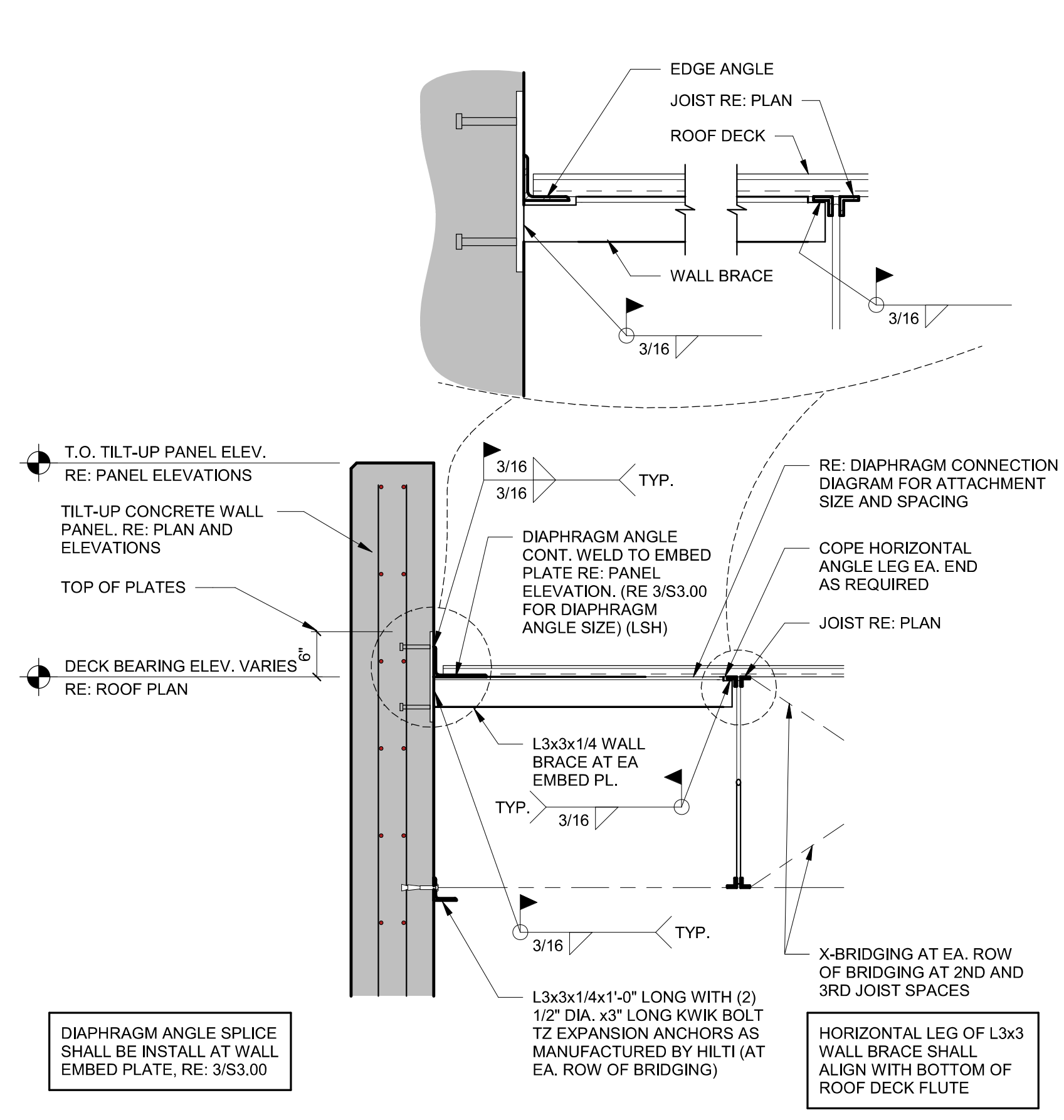
NOTE: RE: 2/S4.00 FOR ITEMS SHOWN BUT NOT NOTED



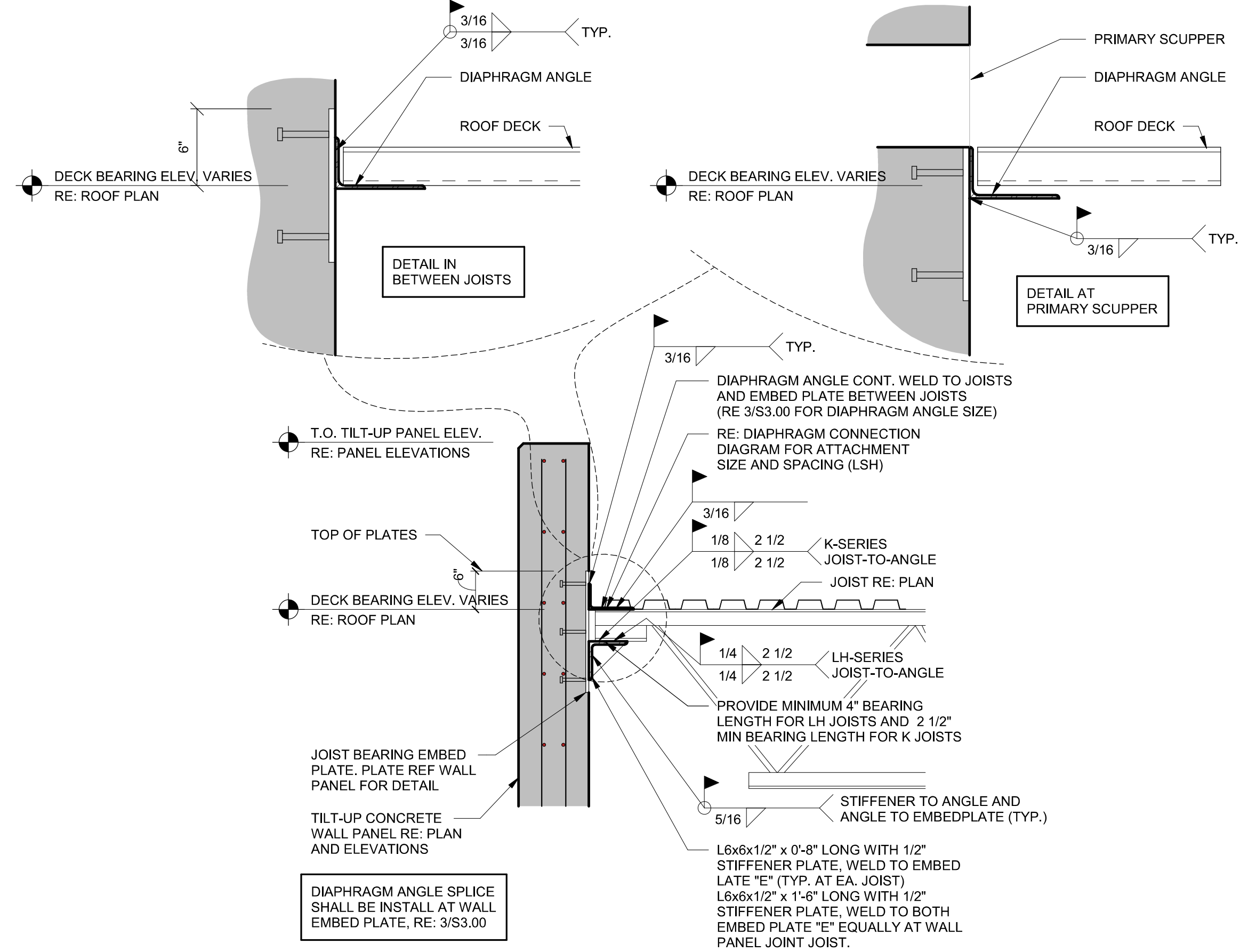
9 PENETRATION AT FOUNDATION WALL
S4.00 3/4" = 1'-0"



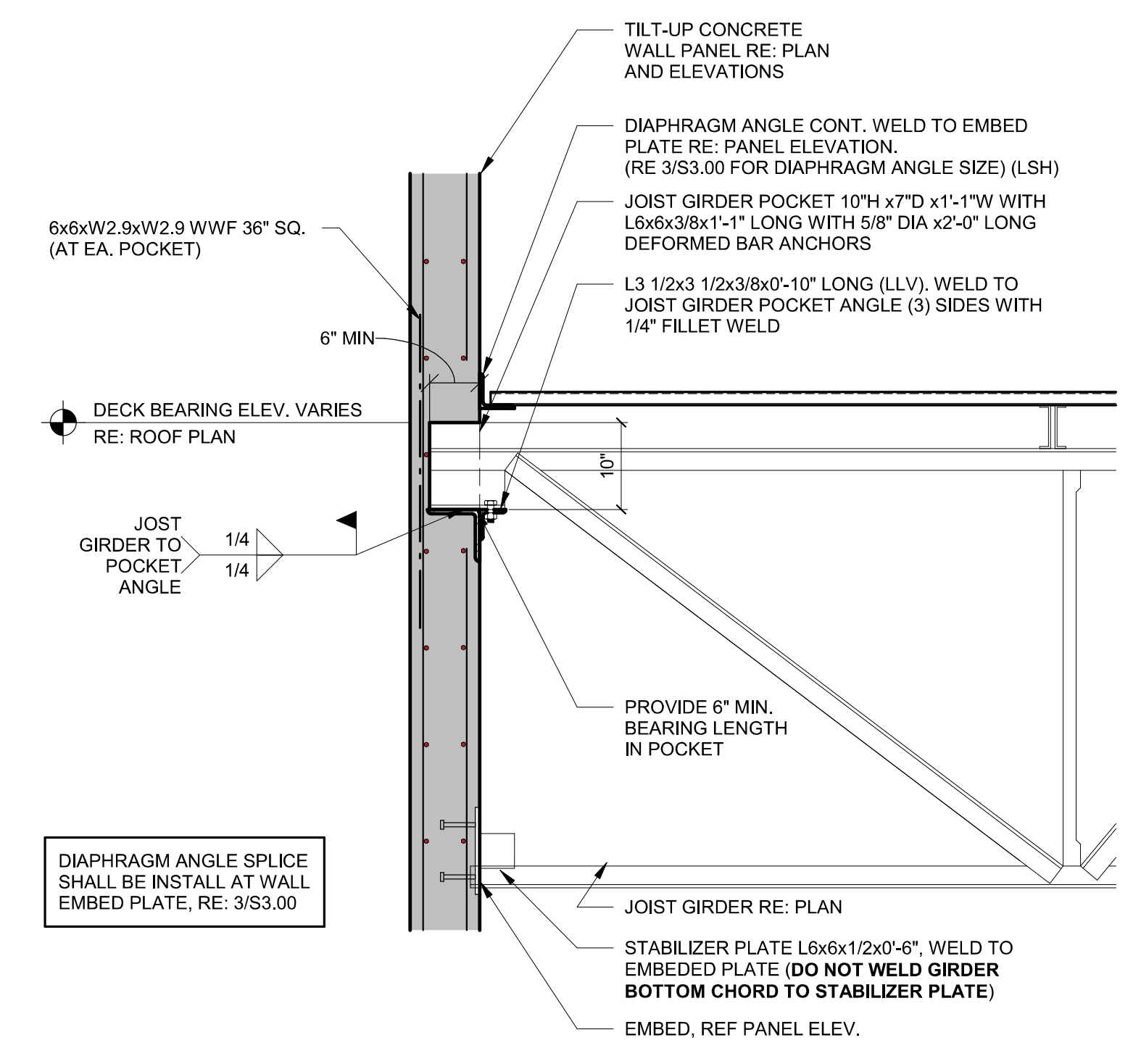
SECTION B



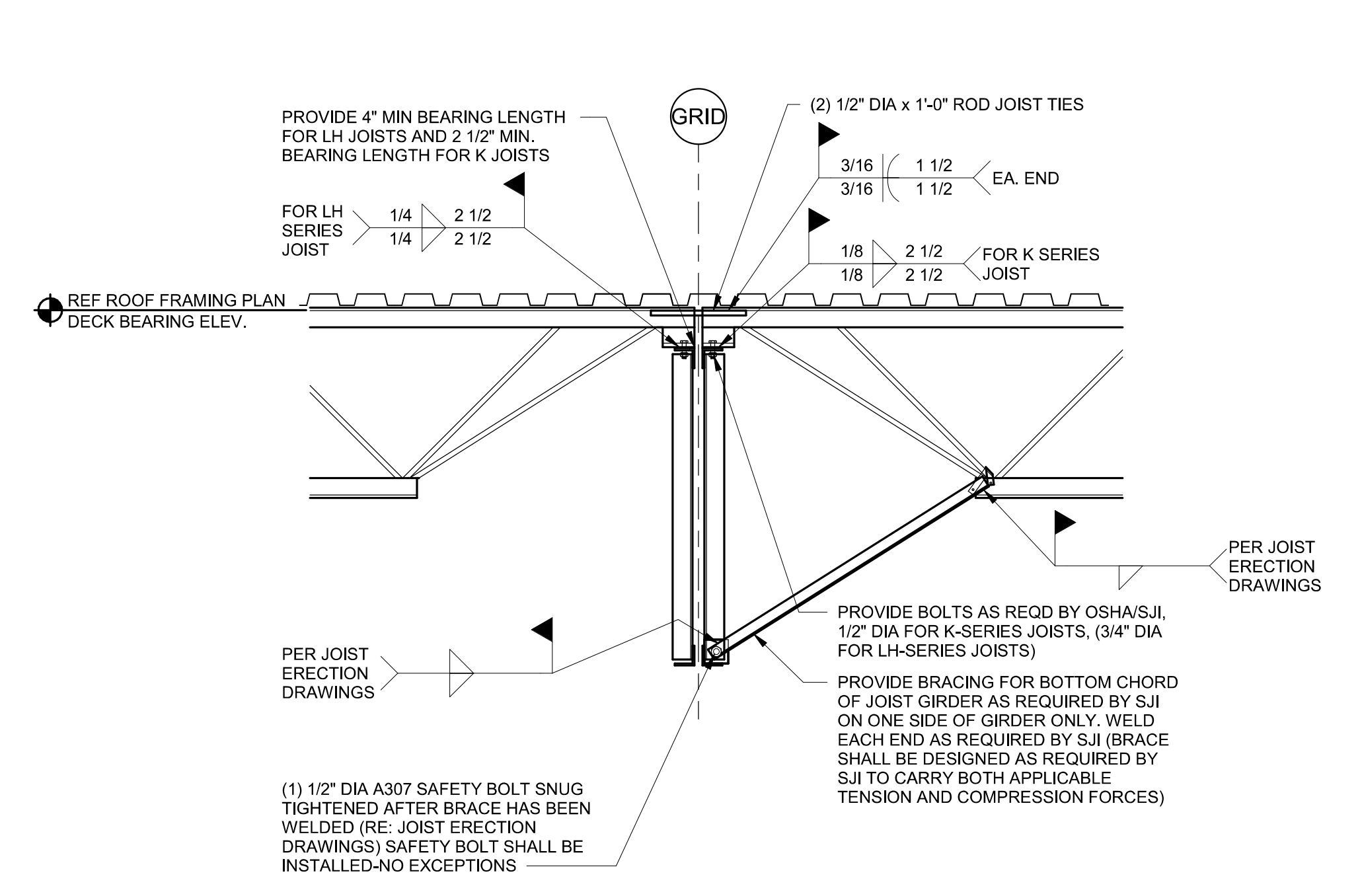
1 WALL SECTION PARALLEL TO JOISTS
3/4" = 1'-0"



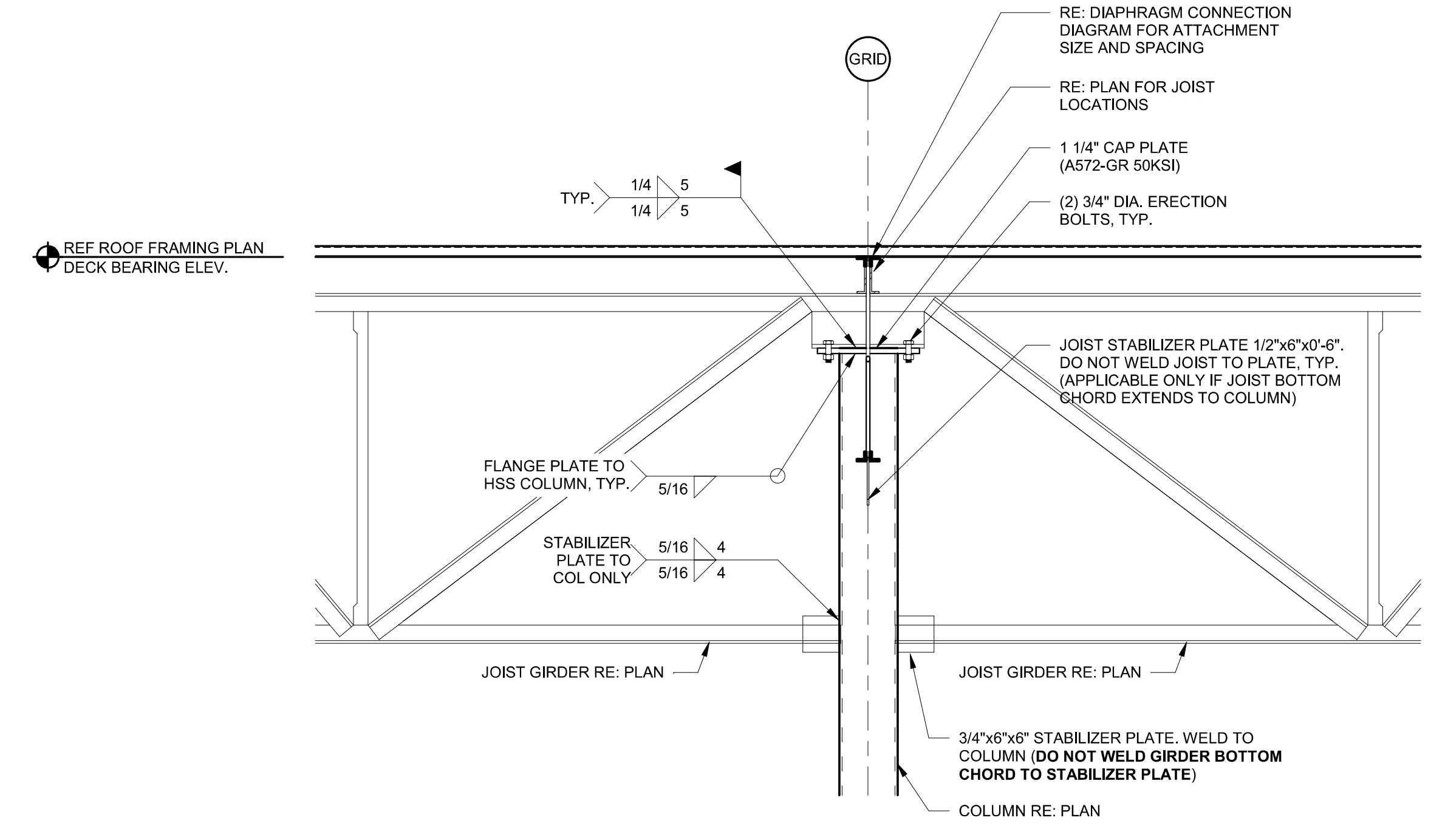
2 WALL SECTION PERPENDICULAR TO JOISTS
3/4" = 1'-0"



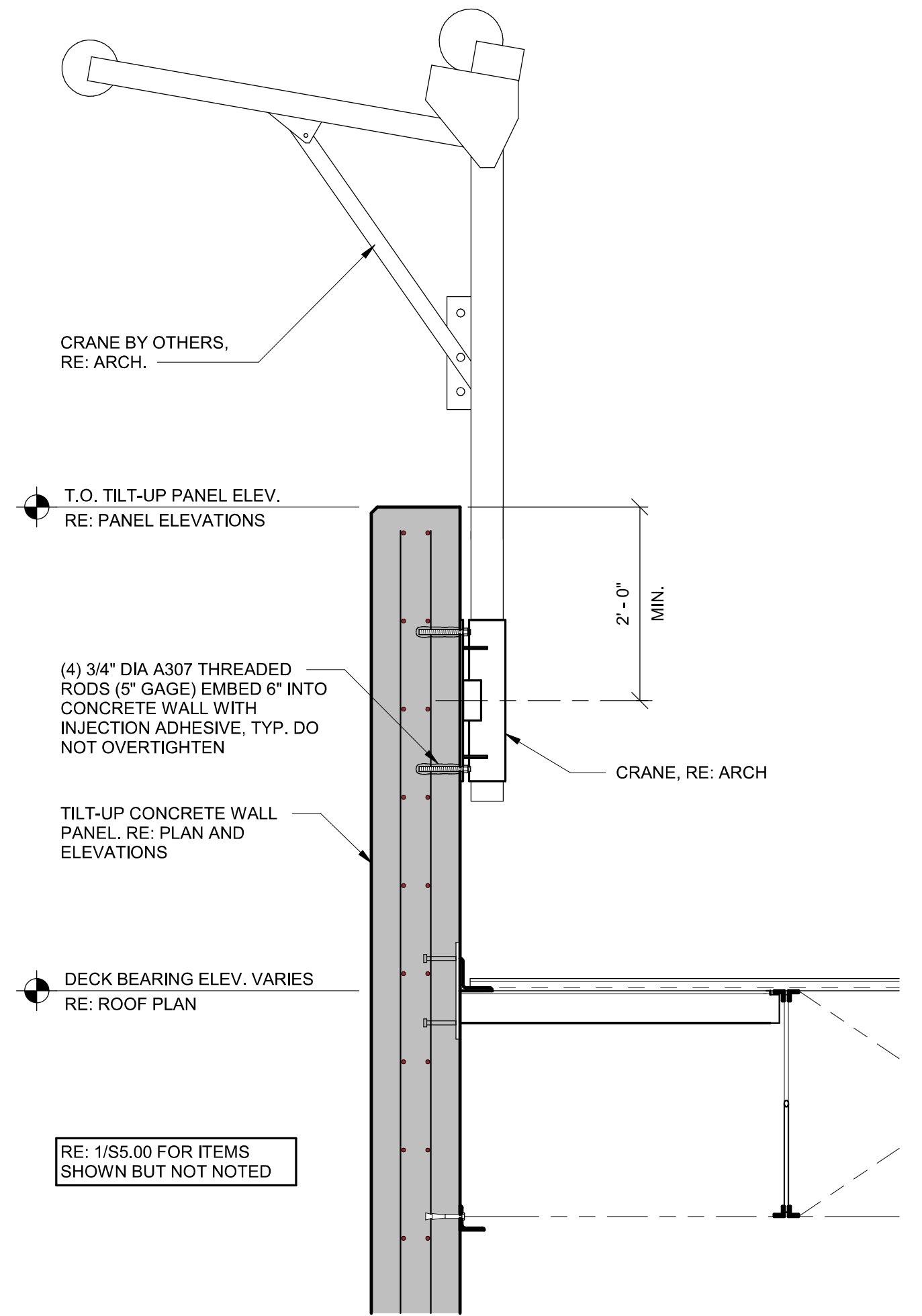
3 GIRDER BEARING AT TILT-UP WALL
3/4" = 1'-0"



4 JOIST TO JOIST GIRDER
3/4" = 1'-0"

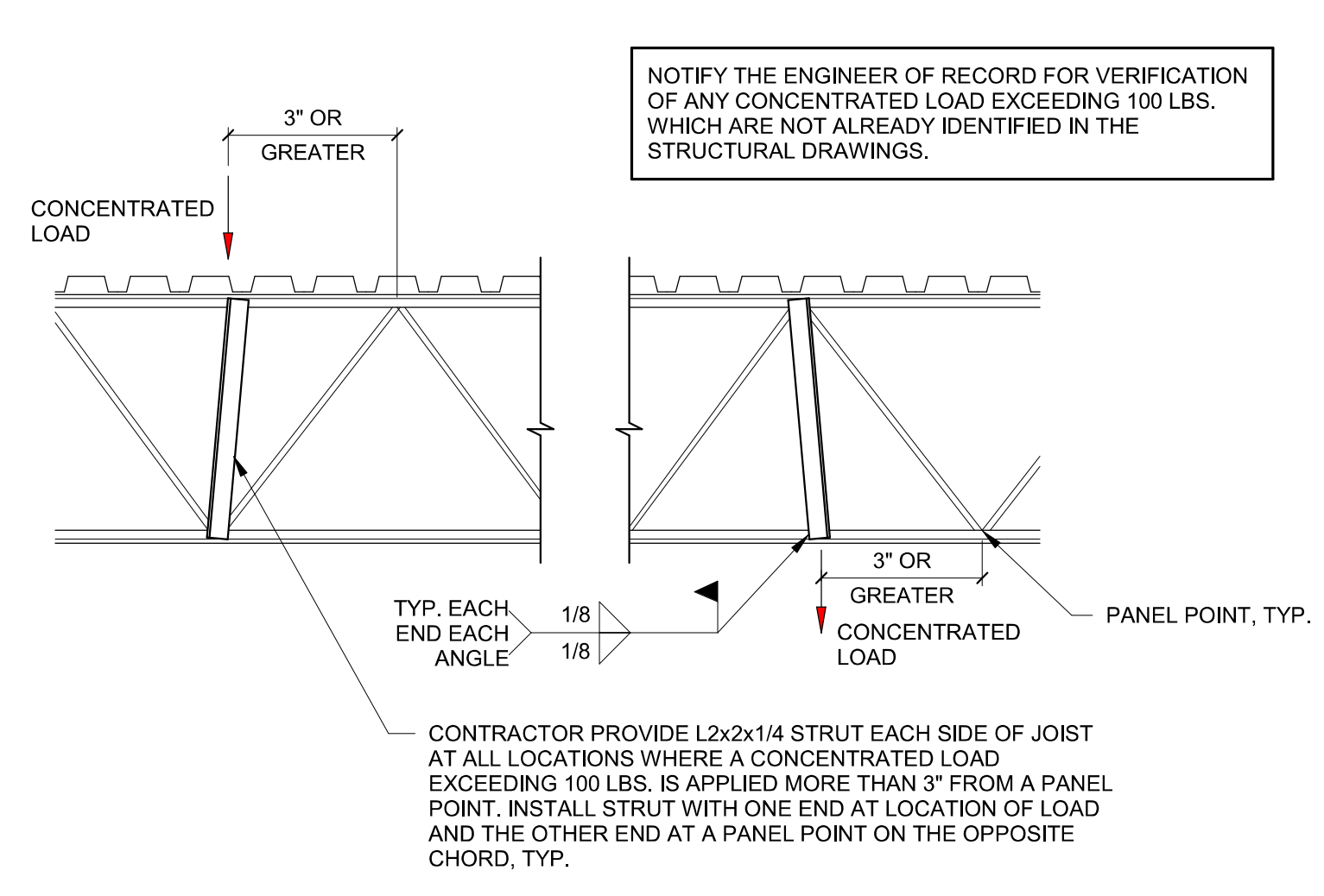


5 JOIST GIRDER AT COLUMN
3/4" = 1'-0"

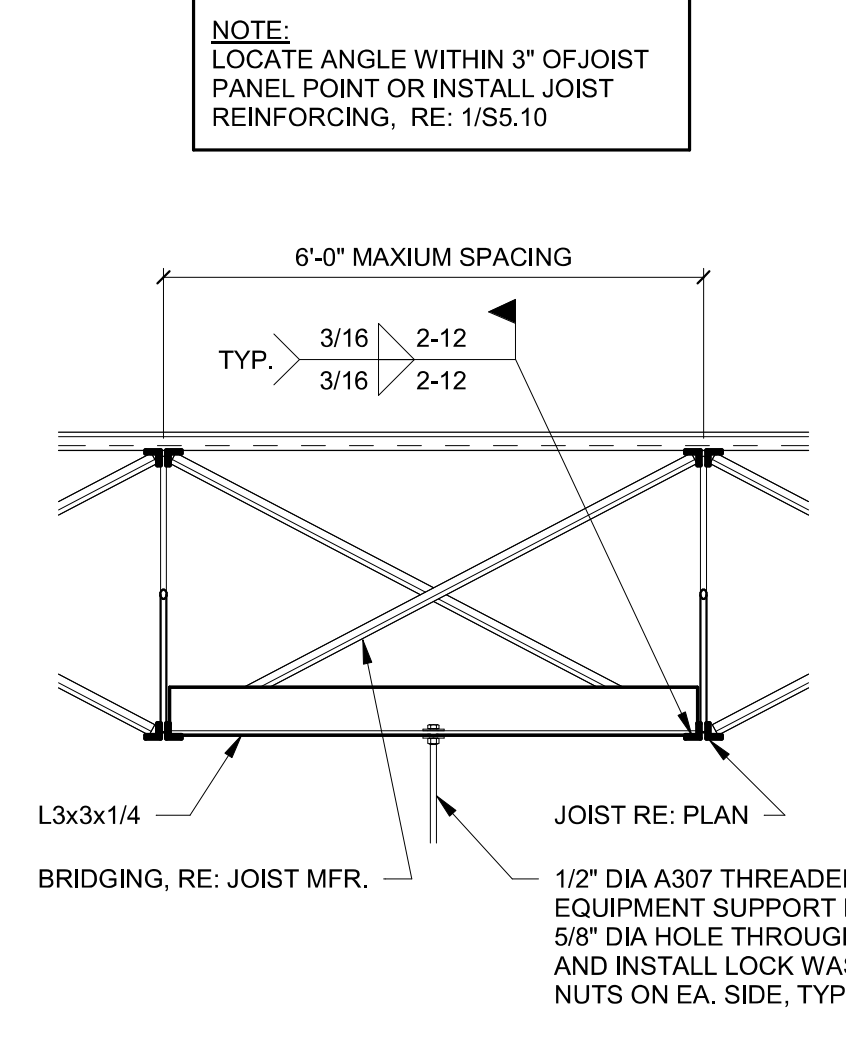


6 CRANE CONNECTON DETAIL
3/4" = 1'-0"

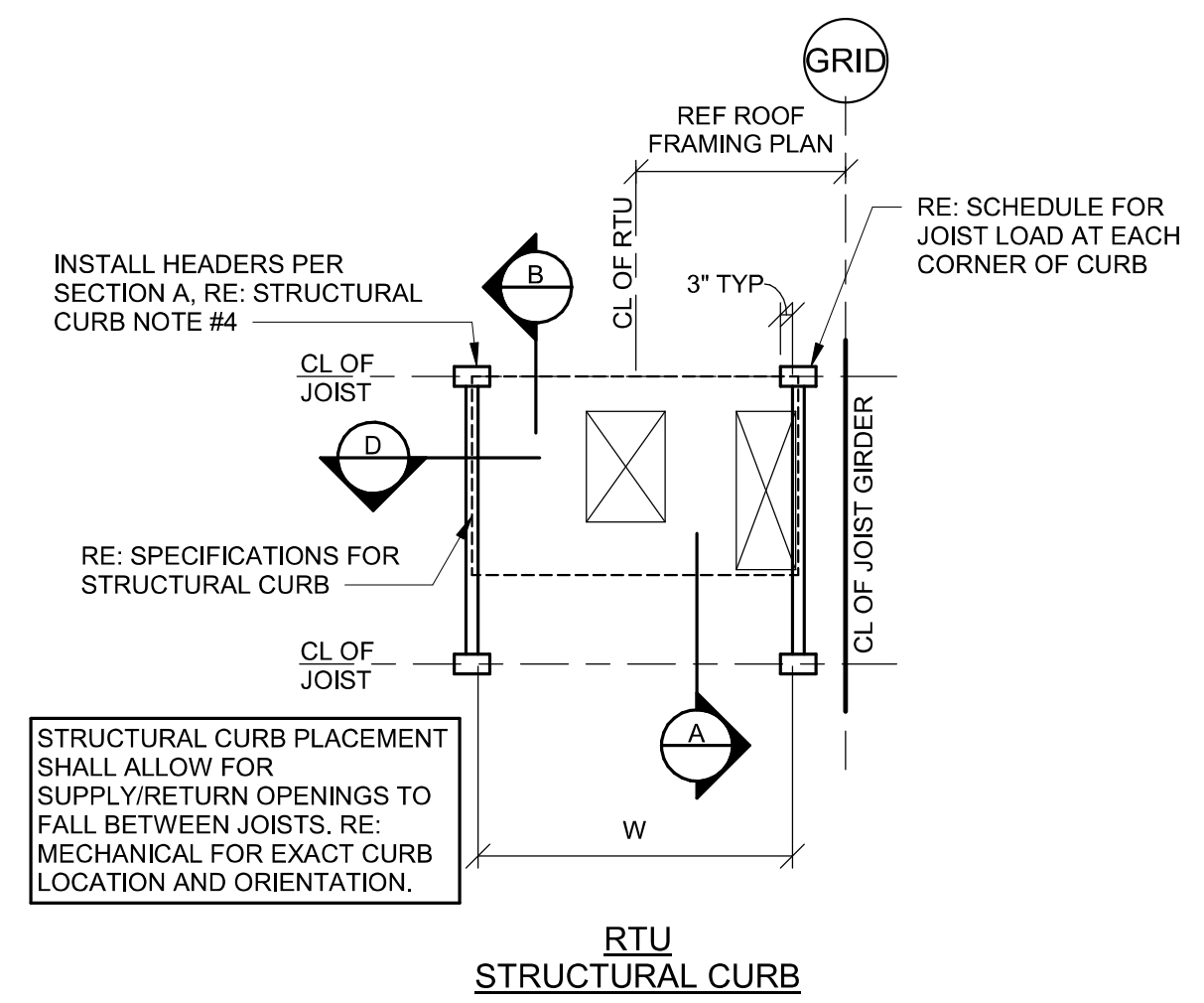
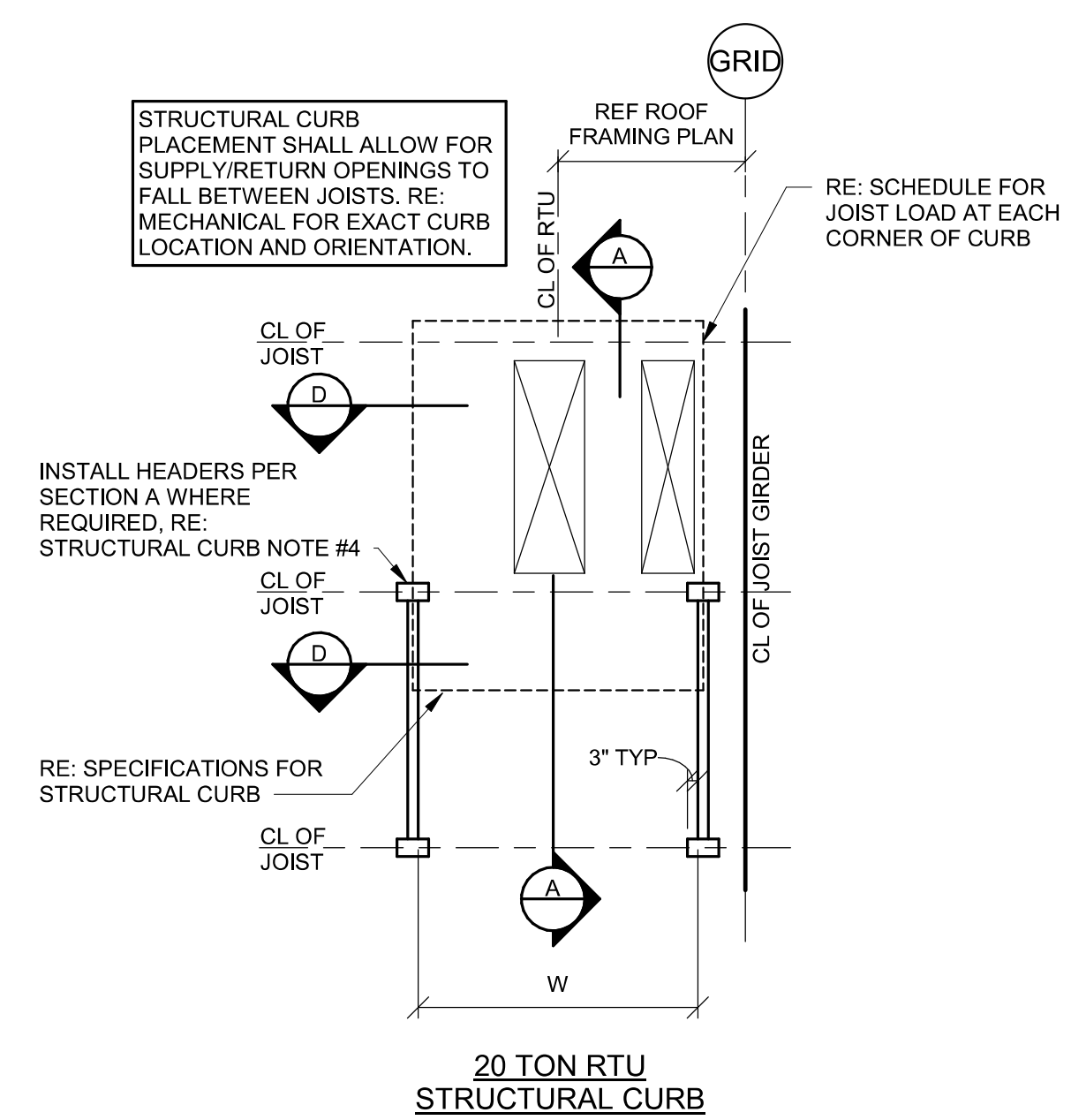
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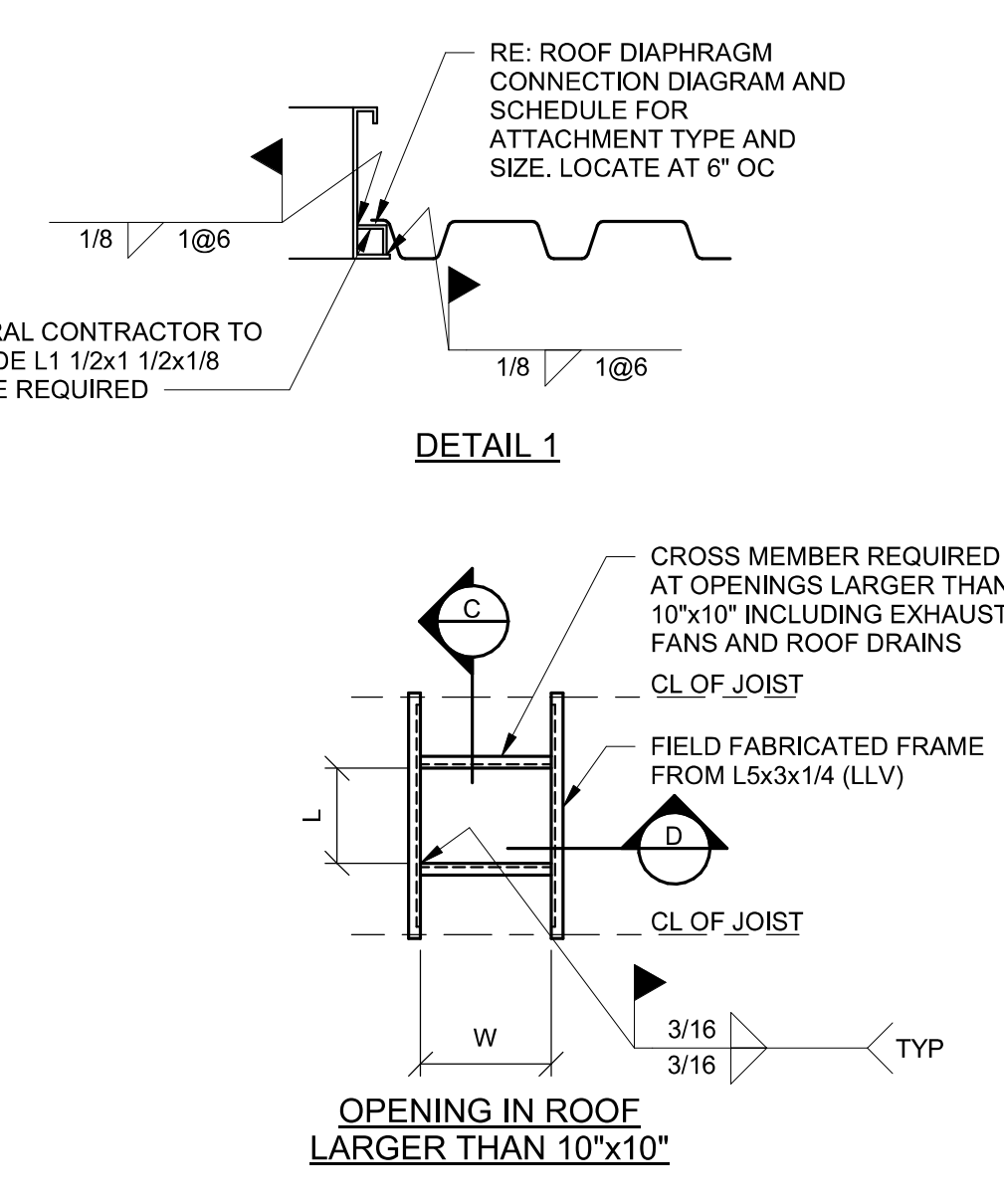
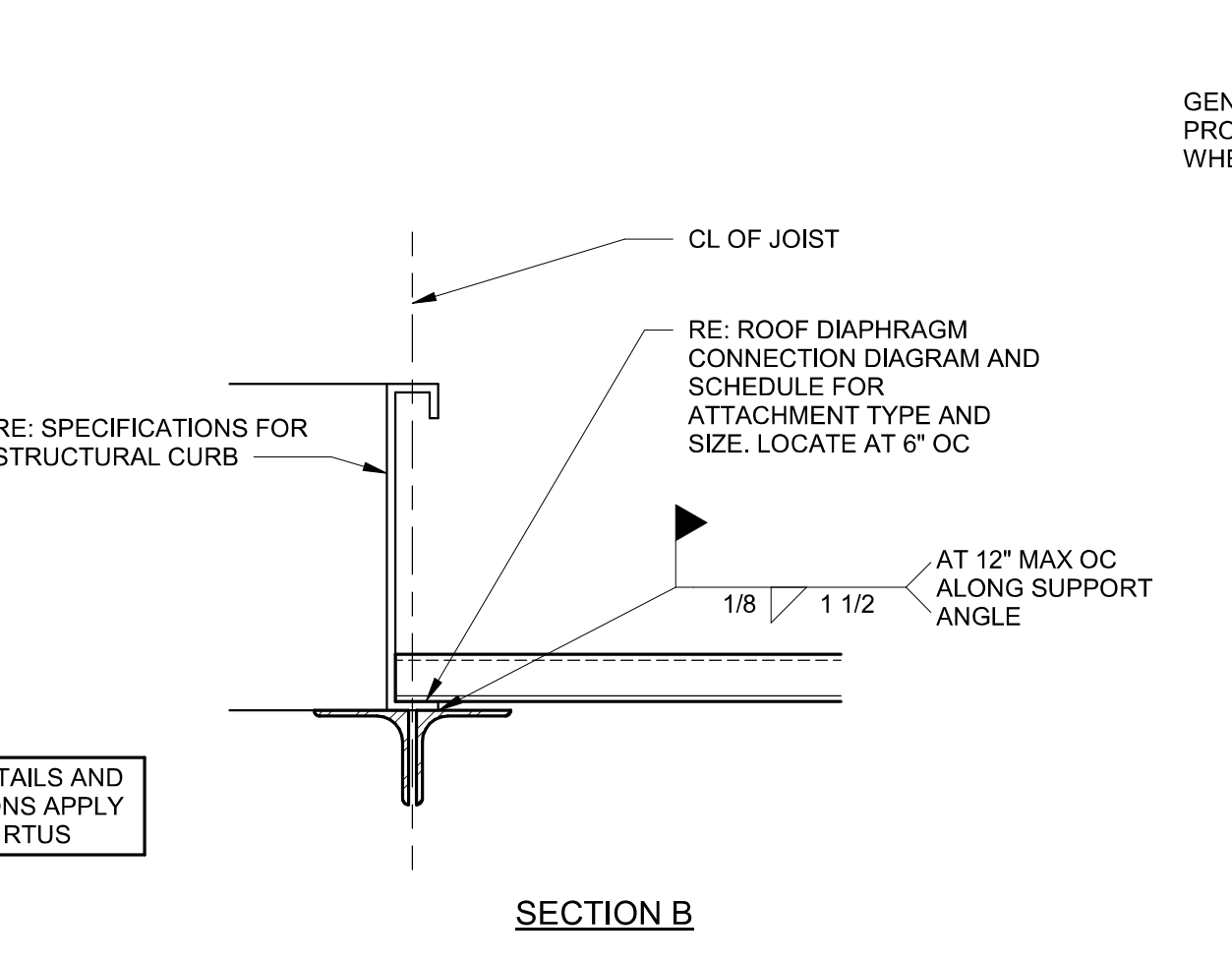
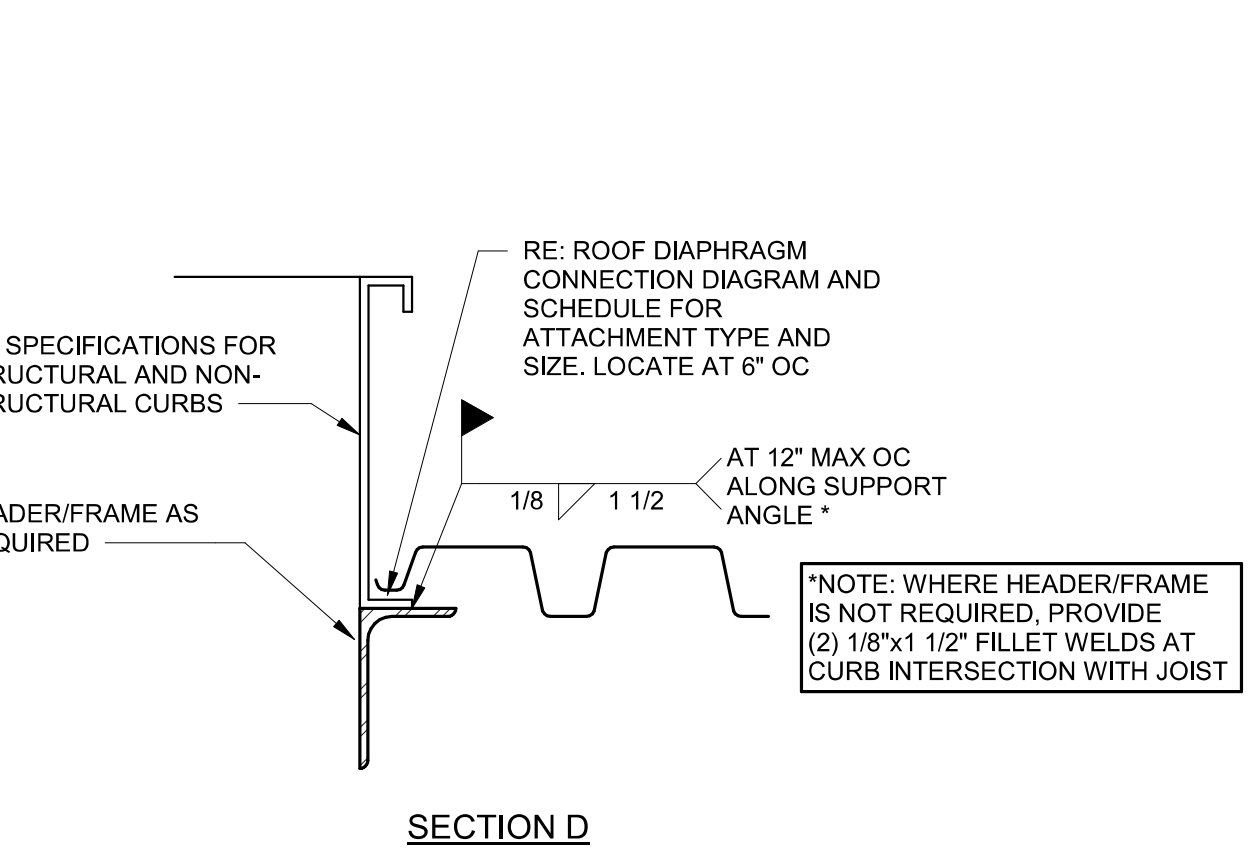
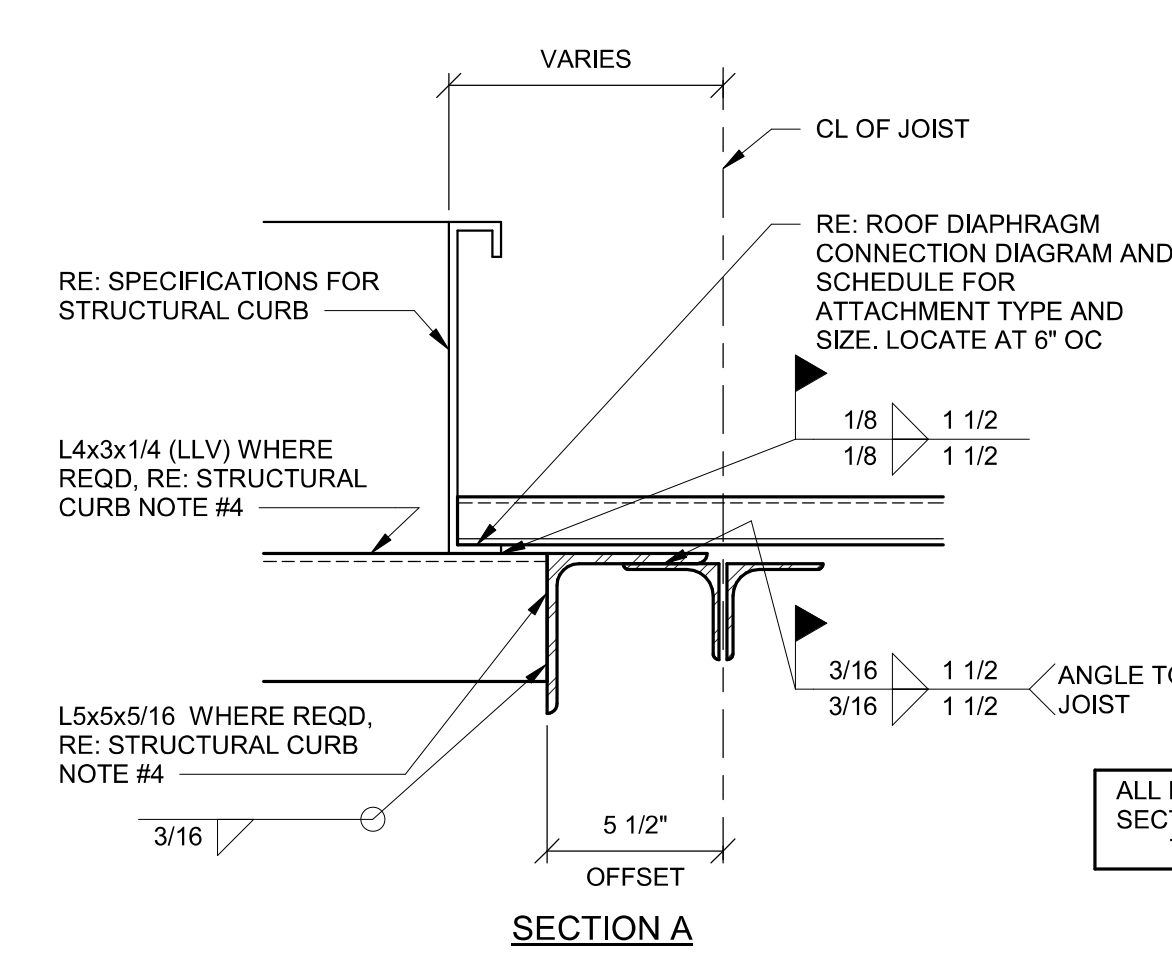
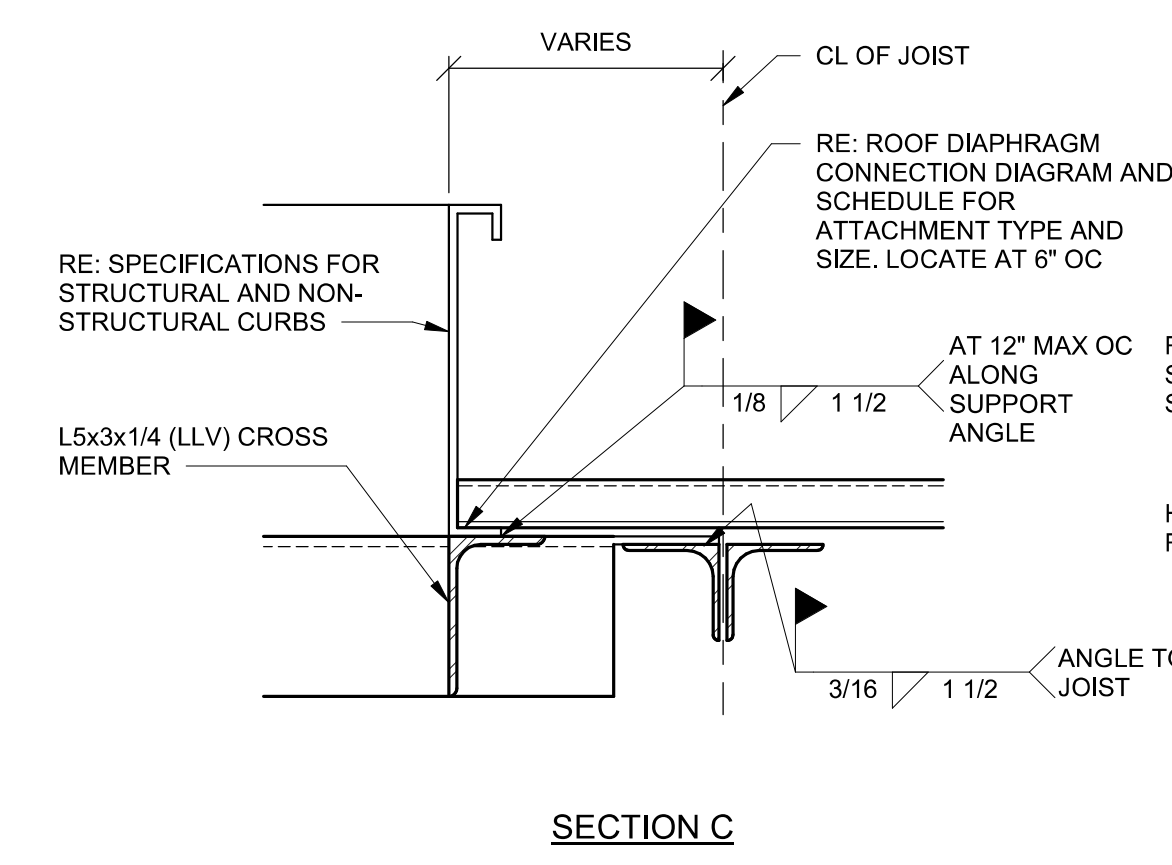
1 JOIST REINFORCING DETAIL
S5.10 3/4" = 1'-0"



2 TYP SUSPENDED EQUIPMENT SUPPORT DETAIL
S5.10 NOT TO SCALE



- NOTES:**
1. INSTALL STRUCTURAL CURBS, HEADERS, AND FRAMES AND WELD TO SUPPORT STEEL BEFORE DECK IS PLACED.
 2. ADJUST LOCATION OF RTU SO CURB FALLS WITHIN 3 INCHES OF JOIST PANEL POINTS. IF CURB IS MORE THAN 3 INCHES FROM PANEL POINT ADD REINFORCING PER JOIST REINFORCING DETAIL. (1/S5.10)
 3. GENERAL CONTRACTOR SHALL COORDINATE RTU DIMENSIONS AND FRAMING LOCATIONS WITH THE STEEL FABRICATOR, MECHANICAL AND ERECTION SUBCONTRACTORS.
 4. HEADERS ARE REQUIRED FOR STRUCTURAL CURBS WHEN THE CURB DOES NOT SPAN BETWEEN TWO JOIST OR THE CURB CANTILEVERS MORE THAN TWO FEET OVER THE JOIST. HEADERS ARE REQUIRED AS SHOWN FOR AHUS AND HYBRID HOUSES.
 5. RE: DETAIL 1 FOR CONNECTION OF DECK PARALLEL TO CURB, WHERE REQUIRED.
 6. DO NOT INSTALL STRUCTURAL CURBS ON TOP OF DECK.
 7. STEEL SUPPLIER TO FURNISH STOCK ANGLE FOR FIELD FABRICATED FRAMES.
 8. RE: SPECIFICATIONS AND MECHANICAL ROOFTOP HVAC UNIT SCHEDULES FOR RTU ANCHORAGE.
 9. CURB WIDTHS SHOWN IN THE STRUCTURAL CURB SCHEDULE ARE FOR ROOF FRAMING DESIGN PURPOSES ONLY AND SHALL NOT BE USED FOR STRUCTURAL CURB FABRICATION.



3 RTU FRAMING SUPPORT PLAN
S5.10 NTS

AMBROSE PROPERTY GROUP

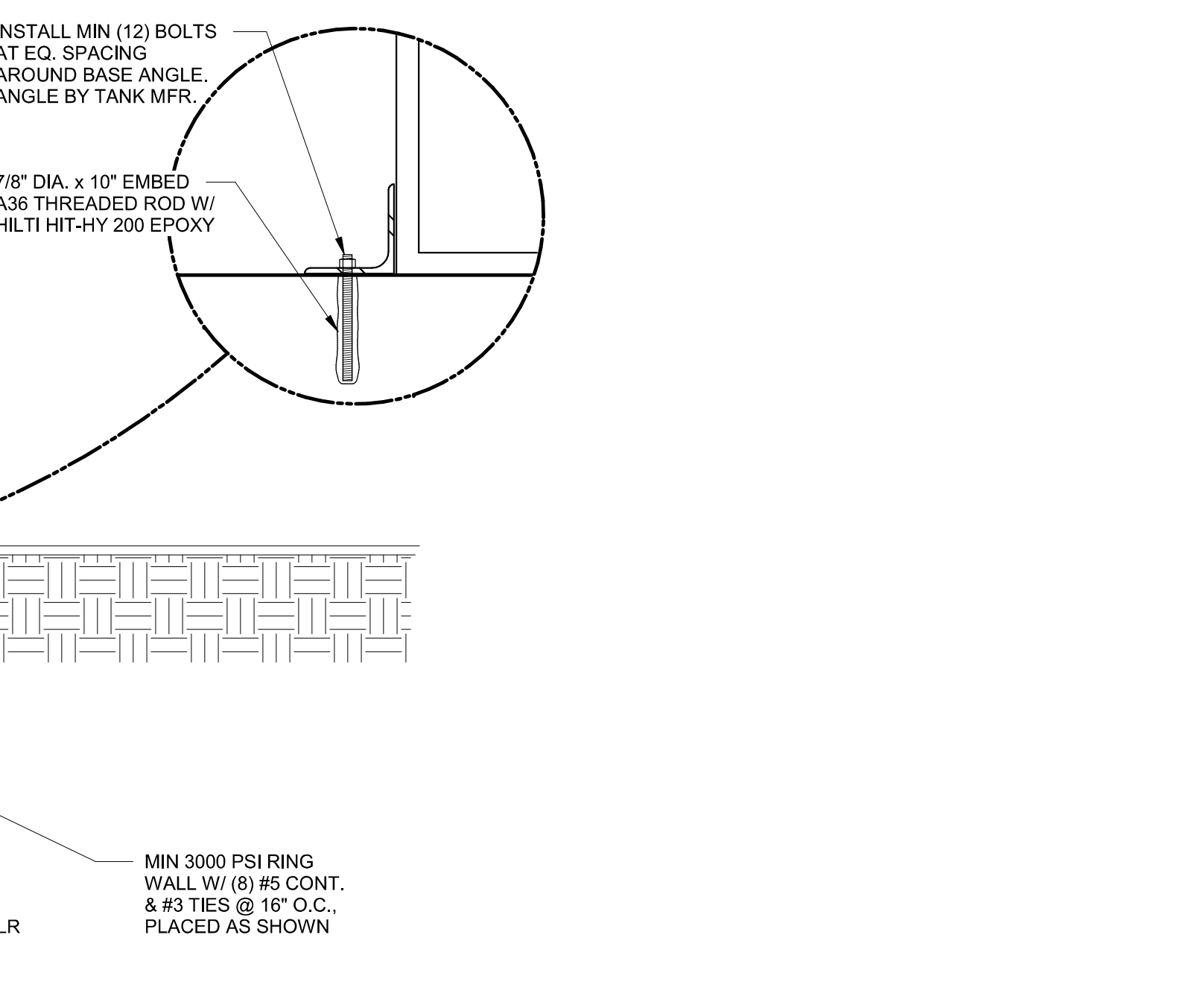
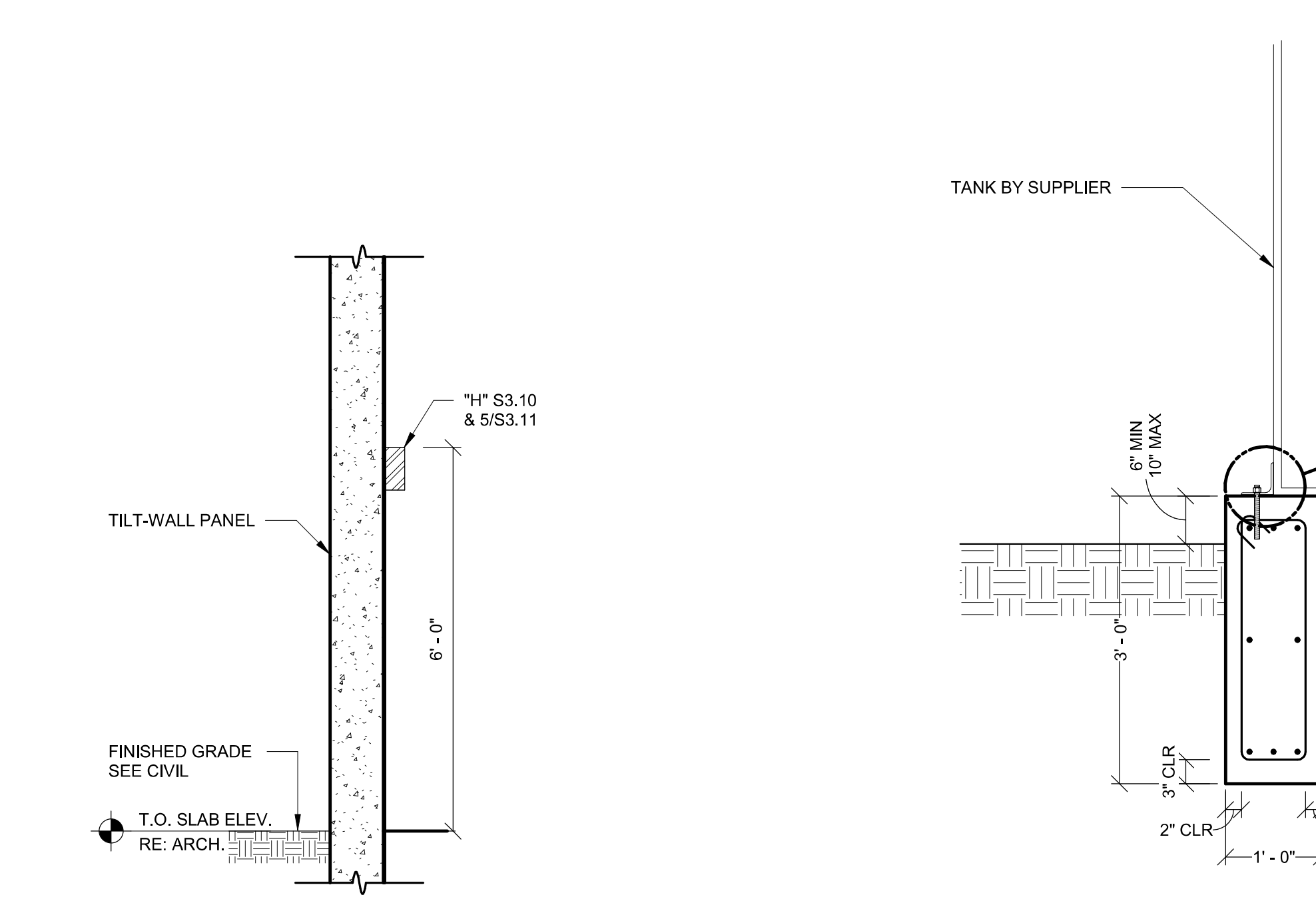
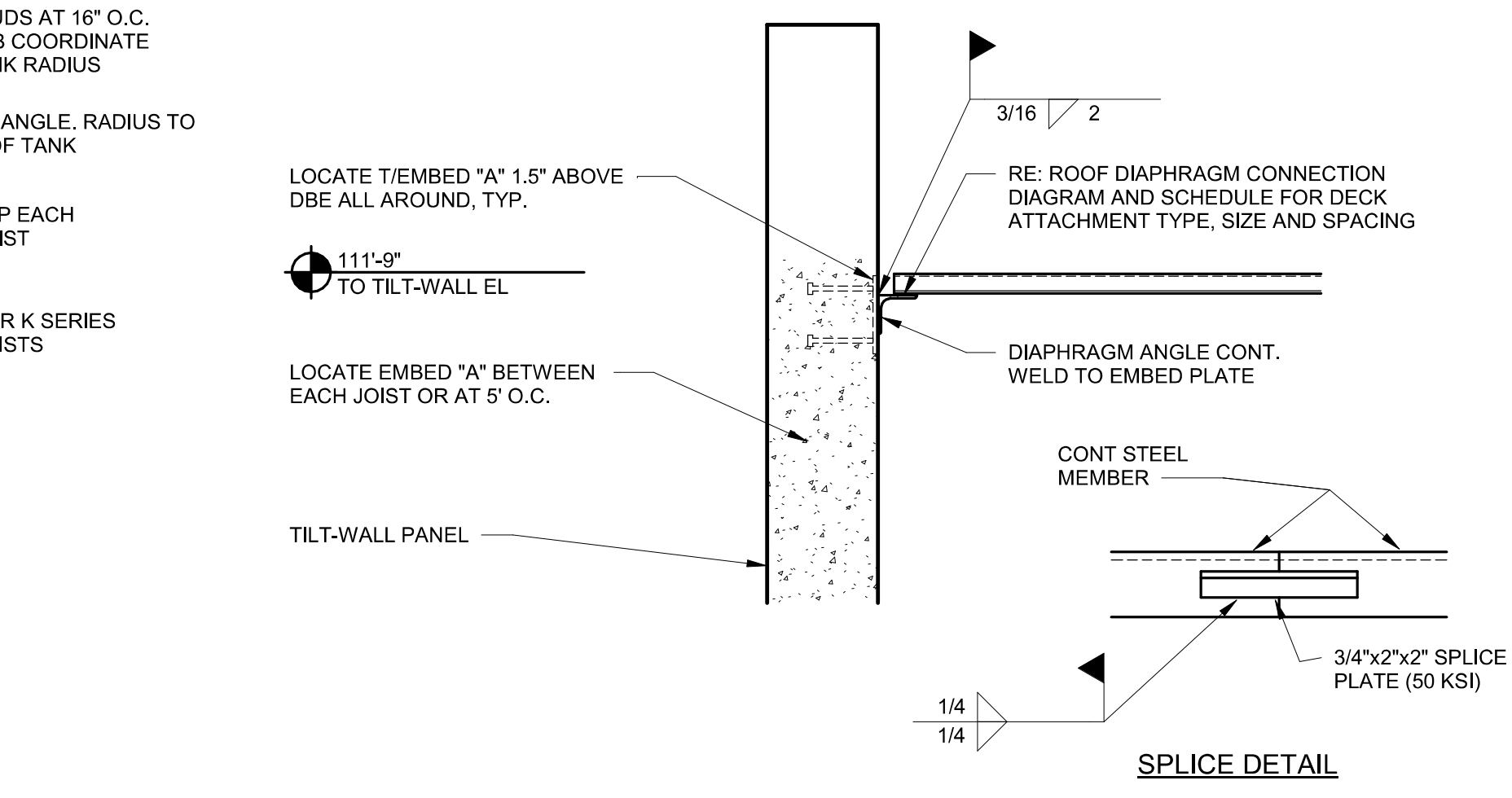
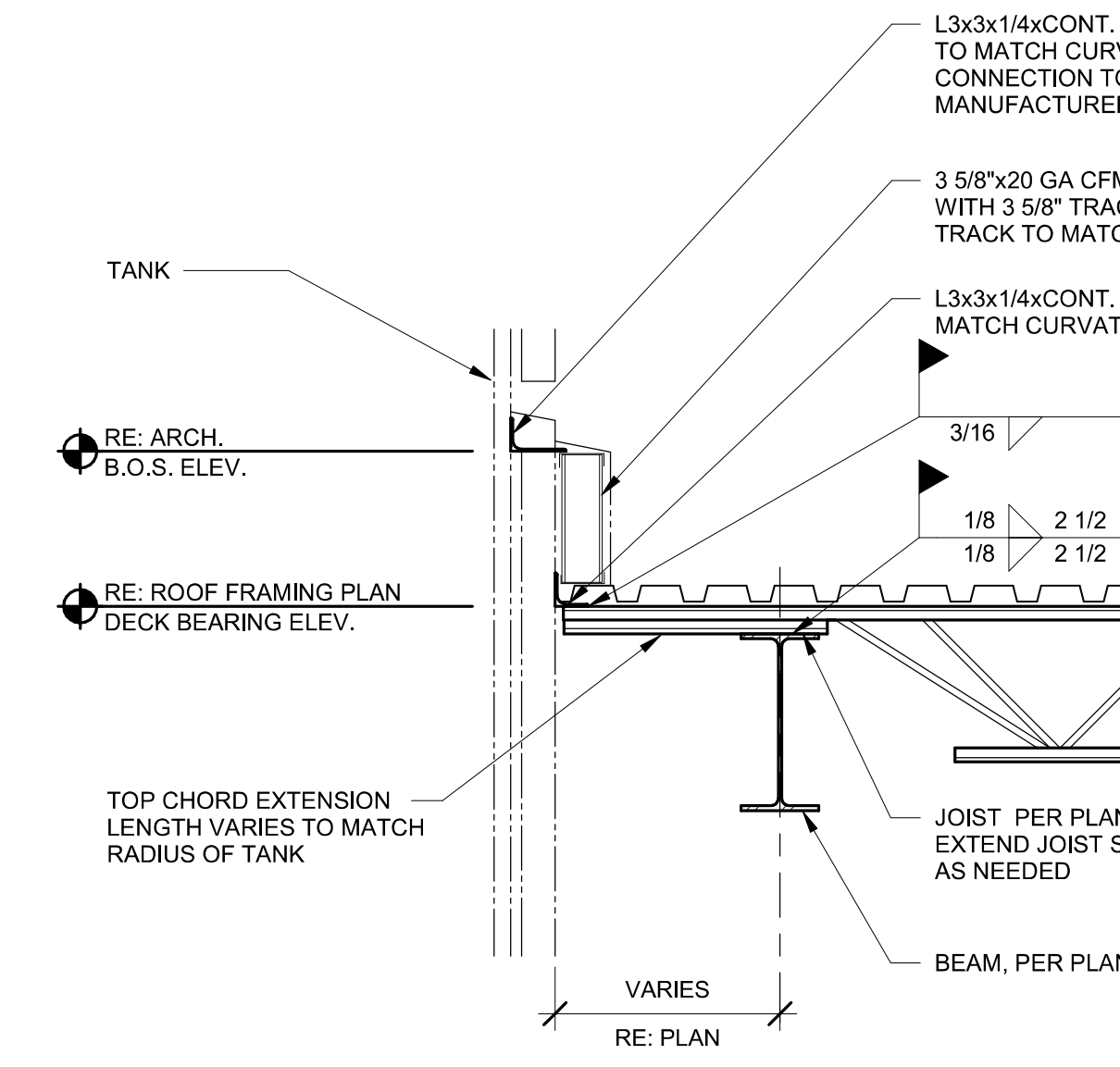
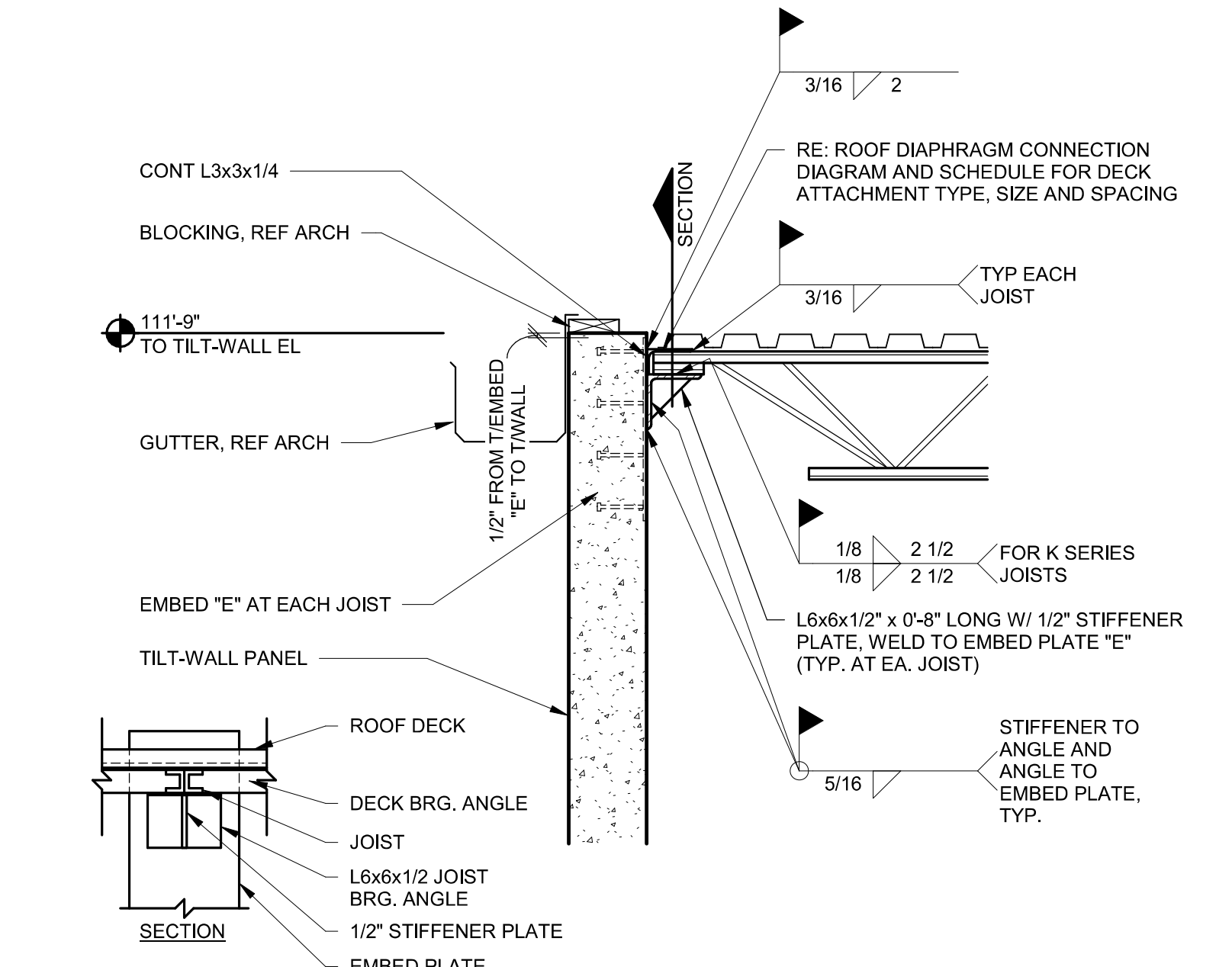
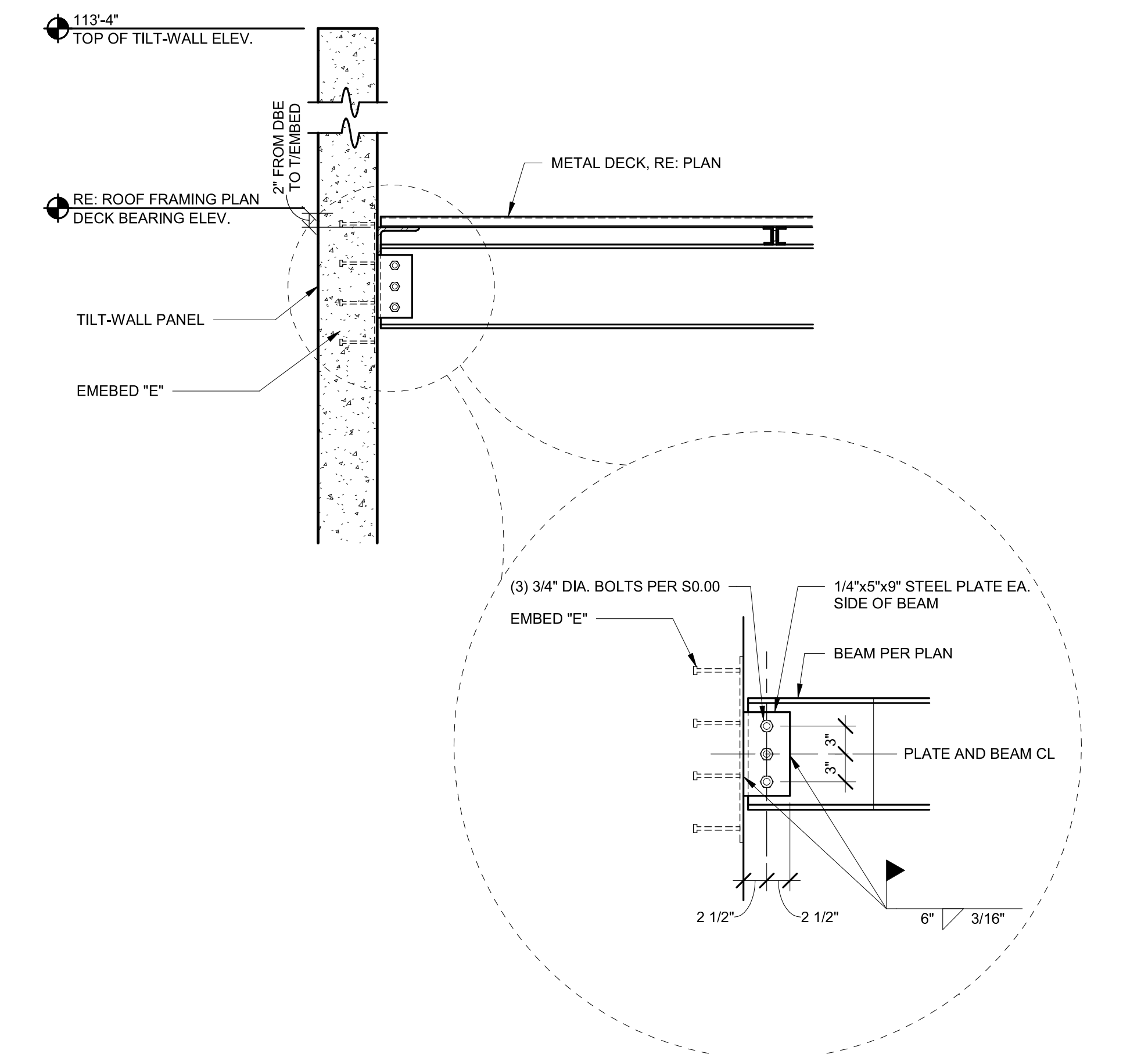
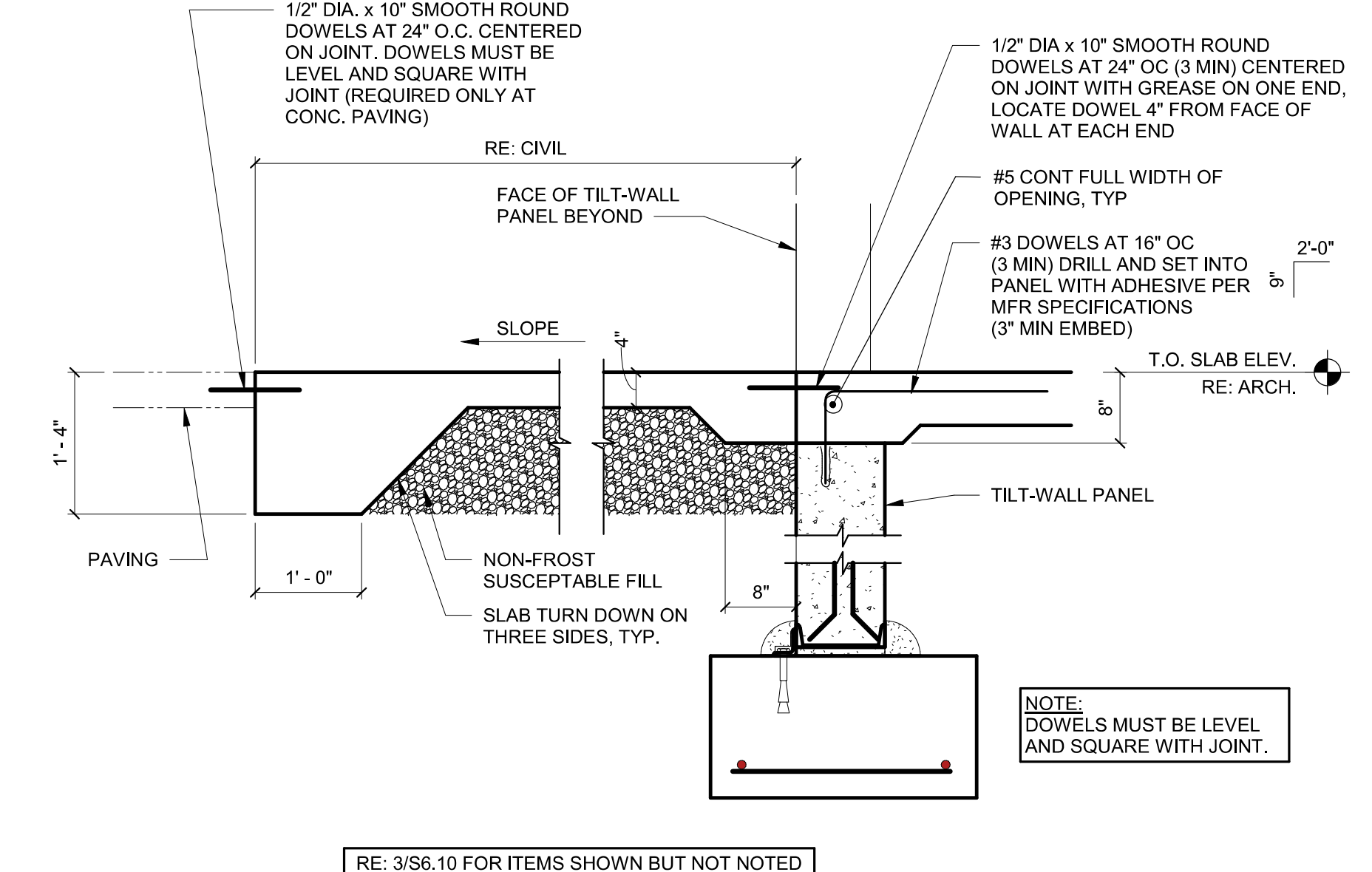
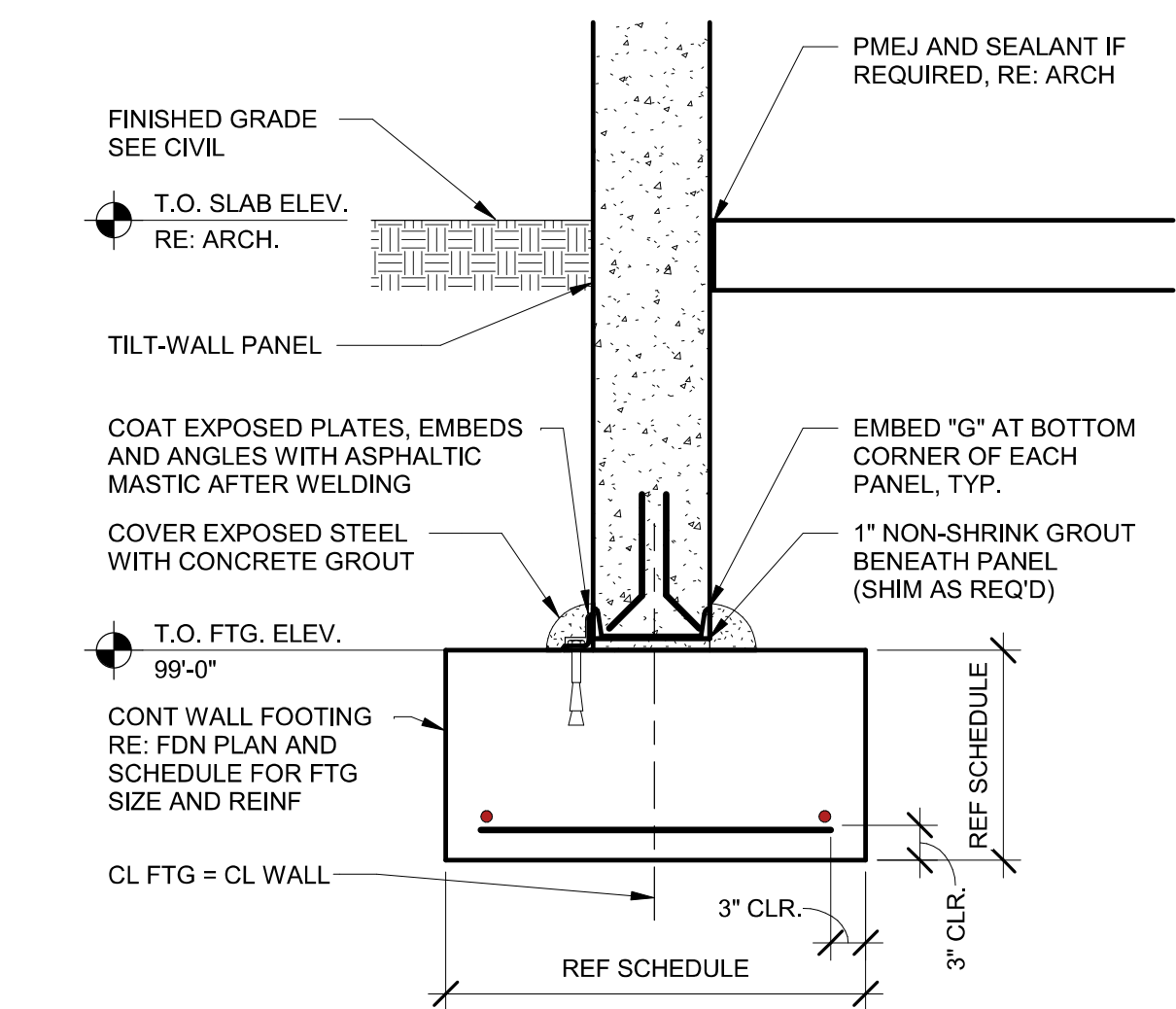
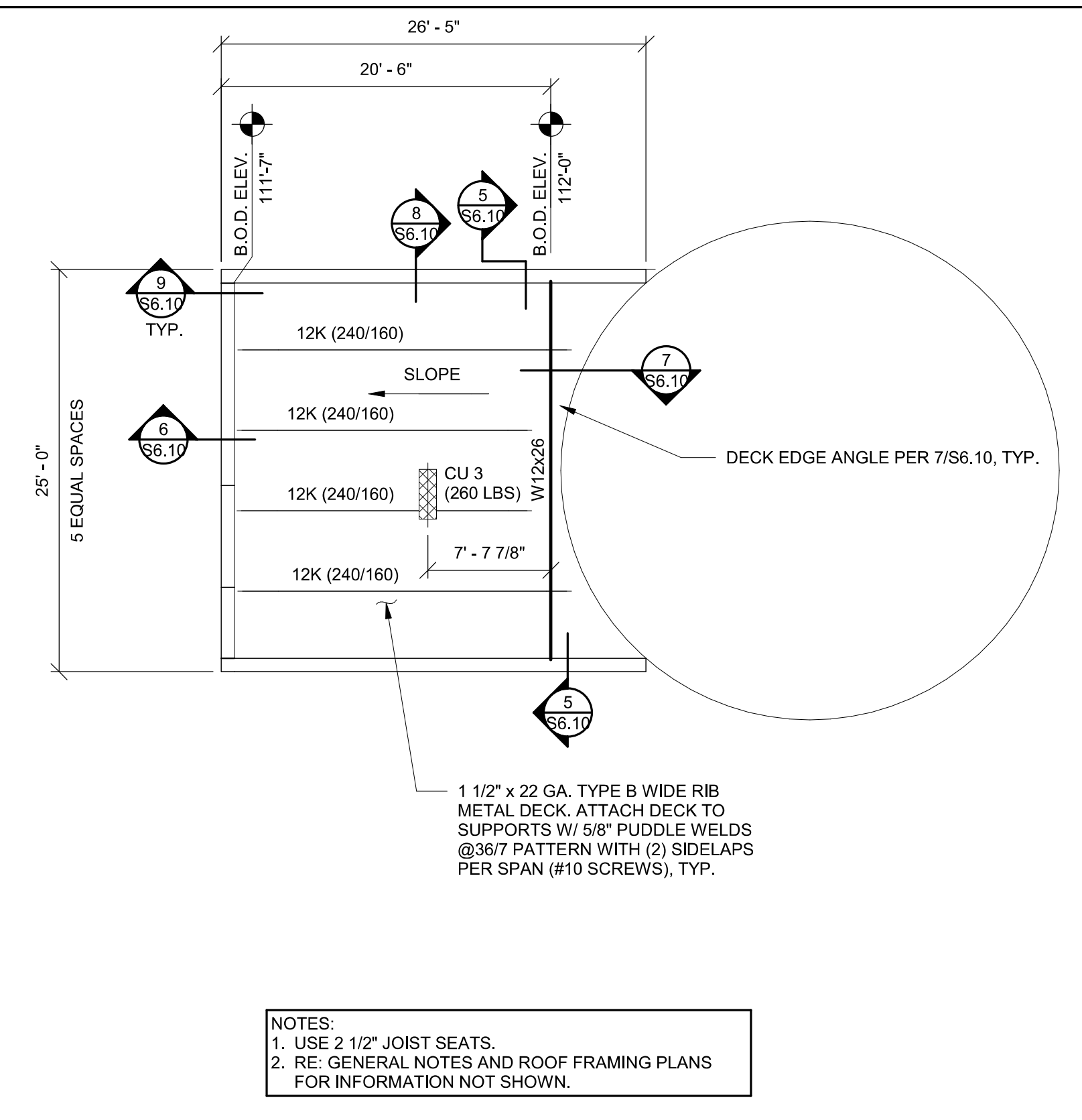
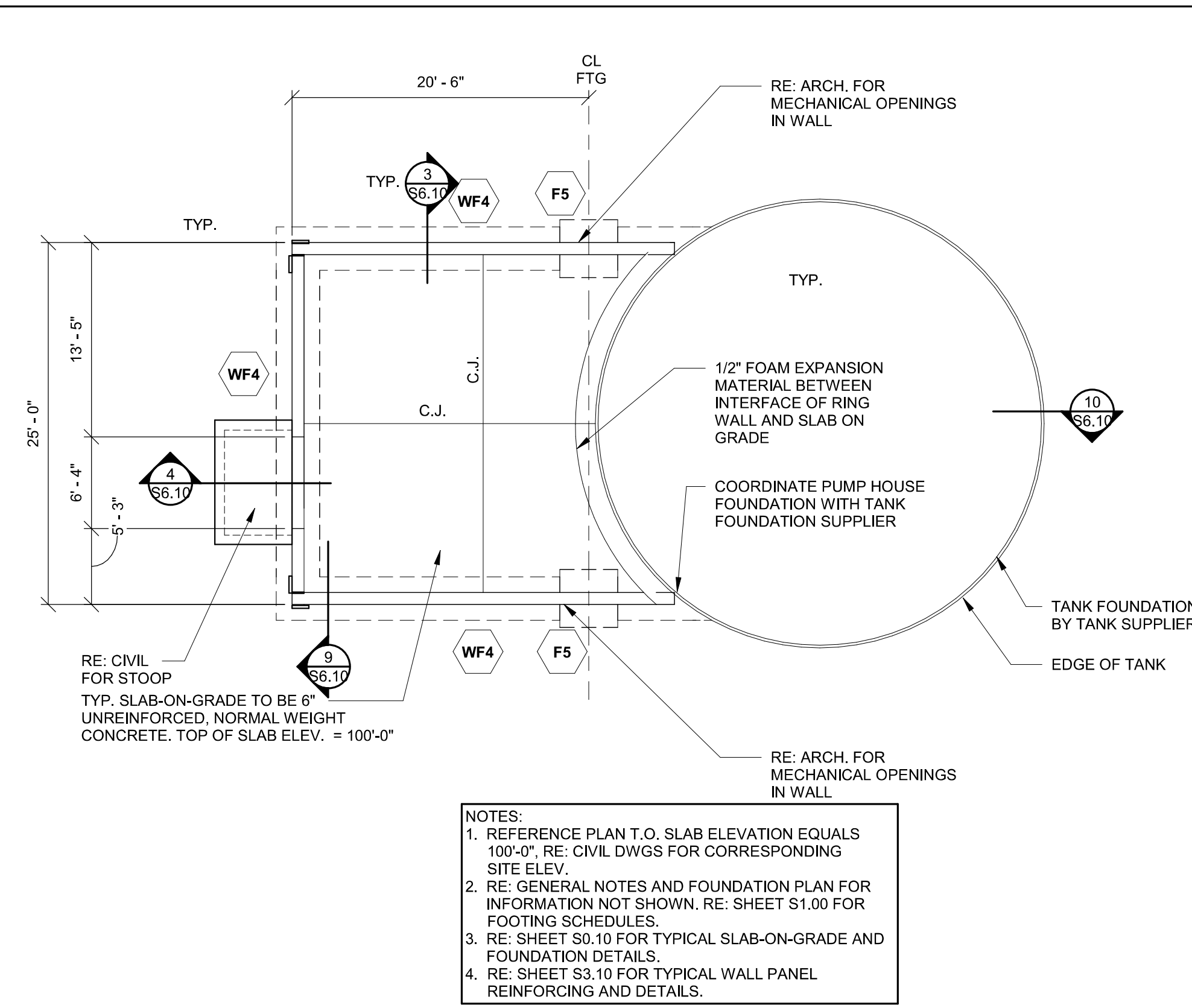
PROJECT PENINSULA
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Revisions / Submissions

ID	Description	Date

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Scale: AS NOTED
Drawn By: GH
Checked By: KB/HR
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
STEEL FRAMING
DETAILS



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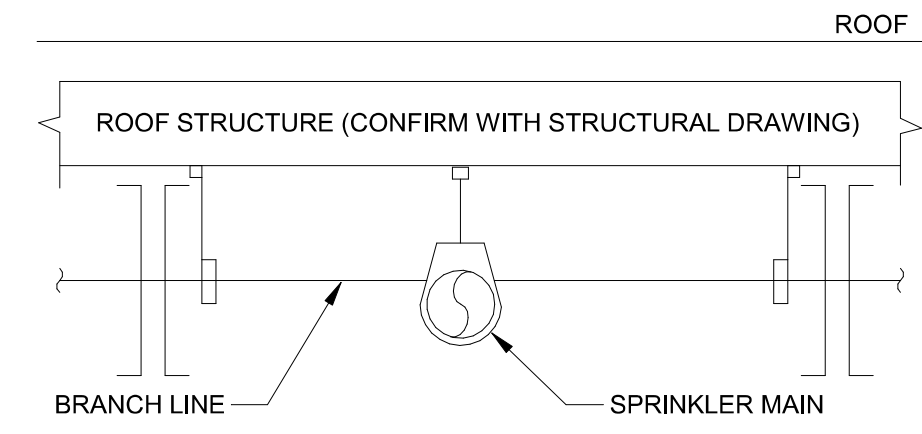
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Drawn By: GH
Checked By: KB/MG
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Sheet Title:
**PUMPHOUSE PLANS,
ELEVATIONS, AND
DETAILS**

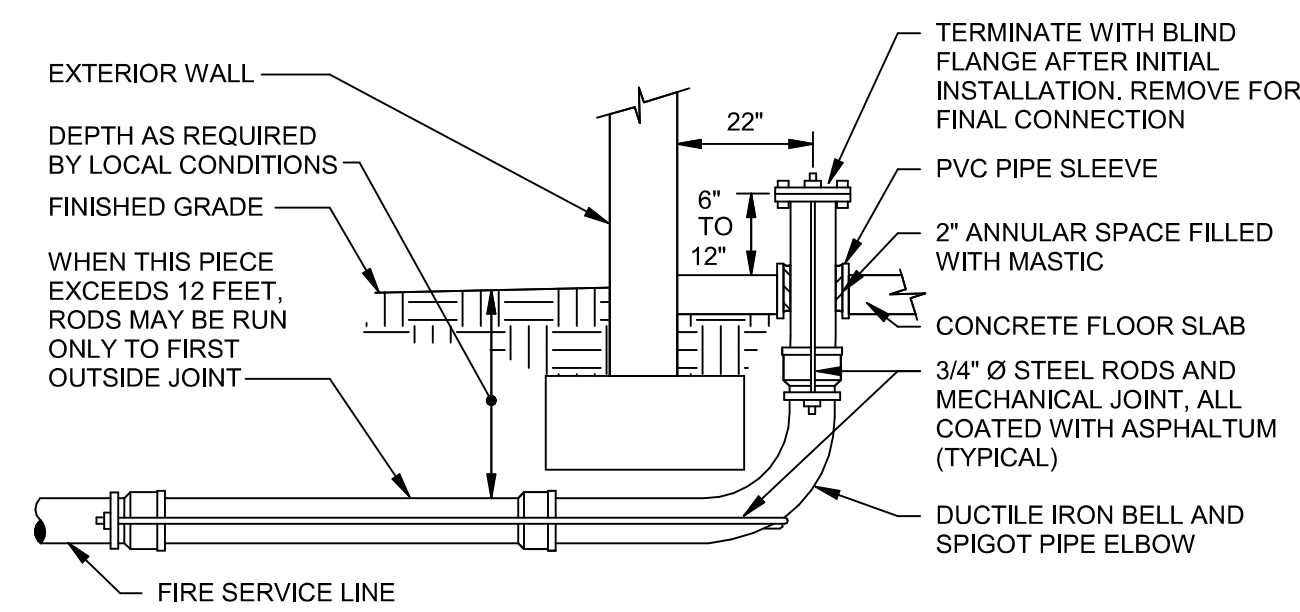
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DETAIL NOTES:
 1. INSTALL THE MAIN AND BRANCH LINE PIPING ABOVE THE BOTTOM OF THE TRUSSES TO PROVIDE THE REQUIRED CLEAR HEIGHT.
 2. REFER TO STRUCTURAL DRAWINGS FOR DETAILS. COORDINATE SPRINKLER PIPE SIZE AND WEIGHTS WITH THE STRUCTURAL ENGINEER.
 3. DO NOT SUPPORT PIPE FROM THE BOTTOM CHORD OF TRUSSES.
 4. DO NOT INSTALL PIPE IN THE CLEAR HEIGHT SPACE.

4 CLEAR HEIGHT

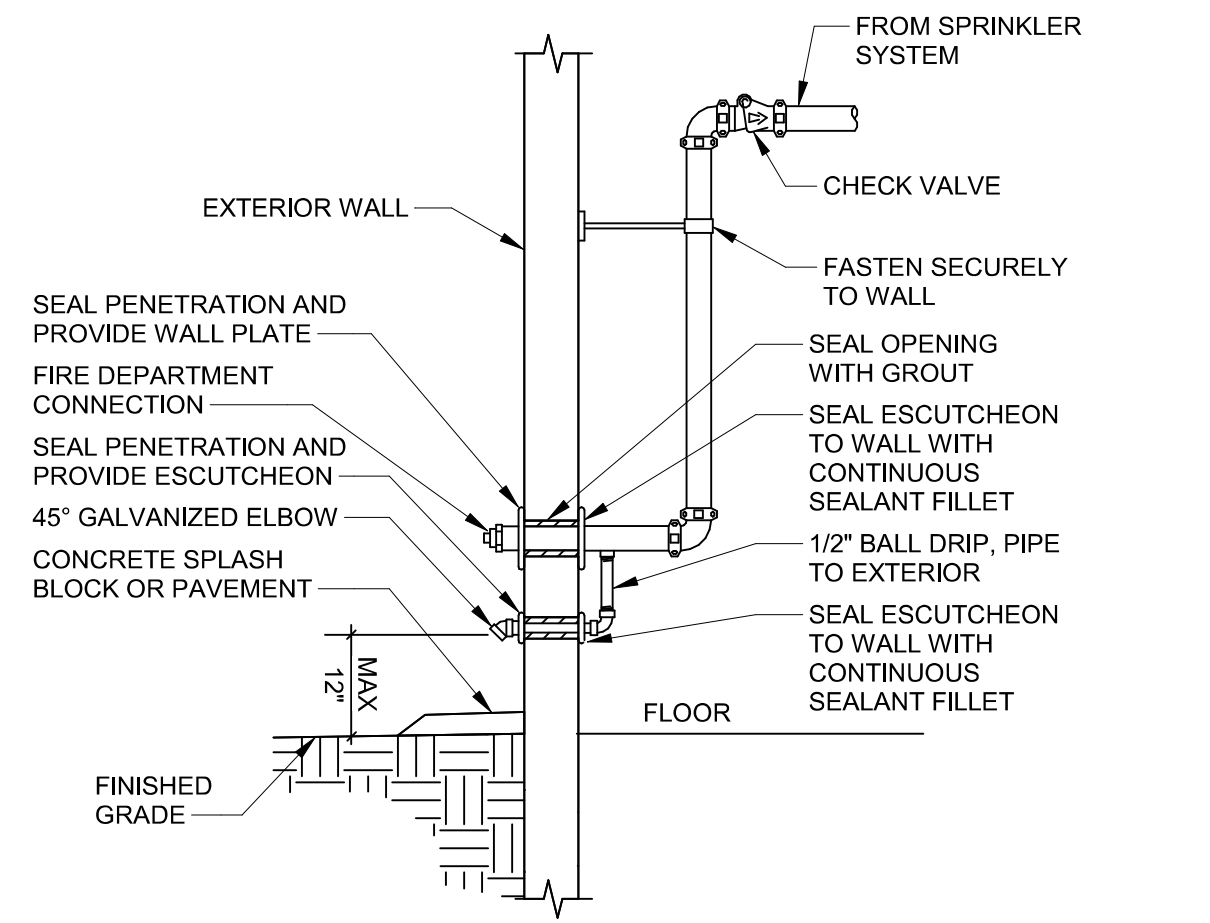
NOT TO SCALE



ARRANGEMENT SHOWN IS SCHEMATIC. MODIFY TO SUIT FIELD CONDITIONS AND MEET APPLICABLE CODE REQUIREMENTS. VERIFY FOUNDATION WITH ARCHITECTURAL DRAWINGS. COORDINATE WHO IS TO PROVIDE THE FIRE SERVICE ENTRY WITH THE GENERAL CONTRACTOR OR CONSTRUCTION MANAGER PRIOR TO SUBMITTING BID.

1 FIRE SERVICE ENTRY

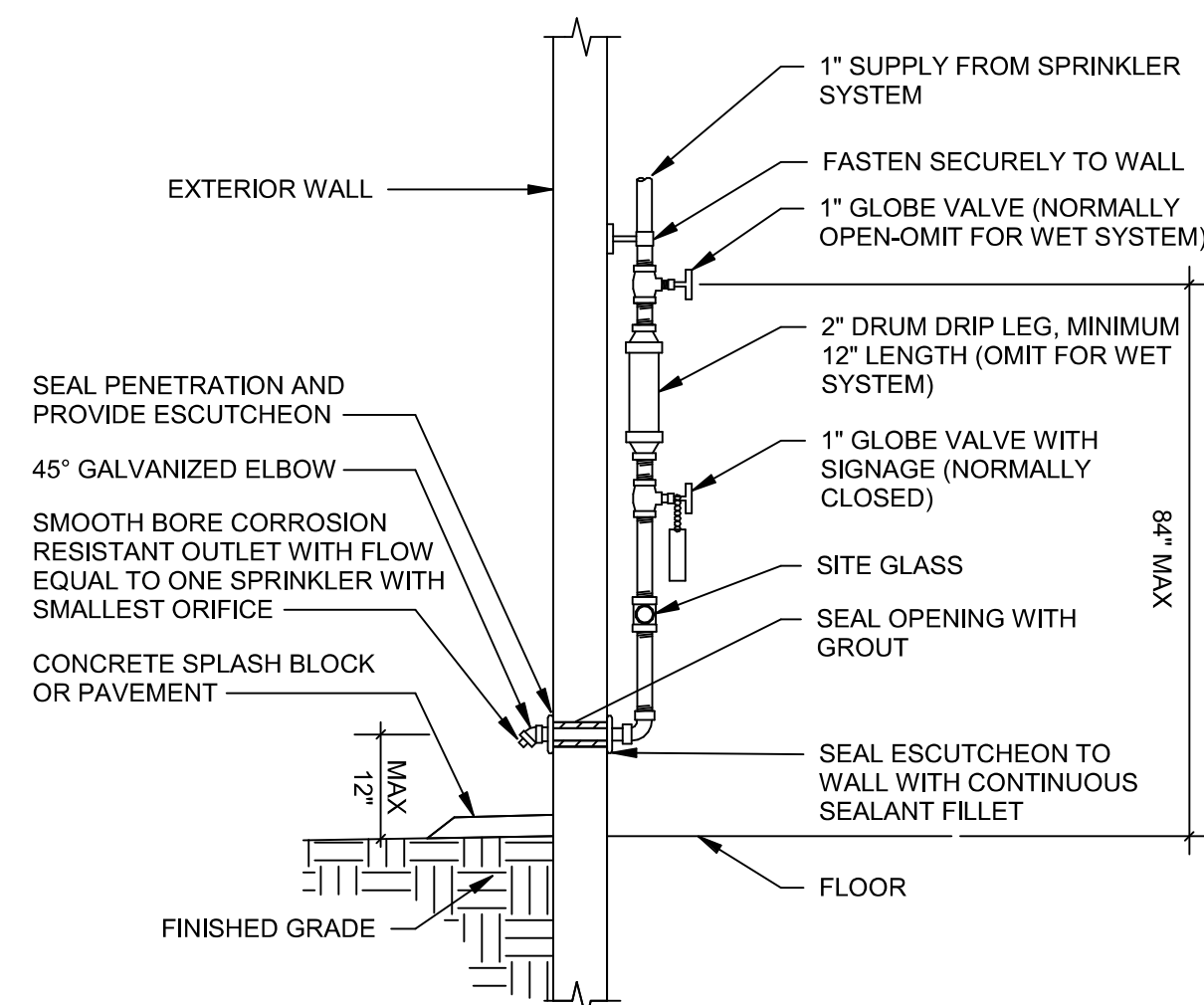
NOT TO SCALE



ARRANGEMENT SHOWN IS SCHEMATIC. MODIFY TO SUIT CONDITIONS AND MEET APPLICABLE CODE REQUIREMENTS. EXTERIOR PIPING AND FITTINGS SHALL BE GALVANIZED. REFER TO DRAWINGS FOR APPROVED LOCATIONS.

2 FIRE DEPARTMENT CONNECTION

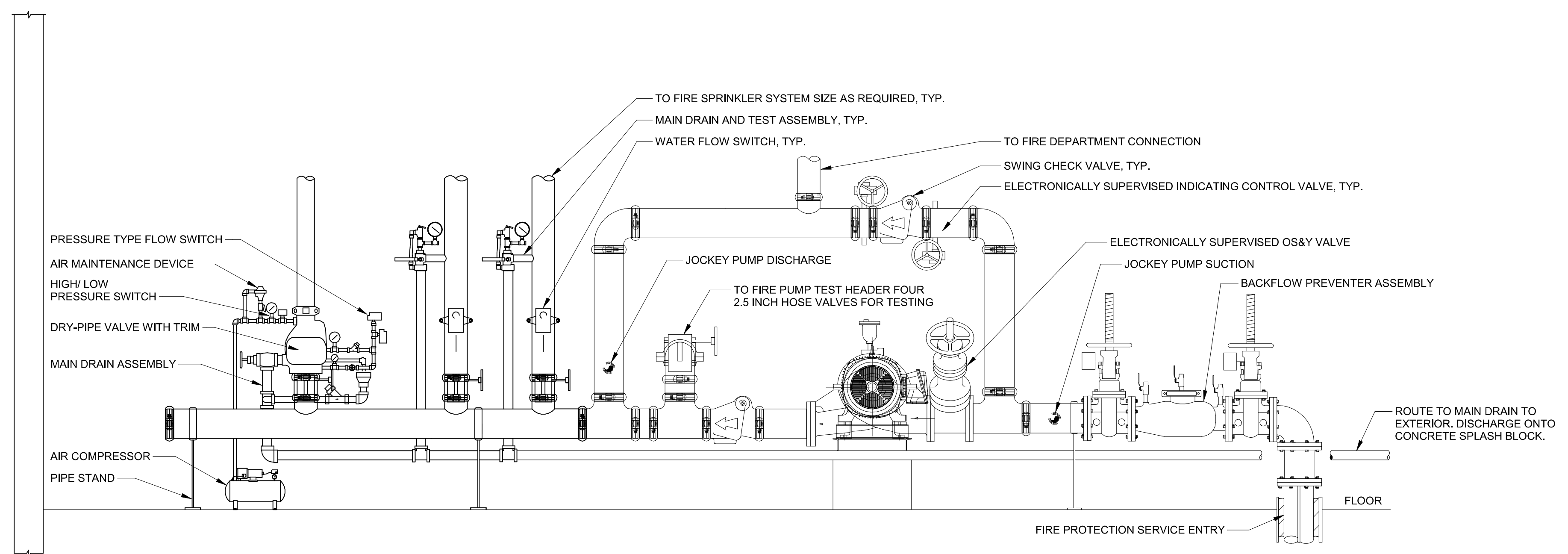
NOT TO SCALE



ARRANGEMENT SHOWN IS SCHEMATIC. MODIFY TO SUIT CONDITIONS AND MEET APPLICABLE CODE REQUIREMENTS. OBTAIN ARCHITECTS APPROVAL FOR FINAL LOCATION. EXTERIOR PIPING AND FITTINGS SHALL BE GALVANIZED.

3 INSPECTORS TEST/AUXILIARY DRAIN

NOT TO SCALE



5 FIRE PUMP

NOT TO SCALE

FIRE PROTECTION GENERAL NOTES

A CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, LAYOUT, AND INSTALLATION OF THE SYSTEM IN ACCORDANCE WITH THE SPECIFICATIONS AND ADOPTED CODES AND STANDARDS.

B CONTRACTOR SHALL PROVIDE SPRINKLER SHOP DRAWINGS FOR ENGINEER, ARCHITECT, OWNER AND OWNER'S INSURANCE COMPANY REVIEW AND APPROVAL. ALL SPRINKLER SHOP DRAWINGS SHALL HAVE AUTHORITY HAVING JURISDICTION AND LOCAL FIRE MARSHAL FINAL APPROVAL. ALL FIRE PROTECTION SHOP DRAWINGS SHALL BEAR THE STAMP AND SIGNATURE OF A REGISTERED FIRE PROTECTION ENGINEER.

C IN THE EVENT OF A DISCREPANCY BETWEEN CONTRACT DRAWINGS AND SPECIFICATIONS, THE MOST STRINGENT SHALL GOVERN. ALL WORK TO BE IN ACCORDANCE WITH REQUIREMENTS OF GOVERNING STATE AND LOCAL FIRE AND BUILDING CODES, NFPA AND OSHA. INSTALL ALL PIPING TO AVOID ARCHITECTURAL FRAMING, STRUCTURAL MEMBERS, AND OTHER OBSTRUCTIONS. COORDINATE PIPING LOCATIONS WITH ALL APPLICABLE CONTRACT DRAWINGS PRIOR TO PLACING SLEEVES IN FLOORS OR WALLS. INSTALL ALL PIPING TO BEST SUIT FIELD CONDITIONS AND COORDINATE WITH THE INSTALLATION WORK OF OTHER TRADES. THE DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED TO DETERMINE EXACT LOCATIONS OF PIPING.

D COORDINATE SPRINKLER ZONES WITH FIRE ALARM ZONES. ONE SPRINKLER SYSTEM ZONE SHALL NOT EXCEED TWO FIRE ALARM ZONES. GENERAL CONTRACTOR AND SPRINKLER SUBCONTRACTOR SHALL FULLY COORDINATE THE INSTALLATION OF THE WET/DRY PIPE SPRINKLER SYSTEMS WITH ARCHITECTURAL REFLECTED CEILING PLANS. PROVIDE COORDINATED SHOP DRAWING INDICATING ALL EQUIPMENT DEVICES.

E CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A NEW TWO HYDRANT FLOW TEST NOT MORE THAN 12 MONTHS OLD PRIOR TO PREPARATION OF SPRINKLER SYSTEM HYDRAULIC CALCULATIONS AND SHOP DRAWINGS.

F FIRE PROTECTION PIPING AND EQUIPMENT SHALL BE RATED FOR EXPECTED MAXIMUM WORKING PRESSURES. WHERE PRESSURES EXCEED 175 PSI, PIPE AND FITTINGS SHALL BE RATED FOR MINIMUM 250 PSI.

G ALL SPRINKLER SYSTEM CONTROL VALVES SHALL BE PROVIDED WITH TAMPER SWITCHES. ALL SYSTEMS SHALL BE EQUIPPED WITH A FLOW SWITCH. ALL TAMPER AND FLOW SWITCHES SHALL BE MONITORED BY AN OFF-SITE PROPRIETARY STATION, U.L. LISTED, AND ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.

H PROVIDE ALL MISCELLANEOUS STEEL, SPECIAL SUPPORTS AND ANCHORING FOR COMPLETE INSTALLATION OF SYSTEMS/EQUIPMENT AND FOR SUPPORT OF ALL PIPING, EQUIPMENT, ETC. REQUIRING SUCH, REFER TO STRUCTURAL DRAWINGS. DRAWINGS ARE DIAGRAMMATIC IN NATURE. AND ALL CONDITIONS SHALL BE CONTRACTOR COORDINATED AND VERIFIED FOR EXACT LOCATION AND SIZES. THE CONTRACTOR IS RESPONSIBLE TO THOROUGHLY VERIFY ALL CONDITIONS BEFORE SUBMITTING BID INFORMATION.

I FIRE DEPARTMENT CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION (A.H.J.). NFPA RECOMMENDS THAT THE FDC BE LOCATED NOT LESS THAN 18 INCHES AND NO MORE THAN 48 INCHES ABOVE FINISHED GRADE.

J PENETRATIONS OF FIRE RATED ASSEMBLIES SHALL BE FIRE-STOPPED. FIRE STOPPING SHALL BE APPROVED BY THE AUTHORITY HAVING JURISDICTION AT VARIOUS STAGES AND UPON COMPLETION OF THE WORK.

K CONTRACTOR SHALL COORDINATE WITH STRUCTURAL ENGINEER FOR ALLOWABLE BEAM PENETRATION LOCATIONS, SIZES, AND DETAILS (IF APPLICABLE).

L ALL MATERIALS AND WORKMANSHIP ARE SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT. ANY PORTION OF THE WORK FOUND TO BE DEFECTIVE SHALL BE REPLACED BY THE CONTRACTOR AS PART OF THIS CONTRACT AT NO ADDITIONAL COST TO THE OWNER.

M IF A FIRE PUMP IS REQUIRED DUE TO INADEQUATE PRESSURE FROM THE SITE WATER SUPPLY, AN ELECTRIC FIRE PUMP SHALL BE UTILIZED.

N ALL SPRINKLER PIPING ABOVE THE BOTTOM OF STRUCTURE TO THE GREATEST EXTENT POSSIBLE IN ORDER TO MAINTAIN CLEAR HEIGHT.

O PROVIDE BOLLARDS IN ORDER TO PROTECT FIRE PROTECTION RISERS IN WAREHOUSE AREAS.

P WAREHOUSE AREAS SHALL BE PROTECTED BY SPRINKLER SYSTEMS WHICH UTILIZE EARLY SUPPRESSION FAST RESPONSE (ESFR) SPRINKLERS. PER NFPA 13, THE WAREHOUSE AREA SPRINKLER SYSTEMS ARE DESIGNED TO MEET A DEMAND OF 1.26 GPM/SQ. FT.

FIRE HYDRANT FLOW TEST

A HYDRANT FLOW TEST SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291 TO ASSESS ADEQUACY OF EXISTING MUNICIPAL WATER SUPPLY. A 24-HOUR STATIC PRESSURE RECORDING SHALL BE TAKEN. ADEQUACY OF THE PUBLIC WATER SUPPLY SHALL BE DETERMINED BY FIRE PROTECTION ENGINEERING CONSULTANT.

COMPLIANCE

COMPLY WITH NFPA 13, NFPA 20, NFPA 291, NFPA 24, FM GLOBAL 2-9, FM GLOBAL 6-9, OWNER FIRE PROTECTION STANDARD, AND LOCAL CODES.

HYDRAULIC SAFETY FACTOR

SAFETY FACTOR SHALL BE BETWEEN THE AVAILABLE WATER SUPPLY RESIDUAL PRESSURE AND THE DEMAND PRESSURE AT THE DEMAND FLOW. MINIMUM ACCEPTABLE SAFETY FACTOR SHALL BE 10 PSI OR 10% OF STATIC PRESSURE AT THE EFFECTIVE POINT OF FLOW TEST (WHICHEVER IS LARGER). MINIMUM SAFETY MARGIN OF SYSTEMS SUPPLIED BY ONSITE WATER STORAGE TANK AND FIRE PUMP SHALL BE 5 PSI BASED ON EMPTY TANK CONDITIONS.

DEFERRED SUBMISSION

FIRE PROTECTION DRAWINGS AND SPECIFICATIONS ARE PERFORMANCE BASED. FIRE PROTECTION CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL AS A DEFERRED SUBMITTAL TO THE LOCAL A.H.J. SHOP DRAWINGS AND HYDRAULIC CALCULATIONS INDICATING THE SPRINKLER SYSTEM LAYOUT INCLUDING FINAL HEAD LOCATIONS SHALL BE PROVIDED. THE PROFESSIONAL SHALL REVIEW THE SHOP DRAWINGS AND HYDRAULIC CALCULATIONS PRIOR TO THE DEFERRED SUBMISSION TO THE A.H.J. AND PROVIDE NOTATION ON DRAWINGS INDICATING THEY WERE REVIEWED FOR COMPLIANCE BY THE PROFESSIONAL. SUBMIT REVIEWED DRAWINGS AND CALCULATIONS WITH THE REQUIRED APPLICATION FEE TO A.H.J. PRIOR TO INSTALLATION.

THE GENERAL CONTRACTOR SHALL PERFORM A TEST TO VALIDATE THE RADIO COVERAGE AND IF IT DOES NOT MEET THE CRITERIA OF THE FIRE CHIEF, THEN THE GENERAL CONTRACTOR SHALL INSTALL FACILITIES TO ENHANCE THE RADIO COVERAGE.

FIRE SPRINKLER SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED.

ABBREVIATIONS V2.02

AFG	ABOVE FINISHED FLOOR	NIC	NOT IN CONTRACT
CD	CEILING	OC	ON CENTER
DI	DUCTILE IRON	PV	POST INDICATOR VALVE
ESFR	EARLY SUPPRESSION FAST RESPONSE	PRV	PRESSURE REDUCING VALVE
ETR	EXISTING TO REMAIN	RD	RETURN DUCT
FHC	FIRE HOSE CABINET	REV	REVISION
FP	FIRE PROTECTION	SD	SUPPLY DUCT
GC	CONTRACTOR	SF	SQUARE FEET
GPM	GALLONS PER MINUTE	TYP	TYPICAL
JBU-BOX	JUNCTION BOX	UNO	UNLESS NOTES OTHERWISE
MAX	MAXIMUM	V	VOLT(S)
MIN	MINIMUM	WP	WEATHERPROOF
NA	NOT APPLICABLE		

ANNOTATION

① FIRE SPRINKLER PLAN NOTE CALLOUT

● CONNECTION POINT OF NEW WORK TO EXISTING

①
F1
①
F1
SECTION CUT DESIGNATION

FIRE SPRINKLERS

○ UPRIGHT SPRINKLER

○ PENDENT SPRINKLER

● CONCEALED SPRINKLER

○ DRY PENDENT SPRINKLER

▽ DRY SIDEWALL SPRINKLER

▽ SIDEWALL SPRINKLER

FIRE SPRINKLER PIPING

— FP — FIRE PROTECTION (FP)

— SHUTOFF VALVE

— CHECK VALVE

— BACKFLOW PREVENTER

— CAP

— ELBOW UP

— ELBOW DOWN

— TEE UP

— TEE DOWN

— FIRE DEPARTMENT CONNECTION

— FIRE PUMP TEST HEADER

— INSPECTOR'S TEST CONNECTION / AUXILIARY DRAIN

— SPRINKLER RISER

— TOP BEAM CLAMP

— TRAPEZE HANGER

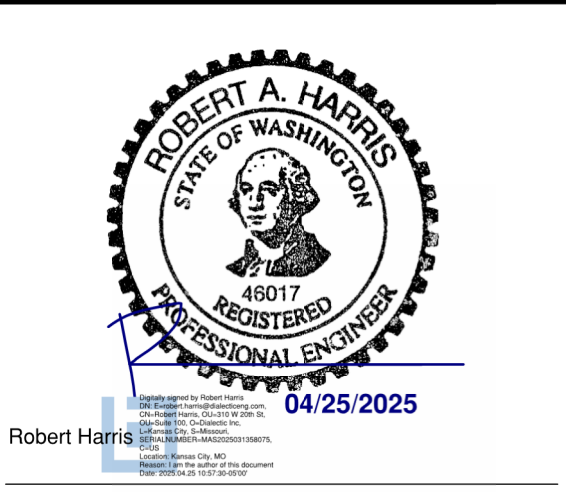
LINETYPE LEGEND

THROUGHOUT THE DRAWINGS DIFFERENT LINETYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASING DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.

EXISTING	NEW
DEMOLISH	FUTURE

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Project #: 012004-15.01

PROJECT PENINSULA
 W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

AMBROSE PROPERTY GROUP

Revisions / Submissions

ID	Description	Date
PERMIT SET		04.25.2025

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Project number: 763838-02
 Scale: AS NOTED
 Drawn By: ZPG
 Checked By: DJJ
 Date: 04.25.2025
 Issue: PERMIT SET

Sheet Title:
FIRE PROTECTION SPECIFICATIONS, SCHEDULES & NOTES

FP0.01

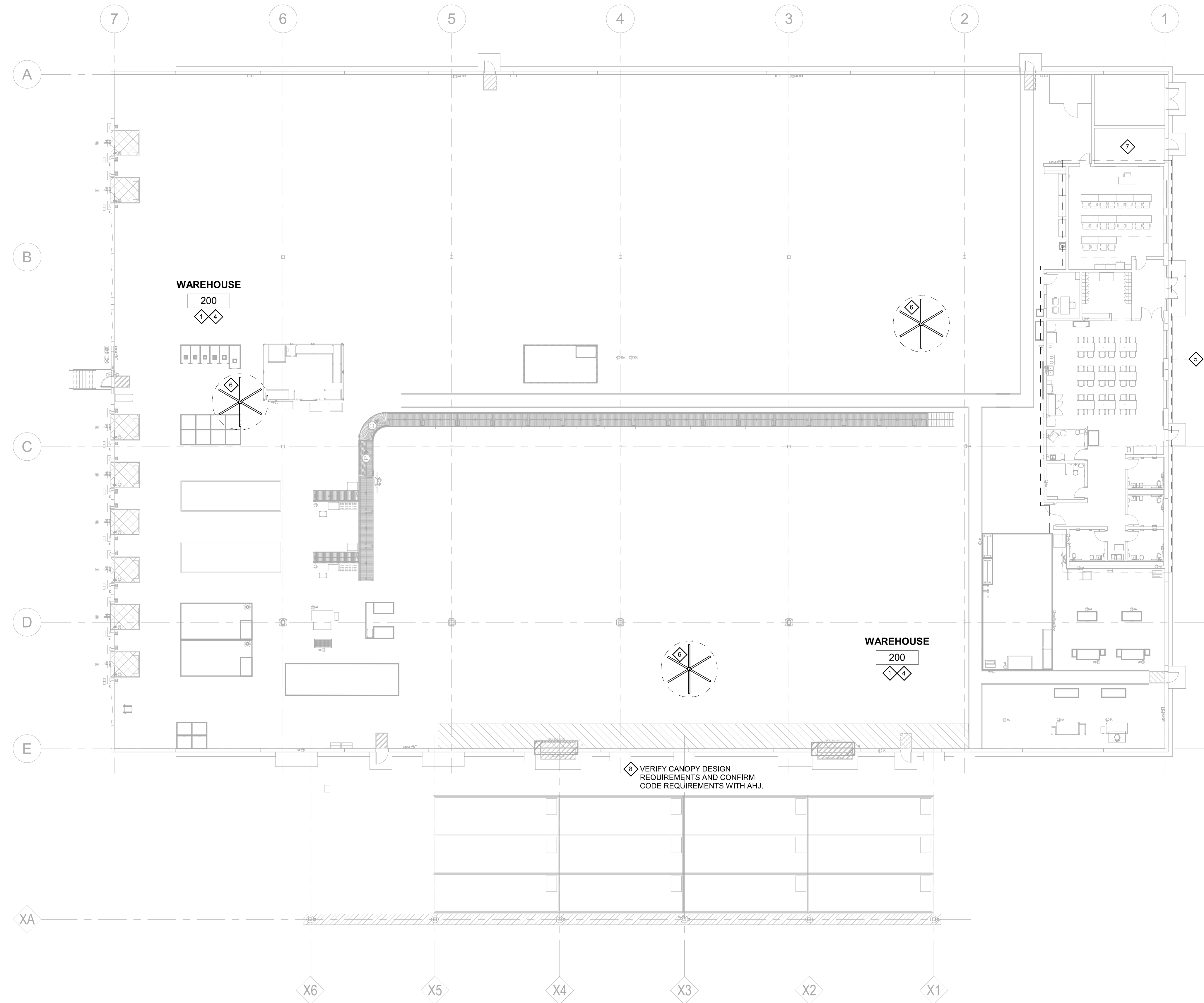
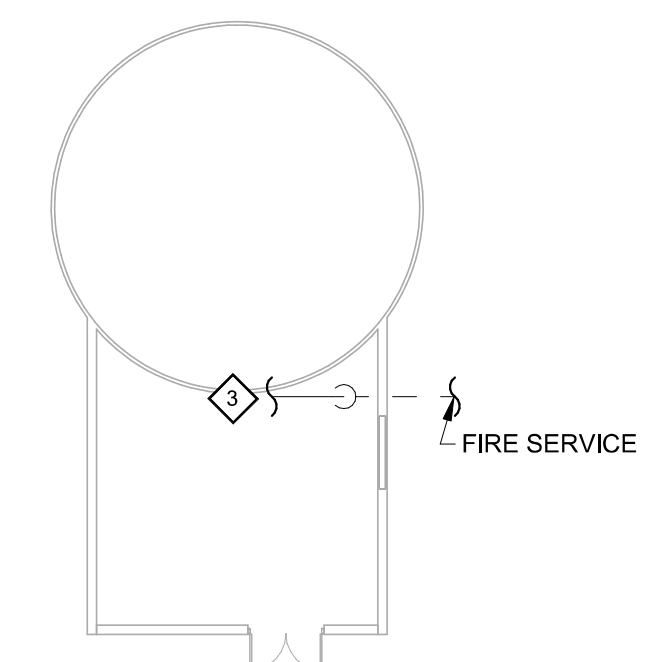
HAZARD CLASSIFICATIONS					
OCCUPANCY CLASSIFICATION	DENSITY	MAXIMUM SPRINKLER SPACING (SQ. FT.)	TOTAL HOSE DEMAND (GPM)	DURATION (MINUTES)	DESIGN BASIS
RESTROOMS / OFFICES / BREAKROOM / MOTHERS ROOM	0.10/1500 SQ. FT.	225	100	30	LIGHT HAZARD; 13:11.2.3.1.1 AND TABLE 11.2.3.1.2
ELECTRICAL / MECHANICAL / BUILDING SUPPORT ROOMS	0.15/1500 SQ. FT.	130	250	60	ORDINARY HAZARD GROUP 1; 13:11.2.3.1.1 AND TABLE 11.2.3.1.2
WAREHOUSE	12.25.2K ESFR @25 PSI	100	250	60	CARTONED AND ENCAPSULATED UNEXPANDED GROUP A PLASTICS ON RACKS; 8 FT MAXIMUM STORAGE HEIGHT; 28 FT MAXIMUM CEILING HEIGHT. OWNER ELECTED PROTECTION SCHEME; UL PROJECT 4790050452; FILE NC32504. CARTONED RETAIL PRODUCTS SORTED INTO FLEXIBLE AND RIGID NYLON BAGS ON RACKS. FILLED BAGS ARE LOADED ON VANS FOR DELIVERY.
LOADING CANOPY	0.20/1500 SQ. FT.	130	250	60	ORDINARY HAZARD GROUP 2; 13:11.2.3.1.1 AND TABLE 11.2.3.1.2

FIRE PROTECTION NOTES

GENERAL:
1. PROVIDE NEW AUTOMATIC WET PIPE SPRINKLER SYSTEMS THROUGHOUT ENTIRE BUILDING. COVERAGE SHALL BE PER DESIGN CRITERIA.
2. ROUTE FIRE PROTECTION PIPING AS REQUIRED TO AVOID NEWEXISTING PLUMBING, HVAC, AND ELECTRICAL EQUIPMENT.
3. INSTALL SPRINKLER PIPING TIGHT TO STRUCTURE.
4. COORDINATE TEMPERATURE RATING OF SPRINKLERS NEAR HEAT PRODUCING SOURCES IN ACCORDANCE WITH NFPA 13 FOR ANTICIPATED AMBIENT CEILING TEMPERATURES.

◊ **WAREHOUSE:** PROVIDE HYDRAULICALLY DESIGNED AUTOMATIC WET PIPE SPRINKLER SYSTEM TO PROTECT WAREHOUSE AREA IN ACCORDANCE WITH LATEST ADOPTED EDITION OF BUILDING CODE AND NFPA 13. REFER TO HAZARD CLASSIFICATIONS ON THIS SHEET FOR ADDITIONAL INFORMATION.
◊ **FIRE PUMP:** PROVIDE NEW FIRE PUMP AND ALL ASSOCIATED EQUIPMENT. REFER TO DETAIL ON SHEET FP001 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
◊ **NEW FIRE PROTECTION SERVICE ENTRANCE.** REFER TO CIVIL DRAWINGS FOR CONTINUATION.
◊ **PROVIDE SPRINKLERS BENEATH OBSTRUCTIONS OVER 2FT WIDE IN AREAS PROTECTED BY ESFR SPRINKLERS IN ACCORDANCE WITH NFPA 13.**

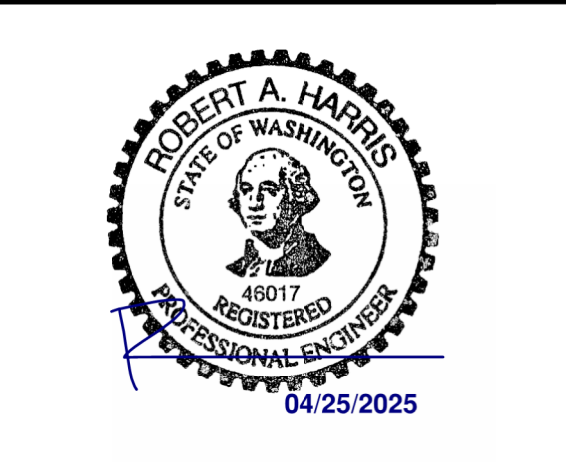
◊ **OFFICE AREA:** PROVIDE HYDRAULICALLY DESIGNED AUTOMATIC WET PIPE SPRINKLER SYSTEM TO PROTECT OFFICE AREA IN ACCORDANCE WITH LATEST ADOPTED EDITION OF STATE BUILDING CODE AND NFPA13.
DESIGN CRITERIA:
LIGHT HAZARD SEMI-RECESSED PENDENTS WITH ESCUTCHEONS.
◊ **LOCATE SPRINKLERS** SO HIGH VOLUME LOW SPEED FAN IS CENTERED APPROXIMATELY BETWEEN FOUR ADJACENT SPRINKLERS. THE VERTICAL CLEARANCE FROM THE HVSLS FAN TO SPRINKLER DEFLECTOR SHALL BE A MINIMUM OF 3 FEET.
◊ **DO NOT ROUTE SPRINKLER PIPING ABOVE ELECTRICAL DISTRIBUTION EQUIPMENT.** PROVIDE DRIP PROTECTION SUCH AS SHIELDS AND TRAYS IN ACCORDANCE WITH NFPA 70 REQUIREMENTS FOR THIS AREA.
◊ **CANOPY:** NON COMBUSTIBLE CANOPY. SPRINKLER PROTECTION NOT REQUIRED PER NFPA 13. IF LOCAL JURISDICTION REQUIRES SPRINKLERS UNDER CANOPY PROVIDE A HYDRAULICALLY DESIGNED AUTOMATIC DRY PIPE SPRINKLER SYSTEM.



1 FIRE PROTECTION CRITERIA PLAN
1/16" = 1'-0"

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Project # - 012024.15.01

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Revisions / Submissions

ID	Description	Date
1	PERMIT SET	04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: ZPG
Checked By: DJJ
Date: 04.25.2025
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Sheet Title:
FIRE PROTECTION CRITERIA PLAN

FP1.01

GENERAL PLUMBING NOTES

- REFER TO PLUMBING SPECIFICATION FOR FURTHER INFORMATION AND REQUIREMENTS FOR PLUMBING CONTRACTOR.
- SUSPEND ALL HORIZONTAL SERVICE PIPING SHOWN ON THIS PROJECT SUCH AS, BUT NOT LIMITED TO WATER, SANITARY WASTE/VENT, STORM WATER, ETCETERA FROM UNDERSIDE OF ROOF AND/OR FLOOR STRUCTURE, UNLESS OTHERWISE NOTED OR INDICATED. HOLD SUCH PIPING HIGH AS POSSIBLE. EXTEND PIPING DOWN IN WALLS, PARTITIONS, CHASIS, ETCETERA TO SERVE FIXTURES AND EQUIPMENT AS SHOWN ON PLANS.
- CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS, INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.
- COORDINATE WITH THE WORK OF OTHER SECTIONS. EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE PIPE RISERS, DROPS, AND OFFSETS, AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.
- DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE PIPING, CONNECTIONS, FITTINGS, VALVES, OFFSETS, ETCETERA AND ALL MATERIALS NECESSARY FOR A COMPLETE SYSTEM. SUBMIT SHOP DRAWINGS PER THE SPECIFICATIONS.
- ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY, INCLUDING APPLICABLE SECTIONS OF ANY INTERIM AMENDMENTS AT THE TIME OF THE PROPOSAL. PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
- PROVIDE BACKFLOW PREVENTION DEVICES (BFD) IN WATER LINES FEEDING PLUMBING FIXTURES AND/OR EQUIPMENT, AS SHOWN ON PLANS AND ELSEWHERE AS REQUIRED BY LOCAL AUTHORITIES. USE DEVICES OF APPROVED TYPE AND MANUFACTURER (ATMOSPHERIC VACUUM, PRESSURE VACUUM, DOUBLE CHECK, AND REDUCED PRESSURE).
- VERIFY SERVICE CONNECTION POINTS, SIZES, ELEVATIONS, AND METERING LOCATIONS FOR PROJECT WITH LOCAL UTILITIES COMPANY'S AND/OR CIVIL ENGINEER. SERVICES TO INCLUDE BUT NOT LIMITED TO DOMESTIC WATER, FIRE, SANITARY SEWER, STORM SEWER, ETCETERA.
- WATER HAMMER ARRESTERS SHALL BE INSTALLED THROUGHOUT PLUMBING WATER SYSTEMS AS REQUIRED PER DETAIL.
- ALL PLUMBING LINES SHALL BE JET SPRAYED, CLEANED AND CHLORINATED. GREASE TRAPS SHALL BE PUMPED AND CLEANED. GC TO PROVIDE PROOF OF COMPLIANCE.

PLUMBING FIXTURE SCHEDULE

ID	FIXTURE TYPE	MANUFACTURER	MODEL_NO.	CONNECTION SIZES				DESCRIPTION	TRIM AND REMARKS
				CW	HW	WASTE	VENT		
DF-1	WATER COOLER (DF-1)	ELKAY	EZSTLDDLC	1/2"		2"	1 1/2"	BHLEVEL WATER COOLER WITH SELF-CLOSING EASY-TOUCH PUSHBAR CONTROLS ON FRONT AND SIDE. NON-FILTERED, NON-REFRIGERATED.	PROVIDE 1/4 TURN ANGLE BALL STOP WITH METAL HANDLE. R-TRAP WITH CLEANOUT AND WASTE ARM TO WALL. PROVIDE APRON FOR UPPER UNIT. COORDINATE MOUNTING HEIGHT AND COLOR WITH ARCHITECT.
DF-2	WATER COOLER (DF-2)	BY TENANT		1/2"				FREE STANDING POINT OF-USE WATER COOLER PROVIDED AND SET IN PLACE BY TENANT.	PROVIDE CW SUPPLY WITH 3/8" DISCONNECT AND SHUT-OFF VALVE AT 24" AFF.
DSN	DOWNSPOUT NOZZLE	ZURN	ZANB-198-SS			6"		DOWNSPOUT NOZZLE WITH NICKEL BRONZE BODY. THREADED INLET, DECORATIVE FACE OF WALL FLANGE AND OUTLET NOZZEL, AND STAINLESS STEEL SCREEN.	REFER TO PLAN FOR OUTLET CONNECTION SIZE.
FB	FOOT BATH	WUDUMATE	WM-COM-A-WHT	1/2"	1/2"	2"	1 1/2"	COMMUNAL ABLUTION FACILITIES. SANITARY GRADE REINFORCED ACRYLIC. INTEGRAL DRAIN. SEAT WITH STAINLESS STEEL POST.	PROVIDE WITH WUDUMATE SINGLE LEVER PILLAR TAP WM-T-SLP-SQ.
FD	FLOOR DRAIN	ZURN	ZN-415B-2NH			<varies>	<varies>	ADJUSTABLE DURA-COATED CAST IRON BODY WITH POLISHED NICKEL BRONZE STRAINER.	PROVIDE WITH 1/2" TRAP PRIMER CONNECTION WITH MEMBRANE FLASHING CLAMP. PROVIDE OUTLET WITH P-TRAP AND CLEAN AND POLISH STRAINER TOP AFTER INSTALLATION.
FPRH	ROOF HYDRANT	JR SMITH	5903	3/4"				ROOF MOUNTED NON-FREEZE SANITARY ROOF HYDRANT WITH STAINLESS STEEL DRAINAGE CANISTER, INLINE VENTURI, HANDLE, AND HEAVY DUTY CAST IRON HEAD WITH PAIL HOOK. 3/4" FEMALE THREADED NPT INLET.	INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE BALL VALVE BELOW DECK FOR MAINTENANCE.
FPWH	FROST PROOF WALL HYDRANT	JR SMITH	5609QT	3/4"				ANTI-SIPHON, AUTOMATIC DRAINING QUARTER TURN WALL HYDRANT, NON-FREEZE INTEGRAL VACUUM BREAKER. ALL BRONZE INTERIOR PARTS, KEY OPERATED. 3/4" SOLDER INLET.	MOUNT 18" (MINIMUM) ABOVE FINISHED GRADE. PROVIDE BALL VALVE ACCESSIBLE FROM FLOOR FOR MAINTENANCE.
FS	FLOOR SINK	ZURN	Z1901-2-23			3"	1 1/2"	CAST IRON BODY. FLASHING CLAMP. ACID RESISTANT COATED INTERIOR AND CAST IRON GRATE. 12" SQUARE 1/2 GRATE AND ALUMINUM SEDIMENT BUCKET. PROVIDE OUTLET WITH P-TRAP.	REFER TO PLAN FOR SIZES.
L-2	LAVATORY (ACCESSIBLE)	AMERICAN STANDARD	0124.131.020	1/2"	1/2"	2"	1 1/2"	WHITE VITREOUS CHINA WALL HUNG LAVATORY. BACK OVERFLOW, FAUCET LEDGE. SOAP DEPRESSION, AND WALL HANGER.	AMERICAN STANDARD #055. 104-V035 SINGLE HOLE BATTERY POWERED FAUCET WITH 0.35 GPM AERATOR. BRASSCRAFT QUARTER TURN LOOSE KEY STOPS. BRAIDED SUPPLIES, AND CHROME ESCUTCHEONS. MCGUIRE #892. 1-1/4"x1-1/2". 17 GA. ADJUSTABLE TRAP WITH CLEANOUT AND WALL FLANGE. CHROME FINISH. MCGUIRE 155-W/C. 1-1/4" 17 GA. OFFSET DRAIN WITH OPEN GRID STRAINER, CHROME PLATED. PROVIDE WITH MCGUIRE PW2125 INSULATION KIT. ZURN Z1231-EZ LAVATORY CARRIER.
MS	MOP SINK	FIAT	MSB2424	1/2"	1/2"	3"	1 1/2"	FLOOR MOUNTED, MOLDED STONE BASIN. 24" X 24" X 10" DEEP. DRAIN AND STOPPER SHALL BE INCLUDED WITH SINK.	PROVIDE WITH FIAT #830-AA FAUCET, HOSE AND BRACKET #832-AA. AND CHROME PLATED WALL NIPPLES AND ESCUTCHEONS.
MV	MIXING VALVE	SYMMONS	MAXLINE	3/4"	3/4"			BELOW LAVATORY MIXING VALVE. 8210-CK. 3/8" COMPRESSION INLETS AND OUTLET.	THERMOSTATIC CONTROLLER WITH INTEGRAL CHECKS. ALL BRASS BODY WITH DUAL STAINLESS STEEL STRAINER, VANDAL-RESISTANT TEMPERATURE ADJUSTMENT HANDLE. SET TO 105°. MOUNT IN ACCESSIBLE LOCATION.
ORD	OVERFLOW ROOF DRAIN	ZURN	Z101-W2			6"		CAST IRON BODY. FLASHING CLAMP AND GRAVEL STOP. 2" INTERNAL WATER DAM. CAST IRON DOME, AND CAST IRON DOME STRAINER.	PROVIDE WITH UNDERDECK CLAMP AND SUMP RECEIVER. OUTLET SIZE AS SHOWN ON PLANS.
RD	ROOF DRAIN	ZURN	Z101			6"		CAST IRON BODY. FLASHING CLAMP AND GRAVEL STOP. CAST IRON DOME, AND CAST IRON DOME STRAINER.	PROVIDE WITH UNDERDECK CLAMP AND SUMP RECEIVER. OUTLET SIZE AS SHOWN ON PLANS.
S-1	SINGLE COMP SINK (ACCESSIBLE)	ELKAY	LRAD-2219-65-3	1/2"	1/2"	2"	1 1/2"	SINGLE COMPARTMENT, SELF-RIMMING, 22" X 19 1/2" X 5 1/2" DEEP. 18 GAUGE STAINLESS STEEL SINK WITH FAUCET LEDGE AND 3 HOLES PUNCHED FOR 8" CENTER SET FAUCET.	PFFISTER STELLEN #LG529-ESAC TOUCHLESS FAUCET. SINGLE HANDLE WITH 9" GOOSNECK SWING SPOUT AND PULL-DOWN HOSE. BRASSCRAFT QUARTER TURN LOOSE KEY STOPS. OFFSET DRAIN. BRAIDED SUPPLIES, AND CHROME ESCUTCHEONS. MCGUIRE PW2125 INSULATION KIT.
S-2	TWO COMP SINK (ACCESSIBLE)	ELKAY	LRAD-3319-65-3	1/2"	1/2"	2"	1 1/2"	DOUBLE BOWL SELF-RIMMING, 18 GA. STAINLESS STEEL SINK. 33" X 19-1/2" X 5-1/2" DEEP.	PFFISTER STELLEN #LG529-ESAC TOUCHLESS FAUCET. SINGLE HANDLE WITH 9" GOOSNECK SWING SPOUT AND PULL-DOWN HOSE. BRASSCRAFT QUARTER TURN LOOSE KEY STOPS. OFFSET DRAIN. BRAIDED SUPPLIES, AND CHROME ESCUTCHEONS. MCGUIRE PW2125 INSULATION KIT.
TP	TRAP PRIMER	PRECISION PLUMBING PRODUCTS	PR-500	1/2"				AUTOMATIC OPERATION. 1/2" INLET AND OUTLET. SERVICE UP TO FOUR (4) FLOOR DRAINS WITH DISTRIBUTION UNIT.	INSTALL IN ACCESSIBLE LOCATION WITH TRAP PRIMER LOCATED MINIMUM OF 6" ABOVE FLOOD LEVEL OF FLOOR DRAIN RIM.
WB	WATER BOX	SIOUX CHIEF	696-1011	1/2"				QUARTER TURN BALL VALVE WITH 3/8" COMPRESSION OUTLET AND 1/2" SUPPLY CONNECTION AND MINNERSTER WATER HAMMER. PVC/ABS SUPPLY BOX.	FRAME AND DEBRIS COVER. GALVANIZED STEEL BRACKET.
WC-2	WATER CLOSET (ACCESSIBLE)	AMERICAN STANDARD	3351.101	1 1/4"		4"	2"	WHITE VITREOUS CHINA. 1.28 GPF. WALL MOUNTED ELONGATED SIPHON. SET BOWL. 1 1/2" SPIN AND RIM AT 18 1/2" AFF. LOCATE HANDLE ON ACCESSIBLE SIDE.	AMERICAN STANDARD #065. 121.002 1.28 GPF BATTERY POWERED FLUSH VALVE. AMERICAN STANDARD #901. 110 STANDARD SET WITH EVERCLEAN. FURNISH WITH ZURN Z1201N_4 OR Z1201-ND4 WATER CLOSET CARRIER.

PLUMBING EQUIPMENT SCHEDULE

TYPE	MARK	FIXTURE TYPE	MANUFACTURER	MODEL	ELECTRICAL DATA				DESCRIPTION	TRIM AND REMARKS
					VOLT	PHASE	WATT	MOCPP		
RCP	1	CIRCULATION PUMP	GRUNDFOS	ALPHA2	120 V	1	65 W	20 A	BRONZE BODY CIRCULATION PUMP WITH "AUTOADAPT" VARIABLE SPEED MOTOR, VARIABLE 4-55W.	INSTALL NEAR WATER HEATER PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE WITH HONEYWELL L606C SURFACE MOUNT AQUASTAT SET TO 5°F BELOW WATER HEATER OPERATING TEMPERATURE.
WH	1	HYBRID WATER HEATER	RHEEM	XE65T10HS45U0	208 V	1	4500 W	30 A	65 GALLON STORAGE. 27 GPH RECOVERY AT 90°F RISE. 75 GPH FIRST HOUR. 4.8KW HEATING INPUT (SINGLE ELEMENT). 30A ELECTRICAL SERVICE. TEN YEAR LIMITED WARRANTY. MEETING THE CURRENT EDITION OF ASHRAE STANDARD 90 AND LOCAL ENERGY CONSERVATION REQUIREMENTS.	PROVIDE WATER HEATER ON HOUSEKEEPING PAD PER "DUAL HYBRID WATER HEATER" DETAIL. PROVIDE AMTROL #S1-8 THERMAL EXPANSION TANK WITH A TOTAL VOLUME OF 3.2 GALLONS AND A MAX ACCEPTANCE VOLUME OF 1.9 GALLONS. 3/4" CONNECTION. INSTALL NEAR WATER HEATER PER MANUFACTURER'S INSTRUCTIONS.
WH	2	HYBRID WATER HEATER	RHEEM	XE65T10HS45U0	208 V	1	4500 W	30 A	65 GALLON STORAGE. 27 GPH RECOVERY AT 90°F RISE. 75 GPH FIRST HOUR. 4.8KW HEATING INPUT (SINGLE ELEMENT). 30A ELECTRICAL SERVICE. TEN YEAR LIMITED WARRANTY. MEETING THE CURRENT EDITION OF ASHRAE STANDARD 90 AND LOCAL ENERGY CONSERVATION REQUIREMENTS.	PROVIDE WATER HEATER ON HOUSEKEEPING PAD PER "DUAL HYBRID WATER HEATER" DETAIL. PROVIDE AMTROL #S1-8 THERMAL EXPANSION TANK WITH A TOTAL VOLUME OF 3.2 GALLONS AND A MAX ACCEPTANCE VOLUME OF 1.9 GALLONS. 3/4" CONNECTION. INSTALL NEAR WATER HEATER PER MANUFACTURER'S INSTRUCTIONS.

DOMESTIC WATER BOOSTER SCHEDULE

TYPE	MARK	MANUFACTURER	MODEL	PUMP TYPE	ELECTRICAL DATA				RPM	HP	NOTES		
					FLOW (TOTAL)	TDH (FT)	VOLT	PHASE				WATT	MOCPP
BP	1	QUANTUMFLO	PRODIGY DUPLEX	END SUCTION	98	72.44	480 V	3	5692 W	30 A	3450	1,5/1.5	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

NOTES:

- NET BOOST PRESSURE IS CALCULATED BY SYSTEM SET PRESSURE MINUS SUCTION PRESSURE LESS SYSTEM LOSSES OF 5 PSI
- SYSTEM SUBMITTALS SHALL INCLUDE CERTIFICATE NUMBER FOR NSF61 CERTIFICATION, UL508A AND OCC21 3RD PARTY COMPLIANCE.
- SYSTEM CONTROLS MUST COMPLY WITH AND PROVIDE FOR EITHER CONTROL LOGIC OR REMOTE SENSOR IN ACCORDANCE WITH ANS/ASHRAE/IES STANDARD 90.1 ENERGY STANDARD
- PROVIDE 5-YEAR WARRANTY ON COMPLETE SYSTEM AND INCLUDE WARRANTY CERTIFICATE WITH DETAILS IN SUBMITTALS
- SYSTEM SHALL BE PRE-SET TO SYSTEM SITE CONDITIONS BY SIMULATING SUCTION PRESSURE. HYDROSTATIC ONLY TESTING IS NOT ACCEPTABLE.
- THE INDUSTRIAL CONTROLLER SHALL BE IN COMPLIANCE WITH CURRENT NEC SECTION 408.110 HAVING A MAXIMUM 100K AVAILABLE FAULT CURRENT.
- SCCR RATINGS MUST BE INCLUSIVE OF ALL COMPONENTS WITHIN THE ENCLOSURE WITHOUT THE NEED TO PROVIDE ADDITIONAL UPSTREAM PROTECTION.
- EQUAL SYSTEMS MUST SHOW MATHEMATICAL ANALYSIS PROVING THAT THE ALTERNATE SUPPLIER MEETS OR EXCEEDS THE KW CAPACITY LISTED.
- PROVIDE THE FOLLOWING OPTIONS: MONITORING PROTOCOL, BACNET, VIBRATION ISOLATION KIT.
- BMS CAPACITY REQUIRED. VERIFY WITH CLIENT'S BMS MATRIX BOOSTER PUMP IS TO BE CONNECTED TO BMS SYSTEM.
- REPRESENTATIVE: ROY F. JOHNSON COMPANY. PHONE: (913) 894-9697
- BASED ON QUANTUMFLO PROJECT NUMBER: 044794
- PRESSURE SHALL BE VERIFIED ON SITE PRIOR TO EQUIPMENT PURCHASE. IF PRESSURE DOES NOT MATCH FLOW TEST DATA SCHEDULE CONTACT MANUFACTURER AND ENGINEER TO VERIFY BOOSTER PUMP SIZE.

PLUMBING SYMBOLS LEGEND

ABBREVIATIONS:	
AFF/AFG	ABOVE FINISHED FLOOR/GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AS	ANGLE STOP
BFP	BACKFLOW PREVENTER
CO	CLEANOUT
EFC	EXISTING TO REMAIN
FPF	FIRE PROTECTION CONTRACTOR
FFOOV/GCO	FLUSH FLOOR/GRADE CLEANOUT
FSEC	FOOD SERVICE EQUIPMENT CONTRACTOR
GFC	GENERAL CONTRACTOR
IO	INDIRECT WASTE
ON	ON CENTER
MC	MECHANICAL CONTRACTOR
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
PC	PLUMBING CONTRACTOR
RI	ROUGH-IN
TYP	TYPICAL
VTR	VENT THRU ROOF
WCO	WALL CLEANOUT
LINE TYPES:	
---	COLD WATER (CW)
---FW---	FILTERED WATER (FW)
---SW---	SOFT WATER (SW)
---IR---	IRRIGATION WATER (IR)
---	HOT WATER (HW) 140°
---	HOT WATER RETURN (HWR)
---	PLUMBING VENT (V)
---	PLUMBING VENT (V) - BELOW SLAB/GRADE
---	SANITARY WASTE (SAN) - BELOW SLAB/GRADE
---	CONDENSATE (D)
---	GREASE WASTE (GW)
---	STORM (ST)
---	OVERFLOW STORM (OST)
---	BELOW SLAB/GRADE STORM (ST)
GENERAL REFERENCES/NOTATIONS:	
	CONNECT TO EXISTING
	KEY NOTE
	PLUMBING FIXTURE/EQUIPMENT TAG
	DETAIL OR SECTION REFERENCE
PIPE SYMBOLS:	
	PIPE TURNING UP/DOWN
	TEE TURNING UP/DOWN
	SHUT-OFF VALVE (BALL TYPE)
	PRESSURE REGULATOR
	END CAP

WATER & WASTE FIXTURE UNIT SCHEDULE

QTY.	FIXTURE	WATER		WASTE	
		WSPFU	WSPFU TOTAL	DFU	DFU TOTAL
1	WATER COOLER (DF-1)	0.25	0.25	0.5	0.5
7	WATER COOLER (DF-2)	0.25	1.75	0	0
4	DOWNSPOUT NOZZLE	0	0	0	0
1	FOOT BATH	0	0	0	0
9	FLOOR DRAIN	0	0	0	0
2	ROOF HYDRANT	0	0	0	0
7	FROST PROOF WALL HYDRANT	4	28	0	0
1	FLOOR SINK	0	0	5	5
4	LAVATORY (ACCESSIBLE)	2	8	1	4
1	MOP SINK	3	3	2	2
5	MIXING VALVE	0	0	0	0
10	OVERFLOW ROOF DRAIN	0	0	0	0
10	ROOF DRAIN	0	0	2	0
1	SINGLE COMP SINK (ACCESSIBLE)	4	4	2	2
4	TWO COMP SINK (ACCESSIBLE)	4	4	2	2
4	TRAP PRIMER	0	0	0	0
5	WATER BOX	0.25	1.25	0	0
4	WATER CLOSET (ACCESSIBLE)	10	40	6	24
FIXTURE UNIT TOTALS			90.25		39.5

FLOW TEST DATA SCHEDULE

FLOW TEST DATE PERFORMED	03.27.2025
FLOW TEST PERFORMED BY	AIE FIRE PROTECTION
STATIC	135 PSI
RESIDUAL	83 PSI
FLOW	1353 GPM

ARCHITECT OF RECORD

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04/25/2025



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Revisions / Submissions

ID	Description	Date
1	PERMIT SET	04.25.2025

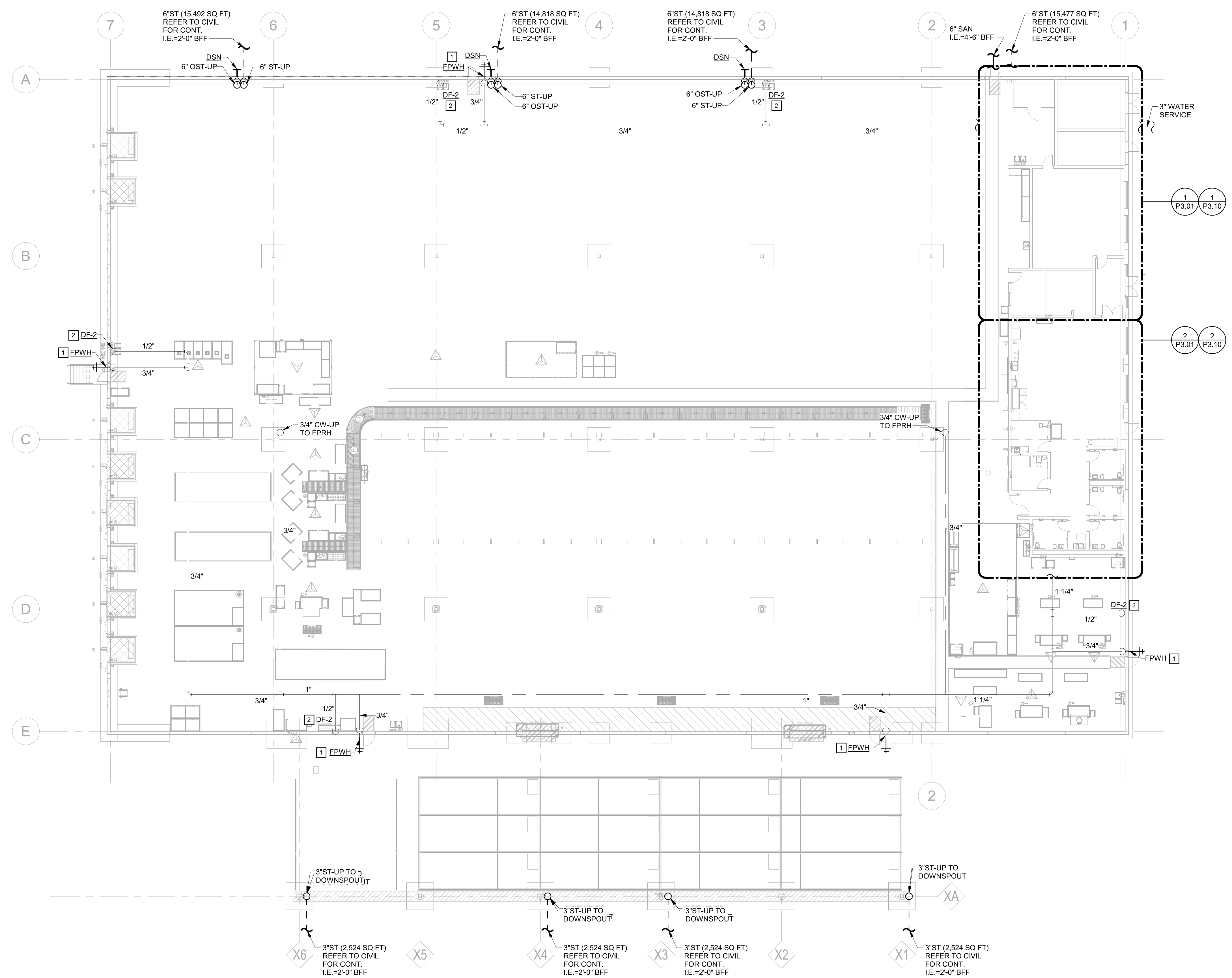
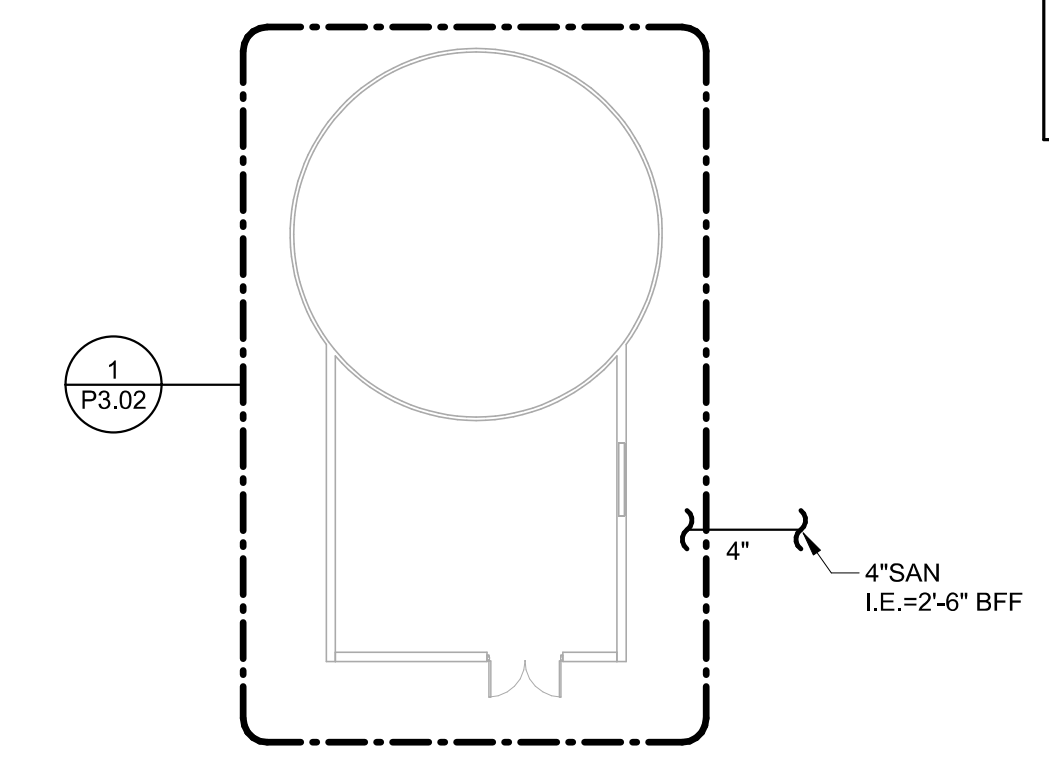
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Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
PLUMBING SPECIFICATIONS, SCHEDULES & NOTES

P0.01

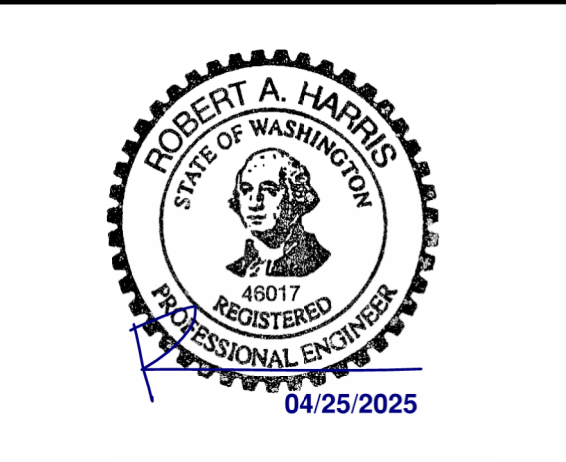
PLUMBING KEY NOTES	
1	ROUTE COLD WATER DOWN TO FROST PROOF WALL HYDRANT AS SHOWN PER PLAN. PROVIDE BALL VALVE ACCESSIBLE FROM FLOOR FOR MAINTENANCE.
2	ROUTE 1/2" CW DOWN TO OWNER PROVIDED WATER COOLER. SUPPORT PIPING FROM STRUCTURE AS REQUIRED. PROVIDE BALL VALVE ACCESSIBLE FROM FLOOR FOR MAINTENANCE.



1 OVERALL PLUMBING PLAN
1/16" = 1'-0"

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Sheet Title:
OVERALL PLUMBING PLAN

P1.01

PLUMBING KEY NOTES	
1	CONNECT TO MECHANICAL EQUIPMENT PER "ROOFTOP UNIT CONDENSATE" DETAIL.
2	PROVIDE SANITARY VENT THROUGH ROOF PER "VENT THRU ROOF (VTR)" DETAIL. LOCATE VENT MINIMUM OF 10'-0" AWAY FROM AIR INTAKES ON ROOF.

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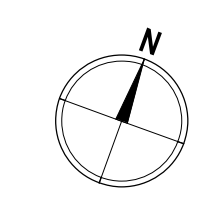
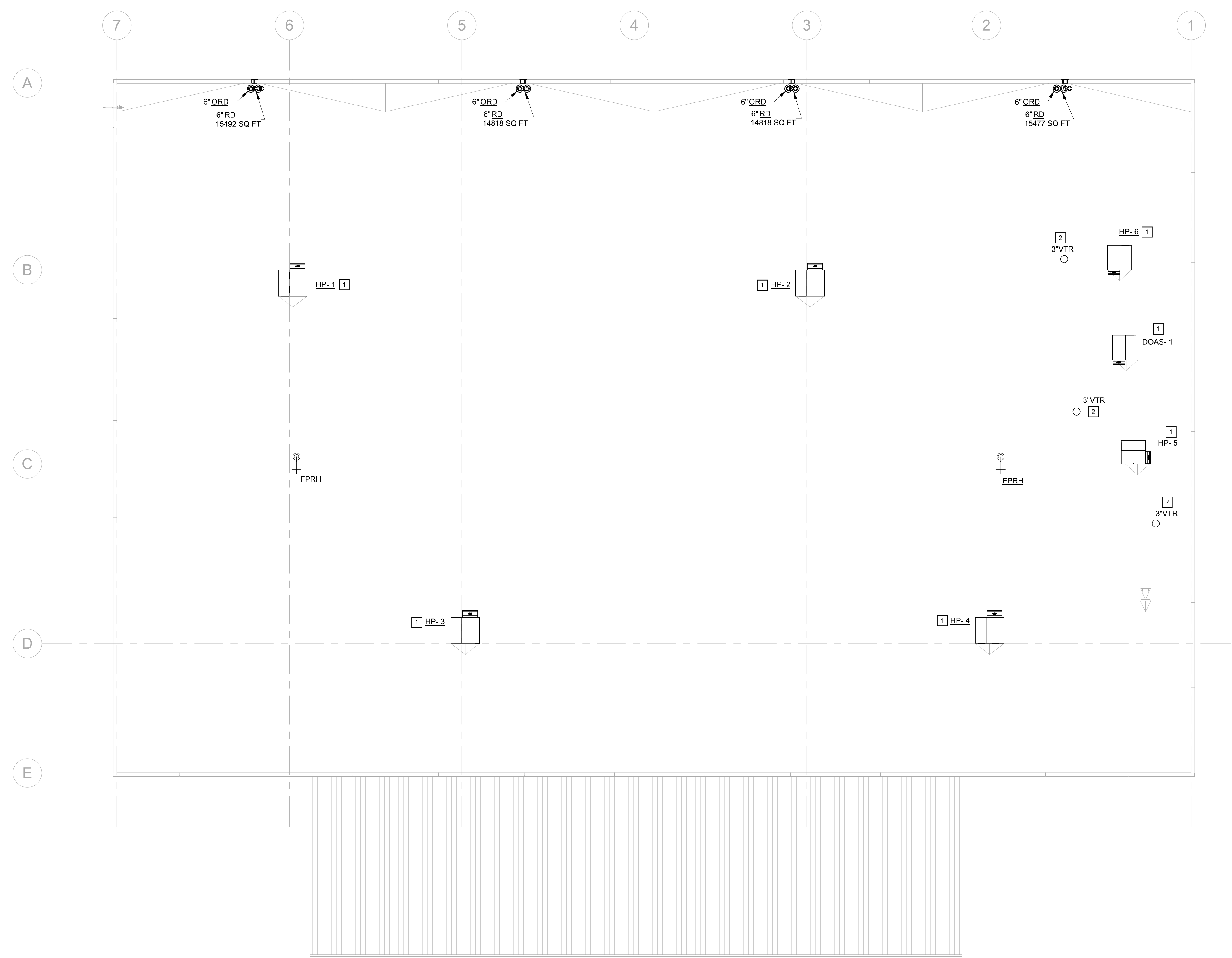
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1 OVERALL PLUMBING PLAN - ROOF
1/16" = 1'-0"

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Sheet Title:
**OVERALL PLUMBING
PLAN - ROOF**

PLUMBING KEY NOTES

1 CONNECT TO AIR HANDLING UNIT PER "AHU CONDENSATE" DETAIL. ROUTE CONDENSATE TO NEAREST FLOOR DRAIN AND DISCHARGE PER "INDIRECT DRAIN" DETAIL.

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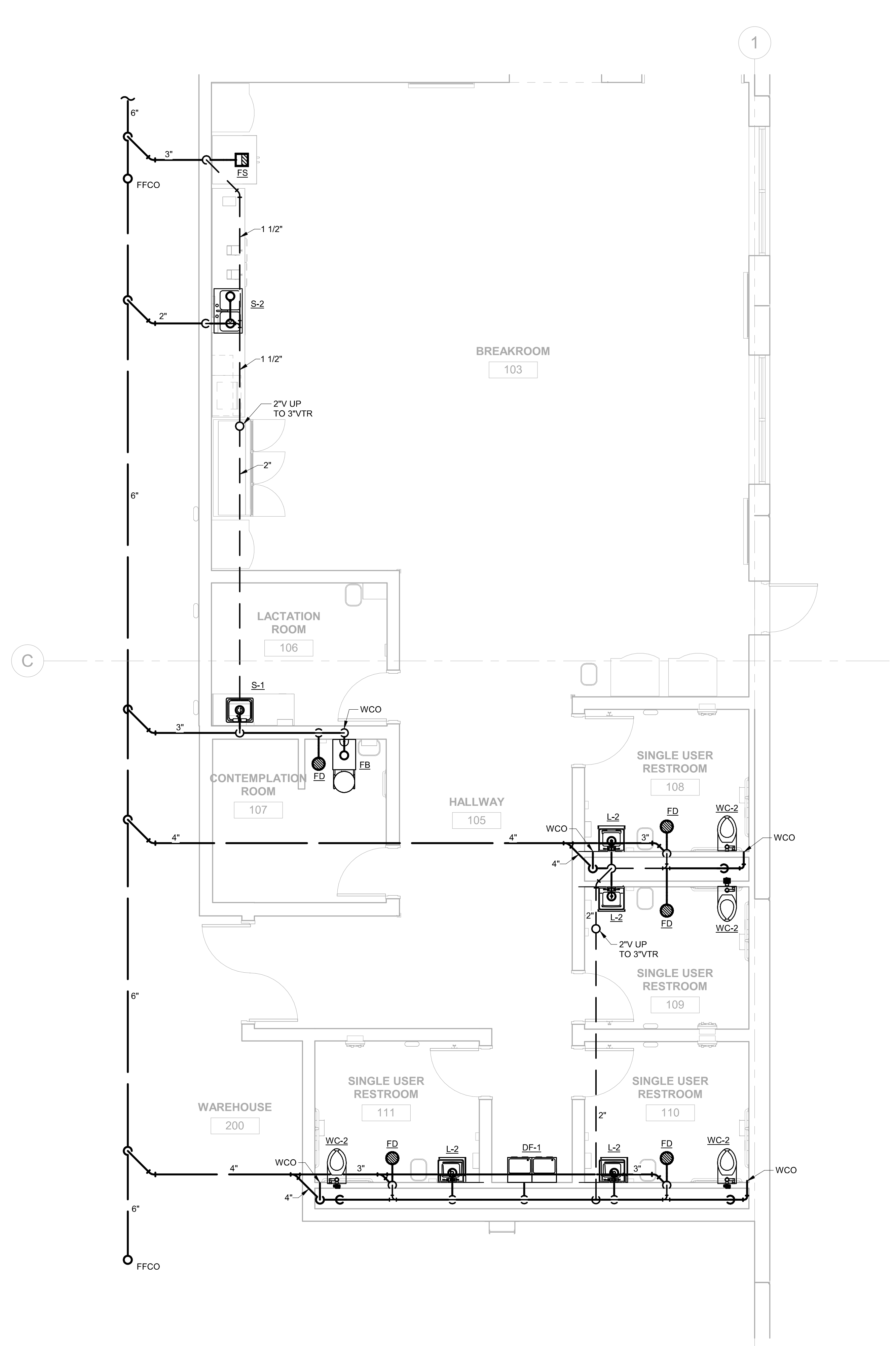
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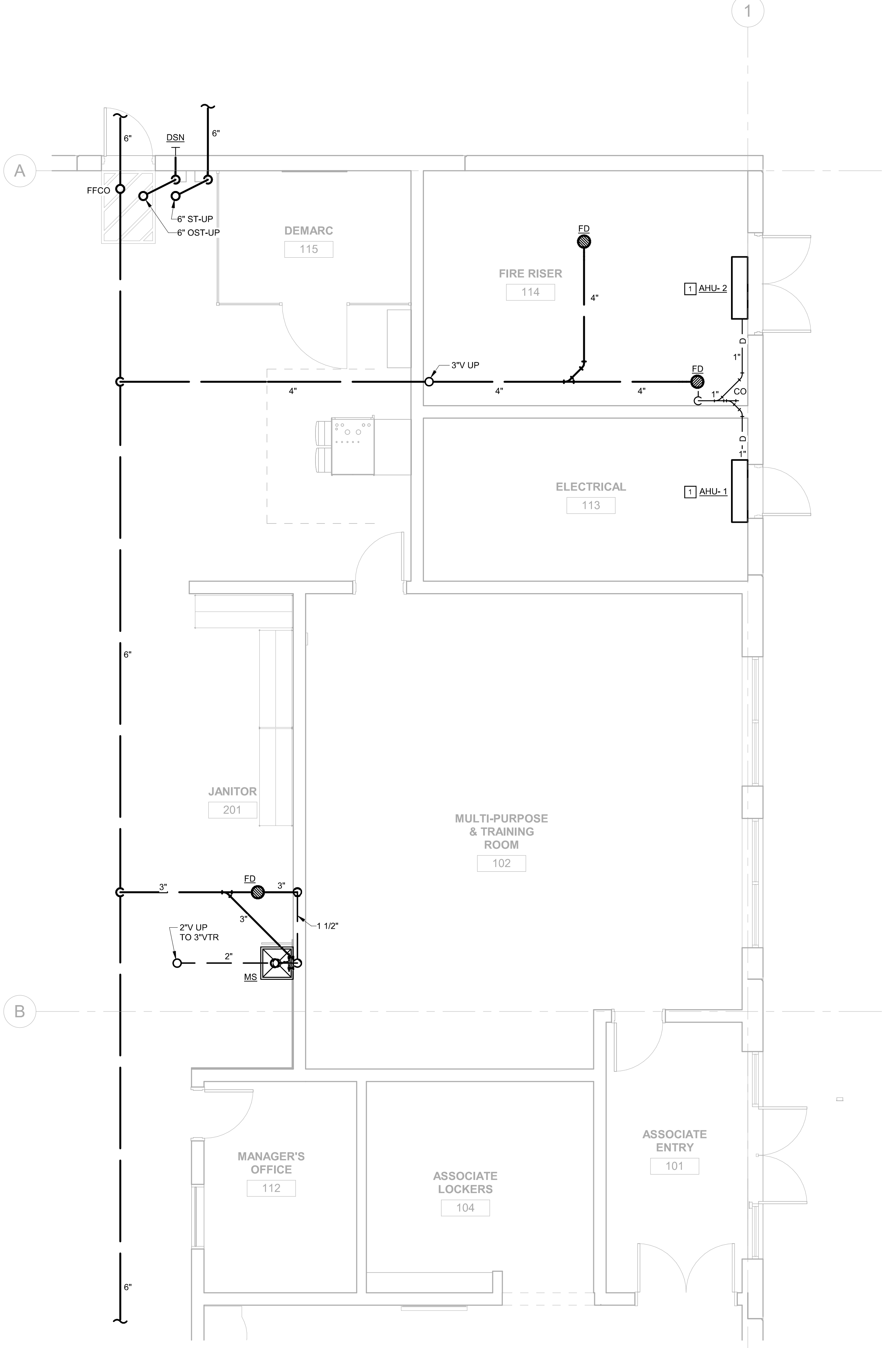
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Sheet Title:
ENLARGED WASTE PLAN

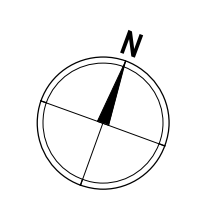
P3.01



2 ENLARGED WASTE PLAN - OFFICE SOUTH
1/4\"/>



1 ENLARGED WASTE PLAN - OFFICE NORTH
1/4\"/>



PLUMBING KEY NOTES	
1	CONNECT TO AIR HANDLING UNIT PER "AHU CONDENSATE" DETAIL. ROUTE CONDENSATE TO NEAREST FLOOR DRAIN AND DISCHARGE PER "INDIRECT DRAIN" DETAIL.

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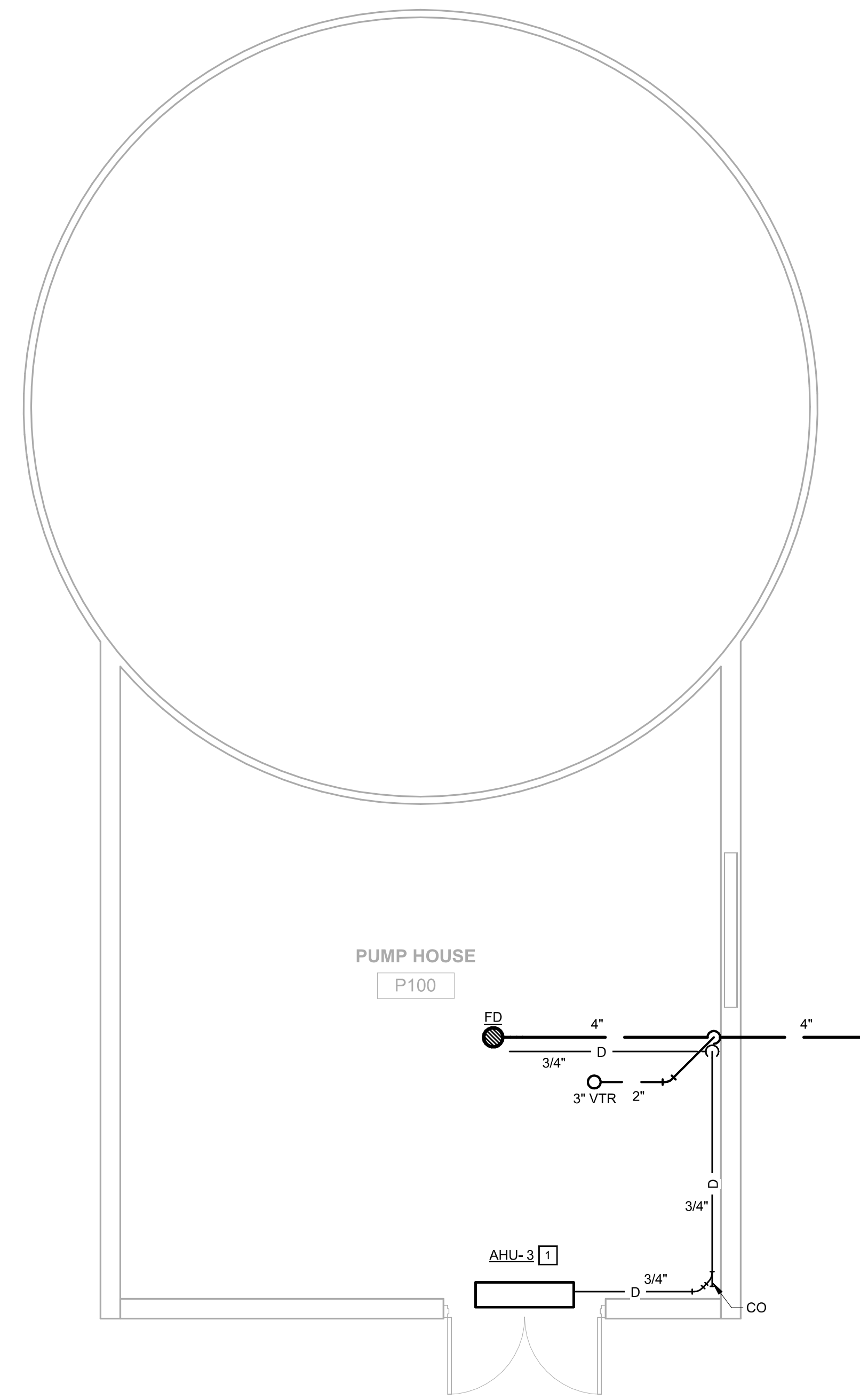
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**ENLARGED WASTE
PLAN**

P3.02

1 ENLARGED WASTE PLANS - FIRE PUMPHOUSE
1/4" = 1'-0"



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Project # - 012024.15.01

Revisions / Submissions

ID	Description	Date
1	PERMIT SET	04.25.2025

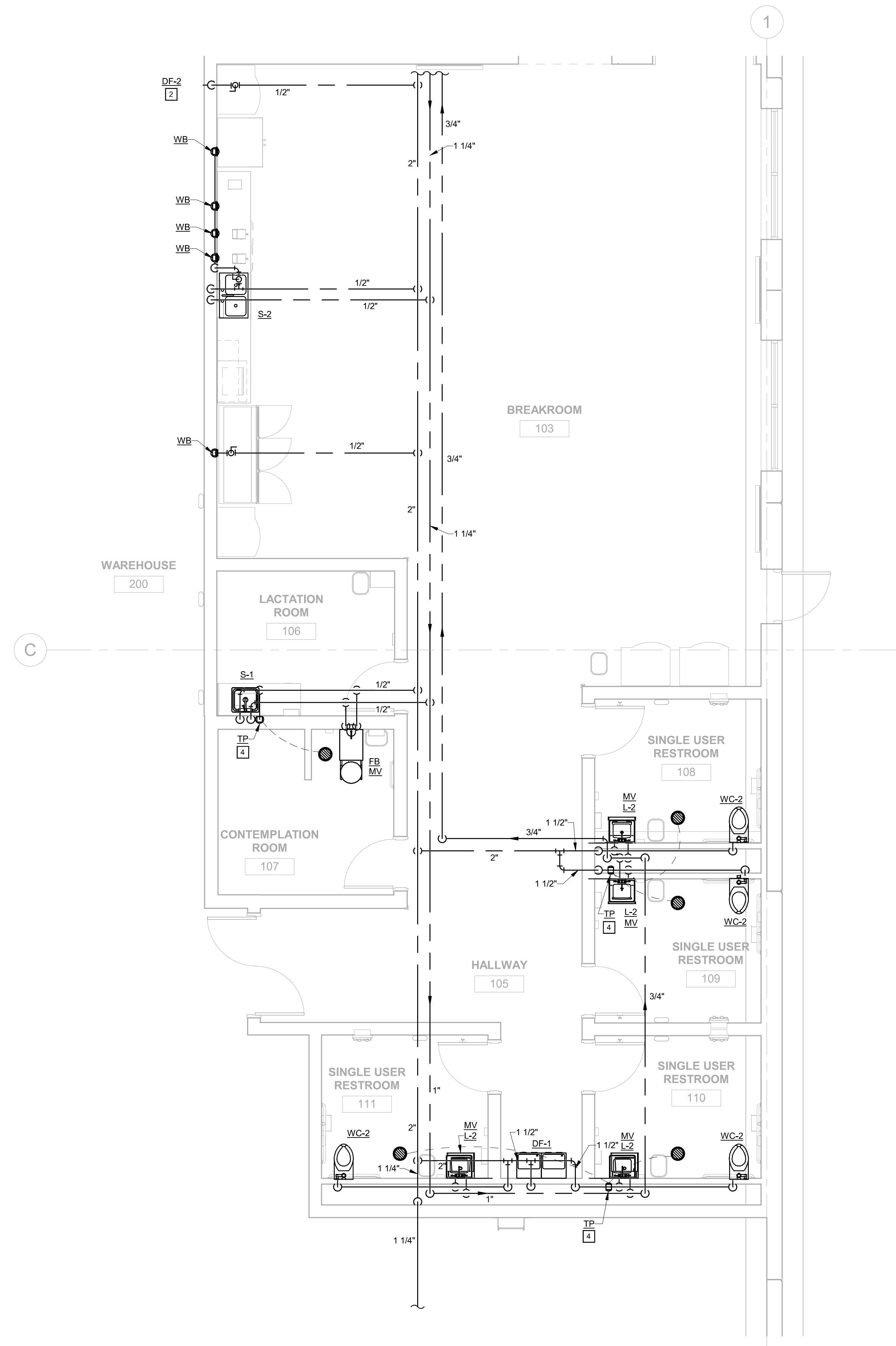
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Project number:	763838-02
Scale:	AS NOTED
Drawn By:	ZPG
Checked By:	DJJ
Date:	04.25.2025
Issue:	PERMIT SET

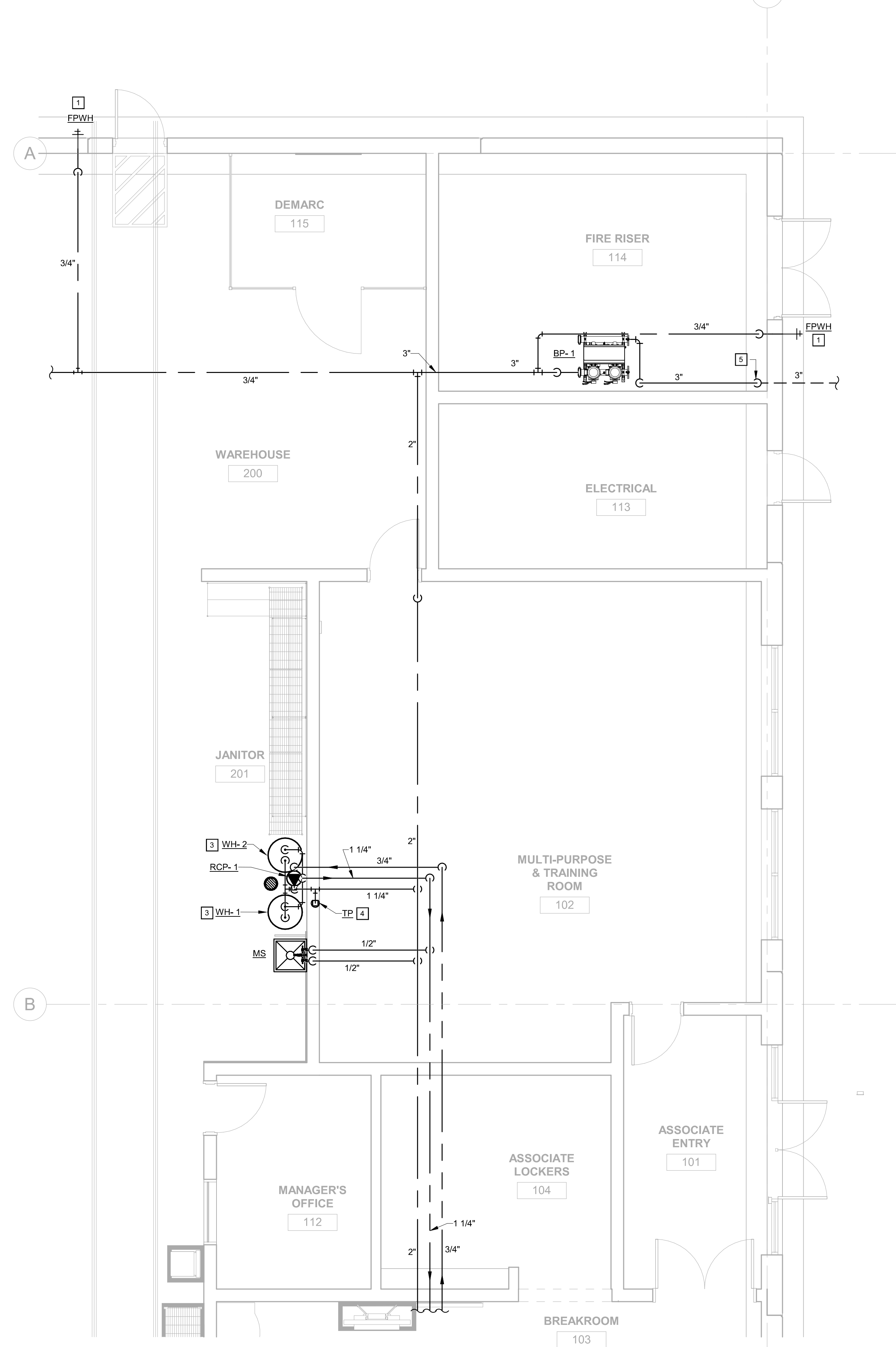
Sheet Title:
ENLARGED WATER PLAN

PLUMBING KEY NOTES

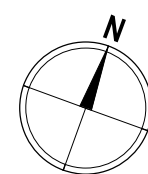
- 1 ROUTE COLD WATER DOWN TO FROST PROOF WALL HYDRANT AS SHOWN PER PLAN. PROVIDE BALL VALVE ACCESSIBLE FROM FLOOR FOR MAINTENANCE.
- 2 ROUTE 1/2" CW PIPING DOWN TO OWNER PROVIDED WATER COOLER. SUPPORT PIPING FROM STRUCTURE AS REQUIRED. PROVIDE BALL VALVE ACCESSIBLE FROM FLOOR FOR MAINTENANCE.
- 3 PROVIDE WATER HEATER AND PUMP PER "DUAL HYBRID WATER HEATERS WITH PUMP" AND "SMALL EXPANSION TANK" DETAILS.
- 4 PROVIDE TRAP PRIMER IN WALL PER "TRAP PRIMER" DETAIL.
- 5 REFER TO "DOMESTIC WATER SERVICE ENTRY" DETAIL. PROVIDE ROUGH-IN FOR FUTURE PROBE-TYPE WATER METER FOR CONNECTION TO BMS. LOCATE NEAR WATER SERVICE ENTRY.



2 ENLARGED WATER PLAN - OFFICE SOUTH
1/4" = 1'-0"



1 ENLARGED WATER PLAN - OFFICE NORTH
1/4" = 1'-0"



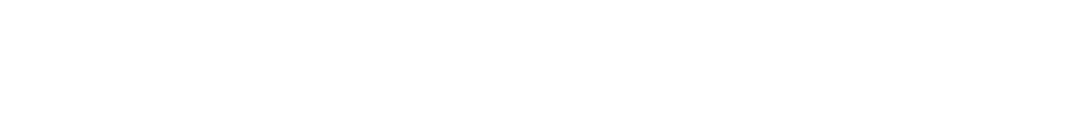
20 DOMESTIC WATER SERVICE ENTRY

NOT TO SCALE



16 VENT THROUGH ROOF (VTR)

NOT TO SCALE



11 PIPE HANGERS

NOT TO SCALE



6 PIPE INSULATION

NOT TO SCALE



1 WATER HAMMER ARRESTERS

NOT TO SCALE



17 ICE MACHINE CONNECTIONS

NOT TO SCALE



12 DUAL HYBRID WATER HEATERS WITH PUMP

NOT TO SCALE



7 WALL CLEANOUT

NOT TO SCALE



2 FLOOR CLEANOUT

NOT TO SCALE



18 SAND OIL INTERCEPTOR

NOT TO SCALE



13 EXPANSION TANK

NOT TO SCALE



8 DOWNSPOUT CONNECTION

NOT TO SCALE



3 ROOF HYDRANT

NOT TO SCALE



19 BEVERAGE DISPENSER CONNECTION

NOT TO SCALE



14 AHU CONDENSATE

NOT TO SCALE



9 ROOFTOP UNIT CONDENSATE

NOT TO SCALE



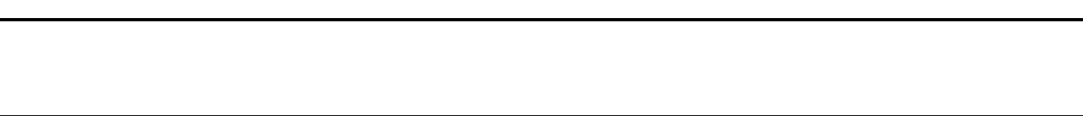
4 TRAP PRIMER

NOT TO SCALE



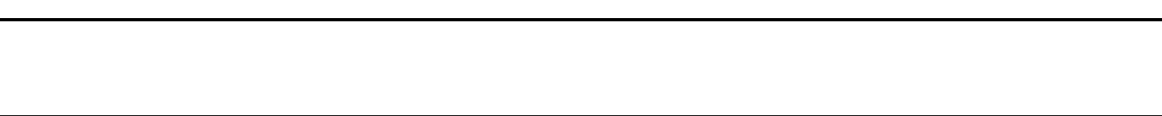
15 INDIRECT DRAIN

NOT TO SCALE



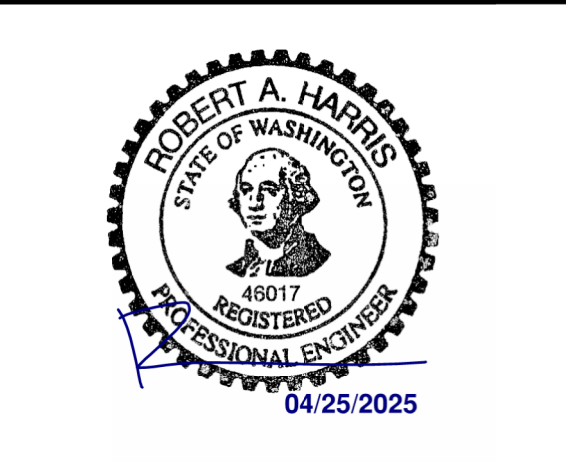
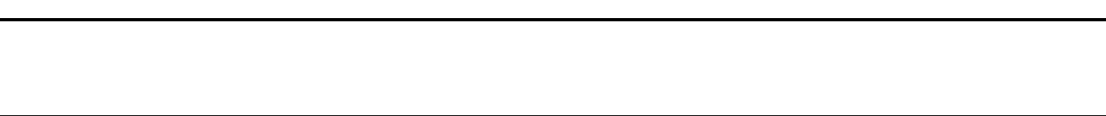
10 ROOF PIPE SUPPORT

NOT TO SCALE



5 FROST PROOF WALL HYDRANT

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Project # - 012024.15.21

Revisions / Submissions	
ID	Description
	PERMIT SET
Date	04.25.2025

Project number:	763838-02
Scale:	AS NOTED
Drawn By:	ZPG
Checked By:	DJJ
Date:	04.25.2025
Issue:	PERMIT SET

Sheet Title:
PLUMBING DETAILS



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3100 W. 20th Street, Suite 100
Kansas City, MO 64108
Washington Certificate of
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Project # - 01202415.01

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

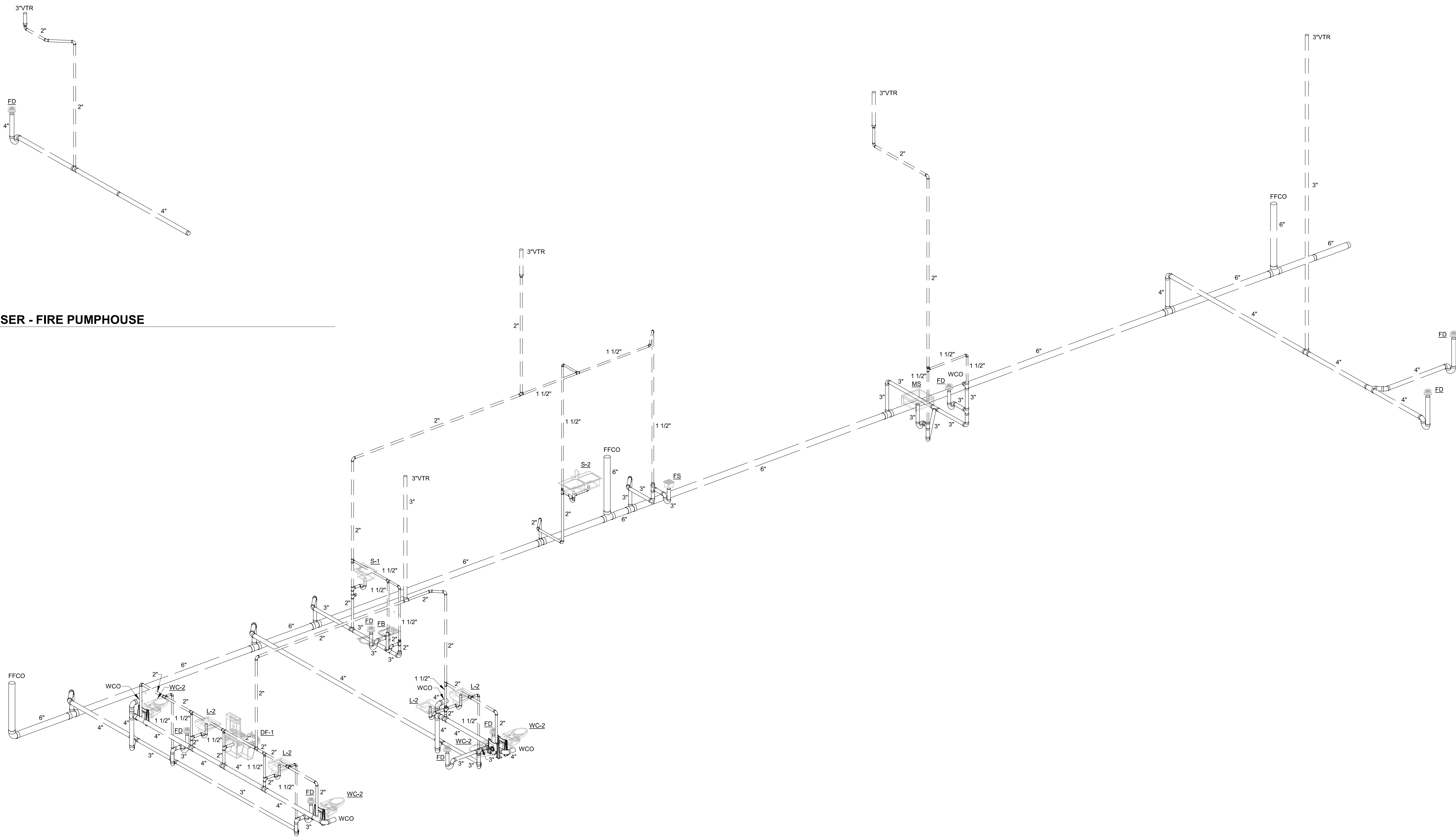
Revisions / Submissions

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1	PERMIT SET	04.25.2025

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Sheet Title:
PLUMBING RISER



2 WASTE RISER - FIRE PUMPHOUSE
NOT TO SCALE

1 WASTE RISER - OFFICE CORE
NOT TO SCALE

OFFICE LOAD CALCULATIONS			
Air System Information		Number of zones 1	
Air System Name	OFFICE	Floor Area	2928.0 sq ft
Equipment Class	PKG ROOF	Location	Port Angeles, Washington
Air System Type	SZCAV		
Sizing Calculation Information		Zone CFM Sizing Peak zone sensible load	
Calculation Months	Jan to Dec	Space CFM Sizing	Coincident space loads
Sizing Data	User-Modified		
Central Cooling Coil Sizing Data			
Total coil load	6.9 Tons	Load occurs at	Jun 1500
Total coil load	82.8 MBH	OA DB / WB	77.8 / 62.0 °F
Sensible coil load	69.8 MBH	Entering DB / WB	74.3 / 61.2 °F
Coil CFM at Jun 1500	2960 CFM	Leaving DB / WB	52.2 / 51.0 °F
Max block CFM	2960 CFM	Coil ADP	49.8 °F
Sum of peak zone CFM	2960 CFM	Bypass Factor	0.100
Sensible heat ratio	0.846	Resulting RH	50 %
CFM/Ton	430.5	Design supply temp.	51.8 °F
RTTon	425.8	Zone T-stat Check	1 of 1 OK
BTU/(hr °F)	28.2	Max zone temperature deviation	0.0 °F
Water flow @ 10.0 °F rise	N/A		
Central Heating Coil Sizing Data			
Max coil load	71.5 MBH	Load occurs at	Des Htg
Coil CFM at Des Htg	2960 CFM	BTU/(hr °F)	24.4
Max coil CFM	2960 CFM	Ent. DB / Lvg DB	58.8 / 81.4 °F
Water flow @ 20.0 °F drop	N/A		
Supply Fan Sizing Data			
Actual max CFM	2960 CFM	Fan motor BHP	0.89 BHP
Standard CFM	2929 CFM	Fan motor kW	0.71 kW
Actual max CFM/#	1.01 CFM/#	Fan static	1.10 in wg
Outdoor Ventilation Air Data			
Design airflow CFM	725 CFM	CFM/person	10.54 CFM/person
CFM/#	0.25 CFM/#		

ZONE LOADS	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jun 1500			HEATING DATA AT Des Htg		
	Details	Sensible (BTU/hr)	Latent (BTU/hr)	Details	Sensible (BTU/hr)	Latent (BTU/hr)
Window & Skylight Solar Loads	202 #	3111	-	202 #	-	-
Wall Transmission	2342 #	653	-	2342 #	5392	-
Roof Transmission	2928 #	6060	-	2928 #	4251	-
Window Transmission	202 #	170	-	202 #	2641	-
Skylight Transmission	0 #	0	-	0 #	0	-
Door Loads	126 #	1566	-	126 #	3379	-
Floor Transmission	2838 #	0	-	2838 #	2827	-
Partitions	720 #	1567	-	720 #	2160	-
Ceiling	0 #	0	-	0 #	0	-
Overhead Lighting	2558 W	7813	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	3989 W	12960	-	0	0	-
People	69	13707	14099	0	0	0
Infiltration	-	0	0	-	11227	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	0% / 0%	0	0	25%	7969	0
>> Total Zone Loads	-	47608	14099	-	39847	0
Zone Conditioning	-	49754	14099	-	39513	0
Plenum Wall Load	0%	0	0	0	0	-
Plenum Roof Load	0%	0	0	0	0	-
Plenum Lighting Load	0%	0	0	0	0	-
Return Fan Load	2960 CFM	0	-	2960 CFM	0	-
Ventilation Load	725 CFM	3611	-1368	725 CFM	34384	0
Supply Fan Load	2960 CFM	2414	-	2960 CFM	-2414	-
Space Fan Coil Fans	-	0	-	-	0	-
Duct Heat Gain / Loss	0%	0	0	0%	0	0
>> Total System Loads	-	55780	12731	-	71484	0
Central Cooling Coil	-	69784	12731	-	0	0
Central Heating Coil	-	-14005	-	-	71484	-
>> Total Conditioning	-	55780	12731	-	71484	0
Key:	Positive values are coil loads			Positive values are htg loads		
	Negative values are htg loads			Negative values are coil loads		

WAREHOUSE LOAD CALCULATIONS			
Air System Information		Number of zones 1	
Air System Name	WAREHOUSE	Floor Area	53095.0 sq ft
Equipment Class	UNDEF	Location	Port Angeles, Washington
Air System Type	SZCAV		
Sizing Calculation Information		Zone CFM Sizing Sum of space airflowrates	
Calculation Months	Jan to Dec	Space CFM Sizing	Individual peak space loads
Sizing Data	User-Modified		
Central Cooling Coil Sizing Data			
Total coil load	46.4 Tons	Load occurs at	Jun 1500
Total coil load	566.2 MBH	OA DB / WB	77.8 / 62.0 °F
Sensible coil load	550.4 MBH	Entering DB / WB	75.2 / 61.5 °F
Coil CFM at Jun 1500	25600 CFM	Leaving DB / WB	55.1 / 53.8 °F
Max block CFM	25600 CFM	Coil ADP	52.8 °F
Sum of peak zone CFM	25600 CFM	Bypass Factor	0.100
Sensible heat ratio	0.990	Resulting RH	50 %
CFM/Ton	652.3	Design supply temp.	57.0 °F
RTTon	1145.5	Zone T-stat Check	1 of 1 OK
BTU/(hr °F)	10.5	Max zone temperature deviation	0.0 °F
Water flow @ 10.0 °F rise	111.30 gpm		
Central Heating Coil Sizing Data			
Max coil load	918.9 MBH	Load occurs at	Des Htg
Coil CFM at Des Htg	25600 CFM	BTU/(hr °F)	17.3
Max coil CFM	25600 CFM	Ent. DB / Lvg DB	46.5 / 79.0 °F
Water flow @ 20.0 °F drop	91.94 gpm		
Supply Fan Sizing Data			
Actual max CFM	25600 CFM	Fan motor BHP	7.71 BHP
Standard CFM	25335 CFM	Fan motor kW	6.12 kW
Actual max CFM/#	0.48 CFM/#	Fan static	1.10 in wg
Outdoor Ventilation Air Data			
Design airflow CFM	10620 CFM	CFM/person	100.01 CFM/person
CFM/#	0.20 CFM/#		

ZONE LOADS	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jun 1500			HEATING DATA AT Des Htg		
	Details	Sensible (BTU/hr)	Latent (BTU/hr)	Details	Sensible (BTU/hr)	Latent (BTU/hr)
Window & Skylight Solar Loads	0 #	0	-	0 #	-	-
Wall Transmission	19247 #	31464	-	19247 #	52339	-
Roof Transmission	53095 #	94719	-	53095 #	51075	-
Window Transmission	0 #	0	-	0 #	0	-
Skylight Transmission	0 #	0	-	0 #	0	-
Door Loads	963 #	859	-	963 #	10353	-
Floor Transmission	53095 #	0	-	53095 #	24836	-
Partitions	0 #	0	-	0 #	0	-
Ceiling	0 #	0	-	0 #	0	-
Overhead Lighting	26548 W	86040	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	53095 W	173989	-	0	0	-
People	106	22328	28671	0	0	0
Infiltration	-	0	0	-	296701	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	0% / 0%	0	0	25%	108826	0
>> Total Zone Loads	-	409280	28671	-	544129	0
Zone Conditioning	-	415253	28671	-	548764	0
Plenum Wall Load	0%	0	0	0	0	-
Plenum Roof Load	0%	0	0	0	0	-
Plenum Lighting Load	0%	0	0	0	0	-
Return Fan Load	25600 CFM	0	-	25600 CFM	0	-
Ventilation Load	10620 CFM	50745	-22878	10620 CFM	391000	0
Supply Fan Load	25600 CFM	20875	-	25600 CFM	-20875	-
Space Fan Coil Fans	-	0	0	-	0	0
Duct Heat Gain / Loss	0%	0	0	0%	0	0
>> Total System Loads	-	486873	5795	-	918888	0
Central Cooling Coil	-	550419	5795	-	0	0
Central Heating Coil	-	-63546	-	-	918888	-
>> Total Conditioning	-	486873	5795	-	918888	0
Key:	Positive values are coil loads			Positive values are htg loads		
	Negative values are htg loads			Negative values are coil loads		

DOAS-1 SEQUENCE OF OPERATIONS	HP-5 AND HP-6 SEQUENCE OF OPERATIONS
PROVIDE ALL NECESSARY SENSORS, DAMPER ACTUATORS, CONTROL TRANSFORMERS WITH SECONDARY OVERLOAD PROTECTION, WIRING AND CONDUIT TO ACCOMPLISH THE FOLLOWING SEQUENCE OF OPERATION:	PROVIDE ALL NECESSARY SENSORS, DAMPER ACTUATORS, CONTROL TRANSFORMERS WITH SECONDARY OVERLOAD PROTECTION, WIRING AND CONDUIT TO ACCOMPLISH THE FOLLOWING SEQUENCE OF OPERATION:
ROOFTOP UNIT (100% OUTSIDE AIR): 1. OCCUPIED COOLING MODE: UNIT OUTSIDE AIR DAMPER SHALL OPEN AND UNIT SUPPLY FAN SHALL BE ENERGIZED. UNIT'S ON BOARD CONTROLLER SHALL ENERGIZE COOLING FOR DEHUMIDIFICATION ONLY AS REQUIRED TO MAINTAIN NEUTRAL SUPPLY AIR CONDITIONS OF 72°F AND 55% RELATIVE HUMIDITY (ADJUSTABLE). COOLING COIL SHALL ONLY BE USED FOR DEHUMIDIFICATION. 2. OCCUPIED HEATING MODE: UNIT OUTSIDE AIR DAMPER SHALL OPEN AND UNIT SUPPLY FAN SHALL BE ENERGIZED. UNIT'S ON BOARD CONTROLLER SHALL ENERGIZE AND STAGE HEATING AS REQUIRED TO MAINTAIN SUPPLY AIR CONDITIONS OF 55°F (ADJUSTABLE). 3. UNOCCUPIED MODE: UPON SIGNAL FROM ON BOARD UNIT CONTROLLER, SUPPLY FAN SHALL ENERGIZE AND OUTSIDE AIR DAMPER SHALL CLOSE. UNIT SHALL REMAIN OFF DURING UNOCCUPIED HOURS. 4. ECONOMIZER MODE: WHEN HP-5 AND HP-6 ENTER ECONOMIZER MODE OF OPERATION DOAS-1 SHALL DEENERGIZE.	ROOFTOP UNIT: UNIT CONTROLLER SHALL BE SET TO DETERMINE OCCUPIED AND UNOCCUPIED HOURS OF OPERATION. HOURS SHALL BE COORDINATED WITH OWNER. SUPPLY FAN SHALL ENERGIZE DURING A CALL FOR COOLING OR HEATING. FAN SHALL DE-ENERGIZE WHILE SPACE TEMPERATURE IS SATISFIED. COOLING: WHEN SPACE TEMPERATURE RISES ABOVE OCCUPIED SET POINT, PACKAGED DIRECT EXPANSION COOLING AND FAN SHALL ENERGIZE AND STAGE AS REQUIRED TO MAINTAIN SPACE TEMPERATURE. ECONOMIZER: WHEN OUTSIDE AIR TEMPERATURE IS BELOW 60°F, ECONOMIZER SHALL MODULATE BETWEEN ITS MINIMUM SET POINT AND FULL OPEN TO MAINTAIN SPACE COOLING SET POINT, SUBJECT TO A MIXED AIR TEMPERATURE LOW LIMIT CONTROLLER SET POINT OF 55°F. IF OUTDOOR TEMPERATURE IS ABOVE COMPRESSOR LOCKOUT, THERMOSTAT SETTING, MECHANICAL COOLING SHALL BE ENABLED AS SECOND STAGE OF COOLING. DEHUMIDIFICATION (WHERE APPLICABLE): WHEN SPACE HUMIDITY READING EXCEEDS 55%RH (ADJUSTABLE), REFRIGERATION SYSTEM SHALL OPERATE AND INITIATE REHEAT. DEHUMIDIFICATION AS REQUIRED TO MAINTAIN SPACE HUMIDITY. HEATING: WHEN SPACE TEMPERATURE FALLS 2 DEGREES OR MORE BELOW HEATING SETPOINT, COMPRESSORS SHALL BE ACTIVATED IN HEATING MODE. ONCE TEMPERATURE REACHES 2 DEGREES ABOVE SET POINT, COMPRESSORS SHALL BE DEACTIVATED. IF HEAT PUMP HEATING CANNOT MEET SPACE REQUIREMENTS, ELECTRIC BACKUP HEATER SHALL BE ACTIVATED AND STAGED AS REQUIRED TO MAINTAIN SPACE TEMPERATURE. MORNING WARM-UP/COOL DOWN CONTROLS SHALL BE CAPABLE OF AUTOMATICALLY ADJUSTING THE DAILY START TIME OF THE UNIT IN ORDER TO BRING EACH SPACE TO DESIRED CAPACITY TEMPERATURE IMMEDIATELY PRIOR TO SCHEDULED OCCUPANCY. AUTOMATIC SETBACK AND SHUTDOWN CONTROLS SHALL BE CAPABLE OF STARTING AND STOPPING THE SYSTEM FOR SEVEN DIFFERENT DAILY SCHEDULES PER WEEK AND SHALL RETAIN THEIR PROGRAMMING AND TIME SETTINGS DURING A, PSS PF (POWER FOR AT LEAST 10 HOURS, CONTROLS SHALL HAVE OVERRIDE WHICH ALLOWS TEMPORARY OPERATION OF THE SYSTEM FOR UP TO TWO HOURS. THE OVERRIDE SHALL BE MANUAL AT THE CONTROLS, A MANUALLY OPERATED TIMER, OR AN OCCUPANCY SENSOR. SMOKE DETECTOR SHUT DOWN SMOKE DETECTOR SHALL DE-ENERGIZE ROOFTOP UNIT SUPPLY FAN AND CLOSE OUTSIDE AIR DAMPER IN BOTH OCCUPIED AND UNOCCUPIED MODES WHENEVER SMOKE IS SENSED BY SMOKE DETECTORS.

DESIGN TEMPERATURE SETPOINTS
WAREHOUSE: WINTER - 60°F SUMMER - 75°F
OFFICE: OCCUPIED: WINTER - 70°F SUMMER - 75°F UNOCCUPIED: WINTER - 55°F SUMMER - 85°F

MECHANICAL SYMBOLS	
GRILLES/DIFFUSERS:	
	SUPPLY DIFFUSER
	SIDEWALL MOUNTED SUPPLY REGISTER
	RETURN GRILLE
	EXHAUST GRILLE
DUCT SYMBOLS:	
	NEW SHEET METAL DUCTWORK
	SUPPLY OR OUTSIDE AIR DUCT
	RETURN AIR DUCT
	EXHAUST AIR DUCT
	DUCTWORK TRANSITION
	SUPPLY DUCT ELBOW UP OR DOWN
	RETURN DUCT ELBOW UP OR DOWN
	EXHAUST DUCT ELBOW UP OR DOWN
	DUCT ELBOW WITH FIXED TURNING VANES
	DUCT BRANCH TAKE-OFF
	ROUND SPIN-IN TAKEOFF
	MANUAL DAMPER
	ELECTRIC OPERATED DAMPER
	FLEXIBLE DUCTWORK
EQUIPMENT:	
	ROOF MOUNTED EXHAUST FAN
	SUPPLY FAN
	CONDENSING UNIT
	AIR HANDLING UNIT
	ROOFTOP UNIT
	UNIT HEATER
	THERMOSTAT
	COMBINATION TEMPERATURE, HUMIDITY, CO2 SENSOR
	FAN CONTROL POWER SWITCH
	DUCT SMOKE DETECTOR
GENERAL REFERENCES/NOTATIONS:	
	NOTE DESIGNATION
	REVISION DESIGNATION
	MECHANICAL EQUIPMENT DESIGNATION
	DIFFUSER DESIGNATION AND CFM
ABBREVIATIONS:	
AD	ACCESS DOOR
AF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AJH	AUTHORITY HAVING JURISDICTION
BHP	BRAKE HORSEPOWER
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
GPM	GALLONS PER MINUTE
HP	HEAT PUMP
HZ	FREQUENCY
LAT	LEAVING AIR TEMPERATURE
MA	MIXED AIR
NC	NOISE CRITERIA
OC	ON CENTER
OA	OUTSIDE AIR
PD	PRESSURE DROP
RA	RETURN AIR
RTU	ROOFTOP UNIT
SA	SUPPLY AIR
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
WB	WET BULB
SYMBOLS LEGEND NOTES:	
1. REFER TO SPECIFICATIONS AND PLAN NOTES FOR DETAILED DESCRIPTION OF ALL DEVICES SHOWN IN THIS SCHEDULE, PROVIDED BY CONTRACTOR.	

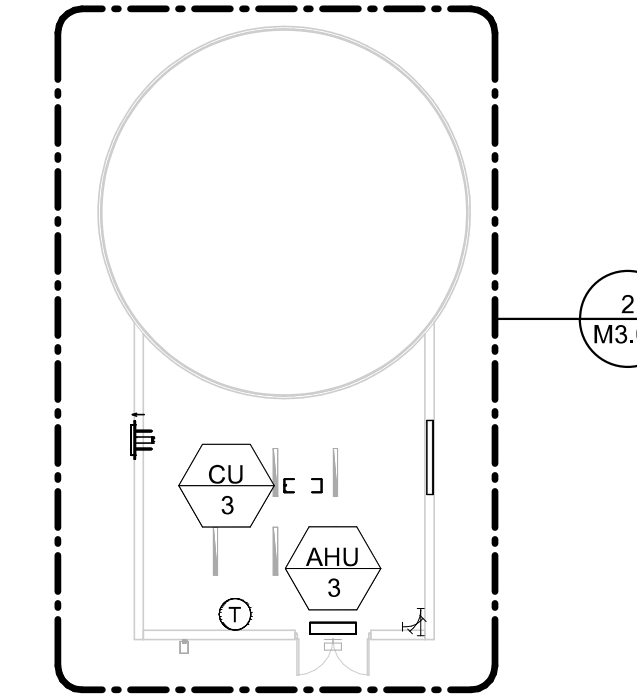
GENERAL MECHANICAL NOTES
A CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW CONSTRUCTION DOCUMENTS, INFORMATION COMPLETE WORK IS DISPERSED THROUGHOUT DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO COMPLETE DOCUMENT SET.
B COORDINATE WITH WORK OF OTHER SECTIONS. EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF OWNER, AND WITH CONSTRAINTS OF EXISTING CONDITIONS OF PROJECT SITE. PROVIDE DUCT AND PIPE RISERS AND DROPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.
C DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
D ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY GOVERNING CITY. PURCHASE PERMITS ASSOCIATED WITH WORK. OBTAIN INSPECTIONS REQUIRED BY CODE.
E INSTALL EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS AND MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCE.
F INSTALL EXHAUST FAN A MINIMUM OF 10 FT FROM INTAKE AIR OPENINGS.
G LOCATE WAREHOUSE AREA SENSORS AND THERMOSTATS SUCH THAT THEY ARE ACCESSIBLE, PROTECTED, AND IN AN AREA OF UNOBSTRUCTED AIR CIRCULATION. LOCATE SENSORS 7FT ABOVE FINISHED FLOOR.

HVAC COMMISSIONING
GENERAL CONTRACTOR SHALL HIRE A THIRD PARTY REGISTERED DESIGN PROFESSIONAL OR APPROVED AGENCY TO DEVELOP A COMMISSIONING PLAN THAT INCLUDE THE FOLLOWING ITEMS:
1. NARRATIVE DESCRIPTION OF ACTIVITIES THAT WILL BE ACCOMPLISHED DURING EACH PHASE OF COMMISSIONING, INCLUDING PERSONNEL INTENDED TO ACCOMPLISH EACH ACTIVITY.
2. LISTING OF SPECIFIC EQUIPMENT, APPLIANCES OR SYSTEMS TO BE TESTED AND A DESCRIPTION OF TESTS TO BE PERFORMED.
3. FUNCTIONS TO BE TESTED, INCLUDING, BUT NOT LIMITED TO, CALIBRATIONS AND ECONOMIZER CONTROLS.
4. CONDITIONS UNDER WHICH TEST WILL BE PERFORMED, AT MINIMUM, TESTING SHALL AFFIRM WINTER AIR AND SUMMER DESIGN CONDITIONS AND FULL OUTSIDE AIR CONDITIONS.
5. MEASURABLE CRITERIA FOR PERFORMANCE.
PRELIMINARY REPORT OF COMMISSIONING TEST PROCEDURES AND RESULTS SHALL BE COMPLETED AND CERTIFIED BY REGISTERED DESIGN PROFESSIONAL OR APPROVED AGENCY IN ACCORDANCE WITH REQUIREMENTS OF SECTION C103.6 AND C408.1 OF 2021 WSEC AND PROVIDED TO PROJECT OWNER. A COPY OF REPORT SHALL BE MADE AVAILABLE TO CODE OFFICIAL IF REQUESTED.
FINAL COMMISSIONING REPORT SHALL BE DUE TO PROJECT OWNER WITHIN 90 DAYS OF RECEIPT OF CERTIFICATE OF OCCUPANCY.

HP-1, HP-2, HP-3, AND HP-4 SEQUENCE OF OPERATIONS
PROVIDE ALL NECESSARY SENSORS, DAMPER ACTUATORS, CONTROL TRANSFORMERS WITH SECONDARY OVERLOAD PROTECTION, WIRING AND CONDUIT TO ACCOMPLISH THE FOLLOWING SEQUENCE OF OPERATION:
ROOFTOP UNIT: UNIT CONTROLLER SHALL BE SET TO DETERMINE OCCUPIED AND UNOCCUPIED HOURS OF OPERATION. HOURS SHALL BE COORDINATED WITH OWNER. SUPPLY FAN SHALL RUN CONTINUOUSLY AND OUTSIDE AIR DAMPER SHALL OPEN TO MINIMUM POSITION TO DELIVER SCHEDULED QUANTITY OF VENTILATION AIR. SUPPLY FAN SPEED SHALL VARY AIRFLOW AS A FUNCTION OF LOAD. DURING NON-COOLING FIRST STAGE COOLING AND NON-HEATING TIMES, SUPPLY FAN SHALL RUN AT MINIMUM SPEED. DURING SECOND STAGE COOLING AND HEATING TIMES, SUPPLY FAN SHALL RUN AT FULL SPEED. OUTSIDE AIR DAMPER SHALL MODULATE POSITION TO MAINTAIN REQUIRED QUANTITY OF OUTSIDE AIR AS SUPPLY FAN SPEED VARIES. COOLING: WHEN SPACE TEMPERATURE RISES ABOVE OCCUPIED COOLING SET POINT, PACKAGED DIRECT EXPANSION COOLING SHALL BE ENERGIZED AND STAGED AS REQUIRED TO MAINTAIN SPACE TEMPERATURE. ECONOMIZER: WHEN OUTSIDE AIR TEMPERATURE IS BELOW 60°F, ECONOMIZER SHALL MODULATE BETWEEN ITS MINIMUM SET POINT AND FULL OPEN TO MAINTAIN SPACE COOLING SET POINT, SUBJECT TO A MIXED AIR TEMPERATURE LOW LIMIT CONTROLLER SET POINT OF 55°F. IF OUTDOOR TEMPERATURE IS ABOVE COMPRESSOR LOCKOUT, THERMOSTAT SETTING, MECHANICAL COOLING SHALL BE ENABLED AS SECOND STAGE OF COOLING. DEHUMIDIFICATION (WHERE APPLICABLE): WHEN SPACE HUMIDITY READING EXCEEDS 55%RH (ADJUSTABLE), REFRIGERATION SYSTEM SHALL OPERATE AND INITIATE REHEAT. DEHUMIDIFICATION AS REQUIRED TO MAINTAIN SPACE HUMIDITY. HEATING: WHEN SPACE TEMPERATURE FALLS 2 DEGREES OR MORE BELOW HEATING SETPOINT, COMPRESSORS SHALL BE ACTIVATED IN HEATING MODE. ONCE TEMPERATURE REACHES 2 DEGREES ABOVE SET POINT, COMPRESSORS SHALL BE DEACTIVATED. IF HEAT PUMP HEATING CANNOT MEET

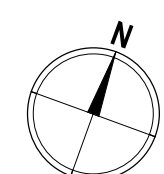
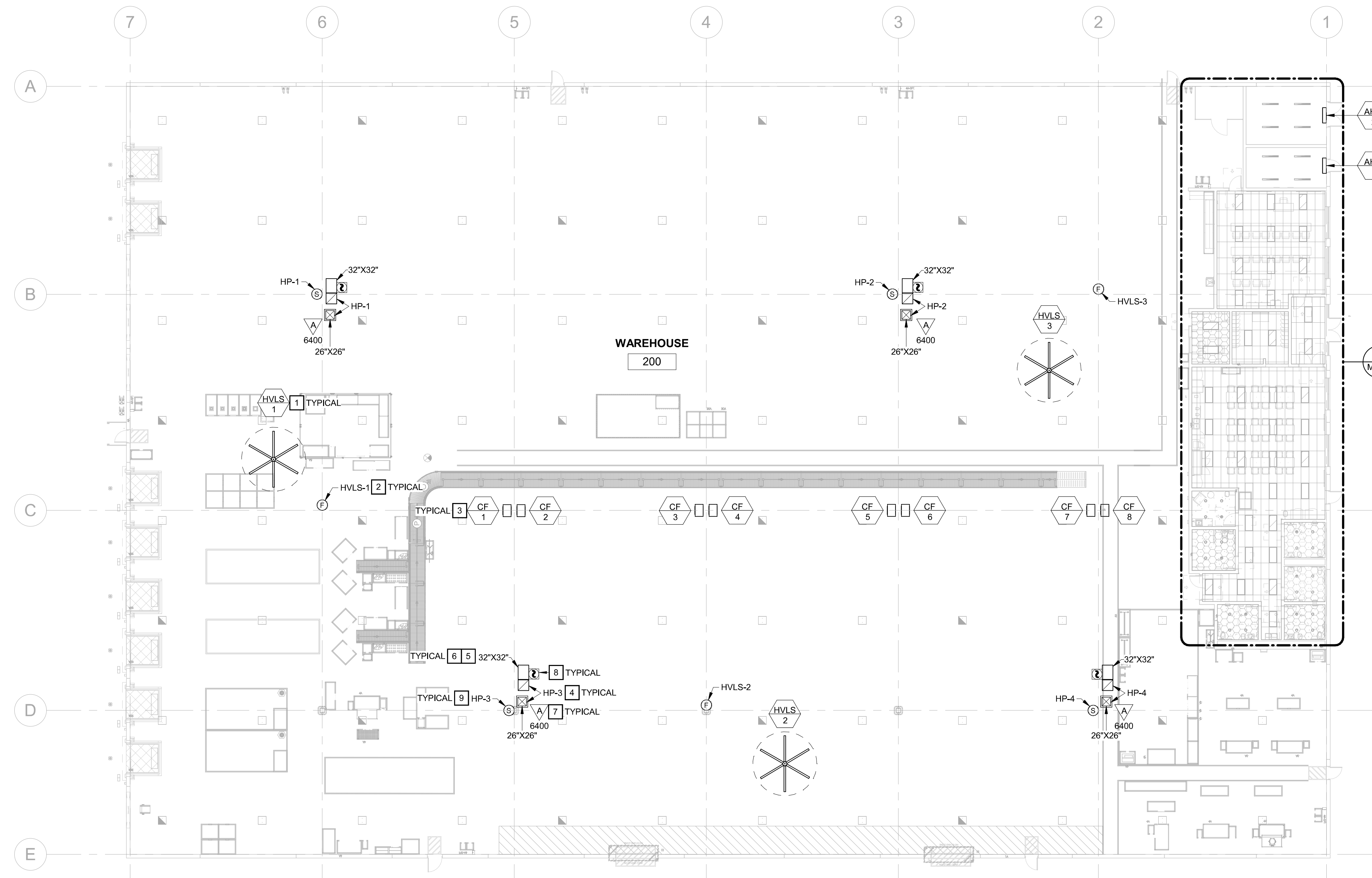
HVLS FAN INSTALLATION NOTES

HVLS FAN DISCONNECT SWITCH HAS TO BE WALL OR COLUMN MOUNTED WITH WITH BOTTOM AT 6 FEET ABOVE THE FLOOR OR WORKING PLATFORM.
 INSTALL SAFETY CABLE ON EVERY HVLS FAN PER MANUFACTURER'S SPECIFICATIONS. HVLS FAN SHOULD NOT BE OPERATED WITHOUT A PROPERLY INSTALLED SAFETY CABLE.
 LOCATIONS OF ALL HVLS FANS SHALL BE COORDINATED SUCH THAT THE HUBS (CENTER OF FANS) ARE LOCATED CENTERED BETWEEN (4) SPRINKLER HEADS AND SUPPORTED BETWEEN (2) JOISTS. SUPPORT FAN BETWEEN (2) JOISTS PER MANUFACTURER INSTALLATION REQUIREMENTS AND DETAILS. PROVIDE ALL MOUNTING HARDWARE AND DETAILS IN SUBMITTALS. FAN SHALL BE INSTALLED AT AN ELEVATION TO ENSURE THE FAN BLADES HAVE A VERTICAL MINIMUM CLEARANCE OF 36" FROM ALL SPRINKLER DEFLECTORS (INSTALL AS HIGH AS POSSIBLE AFTER MEETING THIS REQUIREMENT). COORDINATE INTERFACE OF FANS WITH FIRE ALARM TO DEACTIVATE UPON FIRE ALARM PER NFPA 72. HVLS FAN INSTALLATION SHALL COMPLY WITH NFPA 13 SECTION 11.1.7.



MECHANICAL KEY NOTES

- PROVIDE HVLS FAN. SUSPEND FAN FROM BUILDING STRUCTURE ABOVE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. FAN SHALL BE INSTALLED A MINIMUM OF 3'-0" BELOW BUILDING STRUCTURE. COORDINATE EXACT LOCATION AND HEIGHT IN FIELD SUCH THAT FAN IS CENTERED BETWEEN SPRINKLER HEADS. SPRINKLER SPACING GOVERNS. MAINTAIN MINIMUM 23'-0" CLEARANCE FROM ELEVATED PLATFORMS. CENTER FANS BETWEEN ADJACENT LIGHT FIXTURES. MAINTAIN MINIMUM DISTANCE OF 2'-0" BETWEEN TIP OF HVLS FAN BLADES AND LIGHTING. FAN BLADES TO BE NO CLOSER THAN ONE FAN DIAMETER TO ADJACENT DIFFUSERS. FOOTPRINT OF FAN IS NOT TO OVERLAP WITH CONVEYOR FINGERS. TO AVOID CONFLICTS WITH POWER DROPS AND STOW BY LIGHT SYSTEM.
- PROVIDE FAN CONTROL POWER SWITCH ON COLUMN. MOUNT FAN CONTROL POWER SWITCH 48" ABOVE FINISHED FLOOR. COORDINATE FINAL INSTALLATION LOCATION WITH OWNER.
- PROVIDE CIRCULATION FAN. MOUNT BOTTOM OF FAN 8'-0" ABOVE FINISHED FLOOR.
- DUCT UP TO ASSOCIATED UNIT LOCATED ON ROOF. REFER TO SHEET M1.02 FOR UNIT LOCATION.
- PROVIDE RETURN AIR BOOT WITH ACOUSTICAL DUCT LINER. LINER SHALL BE 1" THICK 2 PCF DENSITY, LONG TEXTILE TYPE FIBER, WITH SURFACE CLEANABLE PER MIMA DUCT CLEANING GUIDELINES. INSTALL LINER IN ACCORDANCE WITH SMACNA DUCT CONSTRUCTION STANDARDS. LAMINATE LINER TO INTERNAL SURFACES OF DUCT IN ACCORDANCE WITH LINER MANUFACTURER'S INSTRUCTIONS, AND FASTEN WITH MECHANICAL FASTENERS.
- PROVIDE 1"X1" GALVANIZED WIRE SCREEN FASTENED TO OUTSIDE OF DUCT END WITH GALVANIZED ANGLE FRAME, FENDER WASHERS, SCREWS AND LOCK WASHERS. FASTENERS SHALL BE GALVANIZED STAINLESS OR OTHER NON-RUSTING MATERIAL.
- PROVIDE DROPBOX DIFFUSER. SEE DETAIL ON SHEET M4.01 FOR MORE INFORMATION. MOUNT BOTTOM OF DIFFUSER APPROXIMATELY 3'-0" BELOW LOWEST STRUCTURE. DIRECT EACH SUPPLY REGISTER ON DROPBOX DIFFUSER 2'-0" DOWNWARD WITH 4'-0" SPREAD.
- DUCT MOUNTED SMOKE DETECTOR FURNISHED BY FIRE ALARM CONTRACTOR AND INSTALLED IN DUCT BY MECHANICAL CONTRACTOR. INTERLOCK WIRING BETWEEN FIRE ALARM SYSTEM RELAY AND UNIT SHUTDOWN CONTACT SHALL BE PROVIDED BY MECHANICAL CONTRACTOR. ALL OTHER WIRING BY FIRE ALARM CONTRACTOR. UPON DETECTION OF SMOKE, UNIT SHALL SHUT DOWN UPON SIGNAL FROM FIRE ALARM SYSTEM.
- PROVIDE COMBINATION TEMPERATURE, HUMIDITY, AND CARBON DIOXIDE SENSOR ON COLUMN. COMBINATION SENSOR SHALL BE COMPATIBLE WITH UNIT CONTROLLER AND BMS. MOUNT BOTTOM OF SENSOR 64" ABOVE FINISHED FLOOR.



1 OVERALL HVAC PLAN
 1/16" = 1'-0"

ARCHITECT OF RECORD

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Project # - 012024.15.01

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
 W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

Revisions / Submissions

ID	Description	Date
1	PERMIT SET	04.25.2025

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Project number: 763838-02
 Scale: AS NOTED
 Drawn By: JLM
 Checked By: CLK
 Date: 04.25.2025
 Issue: PERMIT SET

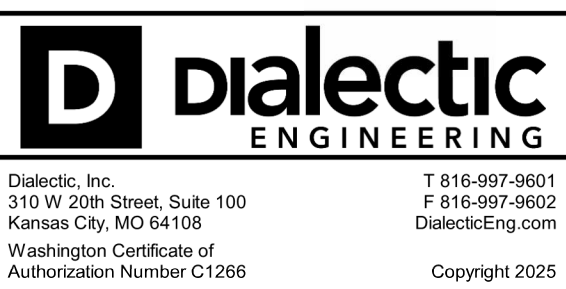
Sheet Title:
OVERALL HVAC PLAN

M1.01

- MECHANICAL KEY NOTES**
- 1 PROVIDE HEAT PUMP ROOFTOP UNIT AND CURB. COORDINATE UNIT WITH STRUCTURE. SHIM UNIT AND CURB LEVEL FOR PROPER FAN OPERATION. PROVIDE FLEXIBLE CONNECTORS ON SUPPLY DUCT AND RETURN AIR DUCT CONNECTIONS.
 - 2 PROVIDE ROOFTOP DOAS UNIT AND CURB. COORDINATE UNIT WITH STRUCTURE. SHIM UNIT AND CURB LEVEL FOR PROPER CONDENSATE DRAINAGE. PROVIDE FLEXIBLE CONNECTOR ON SUPPLY AIR DUCT AND RETURN AIR DUCT CONNECTIONS.
 - 3 PROVIDE HEAT PUMP CONDENSING UNIT AND EQUIPMENT SUPPORT RAILS FOR MOUNTING ON ROOF. PROVIDE MANUFACTURER'S RECOMMENDED TYPE AND SIZE OF REFRIGERANT PIPING FROM AIR HANDLING UNIT TO HEAT PUMP CONDENSING UNIT. PROVIDE PIPE CURB PENETRATIONS AND SUPPORTS. INSULATE PIPING WITH 1" THICK ARMAFLEX AP. PAINT INSULATION LOCATED OUTDOORS WITH ARMAFLEX WB FINISH. TRAP AND SLOPE LINES PER MANUFACTURER'S RECOMMENDATIONS.

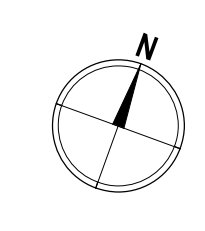
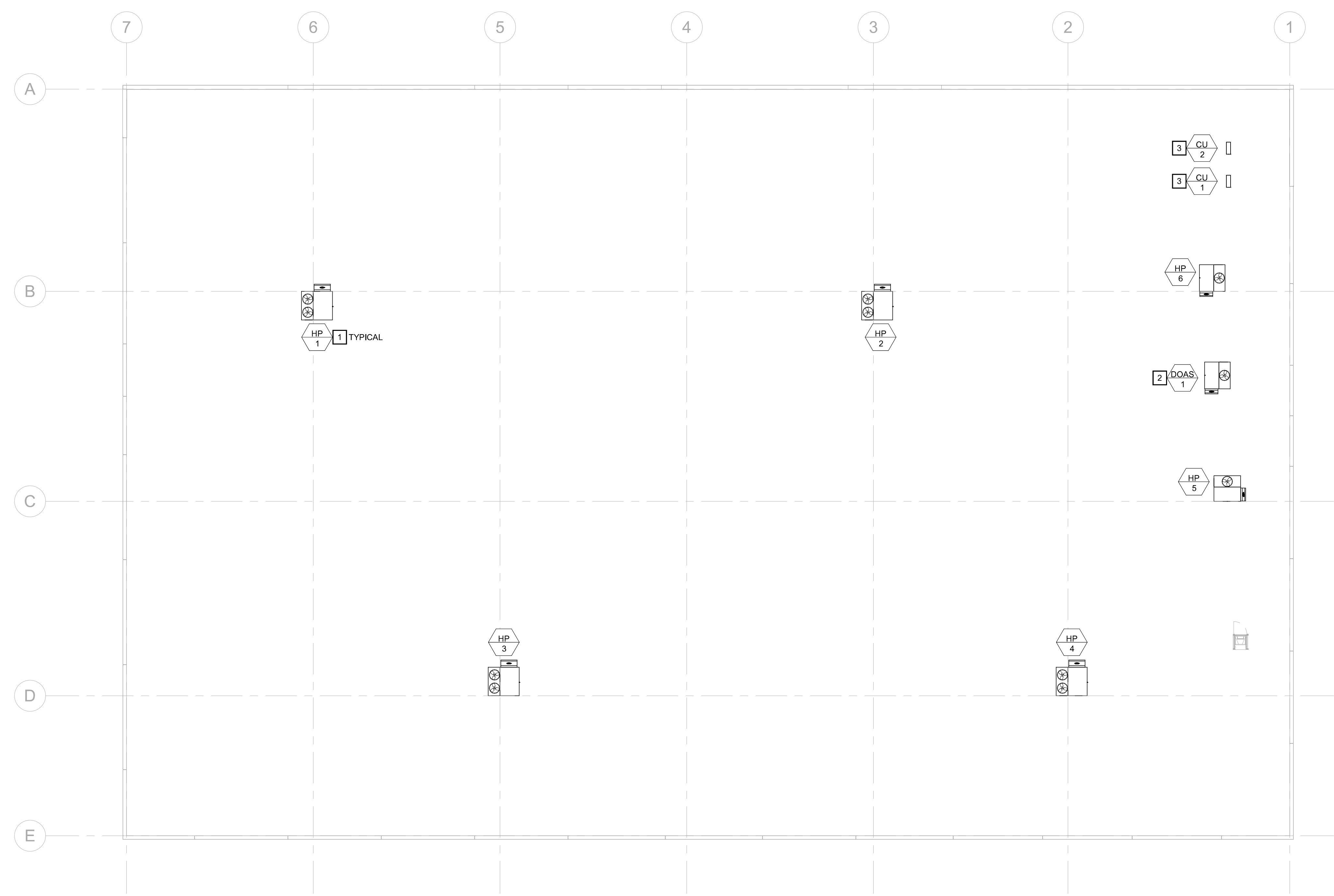
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Project # - 012024.15.01



1 OVERALL HVAC PLAN - ROOF
1/16" = 1'-0"

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W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

Revisions / Submissions

ID	Description	Date
PERMIT SET		04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: JLM
Checked By: CLK
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
**OVERALL HVAC
PLAN - ROOF**

M1.02

AIR CONDITIONING REFRIGERATION INFORMATION						REFRIGERATION INFORMATION			
PUMPHOUSE	ROOM DIMENSIONS			VOLUME (CUBIC FEET)	QTY	TYPE	REFRIGERATION INFORMATION		
	LENGTH (FEET)	WIDTH (FEET)	HEIGHT (FEET)				TOTAL CHARGE (LBS)	ALLOWED LBS/1,000 CUBIC FEET	ACTUAL LBS/1,000 CUBIC FEET
	18.5	23.5	11.5	4999.63	1	R-454B	7.00	22.00	1.40

REFRIGERANT PIPING NOTE

REFRIGERANT PIPE(S) SIZES SHALL BE DETERMINED BY COMPRESSORIZED EQUIPMENT MANUFACTURER OR THEIR REPRESENTATIVE, WHO SHALL ALSO DETERMINE THE NEED FOR DOUBLE SUCTION PIPE RISERS, ACCUMULATORS AND OTHER APPURTENANCES REQUIRED FOR PROPER LONG TERM OPERATION OF THE EQUIPMENT. REFRIGERANT PIPE(S) SIZING AND ROUTING SHALL MEET ALL SYSTEM OPERATING CONDITIONS, PROVIDED TO THE OWNER AND ENGINEER LETTERS AND DRAWINGS THAT ADEQUATELY DEPICT REFRIGERANT PIPING AND COMPONENTS, AND INDICATE RECOMMENDATIONS PROVIDED TO THEM BY THE MANUFACTURER OR THEIR REPRESENTATIVE.

AIR DISTRIBUTION SIZING - ROUND DUCT

UNLESS NOTED OTHERWISE ON PLANS, THE FOLLOWING CHART SHALL APPLY TO ROUND DUCT SIZES FOR SUPPLY AIR*, RETURN AIR AND EXHAUST AIR.

SUPPLY AND EXHAUST AIR CFM RANGE	DUCT SIZE	RETURN AIR CFM RANGE
0-100	6"ø	0-70
105-200	8"ø	75-155
205-395	10"ø	160-285
400-605	12"ø	290-465
610-920	14"ø	470-710
925-1200	16"ø	715-1015

* DIFFUSER NECK SIZES SHALL MATCH SUPPLY AIR DUCT SIZING.

MECHANICAL KEY NOTES

- PROVIDE WALL MOUNTED DUCTLESS SPLIT SYSTEM AIR HANDLING UNIT. INSTALL UNIT LEVEL FOR PROPER CONDENSATE DRAINAGE. PROVIDE WITH CONDENSATE PAN AND OVERFLOW SWITCH. MOUNT UNIT 12" ABOVE DOOR HEIGHT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- PROVIDE WIRED REMOTE CONTROLLER FOR DUCTLESS SPLIT SYSTEM. INSULATE EXTERIOR WALL BEHIND THERMOSTAT AND CAULK WIRE PENETRATION THROUGH WALL. MOUNT THERMOSTAT 48" ABOVE FINISHED FLOOR.
- PROVIDE COMBINATION TEMPERATURE, HUMIDITY, AND CARBON DIOXIDE SENSOR. COMBINATION SENSOR SHALL BE COMPATIBLE WITH RTU CONTROLLER AND BMS. MOUNT SENSOR 48" ABOVE FINISHED FLOOR.
- UNDERCUT DOOR 1" FOR TRANSFER AIR.
- BMS PANEL LOCATION. PANEL BY CONTROLS CONTRACTOR.
- DUCT MOUNTED SMOKE DETECTOR FURNISHED BY FIRE ALARM CONTRACTOR AND INSTALLED IN DUCT BY MECHANICAL CONTRACTOR. INTERLOCK WIRING BETWEEN FIRE ALARM SYSTEM RELAY AND UNIT SHUTDOWN CONTACT SHALL BE PROVIDED BY MECHANICAL CONTRACTOR. ALL OTHER WIRING BY FIRE ALARM CONTRACTOR. UPON DETECTION OF SMOKE, UNIT SHALL SHUT DOWN UPON SIGNAL FROM FIRE ALARM SYSTEM.
- DUCT UP TO ASSOCIATED UNIT LOCATED ON ROOF. REFER TO SHEET M1.02 FOR UNIT LOCATION.
- PROVIDE HEAT PUMP CONDENSING UNIT AND EQUIPMENT SUPPORT RAILS FOR MOUNTING ON ROOF. PROVIDE MANUFACTURER'S RECOMMENDED TYPE AND SIZE OF REFRIGERANT PIPING FROM AIR HANDLING UNIT TO HEAT PUMP CONDENSING UNIT. PROVIDE PIPE CURB PENETRATIONS AND SUPPORTS. INSULATE PIPING WITH 1" THICK ARMAFLEX AP. PAINT INSULATION LOCATED OUTDOORS WITH ARMAFLEX WB FINISH. TRAP AND SLOPE LINES PER MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE LOUVER IN WALL. MOUNT BOTTOM OF LOUVER APPROXIMATELY 6'-0" ABOVE FINISHED FLOOR, COORDINATE WITH ARCHITECTURAL DRAWINGS FOR EXACT MOUNTING HEIGHT.
- PROVIDE SIDEWALL EXHAUST FAN. MOUNT BOTTOM OF FAN APPROXIMATELY 6'-0" ABOVE FINISHED FLOOR. INSTALL PER MANUFACTURER'S INSTALLATION REQUIREMENTS.
- PROVIDE LINE VOLTAGE COOLING THERMOSTAT. SET THERMOSTAT AT 85°F (ADJUSTABLE). INSULATE EXTERIOR WALL BEHIND THERMOSTAT AND CAULK WIRE PENETRATION THROUGH WALL. MOUNT THERMOSTAT 48" ABOVE FINISHED FLOOR.

DEMAND CONTROL VENTILATION

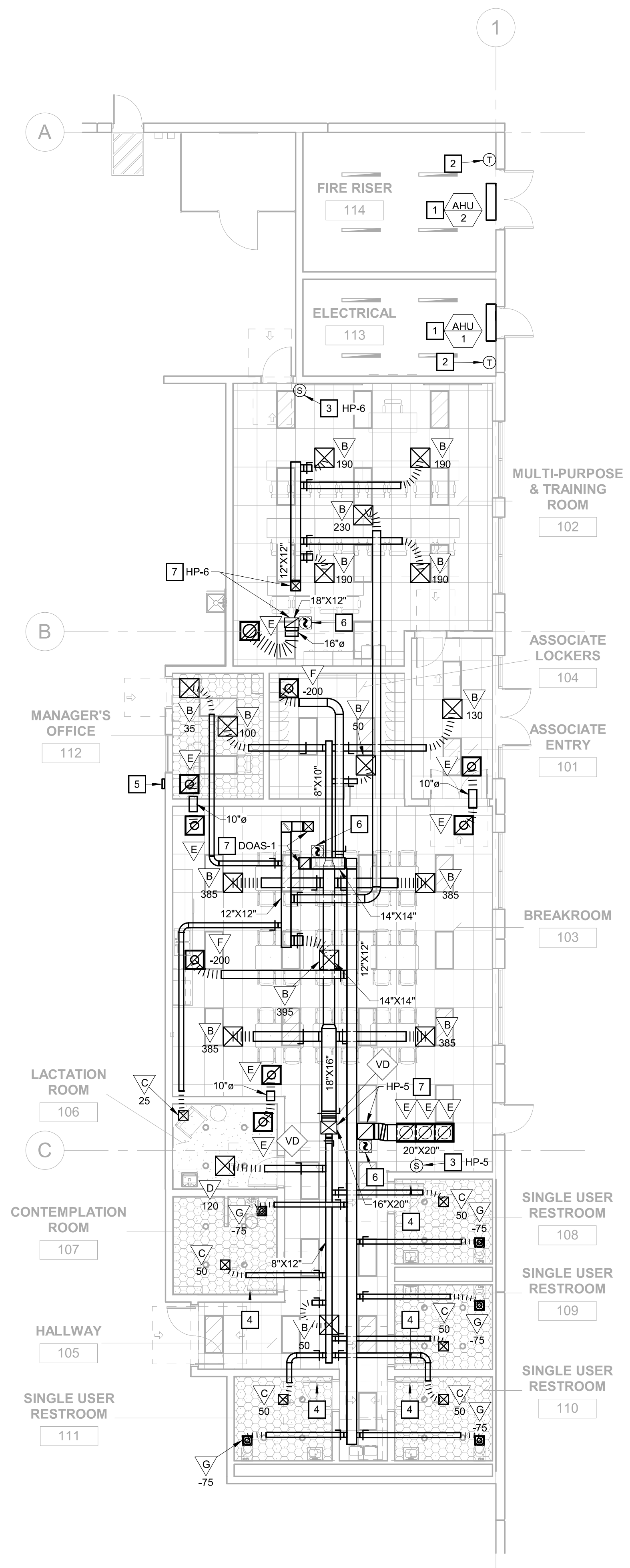
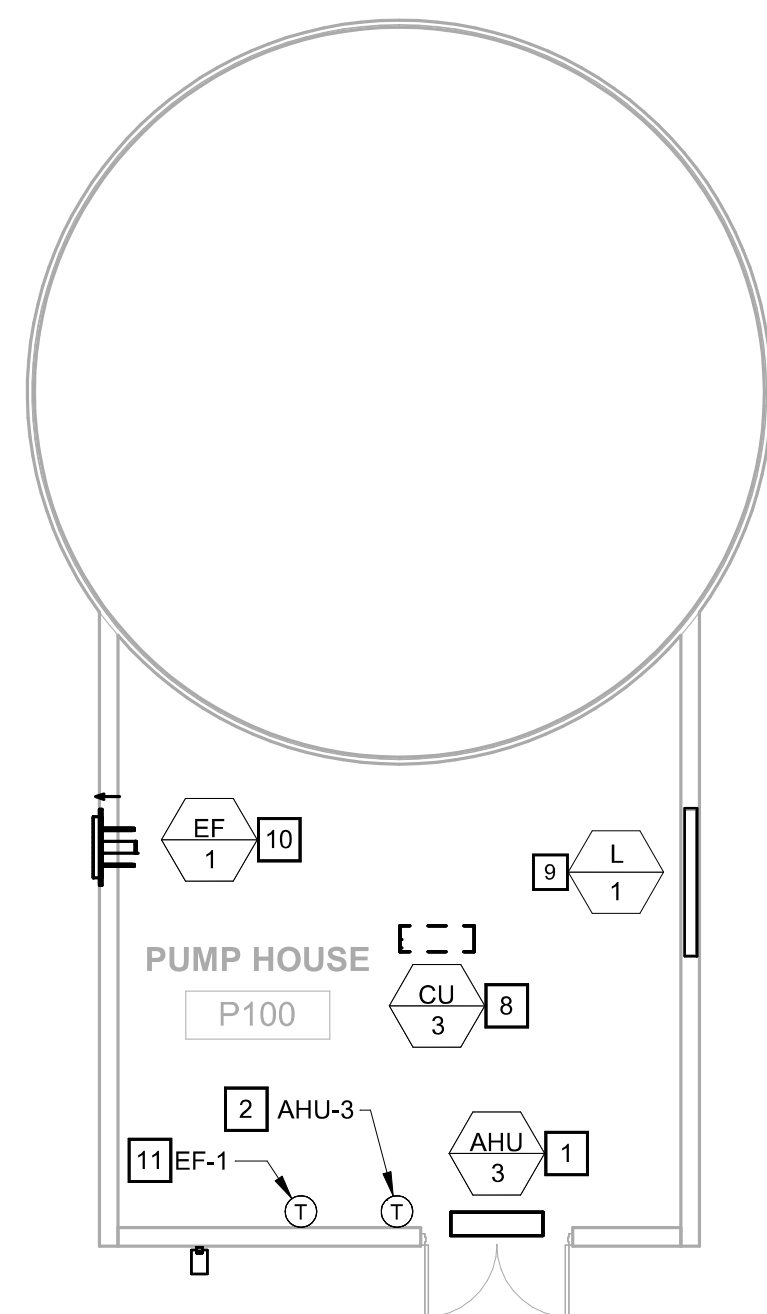
DEMAND CONTROL VENTILATION SYSTEM SHALL OPERATE DURING OCCUPIED HOURS. DEMAND CONTROL VENTILATION SYSTEM IS ONLY APPLICABLE FOR UNITS LISTED BELOW.

OCCUPIED OPERATION:
CO2 SENSORS SHALL MEASURE CO2 LEVEL OF SPACES. THERE SHALL BE ONE SPACE CO2 SENSOR PER UNIT. SPACE CO2 SENSOR SHALL SEND SIGNAL TO ROOFTOP UNIT CONTROLLER TO MODULATE OUTDOOR AIR DAMPER FROM MINIMUM VENTILATION RATE LISTED BELOW AT CO2 LEVEL OF 500 PPM OR LESS TO MAXIMUM OUTSIDE AIR CFM LISTED BELOW AT CO2 LEVEL OF 1000 PPM.

MINIMUM VENTILATION RATES
DOAS-1: 185 CFM

UNOCCUPIED OPERATION:
WHEN BUILDING IS UNOCCUPIED, DEMAND CONTROL VENTILATION SYSTEM SHALL BE DISABLED AND ALL ROOFTOP UNIT OUTSIDE AIR DAMPERS SHALL REMAIN CLOSED.

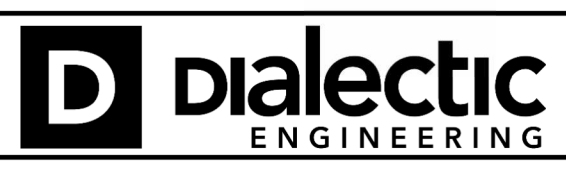
2 ENLARGED PUMPHOUSE
1/8" = 1'-0"



1 ENLARGED HVAC PLAN - OFFICE
1/8" = 1'-0"

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Project #: 012024.15.21

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Revisions / Submissions		
ID	Description	Date
PERMIT SET		04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: JLM
Checked By: CLK
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
ENLARGED HVAC PLAN

M3.01



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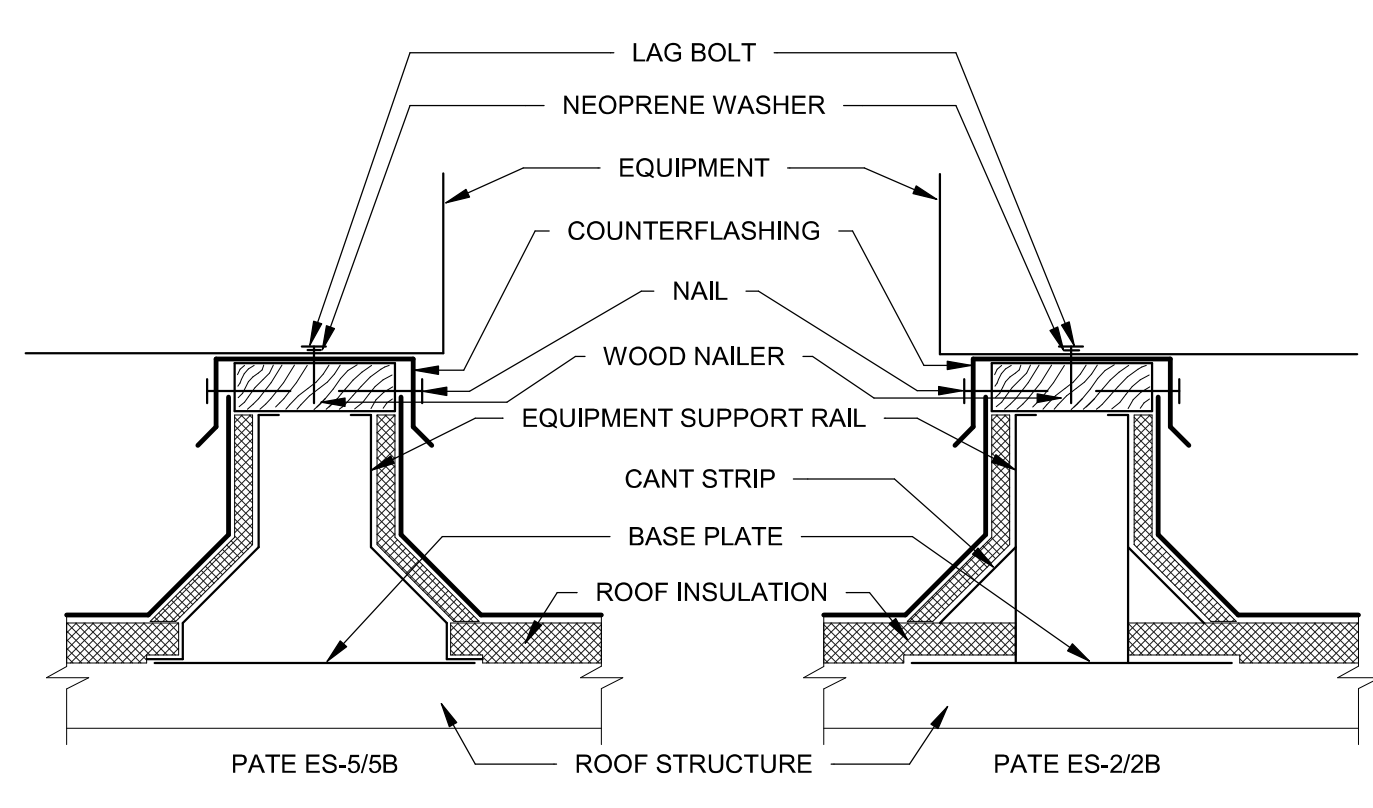
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Scale: AS NOTED
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Sheet Title:
**MECHANICAL
DETAILS**

M4.01



- NOTES:**
1. ROOF RAILS SHALL RUN ALONG LONG DIMENSION OF EACH UNIT.
 2. PROVIDE TWO ROOF RAILS FOR EACH UNIT. PROVIDE 13.5" RAIL HEIGHT.
 3. ES-5/SB (OR APPROVED EQUAL) FOR USE ON DECKS WITH RIGID INSULATION.
 4. ES-2/2B (OR APPROVED EQUAL FOR USE ON DECKS WITH LIGHTWEIGHT FILL OR TAPERED INSULATION).

5 EQUIPMENT SUPPORT RAIL
NOT TO SCALE

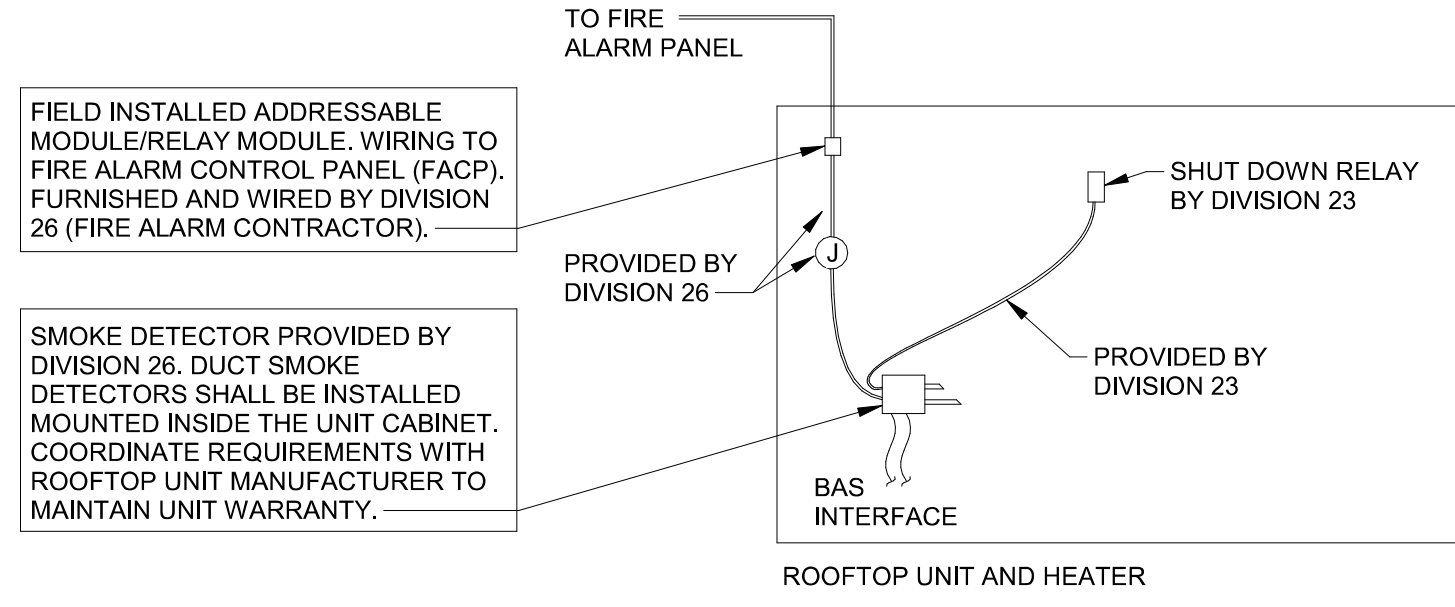
REQUIREMENTS/SCOPE:
NEW DUCT SMOKE DETECTORS SHALL BE INSTALLED IN ALL AIR MOVING FAN SYSTEMS THAT ARE SUPPLYING AND RETURNING AIRFLOW IN EXCESS OF 2,000 CFM AS REQUIRED BY MECHANICAL CODE. NEW DUCT SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH MECHANICAL CODE AND NFPA 72 AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR PROPER FUNCTIONALITY, TESTING, INSPECTION, AND MAINTENANCE.

NEW DUCT SMOKE DETECTOR DEVICE SHALL BE UL-268A LISTED. WHEN DUCT SMOKE DETECTORS ARE REQUIRED A REMOTE VISUAL AND AUDIBLE TEST STATION WILL BE REQUIRED FOR EACH DUCT SMOKE DETECTOR IN ACCORDANCE WITH NFPA 72. ACCESS DOORS AND/OR PANELS SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 90A.

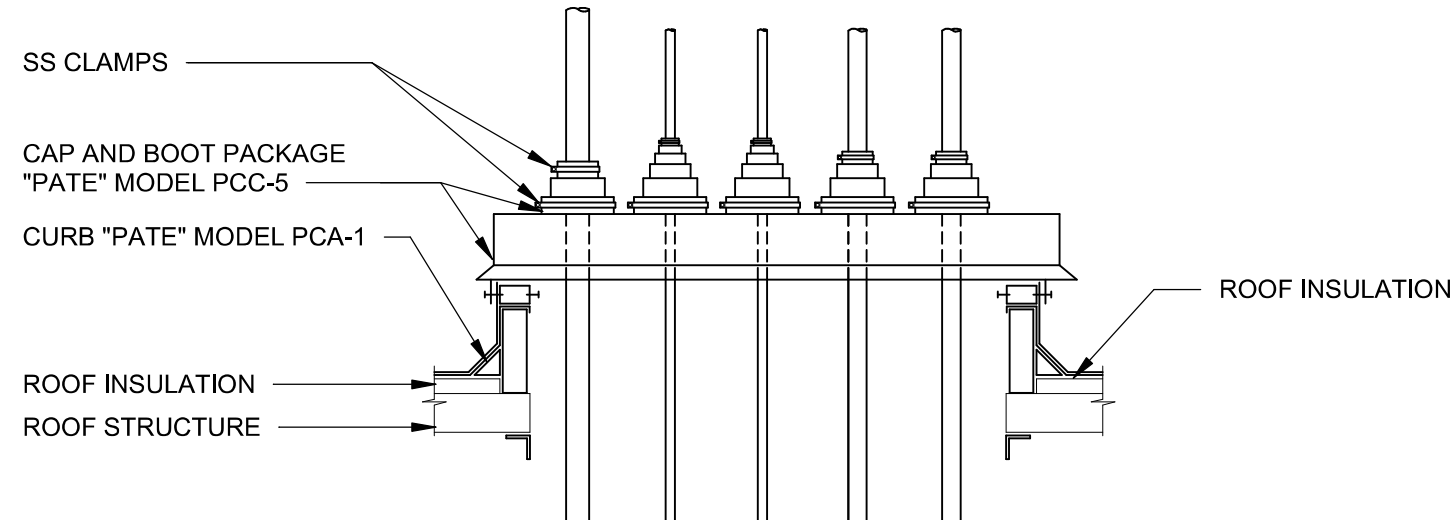
INSTALLATION AND ACCESSIBILITY:
DUCT SMOKE DETECTORS SHALL BE FURNISHED BY FIRE ALARM CONTRACTOR AND INSTALLED IN UNIT AND ACCESSIBLE FROM THE EQUIPMENT ACCESS PANELS.

TESTING AND OPERATION:
REFERENCE FIRE ALARM DRAWINGS FOR MORE INFORMATION. DUCT SMOKE DETECTORS SHALL BE TESTED AND CERTIFIED BY THE FIRE ALARM CONTRACTOR. DUCT SMOKE DETECTORS SHALL ACTIVATE A VISIBLE AND AUDIBLE SIGNAL AT A NORMALLY OCCUPIED LOCATION AND SHALL BE MONITORED BY THE FACP AND REPORT AS A SUPERVISORY SIGNAL PER NFPA 72 AND THE MECHANICAL CODE. DUCT SMOKE DETECTORS SHALL SHUTDOWN ROOFTOP UNITS PER MECHANICAL CODE.

CONTRACTOR RESPONSIBILITIES:

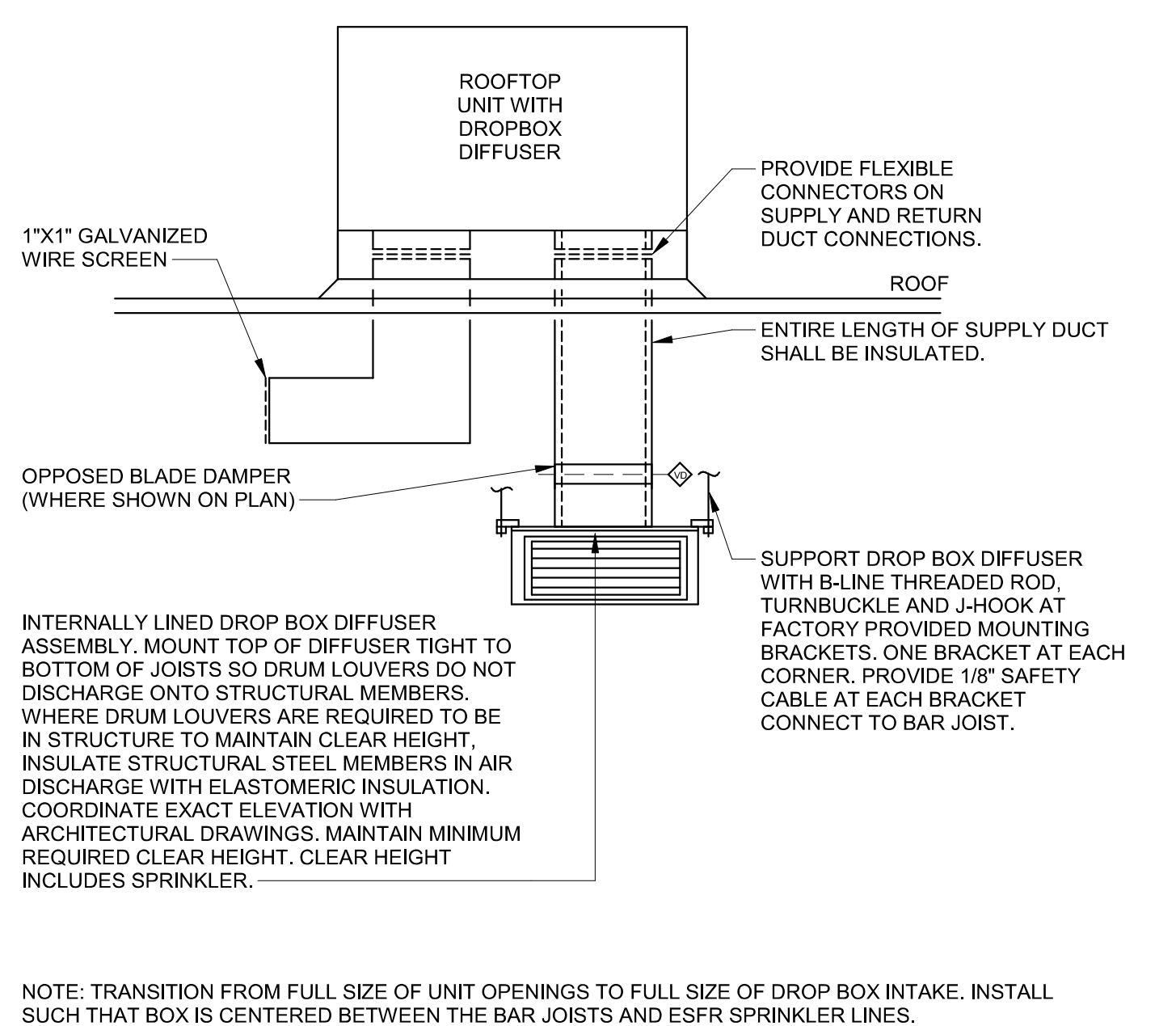


9 DUCT SMOKE DETECTOR AND FIRE ALARM INTERFACE
NOT TO SCALE

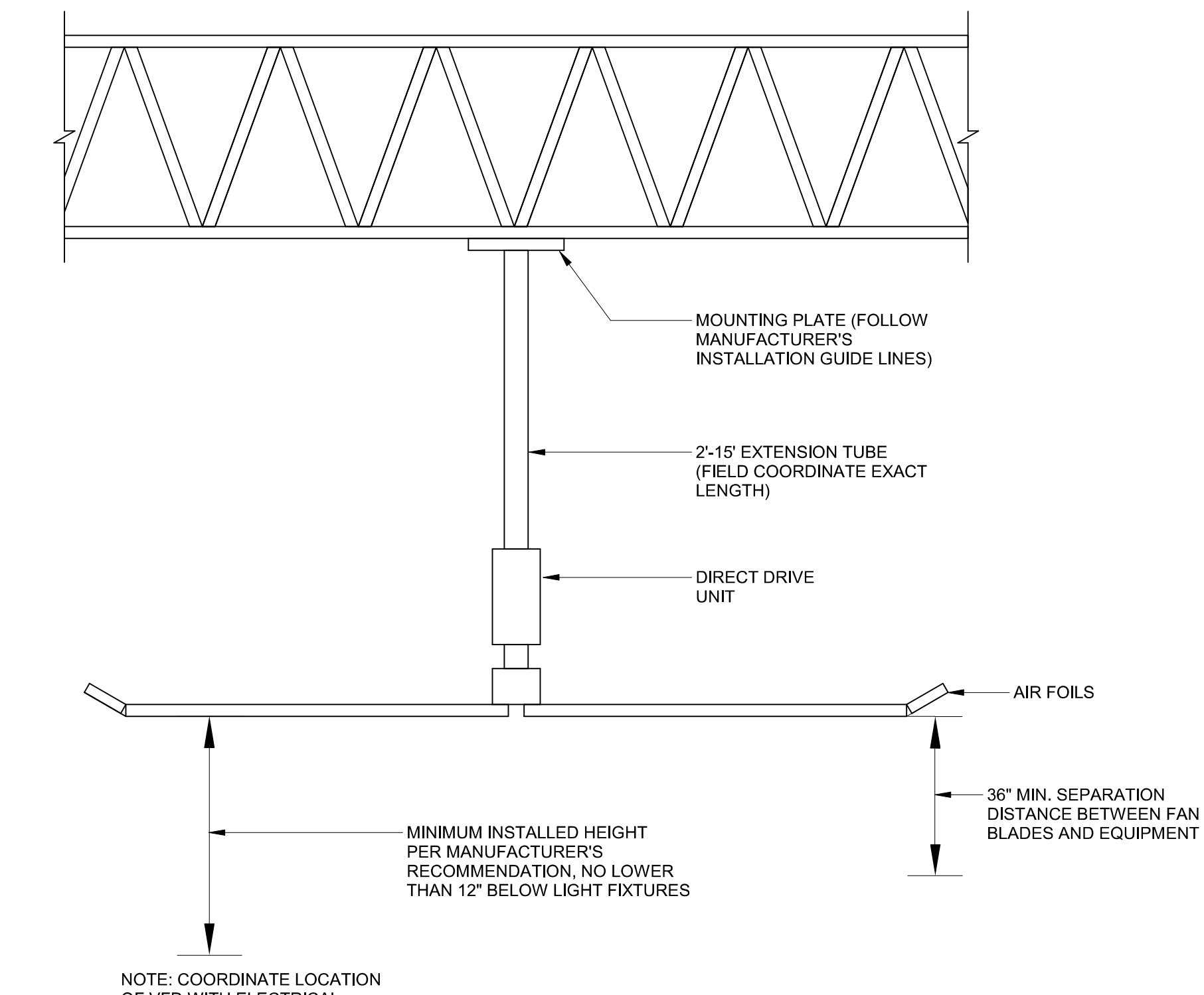


- NOTES:**
1. USE SINGLE ROOF PENETRATION FOR ALL CONTROL WIRING, POWER WIRING, AND REFRIGERANT LINES.
 2. INSULATE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS.

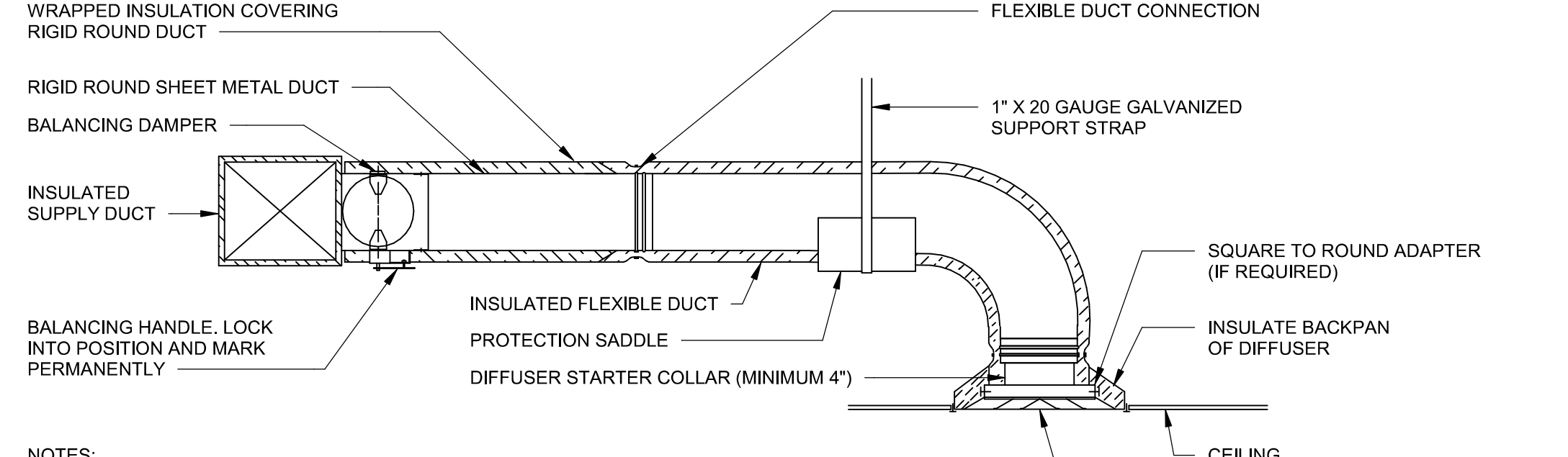
6 PIPE ROOF PENETRATION
NOT TO SCALE



10 DROPBOX DIFFUSER
NOT TO SCALE

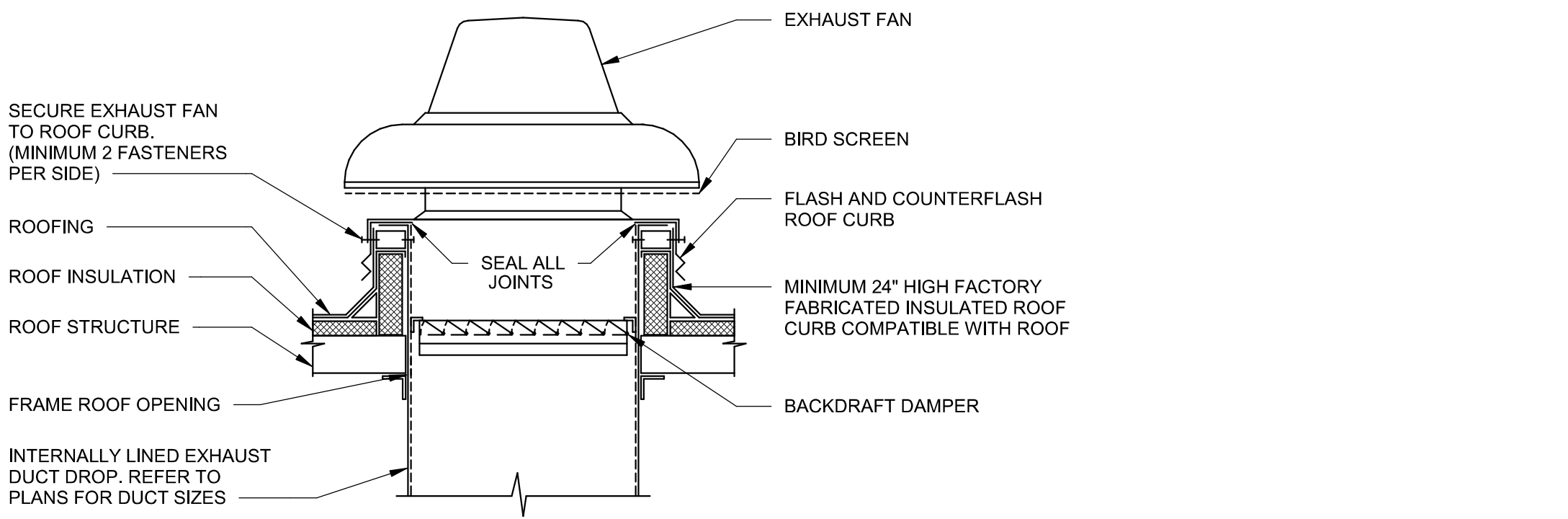


7 HVLS FAN
NOT TO SCALE

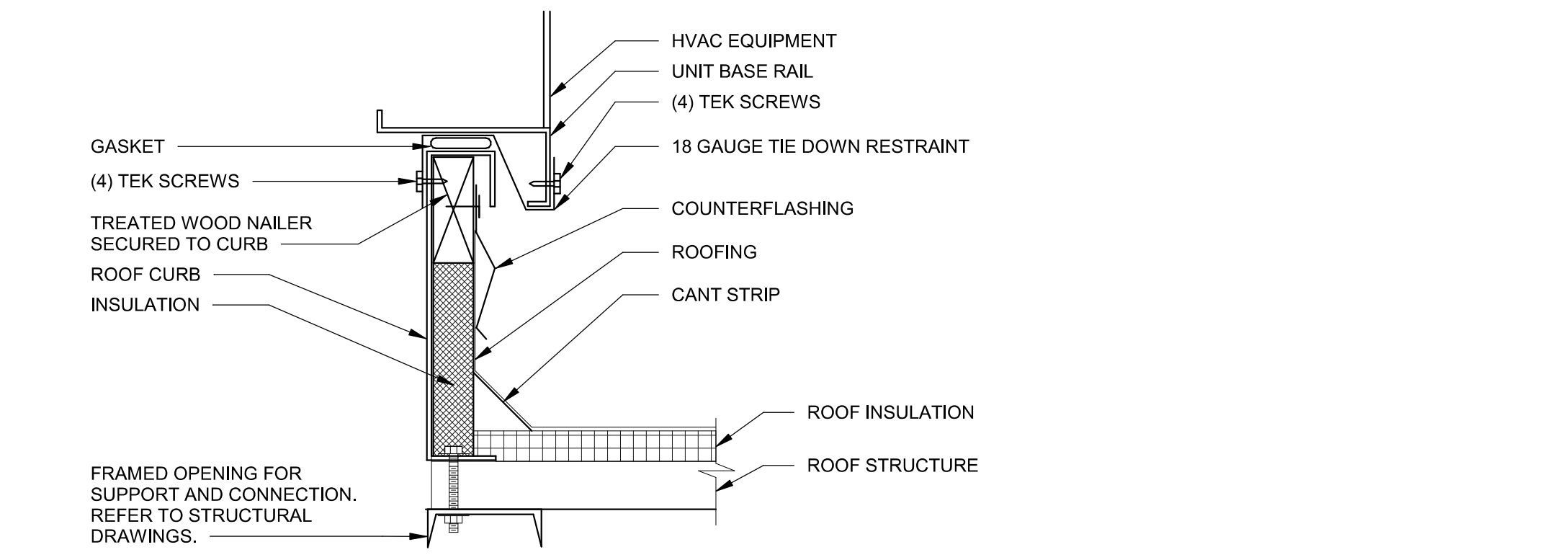


- NOTES:**
1. PROVIDE METAL OR "PANDUIT" DRAW BAND AT FLEXIBLE DUCT CONNECTION ON INTERIOR FLEXIBLE DUCT HELIX. SECURE INSULATION OVER DRAW BAND WITH ADDITIONAL DRAW BAND.
 2. PROVIDE BEADING ON ROUND METAL DUCT 12" OR LARGER IN DIAMETER.
 3. PROVIDE MINIMUM 4" COLLARS FOR ATTACHMENT OF FLEXIBLE DUCT TO ROUND DUCT, DAMPERS, AND DIFFUSERS.
 4. BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

1 DIFFUSER CONNECTION - FLEX DUCT
NOT TO SCALE

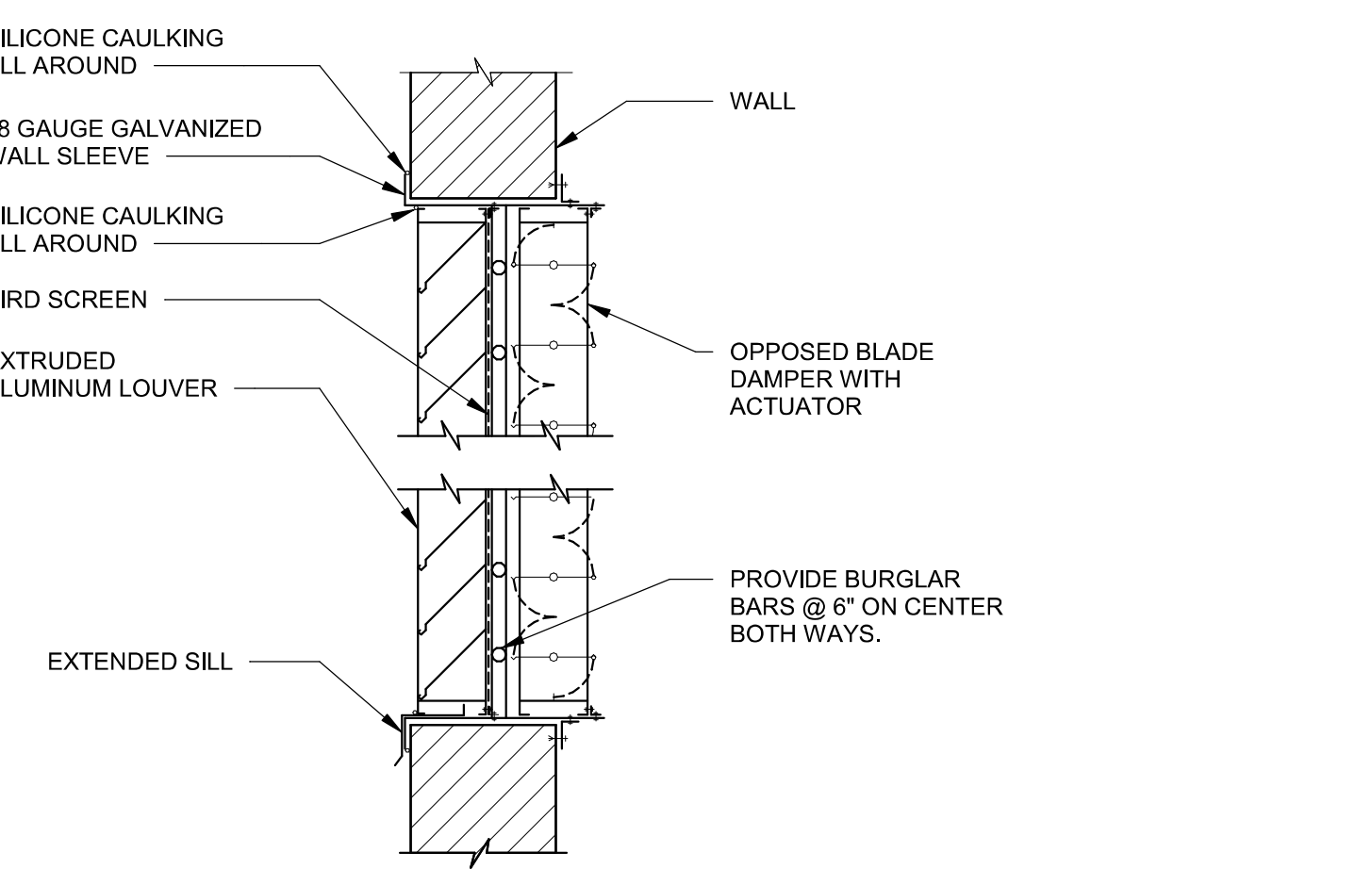


2 EXHAUST FAN
NOT TO SCALE

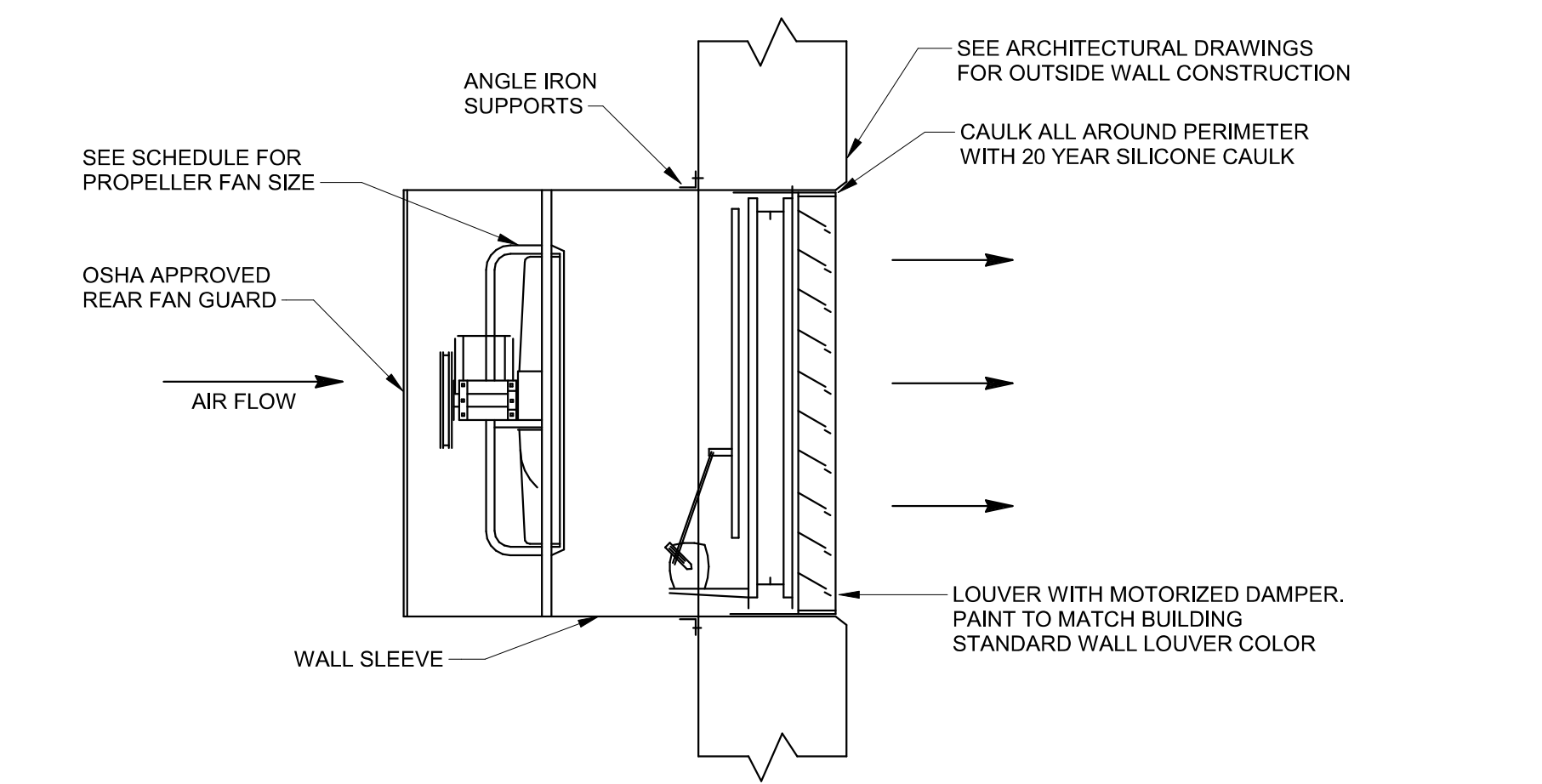


- NOTE:** ROOF EQUIPMENT SHALL BE SET LEVEL AND SIT ON STEEL ANGLES (NOT ON METAL ROOF DECK) COORDINATE ROOF SLOPE WITH ARCHITECTURAL AND PROVIDE SLOPED-BASED ROOF CURB AS REQUIRED FOR LEVEL EQUIPMENT INSTALLATION.
- SUPPORT FRAMING SIZE AND ATTACHMENT TO STRUCTURE/FRAMING SHALL BE AS RECOMMENDED BY CURB MANUFACTURER BASED ON EQUIPMENT SUPPORTED AND PROJECT WIND ZONE CRITERIA. CURB MANUFACTURER SHALL PROVIDE CERTIFIED CALCULATIONS AND ATTACHMENT DETAILS WITH CURB SUBMITTALS.
- RESTRAINT BRACKETS UTILIZED TO SECURE ROOFTOP AIR CONDITIONERS SHALL BE DESIGNED FOR PROJECT WIND SPEEDS. VERIFY REQUIREMENTS WITH STRUCTURAL ENGINEER. STRUCTURAL WIND LOAD CALCULATIONS AND/OR STATE NOTICE OF ACCEPTANCE SHALL BE AVAILABLE FROM THE MANUFACTURER. RESTRAINT BRACKET QUANTITY TO BE DETERMINED BY PROJECT SPECIFIC CALCULATIONS (IF REQUIRED FOR SPECIFIC LOCATION). AT MINIMUM, PROVIDE 4 BRACKETS PER CURB. RESTRAINT BRACKETS SHALL BE ATTACHED TO ROOF CURB WITH (4) #12 TEK SCREWS, AT 2' O.C. RESTRAINT BRACKETS TO BE AES INDUSTRIES MODEL AWS OR EQUAL.

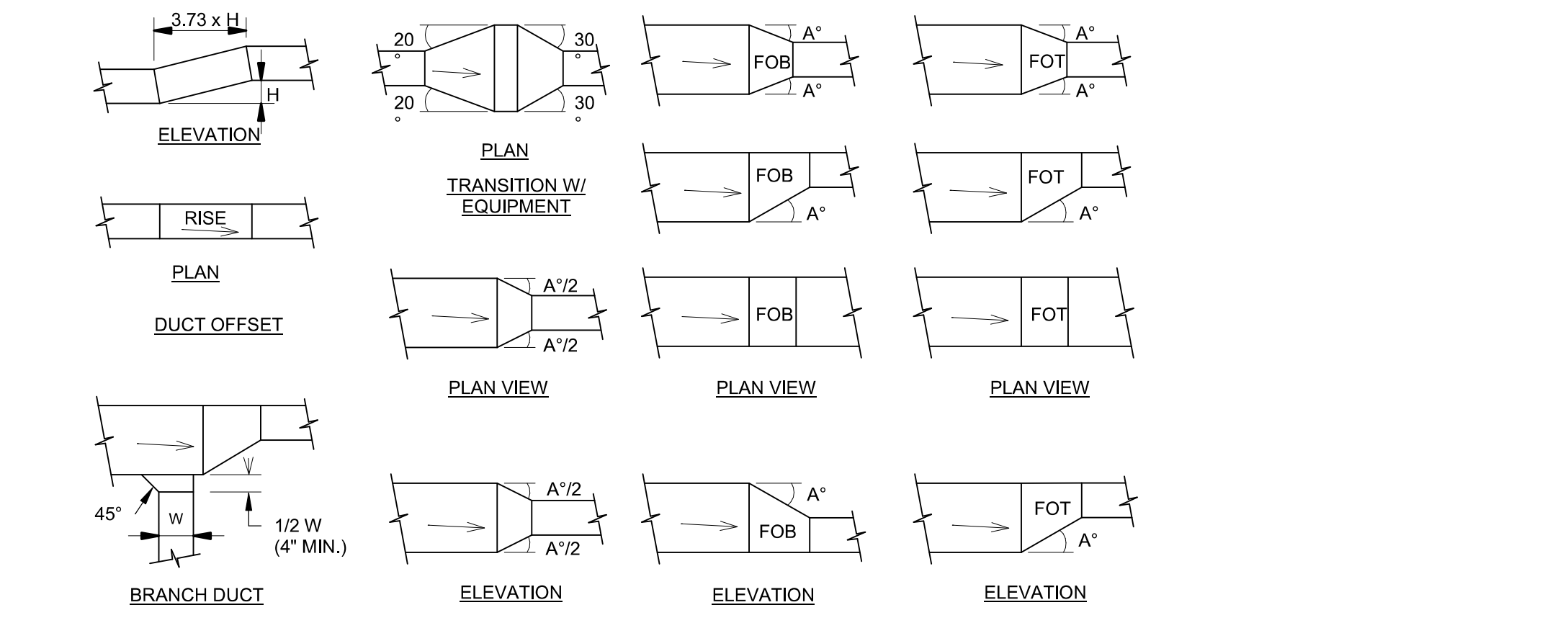
3 ROOFTOP UNIT CURB
NOT TO SCALE



11 LOUVER WITH DAMPER
NOT TO SCALE



8 WALL-MOUNTED FAN W/ MOTORIZED DAMPER
NOT TO SCALE



- NOTES:**
- 1) ANGLE A = 30° WHEN AIR FLOWS IN DIRECTION OF ARROW (SUPPLY AIR).
 - 2) ANGLE A = 20° WHEN AIR FLOWS IN OPPOSITE DIRECTION OF ARROW (RETURN OR EXHAUST).

4 LOW VELOCITY DUCT FITTINGS
NOT TO SCALE

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Table with columns: Applies, Code Section, Code Provision, Compliance Information Required In Permit Documentation, Location in Documents, Building Department Notes. Includes sections for SCOPE, PERFORMANCE CRITERIA & SYSTEM DESIGN, and EQUIPMENT SELECTION & PERFORMANCE.

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Table with columns: YES/NA, Code Section, Description, Verification, and References. Covers HVAC Heating Fuel, Electric heating, and equipment efficiency.

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Table with columns: YES/NA, Code Section, Description, Verification, and References. Includes HVAC Heating Fuel, Electric heating, and equipment efficiency.

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Table with columns: YES/NA, Code Section, Description, Verification, and References. Includes Electric motor efficiency, Gas and oil-fired, and Humidification.

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Table with columns: YES/NA, Code Section, Description, Verification, and References. Includes Dedicated outdoor air systems, DOAS energy recovery, and Fans and fan controls.

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Table with columns: YES/NA, Code Section, Description, Verification, and References. Includes Heating / cooling systems, Decoupled DOAS, Multiple zone DOAS, and Fans and fan controls.

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Table with columns: YES/NA, Code Section, Description, Verification, and References. Includes Fractional hp fan motors, Fan efficiency, and Fan airflow control.

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Table with columns: YES/NA, Code Section, Description, Verification, and References. Includes Improved HVAC TSPR, and Multiple zone DOAS.



Dialectic Engineering logo and contact information: Dialectic, Inc., 310 W 20th Street, Suite 100, Kansas City, MO 64108.

This sheet is part of the construction documents. Drawings, specifications and their sheets apply and need to be reviewed in total. Barriers shown are for diagrams; representation and may not be relied on or used as shop drawings. Provide all modifications required to conform to site conditions, equipment and material used.

Project # - 012024.15.1

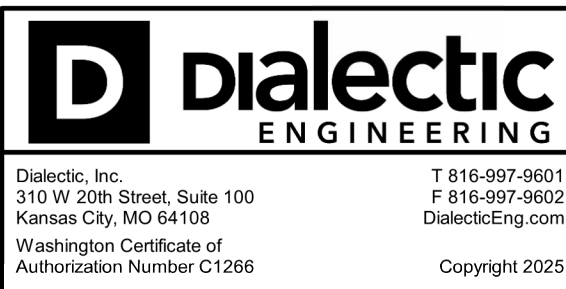
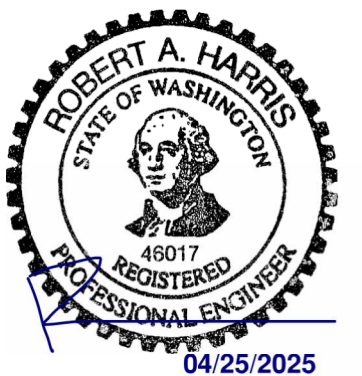
AMBROSE PROPERTY GROUP

PROJECT PENINSULA W. EDGEWOOD DR. & S. CRITCHFIELD RD., PORT ANGELES, WA 98363

Revisions / Submissions table with columns: ID, Description, Date. Shows PERMIT SET dated 04.25.2025.

Project number: 763838-02 Scale: AS NOTED Drawn By: JLM Checked By: CLK Date: 04.25.2025 Issue: PERMIT SET

Sheet Title: MECHANICAL ENERGY FORMS



This sheet is part of the construction documents. Drawings, specifications and other sheets apply and need to be reviewed in total. Items shown are for diagrammatic representation and may not be fielded or used as shop drawings. Provide all modifications required to conform to site conditions, equipment and material used. Verify locations and dimensions of all architectural and structural elements per their respective documents, as these elements are shown only for reference, and require verification prior to fabrication or construction. Engineer has no liability for the accuracy of these associated elements or for any work the engineer has not signed and sealed.
Project #: 012004.15.21

AMBROSE PROPERTY GROUP
PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

Revisions / Submissions
ID Description Date
1 PERMIT SET 04.25.2025

Project number: 763838-02
Scale: AS NOTED
Drawn By: JLM
Checked By: CLK
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
MECHANICAL ENERGY FORMS

M6.02

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Table with 4 columns: ID, Description, Requirements, and Notes. Rows include HVAC equipment heating performance, demand control ventilation design, ventilation, exhaust, and energy recovery controls.

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Table with 4 columns: ID, Description, Requirements, and Notes. Rows include balanced ventilation for Group R-2 occupancy, demand control ventilation, demand control ventilation, occupancy sensors, and ventilation air heating control.

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Table with 4 columns: ID, Description, Requirements, and Notes. Rows include enclosed parking garage ventilation, ventilation/exhaust systems energy recovery, kitchen exhaust hood systems, and laboratory exhaust systems energy recovery.

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Table with 4 columns: ID, Description, Requirements, and Notes. Rows include transfer air, shut-off dampers for building isolation, shut-off dampers for return air, damper actuation, and thermostatic controls.

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Table with 4 columns: ID, Description, Requirements, and Notes. Rows include thermostatic controls, heat pump supplementary heat, deadband, setpoint overlap restriction, heated or cooled vestibules, and heated air curtains.

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Table with 4 columns: ID, Description, Requirements, and Notes. Rows include door switches for HVAC system, automatic setback and shutdown, automatic (optimum) start and stop, exhaust system off-hour controls, transfer and destratification fan systems off-hour controls, combustion heating equipment, and combustion vented appliances.

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Table with 4 columns: ID, Description, Requirements, and Notes. Rows include temperature setpoint controls for Group R-1 guestrooms, ventilation controls for Group R-1 guestrooms, thermostat controls for Group R2/R3 dwelling units, DX air handler variable cooling control, DX air handler variable cooling control, DDC system applications, controls and display, DDC system applications, controls and display, and DDC system applications, controls and display.

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Table with 4 columns: ID, Description, Requirements, and Notes. Rows include DDC system applications, controls and display, DDC demand response setpoint adjustment, demand responsive controls, HVAC System Fault detection and diagnostics, and HVAC load management.

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NA	C406.3.2	HVAC load management	Indicate electric cooling controls configured to gradually increase the cooling setpoint by at least 3°F over 3 hours during summer peak periods; indicate electric heating controls configured to gradually decrease the heating setpoint by at least 3°F over 3 hours during winter peak periods
DUCTWORK, SHAFTS AND PLENUMS			
YES	C403.10.1.1 C403.10.2	Duct construction	Indicate on plans that all ductwork is constructed and sealed per IMC
YES	C403.10.1.1 C403.10.2	Duct construction	For outdoor air ductwork, also indicate on plans that ductwork meets air leakage requirements per C403.2 and vapor retarder requirements per the IRC
YES	C403.10.2.1 C403.10.2.2 C403.10.2.3	Duct pressure classifications	Identify location of low, medium and high pressure ductwork on plans
YES	C403.10.2.3	High pressure duct leakage test	Indicate high pressure duct leakage testing requirements on plans; provide test results to jurisdiction when completed
YES	C403.10.1.1 C403.10.1.2	Duct insulation	For outdoor air ductwork located within conditioned space (upstream or downstream of shaft/dampers), identify climate zone, duct airflow, and indicate ductwork insulation R-value per Table C403.10.1.1 on plans, or exception applied
YES	C403.10.1.1 C403.10.1.2	Duct insulation	For supply and return air ductwork located within unconditioned space or outdoors, identify climate zone and indicate ductwork insulation R-value per Table C403.10.1.2 on plans, or exception applied
YES	C403.10.1.1 C403.10.1.2	Duct insulation	For supply air ductwork located within conditioned space, identify on plans if design supply air temperature is ≤ 55°F or ≥ 103°F; indicate ductwork insulation R-value per Table C403.10.1.2 on plans, or exception applied
YES	C403.10.1.1 C403.10.1.2	Duct insulation	For return and exhaust air ductwork located within conditioned space (upstream of the shaft/d damper) and downstream of an energy recovery media, indicate ductwork insulation R-value per Table C403.10.1.2, or exception applied
YES	C403.10.1.1 C403.10.1.2	Duct insulation	For exhaust and relief air ductwork located within conditioned space and downstream of the shaft/d damper, indicate ductwork insulation R-value per Table C403.10.1.2, or exception applied
NA	C403.10.1.1 C402.1.3	Shaft and plenum insulation	For outdoor air shafts and plenums, indicate on plans that the R-value of insulation on these elements complies with Table C402.1.3 for steel-framed walls

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PIPING			
NA	C403.10.3	Piping insulation	Indicate design temperature range of fluid conveyed in piping and thickness of insulation (in inches) on hydronic piping plans or exception applied
NA	C403.10.3.1	Protection of piping insulation	Indicate method of protection of pipe insulation from damage / degradation on hydronic piping plans
YES	C403.10.4	HVAC refrigerant piping insulation	Indicate refrigerant piping insulation to be installed on all hot gas lines and on some liquid lines per C403.10.4; indicate insulation conductivity ≤ 0.26 Btu·in/h·ft ² ·°F
ECONOMIZERS			
YES	C403.5	Air economizer required	Identify all cooling systems requiring air economizer controls in equipment schedules on plans and in WSEC mechanical equipment compliance reports
YES	C403.5	Air economizer exceptions	Indicate all systems utilizing air economizer exceptions in WSEC mechanical equipment compliance report, including those with water-side economizer in lieu of air economizer; indicate on plans and in WSEC mechanical equipment compliance reports all eligible exceptions taken and measures to comply with exceptions
YES	C403.4.1 C403.5.1	Integrated economizer operation - air and water	Indicate air and water-side economizers are configured for partial cooling operation even where additional mechanical cooling is required to meet the load
YES	C403.4.1 C403.5.1	Integrated economizer operation - air and water	For DX air handlers with single or multiple stages of mechanical cooling; indicate controls are configured with air economizer as the first stage of cooling
YES	C403.4.1 C403.5.1	Integrated economizer operation - air and water	Refer to Requirements List section HVAC Control for additional requirements for DX air handlers
YES	C403.5.2	Economizer heating system impact - air and water	Verify control method of HVAC systems with economizers does not increase building heating energy usage during normal operation
YES	C403.5.3.1	Air economizer capacity	Indicate modulating outdoor air and return air dampers are configured to provide up to 100% outdoor air for cooling
YES	C403.5.1 C403.5.3.2	Air economizer controls and integrated operation	Indicate that economizer controls are configured to provide partial economizer cooling when additional mechanical cooling is also required to meet the cooling load
YES	C403.5.1 C403.5.3.2	Air economizer controls and integrated operation	Indicate that control of economizer dampers is not based only on mixed air temperature; or exception applied for systems with cooling capacity ≤ 65,000 Btu/h

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YES	C403.5.3.3	Air economizer high limit controls	Indicate high limit shut-off control method and required high limit per Table C403.5.3.3
YES	C403.5.3.4	Relief of excess outdoor air	Refer to Requirements List section Ventilation, Exhaust & Energy Recovery
YES	C403.5.3.4	Relief of excess outdoor air	Indicate relief air outlets are sized and configured to relieve excess building air during air economizer operation to prevent building over-pressurization
YES	C403.5.3.4	Relief of excess outdoor air	Indicate relief air outlet are located to avoid recirculation into the building
NA	C403.5.4.1	Water economizer capacity	For eligible systems where water-side economizer may be provided in lieu of air economizer, indicate system is capable of 100% design cooling capacity at 50°F db / 45°F wb outdoor air temperatures; indicate if threshold for 100% design cooling capacity via economizer must be lowered to 45°F db / 40°F wb due to dehumidification requirements
NA	C403.5.4.2	Water economizer maximum pressure drop	Indicate that the pressure drop across pre-cooling coils does not exceed 15 feet (4572 mm)
YES	C403.5.5	DX equipment economizer fault detection and diagnostics	For DX air handlers with economizer and cooling capacity ≥ 54,000 Btu/h, provide a fault detection and diagnostics (FDD) system to monitor economizer system operation and report faults

HYDRONIC SYSTEMS - EQUIPMENT SELECTION & PERFORMANCE

NA	C403.3.2.3	Maximum air cooled chiller capacity	For chilled water plants and buildings with > 500 tons of cooling capacity; indicate air-cooled chiller capacity is ≤ 100 tons, or exception applied
NA	C403.3.2.2	Large capacity cooling systems	For buildings > 300 tons of cooling capacity, indicate method of multi-stage or variable capacity control (VSD), multiple staged compressors, or max capacity of any single unit
NA	C403.3.2.4	Non-standard water-cooled centrifugal chillers	For water-cooled centrifugal chillers not designed for operation at standard conditions, provide calculations documenting maximum full load and part load rated equipment performance requirements
NA	C403.3.3	Hot gas bypass limitation for chillers	For cooling equipment with hot gas bypass, provide either multiple step-unloading or continuous capacity modulation; indicate bypass capacity per Table C403.3.3
NA	C403.3.4 C403.3.4.4	Large capacity boiler systems	For hydronic systems with only a single boiler that has > 500,000 Btu/h input capacity, indicate multi-stage or modulating burner

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NA	C403.4.3 C403.3.4.4	Large capacity boiler systems	For boiler system (single or multiple) with > 1,000,000 Btu/h input capacity, indicate shutdown ratio per Table C403.3.4.4 and method (multiple single input boilers, modulating boilers, or combination)
NA	C403.3.4.1	Large capacity boiler systems	For all boiler systems with input capacity ≥ 2,500,000 Btu/h and all systems where one stack serves 2 or more boilers with a combined input capacity ≥ 2,500,000 Btu/h, indicate combustion air positive shut-off is provided to restrict airflow through the combustion chamber during standby (e.g. the or vent damper).
NA	C403.3.4.2	Large capacity boiler systems	For boiler systems with combustion air fans ≥ 10 hp, indicate variable speed fan
NA	C403.3.4.3	Large capacity boiler systems	For boiler systems with input capacity ≥ 3,000,000 and a steady state full-load combustion efficiency < 90 percent, indicate combustion air volume to be automatically controlled to limit stack gas oxygen concentrations specified in Table C403.3.4.3. List exception if it applies.
NA	C403.3.4.5 C403.3.4.5.1 C403.3.4.5.2	High capacity space heating gas boiler system (new buildings)	For gas hot water space heating systems with ≥ 1,000,000 Btu/h and ≤ 10,000,000 Btu/h capacity, indicate boiler thermal efficiency ≥ 90 percent; coils and heat exchangers sized at design conditions to have a boiler return water temperature ≤ 120°F values and controls to ensure under all operating conditions the water temperature entering the boiler is ≤ 120°F or the supply water recirculating directly into the return system is ≤ 20 percent of design flow of the operating boilers.
NA	C403.2.4	Variable flow capacity - pumps	For pump motors ≥ 5 hp, indicate method of variable flow control (VSD or equivalent method) in equipment schedule, or exception applied
NA	C403.3.7	Hydronic system flow rate	Indicate chilled water and condenser water flow types and operating hours, and maximum flow rates in less than or equal to Table C403.3.7
NA	C403.3.8.1	Chilled-water coil selection	Indicate chilled-water coils sized to provide a 15°F difference between leaving and entering water temperature and a minimum 57°F leaving water temperature at design conditions, or exception applied
NA	C403.3.8.2	Hot-water coil selection	Indicate hot-water coils sized to provide a 20°F difference between leaving and entering water temperature and a maximum 118°F entering water temperature at design conditions, or exception applied

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NA	C403.4.12	Pressure independent control valves	For heating and cooling water coils with a design flow ≥ 5 gpm, indicate modulating pressure independent control valves are provided
HYDRONIC SYSTEMS - CONTROLS			
NA	C403.4.3	Boiler sequencing	Indicate automatic controls that sequence operation of multiple boilers
NA	C403.4.3.2	Two-pipe chnageover systems	Indicate changeover deadband is ≥ 15°F outdoor air temperature; indicate controls are configured so that heating / cooling mode is active for at minimum 4 hours before changeover and that the delta between heating / cooling supply temperatures at changeover point is
NA	C403.4.1.5	Heating water temperature setback	For hot water boilers that provide building heating via one- or two-pipe systems, indicate controls that provide heating water temperature setback based on outdoor temperature
NA	C403.4.4	Hydronic system part load controls and supply water temperature reset	For heating and chilled water systems with ≥ 300,000 Btu/h output capacity, indicate system controls are configured to automatically reset supply water temperature based upon demand, or exception applied
NA	C403.4.4	Hydronic system part load controls and supply water temperature reset	Indicate automatic pump flow controls are configured to reduce system flow rate by ≥ 50%, or the maximum allowed by the equipment manufacturer, based upon the heating or cooling loads; or describe why not required
NA	C403.4.4	Hydronic system part load controls and supply water temperature reset	For hydronic systems with output capacity ≥ 300,000 Btu/h that serve heating water systems, chilled water systems and water-cooled unitary air conditioners, indicate that pumps are provided with a variable speed drive if one of the following conditions apply: 1) System pump motor hp is ≥ 2 hp and pumps are designed to operate continuously or per time schedule; 2) System pump motor hp is ≥ 7.5 hp and pumps are controlled by automatic DDC configured to only operate pumps when there is a call for zone heating or cooling
NA	C403.4.4	Hydronic system part load controls and supply water temperature reset	Where variable speed drives are required, indicate system is configured so that pump motor power is ≤ 30% of design wattage at 50% of design flow rate; indicate pump flow is controlled to maintain one control valve nearly wide open, or to maintain a minimum differential pressure; or exception applied

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NA	C403.4.6	Hydronic system variable pump flow control	For individual pumps required to have variable speed controls, indicate number of pump speed control differential pressure, static pressure setpoint, zone heating or cooling demand, or based on the relationship between variable speed controller (frequency and power)
NA	C403.4.5	Chiller / boiler plant pump isolation	Indicate controls are configured to automatically reduce overall plant flow and shut-off flow through individual chillers and boilers when not in use
NA	C403.4.3.3.1	Water loop heat pump - temperature deadband	Indicate method of water loop temperature control (central plant equipment controls are configured to provide ≥ 20°F water supply temperature deadband between heat rejection and heat addition modes, or controls are configured for system loop temperature optimization)
NA	C403.4.3.3.2	Water loop heat pump - heat rejection equipment	Indicate type of cooling tower (open- or closed-circuit) in equipment schedule; indicate whether the cooling tower is used directly in the heat pump loop or in conjunction with a separate heat exchanger; indicate method used to limit system heat loss when heat rejection is not needed
NA	C403.4.3.3.3	Water loop heat pump - isolation valves	For hydronic heat pump systems with total system power > 10 hp, indicate 2-way isolation valves on each heat pump and variable flow system control
HEAT REJECTION SYSTEMS - EQUIPMENT SELECTION & PERFORMANCE			
NA	C403.9.1.3	Centrifugal fan open-circuit cooling towers	For open-circuit centrifugal fan cooling towers with ≥ 1,100 gpm capacity, indicate cooling towers comply with efficiency requirements for actual fan open-circuit cooling towers
HEAT REJECTION & RECOVERY - CONTROLS			
NA	C403.9.1.1 C403.9.1.2	Fan speed control	For each fan powered by an individual motor or array of motors, with total connected fan power ≥ 5 hp (including motor service factor), indicate method of automatic fan speed control (adjusted based on leaving fluid temperature or condenser temperature / pressure of heat rejection device); verify fan selection provides ≤ 30% design wattage at 50% design airflow
NA	C403.9.1.1 C403.9.1.2	Fan speed control	For multiple-cell heat rejection equipment with VSD, indicate controls are configured to ramp all fans in unison (not staged on / off operation)

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NA	C403.9.1.4	Cooling tower flow shutdown	For open-circuit cooling towers configured with multiple- or variable-speed condenser water pumps, indicate system is designed so all cells can be run in parallel; indicate method of condenser pump run-down control
NA	C403.9.2.1	Heat recovery for service water heating	For buildings with 24-hour operation and ≥ 1,500,000 Btu/h of heat rejection capacity and design service hot water load ≥ 250,000 Btu/h, indicate condenser heat recovery to pre-heat service water or pre-heat service water. Provide calculations showing the amount of recovered heat that is utilized (60% of peak heat rejection load or pre-heat service water to 85°F).
NA	C403.9.2.2	Steam condensate systems heat recovery	For buildings with on-site steam heating systems, indicate condensate water heat recovery and use of recovered heat
NA	C403.9.2.2	Steam condensate systems heat recovery	For buildings that use off-site generated steam where condensate is not returned to the source, indicate on-site condensate water heat recovery
NA	C403.9.2.3	Refrigeration condenser heat recovery	For buildings with food service, meat or deli departments that have ≥ 500,000 Btu/h of remote refrigeration capacity for coolers / freezers, indicate condenser heat recovery and use of captured energy (service water heating, space heating, or dehumidification reheating)
NA	C403.9.2.3	Refrigeration condenser heat recovery	For buildings with ≥ 40,000 ft of conditioned floor area and ≥ 1,000,000 Btu/h of remote refrigeration capacity, indicate condenser heat recovery to pre-heat service water; indicate remaining recovered heat is applied to space heating or dehumidification reheating
NA	C403.9.2.4	Condenser heat recovery for space heating	For buildings that operate > 70-hour per week, that are not served by a DOAS with energy recovery, and have > 1,500,000 Btu/h of heat rejection capacity and ≥ 0.45 cfm per sq ft of design minimum supply airflow with reheat, indicate condenser heat recovery is provided for space heating that complies with Sections C403.9.2.4.1 or C403.9.2.4.2 or C403.9.2.4.4
NA	C403.9.2.4.1 C403.9.2.4.4	Water to water heat recovery	Indicate that 90% or more of the total building space heating and ventilation air design loads are served by heat energy rejected from either a heat recovery chiller or the cooling loop of a water-to-water heat pump equipment
NA	C403.9.2.4.2	Exhaust heat recovery	Indicate that waste heat is recovered from least 90% of the total building exhaust airflow such that heating exhaust air temperature while in heat recovery mode is 55°F dry bulb, note exhaust air systems eligible for exception to this requirement

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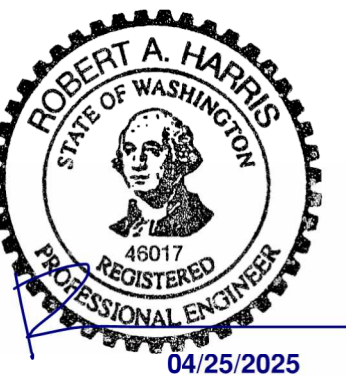
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NA	C403.9.2.4.3	Process heat recovery	In spaces with 5 watts per sq ft of annual cooling loads from lights and equipment, indicate these spaces are served by water-cooled equipment configured for heat recovery
NA	C403.9.2.4.3	Process heat recovery	If these spaces are served by economizer (air or water), indicate automatic controls are configured to disable economizer operation while system is in heat recovery mode
ADDITIONAL ENERGY EFFICIENCY MEASURE - IMPROVED LOW CARBON DISTRICT ENERGY SYSTEMS (10%)			
NA	C406.2.2.4	Improved low-carbon district energy systems (10 percent better)	Provide calculations showing 90% or more of the annual service water and space heat energy use or 90% or more of the annual service water heat, space heat and space cooling energy use is met by a district energy exchange system complying with C406.2.2.4.1 or a district energy heating and/or cooling system complying with C406.2.2.4.2; provide documentation the system is operational and is in accordance with this section prior to the final inspection.
NA	C406.2.2.4.1	Improved low-carbon district energy systems (10 percent better)	Provide calculations and documentation that 45% of the annual district-system-net-load-net (sum of heating and cooling energy provided to attached buildings) comes from heat recovery between connected buildings, waste heat, or renewable energy resources; and more than 25% of the annual heat input to the system comes from fossil fuel or electric-resistance sources.
NA	C406.2.2.4.2	Improved low-carbon district energy heating and cooling or heating only systems (10 percent better)	Provide calculations and documentation that distribution losses are less than or equal to 5% of the annual load delivered to buildings served by the system; and that the system complies with one of the following: 1) 45% of the annual district-system-net-load-net (sum of heating and cooling energy provided to attached buildings) comes from heat recovery between connected buildings, waste heat, or renewable energy resources and no more than 25% of the annual heat input to the system comes from fossil fuel or electric-resistance sources, or 2) 10% or less of the system annual heat input to the system comes from fossil fuels, electric-resistance sources, or heat pump sources with an annual COP < 3
ADDITIONAL ENERGY EFFICIENCY MEASURE - IMPROVED LOW CARBON DISTRICT ENERGY SYSTEMS (20%)			

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Washington Certificate of Authorization Number: CT786
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Project #: 012004.15.1

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD., PORT ANGELES, WA 98163

Revisions / Submissions
ID Description Date
PERMIT SET 04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: JLM
Checked By: CLK
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:

MECHANICAL ENERGY FORMS

M6.03

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NA	C406.2.2.5	Improved low-carbon district energy systems (20 percent better).	Provide calculations showing 90% or more of the annual service water and space heat energy use or 90% or more of the annual service water heat, space heat and space cooling energy use is met by a district energy exchange system complying with C406.2.2.4.1 or a district energy heating and/or cooling system complying with C406.2.2.4.2; provide documentation the system is operational and is in accordance with this section prior to the final inspection.
NA	C406.2.2.5.1	Improved low-carbon district energy exchange systems (20 percent better)	Provide calculations and documentation that 90% of the annual district-system-net-load-net (sum of heating and cooling energy provided to attached buildings) comes from heat recovery between connected buildings, waste heat, or renewable energy resources; and no more than 10% of the annual heat input to the system comes from fossil fuel or electric-resistance sources.
NA	C406.2.2.5.2	Improved low-carbon district energy heating and cooling or heating-only systems (20 percent better)	Provide calculations and documentation that distribution losses are less than or equal to 5% of the annual load delivered to buildings served by the system; and that the system complies with one of the following: 1) 50% of the annual district-system-net-load-net (sum of heating and cooling energy provided to attached buildings) comes from heat recovery between connected buildings, waste heat, or renewable energy resources and no more than 25% of the annual heat input to the system comes from fossil fuel or electric-resistance sources, or 2) 10% or less of the system annual heat input to the system comes from fossil fuel, electric-resistance sources, or heat pump sources with an annual COP \geq 4
LOAD MANAGEMENT MEASURE - COOLING ENERGY STORAGE			
NA	C406.3.5	Cooling energy storage	To comply with this additional efficiency credit, indicate automatic controls connected to central DDC having digital input capable of being activated by external utility signal; where utility real-time demand or pricing program exists indicate system configured to utilize this signal; otherwise indicate building demand monitoring installed and controls configured to utilize demand signals
NA	C406.3.5	Cooling energy storage	Provide calculation of ice or chilled water storage capacity with standby loss \leq 1.5% per day; indicate automatic controls to activate storage to reduce peak period electric demand; provide calculation of storage capacity
MULTIPLE ZONE AIR SYSTEMS			

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NA	C403.6.1	Air systems serving multiple zones	Identify supply air systems serving multiple zones and the zones they serve on plans; indicate whether system is VAV and method of primary air control; or provide supporting documentation for applied exception to VAV
NA	C403.6.1	VAV air terminal primary supply airflow	Provide equipment schedules on plans that list all VAV air terminals and types (fan-powered series and parallel air terminals, single duct and dual duct air terminals, etc.)
NA	C403.6.1	VAV air terminal primary supply airflow	For each air terminal include: maximum primary supply airflow rates during zone peak heating and zone peak cooling; maximum terminal airflow during reheating, recirculating or mixing; minimum ventilation airflow rate; and the basis for these values; if DDC or ASHRAE 62.1 multiple zone equation is the basis for minimum flow rates, provide this calculation on plans
NA	C403.6.2	Single duct VAV terminal units	Indicate single duct terminal units are configured to reduce primary supply air before reheating or recirculating
NA	C403.6.3	Dual duct systems-terminal units	For systems with separate warm air and cool air ducts, indicate terminal units are configured to reduce the flow from one duct to minimum before mixing with air from the other duct
NA	C403.6.8	VAV system static pressure sensors and DDC set points	Indicate locations of duct static pressure sensors on plans; include at least one sensor per major duct; verify control sequence that increases or reduces outdoor air cfm based on VAV terminal feedback of ventilation efficiency (per C403.6.5 without exceptions) or DDC (per C403.7.1)
NA	C403.6.8	VAV system static pressure sensors and DDC set points	For systems with zone level DDC, indicate controls are configured to monitor zone damper position and reset static pressure setpoint based on the zone requiring most pressure; include control logic that automatically detects and generates an alarm if any zone excessively drives reset logic, and allows building operators to exclude zones from reset logic
NA	C403.6.4	VAV system supply air reset	Indicate controls automatically reset supply air temperature in response to building loads or outdoor air temperature; or exception applied
NA	C403.6.4	VAV system supply air reset	Indicate zones expected to experience relatively constant loads and that maximum air flow is designed to deliver peak capacity at the fully reset supply air temperature.
NA	C403.6.5	Multiple-zone VAV system ventilation optimization controls	For systems with zone level DDC controls, indicate controls are configured to automatically reduce outdoor airflow in response to changes in system ventilation efficiency; or exception applied

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NA	C403.6.6	Parallel fan powered VAV air terminals	Indicate controls automatically activate or shut off the air terminal fan based on call for heating and / or ventilation; indicate controls are configured to activate the terminal fan as the first stage of heating prior to activating the heating coil; indicate control method of primary air during warmup or temperature setback mode.
HIGH EFFICIENCY MULTIPLE-ZONE VAV SYSTEMS - EXCEPTION TO C403.6 DOAS, MUST COMPLY WITH ALL 15 PROVISIONS TO BE ELIGIBLE			
NA	C403.6.10, Item 1	Minimum area served and zoning	Indicate that each high efficiency multiple zone VAV system serves an area \geq 3,000 ft^2 and includes \geq 5 zones
NA	C403.6.10, Item 2	Air economizer	Indicate system is configured for 100% air economizer operation and complies with all related economizer requirements per C403.5 (without economizer exceptions)
NA	C403.6.10, Item 3	Direct digital controls (DDC)	Provide DDC controls for all components of system per C403.4.1.1 (regardless of system size); identify all DDC system input / output control points; indicate capability for trending and graphical display
NA	C403.6.10, Items 4 and 5	Supply and outdoor airflow measurement and control	For systems with minimum required outdoor air $>$ 2,500 cfm, provide an airflow monitoring station that is configured to measure outdoor air intake under all load conditions; indicate control sequence that increases or reduces outdoor air cfm based on VAV terminal feedback of ventilation efficiency (per C403.6.5 without exceptions) or DDC (per C403.7.1)
NA	C403.6.10, Items 4 and 5	Supply and outdoor airflow measurement and control	Provide a supply airflow monitoring station that is configured to measure supply air delivered to VAV terminals under all load conditions
NA	C403.6.10I, Item 6	Zone area isolation	Verify maximum area served by a single VAV system is \leq 50,000 ft^2 , or one entire floor, whichever is greater; in addition if a system serves $>$ 25,000 ft^2 , that includes areas that are expected to be occupied non-simultaneously, indicate zone isolation controls per C403.2.1
NA	C403.6.10, Item 7	Interior / exterior zone design supply air temperature	Verify that VAV terminals serving interior cooling driven loads are sized per a design supply air temperature that is 5°F higher than VAV terminals serving exterior zones while in cooling mode
NA	C403.6.10, Item 8	Maximum air terminal inlet velocity	Identify all air terminals with minimum primary airflow velocities $>$ 50% of maximum setpoint in mechanical equipment schedule for these air terminals indicate inlet velocity does not exceed 900 fpm

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NA	C403.6.10, Item 9	Central plant efficiency	If complying via high efficiency heating water plant: indicate all VAV terminals have hydronic heating coils served by a heating water system with either gas-fired boilers with thermal efficiency (E) \geq 92%; air-to-water heat pumps, or heat recovery chillers; indicate hydronic heating coils are sized per a maximum L20F entering water temperature during peak demand
NA	C403.6.10, Item 15	Central plant efficiency	If complying via high efficiency chilled water plant: indicate all VAV air handlers have cooling coils served by chillers with rated IPLV efficiency that exceeds WSEC listed IPLV by at least 25% (see Table C403.3.2/7) (note water-cooled IPLV is max, all others are min); indicate smallest chiller or compressor in plant is \leq 20% of the total plant capacity, or provide thermal storage sized for \geq 20% of total plant capacity
NA	C403.6.10, Item 16	Fault detection and diagnostics	Indicate DDC system includes automatic fault detection and diagnostics (FDD) configured to monitor operation and provide fault reporting of all required parameters for all VAV air handlers and VAV air terminal units in the HPVAV system
HIGH EFFICIENCY SINGLE-ZONE VAV SYSTEMS - EXCEPTION TO C403.5 DOAS, MUST COMPLY WITH ALL 8 PROVISIONS TO BE ELIGIBLE			
NA	C403.12, Item 1	Air economizer	Indicate system is configured for 100% air economizer operation and complies with all related economizer requirements per C403.5 (without economizer exceptions)
NA	C403.12, Item 2	Direct digital controls (DDC)	Provide DDC controls for all components of system per C403.4.1.1 (regardless of system size); identify all DDC system input / output control points; indicate capability for trending and graphical display
NA	C403.12, Item 3	Outdoor airflow measurement and control	For systems with minimum required outdoor air \geq 1,000 cfm, provide an airflow monitoring station that is configured to measure outdoor air intake under all load conditions; indicate controls that adjust outdoor air cfm via DCV per C403.7.1
NA	C403.12, Item 4	Maximum allowable fan power	For each fan system serving a single zone VAV system, provide calculations that verify fan system electrical input power is \leq 90% of the fan power budget in accordance with C403.8.1.1
NA	C403.12, Item 5	Supply airflow control	Provide controls that adjust supply airflow based on the heating and cooling loads; indicate control sequence that limits minimum fan speed to 30% of peak design airflow or required ventilation during unoccupied mode, whichever is less

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NA	C403.12, Item 6	Controls for high occupant density spaces	For zones $>$ 150 ft^2 with high occupant density (\geq 25 people / 1000 ft^2), indicate DDC control that resets ventilation setpoint based on measured CO_2 ; also indicate occupancy sensor control that automatically reduces minimum ventilation to zero and sets back room heating and cooling setpoints by $\geq 5^\circ\text{F}$ when space is unoccupied
NA	C403.12, Item 7	High efficiency system option	Indicate which system performance option is applied: high efficiency DX cooling and heat pump or high efficiency gas heating or heating coils served by a high efficiency heating water plant; or cooling coils served by high efficiency chilled water plant
NA	C403.12, Item 7	High efficiency system option	If complying via high efficiency DX: indicate full load and part load rated cooling efficiency exceeds WSEC listed efficiency by at least 15%; if heating is supplied by a gas-fired furnace, indicate thermal efficiency (E) is \geq 90%; if system is a heat pump, indicate heating efficiency (HSPF or COP) exceeds WSEC listed efficiency by at least 10%; control of cooling and heating coil output shall be configured with a minimum of 2-stage or modulating
NA	C403.12, Item 7	High efficiency system option	If complying via high efficiency heating water plant: indicate hydronic heating coils are served by a heating water system with either gas-fired boilers with thermal efficiency (E) \geq 92%; air-to-water heat pumps, or heat recovery chillers; indicate hydronic heating coils are sized per a maximum L20F entering water temperature during peak demand
NA	C403.12, Item 7	High efficiency system option	If complying via high efficiency chilled water plant: indicate cooling coils are served by chillers with rated IPLV efficiency that exceeds WSEC listed IPLV by at least 25% (see Table C403.3.2/7) (note water-cooled IPLV is max, all others are min); indicate smallest chiller or compressor in plant is \leq 20% of the total plant capacity, or provide thermal storage sized for \geq 20% of total plant capacity
NA	C403.12, Item 8	Fault detection and diagnostics	Indicate DDC system includes automatic fault detection and diagnostics (FDD) configured to monitor operation and provide fault reporting of all required parameters for all HPVAV single-zone air systems
EXTERIOR HEATING SYSTEMS			
NA	C403.1.1.1	Heating outside a building	Indicate systems providing heating in non-enclosed outdoor occupied spaces are radiant systems

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NA	C403.11.1	Heating outside a building	Indicate occupancy sensing or timer switch controls configured to automatically shut off heating system when area served is unoccupied
NA	C403.11.2	Snow melt systems	Indicate automatic controls configured to shut off system when pavement temperature exceeds 50°F and no precipitation is falling, and when outdoor air temperature exceeds 40°F
NA	C403.11.3	Freeze protection system controls	Indicate automatic controls to shut off system when outdoor temperature exceeds 40°F ; or conditions protect fluid from freezing
HVAC EQUIPMENT ENERGY USE METERING			
NA	C409.3.1	HVAC equipment energy use metering	For new buildings and building additions $>$ 25,000 ft^2 , verify energy use metering of all equipment used to provide space heating and cooling, dehumidification and ventilation will be provided per C409; indicate equipment eligible for exception
DOCUMENTATION AND SYSTEM SPECIFIC REQUIREMENT TO SUPPORT COMMISSIONING (CX)			
NA	C408.1	Scope of mechanical systems commissioning	For buildings with areas required to comply with C403.3.5 (DOAS) or with \geq 180,000 Btu/h total output cooling capacity or \geq 240,000 Btu/h total output heating capacity or energy recovery equipment \geq 300 cfm, indicate that all mechanical systems regardless of individual capacity are required to be commissioned; or provide building heating / cooling capacity calculation demonstrating eligibility for exception
NA	C408.1	Scope of mechanical systems commissioning	Indicate that all systems, equipment and controls for which the WSEC requires control functions and / or configuration to perform specific functions are included in the CX scope
NA	C408.1.1	Commissioning requirements in construction documents	Indicate in plans and specifications that CX per C408.1 is required for all applicable mechanical systems
NA	C408.1.1	Commissioning requirements in construction documents	Include general summary that includes at minimum: narrative description of activities, responsibilities of the CX team, schedule of activities including verification of project close out documentation per C403.6, and conflict of interest plan (if required)
NA	C408.1.1	Commissioning requirements in construction documents	Include in general summary that a CX project report or Compliance Checklist (Figure C408.1.A.1) shall be completed by the Certified CX Professional and provided to the owner prior to the final mechanical inspection.

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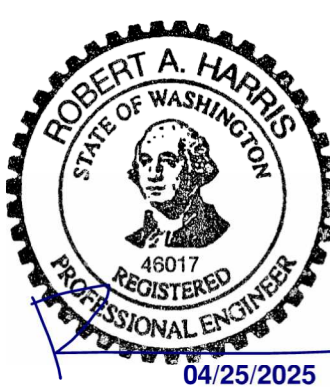
NA	C403.6.10, Item 9	Maximum allowable system brake horsepower	For each fan system serving a multiple-zone VAV HPVAV, provide calculations that verify fan system electrical input power is \leq 90% of the fan power budget in accordance with Section C403.8.1.1
NA	C403.6.10, Item 10	Fan-powered terminal unit motor and control	Indicate all series and parallel fan-powered terminals have electronically commutated motors (ECM); indicate DDC control system is configured to vary air terminal fan speed as a function of the load; indicate fan speed during periods of low heating, low cooling, or ventilation-only mode is \leq 60% of peak design air flow; or provide supporting documentation for applied exception
NA	C403.6.10, Item 11	Application of single duct and fan-powered terminal units	Indicate VAV terminal types on plans; verify fan-powered terminal units only serve perimeter zones with envelope loads and interior zones with high occupant density and DCV per C403.7.1; verify all other zones are served by single duct terminal units
NA	C403.6.10, Item 12	Fan-powered terminal unit primary air reset	Indicate DDC controls are configured to automatically reset the primary supply air cfm setpoint of all fan-powered terminal units to the minimum required to maintain ventilation during occupied heating or deadband mode; based upon the VAV air handling unit minimum ventilation air fraction
NA	C403.6.10, Item 13	Controls for high occupant density spaces	For zones $>$ 150 ft^2 with high occupant density (\geq 25 people / 1000 ft^2), indicate zone is served by a dedicated terminal unit with DDC control that resets terminal unit ventilation setpoint based on measured CO_2 ; also indicate occupancy sensor control that automatically reduces minimum ventilation to zero and sets back room heating and cooling setpoints by $\geq 5^\circ\text{F}$ when space is unoccupied
NA	C403.6.10, Item 14	Dedicated cooling systems serving data centers and server, electronic equipment and telecom spaces	For data centers and server, electronic equipment, telecom or similar spaces with design cooling loads $>$ 5 W/ft 2 , indicate spaces are served by dedicated cooling systems that are independent of the HPVAV systems serving the rest of building
NA	C403.6.10, Item 14	Dedicated cooling systems serving data centers and server, electronic equipment and telecom spaces	Indicate dedicated cooling systems are configured for 100% air economizer operation and comply with all related economizer requirements per C403.5 (without economizer exceptions), or heat recovery per C403.5, Exception 9
NA	C403.6.10, Item 15	Central plant efficiency	Indicate whether systems are served by a high efficiency heating water plant, or a high efficiency chilled water plant

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Kansas City, MO 64108
Washington Certificate of Authorization Number C1788

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Project #: 072004-15.1



Revisions / Submissions

ID	Description	Date
1	PERMIT SET	04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: JLM
Checked By: CLK
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
MECHANICAL ENERGY FORMS

M6.04

BID NOTE

- CONTRACTOR SHALL MAKE PROVISIONS FOR NEMA L5-30R TWIST LOCK RECEPTACLES LOCATED EVERY 50 FEET OF THE MHE SYSTEM. COORDINATE FINAL CONVEYOR POWER DROP LOCATIONS WITH MHE PLANS. PROVIDE ASSOCIATED FEEDERS AND 30A BREAKERS TO NEAREST 120V PANELBOARD.

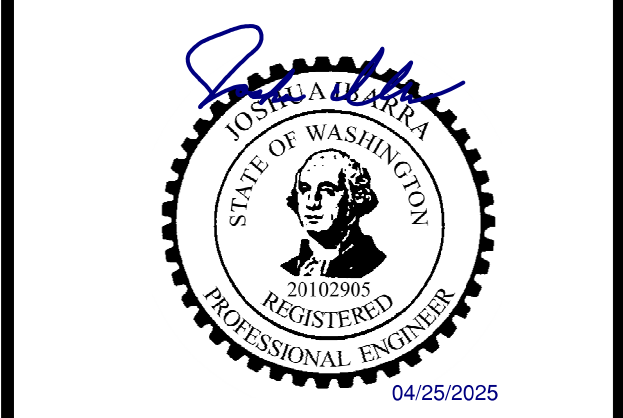
ELECTRICAL KEY NOTES

- PROVIDE 3/4" CONDUIT (FOR INSTALLATION OF CAT6 ETHERNET CABLE) FROM LED CONTROLLER LOCATION ON UNISTRUT, UP THE THREADED ROD SUPPORTING THE UNISTRUT CHANNEL TO 18" BELOW CEILING. REFER TO SBL OVERHEAD INSTALLATION DETAIL FOR MORE INFORMATION.
- PROVIDE DUPLEX RECEPTACLE FOR CONNECTION OF SBL EQUIPMENT (PROVIDED AND INSTALLED BY OTHERS). RECEPTACLES WITH A L.C.L.R. SUBSCRIPT ARE FOR CONNECTION OF THE LED CONTROLLER (50VA) AND LED RECEIVER (80VA). RECEPTACLES WITH A 1.R. SUBSCRIPT ARE FOR CONNECTION OF A SINGLE LED RECEIVER (80VA). REFER TO SBL OVERHEAD INSTALLATION DETAIL FOR MOUNTING AND SPACING REQUIREMENTS OF RECEPTACLES AND SBL EQUIPMENT.
- POWER FOR FABRIC AND COIL DOOR MOTORS AND CONTROLS. PROVIDE (2) JUNCTION BOXES FOR 120V CONNECTION OF DOOR CONTROLS. PROVIDE (2) DISCONNECTS FOR 480V, 3PH CONNECTION OF DOOR MOTORS. COORDINATE FINAL ELECTRICAL REQUIREMENTS WITH DOOR MANUFACTURER PRIOR TO INSTALLATION.
- PROVIDE JUNCTION BOXES FOR EXTERIOR DOCK DOOR CONNECTIONS. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER SPECIFICATIONS PRIOR TO BID.
- PROVIDE HOUSEKEEPING PAD FOR ALL FLOOR MOUNTED ELECTRICAL EQUIPMENT. NEW HOUSEKEEPING PAD SHALL BE MINIMUM 4" HIGH, EDGE OF PAD SHALL EXTEND 4" BEYOND EQUIPMENT FRAME. CHAMFER ALL OUTSIDE CORNERS.
- IDF: PROVIDE RECEPTACLE AND (3) 2" CONDUITS TO 1'-0" BELOW ROOF STRUCTURE FOR INTRA BUILDING BACKBONE AND HORIZONTAL CABLING FOR IDF. VERIFY EXACT LOCATION AND REQUIREMENTS WITH SUPPLY SECURITY AND TELECOM DRAWINGS PRIOR TO INSTALLATION.
- PROVIDE 120V CONNECTION TO JUNCTION BOX AND 3/4"-4X8" FIRE RATED PLYWOOD FOR ACCESS CONTROL PANEL CONNECTION. REFER TO VENDOR DRAWINGS FOR INSTALLATION DETAILS.
- PROVIDE ALL REQUIRED ELECTRICAL CONNECTIONS (120V CONNECTIONS, JUNCTION BOXES AND CONDUIT) FOR SECURED DOOR. PROVIDE 120V CONNECTION FROM NEAREST RECEPTACLE CIRCUIT. REFER TO DOOR ACCESS WITH CARD READER DETAIL FOR MOUNTING OF DEVICES. COORDINATE QUANTITY AND TYPE OF DEVICES REQUIRED AND ANY ASSOCIATED CONDUITS REQUIRED FOR EACH DOOR TYPE WITH SECURITY SYSTEMS VENDOR. FIELD COORDINATE LOCATION OF ALL SECURED DOORS WITH OWNERS REPRESENTATIVE PRIOR TO ROLLOUT.
- PROVIDE NEMA L5-30R AND (2) #10 & (1) #10G FOR MATERIAL HANDLING EQUIPMENT (MHE). COORDINATE NEMA CONFIGURATION WITH MHE VENDOR.
- RECEPTACLES FOR WORKSTATIONS NOT MOUNTED ON A WALL OR STRUCTURAL ELEMENT SHALL BE MOUNTED PER ABOVE TABLE CORD HUNG RECEPTACLE DETAIL AND TYPICAL SO CORD BUS DROP CABLE STRAIN RELIEF DETAIL. COORDINATE MOUNTING WITH AVAILABLE STRUCTURAL MEMBERS. COORDINATE DATA CONNECTIONS WITH IES VENDOR.
- PROVIDE SO CORD DROP FOR AIR QUALITY INDEX MONITOR. MOUNT 6 TO 10 FEET AFT AND VERIFY FINAL LOCATION WITH OWNERS REPRESENTATIVE.

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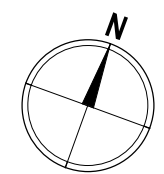
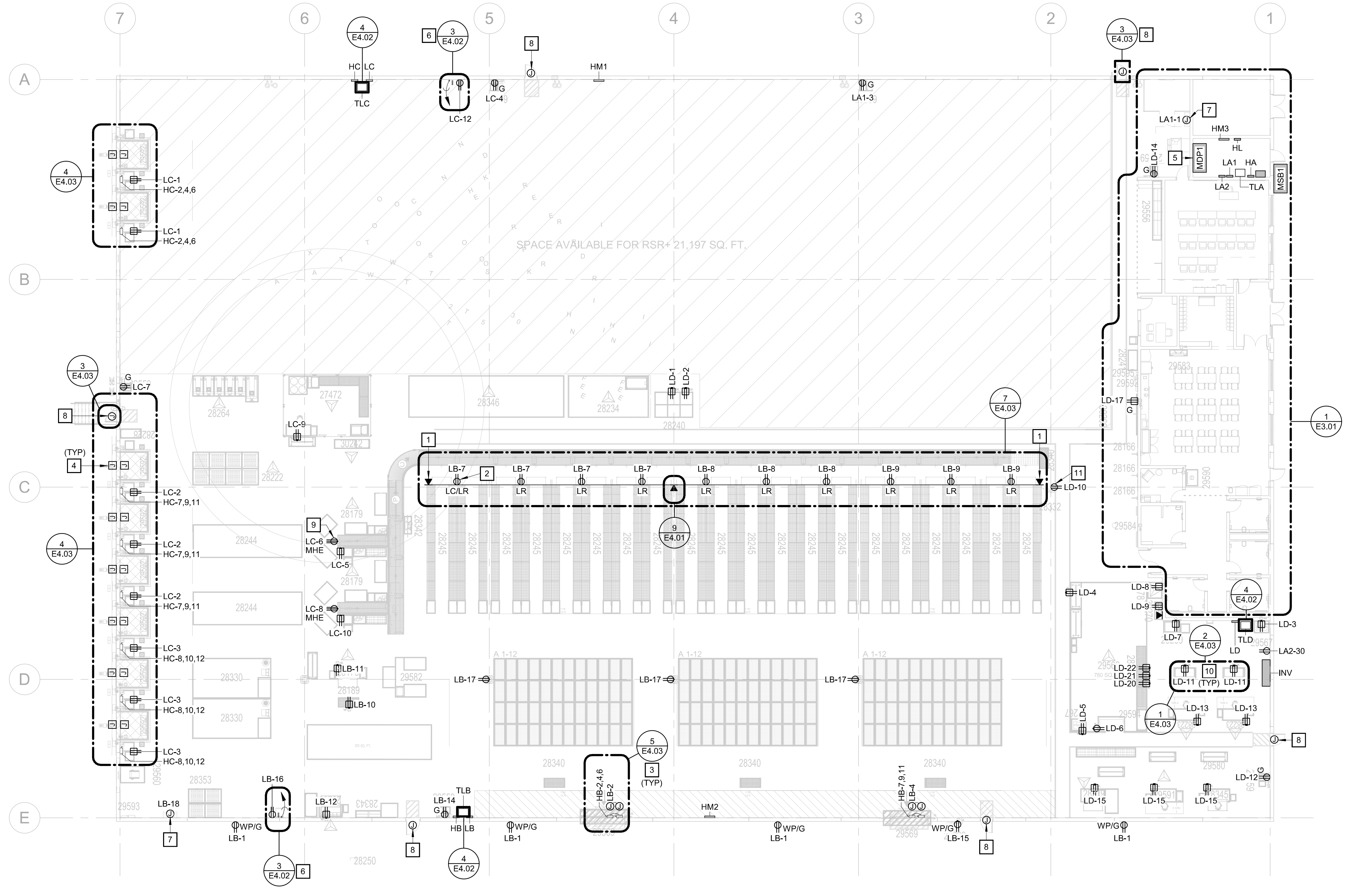
175 Monahan West Ave., Suite 400
Akron, OH 44321
Phone: 330.655.9690 Fax: 330.208.4826



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Project # - 012024.15.01



1 OVERALL POWER PLAN
1/16" = 1'-0"

AMBROSE PROPERTY GROUP

PROJECT PENINSULA

W. EDGEWOOD DR. & S. CRITCHFIELD RD., PORT ANGELES, WA 98363

Revisions / Submissions

ID	Description	Date
1	PERMIT SET	04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: BG
Checked By: JGW
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
OVERALL POWER PLAN

E1.01

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Project # - 012024.15.01

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PROJECT PENINSULA
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Revisions / Submissions

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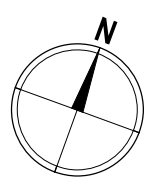
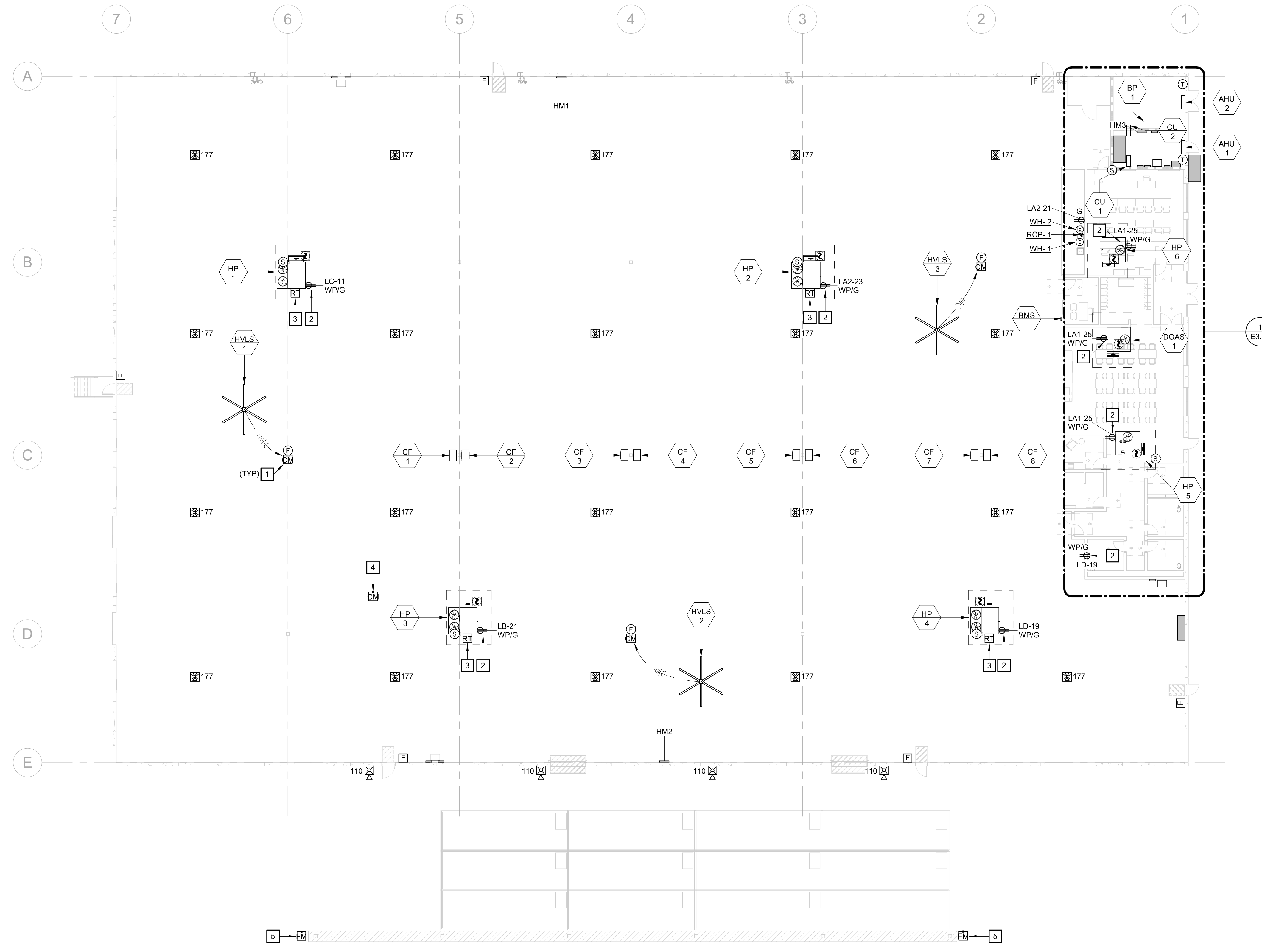
Sheet Title:

**OVERALL
MECHANICAL
POWER AND FIRE
ALARM PLAN**

E1.02

ELECTRICAL KEY NOTES

- RELAY DEVICE TO SHUT DOWN SUPPLY FAN UPON SIGNALING FROM FIRE ALARM CONTROL PANEL.
- PROVIDE WEATHERPROOF RECEPTACLE ON NON-REMOVABLE PANEL OF MECHANICAL UNIT.
- PROVIDE LOW-VOLTAGE WIRING FROM DUCT DETECTOR TO REMOTE TEST STATION. MOUNT REMOTE TEST STATION ON WALL OR COLUMN AT 48" AFF.
- FIRE ALARM CONTRACTOR TO PROVIDE SHUTDOWN TO MATERIAL HANDLING EQUIPMENT (MHE). COORDINATE LOCATION AND QUANTITY WITH MHE VENDOR.
- PROVIDE EQUIPMENT AND CONNECTIONS SUITABLE FOR ENVIRONMENT TO MONITOR AUTO DRUM DRIPS. PROVIDE LIGHTNING PROTECTION FOR ALL CIRCUITS ENTERING/EXITING BUILDING.



1 OVERALL MECHANICAL POWER AND FIRE ALARM PLAN

1/16" = 1'-0"

- ELECTRICAL KEY NOTES**
- 1 PROVIDE PHOTOCELL, CONTACTOR AND TIMECLOCK TO CONTROL CANOPY, BUILDING AND SITE LIGHTING. REFER TO PANEL SCHEDULES FOR LIGHTING CIRCUITS ROUTED THROUGH CONTACTOR.
 - 2 PROVIDE ONE EXIT SIGN MOUNTED SO THAT BOTTOM IS 4" ABOVE DOOR FRAME, OR AIR CURTAIN WHERE PROVIDED, AND A SECOND ONE ABOVE IT ON THE WALL AT 15'-0" AFF. TYPICAL AT ALL EGRESS DOORS THROUGHOUT THE WAREHOUSE.
 - 3 HVLS SHOWN FOR REFERENCE. MAINTAIN MINIMUM DISTANCE OF 2'-0" BETWEEN TIP OF HVLS FAN BLADE AND LIGHTS. LOCATE FAN SO IT DOES NOT CONFLICT WITH POWER DROPS.

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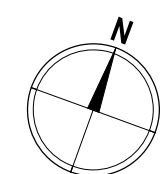
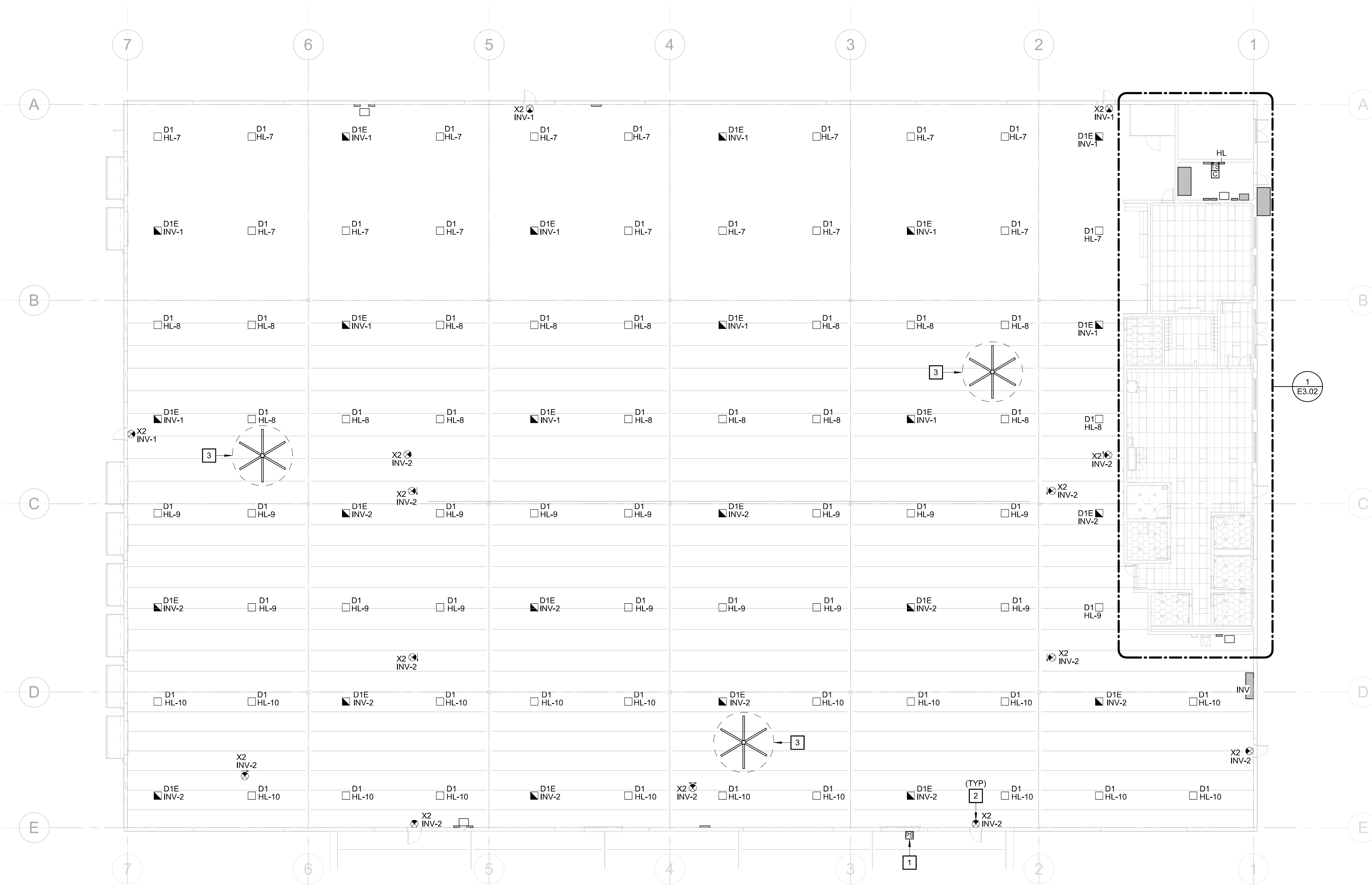
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Project # - 012024.15.01



1 OVERALL LIGHTING PLAN
1/8" = 1'-0"

AMBROSE PROPERTY GROUP
PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

Revisions / Submissions

ID	Description	Date
1	PERMIT SET	04.25.2025

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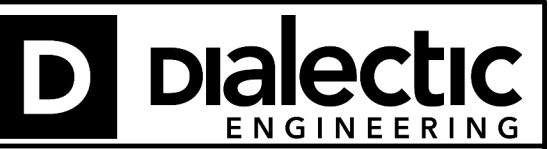
Sheet Title:
OVERALL LIGHTING PLAN

E2.01

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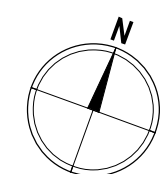
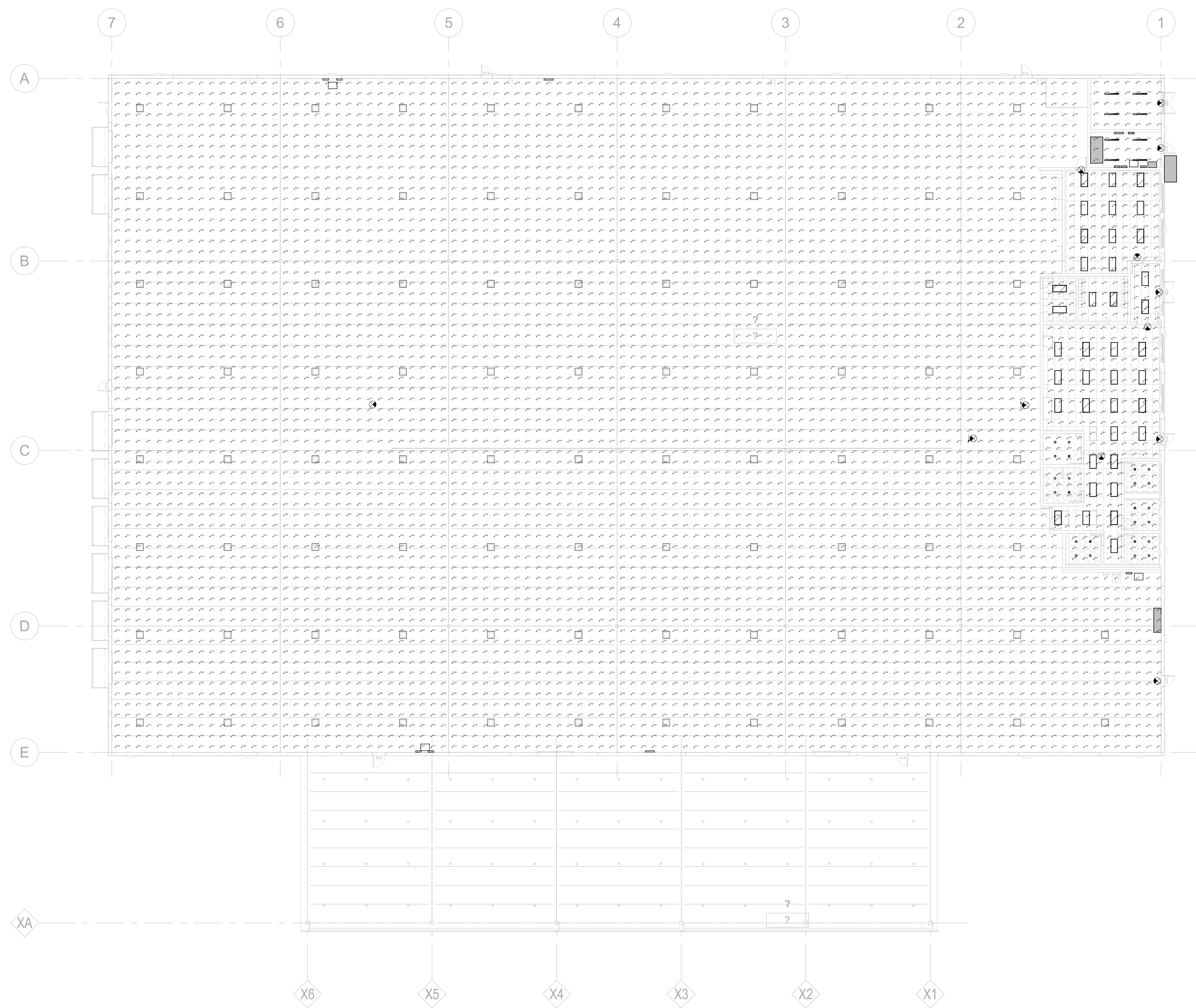
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 Drawn By: JGW
 Checked By: JGW
 Date: 04.25.2025
 Issue: PERMIT SET

Sheet Title:
**OVERALL LIGHTING
 PHOTOMETRICS
 PLAN**

E2.02

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
ASSOCIATE ENTRY - 101	+	19.9 fc	27.8 fc	12.5 fc	2.2:1	1.6:1
ASSOCIATE LOCKERS - 104	+	15.7 fc	22.7 fc	10.2 fc	2.2:1	1.5:1
BREAKROOM - 103	+	29.5 fc	42.7 fc	9.9 fc	4.3:1	3.0:1
CONTEMPLATION ROOM - 107	+	50.3 fc	82.6 fc	31.2 fc	2.6:1	1.6:1
ELECTRICAL - 113	+	28.3 fc	38.9 fc	16.9 fc	2.3:1	1.7:1
FIRE RISER - 114	+	24.8 fc	38.9 fc	12.2 fc	3.2:1	2.0:1
HALLWAY - 105	+	21.9 fc	30.1 fc	12.1 fc	2.5:1	1.8:1
LACTATION ROOM - 106	+	50.2 fc	82.9 fc	30.9 fc	2.7:1	1.6:1
MANAGERS OFFICE - 112	+	25.3 fc	34.3 fc	20.0 fc	1.7:1	1.3:1
SINGLE USER RR - 108	+	46.9 fc	78.1 fc	33.6 fc	2.3:1	1.4:1
SINGLE USER RR - 109	+	46.9 fc	78.1 fc	33.8 fc	2.3:1	1.4:1
SINGLE USER RR - 110	+	46.9 fc	78.1 fc	33.8 fc	2.3:1	1.4:1
SINGLE USER RR - 111	+	46.9 fc	78.1 fc	33.9 fc	2.3:1	1.4:1
TRAINING ROOM - 102	+	29.1 fc	40.3 fc	8.7 fc	4.6:1	3.3:1
WAREHOUSE - 200	+	30.0 fc	34.6 fc	3.2 fc	10.8:1	9.4:1



1 OVERALL LIGHTING PHOTOMETRICS PLAN
1/16" = 1'-0"



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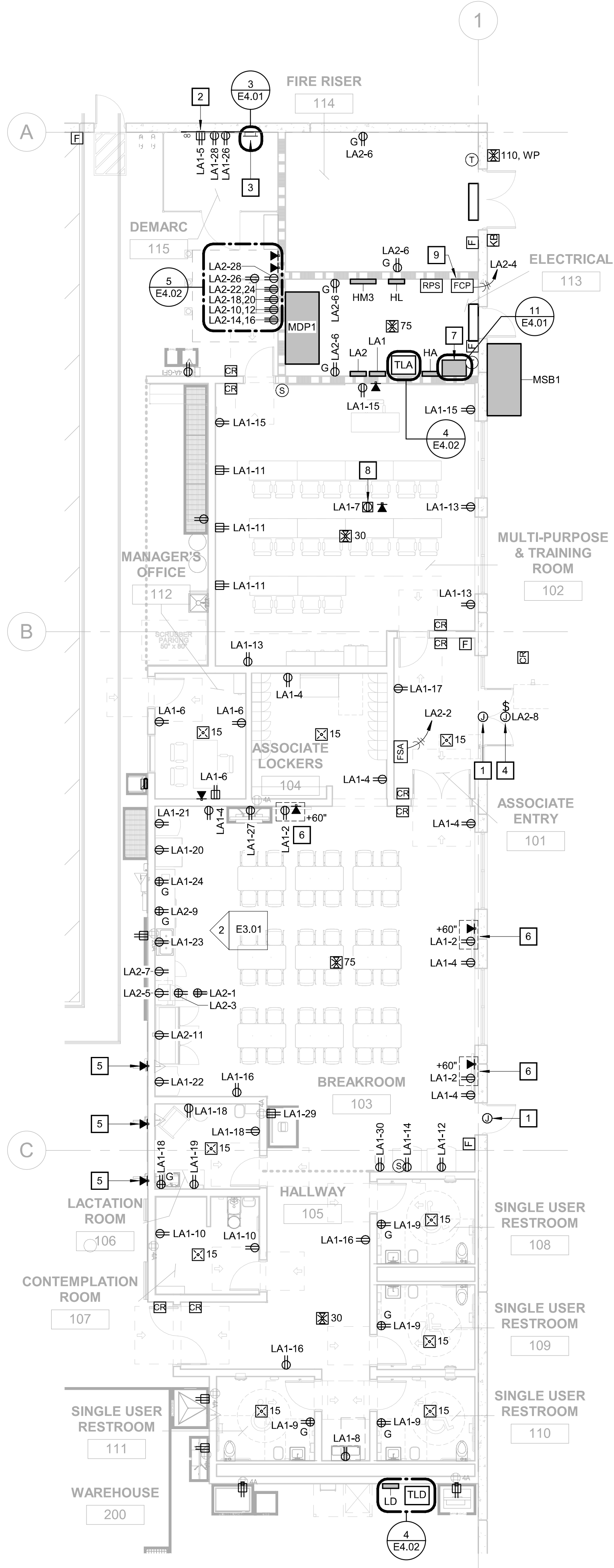
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Project number:	763838-02
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Drawn By:	BG
Checked By:	JGW
Date:	04.25.2025
Issue:	PERMIT SET

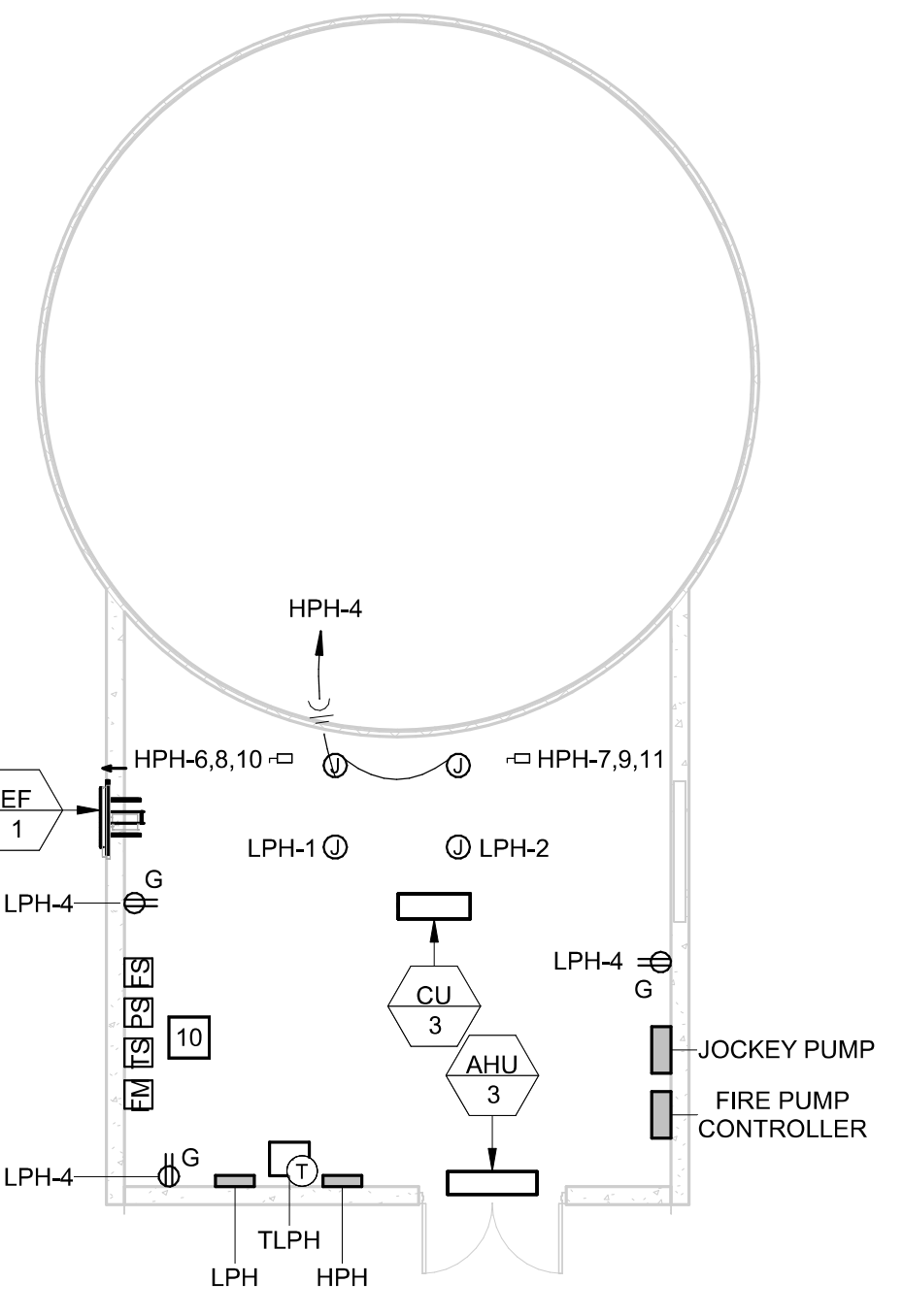
Sheet Title:
ENLARGED POWER PLANS

ELECTRICAL KEY NOTES

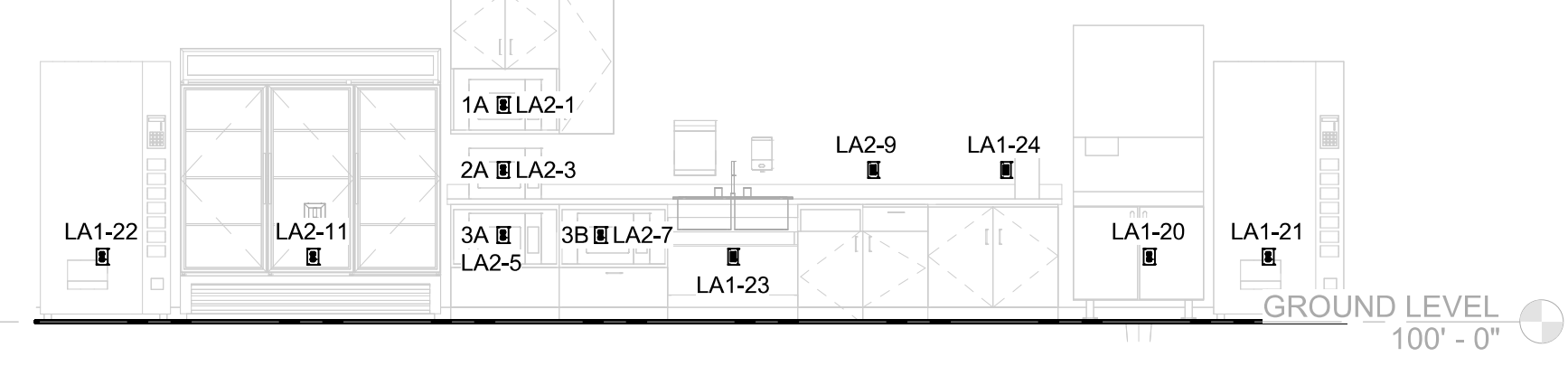
- 1 PROVIDE ALL REQUIRED ELECTRICAL CONNECTIONS (120V CONNECTIONS, JUNCTION BOXES AND CONDUIT) FOR SECURED DOOR. PROVIDE 120V CONNECTION FROM NEAREST RECEPTACLE CIRCUIT. REFER TO "DOOR ACCESS WITH CARD READER DETAIL" FOR MOUNTING OF DEVICES. COORDINATE QUANTITY AND TYPE OF DEVICES REQUIRED AND ANY ASSOCIATED CONDUITS REQUIRED FOR EACH DOOR TYPE WITH SECURITY SYSTEMS VENDOR. FIELD COORDINATE LOCATION OF ALL SECURED DOORS WITH OWNERS REPRESENTATIVE PRIOR TO ROUGH-IN.
- 2 PROVIDE QUAD RECEPTACLE AND (2) 2" CONDUITS FROM BACKBOARD UP TO 1'-4" BELOW ROOF STRUCTURE FOR FIBER DEMARCATION. EXTENSION CABLING FOR DEMARC AS SHOWN. VERIFY EXACT LOCATION WITH PROJECT MANAGER AND REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALLATION.
- 3 PROVIDE TELECOMMUNICATION EQUIPMENT GROUND BAR WITH #6 BOUNDING CONDUCTOR TO BUILDING STEEL, BOND TO NEAREST ADJACENT PANEL WITH #6 GROUND WIRE. COORDINATE EXACT GROUND BAR REQUIREMENTS WITH OWNERS DEPARTMENT.
- 4 PROVIDE WEATHERPROOF JUNCTION BOX AND PULLSTRING FOR EXTERIOR SIGNAGE. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
- 5 PROVIDE DATA FOR IPTIMECLOCK. COORDINATE FINAL LOCATION AND MOUNTING WITH CONSTRUCTION MANAGER PRIOR TO ROUGH-IN.
- 6 PROVIDE POWER AND DATA FOR TELEVISION. VERIFY MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.
- 7 ARC FLASH RELAY AND UPS.
- 8 PROVIDE RECEPTACLE AND DATA IN CEILING FOR PROJECTOR AND SCREEN. COORDINATE EXACT LOCATION WITH OWNER.
- 9 PROVIDE NEW FIRE ALARM CONTROL PANEL, WITH EQUIPMENT AND CONNECTIONS TO REPORT TO BUILDING MANAGEMENT SYSTEM, AND REMOTE POWER SUPPLY TO POWER VISIBLE NOTIFICATION APPLIANCES. PROVIDE A SMOKE DETECTOR ABOVE EQUIPMENT IN ACCORDANCE WITH NFPA 72.
- 10 PROVIDE EQUIPMENT AND CONNECTIONS SUITABLE FOR ENVIRONMENT TO MONITOR AUTO DRUM DRIPS. PROVIDE LIGHTNING PROTECTION FOR ALL CIRCUITS ENTERING/EXITING BUILDING.



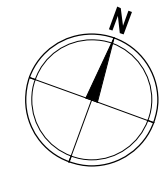
1 ENLARGED POWER PLAN - OFFICE
1/8" = 1'-0"



3 ENLARGED POWER PLAN - PUMPHOUSE
1/8" = 1'-0"



2 BREAKROOM COUNTER ELEVATION
1/4" = 1'-0"



- | ELECTRICAL KEY NOTES | |
|----------------------|--|
| 1 | CONNECT ALL EXIT SIGNS TO THE UNCONTROLLED HOT CIRCUIT. |
| 2 | PROVIDE RELAY EQUAL TO WATTSTOPPER #ELCU-200. RELAY SHALL BE CONNECTED AS A 'CONTROL' DEVICE WHERE THE EMERGENCY LIGHTS WILL BE CONTROLLED IN THE SAME MANNER AS THE LOCAL NORMAL LIGHTS. SEE DETAIL 07, E4.03 FOR ADDITIONAL INFORMATION. |
| 3 | PROVIDE RELAY EQUAL TO WATTSTOPPER #AD-RRU-X-UNV. RELAY TO BE USED IN LOCATIONS WHERE FIXTURES REQUIRE DIMMING. RELAY SHALL BE CONNECTED AS A 'CONTROL' DEVICE WHERE THE EMERGENCY LIGHTS WILL BE CONTROLLED IN THE SAME MANNER AS THE LOCAL NORMAL LIGHTS. SEE DETAIL 09, E4.02 FOR ADDITIONAL INFORMATION. |

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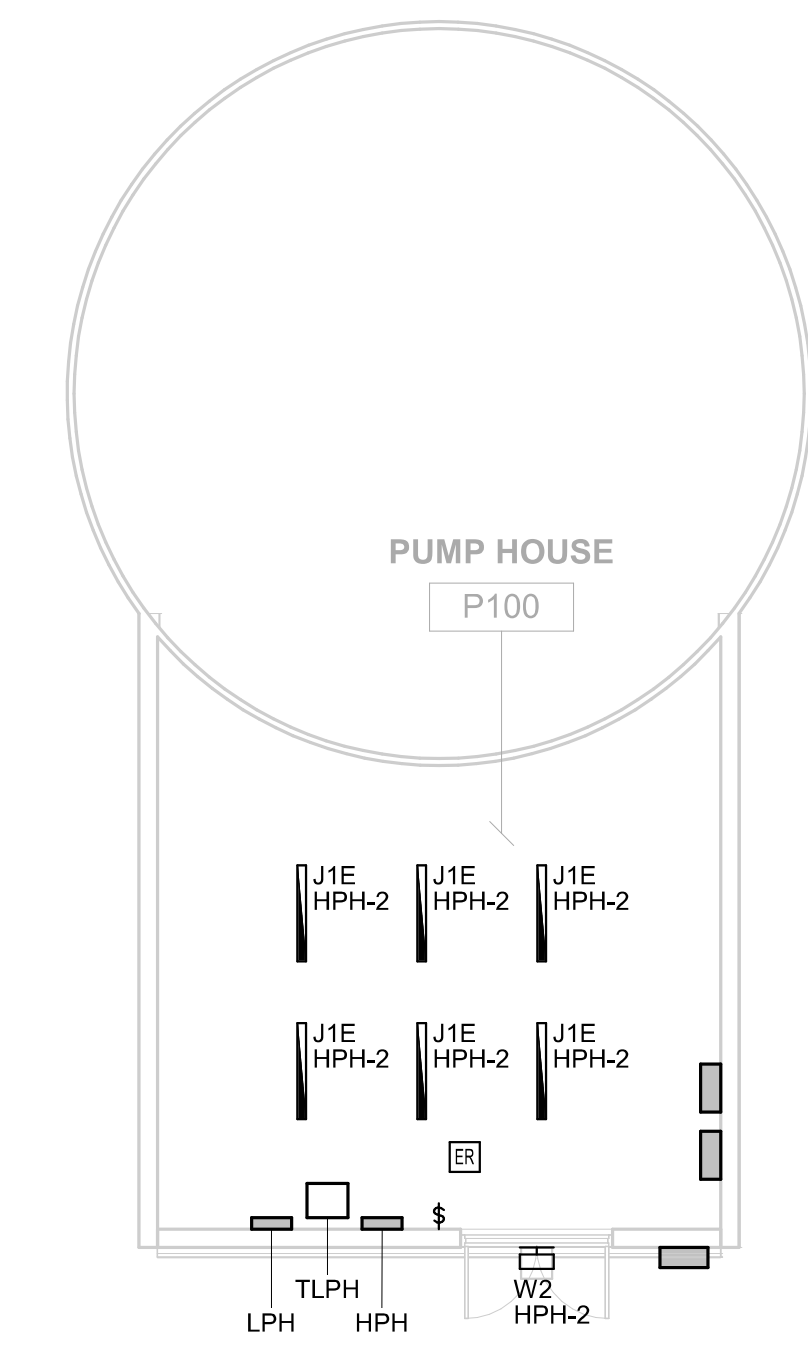
Revisions / Submissions		
ID	Description	Date
PERMIT SET		04.25.2025

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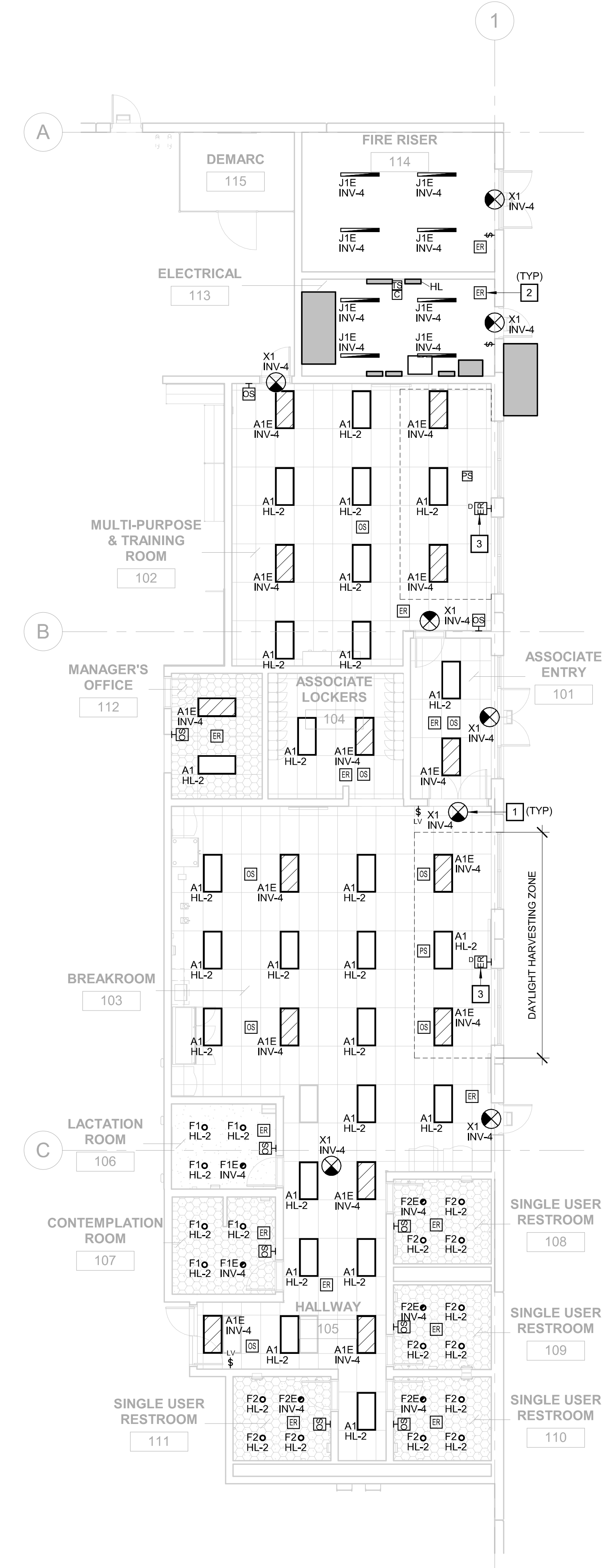
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Scale: AS NOTED
Drawn By: BG
Checked By: JGW
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
ENLARGED LIGHTING PLANS

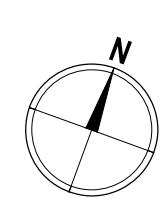
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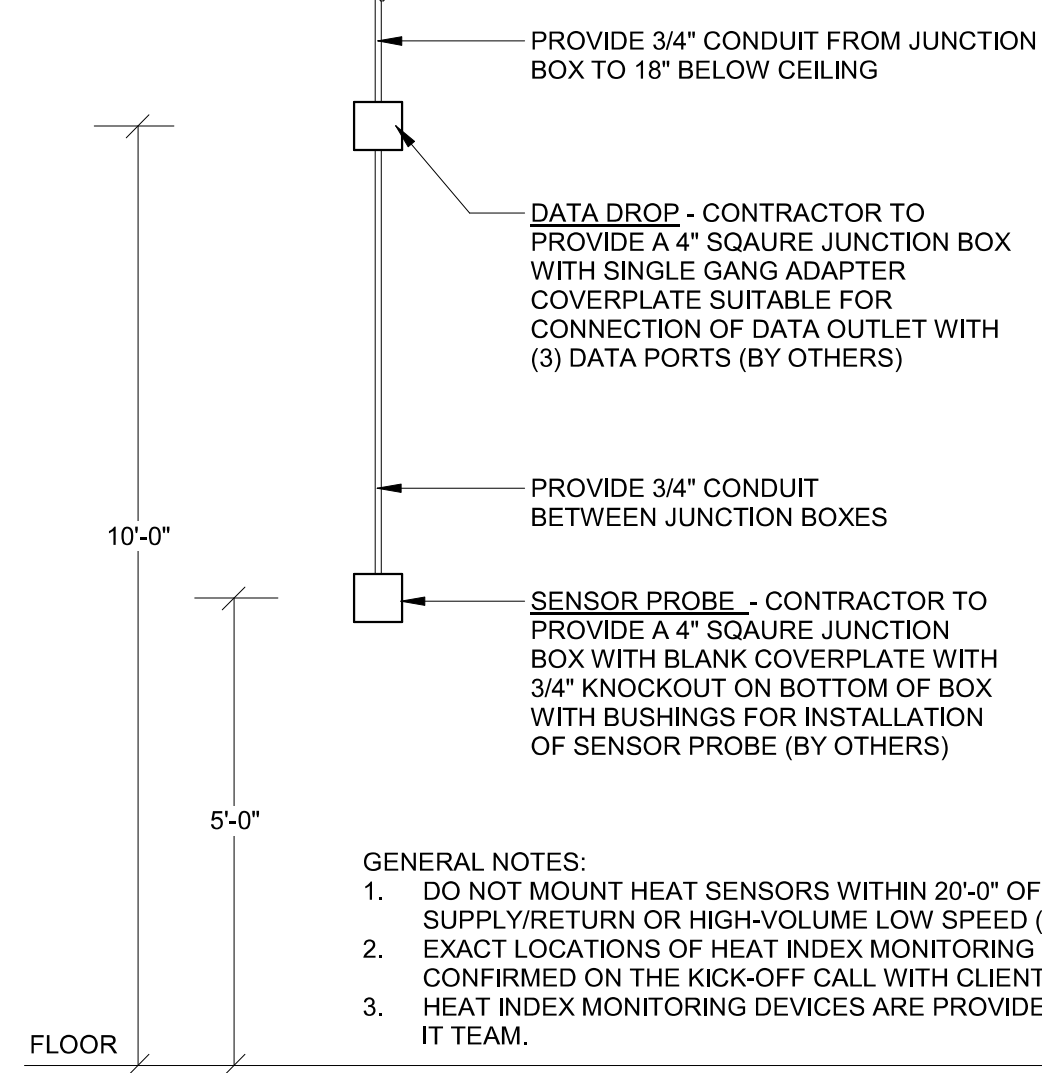


2 ENLARGED LIGHTING PLAN - PUMPHOUSE
1/8" = 1'-0"

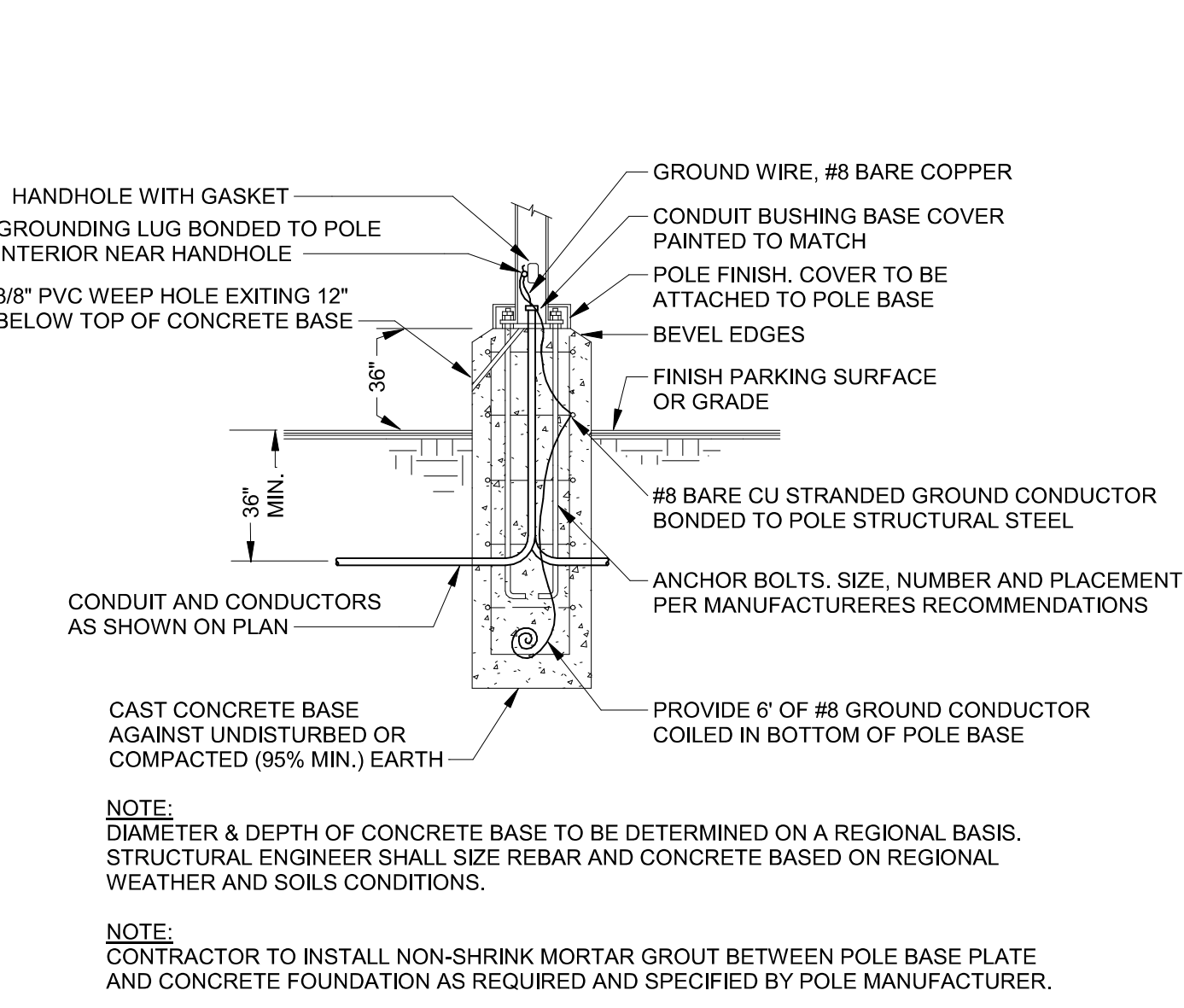


1 ENLARGED LIGHTING PLAN - OFFICE
1/8" = 1'-0"

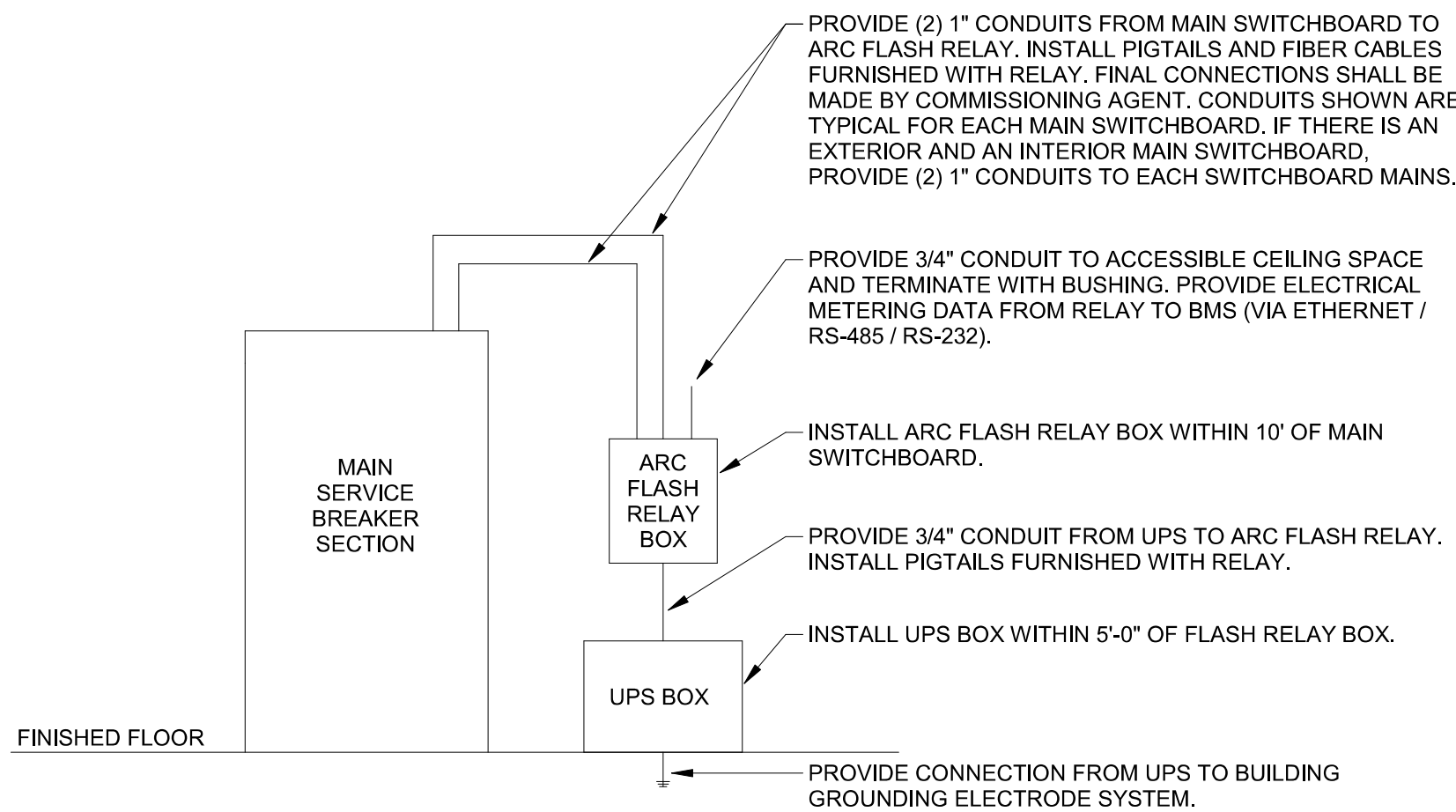




9 HEAT INDEX MONITORING STATION
NOT TO SCALE



10 POLE BASE
NOT TO SCALE

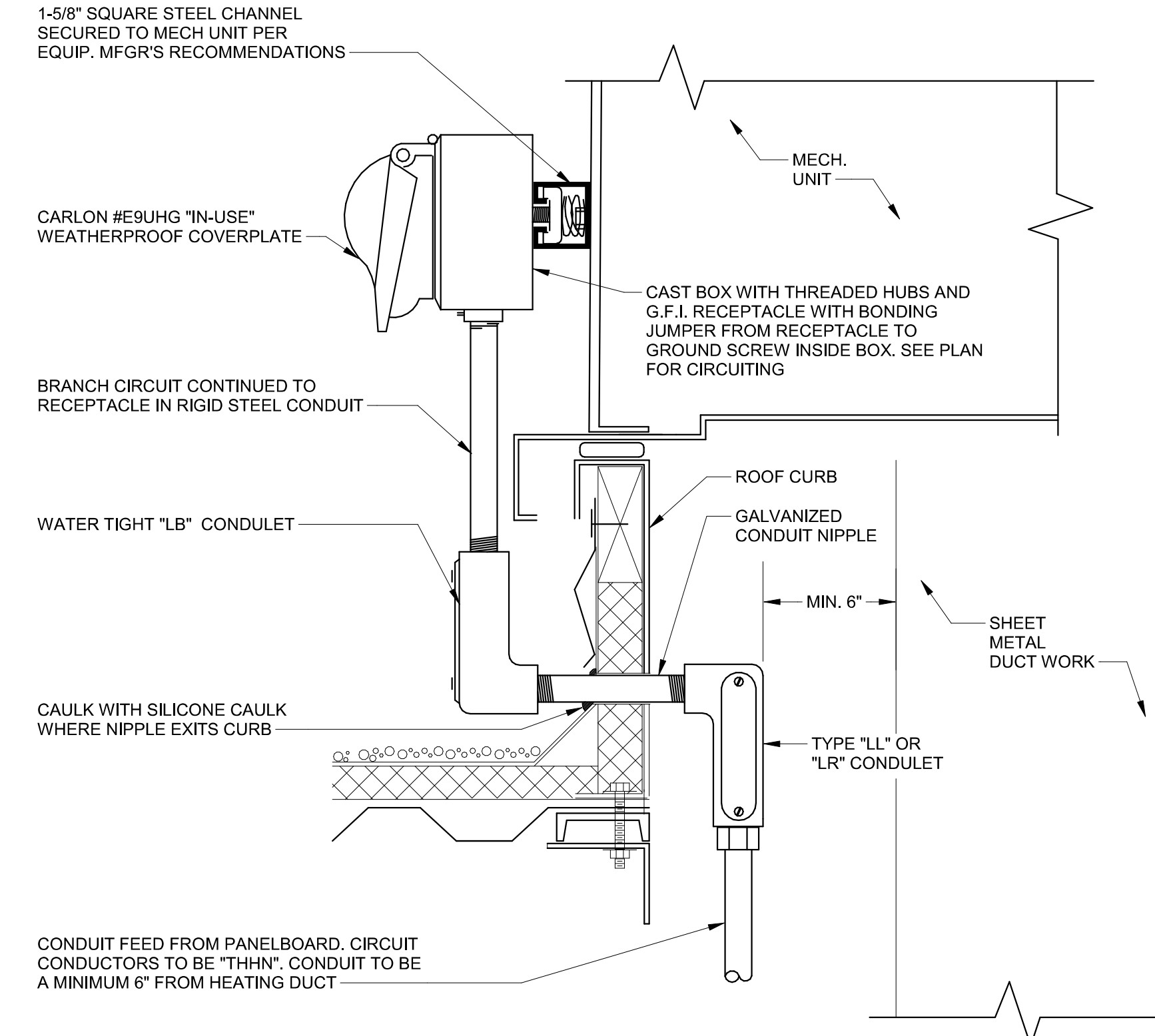


- GENERAL NOTES:**
- CONTACT OWNER-APPROVED ARC FLASH RELAY OEM SUPPLIER FOR ARC FLASH RELAY AND UPS. EQUIPMENT SHALL BE EITHER NEMA 12 RATED (INDOOR) OR NEAM 4 RATED (OUTDOOR). COORDINATE NEMA TYPE WITH PROVIDER AFTER FINAL LOCATION OF EQUIPMENT IS ESTABLISHED.

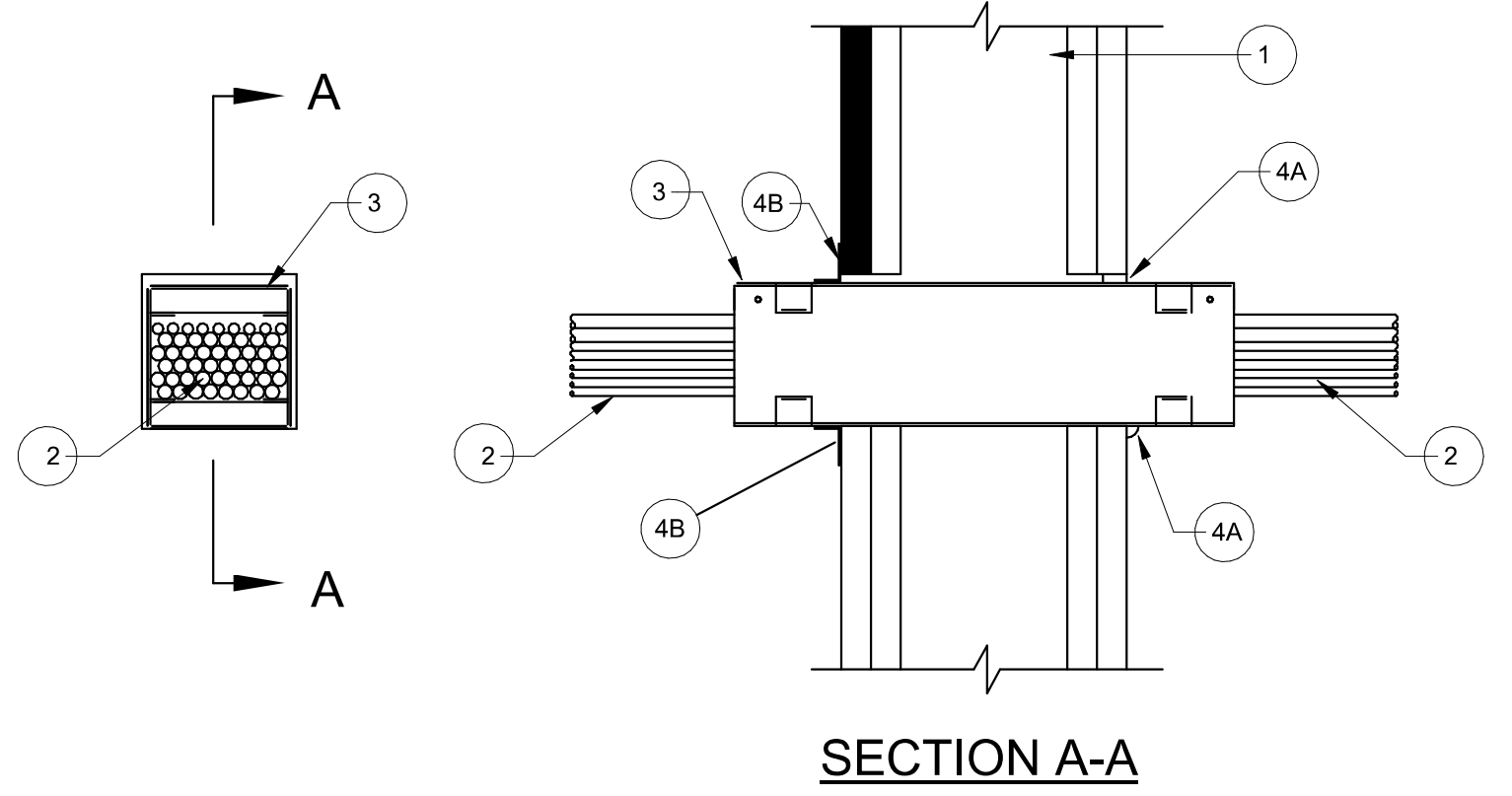
APPROVED ARC FLASH RELAY OEM
SUMMIT ELECTRICAL SUPPLY
(408) 731-2542 (WORK)
BRETT.TRAHAN@SUMMIT.COM
WWW.SUMMIT.COM
 - CONTACT OWNER-APPROVED COMMISSIONING AGENT FOR FINAL CONNECTIONS, TESTING, CONFIGURATION, PROGRAMMING, COMMISSIONING, AND STARTUP OF RELAY SYSTEM.

APPROVED ARC FLASH RELAY COMMISSIONING VENDOR
VECTOR POWER SERVICES
(486) 703-4390 (WORK)
(CLIENT NAME)SUPPORT@VECTORPWRS.COM
WWW.VECTORPWRS.COM
 - MAIN SWITCHBOARD REQUIREMENTS:
A. MAIN BREAKER WITH AUXILIARY CONTACTS.
B. SHUNT-TRIP AND SPRING RELEASE RATED FOR 120VAC.
C. SOLID BUS VOLTAGE TAP ON UTILITY SIDE OF MAIN.
D. VERTICAL BARRIER BETWEEN MAIN BREAKER AND DISTRIBUTION SECTION(S).

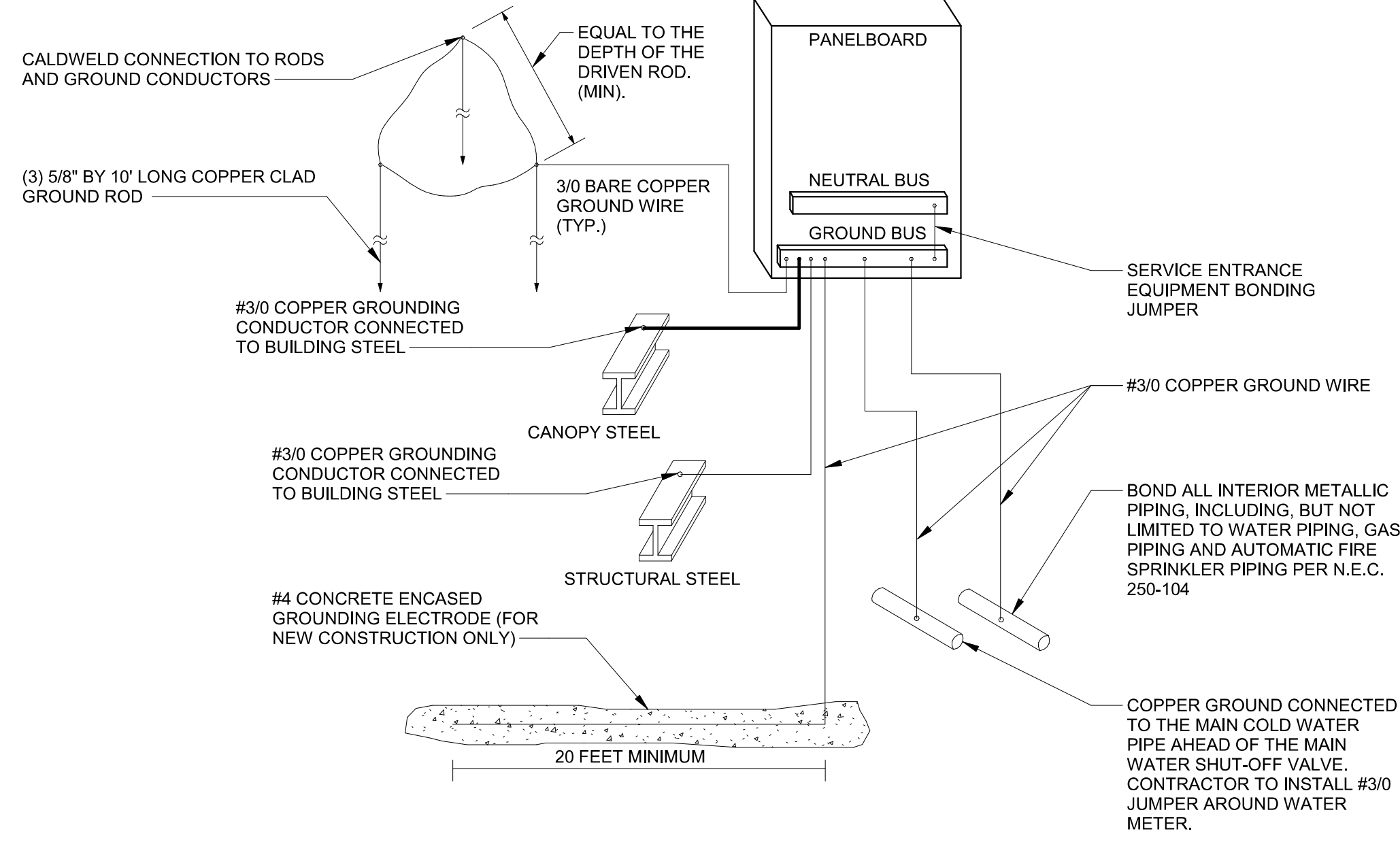
11 ARC FLASH RELAY INSTALLATION
NOT TO SCALE



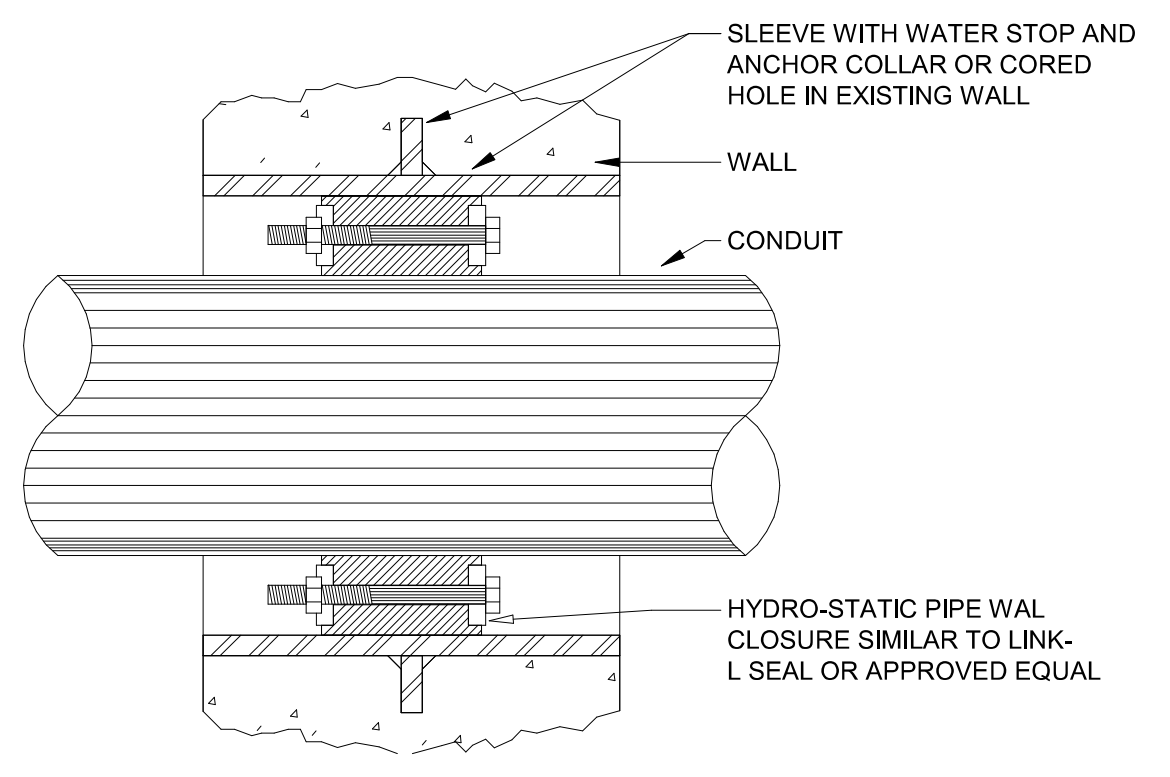
6 CONVENIENCE RECEPTACLE MOUNTING-ROOF TOP UNITS
NOT TO SCALE



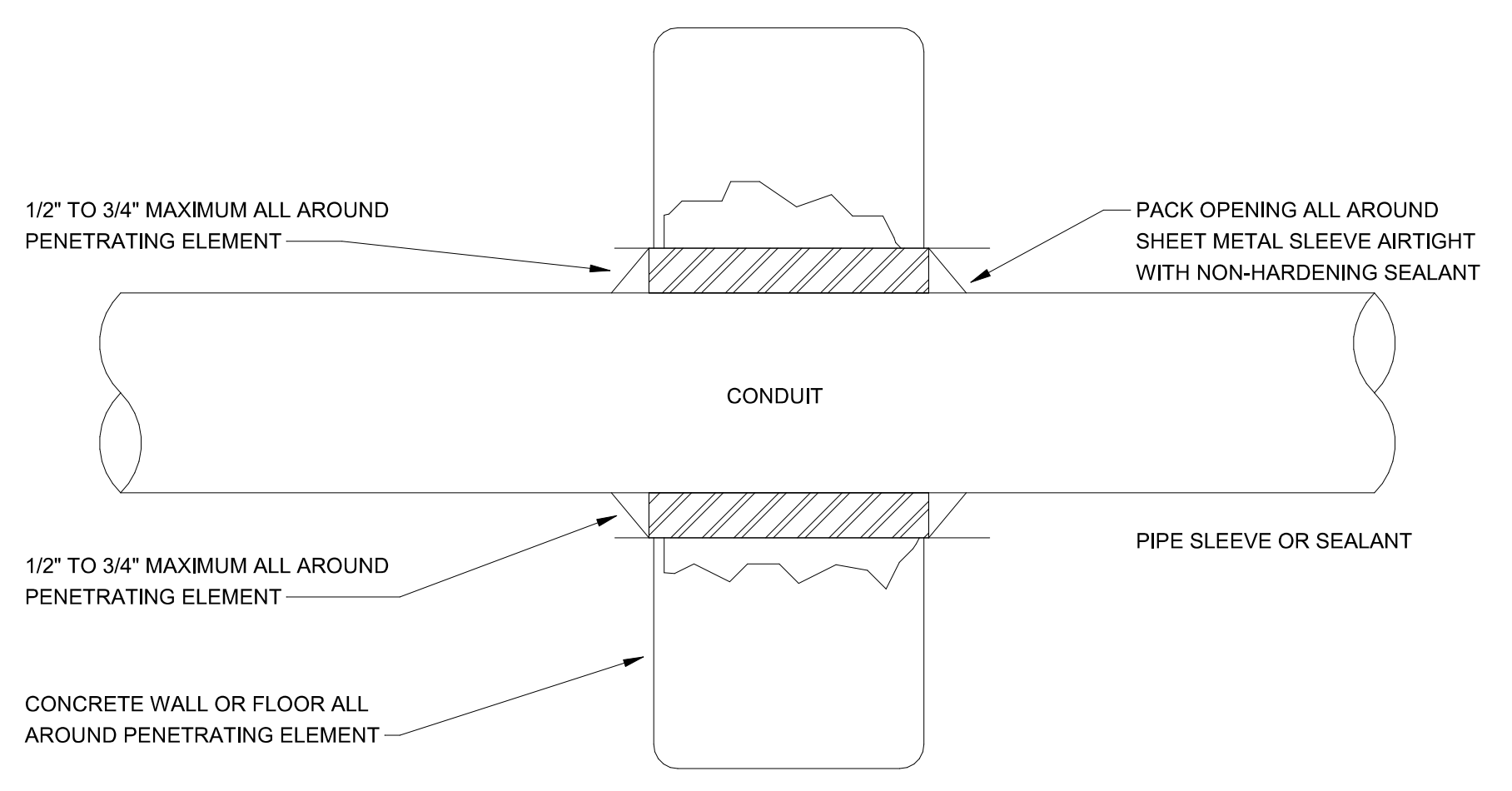
7 FIRE RATED WALL PENETRATION FOR DATA CABLES
NOT TO SCALE



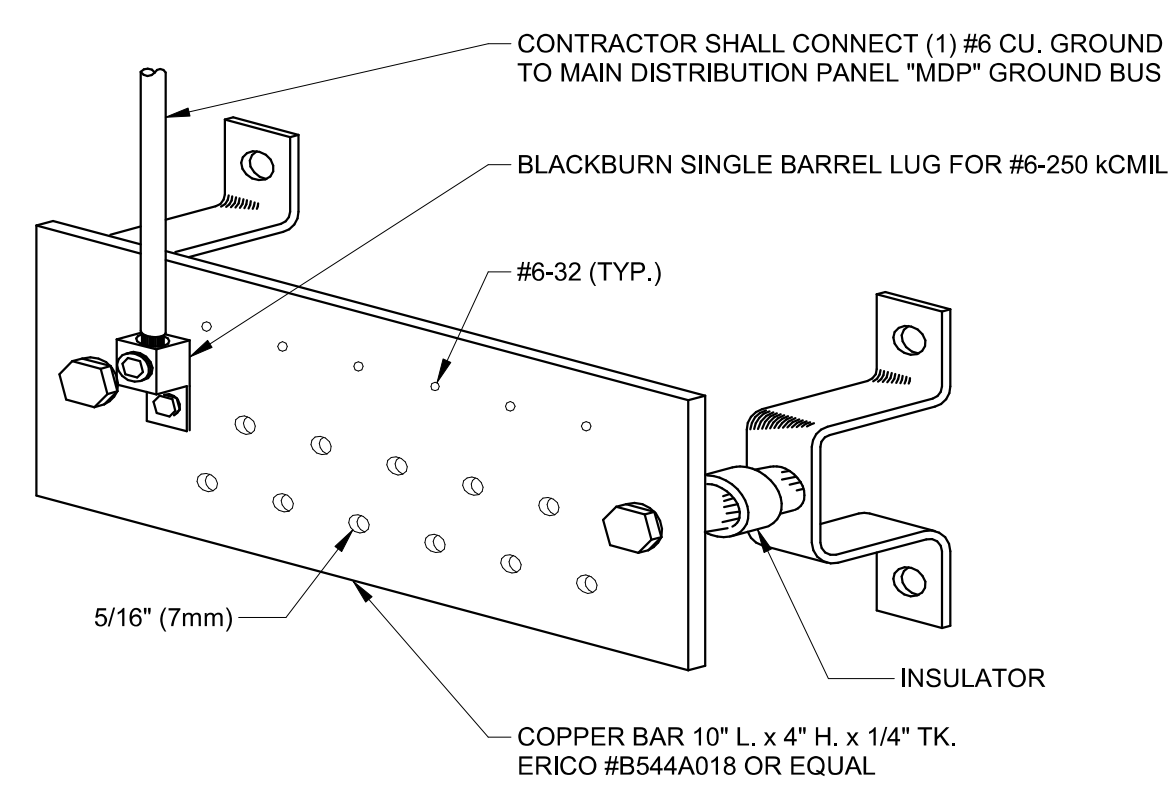
8 SERVICE ENTRANCE GROUNDING
NOT TO SCALE



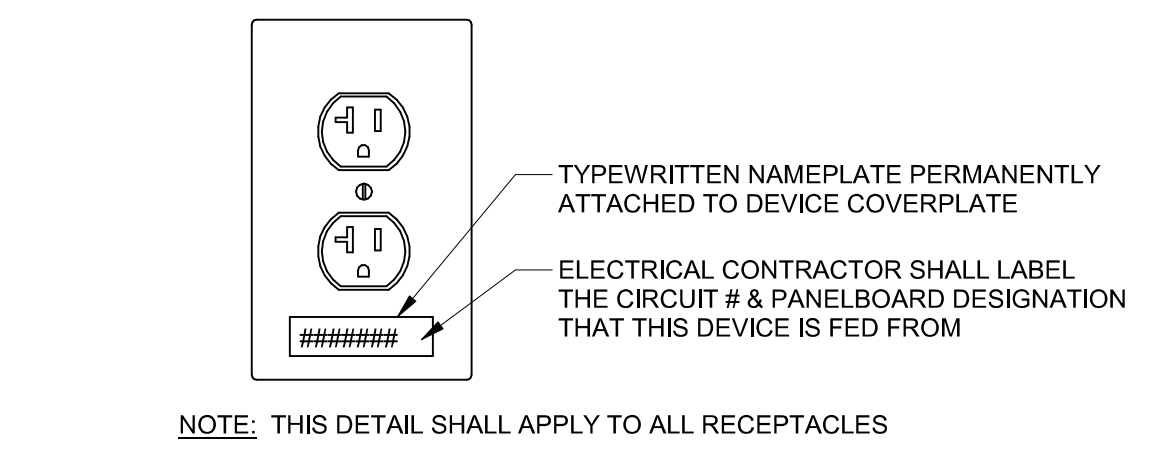
1 CONDUIT THRU FOUNDATION WALL PENETRATION
NOT TO SCALE



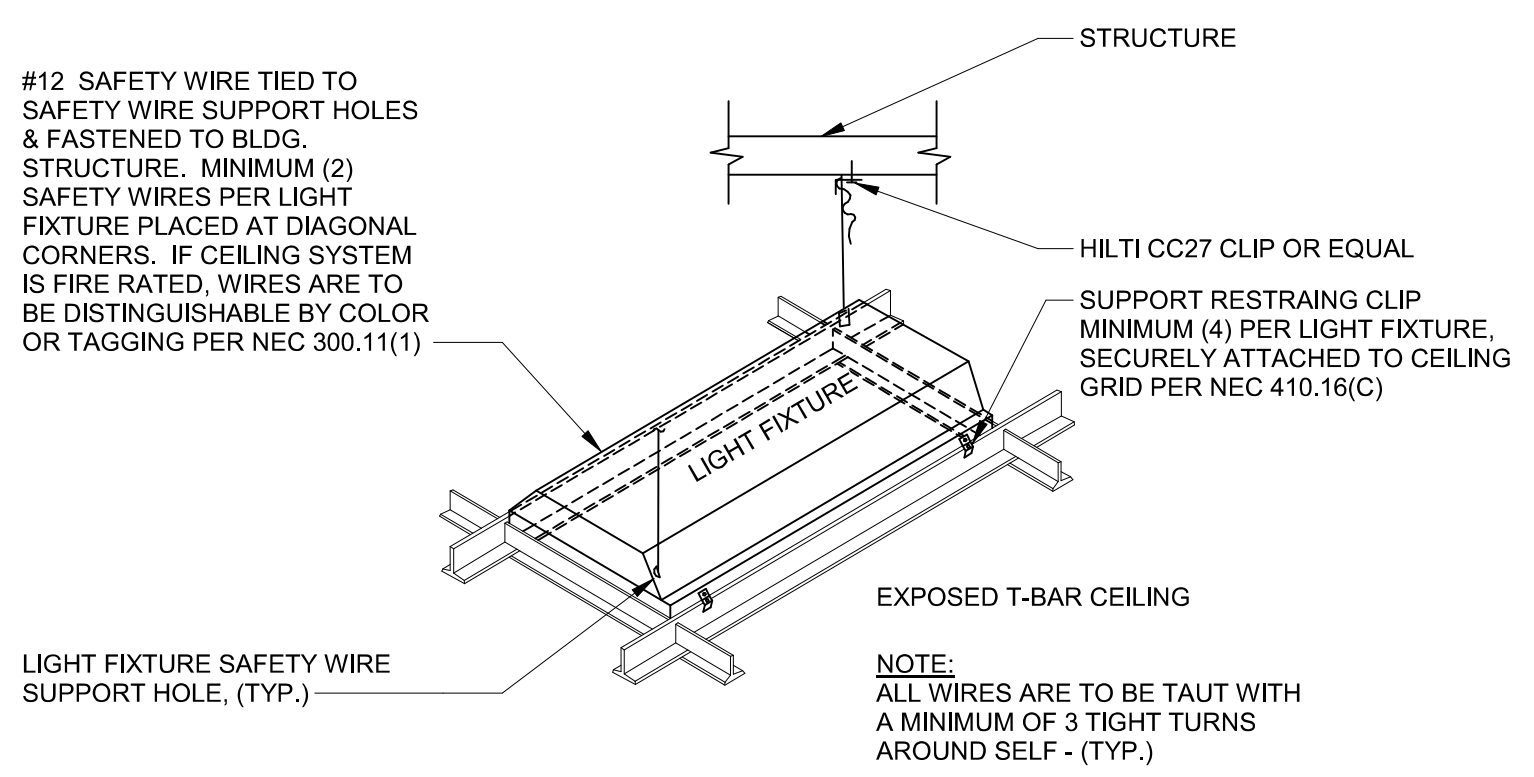
2 NON-RATED CONDUIT PENETRATION
NOT TO SCALE



3 TELECOMMUNICATIONS GROUND BAR
NOT TO SCALE



4 RECEPTACLE LABELING
NOT TO SCALE



5 RECESSED LIGHTING FIXTURE SUPPORT
NOT TO SCALE



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Kansas City, MO 64108
Washington Certificate of Authorization Number CT1268
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Project #: 0120204.15.01

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

AMBROSE PROPERTY GROUP

Revisions / Submissions		
ID	Description	Date
1	PERMIT SET	04.25.2025

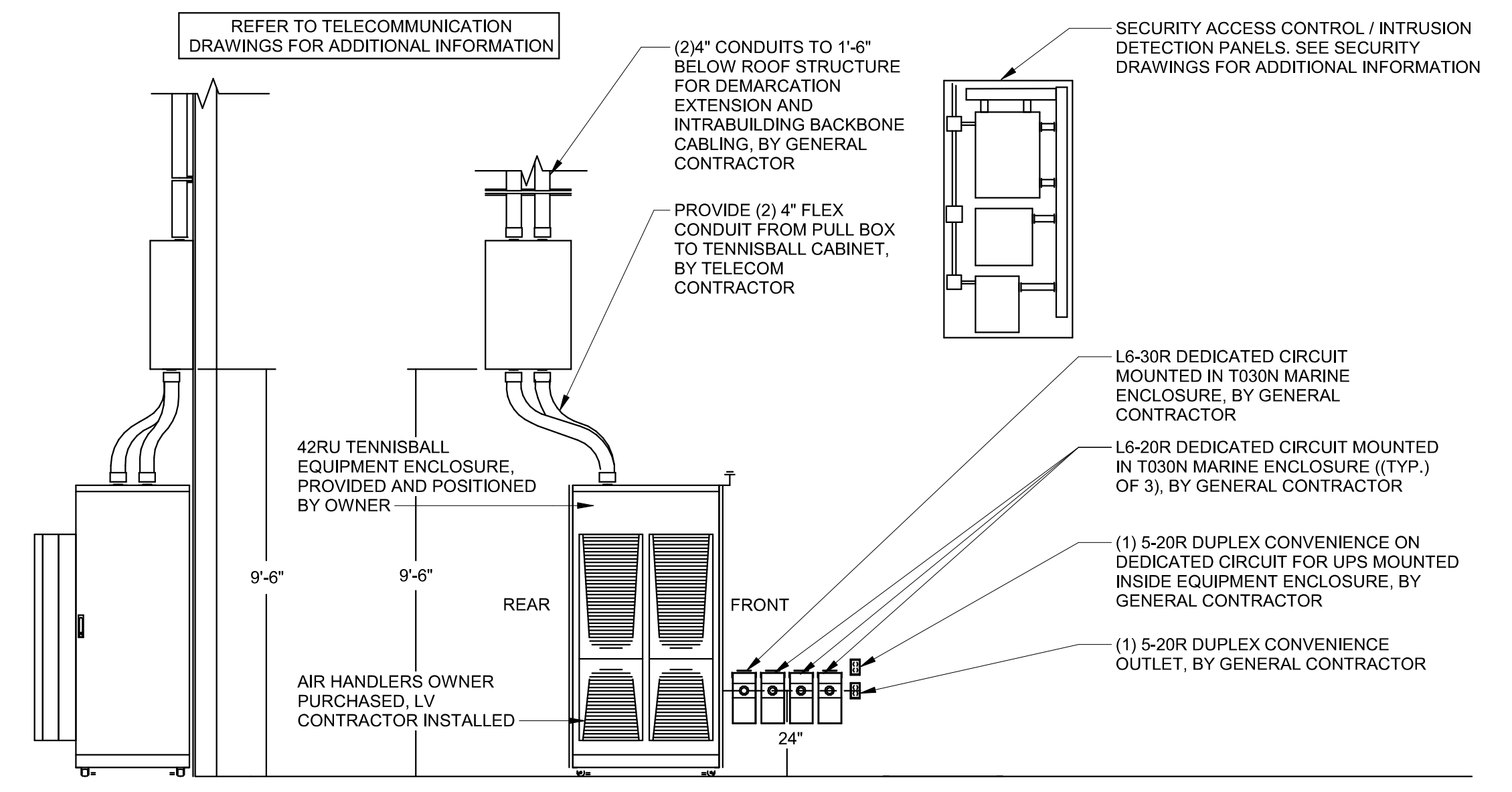
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Project number:	763838-02
Scale:	AS NOTED
Drawn By:	BG
Checked By:	JGW
Date:	04.25.2025
Issue:	PERMIT SET

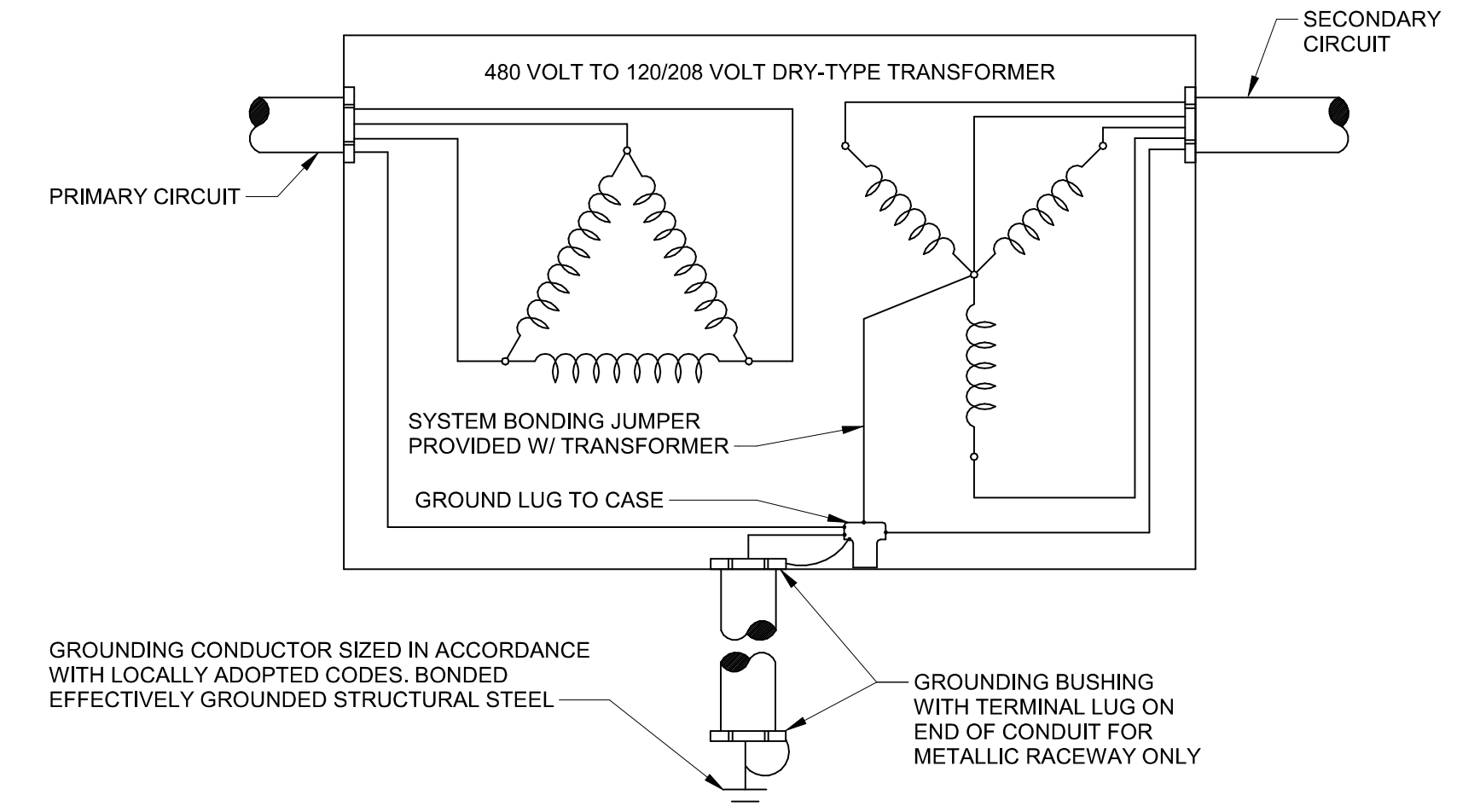
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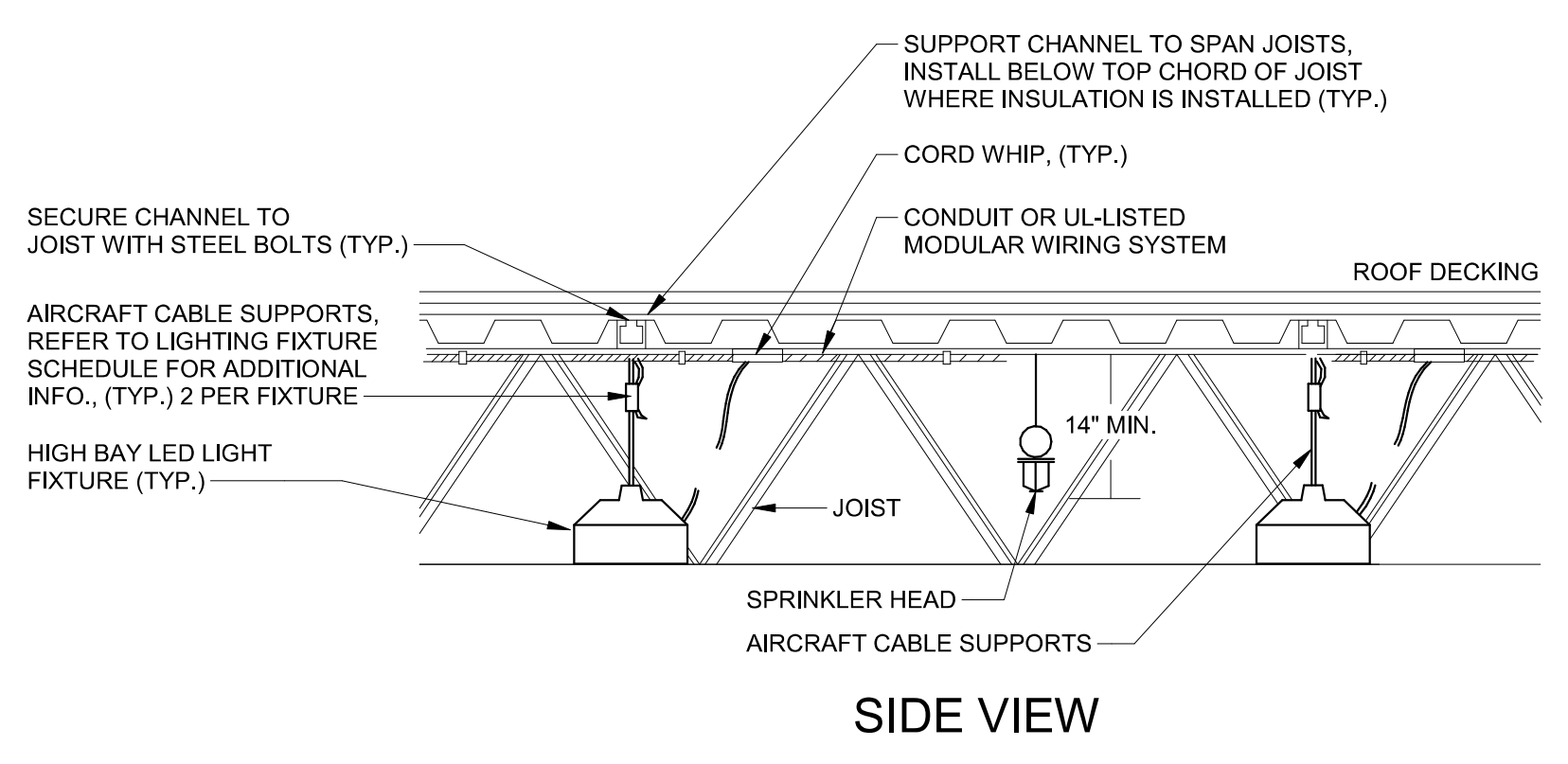
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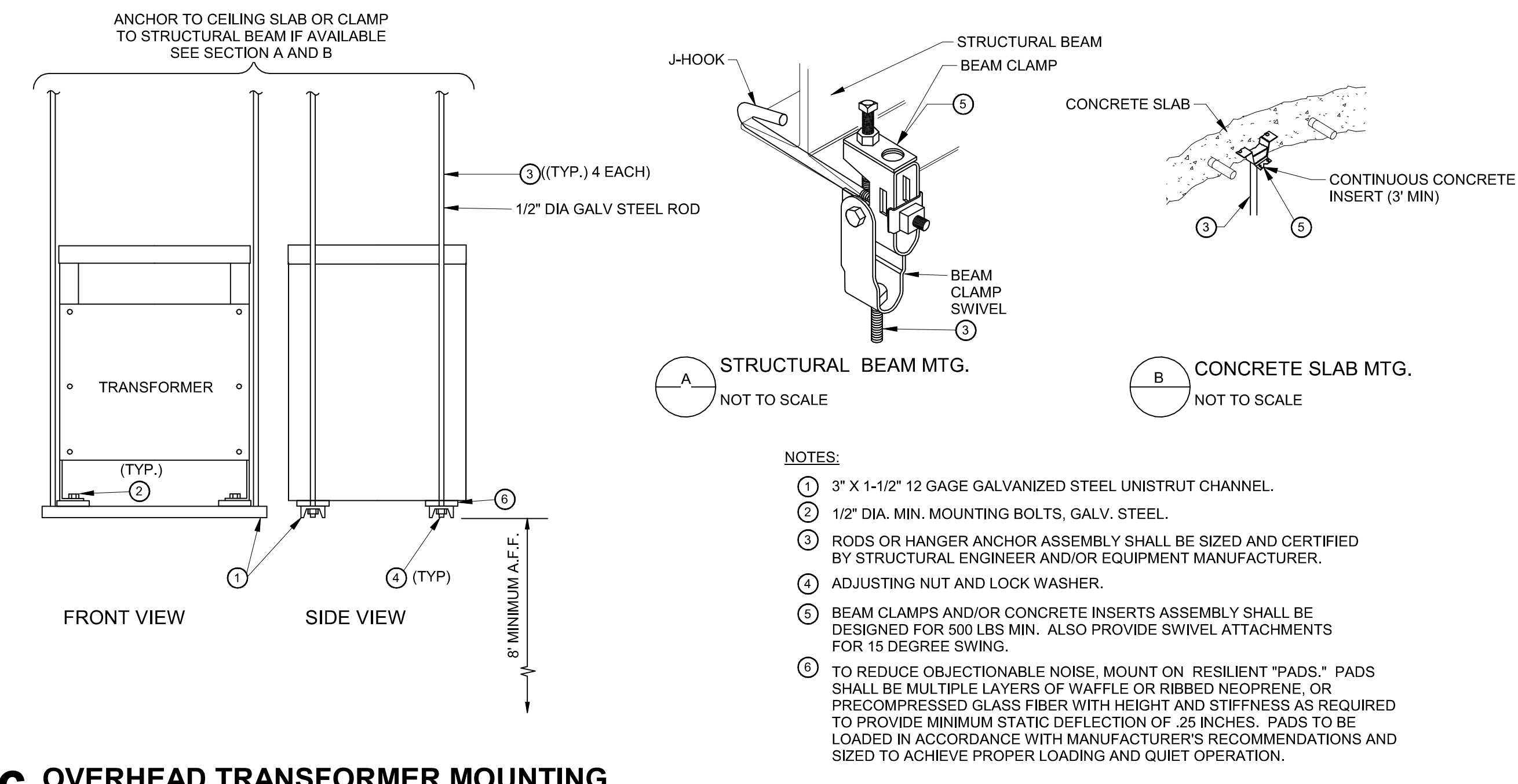
5 TB ENCLOSURE WALL MOUNT (SINGLE-SIDED AIR HANDLER)
NOT TO SCALE



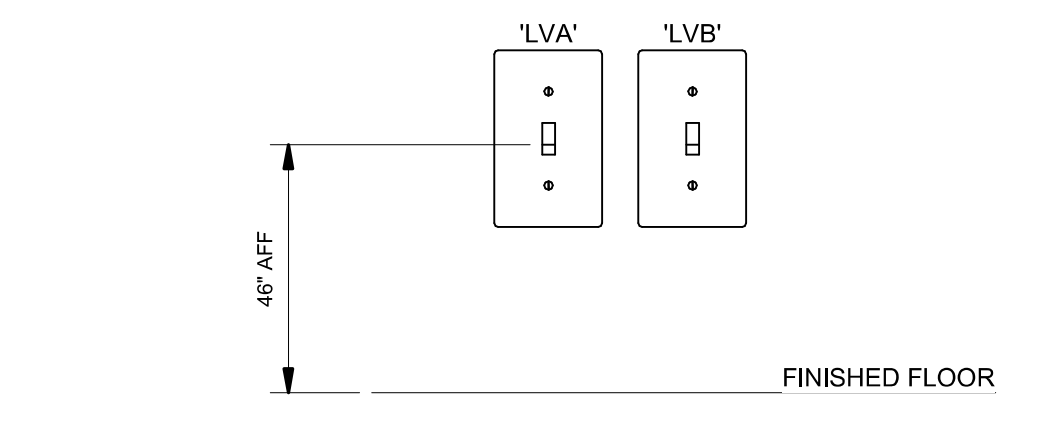
1 DRY TYPE TRANSFORMER GROUNDING
NOT TO SCALE



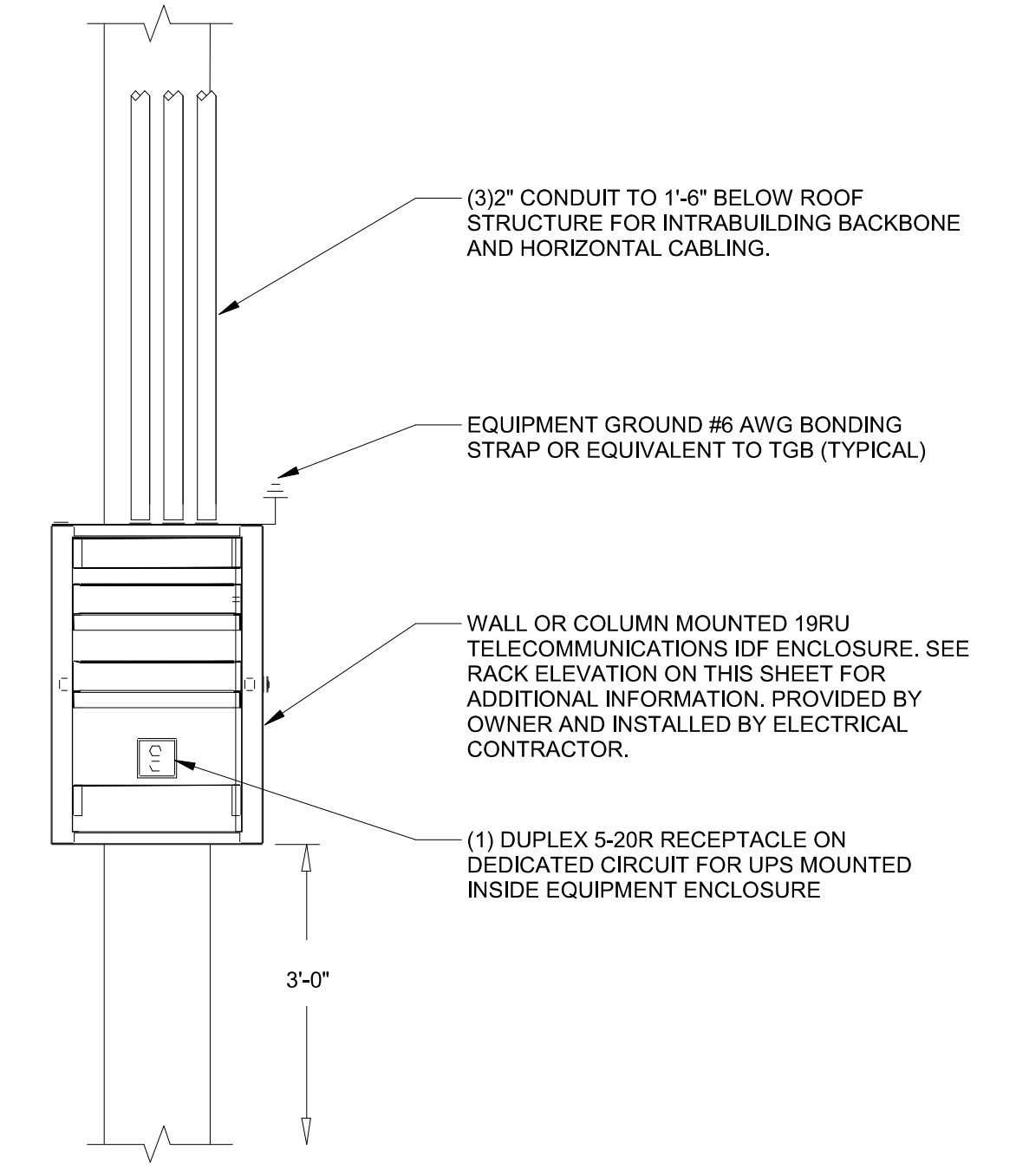
8 HIGH BAY FIXTURE SUPPORT SUSPENDED (WAREHOUSE)
NOT TO SCALE



6 OVERHEAD TRANSFORMER MOUNTING
NOT TO SCALE



2 LIGHTING CONTROL SWITCHBANK
NOT TO SCALE

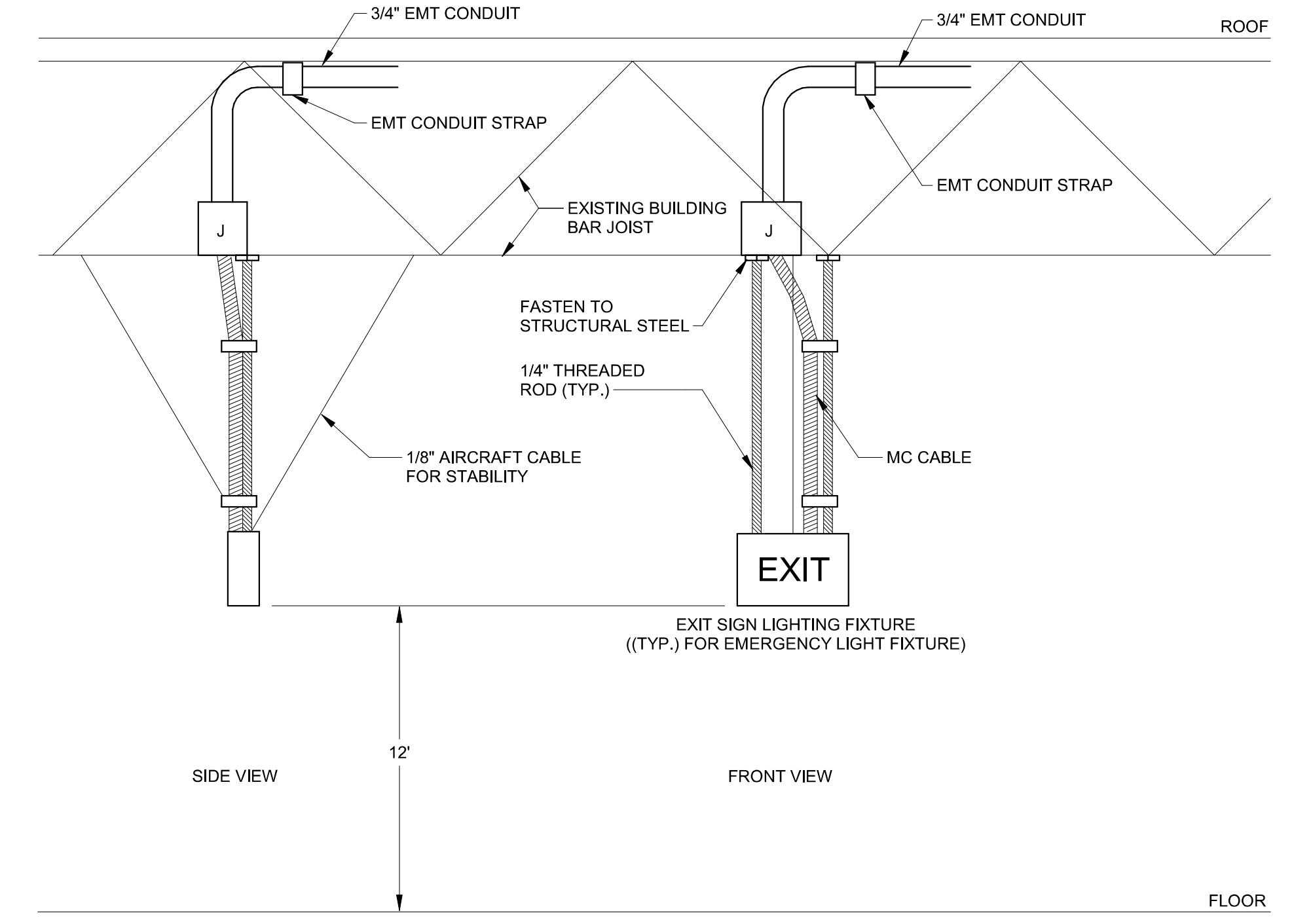


3 WAREHOUSE IDF CABINET
NOT TO SCALE

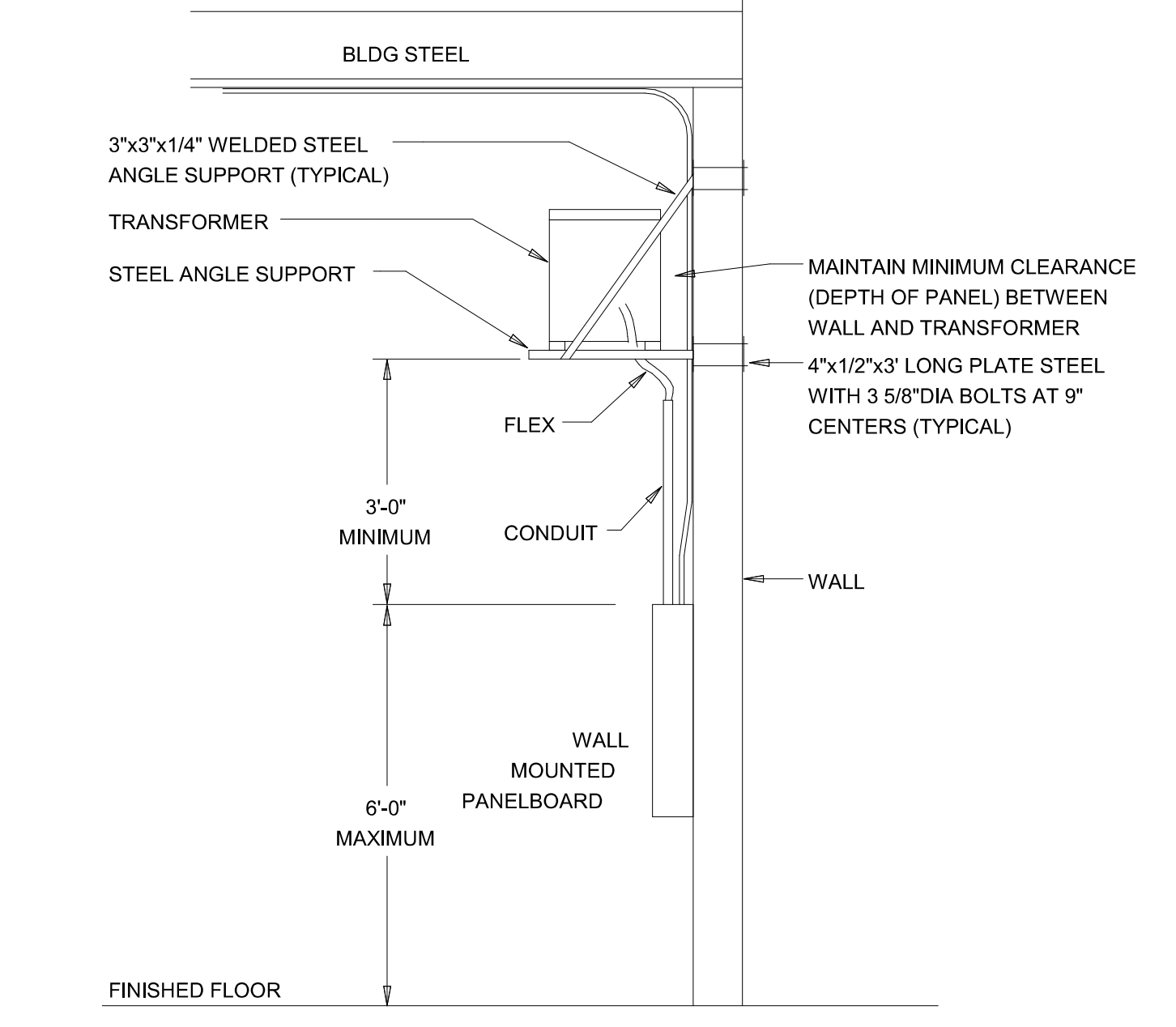
- 1. EV-Capable**
Install electrical panel capacity with a dedicated branch circuit and a continuous raceway from the panel to the future EV parking spot.
Aspen, CO: 3% of parking is EV-Capable (IBC)
Atlanta, GA: 20% is EV-Capable (Ordinance)
- 2. EVSE-Ready Outlet**
Install electrical panel capacity and raceway with conduit to terminate in a junction box or 240-volt charging outlet (typical clothing dryer outlet).
Boulder, CO: 10% of parking is EV-Ready Outlet
- 3. EVSE-Installed**
Install a minimum number of Level 2 EV charging stations.
Palo Alto, CA: 5-10% of parking is EV-Installed

FOR REFERENCE ONLY

9 EV INFRASTRUCTURE INSTALLATION REQUIREMENTS
NOT TO SCALE



7 PENDANT MOUNTED EXIT SIGN
NOT TO SCALE



4 TRANSFORMER FROM WALL
NOT TO SCALE

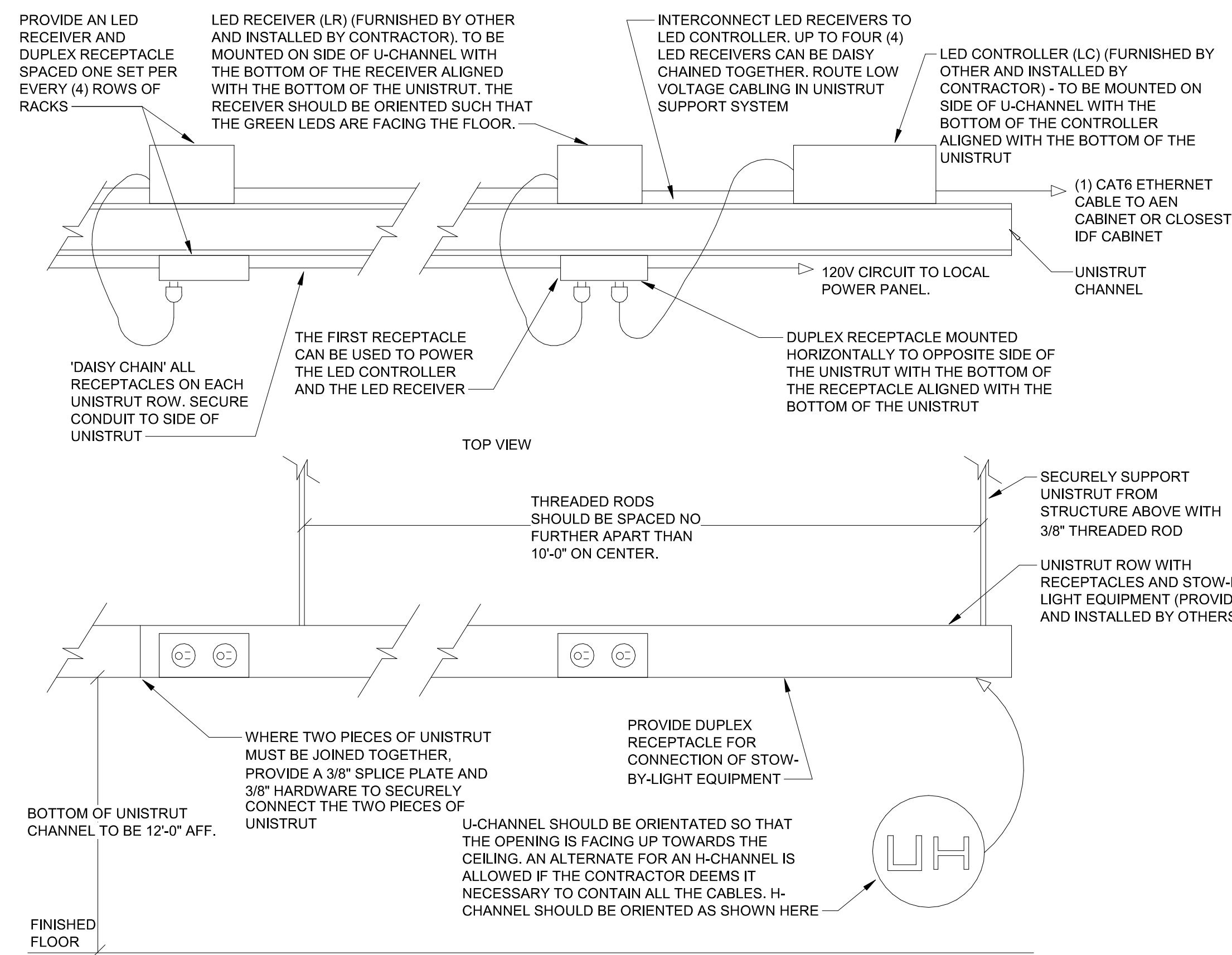


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Revisions / Submissions		
ID	Description	Date
1	PERMIT SET	04.25.2025

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Project number: 763838-02
Scale: AS NOTED
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Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
ELECTRICAL DETAILS

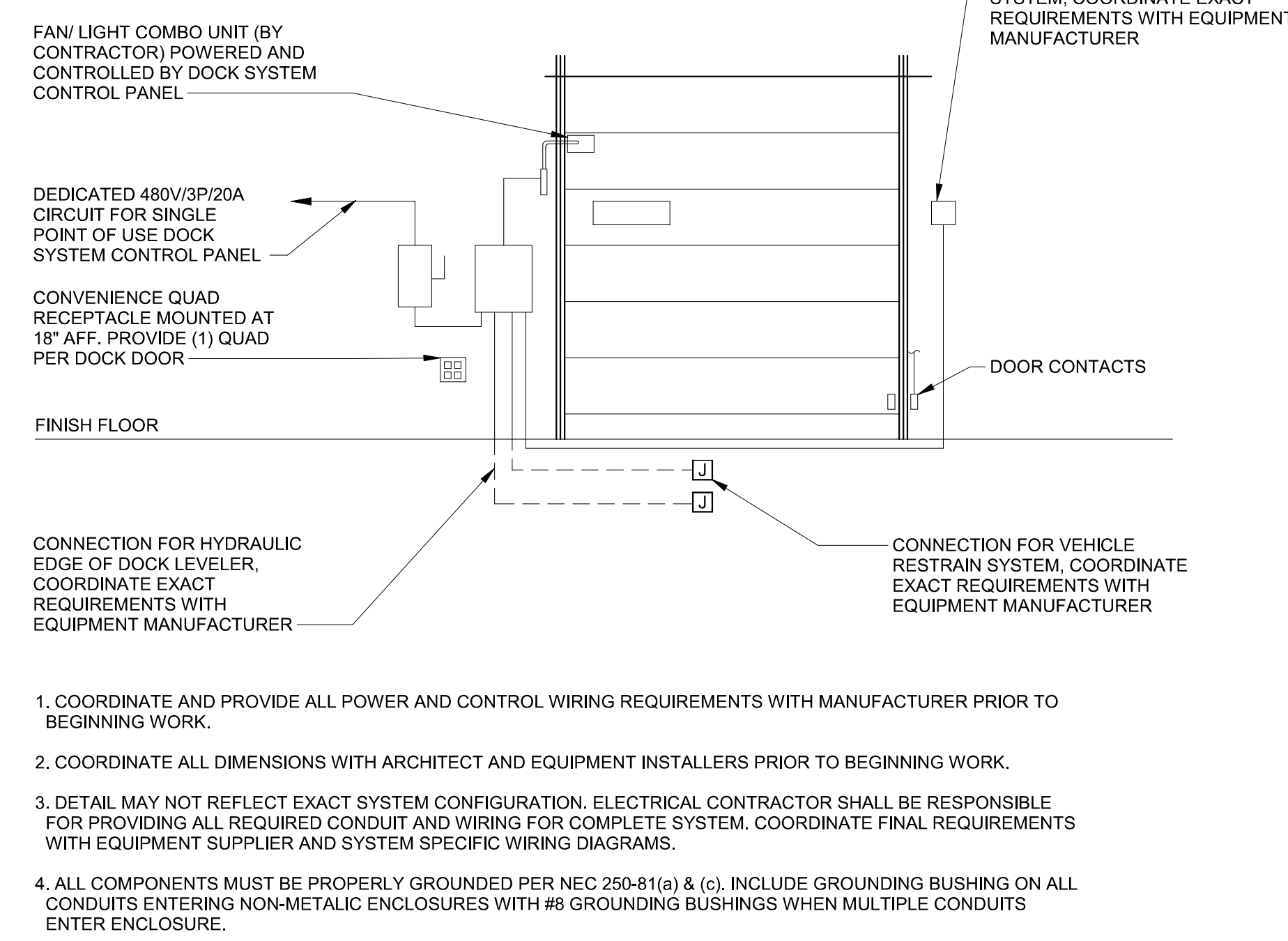


- GENERAL NOTES:
- CONTRACTOR IS RESPONSIBLE FOR DESIGNING, PROVIDING AND INSTALLING A SUPPORT SYSTEM THAT CAN SUPPORT ALL OF THE CONTRACTOR PROVIDED COMPONENTS AS WELL AS EQUIPMENT NOTED TO BE PROVIDED BY OTHERS (LED CONTROLLERS, LED RECEIVERS, LED RECEIVER CABLES, ETC.). THE SUPPORT SYSTEM SHOULD BE RIGID ENOUGH TO PREVENT SWAYING. INCLUDE A 10% SPARE SUPPORT CAPACITY IN THE SUPPORT SYSTEM DESIGN.
 - THE SUPPORT SYSTEM SHOULD BE LOCATED TO AVOID CONFLICT WITH HVLS FAN BLADES. RELOCATE FANS TO ACCOMMODATE THE PLACEMENT OF THE SUPPORT RODS.
 - THE UNISTRUT CHANNEL SHOULD BE LARGE ENOUGH TO ACCOMMODATE (6) CAT6 CABLES CONTAINED WITHIN THE CHANNEL WITHOUT CONFLICTING WITH THE THREADED ROD CONNECTION HARDWARE AND ANY SPLICE PLATES/CONNECTOR HARDWARE.
 - CONTRACTOR TO ACCOUNT FOR ONE LED CONTROLLER PER UNISTRUT ROW (CLUSTER), UP TO 48 ROWS OF RACKS MAXIMUM. THE LED CONTROLLER SHOULD BE LOCATED ON THE UNISTRUT CHANNEL AT THE BEGINNING OF THE CONVEYOR SYSTEM. SOME SITE-SPECIFIC CONDITIONS MAY EXIST WHERE THE CONTROLLER WILL NEED TO BE LOCATED AT THE END OF THE CONVEYOR SYSTEM. FIELD VERIFY WITH IT PRIOR TO INSTALLATION.
 - IF THE LED CONTROLLER NEEDS TO BE LOCATED AT THE END INSTEAD OF THE START OF THE ROW (BASED ON THE SORT AISLE SEQUENCE), THE INSTALLER NEEDS TO MAKE SURE THAT THE CONTROLLER TO RECEIVER CONNECTIONS REFLECT THE CORRECT SEQUENCE OF RECEIVERS THE LC PORT 1 STILL NEEDS TO BE WIRED TO THE FIRST (4) LR'S, WHICH ARE CONNECTED TO THE FIRST 16 SORT AISLES.
 - IF AISLE COUNT EXCEED 48 RACKS PER ROW, A SECOND LED CONTROLLER WILL NEED TO BE ACCOUNTED FOR.
 - SOME COMPONENTS ARE PROVIDED BY OTHER, HOWEVER ALL COMPONENTS SHOWN IN THIS DETAIL ARE TO BE INSTALLED BY THE CONTRACTOR.
 - LOW VOLTAGE CONTRACTOR IS RESPONSIBLE FOR PROVIDING OPS TECH IT LOCAL MANAGEMENT THE FOLLOWING INFORMATION ON EACH SBL ROW (OR CLUSTER):

STOW-BY-LIGHT SYSTEM DATA							
CLUSTER	A	B	C	D	E	F	G
MAC ADDRESS(ES)							
POWER PANEL NAME							
POWER PANEL CIRCUIT							
IDF CABINET #							
IDF SWITCH #							
IDF PORT #							
NUMBER OF AISLES							
BIN LAYOUT							
NOTES:							
1. THE MAC ADDRESS CAN BE FOUND ON THE FRONT FACE OF THE LED CONTROLLER.							
2. ROUTE THE CAT6 CABLE TO THE AEN CABINET, OR IF THAT IS FURTHER THAN 75'-0", THEN TO THE CLOSEST IDF CABINET.							
3. ADJUST TABLE TO PROVIDE ENOUGH COLUMNS FOR THE NUMBER OF CLUSTERS IN THE BUILDING.							

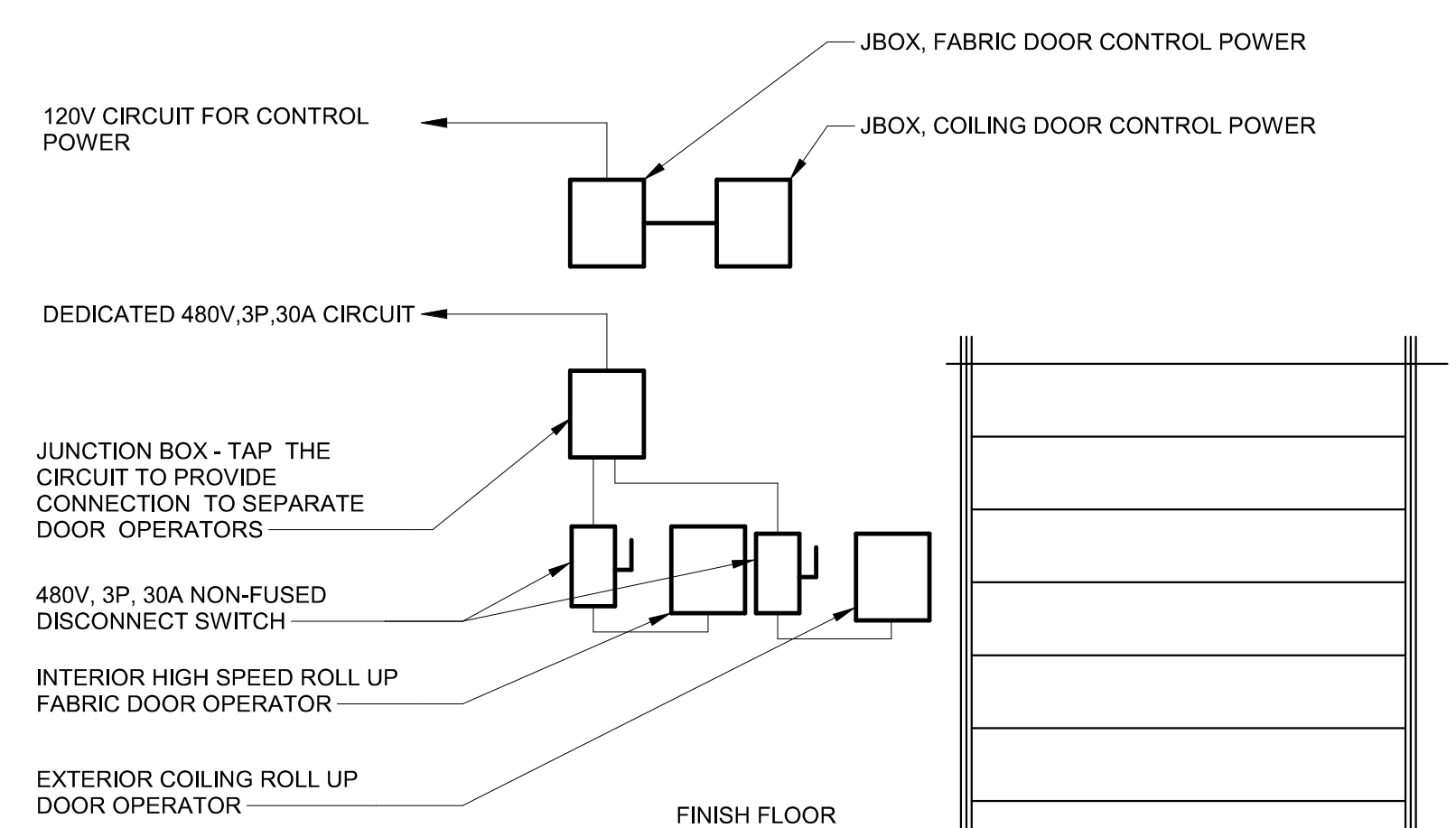
7 STOW-BY-LIGHT (SBL) SYSTEM

NOT TO SCALE



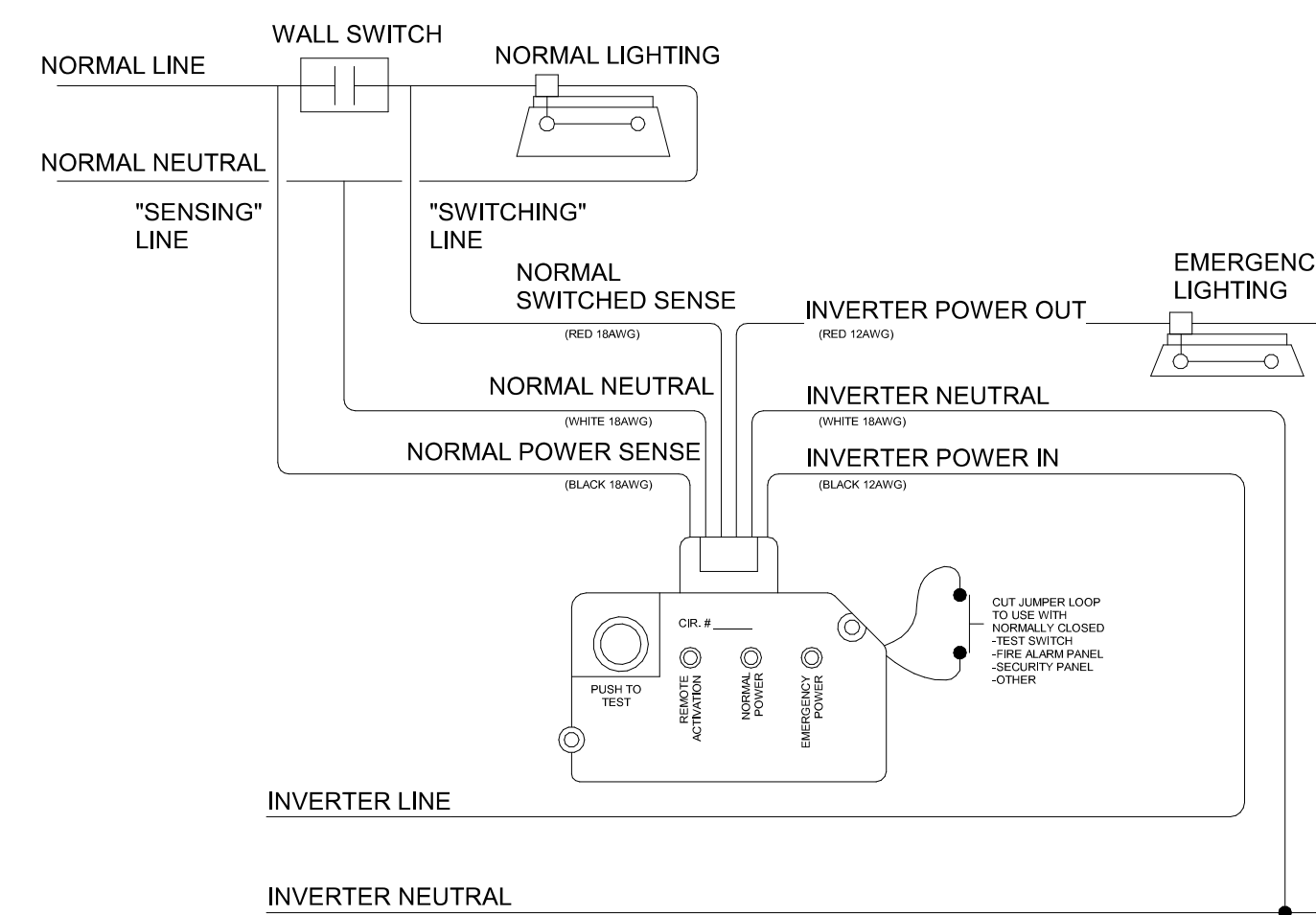
4 TYPICAL LOADING DOCK DOOR ELEVATION

NOT TO SCALE



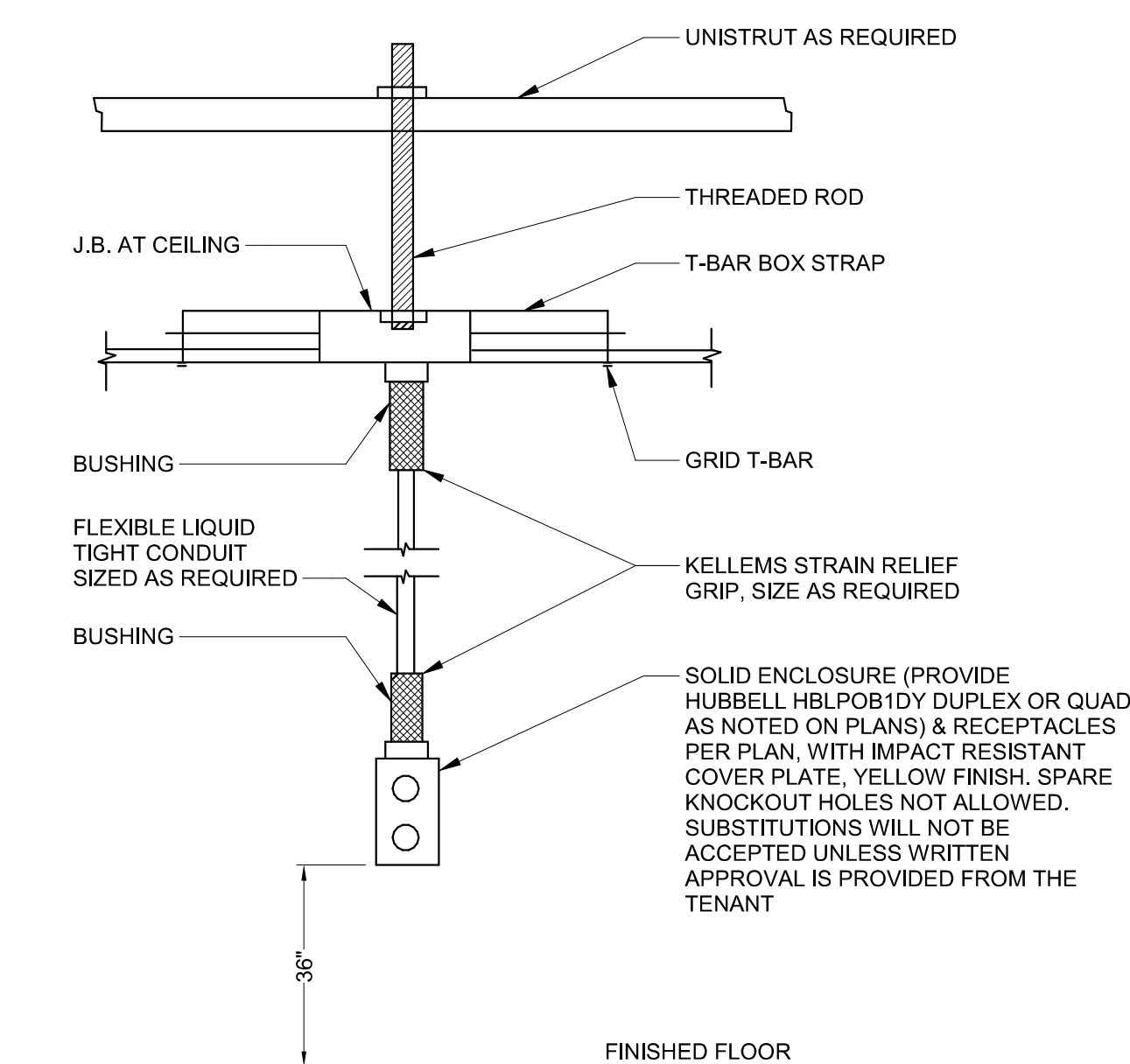
5 TYPICAL HIGH SPEED ROLL UP DOOR ELEVATION

NOT TO SCALE



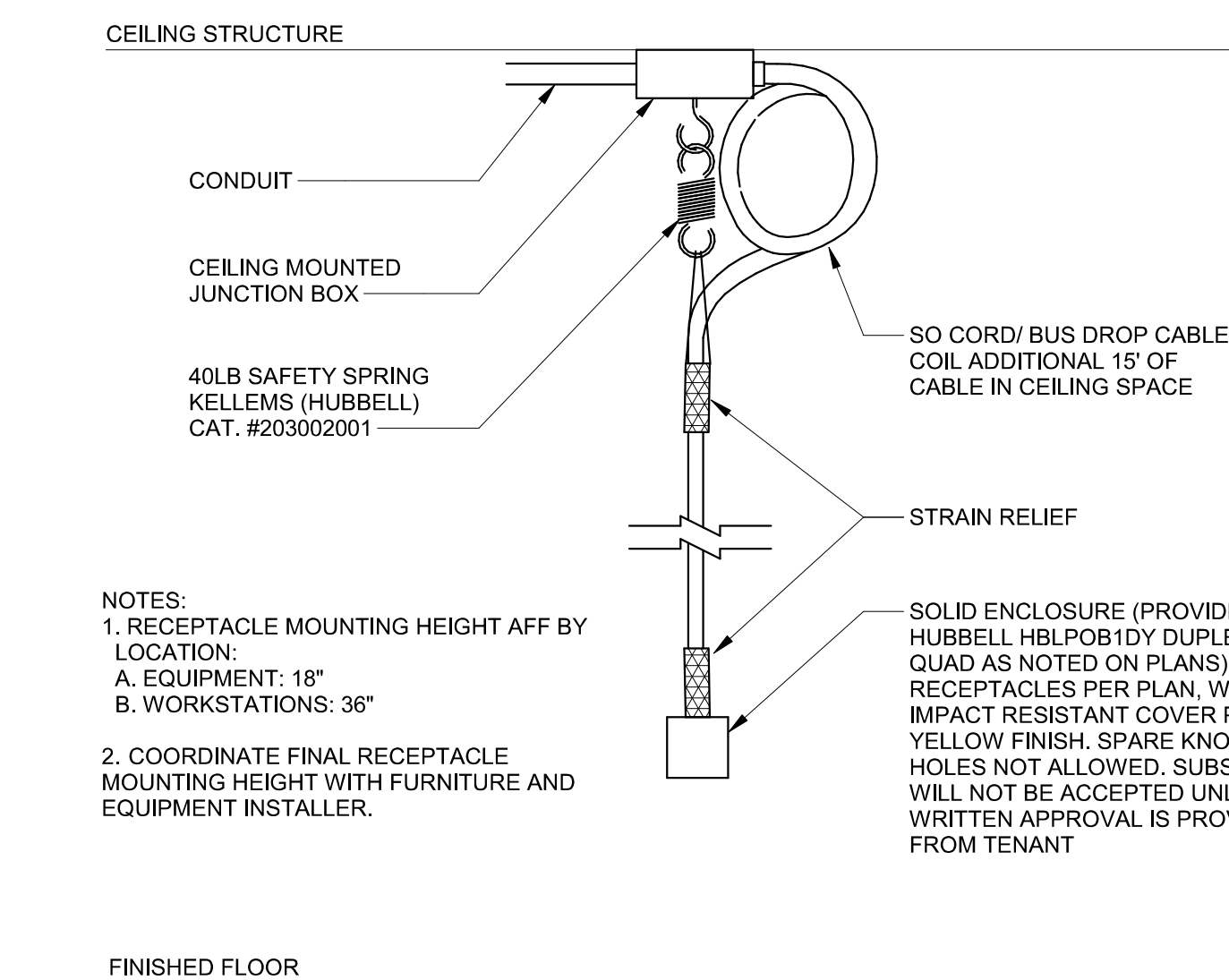
6 EMERGENCY LIGHTING CONTROL DEVICE

NOT TO SCALE



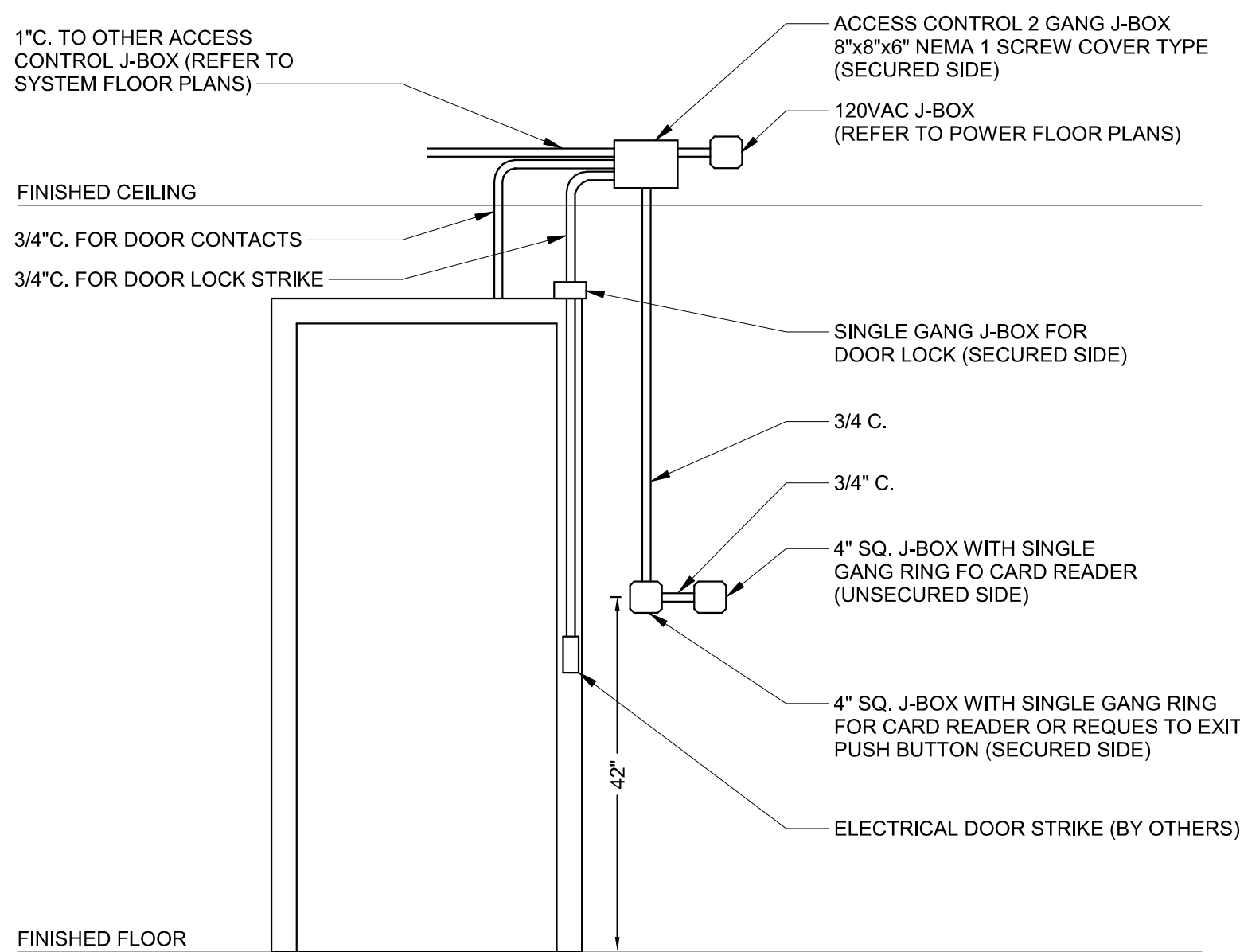
1 ABOVE TABLE CORD HUNG RECEPTACLE

NOT TO SCALE



2 TYPICAL SO CORD BUS DROP CABLE STRAIN RELIEF

NOT TO SCALE



3 DOOR ACCESS WITH CARD READER

NOT TO SCALE



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Project # - 012024.15.21

PANEL: HA SYSTEM: 277480V - 3P FEEDER: SEE RISER DIAGRAM OPTIONS: NEMA ENCLOSURE: Type 1 CABINET MOUNTING: Surface LUGS: 225 A - MLD AIC RATING: SEE FAULT CALCS

LOAD CLASSIFICATION CONNECTED LOAD DEMAND FACTOR ESTIMATED DEMAND PANEL TOTALS

PANEL SCHEDULE NOTES:

PANEL: HL SYSTEM: 277480V - 3P FEEDER: SEE RISER DIAGRAM OPTIONS: NEMA ENCLOSURE: Type 1 CABINET MOUNTING: Surface LUGS: 225 A - MLD AIC RATING: SEE FAULT CALCS

LOAD CLASSIFICATION CONNECTED LOAD DEMAND FACTOR ESTIMATED DEMAND PANEL TOTALS

PANEL SCHEDULE NOTES:

PANEL: HM3 SYSTEM: 277480V - 3P FEEDER: SEE RISER DIAGRAM OPTIONS: NEMA ENCLOSURE: Type 1 CABINET MOUNTING: Surface LUGS: 400 A - MCB AIC RATING: SEE FAULT CALCS

LOAD CLASSIFICATION CONNECTED LOAD DEMAND FACTOR ESTIMATED DEMAND PANEL TOTALS

PANEL SCHEDULE NOTES:

PANEL: HB SYSTEM: 277480V - 3P FEEDER: SEE RISER DIAGRAM OPTIONS: NEMA ENCLOSURE: Type 1 CABINET MOUNTING: Surface LUGS: 225 A - MLD AIC RATING: SEE FAULT CALCS

LOAD CLASSIFICATION CONNECTED LOAD DEMAND FACTOR ESTIMATED DEMAND PANEL TOTALS

PANEL SCHEDULE NOTES:

PANEL: HM1 SYSTEM: 277480V - 3P FEEDER: SEE RISER DIAGRAM OPTIONS: NEMA ENCLOSURE: Type 1 CABINET MOUNTING: Surface LUGS: 400 A - MLD AIC RATING: SEE FAULT CALCS

LOAD CLASSIFICATION CONNECTED LOAD DEMAND FACTOR ESTIMATED DEMAND PANEL TOTALS

PANEL SCHEDULE NOTES:

PANEL: INV SYSTEM: 277480V - 3P FEEDER: SEE RISER DIAGRAM OPTIONS: NEMA ENCLOSURE: Type 1 CABINET MOUNTING: FLOOR LUGS: 35 A - MCB AIC RATING: SEE FAULT CURRENT CALCS

LOAD CLASSIFICATION CONNECTED LOAD DEMAND FACTOR ESTIMATED DEMAND PANEL TOTALS

PANEL SCHEDULE NOTES:

PANEL: HC SYSTEM: 277480V - 3P FEEDER: SEE RISER DIAGRAM OPTIONS: NEMA ENCLOSURE: Type 1 CABINET MOUNTING: Surface LUGS: 225 A - MLD AIC RATING: SEE FAULT CALCS

LOAD CLASSIFICATION CONNECTED LOAD DEMAND FACTOR ESTIMATED DEMAND PANEL TOTALS

PANEL SCHEDULE NOTES:

PANEL: HM2 SYSTEM: 277480V - 3P FEEDER: SEE RISER DIAGRAM OPTIONS: NEMA ENCLOSURE: Type 1 CABINET MOUNTING: Surface LUGS: 400 A - MLD AIC RATING: SEE FAULT CALCS

LOAD CLASSIFICATION CONNECTED LOAD DEMAND FACTOR ESTIMATED DEMAND PANEL TOTALS

PANEL SCHEDULE NOTES:

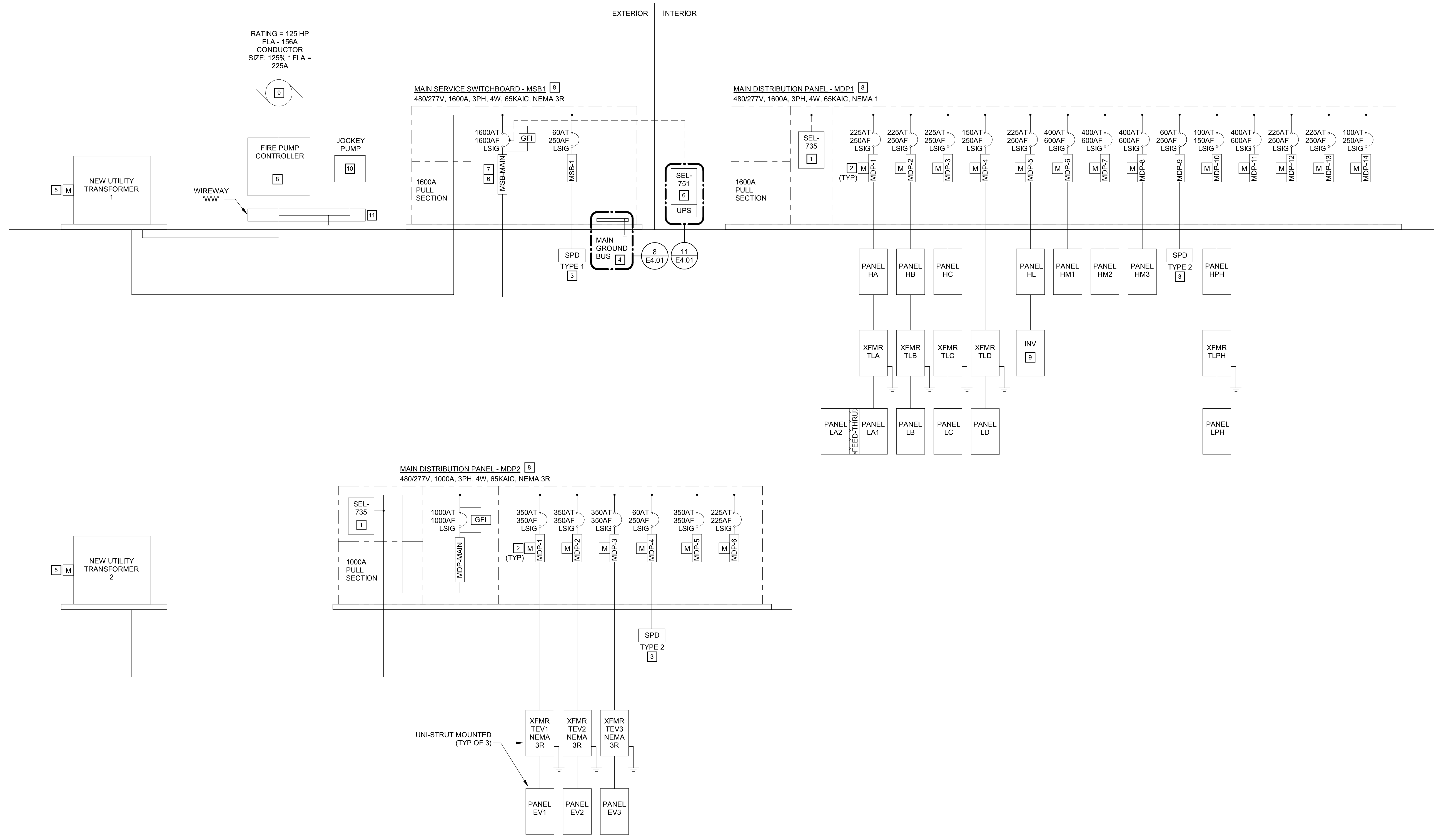
PANEL: HPH SYSTEM: 277480V - 3P FEEDER: SEE RISER DIAGRAM OPTIONS: NEMA ENCLOSURE: Type 1 CABINET MOUNTING: Surface LUGS: 100 A - MCB AIC RATING: SEE FAULT CALCS

LOAD CLASSIFICATION CONNECTED LOAD DEMAND FACTOR ESTIMATED DEMAND PANEL TOTALS

PANEL SCHEDULE NOTES:

PANEL SCHEDULE NOTES: GENERAL NOTES: CIRCUITS SHADED AND ITALICIZED ARE EXISTING TO REMAIN. BALANCE PANELS WITHIN 10% PHASE TO PHASE. CIRCUIT KEY NOTES: LOC HANDLE LOCK 'OFF/ON' CLAMP DEVICE. (RED FOR FIRE ALARM PANEL CIRCUIT) ST SHUNT TRIP BREAKER G GROUND FAULT CIRCUIT INTERRUPTING BREAKER mA 30 MILLIAMP RATED BREAKER RP ROUTE CIRCUIT THROUGH RELAY PANEL. REFER TO RELAY PANEL SCHEDULES

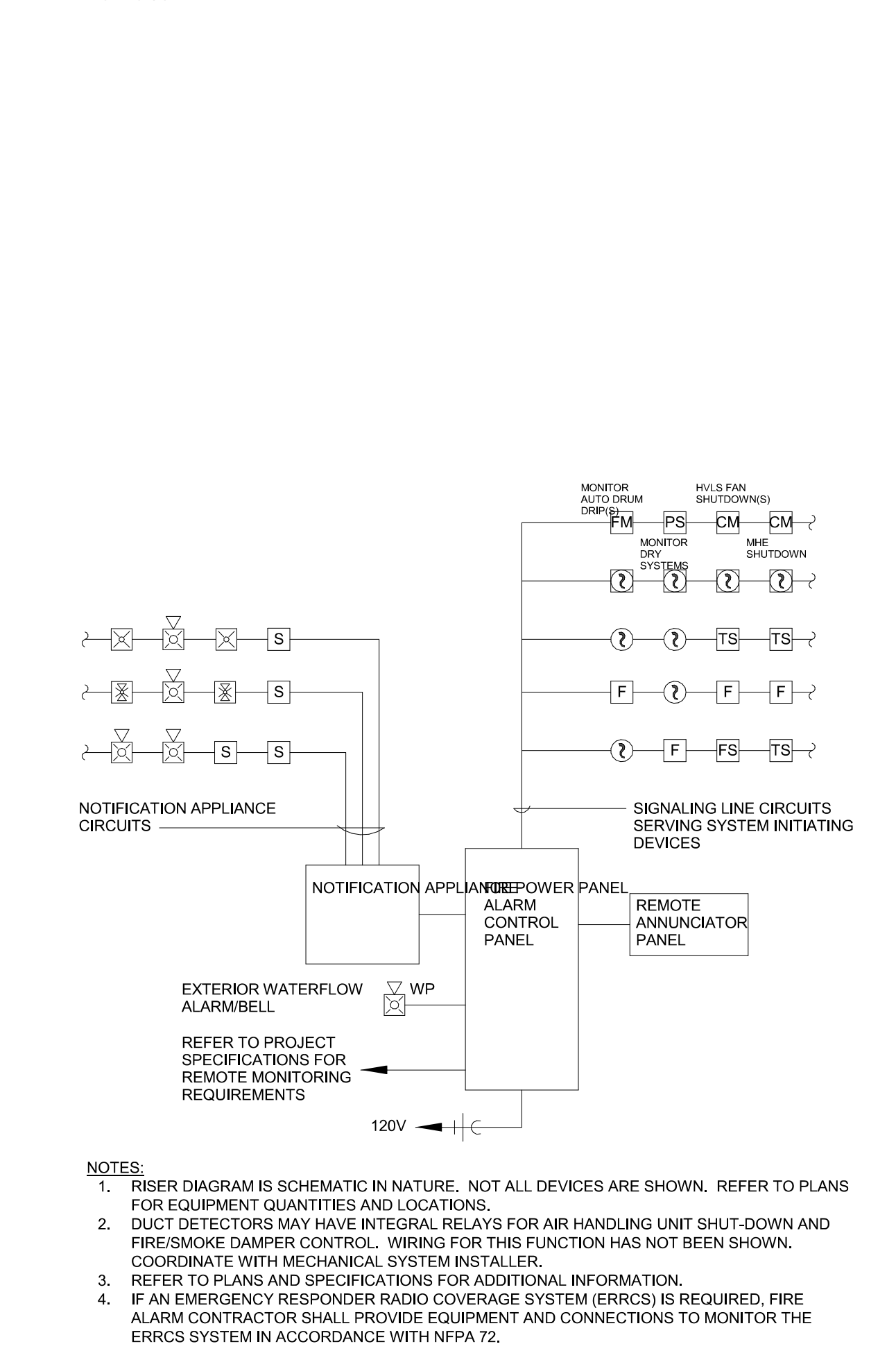
PANELBOARD INDEX: HA HL HM3 HB HM1 INV HC HM2 HPH



- ### ONE-LINE DIAGRAM NOTES:
- 1 PROVIDE (SEL-735 OR SCHNEIDER PM8000) POWER METER INTEGRAL TO SWITCHGEAR BY OEM. METER SHALL BE INTEGRATED WITHIN SWITCHBOARD IN A LOW VOLTAGE CONTROLS COMPARTMENT COMPLETELY ISOLATED FROM THE MAIN BUSCABLE SECTIONS. 480V FEEDER BREAKER TRIP UNIT METERS ARE TO BE WIRED TO A COMMON GATEWAY TO BMS METERING DATA TO BMS SYSTEM VIA MODBUS OR ETHERNET IP PROTOCOL.
 - 2 EACH FEEDER BREAKER SHALL BE LSIG TYPE AND HAVE INTEGRAL TRIP UNIT METERING CAPABILITY. TRIP SETTINGS SHALL BE ADJUSTABLE AND SET PER POWER SYSTEM COORDINATION STUDY PRIOR TO BUILDING.
 - 3 SURGE PROTECTION DEVICE (SPD) UNIT MOUNTED ABOVE PANEL. CONTRACTOR SHALL KEEP CONNECTION DISTANCE AS SHORT AS POSSIBLE. MAXIMUM DISTANCE 18". SPD SHALL BE UL 1449 FOURTH EDITION RATED, TYPE 2 WITH A MINIMUM NOMINAL DISCHARGE CURRENT OF 20KA, AN AUDIBLE ALARM AND (1) SET OF DRY CONTACTS. (LEA MSP200). PROVIDE (4)M3, (1)M6G, IN 1-1/4" C.
 - 4 PROVIDE NEW GROUNDING PER REFERENCED DETAIL.
 - 5 NEW UTILITY METER LOCATED ON NEW UTILITY TRANSFORMER. COORDINATE REQUIREMENTS AND INSTALLATION WITH UTILITY COMPANY.
 - 6 ACTIVE ARC-FLASH MITIGATION RELAY SYSTEM SHALL BE CONNECTED TO THIS MAIN BREAKER. REFER TO REFERENCED DETAIL FOR ADDITIONAL INFORMATION.
 - 7 CIRCUIT BREAKERS RATED 1200A OR HIGHER SHALL HAVE APPROPRIATE DOCUMENTATION AND METHOD TO REDUCE CLEARING TIME IN ORDER TO REDUCE ARC FLASH ENERGY PER CODE. PROVIDE ENERGY-REDUCING MAINTENANCE SWITCH WITH LOCAL STATUS INDICATOR. PROVIDE PROVISIONS TO INTERFACE WITH OWNER ALARMMONITORING TO INDICATE STATUS.
 - 8 MANUFACTURER TO PROVIDE A SHORT CIRCUIT STUDY. SELECTIVE COORDINATION STUDY AND ARC FLASH ANALYSIS FOR THE ELECTRICAL DISTRIBUTION SYSTEM. ADJUST TRIP SETTINGS ON CIRCUIT BREAKERS & MODIFY SHORT CIRCUIT RATINGS OF ELECTRICAL EQUIPMENT PER THE RESULTS. OVERCURRENT PROTECTIVE DEVICES WILL BE SELECTIVELY COORDINATED FOR DISTRIBUTION SYSTEMS.
 - 9 EMERGENCY LIGHTING CENTRAL INVERTER SHALL BE 480V, 16.7KVA MEYERS ILLUMINATOR HYPERNOVA SYSTEM. FAST CHARGE OR APPROVED EQUAL. INPUT VOLTAGE 480V, 3PHASE. OUTPUT VOLTAGE 480/277V, 12 HOUR BATTERY RECHARGE, FACTORY STARTUP PROGRAM, NORMALLY ON OUTPUT CIRCUIT BREAKERS. UNIT SHALL HAVE A MINIMUM OF (10) 277V-1P CIRCUIT BREAKERS. COORDINATE FINAL INSTALLATION REQUIREMENTS WITH MANUFACTURER.
 - 10 FIRE PUMP CONTROLLER. PROVIDE NEW UNDERGROUND SERVICE CONDUCTORS FROM NEW UTILITY TRANSFORMER TO CONTROLLER PER FEEDER SCHEDULE THIS SHEET.
 - 11 NEW 125HP, 3PH, 3W, 480V FIRE PUMP. REFER TO THE FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
 - 12 JOCKEY PUMP AND JOCKEY PUMP CONTROLLER WITH INTEGRAL DISCONNECT PROVIDED BY OTHERS.
 - 13 PROVIDE WIREWAY FOR FIRE AND JOCKEY PUMP CONNECTION. PROVIDE GROUND BAR IN WIREWAY AND CONNECT #6 GROUND TO STRUCTURAL STEEL COLD WATER PIPE AND METALLIC PIPING. PROVIDE 20'-0" MINIMUM # 4 CONCRETE ENCASED GROUNDING ELECTRODE.

1 ELECTRICAL ONE-LINE DIAGRAM

NOT TO SCALE



2 FIRE ALARM RISER DIAGRAM

NOT TO SCALE

ELECTRICAL LOAD SUMMARY - MDP1

PANEL: MDP1 LOCATION: 480/277V, 1000A, 3PH, 4W, 65KVAIC, NEMA 3R

SYSTEM: 277/480V-3P BUS RATING: 1600 A NEMA ENCLOSURE: Type 1 CABINET MOUNTING: FLOOR

FEEDER: SEE RISER DIAGRAM MAINS: 1600 A - MCB LUGS: AIC RATING: SEE FAULT CALC

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED..	PANEL TOTALS
HVAC	542515 VA	100.00%	542515 VA	
Lighting	42327 VA	125.00%	52909 VA	
Motor	6157 VA	100.00%	6167 VA	TOTAL CONN. LOAD: 723641 VA
Non-Continuous Motor	26400 VA	100.00%	26400 VA	TOTAL EST. DEMAND: 716298 VA
Other	1402 VA	100.00%	1402 VA	TOTAL CONN. CURRENT: 870 A
Power	24017 VA	100.00%	24017 VA	TOTAL DEMAND... 853 A
Receptacle	63640 VA	57.83%	36920 VA	
Water Heater-Continuous	9000 VA	100.00%	9000 VA	
CONTINUOUS MOTOR	7983 VA	125.00%	9979 VA	

Notes:

ELECTRICAL LOAD SUMMARY - MDP2

PANEL: MDP2 LOCATION: 480/277V, 1000A, 3PH, 4W, 65KVAIC, NEMA 3R

SYSTEM: 277/480V-3P BUS RATING: 1000 A NEMA ENCLOSURE: Type 3R CABINET MOUNTING: FLOOR

FEEDER: SEE RISER DIAGRAM MAINS: 1000 A - MCB LUGS: AIC RATING: SEE FAULT CALC

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED..	PANEL TOTALS
EV CHARGING	506500 VA	125.00%	632500 VA	
				TOTAL CONN. LOAD: 506500 VA
				TOTAL EST. DEMAND: 632500 VA
				TOTAL CONN. CURRENT: 609 A
				TOTAL DEMAND... 761 A

Notes:

FEEDER SCHEDULE - MSB1

EQUIPMENT MARK	VOLTAGE - PHASE	FAULT CURRENT	VOLTAGE DROP
UTILITY	1500kVA 277/480V-3P INFINITE	51549	
WIREWAY WW	277/480V-3P	9437	
FP CNTLR	277/480V-3P	8838	0.2%
JP CNTLR	277/480V-3P	3553	0.2%
MSB1	277/480V-3P	34420	
MDP1	277/480V-3P	32460	0.3%
HA	277/480V-3P	27182	0.4%
TLA-P	480V-3P	24490	0.4%
TLA	75kVA: 480V-3P to 120/208V-3P, CU	3885	0.4%
LA1	120/208V-3P	3804	0.6%
LA2	120/208V-3P	3725	0.7%
HB	277/480V-3P	8297	2.2%
TLB-P	480V-3P	8028	2.2%
TLB	75kVA: 480V-3P to 120/208V-3P, CU	3405	2.2%
LB	120/208V-3P	3342	2.4%
HC	277/480V-3P	11035	1.6%
TLC-P	480V-3P	10564	1.6%
TLC	75kVA: 480V-3P to 120/208V-3P, CU	3562	1.6%
LC	120/208V-3P	3494	1.7%
TLD-P	480V-3P	10934	0.9%
TLD	75kVA: 480V-3P to 120/208V-3P, CU	3580	0.9%
LD	120/208V-3P	3511	1.0%
HL	277/480V-3P	27182	0.4%
INV	277/480V-3P	2453	1.5%
HM1	277/480V-3P	18053	1.2%
HM2	277/480V-3P	15498	1.6%
HM3	277/480V-3P	29138	0.4%
HPH	277/480V-3P	7303	1.3%
TLPH-P	480V-3P	5756	1.3%
TLPH	15kVA: 480V-3P to 120/208V-3P, CU	952	1.3%
TLPH	120/208V-3P	906	1.5%

FEEDER SCHEDULE - MDP2

EQUIPMENT MARK	VOLTAGE - PHASE	FAULT CURRENT	VOLTAGE DROP
UTILITY	1000kVA 277/480V-3P INFINITE	34366	
MDP2	277/480V-3P	29369	
TEV1-P	480V-3P	19875	0.5%
TEV1	225kVA: 480V-3P to 120/208V-3P, CU	8844	0.5%
EV1	120/208V-3P	8726	0.6%
TEV2-P	480V-3P	15997	0.9%
TEV2	225kVA: 480V-3P to 120/208V-3P, CU	8449	0.9%
EV2	120/208V-3P	8341	1.0%
TEV3-P	480V-3P	10090	2.0%
TEV3	225kVA: 480V-3P to 120/208V-3P, CU	7451	2.0%
EV3	120/208V-3P	7367	2.1%

FEEDER SCHEDULE

EQUIPMENT MARK	FEEDER SIZE	ACTUAL VOLTAGE	WIRE-CONDUIT SIZE	NOTES
MDP1	1600 A	277/480V - 3P	(5) SETS OF (4) #400 & (1) #410 G, 3-1/2"	
MSB1	1600 A	277/480V - 3P	(5) SETS OF (4) #400, 4" C	
MDP2	1000 A	277/480V - 3P	(3) SETS OF (4) #400, 4" C	
EV1	800 A	120/208V - 3P	(3) SETS OF (4) #300 & (1) #210 G, 2-1/2"	
EV2	800 A	120/208V - 3P	(3) SETS OF (4) #300 & (1) #210 G, 2-1/2"	
EV3	800 A	120/208V - 3P	(3) SETS OF (4) #300 & (1) #210 G, 2-1/2"	
HM1	400 A	277/480V - 3P	(2) SETS OF (4) #3/0 & (1) #3 G, 2"	
HM2	400 A	277/480V - 3P	(2) SETS OF (4) #3/0 & (1) #3 G, 2"	
HM3	400 A	277/480V - 3P	(2) SETS OF (4) #3/0 & (1) #3 G, 2"	
TEV1	350 A	480V - 3P	(3) #500 & (1) #3 G, 3"	225KVA XFMR, 1#20 GROUND
TEV2	350 A	480V - 3P	(3) #500 & (1) #3 G, 3"	225KVA XFMR, 1#20 GROUND
TEV3	350 A	480V - 3P	(3) #500 & (1) #3 G, 3"	225KVA XFMR, 1#20 GROUND
FIRE PUMP CONTROLLER	225 A	277/480V - 3P	(4) #410 & (1) #4 G, 2-1/2"	
FIRE PUMP WIREWAY	225 A	277/480V - 3P	(4) #410 & (1) #4 G, 2-1/2"	
HA	225 A	277/480V - 3P	(4) #410 & (1) #4 G, 2-1/2"	
HB	225 A	277/480V - 3P	(4) #410 & (1) #4 G, 2-1/2"	
HC	225 A	277/480V - 3P	(4) #410 & (1) #4 G, 2-1/2"	
HL	225 A	277/480V - 3P	(4) #410 & (1) #4 G, 2-1/2"	
LA1	225 A	120/208V - 3P	(4) #410 & (1) #2 G, 2-1/2"	
LA2	225 A	120/208V - 3P	(4) #410 & (1) #2 G, 2-1/2"	
LB	225 A	120/208V - 3P	(4) #410 & (1) #2 G, 2-1/2"	
LC	225 A	120/208V - 3P	(4) #410 & (1) #2 G, 2-1/2"	
LD	225 A	120/208V - 3P	(4) #410 & (1) #2 G, 2-1/2"	
TLA	150 A	480V - 3P	(3) #110 & (1) #6 G, 1-1/2"	75KVA XFMR, 1#2 GROUND
TLB	150 A	480V - 3P	(3) #110 & (1) #6 G, 1-1/2"	75KVA XFMR, 1#2 GROUND
TLC	150 A	480V - 3P	(3) #110 & (1) #6 G, 1-1/2"	75KVA XFMR, 1#2 GROUND
TLD	150 A	480V - 3P	(3) #110 & (1) #6 G, 1-1/2"	75KVA XFMR, 1#2 GROUND
HPH	100 A	277/480V - 3P	(4) #3 & (1) #8 G, 1-1/4"	
TLPH	50 A	120/208V - 3P	(4) #8 & (1) #10 G, 3/4"	
INV	35 A	277/480V - 3P	(4) #400 IN 3-1/2" C	
TLPH	30 A	480V - 3P	(3) #10 & (1) #10 G, 3/4"	15KVA XFMR, 1#8 GROUND
JOCKEY PUMP	15 A	277/480V - 3P	(4) #12 & (1) #12 G, 1/2"	

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STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
04/25/2025

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Project # - 012004 15.01

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

AMBROSE PROPERTY GROUP

Revisions / Submissions
ID Description Date
PERMIT SET 04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: JBG
Checked By: BGW
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
ELECTRICAL ONE-LINE DIAGRAM
E6.01



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Project #: 012024.15.21

Revisions / Submissions		
ID	Description	Date
PERMIT SET		04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: BG
Checked By: JGW
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
LIGHTNING PROTECTION PRICING PLAN

EXHAUST FAN AIR TERMINALS
Exhaust fans that are not in a zone of protection and subject to a direct lightning strike shall be provided with air terminals. Typically exhaust fans can be protected with a single air terminal provided that no part of the fan cap exceeds 24 inches from the air terminal's center. Exhaust fan air terminals shall extend at least 10 inches above the highest portion of the fan. The common material used for exhaust fan shrouds is aluminum which cannot be used with copper lightning protection equipment. Never install lightning protection equipment on surfaces that are not galvanically compatible as this will accelerate corrosion, especially in the presence of moisture.

CONCEALED DOWN CONDUCTORS
Down conductors are run in 1" schedule 40 PVC conduit down exterior walls to termination with the lightning protection system ground. Where required the use of metallic raceway is acceptable provided that each individual run is bonded to the lightning protection conductor at the top and bottom. All structures shall have at least two down conductors. Lightning protection system down conductors shall be located at average intervals of not more than every 100 feet around the building perimeter.

CONCEALED DOWN CONDUCTOR BONDED TO STEEL
Down conductors are run in 1" schedule 40 PVC conduit down exterior walls to termination with the lightning protection system ground. A break in the conduit run or a j-box is required at the top and bottom of the run so that the structural steel can be bonded to the down conductor. Where required, the use of metallic raceway is acceptable provided that individual runs are bonded to the lightning protection conductor at each end. All structures shall have at least two down conductors. Lightning protection system down conductors shall be located at average intervals of not more than every 100 feet around the building perimeter.

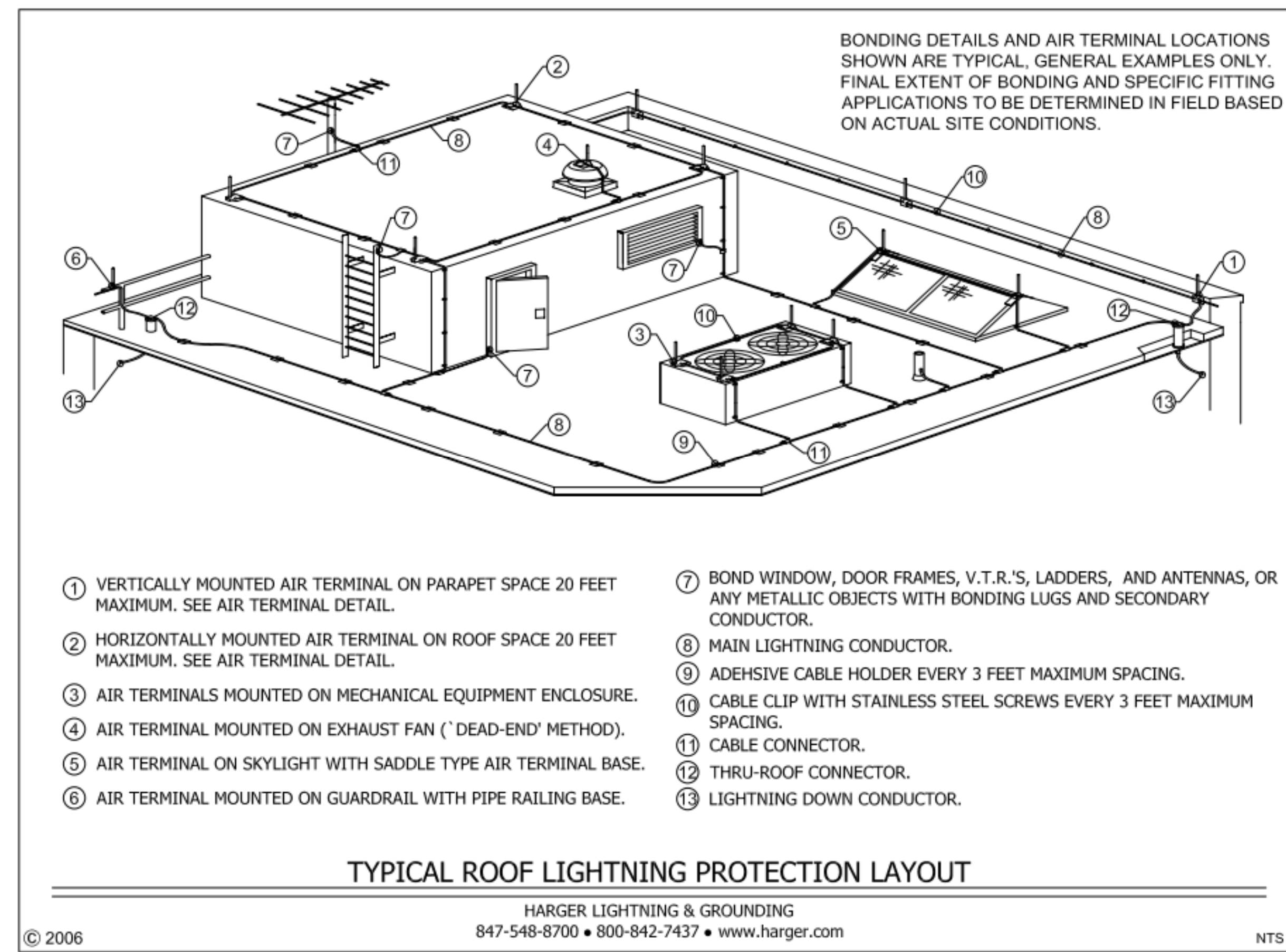
STRUCTURAL STEEL AS DOWN CONDUCTOR
The structural steel can be used as the lightning protection system down conductor, however, it must be electrically continuous throughout the entire facility. Perimeter steel columns are provided with a ground connection at average intervals of 60 feet or less. At the roof level a connection to a perimeter steel column is required at average intervals of 100 feet or less around the building perimeter.

CONDUCTOR BEND REQUIREMENTS
Lightning protection conductors shall maintain a downward or horizontal path to ground. A lightning protection conductor may have no more than an eight inch rise to a through roof connection. Bends in a run of conductor shall be no less than eight inches in radius and shall be greater than or equal to 90 degrees.

STRUCTURAL STEEL GROUNDING
Structural steel columns are provided with ground connections at average intervals of every 60 feet around the building perimeter.

GROUND LOOP
A copper conductor encircles the entire structure and ground rods are placed at average intervals of 100 feet on center. Where lightning protection down conductors terminate at a ground rod an inspection well is provided. With ground loops all other grounded systems within the facility are connected to form a common ground.

POTENTIAL EQUALIZATION BONDING
Metal objects with in six feet of a lightning protection conductor shall be bonded to the lightning protection system. Large metallic objects and objects that are ground receive a primary bond. Ungrounded objects such as flashing, coping, scuppers, and drain caps receive a secondary bond. All other ground systems within a facility must be made common with the lightning protection system grounds. Direct bonding to other grounded systems will help ensure that they all rise and fall at the same potential.



- ① VERTICALLY MOUNTED AIR TERMINAL ON PARAPET SPACE 20 FEET MAXIMUM. SEE AIR TERMINAL DETAIL.
- ② HORIZONTALLY MOUNTED AIR TERMINAL ON ROOF SPACE 20 FEET MAXIMUM. SEE AIR TERMINAL DETAIL.
- ③ AIR TERMINALS MOUNTED ON MECHANICAL EQUIPMENT ENCLOSURE.
- ④ AIR TERMINAL MOUNTED ON EXHAUST FAN ('DEAD-END' METHOD).
- ⑤ AIR TERMINAL ON SKYLIGHT WITH SADDLE TYPE AIR TERMINAL BASE.
- ⑥ AIR TERMINAL MOUNTED ON GUARDRAIL WITH PIPE RAILING BASE.
- ⑦ BOND WINDOW, DOOR FRAMES, V.T.R.'S, LADDERS, AND ANTENNAS, AND ANY METALLIC OBJECTS WITH BONDING LUGS AND SECONDARY CONDUCTOR.
- ⑧ MAIN LIGHTNING CONDUCTOR.
- ⑨ ADHESIVE CABLE HOLDER EVERY 3 FEET MAXIMUM SPACING.
- ⑩ CABLE CLIP WITH STAINLESS STEEL SCREWS EVERY 3 FEET MAXIMUM SPACING.
- ⑪ CABLE CONNECTOR.
- ⑫ THRU-ROOF CONNECTOR.
- ⑬ LIGHTNING DOWN CONDUCTOR.

TYPICAL ROOF LIGHTNING PROTECTION LAYOUT

HARGER LIGHTNING & GROUNDING
847-548-8700 • 800-842-7437 • www.harger.com

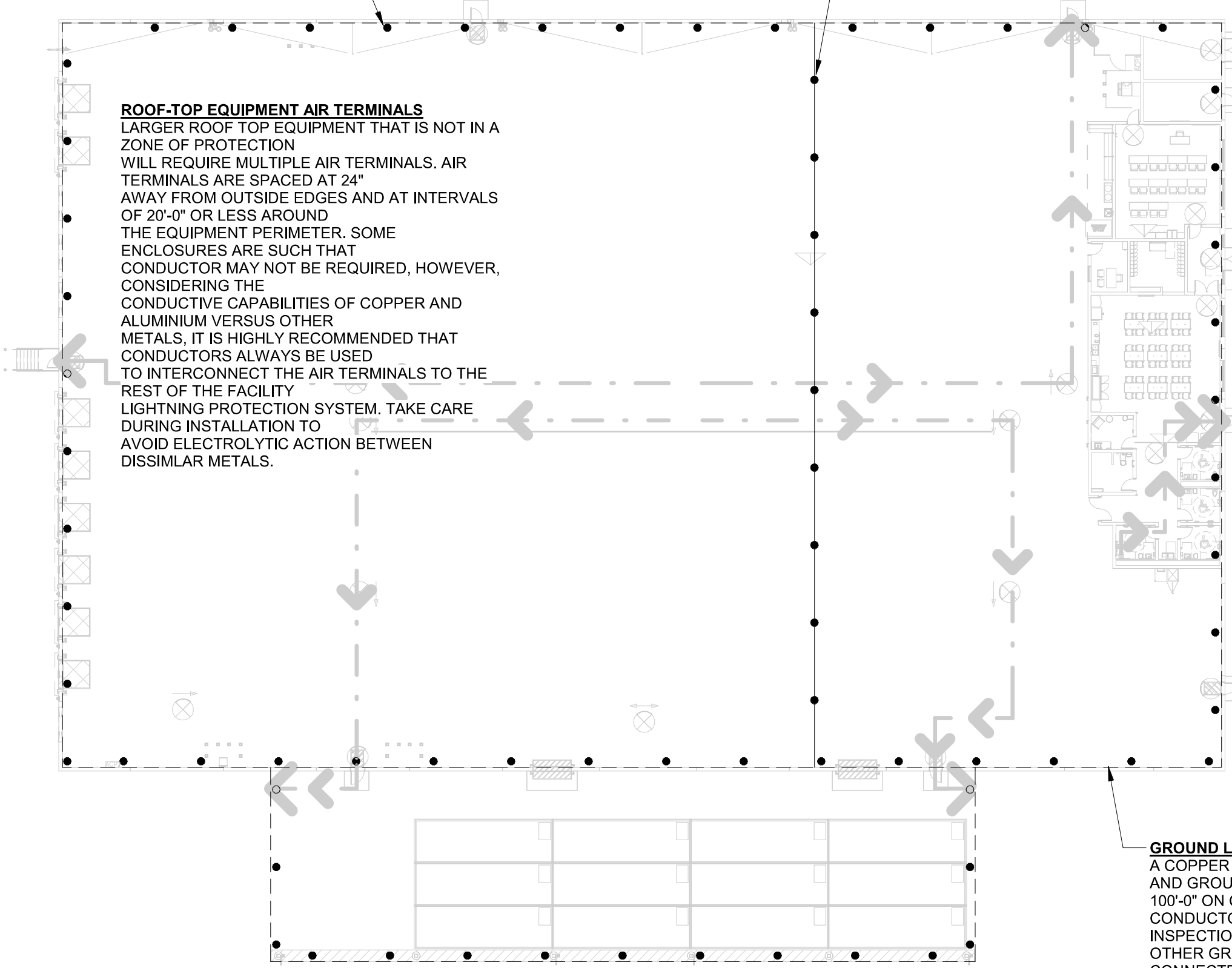
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NTS

LIGHTNING PROTECTION NOTES AND DETAILS ARE SHOWN FOR BIDDING PURPOSES ONLY. ACTUAL INSTALLATIONS SHALL BE PER LIGHTNING PROTECTION SYSTEM VENDOR'S SHOP DRAWINGS.

MID ROOF AIR TERMINALS
AIR TERMINALS ARE PLACED IN THE INTERIOR PORTIONS OF FLAT OR GENTLY SLOPING ROOFS AT INTERVALS OF 50'-0" OR LESS, TO AVOID ROOF PENETRATIONS. AIR TERMINAL BASES ARE GENERALLY ADHERED TO THE ROOF SURFACE WITH A COMPATIBLE BONDING COMPOUND. PRIOR TO THE APPLICATION OF ANY ROOF MOUNTED LIGHTNING PROTECTION EQUIPMENT, WRITTEN APPROVAL OF THE ADHESION METHOD SHALL BE OBTAINED FROM THE ROOFING SYSTEM MANUFACTURER AND/OR INSTALLER TO ENSURE THAT THE ROOF WARRANTY IS NOT VOIDED. INSTALLATION REQUIREMENTS VARY BETWEEN ROOF SYSTEM MANUFACTURERS SO NEVER ASSUME THAT PREVIOUSLY USED METHODS ARE ACCEPTABLE OR YOU COULD END UP PAYING EXORBITANT CHANGE ORDERS IMPOSED BY THE PROJECT ROOFING CONTRACTOR.

PARAPET AIR TERMINALS
AIR TERMINALS ARE PLACED AT INTERVALS OF 20'-0" OR LESS AROUND THE BUILDING PERIMETER. AIR TERMINALS SHALL BE NO MORE THAN 24" AWAY FROM THE OUTSIDE EDGE OF THE OBJECTS THEY PROTECT. PARAPET AIR TERMINALS SHALL EXTEND A MINIMUM OF 10" ABOVE THE PARAPET.



- LIGHTNING PROTECTION GENERAL NOTES**
- INSTALLATION SHALL COMPLY IN ALL RESPECTS TO L.P.I. CODE 175. INSTALLATION SHALL BE MADE BY OR UNDER THE SUPERVISION OF AN L.P.I. CERTIFIED MASTER INSTALLER. COMPLETED INSTALLATION TO RECEIVE SYSTEM CERTIFICATION INCLUDING SUBMITTAL OF FORMS L.P.I. C1-01, 02 AND 03.
 - "AS-BUILT" DRAWINGS SHALL BE SUBMITTED IN ACCORDANCE WITH CERTIFICATION PROCEDURES.
 - ALL AIR TERMINALS SHALL BE WITHIN 24" OF OUTSIDE BUILDING EDGE, OUTSIDE CORNERS AND RIDGE ENDS. ENSURE THAT ALL SPACING DOES NOT EXCEED 20'-0" AND THAT MINIMUM PROJECTION ABOVE PROTECTED OBJECT IS 10".
 - MAINTAIN HORIZONTAL OR DOWNWARD COURSING OF MAIN CONDUCTOR AND ENSURE THAT ALL BENDS HAVE AT LEAST 8" RADIUS AND NOT LESS THAN 90 DEGREES.
 - SUPPORT ALL EXPOSED ROOF DOWNLEAD AND BONDING CABLES 36" ON CENTER MAXIMUM.
 - INSTALL GROUNDING CONDUCTORS NO LESS THAN 12" BELOW GRADE AND 24" FROM FOUNDATION WALL. DRIVEN RODS SHALL PENETRATE EARTH AT LEAST 10'-0".
 - BOND TO WATER SERVICE AND OTHER PIPING SYSTEMS AND AS REQUIRED BY CODE.
 - INTERCONNECT LIGHTNING PROTECTION GROUND TO ELECTRIC, TELEPHONE AND OTHER BUILDING GROUND SYSTEMS AND AS REQUIRED BY CODE.
 - BOND TO METAL BODIES ON CONDUCTANCE ON ROOF WITH MAIN SIZE CONDUCTORS AS SHOWN AND AS REQUIRED BY CODE. THESE BONDS INCLUDE, BUT ARE NOT LIMITED TO EXHAUST FANS, VENTS, HANDRAILS, LADDERS, METAL SCREENS AND PANELS, HVAC UNITS, HATCHES, SKYLIGHTS, FLAG POLES, ANTENNAS, ETC. OR ANY LARGE BODY SUBJECT TO DIRECT STRIKE OR WHICH EXCEEDS THE HEIGHT OF THE ADJACENT AIR TERMINALS.
 - BOND TO METAL BODIES ON CONDUCTANCE LOCATED WITHIN 6'-0" OF MAIN CONDUCTOR OR OTHER BONDED OBJECT WITH APPROVED SECONDARY BONDING CONDUCTOR. SUCH OBJECTS INCLUDE, BUT ARE NOT LIMITED TO FLASHINGS, METAL COPING CAPS, GRAVEL GUARDS, FASCIAS, ROOF DRAINS, DOWNSPOUTS, INTERIOR DUCTS, MACHINERY OR PIPING, ETC. OR IN GENERAL ANY SOLID BODY AT OR BELOW THE ROOF SUBJECT TO INDUCCANCE AND WITHIN 6'-0" OF SYSTEM.
 - SYSTEMS SHALL BE INSTALLED TO ENSURE PROPER CODE COMPLIANCE AND SYSTEM CERTIFICATION ANY MAJOR VARIANCE SHALL ENTAIL RESUBMITTAL AND NEW APPROVAL.
 - ALL MATERIALS TO BE U.L. APPROVED WITH 'A' LABELS ON CONDUCTORS AND 'B' LABELS ON ALL AIR TERMINALS.
 - COMPLETED INSTALLATION SHALL BEAR U.L. MASTER LABEL 'C' TO BE SECURED BY SYSTEM INSTALLER PER UL96A.
 - METAL RACEWAYS, ENCLOSURES, FRAMES AND OTHER NON CURRENT CARRYING METAL PARTS OR ELECTRICAL EQUIPMENT SHALL BE KEPT AT LEAST 6'-0" AWAY FROM LIGHTNING PROTECTION CONDUCTORS OR THEY SHALL BE BONDED TO THE LIGHTNING PROTECTION CONDUCTOR PER ARTICLE 250 OF THE NEC.
 - MADE ELECTRODES FROM GROUNDING OF THE LIGHTNING PROTECTION SYSTEM SHALL NOT BE USED IN LIEU OF THE MADE ELECTRODE REQUIRED FOR GROUNDING WIRING SYSTEMS PER ARTICLE 250 OF THE NEC. THIS PROVISION DOES NOT PROHIBIT THE REQUIRED BONDING TOGETHER OF GROUNDING ELECTRODES OF DIFFERENT SYSTEMS.
 - REFER TO LIGHTNING PROTECTION DETAILS FOR ADDITIONAL INFORMATION.

1 LIGHTNING PROTECTION PRICING PLAN
1" = 30'-0"

NA	C903.7.2	Interior lighting alterations (LPA) - Add/reduce	For alterations that add or replace > 20% of luminaires within an interior space or parking garage, indicate which interior lighting power allowance (LPA) method is applied to the alteration project area (Space-by-Space Method for partial building area). Demonstrate that total proposed interior lighting wattage (including existing to remain lighting wattage) within the alteration project area does not exceed the maximum allowed wattage (Space-by-Space Method) or the sum of the maximum allowed wattages for	N/A		
NA	C903.7.2	Interior lighting alterations (LPA) - Add/reduce	For alterations that add or replace > 20% of luminaires in an interior space or parking garage, calculate total existing interior lighting wattage within the project area prior to the alteration.	N/A		
NA	C903.7.2	Interior lighting alterations (LPA) - Add/reduce	Demonstrate that total proposed interior lighting wattage (including existing to remain lighting wattage) within the alteration project area does not exceed the total existing interior lighting wattage prior to the alteration; provide WSEC interior light fixture schedule in plan, provide same lighting fixture information as for new construction per C405.5.2	N/A		
	C903.7.2	Exterior lighting alterations (LPA) - Add/reduce & age 20%	For alterations that add or replace > 20% of exterior lighting wattage, indicate exterior lighting power allowance (LPA) calculated in the same manner as for new construction			
	C903.7.2	Exterior lighting alterations (LPA) - Add/reduce & age 20%	Demonstrate that total proposed exterior lighting wattage (including existing to remain lighting wattage) does not exceed the total maximum allowed wattage (identifying locations of surface types on plan, including additional allowance retail display areas and areas with display, highlight and decorative lighting)			
	C903.7.2	Exterior lighting alterations (LPA) - Add/reduce	For alterations that add or replace > 20% of exterior lighting wattage, calculate total existing exterior lighting wattage prior to the alteration.			
	C903.7.2	Exterior lighting alterations (LPA) - Add/reduce	Demonstrate that total proposed exterior lighting wattage (including existing to remain lighting wattage) does not exceed the total existing exterior lighting wattage prior to the alteration; identify locations of surface types on plan, including address			
	C903.7.3	Interior lighting wiring & circuiting alterations	Where new wiring is installed to serve new interior luminaires and/or luminaires are reconnected to a new circuit, indicate manual and automatic lighting controls are provided (as applicable) - manual & light reduction (C405.2.3 & C405.2.4); occupancy sensor			

			Where new wiring is installed to serve new exterior luminaires and/or luminaires are reconnected to a new circuit, indicate circuit power area controls (C405.2.7) are provided; indicate commissioning of exterior lighting controls (C408.4) will be provided.			
	C903.7.4	Lighting panel alterations	Where a new interior and/or exterior lighting panel is installed or an existing panel is moved (including all new raceway and conductor wiring), indicate all of the same interior lighting controls requirements as for wiring & circuiting alterations apply.			
	C903.7.5	Newly-created rooms	Where interior spaces are reconfigured (permanently installed walls or ceiling height partitions) to create new enclosed spaces, indicate the following manual and automatic lighting controls are provided (as applicable) - manual & light reduction (C405).			
	C904.2	Lighting repairs	Identify existing luminaires being upgraded with LED and/or ballast replacement; indicate fixture alteration does not increase existing fixture wattage			
	C905.1	Change of interior space use	Identify spaces on plans where the building area type or space use type is being changed from one type to another per Tables C405.2(1) or (2) including additional allowance retail display areas and areas with display, highlight and decorative lighting Demonstrate that total proposed interior lighting wattage (including existing to remain lighting wattage) within the alteration project area does not exceed the maximum allowed wattage (Space-by-Space Method) or the sum of maximum allowed wattages per each			
RECEPTACLES						
YES	C405.10	Automatic receptacle control	Provide schedule on electrical plans that lists the number of controlled and uncontrolled receptacles in each space where controlled receptacles are required - classrooms, enclosed offices, conference rooms, copy/print rooms, break rooms and individual work	Requirement will be met.		
YES			Identify all controlled and uncontrolled receptacles on electrical plans; indicate that 2 50% of all receptacles are provided with automatic controls in each space where they are required; include receptacle configuration such as spacing between controls	Requirement will be met.		
YES			Indicate on plans the method of automatic control for each controlled receptacle zone (occupant sensor or programmable time-of-day control); indicate that the area served by each control device does not exceed 5,000 sf.	Requirement will be met.		

	C405.2.6, Item 2	Switched receptacles in sleeping units	Indicate method of automatic off control of all switched receptacles in sleeping units (frequency or key card control).			
NA	C405.7.1	Electric receptacles at dwelling unit gas appliances	In all designated appliance locations within dwelling units (including cooking appliances, laundry and domestic water heating), indicate electric receptacles or junction box & circuit within 12 inches of the appliance location with sufficient capacity to serve	N/A		
	C903.7.7	Electrical receptacle alterations	For alteration project areas 25,000 sf where electric receptacles are added or replaced, indicate receptacles are provided with automatic controls per C405.10, or exception applied.			
ELECTRIC MOTORS						
	C405.8	Electric motor efficiency	Include all motors, including fractional hp motors, in electric motor schedule on electrical plans; indicate motor type, horsepower, rpm, rated efficiency, or exception applied.	ES.01, MS.01		
ELEVATORS, ESCALATORS & MOVING WALKS						
	C405.9.1	Elevator cabs	For luminaires in each elevator cab, provide calculation that demonstrate average efficiency is not less than 70 lumens per watt. For elevators that do not have an integral air conditioning system, indicate rated watts per cfm for elevator cab ventilation fans do not exceed 0.3 watts per cfm. Indicate automatic controls that de-energize lighting and ventilation fans when elevator is stopped and unoccupied for a period of 15 minutes or more.			
	C405.9.2	Escalators and moving walks	Indicate escalators and moving walks comply with ASME A17.1 LSCA B44 and are provided with automatic controls that are configured to reduce operational speed to the minimum permitted when not in use, or exception applied.			
	C405.9.3	Escalator energy recovery	Indicate escalators are designed to recover electrical energy when existing overvoltage in the down direction.			
RENEWABLE ENERGY						
YES	C411	Renewable Energy	For new construction, including additions, change of use, and change of occupancy, with floor area > 1000sf; provide documentation of on-site renewable energy capacity; provide calculations supporting applicable exceptions, if qualifying by exception provide an accounting for the additional Additional Energy Efficiency Credits that will be required	Requirement will be met.		

RENEWABLE ENERGY - ADDITIONAL ENERGY EFFICIENCY MEASURE						
YES	C406.2.5	On-site and off-site renewable energy	To comply with the renewable energy measure, provide an accounting of on-site and any contracted off-site renewable energy capacity for all off-site sources; indicate the C411.2 renewable energy source type, energy factor, and the rated capacity and calculated code credited kW; indicate on-site renewables used to comply with C411 or for a code exception elsewhere in the code; with the remaining renewable energy provide Equation 4.17 calculations showing the achieved credits and that the achieved credits are 7 the base credits for the measure	Requirement will be met.		
YES	C406.2.5	On-site and off-site renewable energy	Provide documentation that all off-site renewable energy systems comply with Section C411.2.2 and C411.2.3 including all contracts, and the ownership and location of off-site generation	Requirement will be met.		
ELECTRIC ENERGY STORAGE - LOAD MANAGEMENT MEASURE						
	C406.3.4	Electric energy storage	To comply with the electrical energy storage load management measure, indicate automatic controls shall store electricity in electric storage devices during nonpeak periods and use stored energy during peak periods. Document the total electric storage device capacity; indicate it is 7.5 Wh per (Sq. Foot) of gross building area; for generation provide the generation calculations supporting the claimed credit			
GENERAL ELECTRICAL SYSTEMS						
YES	C406.6	Electrical transformers	Include electrical transformer schedule on electrical plans; indicate transformer type, size (kVA), efficiency, or exception applied.	ES.01		
	C405.7	Dwelling unit electrical energy consumption	Indicate on electrical plans that each dwelling unit in a Group R-2 building has a separate electrical energy meter, or exception applied.			
YES	C405.11	Voltage drop	Indicate wire conductors are sized so that the maximum voltage drop from customer service conductors to branch circuit conductors is 4%.	ES.01		
YES	C405.12	Alternating current- output uninterruptible power supplies (AC-output UPS)	Indicate in plans that AC-output UPS systems serving computer rooms meet or exceed the calculation and testing requirements identified in ENERGY STAR Program Requirements for Uninterruptible Power Supplies (UPS) 7 Eligibility Criteria Version 2.0.	ES.01		
COMMISSIONING (CX)						

YES	C408.4	Scope of electrical power & lighting systems commissioning	Indicate that all electrical systems (receptacles, transformers, motors, vertical & horizontal transportation) for which the WSEC requires control functions and/or configurations to perform specific functions are required to be commissioned; include document	ES.01		
YES			Where total building lighting load is ≥ 10 kW or the total lighting load of luminaires requiring daylight sensing and/or occupancy control is ≥ 5 kW, indicate that all automatic lighting control systems are required to be commissioned; or provide ca	ES.01		
YES	C408.1.1	Commissioning requirements in construction documents	Indicate CX requirements in plans and specifications for all applicable electrical and lighting control systems	Requirement will be met.		
YES	C408.1.2 C103.6.3	Commissioning requirements in construction documents	General summary of CX plan shall include the following: 1) Narrative description of activities; 2) Responsibilities of the CX team; 3) Schedule of activities including verification of project close out documentation (C103.6); 4) Conflict of interest plan	Requirement will be met.		
YES	C408.1.3 C408.1.4	Commissioning requirements in construction documents	Include in general summary that a CX project report and CX Compliance Checklist (Figure C408.1.4.1) shall be completed by the Certified CX Professional and provided to the owner prior to the final electrical inspection.	Requirement will be met.		
YES	C408.4.1	Functional performance testing criteria	Identify in plans and specifications the intended operation of all electrical equipment and controls during all modes of operation, including interfacing between new and existing-to-remain systems.	ES.01		
PROJECT CLOSE OUT						
YES	C103.6.3	Documentation requirements	Indicate in plans that project close out documentation is required; indicate information shall include WSEC lighting compliance reports that document all interior lighting areas and space types, exterior lighting surface types, interior/exterior lighting	ES.01		

If "no" is selected for any question, provide explanation.

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 Project #: 012024.01.51

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
 W. EDGEWOOD DR. & S. CRITCHFIELD RD., PORT ANGELES, WA 98163

Revisions / Submissions
 ID Description Date

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 Project number: 763838-02
 Scale: AS NOTED
 Drawn By: BG
 Checked By: JGW
 Date: 04.25.2025
 Issue: PERMIT SET

Sheet Title:
ELECTRICAL ENERGY FORMS

E8.02



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Project # - 01202415.01

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PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD., PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
1	PERMIT SET	04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: BG
Checked By: JGW
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
ELECTRICAL SITE PLAN

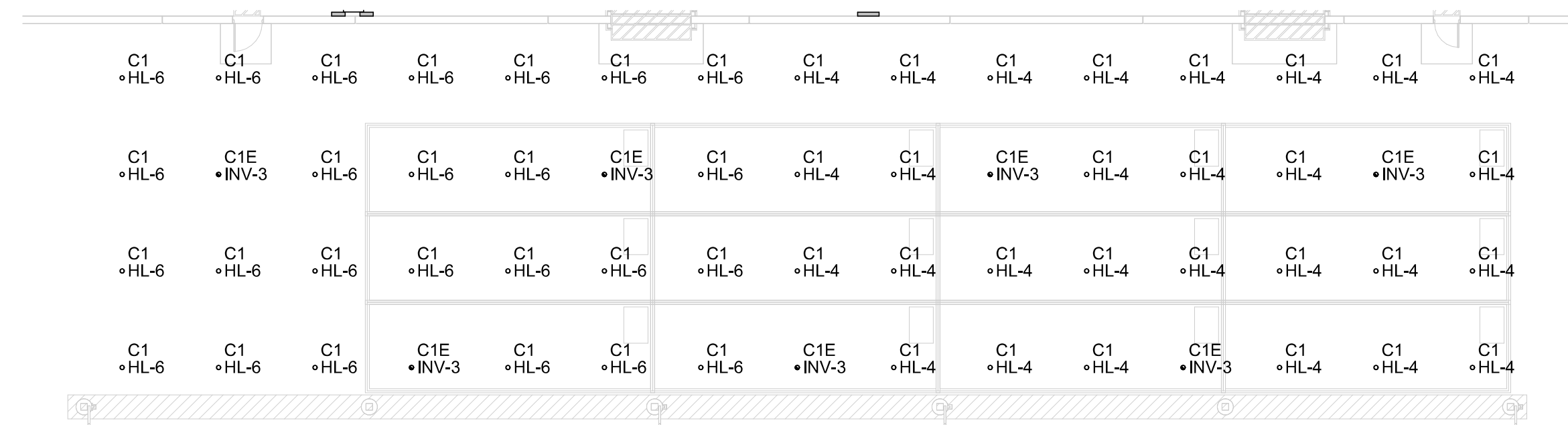
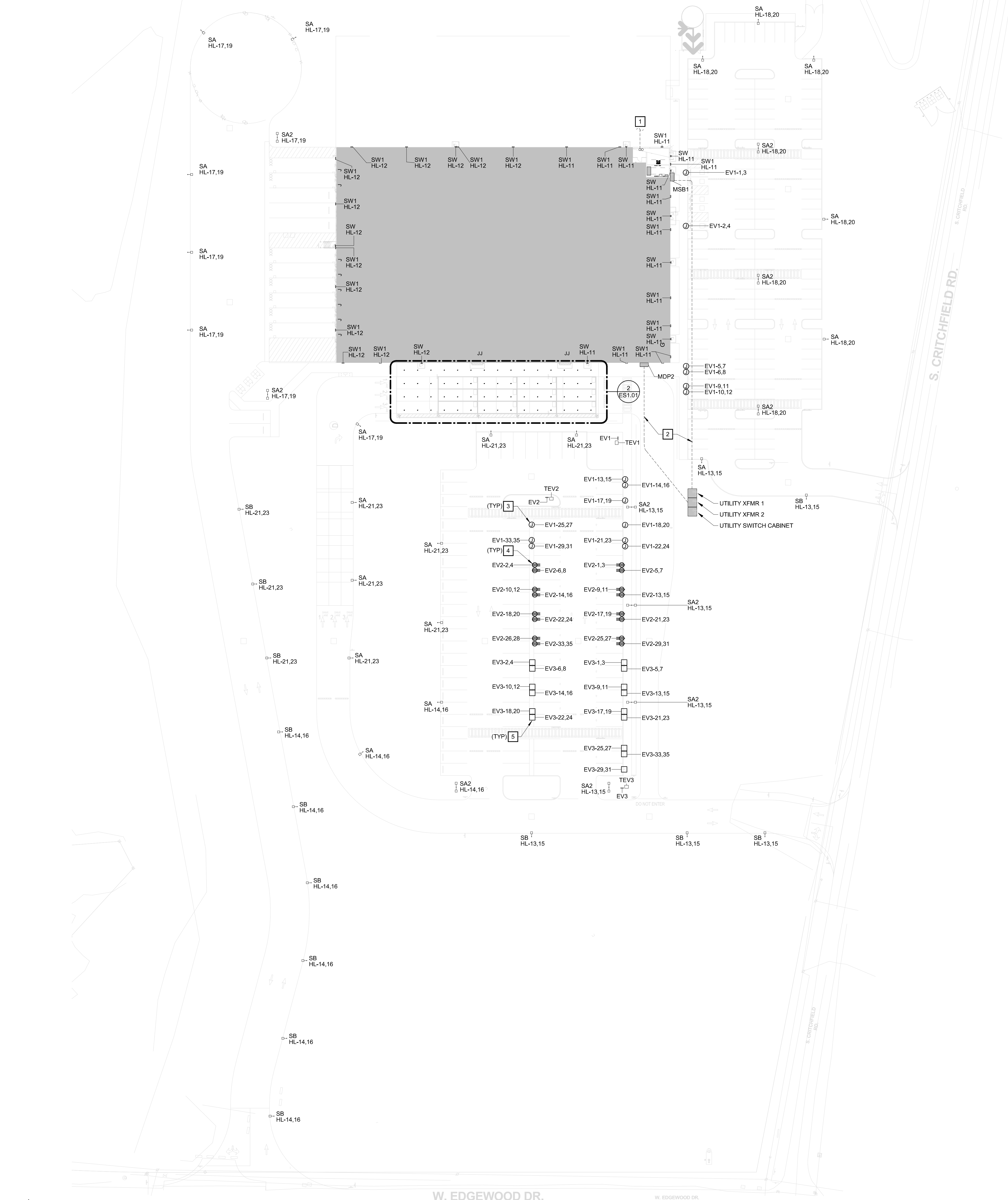
ES1.01

ELECTRICAL KEY NOTES

- PROVIDE (4'-4") TELECOMMUNICATION CONDUITS FROM DEMARCATION LOCATION. COORDINATE ROUTING WITH CIVIL ENGINEER AND TELECOMMUNICATIONS PROVIDER.
- PROPOSED ROUTING OF SECONDARY SERVICE FEEDERS, SEE ONE-LINE FOR QUANTITY AND SIZES. ROUTE CONDUITS UNDERGROUND AND UP INTO MAIN SWITCHBOARD IMMEDIATELY UPON ENTERING THE BUILDING.
- COORDINATE EV CONDUIT ROUTING WITH ALL UNDERGROUND UTILITIES PRIOR TO TRENCHING. REFER TO ONE-LINE DIAGRAM AND EV REQUIREMENTS DETAIL FOR TYPE OF EV TO BE INSTALLED AT EACH LOCATION. COORDINATE FINAL POWER REQUIREMENTS WITH MANUFACTURER INSTALLATION MANUAL. PROVIDE (2) #6, (1) #10G, IN 1" TO EV CHARGER PEDESTAL LOCATIONS SHOWN.
- COORDINATE EV CONDUIT ROUTING WITH ALL UNDERGROUND UTILITIES PRIOR TO TRENCHING. REFER TO ONE-LINE DIAGRAM AND EV REQUIREMENTS DETAIL FOR TYPE OF EV TO BE INSTALLED AT EACH LOCATION. COORDINATE FINAL POWER REQUIREMENTS WITH MANUFACTURER INSTALLATION MANUAL. PROVIDE (2) #6, (1) #10G, IN 1" TO EV CHARGER OUTLET LOCATIONS SHOWN. COORDINATE EV CHARGER OUTLET NEMA CONFIGURATION WITH MANUFACTURER INSTALLATION MANUAL.
- COORDINATE EV CONDUIT ROUTING WITH ALL UNDERGROUND UTILITIES PRIOR TO TRENCHING. REFER TO ONE-LINE DIAGRAM AND EV REQUIREMENTS DETAIL FOR TYPE OF EV TO BE INSTALLED AT EACH LOCATION. COORDINATE FINAL POWER REQUIREMENTS WITH MANUFACTURER INSTALLATION MANUAL. PROVIDE 1" TO FUTURE EV CHARGER PEDESTAL LOCATIONS SHOWN.

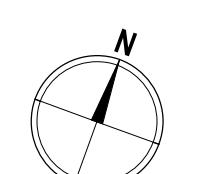
ELECTRICAL SITE NOTES

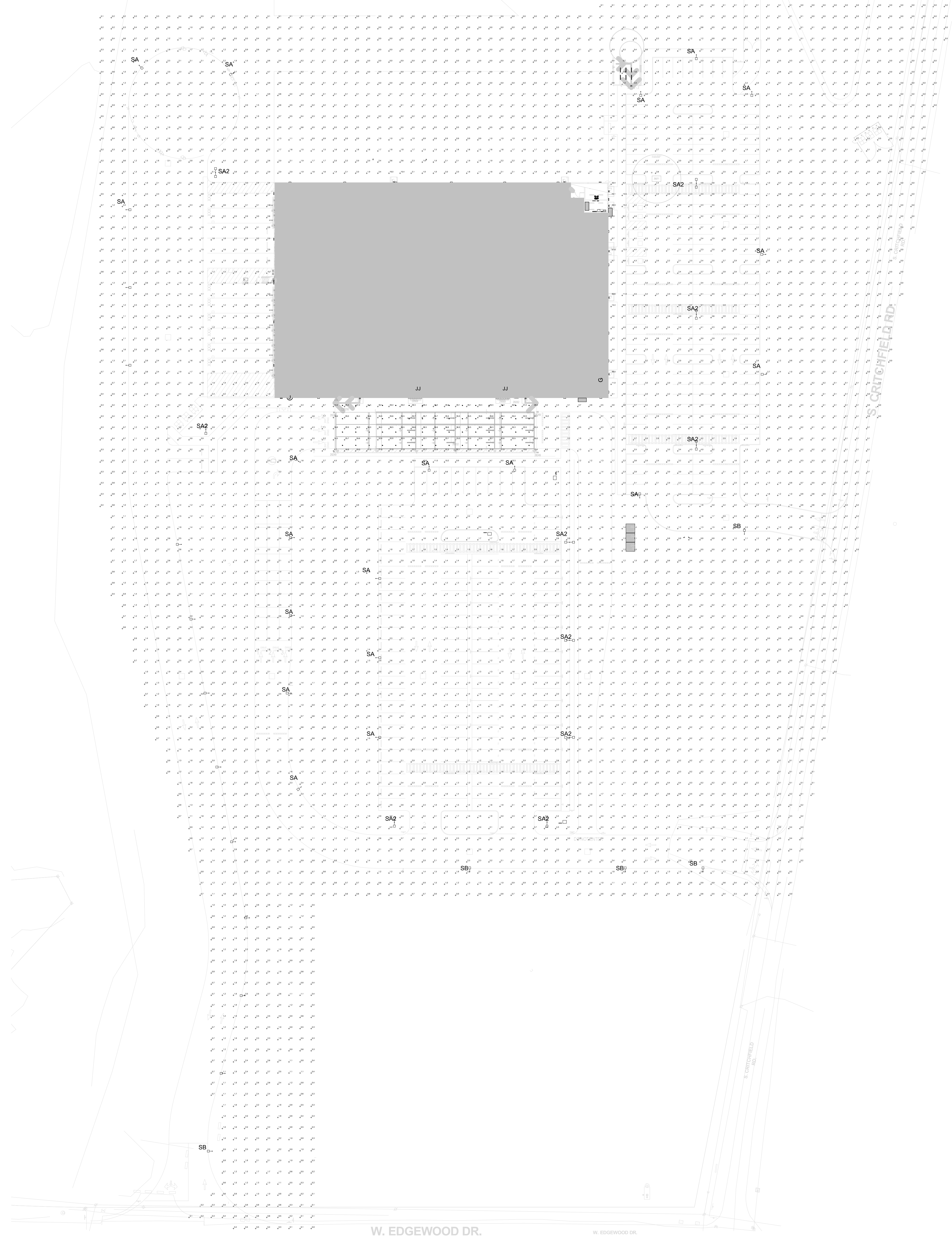
- GROUND AND BOND ALL EQUIPMENT IN ACCORDANCE WITH NEC.
 - REFER TO ONE-LINE DIAGRAM FOR ELECTRIC SERVICE SIZE.
 - COORDINATE CONDUIT ROUTING WITH ALL UNDERGROUND UTILITIES.
 - WHERE REQUIRED BY LOCAL UTILITY, PROVIDE METER BASE, CURRENT TRANSFORMER
- SITE LIGHTING CIRCUITING GENERAL NOTES**
- REFER TO CIVIL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. COORDINATE THE FINAL LOCATION OF ALL SITE LIGHTING POLES, SIGNAGE, UNDERGROUND UTILITIES, CONDUITS, CIRCUITRY, TRANSFORMERS AND OTHER EQUIPMENT WITH CIVIL DRAWINGS LANDSCAPING DRAWINGS AND OWNER PRIOR TO INSTALLATION.
 - COORDINATE ALL SITE ELECTRICAL REQUIREMENTS WITH EQUIPMENT MANUFACTURER INFORMATION AND OTHER TRADES AND ADJUST ELECTRICAL PROVISIONS AS REQUIRED TO MEET REQUIREMENTS.
 - SITE ELECTRICAL CONDUITS SHALL BE 1" MINIMUM, UNLESS NOTED OTHERWISE. WHERE PRACTICABLE, ALL SITE ELECTRICAL CONDUITS SHALL BE INSTALLED A MINIMUM OF 24" BELOW GRADE. UNLESS NOTED OTHERWISE, COORDINATE FINAL CONDUIT ROUTING WITH EXISTING OBSTRUCTIONS AND OTHER TRADES AND ADJUST AS NECESSARY.
 - CAP AND MARK ALL UNDERGROUND CONDUITS PROVIDED FOR FUTURE USE AND INCLUDE PULL STRINGS. PROVIDE DIMENSIONED LOCATIONS OF TERMINATION POINTS ON AS-BUILT DRAWINGS AND SUBMIT TO OWNER.
 - MINIMUM WIRE SIZE FOR SITE ELECTRICAL CIRCUITS SHALL BE #10 AWG CU, UNLESS NOTED OTHERWISE.
 - PROVIDE SPLICE AND PULL BOXES FOR SITE LIGHTING AND SITE ELECTRICAL POWER TO LIMIT MAXIMUM CONDUIT RUN TO 300'. PLACE BOXES IN A PLANTER AREA CLEAR OF VEGETATION WHEREVER PRACTICABLE. (COORDINATE FINAL LOCATION WITH CIVIL, LANDSCAPE CONTRACTOR AND OWNER). BOXES SHALL BE SUITABLE FOR LOCATION AND PROPERLY SIZED FOR QUANTITY AND SIZE OF CONDUITS IN AND OUT AND SHALL BE MARKED "ELECTRICAL". NOT ALL OF THESE BOXES ARE SHOWN ON SITE ELECTRICAL DRAWINGS. CONTRACTOR SHALL PROVIDE LOCATION ON AS-BUILT DRAWINGS AND SUBMIT TO OWNER. SPLICE BOX SHALL BE APPROPRIATE FOR LOCATION AND SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. SPLICE BOX SHALL HAVE A MINIMUM NOMINAL SIZE OF 12"x12"x12". SHALL BE AN OPEN BOTTOM NRTL LISTED UNDERGROUND ENCLOSURE, AND SHALL AT A MINIMUM BE TIER 15 TRAFFIC RATED.



2 ENLARGED CANOPY PLAN
1/16" = 1'-0"

1 ELECTRICAL SITE PLAN
1" = 40'-0"





Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
CANOPY	+	29.8 fc	47.2 fc	9.7 fc	4.9:1	3.1:1
EMPLOYEE PARKING	+	2.9 fc	13.5 fc	1.2 fc	11.3:1	2.4:1
EMPLOYEE/VAN DRIVES	+	2.2 fc	10.2 fc	0.9 fc	11.3:1	2.4:1
FULL SITE	+	2.1 fc	58.9 fc	0.0 fc	N/A	N/A
LOADING DOCK - 60' OUT	+	2.7 fc	27.4 fc	1.1 fc	24.9:1	2.5:1
TRUCK DRIVE	+	2.2 fc	5.0 fc	1.0 fc	5.0:1	2.2:1
VAN PARKING	+	2.1 fc	5.7 fc	1.1 fc	5.2:1	1.9:1
VAN QUEUEING	+	2.1 fc	7.7 fc	0.9 fc	8.6:1	2.3:1



This sheet is part of the construction documents. Drawings, specifications and other sheets apply and need to be reviewed in total. Items shown are for diagrammatic representation and may not be relied on or used as shop drawings. Provide all modifications required to conform to site conditions, equipment and material used. Verify locations and dimensions of all structural and mechanical elements per their respective documents, as these elements are shown only for reference, and require verification prior to fabrication or construction. Engineer has no liability for the accuracy of these associated elements or for any work the engineer has not signed and sealed.

Project # - 01200415.01

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
 W. EDGEWOOD DR. & S. CRITCHFIELD RD., PORT ANGELES, WA 98363

ID	Description	Date
PERMIT SET		04.25.2025

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Project number: 763838-02
 Scale: AS NOTED
 Drawn By: BG
 Checked By: JGW
 Date: 04.25.2025
 Issue: PERMIT SET

Sheet Title:
**ELECTRICAL SITE
PHOTOMETRIC PLAN**

GENERAL GRADING AND PLANTING NOTES

- BY SUBMITTING A PROPOSAL FOR THE LANDSCAPE PLANTING SCOPE OF WORK, THE CONTRACTOR CONFIRMS THAT HE HAS READ, AND WILL COMPLY WITH, THE ASSOCIATED NOTES, SPECIFICATIONS, AND DETAILS WITH THIS PROJECT.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EXISTING VEGETATION (EXCEPT WHERE NOTED TO REMAIN).
- IN THE CONTEXT OF THESE PLANS, NOTES, AND SPECIFICATIONS, "FINISH GRADE" REFERS TO THE FINAL ELEVATION OF THE SOIL SURFACE (NOT TOP OF MULCH) AS INDICATED ON THE GRADING PLANS.
 - BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE ROUGH GRADES OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. SEE SPECIFICATIONS FOR MORE DETAILED INSTRUCTION ON TURF AREA AND PLANTING BED PREPARATION.
 - CONSTRUCT AND MAINTAIN FINISH GRADES AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT AND ON THE GRADING PLANS, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING POTENTIAL.
 - THE LANDSCAPE CONTRACTOR SHALL DETERMINE WHETHER OR NOT THE EXPORT OF ANY SOIL WILL BE NEEDED, TAKING INTO ACCOUNT THE ROUGH GRADE PROVIDED, THE AMOUNT OF SOIL AMENDMENTS TO BE ADDED (**BASED ON A SOIL TEST**, PER SPECIFICATIONS), AND THE FINISH GRADES TO BE ESTABLISHED.
 - ENSURE THAT THE FINISH GRADE IN SHRUB AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 3" BELOW THE ADJACENT FINISH SURFACE, IN ORDER TO ALLOW FOR PROPER MULCH DEPTH. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
 - ENSURE THAT THE FINISH GRADE IN TURF AREAS IMMEDIATELY ADJACENT TO WALKS AND OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 1" BELOW THE FINISH SURFACE OF THE WALKS. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS.
 - SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THESE NOTES AND PLANS, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT, GENERAL CONTRACTOR, AND OWNER.
- ALL PLANT LOCATIONS ARE DIAGRAMMATIC. ACTUAL LOCATIONS SHALL BE VERIFIED WITH THE LANDSCAPE ARCHITECT OR DESIGNER PRIOR TO PLANTING. THE CONTRACTOR SHALL ALLOW THE LANDSCAPE ARCHITECT AND THE OWNER/OWNER'S REPRESENTATIVE TO INSPECT AND APPROVE OR REJECT, ALL PLANTS DELIVERED TO THE JOBSITE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR SUBMITTALS.
 - THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR DETERMINING PLANT QUANTITIES. PLANT QUANTITIES SHOWN ON LEGENDS AND CALLOUTS ARE FOR GENERAL INFORMATION ONLY. IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN AND THE PLANT LEGEND, THE PLANT QUANTITY AS SHOWN ON THE PLAN (FOR INDIVIDUAL SYMBOLS) OR CALLOUT (FOR GROUNDCOVER PATTERNS) SHALL TAKE PRECEDENCE.
 - NO SUBSTITUTIONS OF PLANT MATERIALS SHALL BE ALLOWED WITHOUT THE WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT.** IF SOME OF THE PLANTS ARE NOT AVAILABLE, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING (VIA PROPER CHANNELS).
 - THE CONTRACTOR SHALL, AT A MINIMUM, PROVIDE REPRESENTATIVE PHOTOS OF ALL PLANTS PROPOSED FOR THE PROJECT. THE CONTRACTOR SHALL ALLOW THE LANDSCAPE ARCHITECT AND THE OWNER/OWNER'S REPRESENTATIVE TO INSPECT AND APPROVE OR REJECT, ALL PLANTS DELIVERED TO THE JOBSITE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR SUBMITTALS.
- THE CONTRACTOR SHALL MAINTAIN THE LANDSCAPE IN A HEALTHY CONDITION FOR 90 DAYS AFTER ACCEPTANCE BY THE OWNER. REFER TO SPECIFICATIONS FOR CONDITIONS OF ACCEPTANCE FOR THE START OF THE MAINTENANCE PERIOD, AND FOR FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD.
- SEE SPECIFICATIONS AND DETAILS FOR FURTHER REQUIREMENTS.

IRRIGATION CONCEPT

- AN AUTOMATIC IRRIGATION SYSTEM SHALL BE INSTALLED AND OPERATIONAL BY THE TIME OF FINAL INSPECTION. THE ENTIRE IRRIGATION SYSTEM SHALL BE INSTALLED BY A LICENSED AND QUALIFIED IRRIGATION CONTRACTOR.
- THE IRRIGATION SYSTEM WILL OPERATE ON POTABLE WATER, AND THE SYSTEM WILL HAVE APPROPRIATE BACKFLOW PREVENTION DEVICES INSTALLED TO PREVENT CONTAMINATION OF THE POTABLE SOURCE.
- ALL NON-TURF PLANTED AREAS SHALL BE DRIP IRRIGATED. SODDED AND SEEDED AREAS SHALL BE IRRIGATED WITH SPRAY OR ROTOR HEADS AT 100% HEAD-TO-HEAD COVERAGE.
- ALL PLANTS SHARING SIMILAR HYDROZONE CHARACTERISTICS SHALL BE PLACED ON A VALVE DEDICATED TO PROVIDE THE NECESSARY WATER REQUIREMENTS SPECIFIC TO THAT HYDROZONE.
- THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED, TO THE MAXIMUM EXTENT POSSIBLE, TO CONSERVE WATER BY USING THE FOLLOWING DEVICES AND SYSTEMS: MATCHED PRECIPITATION RATE TECHNOLOGY ON ROTOR AND SPRAY HEADS (WHEREVER POSSIBLE), RAIN SENSORS, AND MULTI-PROGRAM COMPUTERIZED IRRIGATION CONTROLLERS FEATURING SENSORY INPUT CAPABILITIES.

LANDSCAPE CALCULATIONS

GENERAL CALCULATIONS:	
LANDSCAPE AREA PROVIDED:	632,877 SF
PARKING LOT LANDSCAPE:	
PARKING SPOTS:	230
PARKING LOT TREES REQUIRED:	77 TREES (2 TREES PER 6 SPOTS)
PARKING LOT TREES PROVIDED:	77 TREES

MULCHES

AFTER ALL PLANTING IS COMPLETE, CONTRACTOR SHALL INSTALL 3" THICK LAYER OF 1-1/2" SHREDDED WOOD MULCH, RECYCLED, NATURAL (UNDYED), OVER LANDSCAPE FABRIC IN ALL PLANTING AREAS (EXCEPT FOR TURF AND SEEDED AREAS). CONTRACTOR SHALL SUBMIT SAMPLES OF ALL MULCHES TO LANDSCAPE ARCHITECT AND OWNER FOR APPROVAL PRIOR TO CONSTRUCTION. ABSOLUTELY NO EXPOSED GROUND SHALL BE LEFT SHOWING ANYWHERE ON THE PROJECT AFTER MULCH HAS BEEN INSTALLED (SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF THE "GENERAL GRADING AND PLANTING NOTES" AND SPECIFICATIONS).

PROJECT TEAM

LANDSCAPE ARCHITECT:
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 BISHOP RANCH 3, STE 200
 SAN RAMON, CA 94583
 800-680-6630
 WWW.EVERGREENDESIGNGROUP.COM
 CONTACT: BLAKE TOMILLOSO-RHINEHART, PLA
 EMAIL: BLAKE@EVERGREENDESIGNGROUP.COM

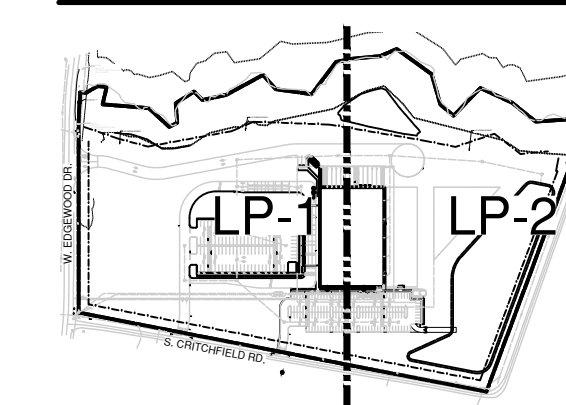
ROOT BARRIERS

THE CONTRACTOR SHALL INSTALL ROOT BARRIERS NEAR ALL NEWLY-PLANTED TREES THAT ARE LOCATED WITHIN FIVE (5) FEET OF PAVING OR CURBS. ROOT BARRIERS SHALL BE "CENTURY" OR "DEEP-ROOT" 24" DEEP PANELS (OR EQUAL). BARRIERS SHALL BE LOCATED IMMEDIATELY ADJACENT TO HARDSCAPE. INSTALL PANELS PER MANUFACTURER'S RECOMMENDATIONS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR USE ROOT BARRIERS OF A TYPE THAT COMPLETELY ENIRCLE THE ROOTBALL.

PLANT SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME	SIZE	CAL	HEIGHT	QTY
TREES					
	GLEDITSIA TRIACANTHOS INERMIS THORNLESS HONEY LOCUST	B&B	2" CAL	8'-10'	33
	QUERCUS MUEHLENBERGII CHINKAPIN OAK	B&B	2" CAL	8'-10'	14
	TILIA CORDATA 'CORZAM' CORINTHIAN® LITTLELEAF LINDEN	B&B	2" CAL	8'-10'	30
SHRUBS					
	RIBES SANGUINEUM 'KING EDWARD VII' RED FLOWERING CURRANT	5 GAL		72" o.c.	15
	SPIRAEA JAPONICA 'GOLDFLAME' GOLDFLAME JAPANESE SPIREA	2 GAL		60" o.c.	9
	VACCINIUM OVATUM EVERGREEN HUCKLEBERRY	2 GAL		48" o.c.	10
GROUND COVERS					
	ARCTOSTAPHYLOS UVA-URSI KINNICKINICK	1 GAL		48" o.c.	8,066 SF
	GRASS SEED MIX CONTRACTOR TO SUBMIT FOR APPROVAL	HYDROSEED			515,886 SF
	LOCAL COBBLE, COLOR GREY 2-4" OVER FABRIC	-			3,935 SF
	STORMWATER LOW GROW SEED MIX CONTRACTOR SHALL SUBMIT FOR APPROVAL	HYDROSEED			103,567 SF

KEY MAP



3011 Rigg Rd., Suite 303
 Mansfield, OH 44842
 Phone: 337.433.8544 Fax: 330.236.4826



AMBROSE

PROJECT PENINSULA

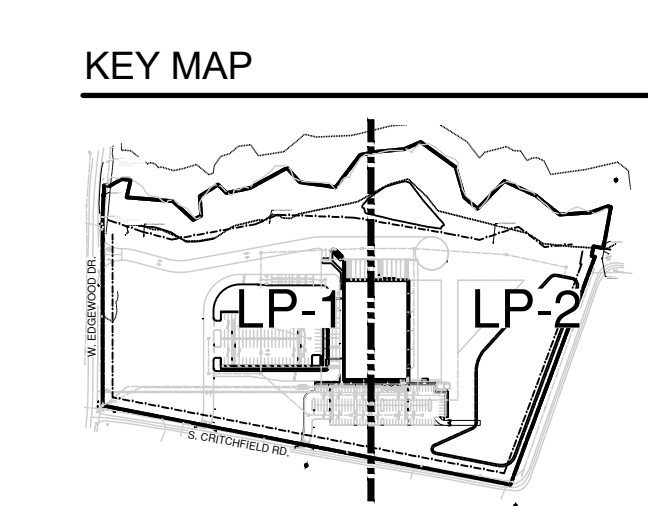
WEDGEWOOD DR.,
 PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date

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 Project Number: EDG 25-105
 Scale: AS NOTED
 Drawn By: BTR
 Checked By: BTR
 Date: 4/15/25
 Issue:

Drawing Title:
**LANDSCAPE
 TITLE SHEET**

LP-0



PLANT SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME	SIZE
TREES		
	GLEDITSIA TRIACANTHOS INERMIS THORNLESS HONEY LOCUST	B&B
	QUERCUS MUEHLENBERGII CHINKAPIN OAK	B&B
	TILIA CORDATA 'CORZAM' CORINTHIAN LITTLELEAF LINDEN	B&B
SHRUBS		
	RIBES SANGUINEUM 'KING EDWARD VII' RED FLOWERING CURRANT	5 GAL
	SPIRAEA JAPONICA 'GOLDFLAME' GOLDFLAME JAPANESE SPIREA	2 GAL
	YACONINUM OVATUM EVERGREEN HUCKLEBERRY	2 GAL
GROUND COVERS		
	ARCTOSTAPHYLOS UVA-URSI KINNIKINICK	1 GAL
	GRASS SEED MIX CONTRACTOR TO SUBMIT FOR APPROVAL	HYDROSEED
	LOCAL COBBLE, COLOR GREY 2'-4' OVER FABRIC	-
	STORMWATER LOW GROW SEED MIX CONTRACTOR SHALL SUBMIT FOR APPROVAL	HYDROSEED

FOR REFERENCE: REFER TO SHEET LP-0 FOR FULL PLANTING SCHEDULE



AMBROSE

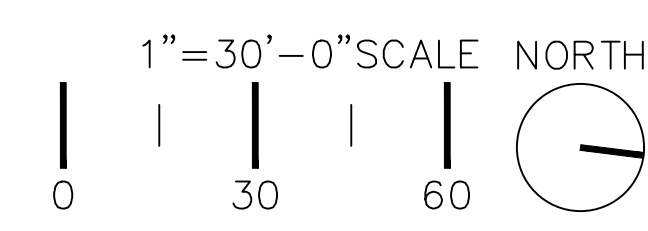
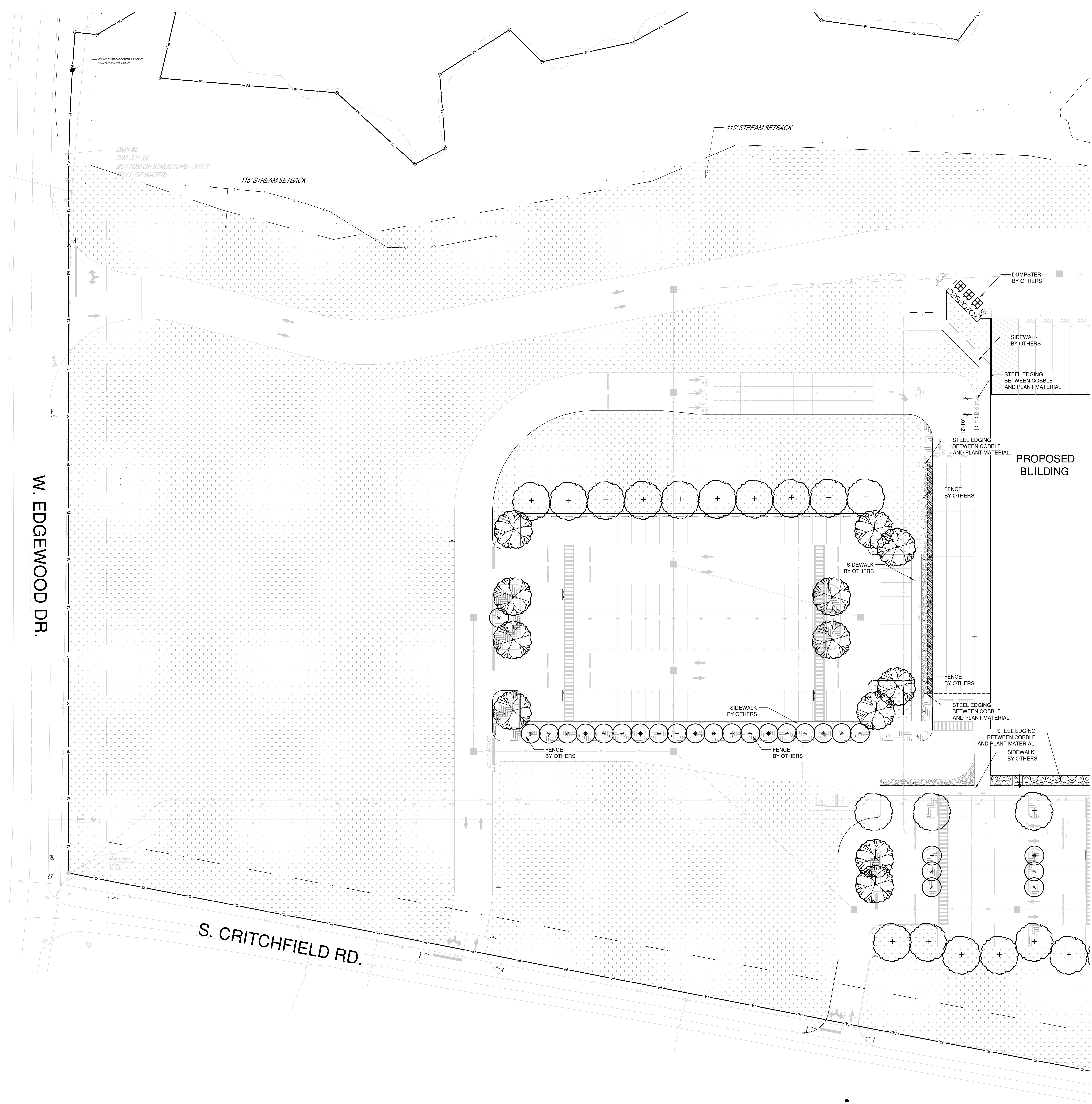
PROJECT PENINSULA
W. EDGEWOOD DR.,
PORT ANGELES, WA 98363

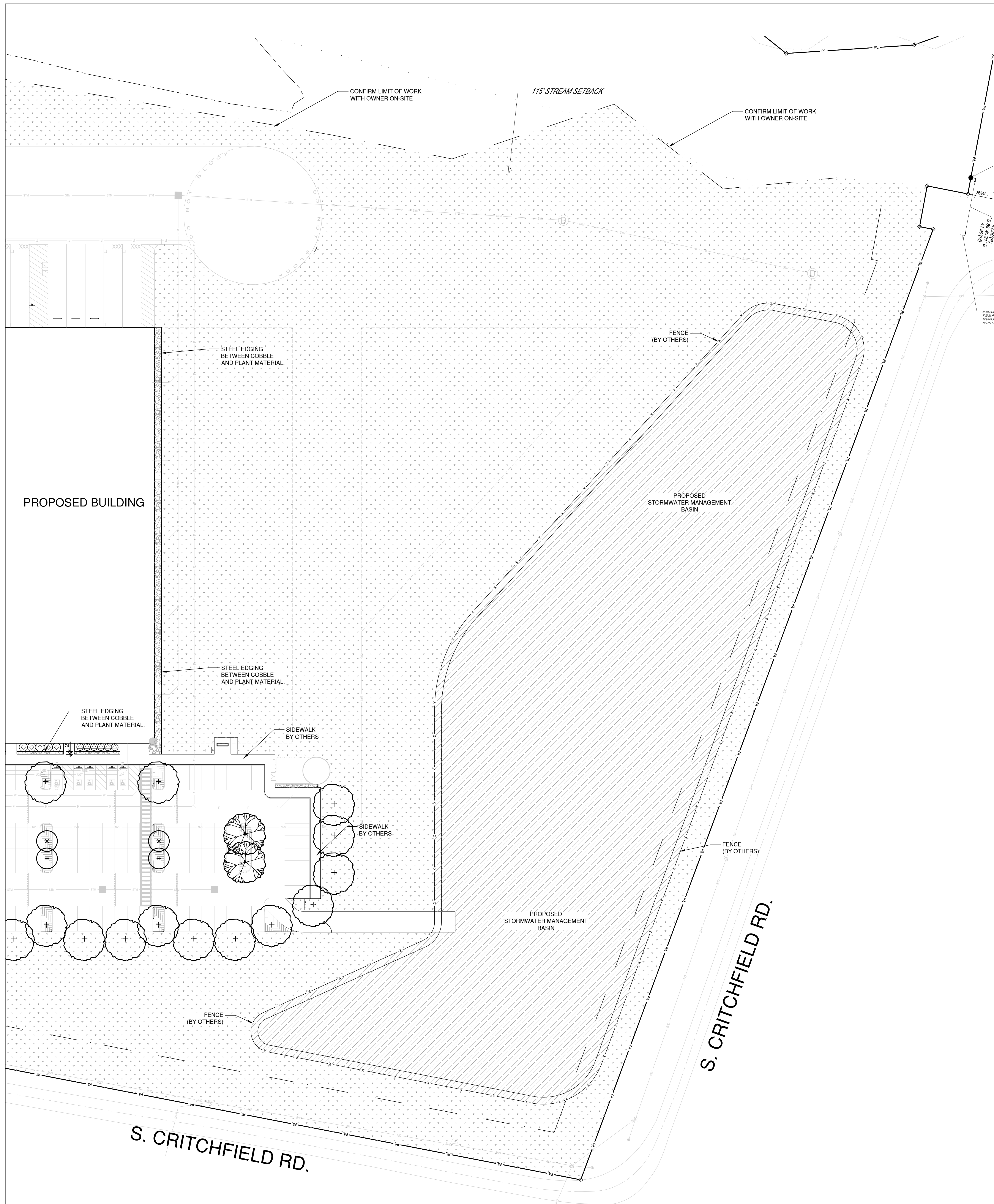
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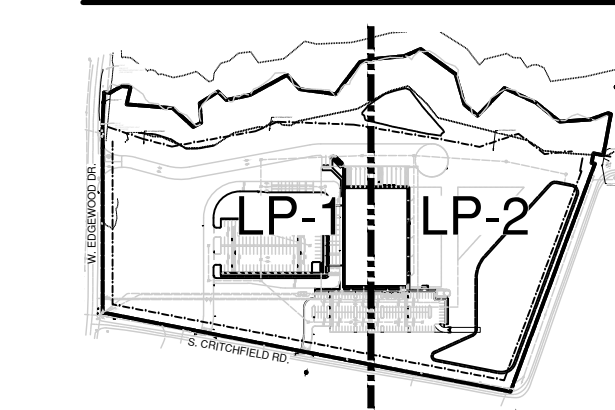
Drawing Title:
PLANTING PLAN

LP-1





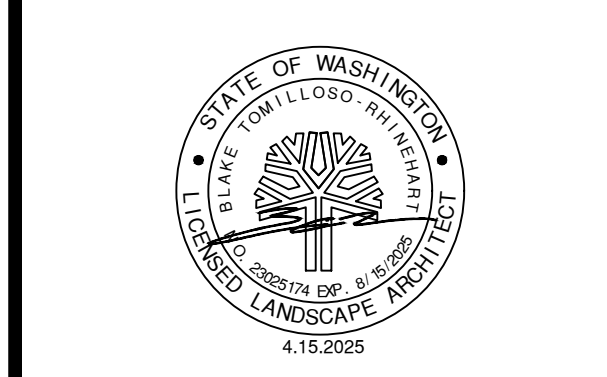
KEY MAP



PLANT SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME	SIZE
TREES		
	GLEDITSIA TRIACANTHOS INERMIS THORNLESS HONEY LOCUST	B&B
	QUERCUS MUEHLENBERGII CHINKAPIN OAK	B&B
	TILIA CORDATA 'CORZAM' CORINTHIAN LITTLELEAF LINDEN	B&B
SHRUBS		
	RIBES SANGUINEUM 'KING EDWARD VII' RED FLOWERING CURRANT	5 GAL
	SPIRAEA JAPONICA 'GOLDFLAME' GOLDFLAME JAPANESE SPIREA	2 GAL
	VACCINIUM OVATUM EVERGREEN HUCKLEBERRY	2 GAL
GROUND COVERS		
	ARCTOSTAPHYLOS UVA-URSI KINNIKINNICK	1 GAL
	GRASS SEED MIX CONTRACTOR TO SUBMIT FOR APPROVAL	HYDROSEED
	LOCAL COBBLE COLOR GREY 2-4' OVER FABRIC	-
	STORMWATER LOW GROW SEED MIX CONTRACTOR SHALL SUBMIT FOR APPROVAL	HYDROSEED

FOR REFERENCE: REFER TO SHEET LP-0 FOR FULL PLANTING SCHEDULE



AMBROSE

PROJECT PENINSULA

WEDGEWOOD DR.,
PORT ANGELES, WA 98363

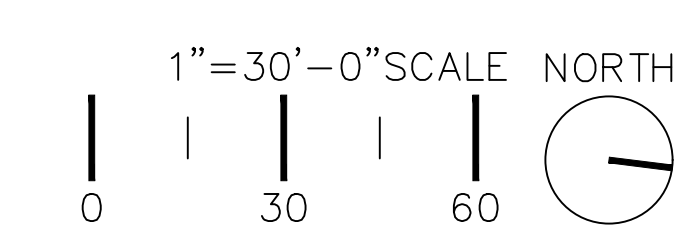
Revisions / Submissions		
ID	Description	Date

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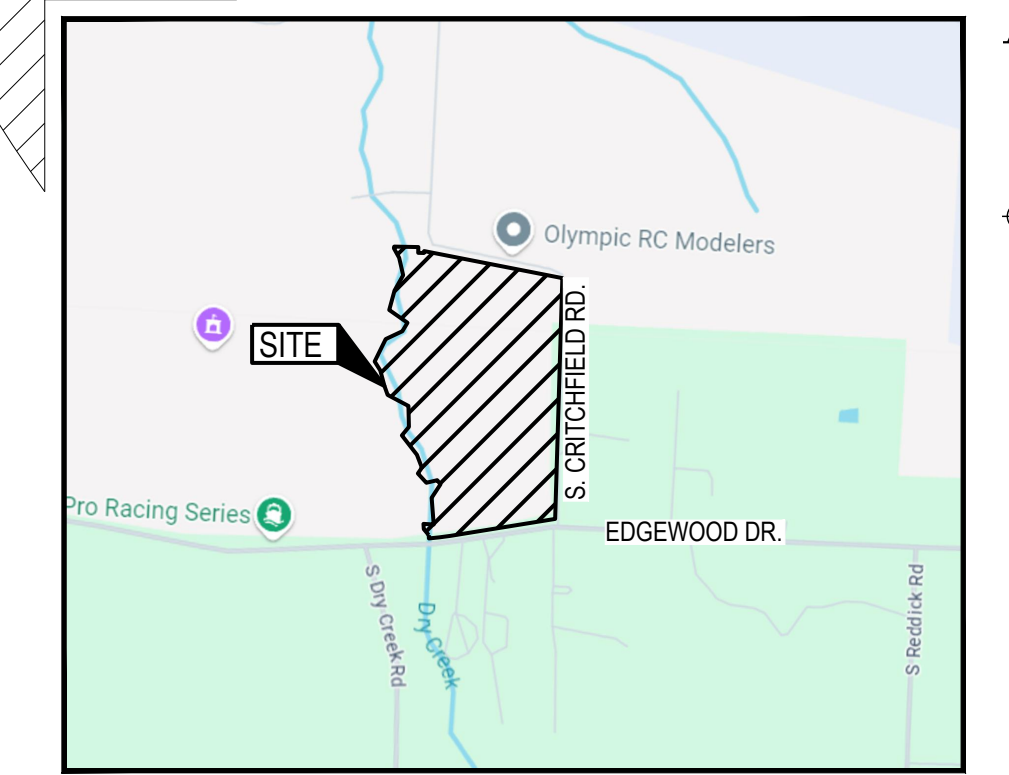
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 Scale: AS NOTED
 Drawn By: BTR
 Checked By: BTR
 Date: 4/15/25
 Issue:

Drawing Title:
PLANTING PLAN

LP-2



CITY OF PORT ANGELES, CLALLAM COUNTY, WASHINGTON
SITE DEVELOPMENT PLANS
 FOR
PROJECT PENINSULA
 W. EDGEWOOD DRIVE
 PORT ANGELES, WASHINGTON



Sheet Number	Sheet Title
C1.0	COVER SHEET
C1.1	GENERAL NOTES
C2.0	DEMOLITION PLAN
C3.0	OVERALL SITE PLAN
C3.1	ENLARGED SITE PLAN
C3.2	ENLARGED SITE PLAN
C3.3	ENLARGED SITE PLAN
C3.4	ENLARGED SITE PLAN
C3.5	SIGNAGE & STRIPING PLAN
C4.0	OVERALL GRADING PLAN
C4.1	ENLARGED GRADING PLAN
C4.2	ENLARGED GRADING PLAN
C4.3	ENLARGED GRADING PLAN
C4.4	ENLARGED GRADING PLAN
C4.5	DETENTION BASIN DETAIL
C4.6	STORM PROFILES
C4.7	STORM PROFILES
C5.0	SWPPP PHASE I PLAN
C5.1	SWPPP PHASE II PLAN
C5.2	SWPPP NOTES
C5.3	SWPPP DETAILS
C5.4	SWPPP DETAILS
C5.5	SWPPP DETAILS
C5.6	SWPPP DETAILS
C6.0	UTILITY PLAN
C6.1	UTILITY DETAILS
C7.0	CONSTRUCTION DETAILS
C7.1	CONSTRUCTION DETAILS
C7.2	CONSTRUCTION DETAILS

ORIGINAL SURVEY DRAWINGS:

SHEET 1 OF 7	ALTANSPS LAND TITLE SURVEY, BLEW, INC. (03/12/2025)
SHEET 2 OF 7	TOPOGRAPHIC DETAIL
SHEET 3 OF 7	TOPOGRAPHIC DETAIL
SHEET 4 OF 7	TOPOGRAPHIC DETAIL
SHEET 5 OF 7	TOPOGRAPHIC DETAIL
SHEET 6 OF 7	TOPOGRAPHIC DETAIL
SHEET 7 OF 7	TOPOGRAPHIC DETAIL

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 PHONE: (860) 417-4652
 EMAIL: SCARTMEL@CITYOFPA.US

ITEM	CODE	REQUIREMENTS	PROPOSED
FRONT YARD SETBACK	§ 17.34.050.B	30'	218.6'
SIDE YARD SETBACK	§ 17.34.050.B	30'	537.4'
REAR YARD SETBACK	§ 17.34.050.B	30'	280.8'
MAXIMUM BUILDING COVERAGE	---	N/A	5.23%
BUILDING HEIGHT	§ 17.34.050.C	75'	32'-6"
PARKING REQUIRED	§ 14.40.030	1 PER EACH TWO EMPLOYEES WITH A MINIMUM OF FIVE PARKING SPACES (10% OF SPACES MUST BE EV-INSTALLED, 10% EV-READY, 10% EV-CAPABLE, TOTAL OF 69 SPACES)	121 SPACES (ASSOCIATE PARKING) 97 MINIMUM (VAN PARKING)
MINIMUM ADA PARKING STALLS	§ 14.40.030	5 SPACES	5 SPACES
MINIMUM PARKING DIMENSIONS	§ 14.40.020.4	8.5' x 17'	9' x 18'
MINIMUM AISLE WIDTH	---	N/A	24' MINIMUM (ASSOCIATE PARKING) 30' MINIMUM (VAN PARKING)

BENCHMARK		DATUM:
TBM #1:	SET 5" REBAR	NAVD83
ELEVATION:	284.24'	
TBM #2:	FOUND 5" REBAR WITH 1" ALLUMINUM CAP "S 3751"	
ELEVATION:	310.04'	

FLOODPLAIN DESIGNATION:

THE PROPERTY IS IN ZONE "C" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 530021048SE WHICH HAS AN EFFECTIVE DATE OF 02/23/2001 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. FIELD SURVEYING WAS NOT PERFORMED TO DETERMINE THIS ZONE. AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR AN AMENDMENT FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

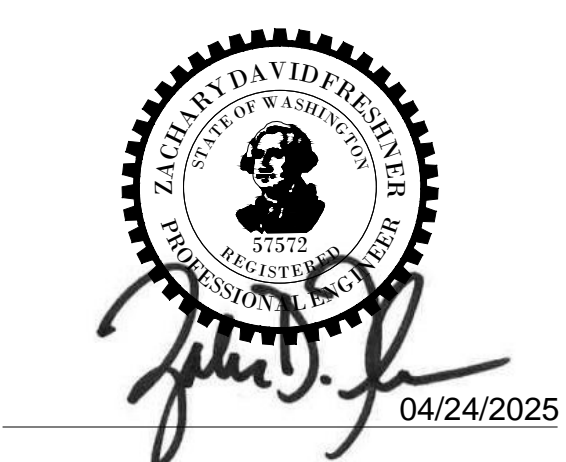
SURVEY PROVIDED BY:

BLEW, INC.
 3825 NORTH SHILOH DRIVE
 FAYETTEVILLE, AR 72703
 PHONE: (479) 443-4506
 CONTACT: BUCKLEY D. BLEW
 DATED: 03/12/2025

CESO PROVIDES NO GUARANTEE TO THE ACCURACY OF THE SURVEY PROVIDED BY BLEW, INC. CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO BID AND CONSTRUCTION.



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE.



AMBROSE PROPERTY GROUP

PROJECT PENINSULA
 W. EDGEWOOD DR.,
 PORT ANGELES, WA 98363

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

© 2025 CESO, INC.
 Project Number: 763838
 Scale: AS SHOWN
 Drawn By: QSS
 Checked By: CG
 Date: 04/24/2025
 Issue: FOR PERMIT

Drawing Title:
COVER SHEET

C1.0

GENERAL NOTES

DEMOLITION NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL. THE DEMOLITION, REMOVAL, AND DISPOSAL IS TO BE APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL FACILITIES SUCH AS: STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, WELLS, ETC. SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL AS SPECIFIED BY A QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER. IF UNDOCUMENTED FACILITIES ARE FOUND ON SITE, CONTRACTOR SHALL CONTACT THE OWNER AND UTILITY COMPANY PRIOR TO REMOVAL. ALL FACILITIES SHALL BE PLUGGED, ABANDONED, OR REMOVED PER STATE AND LOCAL REQUIREMENTS.
- FEDERAL, STATE AND LOCAL CODE REQUIREMENTS SHALL GOVERN THE DISPOSAL OF DEBRIS INCLUDING ANY POTENTIALLY HAZARDOUS AND TOXIC MATERIALS. ALL MATERIALS AND STRUCTURES DESIGNATED AS 'TO BE REMOVED' SHALL BE DISPOSED OF OFF SITE AND AT THE COST OF THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING JOB SITE SAFETY PER OSHA REQUIREMENTS AT ALL TIMES.
- PRIOR TO DEMOLITION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL THE STATE 811 AND NOTIFY ALL UTILITY COMPANIES TO SCHEDULE UTILITY SERVICE REMOVAL AND/OR ABANDONMENT. ALL UTILITIES SHALL BE REMOVED/LOCATED PER THE SPECIFICATIONS OF THE UTILITY COMPANIES. THE CONTRACTOR IS RESPONSIBLE TO PAY ALL FEES AND CHARGES ASSOCIATED WITH THIS WORK.
- CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO INHABITED BUILDINGS ON SITE AND ADJACENT PROPERTIES AT ALL TIMES. INTERRUPTIONS SHALL BE APPROVED BY THE OWNERS OF THE BUILDINGS/PROPERTIES.
- THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ON-SITE LOCATIONS OF EXISTING UTILITIES. IF THE LOCATION OR ELEVATION OF THE EXISTING UTILITIES ARE FOUND TO BE DIFFERENT FROM THE PLANS, CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
- CONTRACTOR SHALL PROTECT EXISTING SITE FEATURES TO REMAIN INSIDE AND OUTSIDE CONSTRUCTION LIMITS. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGES AND NOTIFY THE CITY/COUNTY PRIOR TO CONSTRUCTION START. ANY EXISTING SITE FEATURE TO REMAIN THAT IS DAMAGED DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, CURB, ETC. SHALL BE REPAIRED TO A CONDITION THAT IS EQUAL TO, OR BETTER THAN, THE EXISTING CONDITIONS. PRIOR TO BEING DAMAGED, THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.
- CONTINUOUS ACCESS SHALL BE MAINTAINED TO THE SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND LOCAL REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR PLACING AND MAINTAINING CONSTRUCTION FENCE, SIGNS, ETC. TO WARN AND KEEP UNAUTHORIZED PEOPLE OFF SITE FOR THE DURATION OF THE PROJECT.
- PRIOR TO DEMOLITION, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED PER THE GOVERNING AGENCIES GUIDELINES AND STANDARDS. DUST CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- SAWCUT LINE PROVIDED IS FOR REFERENCE ONLY. CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE EXTENT OF THE SAWCUT THAT WILL BE REQUIRED AS WELL AS PAVEMENT REPAIRS TO INSTALL UTILITY TRENCHING. IF ANY DAMAGE OCCURS ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THAT WHICH IS NECESSARY TO COMPLETE THE INTENT OF THE PROPOSED IMPROVEMENTS. SAWCUT EXISTING PAVEMENT TO FULL DEPTH, USING CARE TO CUT NEAT, STRAIGHT LINES. CUT AT EXISTING JOINTS WHERE POSSIBLE.
- THE CONTRACTOR SHALL MAINTAIN A WELL-DRAINED SITE, FREE OF STANDING WATER DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DRAINAGE MEASURES DURING CONSTRUCTION.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO STUDY THE PLANS AND VISIT THE SITE TO DETERMINE THE ITEMS THAT MUST BE REMOVED TO COMPLY WITH THE SITE DEVELOPMENT PLANS. NO EXTRA FEE WILL BE PAID FOR THE REMOVAL OF ANY ITEM NOT LISTED THAT IS VISIBLE UPON A SITE VISIT. THE DEMOLITION PLAN IS INTENDED TO PRESENT THE SCOPE OF THE DEMOLITION, AND DOES NOT GUARANTEE THAT ALL ITEMS ARE ADDRESSED.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS FOR ALL SITE DEVELOPMENT WORK, PAY ALL FEES FOR PERMITS AND CHECK ALL GOVERNING AUTHORITIES' SPECIFICATIONS FOR, BUT NOT LIMITED TO, GUTTERS, SIDEWALKS, POLES, AND OTHER STRUCTURES, INCLUDING THE REMOVAL OR RELOCATION OF EXISTING UTILITIES OR OTHER PHYSICAL OBJECTS SHOWN ON THE PLANS OR NOTED OTHERWISE.
- THE CONTRACTOR SHALL CREATE AND IMPLEMENT AN EROSION AND SEDIMENTATION CONTROL PLAN FOR ALL SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE PROJECT. THE PLAN MUST CONFORM TO THE EROSION AND SEDIMENTATION REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT OR LOCAL STANDARDS AND CODES, WHICHEVER IS MORE STRINGENT.
- ALL COSTS FOR INSPECTIONS AND/OR TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.

SITE NOTES

- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- ALL MATERIAL NOTED ON DRAWINGS WILL BE SUPPLIED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS TO COORDINATE ACCESS POINTS AND ELEVATIONS. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF DOORS, ENTRY RAMP, AND CANOPY.
- ALL COSTS FOR INSPECTIONS AND/OR TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.
- ACCESSIBILITY STANDARDS SHALL BE IN ACCORDANCE WITH FEDERAL AND LOCAL REQUIREMENTS FOR HANDICAP ACCESSIBILITY, INCLUDING BUT NOT LIMITED TO THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES. ADA PARKING STALLS SHALL MEET ADA GRADE GUIDELINES. CONTRACTOR SHALL FIELD VERIFY EXISTING GRADES AT ACCESS POINTS, ACCESSIBLE ROUTES, AND EXISTING PARKING TO REMAIN TO DETERMINE COMPLIANCE WITH STANDARDS.
- ALL ADA ACCESSIBLE ROUTES, WITHIN THE PUBLIC RIGHT-OF-WAY, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE "PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES" AND ANY APPLICABLE LOCAL OR STATE REQUIREMENTS. THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.
- ALL ADA ACCESSIBLE ROUTES, INCLUDING SIGNAGE AND STRIPING WITHIN THE PROJECT LIMITS, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE "ADA STANDARDS FOR ACCESSIBLE DESIGN" AND ANY LOCAL OR STATE REQUIREMENTS. THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
- ALL DISTURBED AREAS ARE TO RECEIVE 6" OF TOPSOIL, SEED, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
- ALL DIMENSIONS AND RADII ARE TO THE FACE OF THE CURB OR EDGE OF PAVEMENT, AS APPLICABLE, UNLESS OTHERWISE NOTED.
- ALL CURB RADII ARE 5 FEET UNLESS OTHERWISE NOTED.
- PROVIDE SIGNAGE AND STRIPING AS SHOWN. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH THE GOVERNING MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.). PAVEMENT MARKINGS ON ASPHALT SHALL BE WHITE. PAVEMENT MARKINGS ON CONCRETE SHALL BE YELLOW.
- REFER TO ARCHITECTURAL PLANS FOR PROPOSED BUILDING SIGNAGE.
- REFER TO MECHANICAL PLANS FOR EQUIPMENT LAYOUT.
- REFER TO ELECTRICAL PLANS FOR ELECTRICAL WORK.
- REFER TO GEOTECHNICAL ENGINEERING REPORT BY ASPECT CONSULTING ON 04.08.2025 FOR SITE WORK PREPARATION/RECOMMENDATIONS AND PAVEMENT SECTIONS.
- REFER TO ORIGINAL SURVEY PROVIDED BY BLEW, INC DATED 03/12/2025.
- ALL LIGHT POLES TO BE LOCATED 3' FROM THE BACK OF CURB, AS MEASURED FROM THE FACE OF POLE FOUNDATION, UNLESS OTHERWISE DENOTED ON PLANS.

GRADING NOTES

- THE TOPOGRAPHIC SURVEY WAS PERFORMED BY A REGISTERED LAND SURVEYOR. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
- CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA OR APPLICABLE STATE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- EXISTING AND PROPOSED GRADE CONTOUR INTERVALS ARE SHOWN AT 1 FOOT INTERVALS.
- ALL SPOT ELEVATIONS REFER TO FINISHED PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.
- ALL ADA ACCESSIBLE PARKING SPACED AND LOADING AREAS SHALL BE GRADED WITH A 2.0% MAXIMUM SLOPE IN ALL DIRECTIONS. ALL ADA ACCESSIBLE ROUTES SHALL BE GRADED WITH A 2.0% MAXIMUM CROSS SLOPE AND 5.0% MAXIMUM RUNNING SLOPE.
- MAINTAIN EXISTING DRAINAGE PATTERN THROUGHOUT THE SITE, EXCEPT WITHIN THE LIMITS OF DISTURBANCE (LOD).
- COORDINATE GRADES AT BUILDING ENTRIES WITH ARCHITECTURAL PLANS.
- EXISTING DRAINAGE STRUCTURES SHALL BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES ARE TO BE CLEANED TO REMOVE ALL SILT AND DEBRIS AFTER CONSTRUCTION IS COMPLETE.
- IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO A CONDITION EQUAL TO OR BETTER THAN ITS CONDITION PRIOR TO DAMAGE.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDING AND WITHIN PAVED AREAS.
- ALL TOPSOIL MUST BE REMOVED BEFORE FILL MATERIAL IS PLACED.
- ALL WET, OR OTHERWISE UNSUITABLE SOILS MUST BE STABILIZED. THIS MAY BE ACCOMPLISHED BY DRYING, REMOVAL & REPLACEMENT, REMOVAL & DRYING & RECOMPACTION, OR SOIL TREATMENT (LIME/CEMENT) UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER.
- ALL UNSURFACED AREAS, DISTURBED BY GRADING, OPERATION SHALL RECEIVE 6" OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES GREATER THAN 3H:1V AND SEED WITH LOW MAINTENANCE GRASS SEED MIX. CONTRACTOR SHALL SEED DISTURBED AREAS IN ACCORDANCE WITH SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. ALL EXPOSED SURFACE AREAS SHALL BE STABILIZED PER THE SWPPP AND LANDSCAPE REQUIREMENTS AS PART OF THIS PLAN SET.
- ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS SOIL TIGHT.
- ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
- STORM PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

MATERIAL	TYPE	PIPE SPEC	JOINT SPEC	INSTALLATION	ACCEPTABLE AREAS OF USE
REINFORCED CONCRETE PIPE (RCP)	CLASS III, IV, V	ASTM C-76	ASTM C443	ASTM C1479	WITHIN RW, COVER VARIES WITH PIPE CLASS
HIGH DENSITY POLY-ETHYLENE (HDPE)	SMOOTH-WALLED CORRUGATED ADS-N12 OR EQUAL	AASHTO M294 (TYPE S)	ASTM F477	ASTM D2321	ON SITE, 12" TO 60" DIA.
POLY VINYL CHLORIDE (PVC)	SDR 35	ASTM D3034	ASTM D3212	ASTM D2321	ON SITE, 4" TO 10"

- ALL STORM SEWER STRUCTURE GRATES AND FRAMES WITHIN PAVEMENT SHALL BE HEAVY DUTY.
- ALL STORM DRAINAGE SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL COUNTY AND WSDOT STANDARDS.
- ALL DOWNSPOUT DRAIN LINES OR ROOF LEADERS SHALL HAVE A 1.0% MINIMUM SLOPE. UNLESS OTHERWISE NOTED, CONNECT ALL DOWNSPOUTS AND ROOF LEADERS TO THE STORM SEWER SYSTEM. REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT AND ROOF LEADER LOCATIONS. PROVIDE POSITIVE DRAINAGE AND PAVEMENT REPAIR AS NEEDED.
- ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
- THE STORM SEWER GRADE WILL BE SUCH THAT A MINIMUM COVER IS MAINTAINED TO WITHSTAND AASHTO HS-25 LOADING ON THE PIPE. PROVIDE MINIMUM 2.0 FEET OF COVER FOR ALL STORM SEWERS UNLESS OTHERWISE NOTED.
- WHEN A SANITARY SEWER MAIN LIES ABOVE A STORM SEWER, OR WITHIN 18 INCHES BELOW, THE SANITARY SEWER WILL HAVE AN IMPERVIOUS ENCASMENT OR BE CONSTRUCTED OF STRUCTURAL SEWER PIPE FOR A MINIMUM OF 10 FEET ON EACH SIDE OF WHERE THE STORM SEWER CROSSES.
- IF EXISTING FIELD TILES ARE ENCOUNTERED DURING CONSTRUCTION THEY SHALL BE REPAIRED AND/OR TIED INTO A STORM SEWER SYSTEM AS NEEDED TO MAINTAIN POSITIVE DRAINAGE.

UTILITY NOTES

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.
- THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF O.S.H.A. DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, AND OTHER MEANS OF PROTECTION. THIS TO INCLUDE BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR O.S.H.A.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITY DURING CONSTRUCTION AT NO COST TO THE OWNER.
- ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. THE CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY REGULATIONS AND THE OWNER'S INSPECTION AUTHORITIES.
- CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITY'S INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
- WATER AND SANITARY UTILITIES SHALL HAVE TEN (10) FEET OF HORIZONTAL CLEARANCE WHEN PARALLEL OR 18" VERTICAL CLEARANCE WHEN CROSSING. ALL CLEARANCE DISTANCES SHALL BE MEASURED FROM OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE. THE CROSSING SHALL BE ARRANGED SO THAT THE SANITARY SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER LINE JOINTS.
- IF A WATER LINE PASSES UNDER THE SANITARY SEWER LINE, THE SEWER LINE SHOULD BE CONSTRUCTED OF A WATERTIGHT MATERIAL APPROVED BY THE REGULATORY AGENCY FOR USE IN WATER MAIN CONSTRUCTION AND SHALL EXTEND TEN (10) FEET ON BOTH SIDES OF THE CROSSING, AS MEASURED PERPENDICULAR TO THE WATER LINES. ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.
- UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. THE CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY REGULATIONS AND THE OWNER'S INSPECTION AUTHORITIES.
- UTILITY TRENCHES WITHIN PAVED AREAS TO BE BACKFILLED PER UTILITY TRENCH DETAIL PROVIDED WITHIN THE CONSTRUCTION DETAILS SHEET.
- ALL WATER LINE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF PORT ANGELES CONSTRUCTION STANDARDS AND STATE REGULATIONS.
- INSTALL ALL WATER LINES WITH A MINIMUM COVER OF 3'-6".
- ON-SITE WATER LINE MATERIAL SHALL BE AS FOLLOWS:

MATERIAL	PRESSURE RATING	PIPE SPEC	FITTINGS	INSTALLATION	ACCEPTABLE AREAS OF USE
PE 4710 POLY-ETHYLENE PLASTIC (PE)	SDR 11 P.C. = 200 PSI	ASTM D3035 AWWA C901	ASTM D3369 ASTM D3261	ASTM D2774	ON SITE, 2" TO 3" DIA.
P.V.C. POLY VINYL CHLORIDE 4"-8" C900	C900	AWWA C901 (RATED DR 14)	ASTM F-477 ASTM D3139	AWWA C900 C651	ON SITE, 4"-6" WATER LINES & FIRE LINES. INSTALL W/ TRACER & TAPE #12 COPPER
DUCTILE IRON PIPE 4"-12"	CLASS 52 P.C. = 350PSI	AWWA C104, C110, C151, C500	AWWA C111	AWWA C600, C651	6" FIRE HYDRANT LEADS

- ON-SITE SANITARY SEWER LINE MATERIAL SHALL BE AS FOLLOWS:

MATERIAL	PRESSURE RATING	PIPE SPEC	FITTINGS	INSTALLATION	ACCEPTABLE AREAS OF USE
POLY VINYL CHLORIDE (PVC)	SDR 35	ASTM D3034	ASTM D3212	ASTM D2321 WITH TYPE 1 BEDDING	ON SITE, 6" TO 8" DIA., LESS THAN 8.5' OF COVER
POLY VINYL CHLORIDE (PVC)	SDR 26	ASTM 3034	ASTM D3212	ASTM 2321 WITH TYPE 1 BEDDING	ON SITE, 6" TO 8" DIA., GREATER THAN OR EQUAL TO 8.5' OF COVER

- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, SERVICE SIZES TO BE DETERMINED BY ARCHITECT.
- CLEAN OUTS AND CURB BOXES WITHIN THE PAVED AREAS MUST HAVE TRAFFIC LOADING FRAMES AND COVERS.

EXISTING FEATURES LEGEND

APPLIES TO ALL CIVIL SHEETS

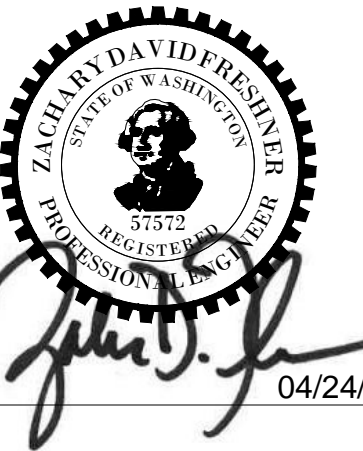
	R/W	RIGHT OF WAY LINE
		PARCEL LINE
	P/L	SUBJECT PROPERTY BOUNDARY LINE
		EASEMENT LINE
		CURB
		EDGE OF PAVEMENT
		EDGE OF WALK
		PAVEMENT MARKINGS
	STM	STORM SEWER
	SSW	SANITARY SEWER
	W	WATER LINE
	G	GAS LINE
	O/E	OVHD ELECTRIC LINE
	U/E	UGND ELECTRIC LINE
	U/T	UGND TELECOMM LINE
	10'	MAJOR CONTOUR
	10'	MINOR CONTOUR

	WATER METER		STORM CATCH BASIN
	WATER VALVE		STORM INLET BASIN
	POWER/TELEPHONE POLE		STORM MANHOLE
	POWER POLE		STORM CLEAN OUT
	AIR CONDITIONER		SANITARY MANHOLE
	ELECTRIC BOX		SANITARY CLEAN OUT
	LIGHT POLE		TRAFFIC/SIGNAL POLE
	GAS VALVE		TRAFFIC MANHOLE
	GAS METER		SIGN



CESO
WWW.CESO.INC.COM

3980 Corporate Exchange Dr., Suite 800
Columbus, OH 43231
Phone: 614.766.7500 Fax: 614.766.8025



04/24/2025

AMBROSE PROPERTY GROUP

PROJECT PENINSULA

WEDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	20250424

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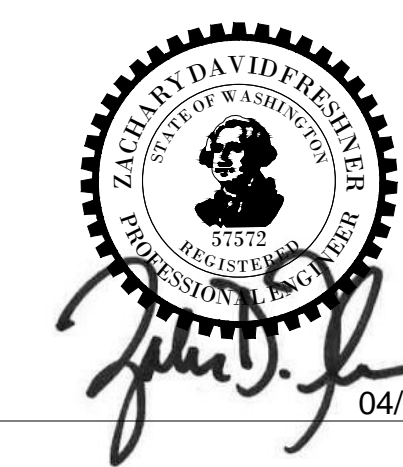
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Scale: AS SHOWN
Drawn By: QSS
Checked By: CG
Date: 04/24/2025
Issue: FOR PERMIT

Drawing Title:
GENERAL NOTES

C1.1



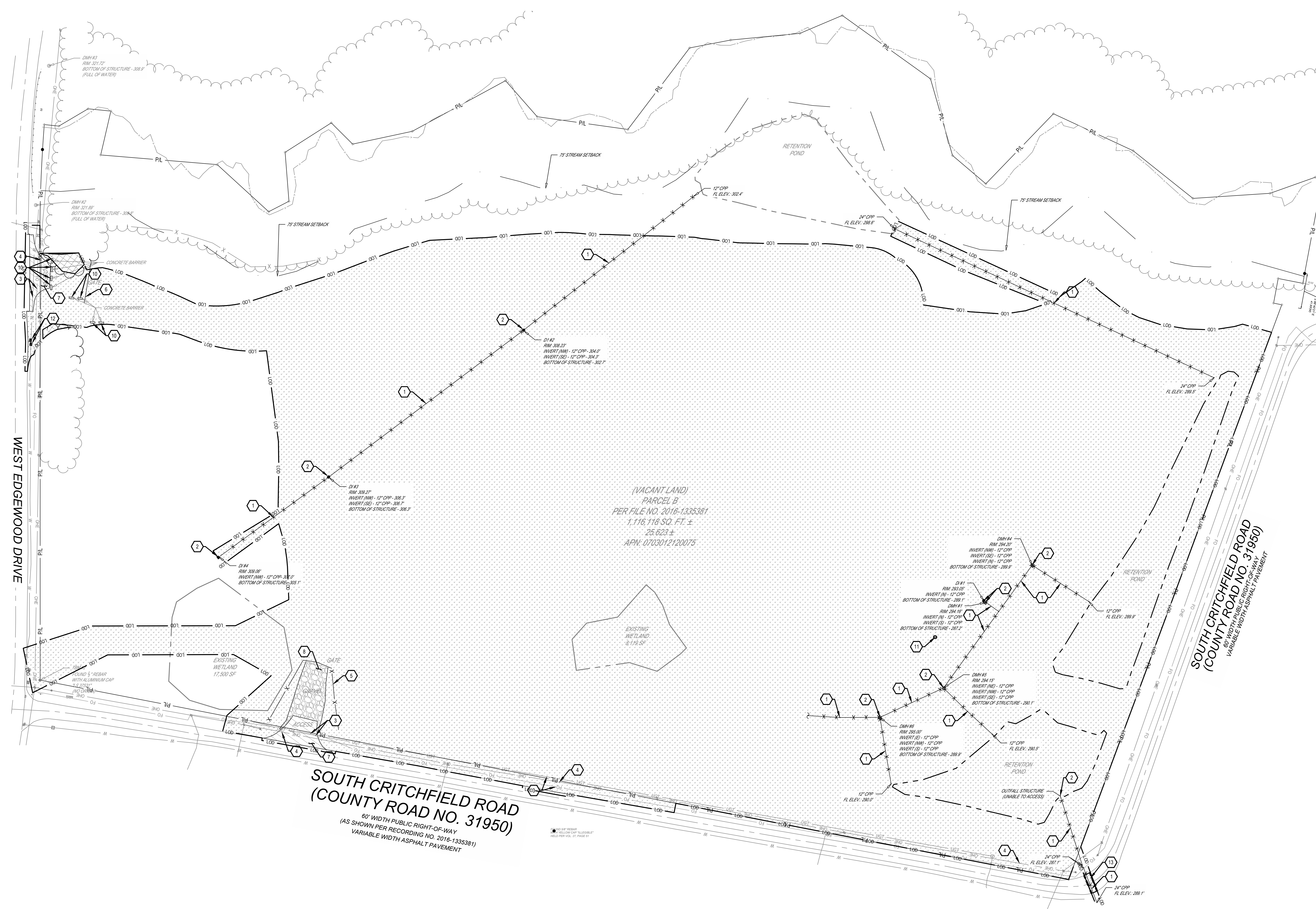
2880 Corporate Exchange Dr., Suite 400
Columbus, OH 43221
Phone: 614.756.2500 Fax: 614.756.4625



04/24/2025

DEMOLITION LEGEND	
EXISTING	
REFER TO XXX FOR EXISTING FEATURES LEGEND	
PROPOSED	
	SITE CLEARING LIMITS
	REMOVE EXISTING FOREST AREA
	REMOVE EXISTING GRAVEL PAVEMENT
	REMOVE EXISTING ASPHALT PAVEMENT
	SAWCUT LINE
	UTILITY LINE TO BE REMOVED / RELOCATED
	REMOVE EXISTING CURB & GUTTER
	REMOVE EXISTING FENCE
	REMOVE AND DISPOSE OF EXISTING TREE
	PROTECT EXISTING TREE TO REMAIN

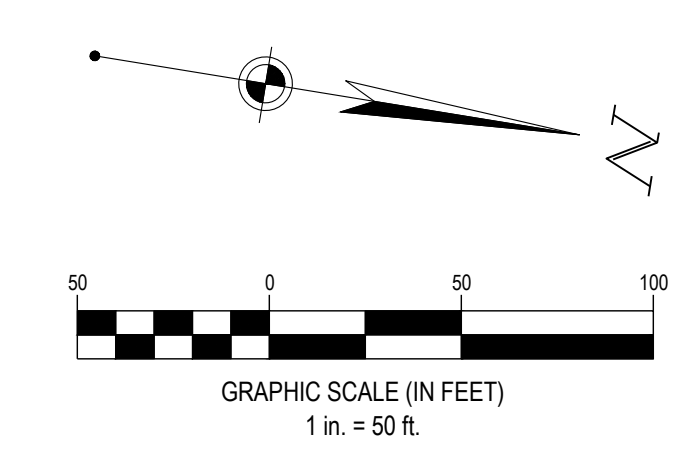
REFER TO SHEET C1.1 FOR GENERAL DEMOLITION NOTES



(VACANT LAND)
PARCEL B
PER FILE NO. 2016-1335381
1,116,118 SQ. FT. ±
25.623 ±
APN: 0703012120075

SOUTH CRITCHFIELD ROAD
(COUNTY ROAD NO. 31950)
80' WIDTH PUBLIC RIGHT-OF-WAY
(AS SHOWN PER RECORDING NO. 2016-1335381)
VARIABLE WIDTH ASPHALT PAVEMENT

- CODED NOTES:**
1. REMOVE EXISTING STORM PIPE.
 2. REMOVE EXISTING STORM STRUCTURE.
 3. PROTECT EXISTING UNDERGROUND UTILITIES.
 4. PROTECT EXISTING OVERHEAD POWERLINE. CONTRACTOR TO USE CAUTION UNDER OVERHEAD POWERLINE.
 5. REMOVE EXISTING FENCE.
 6. REMOVE EXISTING GATE.
 7. REMOVE EXISTING ASPHALT PAVEMENT.
 8. REMOVE EXISTING GRAVEL.
 9. REMOVE EXISTING TREELINE.
 10. REMOVE EXISTING CONCRETE BARRIERS.
 11. CONTRACTOR TO FIELD VERIFY CONDITION OF EXISTING WATER STRUCTURE AND CAP.
 12. REMOVE EXISTING MAILBOX.
 13. SAWCUT, REMOVE, AND REPLACE EXISTING PAVEMENT. PAVEMENT TO BE REPLACED IN-KIND. REFERENCE SAWCUT DETAIL, SHEET 7.0.



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

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Revisions / Submissions		
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1	BUILDING PERMIT SUBMISSION	20250424

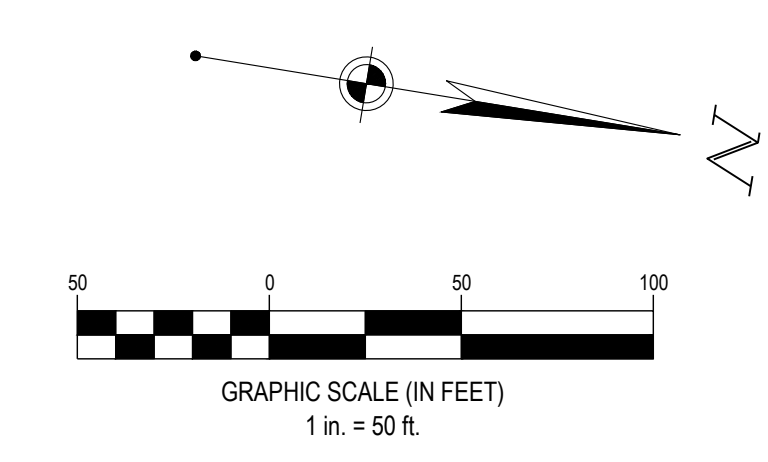
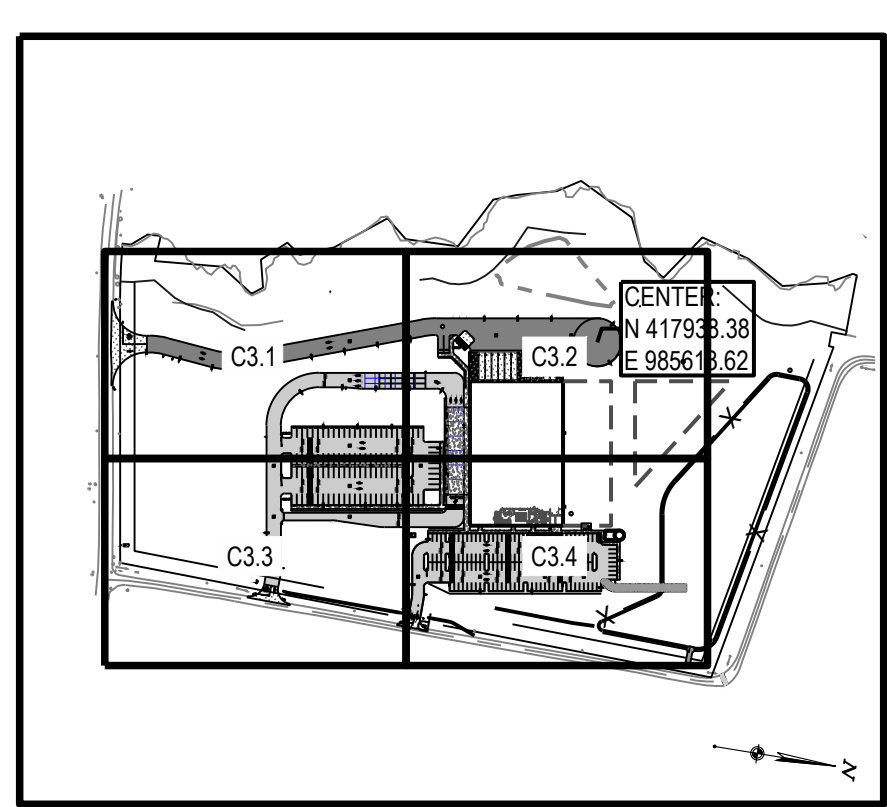
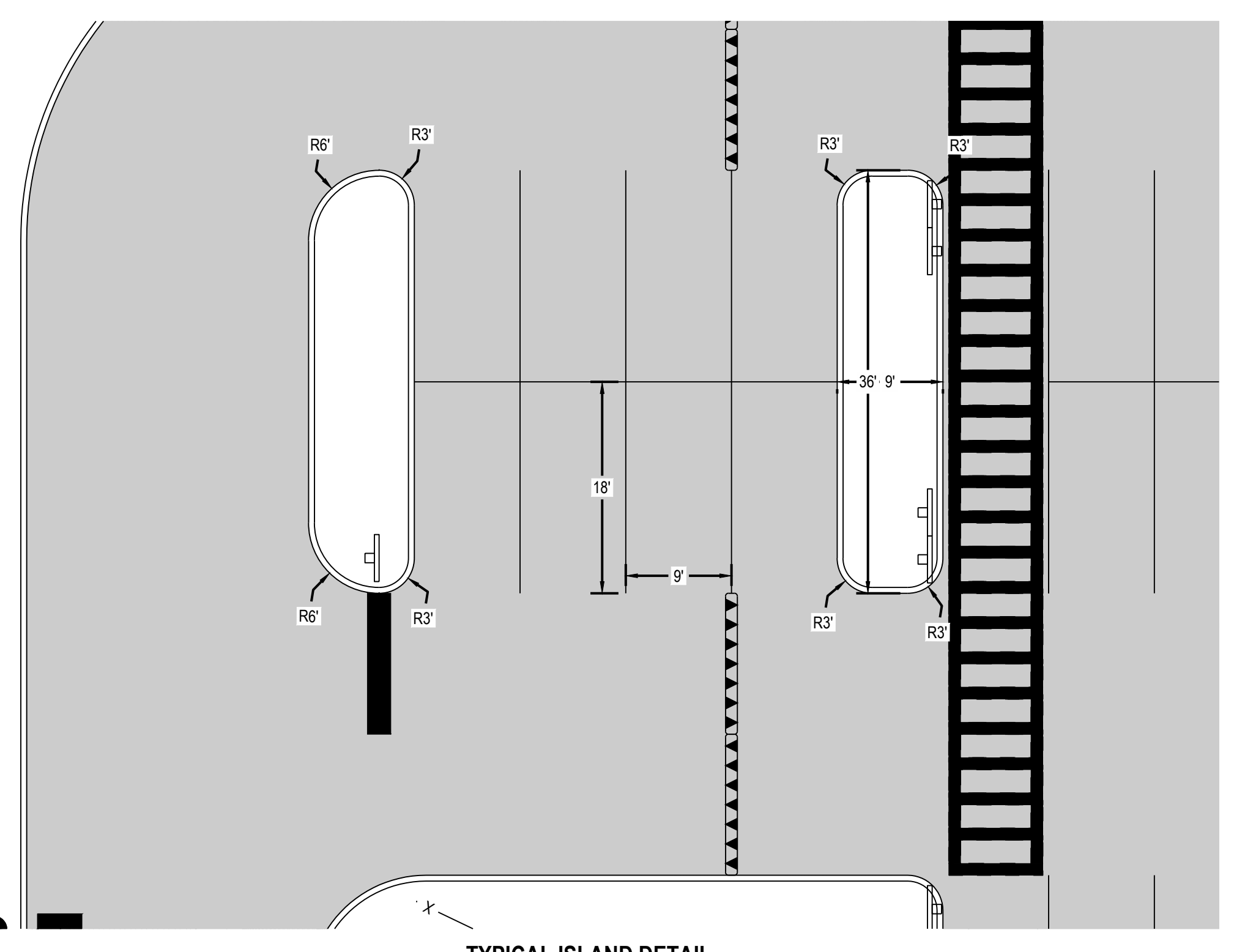
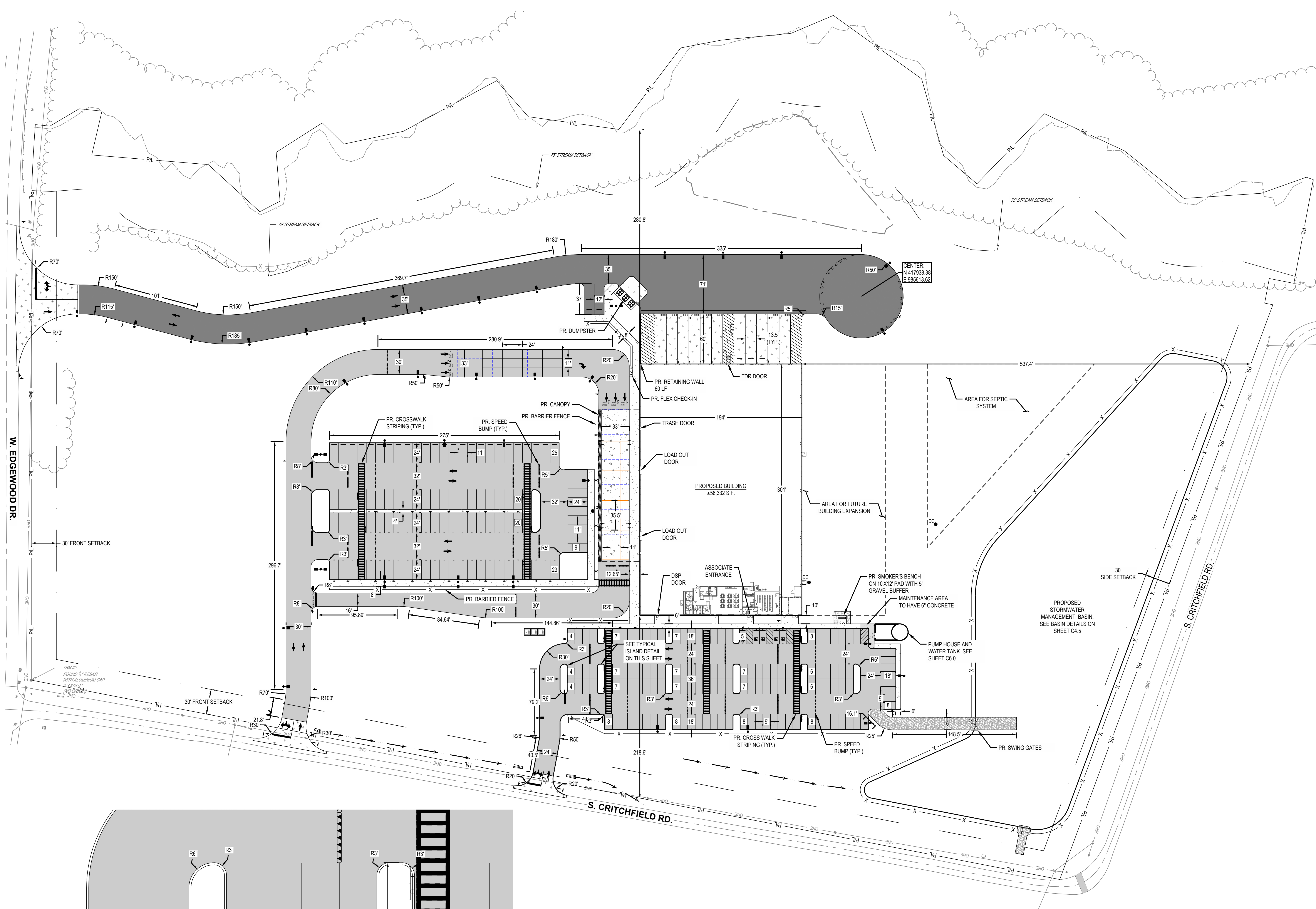
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Project Number: 763838
Scale: AS SHOWN
Drawn By: QSS
Checked By: CG
Date: 04/24/2025
Issue: FOR PERMIT

Drawing Title:
DEMOLITION PLAN

C2.0

SITE LEGEND	
EXISTING	
REFER TO SHEET C1.1 FOR EXISTING FEATURES LEGEND	
PROPOSED	
	LIGHT DUTY ASPHALT PAVEMENT
	HEAVY DUTY ASPHALT PAVEMENT
	LIGHT DUTY CONCRETE PAVEMENT
	HEAVY DUTY CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	GRAVEL
	PROPERTY LINE
	BUILDING
	CONCRETE CURB
	PAVEMENT WALK
	6' PEDESTRIAN BARRIER FENCE
	PARKING SPACE COUNT
	SIGN
	PARKING BLOCK
	LIGHT POLE

REFER TO SHEET C1.1 FOR GENERAL SITE NOTES
REFER TO SHEETS C3.1 - C3.4 FOR ENLARGED SITE PLANS



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W EDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

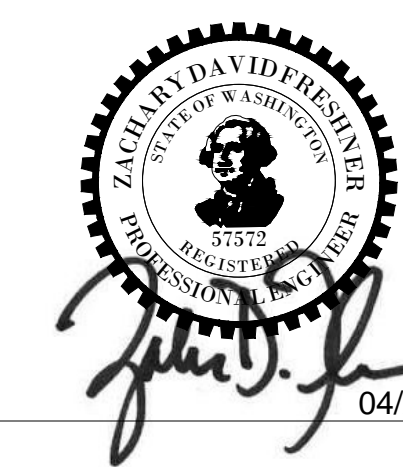
© 2025 CESO, INC.
Project Number: 763838
Scale: AS SHOWN
Drawn By: QSS
Checked By: CG
Date: 04/24/2025
Issue: FOR PERMIT

Drawing Title:
OVERALL SITE PLAN

C3.0



2880 Corporate Exchange Dr., Suite 400
Columbus, OH 43221
Phone: 614.766.2500 Fax: 614.766.4625



SITE LEGEND	
EXISTING	
REFER TO C1.1 FOR EXISTING FEATURES LEGEND	
PROPOSED	
	LIGHT DUTY ASPHALT PAVEMENT
	HEAVY DUTY ASPHALT PAVEMENT
	LIGHT DUTY CONCRETE PAVEMENT
	HEAVY DUTY CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	GRAVEL
	PROPERTY LINE
	BUILDING
	CONCRETE CURB
	PAVEMENT WALK
	6' PEDESTRIAN BARRIER FENCE
	PARKING SPACE COUNT
	SIGN
	PARKING BLOCK
	LIGHT POLE

REFER TO SHEET C1.1 FOR GENERAL SITE NOTES
REFER TO SHEET C3.0 FOR OVERALL SITE PLAN

CODED NOTES:

- PROPOSED 58,332 SF BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED DUMPSTER AREA. SEE ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED 6" STRAIGHT CURB. REFER TO CONSTRUCTION DETAILS, SHEET C7.0.
- PROPOSED INTEGRAL CONCRETE CURB AND SIDEWALK. REFER TO CONSTRUCTION DETAILS, SHEET C7.0.
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- PROPOSED LIGHT POLE.
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- PROPOSED ACCESS GATE. REFER TO CONSTRUCTION DETAILS, SHEET C7.0.
- PROPOSED EV CHARGING STATIONS.
- PROPOSED SMOKER'S BENCH AREA.
- PROPOSED TRUCK WHEEL STOP. REFER TO CONSTRUCTION DETAILS, SHEET C7.0.
- PROPOSED 6" TALL PRIVACY FENCE.

AMBROSE PROPERTY GROUP

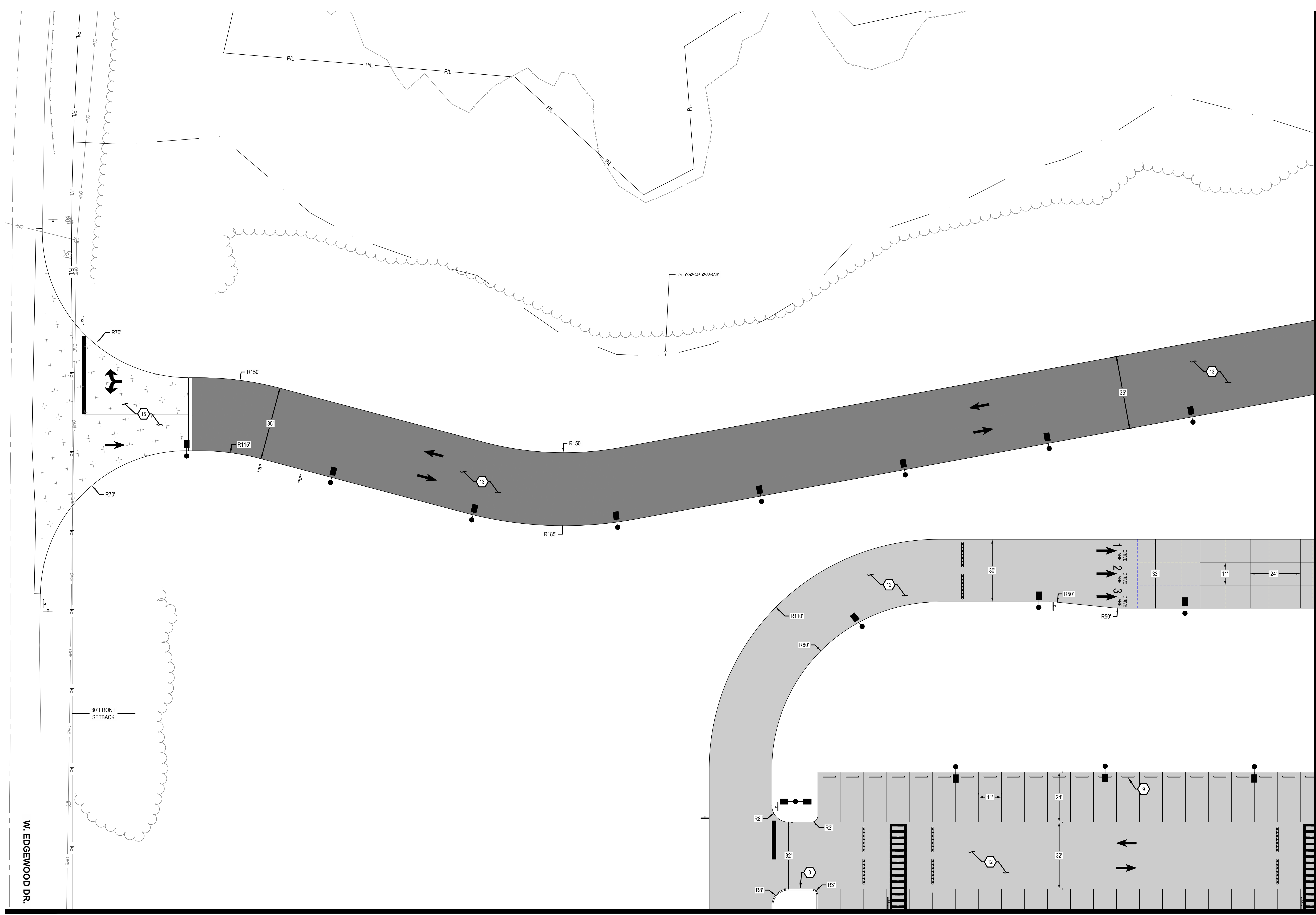
PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	20250424

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Drawing Title:
ENLARGED SITE PLAN

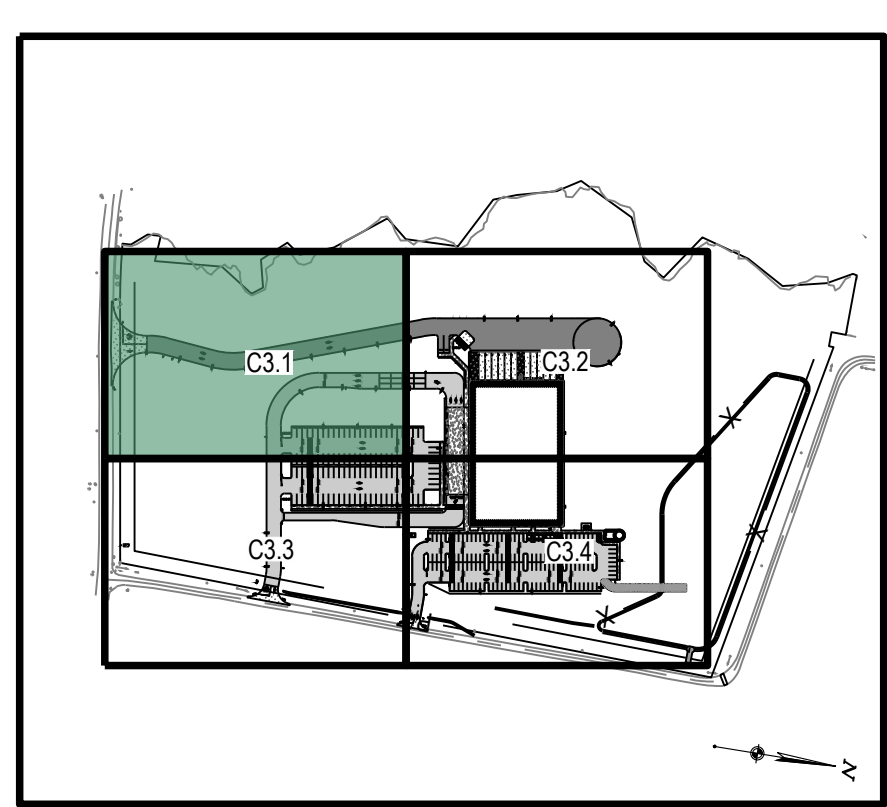
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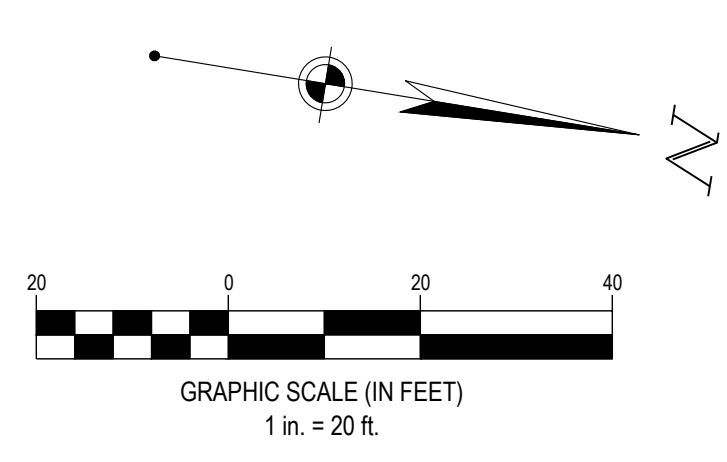
MATCHLINE - SEE SHEET C3.3

MATCHLINE - SEE SHEET C3.2

W. EDGEWOOD DR.



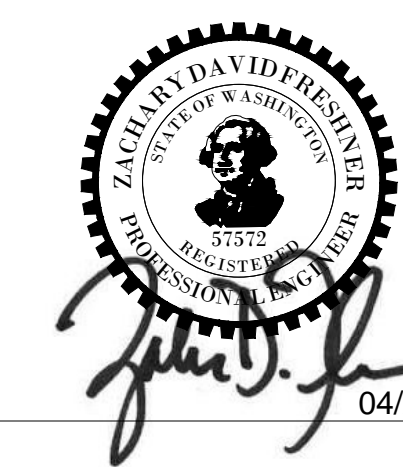
KEY MAP
SCALE: 1" = 400'



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3800 Corporate Exchange Dr., Suite 800
Columbus, OH 43221
Phone: 614.766.7500 Fax: 614.766.4625



SITE LEGEND	
EXISTING	
REFER TO SURVEY FOR EXISTING FEATURES LEGEND	
PROPOSED	
	LIGHT DUTY ASPHALT PAVEMENT
	HEAVY DUTY ASPHALT PAVEMENT
	LIGHT DUTY CONCRETE PAVEMENT
	HEAVY DUTY CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	GRAVEL
	PROPERTY LINE
	BUILDING
	CONCRETE CURB
	PAVEMENT WALK
	6' PEDESTRIAN BARRIER FENCE
	PARKING SPACE COUNT
	SIGN
	PARKING BLOCK
	LIGHT POLE

REFER TO OVERALL SITE PLAN - SHEET C3.0

CODED NOTES:

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- PROPOSED DUMPSTER AREA. SEE ARCHITECTURAL PLANS FOR DETAILS.
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- PROPOSED 6' TALL PRIVACY FENCE.

AMBROSE PROPERTY GROUP

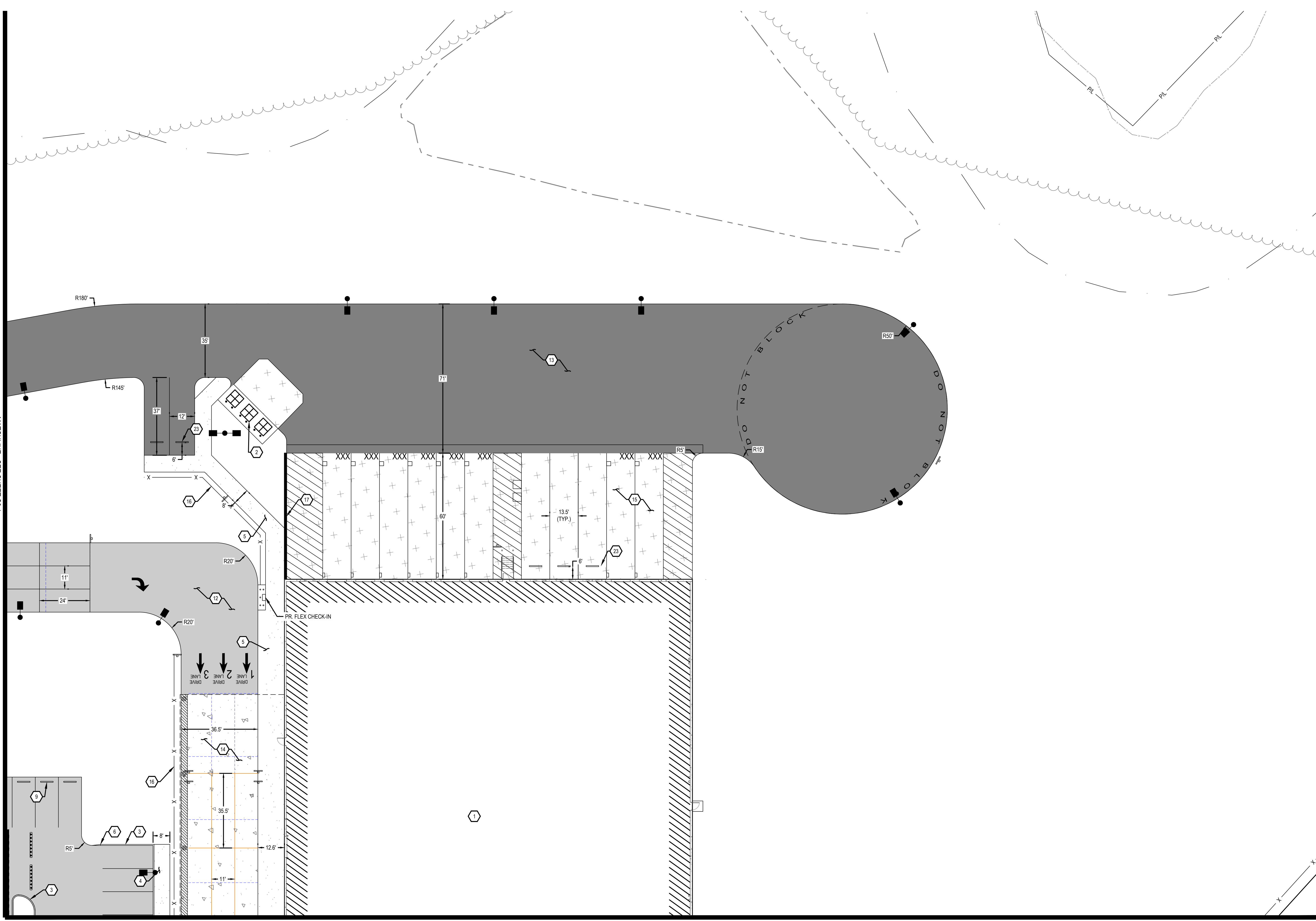
PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

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 Project Number: 763838
 Scale: AS SHOWN
 Drawn By: QSS
 Checked By: CG
 Date: 04/24/2025
 Issue: FOR PERMIT

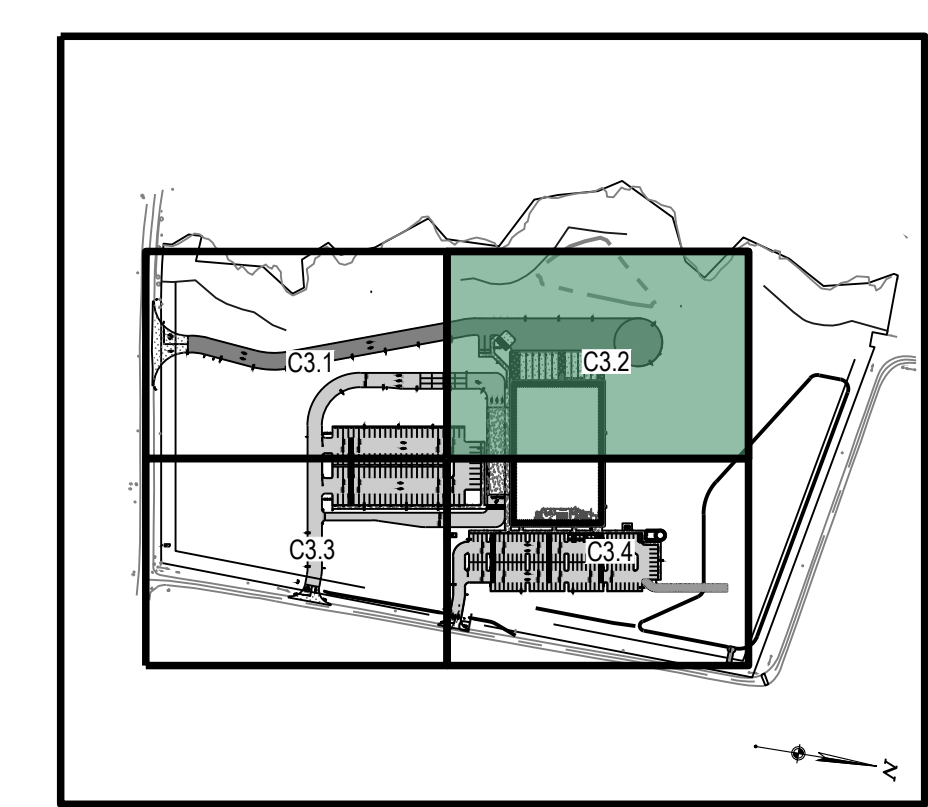
Drawing Title:
ENLARGED SITE PLAN

C3.2

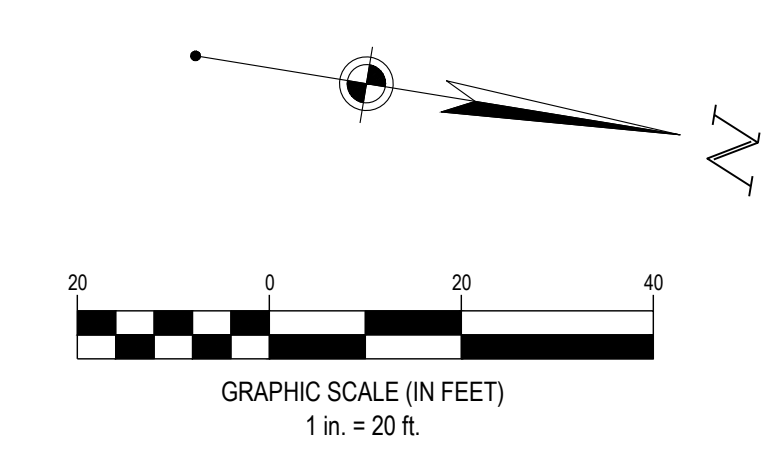


MATCHLINE - SEE SHEET C3.1

MATCHLINE - SEE SHEET C3.4



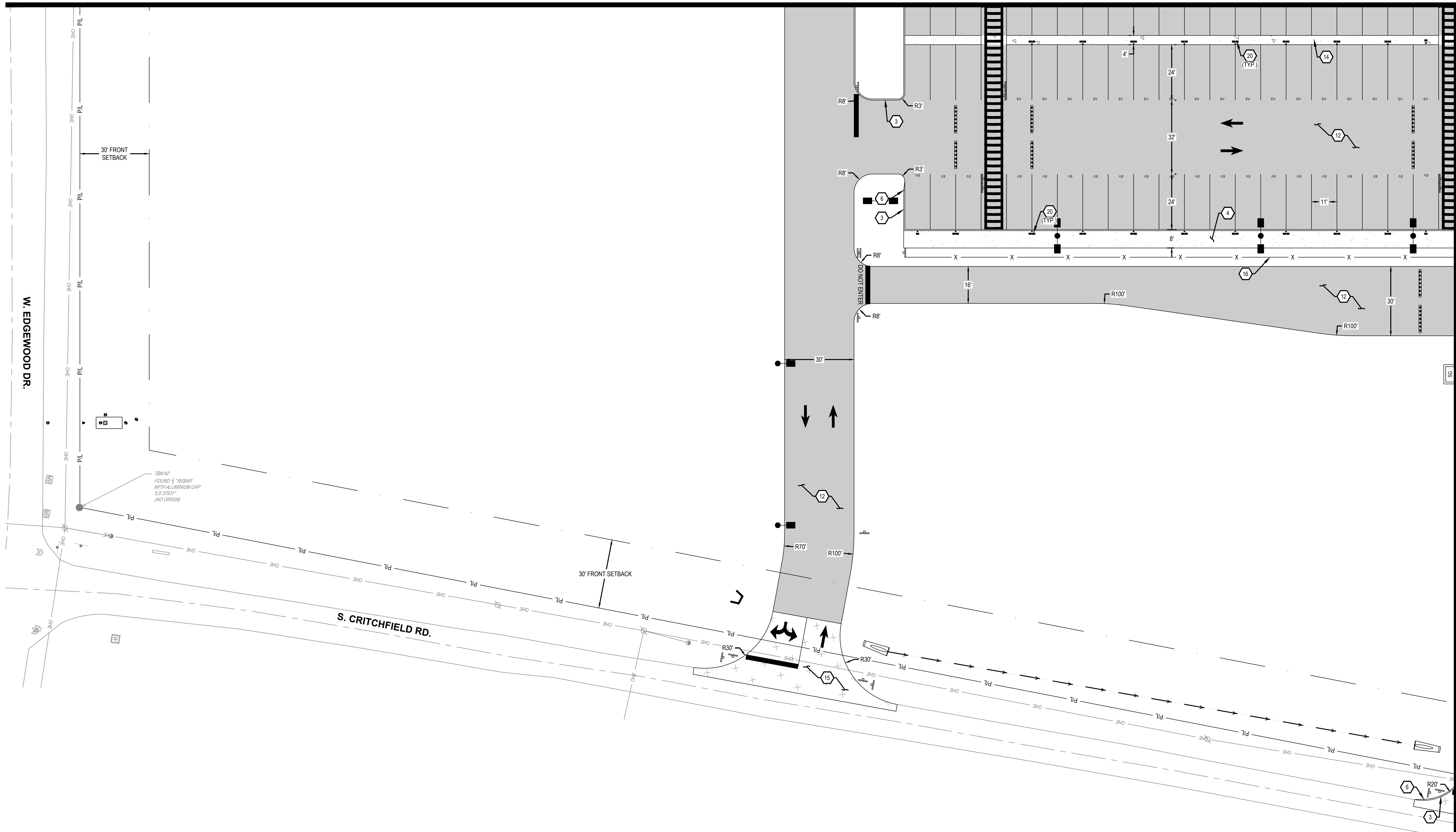
KEY MAP
SCALE: 1" = 400'



GRAPHIC SCALE (IN FEET)
1 in. = 20 ft.



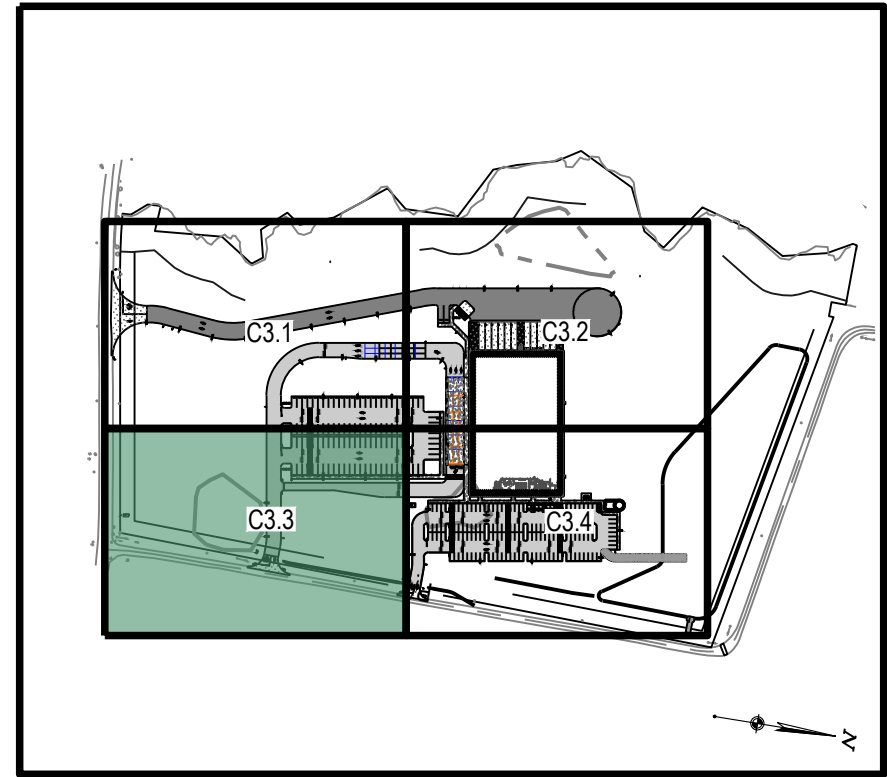
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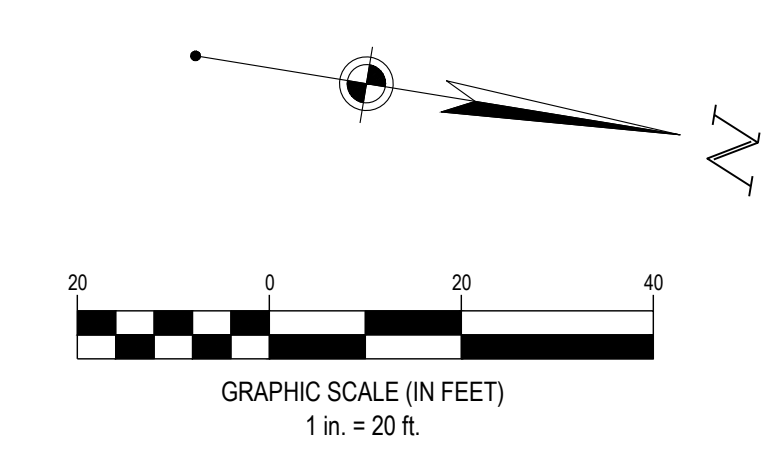
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EXISTING	
REFER TO SURVEY FOR EXISTING FEATURES LEGEND	
PROPOSED	
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	HEAVY DUTY ASPHALT PAVEMENT
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	PARKING BLOCK
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19. PROPOSED ACCESS GATE. REFER TO CONSTRUCTION DETAILS, SHEET C7.0.
20. PROPOSED EV CHARGING STATIONS.
21. PROPOSED SMOKER'S BENCH AREA.
22. PROPOSED PUMP HOUSE AND WATER TANK. REFER TO UTILITY PLAN, SHEET C6.0.
23. PROPOSED TRUCK WHEEL STOP. REFER TO CONSTRUCTION DETAILS, SHEET C7.0.
24. PROPOSED 6' TALL PRIVACY FENCE.



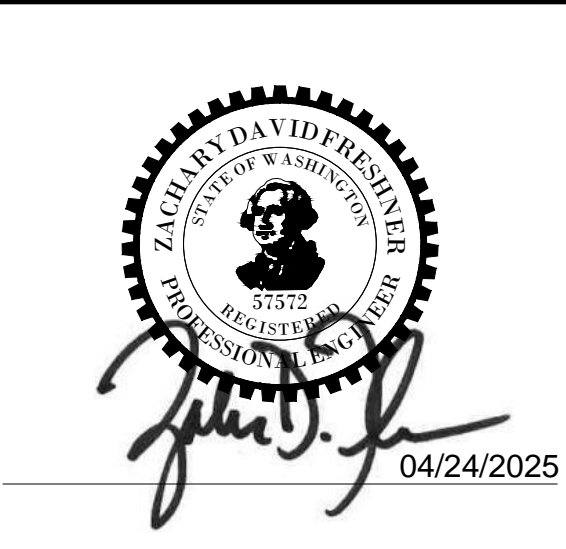
KEY MAP
SCALE: 1" = 400'



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1 in. = 20 ft.



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AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W. EDGEWOOD DR.,
PORT ANGELES, WA 98363

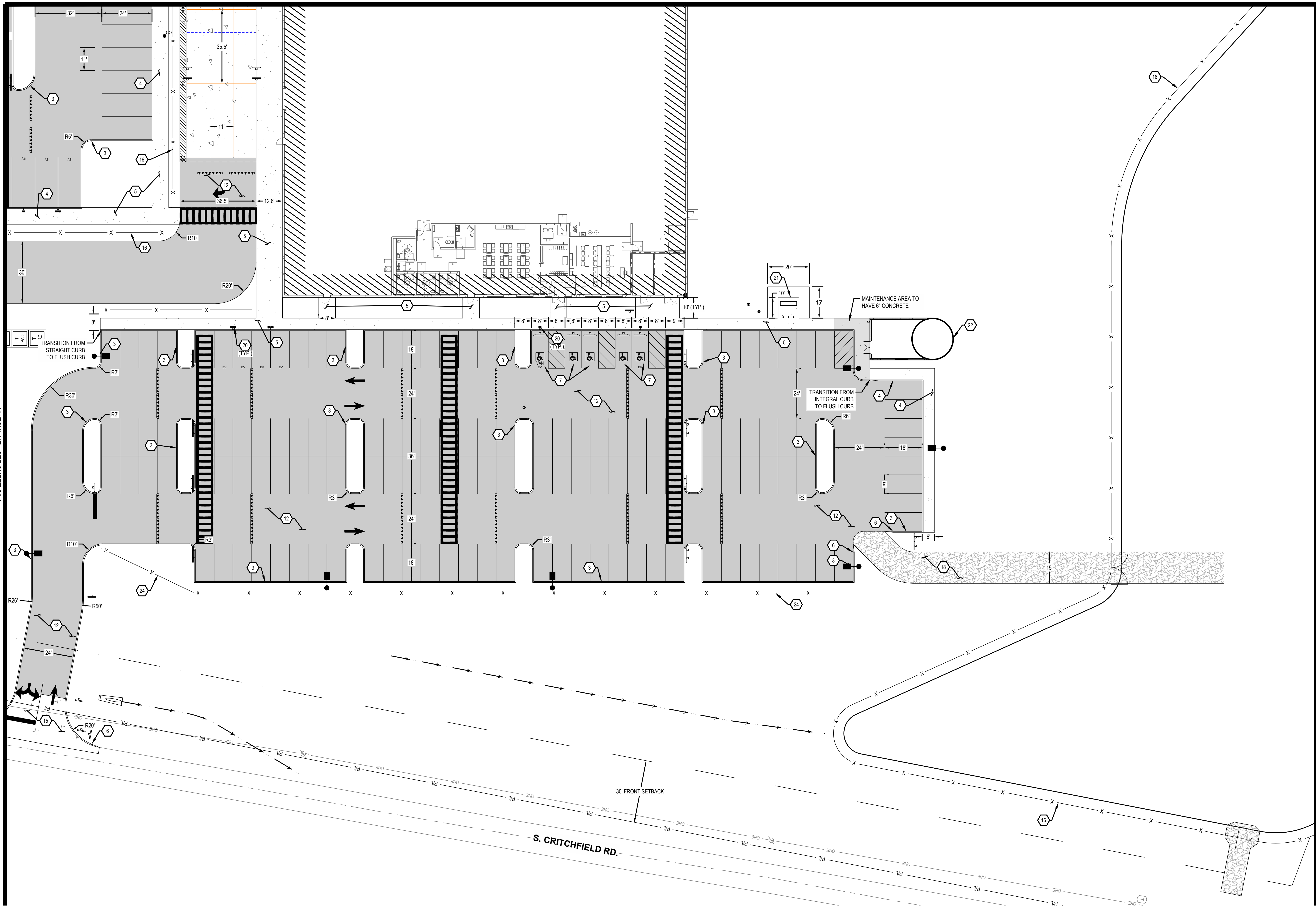
Revisions / Submissions		
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	20250424

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 Project Number: 763838
 Scale: AS SHOWN
 Drawn By: QSS
 Checked By: CG
 Date: 04/24/2025
 Issue: FOR PERMIT

Drawing Title:

ENLARGED SITE PLAN

C3.3



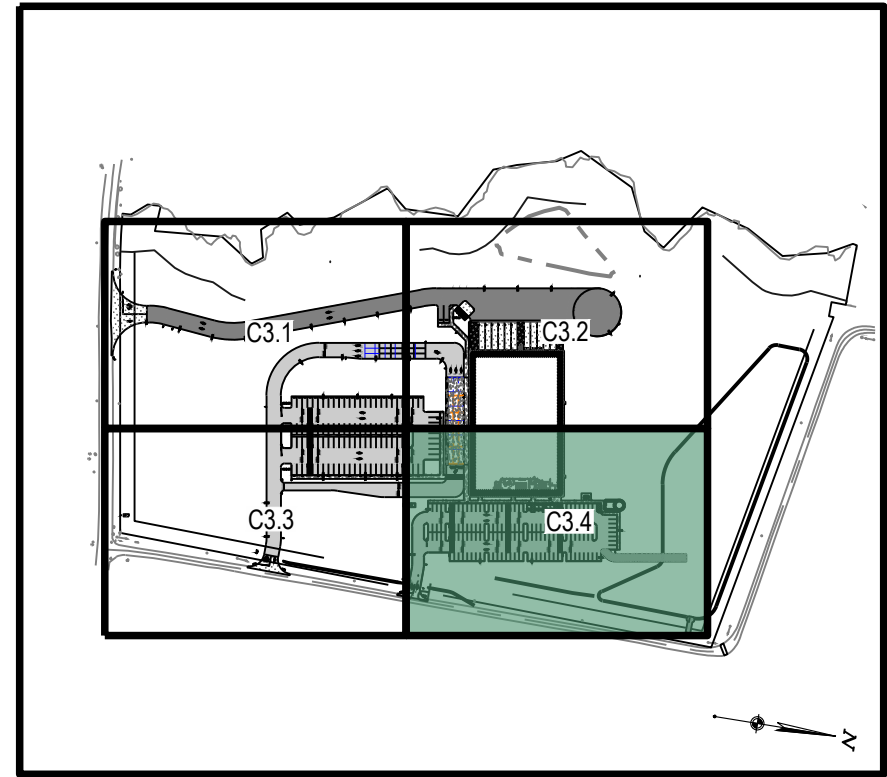
MATCHLINE - SEE SHEET C3.3

SITE LEGEND	
EXISTING	
REFER TO SURVEY FOR EXISTING FEATURES LEGEND	
PROPOSED	
[Symbol]	LIGHT DUTY ASPHALT PAVEMENT
[Symbol]	HEAVY DUTY ASPHALT PAVEMENT
[Symbol]	LIGHT DUTY CONCRETE PAVEMENT
[Symbol]	HEAVY DUTY CONCRETE PAVEMENT
[Symbol]	CONCRETE SIDEWALK
[Symbol]	GRAVEL
[Symbol]	PROPERTY LINE
[Symbol]	BUILDING
[Symbol]	CONCRETE CURB
[Symbol]	PAVEMENT WALK
[Symbol]	6" PEDESTRIAN BARRIER FENCE
[Symbol]	PARKING SPACE COUNT
[Symbol]	SIGN
[Symbol]	PARKING BLOCK
[Symbol]	LIGHT POLE

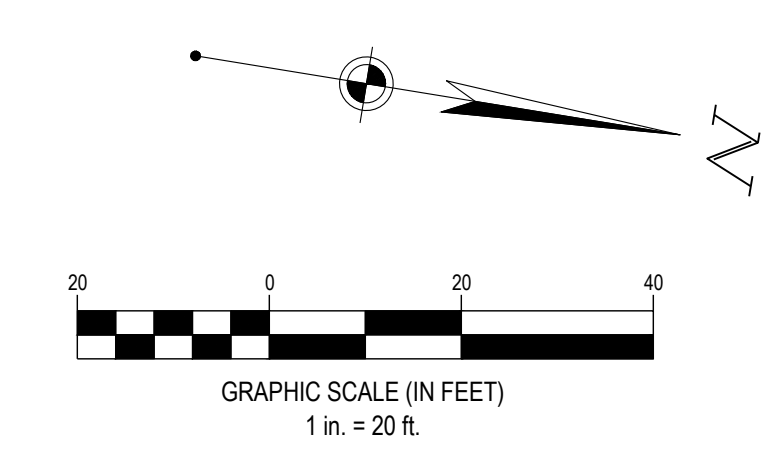
REFER TO OVERALL SITE PLAN - SHEET C3.0

CODED NOTES:

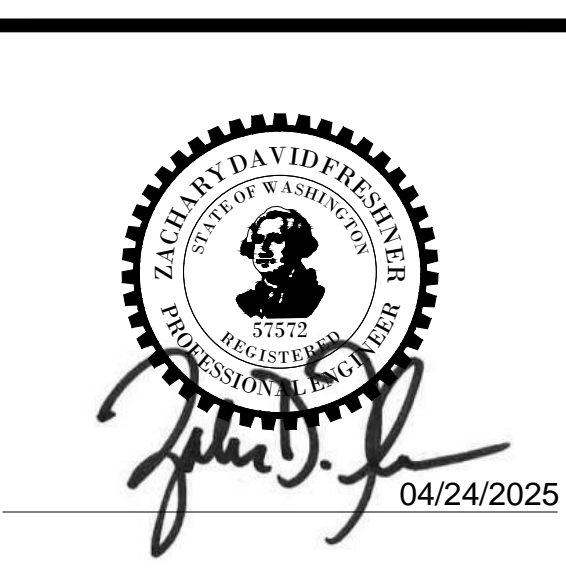
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24. PROPOSED 6" TALL PRIVACY FENCE.



KEY MAP SCALE: 1" = 400'



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AMBROSE PROPERTY GROUP

PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	20250424

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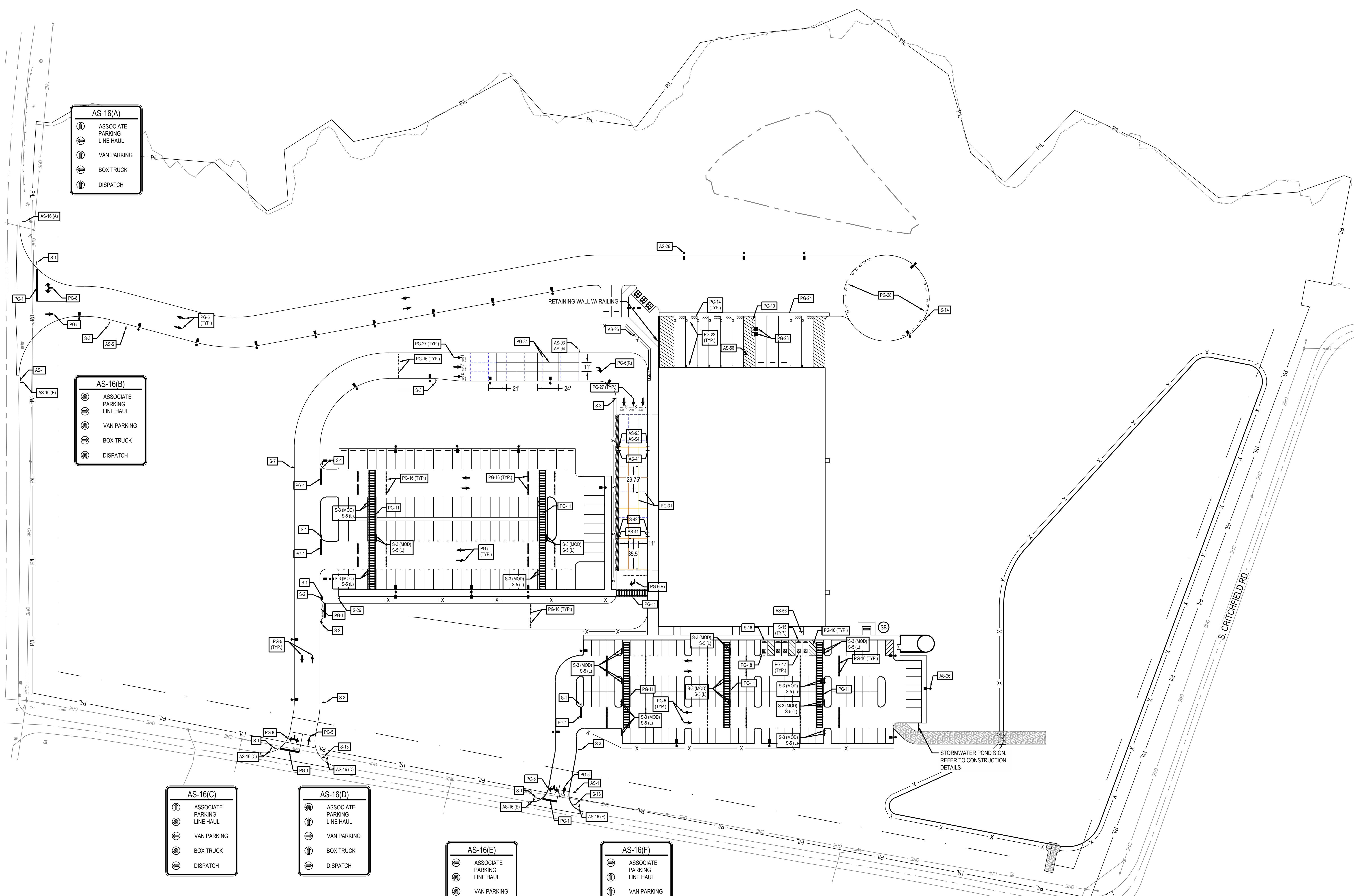
Drawing Title: ENLARGED SITE PLAN

C3.4

GENERAL SIGN FACE LEGEND	
CODE	DESCRIPTION
S-1	"STOP" SIGN
S-2	DO NOT ENTER
S-3	SPEED LIMIT, 5 MPH
S-3 (MOD)	SPEED LIMIT WITH 5 MPH PLACARD
S-4	SPEED LIMIT, 10 MPH
S-4 (MOD)	SPEED LIMIT WITH 10 MPH PLACARD
S-5(L)	PEDESTRIAN CROSSING, LEFT ARROW
S-5(R)	PEDESTRIAN CROSSING, RIGHT ARROW
S-7	ONE-WAY, STRAIGHT ARROW
S-7(L)	ONE-WAY, LEFT ARROW
S-7(R)	ONE-WAY, RIGHT ARROW
S-13	TRUCKS PROHIBITED
S-14	NO PARKING
S-15	"ACCESSIBLE" PARKING SIGN
S-16	"VAN ACCESSIBLE" PARKING SIGN
S-42	NO IDLING ZONE

STRIPING (PAVEMENT GRAPHIC) LEGEND	
CODE	DESCRIPTION
PG-1	STOP BAR
PG-5	STRAIGHT ARROW
PG-6(L)	LEFT TURN ARROW
PG-6(R)	RIGHT TURN ARROW
PG-7(L)	STRAIGHT OR LEFT TURN ARROW
PG-7(R)	STRAIGHT OR RIGHT TURN ARROW
PG-8	LEFT OR RIGHT TURN ARROW
PG-9	LEFT, STRAIGHT, OR RIGHT TURN ARROW
PG-10	18" STRIPING OUTLINE AND HATCH AT 45 DEGREES
PG-11	12" STRIPING OUTLINE AND HATCH @ 36" O.C. (WHITE)
PG-12	12" STRIPING OUTLINE AND HATCH @ 36" O.C. (YELLOW)
PG-14	TRAILER SPACE NUMBERING
PG-15	SPEED HUMP
PG-16	SPEED BUMP
PG-17	ACCESSIBLE CAR PARKING
PG-18	ACCESSIBLE VAN PARKING
PG-20	PEDESTRIAN TABLE
PG-22	TRACTOR DOCK PARKING
PG-23	JACK STAND AREA
PG-24	WARNING LINE
PG-26	BYPASS LANE GRAPHIC
PG-27	DRIVE LANE GRAPHIC
PG-28	DO NOT BLOCK MARKINGS
PG-31	LAUNCH PAD STRIPING

TENANT SIGN FACE LEGEND	
CODE	DESCRIPTION
AS-1	ADDRESS SIGN
AS-2	TRUCKS VISITOR USER
AS-5	YARD RULES
AS-6	TRUCK ENTRANCE
AS-12	NO ENTRANCE
AS-14	NO EXIT
AS-15 (S)	EXIT, STRAIGHT ARROW
AS-15 (L)	EXIT, LEFT ARROW
AS-15 (R)	EXIT, RIGHT ARROW
AS-16	WAYFINDING
AS-22	DROP-OFF/PICK-UP AREA
AS-26	MUSTER AREA
AS-30	NO-SMOKING AREA
AS-31	CUSTOMER PARKING
AS-35	TURNOFF ENGINE
AS-56	ICE WARNING SIGN
AS-93	SHRINKY DINK FLEX
AS-94	SHRINKY DINK DSP
SB	SMOKER BENCH

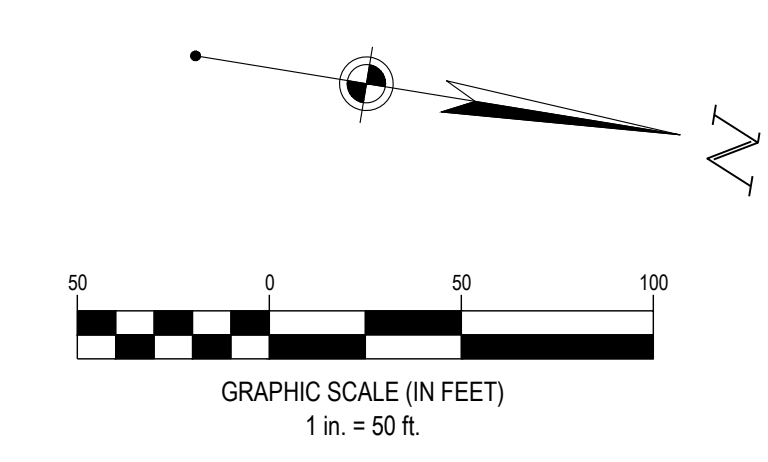
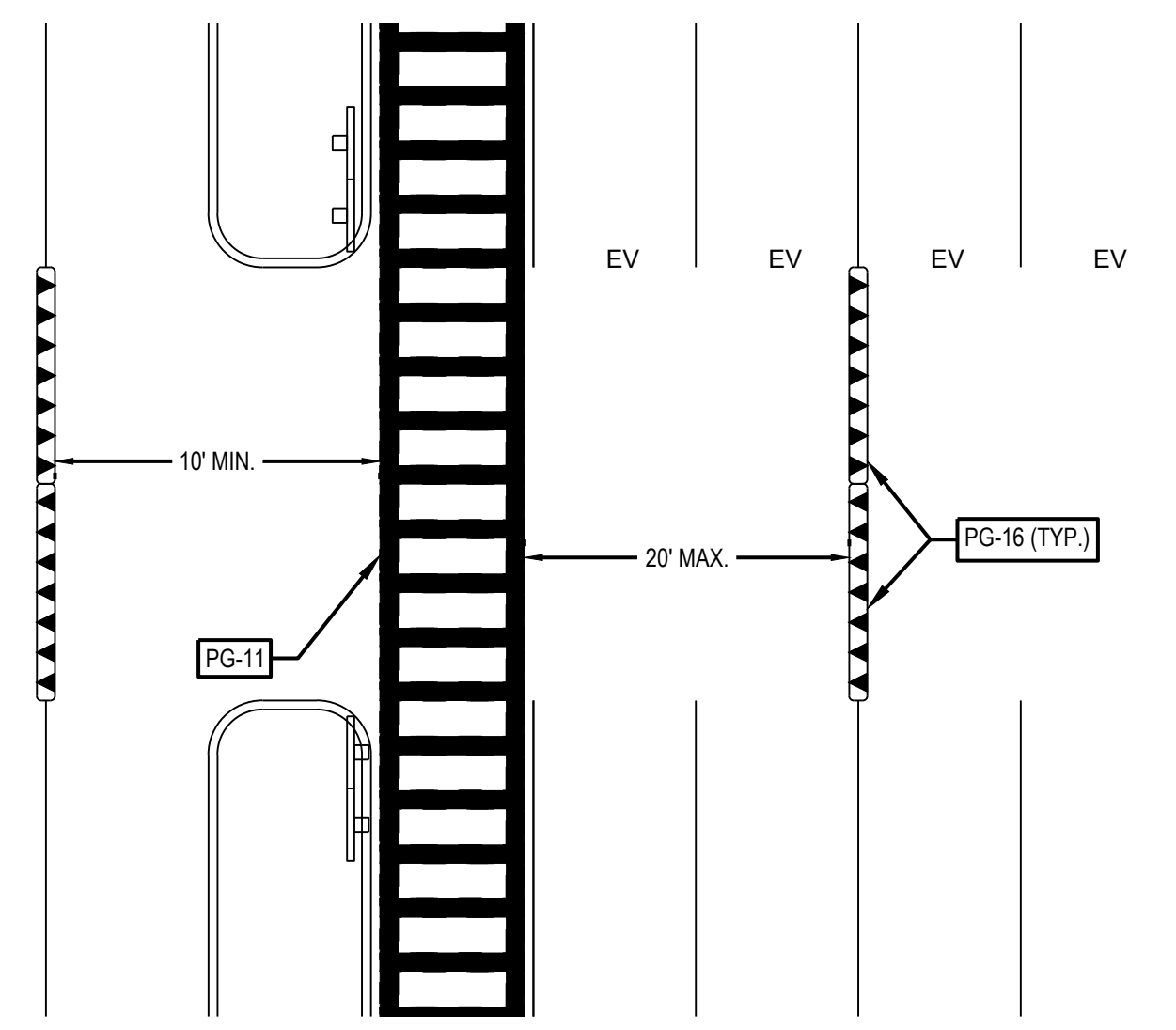


AS-16(C)	
Ⓜ	ASSOCIATE PARKING
Ⓜ	LINE HAUL
Ⓜ	VAN PARKING
Ⓜ	BOX TRUCK
Ⓜ	DISPATCH

AS-16(D)	
Ⓜ	ASSOCIATE PARKING
Ⓜ	LINE HAUL
Ⓜ	VAN PARKING
Ⓜ	BOX TRUCK
Ⓜ	DISPATCH

AS-16(E)	
Ⓜ	ASSOCIATE PARKING
Ⓜ	LINE HAUL
Ⓜ	VAN PARKING
Ⓜ	BOX TRUCK
Ⓜ	DISPATCH

AS-16(F)	
Ⓜ	ASSOCIATE PARKING
Ⓜ	LINE HAUL
Ⓜ	VAN PARKING
Ⓜ	BOX TRUCK
Ⓜ	DISPATCH



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

Revisions / Submissions
Project Number: 763838
Scale: AS SHOWN
Drawn By: QSS
Checked By: CG
Date: 04/24/2025
Issue: FOR PERMIT

Drawing Title:
SIGNAGE & STRIPING PLAN

C3.5



GRADING LEGEND

EXISTING

REFER TO SURVEY FOR EXISTING FEATURES LEGEND

PROPOSED

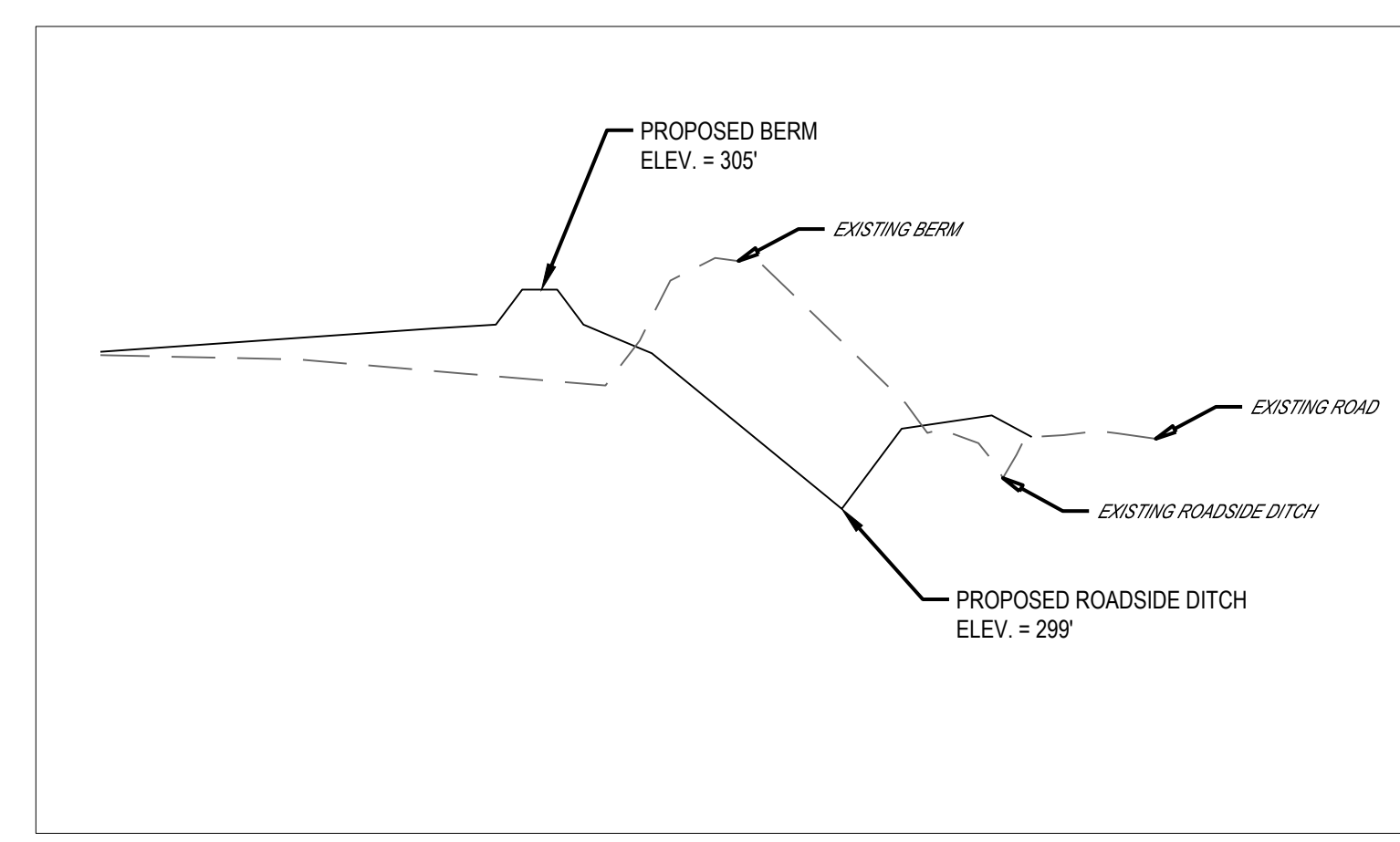
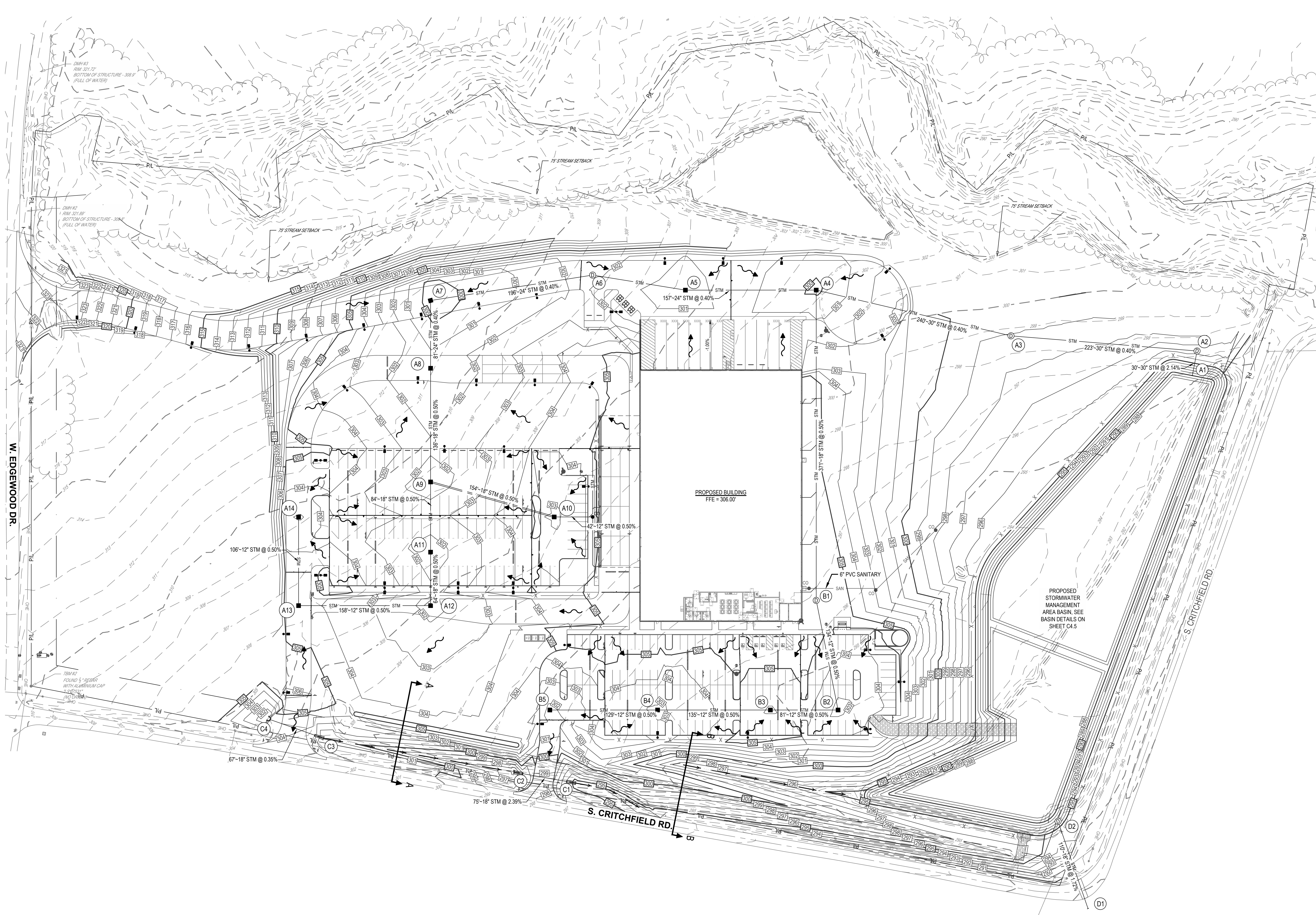
- PROPERTY LINE
- SETBACK
- EASEMENT
- BUILDING
- MAJOR CONTOUR
- MINOR CONTOUR
- GRADE BREAK
- STORM SEWER
- FLOW LINE
- STRUCTURE NUMBER
- CATCH BASIN
- STORM MANHOLE
- CURB INLET
- CLEANOUT
- DOWNSPOUT
- HEADWALL WITH RIPRAP

STORM SEWER STRUCTURE SCHEDULE

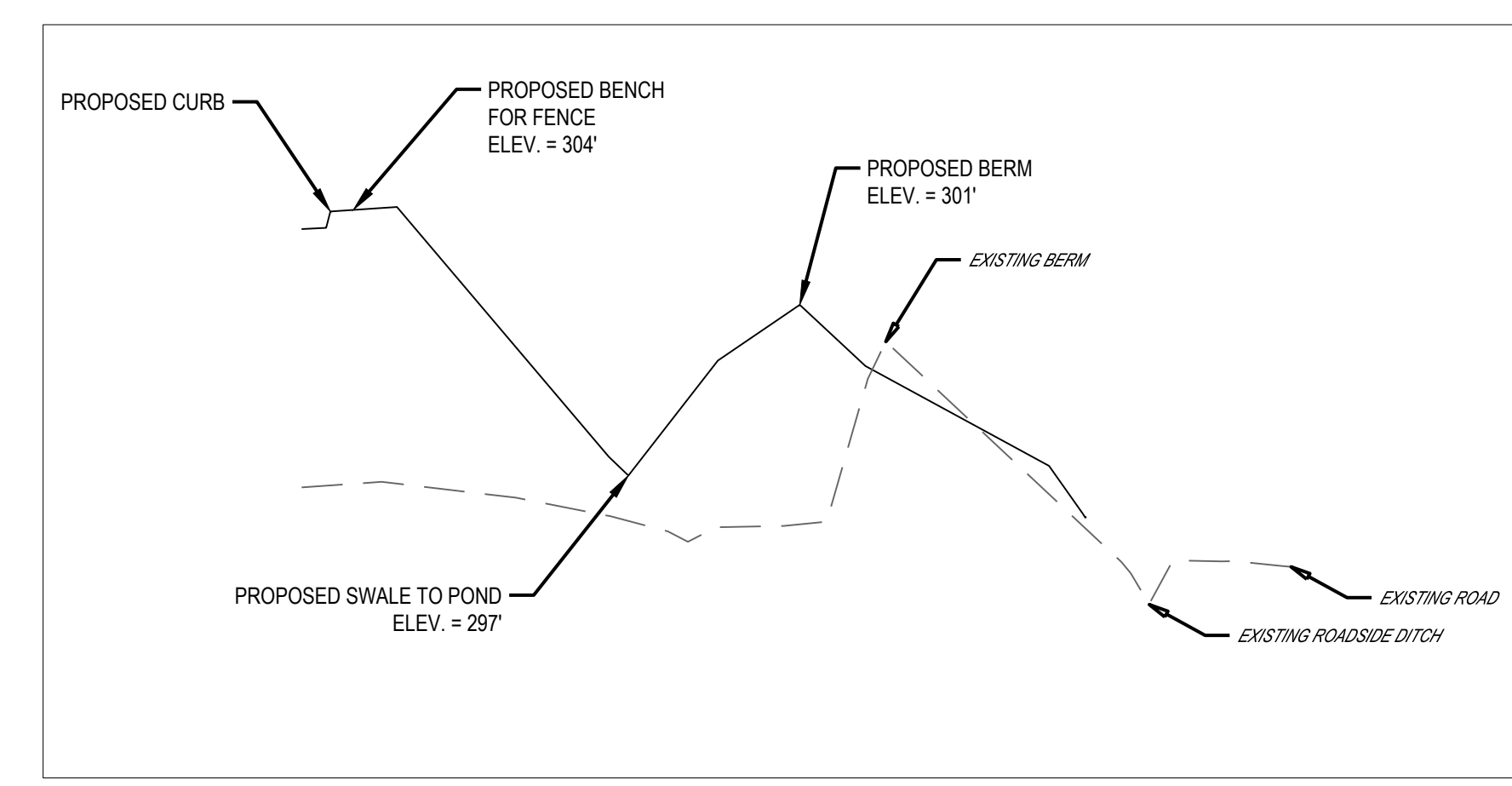
NO.	STRUCTURE	GRATE	INVERT
A1	OLDCASTLE 6' HW	293.58	290.00 (30') W
A2	MANHOLE TYPE 1	296.32	290.73 (30') S 290.64 (30') E
A3	MANHOLE TYPE 1	298.95	291.73 (30') S 291.63 (30') N
A4	CATCH BASIN TYPE 2	299.78	293.59 (24') S 293.69 (18') E 292.69 (30') N
A5	CATCH BASIN TYPE 2	300.33	294.31 (24') S 294.21 (24') N
A6	MANHOLE TYPE 1	302.31	294.86 (24') S 294.76 (24') N
A7	CATCH BASIN TYPE 2	299.44	295.75 (24') E 295.65 (24') N
A8	CATCH BASIN TYPE 2	300.97	296.57 (18') E 296.07 (24') W
A9	CATCH BASIN TYPE 2	301.37	298.50 (18') N 297.34 (18') E 297.25 (18') W
A10	CATCH BASIN TYPE 2	302.77	300.83 (12') N 299.27 (18') S
A11	CATCH BASIN TYPE 2	301.48	297.87 (18') E 297.76 (18') W
A12	CATCH BASIN TYPE 2	301.69	298.09 (12') S 298.18 (18') W
A13	CATCH BASIN TYPE 2	304.00	298.88 (12') W 298.88 (12') N
A14	CATCH BASIN TYPE 2	302.91	299.41 (12') E
B1	MANHOLE TYPE 1	305.66	296.04 (12') E 295.54 (18') W
B2	CATCH BASIN TYPE 2	302.72	296.81 (12') S 296.71 (12') W
B3	CATCH BASIN TYPE 2	303.90	297.32 (12') S 297.22 (12') N
B4	CATCH BASIN TYPE 2	302.81	298.09 (12') S 297.99 (12') N
B5	CATCH BASIN TYPE 2	301.74	298.74 (12') N
C1	HW PER B-75-20-03	296.21	294.00 (18') S
C2	HW PER B-75-20-03	298.01	295.80 (18') N
C3	HW PER B-75-20-03	303.18	300.97 (18') S
C4	OLDCASTLE 6' HW	304.00	
D1	HW PER B-75-20-03	291.60	289.10 (18') SW
D2	OUTLET CONTROL STRUCTURE	283.01	291.00 (18') NE

PIPE TABLE

PIPE NAME	LENGTH	SIZE
CANOPY	42'	12" HDPE
P-A2	30'	30" HDPE
P-A3	223'	30" HDPE
P-A4	240'	30" HDPE
P-A5	157'	24" HDPE
P-A6	112'	24" HDPE
P-A7	196'	24" HDPE
P-A8	81'	24" HDPE
P-A9	136'	18" HDPE
P-A10	154'	18" HDPE
P-A11	84'	18" HDPE
P-A12	64'	18" HDPE
P-A13	168'	12" HDPE
P-A14	106'	12" HDPE
P-B1	371'	18" HDPE
P-B2	134'	12" HDPE
P-B3	81'	12" HDPE
P-B4	135'	12" HDPE
P-B5	129'	12" HDPE
P-C2	75'	18" RCP
P-C4	67'	18" RCP
P-D2	110'	18" CMP

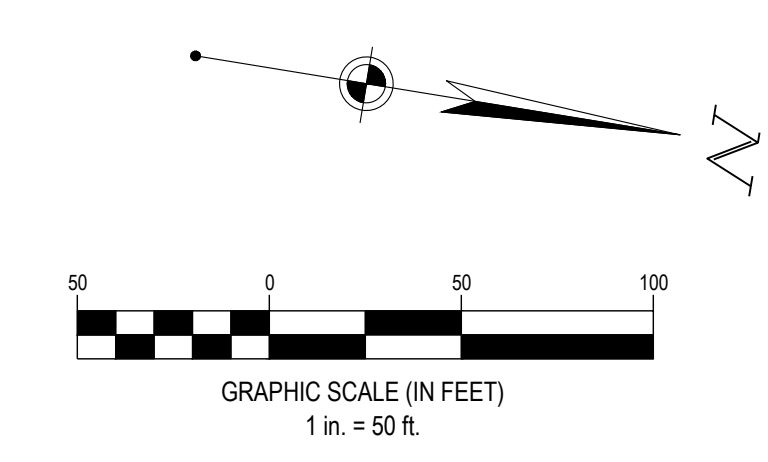


SECTION A-A
NTS



SECTION B-B
NTS

REFER TO SHEET C1.1 FOR GENERAL GRADING NOTES
 REFER TO SHEET C4.1-C4.4 FOR ENLARGED GRADING PLANS
 REFER TO SHEET C4.5 FOR BASIN DETAILS
 REFER TO SHEETS C4.6-C4.7 FOR STORM PROFILES



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

Revisions / Submissions

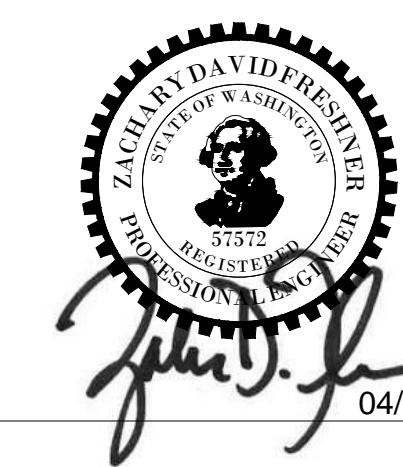
Project Number: 763838
 Scale: AS SHOWN
 Drawn By: QSS
 Checked By: CG
 Date: 04/24/2025
 Issue: FOR PERMIT

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 Drawing Title:
OVERALL GRADING PLAN

C4.0



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Columbus, OH 43221
Phone: 614.766.2500 Fax: 614.766.4825



GRADING LEGEND

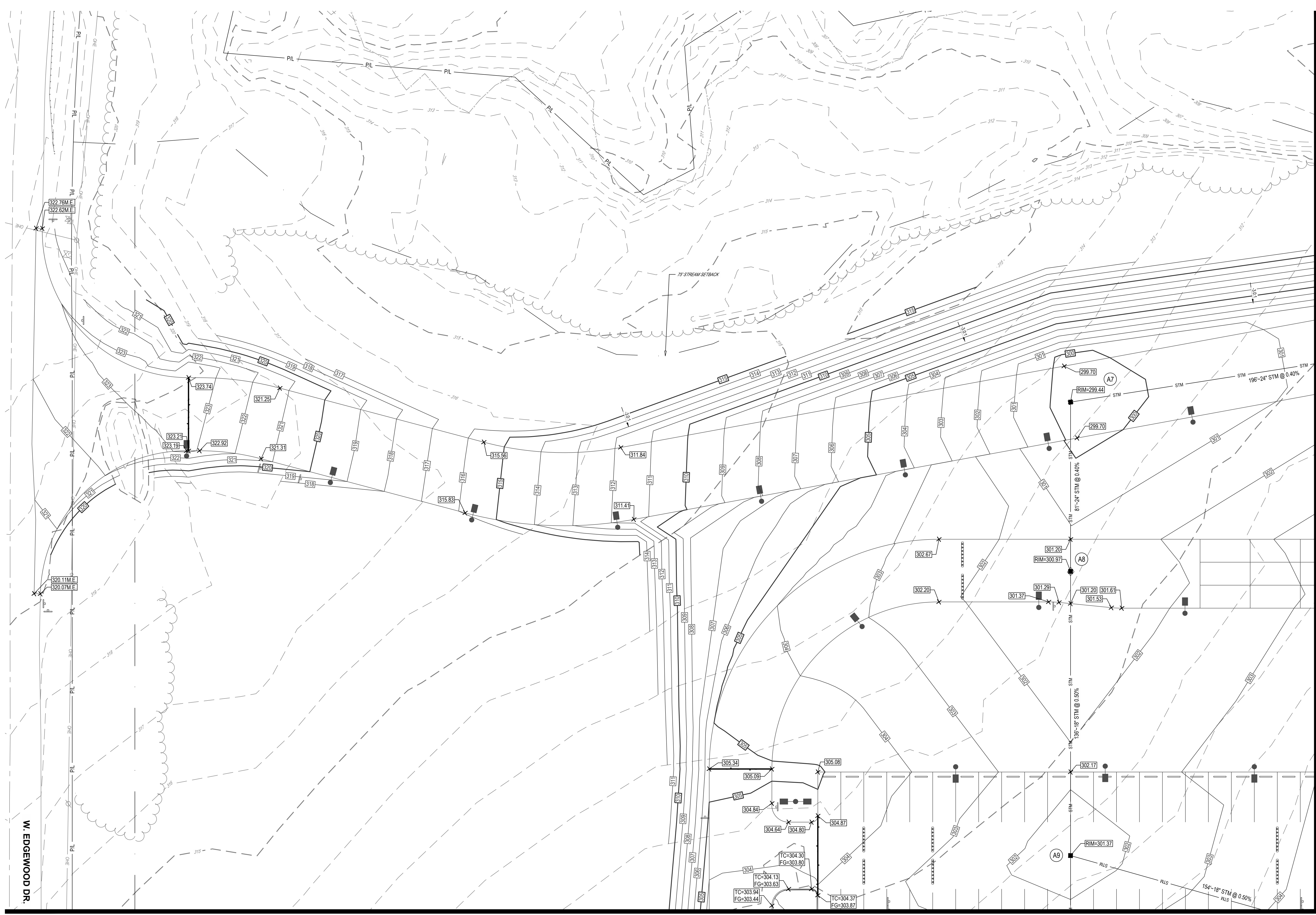
EXISTING

REFER TO SHEET C1.1 FOR EXISTING FEATURES LEGEND

PROPOSED

- PROPERTY LINE
- SETBACK
- EASEMENT
- BUILDING
- MAJOR CONTOUR
- MINOR CONTOUR
- GRADE BREAK
- STORM SEWER
- FLOW LINE
- STRUCTURE NUMBER
- CATCH BASIN
- STORM MANHOLE
- CURB INLET
- CLEANOUT
- DOWNSPOUT
- HEADWALL WITH RIPRAP

REFER TO SHEET C1.1 FOR GENERAL GRADING NOTES
 REFER TO SHEET C4.0 FOR OVERALL GRADING PLAN
 REFER TO SHEET C4.5 FOR BASIN DETAILS
 REFER TO SHEETS C4.6-C4.7 FOR STORM PROFILES



MATCHLINE - SEE SHEET C4.2

MATCHLINE - SEE SHEET C4.3

W. EDGEWOOD DR.

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W EDGEWOOD DR.,
PORT ANGELES, WA 98363

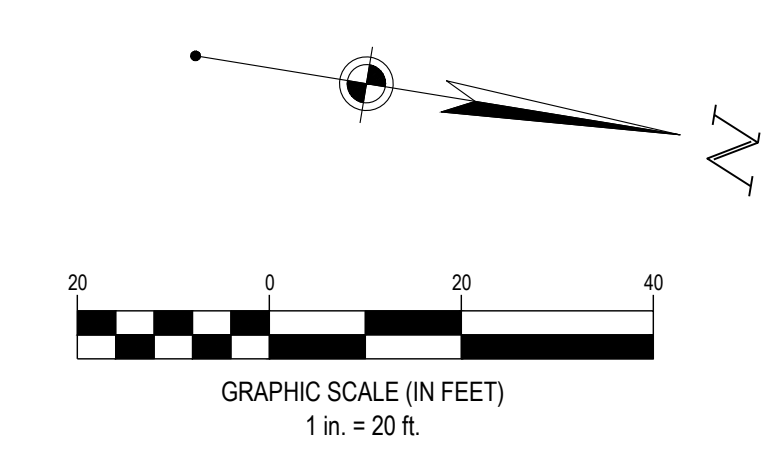
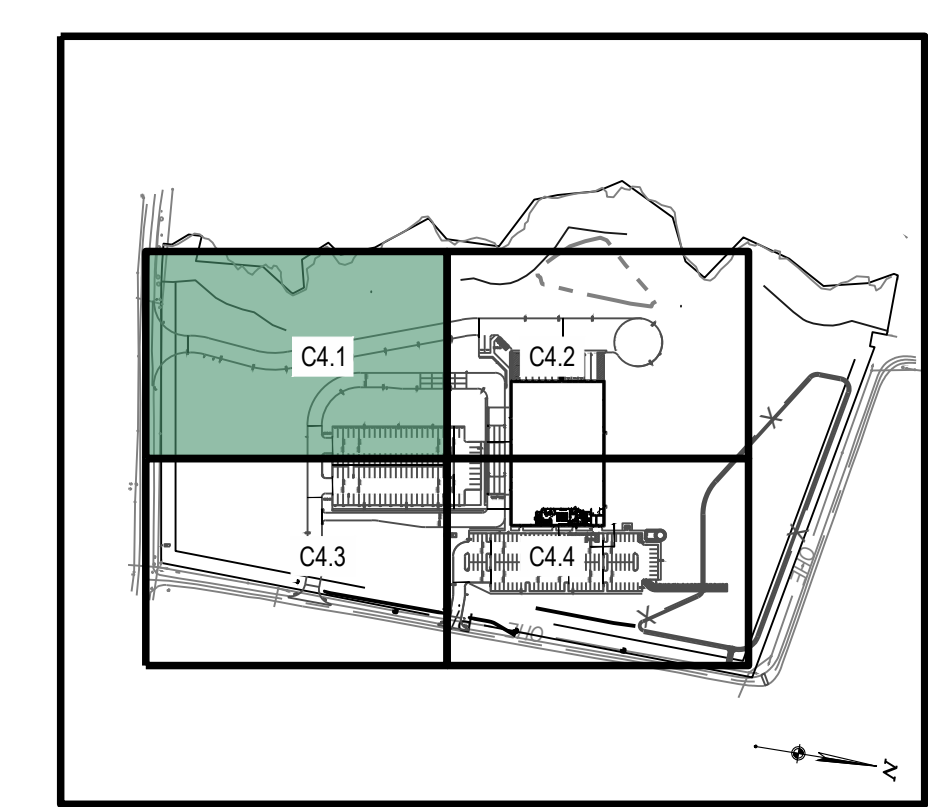
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

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Project Number: 763838
 Scale: AS SHOWN
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 Date: 04/24/2025
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Drawing Title:
ENLARGED GRADING PLAN

C4.1



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

Revisions / Submissions		
ID	Description	Date
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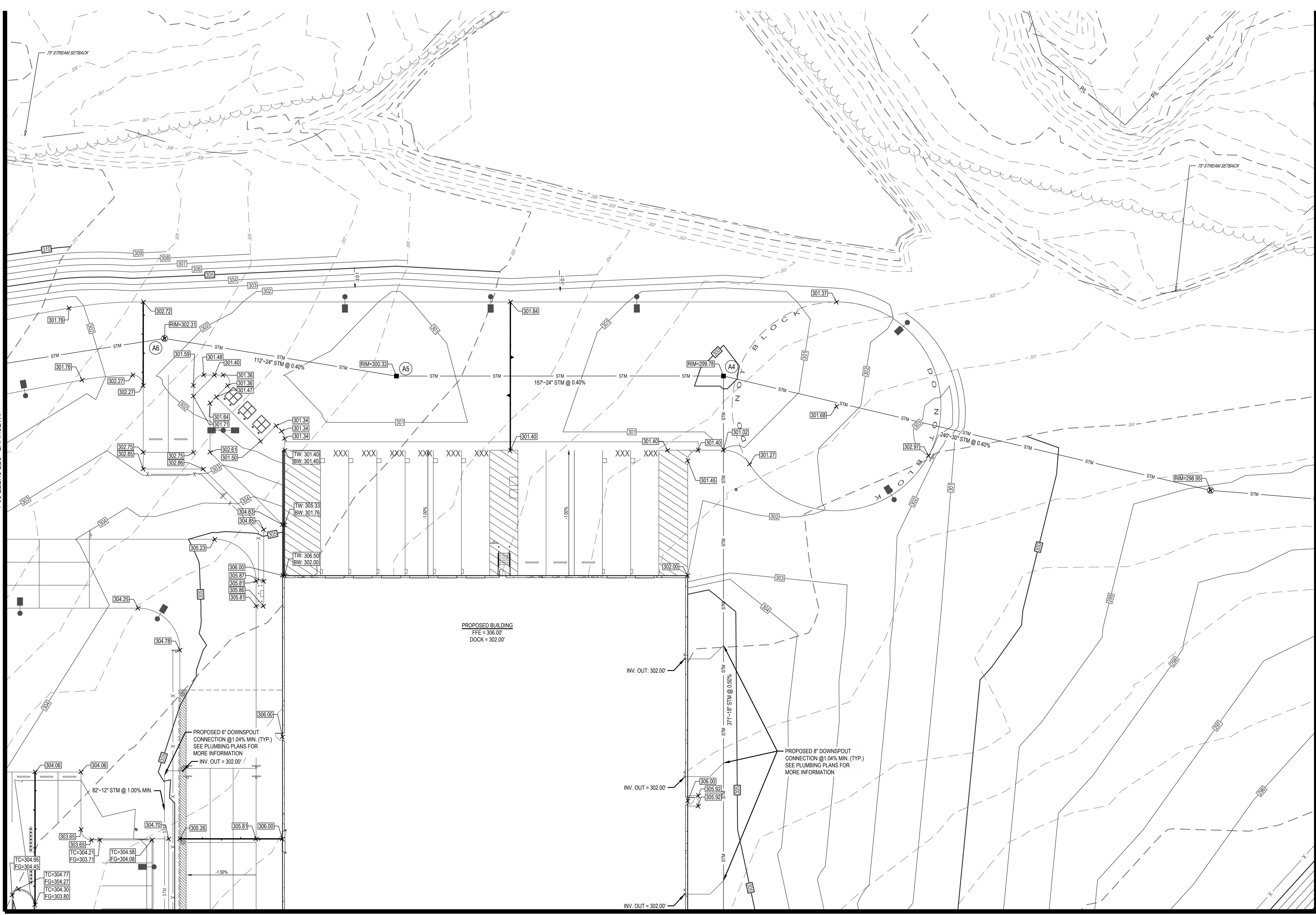
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 Scale: AS SHOWN
 Drawn By: QSS
 Checked By: CG
 Date: 04/24/2025
 Issue: FOR PERMIT

Drawing Title:
ENLARGED GRADING PLAN

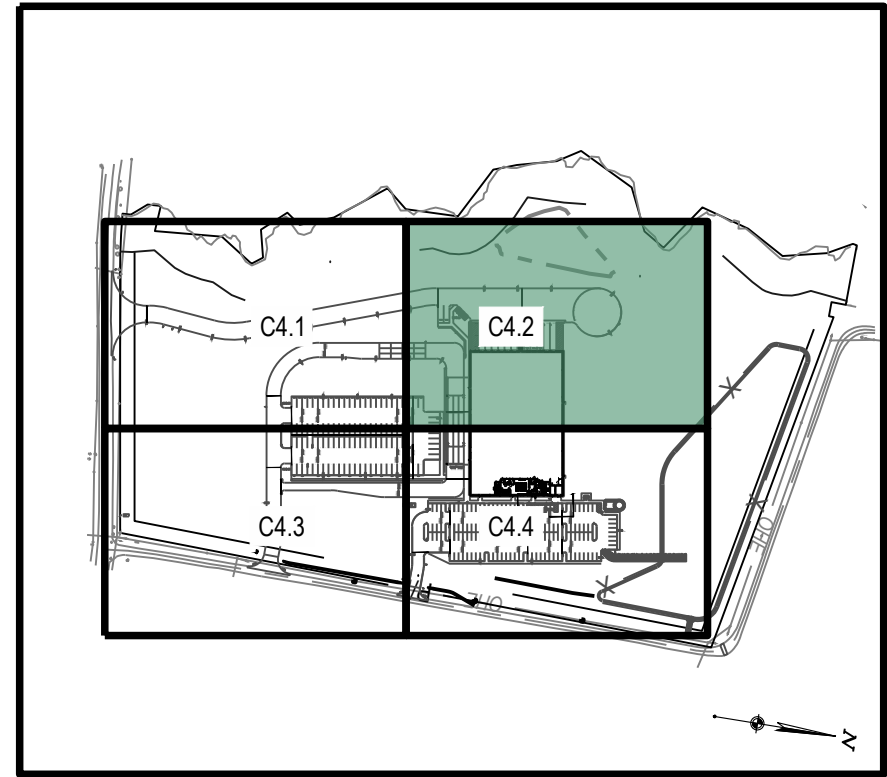
GRADING LEGEND

- EXISTING
 REFER TO SHEET C1.1 FOR EXISTING FEATURES LEGEND
- PROPOSED
- PROPERTY LINE
 - SETBACK
 - EASEMENT
 - BUILDING
 - MAJOR CONTOUR
 - MINOR CONTOUR
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 - FLOW LINE
 - STRUCTURE NUMBER
 - CATCH BASIN
 - STORM MANHOLE
 - CURB INLET
 - CLEANOUT
 - DOWNSPOUT
 - HEADWALL WITH RIPRAP

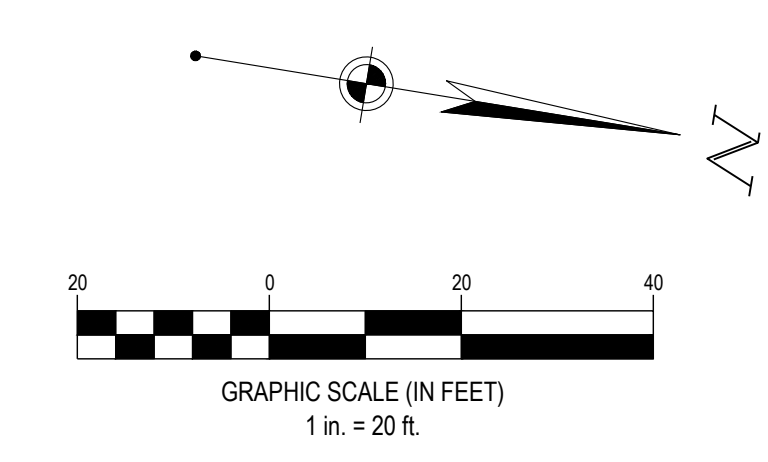
REFER TO SHEET C1.1 FOR GENERAL GRADING NOTES
 REFER TO SHEET C4.0 FOR OVERALL GRADING PLAN
 REFER TO SHEET C4.5 FOR BASIN DETAILS
 REFER TO SHEETS C4.6-C4.7 FOR STORM PROFILES



MATCHLINE - SEE SHEET C4.4

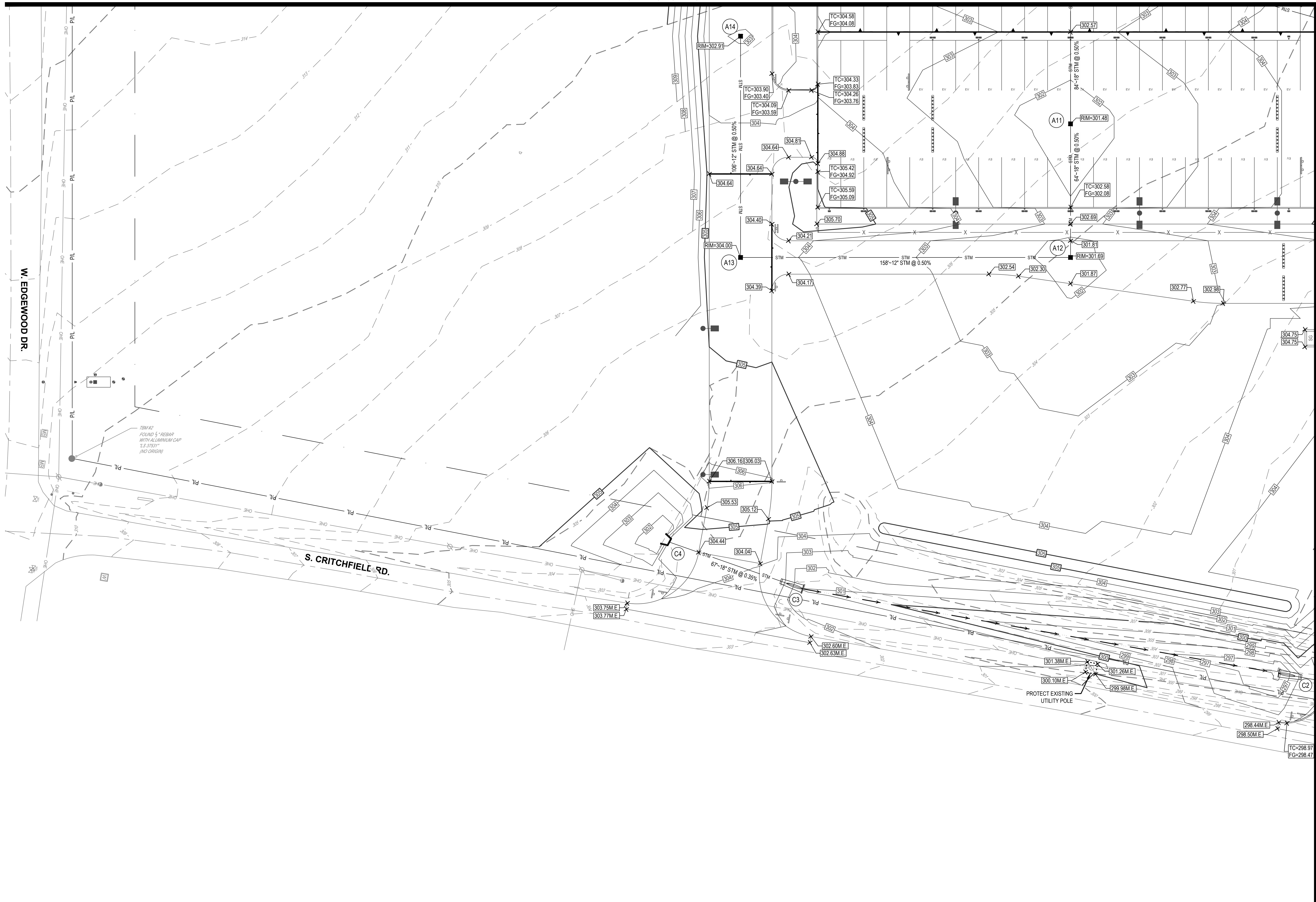


KEY MAP
 SCALE: 1" = 400'



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

MATCHLINE - SEE SHEET C4.1

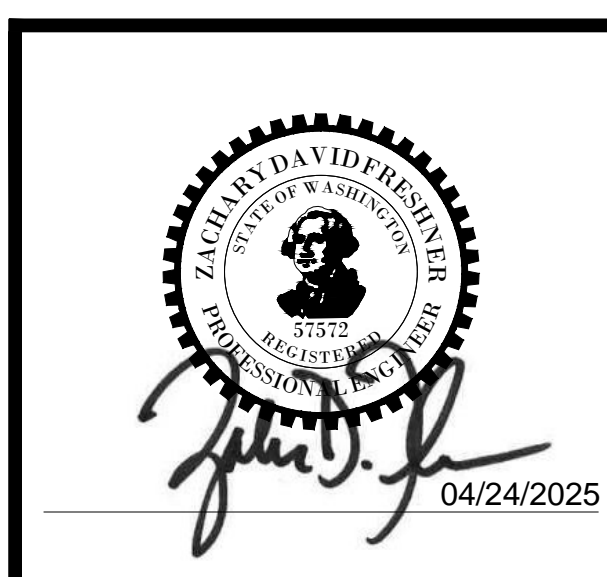


GRADING LEGEND

- EXISTING
REFER TO SHEET C1.1 FOR EXISTING FEATURES LEGEND
- PROPOSED
- PROPERTY LINE
 - SETBACK
 - EASEMENT
 - ▨ BUILDING
 - MAJOR CONTOUR
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REFER TO SHEET C1.1 FOR GENERAL GRADING NOTES
 REFER TO SHEET C4.0 FOR OVERALL GRADING PLAN
 REFER TO SHEET C4.5 FOR BASIN DETAILS
 REFER TO SHEETS C4.6-C4.7 FOR STORM PROFILES

MATCHLINE - SEE SHEET C4.4



AMBROSE PROPERTY GROUP

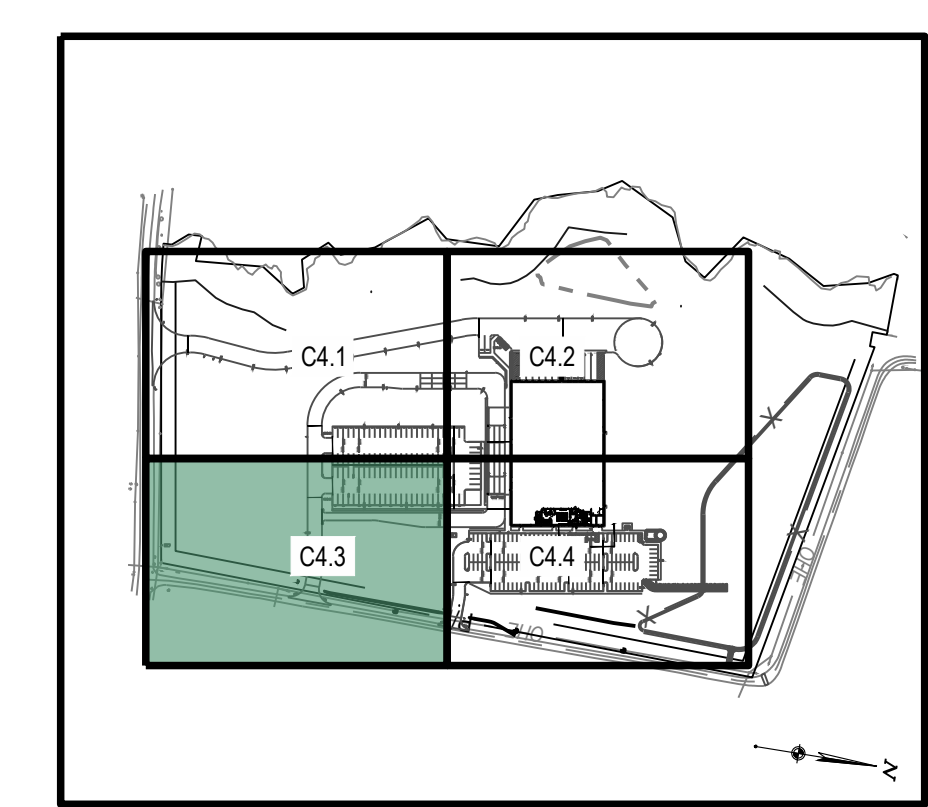
PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	20250424

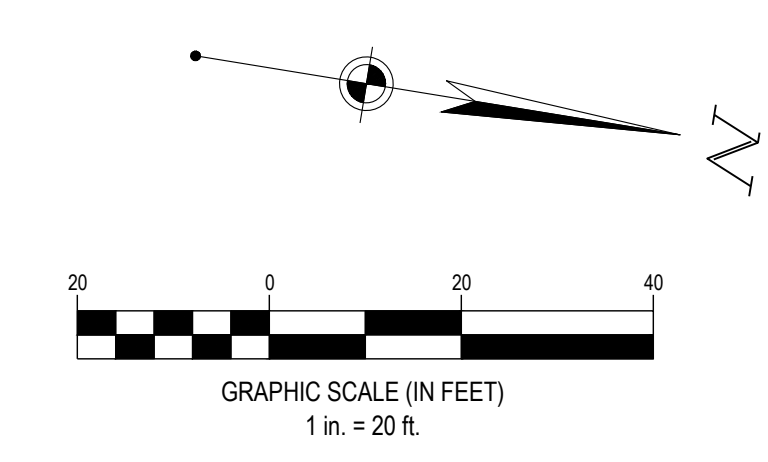
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 Project Number: 763838
 Scale: AS SHOWN
 Drawn By: QSS
 Checked By: CG
 Date: 04/24/2025
 Issue: FOR PERMIT

Drawing Title:
ENLARGED GRADING PLAN

C4.3

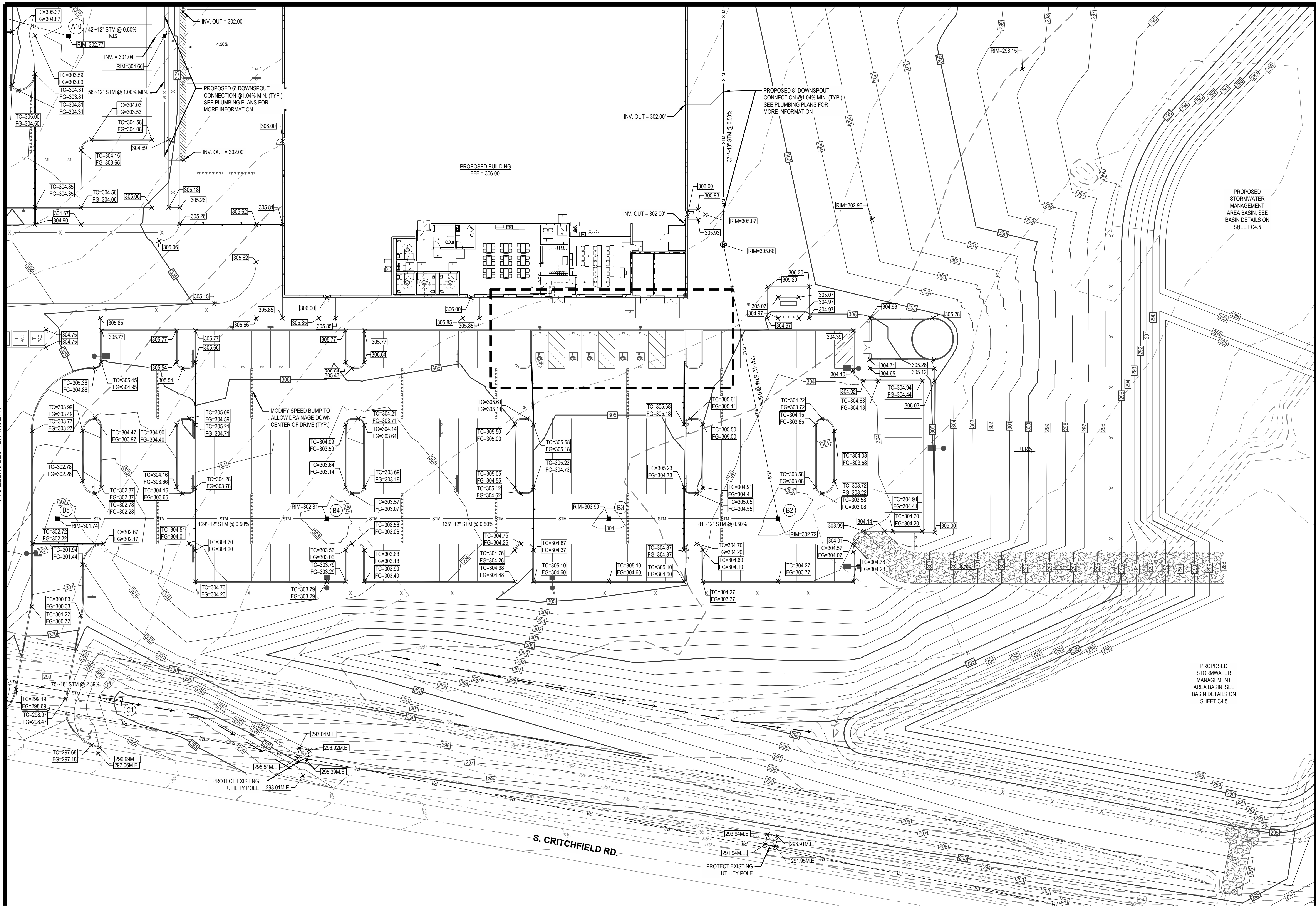


KEY MAP
SCALE: 1" = 400'



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

MATCHLINE - SEE SHEET C4.2



GRADING LEGEND

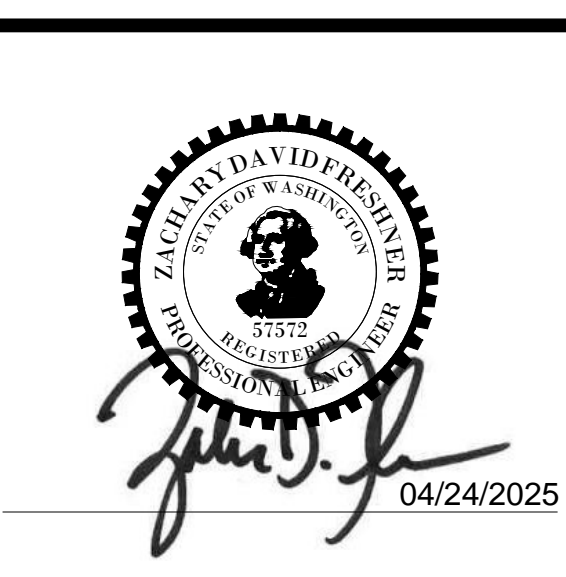
- EXISTING
REFER TO SHEET C1.1 FOR EXISTING FEATURES LEGEND
- PROPOSED
- PROPERTY LINE
 - SETBACK
 - EASEMENT
 - BUILDING
 - MAJOR CONTOUR
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 - STRUCTURE NUMBER
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REFER TO SHEET C1.1 FOR GENERAL GRADING NOTES

REFER TO SHEET C4.0 FOR OVERALL GRADING PLAN

REFER TO SHEET C4.5 FOR BASIN DETAILS

REFER TO SHEETS C4.6-C4.7 FOR STORM PROFILES



AMBROSE PROPERTY GROUP

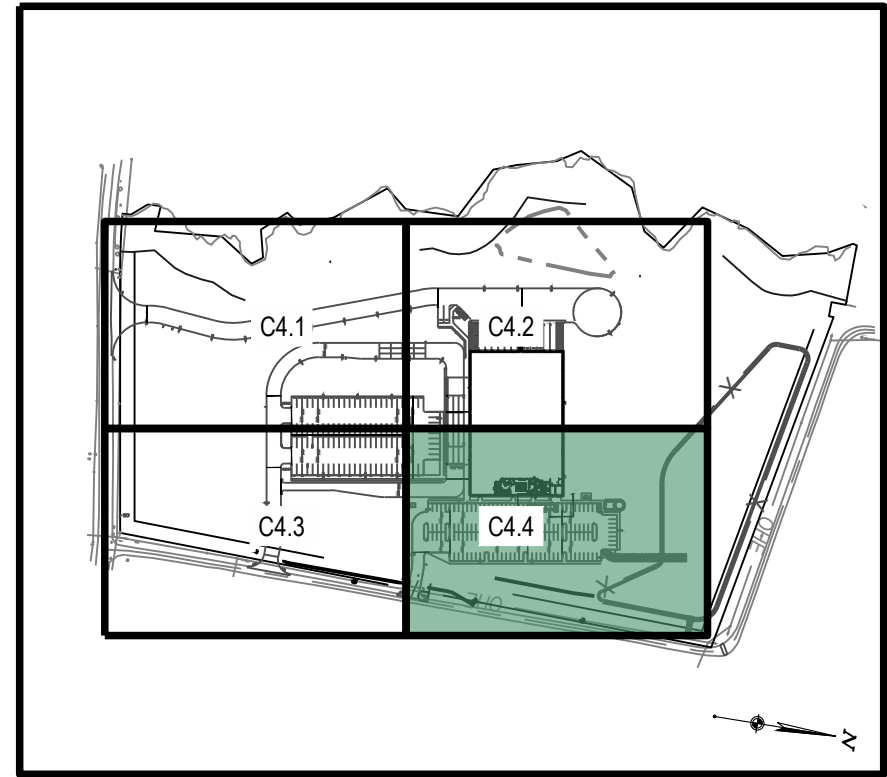
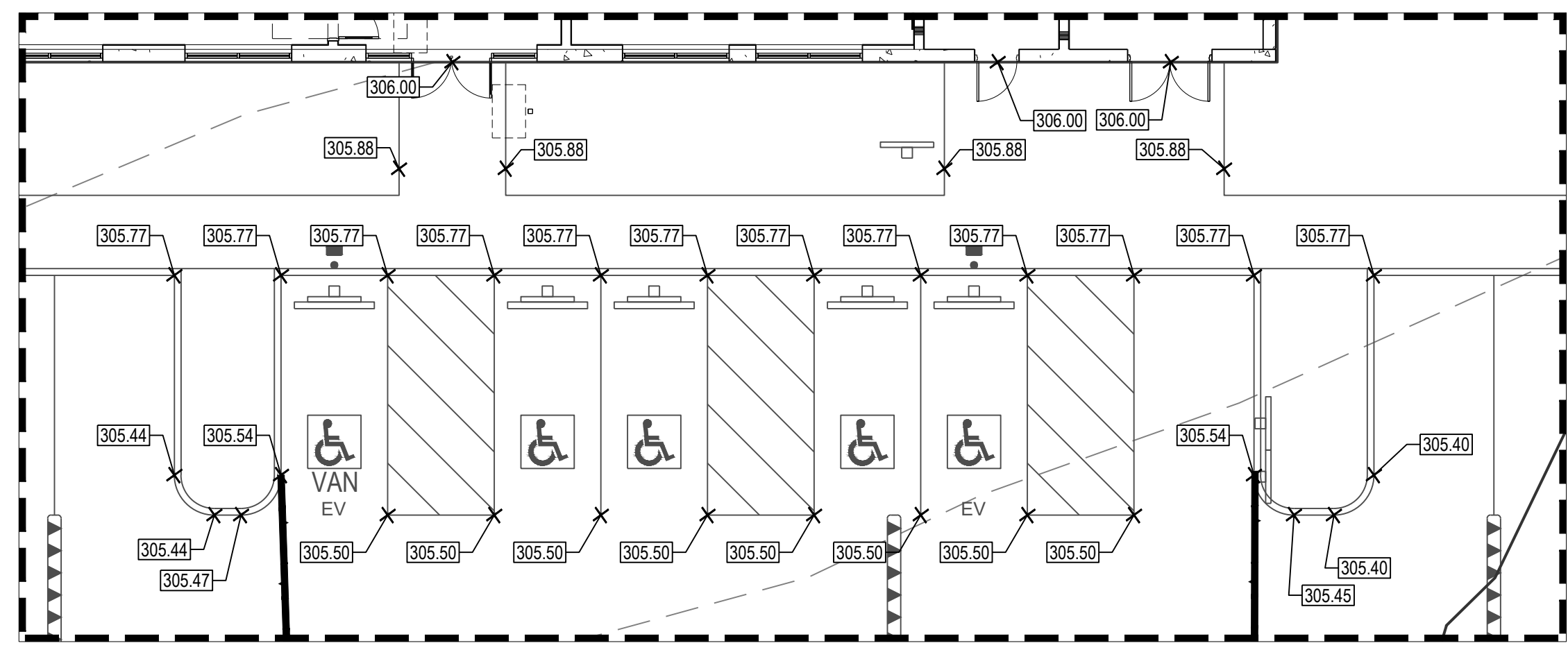
PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

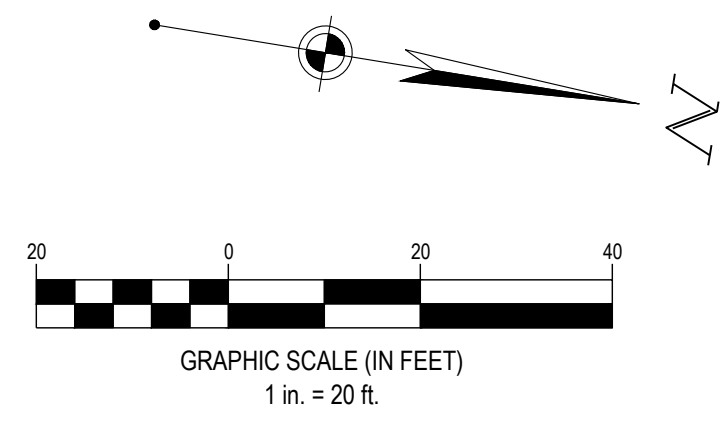
Project Number:		763838
Scale:	AS SHOWN	
Drawn By:	QSS	
Checked By:	CG	
Date:	04/24/2025	
Issue:	FOR PERMIT	

Enlarged Grading Plan

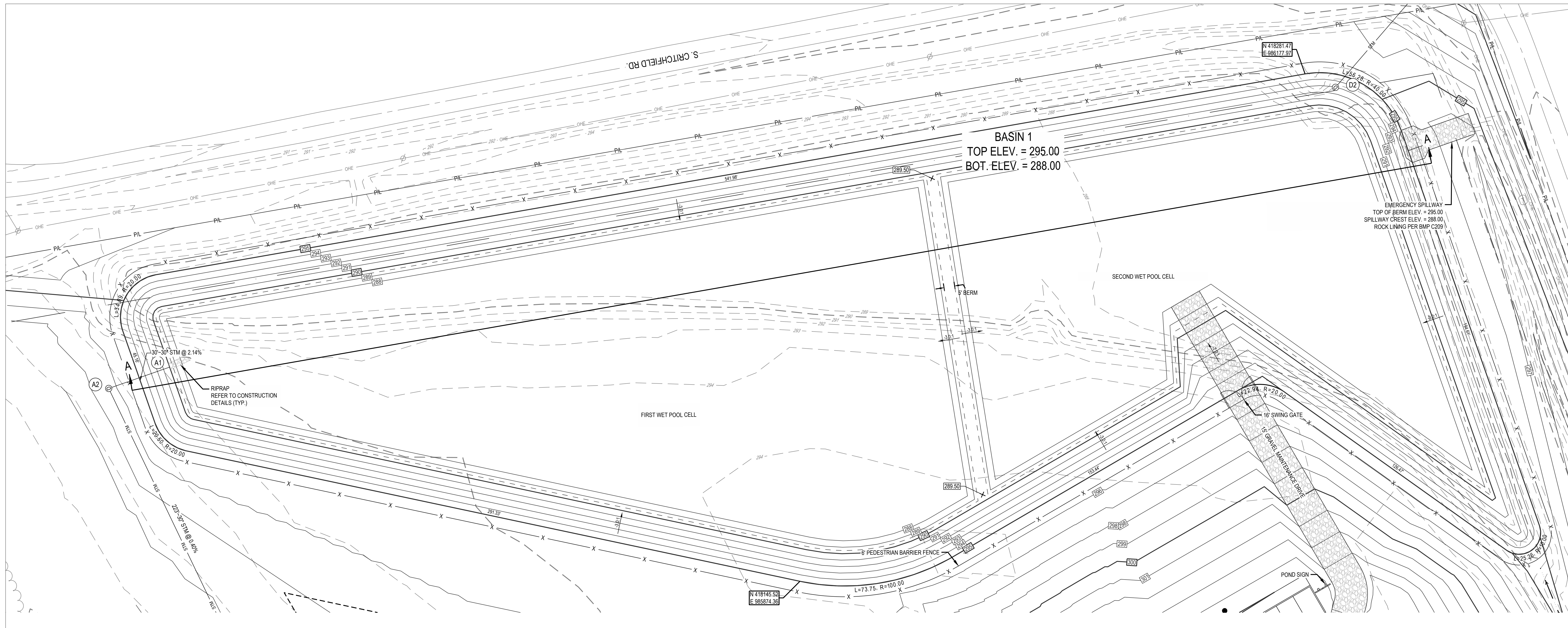
C4.4



KEY MAP
SCALE: 1" = 40'



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

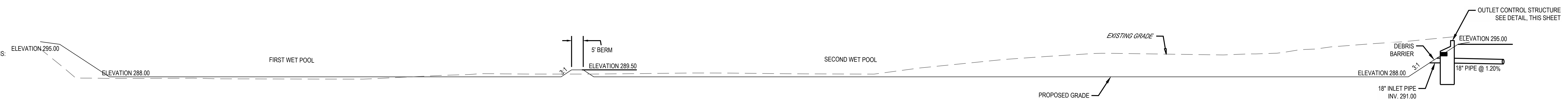


BASIN ELEVATIONS:

SEDIMENT STORAGE:	288.00-289.00
WET STORAGE:	288.00-291.00
BASIN STORAGE:	291.00-294.00
FREEBOARD:	294.00-295.00

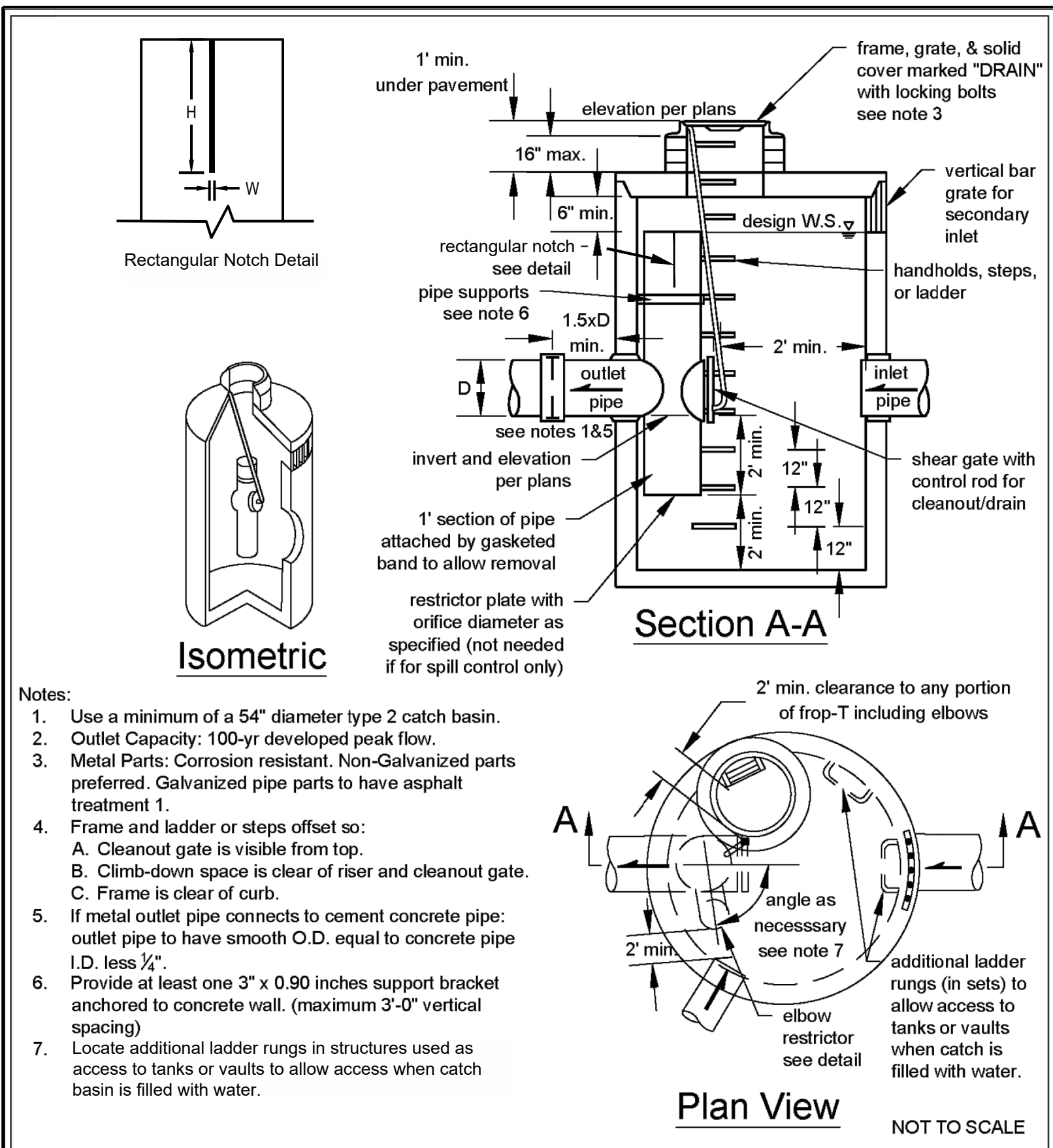
DESIGN STORM WATER SURFACE ELEVATIONS:

100 YR:	293.67
50 YR:	293.50
25 YR:	293.39
10 YR:	293.06
5 YR:	293.06
2 YR:	291.61



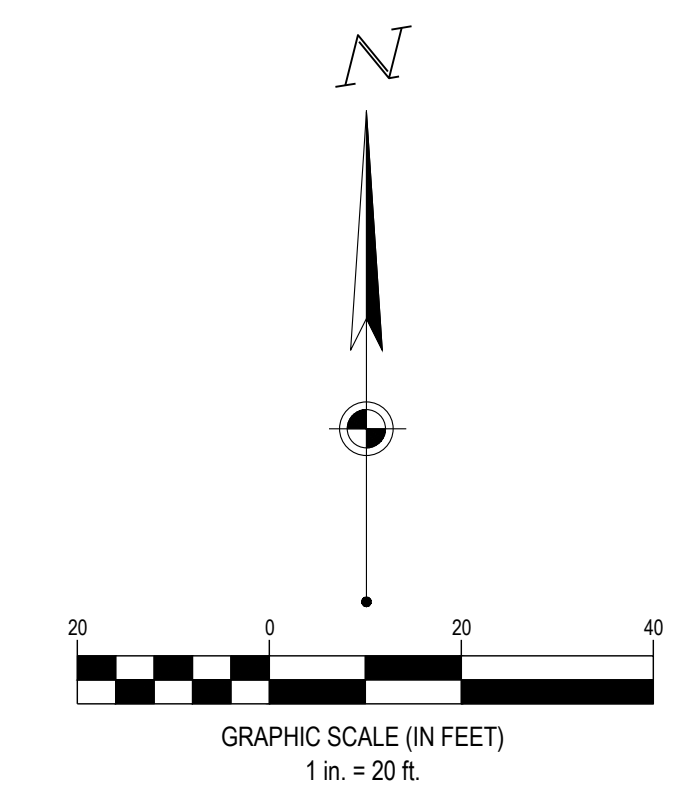
OUTLET CONTROL STRUCTURE D2 DATA

DESIGN WATER SURFACE: 291.00
 RISER DIAMETER: 18 IN.
 RECTANGULAR NOTCH HEIGHT (H): 1 FT.
 RECTANGULAR NOTCH WIDTH (W): 0.25 FT.
 INLET PIPE (18") INVERT: 291.00
 OUTLET PIPE (18") INVERT: 291.00
 RESTRICTOR PLATE ORIFICE DIAMETER: 3.25 IN.



- Notes:**
- Use a minimum of a 54" diameter type 2 catch basin.
 - Outlet Capacity: 100-yr developed peak flow.
 - Metal Parts: Corrosion resistant. Non-Galvanized parts preferred. Galvanized pipe parts to have asphalt treatment 1.
 - Frame and ladder or steps offset so:
 - A. Cleanout gate is visible from top.
 - B. Climb-down space is clear of riser and cleanout gate.
 - C. Frame is clear of curb.
 - If metal outlet pipe connects to cement concrete pipe: outlet pipe to have smooth O.D. equal to concrete pipe I.D. less 1/2".
 - Provide at least one 3" x 0.90 inches support bracket anchored to concrete wall. (maximum 3'-0" vertical spacing)
 - Locate additional ladder rungs in structures used as access to tanks or vaults to allow access when catch basin is filled with water.

Flow Restrictor (TEE)



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

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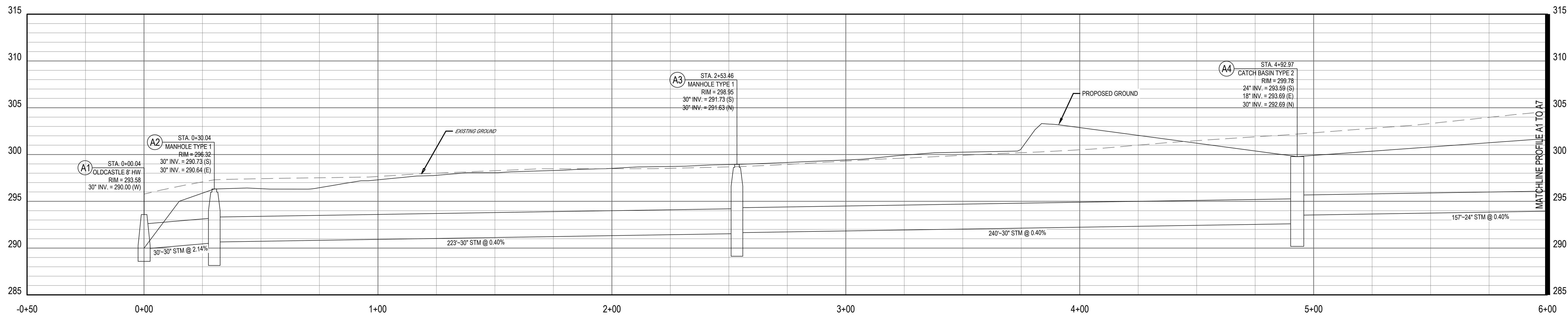
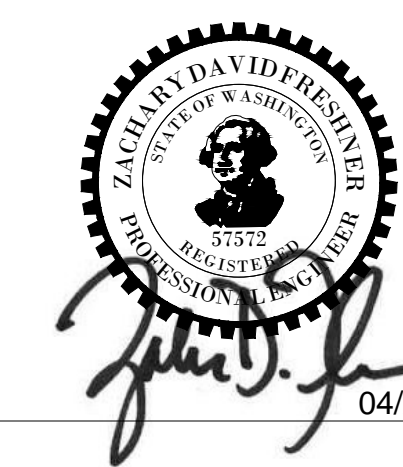
Project Number:	763838
Scale:	AS SHOWN
Drawn By:	QSS
Checked By:	CG
Date:	04/24/2025
Issue:	FOR PERMIT

Drawing Title:
**DETENTION BASIN
DETAIL**

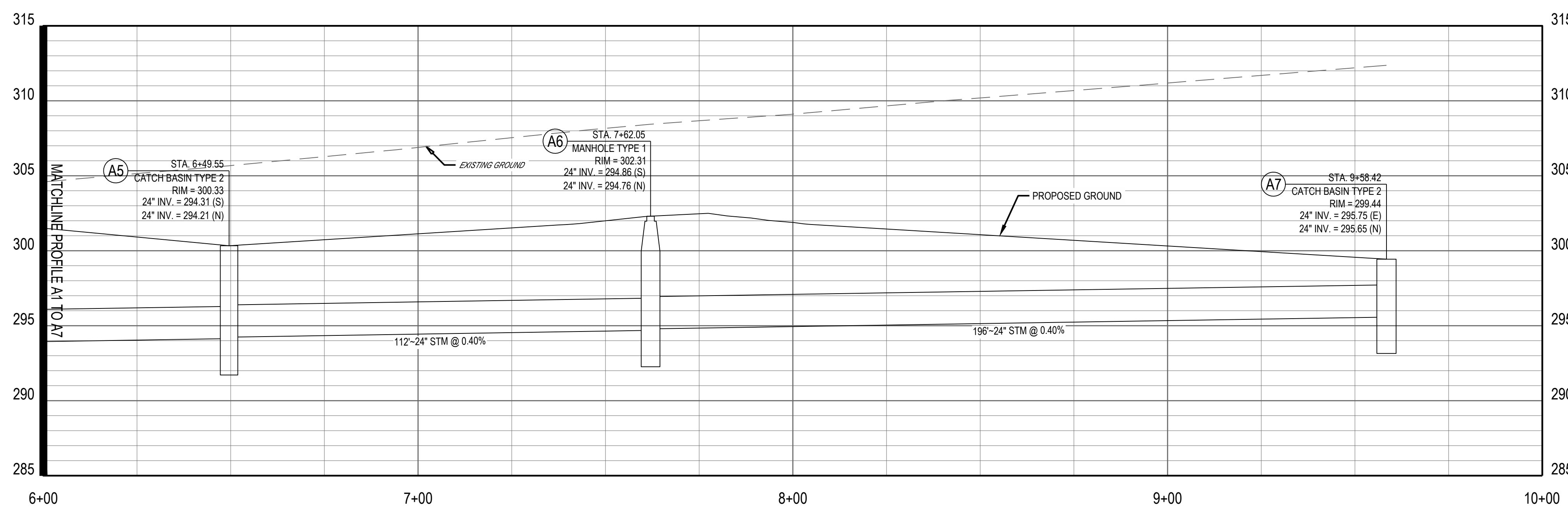
C4.5



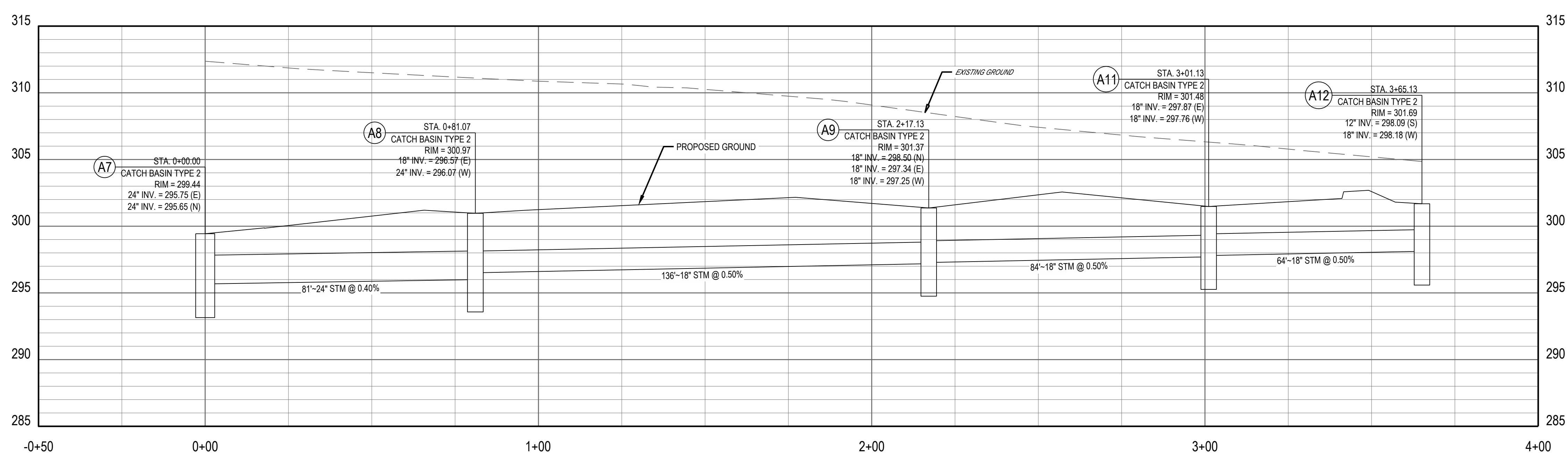
2880 Corporate Exchange Dr., Suite 400
Columbus, OH 43231
Phone: 614.766.7500 Fax: 614.226.4825



STRUCTURE A1 TO STRUCTURE A7 PROFILE
SCALE: 1" = 20' HORIZ.; 1" = 5' VERT.



STRUCTURE A1 TO STRUCTURE A7 PROFILE
SCALE: 1" = 20' HORIZ.; 1" = 5' VERT.



STRUCTURE A7 TO STRUCTURE A12 PROFILE
SCALE: 1" = 20' HORIZ.; 1" = 5' VERT.

AMBROSE PROPERTY GROUP

PROJECT PENINSULA

WEDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
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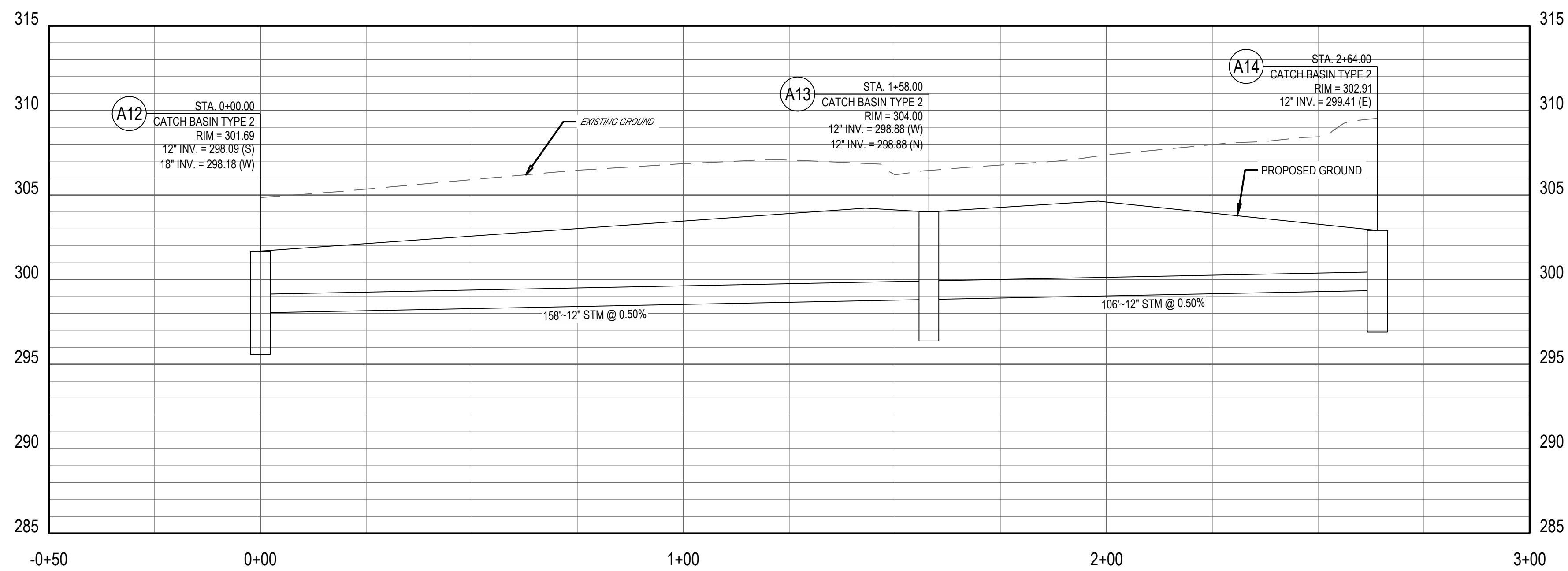
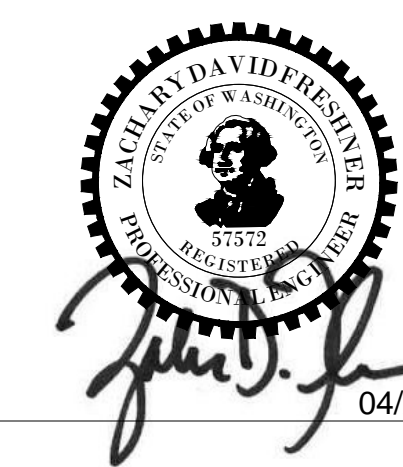
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 Project Number: 763838
 Scale: AS SHOWN
 Drawn By: QSS
 Checked By: CG
 Date: 04/24/2025
 Issue: FOR PERMIT

Drawing Title:
STORM PROFILES

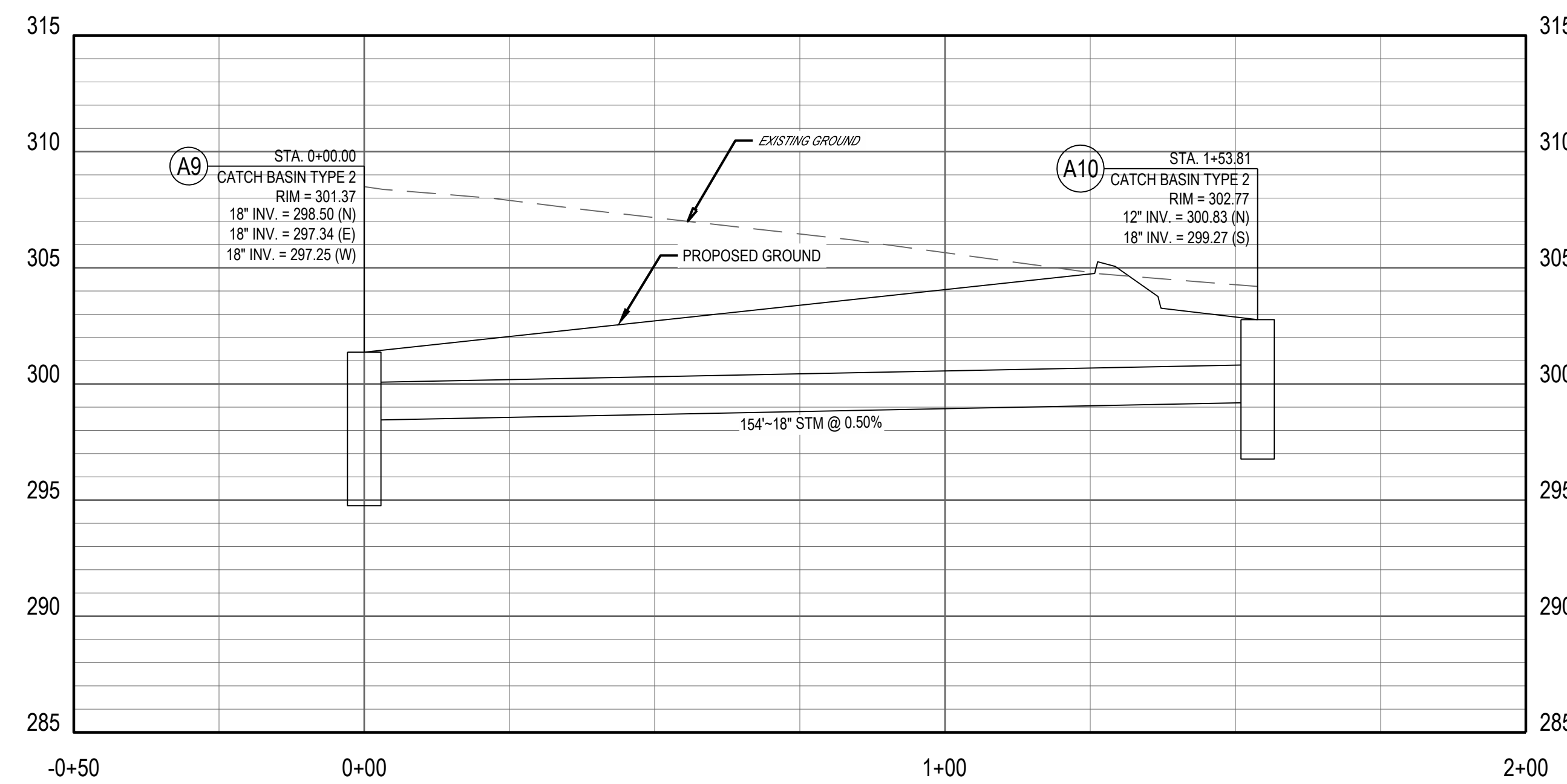
C4.6



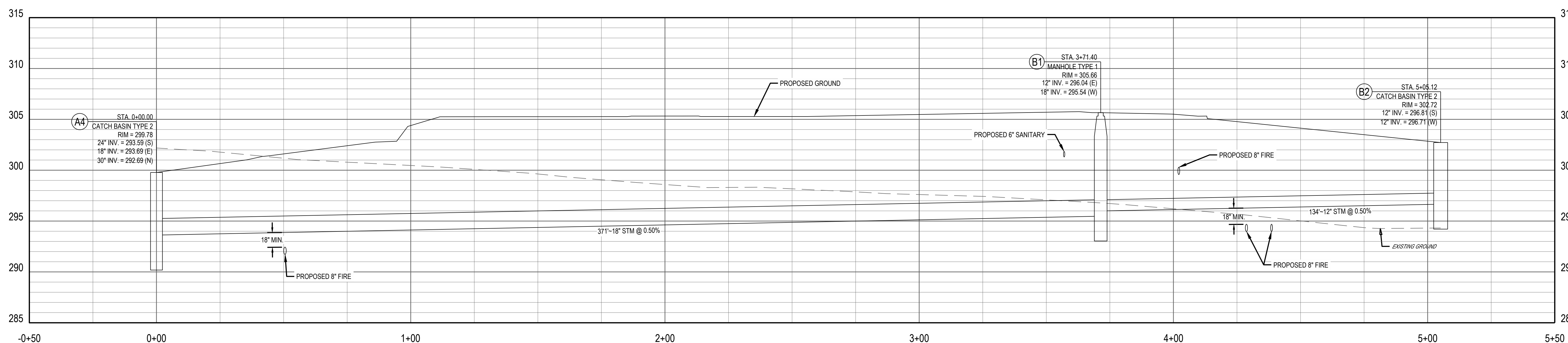
2880 Corporate Exchange Dr., Suite 400
Columbus, OH 43231
Phone: 614.766.7500 Fax: 614.766.4625



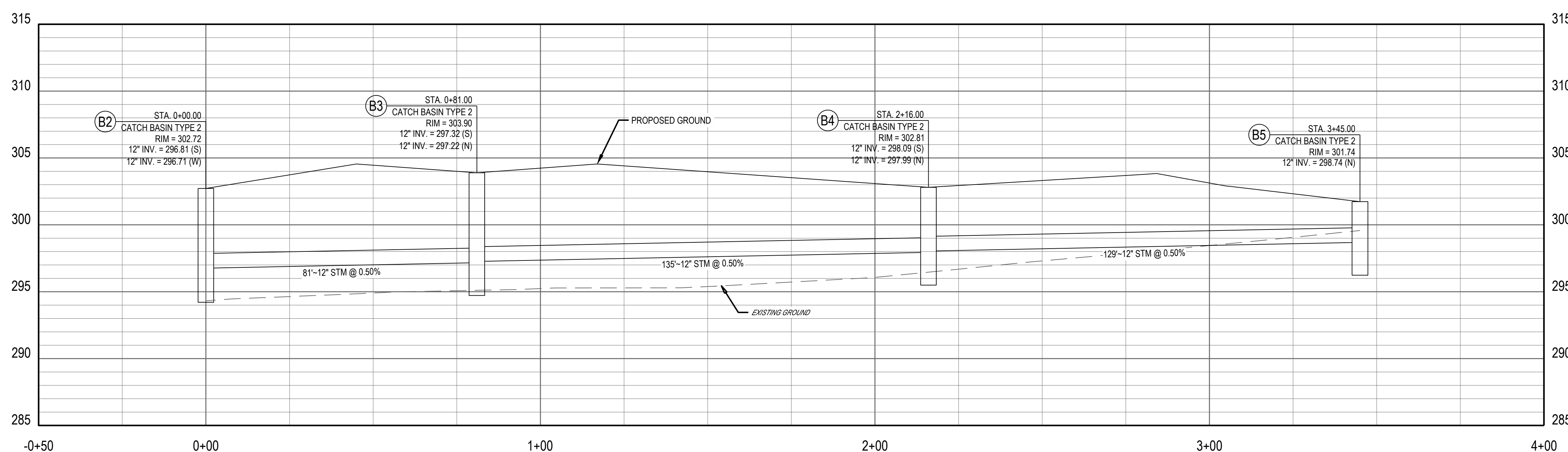
STRUCTURE A12 TO STRUCTURE A14 PROFILE
SCALE: 1" = 20' HORIZ.; 1" = 5' VERT.



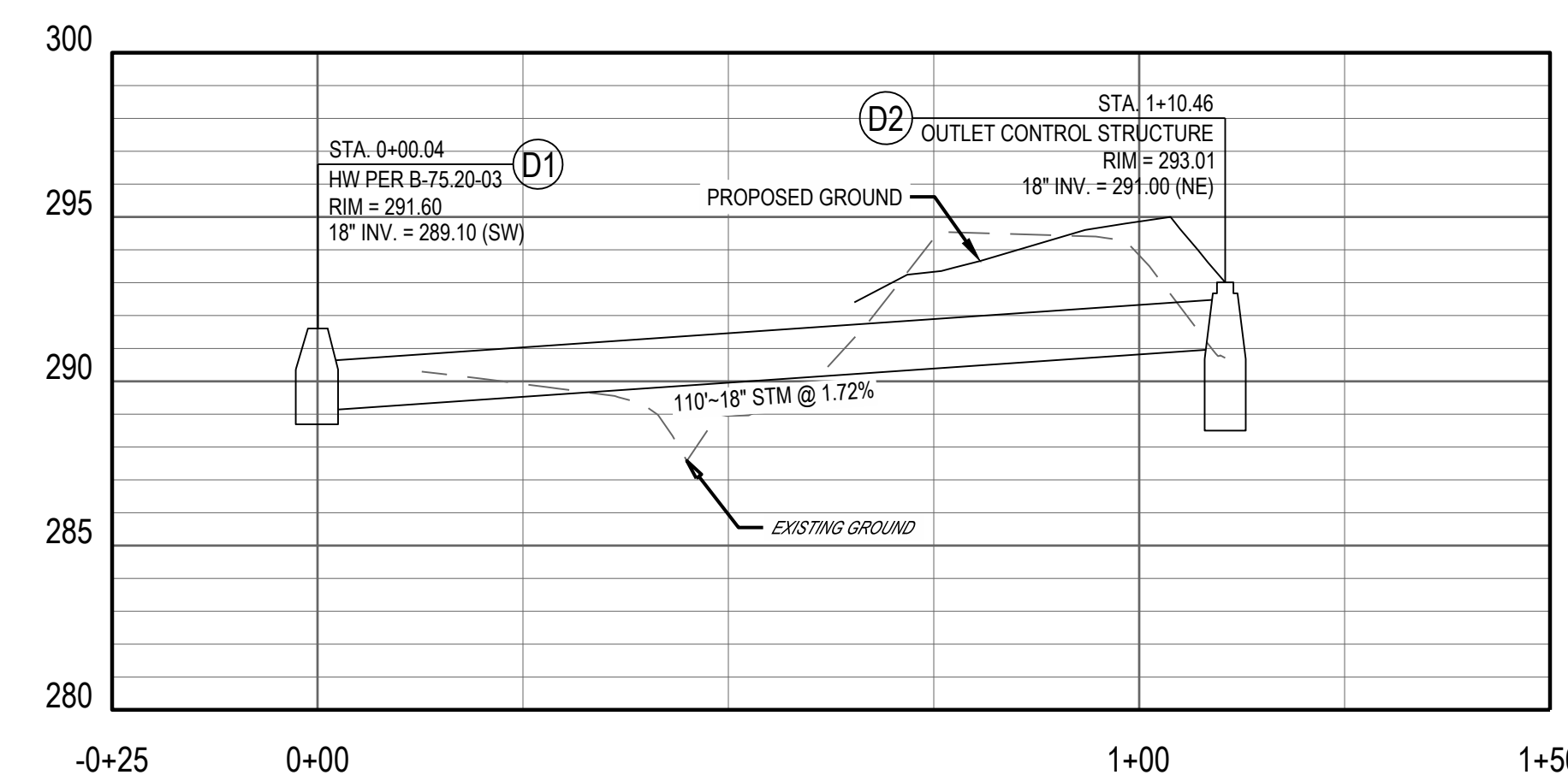
STRUCTURE A8 TO STRUCTURE A10 PROFILE
SCALE: 1" = 20' HORIZ.; 1" = 5' VERT.



STRUCTURE A4 TO B2 PROFILE
SCALE: 1" = 20' HORIZ.; 1" = 5' VERT.



STRUCTURE B2 TO STRUCTURE B5 PROFILE
SCALE: 1" = 20' HORIZ.; 1" = 5' VERT.



STRUCTURE D1 TO STRUCTURE D2 PROFILE
SCALE: 1" = 20' HORIZ.; 1" = 5' VERT.

AMBROSE PROPERTY GROUP

PROJECT PENINSULA

WEDGEWOOD DR.,
PORT ANGELES, WA 98363

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

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 Project Number: 763838
 Scale: AS SHOWN
 Drawn By: QSS
 Checked By: CG
 Date: 04/24/2025
 Issue: FOR PERMIT

Drawing Title:
STORM PROFILES

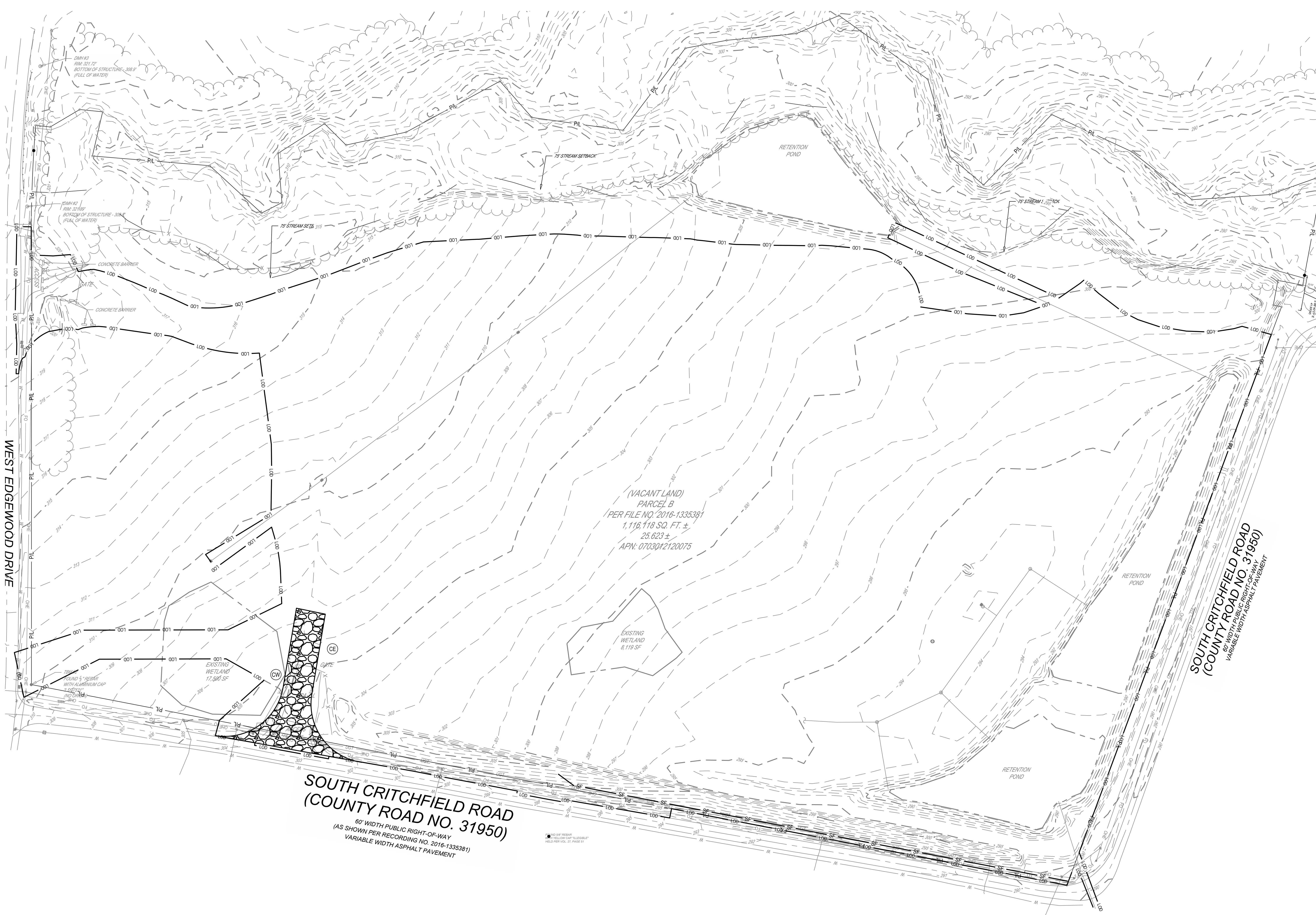
C4.7



2800 Corporate Exchange Dr., Suite 400
Columbus, OH 43231
Phone: 614.750.2500 Fax: 614.750.4825



SWPPP LEGEND	
EXISTING	
REFER TO XXX FOR EXISTING FEATURES LEGEND	
PROPOSED	
[Symbol]	MAJOR CONTOUR
[Symbol]	MINOR CONTOUR
[Symbol]	PAVEMENT WALK
[Symbol]	STORM SEWER
[Symbol]	SILT FENCE
[Symbol]	COMPOST SOCK
[Symbol]	GRADING/SEEDING LIMITS
[Symbol]	LIMIT OF DISTURBANCE
[Symbol]	PERMANENT EROSION CONTROL BLANKET ON ALL 3:1 SLOPES OR STEEPER
[Symbol]	STABILIZED CONSTRUCTION ENTRANCE
[Symbol]	STORAGE AREA
[Symbol]	BASIN SEDIMENT FILTER
[Symbol]	STORM MANHOLE
[Symbol]	CATCH BASIN
[Symbol]	CURB INLET
[Symbol]	STABILIZED CONSTRUCTION ENTRANCE
[Symbol]	TEMPORARY SEEDING
[Symbol]	PERMANENT SOG
[Symbol]	HAZARDOUS WASTE STORAGE AREA
[Symbol]	FUEL STORAGE AREA
[Symbol]	CONCRETE WASHOUT AREA
[Symbol]	INLET PROTECTION
[Symbol]	DANDY CURB (INLET PROTECTION)
[Symbol]	DANDY BAG (INLET PROTECTION)
[Symbol]	TRASH AREA



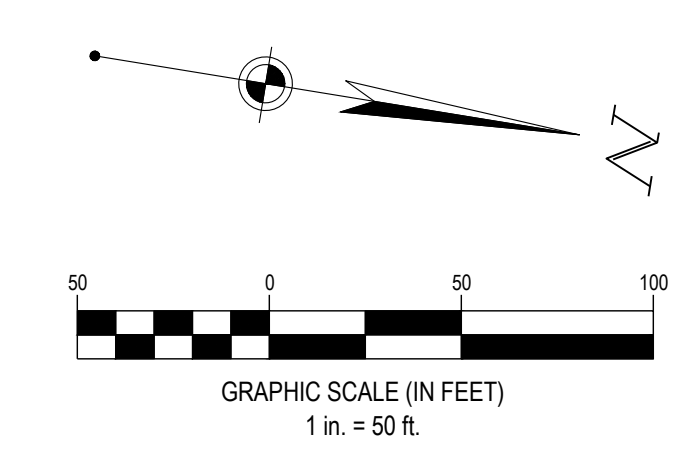
(VACANT LAND)
PARCEL B
PER FILE NO. 2016-1335381
1,116,118 SQ. FT. ±
25.623 ±
APN: 0703012120075

EXISTING WETLAND
17,980 SF

EXISTING WETLAND
8,119 SF

**SOUTH CRITCHFIELD ROAD
(COUNTY ROAD NO. 31950)**
80' WIDTH PUBLIC RIGHT-OF-WAY
(AS SHOWN PER RECORDING NO. 2016-1335381)
VARIABLE WIDTH ASPHALT PAVEMENT

REFER TO SHEET C5.1 FOR SWPPP PHASE II PLAN
REFER TO SHEET C5.2 FOR SWPPP NOTES
REFER TO SHEET C5.3 FOR SWPPP DETAILS



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W EDGEWOOD DR.,
PORT ANGELES, WA 98363

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

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Project Number: 763838
Scale: AS SHOWN
Drawn By: QSS
Checked By: CG
Date: 04/24/2025
Issue: FOR PERMIT

Drawing Title:
SWPPP PHASE I PLAN
C5.0

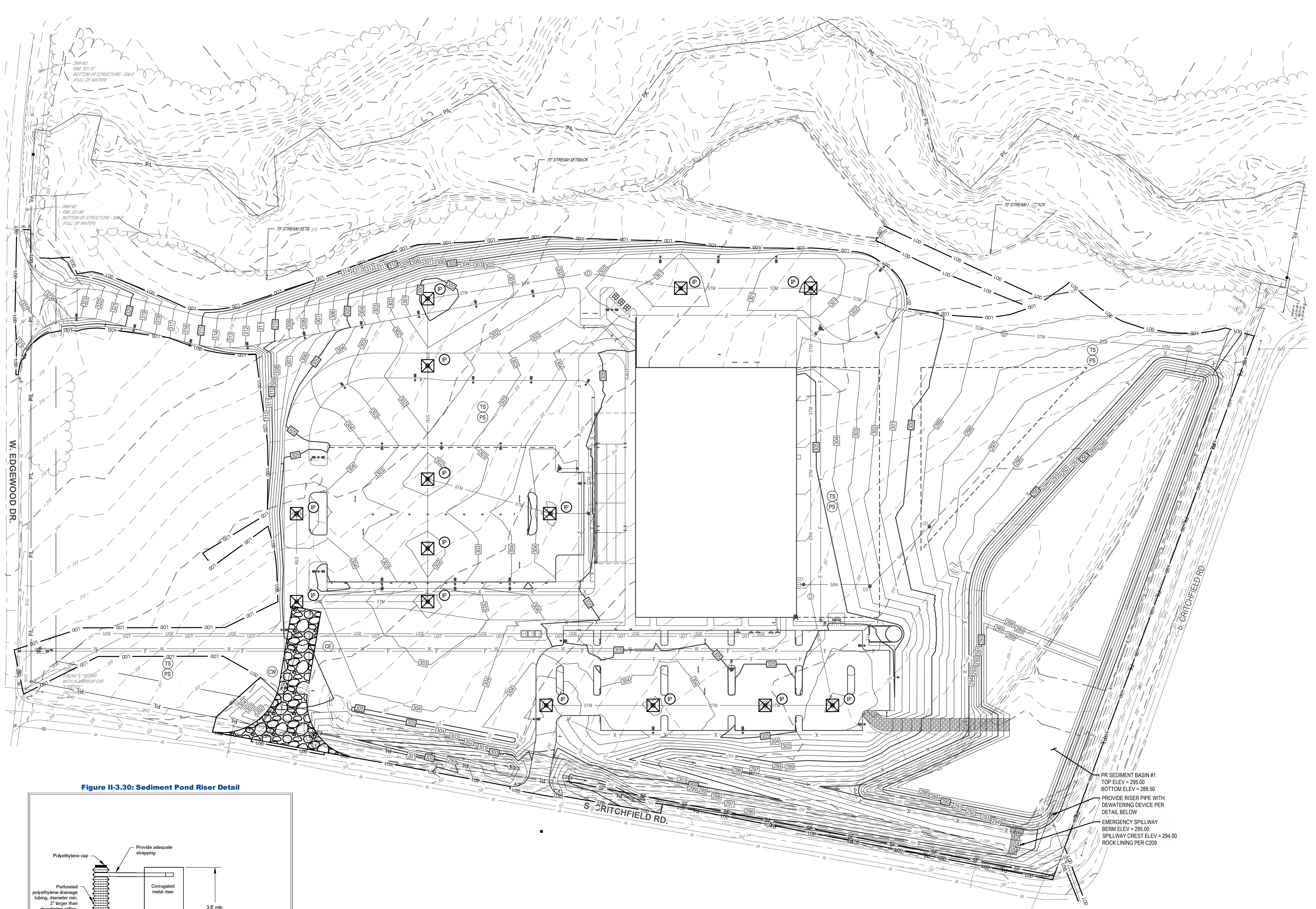
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

Revisions / Submissions

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Project Number: 763838
 Scale: AS SHOWN
 Drawn By: QSS
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Drawing Title:
SWPPP PHASE II PLAN

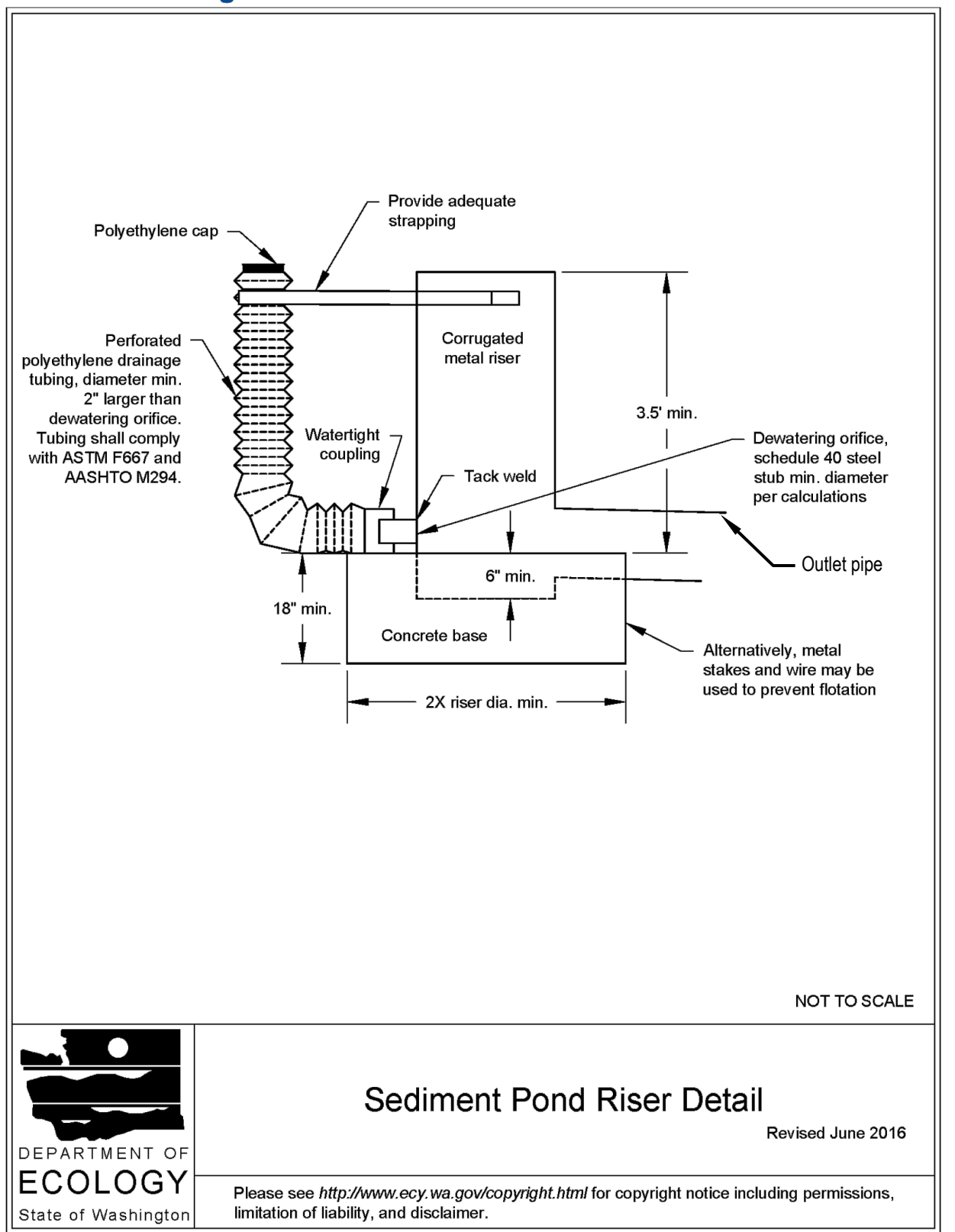


- SWPPP LEGEND**
- EXISTING**
 REFER TO XXX FOR EXISTING FEATURES LEGEND
- PROPOSED**
- MAJOR CONTOUR
 - MINOR CONTOUR
 - PAVEMENT WALK
 - STORM SEWER
 - SILT FENCE
 - COMPOST SOCK
 - GRADING/SEEDING LIMITS
 - LIMIT OF DISTURBANCE
 - PERMANENT EROSION CONTROL BLANKET ON ALL 3:1 SLOPES OR STEEPER
 - STABILIZED CONSTRUCTION ENTRANCE
 - STORAGE AREA
 - BASIN SEDIMENT FILTER
 - STORM MANHOLE
 - CATCH BASIN
 - CURB INLET
 - STABILIZED CONSTRUCTION ENTRANCE
 - TEMPORARY SEEDING
 - PERMANENT SOD
 - HAZARDOUS WASTE STORAGE AREA
 - FUEL STORAGE AREA
 - CONCRETE WASHOUT AREA
 - INLET PROTECTION
 - DANDY CURB (INLET PROTECTION)
 - DANDY BAG (INLET PROTECTION)
 - TRASH AREA

REFER TO SHEET C5.0 FOR SWPPP PHASE I PLAN
 REFER TO SHEET C5.2 FOR SWPPP NOTES
 REFER TO SHEET C5.3 FOR SWPPP DETAILS

FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

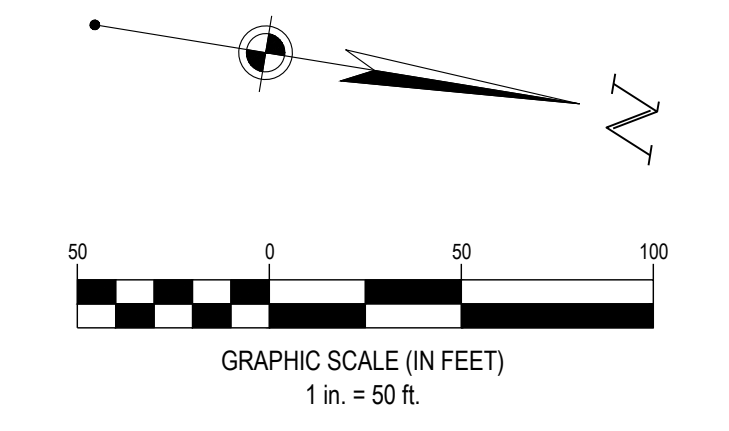
Figure II-3.30: Sediment Pond Riser Detail

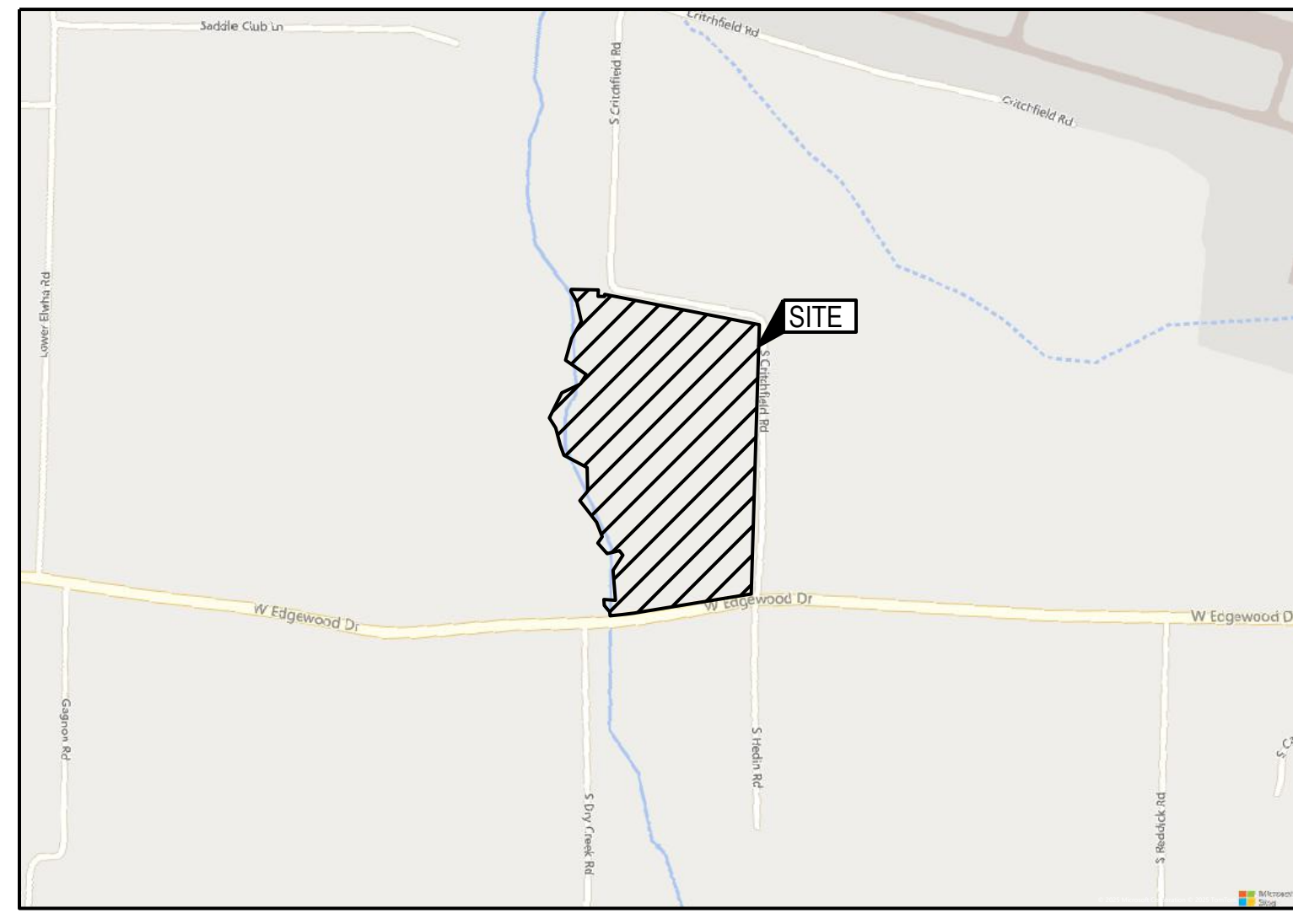


SEDIMENT BASIN 1	
	ELEVATION
TOP OF BASIN	295.00
EMERGENCY SPILLWAY	294.00
TOP OF RISER	293.50
DEWATERING ORIFICE	291.00
BOTTOM OF BASIN	279.50
SEDIMENT STORAGE DEPTH REQUIRED	1.5'
SEDIMENT STORAGE PROVIDED	1.5'
SURFACE AREA - REQUIRED	34,368 SF
SURFACE AREA - PROVIDED	76,582 SF
DEWATERING ORIFICE DIAM. (IN)	6.0
RISER PIPE DIAM. (IN)	15

DEPARTMENT OF ECOLOGY
 State of Washington

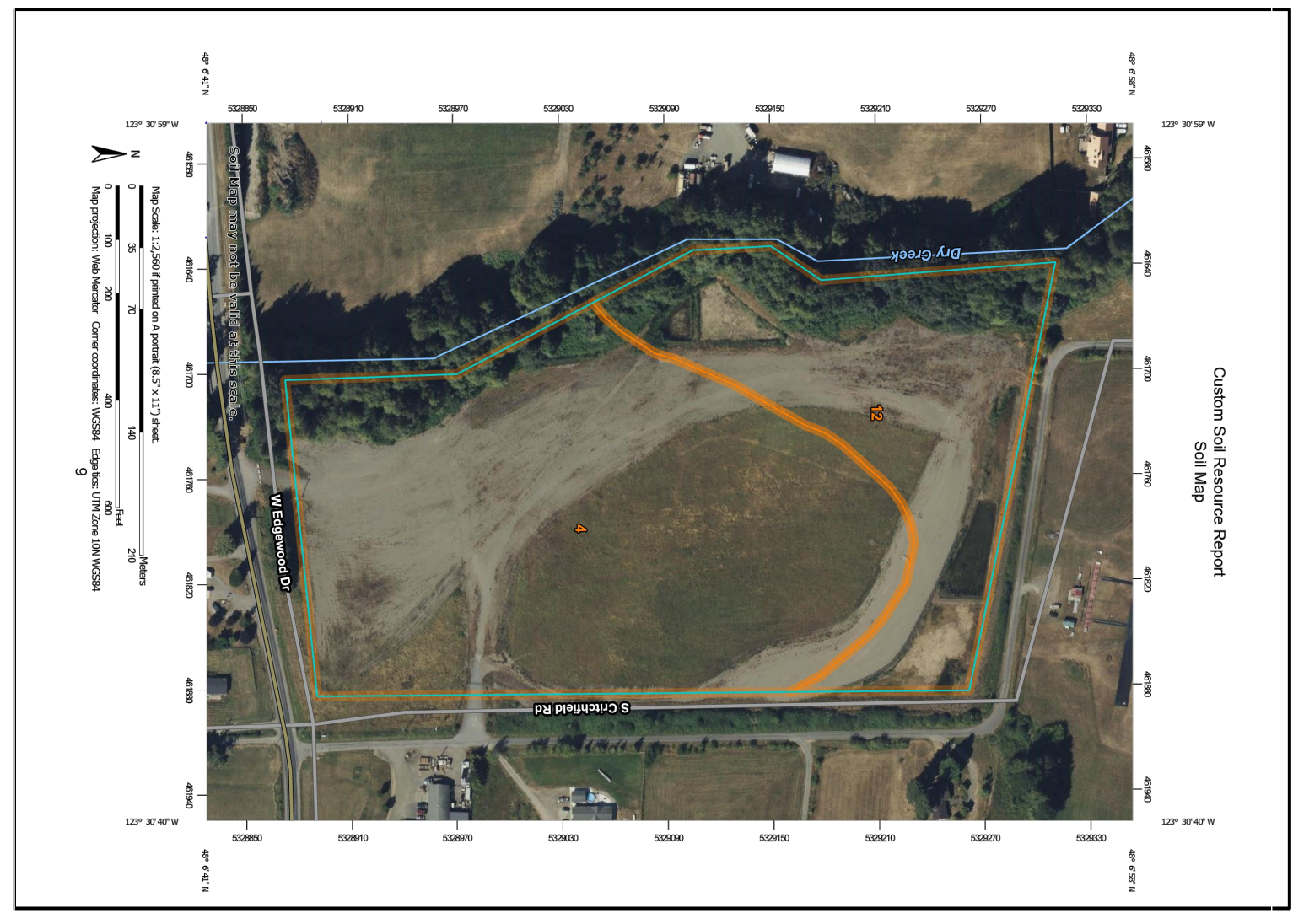
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VICINITY MAP

NO SCALE



SOILS MAP

NO SCALE

SOILS ON SITE: 4 - BELLINGHAM SILTY CLAY LOAM
12 - CLALLAM GRAVELLY SANDY LOAM

EROSION AND SEDIMENT CONTROL NARRATIVE

SITE ADDRESS: W. EDGEWOOD DR., PORT ANGELES, WA 98383

EXISTING SITE CONDITIONS: THE EXISTING SITE CONSISTS OF TWO ASPHALT DRIVEWAYS, A STORM SYSTEM, AND TWO STORMWATER PONDS.

THE SUBJECT PARCEL IS LOCATED WITHIN 'ZONE C' (AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS INDICATED BY THE FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY-PANEL NUMBER 5300210485E, EFFECTIVE DATE: FEBRUARY 23, 2001; PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

PROJECT DESCRIPTION: THE PROJECT CONSISTS OF A BUILDING, CANOPY, PARKING FACILITIES AND STORMWATER MANAGEMENT SYSTEM.

TOTAL SITE AREA: 25.62 ACRES
PRE-CONSTRUCTION IMPERVIOUS ACREAGE = 2.23 ACRES

DISTURBED AREA: 17.25 ACRES
POST-CONSTRUCTION IMPERVIOUS ACREAGE = 8.47ACRES

RUNOFF: THE PRE-CONSTRUCTION RUNOFF CURVE NUMBER IS 62.
THE POST-CONSTRUCTION RUNOFF CURVE NUMBER IS 86.

SITE DRAINS TO: THE NORTHEASTERN CORNER OF THE SITE AND UNDERNEATH S. CRITCHFIELD RD. THIS CULVERT ULTIMATELY DRAINS THROUGH A WOODED AREA AND INTO A NEARBY STREAM THAT IS TRIBUTARY TO DRY CREEK.

RECEIVING BODY: DRY CREEK

SITE BMP'S: FINAL LOCATIONS OF ALL SITE BMP'S INCLUDING DUMPSTER, VEHICLE FUELING AREAS, CONCRETE TRUCK WASH, MATERIAL STORAGE, AND TOPSOIL STOCKPILES SHALL BE DETERMINED BY CONTRACTOR. IF FINAL LOCATION OF BMP'S DIFFER FROM THE LOCATIONS SHOWN, CONTRACTOR SHALL MODIFY SWPPP AND INFORM WASHINGTON DEPARTMENT OF ECOLOGY OF NEW LOCATION OF BMP'S.

ADJACENT AREAS: NORTH: S. CRITCHFIELD RD.
SOUTH: W. EDGEWOOD DR.
EAST: S. CRITCHFIELD RD.
WEST: DRY CREEK

SOILS ON SITE: 4 - BELLINGHAM SILTY CLAY LOAM
12 - CLALLAM GRAVELLY SANDY LOAM

REFER TO THIS SHEET FOR SOILS MAP BOUNDARIES.

EROSION AND SEDIMENT CONTROL MEASURES: PROVIDE INLET PROTECTION OF ALL NEW AND EXISTING DRAINAGE STRUCTURES INDICATED ON THIS PLAN.

ANY OFF-SITE BORROW OR SPOIL AREAS SHALL BE SUBJECT TO THE REQUIREMENTS SET FORTH BY THE WASHINGTON DEPARTMENT OF ECOLOGY. ALL EROSION AND SEDIMENT CONTROL MEASURES FOR OFF-SITE AREAS NOT COVERED BY A SEPARATE NPDES PERMIT OR SWPPP SHALL BE COORDINATED WITH THE WASHINGTON DEPARTMENT OF ECOLOGY.

ALL TRENCH OR EXCAVATION GROUNDWATER CONTAINING SEDIMENT MUST BE EFFECTIVELY TREATED PRIOR TO DISCHARGE INTO THE STORM SEWER SYSTEM.

USE ANY MEANS NECESSARY AND ACCEPTABLE TO THE JURISDICTION TO CONTROL DUST ON THE SITE AND PREVENT TRACKING SOIL OFF SITE.

CRITICAL AREAS: DRY TO THE NORTH OF SITE WITH A 115' BUFFER ENCRDACHING ON SITE. TWO EXISTING ISOLATED WETLANDS ON SITE.

JURISDICTION: ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION AT THE DISCRETION OF CITY OF PORT ANGELES AND THE WASHINGTON DEPARTMENT OF ECOLOGY.

INSPECTIONS: INSPECTIONS OF OUTFALLS/EPSC MEASURES SHALL BE PERFORMED AT LEAST TWICE WEEKLY AND AT LEAST 72 HOURS APART. COORDINATION OF THESE INSPECTIONS IS THE RESPONSIBILITY OF THE OWNER'S REPRESENTATIVE.

DOCUMENT INSPECTIONS WEEKLY AND SUBMIT INSPECTION REPORT MONTHLY. A COPY OF THIS SWPPP AND INSPECTION REPORT IS TO BE MADE AVAILABLE ON SITE AT ALL TIMES. ON-SITE SWPPP IS TO BE LOCATED IN THE JOB TRAILER.

OUTFALLS/EPSC AND OTHER PROTECTIVE MEASURES SHALL BE REPAIRED, REPLACED OR MODIFIED WITHIN 7 DAYS ACCORDING TO THE NEEDS IDENTIFIED IN THE INSPECTION REPORT.

SCHEDULE: CONSTRUCTION ESTIMATED START DATE: 11.01.2025
CONSTRUCTION ESTIMATED COMPLETION DATE: 08.01.2026

STORMWATER POLLUTION PREVENTION PLAN GENERAL NOTES

OWNER/DEVELOPER	ENGINEER/PLAN DESIGNER
AMBROSE PROPERTY GROUP 6888 KEYSTONE CROSSING, SUITE 1150 INDIANAPOLIS, IN 46240	CESO, INC. 2800 CORPORATE EXCHANGE DR., SUITE 400 COLUMBUS, OH 43231
CONTACT: ERIC SEAMANDS PHONE: 317-490-0384	CONTACT: JOSEPH JORGE PHONE: 330-506-4106 EMAIL: JJORGE@CESOINC.COM

STORMWATER POLLUTION PREVENTION PLAN NOTES

SITE EPSC SHALL BE CHECKED AND IF NECESSARY, REPAIRED WEEKLY AND WITHIN 24 HOURS AFTER EACH RAINFALL GREATER THAN 1/8" IN THE EVENT OF CONTINUOUS RAINFALL. EROSION CONTROLS SHALL BE CHECKED DAILY.

REMOVE TRAPPED SEDIMENT FROM SEDIMENT CONTROLS AT OR BEFORE 50% OF DESIGN CAPACITY.

ALL AREAS TO REMAIN BARE GREATER THAN 7 DAYS MUST BE TEMPORARILY STABILIZED.

THERE SHALL BE NO DIRT, DEBRIS, OR STORAGE OF MATERIALS IN THE STREET.

GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STONE LAYER OF THE CONSTRUCTION ENTRANCE.

STRAW BALES SHALL NOT BE USED AS A FORM OF EROSION CONTROL.

ALL EPSC PROPOSED MUST BE INSTALLED TO CONTROL RAINFALL AND RUNOFF FOR THE 24HR, 24-HOUR STORM EVENT.

QUALITY ASSURANCE INSPECTION OF EROSION AND SEDIMENT CONTROLS SHALL BE PERFORMED WITHIN ONE MONTH OF CONSTRUCTION COMMENCING PER SECTION 6 OF THE STATE OF WASHINGTON NPDES PERMIT GUIDELINES.

- ALL EROSION AND SEDIMENTATION CONTROL SHALL BE PERFORMED ACCORDING TO SWPPP AND DETAIL PLANS; ACCORDING TO THE LATEST WASHINGTON DEPARTMENT OF ECOLOGY AUTHORIZATION FOR CONSTRUCTION ACTIVITY UNDER THE "NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM" (NPDES); ANY AND ALL REQUIRED PERMITS, REPORTS, AND RELATED DOCUMENTS. SEE THIS SHEET FOR SWPPP RULES AND REGULATIONS. ALL CONTRACTORS AND SUBCONTRACTORS MUST BECOME FAMILIAR WITH ALL OF THE ABOVE. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED IN THE FIELD BY THE INSPECTOR.
- CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AND GRADE CHANGES TO THE SITE AT NO ADDITIONAL COST TO OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- CONTRACTOR SHALL MINIMIZE CLEARING AND DISTURBANCE TO THE ENVIRONMENT TO THE MAXIMUM EXTENT POSSIBLE OR AS REQUIRED BY THE GENERAL PERMIT. DO NOT DISTURB AREA OUTSIDE OF THE LIMITS OF DISTURBANCE (L.O.D.).
- SEDIMENT STRUCTURE AND PERIMETER SEDIMENT BARRIERS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING WITHIN SEVEN (7) DAYS FROM THE START OF CLEARING AND GRUBBING, AND SHALL CONTINUE TO FUNCTION UNTIL THE SLOPE DEVELOPMENT AREA IS RESTABILIZED.
- SOIL STABILIZATION:
 - PERMANENT SOIL STABILIZATION OF DISTURBED AREAS BY MEANS OF VEGETATION, LANDSCAPE TYPE, MULCHING, MATTING, SOO, RIP RAP, AND OTHER APPROVED LANDSCAPING TECHNIQUES TO BE APPLIED AS FOLLOWS:
WITHIN SEVEN (7) DAYS OF ANY AREA THAT WILL BE DORMANT FOR ONE (1) YEAR OR MORE.
WITHIN TWO (2) DAYS OF ANY AREA WITHIN 50 FEET OF A STREAM AT FINAL GRADE.
WITHIN SEVEN (7) DAYS FOR ANY OTHER AREA AT FINAL GRADE.
 - TEMPORARY SOIL STABILIZATION OF DISTURBED AREAS BY MEANS OF TEMPORARY VEGETATION, MULCHING, GEOTEXTILES, SOO, PRESERVATION OF EXISTING VEGETATION, AND OTHER APPROVED TECHNIQUES TO BE APPLIED AS FOLLOWS:
WITHIN TWO (2) DAYS OF ANY AREA WITHIN 50 FEET OF A STREAM NOT AT FINAL GRADE, WITHIN SEVEN (7) DAYS OF ANY AREA THAT WILL BE DORMANT FOR MORE THAN FOURTEEN (14) DAYS, BUT LESS THAN ONE (1) YEAR, PRIOR TO THE ONSET OF WINTER WEATHER FOR AREAS THAT WILL BE IDLE OVER WINTER.
 - TEMPORARY SEEDING, MULCHING, AND FERTILIZER SPECIFICATIONS:
SEEDING: ANNUAL RYEGRASS AT 2.02 #/1,000 S.F.
MULCHING: STRAW MATERIAL SHALL BE UNROTTED SMALL GRAIN STRAW APPLIED AT A RATE OF TWO (2) TON/ACRE, OR 80-100 POUNDS PER 1,000 S.F. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE FREE OF PROHIBITIVE NOXIOUS WEEDS. MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICAL MEANS, FROM NOVEMBER 01 THRU MARCH 15 INCREASE THE RATE OF STRAW MULCH TO THREE (3) TON/ACRE.
FERTILIZER: APPLY FERTILIZER AT HALF THE RATE OF PERMANENT APPLICATION AND AS PER STATE DOT SPECIFICATIONS. IF PROJECT CONDITIONS PREVENT FERTILIZING THE SOIL, THEN THIS ITEM MAY BE WAIVED.
- PERMANENT SEEDING SHALL BE IN ACCORDANCE WITH WASHINGTON WASHINGTON DEPARTMENT OF ECOLOGY STANDARD SPECIFICATIONS.
- SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION. ALL SLOPES 3:1 OR GREATER THAN 3:1 SHALL BE FERTILIZED, SEEDED, EROSION CONTROL BLANKETS INSTALLED, AND LOW MAINTENANCE GRASS SEED MIX APPLIED ON THE SLOPES, AS SPECIFIED IN THE PLANS.
- NO SOLID (OTHER THAN SEDIMENT) OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORM WATER RUNOFF. ALL NON-SEDIMENT POLLUTANTS MUST BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL GUIDELINES. WASH OUT OF CEMENT TRUCKS SHOULD OCCUR IN DESIGNATED PIT OR DIKED AREAS. WHERE WASHINGS CAN BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE WHEN THEY HARDEN, STORAGE TANKS SHOULD ALSO BE LOCATED IN PIT OR DIKED AREAS. IN ADDITION, SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS TO CLEAN AND CONTAIN FUEL AND CHEMICAL SPILLS MUST BE KEPT ON SITE.
- IF THE ACTION OF VEHICLES TRAVELING OVER THE STABILIZED CONSTRUCTION EXIT DOES NOT SUFFICIENTLY REMOVE MOST OF THE DIRT AND MUD, THEN THE TIRES MUST BE WASHED BEFORE VEHICLES ENTER A PUBLIC ROAD. PROVISIONS MUST BE MADE TO INTERCEPT THE WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DISPOSED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE SITE THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- DUST CONTROL USING APPROVED MATERIALS MUST BE PERFORMED AT ALL TIMES. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION IS PROHIBITED.
- ON-SITE AND OFF-SITE STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION BY THE USE OF BEST MANAGEMENT PRACTICES. THESE AREAS MUST BE SHOWN IN THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS. AT A MINIMUM, A SILT FENCE IS TO BE PLACED AT PERIMETER OF STOCKPILE AREA TO PREVENT SOIL FROM LEAVING THE STOCKPILE AREA.
- ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE ROADWAYS OR INTO THE STORM SEWERS MUST BE REMOVED IMMEDIATELY.
- ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR ASPHALT FOR ROAD CONSTRUCTION.
- THE LAST LAYER OF SOIL, INCLUDING TOP SOIL, SHALL BE COMPACTED TO 80% - 85% OF THE MAXIMUM STANDARD PROCTOR DENSITY, IN AREAS OUTSIDE THE PARKING LOT THAT WILL RECEIVE VEGETATION. THIS IS PARTICULARLY IMPORTANT IN CUT SLOPE AND EMBANKMENT AREAS. IN PAVEMENT AND ISLAND AREAS, IT IS RECOMMENDED THAT THE SOIL BE COMPACTED TO 96% AND 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY RESPECTIVELY; THE LAST COMPACTED LAYER MAY BE SCARIFIED TO IMPROVE THE SOIL GROWTH CHARACTERISTICS.
- IN THE EVENT THAT HIGH GROUND WATER IS ENCOUNTERED, CONTRACTOR IS RESPONSIBLE FOR DESIGNING AND IMPLEMENTING A PLAN TO CONTROL BOTH SURFACE AND GROUND WATER DURING THE COURSE OF CONSTRUCTION. ALL DEWATERING ACTIVITIES SHALL PASS THROUGH A BMP PRIOR TO LEAVING THE SITE.

INSPECTION/MAINTENANCE NOTES

FILTER BARRIERS, INCLUDING BUT NOT LIMITED TO SILT FENCE AND INLET PROTECTION, SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY HALF THE HEIGHT OF THE BARRIER.

IF THE FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE, AND THE BARRIER IS STILL REQUIRED, THE FABRIC SHALL BE REPLACED PROMPTLY.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED, AND SEEDED.

- ALL CONTROL MEASURES STATED IN THE SWPPP SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL TEMPORARY OR PERMANENT STABILIZATION OF THE SITE IS ACHIEVED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED BY A QUALIFIED PERSON IN ACCORDANCE TO THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED ACCORDING TO THE FOLLOWING:
 - INLET PROTECTION DEVICES AND CONTROLS SHALL BE REPAIRED OR REPLACED WHEN THEY SHOW SIGNS OF UNDERMINING AND OR DETERIORATION.
 - ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STANDING OF GRASS IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
 - SILT FENCES AND CHECK DAMS SHALL BE REPAIRED TO THEIR ORIGINAL CONDITION IF DAMAGED. SEDIMENT ACCUMULATION MUST BE REMOVED WHEN SEDIMENT HEIGHT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE OR CHECK DAM.
 - OUTLET STRUCTURES IN SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT MUST BE REMOVED FROM BASINS AND OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 40%.
 - MINIMIZE OFF-SITE SEDIMENT TRACKING OF VEHICLES BY THE USE OF STONE MATERIAL IN ALL CONSTRUCTION ENTRANCES. ALONG WITH REGULARLY SCHEDULED SWEEPING/GOOD HOUSEKEEPING, STABILIZED CONSTRUCTION ENTRANCES TO BE PROPERLY MAINTAINED BY GENERAL CONTRACTOR AND IN GOOD WORKING ORDER AT ALL TIMES. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE STONE AS CONDITIONS DEMAND.
 - THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE) BY GENERAL CONTRACTOR. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
- CONTRACTORS AND SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING ALL SEDIMENT FROM THE SITE, INCLUDING DETENTION BASINS AND STORM SEWER SYSTEMS. SEDIMENT DEPOSITION DURING SITE STABILIZATION MUST ALSO BE REMOVED.
- ALL RIP RAP MUST BE PLACED OVER GEOTEXTILE FILTER.
- STONE CONSTRUCTION EXIT TO BE MAINTAINED BY GENERAL CONTRACTOR UNTIL SITE HAS BEEN PAVED OR IS NO LONGER REQUIRED.

SOLID/SANITARY/TOXIC WASTES NOTES

- CONTAINERS SHALL BE AVAILABLE FOR DISPOSAL OF DEBRIS, TRASH, HAZARDOUS OR PETROLEUM WASTES. ALL CONTAINERS MUST BE COVERED AND LEAK-PROOF. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THE PERTINENT MATERIAL.
- BRICKS, HARDENING CONCRETE AND SOIL WASTE SHALL BE FREE FROM CONTAMINATION WHICH MAY LEACH CONSTITUENTS TO WATERS OF THE STATE.
- CLEAN CONSTRUCTION WASTES THAT WILL BE DISPOSED INTO THE PROPERTY SHALL BE SUBJECT TO ANY LOCAL PROHIBITIONS FROM THIS TYPE OF DISPOSAL.
- ALL CONSTRUCTION AND DEMOLITION DEBRIS (C&DD) WASTE SHALL BE DISPOSED OF IN AN APPROVED C&DD LANDFILL. CONSTRUCTION DEBRIS MAY BE DISPOSED OF ON-SITE, BUT DEMOLITION DEBRIS MUST BE DISPOSED OF IN AN APPROVED LANDFILL. ALSO, MATERIALS WHICH CONTAIN ASBESTOS MUST COMPLY WITH AIR POLLUTION REGULATIONS.
- AREA SHALL BE DESIGNATED BY CONTRACTOR AND SHOWN ON SWPPP MAP FOR MIXING OR STORAGE OF COMPOUNDS SUCH AS FERTILIZERS, LIME ASPHALT, OR CONCRETE. THESE DESIGNATED AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORMWATER DRAINAGE AREA.
- EQUIPMENT FUELING & MAINTENANCE SHALL BE IN DESIGNATED AREAS ONLY.
- A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN MUST BE DEVELOPED FOR SITES WITH ONE ABOVE-GROUND STORAGE TANK OF 660 GALLONS OR MORE, TOTAL ABOVE-GROUND STORAGE OF 1,330 GALLONS OR BELOW-GROUND STORAGE OF 4,200 GALLONS OF FUEL.
- ALL DESIGNATED CONCRETE WASHOUT AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS OR OTHER STORMWATER DRAINAGE AREAS.
- ALL CONTAMINATED SOIL MUST BE TREATED AND/OR DISPOSED OF IN AN APPROVED SOLID WASTE MANAGEMENT FACILITY OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITIES.
- THE CONTRACTOR SHALL CONTACT WASHINGTON DEPARTMENT OF ECOLOGY, THE LOCAL FIRE DEPARTMENT AND THE LOCAL EMERGENCY PLANNING COMMITTEE IN THE EVENT OF A PETROLEUM SPILL (25 GALLONS) OR THE PRESENCE OF SHEEN.
- OPEN BURNING IS NOT PERMITTED ON THE SITE.

BUFFER RESTORATION AND MITIGATION NOTES

- FOR ANY DISTURBED EARTH WITHIN STREAM BUFFER ZONES, SEED WITH EROSION CONTROL BLANKET. GROUNDCOVERS SUFFICIENT TO RESTRAIN EROSION IN THE BUFFER AREA ARE REQUIRED.
- TREES REMOVED WITHIN THE 30' STREAM BUFFER ZONE SHALL BE REPLANTED AT A RATE CONSISTENT WITH THE RATES AND TYPES OF TREES RECOMMENDED BY THE TENNESSEE DEPARTMENT OF AGRICULTURE DIVISION OF FORESTRY.
- PERMANENT CURB INSTALLATION IS PROPOSED AND WILL PREVENT SITE SHEET FLOW TO STREAM BUFFER ZONE.

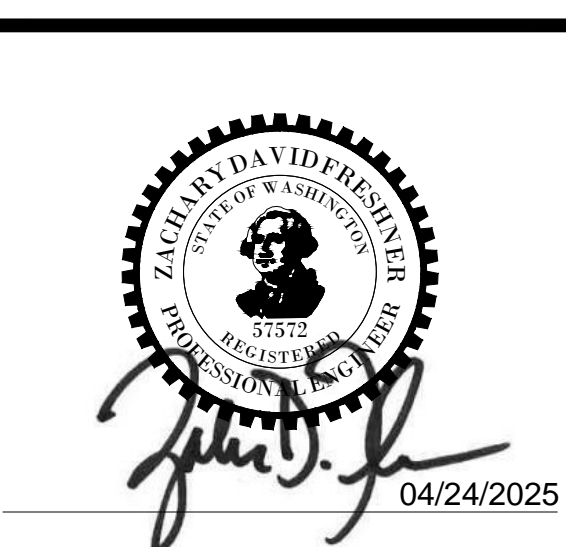
GENERAL NOTES

- ADDITIONAL EROSION AND SEDIMENT CONTROLS MAY BE REQUIRED AS IDENTIFIED WITH WASHINGTON DEPARTMENT OF ECOLOGY AND LOCAL JURISDICTION INSPECTOR.
- CONTRACTOR SHALL REVIEW THE COMPLETE DRAWING SET AND NOTIFY THE DESIGN PROFESSIONAL IN WRITING PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE FOUND WITHIN THE DRAWINGS OR WITH ACTUAL FIELD CONDITIONS.
- ALL STORMWATER POLLUTION PREVENTION PLANS, NOTES AND DETAILS SHALL COMPLY WITH THE WASHINGTON DEPARTMENT OF TRANSPORTATION (WSDOT).
- CONTRACTOR IS RESPONSIBLE TO MAINTAIN EROSION CONTROL MEASURES UNTIL ADEQUATE RE-VEGETATION AND STABILIZATION ARE ACHIEVED.
- CONTRACTOR SHALL PROVIDE AND POST NOTICE OF INTENT (NOI) WITH PROJECT DESCRIPTION AND CONTACT NUMBERS.
- CONTRACTOR SHALL MODIFY THE SEQUENCE OF CONSTRUCTION BASED ON MEANS AND METHODS. ALL EROSION AND SEDIMENT CONTROL MEASURES FROM THE BEGINNING OF EARTH DISTURBING ACTIVITIES TO THE FINAL COMPLETION OF THE PROJECT ARE THE RESPONSIBILITY OF THE SITE WORK CONTRACTOR.

STANDARD NOTES

- APPROVAL OF THIS EROSION / SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTIONS, CHANNELS, RETENTION FACILITIES, UTILITIES).
- THE IMPLEMENTATION OF THIS ESC PLAN AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC BMP'S IS THE RESPONSIBILITY OF THE APPLICANT UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION / LANDSCAPING IS ESTABLISHED.
- CLEARLY FLAG BOUNDARIES OF CLEARING LIMITS SHOWN ON THIS PLAN IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY APPLICANT FOR THE DURATION OF CONSTRUCTION.
- CONSTRUCT THE ESC BMP'S SHOWN ON THE PLAN IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH MANNER AS TO ENSURE THAT SEDIMENT AND LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- THE ESC BMP'S SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, UPGRADE THESE ESC BMP'S AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
- THE APPLICANT SHALL INSPECT THE ESC BMP'S DAILY AND MAINTAIN THEM AS NECESSARY TO ENSURE CONTINUED FUNCTIONING.
- INSPECT AND MAINTAIN THE ESC BMP'S ON INACTIVE SITES A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A MAJOR STORM EVENT (I.E. A 24-HOUR STORM EVENT WITH A 10-1R OR GREATER RECURRENT INTERVAL).
- AT NO TIME SHALL THE SEDIMENT EXCEED 50-PERCENT OF THE SUMP DEPTH OR HAVE LESS THAN 6-INCHES OF CLEARANCE FROM THE SEDIMENT SURFACE TO THE INVERT OF THE LOWEST PIPE. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSREAM SYSTEM.
- INSTALL STABILIZED CONSTRUCTION ENTRANCES AT THE BEGINNING OF CONSTRUCTION AND MAINTAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

REFER TO SHEET C5.0 FOR SWPPP PHASE I PLAN
REFER TO SHEET C5.1 FOR SWPPP PHASE II PLAN
REFER TO SHEET 5.3 FOR SWPPP DETAILS
REFER TO SHEET C4.0 FOR GRADING PLAN



AMBROSE PROPERTY GROUP

PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025.04.24

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Project Number: 763838
Scale: AS SHOWN
Drawn By: QSS
Checked By: CG
Date: 04/24/2025
Issue: FOR PERMIT

Drawing Title:
SWPPP NOTES

C5.2

- A floating pond skimmer may be used for the sediment trap outlet if approved by the Local Permitting Authority.
- Sediment traps may not be feasible on utility projects due to the limited work space or the short-term nature of the work. Portable tanks may be used in place of sediment traps for utility projects.

PS TS

Design and Installation Specifications

- See [Figure II-3.26: Cross Section of Sediment Trap](#) and [Figure II-3.27: Sediment Trap Outlet](#) for details.
- To determine the sediment trap geometry, first calculate the design surface area (SA) of the trap, measured at the invert of the weir. Use the following equation:

$$SA = FS(Q_2/V_s)$$

where

$Q_2 =$

- Option 1 - Single Event Hydrograph Method:
 Q_2 = Peak volumetric flow rate calculated using a 10-minute time step from a Type 1A, 2-year, 24-hour frequency storm for the developed condition. The 10-year peak volumetric flow rate shall be used if the project size, expected timing and duration of construction, or downstream conditions warrant a higher level of protection.
- Option 2 - For construction sites that are less than 1 acre, the Rational Method may be used to determine Q_2 .

V_s = The settling velocity of the soil particle of interest. The 0.02 mm (medium silt) particle with an assumed density of 2.65 g/cm³ has been selected as the particle of interest and has a settling velocity (V_s) of 0.00096 ft/sec.

FS = A safety factor of 2 to account for non-ideal settling.

Therefore, the equation for computing sediment trap surface area becomes:

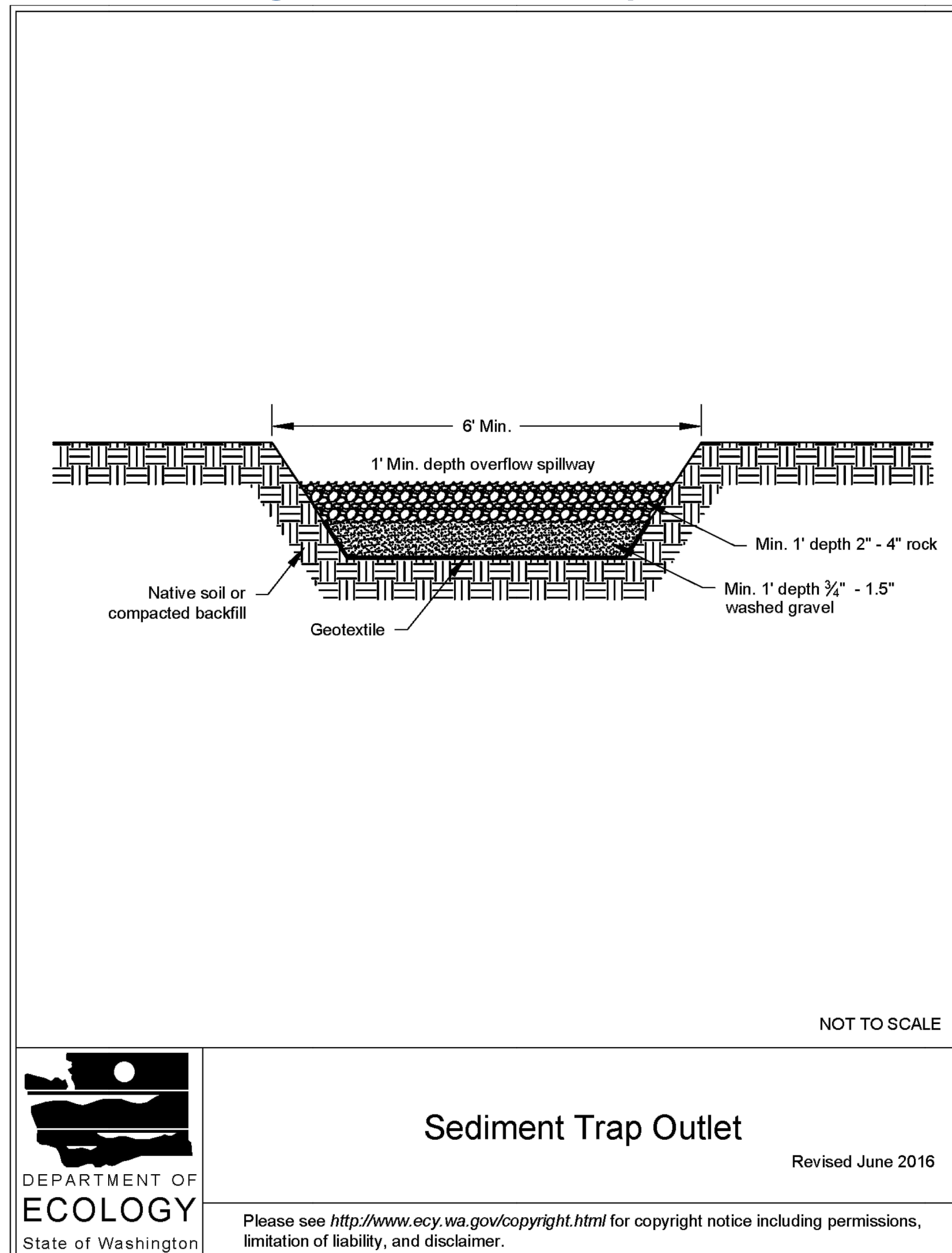
$$SA = 2 \times Q_2 / 0.00096$$

or

$$2080 \text{ square feet per cfs of inflow}$$

- Sediment trap depth shall be 3.5 feet minimum from the bottom of the trap to the top of the overflow weir.
- To aid in determining sediment depth, all sediment traps shall have a staff gauge with a prominent mark 1-foot above the bottom of the trap.

Figure II-3.27: Sediment Trap Outlet



- Design the discharge from the sediment trap by using the guidance for discharge from temporary sediment ponds in [BMP C241: Sediment Pond \(Temporary\)](#).

Maintenance Standards

- Sediment shall be removed from the trap when it reaches 1-foot in depth.
- Any damage to the trap embankments or slopes shall be repaired.

Figure II-3.1: Stabilized Construction Access

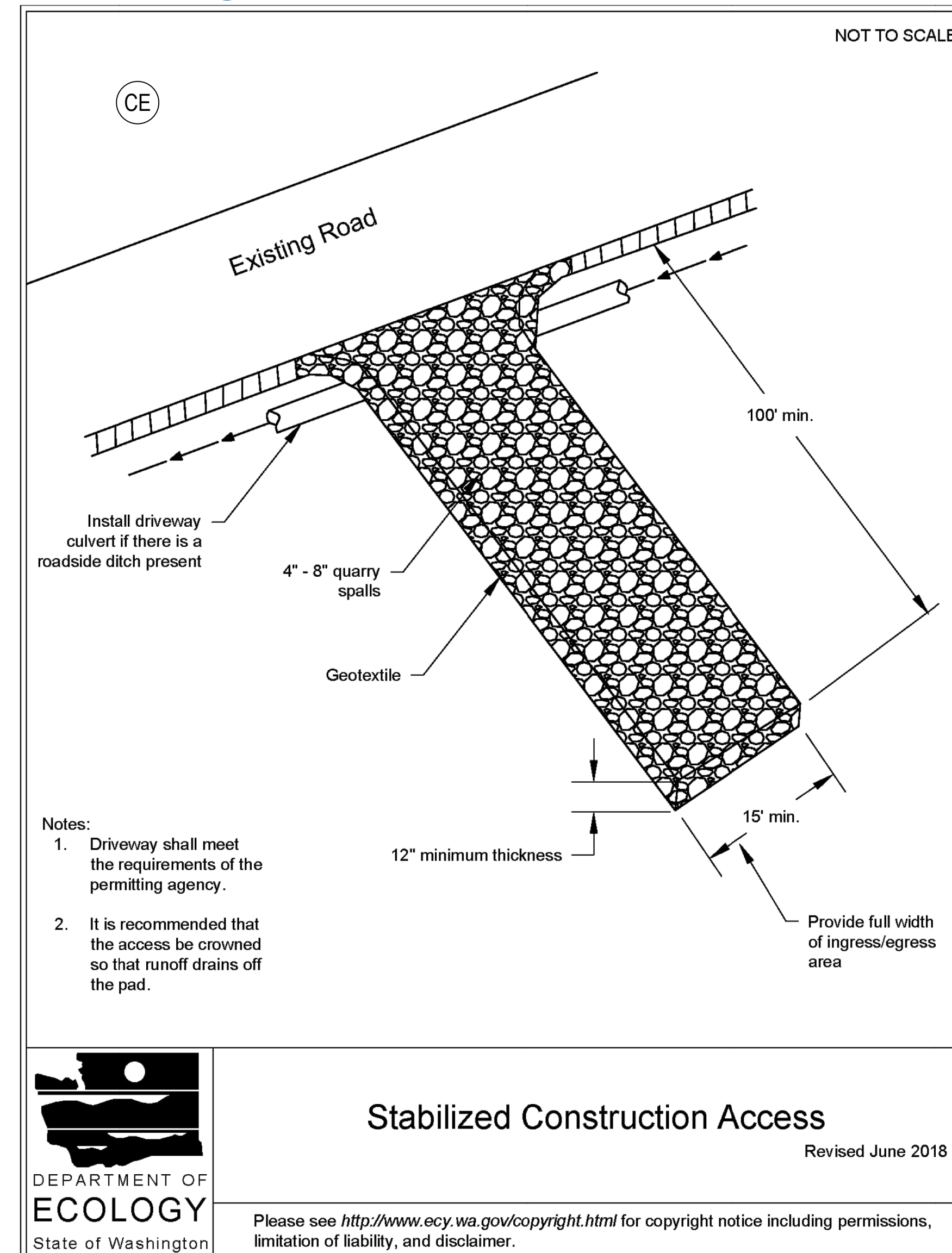


Figure II-3.26: Cross Section of Sediment Trap

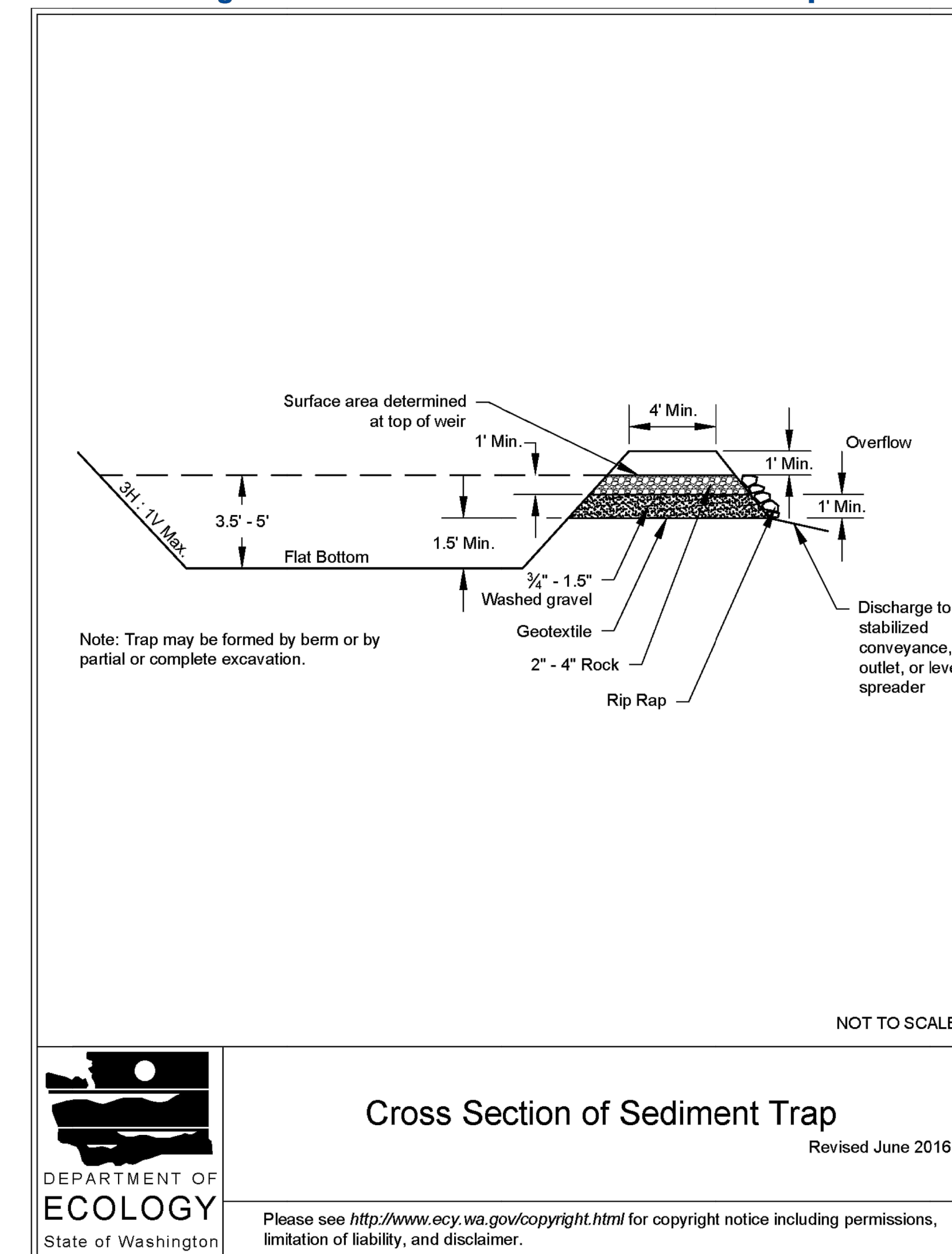
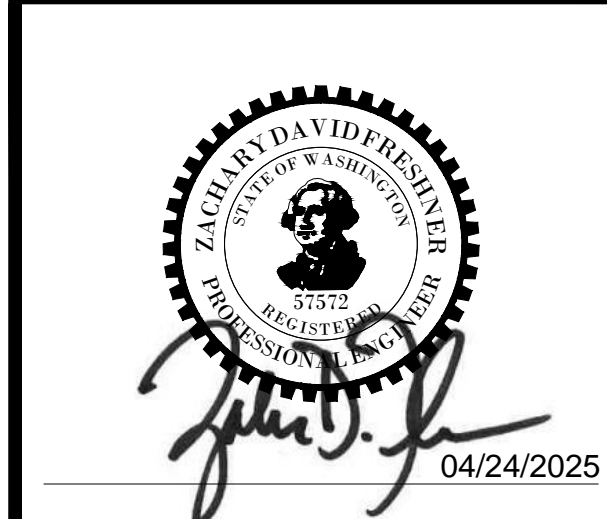
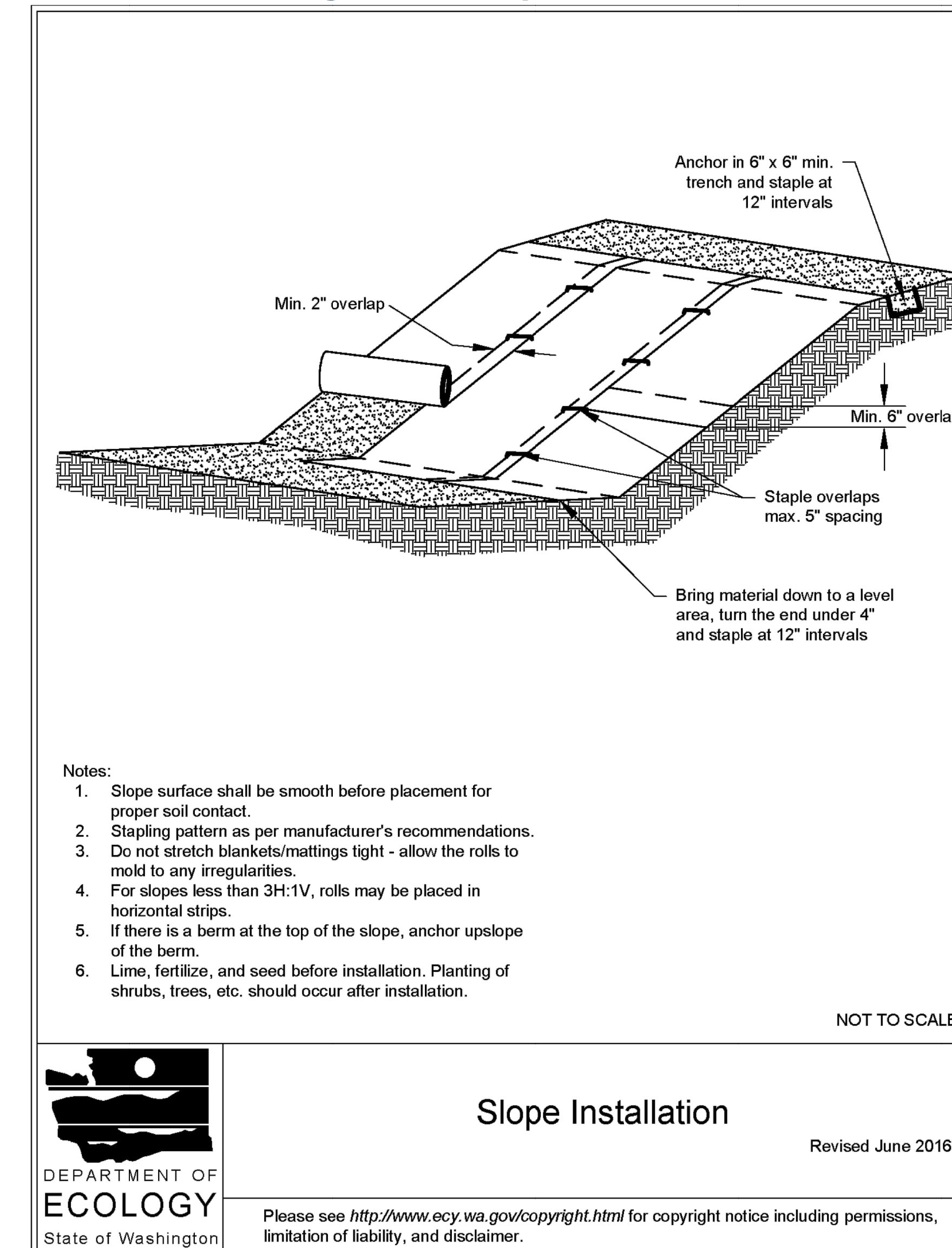


Figure II-3.4: Slope Installation



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SWPPP DETAILS

C5.3

Maintenance Standards

Reseed any seeded areas that fail to establish at least 75 percent cover (100 percent cover for areas that receive sheet or concentrated flows). If reseeding is ineffective, use an alternate method such as sodding, mulching, nets, or blankets.

- Reseed and protect by mulch any areas that experience erosion after achieving adequate cover. Reseed and protect by mulch any eroded area.
- Supply seeded areas with adequate moisture, but do not water to the extent that it causes runoff.

Approved as Functionally Equivalent

Ecology has approved products as able to meet the requirements of this BMP. The products did not pass through the Technology Assessment Protocol – Ecology (TAPE) process. Local jurisdictions may choose not to accept these products, or may require additional testing prior to consideration for local use. Products that Ecology has approved as functionally equivalent are available for review on Ecology's website at:

<https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Emerging-stormwater-treatment-technologies>

BMP C121: Mulching

Purpose

Mulching soils provides immediate temporary protection from erosion. Mulch also enhances plant establishment by conserving moisture, holding fertilizer, seed, and topsoil in place, and moderating soil temperatures. There are a variety of mulches that can be used. This section discusses only the most common types of mulch.

Conditions of Use

As a temporary cover measure, mulch should be used:

- For less than 30 days on disturbed areas that require cover.
- At all times for seeded areas, especially during the wet season and during the hot summer months.
- During the wet season on slopes steeper than 3H:1V with more than 10 feet of vertical relief.

Mulch may be applied at any time of the year and must be refreshed periodically.

For seeded areas, mulch may be made up of 100 percent:

- cottonseed meal;
- fibers made of wood, recycled cellulose, hemp, or kenaf;

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Mulch Material	Guideline	Description
	Remarks	This is a cost-effective way to dispose of debris from clearing and grubbing, and it eliminates the problems associated with burning. Generally, it should not be used on slopes above approx. 10% because of its tendency to be transported by runoff. It is not recommended within 200 feet of surface waters. If permanent seeding or planting is expected shortly after mulch, the decomposition of the chipped vegetation may tie up nutrients important to grass establishment. Note: thick application of this material over existing grass, herbaceous species, and some groundcovers could smother and kill vegetation.
Wood-Based Mulch	Quality Standards	No visible water or dust during handling. Must be purchased from a supplier with a Solid Waste Handling Permit or one exempt from solid waste regulations.
	Application Rates	2" thick min.; approx. 100 tons per acre (approx. 750 lbs. per cubic yard)
	Remarks	This material is often called "wood straw" or "hog fuel". The use of mulch ultimately improves the organic matter in the soil. Special caution is advised regarding the source and composition of wood-based mulches. Its preparation typically does not provide any weed seed control, so evidence of residual vegetation in its composition or known inclusion of weed plants or seeds should be monitored and prevented (or minimized).
Wood Strand Mulch	Quality Standards	A blend of loose, long, thin wood pieces derived from native conifer or deciduous trees with high length-to-width ratio.
	Application Rates	2" thick min.
	Remarks	Cost-effective protection when applied with adequate thickness. A minimum of 95-percent of the wood strand shall have lengths between 2 and 10-inches, with a width and thickness between 1/16 and 1/2-inches. The mulch shall not contain resin, tannin, or other compounds in quantities that would be detrimental to plant life. Sawdust or wood shavings shall not be used as mulch. [Specification 9-14.4(4) from the <i>Standard Specifications for Road, Bridge, and Municipal Construction (WSDOT, 2016)</i>]

BMP C122: Nets and Blankets

Purpose

Erosion control nets and blankets are intended to prevent erosion and hold seed and mulch in place on steep slopes and in channels so that vegetation can become well established. In addition, some nets and blankets can be used to permanently reinforce turf to protect drainage ways during high flows.

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- compost;
- or blends of these.

Tackifier shall be plant-based, such as guar or alpha plantago, or chemical-based such as polyacrylamide or polymers.

Generally, mulches come in 40-50 pound bags. Seed and fertilizer are added at time of application.

Recycled cellulose may contain polychlorinated biphenyl (PCBs). Ecology recommends that products should be evaluated for PCBs prior to use.

Refer to [BMP C126: Polyacrylamide \(PAM\) for Soil Erosion Protection](#) for conditions of use. PAM shall not be directly applied to water or allowed to enter a water body.

Any mulch or tackifier product used shall be installed per the manufacturer's instructions.

Design and Installation Specifications

For mulch materials, application rates, and specifications, see [Table II-3.6: Mulch Standards and Guidelines](#). Consult with the local supplier or the local conservation district for their recommendations. Increase the application rate until the ground is 95% covered (i.e. not visible under the mulch layer). Note: Thickness may be increased for disturbed areas in or near sensitive areas or other areas highly susceptible to erosion.

Where the option of "Compost" is selected, it should be a coarse compost that meets the size gradations listed in [Table II-3.5: Size Gradations of Compost as Mulch Material](#) when tested in accordance with Test Method 02.02-B found in *Test Methods for the Examination of Composting and Compost (Thompson, 2001)*.

Table II-3.5: Size Gradations of Compost as Mulch Material

Sieve Size	Percent Passing
3"	100%
1"	90% - 100%
3/4"	70% - 100%
1/4"	40% - 100%

Mulch used within the ordinary high-water mark of surface waters should be selected to minimize potential flotation of organic matter. Composted organic materials have higher specific gravities (densities) than straw, wood, or chipped material. Consult the Hydraulic Permit Authority (HPA) for mulch mixes if applicable.

Maintenance Standards

The thickness of the mulch cover must be maintained.

Any areas that experience erosion shall be remulched and/or protected with a net or blanket. If the erosion problem is drainage related, then the problem shall be fixed and the eroded area remulched.

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BMP C140: Dust Control

Purpose

Dust control prevents wind transport of dust from disturbed soil surfaces onto roadways, drainage ways, and surface waters.

Conditions of Use

Use dust control in areas (including roadways) subject to surface and air movement of dust where on-site or off-site impacts to roadways, drainage ways, or surface waters are likely.

Design and Installation Specifications

- Vegetate or mulch areas that will not receive vehicle traffic. In areas where planting, mulching, or paving is impractical, apply gravel or landscaping rock.
- Limit dust generation by clearing only those areas where immediate activity will take place, leaving the remaining area(s) in the original condition. Maintain the original ground cover as long as practical.
- Construct natural or artificial windbreaks or windscreens. These may be designed as enclosures for small dust sources.
- Sprinkle the site with water until the surface is wet. Repeat as needed. To prevent carryout of mud onto the street, refer to [BMP C105: Stabilized Construction Access](#) and [BMP C106: Wheel Wash](#).
- Irrigation water can be used for dust control. Irrigation systems should be installed as a first step on sites where dust control is a concern.
- Spray exposed soil areas with a dust palliative, following the manufacturer's instructions and cautions regarding handling and application. Used oil is prohibited from use as a dust suppressant. Local governments may approve other dust palliatives such as calcium chloride or PAM.
- PAM ([BMP C126: Polyacrylamide \(PAM\) for Soil Erosion Protection](#)) added to water at a rate of 0.5 pounds per 1,000 gallons of water per acre and applied from a water truck is more effective than water alone. This is due to increased infiltration of water into the soil and reduced evaporation. In addition, small soil particles are bonded together and are not as easily transported by wind. Adding PAM may reduce the quantity of water needed for dust control. Note that the application rate specified here applies to this BMP, and is not the same application rate that is specified in [BMP C126: Polyacrylamide \(PAM\) for Soil Erosion Protection](#), but the downstream protections still apply.

Refer to [BMP C126: Polyacrylamide \(PAM\) for Soil Erosion Protection](#) for conditions of use. PAM shall not be directly applied to water or allowed to enter a water body.

- Contact your local Air Pollution Control Authority for guidance and training on other dust control measures. Compliance with the local Air Pollution Control Authority constitutes

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precipitation or dry periods may be necessary to ensure that the outflow relationship covers the range of modeled flows.

Ecology acknowledges that it can be challenging to determine the location(s) of flows to and from wetlands. In some cases, there will be a clear channel that is the source of the inflows and outflows, while in others, the water may disperse over a wide area. An alternative would be to gather nearly continuous (every 15 minute) rainfall data along with wetland stage data (hydroperiod monitoring) and adjust the storage and discharge rate within the model using these data. If the flow data or estimation in the model are not available, assume there is no surface outflow for the wetland (closed depression).

Chapter 8 of *Wetlands and Urbanization, Implications for the Future (Azous and Horner, 1997)* indicates that a complete wetland water balance includes precipitation, evapotranspiration, surface inflow, surface outflow, groundwater exchange, and change in wetland storage using a tipping-bucket gage and continuous flow measurements. The wetland assessment as part of this Method 1 needs to consider the more protective approach to develop that relationship. A scientist (e.g. wetland scientist or hydrologist) may determine that the groundwater flow is a significant characteristic of the outflow of the system. In this case the project proponent may need to determine the groundwater regime of the system.

Model Construction and Simulation

The project proponent should develop a stage-storage-discharge (SSD) table that represents the volume of water that ponds in the wetland and the flow rate of water that discharges from the wetland at a given stage.

Having a reliable SSD table that represents the wetland is essential to evaluate the effects of development in the model. Wetland bathymetry and contour data by field measurement or using equations to represent the volume-area-depth relations of wetlands and wetland flow monitoring data are critical to develop the SSD table for the wetland.

In the absence of actual wetland flow monitoring data, it may be possible to develop a SSD table for the wetland by combining the model simulated flows with the field data obtained on the wetland WLF (hydroperiod monitoring) data. This would require an iterative modeling process. The modeling iterations would involve manually changing the discharge rates in the SSD table until the resulting simulated WLF approach WLF from the field monitoring data. The project proponent or modeler should provide the details of how this estimated in its hydrologic assessment report, so that it can be reviewed by the local jurisdiction.

With an SSD table, the following are necessary for the model simulation to evaluate the discharge of development in the model and determine compliance with the Method 1 Wetland Hydroperiod Protection criteria.

- Pre-project condition land uses and associated acreage for the entire contributing area that drains to the wetland.
- Post-project condition land uses and associated acreage for the entire contributing area that drains to the wetland.

compliance with this BMP.

- Use vacuum street sweepers.
- Remove mud and other dirt promptly so it does not dry and then turn into dust.
- Techniques that can be used for unpaved roads and lots include:
 - Lower speed limits. High vehicle speed increases the amount of dust stirred up from unpaved roads and lots.
 - Upgrade the road surface strength by improving particle size, shape, and mineral types that make up the surface and base materials.
 - Add surface gravel to reduce the source of dust emission. Limit the amount of fine particles (those smaller than .075 mm) to 10 to 20 percent.
 - Use geotextile fabrics to increase the strength of new roads or roads undergoing reconstruction.
 - Encourage the use of alternate, paved routes, if available.
 - Apply chemical dust suppressants using the admix method, blending the product with the top few inches of surface material. Suppressants may also be applied as surface treatments.
 - Limit dust-causing work on windy days.
 - Pave unpaved permanent roads and other trafficked areas.

Maintenance Standards

Respray area as necessary to keep dust to a minimum.

BMP C150: Materials on Hand

Purpose

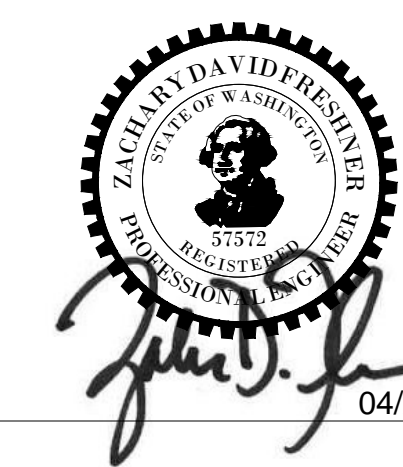
Keep quantities of erosion prevention and sediment control materials on the project site at all times to be used for regular maintenance and emergency situations such as unexpected heavy rains. Having these materials on-site reduces the time needed to replace existing or implement new BMPs when inspections indicate that existing BMPs are not meeting the Construction SWPPP requirements. In addition, contractors can save money by buying some materials in bulk and storing them at their office or yard.

Conditions of Use

- Construction projects of any size or type can benefit from having materials on hand. A small commercial development project could have a roll of plastic and some gravel available for immediate protection of bare soil and temporary berm construction. A large earthwork project, such as highway construction, might have several tons of straw, several rolls of plastic, flexible



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AMBROSE PROPERTY GROUP

PROJECT PENINSULA

WEDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

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Project Number:	763838
Scale:	AS SHOWN
Drawn By:	HS
Checked By:	CG
Date:	04/24/2025
Issue:	FOR PERMIT

Drawing Title:
SWPPP DETAILS

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2019 Stormwater Management Manual for Western Washington
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Figure II-3.8: Concrete Washout Area with Straw Bales

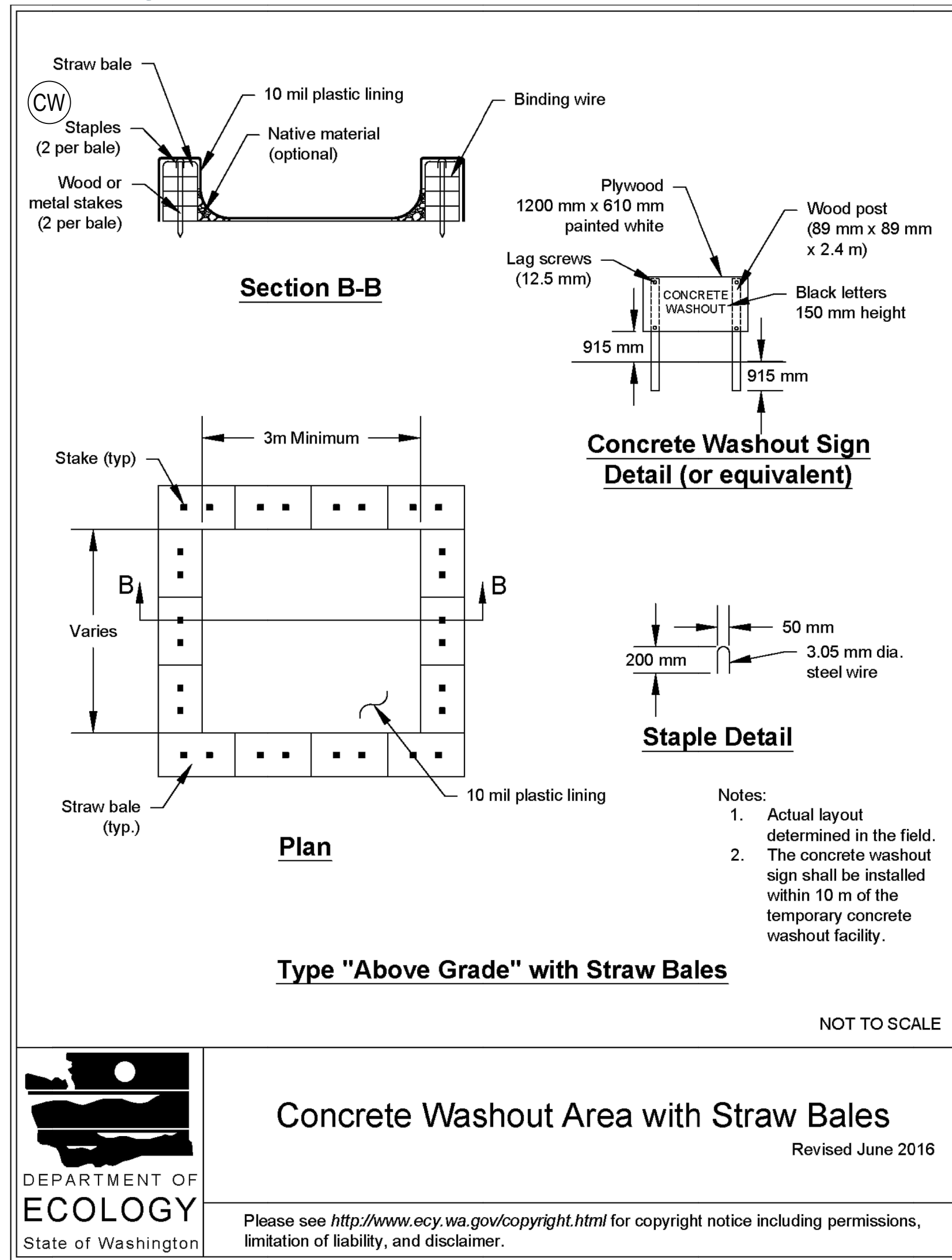
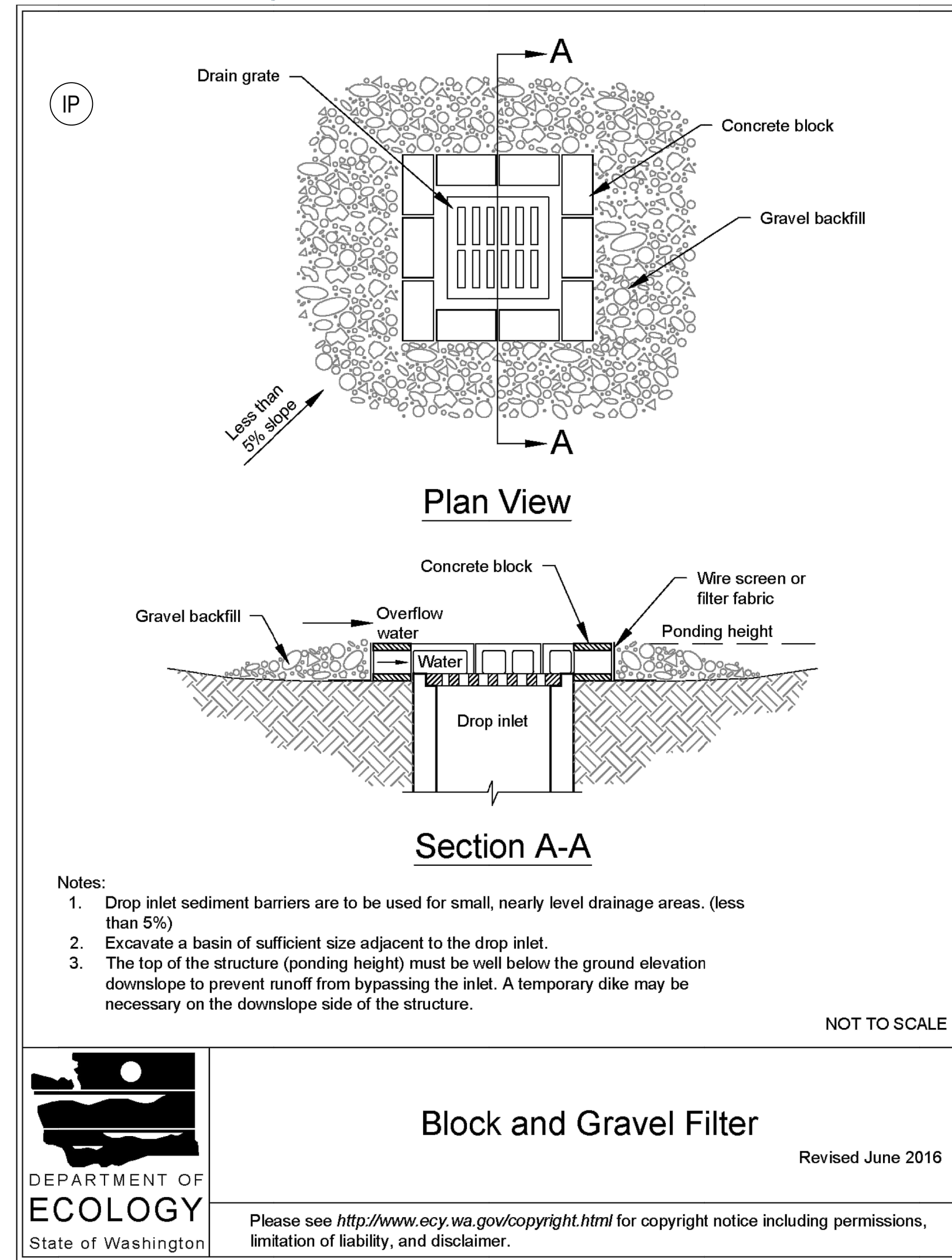


Figure II-3.17: Block and Gravel Filter



Construction SWPPP Narrative

The author of the Construction SWPPP should evaluate the following subject areas for inclusion in the Construction SWPPP narrative. The subject areas below are not an outline for the Construction SWPPP narrative. Not all items listed below are applicable to all construction projects. The author of the Construction SWPPP should ensure that the applicable sections are addressed.

- General Information on the Existing Site and Project
 - Project description: Describe the nature and purpose of the construction project. Include the total size of the area, any increase in existing impervious area; the total area expected to be disturbed by clearing, grading, excavation or other construction activities, including off-site borrow and fill areas; and the volumes of grading cut and fill that are proposed.
 - Existing site conditions: Describe the existing topography, vegetation, and drainage. Include a description of any structures or development on the parcel including the area of existing impervious surfaces.
 - Adjacent areas: Describe adjacent areas, including streams, lakes, wetlands, residential areas, and roads that the construction project might affect. Describe how upstream drainage areas may affect the site. Provide a description of the upstream drainage leading to the site and the downstream drainage leading from the site to the receiving body of water.
 - Critical areas: Describe areas on or adjacent to the site that are classified as critical areas. Critical areas that receive runoff from the site shall be described up to 1/4 mile away. The local permitting authority may increase the distance. Describe special requirements for working near or within these areas.
 - Soil: Describe the soil on the site, giving such information as soil names, mapping unit, erodibility, settleability, permeability, depth, depth to ground water, texture, and soil structure.
 - Potential erosion problem areas: Describe areas on the site that have potential erosion problems.
- 13 Elements: Describe how the Construction SWPPP addresses each of the 13 required elements (see I-3.4.2 MR2: [Construction Stormwater Pollution Prevention Plan \(SWPPP\)](#)). Include the type and location of BMPs used to satisfy the required element. Often using a combination of BMPs is the best way to satisfy required elements. If an element is not applicable to a project, provide a written justification for why it is not applicable.
 - If you propose to use a permanent BMP as temporary storage, provide the plan to return the BMP to the designed condition prior to leaving the site.
- Construction Schedule and Phasing: Describe the construction schedule. If the schedule extends into the wet season, describe what activities will continue during the wet season and how the transport of sediment from the construction site to receiving waters will be prevented. Describe the intended sequence and timing of construction activities and any proposed construction phasing.

Figure II-3.22: Silt Fence

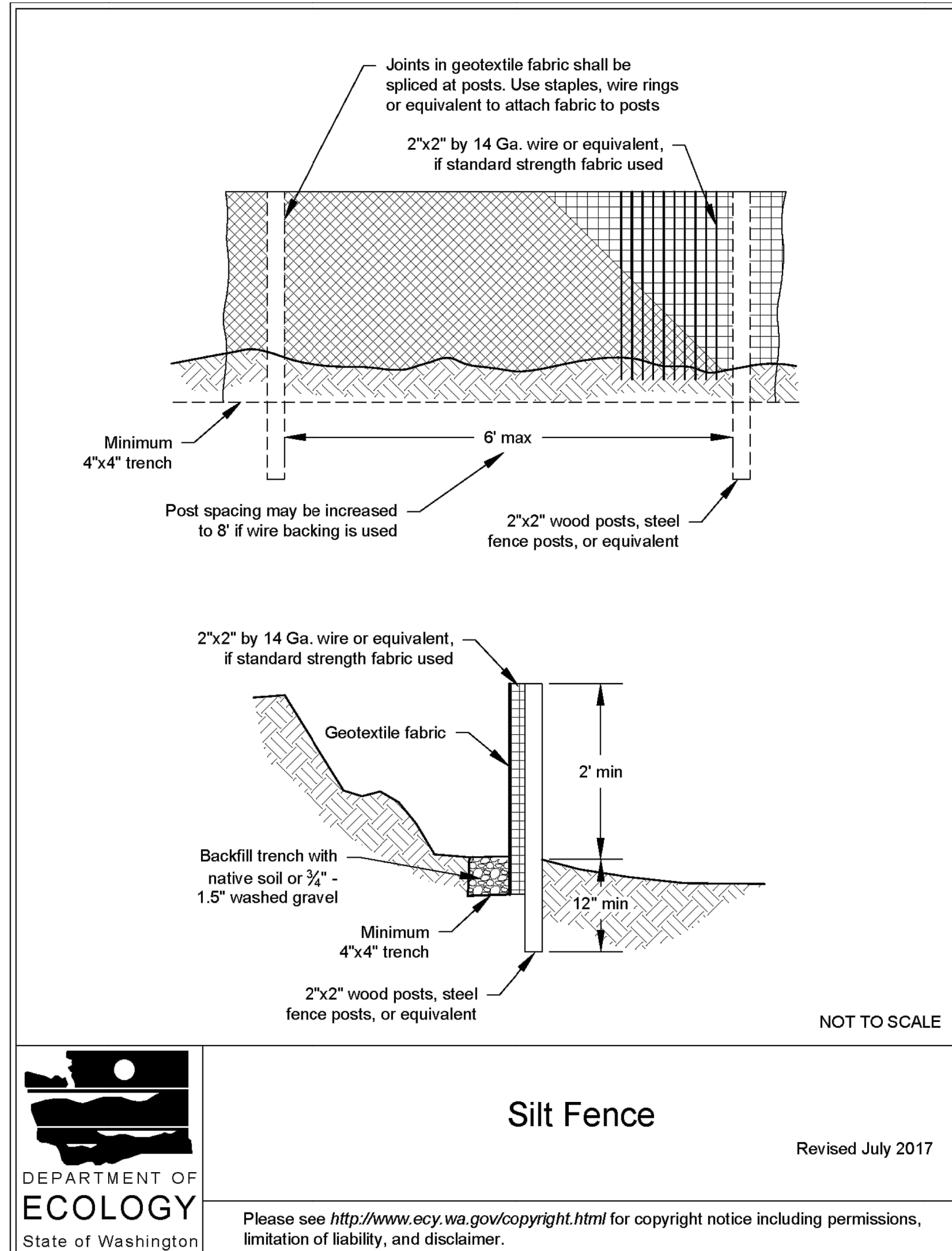


Figure II-3.2: Wheel Wash

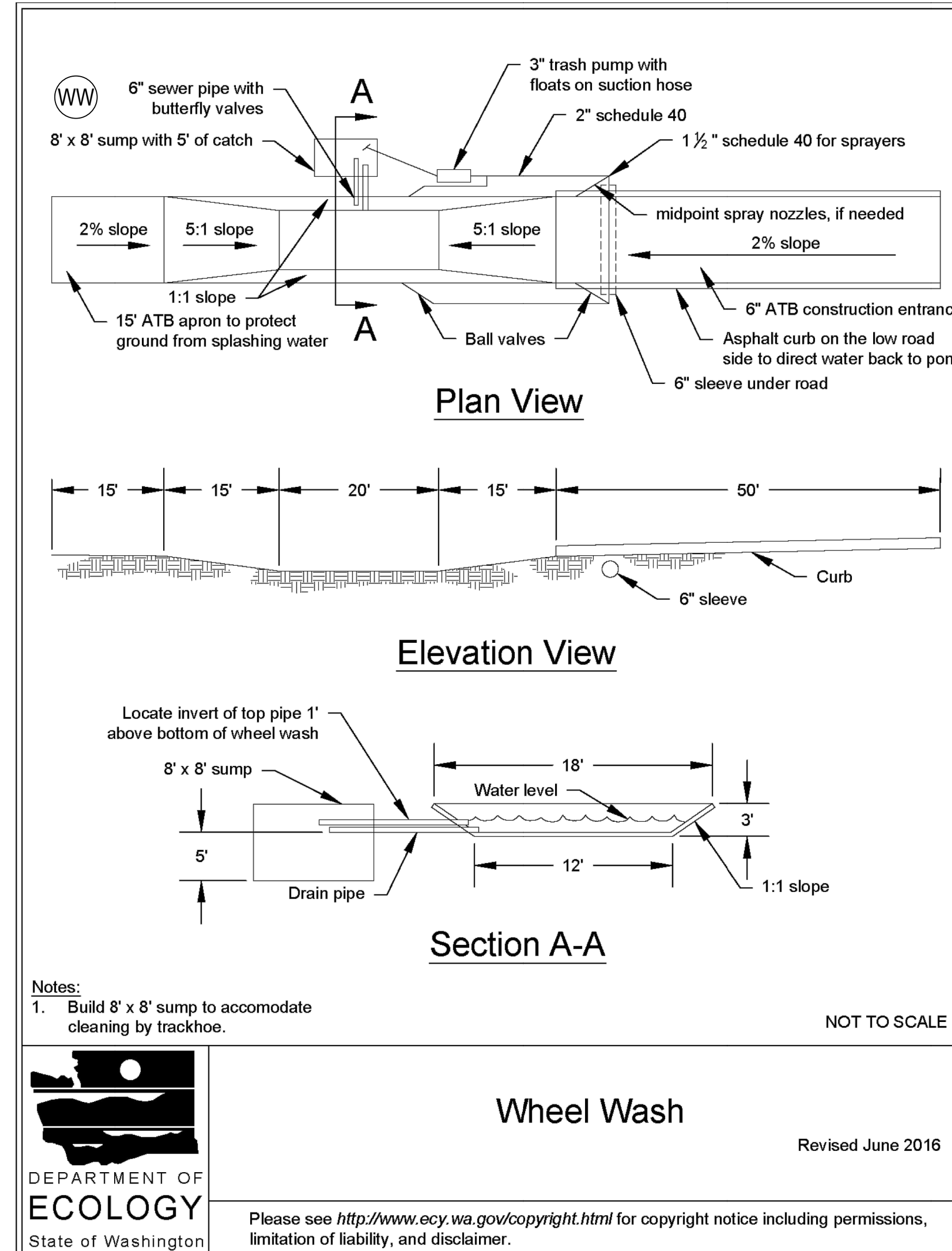
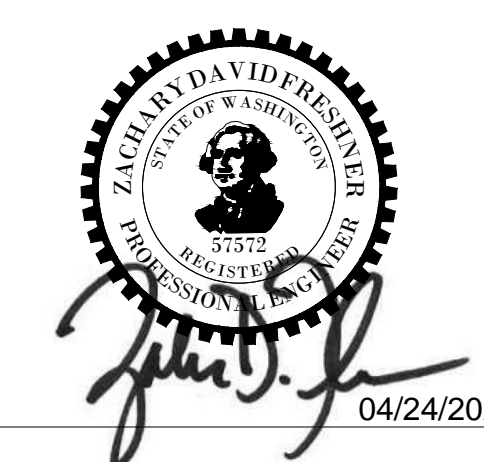
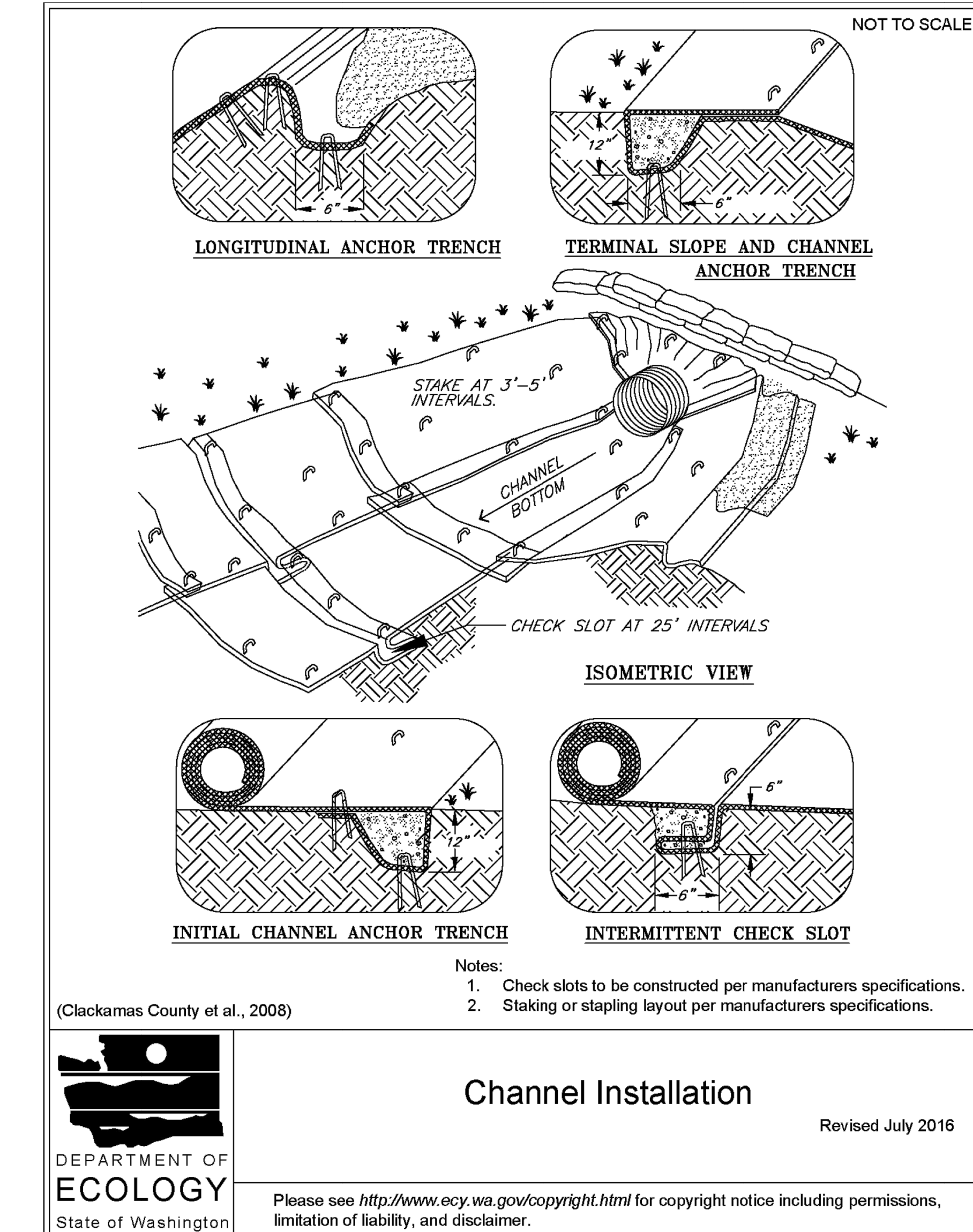


Figure II-3.3: Channel Installation



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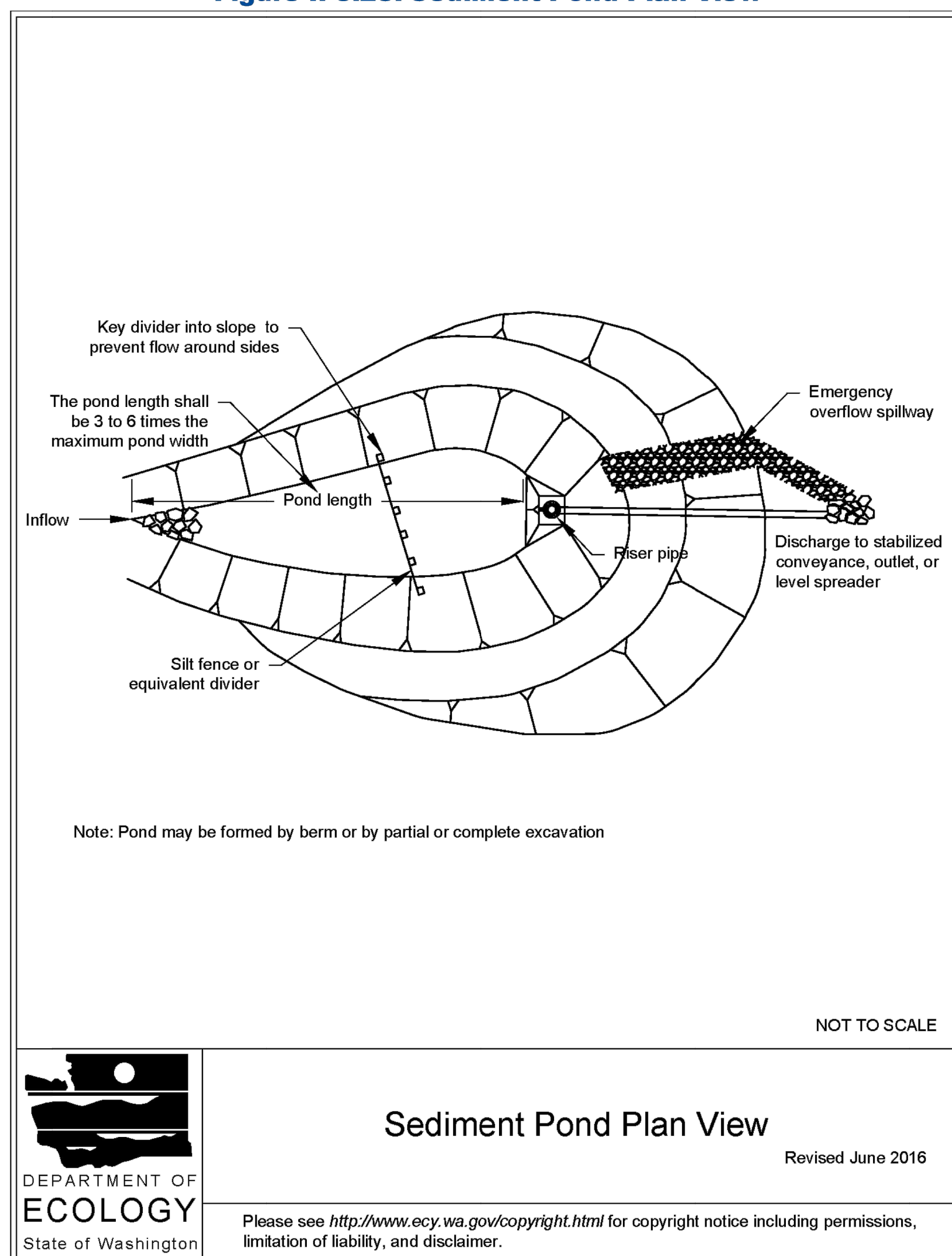
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

Revisions / Submissions		
Project Number:	763838	
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Figure II-3.28: Sediment Pond Plan View



OP

and staples.

- In the case of grass-lined ditches and swales, check dams and accumulated sediment shall be removed when the grass has matured sufficiently to protect the ditch or swale unless the slope of the swale is greater than 4 percent. The area beneath the check dams shall be seeded and mulched immediately after dam removal.

Maintenance Standards

- Inspect TSDs for performance and sediment accumulation during and after each rainfall that produces runoff. Remove sediment when it reaches one half the height of the TSD.
- Anticipate submergence and deposition above the TSD and erosion from high flows around the edges of the TSD. Immediately repair any damage or any undercutting of the TSD.

BMP C209: Outlet Protection

Purpose

Outlet protection prevents scour at conveyance outlets and minimizes the potential for downstream erosion by reducing the velocity of concentrated stormwater flows.

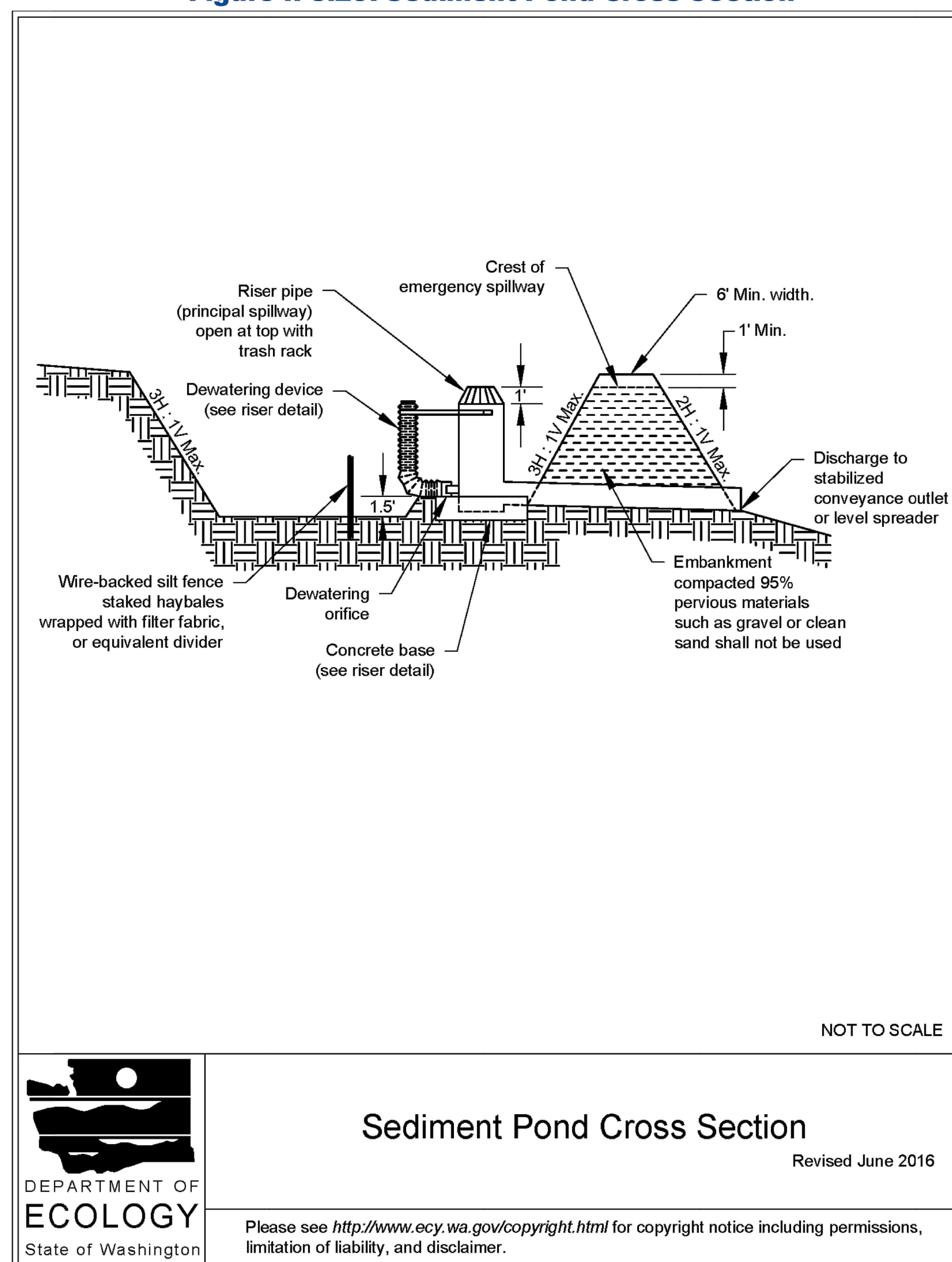
Conditions of Use

Use outlet protection at the outlets of all ponds, pipes, ditches, or other conveyances that discharge to a natural or manmade drainage feature such as a stream, wetland, lake, or ditch.

Design and Installation Specifications

- The receiving channel at the outlet of a pipe shall be protected from erosion by lining a minimum of 6 feet downstream and extending up the channel sides a minimum of 1-foot above the maximum tailwater elevation, or 1-foot above the crown, whichever is higher. For pipes larger than 18 inches in diameter, the outlet protection lining of the channel shall be four times the diameter of the outlet pipe.
- Standard wingwalls, tapered outlets, and paved channels should also be considered when appropriate for permanent culvert outlet protection ([WSDOT, 2015](#)).
- [BMP C122: Nets and Blankets](#) or [BMP C202: Riprap Channel Lining](#) provide suitable options for lining materials.
- With low flows, [BMP C201: Grass-Lined Channels](#) can be an effective alternative for lining material.
- The following guidelines shall be used for outlet protection with riprap:
 - If the discharge velocity at the outlet is less than 5 fps, use 2-inch to 8-inch riprap. Minimum thickness is 1-foot.
 - For 5 to 10 fps discharge velocity at the outlet, use 24-inch to 48-inch riprap. Minimum

Figure II-3.29: Sediment Pond Cross Section



thickness is 2 feet.

- For outlets at the base of steep slope pipes (pipe slope greater than 10 percent), use an engineered energy dissipator.
- Filter fabric or erosion control blankets should always be used under riprap to prevent scour and channel erosion. See [BMP C122: Nets and Blankets](#).
- Bank stabilization, bioengineering, and habitat features may be required for disturbed areas. This work may require a Hydraulic Project Approval (HPA) from the Washington State Department of Fish and Wildlife. See [I-2.11 Hydraulic Project Approvals](#).

Maintenance Standards

- Inspect and repair as needed.
- Add rock as needed to maintain the intended function.
- Clean energy dissipator if sediment builds up.

BMP C220: Inlet Protection

Purpose

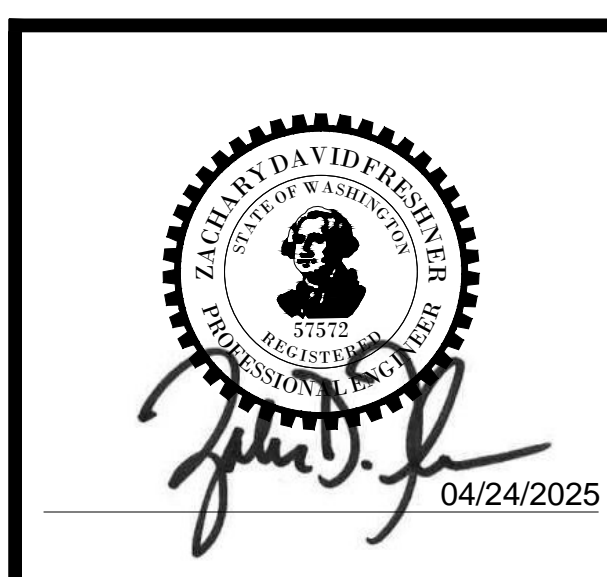
Inlet protection prevents coarse sediment from entering drainage systems prior to permanent stabilization of the disturbed area.

Conditions of Use

Use inlet protection at inlets that are operational before permanent stabilization of the disturbed areas that contribute runoff to the inlet. Provide protection for all storm drain inlets downslope and within 500 feet of a disturbed or construction area, unless those inlets are preceded by a sediment trapping BMP.

Also consider inlet protection for lawn and yard drains on new home construction. These small and numerous drains coupled with lack of gutters can add significant amounts of sediment into the roof drain system. If possible, delay installing lawn and yard drains until just before landscaping, or cap these drains to prevent sediment from entering the system until completion of landscaping. Provide 18-inches of sod around each finished lawn and yard drain.

[Table II-3.10: Storm Drain Inlet Protection](#) lists several options for inlet protection. All of the methods for inlet protection tend to plug and require a high frequency of maintenance. Limit contributing drainage areas for an individual inlet to one acre or less. If possible, provide emergency overflows with additional end-of-pipe treatment where stormwater ponding would cause a hazard.



AMBROSE PROPERTY GROUP
 PROJECT PENINSULA
 WEDGEWOOD DR.,
 PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

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Project Number:	763838
Scale:	AS SHOWN
Drawn By:	HS
Checked By:	CG
Date:	04/24/2025
Issue:	FOR PERMIT

Drawing Title:
SWPPP DETAILS

C5.6



3800 Corporate Exchange Dr., Suite 400
Columbus, OH 43231
Phone: 614.766.5500 Fax: 614.766.4828



04/24/2025

UTILITY LEGEND

EXISTING

REFER TO SURVEY FOR EXISTING FEATURES LEGEND

PROPOSED

- BUILDING
- CONCRETE CURB
- PAVEMENT WALK
- STORM SEWER LINE
- SANITARY SEWER LINE
- DOMESTIC WATER SERVICE LINE
- GAS SERVICE LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- FIRE LINE
- CATCH BASIN
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- CURB INLET
- CLEANOUT
- DOWNSPOUT
- ELECTRICAL TRANSFORMER PAD
- ELECTRICAL SWITCHGEAR PAD
- FIRE HYDRANT
- WATER VALVE
- FIRE DEPARTMENT CONNECTION

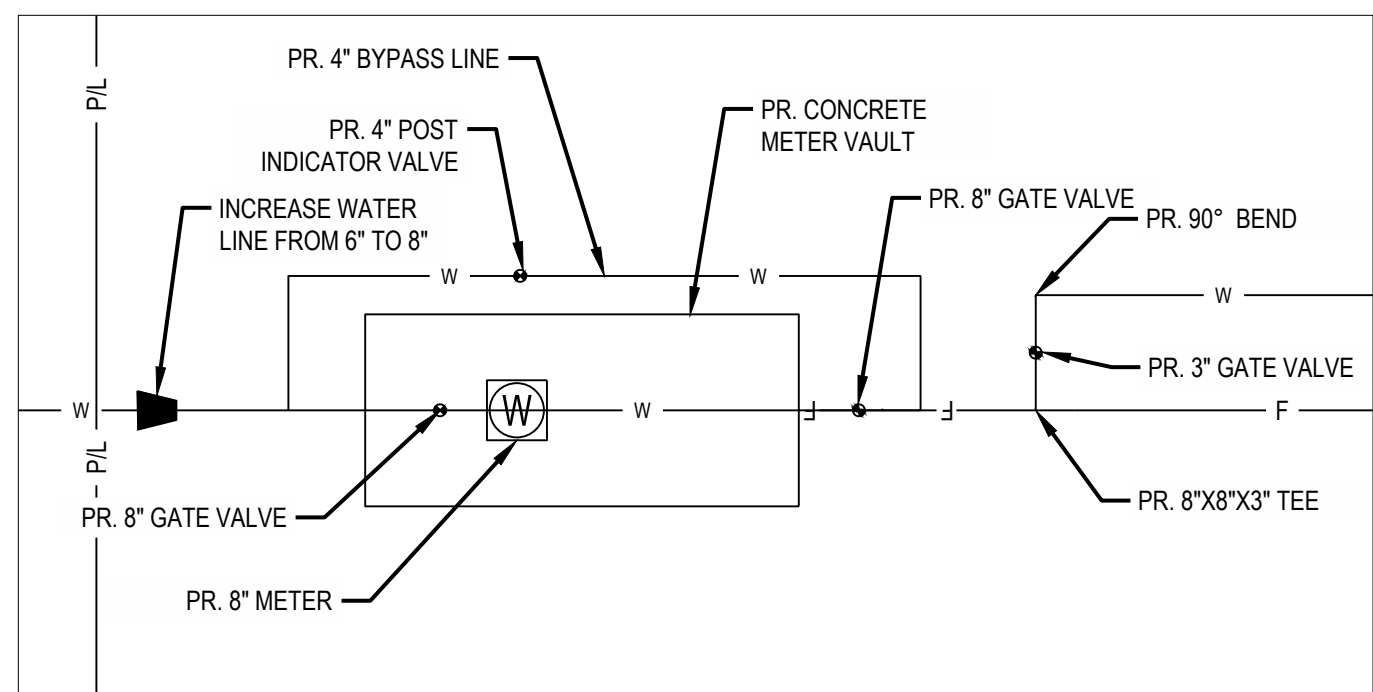
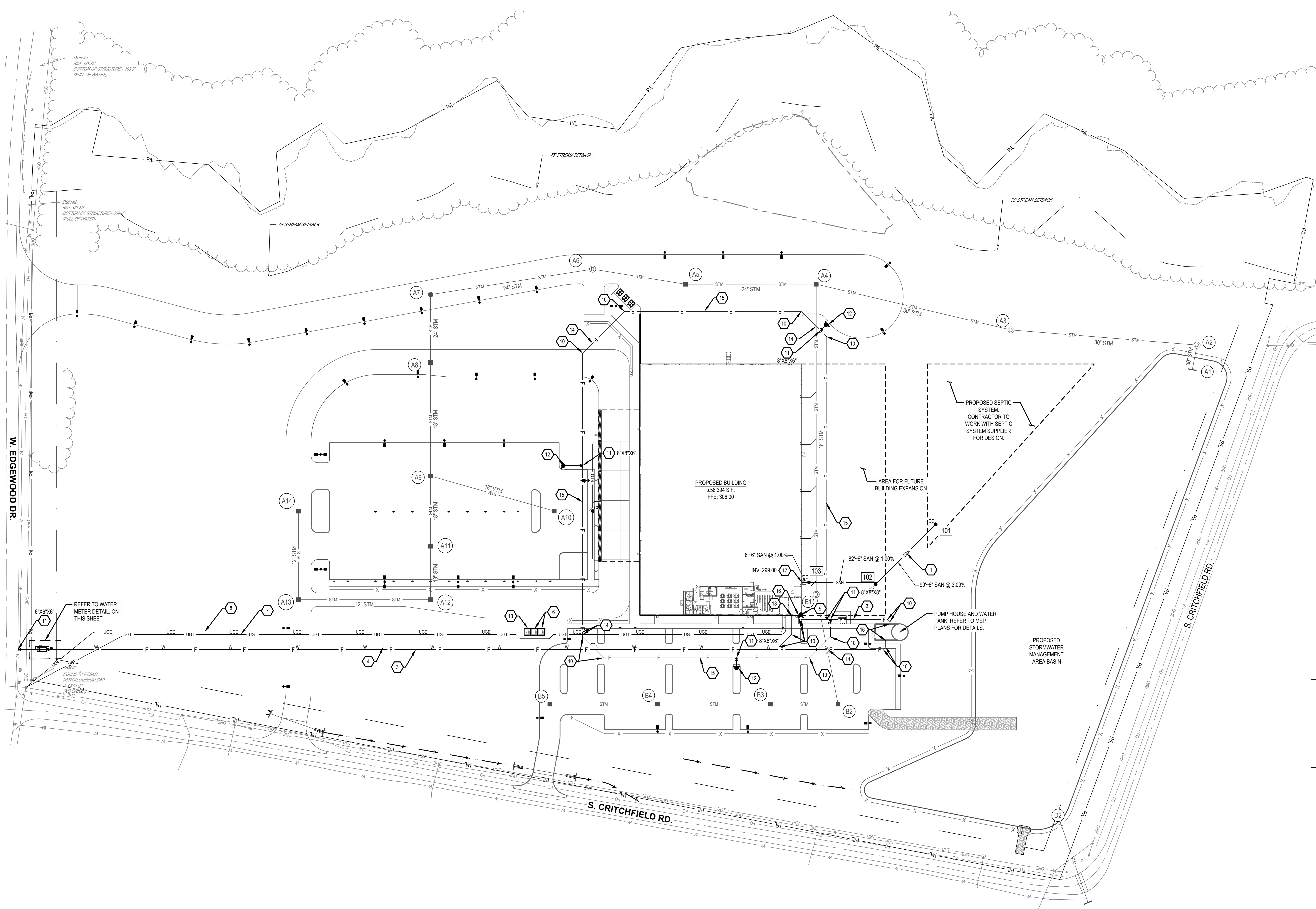
REFER TO SHEET C1.1 FOR GENERAL UTILITY NOTES
REFER TO SHEET C1.1 FOR UTILITY DETAILS

CODED NOTES:

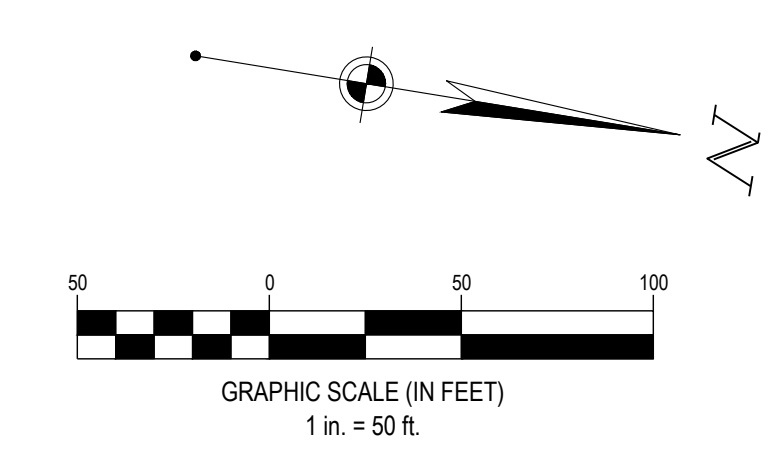
1. PROPOSED 6" SANITARY SERVICE.
2. PROPOSED 6" FIRE LOOP, SHOWN FOR REFERENCE ONLY. FINAL DESIGN TO BE COORDINATED WITH FIRE PROTECTION ENGINEER.
3. PROPOSED 8" FIRE WATER SERVICE, SHOWN FOR REFERENCE ONLY. FINAL DESIGN TO BE COORDINATED WITH FIRE PROTECTION ENGINEER.
4. PROPOSED 3" DOMESTIC WATER SERVICE.
5. PROPOSED WATER METER VAULT WITH 6" METER PER CITY OF PORT ANGELES (COPA) MASTER WATER METER STANDARD DETAIL. CONTRACTOR MUST SUBMIT SHOP DRAWING TO COPA PRIOR TO ORDERING.
6. PROPOSED ELECTRICAL TRANSFORMER.
7. PROPOSED UNDERGROUND ELECTRICAL SERVICE.
8. PROPOSED COMMUNICATION SERVICE. CONTRACTOR TO PROVIDE 4-4" CONDUITS.
9. PROPOSED FIRE DEPARTMENT CONNECTION.
10. PROPOSED 45" BEND.
11. PROPOSED TEE AND GATE VALVE. SEE PLAN FOR SIZE.
12. PROPOSED FIRE HYDRANT ASSEMBLY WITH 6" SERVICE LINE AND 6" GATE VALVE. MATERIALS AND INSTALLATION PER CITY OF PORT ANGELES STANDARDS.
13. PROPOSED ELECTRICAL SWITCHGEAR.
14. PROPOSED UTILITY CROSSING. MAINTAIN 18" VERTICAL SEPARATION BETWEEN UTILITIES.
15. PROPOSED 12" FIRE LOOP.
16. PROPOSED FIRE SERVICE CONNECTION. COORDINATE WITH MEP PLANS.
17. PROPOSED SANITARY CONNECTION. COORDINATE WITH MEP PLANS.
18. PROPOSED DOMESTIC WATER CONNECTION. COORDINATE WITH ARCHITECTURAL AND MEP PLANS.

SANITARY SEWER STRUCTURE SCHEDULE

NO.	STRUCTURE	RIM	INVERT
101	6" CO	298.15	295.05 (6") SE
102	6" CO	302.80	298.10 (6") NW
103	6" CO	305.87	296.92 (6") N 296.92 (6") S



WATER METER DETAIL
SCALE: 1"=5'



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions

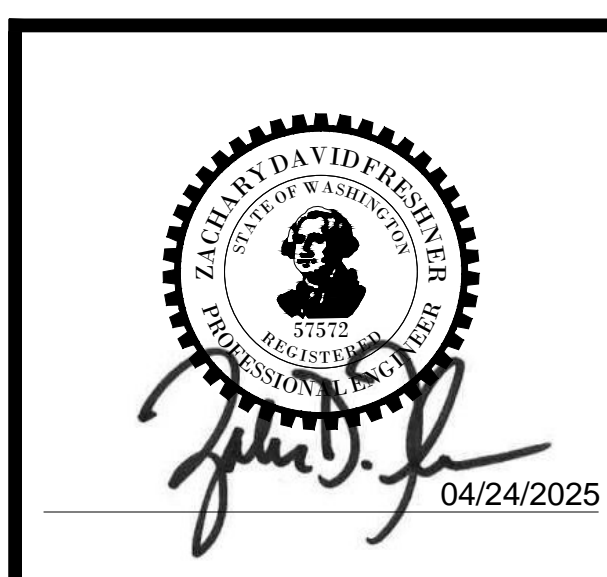
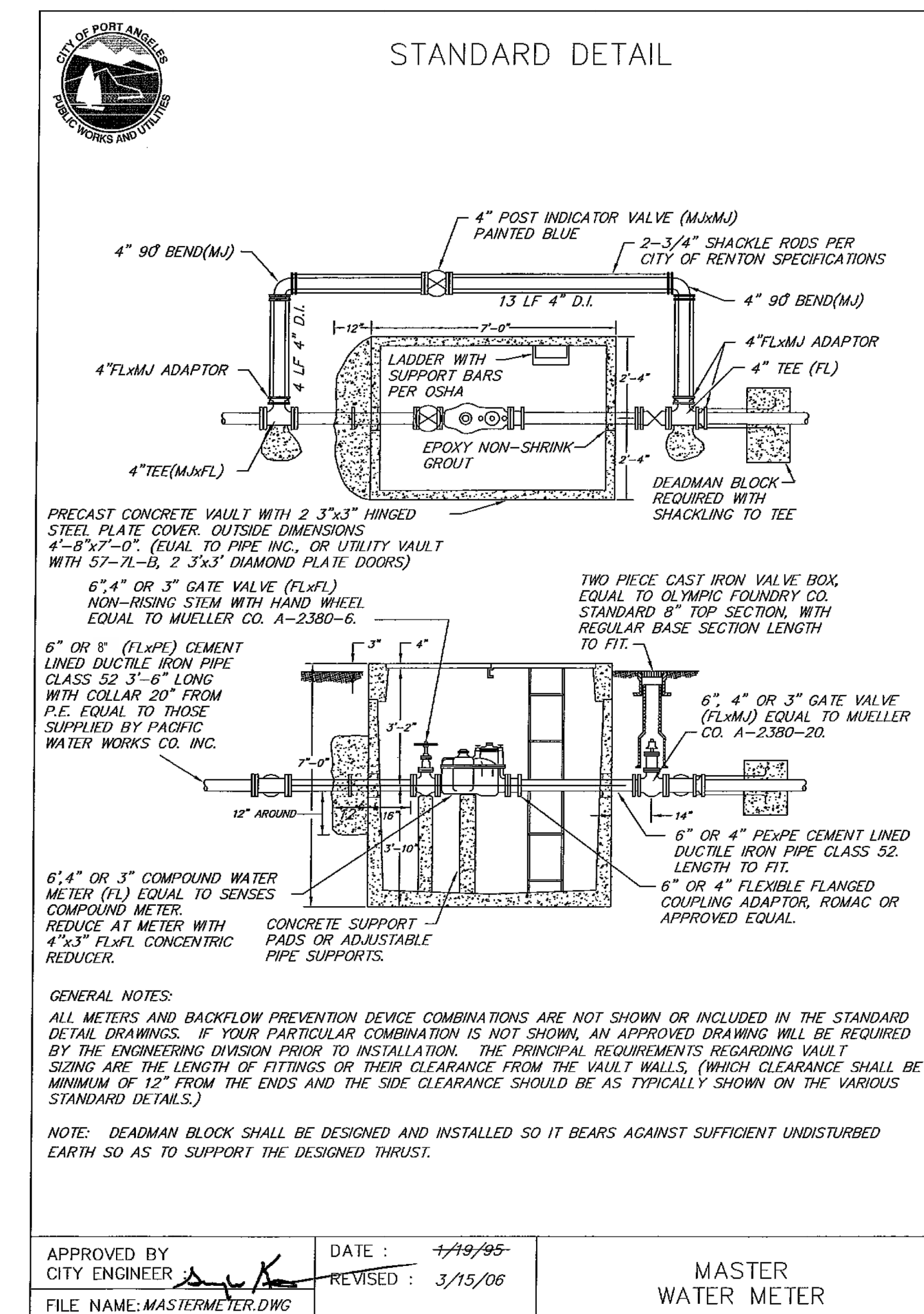
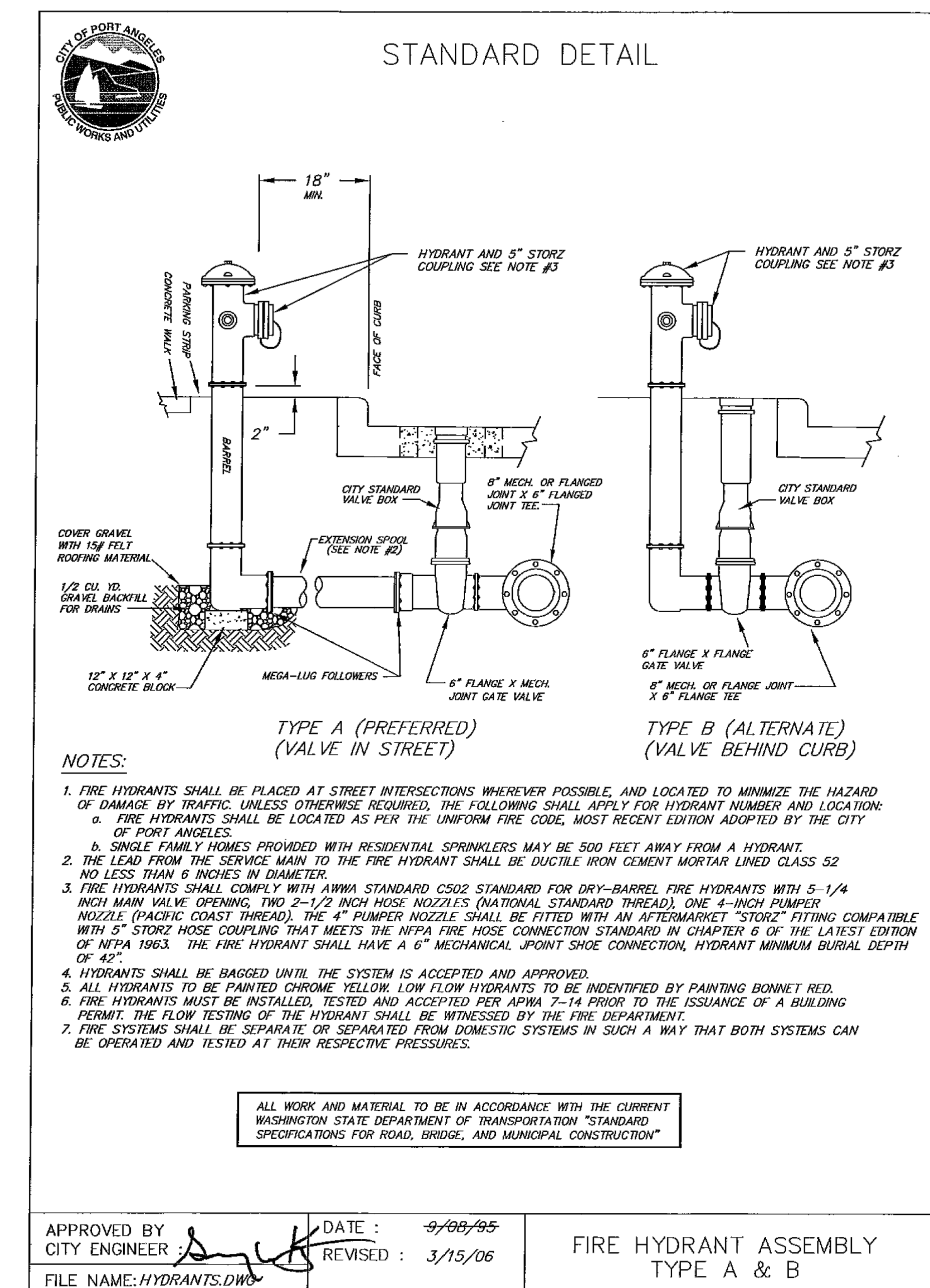
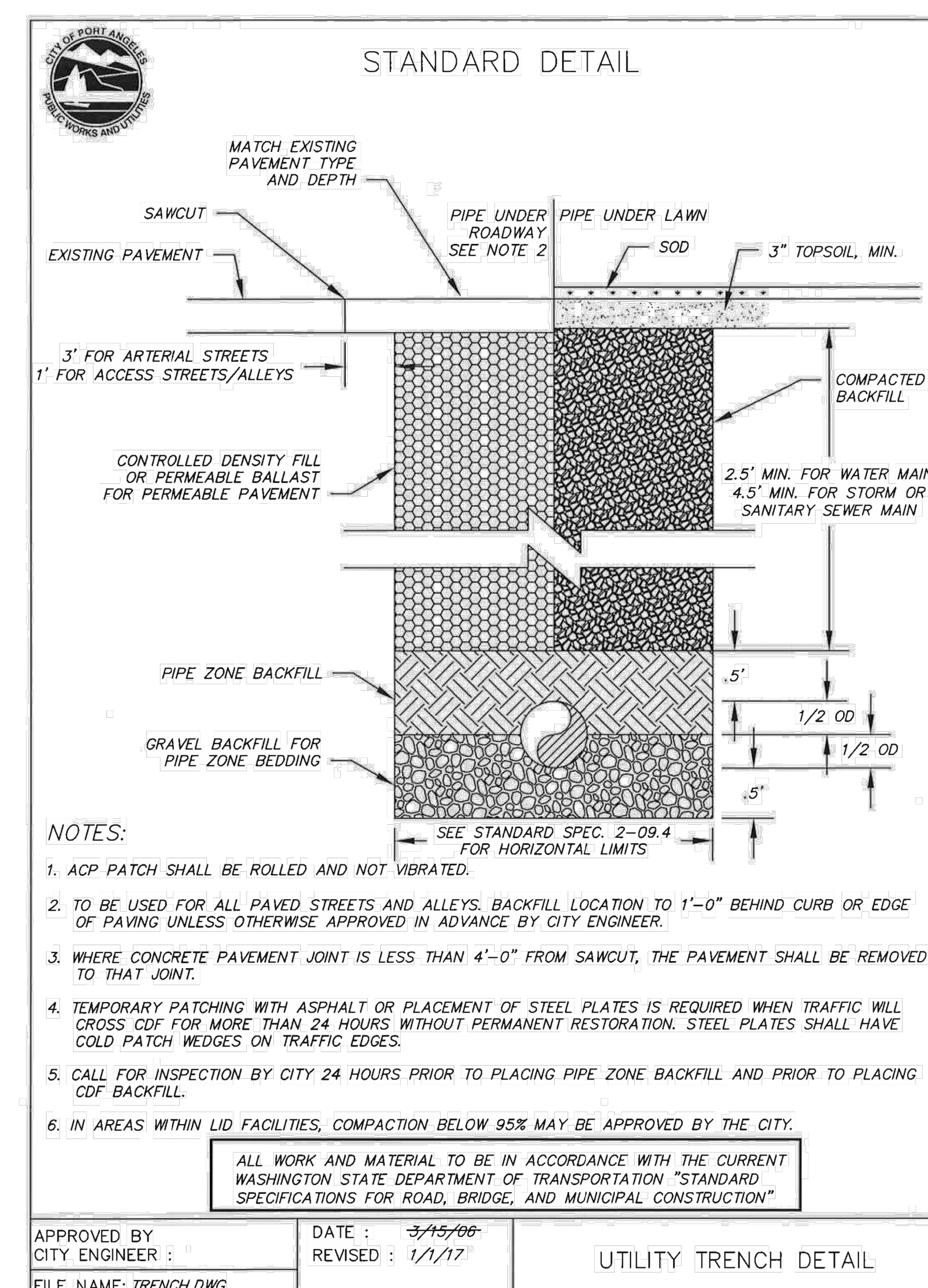
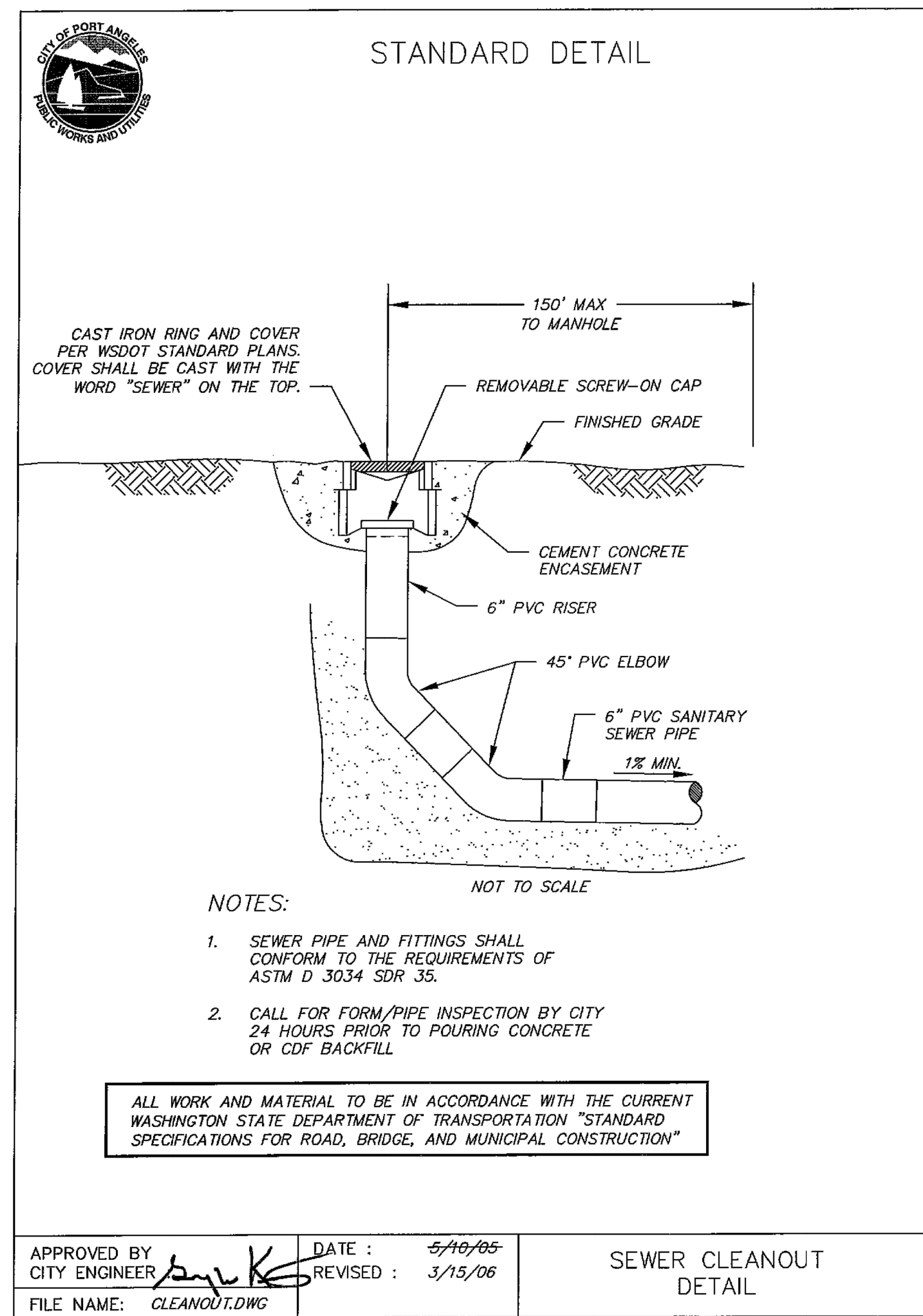
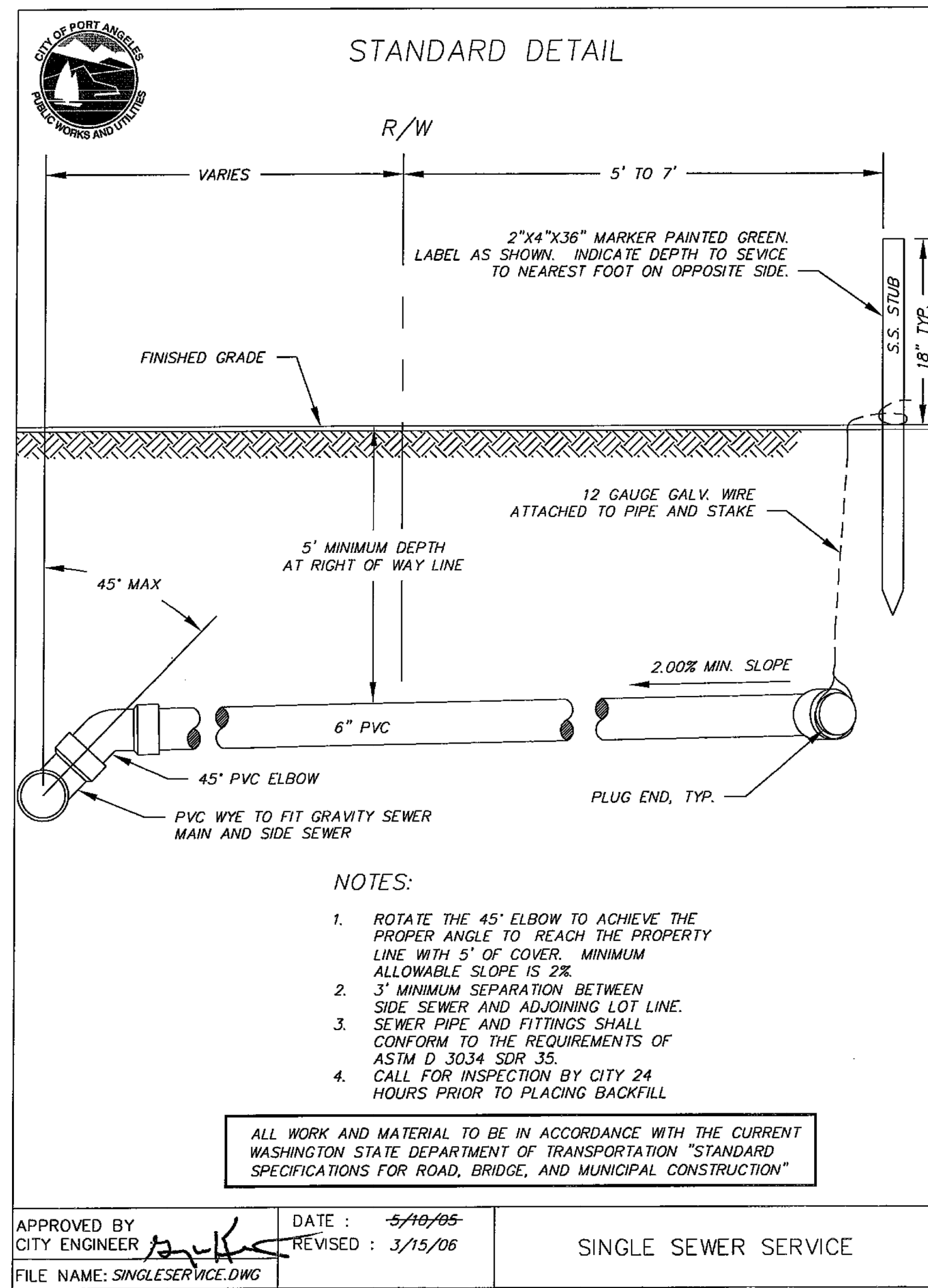
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	20250424

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Project Number: 763838
Scale: AS SHOWN
Drawn By: QSS
Checked By: CG
Date: 04/24/2025
Issue: FOR PERMIT

Drawing Title:
UTILITY PLAN

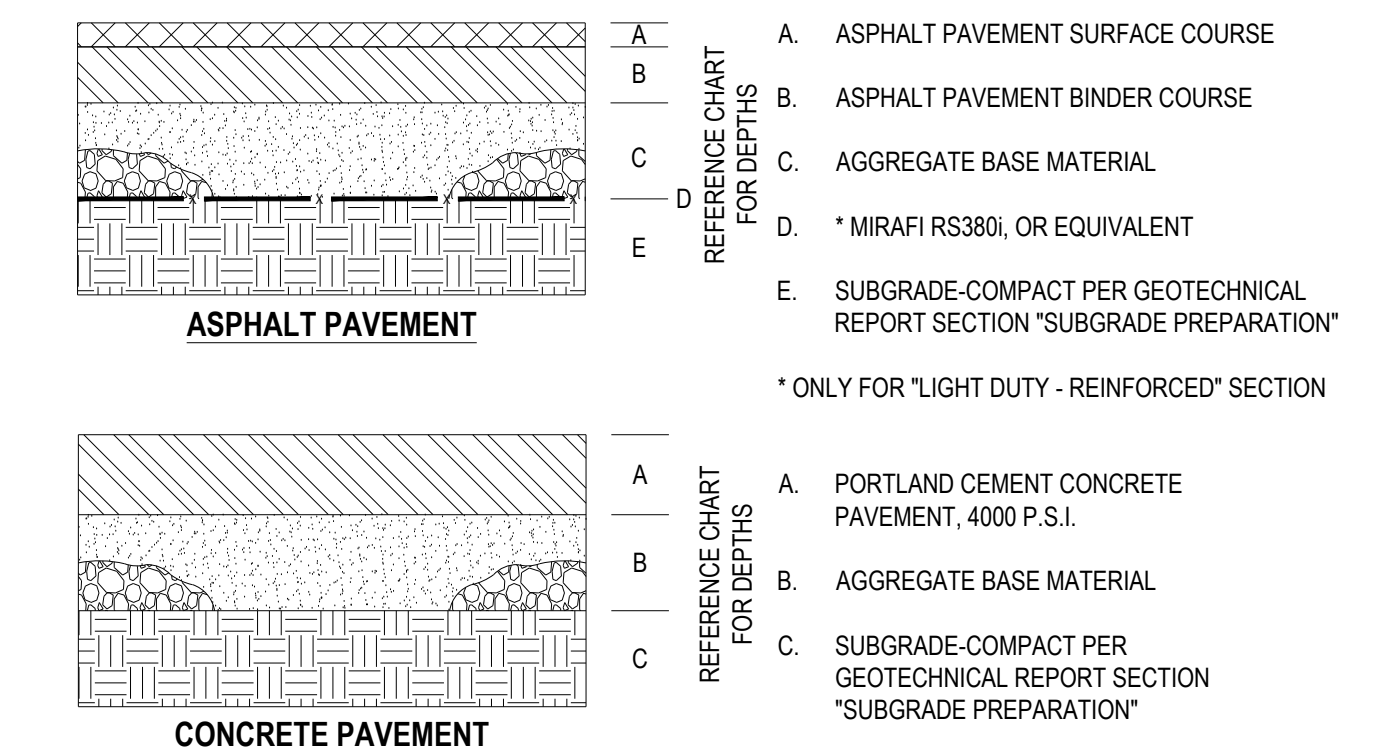
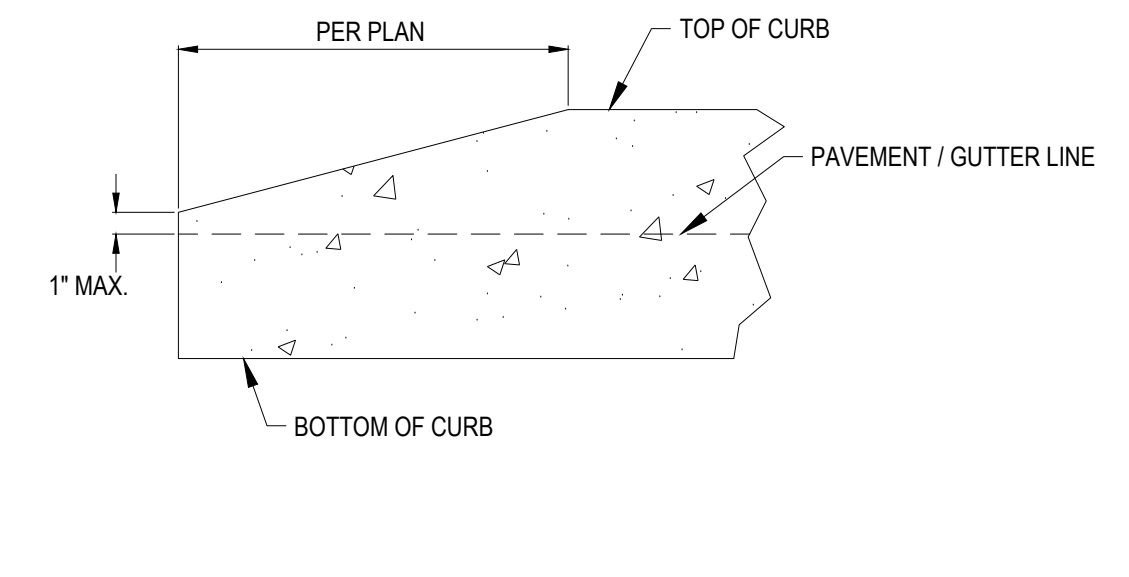
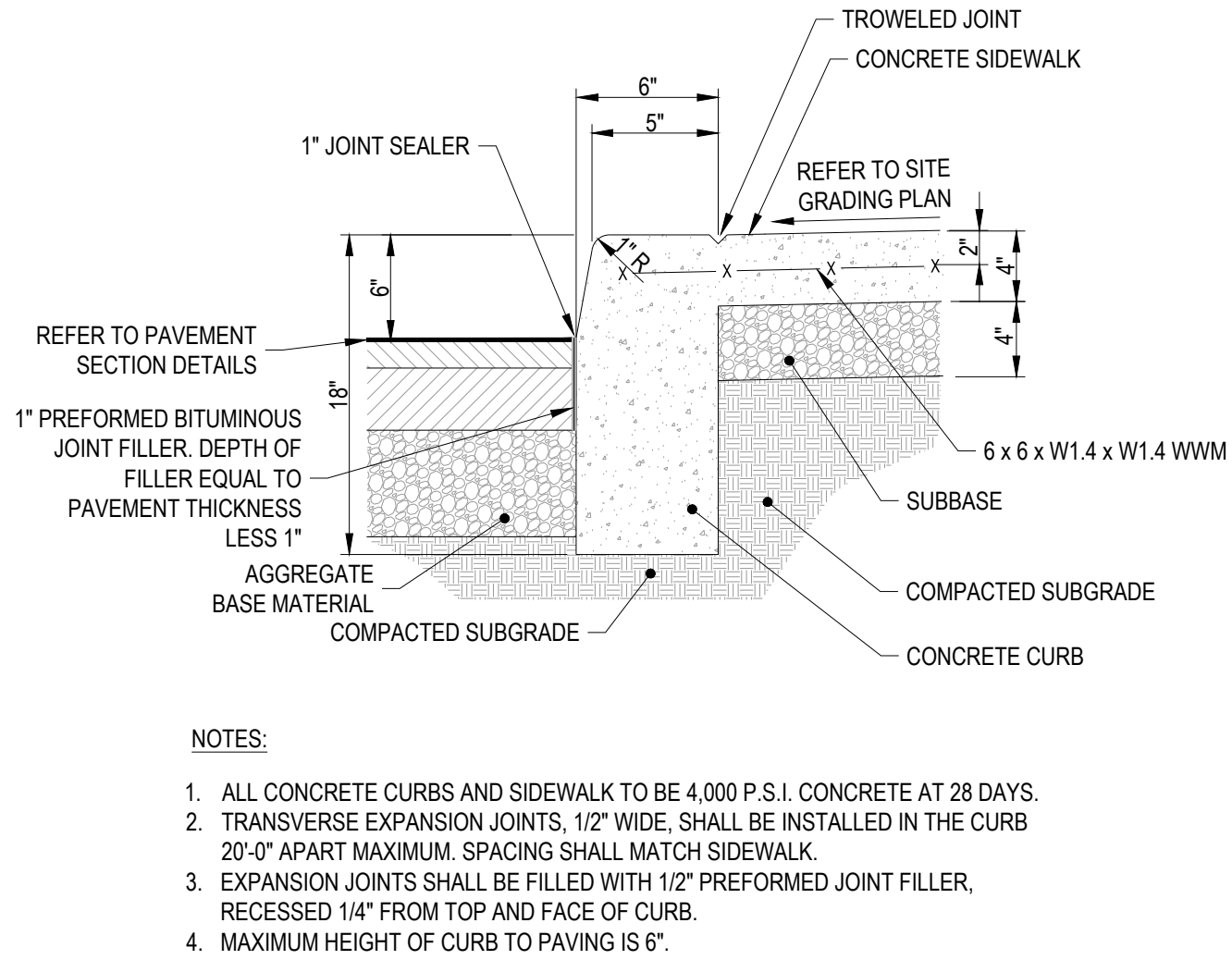
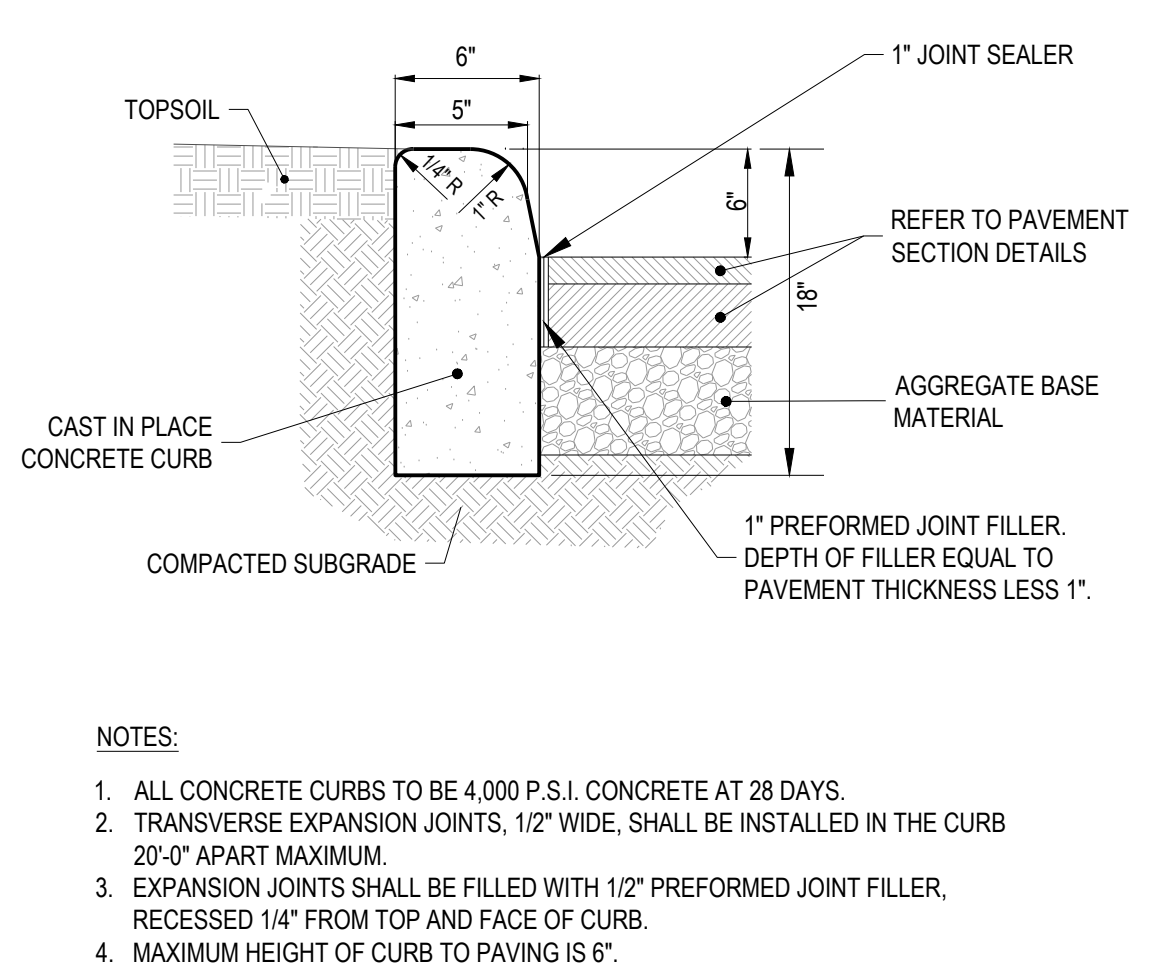
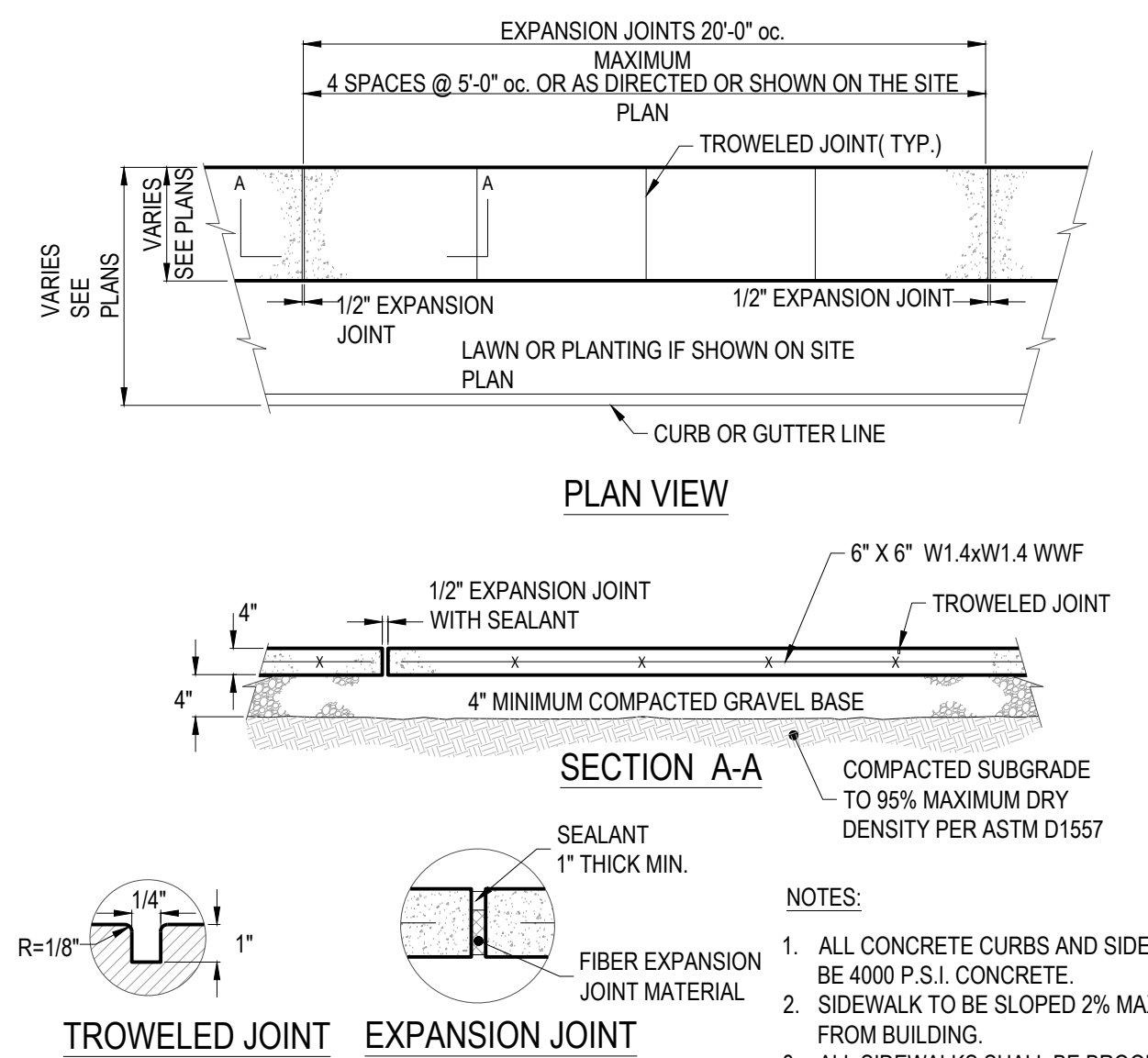
C6.0



AMBROSE PROPERTY GROUP
PROJECT PENINSULA
 WEDGEWOOD DR.,
 PORT ANGELES, WA 98363

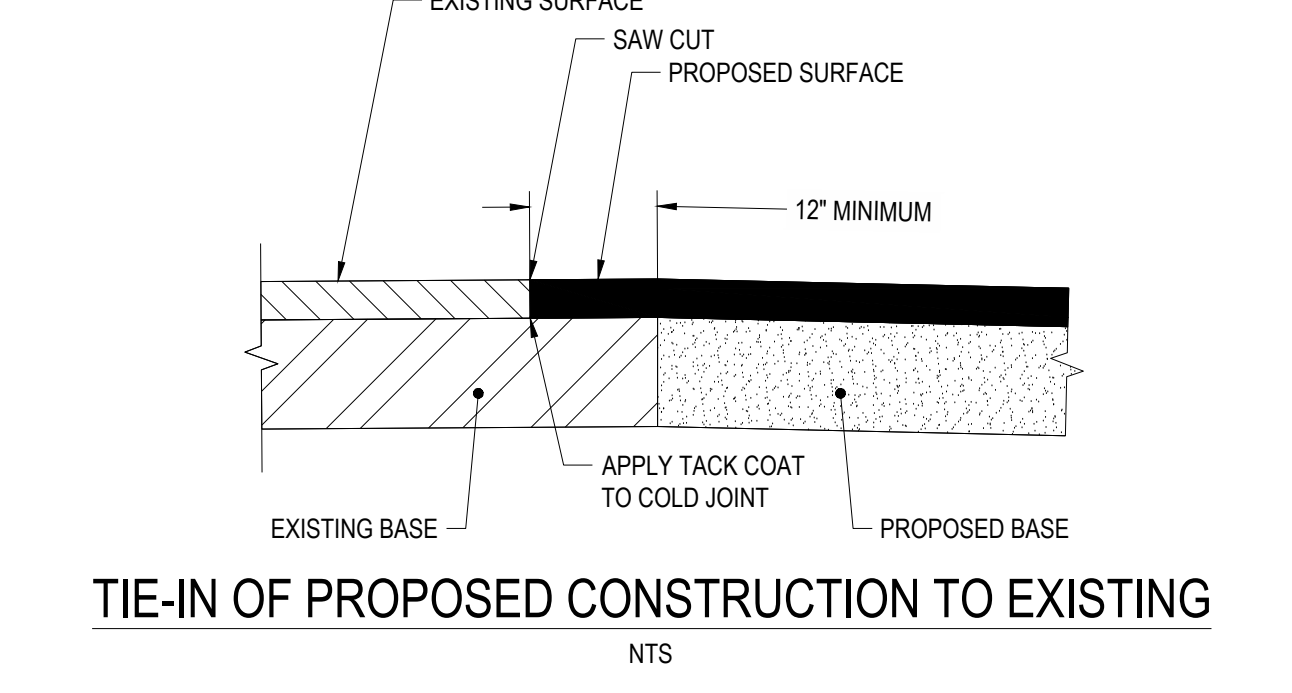
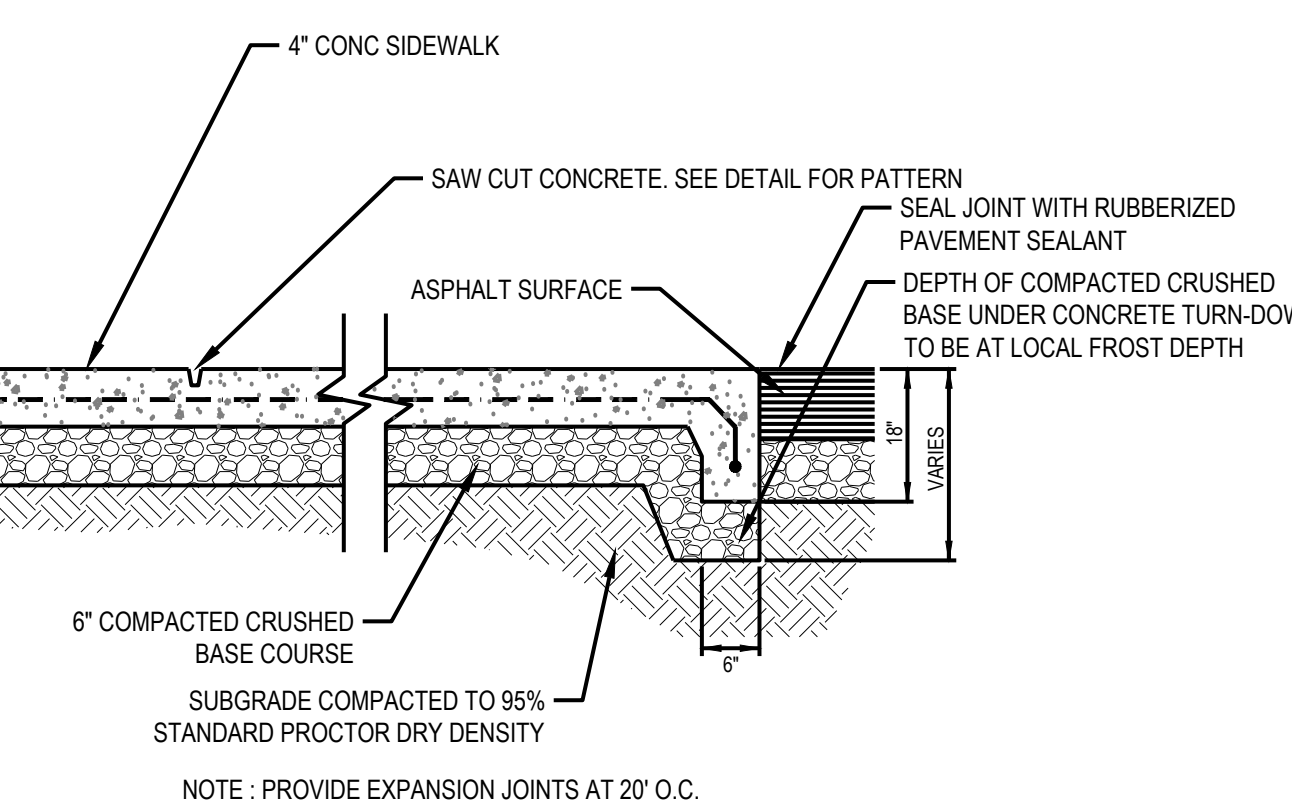
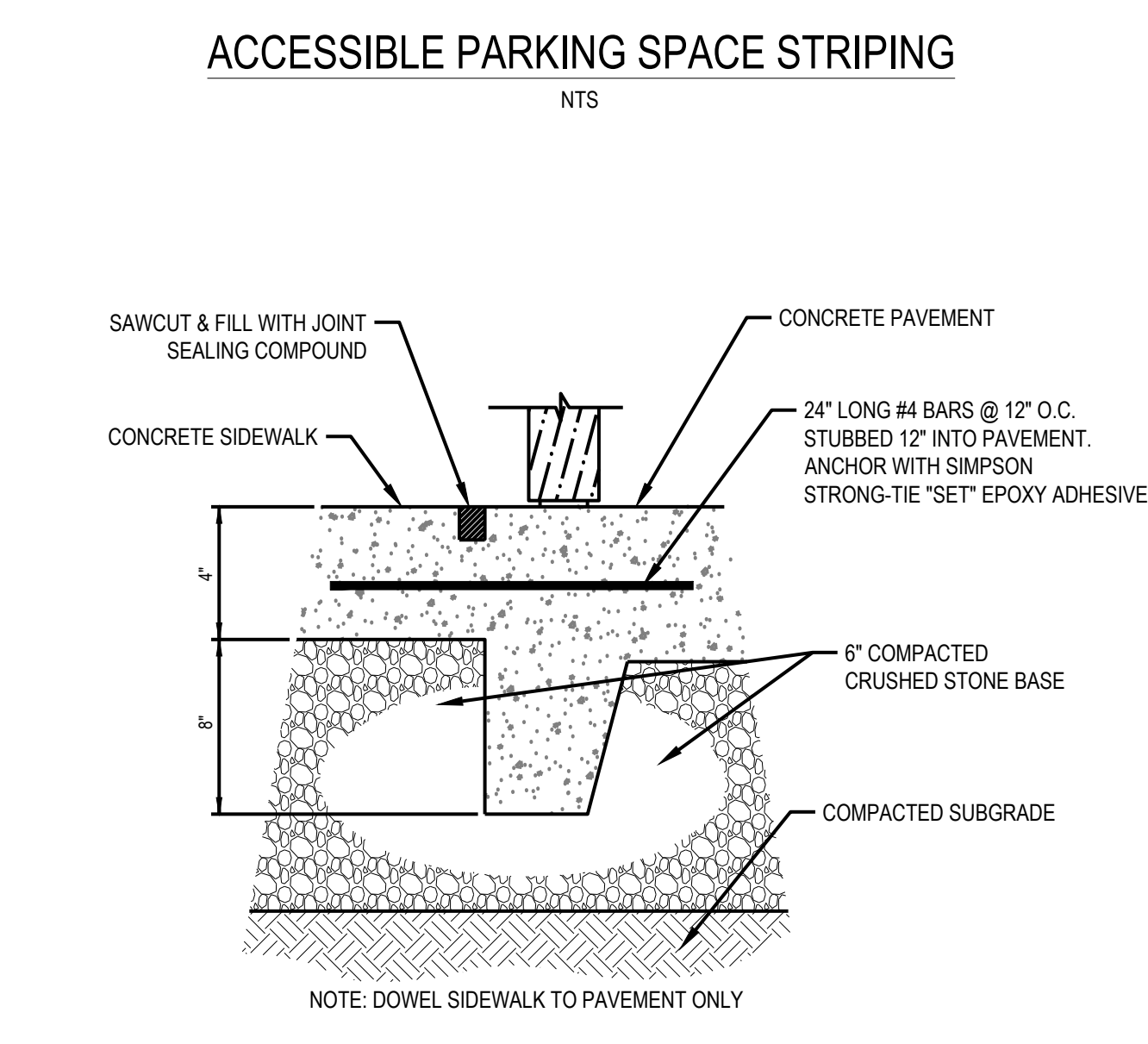
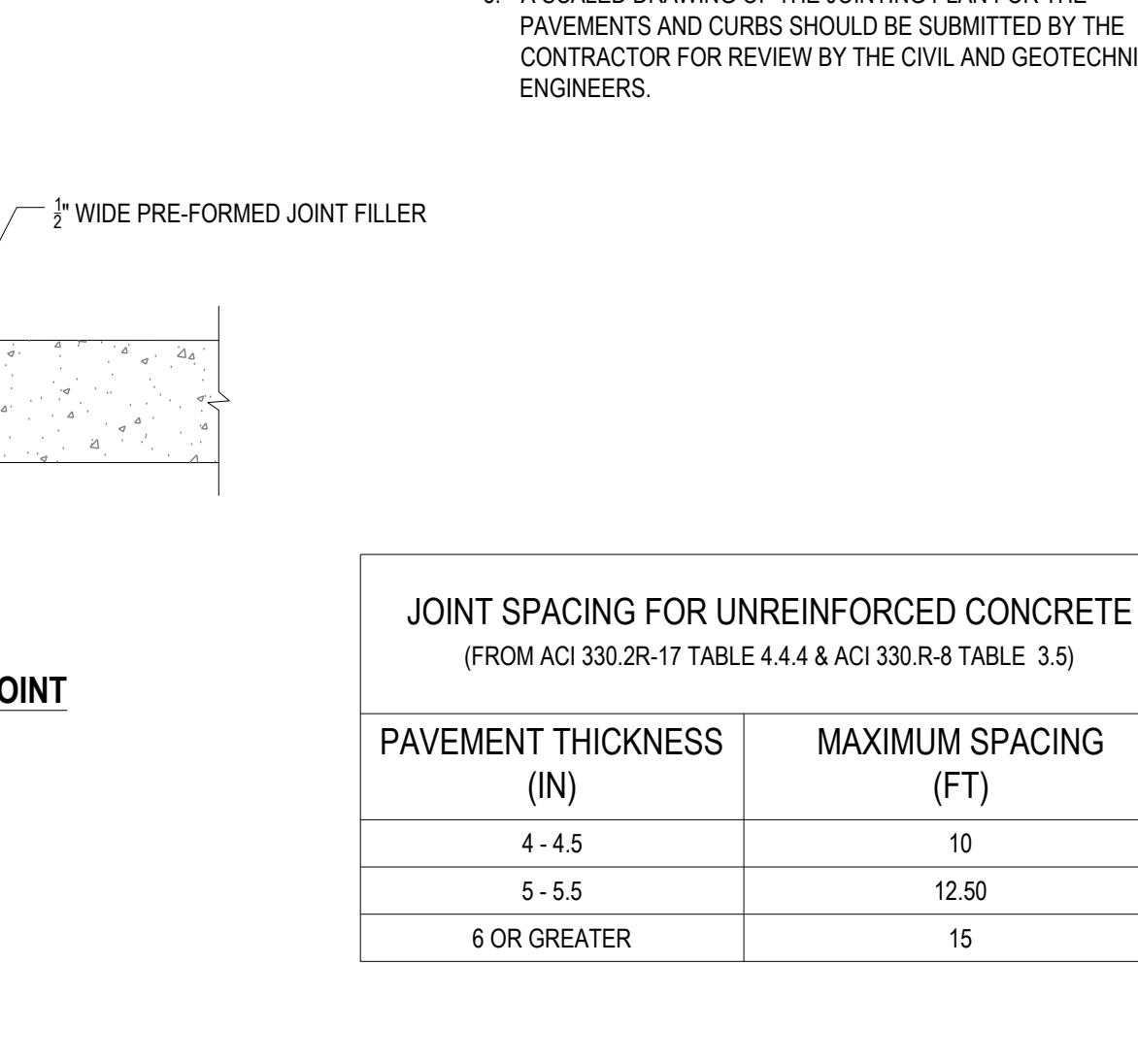
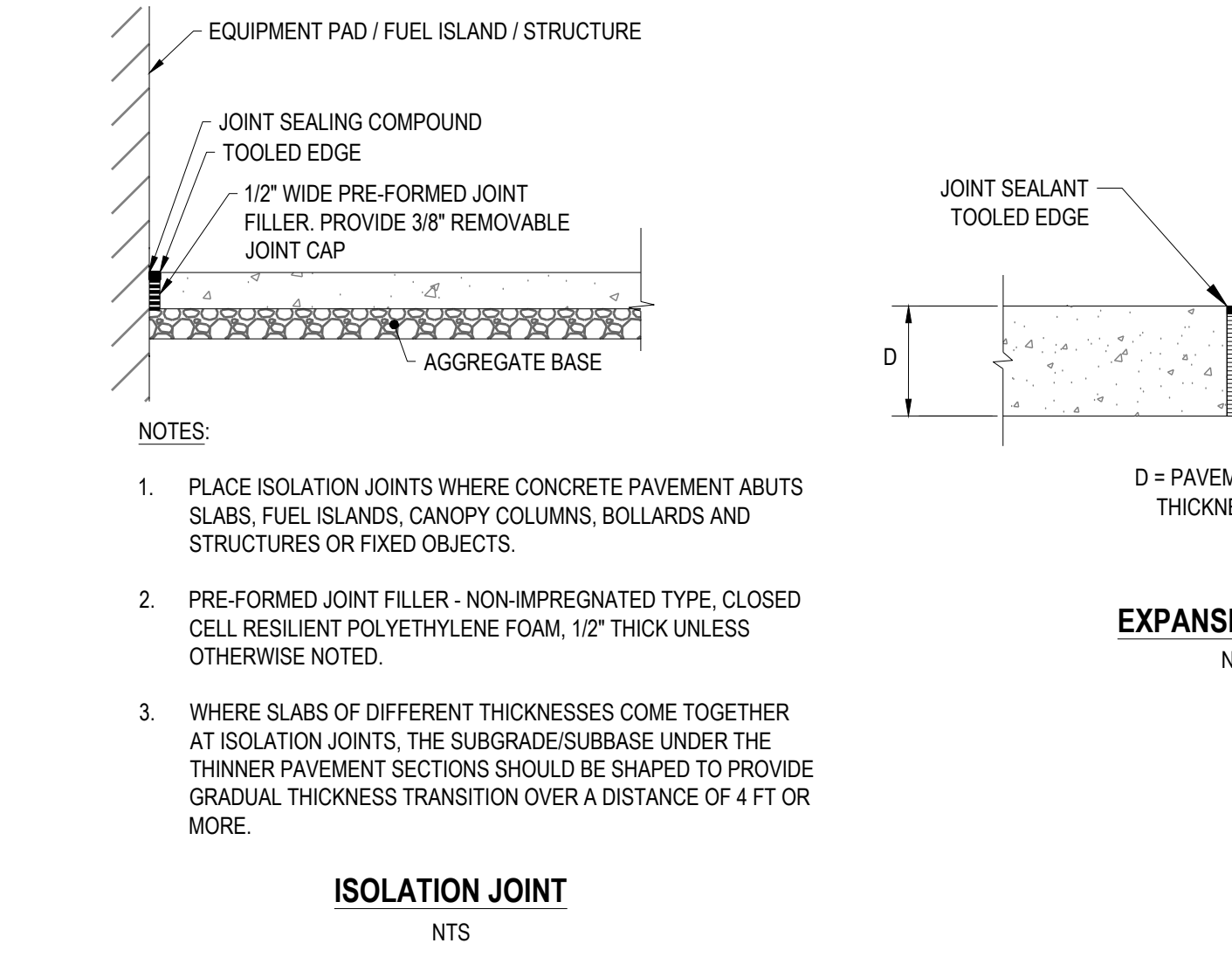
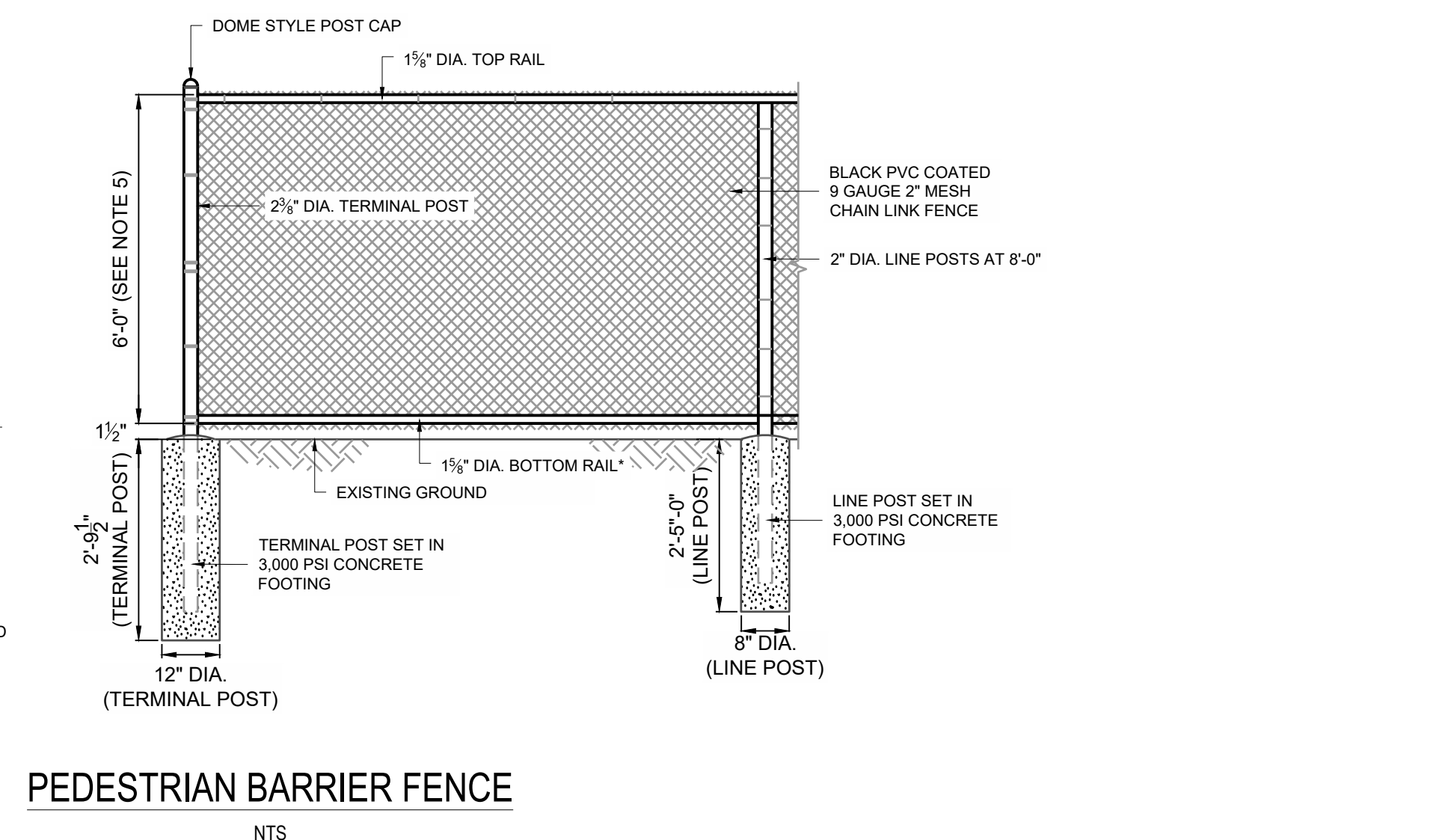
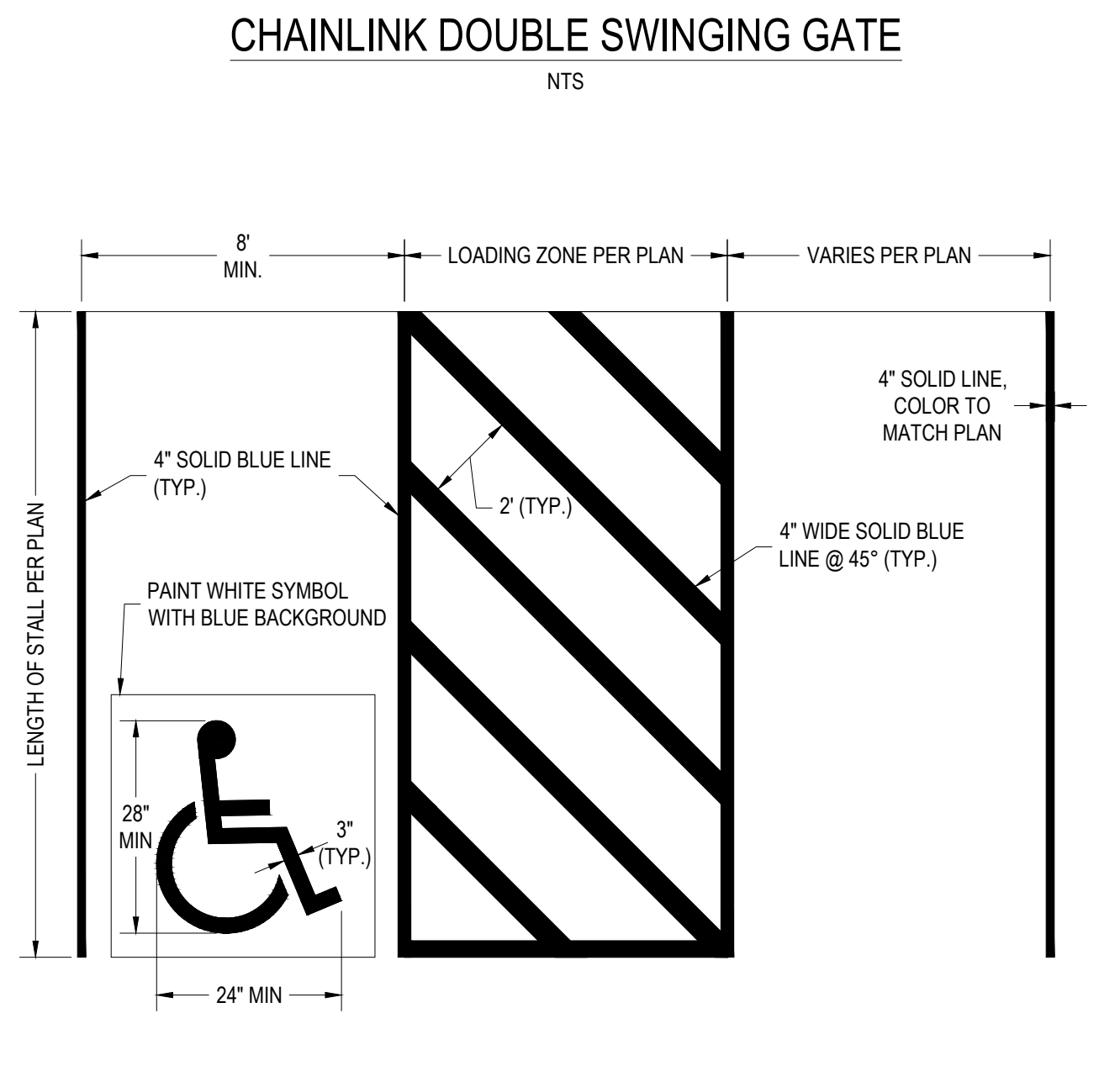
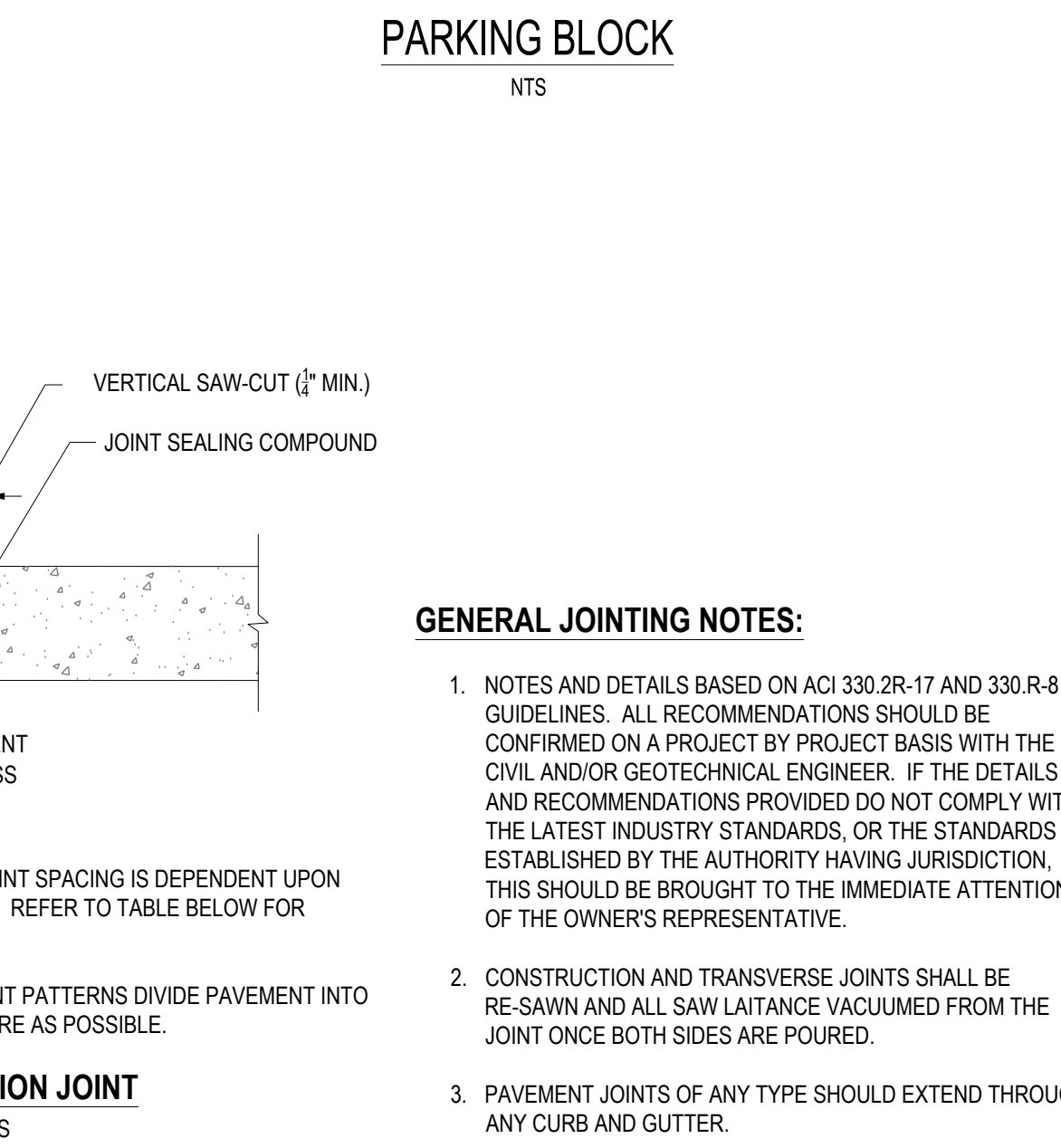
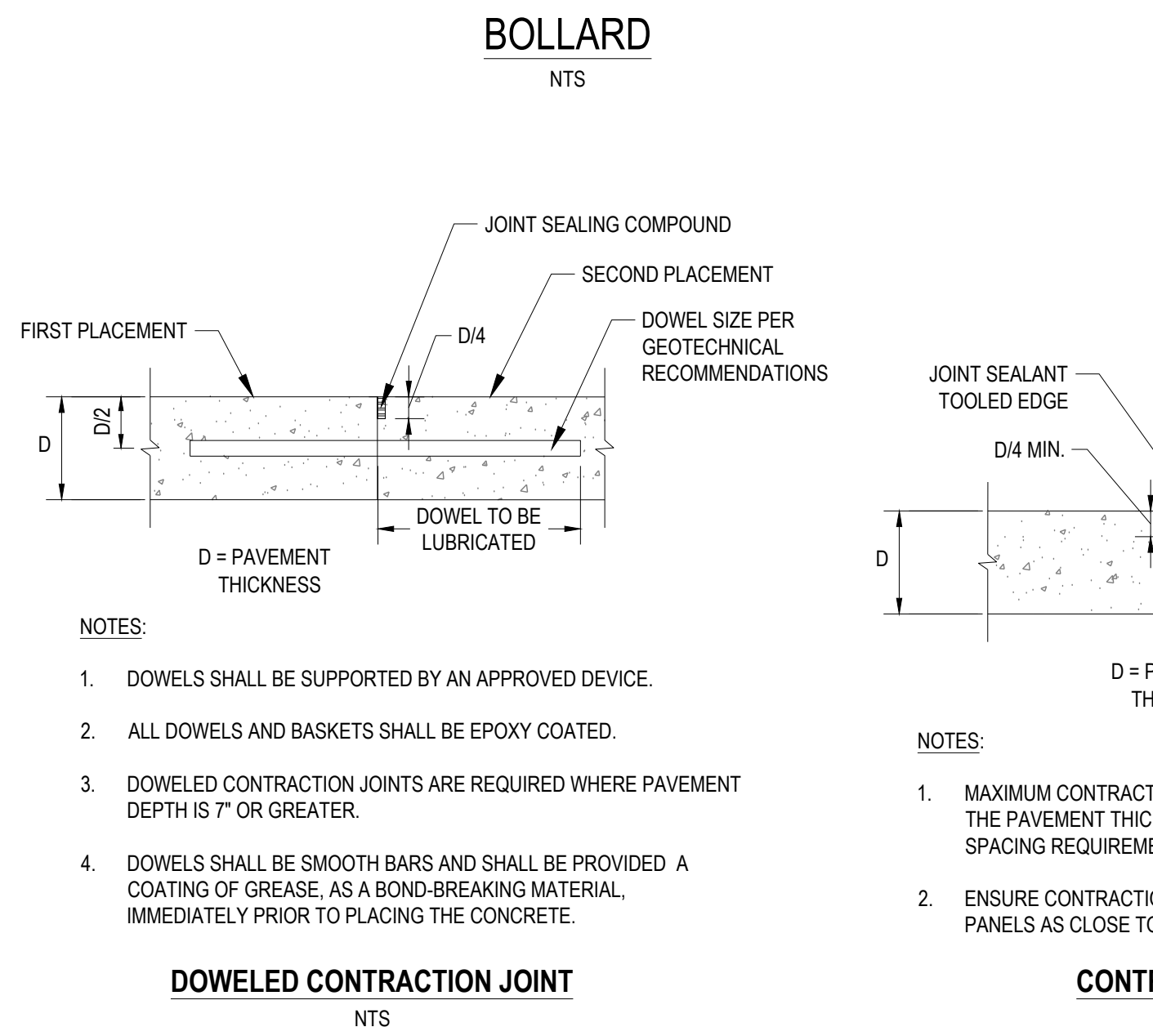
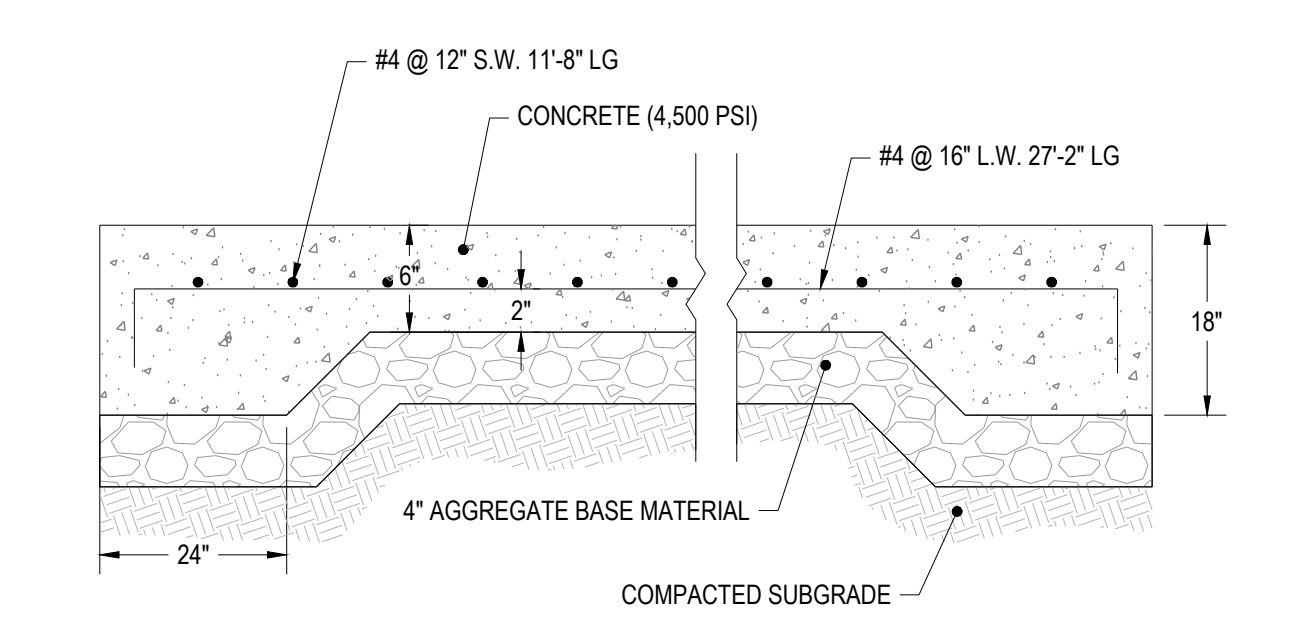
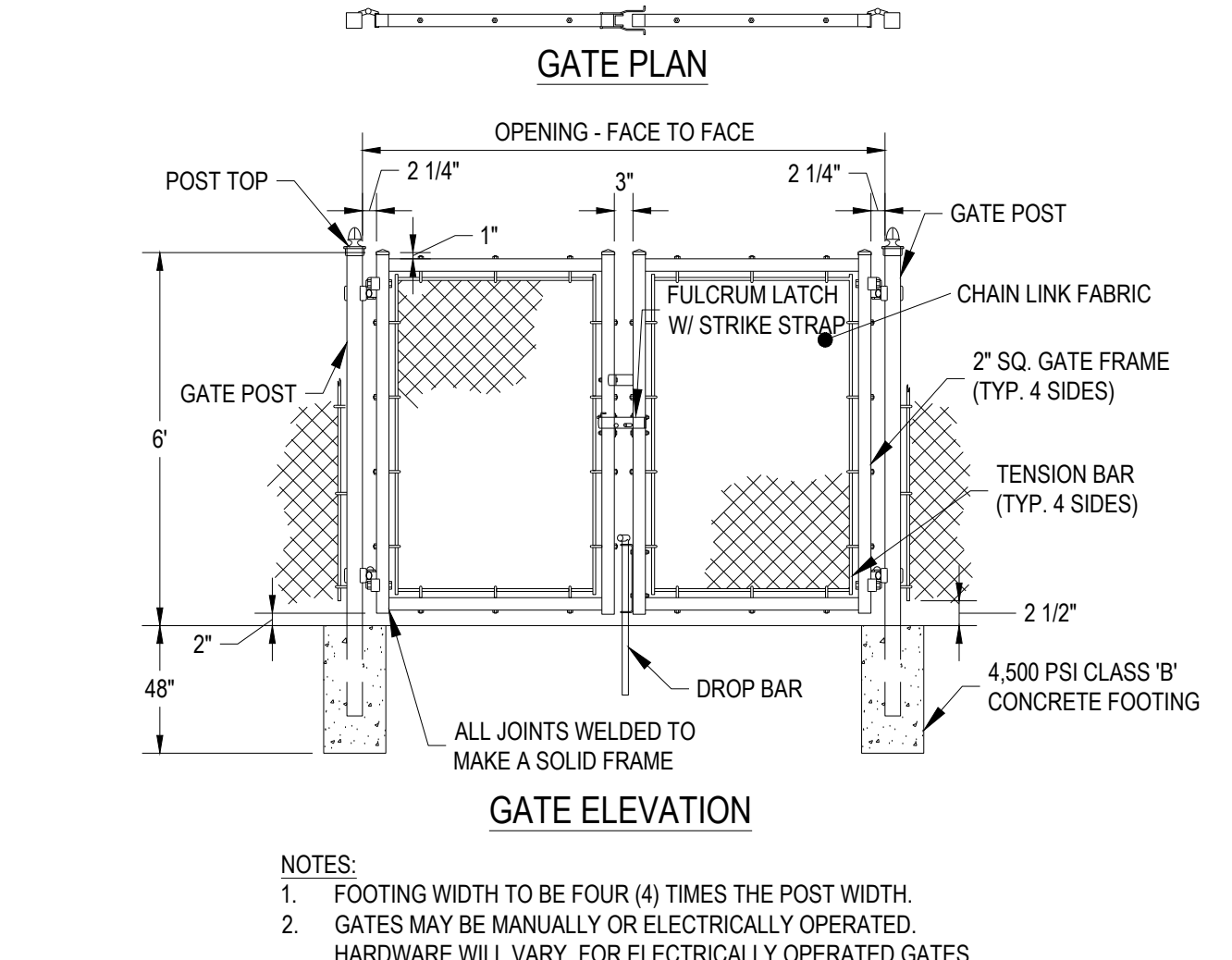
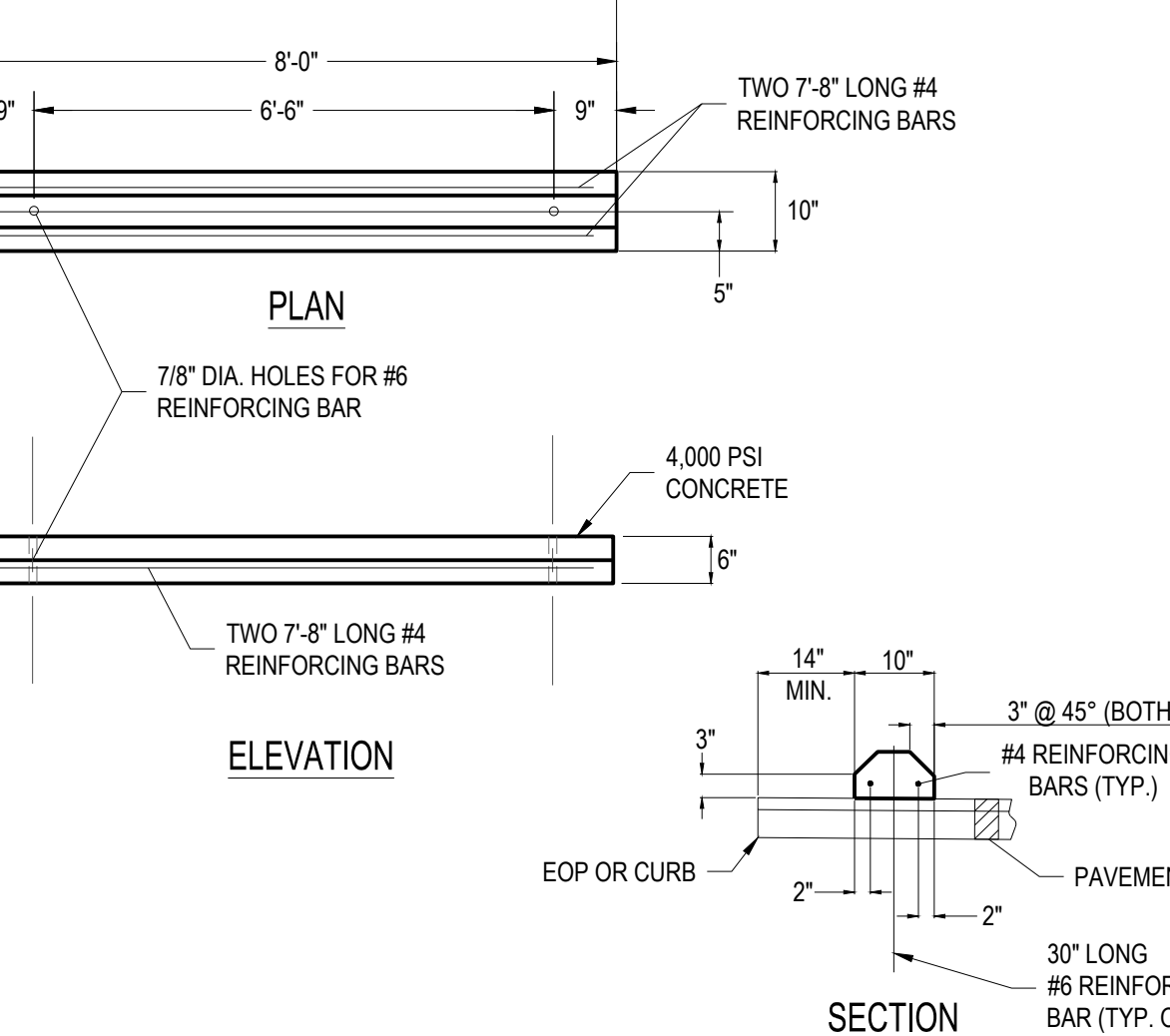
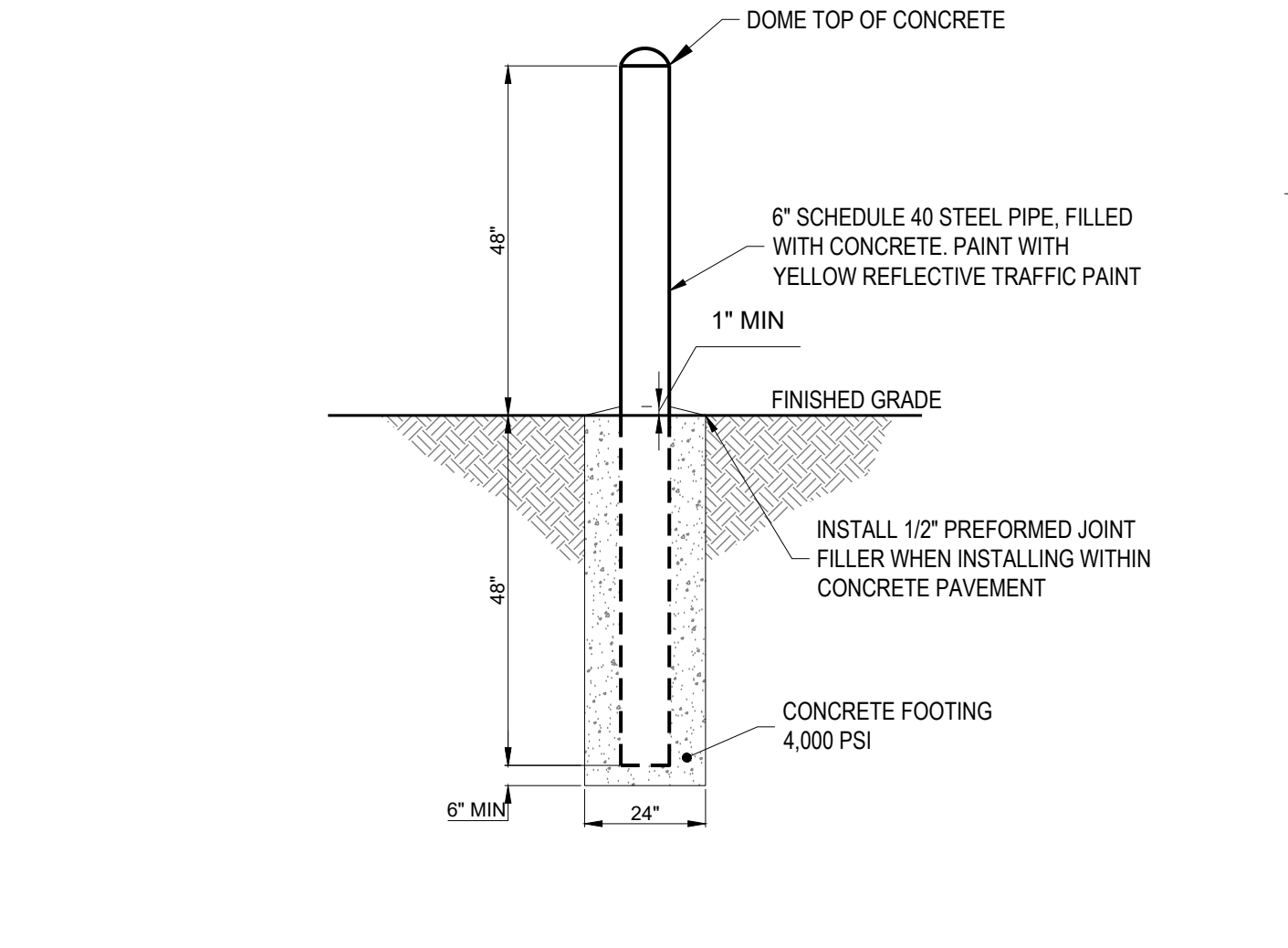
Revisions / Submissions
 ID Description Date
 1 BUILDING PERMIT SUBMISSION 20250424

Project Number: 763838
 Scale: AS SHOWN
 Drawn By: QSS
 Checked By: CG
 Date: 04/24/2025
 Issue: FOR PERMIT
 Drawing Title:
UTILITY DETAILS
C6.1



PAVEMENT LAYER DEPTHS

	ASPHALT		CONCRETE	
	A	B	A	B
LIGHT DUTY	3.0	--	8.0	4.0
HEAVY DUTY	4.0	--	10.0	6.0



GENERAL JOINTING NOTES:

- NOTES AND DETAILS BASED ON ACI 330.2R-17 AND 330.8 GUIDELINES. ALL RECOMMENDATIONS SHOULD BE CONFIRMED ON A PROJECT BY PROJECT BASIS WITH THE CIVIL AND/OR GEOTECHNICAL ENGINEER. IF THE DETAILS AND RECOMMENDATIONS PROVIDED DO NOT COMPLY WITH THE LATEST INDUSTRY STANDARDS, OR THE STANDARDS ESTABLISHED BY THE AUTHORITY HAVING JURISDICTION, THIS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNER'S REPRESENTATIVE.
- CONSTRUCTION AND TRANSVERSE JOINTS SHALL BE RE-SAWN AND ALL SAW LANTANCE VACUUMED FROM THE JOINT ONCE BOTH SIDES ARE POURED.
- PAVEMENT JOINTS OF ANY TYPE SHOULD EXTEND THROUGH ANY CURB AND GUTTER.
- CONCRETE CONTRACTOR SHALL SUBMIT THE CONCRETE MIX TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL.
- A SCALED DRAWING OF THE JOINTING PLAN FOR THE PAVEMENTS AND CURBS SHOULD BE SUBMITTED BY THE CONTRACTOR FOR REVIEW BY THE CIVIL AND GEOTECHNICAL ENGINEERS.

JOINT SPACING FOR UNREINFORCED CONCRETE
(FROM ACI 330.2R-17 TABLE 4.4.4 & ACI 330.8 TABLE 3.5)

PAVEMENT THICKNESS (IN)	MAXIMUM SPACING (FT)
4 - 4.5	10
5 - 5.5	12.50
6 OR GREATER	15

Revisions / Submissions

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

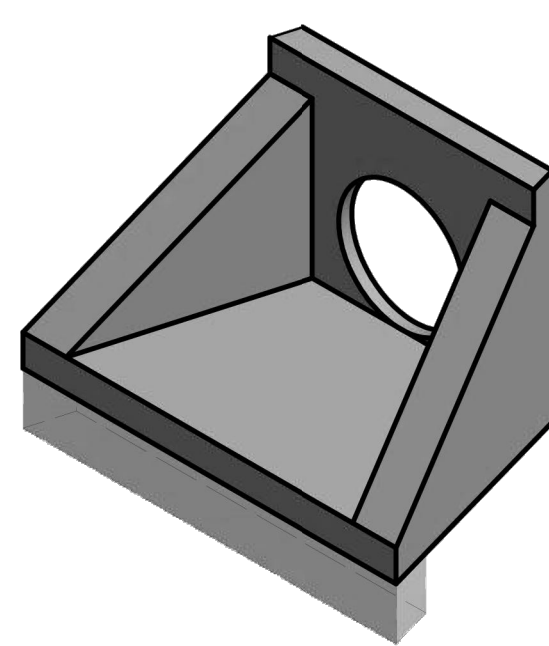
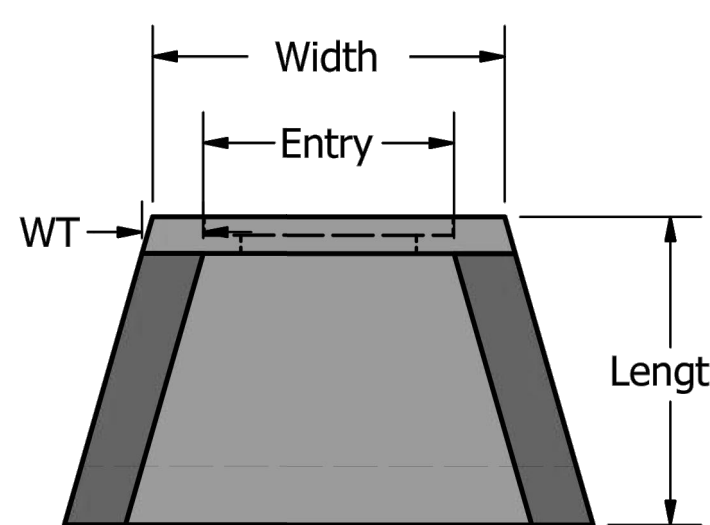
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Project Number: 763838
Scale: AS SHOWN
Drawn By: QSS
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Date: 04/24/2025
Issue: FOR PERMIT

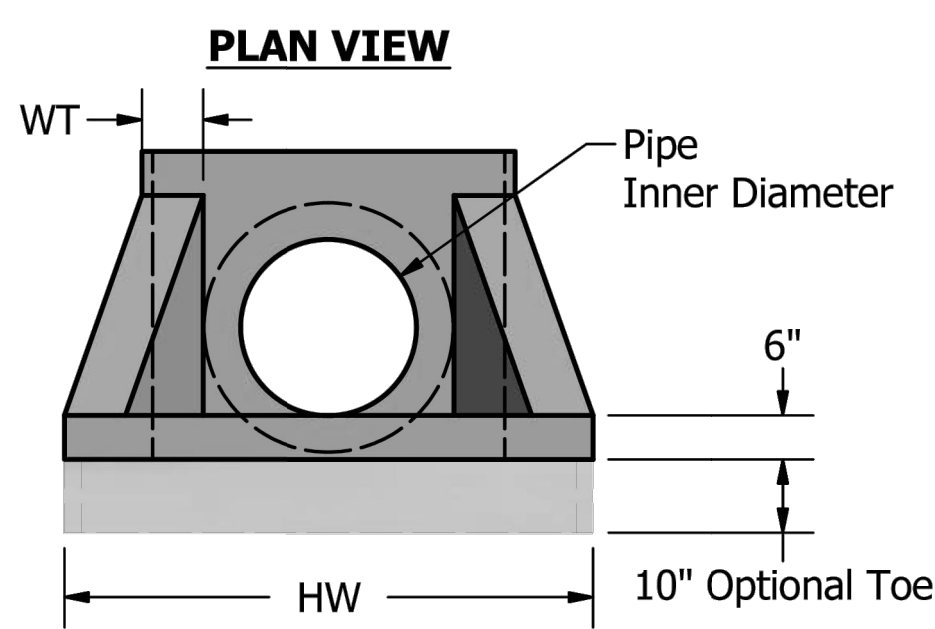
Winged Headwalls

HW	Width	Height	Entry	Length	WT	Max HS	Dissipators	WEIGHT (lbs)	
								Without Toe	With Toe
4'-0"	2'-8"	2'-7"	2'-0 5/16"	2'-6"	5"	22"	1 Each	1,090	1,360
6'-0"	4'-0"	3'-6"	2'-11 3/4"	3'-8"	8"	34"	3 Each	3,130	3,540
8'-0"	6'-0"	4'-10"	4'-11 3/8"	4'-2"	8"	48"	5 Each	5,625	6,200
10'-0"	8'-0"	6'-0"	6'-11 1/8"	4'-8"	8"	62"	7 Each	8,575	9,265

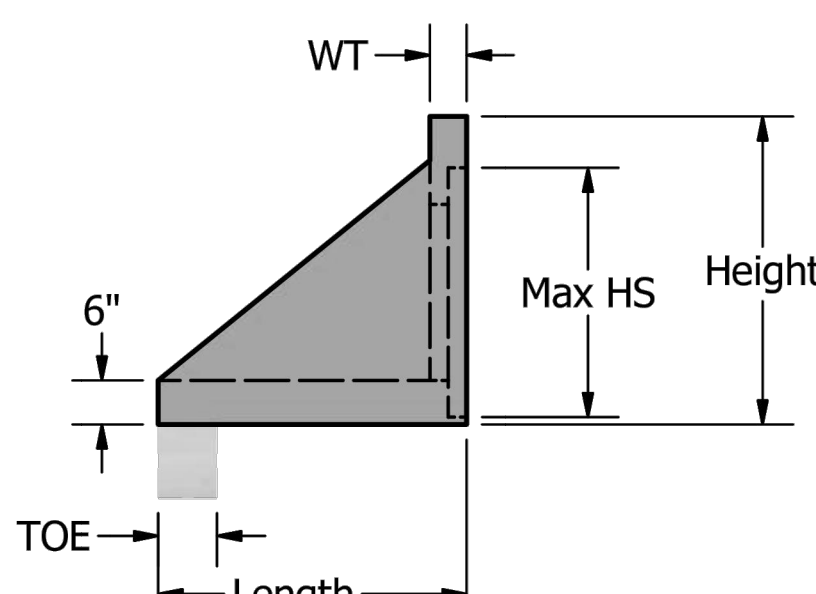
BY DEFAULT, HEADWALLS ARE PRODUCED WITHOUT 10" TOE SPECIAL SHAPES AND OPENINGS AVAILABLE ON REQUEST SEE PIPE DIMENSIONS CHART FOR MINIMUM HEADWALL SIZE DISSIPATORS AVAILABLE - SEE TABLE FOR MORE INFORMATION



ISOMETRIC VIEW



FRONT VIEW



SIDE VIEW

SPECIFICATIONS:
CONCRETE MINIMUM COMPRESSION STRENGTH 5,000 PSI @ 28 DAYS
REINFORCEMENT CONFORMS TO ASTM A-615 60,000 PSI

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For more information about our product selection visit: oldcastleinfrastructure.com
(615) 453-6111

Pipe Dimensions

Min. HW	Size	ADS (HDPE)		Hole Size
		Wall Thickness	OD	
4'	4"	0.39"	4.78"	8"
	6"	0.46"	6.92"	12"
	8"	0.56"	9.12"	12"
	10"	0.68"	11.36"	16"
	12"	1.23"	14.46"	18"
6'	15"	1.29"	17.58"	22"
	18"	1.6"	21.2"	26"
	24"	1.9"	27.8"	32"
	30"	2.55"	35.1"	40"
	36"	2.85"	41.7"	48"
8'	42"	2.85"	47.7"	50"
	48"	2.35"	52.7"	56"
	54"	N/A	N/A	62"
	60"	2.75"	65.5"	70"
	66"	N/A	N/A	N/A
N/A	72"	N/A	N/A	N/A

Min. HW	Size	CCP		Hole Size
		Wall Thickness	OD	
4'	4"	0.4"	4.8"	8"
	6"	0.5"	7"	12"
	10"	0.65"	9.3"	12"
	12"	1.1"	14.2"	16"
	15"	1.35"	17.7"	22"
6'	18"	1.75"	21.5"	26"
	24"	2.2"	28.4"	32"
	30"	3"	36"	40"
	36"	3"	42"	48"
	42"	3"	48"	56"
10'	48"	3"	54"	62"

Min. HW	Size	RCP		Hole Size
		Wall	OD	
4'	12"	B	16"	18"
	15"	B	20"	22"
	18"	B	23"	26"
	21"	B	26.5"	28"
6'	24"	B	30"	32"
	30"	B	37"	40"
	36"	B	44"	48"
	42"	B	51"	56"
10'	48"	B	58"	62"
	54"	B	65"	70"
	60"	B	72"	78"
	66"	B	79"	86"
N/A	72"	B	86"	96"
	84"	B	100"	105"

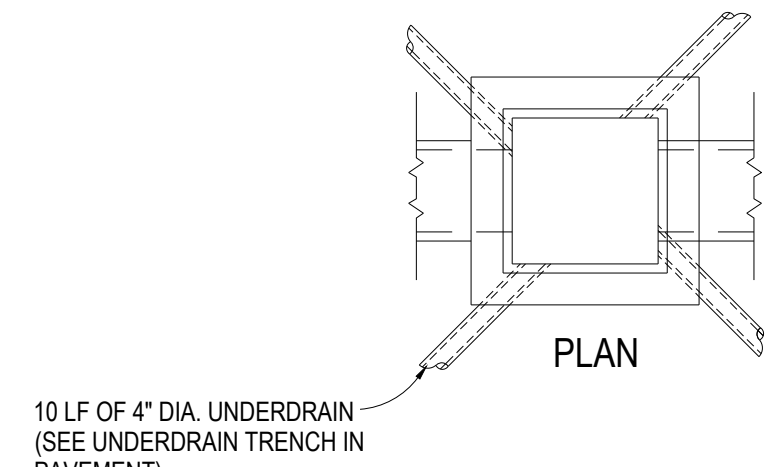
Min. HW	Size	PVC		Cored Hole Size
		OD		
4'	1.5"	1.9"		8"
	2"	2.39"		8"
	3"	3.5"		8"
	4"	4.21"		8"
	6"	6.275"		8"
	8"	8.4"		12"
	10"	10.5"		12"
	12"	12.5"		16"
	15"	15.3"		18"
	18"	19.5"		22"
6'	21"	22.05"		26"
	24"	24.8"		28"
	27"	27.98"		30"

Min. HW	Size	CMP	
		Size	Hole Size
4'	4"		8"
	6"		12"
	10"		16"
	12"		18"
	15"		22"
6'	18"		26"
	24"		32"
	30"		40"
	36"		48"
	42"		56"
N/A	48"		62"

Min. HW	Equivalent	Elliptical Pipe		Hole Size
		Size		
4'	12"	23" x 14"	32" x 23"	
6'	15"	30" x 19"	40" x 29"	
	18"	38" x 24"	49" x 35"	
	21"	45" x 29"	58" x 41"	
N/A	24"	53" x 34"	69" x 50"	
	30"	60" x 38"	78" x 55"	
	36"	68" x 43"	86" x 60"	
	42"	76" x 48"	96" x 68"	

NOTES:
Headwall Specifications for Non-DOT Projects

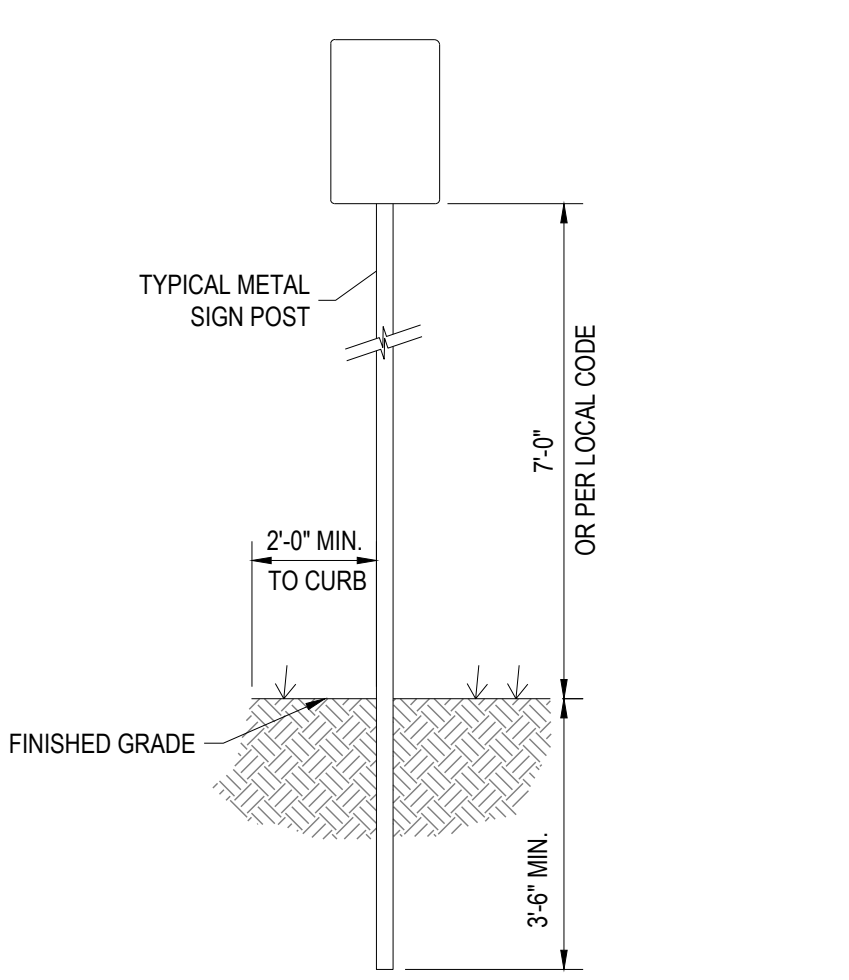
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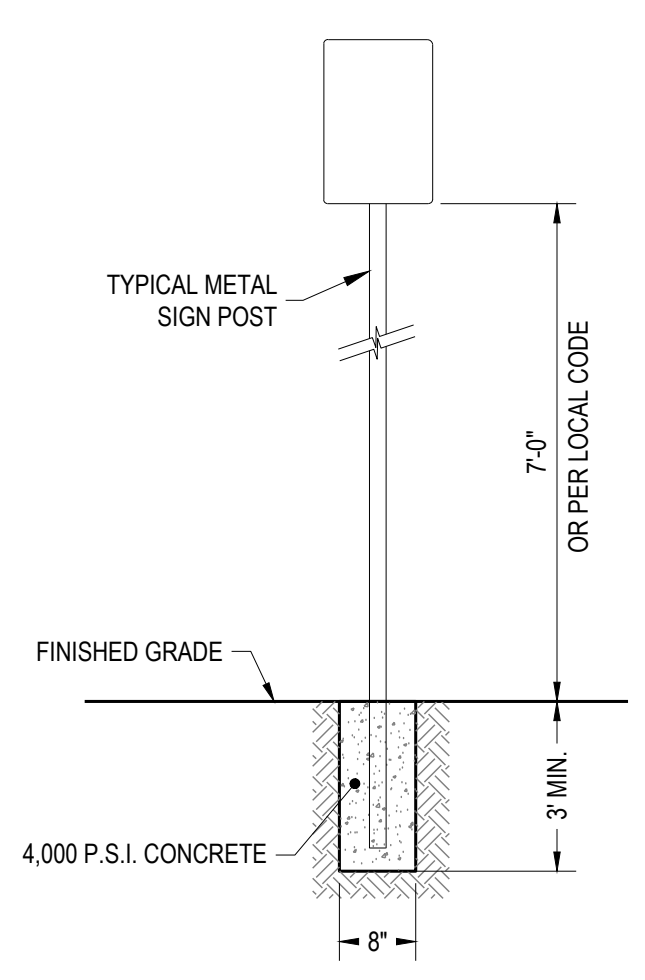
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FINGER DRAIN

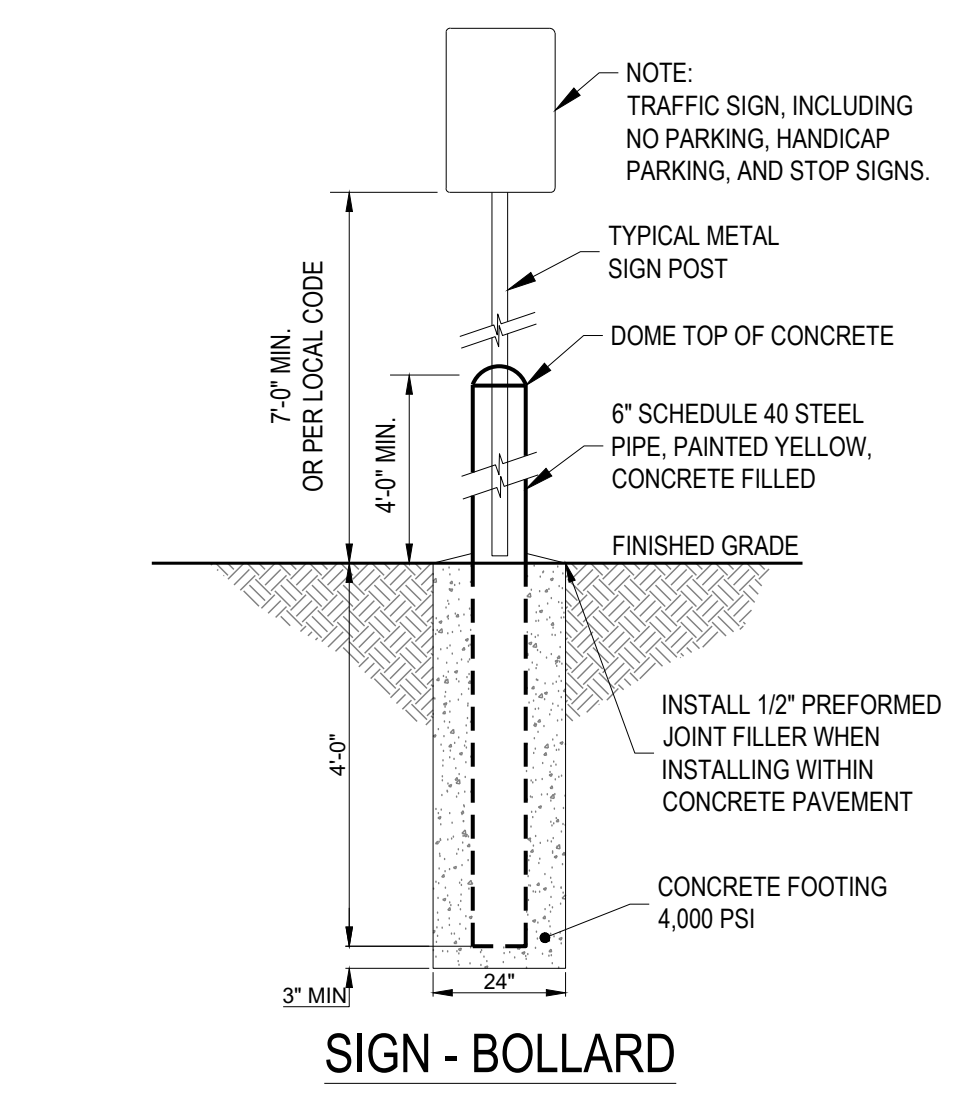
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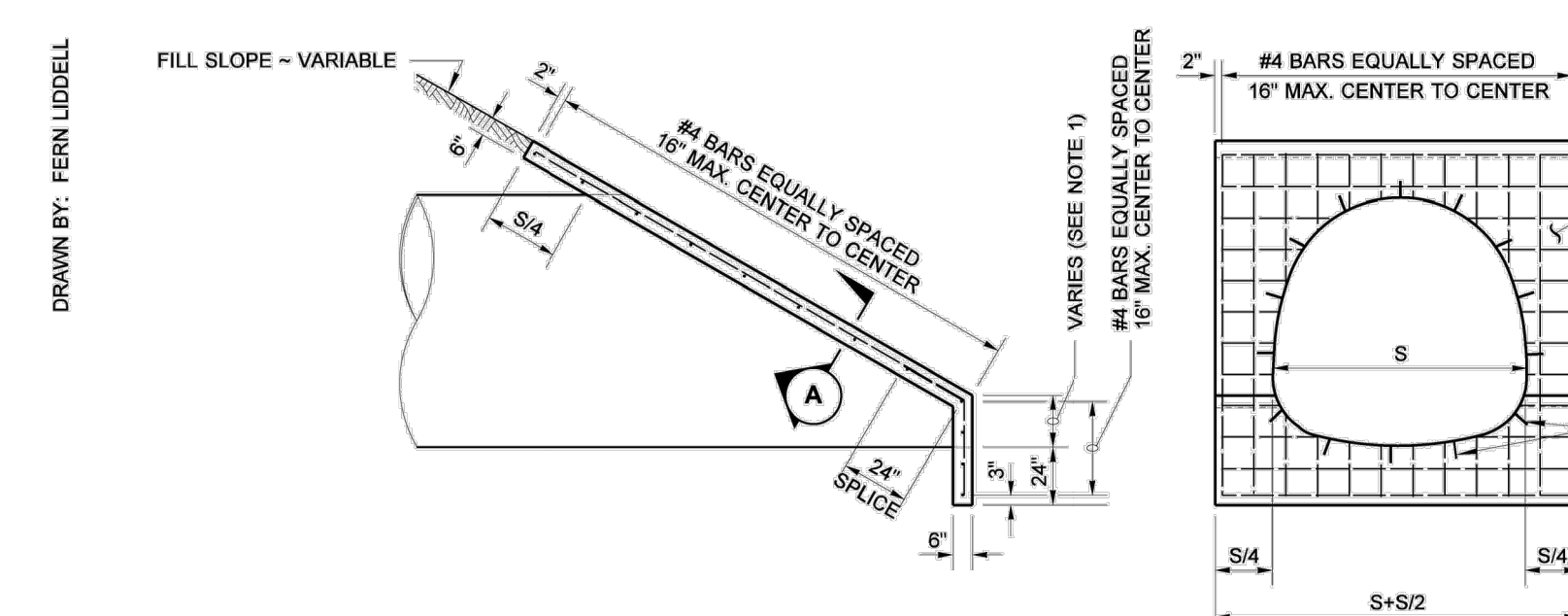
SIGN - LANDSCAPE NTS



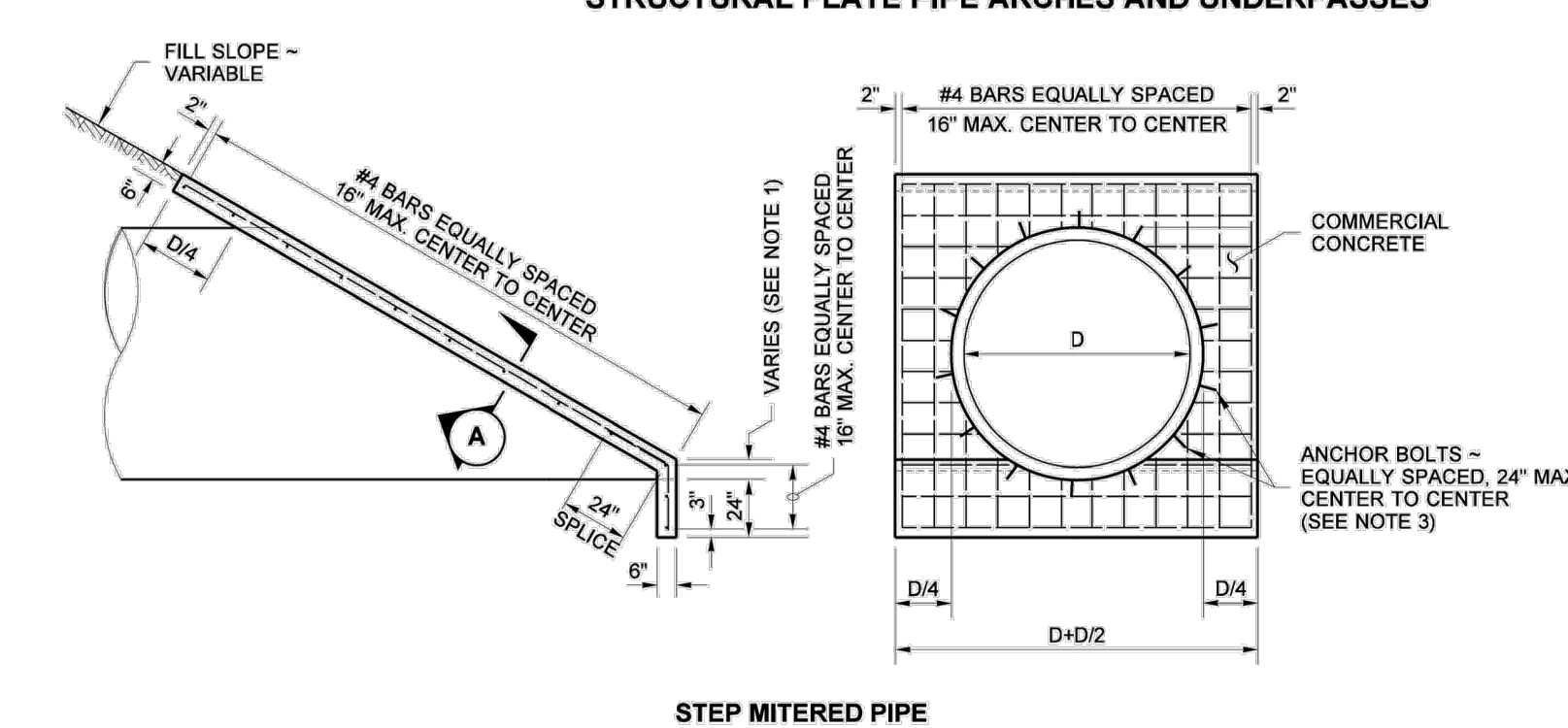
SIGN - PAVEMENT NTS



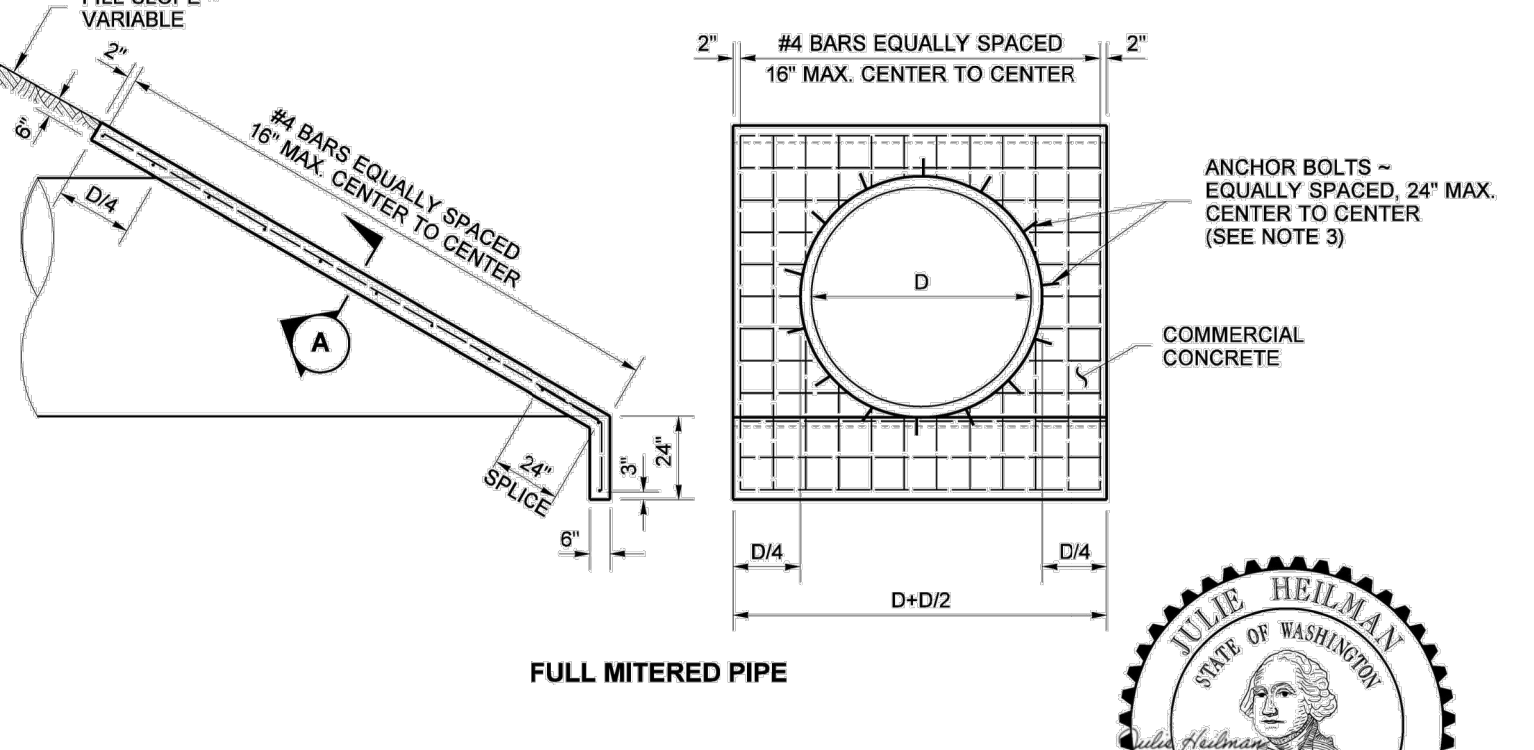
SIGN - BOLLARD NTS



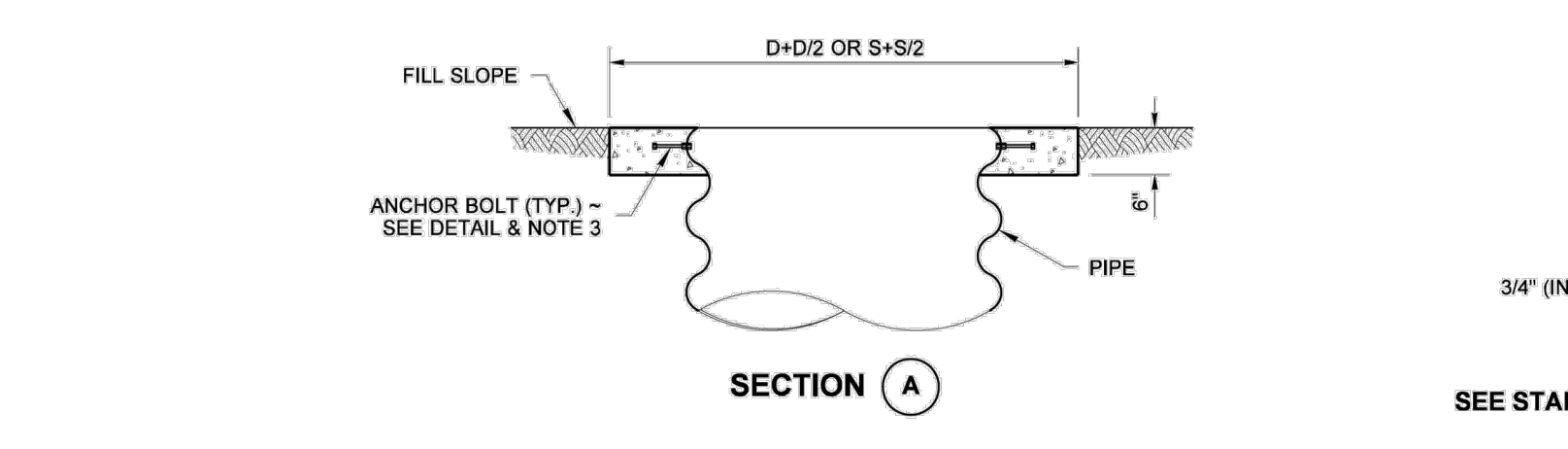
STRUCTURAL PLATE PIPE ARCHES AND UNDERPASSES



STEP MITERED PIPE



FULL MITERED PIPE



PIPES AND STRUCTURAL PLATE PIPES



ANCHOR BOLT DETAIL SEE STANDARD SPECIFICATION SECTION 9-06.5(1)

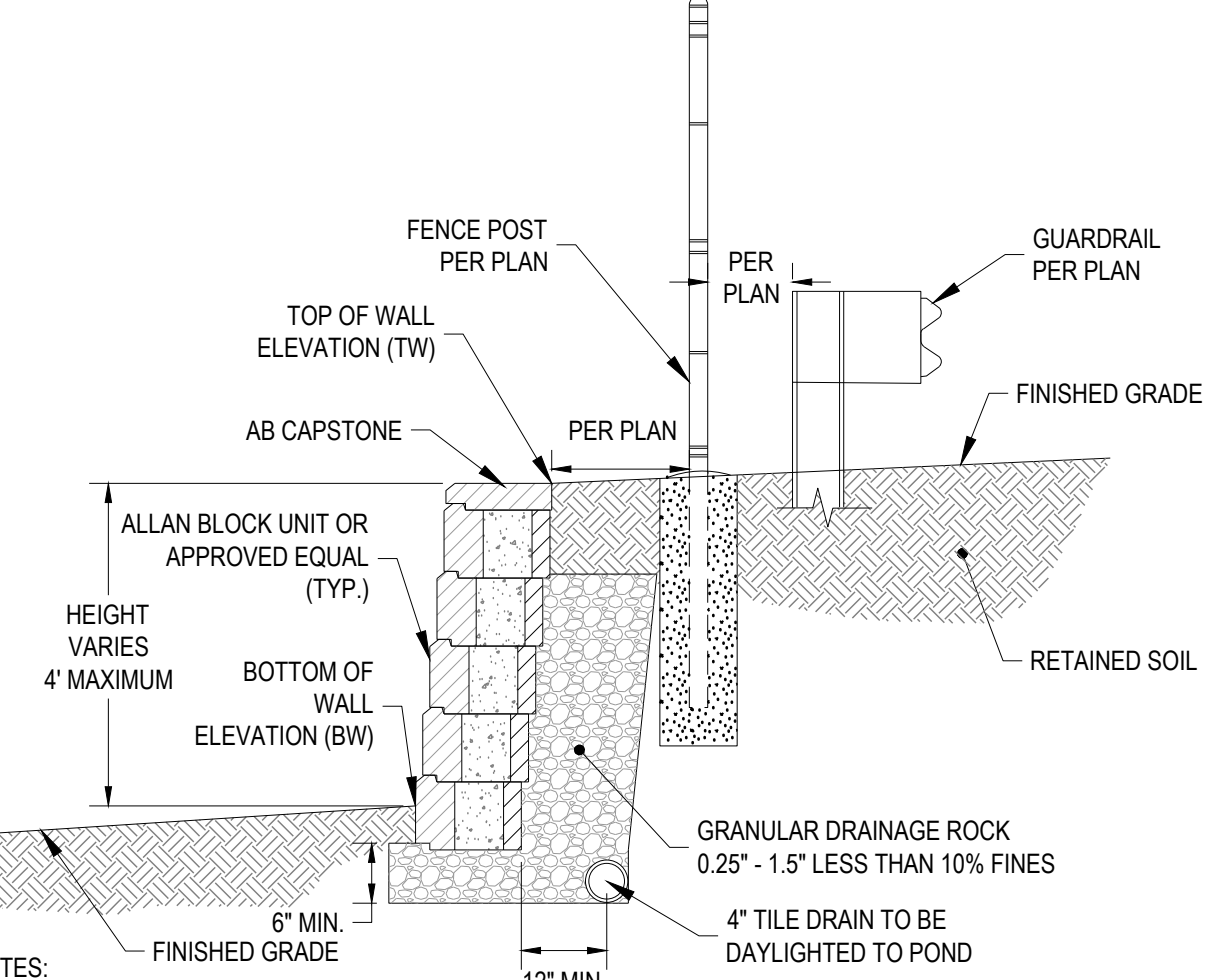
- NOTES
- The variable dimension indicated for the height of step for step mitered pipes shall conform to the manufacturers recommendations unless specified differently on the plans or in the Special Provisions.
 - Reinforcing steel shall have 1 1/2" (in) min. clear cover to all concrete surfaces.
 - Headwalls for concrete culvert pipe may omit anchor bolt attachment.
 - When steel pipe safety bars are used, headwall thickness shall be increased to 8" (in).



Aug 17, 2021
HEADWALLS FOR CULVERT PIPE AND UNDERPASS
STANDARD PLAN B-75.20-03
SHEET 1 OF 1 SHEET
APPROVED FOR PUBLICATION
Aug 17, 2021
STATE DESIGN ENGINEER
Washington State Department of Transportation

RIPRAP-STORM SEWER OUTLET

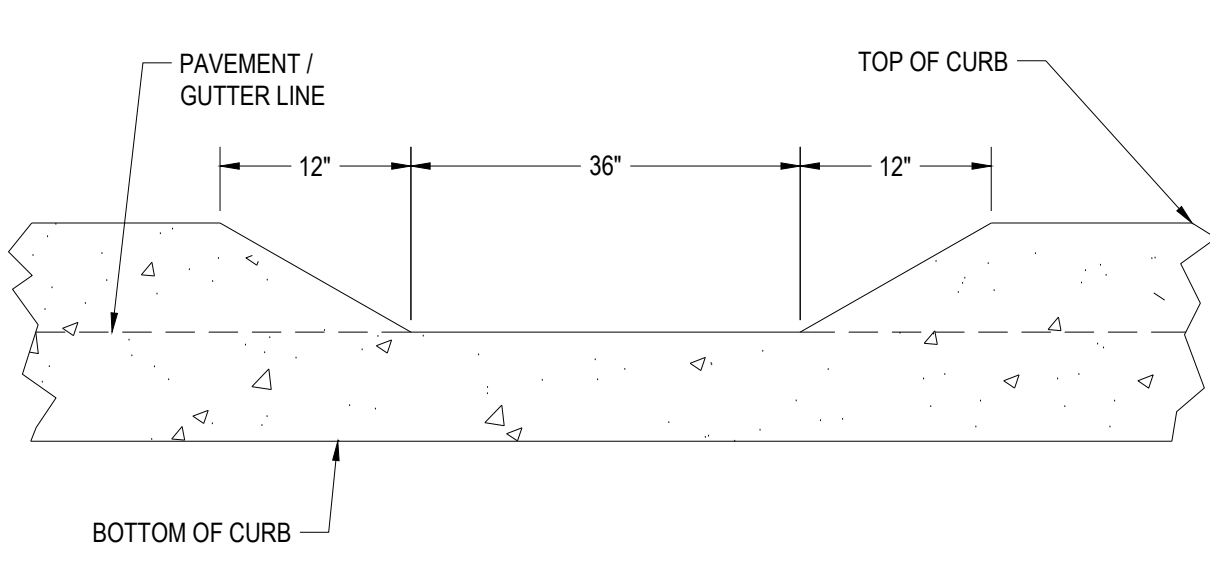
NTS



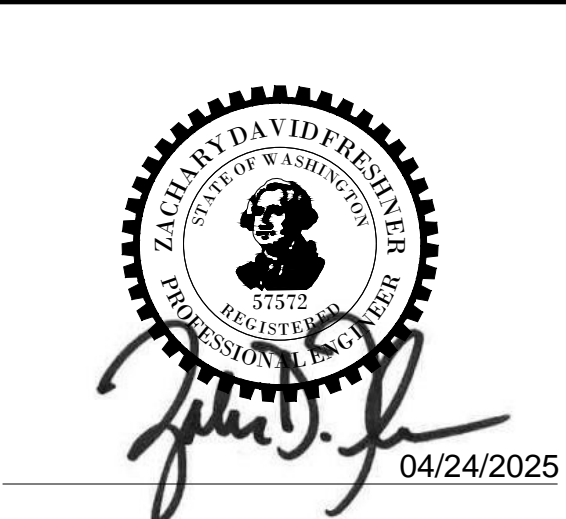
NOTES:
1. THE MAXIMUM WALL HEIGHT SHALL BE 4'. ANY WALLS EXCEEDING THIS DIMENSION SHALL BE DESIGNED BY A STRUCTURAL ENGINEER.
2. WALL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. ADEQUATE CONSIDERATION SHOULD BE GIVEN TO SITE SPECIFIC CONDITIONS INFLUENCING STABILITY AND FUNCTIONALITY OF RETAINING WALL INCLUDING SOIL, HEIGHT, GEODIG, PROXIMITY TO PROPERTY LINES, ETC.
3. CONTRACTOR TO PLACE FENCE POST FOUNDATION OUTSIDE OF THE GRANULAR BACKFILL MATERIAL FOR THE WALL.

SEGMENTAL BLOCK RETAINING WALL

NTS



CURB CUT NTS



04/24/2025

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

© 2025 CESO, INC.
Project Number: 763838
Scale: AS SHOWN
Drawn By: HS
Checked By: CG
Date: 04/24/2025
Issue: FOR PERMIT

Drawing Title:
CONSTRUCTION DETAILS

C7.1

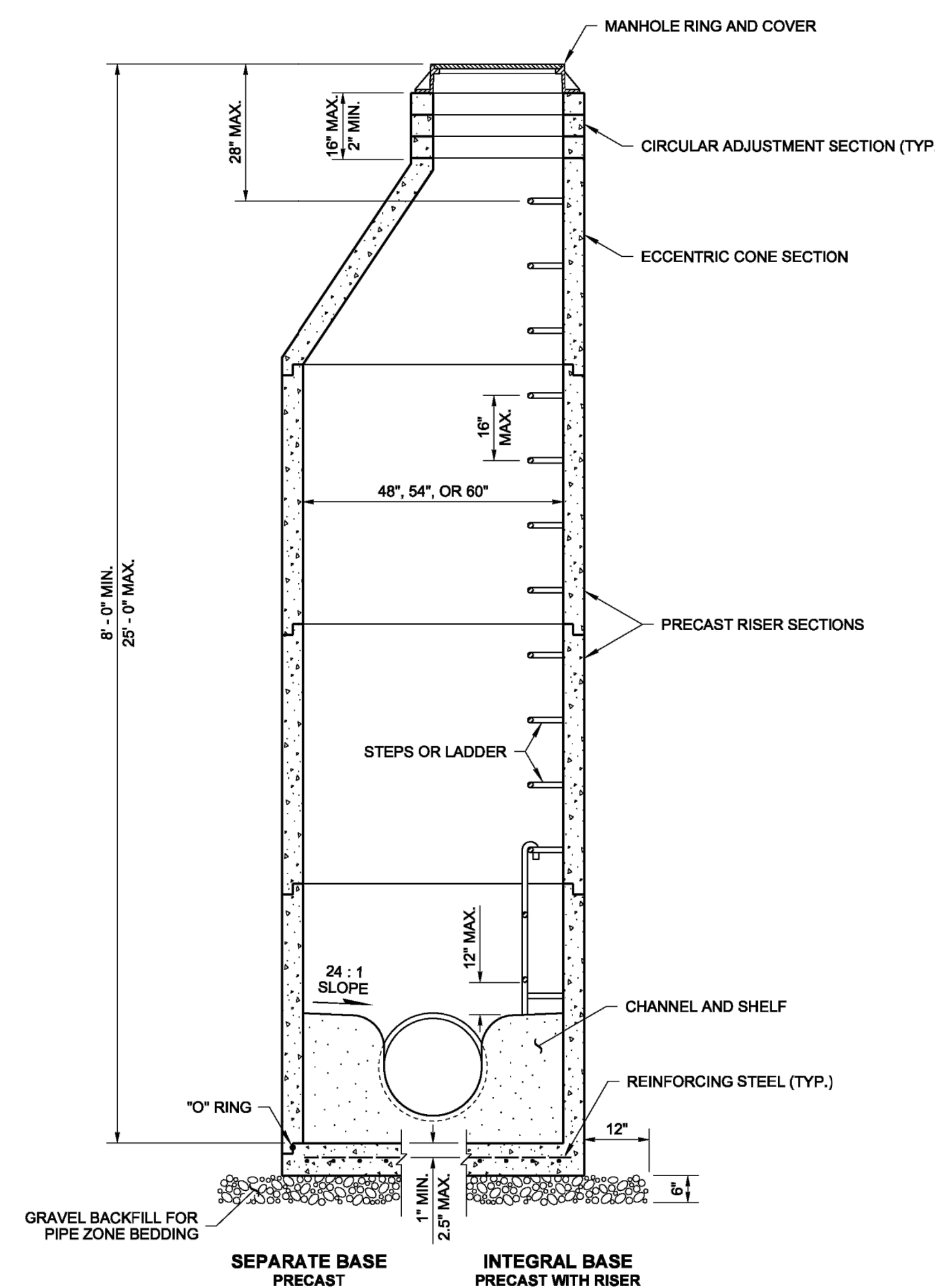
Figure V-12.12: Example of Permanent Surface Water Control Pond Sign

Stormwater Pond
This pond is in our care. Runoff is held here after storms. It is released slowly or stored until the next storm when it is replaced by incoming flows. This helps prevent downstream flooding and erosion and helps clean the water. For more information or to report littering, vandalism or other problems, call: TEL No. _____ Pond Name and Number

Sample Specifications:
Size: 48 inches by 24 inches
Material: 0.125-gauge aluminum
Face: Non-reflective vinyl or 3 coats outdoor enamel (sprayed).
Lettering: Silk screen enamel where possible, or vinyl letters.
Colors: Beige background, teal letters.
Type face: Helvetica condensed. Title: 3 inch; Sub-Title: 1 1/2 inch; Text: 1 inch; Outer Border: 1/8 inch; Border Distance from Edge: 1/4 inch; all text 1 3/4 inch from border.
Posts: Pressure treated, beveled tops, 1 1/2 inch higher than sign.
Installation: Secure to chain link fence if available. Otherwise install on two 4" x 4" posts, pressure treated, mounted atop gravel bed, installed in 30-inch concrete filled post holes (8-inch minimum diameter). Top of sign no higher than 42 inches from ground surface.
Placement: Face sign in direction of primary visual or physical access. Do not block any access road. Do not place within 6 feet of structural facilities (e.g. manholes, spillways, pipe inlets).
Special Notes: This facility is lined to protect groundwater (if a liner that restricts infiltration of stormwater exists).

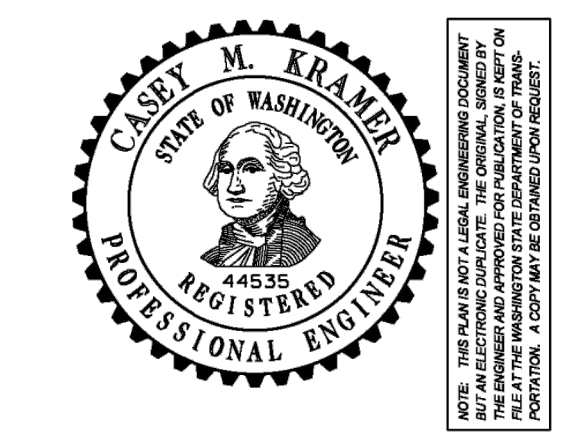
DEPARTMENT OF **ECOLOGY** State of Washington
Example of Permanent Surface Water Control Pond Sign
Revised June 2016
Please see <http://www.ecy.wa.gov/copyright.html> for copyright notice including permissions, limitation of liability, and disclaimer.

DRAWN BY: USA CYFORD



- NOTES**
- Knockouts shall have a wall thickness of 2" minimum to 2.5" maximum.
 - For pipe allowances, see **Standard Plan B-10.20**.

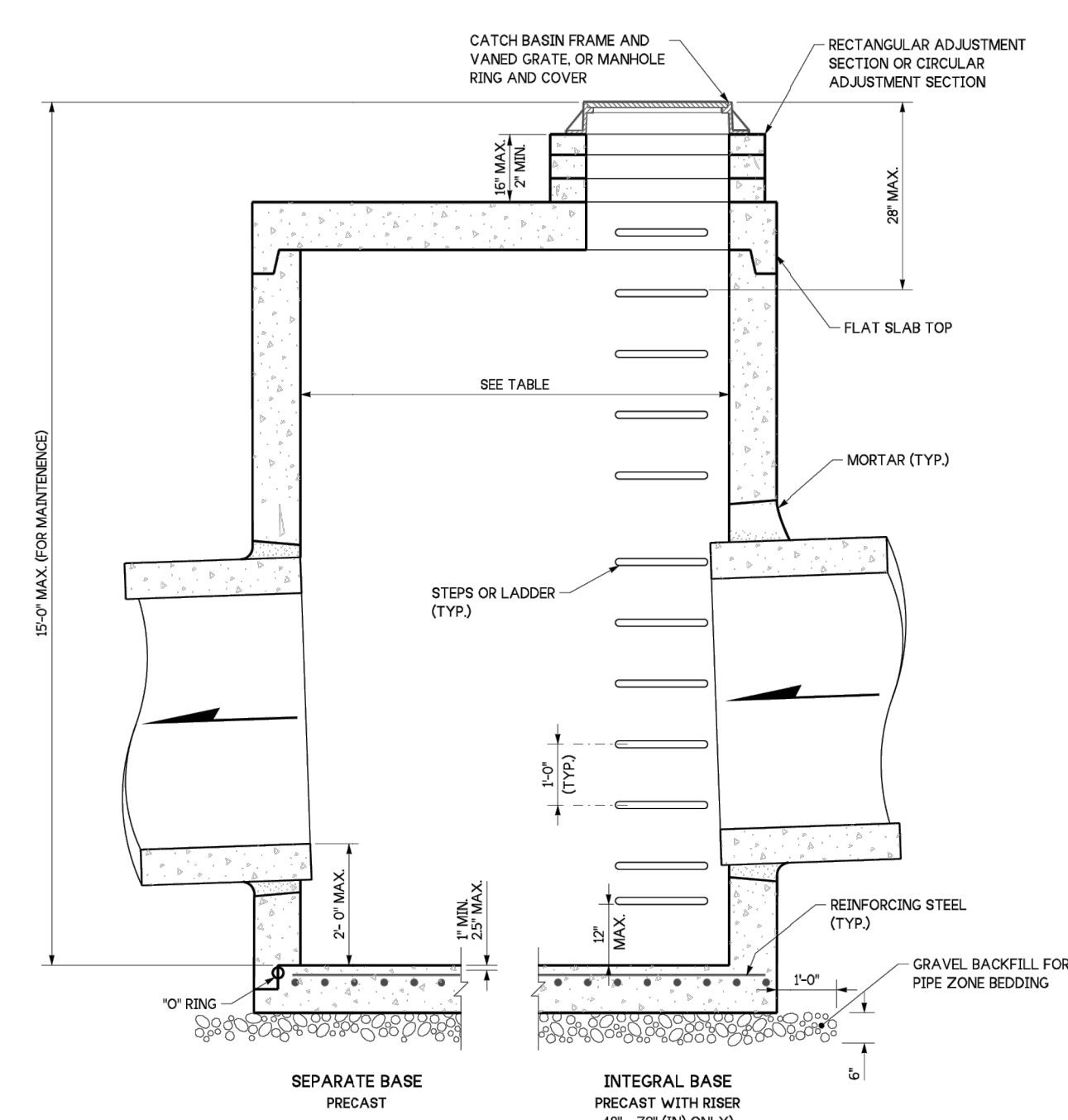
DIAM.	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS
48"	4"	6"	36"	8"
54"	4.5"	8"	42"	8"
60"	5"	8"	48"	8"



MANHOLE TYPE 1
STANDARD PLAN B-15.20-01
SHEET 1 OF 1 SHEET
APPROVED FOR PUBLICATION
Pasco Bakotich III 02-07-12
STATE DESIGN ENGINEER
Washington State Department of Transportation

2019 Stormwater Management Manual for Western Washington
Volume V - Chapter 12 - Page 979

- NOTES:**
- No steps are required when height is 4' or less.
 - The bottom of the precast catch basin may be sloped to facilitate cleaning.
 - The rectangular frame and grate may be installed with the flange up or down. The frame may be cast into the adjustment section.
 - Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 15" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3**.
 - Pipe allowances will vary depending on the pipe material used. Contact the Region Hydraulics Engineer for assistance.



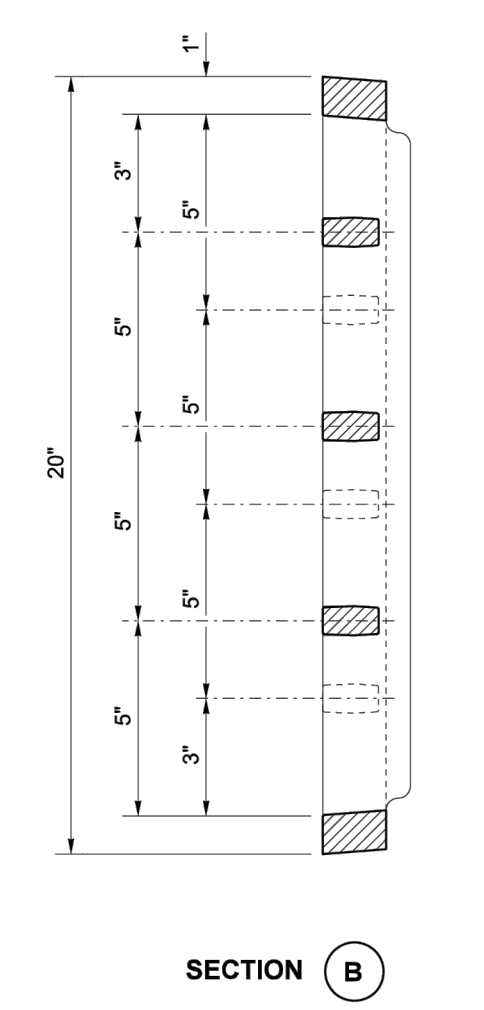
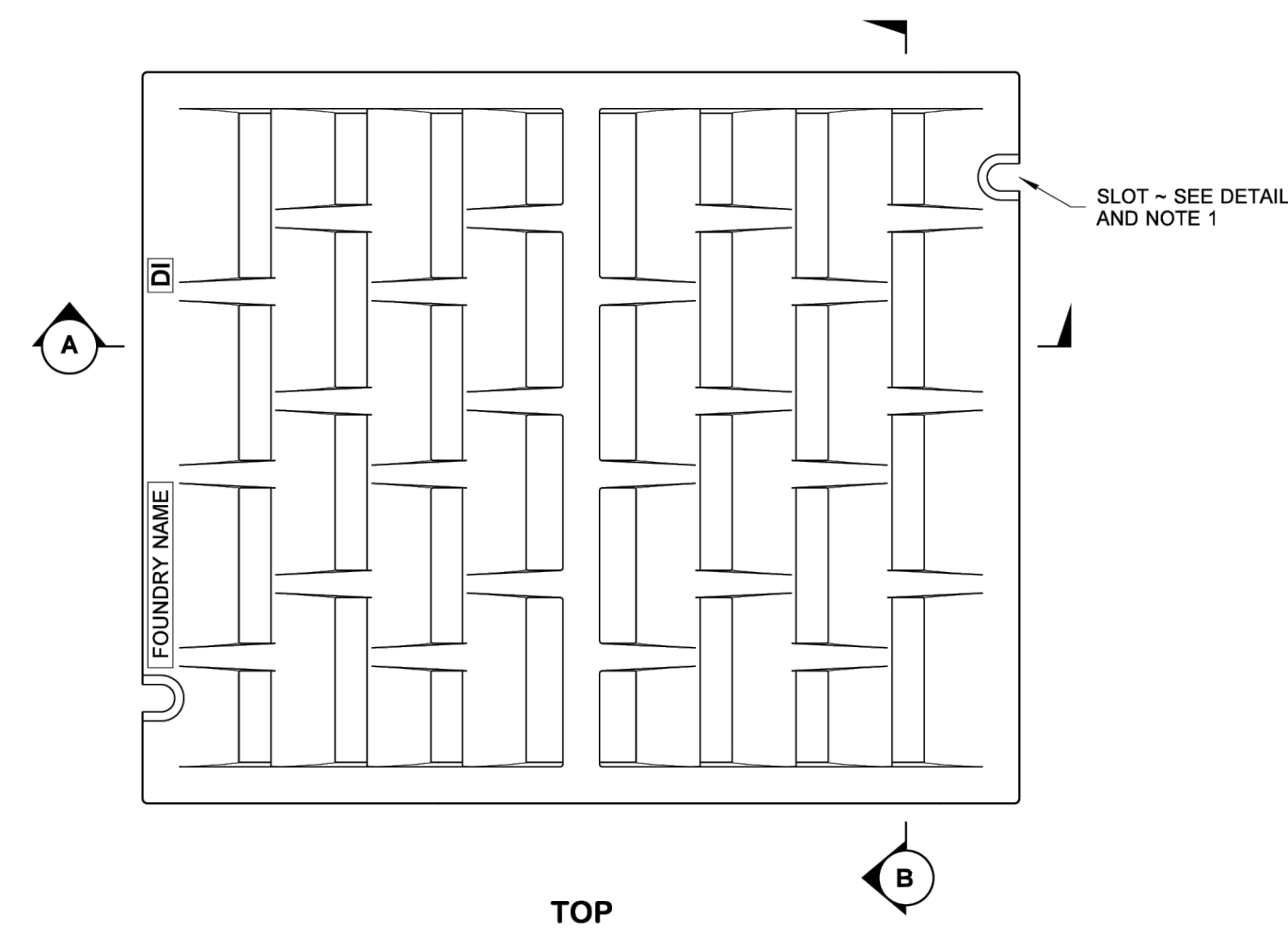
CATCH BASIN DIAMETER	MIN. WALL THICKNESS	MIN. BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS
48"	4"	6"	36"	8"
54"	4.5"	8"	42"	8"
60"	5"	8"	48"	8"
72"	6"	8"	60"	12"
84"	8"	12"	72"	12"
96"	8"	12"	84"	12"
120"	10"	12"	96"	12"
144"	12"	12"	108"	12"

CATCH BASIN DIAMETER	PIPE MATERIAL WITH MAXIMUM INSIDE DIAMETER			
	CONCRETE	ALL METAL	CPSP (1) PP (4)	SOLID WALL PVC (2) PROFILE WALL PVC (3)
48"	24"	30"	24"	30"
54"	30"	36"	30"	36"
60"	36"	42"	36"	42"
72"	42"	54"	42"	48"
84"	54"	60"	54"	48"
96"	60"	72"	60"	48"
120"	66"	84"	60"	48"
144"	78"	96"	60"	48"

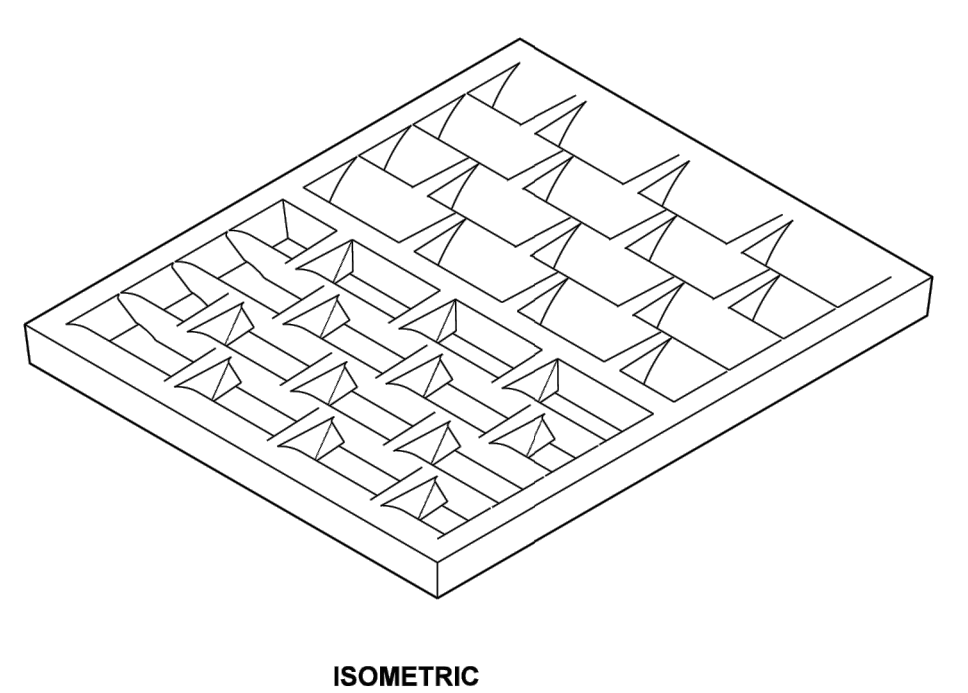
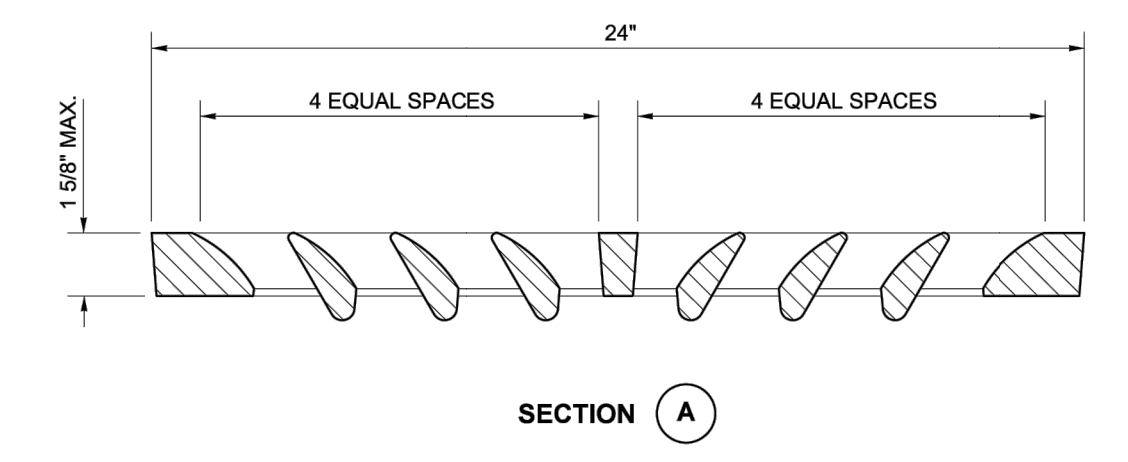
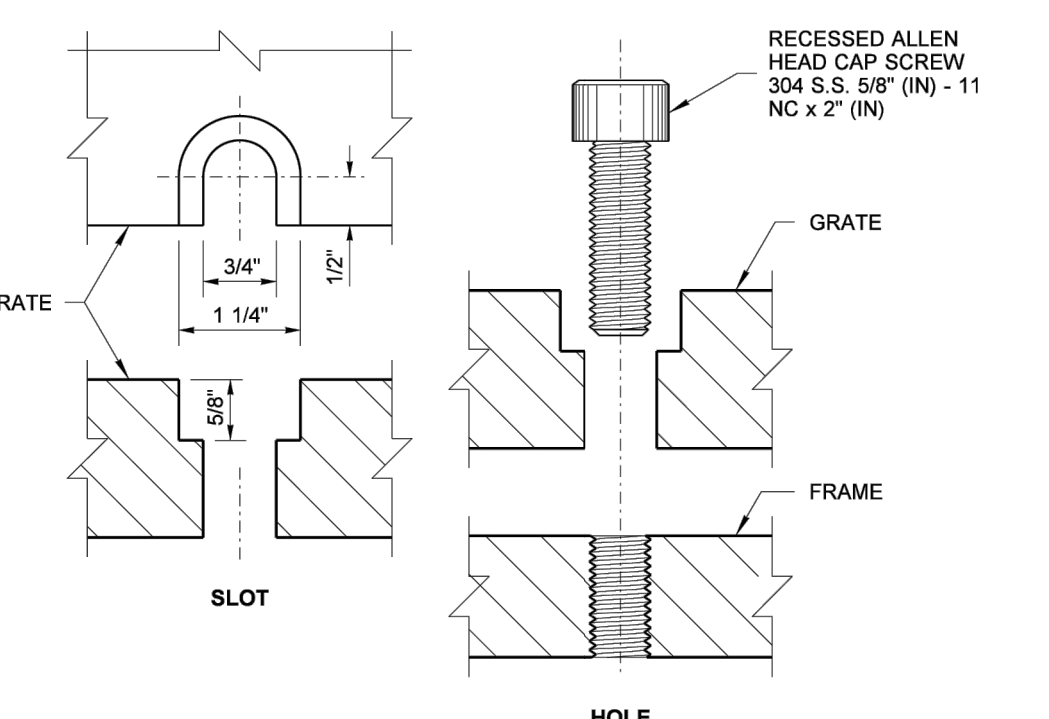
- ① Corrugated Polyethylene Storm Sewer Pipe (See **Standard Specification Section 9-05.20**)
② See **Standard Specification Section 9-05.12(3)**
③ See **Standard Specification Section 9-05.12(2)**
④ Polypropylene Pipe (See **Standard Specification Section 9-05.24**)



CATCH BASIN TYPE 2
STANDARD PLAN B-10.20-03
SHEET 1 OF 1 SHEET
APPROVED FOR PUBLICATION
Mark A. Powers Aug 23, 2023
STATE DESIGN ENGINEER
Washington State Department of Transportation



- NOTES**
- Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" (in) - 11 NC x 2" (in) allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer.
 - Refer to **Standard Specification Section 9-05.15**, and **9-05.18(2)** for additional requirements.
 - For frame details, see **Standard Plan B-30.10**.



JOSEPH HEILMAN
REGISTERED PROFESSIONAL ENGINEER
Feb 20 2018 12:54 PM
RECTANGULAR BI-DIRECTIONAL VANE GRATE
STANDARD PLAN B-30.40-03
SHEET 1 OF 1 SHEET
APPROVED FOR PUBLICATION
COURTESY, JLF
Feb 7 2018 10:45 AM
STATE DESIGN ENGINEER
Washington State Department of Transportation

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/24

© 2025 CESO, INC.
Project Number: 763838
Scale: AS SHOWN
Drawn By: HS
Checked By: CG
Date: 04/24/2025
Issue: FOR PERMIT

Drawing Title:
CONSTRUCTION DETAILS

SITE INFORMATION

NF: DELHUR INDUSTRIES INC
CRITCHFIELD ROAD, PORT ANGELES, WASHINGTON 98363
APN: 073012120075
TOTAL AREA:
1,116,118 ± SQUARE FEET, OR 25.623 ± ACRES

TITLE COMMITMENT INFORMATION

THE PROPERTY HEREON DESCRIBED IS THE SAME AS THE PERTINENT PROPERTY AS DESCRIBED IN CHICAGO TITLE INSURANCE COMPANY, ORDER NO. 133853-TO (REF NO. 1250151-NCS), WITH A COMMITMENT DATE OF JANUARY 15, 2025 AT 08:30 A.M.

SCHEDULE A DESCRIPTION

PARCEL B OF BOUNDARY LINE ADJUSTMENT SURVEY RECORDED JUNE 7, 2016 IN VOLUME 78 OF SURVEYS, PAGE 81, UNDER AUDITOR'S FILE NO. 2016-1335381, BEING A PORTION OF THE NORTHWEST QUARTER AND THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 30 NORTH, RANGE 7 WEST, W.M., LYING NORTHERLY OF HIGHWAY 112 AND SOUTHWESTERLY OF COUNTY ROAD NO. 31950 (CRITCHFIELD ROAD).

SITUATE IN CLALLAM COUNTY, STATE OF WASHINGTON.

NOTES CORRESPONDING TO SCHEDULE B

- C** — SPECIAL EXCEPTIONS TO FOLLOW:
- C2** — ALL COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS OR OTHER SERVITUDES, IF ANY, DISCLOSED BY BOUNDARY LINE ADJUSTMENT SURVEY RECORDED UNDER CLALLAM COUNTY RECORDING NO. 2016-1335381, BUT OMITTING COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, RIGHTS OR BENEFITS, IF ANY, WHICH MAY BE DISCLOSED BY THE RECORDED DOCUMENT(S) ABOVE AFFECTING LAND OUTSIDE THE BOUNDARY DESCRIBED HEREIN. (AFFECTS: CONTAINS NO PLOTTABLE EASEMENT ITEMS)
- C4** — MATTERS SET FORTH BY SURVEY:
RECORDED: OCTOBER 4, 2013
RECORDING NO.: 2013-1301128 (V 74 OF SVYS. P 82)
DISCLOSES: LOCATION OF ROADS
(AFFECTS: CONTAINS NO PLOTTABLE EASEMENT ITEMS)
- C5** — ALL COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS OR OTHER SERVITUDES, IF ANY, DISCLOSED BY SURVEY RECORDED UNDER CLALLAM COUNTY RECORDING NO. 2016-1335384, BUT OMITTING COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, RIGHTS OR BENEFITS, IF ANY, WHICH MAY BE DISCLOSED BY THE RECORDED DOCUMENT(S) ABOVE AFFECTING LAND OUTSIDE THE BOUNDARY DESCRIBED HEREIN. (AFFECTS: CONTAINS NO PLOTTABLE EASEMENT ITEMS)
- C6** — COVENANT FOR MAINTENANCE, REPAIR AND OPERATION OF STORM DRAINAGE FACILITIES, IMPOSED BY DOCUMENT RECORDED UNDER CLALLAM COUNTY RECORDING NO. 2024-1463405
(AFFECTS: BLANKET IN NATURE)
- C7** — OPERATION AND MAINTENANCE MANUAL, IMPOSED BY DOCUMENT RECORDED UNDER CLALLAM COUNTY RECORDING NO. 2024-1463406
(AFFECTS: CONTAINS NO PLOTTABLE EASEMENT ITEMS)
- C8** — EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
GRANTEE: PACIFIC TELEPHONE AND TELEGRAPH COMPANY
PURPOSE: MAINTAIN POLES AND WIRE
AREA AFFECTED: PORTION OF PROPERTY HEREIN DESCRIBED
RECORDED: JULY 25, 1928
RECORDING NO.: 124419
(AFFECTS: CONTAINS NO PLOTTABLE EASEMENT ITEMS)
- C9** — EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
GRANTEE: PUGET SOUND POWER & LIGHT COMPANY
PURPOSE: MAINTAIN LINES AND POLES
AREA AFFECTED: PORTION OF PROPERTY HEREIN DESCRIBED
RECORDED: AUGUST 21, 1937
RECORDING NO.: 112267
(UNABLE TO DETERMINE, INSUFFICIENT LEGAL DESCRIPTION, BLOCK 30 REFERENCED WITHIN NOT KNOWN TO SURVEYOR)
- C10** — EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
GRANTEE: PORT OF PORT ANGELES
PURPOSE: AVIATION EASEMENT
AREA AFFECTED: PORTION OF PROPERTY HEREIN DESCRIBED
RECORDED: AUGUST 29, 2008
RECORDING NO.: 2008-1225974
(AFFECTS: BLANKET IN NATURE)
- C11** — TERMS AND CONDITIONS OF WAIVER OF CLAIM FOR DAMAGES AND CONSENT TO LOCATE ROAD
RECORDED IN VOLUME 964 OF OFFICIAL RECORDS AT PAGE 65
(UNABLE TO DETERMINE, INSUFFICIENT LEGAL DESCRIPTION, LOT 1 REFERENCED WITHIN NOT KNOWN TO SURVEYOR)

ZONING INFORMATION

PROPERTY IS CURRENTLY ZONED: **AWAITING ZONING REPORT**

OBSERVED USE: VACANT LAND ; USE PERMITTED BY ZONE: YES, or NO

ITEM	REQUIRED	OBSERVED
MIN. SETBACKS FRONT		N/A
MIN. SETBACKS SIDE		N/A
MIN. SETBACKS REAR		N/A
MAX. BUILDING HEIGHT		N/A
MIN. LOT AREA		1,116,118 SQ. FT. ±
MIN. LOT WIDTH		890.04'
MAX. BLDG COVERAGE		0%
PARKING REGULAR		0
PARKING HANDICAP		0
PARKING TOTAL		0

GENERAL NOTES

- SOME FEATURES SHOWN ON THIS PLAT MAY BE SHOWN OUT OF SCALE FOR CLARITY.
- DIMENSIONS ON THIS PLAT ARE EXPRESSED IN FEET AND DECIMAL PARTS THEREOF UNLESS OTHERWISE NOTED. MONUMENTS WERE FOUND AT POINTS WHERE INDICATED.
- IN REGARD TO ALTA/NSPS TABLE A ITEM 16, THERE WAS NO OBSERVABLE EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR ADDITIONS EXCEPT AS SHOWN HEREON.
- IN REGARD TO ALTA/NSPS TABLE A ITEM 17, THERE WERE NO KNOWN PROPOSED CHANGES IN RIGHT OF WAY LINES, RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS EXCEPT AS SHOWN HEREON.
- AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP, OR SANITARY LANDFILL.
- AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A CEMETERY, ISOLATED GRAVE SITE OR BURIAL GROUNDS.
- COMPLETED FIELD WORK WAS MARCH 05, 2025.
- THE DISTANCES SHOWN HEREON ARE UNITS OF GROUND MEASUREMENT.
- THE NEAREST INTERSECTING STREET IS THE INTERSECTION OF SOUTH CRITCHFIELD ROAD AND WEST EDGEWOOD DRIVE, WHICH IS ADJACENT TO THE SOUTHEAST CORNER OF THE SUBJECT PROPERTY.
- THE SUBJECT PROPERTY HAS DIRECT PHYSICAL ACCESS TO SOUTH CRITCHFIELD ROAD AND WEST EDGEWOOD DRIVE, EACH BEING A PUBLICLY DEDICATED RIGHT-OF-WAY.
- NO SURVEYOR OR ANY OTHER PERSON OTHER THAN A LICENSED WASHINGTON ATTORNEY MAY PROVIDE LEGAL ADVICE CONCERNING THE STATUS OF TITLE TO THE PROPERTY DESCRIBED IN THIS SURVEY (THE SUBJECT PROPERTY). THE PURPOSE OF THIS SURVEY, AND THE COMMENTS RELATED TO THE SCHEDULE B/II EXCEPTIONS, IS ONLY TO SHOW THE LOCATION OF BOUNDARIES AND PHYSICAL OBJECTIONS IN RELATION THERETO. TO THE EXTENT THAT THE SURVEY INDICATES THAT THE LEGAL INSTRUMENT "AFFECTS" THE SUBJECT PROPERTY, SUCH STATEMENT IS ONLY INTENDED TO INDICATE THAT PROPERTY BOUNDARIES INCLUDED IN SUCH INSTRUMENT INCLUDE SOME OR ALL OF THE SUBJECT PROPERTY. THE SURVEYOR DOES NOT PURPORT TO DESCRIBE HOW SUCH INSTRUMENT AFFECTS THE SUBJECT PROPERTY OR THE ENFORCEABILITY OR LEGAL CONSEQUENCES OF SUCH INSTRUMENT.
- NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS WERE TAKEN FROM CLALLAM COUNTY GIS.
- THE SUBJECT PROPERTY SHOWN HEREON FORMS A MATHEMATICALLY CLOSED FIGURE AND IS CONTIGUOUS WITH THE ADJOINING PUBLIC RIGHT-OF-WAY AND/OR ADJOINING PARCELS WITH NO GAPS OR OVERLAPS.
- IN REGARD TO ALTA/NSPS TABLE A ITEM 10, NO VISIBLE DIVISION OR PARTY WALLS WITH RESPECT TO ADJOINING PROPERTIES WERE OBSERVED AT THE TIME THE FIELD SURVEY WAS PERFORMED, NOR WERE ANY DESIGNATED BY THE CLIENT.
- A PRIVATE UTILITY LOCATE WAS CONDUCTED ON THE SUBJECT PROPERTY BY BLEW & ASSOCIATES ON FEBRUARY 26, 2025.
- AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WERE NO OBSERVED BUILDINGS ON THE SUBJECT PROPERTY.
- LINE MARKED BLUE BY OTHERS WE ATTEMPTED TO LOCATE THESE LINE(S)/FEATURE(S) WITH BOTH ELECTROMAGNETIC LOCATOR AND GROUND PENETRATING RADAR BUT DID NOT RECEIVE A RESPONSE. THIS WOULD INDICATE THAT THE LINE IS NON CONDUCTIVE, PREVENTING US FROM LOCATING IT WITH EM AND THAT THE SOIL CONDITIONS/SIZE/DEPTH OF THE LINE ARE NOT CONDUCTIVE TO LOCATING WITH GPR.
- UNKNOWN WATERLINE PIPE TYPE/SIZE, NO GIS MAPS PROVIDED TO SURVEYOR
- ELEVATIONS ESTABLISHED WITH GPS STATIC OBSERVATIONS UTILIZING ONLINE POSITIONING USER SERVICE (OPUS) FOR POST PROCESSING, VERTICAL DATUM BASED UPON NORTH AMERICAN VERTICAL DATUM (NAVD88) IN US SURVEY FEET. CONTOURS SHOWN ARE 1 FOOT INTERVALS.

ALTA/NSPS LAND TITLE SURVEY

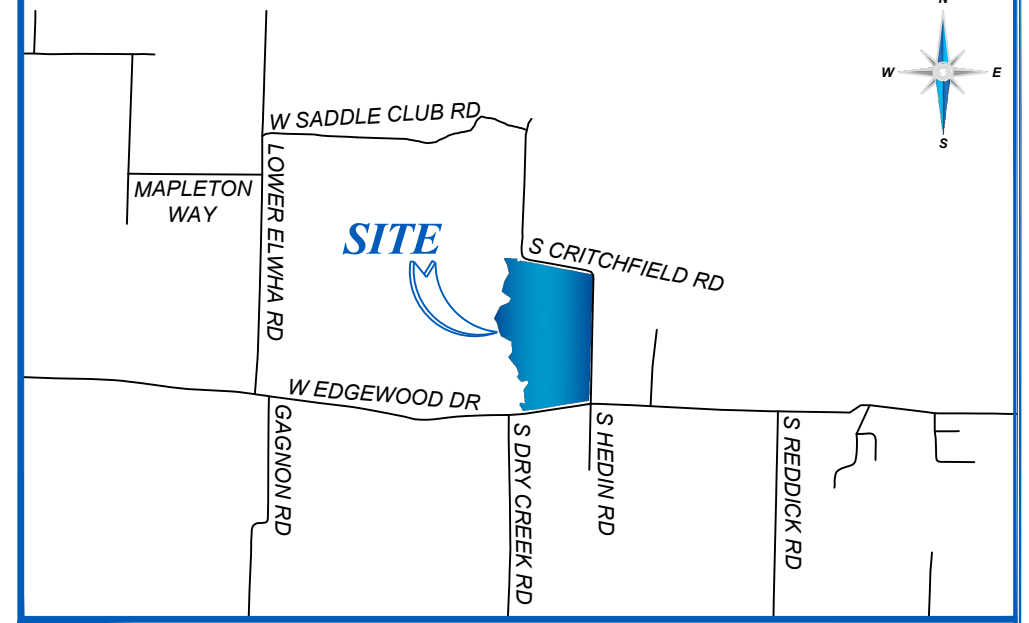
CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

A PORTION OF SECTION 12, T-30-N, R-7-W
WILLIAMETTE MERIDIAN, CITY OF PORT ANGELES,
CLALLAM COUNTY, STATE OF WASHINGTON

VICINITY MAP

NOT TO SCALE



PARKING INFORMATION

NO PARKING STRIPES OBSERVED AT THE TIME OF THE ALTA SURVEY.

FLOOD ZONE INFORMATION

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE "C" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 5300210485E, WHICH BEARS AN EFFECTIVE DATE OF 02/23/2001 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

ZONE "C" - AREA OF MINIMAL FLOOD HAZARD, USUALLY DEPICTED ON FIRMS AS ABOVE THE 500-YEAR FLOOD LEVEL. ZONE "C" MAY HAVE FLOODING AND LOCAL DRAINAGE PROBLEMS THAT DON'T WARRANT A DETAILED STUDY OR DESIGNATION AS BASE FLOODPLAIN.

BASIS OF BEARING

THE BASIS OF BEARING OF THIS SURVEY IS GRID NORTH BASED ON THE EAST LINE OF THE SUBJECT PROPERTY, THE BEARING IS DENOTED AS N01°42'44"E PER GPS COORDINATE OBSERVATIONS WASHINGTON STATE PLANE, NORTH ZONE NAD83.

LATITUDE = 48°06'46.6503"
LONGITUDE = -123°30'43.3722"
CONVERGENCE ANGLE = -01°59'39.6866"

SIGNIFICANT OBSERVATIONS

NONE OBSERVED AT THE TIME OF THE ALTA/NSPS SURVEY.

UTILITY INFORMATION

THE UTILITIES SHOWN ON THIS DRAWING HEREON HAVE BEEN LOCATED BY FIELD MEASUREMENTS, PRIVATE UTILITY LOCATE BY BLEW & ASSOCIATES, UTILITY MAP DRAWINGS, AND WASHINGTON 811 DIG UTILITY LOCATE REQUEST. BLEW AND ASSOCIATES MAKES NO WARRANTY TO THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THIS DRAWING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION. TICKET NUMBER: 550016006

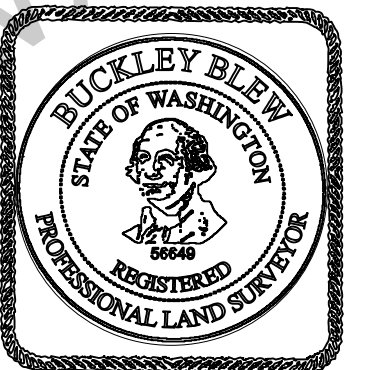
COMPANY:	CONTACT:
CLALLAM COUNTY PUBLIC WORKS	360-417-2379
PUD #1 OF CLALLAM COUNTY	360-452-9771
DRY CREEK WATER ASSOCIATION	360-452-2780
CITY OF PORT ANGELES	360-417-4724
CENTURYLINK ENGINEERING	877-366-8344
ASTOUND BROADBAND	866-928-3123

SURVEYOR'S CERTIFICATE

TO: CHICAGO TITLE INSURANCE COMPANY.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 5, 6(A), 6(B), 7(B)(1), 7(C), 8, 9, 10, 11(B), 13, 14, 16, 17, AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 03/05/2025.

DATE OF PLAT OR MAP: 03/12/2025



BUCKLEY D. BLEW
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 56649
STATE OF WASHINGTON
WASHINGTON C.O.A. 3994

BLEW

Surveying | Engineering | Environmental

3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703
EMAIL: SURVEY@BLEWINC.COM

OFFICE: 479.443.4506 FAX: 479.582.1883
WWW.BLEWINC.COM

SURVEYOR JOB NUMBER:
25-0748

SURVEY DRAWN BY:
MEK & TL - 03/12/2025

SURVEY REVIEWED BY:
KLR

SHEET:
1 OF 7

DATE	REVISION HISTORY	BY

ALTANSPS LAND TITLE SURVEY

CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

A PORTION OF THE N 1/2, SEC. 12, T-30-N, R-7-W
WILLIAMETTE MERIDIAN, CITY OF PORT ANGELES,
CLALLAM COUNTY, STATE OF WASHINGTON

TEMPORARY BENCHMARK INFORMATION

TBM #1
NORTHING: 418491.04
EASTING: 985576.62
ELEVATION: 291.04'
SET 5/8" REBAR

TBM #2
NORTHING: 417031.30
EASTING: 986226.98
ELEVATION: 310.04'
FOUND 5/8" REBAR
WITH 1" ALUMINIUM CAP
"LS 37531"

INVERT INFORMATION

DMH #1
RIM: 294.16'
INVERT N - 12" CPP
INVERT S - 12" CPP
BOTTOM OF STRUCTURE - 287.2'

DMH #2
RIM: 321.89'
BOTTOM OF STRUCTURE - 309.8'
(FULL OF WATER)

DMH #3
RIM: 321.72'
BOTTOM OF STRUCTURE - 308.9'
(FULL OF WATER)

DMH #4
RIM: 294.20'
INVERT NW - 12" CPP
INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 289.9'

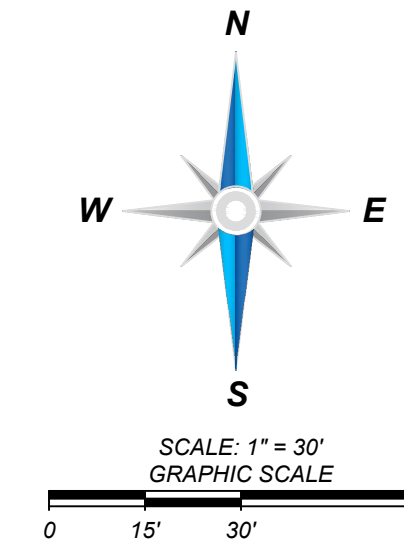
DMH #5
RIM: 294.15'
INVERT NE - 12" CPP
INVERT NW - 12" CPP
INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 290.1'

DI #1
RIM: 293.05'
INVERT N - 12" CPP
BOTTOM OF STRUCTURE - 289.1'

DI #2
RIM: 308.23'
INVERT NW - 12" CPP - 304.0'
INVERT SE - 12" CPP - 304.3'
BOTTOM OF STRUCTURE - 302.7'

DI #3
RIM: 305.27'
INVERT NW - 12" CPP - 306.3'
INVERT SE - 12" CPP - 306.7'
BOTTOM OF STRUCTURE - 306.3'

DI #4
RIM: 309.06'
INVERT NW - 12" CPP - 307.0'
BOTTOM OF STRUCTURE - 305.1'



(VACANT LAND)
PARCEL B
PER FILE NO. 2016-1335381
TOTAL AREA:
1,116,116 SQ. FT. ±
25.623 ACRES ±
APN: 073012120075

LEGEND & SYMBOLS

- FOUND MONUMENT AS NOTED
- COMPUTED POINT
- ⊕ TEMPORARY BENCHMARK (TBM)
- ⊙ POWER POLE
- ⊕ SIGN
- ⊕ IRRIGATION CONTROL VALVE
- ⊕ WATER METER
- ⊕ WATER VALVE
- ⊕ WELLHEAD
- ⊕ WATER VAULT
- ⊕ DRAIN INLET (DI)
- ⊕ STORM MANHOLE (DMH)
- ⊕ TELEPHONE PEDESTAL
- ⊕ MAILBOX
- (M) MEASURED/CALCULATED DIMENSION
- (R) RECORD DIMENSION
- N/F NOW OR FORMERLY
- TB TOP OF BANK
- BB BOTTOM OF BANK
- EW EDGE OF WATER
- EC EDGE OF CONCRETE
- EA EDGE OF ASPHALT
- NG NATURAL GROUND
- CPP CORRUGATED PLASTIC PIPE
- CD CENTERLINE OF DITCH
- BOUNDARY LINE
- ADJOINER/TITLE LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- CROWN OF ROAD
- x-x-x-x- FENCE LINE
- DP-DP- OVERHEAD POWER LINE
- LOE- UNDERGROUND ELECTRIC LINE
- WL-WL- UNDERGROUND WATER LINE
- GUARDRAIL
- DIP- DRIP LINE
- FOP- UNDERGROUND FIBER OPTIC LINE
- BTL- UNDERGROUND TELEPHONE LINE
- UNK- UNKNOWN UNDERGROUND UTILITY LINE
- SD- UNDERGROUND STORM DRAIN LINE
- MAJ- MAJOR CONTOUR
- MIN- MINOR CONTOUR
- EOW- EDGE OF WATER

LINE TABLE

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1(M)	S 01°53'35" W	10.00'	L1(R)	S 01°53'31" W	10.00'
L2(M)	N 88°40'06" W	30.00'	L2(R)	N 88°40'10" W	30.00'
L3(M)	S 01°53'36" W	30.00'	L3(R)	S 01°53'31" W	30.00'
L4(M)	S 88°40'21" E	126.34'	L4(R)	S 88°40'10" E	126.34'
L5(M)	N 09°37'00" E	8.76'	L5(R)	N 09°36'56" E	8.76'
L6(M)	N 28°51'25" W	57.44'	L6(R)	N 28°51'29" W	57.44'
L7(M)	N 13°01'50" W	92.49'	L7(R)	N 13°01'54" W	92.49'
L8(M)	N 29°17'55" E	91.67'	L8(R)	N 29°17'51" E	91.67'
L9(M)	N 15°36'31" E	105.06'	L9(R)	N 15°36'47" E	105.06'
L10(M)	N 55°15'40" W	116.52'	L10(R)	N 55°15'44" W	116.52'
L11(M)	N 31°06'23" E	52.31'	L11(R)	N 31°06'19" E	52.31'
L12(M)	N 64°42'03" E	95.52'	L12(R)	N 64°41'59" E	95.52'
L13(M)	N 26°25'35" E	129.97'	L13(R)	N 26°25'31" E	129.97'
L14(M)	N 32°11'37" W	55.04'	L14(R)	N 32°11'41" W	55.04'
L15(M)	S 14°46'56" E	83.29'	L15(R)	S 14°47'00" E	83.29'
L16(M)	N 20°06'30" W	50.03'	L16(R)	N 20°06'34" W	50.03'
L17(M)	N 62°06'13" W	122.40'	L17(R)	N 62°06'17" W	122.40'
L18(M)	N 01°15'37" W	109.58'	L18(R)	N 01°15'31" W	109.58'
L19(M)	N 39°25'38" E	57.43'	L19(R)	N 39°25'34" E	57.43'
L20(M)	N 37°45'34" W	127.05'	L20(R)	N 37°45'38" W	127.05'
L21(M)	N 21°21'04" W	72.95'	L21(R)	N 21°21'08" W	72.95'
L22(M)	N 35°31'19" E	36.07'	L22(R)	N 35°31'15" E	36.07'
L23(M)	S 41°47'27" E	85.51'	L23(R)	S 41°47'31" E	85.51'
L24(M)	N 76°17'49" E	58.79'	L24(R)	N 76°17'45" E	58.79'
L25(M)	S 36°31'27" E	27.26'	L25(R)	S 36°31'31" E	27.26'
L26(M)	N 33°13'12" E	83.49'	L26(R)	N 33°13'08" E	83.49'
L27(M)	N 04°31'54" W	140.00'	L27(R)	N 04°31'58" W	140.00'
L28(M)	S 86°11'00" E	53.88'	L28(R)	S 86°11'04" E	53.88'
L29(M)	N 03°29'18" W	27.38'	L29(R)	N 03°29'22" W	27.38'
L30(M)	S 39°50'47" E	40.70'	L30(R)	S 39°50'51" E	40.70'
L31(M)	N 03°11'58" W	17.51'	L31(R)	N 03°11'53" W	17.52'
L32(M)	S 88°40'21" E	30.00'	L32(R)	S 88°40'10" E	30.00'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1(M)	1714.31'	30.01'	30.00'	N 84°44'14" E	1°00'10"
C1(R)	1714.31'	30.00'	30.00'	N 81°54'41" E	4°38'56"
C2(M)	1714.31'	139.09'	139.09'	-	5°39'05"
C2(R)	1714.31'	169.09'	-	-	-

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Surveying | Engineering | Environmental
3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703
EMAIL: SURVEY@BLEWINC.COM
OFFICE: 479.443.4506 FAX: 479.582.1883
WWW.BLEWINC.COM

SURVEYOR JOB NUMBER: 25-0748	SURVEY DRAWN BY: MEK & TL - 03/12/2025
SURVEY REVIEWED BY: KLR	SHEET: 2 OF 7

ALTANSPS LAND TITLE SURVEY

CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

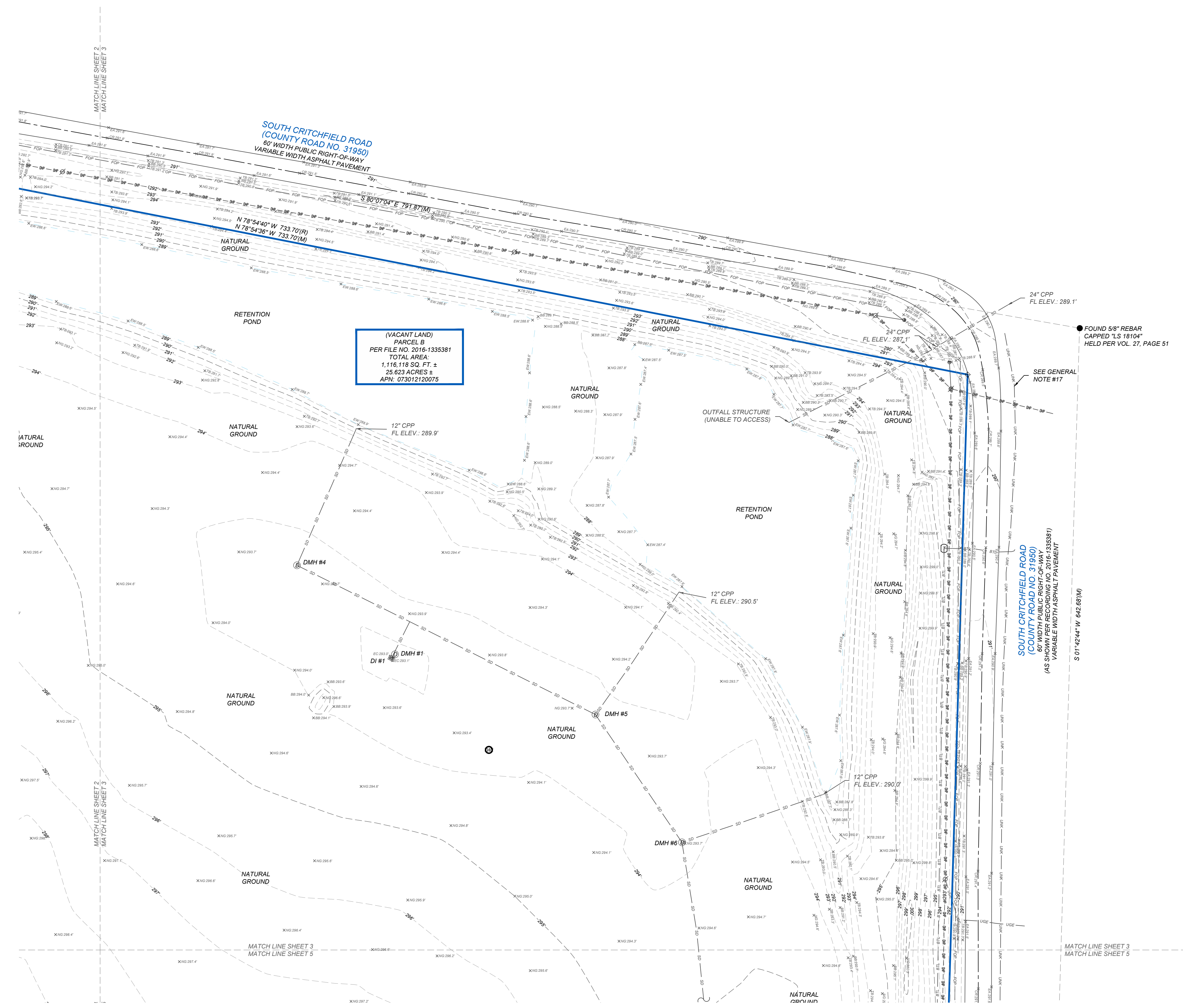
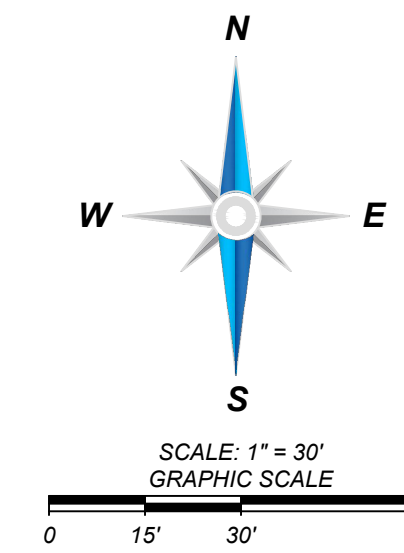
A PORTION OF THE N 1/2, SEC. 12, T-30-N, R-7-W
WILLIAMETTE MERIDIAN, CITY OF PORT ANGELES,
CLALLAM COUNTY, STATE OF WASHINGTON

TEMPORARY BENCHMARK INFORMATION

TBM #1	TBM #2
NORTHING: 418491.04	NORTHING: 417031.30
EASTING: 985576.62	EASTING: 986226.98
ELEVATION: 291.04'	ELEVATION: 310.04'
SET 5/8" REBAR	FOUND 5/8" REBAR WITH 1" ALUMINIUM CAP "LS 37531"

INVERT INFORMATION

DMH #1	DMH #2	DMH #3	DMH #4	DMH #5	DI #1	DI #2	DI #3	DI #4
RIM: 294.16'	RIM: 321.89'	RIM: 321.72'	RIM: 294.20'	RIM: 294.15'	RIM: 293.05'	RIM: 308.23'	RIM: 305.27'	RIM: 309.05'
INVERT N - 12" CPP	BOTTOM OF STRUCTURE - 309.8'	BOTTOM OF STRUCTURE - 308.9'	INVERT NW - 12" CPP	INVERT NE - 12" CPP	INVERT NW - 12" CPP	INVERT NW - 12" CPP	INVERT NW - 12" CPP	INVERT NW - 12" CPP
INVERT S - 12" CPP	(FULL OF WATER)	(FULL OF WATER)	INVERT SE - 12" CPP	INVERT SE - 12" CPP	INVERT SE - 12" CPP	INVERT SE - 12" CPP	INVERT SE - 12" CPP	INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 287.2'			BOTTOM OF STRUCTURE - 289.9'	BOTTOM OF STRUCTURE - 290.1'	BOTTOM OF STRUCTURE - 289.1'	BOTTOM OF STRUCTURE - 304.0'	BOTTOM OF STRUCTURE - 306.3'	BOTTOM OF STRUCTURE - 305.1'



LEGEND & SYMBOLS

- FOUND MONUMENT AS NOTED
- COMPUTED POINT
- ⊕ TEMPORARY BENCHMARK (TBM)
- ⊙ POWER POLE
- ⊕ SIGN
- ⊕ IRRIGATION CONTROL VALVE
- ⊕ WATER METER
- ⊕ WATER VALVE
- ⊕ WELLHEAD
- ⊕ WATER VAULT
- ⊕ DRAIN INLET (DI)
- ⊕ STORM MANHOLE (DMH)
- ⊕ TELEPHONE PEDESTAL
- ⊕ MAILBOX
- (M) MEASURED/CALCULATED DIMENSION
- (R) RECORD DIMENSION
- N/F NOW OR FORMERLY
- TB TOP OF BANK
- BB BOTTOM OF BANK
- EW EDGE OF WATER
- EC EDGE OF CONCRETE
- EA EDGE OF ASPHALT
- NG NATURAL GROUND
- CPP CORRUGATED PLASTIC PIPE
- CD CENTERLINE OF DITCH
- BOUNDARY LINE
- ADJOINER/TITLE LINE
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- GUARDRAIL
- DRIP LINE
- UNDERGROUND FIBER OPTIC LINE
- UNDERGROUND TELEPHONE LINE
- UNKNOWN UNDERGROUND UTILITY LINE
- UNDERGROUND STORM DRAIN LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- EDGE OF WATER

LINE TABLE

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1(M)	S 01°53'35" W	10.00'	L1(R)	S 01°53'31" W	10.00'
L2(M)	N 88°40'06" W	30.00'	L2(R)	N 88°40'10" W	30.00'
L3(M)	S 01°53'36" W	30.00'	L3(R)	S 01°53'31" W	30.00'
L4(M)	S 88°40'21" E	126.34'	L4(R)	S 88°40'10" E	126.34'
L5(M)	N 09°37'00" E	8.76'	L5(R)	N 09°36'56" E	8.76'
L6(M)	N 28°51'25" W	57.44'	L6(R)	N 28°51'29" W	57.44'
L7(M)	N 13°01'50" W	92.49'	L7(R)	N 13°01'54" W	92.49'
L8(M)	N 29°17'55" E	91.67'	L8(R)	N 29°17'51" E	91.67'
L9(M)	N 15°36'31" E	105.06'	L9(R)	N 15°36'47" E	105.06'
L10(M)	N 55°15'40" W	116.52'	L10(R)	N 55°15'44" W	116.52'
L11(M)	N 31°06'23" E	52.31'	L11(R)	N 31°06'19" E	52.31'
L12(M)	N 64°42'03" E	95.52'	L12(R)	N 64°41'59" E	95.52'
L13(M)	N 26°25'35" E	129.97'	L13(R)	N 26°25'31" E	129.97'
L14(M)	N 32°11'37" W	55.04'	L14(R)	N 32°11'41" W	55.04'
L15(M)	S 14°46'56" E	83.29'	L15(R)	S 14°47'00" E	83.29'
L16(M)	N 20°06'30" W	50.03'	L16(R)	N 20°06'34" W	50.03'
L17(M)	N 02°06'13" W	122.40'	L17(R)	N 02°06'17" W	122.40'
L18(M)	N 01°15'37" W	109.58'	L18(R)	N 01°15'31" W	109.58'
L19(M)	N 39°25'38" E	57.43'	L19(R)	N 39°25'34" E	57.43'
L20(M)	N 37°45'34" W	127.05'	L20(R)	N 37°45'38" W	127.05'
L21(M)	N 21°21'04" W	72.95'	L21(R)	N 21°21'08" W	72.95'
L22(M)	N 35°31'19" E	36.07'	L22(R)	N 35°31'15" E	36.07'
L23(M)	S 41°47'27" E	85.51'	L23(R)	S 41°47'31" E	85.51'
L24(M)	N 76°17'49" E	58.79'	L24(R)	N 76°17'45" E	58.79'
L25(M)	S 36°31'27" E	27.26'	L25(R)	S 36°31'31" E	27.26'
L26(M)	N 33°13'12" E	83.49'	L26(R)	N 33°13'08" E	83.49'
L27(M)	N 04°31'54" W	140.00'	L27(R)	N 04°31'58" W	140.00'
L28(M)	S 86°11'00" E	53.88'	L28(R)	S 86°11'04" E	53.88'
L29(M)	N 03°29'18" W	27.38'	L29(R)	N 03°29'22" W	27.38'
L30(M)	S 39°50'47" E	40.70'	L30(R)	S 39°50'51" E	40.70'
L31(M)	N 03°11'58" W	17.51'	L31(R)	N 03°11'53" W	17.52'
L32(M)	S 88°40'21" E	30.00'	L32(R)	S 88°40'10" E	30.00'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1(M)	1714.31'	30.01'	30.00'	N 84°44'14" E	1°00'10"
C1(R)	1714.31'	30.00'	-	-	1°00'10"
C2(M)	1714.31'	139.09'	139.05'	N 81°54'41" E	4°38'56"
C2(R)	1714.31'	169.09'	-	-	5°39'05"

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SURVEYOR JOB NUMBER: 25-0748	SURVEY DRAWN BY: MEK & TL - 03/12/2025
SURVEY REVIEWED BY: KLR	SHEET: 3 OF 7

ALTANSPS LAND TITLE SURVEY

CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

A PORTION OF THE N 1/2, SEC. 12, T-30-N, R-7-W
WILLIAMETTE MERIDIAN, CITY OF PORT ANGELES,
CLALLAM COUNTY, STATE OF WASHINGTON

N/A22 ENTERPRISES LLC
403 S LINCOLN ST STE 4 PMB 50
PORT ANGELES WA 98362
APN: 073012120050

N/A22 ENTERPRISES LLC
403 S LINCOLN ST STE 4 PMB 50
PORT ANGELES WA 98362
APN: 073012120050

(VACANT LAND)
PARCEL B
PER FILE NO. 2016-1335381
TOTAL AREA:
1,116,116 SQ. FT. ±
25.623 ACRES ±
APN: 073012120075

TEMPORARY BENCHMARK INFORMATION

TBM #1
NORTHING: 418491.04
EASTING: 985576.62
ELEVATION: 291.04'
SET 5/8" REBAR

TBM #2
NORTHING: 417031.30
EASTING: 985226.98
ELEVATION: 310.04'
FOUND 5/8" REBAR
WITH 1" ALUMINIUM CAP
"LS 37531"

INVERT INFORMATION

DMH #1
RIM: 294.16'
INVERT E - 12" CPP
INVERT S - 12" CPP
BOTTOM OF STRUCTURE - 287.2'

DMH #2
RIM: 321.89'
BOTTOM OF STRUCTURE - 309.8'
(FULL OF WATER)

DMH #3
RIM: 321.72'
BOTTOM OF STRUCTURE - 308.9'
(FULL OF WATER)

DMH #4
RIM: 294.20'
INVERT NW - 12" CPP
INVERT SE - 12" CPP
INVERT N - 12" CPP
BOTTOM OF STRUCTURE - 289.9'

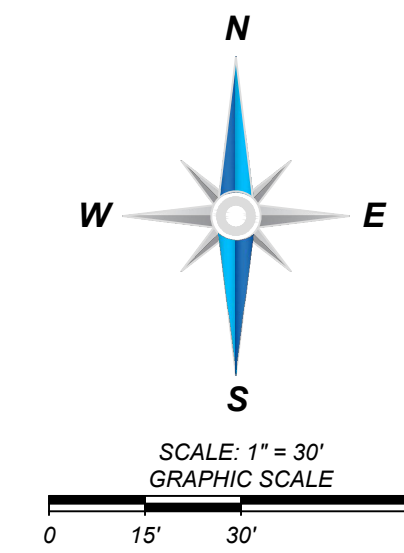
DMH #5
RIM: 294.15'
INVERT NE - 12" CPP
INVERT NW - 12" CPP
INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 290.1'

DI #1
RIM: 295.05'
INVERT N - 12" CPP
BOTTOM OF STRUCTURE - 289.1'

DI #2
RIM: 308.23'
INVERT NW - 12" CPP - 304.0'
INVERT SE - 12" CPP - 304.3'
BOTTOM OF STRUCTURE - 302.7'

DI #3
RIM: 305.27'
INVERT NW - 12" CPP - 306.3'
INVERT SE - 12" CPP - 306.7'
BOTTOM OF STRUCTURE - 306.3'

DI #4
RIM: 309.06'
INVERT NW - 12" CPP - 307.0'
BOTTOM OF STRUCTURE - 305.1'



LEGEND & SYMBOLS

- FOUND MONUMENT AS NOTED
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- ⊕ TEMPORARY BENCHMARK (TBM)
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LINE TABLE

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1(M)	S 01°53'35" W	10.00'	L1(R)	S 01°53'31" W	10.00'
L2(M)	N 88°40'06" W	30.00'	L2(R)	N 88°40'10" W	30.00'
L3(M)	S 01°53'36" W	30.00'	L3(R)	S 01°53'31" W	30.00'
L4(M)	S 88°40'21" E	126.34'	L4(R)	S 88°40'10" E	126.34'
L5(M)	N 09°30'00" E	8.76'	L5(R)	N 09°30'56" E	8.76'
L6(M)	N 28°51'25" W	57.44'	L6(R)	N 28°51'29" W	57.44'
L7(M)	N 13°01'50" W	92.49'	L7(R)	N 13°01'54" W	92.49'
L8(M)	N 29°17'53" E	91.67'	L8(R)	N 29°17'51" E	91.67'
L9(M)	N 15°36'31" E	105.06'	L9(R)	N 15°36'47" E	105.06'
L10(M)	N 55°15'40" W	116.52'	L10(R)	N 55°15'44" W	116.52'
L11(M)	N 31°06'23" E	52.31'	L11(R)	N 31°06'19" E	52.31'
L12(M)	N 64°42'03" E	95.52'	L12(R)	N 64°41'59" E	95.52'
L13(M)	N 26°25'35" E	129.97'	L13(R)	N 26°25'31" E	129.97'
L14(M)	N 32°11'37" W	55.04'	L14(R)	N 32°11'41" W	55.04'
L15(M)	S 14°46'56" E	83.29'	L15(R)	S 14°47'00" E	83.29'
L16(M)	N 20°06'30" W	50.03'	L16(R)	N 20°06'34" W	50.03'
L17(M)	N 62°06'13" W	122.40'	L17(R)	N 62°06'17" W	122.40'
L18(M)	N 01°15'37" W	109.58'	L18(R)	N 01°15'31" W	109.58'
L19(M)	N 39°25'38" E	57.43'	L19(R)	N 39°25'34" E	57.43'
L20(M)	N 37°45'34" W	127.05'	L20(R)	N 37°45'38" W	127.05'
L21(M)	N 21°21'04" W	72.95'	L21(R)	N 21°21'08" W	72.95'
L22(M)	N 35°31'19" E	36.07'	L22(R)	N 35°31'15" E	36.07'
L23(M)	S 41°47'27" E	65.51'	L23(R)	S 41°47'31" E	65.51'
L24(M)	N 76°17'49" E	58.79'	L24(R)	N 76°17'45" E	58.79'
L25(M)	S 36°31'27" E	27.26'	L25(R)	S 36°31'31" E	27.26'
L26(M)	N 33°13'12" E	63.49'	L26(R)	N 33°13'08" E	63.49'
L27(M)	N 04°31'54" W	140.00'	L27(R)	N 04°31'58" W	140.00'
L28(M)	S 86°11'00" E	53.88'	L28(R)	S 86°11'04" E	53.88'
L29(M)	N 03°29'18" W	27.38'	L29(R)	N 03°29'22" W	27.38'
L30(M)	S 39°50'47" E	40.70'	L30(R)	S 39°50'51" E	40.70'
L31(M)	N 03°11'58" W	17.51'	L31(R)	N 03°11'53" W	17.52'
L32(M)	S 88°40'21" E	30.00'	L32(R)	S 88°40'10" E	30.00'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1(M)	1714.31'	30.01'	30.00'	N 84°44'14" E	1°00'10"
C1(R)	1714.31'	30.00'	-	-	1°00'10"
C2(M)	1714.31'	139.09'	139.05'	N 81°54'41" E	4°38'56"
C2(R)	1714.31'	169.09'	-	-	5°39'05"

BLEW

Surveying | Engineering | Environmental

3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703

EMAIL: SURVEY@BLEWINC.COM

OFFICE: 479.443.4506 FAX: 479.582.1883

WWW.BLEWINC.COM

SURVEYOR JOB NUMBER:
25-0748

SURVEY REVIEWED BY:
KLR

SURVEY DRAWN BY:
MEK & TL - 03/12/2025

SHEET:
4 OF 7

ALTANSPS LAND TITLE SURVEY

CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

A PORTION OF THE N 1/2, SEC. 12, T-30-N, R-7-W
WILLAMETTE MERIDIAN, CITY OF PORT ANGELES,
CLALLAM COUNTY, STATE OF WASHINGTON

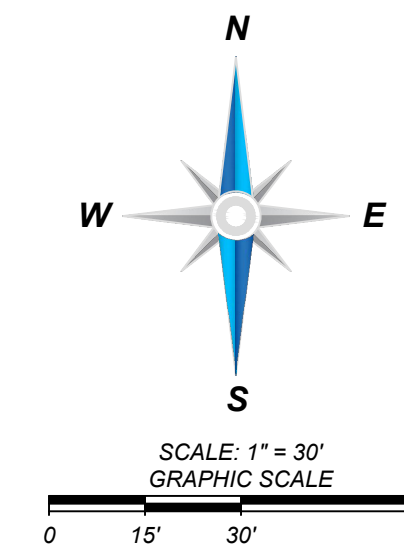
(VACANT LAND)
PARCEL B
PER FILE NO. 2016-1335381
TOTAL AREA:
1,116.118 SQ. FT. ±
25.623 ACRES ±
APN: 073012120075

SEE GENERAL
NOTE #17

S 01°42'44" W 642.65'(W)

FOUND 5/8" REBAR
WITH YELLOW CAP "ILLEGIBLE"
HELD PER VOL. 27, PAGE 51

FOUND 5/8" REBAR
WITH YELLOW CAP "ILLEGIBLE"
HELD PER VOL. 27, PAGE 51



TEMPORARY BENCHMARK INFORMATION

TBM #1 NORTHING: 418491.04 EASTING: 985576.62 ELEVATION: 291.04' SET 5/8" REBAR	TBM #2 NORTHING: 417031.30 EASTING: 986226.98 ELEVATION: 310.04' FOUND 5/8" REBAR WITH 1" ALUMINIUM CAP "LS 37531"
--	---

INVERT INFORMATION

DMH #1 RIM: 294.16' INVERT N - 12" CPP INVERT S - 12" CPP BOTTOM OF STRUCTURE - 287.2'	DMH #2 RIM: 321.89' BOTTOM OF STRUCTURE - 309.8' (FULL OF WATER)	DMH #3 RIM: 321.72' BOTTOM OF STRUCTURE - 308.9' (FULL OF WATER)	DMH #4 RIM: 294.20' INVERT NW - 12" CPP INVERT SE - 12" CPP INVERT N - 12" CPP BOTTOM OF STRUCTURE - 289.9'	DMH #5 RIM: 294.15' INVERT NE - 12" CPP INVERT NW - 12" CPP INVERT SE - 12" CPP BOTTOM OF STRUCTURE - 290.1'
DI #1 RIM: 293.05' INVERT N - 12" CPP BOTTOM OF STRUCTURE - 289.1'	DI #2 RIM: 308.23' INVERT NW - 12" CPP - 304.0' INVERT SE - 12" CPP - 304.3' BOTTOM OF STRUCTURE - 302.7'	DI #3 RIM: 305.27' INVERT NW - 12" CPP - 306.3' INVERT SE - 12" CPP - 306.7' BOTTOM OF STRUCTURE - 306.3'	DI #4 RIM: 309.06' INVERT NW - 12" CPP - 307.0' BOTTOM OF STRUCTURE - 305.1'	

LEGEND & SYMBOLS

- FOUND MONUMENT AS NOTED
- COMPUTED POINT
- ⊕ TEMPORARY BENCHMARK (TBM)
- ⊙ POWER POLE
- ⊛ SIGN
- ⊕ IRRIGATION CONTROL VALVE
- ⊕ WATER METER
- ⊕ WATER VALVE
- ⊕ WELLHEAD
- ⊕ WATER VAULT
- ⊕ DRAIN INLET (DI)
- ⊕ STORM MANHOLE (DMH)
- ⊕ TELEPHONE PEDESTAL
- ⊕ MAILBOX
- (M) MEASURED/CALCULATED DIMENSION
- (R) RECORD DIMENSION
- N/F NOW OR FORMERLY
- TB TOP OF BANK
- BB BOTTOM OF BANK
- EW EDGE OF WATER
- EC EDGE OF CONCRETE
- EA EDGE OF ASPHALT
- NG NATURAL GROUND
- CPP CORRUGATED PLASTIC PIPE
- CD CENTERLINE OF DITCH
- BOUNDARY LINE
- ADJOINER/TITLE LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- CROWN-OF-ROAD
- x-x-x-x-x- FENCE LINE
- OVERHEAD POWER LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND WATER LINE
- GUARDRAIL
- DRIP LINE
- UNDERGROUND FIBER OPTIC LINE
- BTL UNDERGROUND TELEPHONE LINE
- UNKNOWN UNDERGROUND UTILITY LINE
- UNDERGROUND STORM DRAIN LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- EDGE OF WATER

LINE TABLE

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1(M)	S 01°53'35" W	10.00'	L1(L)	S 01°53'31" W	10.00'
L2(M)	N 88°40'06" W	30.00'	L2(R)	N 88°40'10" W	30.00'
L3(M)	S 01°53'36" W	30.00'	L3(R)	S 01°53'31" W	30.00'
L4(M)	S 88°40'21" E	126.34'	L4(R)	S 88°40'10" E	126.34'
L5(M)	N 09°37'00" E	8.76'	L5(R)	N 09°36'56" E	8.76'
L6(M)	N 28°51'25" W	57.44'	L6(R)	N 28°51'29" W	57.44'
L7(M)	N 13°01'50" W	92.49'	L7(R)	N 13°01'54" W	92.49'
L8(M)	N 29°17'53" E	91.67'	L8(R)	N 29°17'51" E	91.67'
L9(M)	N 15°36'31" E	105.06'	L9(R)	N 15°36'47" E	105.06'
L10(M)	N 55°15'40" W	116.52'	L10(R)	N 55°15'44" W	116.52'
L11(M)	N 31°06'23" E	52.31'	L11(R)	N 31°06'19" E	52.31'
L12(M)	N 64°42'03" E	95.52'	L12(R)	N 64°41'59" E	95.52'
L13(M)	N 26°25'35" E	129.97'	L13(R)	N 26°25'31" E	129.97'
L14(M)	N 32°11'37" W	55.04'	L14(R)	N 32°11'41" W	55.04'
L15(M)	S 14°46'56" E	83.29'	L15(R)	S 14°47'00" E	83.29'
L16(M)	N 20°06'30" W	50.03'	L16(R)	N 20°06'34" W	50.03'
L17(M)	N 62°06'13" W	122.40'	L17(R)	N 62°06'17" W	122.40'
L18(M)	N 01°15'37" W	109.58'	L18(R)	N 01°16'01" W	109.58'
L19(M)	N 39°25'38" E	57.43'	L19(R)	N 39°25'34" E	57.43'
L20(M)	N 37°45'34" W	127.05'	L20(R)	N 37°45'38" W	127.05'
L21(M)	N 21°21'04" W	72.95'	L21(R)	N 21°21'08" W	72.95'
L22(M)	N 35°31'19" E	36.07'	L22(R)	N 35°31'15" E	36.07'
L23(M)	S 41°47'27" E	85.51'	L23(R)	S 41°47'31" E	85.51'
L24(M)	N 76°17'49" E	58.79'	L24(R)	N 76°17'45" E	58.79'
L25(M)	S 36°31'27" E	27.26'	L25(R)	S 36°31'31" E	27.26'
L26(M)	N 33°13'12" E	83.49'	L26(R)	N 33°13'08" E	83.49'
L27(M)	N 04°31'54" W	140.00'	L27(R)	N 04°31'58" W	140.00'
L28(M)	S 86°11'00" E	53.88'	L28(R)	S 86°11'04" E	53.88'
L29(M)	N 03°29'18" W	27.38'	L29(R)	N 03°29'22" W	27.38'
L30(M)	S 39°50'47" E	40.70'	L30(R)	S 39°50'51" E	40.70'
L31(M)	N 03°11'58" W	17.51'	L31(R)	N 03°12'03" W	17.52'
L32(M)	S 88°40'21" E	30.00'	L32(R)	S 88°40'10" E	30.00'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1(M)	1714.31'	30.01'	30.00'	N 84°44'14" E	1°00'10"
C1(R)	1714.31'	30.00'	-	-	1°00'10"
C2(M)	1714.31'	139.09'	139.05'	N 81°54'41" E	4°38'56"
C2(R)	1714.31'	169.09'	-	-	5°39'05"

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SURVEYOR JOB NUMBER: 25-0748	SURVEY DRAWN BY: MEK & TL - 03/12/2025
SURVEY REVIEWED BY: KLR	SHEET: 5 OF 7

ALTANSPS LAND TITLE SURVEY

CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

A PORTION OF THE N 1/2, SEC. 12, T-30-N, R-7-W
WILLIAMETTE MERIDIAN, CITY OF PORT ANGELES,
CLALLAM COUNTY, STATE OF WASHINGTON

TEMPORARY BENCHMARK INFORMATION

TBM #1
NORTHING: 418491.04
EASTING: 985576.62
ELEVATION: 291.04'
SET 5/8" REBAR

TBM #2
NORTHING: 417031.30
EASTING: 986226.98
ELEVATION: 310.04'
FOUND 5/8" REBAR
WITH 1" ALUMINIUM CAP
"LS 37531"

INVERT INFORMATION

DMH #1
RIM: 294.16'
INVERT N - 12" CPP
INVERT S - 12" CPP
BOTTOM OF STRUCTURE - 287.2'

DMH #2
RIM: 321.89'
BOTTOM OF STRUCTURE - 309.8'
(FULL OF WATER)

DMH #3
RIM: 321.72'
BOTTOM OF STRUCTURE - 308.9'
(FULL OF WATER)

DMH #4
RIM: 294.20'
INVERT NW - 12" CPP
INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 289.9'

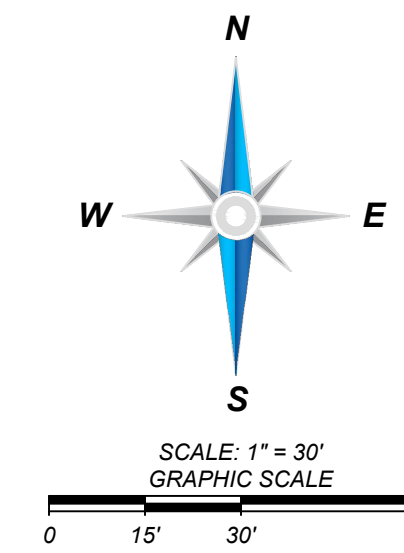
DMH #5
RIM: 294.15'
INVERT NE - 12" CPP
INVERT NW - 12" CPP
INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 290.1'

DI #1
RIM: 293.05'
INVERT N - 12" CPP
BOTTOM OF STRUCTURE - 289.1'

DI #2
RIM: 308.23'
INVERT NW - 12" CPP - 304.0'
INVERT SE - 12" CPP - 304.3'
BOTTOM OF STRUCTURE - 302.7'

DI #3
RIM: 305.27'
INVERT NW - 12" CPP - 306.3'
INVERT SE - 12" CPP - 306.7'
BOTTOM OF STRUCTURE - 306.3'

DI #4
RIM: 309.06'
INVERT NW - 12" CPP - 307.0'
BOTTOM OF STRUCTURE - 305.1'



LEGEND & SYMBOLS

- FOUND MONUMENT AS NOTED
- COMPUTED POINT
- ⊕ TEMPORARY BENCHMARK (TBM)
- ⊙ POWER POLE
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- ⊕ IRRIGATION CONTROL VALVE
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L3(M)	S 01°53'36" W	30.00'	L3(R)	S 01°53'31" W	30.00'
L4(M)	S 88°40'21" E	126.34'	L4(R)	S 88°40'10" E	126.34'
L5(M)	N 09°37'00" E	8.76'	L5(R)	N 09°36'56" E	8.76'
L6(M)	N 28°51'25" W	57.44'	L6(R)	N 28°51'29" W	57.44'
L7(M)	N 13°01'50" W	92.49'	L7(R)	N 13°01'54" W	92.49'
L8(M)	N 29°17'55" E	91.67'	L8(R)	N 29°17'51" E	91.67'
L9(M)	N 15°36'31" E	105.06'	L9(R)	N 15°36'47" E	105.06'
L10(M)	N 55°15'40" W	116.52'	L10(R)	N 55°15'44" W	116.52'
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L16(M)	N 20°06'30" W	50.03'	L16(R)	N 20°06'34" W	50.03'
L17(M)	N 62°06'13" W	122.40'	L17(R)	N 62°06'17" W	122.40'
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SURVEYOR JOB NUMBER:
25-0748

SURVEY DRAWN BY:
MEK & TL - 03/12/2025

SURVEY REVIEWED BY:
KLR

SHEET:
6 OF 7

N/F AZZ ENTERPRISES LLC
403 S LINCOLN ST STE 4 PMB 50
PORT ANGELES WA 98362
APN: 073012210050

(VACANT LAND)
PARCEL B
PER FILE NO. 2016-1335381
TOTAL AREA:
1,116,116 SQ. FT. ±
25.623 ACRES ±
APN: 073012120075

N/F AZZ ENTERPRISES LLC
403 S LINCOLN ST STE 4 PMB 50
PORT ANGELES WA 98362
APN: 073012210050

STRUCTURE IS FULL OF WATER
UNABLE TO VERIFY SIZE TYPE
OR INVERT OF PIPES IN STRUCTURE

STRUCTURE IS FULL OF WATER
UNABLE TO VERIFY SIZE TYPE
OR INVERT OF PIPES IN STRUCTURE

WEST EDGEWOOD DRIVE
60' WIDTH PUBLIC RIGHT-OF-WAY
VARIABLE WIDTH ASPHALT PAVEMENT

ALTANSPS LAND TITLE SURVEY

CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

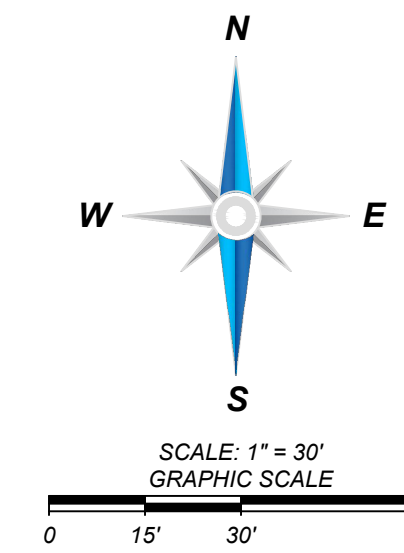
A PORTION OF THE N 1/2, SEC. 12, T-30-N, R-7-W
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INVERT INFORMATION

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LEGEND & SYMBOLS

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- w-w-w-w-w- UNDERGROUND WATER LINE
- o-o-o-o-o- GUARDRAIL
- d-d-d-d-d- DRIP LINE
- f-f-f-f-f- UNDERGROUND FIBER OPTIC LINE
- t-t-t-t-t- UNDERGROUND TELEPHONE LINE
- u-u-u-u-u- UNKNOWN UNDERGROUND UTILITY LINE
- s-s-s-s-s- UNDERGROUND STORM DRAIN LINE
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LINE TABLE

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L2(M)	N 88°40'06" W	30.00'	L2(R)	N 88°40'10" W	30.00'
L3(M)	S 01°53'36" W	30.00'	L3(R)	S 01°53'31" W	30.00'
L4(M)	S 88°40'21" E	126.34'	L4(R)	S 88°40'10" E	126.34'
L5(M)	N 09°37'00" E	8.76'	L5(R)	N 09°36'56" E	8.76'
L6(M)	N 28°51'25" W	57.44'	L6(R)	N 28°51'29" W	57.44'
L7(M)	N 13°01'50" W	92.49'	L7(R)	N 13°01'54" W	92.49'
L8(M)	N 29°17'53" E	91.67'	L8(R)	N 29°17'51" E	91.67'
L9(M)	N 15°36'51" E	105.06'	L9(R)	N 15°36'47" E	105.06'
L10(M)	N 55°15'40" W	116.52'	L10(R)	N 55°15'44" W	116.52'
L11(M)	N 31°06'23" E	52.31'	L11(R)	N 31°06'19" E	52.31'
L12(M)	N 64°42'03" E	95.52'	L12(R)	N 64°41'59" E	95.52'
L13(M)	N 26°25'35" E	129.97'	L13(R)	N 26°25'31" E	129.97'
L14(M)	N 32°11'37" W	55.04'	L14(R)	N 32°11'41" W	55.04'
L15(M)	S 14°46'56" E	83.29'	L15(R)	S 14°47'00" E	83.29'
L16(M)	N 20°06'30" W	50.03'	L16(R)	N 20°06'34" W	50.03'
L17(M)	N 62°06'13" W	122.40'	L17(R)	N 62°06'17" W	122.40'
L18(M)	N 01°15'37" W	109.58'	L18(R)	N 01°15'31" W	109.58'
L19(M)	N 39°25'38" E	57.43'	L19(R)	N 39°25'34" E	57.43'
L20(M)	N 37°45'34" W	127.05'	L20(R)	N 37°45'38" W	127.05'
L21(M)	N 21°21'04" W	72.95'	L21(R)	N 21°21'08" W	72.95'
L22(M)	N 35°31'19" E	36.07'	L22(R)	N 35°31'15" E	36.07'
L23(M)	S 41°47'27" E	85.51'	L23(R)	S 41°47'31" E	85.51'
L24(M)	N 76°17'49" E	58.79'	L24(R)	N 76°17'45" E	58.79'
L25(M)	S 36°31'27" E	27.26'	L25(R)	S 36°31'31" E	27.26'
L26(M)	N 33°13'12" E	83.49'	L26(R)	N 33°13'08" E	83.49'
L27(M)	N 04°31'54" W	140.00'	L27(R)	N 04°31'58" W	140.00'
L28(M)	S 86°11'00" E	53.88'	L28(R)	S 86°11'04" E	53.88'
L29(M)	N 03°29'18" W	27.38'	L29(R)	N 03°29'22" W	27.38'
L30(M)	S 39°50'47" E	40.70'	L30(R)	S 39°50'51" E	40.70'
L31(M)	N 03°11'58" W	17.51'	L31(R)	N 03°11'53" W	17.52'
L32(M)	S 88°40'21" E	30.00'	L32(R)	S 88°40'10" E	30.00'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1(M)	1714.31'	30.00'	30.00'	N 84°44'14" E	1°00'10"
C1(R)	1714.31'	30.00'	30.00'	N 84°44'14" E	1°00'10"
C2(M)	1714.31'	139.09'	139.09'	N 81°54'41" E	4°38'56"
C2(R)	1714.31'	169.09'	-	-	5°39'05"

BLEW

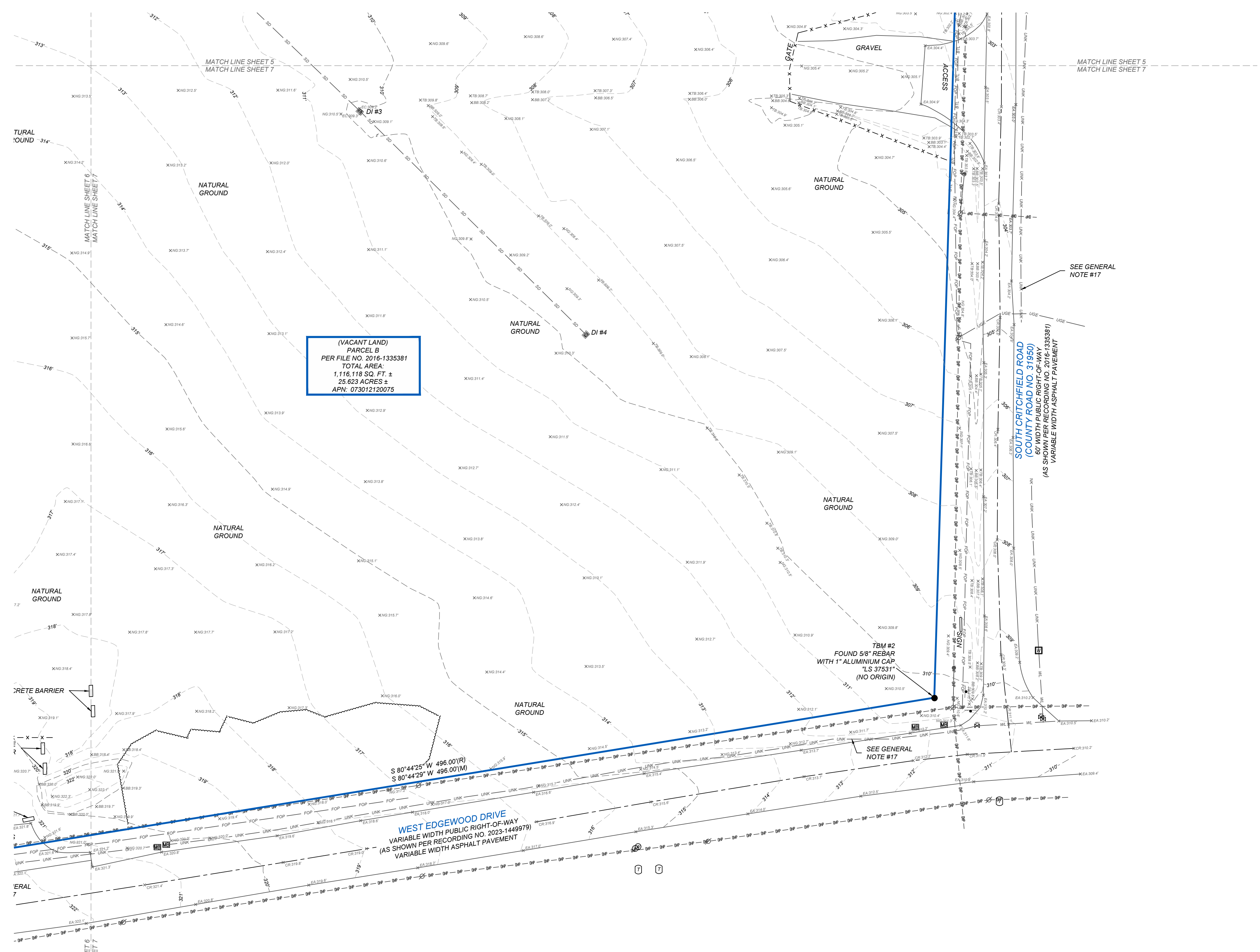
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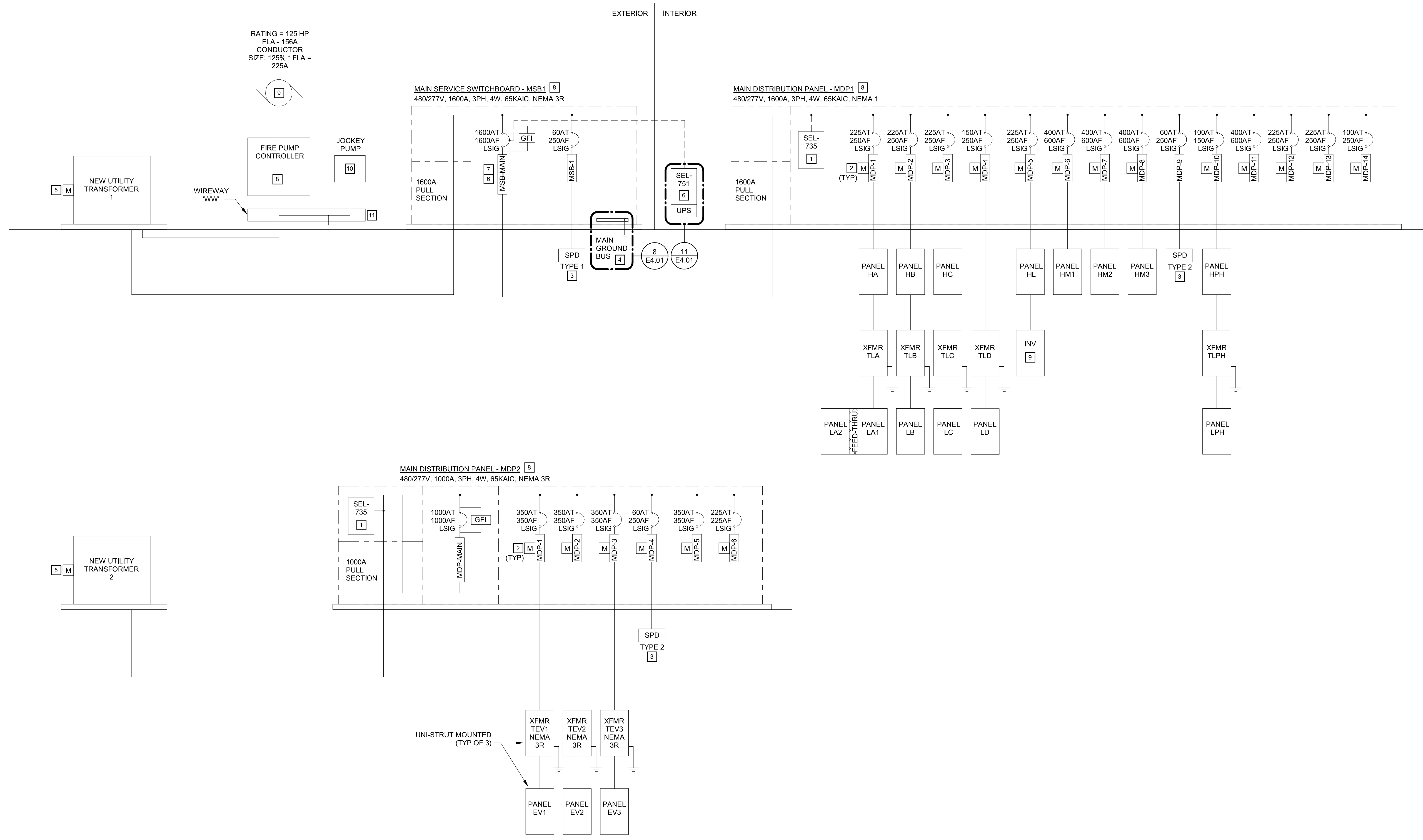
3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703

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SURVEYOR JOB NUMBER: 25-0748	SURVEY DRAWN BY: MEK & TL - 03/12/2025
SURVEY REVIEWED BY: KLR	SHEET: 7 OF 7

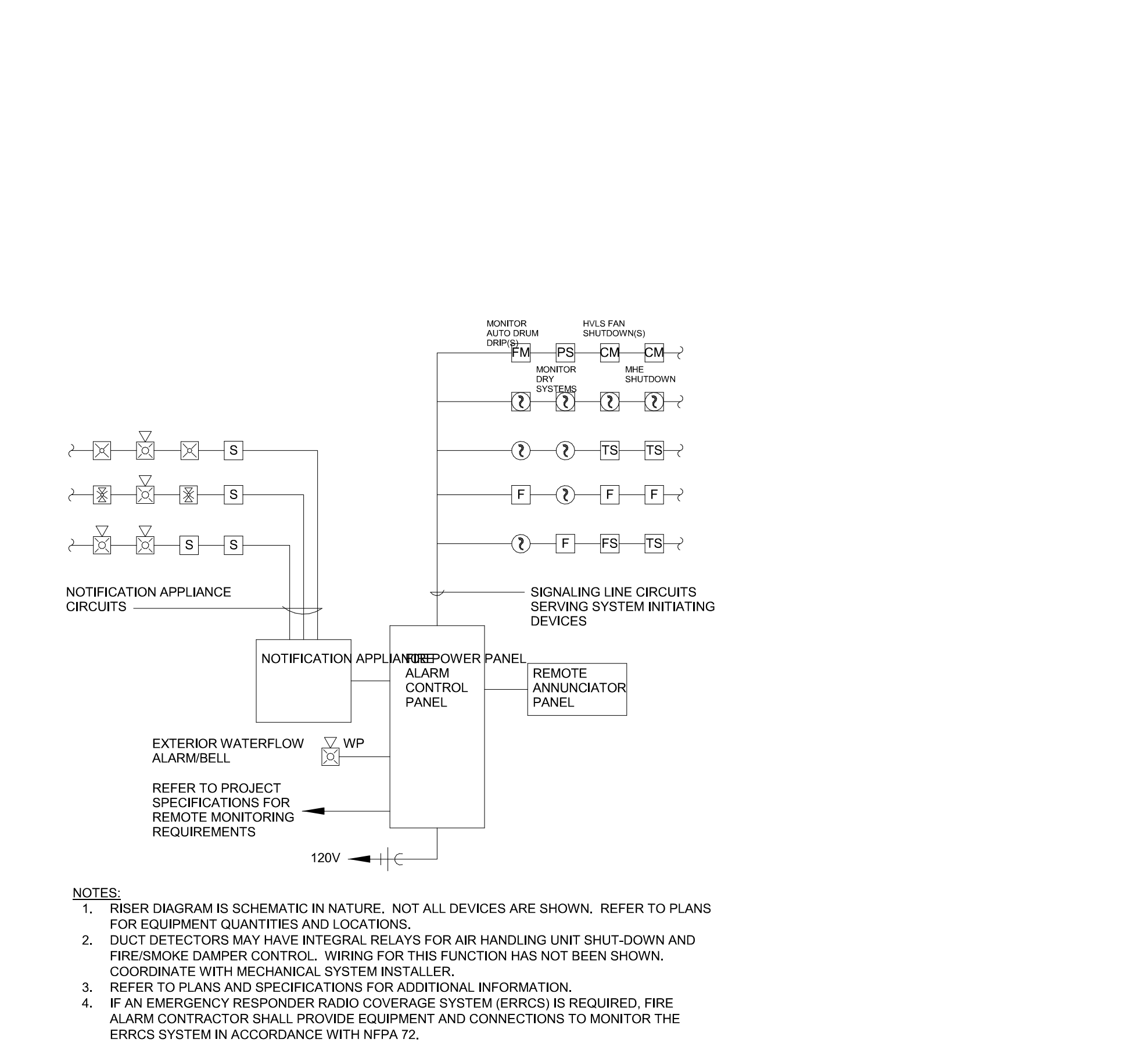




- ### ONE-LINE DIAGRAM NOTES:
- PROVIDE (SEL-735 OR SCHNEIDER PM8000) POWER METER INTEGRAL TO SWITCHGEAR BY OEM. METER SHALL BE INTEGRATED WITHIN SWITCHBOARD IN A LOW VOLTAGE CONTROLS COMPARTMENT COMPLETELY ISOLATED FROM THE MAIN BUSCABLE SECTIONS. 480V FEEDER BREAKER TRIP UNIT METERS ARE TO BE WIRED TO A COMMON GATEWAY TO BMS METERING DATA TO BMS SYSTEM VIA MODBUS OR ETHERNET IP PROTOCOL.
 - EACH FEEDER BREAKER SHALL BE LSIQ TYPE AND HAVE INTEGRAL TRIP UNIT METERS. CAPABILITY TRIP SETTINGS SHALL BE ADJUSTABLE AND SET PER POWER SYSTEM COORDINATION STUDY PRIOR TO BUILDING.
 - SURGE PROTECTION DEVICE (SPD) UNIT MOUNTED ABOVE PANEL. CONTRACTOR SHALL KEEP CONNECTION DISTANCE AS SHORT AS POSSIBLE. MAXIMUM DISTANCE 18". SPD SHALL BE UL 1449 FOURTH EDITION RATED, TYPE 2 WITH A MINIMUM NOMINAL DISCHARGE CURRENT OF 20KA, AN AUDIBLE ALARM AND (1) SET OF DRY CONTACTS. (LEA #SP200). PROVIDE (4)MS, (1)#6G, IN 1-1/4".
 - PROVIDE NEW GROUNDING PER REFERENCED DETAIL.
 - NEW UTILITY METER LOCATED ON NEW UTILITY TRANSFORMER. COORDINATE REQUIREMENTS AND INSTALLATION WITH UTILITY COMPANY.
 - ACTIVE ARC-FLASH MITIGATION RELAY SYSTEM SHALL BE CONNECTED TO THIS MAIN BREAKER. REFER TO REFERENCED DETAIL FOR ADDITIONAL INFORMATION.
 - CIRCUIT BREAKERS RATED 1200A OR HIGHER SHALL HAVE APPROPRIATE DOCUMENTATION AND METHOD TO REDUCE CLEARING TIME IN ORDER TO REDUCE ARC FLASH ENERGY PER CODE. PROVIDE ENERGY-REDUCING MAINTENANCE SWITCH WITH LOCAL STATUS INDICATOR. PROVIDE PROVISIONS TO INTERFACE WITH OWNER ALARMMONITORING TO INDICATE STATUS.
 - MANUFACTURER TO PROVIDE A SHORT CIRCUIT STUDY. SELECTIVE COORDINATION STUDY AND ARC FLASH ANALYSIS FOR THE ELECTRICAL DISTRIBUTION SYSTEM. ADJUST TRIP SETTINGS ON CIRCUIT BREAKERS & MODIFY SHORT CIRCUIT RATINGS OF ELECTRICAL EQUIPMENT PER THE RESULTS. OVERCURRENT PROTECTIVE DEVICES WILL BE SELECTIVELY COORDINATED FOR DISTRIBUTION SYSTEMS.
 - EMERGENCY LIGHTING CENTRAL INVERTER SHALL BE 480V, 16.7KVA MEYERS ILLUMINATOR HYPERNOVA SYSTEM. FAST CHARGE OR APPROVED EQUAL. INPUT VOLTAGE 480V, 3PHASE. OUTPUT VOLTAGE 480/277V, 12 HOUR BATTERY RECHARGE, FACTORY STARTUP PROGRAM. NORMALLY ON OUTPUT CIRCUIT BREAKERS. UNIT SHALL HAVE A MINIMUM OF (10) 277V-1P CIRCUIT BREAKERS. COORDINATE FINAL INSTALLATION REQUIREMENTS WITH MANUFACTURER.
 - FIRE PUMP CONTROLLER. PROVIDE NEW UNDERGROUND SERVICE CONDUCTORS FROM NEW UTILITY TRANSFORMER TO CONTROLLER PER FEEDER SCHEDULE THIS SHEET.
 - NEW 125HP, 3PH, 3W, 480V FIRE PUMP. REFER TO THE FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
 - JOCKEY PUMP AND JOCKEY PUMP CONTROLLER WITH INTEGRAL DISCONNECT PROVIDED BY OTHERS.
 - PROVIDE WIREWAY FOR FIRE AND JOCKEY PUMP CONNECTION. PROVIDE GROUND BAR IN WIREWAY AND CONNECT #6 GROUND TO STRUCTURAL STEEL COLD WATER PIPE AND METALLIC PIPING. PROVIDE 20'-0" MINIMUM # 4 CONCRETE ENCASED GROUNDING ELECTRODE.

1 ELECTRICAL ONE-LINE DIAGRAM

NOT TO SCALE



2 FIRE ALARM RISER DIAGRAM

NOT TO SCALE

- RISER DIAGRAM IS SCHEMATIC IN NATURE. NOT ALL DEVICES ARE SHOWN. REFER TO PLANS FOR EQUIPMENT QUANTITIES AND LOCATIONS.
- DUCT DETECTORS MAY HAVE INTEGRAL RELAYS FOR AIR HANDLING UNIT SHUT-DOWN AND FIRE SMOKE DAMPER CONTROL. WIRING FOR THIS FUNCTION HAS NOT BEEN SHOWN. COORDINATE WITH MECHANICAL SYSTEM INSTALLER.
- REFER TO PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- IF AN EMERGENCY RESPONDER RADIO COVERAGE SYSTEM (ERRCS) IS REQUIRED, FIRE ALARM CONTRACTOR SHALL PROVIDE EQUIPMENT AND CONNECTIONS TO MONITOR THE ERRCS SYSTEM IN ACCORDANCE WITH NFPA 72.

ELECTRICAL LOAD SUMMARY - MDP1

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED...	PANEL TOTALS
HVAC	542515 VA	100.00%	542515 VA	
Lighting	42327 VA	125.00%	52909 VA	
Motor	6157 VA	100.00%	6157 VA	TOTAL CONN. LOAD: 723641 VA
Non-Continuous Motor	26400 VA	100.00%	26400 VA	TOTAL EST. DEMAND: 702288 VA
Other	1402 VA	100.00%	1402 VA	TOTAL CONN. CURRENT: 870 A
Power	24017 VA	100.00%	24017 VA	TOTAL DEMAND... 853 A
Receptacle	63640 VA	57.83%	36920 VA	
Water Heater-Continuous	9000 VA	100.00%	9000 VA	
CONTINUOUS MOTOR	7983 VA	125.00%	9979 VA	

ELECTRICAL LOAD SUMMARY - MDP2

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED...	PANEL TOTALS
EV CHARGING	506500 VA	125.00%	632500 VA	
				TOTAL CONN. LOAD: 506500 VA
				TOTAL EST. DEMAND: 632500 VA
				TOTAL CONN. CURRENT: 609 A
				TOTAL DEMAND... 761 A

FEEDER SCHEDULE - MSB1

EQUIPMENT MARK	VOLTAGE - PHASE	FAULT CURRENT	VOLTAGE DROP
UTILITY	1500kVA 277/480V-3P INFINITE	51549	
WIREWAY WW	277/480V-3P	9437	
FP CNTLR	277/480V-3P	8838	0.2%
JP CNTLR	277/480V-3P	3553	0.2%
MSB1	277/480V-3P	34420	
MDP1	277/480V-3P	32460	0.3%
HA	277/480V-3P	27182	0.4%
TLA-P	480V-3P	24490	0.4%
TLA	75kVA: 480V-3P to 120/208V-3P, CU	3885	0.4%
LA1	120/208V-3P	3804	0.6%
LA2	120/208V-3P	3725	0.7%
HB	277/480V-3P	8297	2.2%
TLB-P	480V-3P	8028	2.2%
TLB	75kVA: 480V-3P to 120/208V-3P, CU	3405	2.2%
LB	120/208V-3P	3342	2.4%
HC	277/480V-3P	11035	1.6%
TLC-P	480V-3P	10564	1.6%
TLC	75kVA: 480V-3P to 120/208V-3P, CU	3562	1.6%
LC	120/208V-3P	3494	1.7%
TLD-P	480V-3P	10934	0.9%
TLD	75kVA: 480V-3P to 120/208V-3P, CU	3580	0.9%
LD	120/208V-3P	3511	1.0%
HL	277/480V-3P	27182	0.4%
INV	277/480V-3P	2453	1.5%
HM1	277/480V-3P	18053	1.2%
HM2	277/480V-3P	15498	1.6%
HM3	277/480V-3P	29138	0.4%
HPH	277/480V-3P	7303	1.3%
TLPH-P	480V-3P	5756	1.3%
TLPH	15kVA: 480V-3P to 120/208V-3P, CU	952	1.3%
LPH	120/208V-3P	906	1.5%

FEEDER SCHEDULE - MDP2

EQUIPMENT MARK	VOLTAGE - PHASE	FAULT CURRENT	VOLTAGE DROP
UTILITY	1000kVA 277/480V-3P INFINITE	34366	
MDP2	277/480V-3P	29369	
TLB-P	480V-3P	19875	0.5%
TEV1	225kVA: 480V-3P to 120/208V-3P, CU	8844	0.5%
EV1	120/208V-3P	8726	0.6%
TEV2-P	480V-3P	15997	0.9%
TEV2	225kVA: 480V-3P to 120/208V-3P, CU	8449	0.9%
EV2	120/208V-3P	8341	1.0%
TEV3-P	480V-3P	10090	2.0%
TEV3	225kVA: 480V-3P to 120/208V-3P, CU	7451	2.0%
EV3	120/208V-3P	7367	2.1%

FEEDER SCHEDULE

EQUIPMENT MARK	FEEDER SIZE	ACTUAL VOLTAGE	WIRE-CONDUIT SIZE	NOTES
MDP1	1600 A	277/480V - 3P	(5) SETS OF (4)#400 & (1)#410 G, 3-1/2"	
MSB1	1600 A	277/480V - 3P	(5) SETS OF (4)#400, 4" C	
MDP2	1000 A	277/480V - 3P	(3) SETS OF (4)#400, 4" C	
EV1	800 A	120/208V - 3P	(3) SETS OF (4)#300 & (1)#210 G, 2-1/2"	
EV2	800 A	120/208V - 3P	(3) SETS OF (4)#300 & (1)#210 G, 2-1/2"	
EV3	800 A	120/208V - 3P	(3) SETS OF (4)#300 & (1)#210 G, 2-1/2"	
HM1	400 A	277/480V - 3P	(2) SETS OF (4)#310 & (1)#3 G, 2"	
HM2	400 A	277/480V - 3P	(2) SETS OF (4)#310 & (1)#3 G, 2"	
HM3	400 A	277/480V - 3P	(2) SETS OF (4)#310 & (1)#3 G, 2"	
TEV1	350 A	480V - 3P	(3)#500 & (1)#3 G, 3"	225kVA XFMR, 1#20 GROUND
TEV2	350 A	480V - 3P	(3)#500 & (1)#3 G, 3"	225kVA XFMR, 1#20 GROUND
TEV3	350 A	480V - 3P	(3)#500 & (1)#3 G, 3"	225kVA XFMR, 1#20 GROUND
FIRE PUMP CONTROLLER	225 A	277/480V - 3P	(4)#410 & (1)#4 G, 2-1/2"	
FIRE PUMP WIREWAY	225 A	277/480V - 3P	(4)#410 & (1)#4 G, 2-1/2"	
HA	225 A	277/480V - 3P	(4)#410 & (1)#4 G, 2-1/2"	
HB	225 A	277/480V - 3P	(4)#410 & (1)#4 G, 2-1/2"	
HC	225 A	277/480V - 3P	(4)#410 & (1)#4 G, 2-1/2"	
HL	225 A	277/480V - 3P	(4)#410 & (1)#4 G, 2-1/2"	
LA1	225 A	120/208V - 3P	(4)#410 & (1)#2 G, 2-1/2"	
LA2	225 A	120/208V - 3P	(4)#410 & (1)#2 G, 2-1/2"	
LB	225 A	120/208V - 3P	(4)#410 & (1)#2 G, 2-1/2"	
LC	225 A	120/208V - 3P	(4)#410 & (1)#2 G, 2-1/2"	
LD	225 A	120/208V - 3P	(4)#410 & (1)#2 G, 2-1/2"	
TLA	150 A	480V - 3P	(3)#110 & (1)#6 G, 1-1/2"	75kVA XFMR, 1#2 GROUND
TLB	150 A	480V - 3P	(3)#110 & (1)#6 G, 1-1/2"	75kVA XFMR, 1#2 GROUND
TLC	150 A	480V - 3P	(3)#110 & (1)#6 G, 1-1/2"	75kVA XFMR, 1#2 GROUND
TLD	150 A	480V - 3P	(3)#110 & (1)#6 G, 1-1/2"	75kVA XFMR, 1#2 GROUND
HPH	100 A	277/480V - 3P	(4)#3 & (1)#8 G, 1-1/4"	
LPH	50 A	120/208V - 3P	(4)#8 & (1)#10 G, 3/4"	
INV	35 A	277/480V - 3P	(4)#410 IN 3-1/2" C	
TLPH	30 A	480V - 3P	(3)#110 & (1)#10 G, 3/4"	15kVA XFMR, 1#8 GROUND
JOCKEY PUMP	15 A	277/480V - 3P	(4)#12 & (1)#12 G, 1/2"	

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4/25/2025

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Project # - 012024-15-1

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W. EDGEWOOD DR. & S. CRITCHFIELD RD, PORT ANGELES, WA 98363

Revisions / Submissions

ID	Description	Date
1	PERMIT SET	04.25.2025

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Project number: 763838-02
Scale: AS NOTED
Drawn By: JBG
Checked By: JGW
Date: 04.25.2025
Issue: PERMIT SET

Sheet Title:
ELECTRICAL ONE-LINE DIAGRAM

E6.01



Stormwater Management Report

PROJECT PENINSULA
W. EDGEWOOD DRIVE
PORT ANGELES, WA 98363

Date Prepared: 04/016/2025

On behalf of:

**AMBROSE
PROPERTIES**

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04/24/2025

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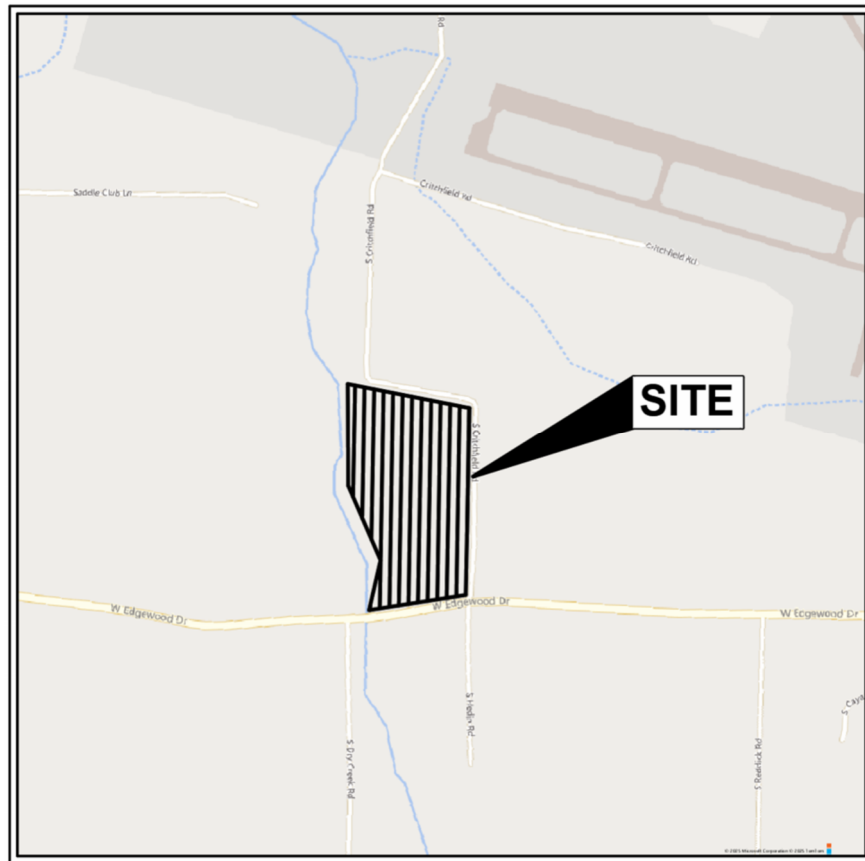
APPENDICES

- A. Overall Site Plan**
- B. Site Survey**
- C. Web Soil Survey**
- D. Pre- and Post-Developed Coverage Maps**
- E. Off-Site Analysis Map**
- F. Detention Basin Details**
- G. Post-Construction Stormwater Management Calculations**
 - G1. Runoff Treatment Calculations**
 - G2. Flow Control Calculations**
 - G3. Storm Sewer Conveyance Calculations**
- H. SWPPP**
- I. Port Angeles Worksheets for MR #5**
- J. Operation and Maintenance Manual**

Introduction

Project Olympic is the proposed development of an 25.62-acre lot in the City of Port Angeles, Clallam County, Washington. The site is located to the northwest of the intersection of W Edgewood Drive and S Critchfield Drive. The Olympic RC Modelers neighbors the project to north. Residences and businesses are located to the east and south. Dry Creek runs along the western edge of the project. The site was previously mass graded with two basins on site to handle runoff.

The proposed project consists of a ±58,394-sf Distribution Facility with associated truck docks, driveways, parking lots, loading canopy, and stormwater management facilities. Anticipated disturbance for the development is 17.50 acres which includes 8.99 acres of pervious area and 8.51 acres of impervious area. 2.18 acres of the impervious total is attributed to the on-site stormwater management facility. 17.70 acres will be used as the treated area (i.e. the area draining to the on-site BMPs) throughout the report and supporting calculations. The remainder of the lot is undisturbed and left as preservation area in alignment with MR #4.



This Stormwater Management Report has been written for compliance with the City of Port Angeles’ Urban Services Standards and Guidelines (USSG), Chapter 5 – Stormwater, as well as the Washington Department of Ecology’s 2019 version of the Stormwater Management Manual for Western Washington (SWMMWW). Per USSG Figure 5.1 – Flow Chart for Determining Requirements for New Development, Project Olympic is subject to compliance with the nine (9) Minimum Requirements (MR) discussed in Section 5.04 of the USSG, including the requirements for a Large Project Stormwater Plan.

MR #1 – Stormwater Site Plan

MR #1 – the Preparation of Stormwater Site Plans – shall include the elements summarized in the City’s USSG Table 5.2. Below is a detailed review of each element:

Existing Conditions Summary

The existing site is an 25.62-acre parcel located northwest of the intersection of W Edgewood Drive and S. Critchfield Road in Port Angeles, WA. The existing project area primarily consists of open space with sparse vegetation, two existing basins, and a tree line located on the west portion of the site.

According to a wetland delineation, performed on 03/24/2025, two category IV wetlands were discovered within the limits of disturbance. However, based on discussions with the City of Port Angeles, permitting for disturbance activities of these wetlands will not be required due to recent grading activities being the creation of the wetland areas.

Although the site’s topography is generally considered fairly flat, current drainage patterns either flow to the west towards Dry Creek within the wooded area, or flow from southwest to northeast towards the existing detention basin. There is an existing ditch that borders the eastern edge of the property along Critchfield Road. The on-site runoff drains to the connected existing detention basins and outlet at the northeast corner of the site through a culvert across Critchfield Road.

The Web Soil Survey indicates the site to have Bellingham silty clay loam (4) and Clallam Gravelly Sandy Loam (12).Per the SWMMWW, the pre-developed runoff curve number is 70.

Site Map

Refer to Appendix A for the Overall Site Plan.

Site Survey

Refer to Appendix B for the Site Survey provided by Blew & Associates, dated 03/12/2025.

Soils Report

Refer to Appendix C for the soils report generated by the USDA’s Web Soil Survey (usda.gov) dated 04/04/2025.

A detailed Geotechnical Engineering Report, prepared by Aspect Consulting (Aspect) and dated 04/08/2025, was prepared for this project and has been included under a separate cover to accompany this stormwater management report.

Native Soil and Vegetation Protection Areas

Areas designated to be protected from construction activities include the 5.54 acres within the property boundary that are not disturbed. Much of that area is forested and within the stream setback and creates a natural no-work delineation at the tree line. Refer to Appendix D for the Pre-and Post-Developed Coverage Maps.

Developed Site Layout

Refer to Appendix A for the Overall Site Plan for the proposed project. Refer to Appendix D for the Pre-and Post-Developed Coverage Maps. Additionally, Table 1 and Table 2 give a summary of the proposed surface coverages.

Table 1: New, Replaced, and Converted Surface Areas

New Hard Surface Area (Acres)	Replaced Hard Surface Area (Acres)	Converted Pervious Surface Area (Acres)
6.33	2.18	0.00

Table 2: Post-Developed Land Cover Routed to BMP's

Post-Developed Land Cover to BMP's								
Pervious Area (Acres)			Impervious Area (Acres)				Total (Acres)	
Curve Number = 74			Curve Number = 98				Composite CN = 86	
Lawn (Flat)	Lawn (Moderate)	Lawn (Steep)	Roof Tops		Sidewalks	Parking Lots		
7.34	1.40	0.45	1.34		0.29	4.70	2.18	17.70

Off-Site Analysis

The off-site analysis is a qualitative analysis of upstream systems (run-on) and downstream systems leaving the site (runoff). For this project, there is no run-on. As described in the Existing Conditions Summary, the eastern ditch is located at the upstream perimeter of the site and intercepts upstream flow before it enters the project area. Therefore, the remainder of the off-site analysis will focus on the downstream system.

Once stormwater is released from the site, it discharges across Critchfield Road into a wetland area / unnamed tributary to Dry Creek. However, the quarter-mile limit-of-analysis per USSG Section 5.04.01.3 is reached prior to the runoff reaching Dry Creek. Where the site discharge eventually flows into Dry Creek, there are no impairments nor TMDL thresholds. Refer to Appendix E for an Off-Site Analysis Map.

Permanent Stormwater Control Plan

The proposed site drainage was designed to preserve the natural drainage pattern and utilize existing outfalls. Stormwater is collected through roof downspouts and site catch basins and then routed through storm piping into the stormwater management basin. The site is served by one (1) stormwater basin, referred to in the site plans as Basin 1.

Basin 1 – Combined Detention and Wetpool Facility per BMP T10.40 (SWMMWW)

The existing basin on the west side of the site is to remain undisturbed. The outlet pipe will be removed, and the drainage area will be largely minimized. The existing basin will now overtop its western berm and discharge directly into Dry Creek.

Stormwater from the site drains to Basin 1 through the on-site storm sewer system. Untreated runoff then enters the 3-foot deep wetpool for water quality treatment (refer to MR #6 – Runoff Treatment). The bottom elevation of the wetpool is 288.00 ft and the top elevation of the wetpool is 291.00 ft. The basin, in conjunction with the outlet control structure (OCS), provide the necessary storage for the site based on WWHM2012 modeling software (refer to MR #7 – Flow Control). The outlet control structure (OCS) – a flow restrictor with a rectangular notched riser – is set in Basin 1 and discharges offsite similarly to the existing conditions on site. Basin 1 has an emergency spillway designed to carry over the 100-yr storm to the ditch

along Critchfield Road to the east of the site. All pipes on-site have been sized for the 25-yr storm event in accordance with USSG Section 5.06.02. Table 3 summarizes the requirements for Flow Control and the corresponding results from the analysis and calculations.

Table 3: Flow Control Summary

Return Period	Pre-Developed Peak Discharge (cfs)	Post-Developed (Mitigated) Peak Discharge (cfs)
2-YR	0.872798	0.335067
5-YR	1.299258	0.460711
10-YR	1.613768	0.557599
25-YR	2.047243	0.696738
50-YR	2.396319	0.813324
100-YR	2.767850	0.941705

Refer to Appendix F for the Detention Basin Details and Appendix G for the Runoff Treatment, Flow Control and Storm Sewer Conveyance Calculations.

MR #1 Conclusion

In summary, the proposed site development achieves compliance with the City’s USSG and the State’s SWMMWW regulations through a combination of BMP technologies and engineering practices tailored to suit the site. The chosen stormwater practices and the overall site analyses are further detailed and discussed in the remainder of the Minimum Requirements and supporting documentation.

MR #2 – SWPPP

Preparation of the SWPPP follows the requirements from Volume II Construction Stormwater Pollution Prevention from the SWMMWW. Refer to Appendix H for the SWPPP, including notes, plans, and details.

MR #3 – Source Control of Pollution

Pollution will be controlled at the source through the use of erosion and sediment controls (ESCs). Additionally, site disturbance is kept to the minimum necessary for development of the proposed plan. Most of the densely wooded area will remain intact throughout the life of construction and once the facility is open and operational. ESCs will be set up in two phases. Phase I controls are needed for the contractor to access the site and put the perimeter controls in place prior to any earth disturbance. Once construction is further along, additional ESCs will be added per the plans. Stormwater collected during construction will be sent through the designed sediment basin prior to being discharged off-site. Refer to Appendix H for SWPPP Notes, Plans, and Details. Additionally, a separate SWPPP report has been prepared for this project and has been included under a separate cover to accompany this stormwater management report.

MR #4 – Preservation of Natural Drainage Systems and Outfalls

The existing ditch along Critchfield Road to the east of the site that flows south to north has been maintained using three (2) proposed culverts to send the stormwater underneath the proposed driveways. The culverts allow the stormwater to follow the existing path of travel through the ditch to existing structure SCP15, which then takes the stormwater north through an existing culvert underneath Critchfield Road where the stormwater is discharged. The existing drainage pattern of the site generally flows from southwest to

northeast across the site to the existing stormwater detention basin. The proposed basin utilizes the storage of the existing basin on site. The existing site drains to an eventual outfall to the existing tree line/wetland area north of Critchfield Road, which is the same for the proposed drainage pattern after the stormwater has passed through the detention basins. The downstream receiving waters will not be adversely affected by the development because Runoff Treatment thresholds have been met per MR #6 and Flow Control requirements has been achieved per MR #7. All outfalls from the site are protected with riprap or rock channel protection.

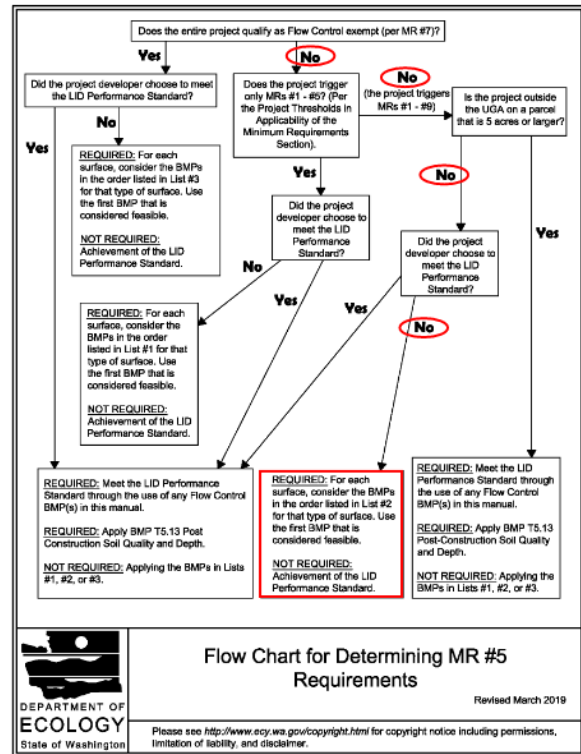
MR #5 – On-Site Stormwater Management

Per the SWMMWW Figure I-3.3: Flow Chart for Determining MR #5 Requirements, the project is required to consider the BMPs in List #2 for each type of surface. The project is not required to meet the LID performance standards.

The site will implement BMP T5.13: Post-Construction Soil Quality and Depth. However, due to the nature of the existing soils on-site and as described in the Geotechnical Investigation Report Section 3.8, the Geotechnical Engineer concluded that “concentrated stormwater infiltration is infeasible at the Site.” Therefore, the BMPs found in Table I-3.2: List #2 are not achievable nor applicable to this project.

Refer to Appendix I for the Port Angeles Worksheets for MR #5, which includes Worksheet C (Infeasibility Criteria) and Worksheet D (Post-Construction Soil Management).

Figure I-3.3: Flow Chart for Determining MR #5 Requirements



MR #6 – Runoff Treatment

Runoff Treatment has been achieved for this project through the use of a Combined Detention and Wetpool Facility. Refer to Table 3 under the MR #1 section of this report for a summary of the required and proposed Runoff Treatment Volumes. The wetpool BMP was designed in accordance with BMP T10.40 which refers to BMP T10.10 for a Wetpond. The size of the wetpool was determined based on the criteria found in the SWMMWW Volume III-2.6 for Water Quality Design Volume – Single Event Hydrograph Method. The wetpond is designed as a two unit separated by a 5-foot-wide earthen berm in accordance with the BMP T10.10 guidelines. The first wetpool cell is designed for 25% of the runoff volume. The length of the wetpond is ~459 ft. and the width is ~168 ft, yielding a length to width ratio of 2.7:1. The sides of the wetpond are designed at a 3:1 (Horizontal to Vertical) slope and the wetpool is 3-feet deep. This includes a 1-foot sediment storage zone as required in the guidelines. As the water level rises in the basin due to incoming flow from runoff and direct intake, the OCS designed and implemented at Basin 1 will activate and release water to the ultimate discharge point off-site at SCP19. This is the primary outlet for the entire stormwater management system. Refer to Appendix F for the Detention Basin Details and Appendix G1 for Runoff Treatment Calculations.

MR #7 – Flow Control

Flow Control is required so that the peak discharge from the Post-Developed (Mitigated) site does not exceed the Pre-Developed peak discharge rate for 50% of the 2-year up to and including the 50-year storm events. Flow Control has been achieved for this project through the use of one (1) Detention Pond. Refer to Table 4 under the MR #1 section of this report for a summary of the required and proposed flow control flows for each storm event from the 2-yr to the 100-yr. The detention pond was designed in accordance with BMP T10.40 which refers to BMP D.1: Detention Ponds. The detention pond have a top elevation of 295.00 and a bottom elevation of 288.00. The basin side slopes are 3:1 (Horizontal to Vertical), and therefore a protection fence has been provided around the perimeter of each basin. The basin also includes a 15-foot gravel access road down to the bottom of the basin and a 16-foot double swing gate. Near the entrance of each gate / drive is the required Stormwater Pond signage. An emergency spillway designed to carry the 100-year peak flow has been designed for Basin 1, including riprap lining. The emergency spillway is designed through the 6-foot-wide berm on the northeast side of Basin 1. WWHM2012 (WWHM) software was used to size the detention ponds as required by USSG Chapter 5. The model was created with pre-developed and mitigated basins. For the pre-developed condition, the site was modeled with a historic forested cover per the regulations. The mitigated scenario was created using a single trapezoidal pond with the same height and riser configuration used in the basin design. The length and width of the WWHM pond was arbitrary in order to obtain the required storage capacity for a system that would yield compliance with the requirements. Per WWHM, the required capacity of the system shall be no less than $3.23 \pm$ ac-ft. The volume of the proposed basin yields a capacity of $7.9 \pm$ ac-ft. This figure does not include any storage above the elevation 294.00. The riser that was sized in the calculations is an 18-inch diameter riser with a rectangular notch designed at 1-foot high (measured from the top of the riser) and 0.30-feet wide. A 3.1-inch diameter orifice is located at the bottom of the riser to restrict the flow out of the ponds. Refer to Appendix F for the Detention Basin Details and Appendix G2 for Flow Control Calculations.

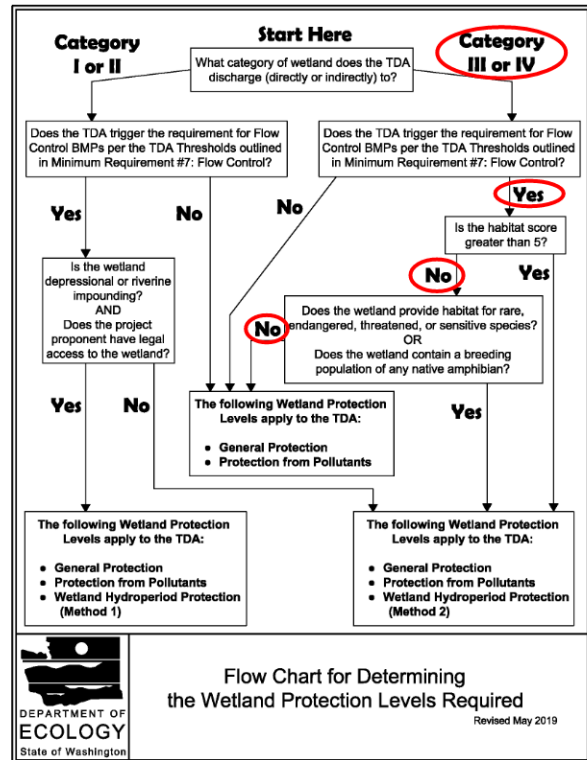
MR #8 – Wetlands Protection

According to a wetland delineation, performed on 03/24/2025, two category IV wetlands were discovered within the limits of disturbance. However, based on discussions with the City of Port Angeles, permitting for disturbance activities of these wetlands will not be required due to recent grading activities being the creation of the wetland areas.

MR #9 – Operation and Maintenance Manual

A site-specific Operation and Maintenance (O&M) Manual was prepared for this project, pursuant to the SWMMWW and MR #9. Refer to Appendix J.

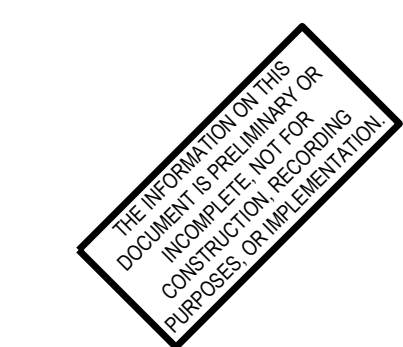
Figure I-3.5: Flow Chart for Determining Wetland Protection Level Requirements



APPENDIX A:
OVERALL SITE PLAN

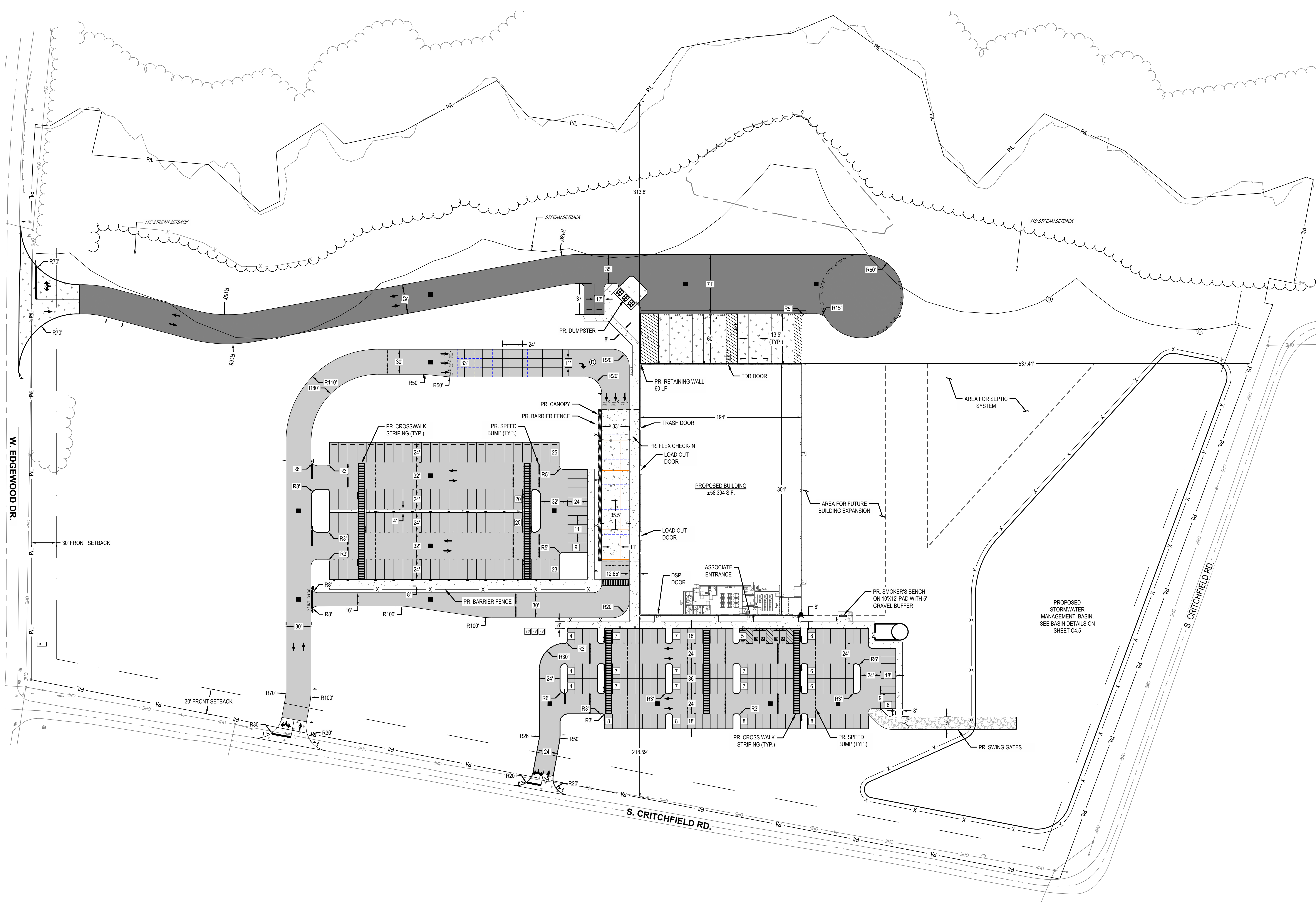


3011 Rhye Rd., Suite 303
Mansfield, OH 44842
Phone: 337.433.8544 Fax: 337.235.4825



SITE LEGEND	
EXISTING	
REFER TO SURVEY FOR EXISTING FEATURES LEGEND	
PROPOSED	
	LIGHT DUTY ASPHALT PAVEMENT
	HEAVY DUTY ASPHALT PAVEMENT
	LIGHT DUTY CONCRETE PAVEMENT
	HEAVY DUTY CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	GRAVEL
	PROPERTY LINE
	BUILDING
	CONCRETE CURB
	PAVEMENT WALK
	6' PEDESTRIAN BARRIER FENCE
	PARKING SPACE COUNT
	SIGN
	PARKING BLOCK
	LIGHT POLE

REFER TO SHEET C1.1 FOR GENERAL SITE NOTES
REFER TO SHEETS C3.1 - C3.4 FOR ENLARGED SITE PLANS



PROJECT PENINSULA
W EDGEWOOD DR.,
PORT ANGELES, WA 98363

AMBROSE

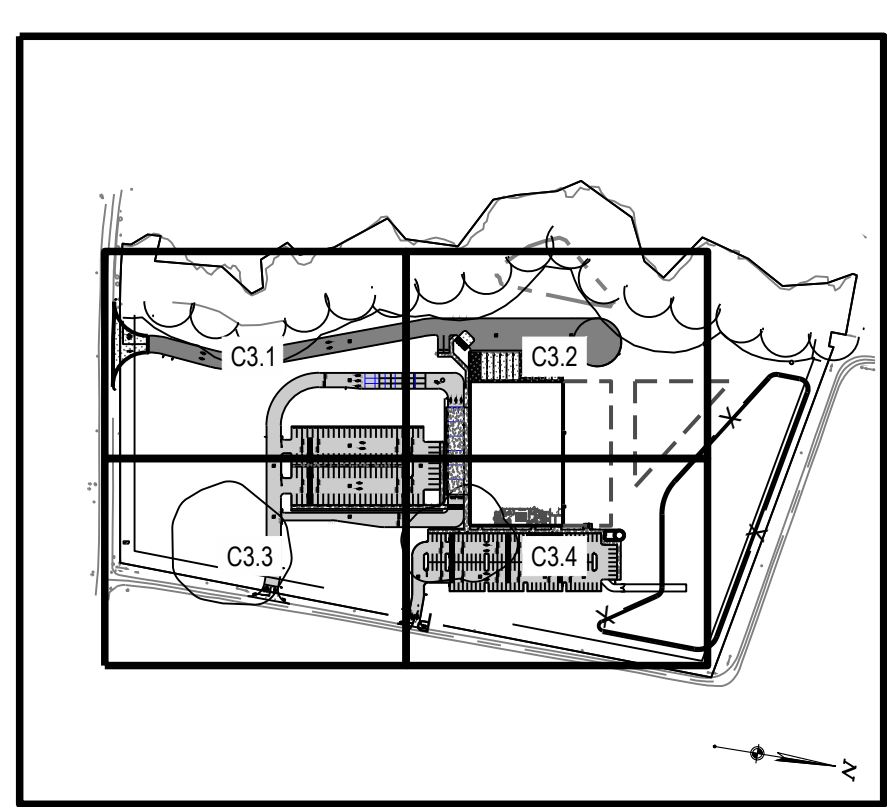
Revisions / Submissions

ID	Description	Date

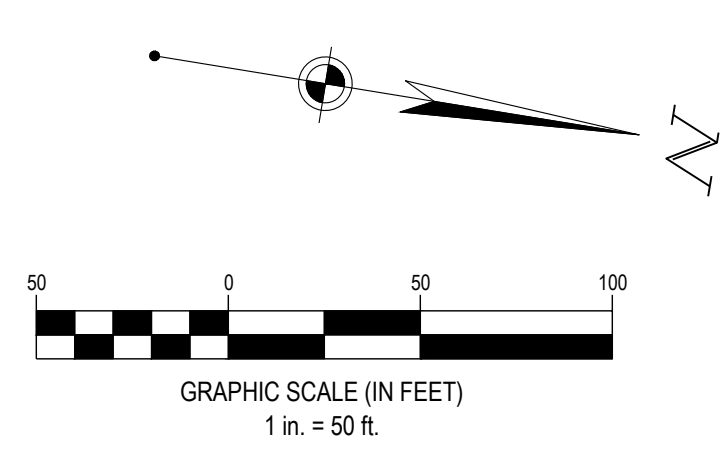
© 2024 CESO, INC.
Project Number: 763838
Scale: AS SHOWN
Drawn By: QSS
Checked By: CG
Date: 04/14/2025
Issue: NOT FOR CONSTRUCTION

Drawing Title:
OVERALL SITE PLAN

C3.0



KEY MAP
SCALE: 1" = 400'



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

APPENDIX B:
SITE SURVEY

SITE INFORMATION

NF: DELHUR INDUSTRIES INC
CRITCHFIELD ROAD, PORT ANGELES, WASHINGTON 98363
APN: 073012120075
TOTAL AREA:
1,116,118 ± SQUARE FEET, OR 25.623 ± ACRES

TITLE COMMITMENT INFORMATION

THE PROPERTY HEREON DESCRIBED IS THE SAME AS THE PERTINENT PROPERTY AS DESCRIBED IN CHICAGO TITLE INSURANCE COMPANY, ORDER NO. 133853-TO (REF NO. 1250151-NCS), WITH A COMMITMENT DATE OF JANUARY 15, 2025 AT 08:30 A.M.

SCHEDULE A DESCRIPTION

PARCEL B OF BOUNDARY LINE ADJUSTMENT SURVEY RECORDED JUNE 7, 2016 IN VOLUME 78 OF SURVEYS, PAGE 81, UNDER AUDITOR'S FILE NO. 2016-1335381, BEING A PORTION OF THE NORTHWEST QUARTER AND THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 30 NORTH, RANGE 7 WEST, W.M., LYING NORTHERLY OF HIGHWAY 112 AND SOUTHWESTERLY OF COUNTY ROAD NO. 31950 (CRITCHFIELD ROAD).

SITUATE IN CLALLAM COUNTY, STATE OF WASHINGTON.

NOTES CORRESPONDING TO SCHEDULE B

- C** — SPECIAL EXCEPTIONS TO FOLLOW:
- C2** — ALL COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS OR OTHER SERVITUDES, IF ANY, DISCLOSED BY BOUNDARY LINE ADJUSTMENT SURVEY RECORDED UNDER CLALLAM COUNTY RECORDING NO. 2016-1335381, BUT OMITTING COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, RIGHTS OR BENEFITS, IF ANY, WHICH MAY BE DISCLOSED BY THE RECORDED DOCUMENT(S) ABOVE AFFECTING LAND OUTSIDE THE BOUNDARY DESCRIBED HEREIN. (AFFECTS: CONTAINS NO PLOTTABLE EASEMENT ITEMS)
- C4** — MATTERS SET FORTH BY SURVEY:
RECORDED: OCTOBER 4, 2013
RECORDING NO.: 2013-1301128 (V 74 OF SVYS, P 82)
DISCLOSES: LOCATION OF ROADS
(AFFECTS: CONTAINS NO PLOTTABLE EASEMENT ITEMS)
- C5** — ALL COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS OR OTHER SERVITUDES, IF ANY, DISCLOSED BY SURVEY RECORDED UNDER CLALLAM COUNTY RECORDING NO. 2016-1335384, BUT OMITTING COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, RIGHTS OR BENEFITS, IF ANY, WHICH MAY BE DISCLOSED BY THE RECORDED DOCUMENT(S) ABOVE AFFECTING LAND OUTSIDE THE BOUNDARY DESCRIBED HEREIN. (AFFECTS: CONTAINS NO PLOTTABLE EASEMENT ITEMS)
- C6** — COVENANT FOR MAINTENANCE, REPAIR AND OPERATION OF STORM DRAINAGE FACILITIES, IMPOSED BY DOCUMENT RECORDED UNDER CLALLAM COUNTY RECORDING NO. 2024-1463405.
(AFFECTS: BLANKET IN NATURE)
- C7** — OPERATION AND MAINTENANCE MANUAL, IMPOSED BY DOCUMENT RECORDED UNDER CLALLAM COUNTY RECORDING NO. 2024-1463406.
(AFFECTS: CONTAINS NO PLOTTABLE EASEMENT ITEMS)
- C8** — EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
GRANTEE: PACIFIC TELEPHONE AND TELEGRAPH COMPANY
PURPOSE: MAINTAIN POLES AND WIRE
AREA AFFECTED: PORTION OF PROPERTY HEREIN DESCRIBED
RECORDED: JULY 25, 1928
RECORDING NO.: 124419
(AFFECTS: CONTAINS NO PLOTTABLE EASEMENT ITEMS)
- C9** — EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
GRANTEE: PUGET SOUND POWER & LIGHT COMPANY
PURPOSE: MAINTAIN LINES AND POLES
AREA AFFECTED: PORTION OF PROPERTY HEREIN DESCRIBED
RECORDED: AUGUST 21, 1937
RECORDING NO.: 112267
(UNABLE TO DETERMINE, INSUFFICIENT LEGAL DESCRIPTION, BLOCK 30 REFERENCED WITHIN NOT KNOWN TO SURVEYOR)
- C10** — EASEMENT AND THE TERMS AND CONDITIONS THEREOF:
GRANTEE: PORT OF PORT ANGELES
PURPOSE: AVIATION EASEMENT
AREA AFFECTED: PORTION OF PROPERTY HEREIN DESCRIBED
RECORDED: AUGUST 29, 2008
RECORDING NO.: 2008-1225974
(AFFECTS: BLANKET IN NATURE)
- C11** — TERMS AND CONDITIONS OF WAIVER OF CLAIM FOR DAMAGES AND CONSENT TO LOCATE ROAD
RECORDED IN VOLUME 964 OF OFFICIAL RECORDS AT PAGE 65
(UNABLE TO DETERMINE, INSUFFICIENT LEGAL DESCRIPTION, LOT 1 REFERENCED WITHIN NOT KNOWN TO SURVEYOR)

ZONING INFORMATION

PROPERTY IS CURRENTLY ZONED: **AWAITING ZONING REPORT**

OBSERVED USE: VACANT LAND ; USE PERMITTED BY ZONE: YES, or NO

ITEM	REQUIRED	OBSERVED
MIN. SETBACKS FRONT		N/A
MIN. SETBACKS SIDE		N/A
MIN. SETBACKS REAR		N/A
MAX. BUILDING HEIGHT		N/A
MIN. LOT AREA		1,116,118 SQ. FT. ±
MIN. LOT WIDTH		890.04'
MAX. BLDG COVERAGE		0%
PARKING REGULAR		0
PARKING HANDICAP		0
PARKING TOTAL		0

GENERAL NOTES

- SOME FEATURES SHOWN ON THIS PLAT MAY BE SHOWN OUT OF SCALE FOR CLARITY.
- DIMENSIONS ON THIS PLAT ARE EXPRESSED IN FEET AND DECIMAL PARTS THEREOF UNLESS OTHERWISE NOTED. MONUMENTS WERE FOUND AT POINTS WHERE INDICATED.
- IN REGARD TO ALTA/NSPS TABLE A ITEM 16, THERE WAS NO OBSERVABLE EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR ADDITIONS EXCEPT AS SHOWN HEREON.
- IN REGARD TO ALTA/NSPS TABLE A ITEM 17, THERE WERE NO KNOWN PROPOSED CHANGES IN RIGHT OF WAY LINES, RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS EXCEPT AS SHOWN HEREON.
- AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP, OR SANITARY LANDFILL.
- AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A CEMETERY, ISOLATED GRAVE SITE OR BURIAL GROUNDS.
- COMPLETED FIELD WORK WAS MARCH 05, 2025.
- THE DISTANCES SHOWN HEREON ARE UNITS OF GROUND MEASUREMENT.
- THE NEAREST INTERSECTING STREET IS THE INTERSECTION OF SOUTH CRITCHFIELD ROAD AND WEST EDGEWOOD DRIVE, WHICH IS ADJACENT TO THE SOUTHEAST CORNER OF THE SUBJECT PROPERTY.
- THE SUBJECT PROPERTY HAS DIRECT PHYSICAL ACCESS TO SOUTH CRITCHFIELD ROAD AND WEST EDGEWOOD DRIVE, EACH BEING A PUBLICLY DEDICATED RIGHT-OF-WAY.
- NO SURVEYOR OR ANY OTHER PERSON OTHER THAN A LICENSED WASHINGTON ATTORNEY MAY PROVIDE LEGAL ADVICE CONCERNING THE STATUS OF TITLE TO THE PROPERTY DESCRIBED IN THIS SURVEY (THE SUBJECT PROPERTY). THE PURPOSE OF THIS SURVEY, AND THE COMMENTS RELATED TO THE SCHEDULE B/II EXCEPTIONS, IS ONLY TO SHOW THE LOCATION OF BOUNDARIES AND PHYSICAL OBJECTIONS IN RELATION THERETO. TO THE EXTENT THAT THE SURVEY INDICATES THAT THE LEGAL INSTRUMENT "AFFECTS" THE SUBJECT PROPERTY, SUCH STATEMENT IS ONLY INTENDED TO INDICATE THAT PROPERTY BOUNDARIES INCLUDED IN SUCH INSTRUMENT INCLUDE SOME OR ALL OF THE SUBJECT PROPERTY. THE SURVEYOR DOES NOT PURPORT TO DESCRIBE HOW SUCH INSTRUMENT AFFECTS THE SUBJECT PROPERTY OR THE ENFORCEABILITY OR LEGAL CONSEQUENCES OF SUCH INSTRUMENT.
- NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS WERE TAKEN FROM CLALLAM COUNTY GIS.
- THE SUBJECT PROPERTY SHOWN HEREON FORMS A MATHEMATICALLY CLOSED FIGURE AND IS CONTIGUOUS WITH THE ADJOINING PUBLIC RIGHT-OF-WAY AND/OR ADJOINING PARCELS WITH NO GAPS OR OVERLAPS.
- IN REGARD TO ALTA/NSPS TABLE A ITEM 10, NO VISIBLE DIVISION OR PARTY WALLS WITH RESPECT TO ADJOINING PROPERTIES WERE OBSERVED AT THE TIME THE FIELD SURVEY WAS PERFORMED, NOR WERE ANY DESIGNATED BY THE CLIENT.
- A PRIVATE UTILITY LOCATE WAS CONDUCTED ON THE SUBJECT PROPERTY BY BLEW & ASSOCIATES ON FEBRUARY 26, 2025.
- AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WERE NO OBSERVED BUILDINGS ON THE SUBJECT PROPERTY.
- LINE MARKED BLUE BY OTHERS WE ATTEMPTED TO LOCATE THESE LINE(S)/FEATURE(S) WITH BOTH ELECTROMAGNETIC LOCATOR AND GROUND PENETRATING RADAR BUT DID NOT RECEIVE A RESPONSE. THIS WOULD INDICATE THAT THE LINE IS NON CONDUCTIVE, PREVENTING US FROM LOCATING IT WITH EM AND THAT THE SOIL CONDITIONS/SIZE/DEPTH OF THE LINE ARE NOT CONDUCTIVE TO LOCATING WITH GPR.
- UNKNOWN WATERLINE PIPE TYPE/SIZE, NO GIS MAPS PROVIDED TO SURVEYOR
- ELEVATIONS ESTABLISHED WITH GPS STATIC OBSERVATIONS UTILIZING ONLINE POSITIONING USER SERVICE (OPUS) FOR POST PROCESSING, VERTICAL DATUM BASED UPON NORTH AMERICAN VERTICAL DATUM (NAVD88) IN US SURVEY FEET. CONTOURS SHOWN ARE 1 FOOT INTERVALS.

ALTA/NSPS LAND TITLE SURVEY

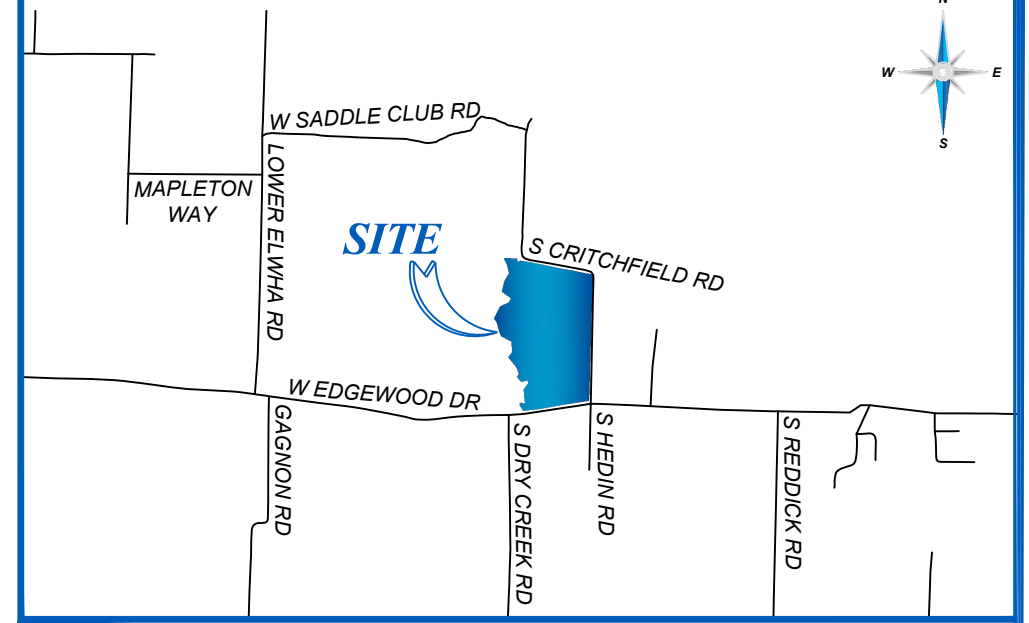
CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

A PORTION OF SECTION 12, T-30-N, R-7-W
WILLIAMETTE MERIDIAN, CITY OF PORT ANGELES,
CLALLAM COUNTY, STATE OF WASHINGTON

VICINITY MAP

NOT TO SCALE



PARKING INFORMATION

NO PARKING STRIPES OBSERVED AT THE TIME OF THE ALTA SURVEY.

FLOOD ZONE INFORMATION

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE "C" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 5300210485E, WHICH BEARS AN EFFECTIVE DATE OF 02/23/2001 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

ZONE "C" - AREA OF MINIMAL FLOOD HAZARD, USUALLY DEPICTED ON FIRMS AS ABOVE THE 500-YEAR FLOOD LEVEL. ZONE "C" MAY HAVE PONDING AND LOCAL DRAINAGE PROBLEMS THAT DON'T WARRANT A DETAILED STUDY OR DESIGNATION AS BASE FLOODPLAIN.

BASIS OF BEARING

THE BASIS OF BEARING OF THIS SURVEY IS GRID NORTH BASED ON THE EAST LINE OF THE SUBJECT PROPERTY, THE BEARING IS DENOTED AS N01°42'44"E PER GPS COORDINATE OBSERVATIONS WASHINGTON STATE PLANE, NORTH ZONE NAD83.

LATITUDE = +48°06'46.6503"
LONGITUDE = -123°30'43.3722"
CONVERGENCE ANGLE = -01°59'39.6866"

SIGNIFICANT OBSERVATIONS

NONE OBSERVED AT THE TIME OF THE ALTA/NSPS SURVEY.

UTILITY INFORMATION

THE UTILITIES SHOWN ON THIS DRAWING HEREON HAVE BEEN LOCATED BY FIELD MEASUREMENTS, PRIVATE UTILITY LOCATE BY BLEW & ASSOCIATES, UTILITY MAP DRAWINGS, AND WASHINGTON 811 DIG UTILITY LOCATE REQUEST. BLEW AND ASSOCIATES MAKES NO WARRANTY TO THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THIS DRAWING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION. TICKET NUMBER: 550016006

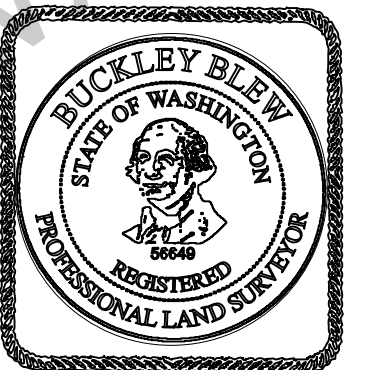
COMPANY:	CONTACT:
CLALLAM COUNTY PUBLIC WORKS	360-417-2379
PUD #1 OF CLALLAM COUNTY	360-452-9771
DRY CREEK WATER ASSOCIATION	360-452-2780
CITY OF PORT ANGELES	360-417-4724
CENTURYLINK ENGINEERING	877-366-8344
ASTOUND BROADBAND	866-928-3123

SURVEYOR'S CERTIFICATE

TO: CHICAGO TITLE INSURANCE COMPANY;

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 5, 6(A), 6(B), 7(B)(1), 7(C), 8, 9, 10, 11(B), 13, 14, 16, 17, AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 03/05/2025.

DATE OF PLAT OR MAP: 03/12/2025



BUCKLEY D. BLEW
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 56649
STATE OF WASHINGTON
WASHINGTON C.O.A. 3994

BLEW

Surveying | Engineering | Environmental

3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703
EMAIL: SURVEY@BLEWINC.COM

OFFICE: 479.443.4506 FAX: 479.582.1883
WWW.BLEWINC.COM

SURVEYOR JOB NUMBER:
25-0748

SURVEY DRAWN BY:
MEK & TL - 03/12/2025

SURVEY REVIEWED BY:
KLR

SHEET:
1 OF 7

DATE	REVISION HISTORY	BY

ALTANSPS LAND TITLE SURVEY

CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

A PORTION OF THE N 1/2, SEC. 12, T-30-N, R-7-W
WILLIAMETTE MERIDIAN, CITY OF PORT ANGELES,
CLALLAM COUNTY, STATE OF WASHINGTON

TEMPORARY BENCHMARK INFORMATION

TBM #1
NORTHING: 418491.04
EASTING: 985576.62
ELEVATION: 291.04'
SET 5/8" REBAR

TBM #2
NORTHING: 417031.30
EASTING: 986226.98
ELEVATION: 310.04'
FOUND 5/8" REBAR
WITH 1" ALUMINIUM CAP
"LS 37531"

INVERT INFORMATION

DMH #1
RIM: 294.16'
INVERT N - 12" CPP
INVERT S - 12" CPP
BOTTOM OF STRUCTURE - 287.2'

DMH #2
RIM: 321.89'
BOTTOM OF STRUCTURE - 309.8'
(FULL OF WATER)

DMH #3
RIM: 321.72'
BOTTOM OF STRUCTURE - 308.9'
(FULL OF WATER)

DMH #4
RIM: 294.20'
INVERT NW - 12" CPP
INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 289.9'

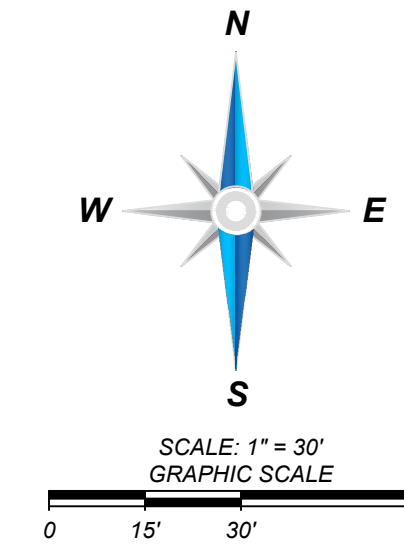
DMH #5
RIM: 294.15'
INVERT NE - 12" CPP
INVERT NW - 12" CPP
INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 290.1'

DI #1
RIM: 293.05'
INVERT N - 12" CPP
BOTTOM OF STRUCTURE - 289.1'

DI #2
RIM: 308.23'
INVERT NW - 12" CPP - 304.0'
INVERT SE - 12" CPP - 304.3'
BOTTOM OF STRUCTURE - 302.7'

DI #3
RIM: 305.27'
INVERT NW - 12" CPP - 306.3'
INVERT SE - 12" CPP - 306.7'
BOTTOM OF STRUCTURE - 306.3'

DI #4
RIM: 309.06'
INVERT NW - 12" CPP - 307.0'
BOTTOM OF STRUCTURE - 305.1'



(VACANT LAND)
PARCEL B
PER FILE NO. 2016-1335381
TOTAL AREA:
1,116,116 SQ. FT. ±
25.623 ACRES ±
APN: 073012120075

LEGEND & SYMBOLS

- FOUND MONUMENT AS NOTED
- COMPUTED POINT
- ⊕ TEMPORARY BENCHMARK (TBM)
- ⊙ POWER POLE
- ⊕ SIGN
- ⊕ IRRIGATION CONTROL VALVE
- ⊕ WATER METER
- ⊕ WATER VALVE
- ⊕ WELLHEAD
- ⊕ WATER VAULT
- ⊕ DRAIN INLET (DI)
- ⊕ STORM MANHOLE (DMH)
- ⊕ TELEPHONE PEDESTAL
- ⊕ MAILBOX
- (M) MEASURED/CALCULATED DIMENSION
- (R) RECORD DIMENSION
- N/F NOW OR FORMERLY
- TB TOP OF BANK
- BB BOTTOM OF BANK
- EW EDGE OF WATER
- EC EDGE OF CONCRETE
- EA EDGE OF ASPHALT
- NG NATURAL GROUND
- CPP CORRUGATED PLASTIC PIPE
- CD CENTERLINE OF DITCH
- BOUNDARY LINE
- ADJOINER/TITLE LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- CROWN OF ROAD
- x-x-x-x- FENCE LINE
- DP-DP- OVERHEAD POWER LINE
- LOE- UNDERGROUND ELECTRIC LINE
- WL-WL- UNDERGROUND WATER LINE
- GUARDRAIL
- DIP- DRIP LINE
- FOP- UNDERGROUND FIBER OPTIC LINE
- BTL- UNDERGROUND TELEPHONE LINE
- UNK- UNKNOWN UNDERGROUND UTILITY LINE
- SD- UNDERGROUND STORM DRAIN LINE
- MAJ- MAJOR CONTOUR
- MIN- MINOR CONTOUR
- EOW- EDGE OF WATER

LINE TABLE

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1(M)	S 01°53'35" W	10.00'	L1(R)	S 01°53'31" W	10.00'
L2(M)	N 88°40'06" W	30.00'	L2(R)	N 88°40'10" W	30.00'
L3(M)	S 01°53'36" W	30.00'	L3(R)	S 01°53'31" W	30.00'
L4(M)	S 88°40'21" E	126.34'	L4(R)	S 88°40'10" E	126.34'
L5(M)	N 09°37'00" E	8.76'	L5(R)	N 09°36'56" E	8.76'
L6(M)	N 28°51'25" W	57.44'	L6(R)	N 28°51'29" W	57.44'
L7(M)	N 13°01'50" W	92.49'	L7(R)	N 13°01'54" W	92.49'
L8(M)	N 29°17'55" E	91.67'	L8(R)	N 29°17'51" E	91.67'
L9(M)	N 15°36'31" E	105.06'	L9(R)	N 15°36'47" E	105.06'
L10(M)	N 55°15'40" W	116.52'	L10(R)	N 55°15'44" W	116.52'
L11(M)	N 31°06'23" E	52.31'	L11(R)	N 31°06'19" E	52.31'
L12(M)	N 64°42'03" E	95.52'	L12(R)	N 64°41'59" E	95.52'
L13(M)	N 26°25'35" E	129.97'	L13(R)	N 26°25'31" E	129.97'
L14(M)	N 32°11'37" W	55.04'	L14(R)	N 32°11'41" W	55.04'
L15(M)	S 14°46'56" E	83.29'	L15(R)	S 14°47'00" E	83.29'
L16(M)	N 20°06'30" W	50.03'	L16(R)	N 20°06'34" W	50.03'
L17(M)	N 62°06'13" W	122.40'	L17(R)	N 62°06'17" W	122.40'
L18(M)	N 01°15'37" W	109.58'	L18(R)	N 01°15'31" W	109.58'
L19(M)	N 39°25'38" E	57.43'	L19(R)	N 39°25'34" E	57.43'
L20(M)	N 37°45'34" W	127.05'	L20(R)	N 37°45'38" W	127.05'
L21(M)	N 21°21'04" W	72.95'	L21(R)	N 21°21'08" W	72.95'
L22(M)	N 35°31'19" E	36.07'	L22(R)	N 35°31'15" E	36.07'
L23(M)	S 41°47'27" E	85.51'	L23(R)	S 41°47'31" E	85.51'
L24(M)	N 76°17'49" E	58.79'	L24(R)	N 76°17'45" E	58.79'
L25(M)	S 36°31'27" E	27.26'	L25(R)	S 36°31'31" E	27.26'
L26(M)	N 33°13'12" E	83.49'	L26(R)	N 33°13'08" E	83.49'
L27(M)	N 04°31'54" W	140.00'	L27(R)	N 04°31'58" W	140.00'
L28(M)	S 86°11'00" E	53.88'	L28(R)	S 86°11'04" E	53.88'
L29(M)	N 03°29'18" W	27.38'	L29(R)	N 03°29'22" W	27.38'
L30(M)	S 39°50'47" E	40.70'	L30(R)	S 39°50'51" E	40.70'
L31(M)	N 03°11'58" W	17.51'	L31(R)	N 03°11'53" W	17.52'
L32(M)	S 88°40'21" E	30.00'	L32(R)	S 88°40'10" E	30.00'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1(M)	1714.31'	30.01'	30.00'	N 84°44'14" E	1°00'10"
C1(R)	1714.31'	30.00'	30.00'	N 81°54'41" E	4°38'56"
C2(M)	1714.31'	139.09'	139.09'	-	5°39'05"
C2(R)	1714.31'	169.09'	-	-	-

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3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703
 EMAIL: SURVEY@BLEWINC.COM
 OFFICE: 479.443.4506 FAX: 479.582.1883
 WWW.BLEWINC.COM

SURVEYOR JOB NUMBER: 25-0748	SURVEY DRAWN BY: MEK & TL - 03/12/2025
SURVEY REVIEWED BY: KLR	SHEET: 2 OF 7

ALTANSPS LAND TITLE SURVEY

CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

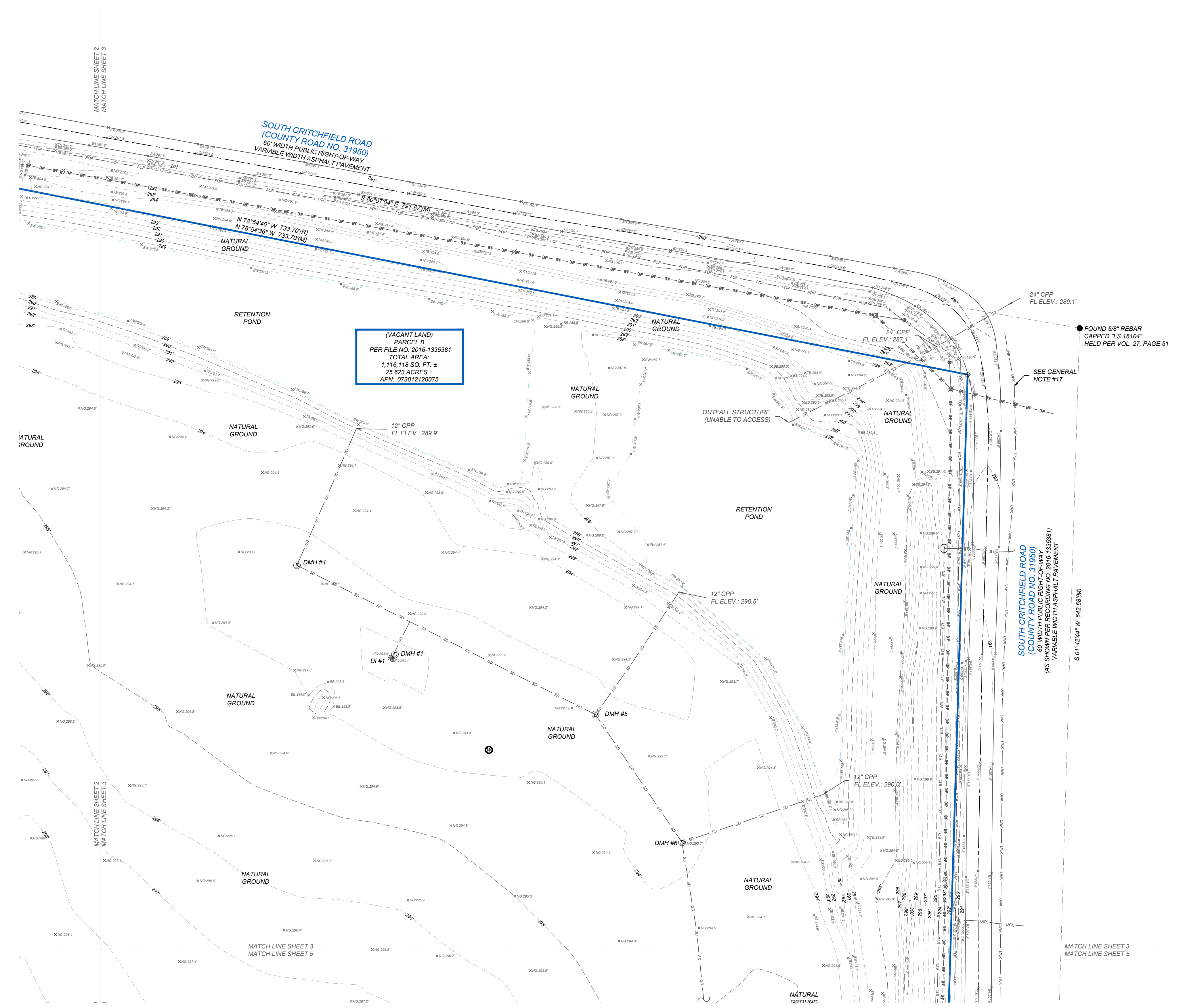
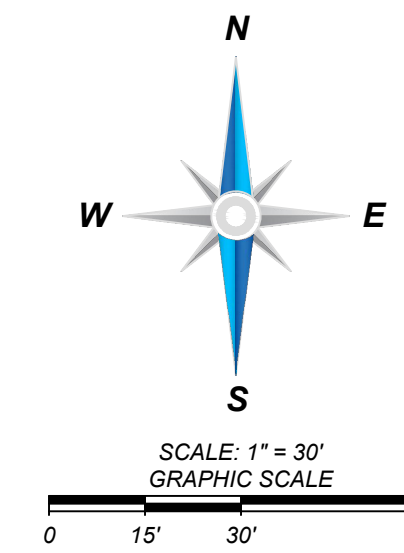
A PORTION OF THE N 1/2, SEC. 12, T-30-N, R-7-W
WILLIAMETTE MERIDIAN, CITY OF PORT ANGELES,
CLALLAM COUNTY, STATE OF WASHINGTON

TEMPORARY BENCHMARK INFORMATION

TBM #1	TBM #2
NORTHING: 418491.04	NORTHING: 417031.30
EASTING: 985576.62	EASTING: 986226.98
ELEVATION: 291.04'	ELEVATION: 310.04'
SET 5/8" REBAR	FOUND 5/8" REBAR WITH 1" ALUMINIUM CAP 'LS 37531'

INVERT INFORMATION

DMH #1	DMH #2	DMH #3	DMH #4	DMH #5	DI #1	DI #2	DI #3	DI #4
RIM: 294.16'	RIM: 321.89'	RIM: 321.72'	RIM: 294.20'	RIM: 294.15'	RIM: 293.05'	RIM: 308.23'	RIM: 305.27'	RIM: 309.05'
INVERT N - 12" CPP	BOTTOM OF STRUCTURE - 309.8'	BOTTOM OF STRUCTURE - 308.9'	INVERT NW - 12" CPP	INVERT NE - 12" CPP	INVERT NW - 12" CPP	INVERT NW - 12" CPP	INVERT NW - 12" CPP	INVERT NW - 12" CPP
INVERT S - 12" CPP	(FULL OF WATER)	(FULL OF WATER)	INVERT SE - 12" CPP	INVERT SE - 12" CPP	INVERT SE - 12" CPP	INVERT SE - 12" CPP	INVERT SE - 12" CPP	INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 287.2'			BOTTOM OF STRUCTURE - 289.9'	BOTTOM OF STRUCTURE - 290.1'	BOTTOM OF STRUCTURE - 289.1'	BOTTOM OF STRUCTURE - 304.0'	BOTTOM OF STRUCTURE - 306.3'	BOTTOM OF STRUCTURE - 305.1'



(VACANT LAND)
PARCEL B
PER FILE NO. 2016-1335381
TOTAL AREA:
1,116,119 SQ. FT. ±
25.823 ACRES ±
APN: 073012120075

LEGEND & SYMBOLS

- FOUND MONUMENT AS NOTED
- COMPUTED POINT
- ⊕ TEMPORARY BENCHMARK (TBM)
- ⊙ POWER POLE
- ⊕ SIGN
- ⊕ IRRIGATION CONTROL VALVE
- ⊕ WATER METER
- ⊕ WATER VALVE
- ⊕ WELLHEAD
- ⊕ WATER VAULT
- ⊕ DRAIN INLET (DI)
- ⊕ STORM MANHOLE (DMH)
- ⊕ TELEPHONE PEDESTAL
- ⊕ MAILBOX
- (M) MEASURED/CALCULATED DIMENSION
- (R) RECORD DIMENSION
- N/F NOW OR FORMERLY
- TB TOP OF BANK
- BB BOTTOM OF BANK
- EW EDGE OF WATER
- EC EDGE OF CONCRETE
- EA EDGE OF ASPHALT
- NG NATURAL GROUND
- CPP CORRUGATED PLASTIC PIPE
- CD CENTERLINE OF DITCH
- ADJOINER/TIE LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- CROWN OF ROAD
- x-x-x-x- FENCE LINE
- o-o-o-o- OVERHEAD POWER LINE
- u-u-u-u- UNDERGROUND ELECTRIC LINE
- w-w-w-w- UNDERGROUND WATER LINE
- g-g-g-g- GUARDRAIL
- f-f-f-f- DRIP LINE
- f-f-f-f- UNDERGROUND FIBER OPTIC LINE
- t-t-t-t- UNDERGROUND TELEPHONE LINE
- u-u-u-u- UNKNOWN UNDERGROUND UTILITY LINE
- s-s-s-s- UNDERGROUND STORM DRAIN LINE
- m-m-m-m- MAJOR CONTOUR
- m-m-m-m- MINOR CONTOUR
- e-e-e-e- EDGE OF WATER

LINE TABLE

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1(M)	S 01°53'35" W	10.00'	L1(R)	S 01°53'31" W	10.00'
L2(M)	N 88°40'06" W	30.00'	L2(R)	N 88°40'10" W	30.00'
L3(M)	S 01°53'36" W	30.00'	L3(R)	S 01°53'31" W	30.00'
L4(M)	S 88°40'21" E	126.34'	L4(R)	S 88°40'10" E	126.34'
L5(M)	N 09°37'00" E	8.76'	L5(R)	N 09°36'56" E	8.76'
L6(M)	N 28°51'25" W	57.44'	L6(R)	N 28°51'29" W	57.44'
L7(M)	N 13°01'50" W	92.49'	L7(R)	N 13°01'54" W	92.49'
L8(M)	N 29°17'55" E	91.67'	L8(R)	N 29°17'51" E	91.67'
L9(M)	N 15°36'31" E	105.06'	L9(R)	N 15°36'47" E	105.06'
L10(M)	N 55°15'40" W	116.52'	L10(R)	N 55°15'44" W	116.52'
L11(M)	N 31°06'23" E	52.31'	L11(R)	N 31°06'19" E	52.31'
L12(M)	N 64°42'03" E	95.52'	L12(R)	N 64°41'59" E	95.52'
L13(M)	N 26°25'35" E	129.97'	L13(R)	N 26°25'31" E	129.97'
L14(M)	N 32°11'37" W	55.04'	L14(R)	N 32°11'41" W	55.04'
L15(M)	S 14°46'56" E	83.29'	L15(R)	S 14°47'00" E	83.29'
L16(M)	N 20°06'30" W	50.03'	L16(R)	N 20°06'34" W	50.03'
L17(M)	N 02°06'13" W	122.40'	L17(R)	N 02°06'17" W	122.40'
L18(M)	N 01°15'37" W	109.58'	L18(R)	N 01°15'31" W	109.58'
L19(M)	N 39°25'38" E	57.43'	L19(R)	N 39°25'34" E	57.43'
L20(M)	N 37°45'34" W	127.05'	L20(R)	N 37°45'38" W	127.05'
L21(M)	N 21°21'04" W	72.95'	L21(R)	N 21°21'08" W	72.95'
L22(M)	N 35°31'19" E	36.07'	L22(R)	N 35°31'15" E	36.07'
L23(M)	S 41°47'27" E	85.51'	L23(R)	S 41°47'31" E	85.51'
L24(M)	N 76°17'49" E	58.79'	L24(R)	N 76°17'45" E	58.79'
L25(M)	S 36°31'27" E	27.26'	L25(R)	S 36°31'31" E	27.26'
L26(M)	N 33°13'12" E	83.49'	L26(R)	N 33°13'08" E	83.49'
L27(M)	N 04°31'54" W	140.00'	L27(R)	N 04°31'58" W	140.00'
L28(M)	S 86°11'00" E	53.88'	L28(R)	S 86°11'04" E	53.88'
L29(M)	N 03°29'18" W	27.38'	L29(R)	N 03°29'22" W	27.38'
L30(M)	S 39°50'47" E	40.70'	L30(R)	S 39°50'51" E	40.70'
L31(M)	N 03°11'58" W	17.51'	L31(R)	N 03°11'53" W	17.52'
L32(M)	S 88°40'21" E	30.00'	L32(R)	S 88°40'10" E	30.00'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1(M)	1714.31'	30.01'	30.00'	N 84°44'14" E	1°00'10"
C1(R)	1714.31'	30.00'	30.00'	N 81°54'41" E	4°38'56"
C2(R)	1714.31'	169.09'	-	-	5°39'05"

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 EMAIL: SURVEY@BLEWINC.COM
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SURVEYOR JOB NUMBER: 25-0748	SURVEY DRAWN BY: MEK & TL - 03/12/2025
SURVEY REVIEWED BY: KLR	SHEET: 3 OF 7

ALTANSPS LAND TITLE SURVEY

CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

A PORTION OF THE N 1/2, SEC. 12, T-30-N, R-7-W
WILLIAMETTE MERIDIAN, CITY OF PORT ANGELES,
CLALLAM COUNTY, STATE OF WASHINGTON

N/A22 ENTERPRISES LLC
403 S LINCOLN ST STE 4 PMB 50
PORT ANGELES WA 98362
APN: 073012120050

N/A22 ENTERPRISES LLC
403 S LINCOLN ST STE 4 PMB 50
PORT ANGELES WA 98362
APN: 073012120050

(VACANT LAND)
PARCEL B
PER FILE NO. 2016-1335381
TOTAL AREA:
1,116,116 SQ. FT. ±
25.623 ACRES ±
APN: 073012120075

TEMPORARY BENCHMARK INFORMATION

TBM #1
NORTHING: 418491.04
EASTING: 985576.62
ELEVATION: 291.04'
SET 5/8" REBAR

TBM #2
NORTHING: 417031.30
EASTING: 985226.98
ELEVATION: 310.04'
FOUND 5/8" REBAR
WITH 1" ALUMINIUM CAP
"LS 37531"

INVERT INFORMATION

DMH #1
RIM: 294.16'
INVERT E - 12" CPP
INVERT S - 12" CPP
BOTTOM OF STRUCTURE - 287.2'

DMH #2
RIM: 321.89'
BOTTOM OF STRUCTURE - 309.8'
(FULL OF WATER)

DMH #3
RIM: 321.72'
BOTTOM OF STRUCTURE - 308.9'
(FULL OF WATER)

DMH #4
RIM: 294.20'
INVERT NW - 12" CPP
INVERT SE - 12" CPP
INVERT N - 12" CPP
BOTTOM OF STRUCTURE - 289.9'

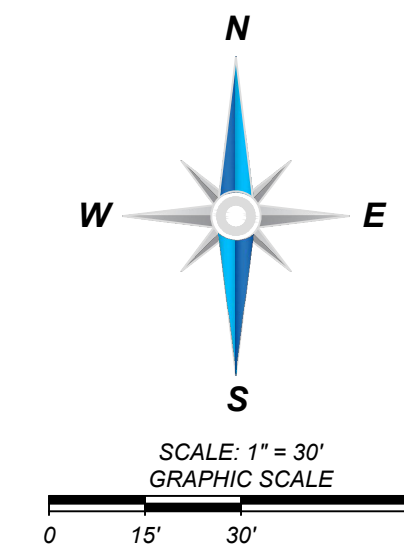
DMH #5
RIM: 294.15'
INVERT NE - 12" CPP
INVERT NW - 12" CPP
INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 290.1'

DI #1
RIM: 295.05'
INVERT N - 12" CPP
BOTTOM OF STRUCTURE - 289.1'

DI #2
RIM: 308.23'
INVERT NW - 12" CPP - 304.0'
INVERT SE - 12" CPP - 304.3'
BOTTOM OF STRUCTURE - 302.7'

DI #3
RIM: 305.27'
INVERT NW - 12" CPP - 306.3'
INVERT SE - 12" CPP - 306.7'
BOTTOM OF STRUCTURE - 306.3'

DI #4
RIM: 309.06'
INVERT NW - 12" CPP - 307.0'
BOTTOM OF STRUCTURE - 305.1'



LEGEND & SYMBOLS

- FOUND MONUMENT AS NOTED
- COMPUTED POINT
- ⊕ TEMPORARY BENCHMARK (TBM)
- ⊕ POWER POLE
- ⊕ SIGN
- ⊕ IRRIGATION CONTROL VALVE
- ⊕ WATER METER
- ⊕ WATER VALVE
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- ⊕ DRAIN INLET (DI)
- ⊕ STORM MANHOLE (DMH)
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- (M) MEASURED/CALCULATED DIMENSION
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- CPP CORRUGATED PLASTIC PIPE
- CD CENTERLINE OF DITCH
- BOUNDARY LINE
- ADJOINER/TIE LINE
- EASEMENT LINE
- R/W RIGHT-OF-WAY LINE
- CR CROWN OF ROAD
- FENCE LINE
- OVERHEAD POWER LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND WATER LINE
- GUARDRAIL
- DRIP LINE
- UNDERGROUND FIBER OPTIC LINE
- UNDERGROUND TELEPHONE LINE
- UNKNOWN UNDERGROUND UTILITY LINE
- UNDERGROUND STORM DRAIN LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- EDGE OF WATER

LINE TABLE

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1(M)	S 01°53'35" W	10.00'	L1(R)	S 01°53'31" W	10.00'
L2(M)	N 88°40'06" W	30.00'	L2(R)	N 88°40'10" W	30.00'
L3(M)	S 01°53'36" W	30.00'	L3(R)	S 01°53'31" W	30.00'
L4(M)	S 88°40'21" E	126.34'	L4(R)	S 88°40'10" E	126.34'
L5(M)	N 09°30'00" E	8.76'	L5(R)	N 09°30'56" E	8.76'
L6(M)	N 28°51'25" W	57.44'	L6(R)	N 28°51'29" W	57.44'
L7(M)	N 13°01'50" W	92.49'	L7(R)	N 13°01'54" W	92.49'
L8(M)	N 29°17'53" E	91.67'	L8(R)	N 29°17'51" E	91.67'
L9(M)	N 15°36'31" E	105.06'	L9(R)	N 15°36'47" E	105.06'
L10(M)	N 55°15'40" W	116.52'	L10(R)	N 55°15'44" W	116.52'
L11(M)	N 31°06'23" E	52.31'	L11(R)	N 31°06'19" E	52.31'
L12(M)	N 64°42'03" E	95.52'	L12(R)	N 64°41'59" E	95.52'
L13(M)	N 26°25'35" E	129.97'	L13(R)	N 26°25'31" E	129.97'
L14(M)	N 32°11'37" W	55.04'	L14(R)	N 32°11'41" W	55.04'
L15(M)	S 14°46'56" E	83.29'	L15(R)	S 14°47'00" E	83.29'
L16(M)	N 20°06'30" W	50.03'	L16(R)	N 20°06'34" W	50.03'
L17(M)	N 62°06'13" W	122.40'	L17(R)	N 62°06'17" W	122.40'
L18(M)	N 01°15'37" W	109.58'	L18(R)	N 01°15'31" W	109.58'
L19(M)	N 39°25'38" E	57.43'	L19(R)	N 39°25'34" E	57.43'
L20(M)	N 37°45'34" W	127.05'	L20(R)	N 37°45'38" W	127.05'
L21(M)	N 21°21'04" W	72.95'	L21(R)	N 21°21'08" W	72.95'
L22(M)	N 35°31'19" E	36.07'	L22(R)	N 35°31'15" E	36.07'
L23(M)	S 41°47'27" E	65.51'	L23(R)	S 41°47'31" E	65.51'
L24(M)	N 76°17'49" E	58.79'	L24(R)	N 76°17'45" E	58.79'
L25(M)	S 36°31'27" E	27.26'	L25(R)	S 36°31'31" E	27.26'
L26(M)	N 33°13'12" E	63.49'	L26(R)	N 33°13'08" E	63.49'
L27(M)	N 04°31'54" W	140.00'	L27(R)	N 04°31'58" W	140.00'
L28(M)	S 86°11'00" E	53.88'	L28(R)	S 86°11'04" E	53.88'
L29(M)	N 03°29'18" W	27.38'	L29(R)	N 03°29'22" W	27.38'
L30(M)	S 39°50'47" E	40.70'	L30(R)	S 39°50'51" E	40.70'
L31(M)	N 03°11'58" W	17.51'	L31(R)	N 03°11'53" W	17.52'
L32(M)	S 88°40'21" E	30.00'	L32(R)	S 88°40'10" E	30.00'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1(M)	1714.31'	30.01'	30.00'	N 84°44'14" E	1°00'10"
C1(R)	1714.31'	30.00'	-	-	1°00'10"
C2(M)	1714.31'	139.09'	139.05'	N 81°54'41" E	4°38'56"
C2(R)	1714.31'	169.09'	-	-	5°39'05"

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SURVEYOR JOB NUMBER:
25-0748

SURVEY DRAWN BY:
MEK & TL - 03/12/2025

SURVEY REVIEWED BY:
KLR

SHEET:
4 OF 7

ALTANSPS LAND TITLE SURVEY

CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

A PORTION OF THE N 1/2, SEC. 12, T-30-N, R-7-W
WILLAMETTE MERIDIAN, CITY OF PORT ANGELES,
CLALLAM COUNTY, STATE OF WASHINGTON

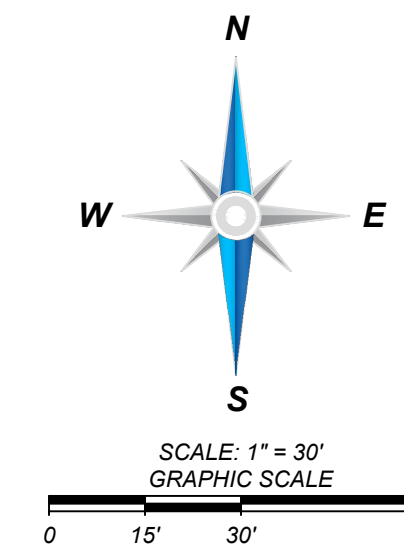
(VACANT LAND)
PARCEL B
PER FILE NO. 2016-1335381
TOTAL AREA:
1,116.118 SQ. FT. ±
25.623 ACRES ±
APN: 073012120075

SEE GENERAL
NOTE #17

S 01°42'44" W 642.65'(M)

FOUND 5/8" REBAR
WITH YELLOW CAP "ILLEGIBLE"
HELD PER VOL. 27, PAGE 51

FOUND 5/8" REBAR
WITH YELLOW CAP "ILLEGIBLE"
HELD PER VOL. 27, PAGE 51



TEMPORARY BENCHMARK INFORMATION

TBM #1	TBM #2
NORTHING: 418491.04	NORTHING: 417031.30
EASTING: 985576.62	EASTING: 986226.98
ELEVATION: 291.04'	ELEVATION: 310.04'
SET 5/8" REBAR	FOUND 5/8" REBAR WITH 1" ALUMINIUM CAP "LS 37531"

INVERT INFORMATION

DMH #1	DMH #2	DMH #3	DMH #4	DMH #5	DI #1	DI #2	DI #3	DI #4
RIM: 294.16'	RIM: 321.89'	RIM: 321.72'	RIM: 294.20'	RIM: 294.15'	RIM: 295.00'	RIM: 308.23'	RIM: 305.27'	RIM: 309.05'
INVERT N - 12" CPP	BOTTOM OF STRUCTURE - 287.2'	BOTTOM OF STRUCTURE - 308.9'	INVERT NW - 12" CPP	INVERT NE - 12" CPP	INVERT E - 12" CPP	INVERT NW - 12" CPP	INVERT NW - 12" CPP	INVERT NW - 12" CPP
INVERT S - 12" CPP	BOTTOM OF STRUCTURE - 289.9'	BOTTOM OF STRUCTURE - 308.9'	INVERT SE - 12" CPP	INVERT SE - 12" CPP	INVERT SE - 12" CPP	INVERT SE - 12" CPP	INVERT SE - 12" CPP	INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 287.2'	BOTTOM OF STRUCTURE - 289.9'	BOTTOM OF STRUCTURE - 308.9'	BOTTOM OF STRUCTURE - 289.9'	BOTTOM OF STRUCTURE - 290.1'	BOTTOM OF STRUCTURE - 289.1'	BOTTOM OF STRUCTURE - 302.7'	BOTTOM OF STRUCTURE - 306.3'	BOTTOM OF STRUCTURE - 305.1'

LEGEND & SYMBOLS

- FOUND MONUMENT AS NOTED
- COMPUTED POINT
- ⊕ TEMPORARY BENCHMARK (TBM)
- ⊙ POWER POLE
- ⊕ SIGN
- ⊕ IRRIGATION CONTROL VALVE
- ⊕ WATER METER
- ⊕ WATER VALVE
- ⊕ WELLHEAD
- ⊕ WATER VAULT
- ⊕ DRAIN INLET (DI)
- ⊕ STORM MANHOLE (DMH)
- ⊕ TELEPHONE PEDESTAL
- ⊕ MAILBOX
- (M) MEASURED/CALCULATED DIMENSION
- (R) RECORD DIMENSION
- N/F NOW OR FORMERLY
- TB TOP OF BANK
- BB BOTTOM OF BANK
- EW EDGE OF WATER
- EC EDGE OF CONCRETE
- EA EDGE OF ASPHALT
- NG NATURAL GROUND
- CPP CORRUGATED PLASTIC PIPE
- CD CENTERLINE OF DITCH
- BOUNDARY LINE
- ADJOINER/TITLE LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- CROWN-OF-ROAD
- x-x-x-x-x- FENCE LINE
- OVERHEAD POWER LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND WATER LINE
- GUARDRAIL
- DRIP LINE
- UNDERGROUND FIBER OPTIC LINE
- UNDERGROUND TELEPHONE LINE
- UNKNOWN UNDERGROUND UTILITY LINE
- UNDERGROUND STORM DRAIN LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- EDGE OF WATER

LINE TABLE

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1(M)	S 01°53'35" W	10.00'	L1(L)	S 01°53'31" W	10.00'
L2(M)	N 88°40'06" W	30.00'	L2(R)	N 88°40'10" W	30.00'
L3(M)	S 01°53'36" W	30.00'	L3(R)	S 01°53'31" W	30.00'
L4(M)	S 88°40'21" E	126.34'	L4(R)	S 88°40'10" E	126.34'
L5(M)	N 09°37'00" E	8.76'	L5(R)	N 09°36'56" E	8.76'
L6(M)	N 28°51'25" W	57.44'	L6(R)	N 28°51'29" W	57.44'
L7(M)	N 13°01'50" W	92.49'	L7(R)	N 13°01'54" W	92.49'
L8(M)	N 29°17'53" E	91.67'	L8(R)	N 29°17'51" E	91.67'
L9(M)	N 15°36'51" E	105.06'	L9(R)	N 15°36'47" E	105.06'
L10(M)	N 55°15'40" W	116.52'	L10(R)	N 55°15'44" W	116.52'
L11(M)	N 31°06'23" E	52.31'	L11(R)	N 31°06'19" E	52.31'
L12(M)	N 64°42'03" E	95.52'	L12(R)	N 64°41'59" E	95.52'
L13(M)	N 26°25'35" E	129.97'	L13(R)	N 26°25'31" E	129.97'
L14(M)	N 32°11'37" W	55.04'	L14(R)	N 32°11'41" W	55.04'
L15(M)	S 14°46'56" E	83.29'	L15(R)	S 14°47'00" E	83.29'
L16(M)	N 20°06'30" W	50.03'	L16(R)	N 20°06'34" W	50.03'
L17(M)	N 62°06'13" W	122.40'	L17(R)	N 62°06'17" W	122.40'
L18(M)	N 01°15'37" W	109.58'	L18(R)	N 01°15'31" W	109.58'
L19(M)	N 39°25'38" E	57.43'	L19(R)	N 39°25'34" E	57.43'
L20(M)	N 37°45'34" W	127.05'	L20(R)	N 37°45'38" W	127.05'
L21(M)	N 21°21'04" W	72.95'	L21(R)	N 21°21'08" W	72.95'
L22(M)	N 35°31'19" E	36.07'	L22(R)	N 35°31'15" E	36.07'
L23(M)	S 41°47'27" E	65.51'	L23(R)	S 41°47'31" E	65.51'
L24(M)	N 76°17'49" E	58.79'	L24(R)	N 76°17'45" E	58.79'
L25(M)	S 36°31'27" E	27.26'	L25(R)	S 36°31'31" E	27.26'
L26(M)	N 33°13'12" E	63.49'	L26(R)	N 33°13'08" E	63.49'
L27(M)	N 04°31'54" W	140.00'	L27(R)	N 04°31'58" W	140.00'
L28(M)	S 86°11'00" E	53.88'	L28(R)	S 86°11'04" E	53.88'
L29(M)	N 03°29'18" W	27.38'	L29(R)	N 03°29'22" W	27.38'
L30(M)	S 39°50'47" E	40.70'	L30(R)	S 39°50'51" E	40.70'
L31(M)	N 03°11'58" W	17.51'	L31(R)	N 03°11'53" W	17.52'
L32(M)	S 88°40'21" E	30.00'	L32(R)	S 88°40'10" E	30.00'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1(M)	1714.31'	30.01'	30.00'	N 84°44'14" E	1°00'10"
C1(R)	1714.31'	30.00'	-	-	1°00'10"
C2(M)	1714.31'	139.09'	139.05'	N 81°54'41" E	4°38'56"
C2(R)	1714.31'	169.09'	-	-	5°39'05"

BLEW

Surveying | Engineering | Environmental

3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703

EMAIL: SURVEY@BLEWINC.COM

OFFICE: 479.443.4506 FAX: 479.582.1883

WWW.BLEWINC.COM

SURVEYOR JOB NUMBER: 25-0748	SURVEY DRAWN BY: MEK & TL - 03/12/2025
SURVEY REVIEWED BY: KLR	SHEET: 5 OF 7

ALTANSPS LAND TITLE SURVEY

CRITCHFIELD ROAD

PORT ANGELES, CLALLAM COUNTY, WASHINGTON 98363

A PORTION OF THE N 1/2, SEC. 12, T-30-N, R-7-W
WILLIAMETTE MERIDIAN, CITY OF PORT ANGELES,
CLALLAM COUNTY, STATE OF WASHINGTON

TEMPORARY BENCHMARK INFORMATION

TBM #1
NORTHING: 418491.04
EASTING: 985576.62
ELEVATION: 291.04'
SET 5/8" REBAR

TBM #2
NORTHING: 417031.30
EASTING: 986226.98
ELEVATION: 310.04'
FOUND 5/8" REBAR
WITH 1" ALUMINIUM CAP
"LS 37531"

INVERT INFORMATION

DMH #1
RIM: 294.16'
INVERT N - 12" CPP
INVERT S - 12" CPP
BOTTOM OF STRUCTURE - 287.2'

DMH #2
RIM: 321.89'
BOTTOM OF STRUCTURE - 309.8'
(FULL OF WATER)

DMH #3
RIM: 321.72'
BOTTOM OF STRUCTURE - 308.9'
(FULL OF WATER)

DMH #4
RIM: 294.20'
INVERT NW - 12" CPP
INVERT SE - 12" CPP
INVERT N - 12" CPP
BOTTOM OF STRUCTURE - 289.9'

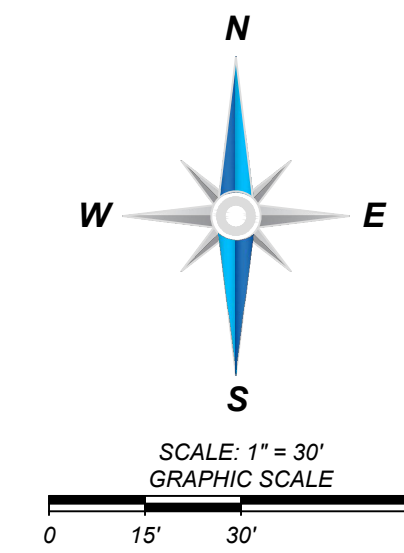
DMH #5
RIM: 294.15'
INVERT NE - 12" CPP
INVERT NW - 12" CPP
INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 290.1'

DI #1
RIM: 293.05'
INVERT N - 12" CPP
BOTTOM OF STRUCTURE - 289.1'

DI #2
RIM: 308.23'
INVERT NW - 12" CPP - 304.0'
INVERT SE - 12" CPP - 304.3'
BOTTOM OF STRUCTURE - 302.7'

DI #3
RIM: 305.27'
INVERT NW - 12" CPP - 306.3'
INVERT SE - 12" CPP - 306.7'
BOTTOM OF STRUCTURE - 306.3'

DI #4
RIM: 309.06'
INVERT NW - 12" CPP - 307.0'
BOTTOM OF STRUCTURE - 305.1'



LEGEND & SYMBOLS

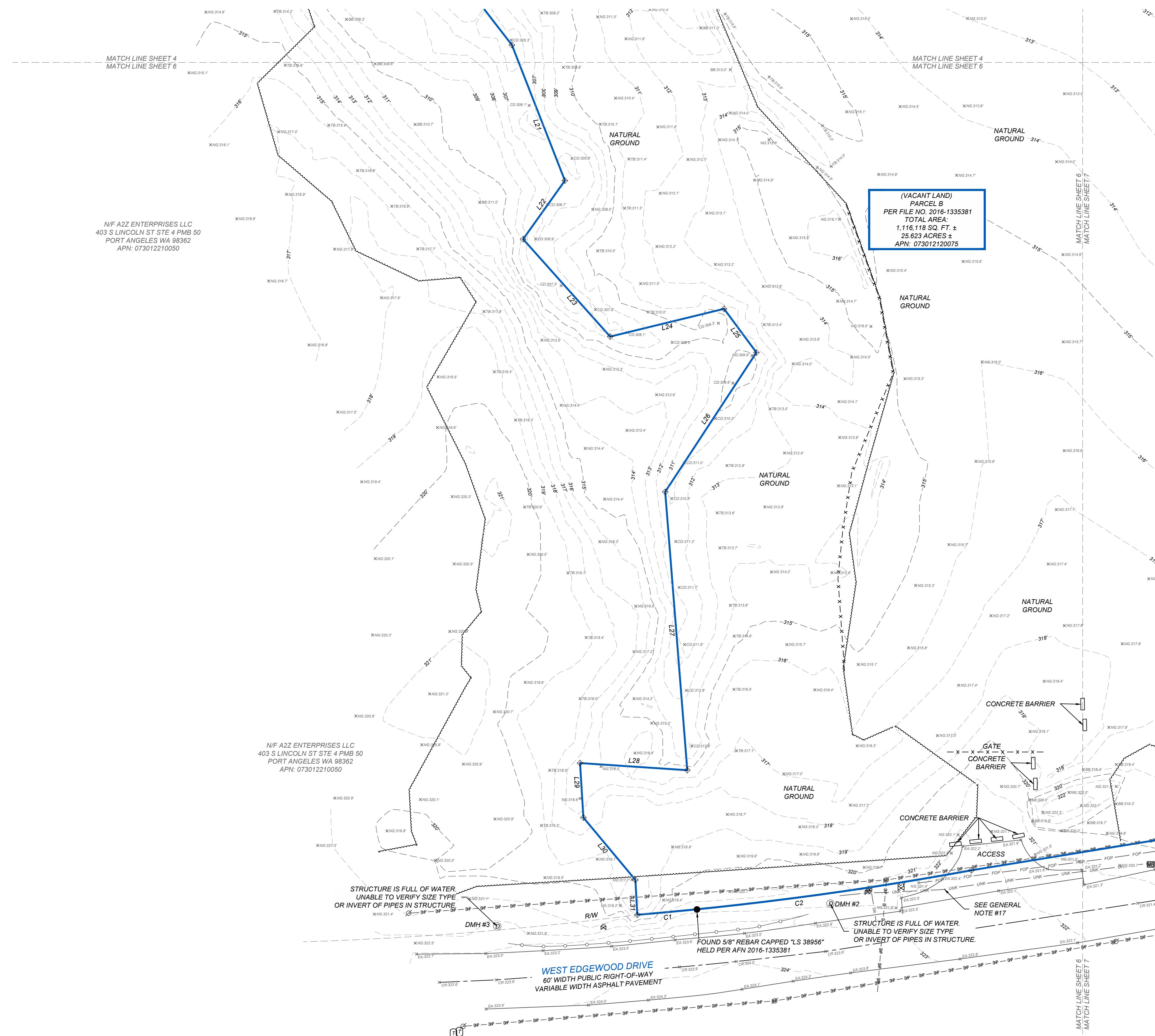
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L5(M)	N 09°37'00" E	8.76'	L5(R)	N 09°36'56" E	8.76'
L6(M)	N 28°51'25" W	57.44'	L6(R)	N 28°51'29" W	57.44'
L7(M)	N 13°01'50" W	92.49'	L7(R)	N 13°01'54" W	92.49'
L8(M)	N 29°17'55" E	91.67'	L8(R)	N 29°17'51" E	91.67'
L9(M)	N 15°36'31" E	105.06'	L9(R)	N 15°36'47" E	105.06'
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L15(M)	S 14°46'56" E	83.29'	L15(R)	S 14°47'00" E	83.29'
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L27(M)	N 04°01'54" W	140.00'	L27(R)	N 04°01'58" W	140.00'
L28(M)	S 86°11'00" E	53.88'	L28(R)	S 86°11'04" E	53.88'
L29(M)	N 03°29'18" W	27.38'	L29(R)	N 03°29'22" W	27.38'
L30(M)	S 39°50'47" E	40.70'	L30(R)	S 39°50'51" E	40.70'
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CURVE TABLE

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C2(M)	1714.31'	139.09'	139.05'	N 81°54'41" E	4°38'56"
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NF AZZ ENTERPRISES LLC
403 S LINCOLN ST STE 4 PMB 50
PORT ANGELES WA 98362
APN: 073012210050

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SURVEYOR JOB NUMBER:
25-0748

SURVEY DRAWN BY:
MEK & TL - 03/12/2025

SURVEY REVIEWED BY:
KLR

SHEET:
6 OF 7

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SET 5/8" REBAR

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INVERT INFORMATION

DMH #1
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BOTTOM OF STRUCTURE - 287.2'

DMH #2
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BOTTOM OF STRUCTURE - 309.8'
(FULL OF WATER)

DMH #3
RIM: 321.72'
BOTTOM OF STRUCTURE - 308.9'
(FULL OF WATER)

DMH #4
RIM: 294.20'
INVERT NW - 12" CPP
INVERT SE - 12" CPP
INVERT N - 12" CPP
BOTTOM OF STRUCTURE - 289.9'

DMH #5
RIM: 294.15'
INVERT NE - 12" CPP
INVERT NW - 12" CPP
INVERT SE - 12" CPP
BOTTOM OF STRUCTURE - 290.1'

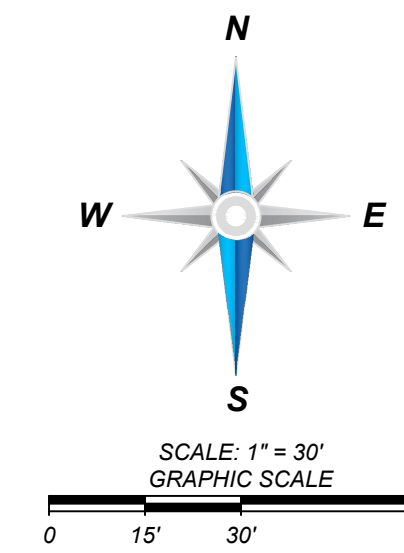
DMH #6
RIM: 295.00'
INVERT E - 12" CPP
INVERT NW - 12" CPP
INVERT S - 12" CPP
BOTTOM OF STRUCTURE - 289.9'

DI #1
RIM: 293.05'
INVERT N - 12" CPP
BOTTOM OF STRUCTURE - 289.1'

DI #2
RIM: 308.23'
INVERT NW - 12" CPP - 304.0'
INVERT SE - 12" CPP - 304.3'
BOTTOM OF STRUCTURE - 302.7'

DI #3
RIM: 305.27'
INVERT NW - 12" CPP - 306.3'
INVERT SE - 12" CPP - 306.7'
BOTTOM OF STRUCTURE - 306.3'

DI #4
RIM: 309.06'
INVERT NW - 12" CPP - 307.0'
BOTTOM OF STRUCTURE - 305.1'



LEGEND & SYMBOLS

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L20(M)	N 37°45'34" W	127.05'	L20(R)	N 37°45'38" W	127.05'
L21(M)	N 21°21'04" W	72.95'	L21(R)	N 21°21'08" W	72.95'
L22(M)	N 35°31'19" E	36.07'	L22(R)	N 35°31'15" E	36.07'
L23(M)	S 41°47'27" E	85.51'	L23(R)	S 41°47'31" E	85.51'
L24(M)	N 76°17'49" E	58.79'	L24(R)	N 76°17'45" E	58.79'
L25(M)	S 36°31'27" E	27.26'	L25(R)	S 36°31'31" E	27.26'
L26(M)	N 33°13'12" E	83.49'	L26(R)	N 33°13'08" E	83.49'
L27(M)	N 04°31'54" W	140.00'	L27(R)	N 04°31'58" W	140.00'
L28(M)	S 86°11'00" E	53.88'	L28(R)	S 86°11'04" E	53.88'
L29(M)	N 03°29'18" W	27.38'	L29(R)	N 03°29'22" W	27.38'
L30(M)	S 39°50'47" E	40.70'	L30(R)	S 39°50'51" E	40.70'
L31(M)	N 03°11'58" W	17.51'	L31(R)	N 03°11'53" W	17.52'
L32(M)	S 88°40'21" E	30.00'	L32(R)	S 88°40'10" E	30.00'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1(M)	1714.31'	30.00'	30.00'	N 84°44'14" E	1°00'10"
C1(R)	1714.31'	30.00'	30.00'	N 84°44'14" E	1°00'10"
C2(M)	1714.31'	139.09'	139.09'	N 81°54'41" E	4°38'56"
C2(R)	1714.31'	169.09'	-	-	5°39'05"

BLEW

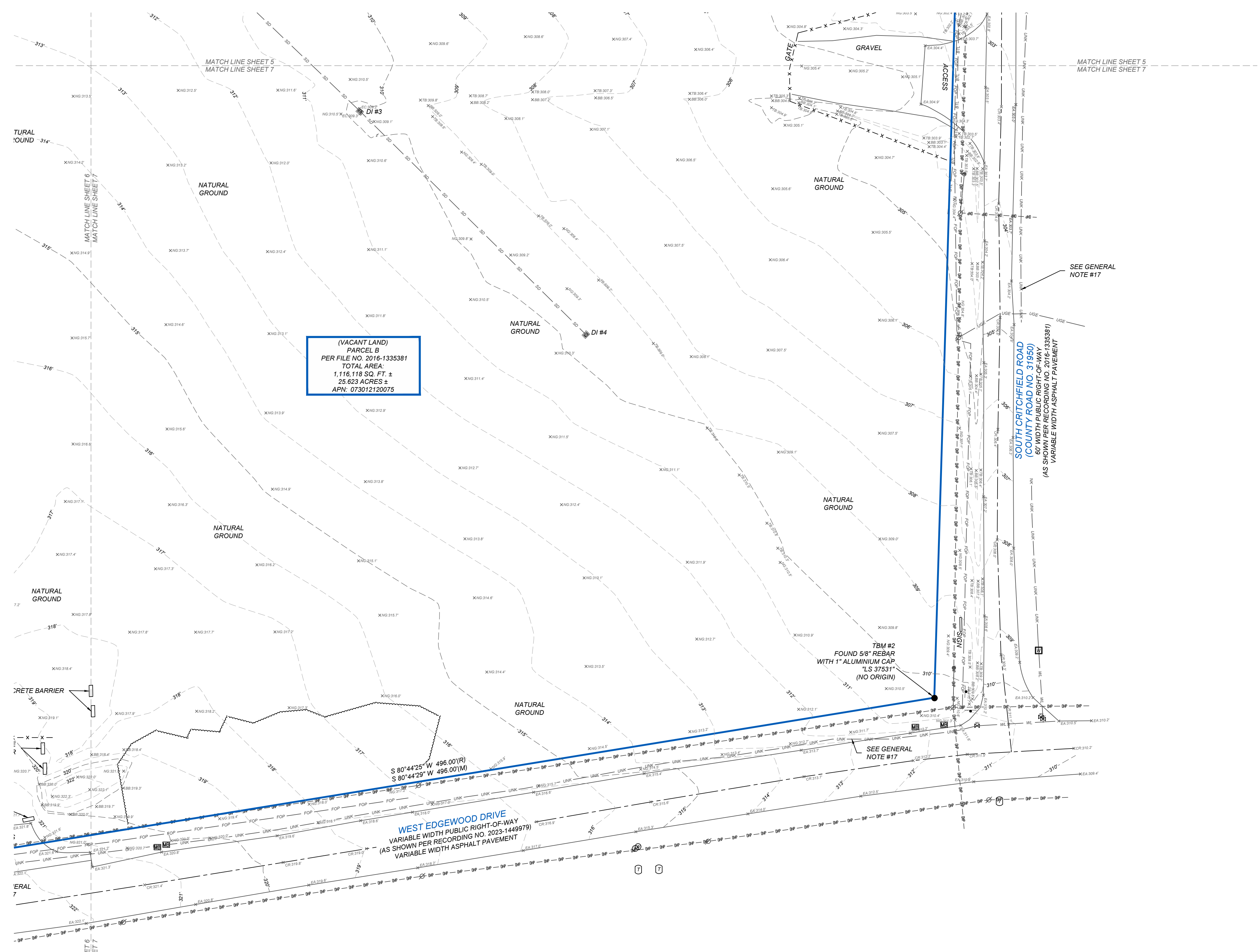
Surveying | Engineering | Environmental

3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703

OFFICE: 479.443.4506 FAX: 479.582.1883

WWW.BLEWINC.COM

SURVEYOR JOB NUMBER: 25-0748	SURVEY DRAWN BY: MEK & TL - 03/12/2025
SURVEY REVIEWED BY: KLR	SHEET: 7 OF 7



APPENDIX C:
WEB SOIL SURVEY



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Clallam County Area, Washington



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

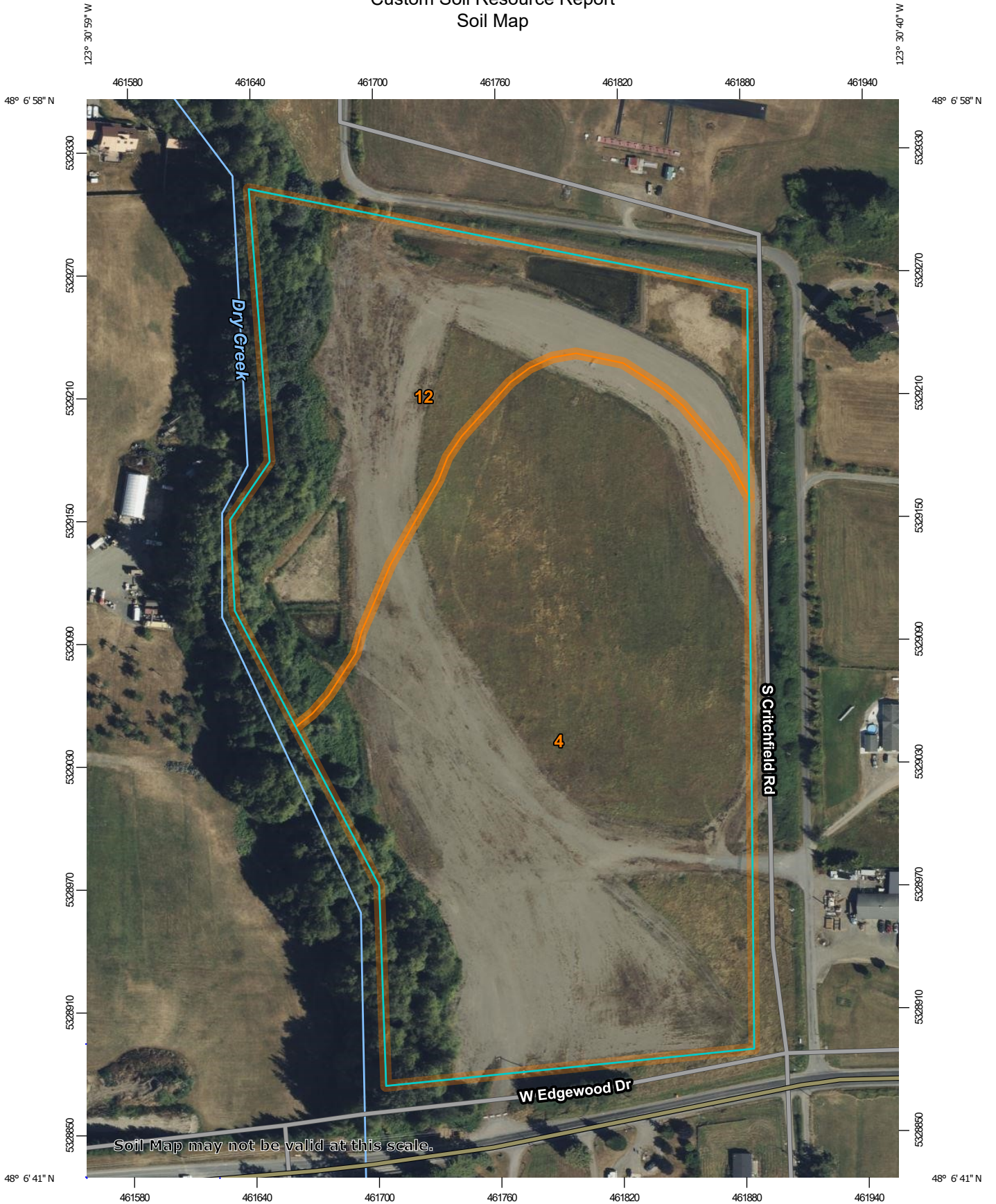
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

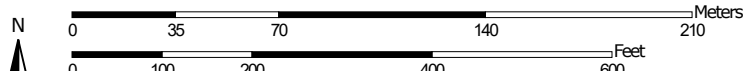
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map




Map Scale: 1:2,560 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Clallam County Area, Washington
 Survey Area Data: Version 22, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 8, 2022—Aug 29, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
4	Bellingham silty clay loam	14.9	67.3%
12	Clallam gravelly sandy loam, 0 to 15 percent slopes	7.3	32.7%
Totals for Area of Interest		22.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Clallam County Area, Washington

4—Bellingham silty clay loam

Map Unit Setting

National map unit symbol: 2ggg
Elevation: 10 to 600 feet
Mean annual precipitation: 35 to 60 inches
Mean annual air temperature: 50 degrees F
Frost-free period: 150 to 210 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Bellingham and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bellingham

Setting

Landform: Depressions on terraces
Parent material: Alluvium

Typical profile

H1 - 0 to 9 inches: silty clay loam
H2 - 9 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very high (about 12.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Ecological site: F002XA007WA - Puget Lowlands Wet Forest
Forage suitability group: Wet Soils (G002XN102WA)
Other vegetative classification: Wet Soils (G002XN102WA)
Hydric soil rating: Yes

Minor Components

Mckenna

Percent of map unit: 8 percent
Landform: Depressions
Other vegetative classification: Wet Soils (G002XF103WA)
Hydric soil rating: Yes

Puget, undrained

Percent of map unit: 7 percent

Landform: Terraces

Other vegetative classification: Wet Soils (G002XN102WA)

Hydric soil rating: Yes

12—Clallam gravelly sandy loam, 0 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2gfc

Elevation: 40 to 1,800 feet

Mean annual precipitation: 23 inches

Mean annual air temperature: 48 degrees F

Frost-free period: 160 to 200 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Clallam and similar soils: 85 percent

Minor components: 3 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Clallam

Setting

Landform: Hillslopes

Parent material: Till

Typical profile

H1 - 0 to 10 inches: gravelly ashy sandy loam

H2 - 10 to 28 inches: very gravelly ashy sandy loam

H3 - 28 to 60 inches: very gravelly sandy loam

Properties and qualities

Slope: 0 to 15 percent

Depth to restrictive feature: 20 to 40 inches to densic material

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 18 to 36 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 4s

Hydrologic Soil Group: C

Ecological site: F002XA001WA - Puget Lowlands Dry Forest

Forage suitability group: Limited Depth Soils (G002XN302WA)

Other vegetative classification: Limited Depth Soils (G002XN302WA)

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Hydric soil rating: No

Minor Components

Mckenna

Percent of map unit: 3 percent

Landform: Depressions

Other vegetative classification: Wet Soils (G002XF103WA)

Hydric soil rating: Yes

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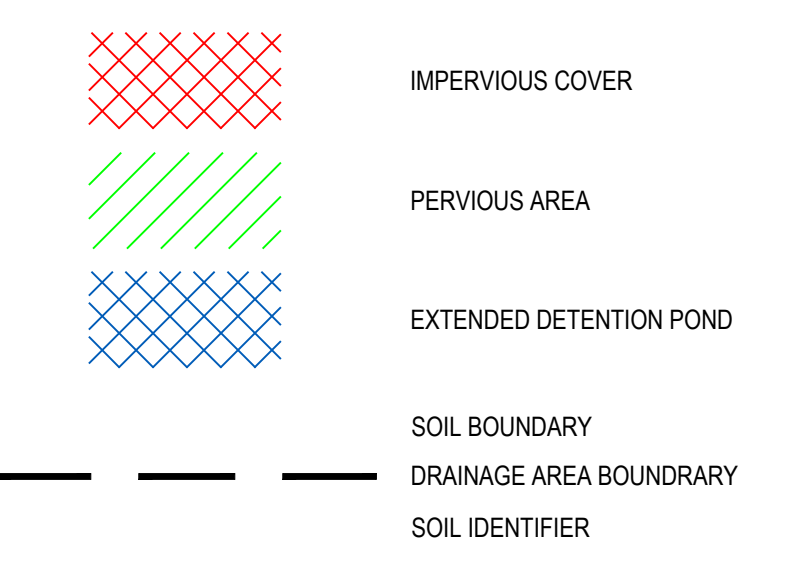
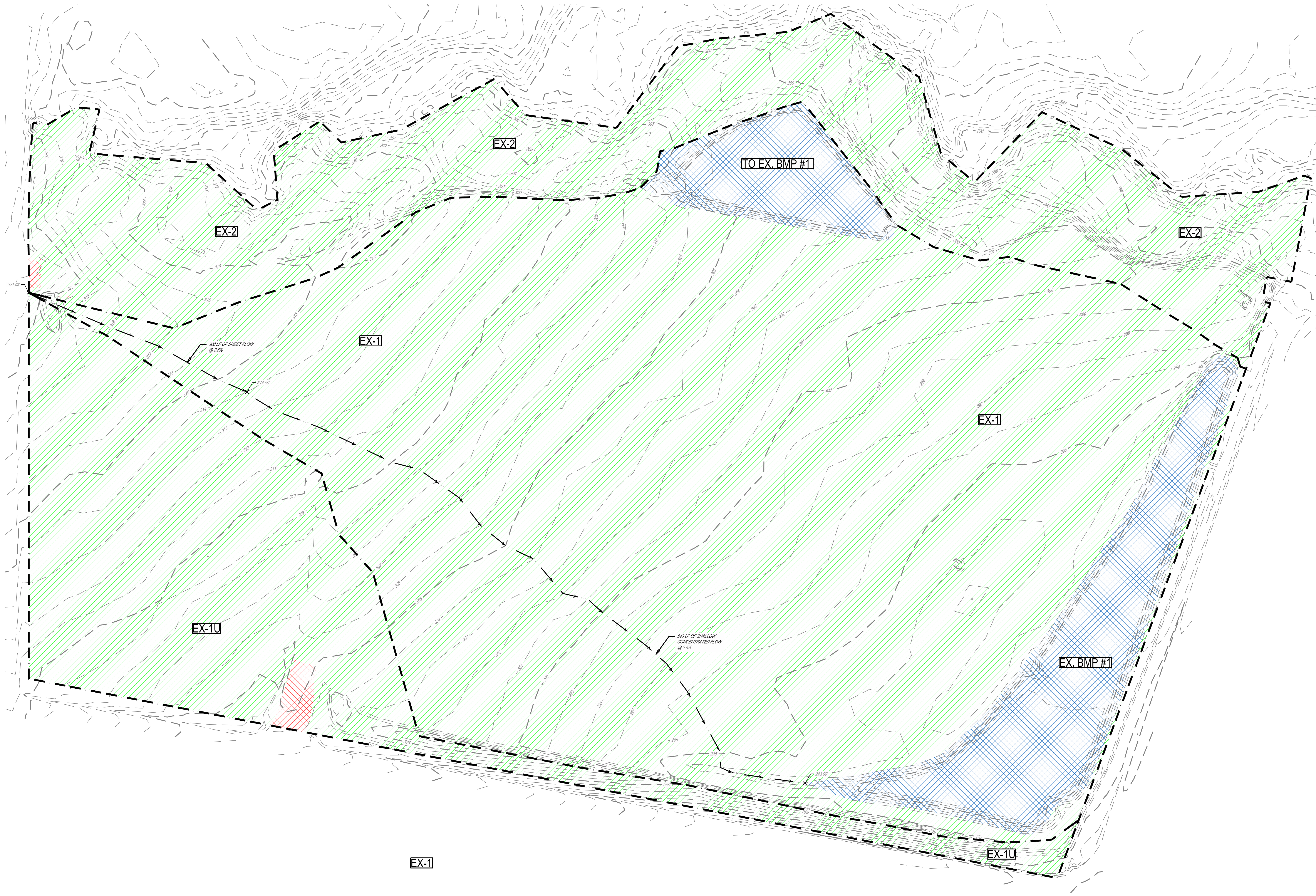
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APPENDIX D:

PRE- AND POST-DEVELOPED COVERAGE MAPS



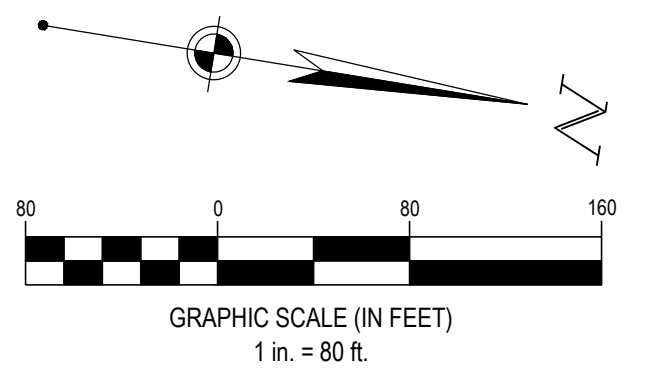
SOIL DATA TABLE	
SOIL NAME	HYDRAULIC SOIL GROUP
22B - xxx	x
23B - xxx	xx

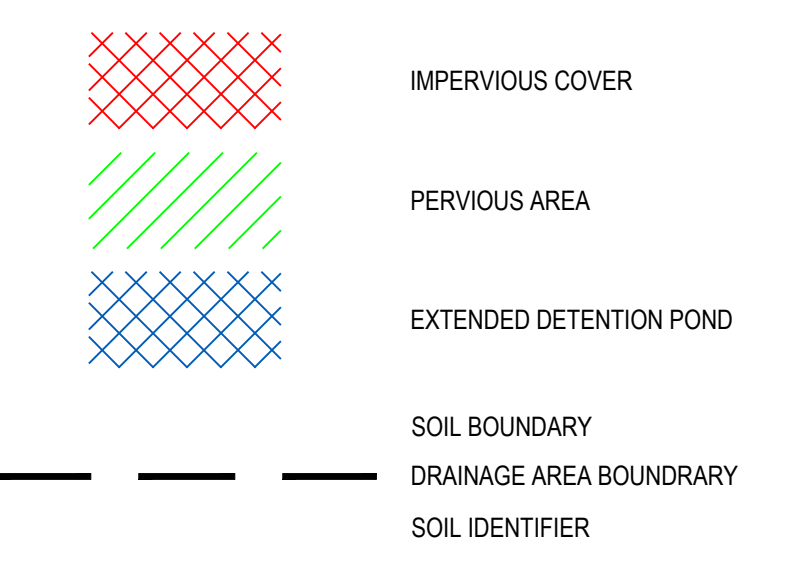
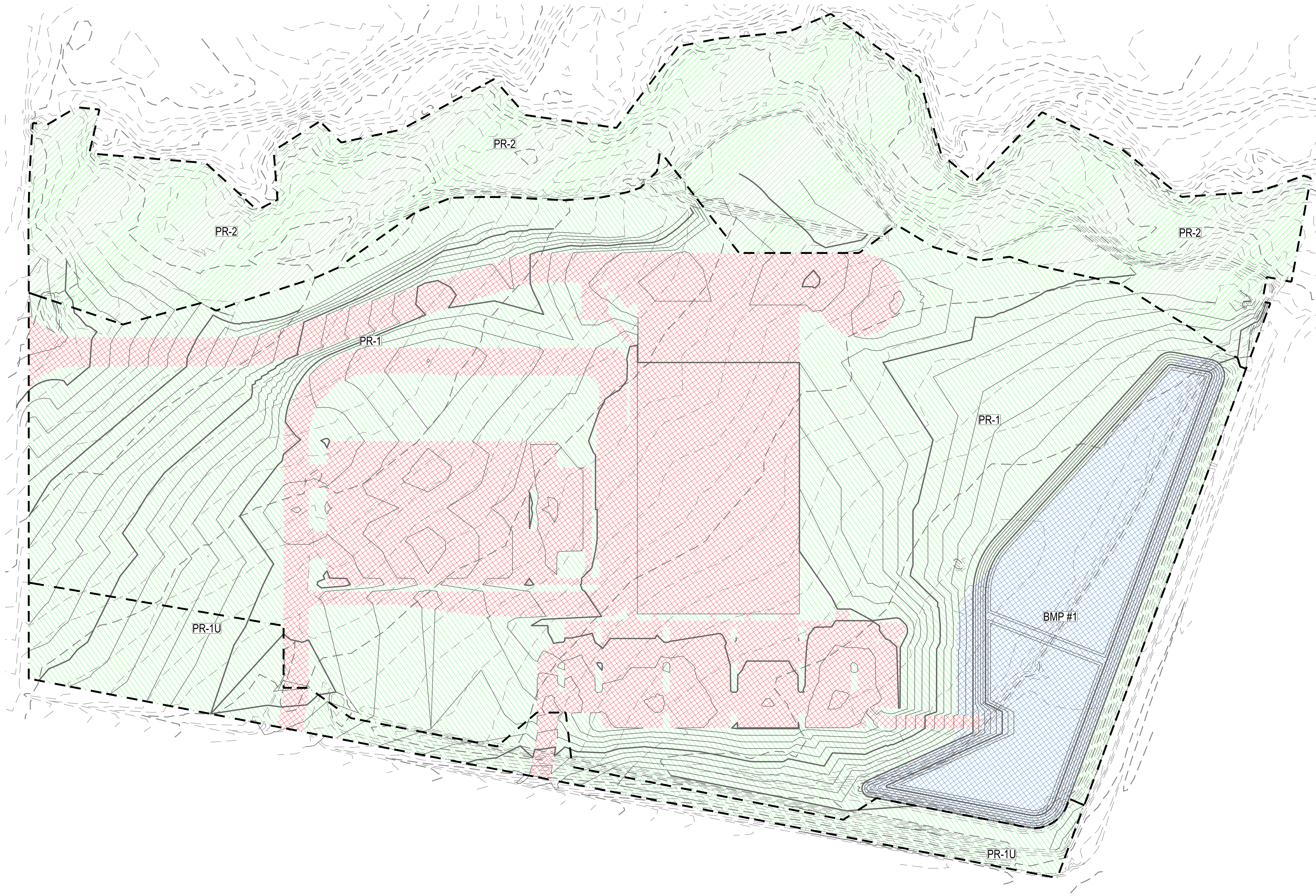
PRE DEVELOPED LAND COVER		
IMPERVIOUS COVER (ACRES)	PERVIOUS COVER (ACRES)	TOTAL AREA (ACRES)
HSG D (CN = xx)	HSG D (CN = xx)	
2.23	23.39	25.62

PRE DEVELOPED LAND COVER TO EX BMP 1 (EX-1)		
IMPERVIOUS COVER (ACRES)	PERVIOUS COVER (ACRES)	TOTAL AREA (ACRES)
HSG x (CN = xx)	HSG x (CN = xx)	
2.15	14.35	16.50

POST DEVELOPED LAND COVER TO OFFSITE UNDETAINED (EX-1U)		
IMPERVIOUS COVER (ACRES)	PERVIOUS COVER (ACRES)	TOTAL AREA (ACRES)
HSG D (CN = xxx)	HSG D (CN = xxx)	
0.07	4.00	4.07

POST DEVELOPED LAND COVER TO OFFSITE (EX-2)		
IMPERVIOUS COVER (ACRES)	PERVIOUS COVER (ACRES)	TOTAL AREA (ACRES)
HSG D (CN = xx)	HSG D (CN = xx)	
0.01	5.04	5.05





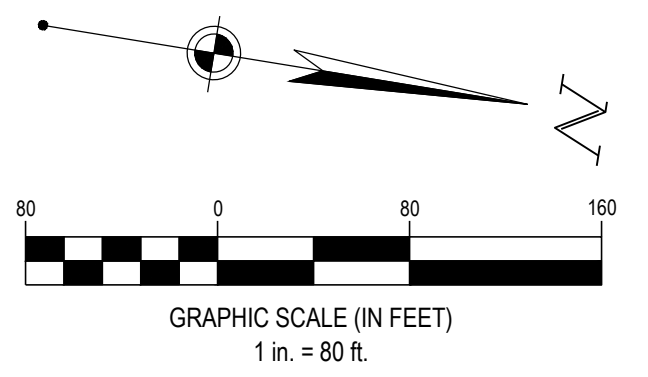
SOIL DATA TABLE	
SOIL NAME	HYDRAULIC SOIL GROUP
22B - xxx	x
23B - xxx	xx

POST DEVELOPED LAND COVER		
IMPERVIOUS COVER (ACRES)	PERVIOUS COVER (ACRES)	TOTAL AREA (ACRES)
HSG D (CN = xx)	HSG D (CN = xx)	
8.47	17.15	25.62

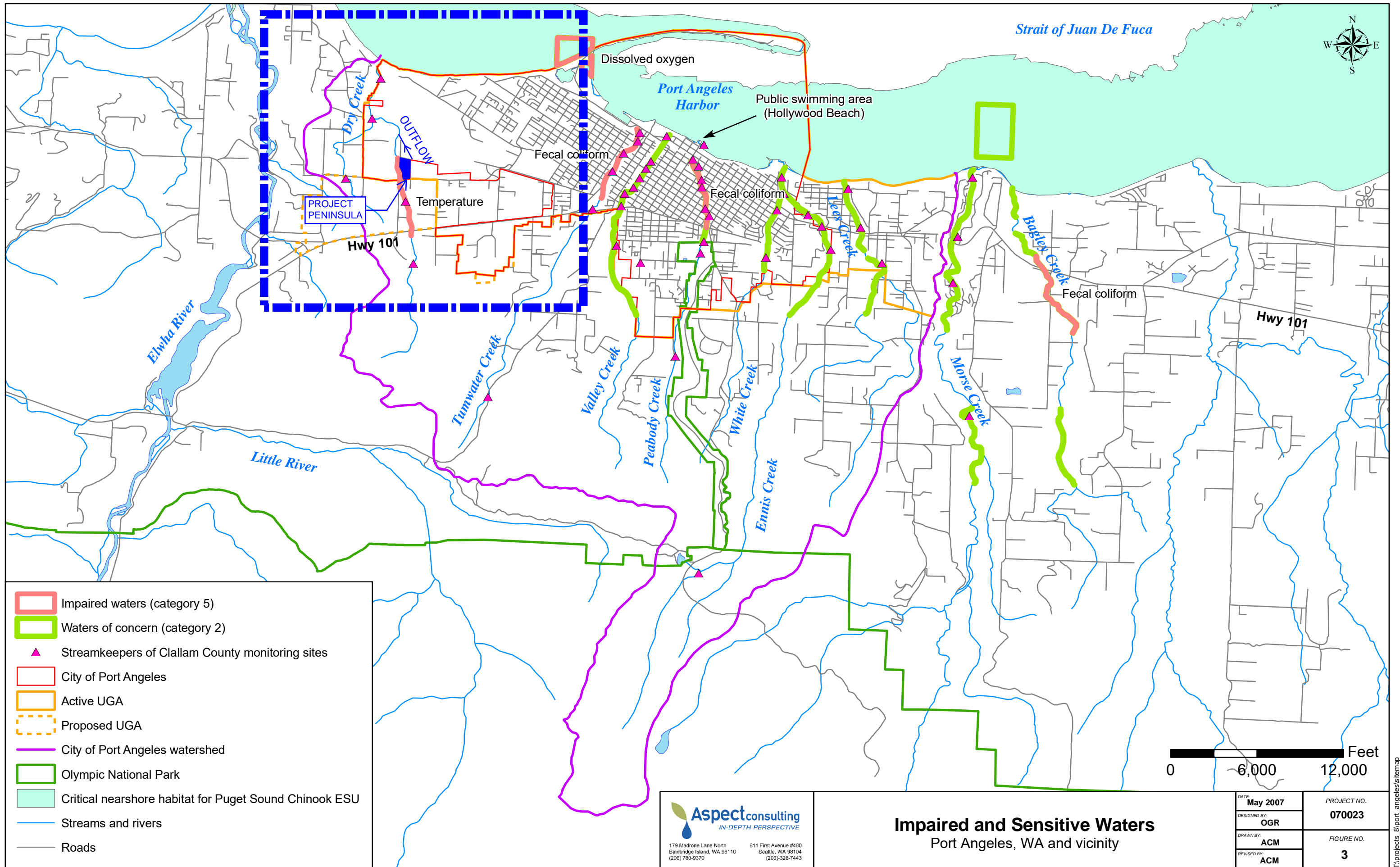
POST DEVELOPED LAND COVER TO BMP 1 (PR-1)		
IMPERVIOUS COVER (ACRES)	PERVIOUS COVER (ACRES)	TOTAL AREA (ACRES)
HSG x (CN = xx)	HSG x (CN = xx)	
8.39	9.81	18.20

POST DEVELOPED LAND COVER TO OFFSITE UNDETAINED (PR-1U)		
IMPERVIOUS COVER (ACRES)	PERVIOUS COVER (ACRES)	TOTAL AREA (ACRES)
HSG D (CN = xxx)	HSG D (CN = xxx)	
0.08	1.56	1.64

POST DEVELOPED LAND COVER TO OFFSITE (PR-2)		
IMPERVIOUS COVER (ACRES)	PERVIOUS COVER (ACRES)	TOTAL AREA (ACRES)
HSG D (CN = xx)	HSG D (CN = xx)	
0.0	5.78	5.78



APPENDIX E:
OFF-SITE ANALYSIS MAP



- Impaired waters (category 5)
- Waters of concern (category 2)
- Streamkeepers of Clallam County monitoring sites
- City of Port Angeles
- Active UGA
- Proposed UGA
- City of Port Angeles watershed
- Olympic National Park
- Critical nearshore habitat for Puget Sound Chinook ESU
- Streams and rivers
- Roads

Aspect consulting
IN-DEPTH PERSPECTIVE

179 Madrone Lane North
Bainbridge Island, WA 98110
(206) 760-6370

811 First Avenue #430
Seattle, WA 98104
(206) 326-7443

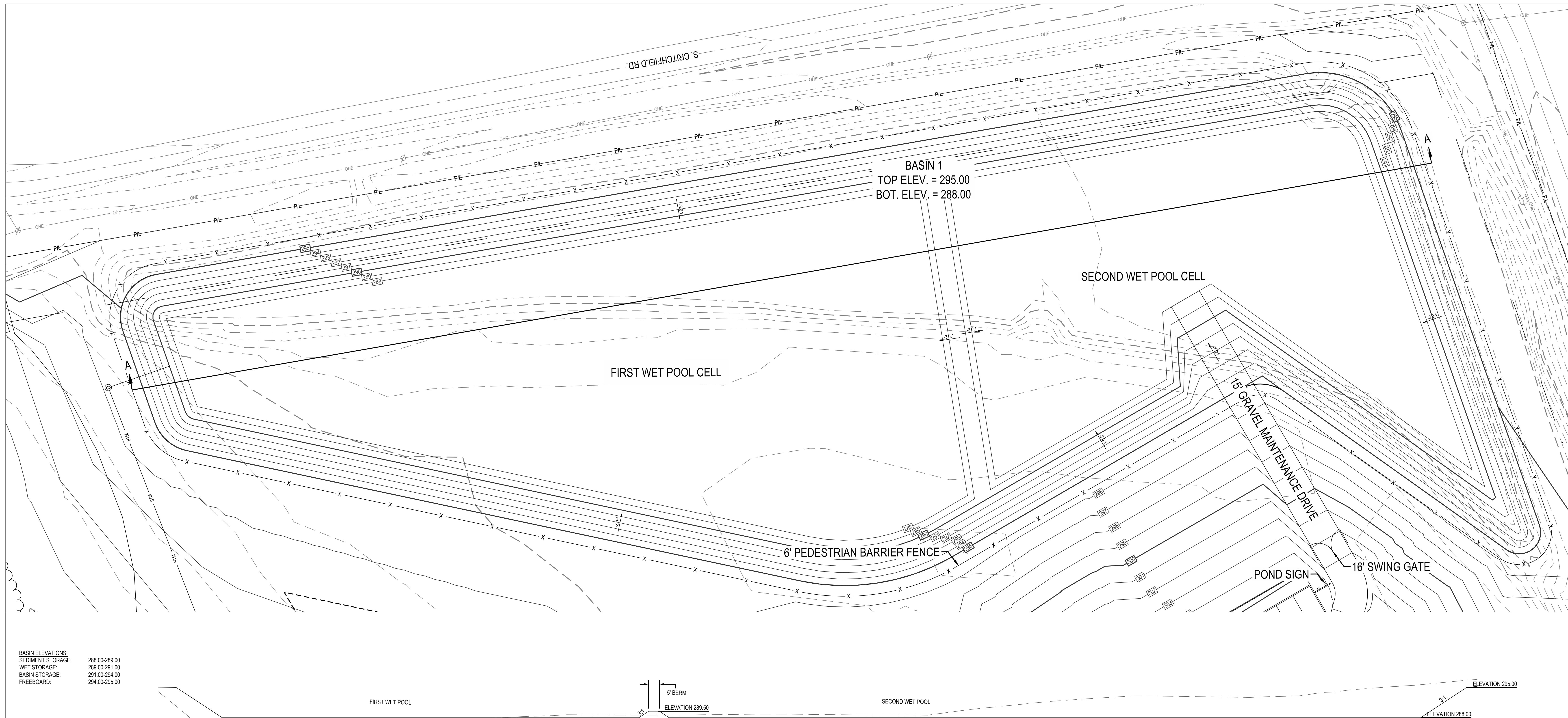
Impaired and Sensitive Waters

Port Angeles, WA and vicinity

DATE	May 2007	PROJECT NO.	070023
DESIGNED BY:	OGR	DRAWN BY:	ACM
REVISED BY:	ACM	FIGURE NO.	3

T:\projects_8\port_angeles\stemap

APPENDIX F:
DETENTION BASIN DETAILS

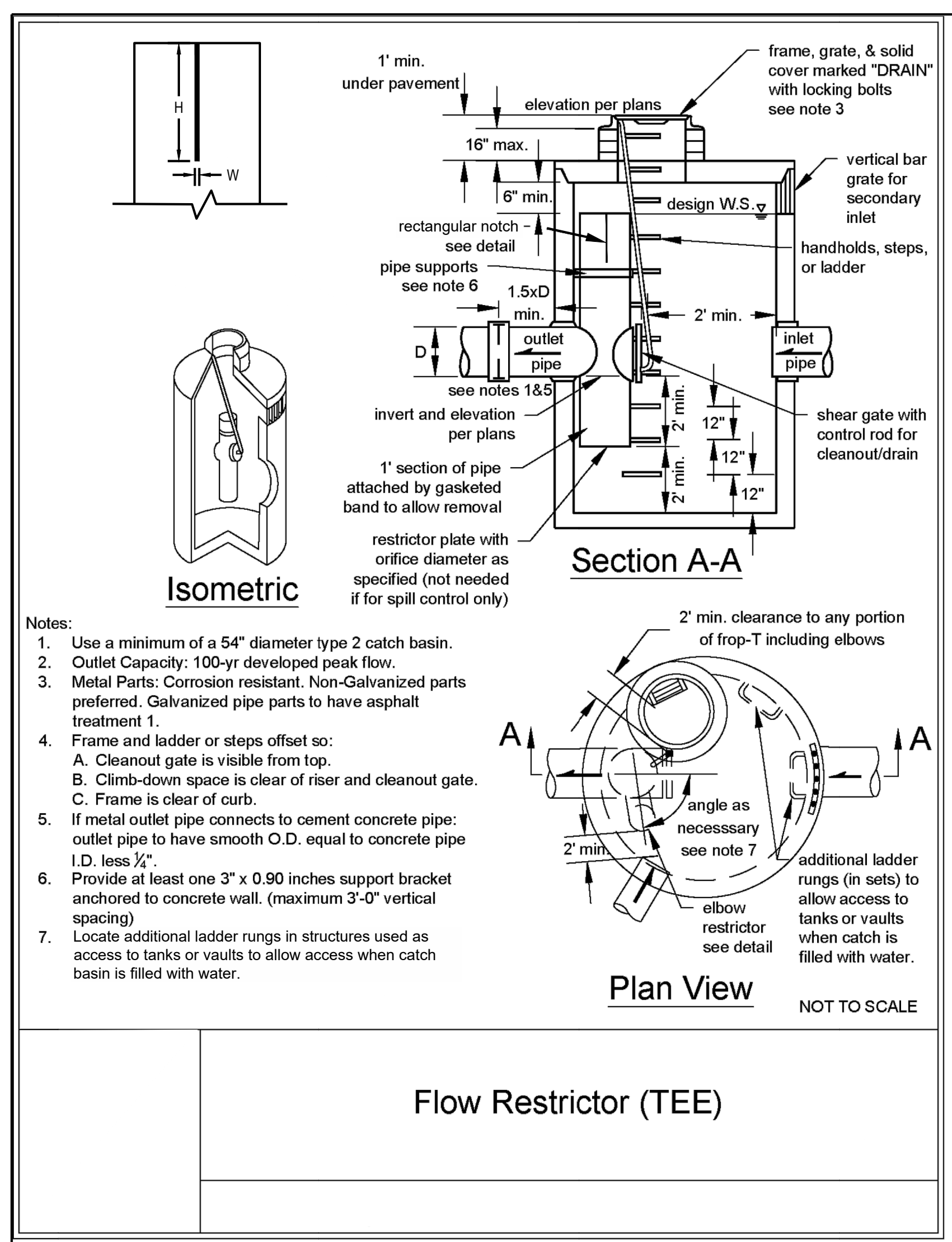


Revisions / Submissions

ID	Description	Date

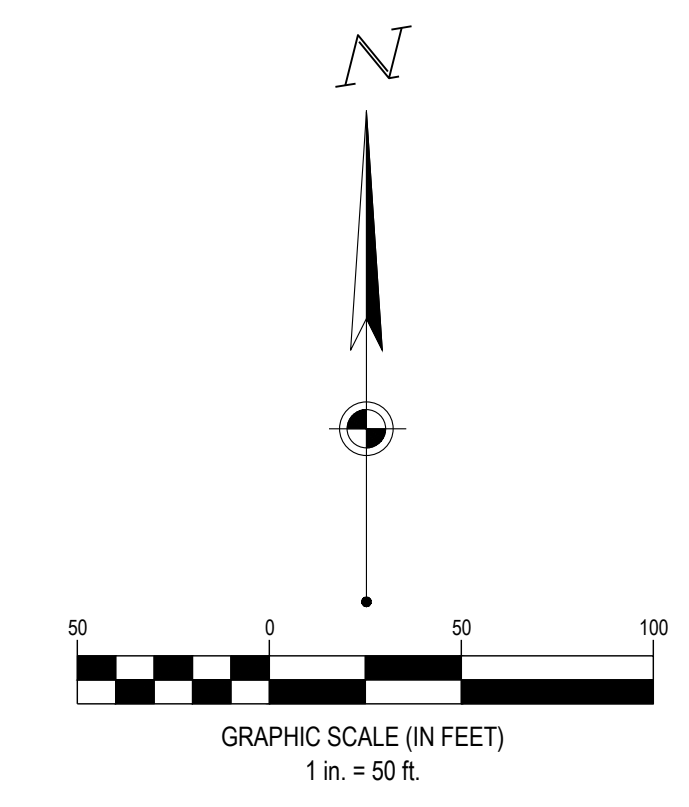
© 2024 CESO, INC.

763838
AS SHOWN
QSS
CG
04/14/2025
NOT FOR CONSTRUCTION



**OUTLET CONTROL
STRUCTURE A2 DATA**

DESIGN WATER SURFACE: 291.00
RISER DIAMETER: 18 IN.
RECTANGULAR NOTCH HEIGHT (H): 1 FT.
RECTANGULAR NOTCH WIDTH (W): 0.25 FT.
INLET PIPE (18") INVERT: 291.00
OUTLET PIPE (18") INVERT: 291.00
RESTRICTOR PLATE ORIFICE DIAMETER: 3.25 IN.



WASHINGTON

FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

APPENDIX G:

POST-CONSTRUCTION STORMWATER MANAGEMENT CALCULATIONS

APPENDIX G1:
RUNOFF TREATMENT CALCULATIONS



Project Olympic Water Quality Calcs				Prepared by: HKS
Page 452 of 2019 Manual				Date: 4/11/2025
Item		Value	Unit	Notes
6 month storm depth (P) =		1.12	inches	taken from Apdx III-C for Port Angeles
Post-Developed Curve # (CN) =		85		WWHM post-dev breakdown below:
				Pervious Total <input type="text" value="9.67"/> Acres
				Impervious Total <input type="text" value="8.53"/> Acres
				Basin Total <input type="text" value="18.2"/> Acres
				CN values taken from Table III-2.5
				Pervious Area:
				Grass, Good Condition, HSG C
				CN = 74, Area = 3.37 AC
				Impervious Area:
				Paved
				CN = 98, Area = 6.41 AC
				Weighted CN = (74*9.67 + 98*8.53) / 18.2
Potential Max Detention (S) =		1.76		S = (1000 / CN) - 10
				S = (1000/85) - 10
Runoff Depth over the Area (Qd) =		0.23	inches	$Q_d = (P - 0.2S)^2 / (P + 0.8S)$, for $P \geq 0.2S$
				$Q_d = ((1.12 - (0.2 * 1.76))^2) / (1.12 + (0.8 * 1.76))$
TOTAL RUNOFF VOLUME (WQv) =		15,195	ft³	Total Runoff Volume (cu. ft.) = 3,630 (cu. ft./ac. in.) x Q _d (in) x A (ac)
				WQv = 3630*0.23*18.2
		0.35	ac-ft	
Volume required in Cell 1	=	3798.795	ft³	25% of Runoff Volume

III-2.3 Single Event Hydrograph Method

Hydrograph analysis utilizes the standard plot of runoff flow versus time for a given design storm, thereby allowing the key characteristics of runoff such as peak, volume, and phasing to be considered in the design of drainage facilities. Because this manual only uses single event methods as an option for determining the Water Quality Design Storm Volume, which is then used to size volume based Runoff Treatment BMPs, only the subjects of design storms, curve numbers and calculating runoff volumes are presented. If single event methods are used to size temporary and permanent conveyances, the reader should reference other texts and software for assistance.

Water Quality Design Storm

As stated in [III-2.6 Sizing Your Runoff Treatment BMPs](#), a single event design storm may be used for determining the Water Quality Design Storm Volume as an alternative to using an approved continuous simulation model. This design storm is the 6-month, 24-hour storm. Unless amended to reflect local precipitation statistics, the 6-month, 24-hour precipitation amount may be assumed to be 72 percent of the 2-year, 24-hour amount. Precipitation estimates of the 6-month and 2-year, 24-hour storms for certain towns and cities are listed in [Appendix III-C: Rainfall Amounts and Statistics](#). For other areas, interpolating between isopluvials for the 2-year, 24-hour precipitation and multiplying by 72% yields the appropriate storm size. Isopluvials for 2-year, 24-hour amounts for Western Washington are reprinted in [Appendix III-B: Isopluvial Maps for Design Storms](#).

Curve Numbers

All single event hydrograph methods require input of parameters that describe the physical drainage basin characteristics. These parameters provide the basis from which the runoff hydrograph is developed. This section describes only the key parameter of curve number that is used to estimate the runoff volume from the water quality design storm.

[Table III-2.5: Post-Development Runoff Curve Numbers for Selected Agricultural, Suburban, and Urban Areas](#) shows the CNs, by land use description, for the four hydrologic soil groups. These numbers are for a 24-hour duration storm and typical antecedent soil moisture condition preceding 24 hour storms.

Calculating the Water Quality Design Storm Volume Using the NRCS Curve Number Equations

The rainfall-runoff equations of the NRCS curve number method relates a land area's runoff depth (precipitation excess) to the precipitation it receives and to its natural storage capacity, as follows:

$$Q_d = (P - 0.2S)^2 / (P + 0.8S), \text{ for } P \geq 0.2S$$

and

$$Q_d = 0, \text{ for } P < 0.2S$$

Where:

$$Q_d = \text{runoff depth in inches over the area,}$$

P = precipitation depth in inches over the area. For calculating the water quality design storm volume, this number is the 6-month 24-hour storm (in inches), as described in [III-2.6 Sizing Your Runoff Treatment BMPs](#), and

S = potential maximum natural detention, in inches over the area, due to infiltration, storage, etc.

The area's potential maximum detention, S, is related to its curve number, CN:

$$S = (1000 / \text{CN}) - 10$$

The combination of the above equations allows for estimation of the total runoff volume by computing total runoff depth, Q_d , given the total precipitation depth, P. For example, if the curve number of the area is 70, then the value of S is 4.29. With a total precipitation for the design event of 2.0 inches, the total runoff depth would be:

$$Q_d = [2.0 - 0.2(4.29)]^2 / [2.0 + 0.8(4.29)] = 0.24 \text{ inches}$$

This computed runoff represents inches over the tributary area.

Therefore, the total volume of runoff is found by multiplying Q_d by the tributary area (with necessary conversions):

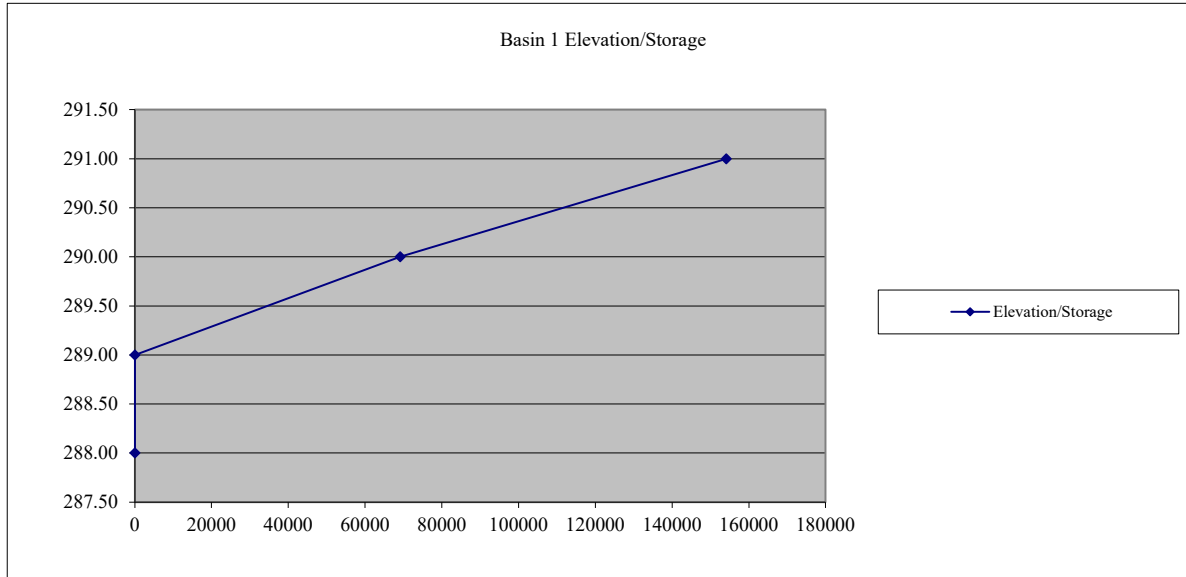
$$\text{Total Runoff Volume (cu. ft.)} = 3,630 \text{ (cu. ft./ac. in.)} \times Q_d \text{ (in)} \times A \text{ (ac)}$$



PROJECT PENINSULA: BASIN 1 - WETPOOL VOLUME (DEAD STORAGE)

Elevation (ft)	Area (sq ft)	Average Area (sq ft)	Incremental Depth (ft)	Incremental Volume (cu ft)	Total Volume (cu ft)	Total Volume (ac ft)
288.00	61,106	0	0.00	0	0	0
289.00	66,288	0	0.00	0	0	0.00
290.00	71,943	69,116	1.00	69,116	69,116	1.59
291.00	76,582	85,033	1.00	85,033	154,149	3.54

1-FT Sediment Storage



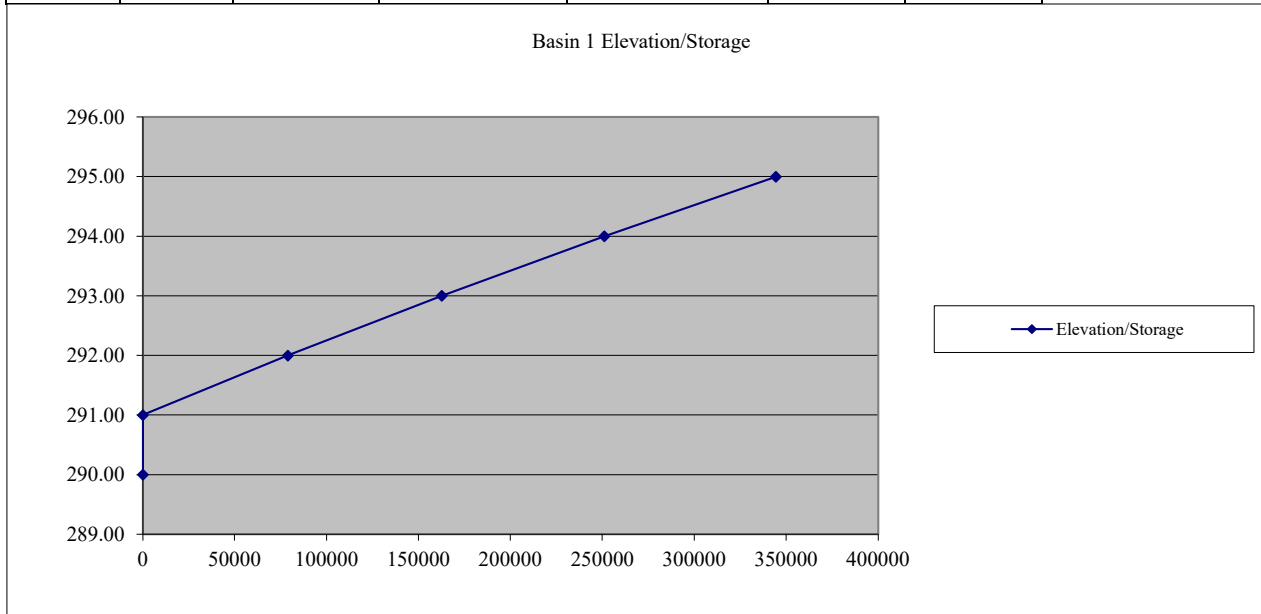
APPENDIX G2:
FLOW CONTROL CALCULATIONS



PROJECT PENINSULA: BASIN 1 - VOLUME (LIVE STORAGE)

Elevation (ft)	Area (sq ft)	Average Area (sq ft)	Incremental Depth (ft)	Incremental Volume (cu ft)	Total Volume (cu ft)	Total Volume (ac ft)
290.00	71,943	0	0.00	0	0	0
291.00	76,582	0	0.00	0	0	0.00
292.00	81,301	78,942	1.00	78,942	78,942	1.81
293.00	86,073	83,687	1.00	83,687	162,629	3.73
294.00	90,892	88,483	1.00	88,483	251,111	5.76
295.00	95,758	93,325	1.00	93,325	344,436	7.91

1-FT Sediment Storage



TOTAL CUMULATIVE VOLUME (BASIN 1+2) = 344,436 CU FT = 7.907 AC FT

REQUIRED VOLUME = 137,475 CU FT = 3.156 AC FT

WWHM2012
PROJECT REPORT

General Model Information

WWHM2012 Project Name: Project Peninsula WWHM

Site Name: Project Peninsula
Site Address: W. Edgewood Dr
City: Port Angeles
Report Date: 4/11/2025
Gage: Port Angelis
Data Start: 1948/10/01
Data End: 2009/09/30
Timestep: Hourly
Precip Scale: 1.143
Version Date: 2024/06/28
Version: 4.3.1

POC Thresholds

Low Flow Threshold for POC1: 50 Percent of the 2 Year
High Flow Threshold for POC1: 50 Year

Landuse Basin Data

Predeveloped Land Use

Predeveloped Basin

Bypass:	No
GroundWater:	No
Pervious Land Use C, Forest, Flat	acre 14.35
Pervious Total	14.35
Impervious Land Use POND	acre 2.15
Impervious Total	2.15
Basin Total	16.5

Element Flow Components:
Surface Interflow Groundwater
Component Flows To:
POC 1 POC 1

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Mitigated Land Use

Basin 1

Bypass: No

GroundWater: No

Pervious Land Use	acre
C, Lawn, Flat	7.82
C, Lawn, Mod	1.42
C, Lawn, Steep	0.43

Pervious Total 9.67

Impervious Land Use	acre
ROOF TOPS FLAT	1.34
SIDEWALKS FLAT	0.29
PARKING FLAT	4.7
POND	2.2

Impervious Total 8.53

Basin Total 18.2

Element Flow Components:

Surface Interflow Groundwater

Component Flows To:

Trapezoidal Pond 1 Trapezoidal Pond 1

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Routing Elements
Predeveloped Routing

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Mitigated Routing

Trapezoidal Pond 1

Bottom Length: 459.00 ft.
 Bottom Width: 168.00 ft.
 Depth: 5 ft.
 Volume at riser head: 7.9080 acre-feet.
 Side slope 1: 3 To 1
 Side slope 2: 3 To 1
 Side slope 3: 3 To 1
 Side slope 4: 3 To 1
 Discharge Structure
 Riser Height: 4 ft.
 Riser Diameter: 18 in.
 Notch Type: Rectangular
 Notch Width: 0.250 ft.
 Notch Height: 1.000 ft.
 Orifice 1 Diameter: 3.250 in. Elevation:0 ft.
 Element Outlets:
 Outlet 1 Outlet 2
 Outlet Flows To:

Pond Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	Infilt(cfs)
290.00	1.770	0.000	0.000	0.000
290.06	1.775	0.098	0.067	0.000
290.11	1.779	0.197	0.095	0.000
290.17	1.784	0.296	0.117	0.000
290.22	1.789	0.395	0.135	0.000
290.28	1.794	0.495	0.151	0.000
290.33	1.799	0.594	0.165	0.000
290.39	1.804	0.695	0.178	0.000
290.44	1.808	0.795	0.191	0.000
290.50	1.813	0.896	0.202	0.000
290.56	1.818	0.996	0.213	0.000
290.61	1.823	1.098	0.224	0.000
290.67	1.828	1.199	0.234	0.000
290.72	1.833	1.301	0.243	0.000
290.78	1.837	1.403	0.252	0.000
290.83	1.842	1.505	0.261	0.000
290.89	1.847	1.607	0.270	0.000
290.94	1.852	1.710	0.278	0.000
291.00	1.857	1.813	0.286	0.000
291.06	1.862	1.917	0.294	0.000
291.11	1.867	2.020	0.302	0.000
291.17	1.872	2.124	0.309	0.000
291.22	1.877	2.228	0.316	0.000
291.28	1.882	2.333	0.324	0.000
291.33	1.886	2.437	0.331	0.000
291.39	1.891	2.542	0.337	0.000
291.44	1.896	2.648	0.344	0.000
291.50	1.901	2.753	0.351	0.000
291.56	1.906	2.859	0.357	0.000
291.61	1.911	2.965	0.363	0.000
291.67	1.916	3.071	0.370	0.000

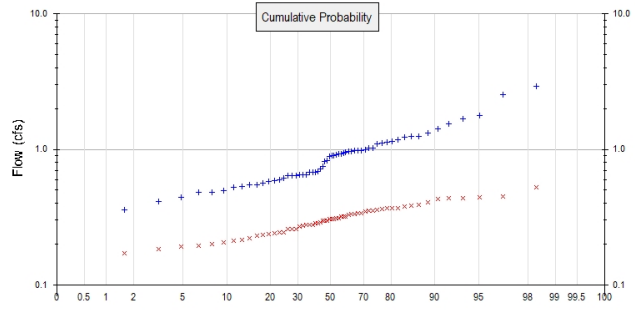
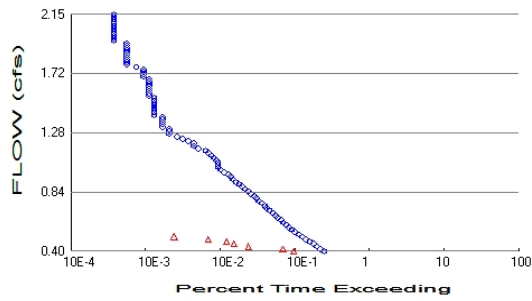
291.72	1.921	3.178	0.376	0.000
291.78	1.926	3.285	0.382	0.000
291.83	1.931	3.392	0.388	0.000
291.89	1.936	3.499	0.393	0.000
291.94	1.941	3.607	0.399	0.000
292.00	1.946	3.715	0.405	0.000
292.06	1.951	3.823	0.411	0.000
292.11	1.956	3.932	0.416	0.000
292.17	1.961	4.041	0.421	0.000
292.22	1.966	4.150	0.427	0.000
292.28	1.971	4.259	0.432	0.000
292.33	1.976	4.369	0.437	0.000
292.39	1.981	4.479	0.443	0.000
292.44	1.986	4.589	0.448	0.000
292.50	1.991	4.699	0.453	0.000
292.56	1.996	4.810	0.458	0.000
292.61	2.001	4.921	0.463	0.000
292.67	2.006	5.033	0.468	0.000
292.72	2.011	5.144	0.472	0.000
292.78	2.016	5.256	0.477	0.000
292.83	2.021	5.368	0.482	0.000
292.89	2.026	5.481	0.487	0.000
292.94	2.031	5.593	0.491	0.000
293.00	2.036	5.706	0.496	0.000
293.06	2.041	5.820	0.511	0.000
293.11	2.046	5.933	0.535	0.000
293.17	2.052	6.047	0.564	0.000
293.22	2.057	6.161	0.597	0.000
293.28	2.062	6.276	0.634	0.000
293.33	2.067	6.390	0.672	0.000
293.39	2.072	6.505	0.713	0.000
293.44	2.077	6.621	0.756	0.000
293.50	2.082	6.736	0.801	0.000
293.56	2.087	6.852	0.846	0.000
293.61	2.092	6.968	0.893	0.000
293.67	2.098	7.085	0.941	0.000
293.72	2.103	7.201	0.990	0.000
293.78	2.108	7.318	1.039	0.000
293.83	2.113	7.436	1.088	0.000
293.89	2.118	7.553	1.138	0.000
293.94	2.123	7.671	1.189	0.000
294.00	2.128	7.789	1.239	0.000
294.06	2.134	7.908	1.451	0.000
294.11	2.139	8.026	1.835	0.000
294.17	2.144	8.145	2.325	0.000
294.22	2.149	8.264	2.891	0.000
294.28	2.154	8.384	3.507	0.000
294.33	2.160	8.504	4.145	0.000
294.39	2.165	8.624	4.776	0.000
294.44	2.170	8.744	5.373	0.000
294.50	2.175	8.865	5.913	0.000
294.56	2.180	8.986	6.375	0.000
294.61	2.186	9.108	6.749	0.000
294.67	2.191	9.229	7.039	0.000
294.72	2.196	9.351	7.263	0.000
294.78	2.201	9.473	7.542	0.000
294.83	2.207	9.596	7.765	0.000
294.89	2.212	9.718	7.981	0.000

294.94	2.217	9.841	8.190	0.000
295.00	2.222	9.965	8.393	0.000
295.06	2.228	10.08	8.591	0.000

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Analysis Results

POC 1



+ Predeveloped x Mitigated

Predeveloped Landuse Totals for POC #1

Total Pervious Area: 14.35
 Total Impervious Area: 2.15

Mitigated Landuse Totals for POC #1

Total Pervious Area: 9.67
 Total Impervious Area: 8.53

Flow Frequency Method: Log Pearson Type III 17B

Flow Frequency Return Periods for Predeveloped. POC #1

Return Period	Flow(cfs)
2 year	0.807527
5 year	1.180003
10 year	1.45692
25 year	1.841922
50 year	2.154736
100 year	2.490307

Flow Frequency Return Periods for Mitigated. POC #1

Return Period	Flow(cfs)
2 year	0.297782
5 year	0.368649
10 year	0.410184
25 year	0.457997
50 year	0.490851
100 year	0.521736

Annual Peaks

Annual Peaks for Predeveloped and Mitigated. POC #1

Year	Predeveloped	Mitigated
1949	0.984	0.364
1950	0.831	0.306
1951	1.239	0.278
1952	0.614	0.154
1953	0.888	0.275
1954	1.410	0.526
1955	1.317	0.348
1956	0.545	0.339
1957	0.813	0.309
1958	0.646	0.244

1959	0.901	0.391
1960	0.962	0.318
1961	1.125	0.370
1962	0.643	0.183
1963	0.679	0.285
1964	0.912	0.270
1965	0.653	0.279
1966	0.545	0.211
1967	1.100	0.369
1968	0.716	0.206
1969	0.598	0.194
1970	0.641	0.230
1971	2.902	0.235
1972	1.777	0.319
1973	0.928	0.331
1974	0.331	0.351
1975	0.748	0.241
1976	0.943	0.333
1977	0.485	0.297
1978	0.577	0.190
1979	0.976	0.305
1980	0.898	0.443
1981	1.111	0.433
1982	1.179	0.278
1983	0.967	0.337
1984	0.639	0.245
1985	1.680	0.357
1986	1.548	0.435
1987	1.149	0.307
1988	0.648	0.379
1989	0.676	0.238
1990	0.564	0.286
1991	1.245	0.385
1992	0.988	0.355
1993	0.532	0.220
1994	0.413	0.200
1995	0.355	0.258
1996	0.589	0.259
1997	1.019	0.406
1998	0.522	0.171
1999	1.228	0.435
2000	0.932	0.259
2001	0.445	0.216
2002	0.953	0.334
2003	0.674	0.318
2004	0.974	0.446
2005	0.686	0.296
2006	1.022	0.296
2007	2.540	0.310
2008	0.483	0.366
2009	0.494	0.288

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Ranked Annual Peaks

Ranked Annual Peaks for Predeveloped and Mitigated. POC #1

Rank	Predeveloped	Mitigated
1	2.9024	0.5256
2	2.5403	0.4457
3	1.7767	0.4430

4	1.6802	0.4355
5	1.5484	0.4346
6	1.4098	0.4330
7	1.3172	0.4058
8	1.2450	0.3905
9	1.2392	0.3850
10	1.2279	0.3795
11	1.1789	0.3699
12	1.1494	0.3695
13	1.1252	0.3662
14	1.1106	0.3643
15	1.1004	0.3567
16	1.0218	0.3547
17	1.0186	0.3509
18	0.9881	0.3479
19	0.9843	0.3392
20	0.9761	0.3369
21	0.9738	0.3345
22	0.9668	0.3328
23	0.9619	0.3308
24	0.9531	0.3195
25	0.9428	0.3183
26	0.9316	0.3180
27	0.9284	0.3098
28	0.9124	0.3090
29	0.9006	0.3075
30	0.8984	0.3057
31	0.8881	0.3054
32	0.8314	0.2965
33	0.8130	0.2958
34	0.7484	0.2956
35	0.7161	0.2876
36	0.6859	0.2859
37	0.6793	0.2850
38	0.6762	0.2788
39	0.6738	0.2783
40	0.6530	0.2779
41	0.6481	0.2751
42	0.6462	0.2697
43	0.6427	0.2591
44	0.6410	0.2589
45	0.6387	0.2584
46	0.6136	0.2450
47	0.5981	0.2443
48	0.5893	0.2407
49	0.5767	0.2378
50	0.5641	0.2353
51	0.5448	0.2301
52	0.5446	0.2204
53	0.5319	0.2157
54	0.5216	0.2109
55	0.4938	0.2062
56	0.4848	0.2000
57	0.4831	0.1938
58	0.4447	0.1904
59	0.4131	0.1832
60	0.3554	0.1708
61	0.3306	0.1540

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Duration Flows

The Facility PASSED

Flow(cfs)	Predev	Mit	Percentage	Pass/Fail
0.4038	1335	514	38	Pass
0.4215	1177	371	31	Pass
0.4391	1063	129	12	Pass
0.4568	958	82	8	Pass
0.4745	844	65	7	Pass
0.4922	755	37	4	Pass
0.5099	673	13	1	Pass
0.5276	609	0	0	Pass
0.5453	533	0	0	Pass
0.5629	490	0	0	Pass
0.5806	447	0	0	Pass
0.5983	411	0	0	Pass
0.6160	373	0	0	Pass
0.6337	350	0	0	Pass
0.6514	320	0	0	Pass
0.6691	297	0	0	Pass
0.6867	272	0	0	Pass
0.7044	244	0	0	Pass
0.7221	223	0	0	Pass
0.7398	212	0	0	Pass
0.7575	195	0	0	Pass
0.7752	177	0	0	Pass
0.7929	164	0	0	Pass
0.8106	152	0	0	Pass
0.8282	137	0	0	Pass
0.8459	127	0	0	Pass
0.8636	117	0	0	Pass
0.8813	105	0	0	Pass
0.8990	96	0	0	Pass
0.9167	87	0	0	Pass
0.9344	80	0	0	Pass
0.9520	74	0	0	Pass
0.9697	69	0	0	Pass
0.9874	60	0	0	Pass
1.0051	55	0	0	Pass
1.0228	51	0	0	Pass
1.0405	50	0	0	Pass
1.0582	50	0	0	Pass
1.0759	47	0	0	Pass
1.0935	44	0	0	Pass
1.1112	41	0	0	Pass
1.1289	37	0	0	Pass
1.1466	34	0	0	Pass
1.1643	27	0	0	Pass
1.1820	24	0	0	Pass
1.1997	24	0	0	Pass
1.2173	20	0	0	Pass
1.2350	17	0	0	Pass
1.2527	14	0	0	Pass
1.2704	11	0	0	Pass
1.2881	11	0	0	Pass
1.3058	11	0	0	Pass
1.3235	9	0	0	Pass

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1.3412	9	0	0	Pass
1.3588	9	0	0	Pass
1.3765	9	0	0	Pass
1.3942	9	0	0	Pass
1.4119	7	0	0	Pass
1.4296	7	0	0	Pass
1.4473	7	0	0	Pass
1.4650	7	0	0	Pass
1.4826	7	0	0	Pass
1.5003	7	0	0	Pass
1.5180	7	0	0	Pass
1.5357	7	0	0	Pass
1.5534	6	0	0	Pass
1.5711	6	0	0	Pass
1.5888	6	0	0	Pass
1.6065	6	0	0	Pass
1.6241	6	0	0	Pass
1.6418	6	0	0	Pass
1.6595	6	0	0	Pass
1.6772	6	0	0	Pass
1.6949	5	0	0	Pass
1.7126	5	0	0	Pass
1.7303	5	0	0	Pass
1.7479	5	0	0	Pass
1.7656	4	0	0	Pass
1.7833	3	0	0	Pass
1.8010	3	0	0	Pass
1.8187	3	0	0	Pass
1.8364	3	0	0	Pass
1.8541	3	0	0	Pass
1.8718	3	0	0	Pass
1.8894	3	0	0	Pass
1.9071	3	0	0	Pass
1.9248	3	0	0	Pass
1.9425	3	0	0	Pass
1.9602	2	0	0	Pass
1.9779	2	0	0	Pass
1.9956	2	0	0	Pass
2.0132	2	0	0	Pass
2.0309	2	0	0	Pass
2.0486	2	0	0	Pass
2.0663	2	0	0	Pass
2.0840	2	0	0	Pass
2.1017	2	0	0	Pass
2.1194	2	0	0	Pass
2.1370	2	0	0	Pass
2.1547	2	0	0	Pass

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Water Quality

Water Quality BMP Flow and Volume for POC #1

On-line facility volume: 0 acre-feet

On-line facility target flow: 0 cfs.

Adjusted for 15 min: 0 cfs.

Off-line facility target flow: 0 cfs.

Adjusted for 15 min: 0 cfs.

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Model Default Modifications

Total of 0 changes have been made.

PERLND Changes

No PERLND changes have been made.

IMPLND Changes

No IMPLND changes have been made.

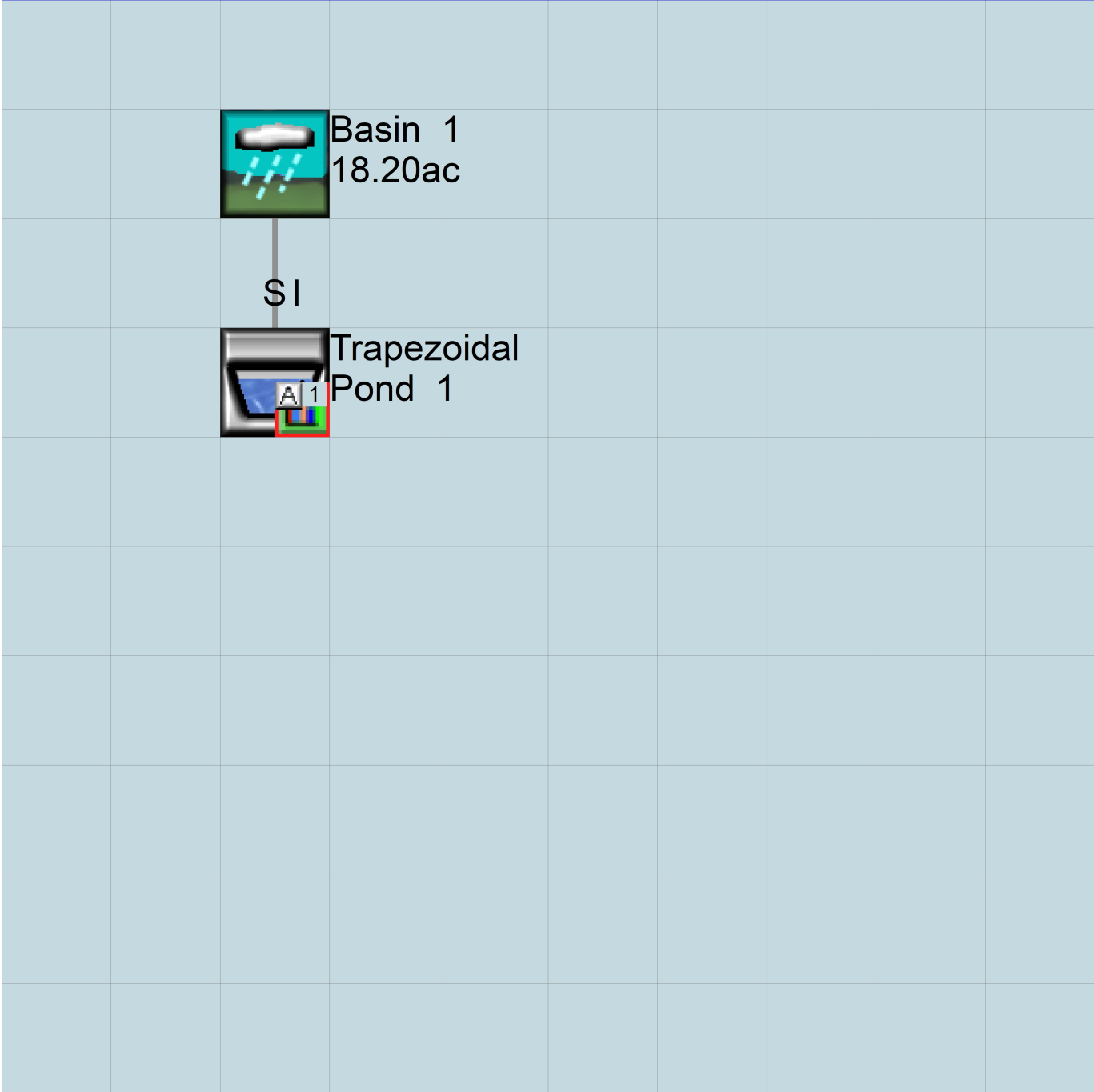
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Appendix
Predeveloped Schematic



Predeveloped
Basin
16.50ac

Mitigated Schematic



Predeveloped UCI File

RUN

```
GLOBAL
  WWHM4 model simulation
  START      1948 10 01      END      2009 09 30
  RUN INTERP OUTPUT LEVEL    3      0
  RESUME     0 RUN          1
  UNIT SYSTEM 1
```

```
FILES
<File> <Un#> <-----File Name----->***
<-ID->                                     ***
WDM      26    Project Peninsula WWHM.wdm
MESSU    25    PreProject Peninsula WWHM.MES
          27    PreProject Peninsula WWHM.L61
          28    PreProject Peninsula WWHM.L62
          30    POCProject Peninsula WWHM1.dat

END FILES
```

```
OPN SEQUENCE
  INGRP          INDELT 00:60
  PERLND         10
  IMPLND         14
  COPY           501
  DISPLY         1
  END INGRP
END OPN SEQUENCE
```

```
DISPLY
  DISPLY-INFO1
  # - #<-----Title----->***TRAN PIVL DIG1 FIL1  PYR DIG2 FIL2 YRND
  1   Predeveloped Basin      MAX          1   2   30   9
  END DISPLY-INFO1
END DISPLY
```

```
COPY
  TIMESERIES
  # - # NPT NMN ***
  1   1   1
  501 1   1
  END TIMESERIES
```

```
END COPY
GENER
  OPCODE
  #   # OPCD ***
  END OPCODE
  PARM
  #   #           K ***
  END PARM
```

```
END GENER
PERLND
  GEN-INFO
  <PLS ><-----Name----->NBLKS  Unit-systems  Printer ***
  # - #                               User  t-series  Engl Metr ***
                                   in  out      ***
  10   C, Forest, Flat              1   1   1   1   27   0
  END GEN-INFO
  *** Section PWATER***
```

```
ACTIVITY
  <PLS > ***** Active Sections *****
  # - # ATMP SNOW PWAT  SED  PST  PWG  PQAL MSTL PEST NITR PHOS TRAC ***
  10   0   0   1   0   0   0   0   0   0   0   0   0
  END ACTIVITY
```

```
PRINT-INFO
  <PLS > ***** Print-flags ***** PIVL  PYR
  # - # ATMP SNOW PWAT  SED  PST  PWG  PQAL MSTL PEST NITR PHOS TRAC *****
  10   0   0   4   0   0   0   0   0   0   0   0   0   1   9
  END PRINT-INFO
```

```

PWAT-PARM1
  <PLS > PWATER variable monthly parameter value flags ***
  # - # CSNO RTOP UZFG VCS VUZ VNN VIFW VIRC VLE INFC HWT ***
  10 0 0 0 0 0 0 0 0 0 0 0
END PWAT-PARM1

PWAT-PARM2
  <PLS > PWATER input info: Part 2 ***
  # - # ***FOREST LZSN INFILT LSUR SLSUR KVARY AGWRC
  10 0 4.5 0.08 400 0.05 0.5 0.996
END PWAT-PARM2

PWAT-PARM3
  <PLS > PWATER input info: Part 3 ***
  # - # ***PETMAX PETMIN INFEXP INFILD DEEPFR BASETP AGWETP
  10 0 0 2 2 0 0 0
END PWAT-PARM3

PWAT-PARM4
  <PLS > PWATER input info: Part 4 ***
  # - # CEPSC UZSN NSUR INTFW IRC LZETP ***
  10 0.2 0.5 0.35 6 0.5 0.7
END PWAT-PARM4

PWAT-STATE1
  <PLS > *** Initial conditions at start of simulation
  ran from 1990 to end of 1992 (pat 1-11-95) RUN 21 ***
  # - # *** CEPS SURS UZS IFWS LZS AGWS GWVS
  10 0 0 0 0 2.5 1 0
END PWAT-STATE1

END PERLND

IMPLND
GEN-INFO
  <PLS ><-----Name-----> Unit-systems Printer ***
  # - # User t-series Engl Metr ***
  in out ***
  14 POND 1 1 1 27 0
END GEN-INFO
*** Section IWATER***

ACTIVITY
  <PLS > ***** Active Sections *****
  # - # ATMP SNOW IWAT SLD IWG IQAL ***
  14 0 0 1 0 0 0
END ACTIVITY

PRINT-INFO
  <ILS > ***** Print-flags ***** PIVL PYR
  # - # ATMP SNOW IWAT SLD IWG IQAL *****
  14 0 0 4 0 0 0 1 9
END PRINT-INFO

IWAT-PARM1
  <PLS > IWATER variable monthly parameter value flags ***
  # - # CSNO RTOP VRS VNN RTLI ***
  14 0 0 0 0 0
END IWAT-PARM1

IWAT-PARM2
  <PLS > IWATER input info: Part 2 ***
  # - # *** LSUR SLSUR NSUR RETSC
  14 400 0.01 0.1 0.1
END IWAT-PARM2

IWAT-PARM3
  <PLS > IWATER input info: Part 3 ***
  # - # ***PETMAX PETMIN
  14 0 0

```


END SPEC-ACTIONS
FTABLES
END FTABLES

EXT SOURCES

```
<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***  
<Name> # <Name> # tem strg<-factor->strg <Name> # # <Name> # # ***  
WDM 2 PREC ENGL 1.143 SUM PERLND 1 999 EXTNL PREC  
WDM 2 PREC ENGL 1.143 SUM IMPLND 1 999 EXTNL PREC  
WDM 1 EVAP ENGL 0.76 PERLND 1 999 EXTNL PETINP  
WDM 1 EVAP ENGL 0.76 IMPLND 1 999 EXTNL PETINP
```

END EXT SOURCES

EXT TARGETS

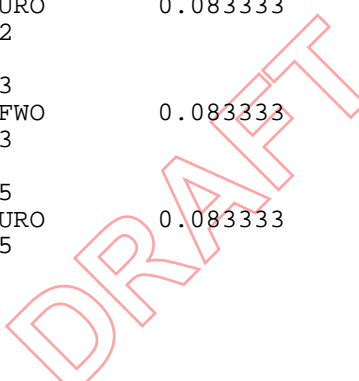
```
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Volume-> <Member> Tsys Tgap Amd ***  
<Name> # <Name> # #<-factor->strg <Name> # <Name> tem strg strg***  
COPY 501 OUTPUT MEAN 1 1 12.1 WDM 501 FLOW ENGL REPL  
END EXT TARGETS
```

MASS-LINK

```
<Volume> <-Grp> <-Member-><--Mult--> <Target> <-Grp> <-Member->***  
<Name> <Name> # #<-factor-> <Name> <Name> # #***  
MASS-LINK 12  
PERLND PWATER SURO 0.083333 COPY INPUT MEAN  
END MASS-LINK 12  
  
MASS-LINK 13  
PERLND PWATER IFWO 0.083333 COPY INPUT MEAN  
END MASS-LINK 13  
  
MASS-LINK 15  
IMPLND IWATER SURO 0.083333 COPY INPUT MEAN  
END MASS-LINK 15
```

END MASS-LINK

END RUN



Mitigated UCI File

RUN

GLOBAL

WVHM4 model simulation
START 1948 10 01 END 2009 09 30
RUN INTERP OUTPUT LEVEL 3 0
RESUME 0 RUN 1 UNIT SYSTEM 1
END GLOBAL

FILES

<File> <Un#> <-----File Name----->***
<-ID-> ***
WDM 26 Project Peninsula WVHM.wdm
MESSU 25 MitProject Peninsula WVHM.MES
27 MitProject Peninsula WVHM.L61
28 MitProject Peninsula WVHM.L62
30 POCProject Peninsula WVHM1.dat
END FILES

OPN SEQUENCE

INGRP INDELT 00:60

PERLND 16
PERLND 17
PERLND 18
IMPLND 4
IMPLND 8
IMPLND 11
IMPLND 14
RCHRES 1
COPY 1
COPY 501
DISPLY 1

END INGRP

END OPN SEQUENCE

DISPLY

DISPLY-INFO1

- #<-----Title----->***TRAN PIVL DIG1 FIL1 PYR DIG2 FIL2 YRND
1 Trapezoidal Pond 1 MAX 1 2 30 9

END DISPLY-INFO1

END DISPLY

COPY

TIMESERIES

- # NPT NMN ***
1 1 1
501 1 1

END TIMESERIES

END COPY

GENER

OPCODE

OPCD ***

END OPCODE

PARM

K ***

END PARM

END GENER

PERLND

GEN-INFO

<PLS ><-----Name----->NBLKS Unit-systems Printer ***
- # User t-series Engl Metr ***
in out ***
16 C, Lawn, Flat 1 1 1 1 27 0
17 C, Lawn, Mod 1 1 1 1 27 0
18 C, Lawn, Steep 1 1 1 1 27 0

END GEN-INFO

*** Section PWATER***

ACTIVITY

<PLS > ***** Active Sections *****

```

# - # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC ***
16      0      0      1      0      0      0      0      0      0      0      0      0
17      0      0      1      0      0      0      0      0      0      0      0      0
18      0      0      1      0      0      0      0      0      0      0      0      0
END ACTIVITY

```

```

PRINT-INFO
<PLS > ***** Print-flags ***** PIVL  PYR
# - # ATMP SNOW PWAT SED PST PWG PQAL MSTL PEST NITR PHOS TRAC *****
16      0      0      4      0      0      0      0      0      0      0      0      0      1      9
17      0      0      4      0      0      0      0      0      0      0      0      0      1      9
18      0      0      4      0      0      0      0      0      0      0      0      0      1      9
END PRINT-INFO

```

```

PWAT-PARM1
<PLS > PWATER variable monthly parameter value flags ***
# - # CSNO RTOP UZFG VCS VUZ VNN VIFW VIRC VLE INFC HWT ***
16      0      0      0      0      0      0      0      0      0      0      0
17      0      0      0      0      0      0      0      0      0      0      0
18      0      0      0      0      0      0      0      0      0      0      0
END PWAT-PARM1

```

```

PWAT-PARM2
<PLS > PWATER input info: Part 2 ***
# - # ***FOREST LZSN INFILT LRSUR SLSUR KVARY AGWRC
16      0      4.5      0.03      400      0.05      0.5      0.996
17      0      4.5      0.03      400      0.1      0.5      0.996
18      0      4.5      0.03      400      0.15      0.5      0.996
END PWAT-PARM2

```

```

PWAT-PARM3
<PLS > PWATER input info: Part 3 ***
# - # ***PETMAX PETMIN INFEXP INFILD DEEPFR BASETP AGWETP
16      0      0      2      2      0      0      0
17      0      0      2      2      0      0      0
18      0      0      2      2      0      0      0
END PWAT-PARM3

```

```

PWAT-PARM4
<PLS > PWATER input info: Part 4 ***
# - # CEPSC UZSN NSUR INTFW IRC LZETP ***
16      0.1      0.25      0.25      6      0.5      0.25
17      0.1      0.25      0.25      6      0.5      0.25
18      0.1      0.15      0.25      6      0.3      0.25
END PWAT-PARM4

```

```

PWAT-STATE1
<PLS > *** Initial conditions at start of simulation
ran from 1990 to end of 1992 (pat 1-11-95) RUN 21 ***
# - # *** CEPS SURS UZS IFWS LZS AGWS GWVS
16      0      0      0      0      2.5      1      0
17      0      0      0      0      2.5      1      0
18      0      0      0      0      2.5      1      0
END PWAT-STATE1

```

END PERLND

IMPLND

```

GEN-INFO
<PLS ><-----Name-----> Unit-systems Printer ***
# - # User t-series Engl Metr ***
in out ***
4      ROOF TOPS/FLAT      1      1      1      27      0
8      SIDEWALKS/FLAT      1      1      1      27      0
11     PARKING/FLAT      1      1      1      27      0
14     POND      1      1      1      27      0
END GEN-INFO
*** Section IWATER***

```

```

ACTIVITY
<PLS > ***** Active Sections *****

```

```

# - # ATMP SNOW IWAT SLD IWG IQAL ***
4      0      0      1      0      0      0
8      0      0      1      0      0      0
11     0      0      1      0      0      0
14     0      0      1      0      0      0

```

END ACTIVITY

PRINT-INFO

```

<ILS > ***** Print-flags ***** PIVL  PYR
# - # ATMP SNOW IWAT SLD IWG IQAL *****
4      0      0      4      0      0      4      1      9
8      0      0      4      0      0      0      1      9
11     0      0      4      0      0      0      1      9
14     0      0      4      0      0      0      1      9

```

END PRINT-INFO

IWAT-PARM1

```

<PLS > IWATER variable monthly parameter value flags ***
# - # CSNO RTOP VRS VNN RTLI ***
4      0      0      0      0      0
8      0      0      0      0      0
11     0      0      0      0      0
14     0      0      0      0      0

```

END IWAT-PARM1

IWAT-PARM2

```

<PLS > IWATER input info: Part 2 ***
# - # *** LSUR SLSUR NSUR RETSC
4      400      0.01      0.1      0.1
8      400      0.01      0.1      0.1
11     400      0.01      0.1      0.1
14     400      0.01      0.1      0.1

```

END IWAT-PARM2

IWAT-PARM3

```

<PLS > IWATER input info: Part 3 ***
# - # ***PETMAX PETMIN
4      0      0
8      0      0
11     0      0
14     0      0

```

END IWAT-PARM3

IWAT-STATE1

```

<PLS > *** Initial conditions at start of simulation
# - # *** RETS SURS
4      0      0
8      0      0
11     0      0
14     0      0

```

END IWAT-STATE1

END IMPLND

SCHEMATIC

<-Source->	<--Area-->	<-Target->	MBLK	***
<Name> #	<-factor-->	<Name> #	Tbl#	***
Basin 1***				
PERLND 16	7.82	RCHRES 1	2	
PERLND 16	7.82	RCHRES 1	3	
PERLND 17	1.42	RCHRES 1	2	
PERLND 17	1.42	RCHRES 1	3	
PERLND 18	0.43	RCHRES 1	2	
PERLND 18	0.43	RCHRES 1	3	
IMPLND 4	1.34	RCHRES 1	5	
IMPLND 8	0.29	RCHRES 1	5	
IMPLND 11	4.7	RCHRES 1	5	
IMPLND 14	2.2	RCHRES 1	5	

*****Routing*****

```

PERLND 16          7.82      COPY      1      12
PERLND 17          1.42      COPY      1      12
PERLND 18          0.43      COPY      1      12
IMPLND  4          1.34      COPY      1      15
IMPLND  8          0.29      COPY      1      15
IMPLND 11          4.7       COPY      1      15
IMPLND 14          2.2       COPY      1      15
PERLND 16          7.82      COPY      1      13
PERLND 17          1.42      COPY      1      13
PERLND 18          0.43      COPY      1      13
RCHRES  1          1         COPY     501     16
END SCHEMATIC

```

```

NETWORK
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> # <Name> # #<-factor->strg <Name> # # <Name> # # ***
COPY 501 OUTPUT MEAN 1 1 12.1 DISPLY 1 INPUT TIMSER 1

```

```

<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> # <Name> # #<-factor->strg <Name> # # <Name> # # ***
END NETWORK

```

```

RCHRES
GEN-INFO
RCHRES      Name      Nexits  Unit Systems  Printer      ***
# - #<-----><----> User T-series  Engr Metr LKFG      ***
              in out
1 Trapezoidal Pond-011 1 1 1 1 28 0 1
END GEN-INFO
*** Section RCHRES***

```

```

ACTIVITY
<PLS > ***** Active Sections *****
# - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFQ PKFG PHFG ***
1 1 0 0 0 0 0 0 0 0 0 0
END ACTIVITY

```

```

PRINT-INFO
<PLS > ***** Print-flags ***** PIVL PYR *****
# - # HYDR ADCA CONS HEAT SED GQL OXRX NUTR PLNK PHCB PIVL PYR *****
1 1 4 0 0 0 0 0 0 0 0 0 0 1 9
END PRINT-INFO

```

```

HYDR-PARM1
RCHRES      Flags for each HYDR Section      ***
# - # VC A1 A2 A3 ODFVFG for each *** ODGTFG for each FUNCT for each
      FG FG FG FG possible exit *** possible exit possible exit
      * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
1 0 1 0 0 4 0 0 0 0 0 0 0 0 0 0 2 2 2 2 2
END HYDR-PARM1

```

```

HYDR-PARM2
# - # FTABNO      LEN      DELTH      STCOR      KS      DB50      ***
<-----><-----><-----><-----><-----><----->
1 1 0.09 0.0 290.0 0.5 0.0
END HYDR-PARM2

```

```

HYDR-INIT
RCHRES      Initial conditions for each HYDR section      ***
# - # *** VOL      Initial value of COLIND      Initial value of OUTDGT
      *** ac-ft      for each possible exit      for each possible exit
<-----><-----> <---><---><---><---><---> *** <---><---><---><---><--->
1 0 4.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
END HYDR-INIT

```

```

END RCHRES
SPEC-ACTIONS
END SPEC-ACTIONS
FTABLES

```

FTABLE 1
91 4

Depth (ft)	Area (acres)	Volume (acre-ft)	Outflow (cfs)	Velocity (ft/sec)	Travel Time*** (Minutes)***
0.000000	1.770248	0.000000	0.000000		
0.055556	1.775048	0.098480	0.067560		
0.111111	1.779854	0.197228	0.095544		
0.166667	1.784665	0.296242	0.117017		
0.222222	1.789481	0.395524	0.135120		
0.277778	1.794302	0.495073	0.151069		
0.333333	1.799128	0.594891	0.165487		
0.388889	1.803959	0.694977	0.178747		
0.444444	1.808795	0.795331	0.191088		
0.500000	1.813636	0.895954	0.202680		
0.555556	1.818483	0.996846	0.213643		
0.611111	1.823334	1.098008	0.224071		
0.666667	1.828191	1.199439	0.234034		
0.722222	1.833053	1.301140	0.243591		
0.777778	1.837920	1.403112	0.252786		
0.833333	1.842792	1.505354	0.261658		
0.888889	1.847669	1.607867	0.270240		
0.944444	1.852551	1.710650	0.278557		
1.000000	1.857438	1.813706	0.286633		
1.055556	1.862330	1.917033	0.294487		
1.111111	1.867228	2.020631	0.302137		
1.166667	1.872130	2.124502	0.309598		
1.222222	1.877038	2.228646	0.316884		
1.277778	1.881951	2.333062	0.324006		
1.333333	1.886869	2.437752	0.330975		
1.388889	1.891792	2.542715	0.337800		
1.444444	1.896720	2.647951	0.344489		
1.500000	1.901653	2.753461	0.351052		
1.555556	1.906591	2.859246	0.357494		
1.611111	1.911535	2.965305	0.363821		
1.666667	1.916483	3.071639	0.370041		
1.722222	1.921437	3.178248	0.376158		
1.777778	1.926395	3.285132	0.382177		
1.833333	1.931359	3.392292	0.388102		
1.888889	1.936328	3.499727	0.393939		
1.944444	1.941302	3.607439	0.399690		
2.000000	1.946281	3.715428	0.405360		
2.055556	1.951265	3.823693	0.410951		
2.111111	1.956254	3.932235	0.416467		
2.166667	1.961249	4.041055	0.421912		
2.222222	1.966248	4.150152	0.427287		
2.277778	1.971253	4.259527	0.432595		
2.333333	1.976263	4.369180	0.437838		
2.388889	1.981277	4.479112	0.443020		
2.444444	1.986297	4.589322	0.448142		
2.500000	1.991322	4.699812	0.453206		
2.555556	1.996352	4.810580	0.458214		
2.611111	2.001388	4.921629	0.463168		
2.666667	2.006428	5.032957	0.468069		
2.722222	2.011473	5.144565	0.472920		
2.777778	2.016524	5.256454	0.477721		
2.833333	2.021579	5.368624	0.482474		
2.888889	2.026640	5.481074	0.487182		
2.944444	2.031706	5.593806	0.491844		
3.000000	2.036777	5.706819	0.496462		
3.055556	2.041853	5.820115	0.511818		
3.111111	2.046934	5.933692	0.535720		
3.166667	2.052020	6.047552	0.564823		
3.222222	2.057112	6.161695	0.597855		
3.277778	2.062208	6.276120	0.634046		
3.333333	2.067309	6.390829	0.672851		
3.388889	2.072416	6.505821	0.713851		
3.444444	2.077528	6.621097	0.756708		
3.500000	2.082645	6.736658	0.801140		
3.555556	2.087767	6.852503	0.846904		
3.611111	2.092894	6.968632	0.893785		

```

3.666667 2.098026 7.085046 0.941594
3.722222 2.103163 7.201746 0.990160
3.777778 2.108305 7.318731 1.039326
3.833333 2.113453 7.436002 1.088948
3.888889 2.118605 7.553560 1.138894
3.944444 2.123763 7.671403 1.189038
4.000000 2.128926 7.789533 1.239265
4.055556 2.134093 7.907951 1.451504
4.111111 2.139266 8.026655 1.834978
4.166667 2.144444 8.145647 2.325356
4.222222 2.149628 8.264927 2.891919
4.277778 2.154816 8.384495 3.507673
4.333333 2.160009 8.504351 4.145192
4.388889 2.165208 8.624496 4.776406
4.444444 2.170411 8.744930 5.373907
4.500000 2.175620 8.865653 5.913131
4.555556 2.180834 8.986665 6.375135
4.611111 2.186052 9.107968 6.749842
4.666667 2.191276 9.229560 7.039691
4.722222 2.196505 9.351443 7.263632
4.777778 2.201740 9.473616 7.542378
4.833333 2.206979 9.596081 7.765370
4.888889 2.212223 9.718837 7.981143
4.944444 2.217473 9.841884 8.190362
5.000000 2.222727 9.965223 8.393597

```

END FTABLE 1

END FTABLES

EXT SOURCES

```

<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> # <Name> # tem strg<-factor->strg <Name> # # <Name> # # ***
WDM 2 PREC ENGL 1.143 SUM PERLND 1 999 EXTNL PREC
WDM 2 PREC ENGL 1.143 SUM IMPLND 1 999 EXTNL PREC
WDM 1 EVAP ENGL 0.76 PERLND 1 999 EXTNL PETINP
WDM 1 EVAP ENGL 0.76 IMPLND 1 999 EXTNL PETINP

```

END EXT SOURCES

EXT TARGETS

```

<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Volume-> <Member> Tsys Tgap Amd ***
<Name> # <Name> # #<-factor->strg <Name> # <Name> tem strg strg***
RCHRES 1 HYDR RO 1 1 1 WDM 1000 FLOW ENGL REPL
RCHRES 1 HYDR STAGE 1 1 1 WDM 1001 STAG ENGL REPL
COPY 1 OUTPUT MEAN 1 1 12.1 WDM 701 FLOW ENGL REPL
COPY 501 OUTPUT MEAN 1 1 12.1 WDM 801 FLOW ENGL REPL

```

END EXT TARGETS

MASS-LINK

```

<Volume> <-Grp> <-Member-><--Mult--> <Target> <-Grp> <-Member->***
<Name> <Name> # #<-factor-> <Name> <Name> # #***
MASS-LINK 2
PERLND PWATER SURO 0.083333 RCHRES INFLOW IVOL
END MASS-LINK 2

MASS-LINK 3
PERLND PWATER IFWO 0.083333 RCHRES INFLOW IVOL
END MASS-LINK 3

MASS-LINK 5
IMPLND IWATER SURO 0.083333 RCHRES INFLOW IVOL
END MASS-LINK 5

MASS-LINK 12
PERLND PWATER SURO 0.083333 COPY INPUT MEAN
END MASS-LINK 12

MASS-LINK 13
PERLND PWATER IFWO 0.083333 COPY INPUT MEAN
END MASS-LINK 13

```

MASS-LINK 15
IMPLND IWATER SURO 0.083333 COPY INPUT MEAN
END MASS-LINK 15

MASS-LINK 16
RCHRES ROFLOW COPY INPUT MEAN
END MASS-LINK 16

END MASS-LINK

END RUN

DRAFT

DRAFT

DRAFT

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APPENDIX G3:

STORM SEWER CONVEYANCE CALCULATIONS

Storm Sewer Tabulation

Station		Len (ft)	Drng Area		Rnoff coeff (C)	Area x C		Tc		Rain (l) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line		Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	30.093	0.00	11.54	0.00	0.00	6.61	0.0	14.2	1.5	9.79	33.49	5.48	30	0.57	290.00	290.17	290.93	291.21	294.60	296.86	P-A2
2	1	230.976	0.00	11.54	0.00	0.00	6.61	0.0	13.3	1.5	10.21	24.33	4.74	30	0.30	290.27	290.96	291.40	292.09	296.86	299.97	P-A3
3	2	230.976	1.87	11.54	0.88	1.65	6.61	6.3	12.5	1.6	10.67	24.46	4.82	30	0.30	291.06	291.76	292.22	292.91	299.97	299.78	P-A4
4	3	156.585	0.86	9.67	0.62	0.53	4.96	6.3	12.0	1.7	8.29	13.42	4.50	24	0.30	292.26	292.73	293.40	293.86	299.78	302.88	P-A5
5	4	112.492	0.21	8.81	0.90	0.19	4.43	6.3	11.5	1.7	7.60	13.27	4.12	24	0.29	292.83	293.16	294.02	294.25	302.88	306.58	P-A6
6	5	197.568	0.53	8.60	0.53	0.28	4.24	6.3	10.8	1.8	7.61	15.49	4.62	24	0.40	293.26	294.05	294.37	295.03	306.58	304.47	P-A7
7	6	74.147	1.61	8.07	0.42	0.68	3.96	6.3	10.5	1.8	7.23	15.59	4.86	24	0.40	294.15	294.45	295.11	295.41	304.47	300.97	P-A8
8	7	136.058	0.44	6.46	0.90	0.40	3.28	6.3	10.0	1.9	6.20	7.23	4.60	18	0.40	294.95	295.50	296.02	296.57	300.97	301.37	P-A9
9	8	84.000	0.51	5.67	0.90	0.46	2.63	6.3	9.6	1.9	5.13	7.24	3.11	18	0.40	295.59	295.93	297.05	297.17	301.37	301.48	P-A11
10	9	64.000	1.20	5.16	0.33	0.40	2.17	6.3	9.3	2.0	4.35	7.25	3.09	18	0.41	296.03	296.29	297.25	297.32	301.48	301.69	P-A12
11	10	189.689	0.20	1.30	0.76	0.15	1.08	6.3	8.4	2.1	2.31	2.44	3.51	12	0.40	296.79	297.55	297.58	298.32	301.69	301.74	P-B1
12	11	129.000	0.50	1.10	0.84	0.42	0.92	6.3	7.7	2.3	2.10	2.43	3.14	12	0.40	297.65	298.16	298.53	298.89	301.74	302.81	P-B2
13	12	135.000	0.23	0.60	0.87	0.20	0.50	6.3	6.8	2.5	1.24	2.44	2.67	12	0.40	298.26	298.80	298.98	299.28	302.81	303.90	P-B3
14	13	81.000	0.37	0.37	0.82	0.30	0.30	6.3	6.3	2.6	0.78	2.46	2.57	12	0.41	298.90	299.23	299.37	299.60	303.90	302.72	P-B4
15	10	158.000	1.13	2.66	0.27	0.31	0.70	6.3	7.1	2.4	1.69	2.73	3.65	12	0.50	298.09	298.88	298.66	299.45	301.69	304.00	P-A13
16	15	106.000	1.53	1.53	0.26	0.40	0.40	6.3	6.3	2.6	1.03	2.73	2.31	12	0.50	298.88	299.41	299.76	299.84	304.00	302.91	P-A14
17	8	153.813	0.35	0.35	0.72	0.25	0.25	6.3	6.3	2.6	0.65	2.73	2.83	12	0.50	298.50	299.27	298.83	299.61	301.37	302.77	P-A10

Project File: Project Peninsula Storm Sewers.stm

Number of lines: 17

Run Date: 4/5/2025

NOTES: Intensity = 13.00 / (Inlet time + 1.40) ^ 0.79; Return period = Yrs. 25 ; c = cir e = ellip b = box

DRAINAGE LABEL	DRAINAGE AREA (SF)	DRAINAGE AREA (AC)	IMPERVIOUS AREA (AC) C=0.9	PERVIOUS AREA (AC) C=0.2	RUNOFF COEFFICIENT
A4	81459	1.87	1.82	0.05	0.88
A5	37343	0.86	0.52	0.34	0.62
A6	9010	0.21	0.21	0.00	0.90
A7	23116	0.53	0.25	0.28	0.53
A8	70389	1.62	0.51	1.10	0.42
A9	19370	0.44	0.44	0.00	0.90
A10	15190	0.35	0.26	0.09	0.72
A11	22289	0.51	0.51	0.00	0.90
A12	52212	1.20	0.229	0.970	0.33
A13	49291	1.13	0.11	1.02	0.27
A14	66799	1.53	0.13	1.40	0.26
B1	8758	0.20	0.16	0.04	0.76
B2	21729	0.50	0.46	0.04	0.84
B3	9950	0.23	0.22	0.01	0.87
B4	15871	0.36	0.33	0.04	0.82

APPENDIX H:

SWPPP

Construction Stormwater General Permit (CSWGP)

Stormwater Pollution Prevention Plan (SWPPP)

for

Project Peninsula – Port Angeles, WA 98363

Prepared for:

Ambrose Property Group

Permittee / Owner	Developer	Operator / Contractor
Ambrose Property Group	Ambrose Property Group	Ambrose Property Group

South Airport Road Port Angeles, WA 98363

Certified Erosion and Sediment Control Lead (CESCL)

Name	Organization	Contact Phone Number
TBD	TBD	TBD

SWPPP Prepared By

Name	Organization	Contact Phone Number
Joe Jorge	CESO Inc.	614-794-7080

SWPPP Preparation Date

04 / 18 / 2025

Project Construction Dates

Activity / Phase	Start Date	End Date
Pre-Permit	11/01/2025	06/01/2026

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Project Information (1.0)

Project/Site Name: Project Peninsula
Street/Location: W Edgewood Drive
City: Port Angeles State: WA Zip code: 98363
Subdivision: N/A.
Receiving waterbody: Dry Creek

Existing Conditions (1.1)

Total acreage (including support activities such as off-site equipment staging yards, material storage areas, borrow areas).

Total acreage: 25.62 Acres

Disturbed acreage: 17.50 Acres

Existing structures: None.

Landscape topography: The current soil on site includes 4-Bellingham Silty Clay Loam and 12-Clallam Gravelly Sandy Loam, 0 to 15 % slopes. The existing site is relatively flat. There are two existing detention basins on site.

Drainage patterns: The site currently drains directly into Dry Creek or from southwest to northeast to an existing the existing basin on the north side of the site.

Existing Vegetation: The existing site is a vacant lot with various land cover types ranging from sparse grass, gravel, sparse vegetation, and dense woods.

Critical Areas (wetlands, streams, high erosion risk, steep or difficult to stabilize slopes):

The current site has two Category 3 wetlands with a 50' wetland buffer surrounding the wetland. The site also has a 75' stream buffer.

List of known impairments for 303(d) listed or Total Maximum Daily Load (TMDL) for the receiving waterbody:

The United States Protection Agency (U.S. EPA) has found Dry Creek to have no impairments downstream of the site at the point of connection.

Table 1 includes a list of suspected and/or known contaminants associated with the construction activity.

Table 1 – Summary of Site Pollutant Constituents

Constituent (Pollutant)	Location	Depth	Concentration
Sediment Runoff	On Site	N/A	N/A
Oil and Gas	On Site	N/A	N/A
Trash	On Site	N/A	N/A
Debris	On Site	N/A	N/A

Proposed Construction Activities (1.2)

Description of site development (example: subdivision):

The proposed project consists of a ±58,394 S.F. Distribution Facility with associated truck docs, driveways, parking lots, loading canopy, and stormwater facilities. The site development will be considered an industrial heavy development. Anticipated disturbance for the development is 17.50 acres which includes 8.99 acres of pervious and 8.51 acres of impervious area. 2.18 acres of the impervious total is attributed to the onsite stormwater facilities.

Description of construction activities (example: site preparation, demolition, excavation):

The construction activities will consist of site demolition and clearing, rough grading, and installation of underground utilities, etc.

Description of site drainage including flow from and onto adjacent properties. Must be consistent with Site Map in Appendix A:

The off-site analysis is a qualitative analysis of upstream systems (run-on) and downstream systems leaving the site (runoff). For this project, there is no run-on. As described in the Existing Conditions Summary, the eastern ditch is located at the upstream perimeter of the site and intercepts upstream flow before it enters the project area. Therefore, the remainder of the off-site analysis will focus on the downstream system.

Once stormwater is released from the site, it discharges across Critchfield Road into a wetland area / unnamed tributary to Dry Creek. However, the quarter-mile limit-of-analysis per USSG Section 5.04.01.3 is reached prior to the runoff reaching Dry Creek. Where the site discharge eventually flows into Dry Creek, there are no impairments nor TMDL thresholds.

Description of final stabilization (example: extent of revegetation, paving, landscaping):

The final stabilization activities will consist of building pad and curb construction, fine grading, pavement subgrade preparation, asphalt and remaining concrete flatwork, and preparing landscaped areas to finished grade, etc.

Contaminated Site Information:

Proposed activities regarding contaminated soils or groundwater (example: on-site treatment system, authorized sanitary sewer discharge): N/A

Construction Stormwater Best Management Practices (BMPs) (2.0)

The SWPPP is a living document reflecting current conditions and changes throughout the life of the project. These changes may be informal (i.e. hand-written notes and deletions). Update the SWPPP when the CESCL has noted a deficiency in BMPs or deviation from original design.

The 13 Elements (2.1)

Element 1: Preserve Vegetation / Mark Clearing Limits (2.1.1)

List and describe BMPs:

1- BMP C233: Silt Fence – The silt fence is to act as high - visibility fence. The silt fence reduces the transport of coarse sediment from a construction site by providing a temporary physical barrier to sediment and reducing the runoff velocities of overland flow. The silt fence is noted on the SWPPP plan sheets Phase 1 and Phase 2.

2- Prior to the start of construction, the limits of disturbance (LOD) shown on the plans are to be surveyed and marked. Contractor shall not cause any disturbance outside of the site area. The LOD is noted on the SWPPP plan sheets Phase 1 and Phase 2.

Installation Schedules:

Installation shall be complete prior to commencing land disturbing activities.

Inspection and Maintenance plan:

All features shall be inspected once every seven (7) days and within twenty-four (24) hours of each rain event or greater than 0.5". Any damages shall be repaired immediately.

Responsible Staff:

Contractor (Installation & Maintenance), Owner (Inspection).

Element 2: Establish Construction Access (2.1.2)

List and describe BMPs:

1- BMP C105: Stabilized Construction Access – The stabilized construction access is established to reduce the amount of sediment transported onto the paved roads outside the project site by vehicles or equipment. This is done by constructing a stabilized pad of quarry spalls at entrances and exits on for the site. One stabilized construction access is located on the proposed site to the North of the site and shown on the SWPPP plan sheets Phase 1 and Phase 2.

2- BMP C106: Wheel Wash – The wheel wash is used to reduce the amount of sediment transported onto paved roads by washing dirt from wheels of motor vehicles prior to the motor vehicles leaving the construction site. A wheel wash is placed next to the stabilized construction accesses. It is shown on the SWPPP plan sheets Phase 1 and Phase 2.

Installation Schedules:

Installation shall be complete prior to commencing land disturbing activities.

Inspection and Maintenance plan:

Inspect on a weekly basis and add material as needed.

1-Stabilized Construction Access: quarry spalls shall be added of the pad is no longer in accordance with the specifications.

2-Wheel Wash: the wheel wash should start out each day with fresh water. The wheel was water should be changed a minimum of once per day. On larger jobs the wheel wash should be changed more often.

Responsible Staff:

Contractor (Installation & Maintenance), Owner (Inspection).

Element 3: Control Flow Rates (2.1.3)

Will you construct stormwater retention and/or detention facilities?

Yes No

Will you use permanent infiltration ponds or other low impact development (example: rain gardens, bio-retention, porous pavement) to control flow during construction?

Yes No

List and describe BMPs:

1- BMP C240: Sediment Pond (Temporary) – The sediment pond (temporary) is used during construction to remove sediment from runoff originating from disturbed areas of the project site. Sediment ponds are typically designed to remove sediment no smaller than medium silt (0.02 mm). Consequently, they usually reduce turbidity only slightly. The permanent detention basin BMP footprint will be utilized for the temporary sediment pond. The permanent sediment pond footprint is called out on SWPPP plan sheets Phase 1 and 2.

2- Sediment Dewatering Device Skimmer.

3- BMP C209: Outlet Protection – The outlet protection prevents scour at conveyance outlets and minimizes the potential for downstream erosion by reducing the velocity of the concentrated storm flows. Specifically, BMPC122: Net and Blankets or BMP C202: Riprap Channel Lining may be utilized. The outlet protection is called out on the SWPPP plan sheet Phase 2.

Installation Schedules:

1- Sediment Pond (Temporary): the site drains to established detention basin for sediment basin.

2- Sediment Dewatering Device Skimmer: installation shall be complete prior to commencing land disturbing activities for sediment dewatering device skimmer.

3- Outlet Protection: the site drains to established detention basin for sediment basin.

Inspection and Maintenance plan:

All features shall be inspected every seven (7) days and within twenty-four (24) hours of each rain event. Insect and repair as need. Add rock as needed to maintain intended function to outlet protection. Clean energy dissipator if sediment builds up.

Responsible Staff:

Contractor (Installation & Maintenance), Owner (Inspection).

Element 4: Install Sediment Controls (2.1.4)

List and describe BMPs:	<p>1- BMP C233: Silt Fence – The silt fence is to act as high - visibility fence. The silt fence reduces the transport of coarse sediment from a construction site by providing a temporary physical barrier to sediment and reducing the runoff velocities of overland flow. The silt fence is noted on the SWPPP plan sheets Phase 1 and Phase 2.</p> <p>2- BMP C240: Sediment Pond (Temporary) – The sediment pond (temporary) is used during construction to remove sediment from runoff originating from disturbed areas of the project site. Sediment ponds are typically designed to remove sediment no smaller than medium silt (0.02 mm). Consequently, they usually reduce turbidity only slightly. The permanent detention basin BMP footprint will be utilized for the temporary sediment pond. The permanent sediment pond footprint is called out on SWPPP plan sheets Phase 1 and 2.</p>
Installation Schedules:	<p>1- Silt Fence: installation shall be complete prior to commencing land disturbing activities.</p> <p>2- Sediment Pond (Temporary): the site drains to established detention basin for sediment basin.</p>
Inspection and Maintenance plan:	<p>All features shall be inspected once every seven (7) days and withing twenty-four (24) hours of each rain event. Any damages shall be repaired immediately. Inspect and repair as needed.</p>
Responsible Staff:	<p>Contractor (Installation & Maintenance), Owner (Inspection).</p>

Element 5: Stabilize Soils (2.1.5)

West of the Cascade Mountains Crest

Season	Dates	Number of Days Soils Can be Left Exposed
During the Dry Season	May 1 – September 30	7 days
During the Wet Season	October 1 – April 30	2 days

Soils must be stabilized at the end of the shift before a holiday or weekend if needed based on the weather forecast.

Anticipated project dates: Start date: 11.01.2025 End date: 06.01.2026

Will you construct during the wet season?

Yes No

List and describe BMPs:

1- BMP C120: Temporary and Permanent Seeding – Temporary and Permanent Seeding reduces erosion by stabilizing exposed soils. A well-established vegetative cover is one of the most effective methods of reducing erosion. Areas that require temporary and permanent seeding are called out on the SWPPP plan phase 2.

2- BMP C121: Mulching – Mulching provides immediate temporary protection from erosion. Mulch also enhances plan establishment by conserving moisture, holding fertilizer, seed, and topsoil in place and moderating soil temperatures. There are a variety of mulches that can be used.

3- BMP C140: Dust Control – Dust Control prevents wind transport of dust from disturbed soil surfaces onto roadways, drainage ways, and surface waters.

4- BMP C122: Net and Blankets- Net and Blankets are intended to prevent erosion and hold seed and mulch in place on steep slopes and in channels so that vegetation can become well established. In addition, some nets and blankets can be used to permanently reinforce turf to protect drainage ways during high flows.

Installation Schedules:

1- Temporary and Permanent Seeding: use seeding throughout the project on disturbed areas that have

reached final grade or that will remain unworked for more than 30 days.

2- Mulching: Use for less than 30 days on undisturbed areas that require cover. At all times for seeded areas, especially during wet season and during hot summer months. Mulch may be applied at any time of the year.

3- Dust Control: Irrigation can be used as a form of dust control. Spray as necessary to keep dust at a minimum.

4- Nets and Blankets: Installation shall be conducted immediately after disturbed slopes have been temporarily or permanently seeded or sodded.

Inspection and Maintenance plan:

1- Temporary and Permanent Seeding: shall be inspected within fourteen (14) days of planting. Review all disturbed areas in late August to early September. On-going inspection throughout construction activities to ensure that phasing of soil disturbance and soil stabilization is being implemented. Routinely verify that work is progressing in accordance with the project schedule and take corrective action as necessary.

2- Mulch: must be refreshed periodically.

3- Dust Control: Respray area as necessary to keep dust at a minimum.

4- Monitor and repair the blanket as necessary until ground cover is established. Inspections should include walking across the slope to check for erosion gullies. Repair and staple any areas of the net or blanket that are damaged or not in close contact with the ground. Fix and protect eroded areas if erosion occurs due to poorly controlled drainage.

Responsible Staff:

Contractor (Installation & Maintenance), Owner (Inspection).

Element 6: Protect Slopes (2.1.6)

Will steep slopes be present at the site during construction?

Yes No

List and describe BMPs:

1- BMP C120: Temporary and Permanent Seeding – Temporary and Permanent Seeding reduces erosion by stabilizing exposed soils. A well-established vegetative cover is one of the most effective methods of reducing erosion. Areas that require temporary and permanent seeding are called out on the SWPPP plan phase 2.

2- BMP C121: Mulching – Mulching provides immediate temporary protection from erosion. Mulch also enhances plan establishment by conserving moisture, holding fertilizer, seed, and topsoil in place and moderating soil temperatures. There are a variety of mulches that can be used.

3- BMP C122: Net and Blankets- Net and Blankets are intended to prevent erosion and hold seed and mulch in place on steep slopes and in channels so that vegetation can become well established. In addition, some nets and blankets can be used to permanently reinforce turf to protect drainage ways during high flows.

Installation Schedules:

1- Temporary and Permanent Seeding: use seeding throughout the project on disturbed areas that have reached final grade or that will remain unworked for more than 30 days.

2- Mulching: Use for less than 30 days on undisturbed areas that require cover. At all times for seeded areas, especially during wet season and during hot summer months. Mulch may be applied at any time of the year.

3- Nets and Blankets: Installation shall be conducted immediately after disturbed slopes have been temporarily or permanently seeded or sodded.

Inspection and Maintenance plan:

1- Temporary and Permanent Seeding: shall be inspected within fourteen (14) days of planting. Review all disturbed areas in late August to early September. On-going inspection throughout construction activities to ensure that phasing of soil disturbance and soil stabilization is being implemented. Routinely verify that work is progressing in

accordance with the project schedule and take corrective action as necessary.

2- Mulch: must be refreshed periodically.

3- Monitor and repair the blanket as necessary until ground cover is established. Inspections should include walking across the slope to check for erosion gullies. Repair and staple any areas of the net or blanket that are damaged or not in close contact with the ground. Fix and protect eroded areas if erosion occurs due to poorly controlled drainage.

Responsible Staff:

Contractor (Installation & Maintenance), Owner (Inspection).

Element 7: Protect Drain Inlets (2.1.7)

List and describe BMPs:	1- BMP C220 Inlet Protection – Inlet protection prevents coarse sediment from entering the drainage systems prior to permanent stabilization of the disturbed area. Existing and proposed structures require inlet protection and are called out on SWPPP Plans Phase 1 for existing structures and Phase 2 for existing and proposed structures.
Installation Schedules:	1- Inlet Protection: install prior to commencing land disturbing activities and as new storm structures are installed.
Inspection and Maintenance plan:	1- Inlet Protection: inspect all forms of inlet protection frequently, especially after storm events. Clean and replace clogged catch basin filters. For rock and gravel filters pull away rocks from the inlet and clean or replace. Do not wash sediment into storm drains while cleaning. Spread all excavated material evenly over the surrounding land area or stockpile and stabilize appropriately. Inlets will be inspected weekly at a minimum and daily during storm events.
Responsible Staff:	Contractor (Installation & Maintenance), Owner (Inspection).

Element 8: Stabilize Channels and Outlets (2.1.8)

Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches, will be installed at the outlets of all conveyance systems.

List and describe BMPs:

1- BMP C122: Net and Blankets- Net and Blankets are intended to prevent erosion and hold seed and mulch in place on steep slopes and in channels so that vegetation can become well established. In addition, some nets and blankets can be used to permanently reinforce turf to protect drainage ways during high flows.

2- BMP C209: Outlet Protection – The outlet protection prevents scour at conveyance outlets and minimizes the potential for downstream erosion by reducing the velocity of the concentrated storm flows. Specifically, BMPC122: Net and Blankets or BMP C202: Riprap Channel Lining may be utilized. The outlet protection is called out on the SWPPP plan sheet Phase 2.

Installation Schedules:

1- Nets and Blankets: Installation shall be conducted immediately after disturbed slopes have been temporarily or permanently seeded or sodded.

2- Outlet Protection: the site drains to established detention basin for sediment basin.

Inspection and Maintenance plan:

1- Net and Blanket: Monitor and repair the blanket as necessary until ground cover is established. Inspections should include walking across the slope to check for erosion gullies. Repair and staple any areas of the net or blanket that are damaged or not in close contact with the ground. Fix and protect eroded areas if erosion occurs due to poorly controlled drainage.

Outlet Protection: Insect and repair as need. Add rock as needed to maintain intended function to outlet protection. Clean energy dissipator if sediment builds up.

Responsible Staff:

Contractor (Installation & Maintenance), Owner (Inspection).

Element 9: Control Pollutants (2.1.9)

The following pollutants are anticipated to be present on-site:

Table 2 – Pollutants

Pollutant (and source, if applicable)
Oil
Gas
Trash
Debris

List and describe BMPs: 1- BMP C154: Concrete Washout Area – Concrete washout area is used to prevent or reduce the discharge of pollutants from concrete waste to stormwater by conducting wash off-site, or performing on-site washout in designated area.

Installation Schedules: 1- Concrete Washout Area: installation shall be complete prior to commencing concrete work.

Inspection and Maintenance plan: 1- Concrete Washout Area: inspect and verify that concrete washout areas are in place prior to commencement of concrete work. Concrete washout areas must be cleaned, or new concrete washout areas must be constructed and ready for use once the concrete washout area is 75% full.

Responsible Staff: Contractor (Installation & Maintenance), Owner (Inspection).

Will maintenance, fueling, and/or repair of heavy equipment and vehicles occur on-site?

Yes No

Will wheel wash or tire bath system BMPs be used during construction?

Yes No

If yes, provide disposal methods for wastewater generated by BMPs.

Wastewater must be transported off-site and disposed of in an approved facility.

Will pH-modifying sources be present on-site?

Yes No If yes, check the source(s).

Table 3 – pH-Modifying Sources

X	None
	Bulk cement
	Cement kiln dust
	Fly ash
	Other cementitious materials
	New concrete washing or curing waters
	Waste streams generated from concrete grinding and sawing
	Exposed aggregate processes
	Dewatering concrete vaults
	Concrete pumping and mixer washout waters
	Recycled concrete
	Other (i.e. calcium lignosulfate) [please describe]

Concrete trucks must not be washed out onto the ground, or into storm drains, open ditches, streets, or streams. Excess concrete must not be dumped on-site, except in designated concrete washout areas with appropriate BMPs installed.

Element 10: Control Dewatering (2.1.10)

Table 4 – Dewatering BMPs

	Infiltration
	Transport off-site in a vehicle (vacuum truck for legal disposal)
	Ecology-approved on-site chemical treatment or other suitable treatment technologies
	Sanitary or combined sewer discharge with local sewer district approval (last resort)
X	Use of sedimentation bag with discharge to ditch or swale (small volumes of localized dewatering)

List and describe BMPs: 1- Sedimentation Bag

Installation Schedules: 1- Sedimentation Bag: shall be installed and utilized as necessary.

Inspection and Maintenance plan: 1- Sedimentation Bag: Inspect and repair as needed.

Responsible Staff: Contractor (Installation & Maintenance), Owner (Inspection).

Element 11: Maintain BMPs (2.1.11)

All temporary and permanent Erosion and Sediment Control (ESC) BMPs shall be maintained and repaired as needed to ensure continued performance of their intended function.

Maintenance and repair shall be conducted in accordance with each particular BMP specification (see *Volume II of the SWMMWW* or *Chapter 7 of the SWMMEW*).

Visual monitoring of all BMPs installed at the site will be conducted at least once every calendar week and within 24 hours of any stormwater or non-stormwater discharge from the site. If the site becomes inactive and is temporarily stabilized, the inspection frequency may be reduced to once every calendar month.

All temporary ESC BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed.

Trapped sediment shall be stabilized on-site or removed. Disturbed soil resulting from removal of either BMPs or vegetation shall be permanently stabilized.

Additionally, protection must be provided for all BMPs installed for the permanent control of stormwater from sediment and compaction. BMPs that are to remain in place following completion of construction shall be examined and restored to full operating condition. If sediment enters these BMPs during construction, the sediment shall be removed, and the facility shall be returned to conditions specified in the construction documents.

Element 12: Manage the Project (2.1.12)

The project will be managed based on the following principles:

- Projects will be phased to the maximum extent practicable and seasonal work limitations will be taken into account.
- Inspection and monitoring:
 - Inspection, maintenance and repair of all BMPs will occur as needed to ensure performance of their intended function.
 - Site inspections and monitoring will be conducted in accordance with Special Condition S4 of the CSWGP. Sampling locations are indicated on the [Site Map](#). Sampling station(s) are located in accordance with applicable requirements of the CSWGP.
- Maintain an updated SWPPP.
 - The SWPPP will be updated, maintained, and implemented in accordance with Special Conditions S3, S4, and S9 of the CSWGP.

As site work progresses the SWPPP will be modified routinely to reflect changing site conditions. The SWPPP will be reviewed monthly to ensure the content is current.

Table 5 – Management

X	Design the project to fit the existing topography, soils, and drainage patterns
X	Emphasize erosion control rather than sediment control
X	Minimize the extent and duration of the area exposed
X	Keep runoff velocities low
X	Retain sediment on-site
X	Thoroughly monitor site and maintain all ESC measures
X	Schedule major earthwork during the dry season
	Other (please describe)

Element 13: Protect Low Impact Development (LID) BMPs (2.1.13)

N/A

Pollution Prevention Team (3.0)

Table 7 – Team Information

Title	Name(s)	Phone Number
Certified Erosion and Sediment Control Lead (CESCL)	TBD	TBD
Resident Engineer	TBD	TBD
Emergency Ecology Contact	TBD	TBD
Emergency Permittee/ Owner Contact	TBD	TBD
Non-Emergency Owner Contact	TBD	TBD
Monitoring Personnel	TBD	TBD
Ecology Regional Office	TBD	TBD

Monitoring and Sampling Requirements (4.0)

Monitoring includes visual inspection, sampling for water quality parameters of concern, and documentation of the inspection and sampling findings in a site log book. A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Stormwater sampling data

Create your own Site Inspection Form or use the Construction Stormwater Site Inspection Form found on Ecology's website. <https://www.ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit>

File a blank form under Appendix D.

The site log book must be maintained on-site within reasonable access to the site and be made available upon request to Ecology or the local jurisdiction.

Numeric effluent limits may be required for certain discharges to 303(d) listed waterbodies. See CSWGP Special Condition S8 and Section 5 of this template.

Complete the following paragraph for sites that discharge to impaired waterbodies for fine sediment, turbidity, phosphorus, or pH: N/A

Site Inspection (4.1)

Site inspections will be conducted at least once every calendar week and within 24 hours following any discharge from the site. For sites that are temporarily stabilized and inactive, the required frequency is reduced to once per calendar month.

The discharge point(s) are indicated on the Site Map (see Appendix A) and in accordance with the applicable requirements of the CSWGP.

Stormwater Quality Sampling (4.2)

Turbidity Sampling (4.2.1)

Requirements include calibrated turbidity meter or transparency tube to sample site discharges for compliance with the CSWGP. Sampling will be conducted at all discharge points at least once per calendar week.

Method for sampling turbidity:

Check the analysis method you will use:

Table 8 – Turbidity Sampling Method

X	Turbidity Meter/Turbidimeter (required for disturbances 5 acres or greater in size)
	Transparency Tube (option for disturbances less than 1 acre and up to 5 acres in size)

The benchmark for turbidity value is 25 nephelometric turbidity units (NTU) and a transparency less than 33 centimeters.

If the discharge's turbidity is 26 to 249 NTU or the transparency is less than 33 cm but equal to or greater than 6 cm, the following steps will be conducted:

1. Review the SWPPP for compliance with Special Condition S9. Make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.
3. Document BMP implementation and maintenance in the site log book.

If the turbidity exceeds 250 NTU or the transparency is 6 cm or less at any time, the following steps will be conducted:

1. Telephone or submit an electronic report to the applicable Ecology Region's Environmental Report Tracking System (ERTS) within 24 hours.
<https://www.ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue>
 - Central Region (Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima): (509) 575-2490
 - Eastern Region (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman): (509) 329-3400
 - Northwest Region (King, Kitsap, Island, San Juan, Skagit, Snohomish, Whatcom): (425) 649-7000
 - Southwest Region (Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum,): (360) 407-6300

2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period
3. Document BMP implementation and maintenance in the site log book.
4. Continue to sample discharges daily until one of the following is true:
 - Turbidity is 25 NTU (or lower).
 - Transparency is 33 cm (or greater).
 - Compliance with the water quality limit for turbidity is achieved.
 - 1 - 5 NTU over background turbidity, if background is less than 50 NTU
 - 1% - 10% over background turbidity, if background is 50 NTU or greater
 - The discharge stops or is eliminated.

pH Sampling (4.2.2)

pH monitoring is required for “Significant concrete work” (i.e. greater than 1000 cubic yards poured concrete or recycled concrete over the life of the project). The use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD] or fly ash) also requires pH monitoring.

For significant concrete work, pH sampling will start the first day concrete is poured and continue until it is cured, typically three (3) weeks after the last pour.

For engineered soils and recycled concrete, pH sampling begins when engineered soils or recycled concrete are first exposed to precipitation and continues until the area is fully stabilized.

If the measured pH is 8.5 or greater, the following measures will be taken:

1. Prevent high pH water from entering storm sewer systems or surface water.
2. Adjust or neutralize the high pH water to the range of 6.5 to 8.5 su using appropriate technology such as carbon dioxide (CO₂) sparging (liquid or dry ice).
3. Written approval will be obtained from Ecology prior to the use of chemical treatment other than CO₂ sparging or dry ice.

Method for sampling pH:

Table 8 – pH Sampling Method

	pH meter
X	pH test kit
	Wide range pH indicator paper

Discharges to 303(d) or Total Maximum Daily Load (TMDL) Waterbodies (5.0)

303(d) Listed Waterbodies (5.1)

The 303(d) status is listed on the Water Quality Atlas: <https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d>

Circle the applicable answer, if necessary:

Is the receiving water 303(d) (Category 5) listed for turbidity, fine sediment, phosphorus, or pH?

Yes No

List the impairment(s):

N/A

TMDL Waterbodies (5.2)

Waste Load Allocation for CWSGP discharges: N/A

Describe the method(s) for TMDL compliance: N/A

List and describe BMPs: N/A

Discharges to TMDL receiving waterbodies will meet in-stream water quality criteria at the point of discharge.

The Construction Stormwater General Permit Proposed New Discharge to an Impaired Water Body form is included in Appendix F.

Reporting and Record Keeping (6.0)

Record Keeping (6.1)

Site Log Book (6.1.1)

A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Sample logs

Records Retention (6.1.2)

Records will be retained during the life of the project and for a minimum of three (3) years following the termination of permit coverage in accordance with Special Condition S5.C of the CSWGP.

Permit documentation to be retained on-site:

- CSWGP
- Permit Coverage Letter
- SWPPP
- Site Log Book

Permit documentation will be provided within 14 days of receipt of a written request from Ecology. A copy of the SWPPP or access to the SWPPP will be provided to the public when requested in writing in accordance with Special Condition S5.G.2.b of the CSWGP.

Updating the SWPPP (6.1.3)

The SWPPP will be modified if:

- Found ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site.
- There is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

The SWPPP will be modified within seven (7) days if inspection(s) or investigation(s) determine additional or modified BMPs are necessary for compliance. An updated timeline for BMP implementation will be prepared.

Reporting (6.2)

Discharge Monitoring Reports (6.2.1)

Cumulative soil disturbance is one (1) acre or larger; therefore, Discharge Monitoring Reports (DMRs) will be submitted to Ecology monthly. If there was no discharge during a given monitoring period the DMR will be submitted as required, reporting “No Discharge”. The DMR due date is fifteen (15) days following the end of each calendar month.

DMRs will be reported online through Ecology’s WQWebDMR System.

To sign up for WQWebDMR go to:

<https://www.ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance>

Notification of Noncompliance (6.2.2)

If any of the terms and conditions of the permit is not met, and the resulting noncompliance may cause a threat to human health or the environment, the following actions will be taken:

1. Ecology will be notified within 24-hours of the failure to comply by calling the applicable Regional office ERTS phone number (Regional office numbers listed below).
2. Immediate action will be taken to prevent the discharge/pollution or otherwise stop or correct the noncompliance. If applicable, sampling and analysis of any noncompliance will be repeated immediately and the results submitted to Ecology within five (5) days of becoming aware of the violation.
3. A detailed written report describing the noncompliance will be submitted to Ecology within five (5) days, unless requested earlier by Ecology.

Specific information to be included in the noncompliance report is found in Special Condition S5.F.3 of the CSWGP.

Anytime turbidity sampling indicates turbidity is 250 NTUs or greater, or water transparency is 6 cm or less, the Ecology Regional office will be notified by phone within 24 hours of analysis as required by Special Condition S5.A of the CSWGP.

- Central Region at (509) 575-2490 for Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, or Yakima County
- Eastern Region at (509) 329-3400 for Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, or Whitman County
- Northwest Region at (425) 649-7000 for Island, King, Kitsap, San Juan, Skagit, Snohomish, or Whatcom County

- Southwest Region at (360) 407-6300 for Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, or Wahkiakum

Include the following information:

1. Your name and / Phone number
2. Permit number
3. City / County of project
4. Sample results
5. Date / Time of call
6. Date / Time of sample
7. Project name

In accordance with Special Condition S4.D.5.b of the CSWGP, the Ecology Regional office will be notified if chemical treatment other than CO₂ sparging is planned for adjustment of high pH water.

Appendix/Glossary

A. Site Map

The site map must meet the requirements of Special Condition S9.E of the CSWGP

B. BMP Detail

Insert BMPs specification sheets here.

Download BMPs from the Ecology Construction Stormwater website at:

<https://www.ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Stormwater-manuals>

C. Correspondence

City of Port Angeles

D. Site Inspection Form

Create your own or download Ecology's template:

<https://www.ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit>

E. Construction Stormwater General Permit (CSWGP)

Download CSWGP: <https://www.ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit>

F. 303(d) List Waterbodies / TMDL Waterbodies Information

N/A

G. Contaminated Site Information

N/A

H. Engineering Calculations

APPENDIX A
SITE MAP



LOCATION MAP

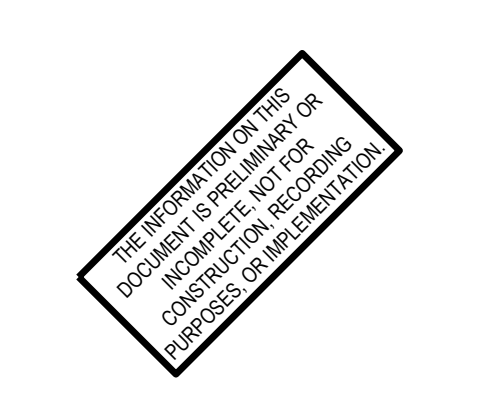
1" = 800'

PROJECT PENINSULA PORT ANGELES, WA

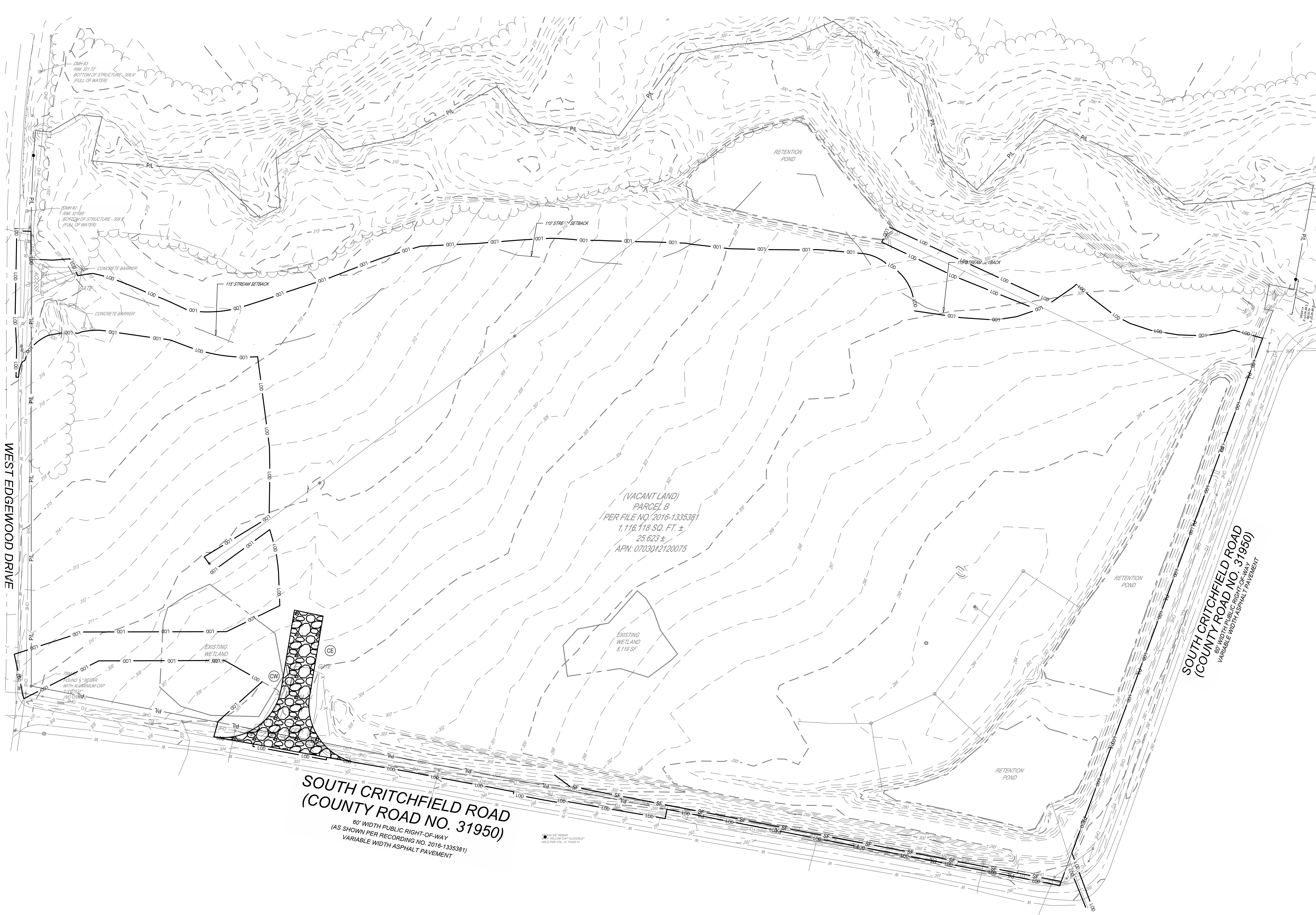


JOB NO.:	763838
REF. SHT:	SWPPP
DESIGN:	HKS
DATE:	APRIL 2025
EXHIBIT NO.	A

APPENDIX B
BMP DETAIL



SWPPP LEGEND	
EXISTING	
REFER TO XXX FOR EXISTING FEATURES LEGEND	
PROPOSED	
[Symbol]	MAJOR CONTOUR
[Symbol]	MINOR CONTOUR
[Symbol]	PAVEMENT WALK
[Symbol]	STORM SEWER
[Symbol]	SILT FENCE
[Symbol]	COMPOST SOCK
[Symbol]	GRADING/SEEDING LIMITS
[Symbol]	LIMIT OF DISTURBANCE
[Symbol]	PERMANENT EROSION CONTROL BLANKET ON ALL 3:1 SLOPES OR STEEPER
[Symbol]	STABILIZED CONSTRUCTION ENTRANCE
[Symbol]	STORAGE AREA
[Symbol]	BASIN SEDIMENT FILTER
[Symbol]	STORM MANHOLE
[Symbol]	CATCH BASIN
[Symbol]	CURB INLET
[Symbol]	STABILIZED CONSTRUCTION ENTRANCE
[Symbol]	TEMPORARY SEEDING
[Symbol]	PERMANENT SOG
[Symbol]	HAZARDOUS WASTE STORAGE AREA
[Symbol]	FUEL STORAGE AREA
[Symbol]	CONCRETE WASHOUT AREA
[Symbol]	INLET PROTECTION
[Symbol]	DANDY CURB (INLET PROTECTION)
[Symbol]	DANDY BAG (INLET PROTECTION)
[Symbol]	TRASH AREA

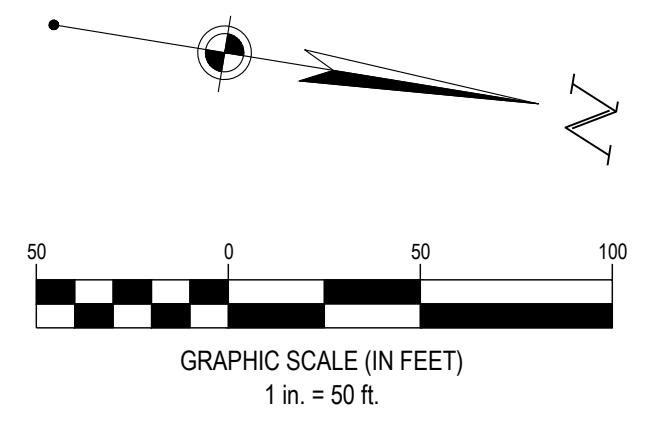


**SOUTH CRITCHFIELD ROAD
(COUNTY ROAD NO. 31950)**
80' WIDTH PUBLIC RIGHT-OF-WAY
(AS SHOWN PER RECORDING NO. 2016-1335381)
VARIABLE WIDTH ASPHALT PAVEMENT

(VACANT LAND)
PARCEL B
PER FILE NO. 2016-1335381
1,116,118 SQ. FT. ±
25.623 ±
APN: 0703012120075

**SOUTH CRITCHFIELD ROAD
(COUNTY ROAD NO. 31950)**
60' WIDTH PUBLIC RIGHT-OF-WAY
VARIABLE WIDTH ASPHALT PAVEMENT

REFER TO SHEET C5.1 FOR SWPPP PHASE II PLAN
REFER TO SHEET C5.2 FOR SWPPP NOTES
REFER TO SHEET C5.3 FOR SWPPP DETAILS



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W EDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/18

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Project Number: 763838
Scale: AS SHOWN
Drawn By: QSS
Checked By: CG
Date: 04/18/2025
Issue: NOT FOR CONSTRUCTION

Drawing Title:
SWPPP PHASE I PLAN

C5.0

THIS DRAWING IS THE PROPERTY OF CESO AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
W EDGEWOOD DR.,
PORT ANGELES, WA 98363

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/18

Revisions / Submissions

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Project Number: 763838
Scale: AS SHOWN
Drawn By: QSS
Checked By: CG
Date: 04/18/2025
Issue: NOT FOR CONSTRUCTION

Drawing Title:
SWPPP PHASE II PLAN

C5.1

SWPPP LEGEND

- EXISTING
REFER TO XXX FOR EXISTING FEATURES LEGEND
- PROPOSED
- MAJOR CONTOUR
 - MINOR CONTOUR
 - PAVEMENT/WALK
 - STORM SEWER
 - SILT FENCE
 - COMPOST SOCK
 - GRADING/SEEDING LIMITS
 - LIMIT OF DISTURBANCE
 - PERMANENT EROSION CONTROL BLANKET ON ALL 3:1 SLOPES OR STEEPER
 - STABILIZED CONSTRUCTION ENTRANCE
 - STORAGE AREA
 - BASIN SEDIMENT FILTER
 - STORM MANHOLE
 - CATCH BASIN
 - CURB INLET
 - STABILIZED CONSTRUCTION ENTRANCE
 - TEMPORARY SEEDING
 - PERMANENT SOD
 - HAZARDOUS WASTE STORAGE AREA
 - FUEL STORAGE AREA
 - CONCRETE WASHOUT AREA
 - INLET PROTECTION
 - DANDY CURB (INLET PROTECTION)
 - DANDY BAG (INLET PROTECTION)
 - TRASH AREA

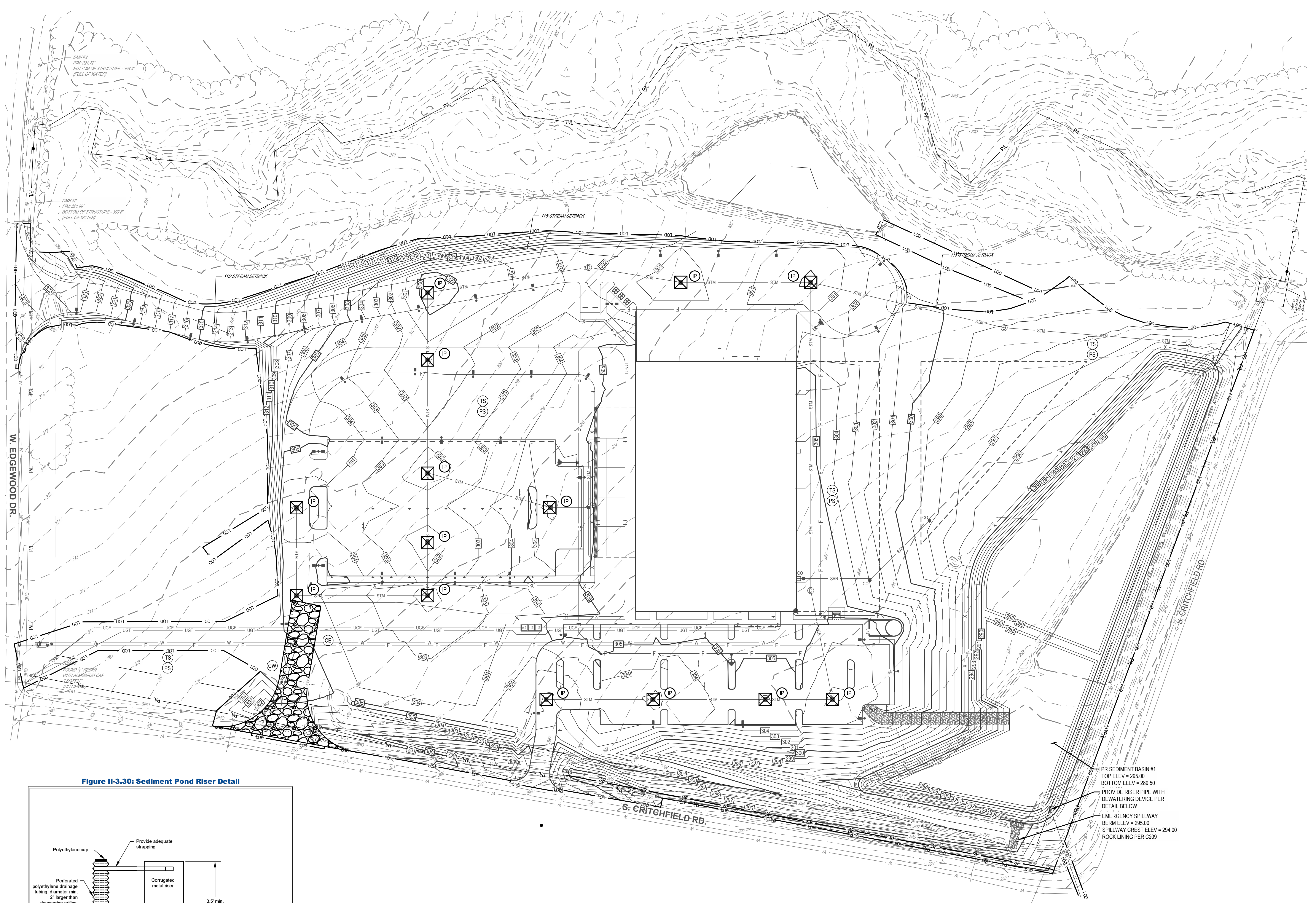
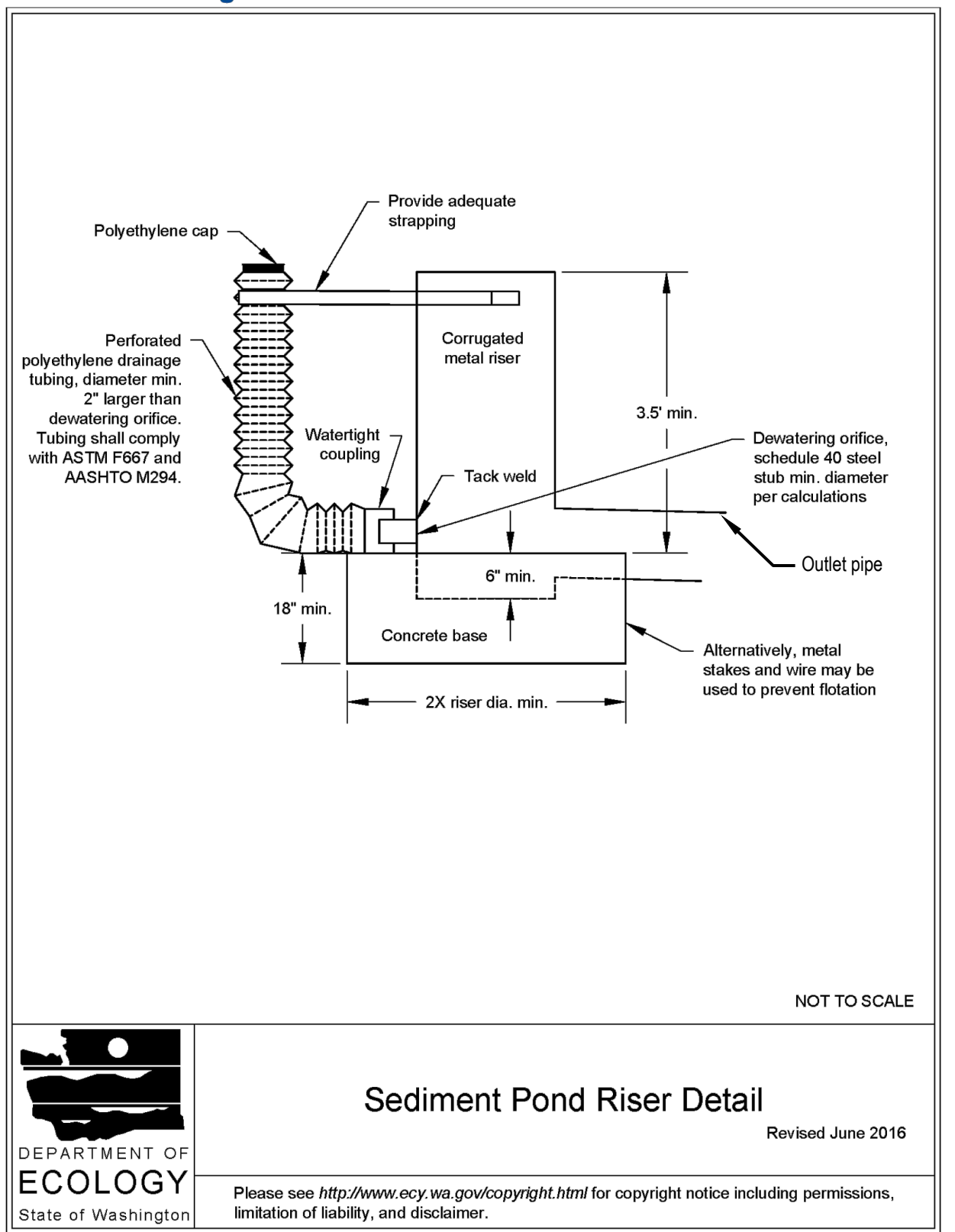
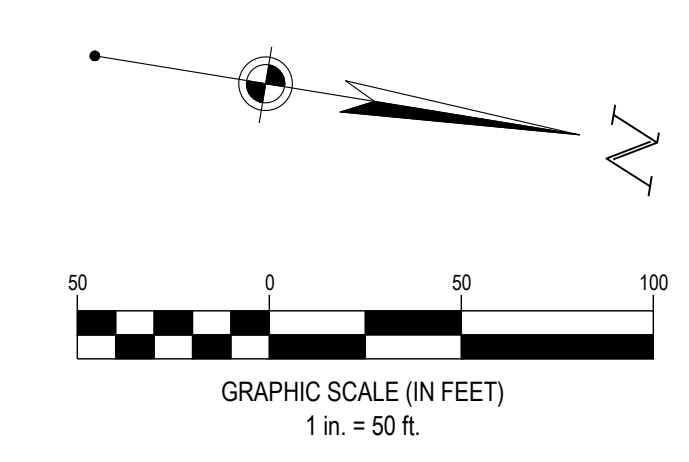
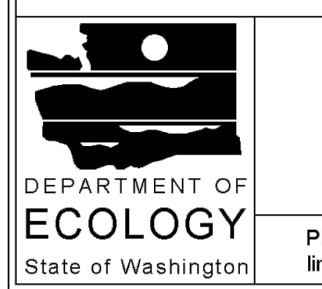


Figure II-3.30: Sediment Pond Riser Detail

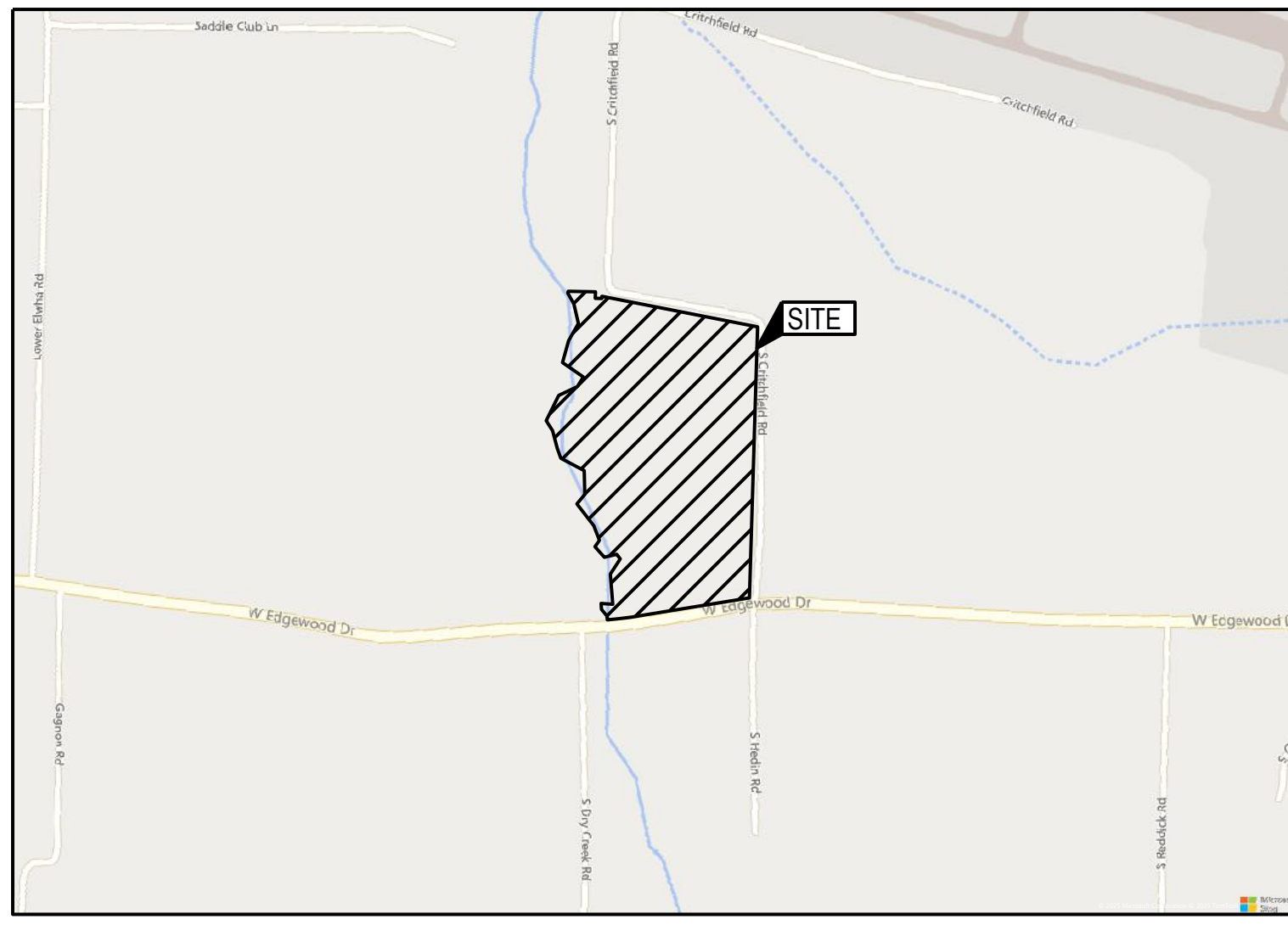


SEDIMENT BASIN 1	
	ELEVATION
TOP OF BASIN	295.00
EMERGENCY SPILLWAY	294.00
TOP OF RISER	293.50
DEWATERING ORIFICE	291.00
BOTTOM OF BASIN	279.50
SEDIMENT STORAGE DEPTH REQUIRED	1.5'
SEDIMENT STORAGE PROVIDED	1.5'
SURFACE AREA - REQUIRED	34,368 SF
SURFACE AREA - PROVIDED	76,582 SF
DEWATERING ORIFICE DIAM. (IN)	6.0
RISER PIPE DIAM. (IN)	15

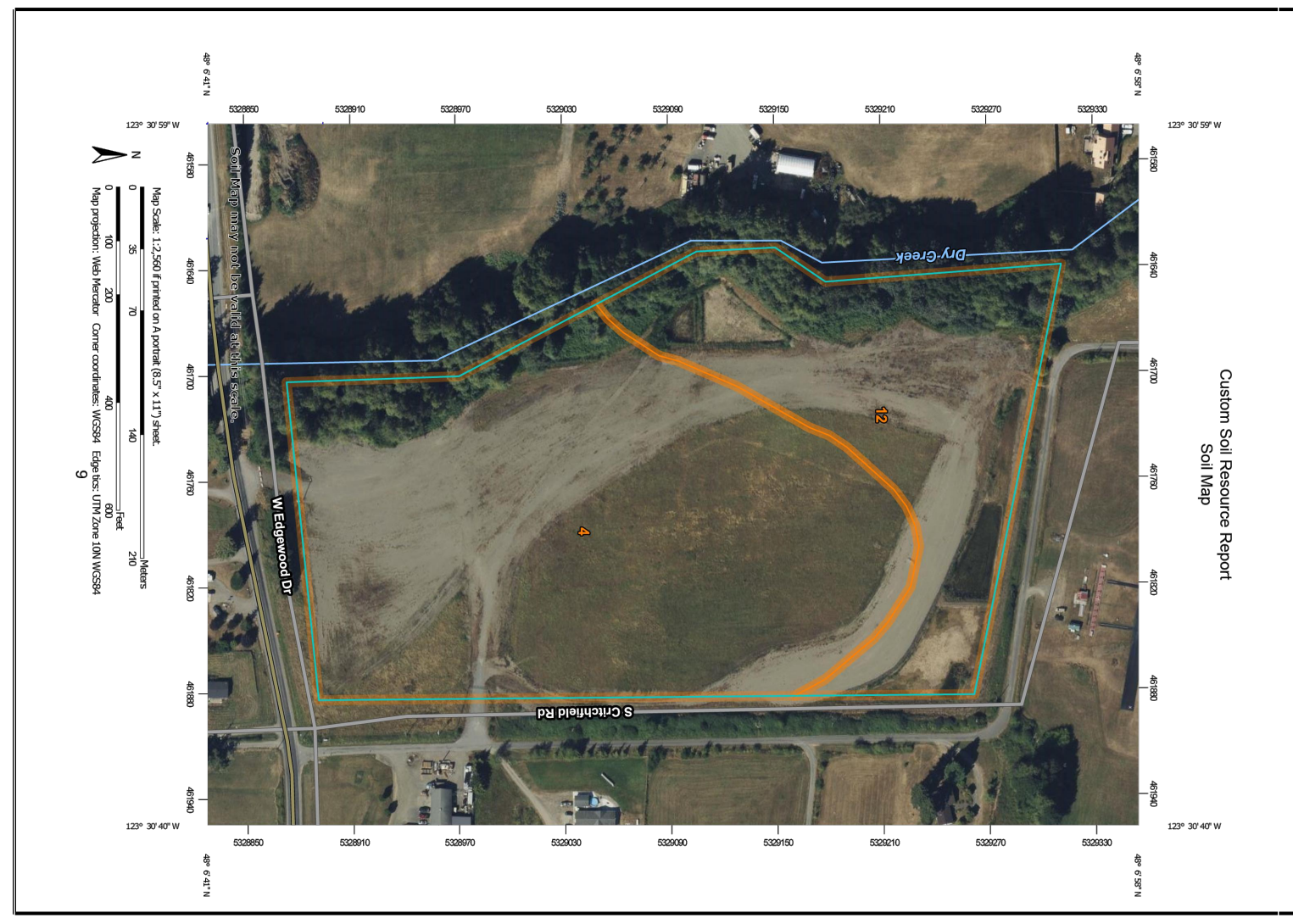
Sediment Pond Riser Detail
Revised June 2016



FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE.



VICINITY MAP
NO SCALE



SOILS MAP
NO SCALE

SOILS ON SITE: 4 - BELLINGHAM SILTY CLAY LOAM
12 - CLALLAM GRAVELLY SANDY LOAM

EROSION AND SEDIMENT CONTROL NARRATIVE

SITE ADDRESS:	W. EDGEWOOD DR., PORT ANGELES, WA 98363
EXISTING SITE CONDITIONS:	THE EXISTING SITE CONSISTS OF TWO ASPHALT DRIVEWAYS, A STORM SYSTEM, AND TWO STORMWATER PONDS. THE SUBJECT PARCEL IS LOCATED WITHIN "ZONE C" (AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS INDICATED BY THE FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY-PANEL NUMBER 5300210485E, EFFECTIVE DATE: FEBRUARY 23, 2001; PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
PROJECT DESCRIPTION:	THE PROJECT CONSISTS OF A BUILDING, CANOPY, PARKING FACILITIES AND STORMWATER MANAGEMENT SYSTEM.
TOTAL SITE AREA:	25.62 ACRES PRE-CONSTRUCTION IMPERVIOUS ACREAGE = 2.23 ACRES
DISTURBED AREA:	17.25 ACRES POST-CONSTRUCTION IMPERVIOUS ACREAGE = 8.47ACRES
RUNOFF:	THE PRE-CONSTRUCTION RUNOFF CURVE NUMBER IS 62. THE POST-CONSTRUCTION RUNOFF CURVE NUMBER IS 86.
SITE DRAINS TO:	THE NORTHEASTERN CORNER OF THE SITE AND UNDERNEATH S. CRITCHFIELD RD. THIS CULVERT ULTIMATELY DRAINS THROUGH A WOODED AREA AND INTO A NEARBY STREAM THAT IS TRIBUTARY TO DRY CREEK.
RECEIVING BODY:	DRY CREEK
SITE BMP'S:	FINAL LOCATIONS OF ALL SITE BMP'S INCLUDING DUMPSTER, VEHICLE FUELING AREAS, CONCRETE TRUCK WASH, MATERIAL STORAGE, AND TOPSOIL STOCKPILES SHALL BE DETERMINED BY CONTRACTOR. IF FINAL LOCATION OF BMP'S DIFFER FROM THE LOCATIONS SHOWN, CONTRACTOR SHALL MODIFY SWPPP AND INFORM WASHINGTON DEPARTMENT OF ECOLOGY OF NEW LOCATION OF BMP'S.
ADJACENT AREAS:	NORTH: S. CRITCHFIELD RD. SOUTH: W. EDGEWOOD DR. EAST: S. CRITCHFIELD RD. WEST: DRY CREEK
SOILS ON SITE:	4 - BELLINGHAM SILTY CLAY LOAM 12 - CLALLAM GRAVELLY SANDY LOAM REFER TO THIS SHEET FOR SOILS MAP BOUNDARIES.
EROSION AND SEDIMENT CONTROL MEASURES:	PROVIDE INLET PROTECTION OF ALL NEW AND EXISTING DRAINAGE STRUCTURES INDICATED ON THIS PLAN. ANY OFF-SITE BORROW OR SPOIL AREAS SHALL BE SUBJECT TO THE REQUIREMENTS SET FORTH BY THE WASHINGTON DEPARTMENT OF ECOLOGY. ALL EROSION AND SEDIMENT CONTROL MEASURES FOR OFF-SITE AREAS NOT COVERED BY A SEPARATE NPDES PERMIT OR SWPPP SHALL BE COORDINATED WITH THE WASHINGTON DEPARTMENT OF ECOLOGY. ALL TRENCH OR EXCAVATION GROUNDWATER CONTAINING SEDIMENT MUST BE EFFECTIVELY TREATED PRIOR TO DISCHARGE INTO THE STORM SEWER SYSTEM. USE ANY MEANS NECESSARY AND ACCEPTABLE TO THE JURISDICTION TO CONTROL DUST ON THE SITE AND PREVENT TRACKING SOIL OFF SITE.
CRITICAL AREAS:	DRY TO THE NORTH OF SITE WITH A 115' BUFFER ENCRDACHING ON SITE. TWO EXISTING ISOLATED WETLANDS ON SITE.
JURISDICTION:	ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION AT THE DISCRETION OF CITY OF PORT ANGELES AND THE WASHINGTON DEPARTMENT OF ECOLOGY.
INSPECTIONS:	INSPECTIONS OF OUTFALLS/EPSC MEASURES SHALL BE PERFORMED AT LEAST TWICE WEEKLY AND AT LEAST 72 HOURS APART. COORDINATION OF THESE INSPECTIONS IS THE RESPONSIBILITY OF THE OWNERS REPRESENTATIVE. DOCUMENT INSPECTIONS WEEKLY AND SUBMIT INSPECTION REPORT MONTHLY. A COPY OF THIS SWPPP AND INSPECTION REPORT IS TO BE MADE AVAILABLE ON SITE AT ALL TIMES. ON-SITE SWPPP IS TO BE LOCATED IN THE JOB TRAILER. OUTFALLS/EPSC AND OTHER PROTECTIVE MEASURES SHALL BE REPAIRED, REPLACED OR MODIFIED WITHIN 7 DAYS ACCORDING TO THE NEEDS IDENTIFIED IN THE INSPECTION REPORT.
SCHEDULE:	CONSTRUCTION ESTIMATED START DATE: 11.01.2025 CONSTRUCTION ESTIMATED COMPLETION DATE: 06.01.2026

STORMWATER POLLUTION PREVENTION PLAN GENERAL NOTES

OWNER/DEVELOPER	ENGINEER/PLAN DESIGNER
AMBROSE PROPERTY GROUP 6888 KEYSTONE CROSSING, SUITE 1150 INDIANAPOLIS, IN 46240	CESO, INC. 2800 CORPORATE EXCHANGE DR., SUITE 400 COLUMBUS, OH 43231
CONTACT: ERIC SEAMANDS PHONE: 317-490-0384	CONTACT: JOSEPH JORGE PHONE: 330-056-4106 EMAIL: JJORGE@CESOINC.COM

STORMWATER POLLUTION PREVENTION PLAN NOTES

- SITE EPSC SHALL BE CHECKED AND IF NECESSARY, REPAIRED WEEKLY AND WITHIN 24 HOURS AFTER EACH RAINFALL GREATER THAN 1/2" IN THE EVENT OF CONTINUOUS RAINFALL. EROSION CONTROLS SHALL BE CHECKED DAILY.
- REMOVE TRAPPED SEDIMENT FROM SEDIMENT CONTROLS AT OR BEFORE 50% OF DESIGN CAPACITY.
- ALL AREAS TO REMAIN BARE GREATER THAN 7 DAYS MUST BE TEMPORARILY STABILIZED.
- THERE SHALL BE NO DIRT, DEBRIS, OR STORAGE OF MATERIALS IN THE STREET.
- GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STONE LAYER OF THE CONSTRUCTION ENTRANCE.
- STRAW BALES SHALL NOT BE USED AS A FORM OF EROSION CONTROL.
- ALL EPSC PROPOSED MUST BE INSTALLED TO CONTROL RAINFALL AND RUNOFF FOR THE 24HR, 24-HOUR STORM EVENT.
- QUALITY ASSURANCE INSPECTION OF EROSION AND SEDIMENT CONTROLS SHALL BE PERFORMED WITHIN ONE MONTH OF CONSTRUCTION COMMENCING PER SECTION 6 OF THE STATE OF WASHINGTON NPDES PERMIT GUIDELINES.
- ALL EROSION AND SEDIMENTATION CONTROL SHALL BE PERFORMED ACCORDING TO SWPPP AND DETAIL PLANS; ACCORDING TO THE LATEST WASHINGTON DEPARTMENT OF ECOLOGY AUTHORIZATION FOR CONSTRUCTION ACTIVITY UNDER THE "NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM" (NPDES); ANY AND ALL REQUIRED PERMITS, REPORTS, AND RELATED DOCUMENTS. SEE THIS SHEET FOR SWPPP RULES AND REGULATIONS. ALL CONTRACTORS AND SUBCONTRACTORS MUST BECOME FAMILIAR WITH ALL OF THE ABOVE. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED IN THE FIELD BY THE INSPECTOR.
 - CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AND GRADE CHANGES TO THE SITE AT NO ADDITIONAL COST TO OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
 - CONTRACTOR SHALL MINIMIZE CLEARING AND DISTURBANCE TO THE ENVIRONMENT TO THE MAXIMUM EXTENT POSSIBLE OR AS REQUIRED BY THE GENERAL PERMIT. DO NOT DISTURB AREA OUTSIDE OF THE LIMITS OF DISTURBANCE (L.O.D.).
 - SEDIMENT STRUCTURE AND PERIMETER SEDIMENT BARRIERS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING WITHIN SEVEN (7) DAYS FROM THE START OF CLEARING AND GRUBBING, AND SHALL CONTINUE TO FUNCTION UNTIL THE SLOPE DEVELOPMENT AREA IS RESTABILIZED.
 - SOIL STABILIZATION:
 - PERMANENT SOIL STABILIZATION OF DISTURBED AREAS BY MEANS OF VEGETATION, LANDSCAPE TYPE, MULCHING, MATTING, SOD, RIP RAP, AND OTHER APPROVED LANDSCAPING TECHNIQUES TO BE APPLIED AS FOLLOWS:
 - WITHIN SEVEN (7) DAYS OF ANY AREA THAT WILL BE DORMANT FOR ONE (1) YEAR OR MORE.
 - WITHIN TWO (2) DAYS OF ANY AREA WITHIN 50 FEET OF A STREAM AT FINAL GRADE.
 - WITHIN SEVEN (7) DAYS FOR ANY OTHER AREA AT FINAL GRADE.
 - TEMPORARY SOIL STABILIZATION OF DISTURBED AREAS BY MEANS OF TEMPORARY VEGETATION, MULCHING, GEOTEXTILES, SOD, PRESERVATION OF EXISTING VEGETATION, AND OTHER APPROVED TECHNIQUES TO BE APPLIED AS FOLLOWS:
 - WITHIN TWO (2) DAYS OF ANY AREA WITHIN 50 FEET OF A STREAM NOT AT FINAL GRADE, WITHIN SEVEN (7) DAYS OF ANY AREA THAT WILL BE DORMANT FOR MORE THAN FOURTEEN (14) DAYS, BUT LESS THAN ONE (1) YEAR, PRIOR TO THE ONSET OF WINTER WEATHER FOR AREAS THAT WILL BE IDLE OVER WINTER.
 - TEMPORARY SEEDING, MULCHING, AND FERTILIZER SPECIFICATIONS:
 - SEEDING: ANNUAL RYEGRASS AT 2.02 #/1,000 S.F.
 - MULCHING: STRAW MATERIAL SHALL BE UNROTTED SMALL GRAIN STRAW APPLIED AT A RATE OF TWO (2) TON/ACRE, OR 80-100 POUNDS PER 1,000 S.F. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE FREE OF PROHIBITIVE NOXIOUS WEEDS. MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICAL MEANS, FROM NOVEMBER 01 THRU MARCH 15 INCREASE THE RATE OF STRAW MULCH TO THREE (3) TON/ACRE.
 - FERTILIZER: APPLY FERTILIZER AT HALF THE RATE OF PERMANENT APPLICATION AND AS PER STATE DOT SPECIFICATIONS. IF PROJECT CONDITIONS PREVENT FERTILIZING THE SOIL, THEN THIS ITEM MAY BE WAIVED.
 - PERMANENT SEEDING SHALL BE IN ACCORDANCE WITH WASHINGTON WASHINGTON DEPARTMENT OF ECOLOGY STANDARD SPECIFICATIONS.
 - SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION. ALL SLOPES 3:1 OR GREATER THAN 3:1 SHALL BE FERTILIZED, SEEDED, EROSION CONTROL BLANKETS INSTALLED, AND LOW MAINTENANCE GRASS SEED MIX APPLIED ON THE SLOPES, AS SPECIFIED IN THE PLANS.
 - NO SOLID (OTHER THAN SEDIMENT) OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORM WATER RUNOFF. ALL NON-SEDIMENT POLLUTANTS MUST BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL GUIDELINES. WASH OUT OF CEMENT TRUCKS SHOULD OCCUR IN DESIGNATED PIT OR DIKED AREAS, WHERE WASHINGS CAN BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE WHEN THEY HARDEN. STORAGE TANKS SHOULD ALSO BE LOCATED IN PIT OR DIKED AREAS. IN ADDITION, SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS TO CLEAN AND CONTAIN FUEL AND CHEMICAL SPILLS MUST BE KEPT ON SITE.
 - IF THE ACTION OF VEHICLES TRAVELING OVER THE STABILIZED CONSTRUCTION EXIT DOES NOT SUFFICIENTLY REMOVE MOST OF THE DIRT AND MUD, THEN THE TIRES MUST BE WASHED BEFORE VEHICLES ENTER A PUBLIC ROAD. PROVISIONS MUST BE MADE TO INTERCEPT THE WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
 - RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DISPOSED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE SITE THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
 - DUST CONTROL USING APPROVED MATERIALS MUST BE PERFORMED AT ALL TIMES. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION IS PROHIBITED.
 - ON-SITE AND OFF-SITE STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION BY THE USE OF BEST MANAGEMENT PRACTICES. THESE AREAS MUST BE SHOWN IN THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS. AT A MINIMUM, A SILT FENCE IS TO BE PLACED AT PERIMETER OF STOCKPILE AREA TO PREVENT SOIL FROM LEAVING THE STOCKPILE AREA.
 - ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE ROADWAYS OR INTO THE STORM SEWERS MUST BE REMOVED IMMEDIATELY.
 - ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR ASPHALT FOR ROAD CONSTRUCTION.
 - THE LAST LAYER OF SOIL, INCLUDING TOP SOIL, SHALL BE COMPACTED TO 80% - 85% OF THE MAXIMUM STANDARD PROCTOR DENSITY, IN AREAS OUTSIDE THE PARKING LOT THAT WILL RECEIVE VEGETATION. THIS IS PARTICULARLY IMPORTANT IN CUT SLOPE AND EMBANKMENT AREAS. IN PAVEMENT AND ISLAND AREAS, IT IS RECOMMENDED THAT THE SOIL BE COMPACTED TO 96% AND 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY RESPECTIVELY; THE LAST COMPACTED LAYER MAY BE SCARIFIED TO IMPROVE THE SOIL GROWTH CHARACTERISTICS.
 - IN THE EVENT THAT HIGH GROUND WATER IS ENCOUNTERED, CONTRACTOR IS RESPONSIBLE FOR DESIGNING AND IMPLEMENTING A PLAN TO CONTROL BOTH SURFACE AND GROUND WATER DURING THE COURSE OF CONSTRUCTION. ALL DEWATERING ACTIVITIES SHALL PASS THROUGH A BMP PRIOR TO LEAVING THE SITE.

INSPECTION/MAINTENANCE NOTES

- FILTER BARRIERS, INCLUDING BUT NOT LIMITED TO SILT FENCE AND INLET PROTECTION, SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY HALF THE HEIGHT OF THE BARRIER.
- IF THE FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE, AND THE BARRIER IS STILL REQUIRED, THE FABRIC SHALL BE REPLACED PROMPTLY.
- ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED, AND SEEDDED.
- ALL CONTROL MEASURES STATED IN THE SWPPP SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL TEMPORARY OR PERMANENT STABILIZATION OF THE SITE IS ACHIEVED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED BY A QUALIFIED PERSON IN ACCORDANCE TO THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED ACCORDING TO THE FOLLOWING:
 - INLET PROTECTION DEVICES AND CONTROLS SHALL BE REPAIRED OR REPLACED WHEN THEY SHOW SIGNS OF UNDERMINING AND OR DETERIORATION.
 - ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STANDING OF GRASS IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
 - SILT FENCES AND CHECK DAMS SHALL BE REPAIRED TO THEIR ORIGINAL CONDITION IF DAMAGED. SEDIMENT ACCUMULATION MUST BE REMOVED WHEN SEDIMENT HEIGHT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE OR CHECK DAM.
 - OUTLET STRUCTURES IN SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT MUST BE REMOVED FROM BASINS AND OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 40%.
 - MINIMIZE OFF-SITE SEDIMENT TRACKING OF VEHICLES BY THE USE OF STONE MATERIAL IN ALL CONSTRUCTION ENTRANCES, ALONG WITH REGULARLY SCHEDULED SWEEPING/GOOD HOUSEKEEPING. STABILIZED CONSTRUCTION ENTRANCES TO BE PROPERLY MAINTAINED BY GENERAL CONTRACTOR AND IN GOOD WORKING ORDER AT ALL TIMES. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE STONE AS CONDITIONS DEMAND.
 - THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE) BY GENERAL CONTRACTOR. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
 - CONTRACTORS AND SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING ALL SEDIMENT FROM THE SITE, INCLUDING DETENTION BASINS AND STORM SEWER SYSTEMS. SEDIMENT DEPOSITION DURING SITE STABILIZATION MUST ALSO BE REMOVED.
 - ALL RIP RAP MUST BE PLACED OVER GEOTEXTILE FILTER.
 - STONE CONSTRUCTION EXIT TO BE MAINTAINED BY GENERAL CONTRACTOR UNTIL SITE HAS BEEN PAVED OR IS NO LONGER REQUIRED.

SOLID/SANITARY/TOXIC WASTES NOTES

- CONTAINERS SHALL BE AVAILABLE FOR DISPOSAL OF DEBRIS, TRASH, HAZARDOUS OR PETROLEUM WASTES. ALL CONTAINERS MUST BE COVERED AND LEAK-PROOF. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THE PERTINENT MATERIAL.
- BRICKS, HARDENING CONCRETE AND SOIL WASTE SHALL BE FREE FROM CONTAMINATION WHICH MAY LEACH CONSTITUENTS TO WATERS OF THE STATE.
- CLEAN CONSTRUCTION WASTES THAT WILL BE DISPOSED INTO THE PROPERTY SHALL BE SUBJECT TO ANY LOCAL PROHIBITIONS FROM THIS TYPE OF DISPOSAL.
- ALL CONSTRUCTION AND DEMOLITION DEBRIS (C&DD) WASTE SHALL BE DISPOSED OF IN AN APPROVED C&DD LANDFILL. CONSTRUCTION DEBRIS MAY BE DISPOSED OF ON-SITE, BUT DEMOLITION DEBRIS MUST BE DISPOSED OF IN AN APPROVED LANDFILL. ALSO, MATERIALS WHICH CONTAIN ASBESTOS MUST COMPLY WITH AIR POLLUTION REGULATIONS.
- AREA SHALL BE DESIGNATED BY CONTRACTOR AND SHOWN ON SWPPP MAP FOR MIXING OR STORAGE OF COMPOUNDS SUCH AS FERTILIZERS, LIME ASPHALT, OR CONCRETE. THESE DESIGNATED AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORMWATER DRAINAGE AREA.
- EQUIPMENT FUELING & MAINTENANCE SHALL BE IN DESIGNATED AREAS ONLY.
- A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN MUST BE DEVELOPED FOR SITES WITH ONE ABOVE-GROUND STORAGE TANK OF 660 GALLONS OR MORE, TOTAL ABOVE-GROUND STORAGE OF 1,330 GALLONS OR BELOW-GROUND STORAGE OF 4,200 GALLONS OF FUEL.
- ALL DESIGNATED CONCRETE WASHOUT AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS OR OTHER STORMWATER DRAINAGE AREAS.
- ALL CONTAMINATED SOIL MUST BE TREATED AND/OR DISPOSED OF IN AN APPROVED SOLID WASTE MANAGEMENT FACILITY OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITIES.
- THE CONTRACTOR SHALL CONTACT WASHINGTON DEPARTMENT OF ECOLOGY, THE LOCAL FIRE DEPARTMENT AND THE LOCAL EMERGENCY PLANNING COMMITTEE IN THE EVENT OF A PETROLEUM SPILL (>25 GALLONS) OR THE PRESENCE OF SHEEN.
- OPEN BURNING IS NOT PERMITTED ON THE SITE.

BUFFER RESTORATION AND MITIGATION NOTES

- FOR ANY DISTURBED EARTH WITHIN STREAM BUFFER ZONES, SEED WITH EROSION CONTROL BLANKET. GROUNDCOVERS SUFFICIENT TO RESTRAIN EROSION IN THE BUFFER AREA ARE REQUIRED.
- TREES REMOVED WITHIN THE 30' STREAM BUFFER ZONE SHALL BE REPLANTED AT A RATE CONSISTENT WITH THE RATES AND TYPES OF TREES RECOMMENDED BY THE TENNESSEE DEPARTMENT OF AGRICULTURE DIVISION OF FORESTRY.
- PERMANENT CURB INSTALLATION IS PROPOSED AND WILL PREVENT SITE SHEET FLOW TO STREAM BUFFER ZONE.

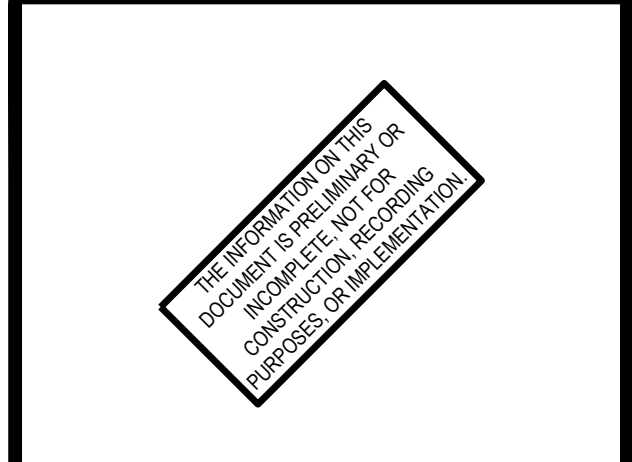
GENERAL NOTES

- ADDITIONAL EROSION AND SEDIMENT CONTROLS MAY BE REQUIRED AS IDENTIFIED WITH WASHINGTON DEPARTMENT OF ECOLOGY AND LOCAL JURISDICTION INSPECTOR.
- CONTRACTOR SHALL REVIEW THE COMPLETE DRAWING SET AND NOTIFY THE DESIGN PROFESSIONAL IN WRITING PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE FOUND WITHIN THE DRAWINGS OR WITH ACTUAL FIELD CONDITIONS.
- ALL STORMWATER POLLUTION PREVENTION PLANS, NOTES AND DETAILS SHALL COMPLY WITH THE WASHINGTON DEPARTMENT OF TRANSPORTATION (WSDOT).
- CONTRACTOR IS RESPONSIBLE TO MAINTAIN EROSION CONTROL MEASURES UNTIL ADEQUATE RE-VEGETATION AND STABILIZATION ARE ACHIEVED.
- CONTRACTOR SHALL PROVIDE AND POST NOTICE OF INTENT (NOI) WITH PROJECT DESCRIPTION AND CONTACT NUMBERS.
- CONTRACTOR SHALL MODIFY THE SEQUENCE OF CONSTRUCTION BASED ON MEANS AND METHODS. ALL EROSION AND SEDIMENT CONTROL MEASURES FROM THE BEGINNING OF EARTH DISTURBING ACTIVITIES TO THE FINAL COMPLETION OF THE PROJECT ARE THE RESPONSIBILITY OF THE SITE WORK CONTRACTOR.

STANDARD NOTES

- APPROVAL OF THIS EROSION / SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTIONS, CHANNELS, RETENTION FACILITIES, UTILITIES).
- THE IMPLEMENTATION OF THIS ESC PLAN AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC BMP'S IS THE RESPONSIBILITY OF THE APPLICANT UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION / LANDSCAPING IS ESTABLISHED.
- CLEARLY FLAG BOUNDARIES OF CLEARING LIMITS SHOWN ON THIS PLAN IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY APPLICANT FOR THE DURATION OF CONSTRUCTION.
- CONSTRUCT THE ESC BMP'S SHOWN ON THE PLAN IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH MANNER AS TO ENSURE THAT SEDIMENT AND LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- THE ESC BMP'S SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, UPGRADE THESE ESC BMP'S AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
- THE APPLICANT SHALL INSPECT THE ESC BMP'S DAILY AND MAINTAIN THEM AS NECESSARY TO ENSURE CONTINUED FUNCTIONING.
- INSPECT AND MAINTAIN THE ESC BMP'S ON INACTIVE SITES A MINIMUM OF ONCE A MONTH OR WITHIN 48 HOURS FOLLOWING A MAJOR STORM EVENT (I.E. A 24-HOUR STORM EVENT WITH A 10-YR OR GREATER RECURRENCE INTERVAL).
- AT NO TIME SHALL THE SEDIMENT EXCEED 50-PERCENT OF THE SUMP DEPTH OR HAVE LESS THAN 6-INCHES OF CLEARANCE FROM THE SEDIMENT SURFACE TO THE INVERT OF THE LOWEST PIPE. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- INSTALL STABILIZED CONSTRUCTION ENTRANCES AT THE BEGINNING OF CONSTRUCTION AND MAINTAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

REFER TO SHEET C5.0 FOR SWPPP PHASE I PLAN
REFER TO SHEET C5.1 FOR SWPPP PHASE II PLAN
REFER TO SHEET 5.3 FOR SWPPP DETAILS
REFER TO SHEET C4.0 FOR GRADING PLAN



AMBROSE PROPERTY GROUP

PROJECT PENINSULA
WEDGEWOOD DR.,
PORT ANGELES, WA 98363

Revisions / Submissions		
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/18

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Project Number: 763838
Scale: AS SHOWN
Drawn By: QSS
Checked By: CG
Date: 04/18/2025
Issue: NOT FOR CONSTRUCTION

Drawing Title:
SWPPP NOTES

C5.2

- A floating pond skimmer may be used for the sediment trap outlet if approved by the Local Permitting Authority.
- Sediment traps may not be feasible on utility projects due to the limited work space or the short-term nature of the work. Portable tanks may be used in place of sediment traps for utility projects.

PS TS

Design and Installation Specifications

- See **Figure II-3.26: Cross Section of Sediment Trap** and **Figure II-3.27: Sediment Trap Outlet** for details.
- To determine the sediment trap geometry, first calculate the design surface area (SA) of the trap, measured at the invert of the weir. Use the following equation:

$$SA = FS(Q_2/V_s)$$

where

$Q_2 =$

- Option 1 - Single Event Hydrograph Method:
 Q_2 = Peak volumetric flow rate calculated using a 10-minute time step from a Type 1A, 2-year, 24-hour frequency storm for the developed condition. The 10-year peak volumetric flow rate shall be used if the project size, expected timing and duration of construction, or downstream conditions warrant a higher level of protection.
- Option 2 - For construction sites that are less than 1 acre, the Rational Method may be used to determine Q_2 .

V_s = The settling velocity of the soil particle of interest. The 0.02 mm (medium silt) particle with an assumed density of 2.65 g/cm³ has been selected as the particle of interest and has a settling velocity (V_s) of 0.00096 ft/sec.

FS = A safety factor of 2 to account for non-ideal settling.

Therefore, the equation for computing sediment trap surface area becomes:

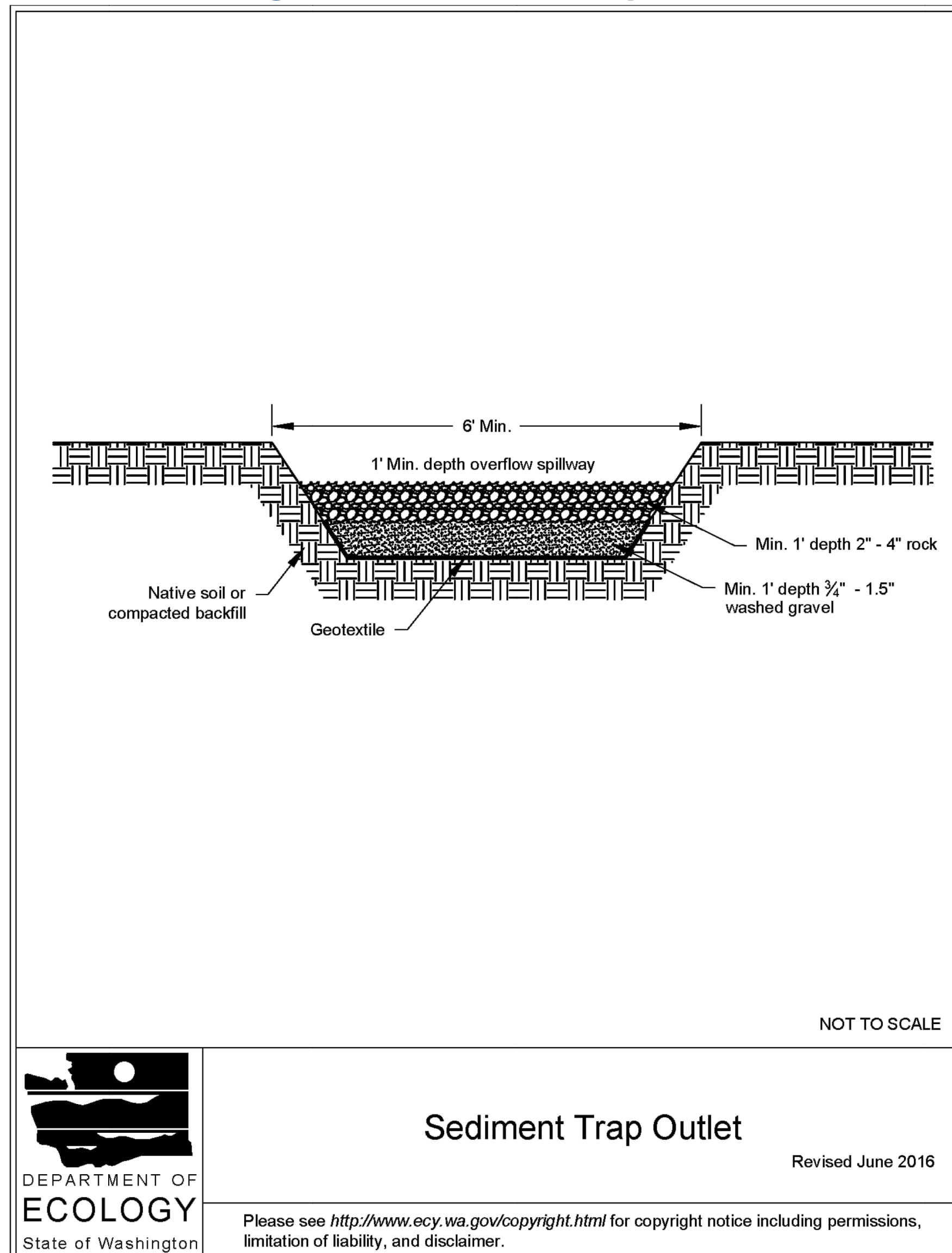
$$SA = 2 \times Q_2 / 0.00096$$

or

$$2080 \text{ square feet per cfs of inflow}$$

- Sediment trap depth shall be 3.5 feet minimum from the bottom of the trap to the top of the overflow weir.
- To aid in determining sediment depth, all sediment traps shall have a staff gauge with a prominent mark 1-foot above the bottom of the trap.

Figure II-3.27: Sediment Trap Outlet



- Design the discharge from the sediment trap by using the guidance for discharge from temporary sediment ponds in **BMP C241: Sediment Pond (Temporary)**.

Maintenance Standards

- Sediment shall be removed from the trap when it reaches 1-foot in depth.
- Any damage to the trap embankments or slopes shall be repaired.

Figure II-3.1: Stabilized Construction Access

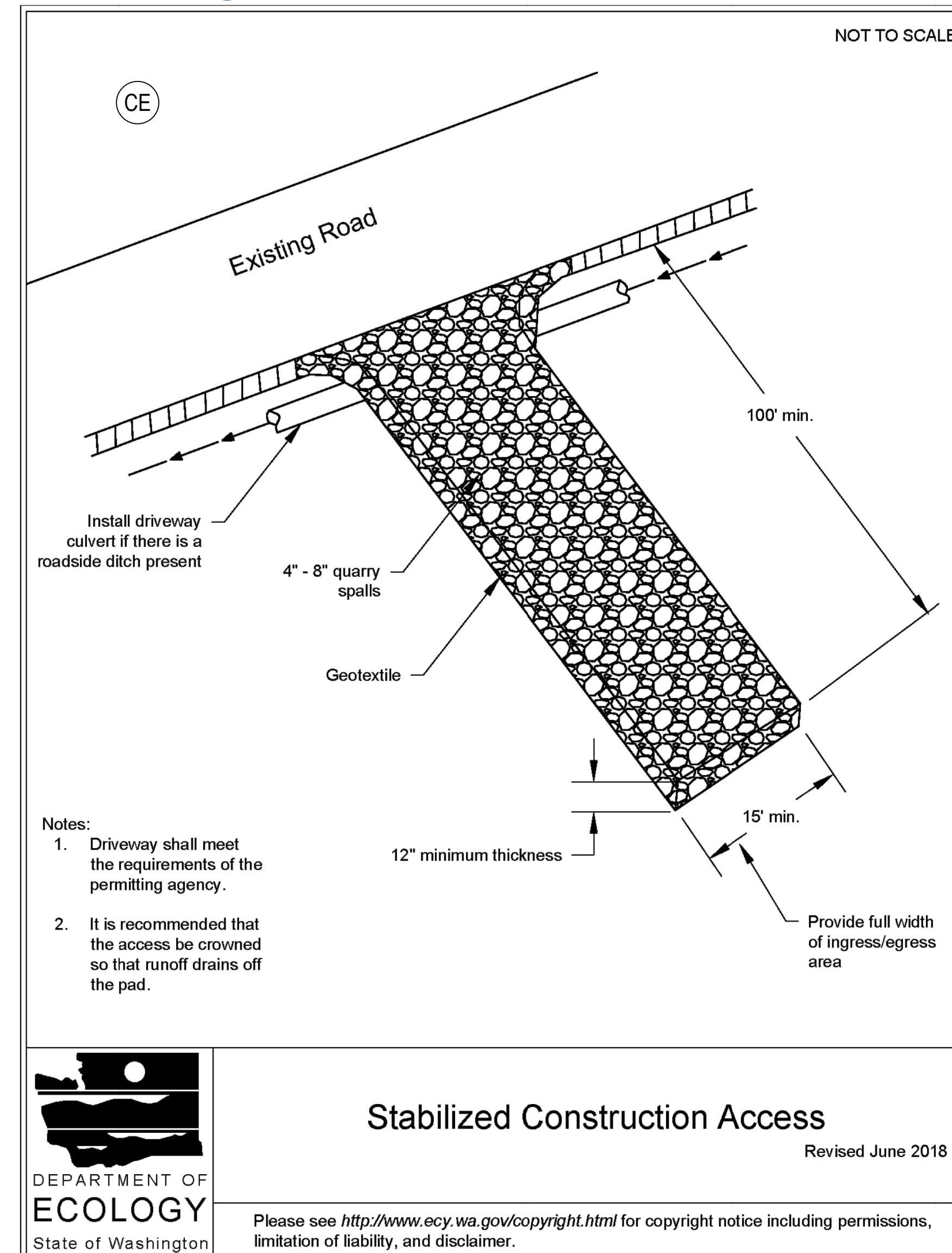


Figure II-3.26: Cross Section of Sediment Trap

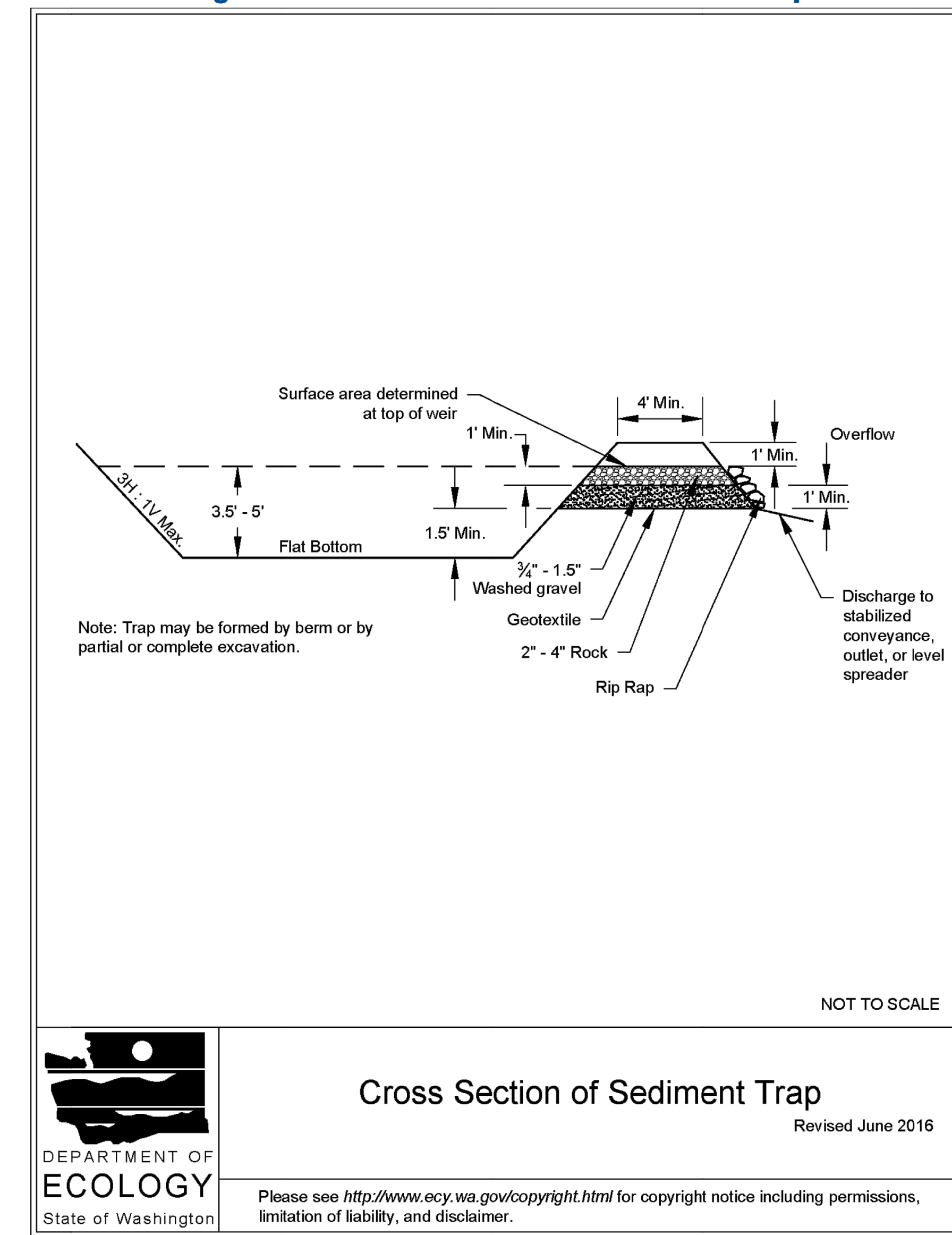
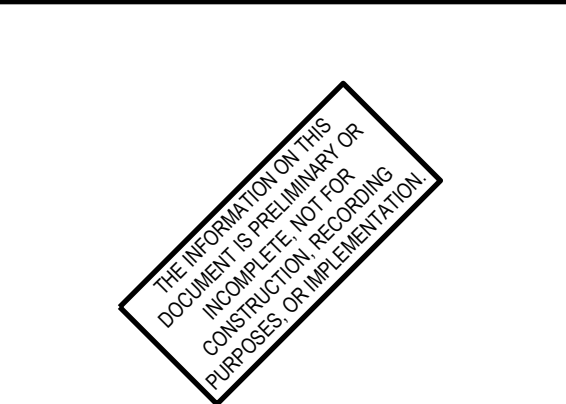
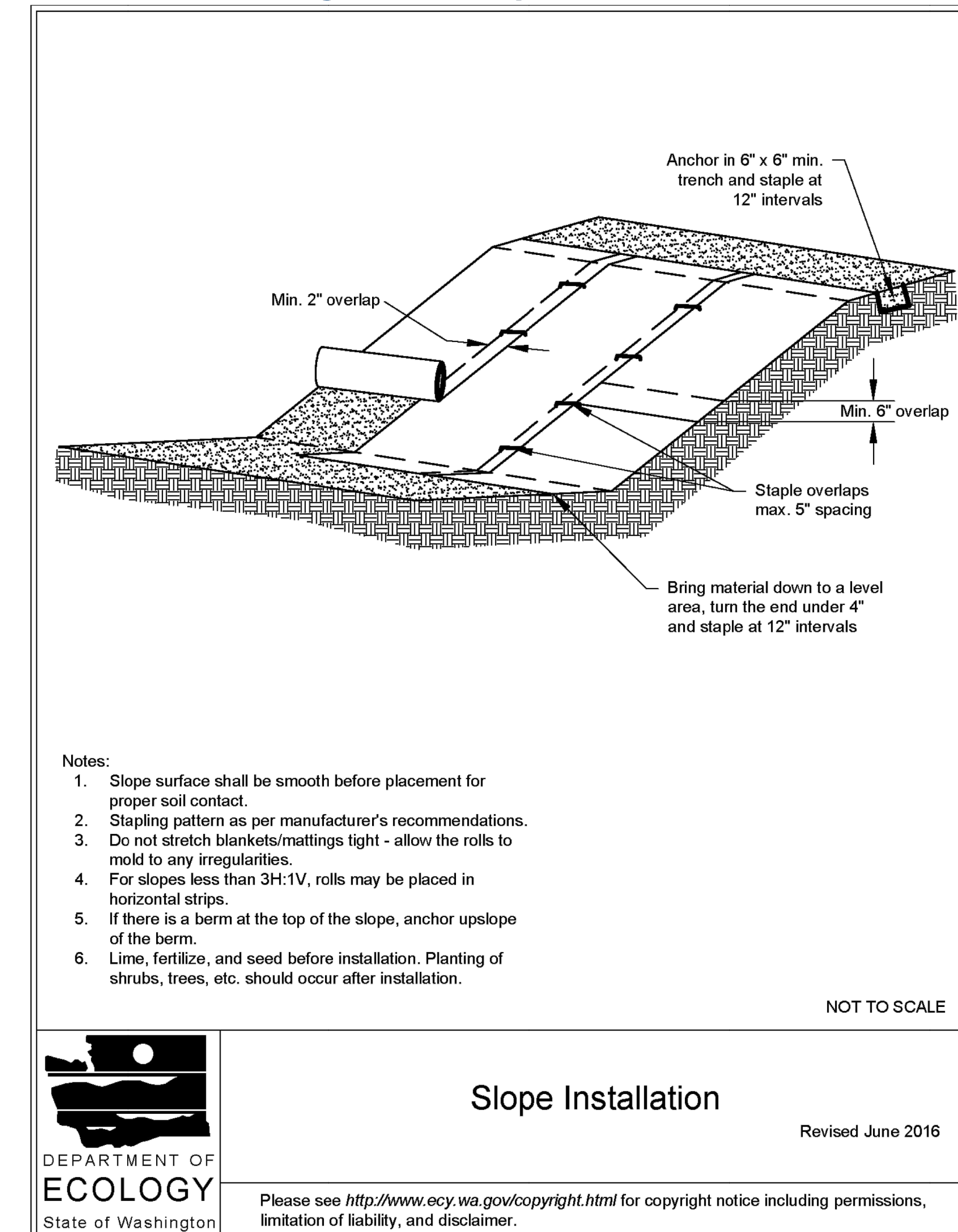


Figure II-3.4: Slope Installation



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Project Number:	763838
Scale:	AS SHOWN
Drawn By:	QSS
Checked By:	CG
Date:	04/18/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
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Maintenance Standards

Reseed any seeded areas that fail to establish at least 75 percent cover (100 percent cover for areas that receive sheet or concentrated flows). If reseeding is ineffective, use an alternate method such as sodding, mulching, nets, or blankets.

- Reseed and protect by mulch any areas that experience erosion after achieving adequate cover. Reseed and protect by mulch any eroded area.
- Supply seeded areas with adequate moisture, but do not water to the extent that it causes runoff.

Approved as Functionally Equivalent

Ecology has approved products as able to meet the requirements of this BMP. The products did not pass through the Technology Assessment Protocol – Ecology (TAPE) process. Local jurisdictions may choose not to accept these products, or may require additional testing prior to consideration for local use. Products that Ecology has approved as functionally equivalent are available for review on Ecology's website at:

<https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Emerging-stormwater-treatment-technologies>

BMP C121: Mulching

Purpose

Mulching soils provides immediate temporary protection from erosion. Mulch also enhances plant establishment by conserving moisture, holding fertilizer, seed, and topsoil in place, and moderating soil temperatures. There are a variety of mulches that can be used. This section discusses only the most common types of mulch.

Conditions of Use

As a temporary cover measure, mulch should be used:

- For less than 30 days on disturbed areas that require cover.
- At all times for seeded areas, especially during the wet season and during the hot summer months.
- During the wet season on slopes steeper than 3H:1V with more than 10 feet of vertical relief.

Mulch may be applied at any time of the year and must be refreshed periodically.

For seeded areas, mulch may be made up of 100 percent:

- cottonseed meal;
- fibers made of wood, recycled cellulose, hemp, or kenaf;

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Mulch Material	Guideline	Description
	Remarks	This is a cost-effective way to dispose of debris from clearing and grubbing, and it eliminates the problems associated with burning. Generally, it should not be used on slopes above approx. 10% because of its tendency to be transported by runoff. It is not recommended within 200 feet of surface waters. If permanent seeding or planting is expected shortly after mulch, the decomposition of the chipped vegetation may tie up nutrients important to grass establishment. Note: thick application of this material over existing grass, herbaceous species, and some groundcovers could smother and kill vegetation.
Wood-Based Mulch	Quality Standards	No visible water or dust during handling. Must be purchased from a supplier with a Solid Waste Handling Permit or one exempt from solid waste regulations.
	Application Rates	2" thick min.; approx. 100 tons per acre (approx. 750 lbs. per cubic yard)
	Remarks	This material is often called "wood straw" or "hog fuel". The use of mulch ultimately improves the organic matter in the soil. Special caution is advised regarding the source and composition of wood-based mulches. Its preparation typically does not provide any weed seed control, so evidence of residual vegetation in its composition or known inclusion of weed plants or seeds should be monitored and prevented (or minimized).
Wood Strand Mulch	Quality Standards	A blend of loose, long, thin wood pieces derived from native conifer or deciduous trees with high length-to-width ratio.
	Application Rates	2" thick min.
	Remarks	Cost-effective protection when applied with adequate thickness. A minimum of 95-percent of the wood strand shall have lengths between 2 and 10-inches, with a width and thickness between 1/16 and 1/2-inches. The mulch shall not contain resin, tannin, or other compounds in quantities that would be detrimental to plant life. Sawdust or wood shavings shall not be used as mulch. [Specification 9-14.4(4) from the <i>Standard Specifications for Road, Bridge, and Municipal Construction (WSDOT, 2016)</i>]

BMP C122: Nets and Blankets

Purpose

Erosion control nets and blankets are intended to prevent erosion and hold seed and mulch in place on steep slopes and in channels so that vegetation can become well established. In addition, some nets and blankets can be used to permanently reinforce turf to protect drainage ways during high flows.

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- compost;
- or blends of these.

Tackifier shall be plant-based, such as guar or alpha plantago, or chemical-based such as polyacrylamide or polymers.

Generally, mulches come in 40-50 pound bags. Seed and fertilizer are added at time of application.

Recycled cellulose may contain polychlorinated biphenyl (PCBs). Ecology recommends that products should be evaluated for PCBs prior to use.

Refer to [BMP C126: Polyacrylamide \(PAM\) for Soil Erosion Protection](#) for conditions of use. PAM shall not be directly applied to water or allowed to enter a water body.

Any mulch or tackifier product used shall be installed per the manufacturer's instructions.

Design and Installation Specifications

For mulch materials, application rates, and specifications, see [Table II-3.6: Mulch Standards and Guidelines](#). Consult with the local supplier or the local conservation district for their recommendations. Increase the application rate until the ground is 95% covered (i.e. not visible under the mulch layer). Note: Thickness may be increased for disturbed areas in or near sensitive areas or other areas highly susceptible to erosion.

Where the option of "Compost" is selected, it should be a coarse compost that meets the size gradations listed in [Table II-3.5: Size Gradations of Compost as Mulch Material](#) when tested in accordance with Test Method 02.02-B found in *Test Methods for the Examination of Composting and Compost (Thompson, 2001)*.

Table II-3.5: Size Gradations of Compost as Mulch Material

Sieve Size	Percent Passing
3"	100%
1"	90% - 100%
3/4"	70% - 100%
1/4"	40% - 100%

Mulch used within the ordinary high-water mark of surface waters should be selected to minimize potential flotation of organic matter. Composted organic materials have higher specific gravities (densities) than straw, wood, or chipped material. Consult the Hydraulic Permit Authority (HPA) for mulch mixes if applicable.

Maintenance Standards

The thickness of the mulch cover must be maintained.

Any areas that experience erosion shall be remulched and/or protected with a net or blanket. If the erosion problem is drainage related, then the problem shall be fixed and the eroded area remulched.

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BMP C140: Dust Control

Purpose

Dust control prevents wind transport of dust from disturbed soil surfaces onto roadways, drainage ways, and surface waters.

Conditions of Use

Use dust control in areas (including roadways) subject to surface and air movement of dust where on-site or off-site impacts to roadways, drainage ways, or surface waters are likely.

Design and Installation Specifications

- Vegetate or mulch areas that will not receive vehicle traffic. In areas where planting, mulching, or paving is impractical, apply gravel or landscaping rock.
- Limit dust generation by clearing only those areas where immediate activity will take place, leaving the remaining area(s) in the original condition. Maintain the original ground cover as long as practical.
- Construct natural or artificial windbreaks or windscreens. These may be designed as enclosures for small dust sources.
- Sprinkle the site with water until the surface is wet. Repeat as needed. To prevent carryout of mud onto the street, refer to [BMP C105: Stabilized Construction Access](#) and [BMP C106: Wheel Wash](#).
- Irrigation water can be used for dust control. Irrigation systems should be installed as a first step on sites where dust control is a concern.
- Spray exposed soil areas with a dust palliative, following the manufacturer's instructions and cautions regarding handling and application. Used oil is prohibited from use as a dust suppressant. Local governments may approve other dust palliatives such as calcium chloride or PAM.
- PAM ([BMP C126: Polyacrylamide \(PAM\) for Soil Erosion Protection](#)) added to water at a rate of 0.5 pounds per 1,000 gallons of water per acre and applied from a water truck is more effective than water alone. This is due to increased infiltration of water into the soil and reduced evaporation. In addition, small soil particles are bonded together and are not as easily transported by wind. Adding PAM may reduce the quantity of water needed for dust control. Note that the application rate specified here applies to this BMP, and is not the same application rate that is specified in [BMP C126: Polyacrylamide \(PAM\) for Soil Erosion Protection](#), but the downstream protections still apply.

Refer to [BMP C126: Polyacrylamide \(PAM\) for Soil Erosion Protection](#) for conditions of use. PAM shall not be directly applied to water or allowed to enter a water body.

- Contact your local Air Pollution Control Authority for guidance and training on other dust control measures. Compliance with the local Air Pollution Control Authority constitutes

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precipitation or dry periods may be necessary to ensure that the outflow relationship covers the range of modeled flows.

Ecology acknowledges that it can be challenging to determine the location(s) of flows to and from wetlands. In some cases, there will be a clear channel that is the source of the inflows and outflows, while in others, the water may disperse over a wide area. An alternative would be to gather nearly continuous (every 15 minute) rainfall data along with wetland stage data (hydroperiod monitoring) and adjust the storage and discharge rate within the model using these data. If the flow data or estimation in the model are not available, assume there is no surface outflow for the wetland (closed depression).

Chapter 8 of *Wetlands and Urbanization, Implications for the Future (Azous and Horner, 1997)* indicates that a complete wetland water balance includes precipitation, evapotranspiration, surface inflow, surface outflow, groundwater exchange, and change in wetland storage using a tipping-bucket gage and continuous flow measurements. The wetland assessment as part of this Method 1 needs to consider the more protective approach to develop that relationship. A scientist (e.g. wetland scientist or hydrologist) may determine that the groundwater flow is a significant characteristic of the outflow of the system. In this case the project proponent may need to determine the groundwater regime of the system.

Model Construction and Simulation

The project proponent should develop a stage-storage-discharge (SSD) table that represents the volume of water that ponds in the wetland and the flow rate of water that discharges from the wetland at a given stage.

Having a reliable SSD table that represents the wetland is essential to evaluate the effects of development in the model. Wetland bathymetry and contour data by field measurement or using equations to represent the volume-area-depth relations of wetlands and wetland flow monitoring data are critical to develop the SSD table for the wetland.

In the absence of actual wetland flow monitoring data, it may be possible to develop a SSD table for the wetland by combining the model simulated flows with the field data obtained on the wetland WLF (hydroperiod monitoring) data. This would require an iterative modeling process. The modeling iterations would involve manually changing the discharge rates in the SSD table until the resulting simulated WLF approach WLF from the field monitoring data. The project proponent or modeler should provide the details of how this estimated in its hydrologic assessment report, so that it can be reviewed by the local jurisdiction.

With an SSD table, the following are necessary for the model simulation to evaluate the discharge of development in the model and determine compliance with the Method 1 Wetland Hydroperiod Protection criteria.

- Pre-project condition land uses and associated acreage for the entire contributing area that drains to the wetland.
- Post-project condition land uses and associated acreage for the entire contributing area that drains to the wetland.

compliance with this BMP.

- Use vacuum street sweepers.
- Remove mud and other dirt promptly so it does not dry and then turn into dust.
- Techniques that can be used for unpaved roads and lots include:
 - Lower speed limits. High vehicle speed increases the amount of dust stirred up from unpaved roads and lots.
 - Upgrade the road surface strength by improving particle size, shape, and mineral types that make up the surface and base materials.
 - Add surface gravel to reduce the source of dust emission. Limit the amount of fine particles (those smaller than .075 mm) to 10 to 20 percent.
 - Use geotextile fabrics to increase the strength of new roads or roads undergoing reconstruction.
 - Encourage the use of alternate, paved routes, if available.
 - Apply chemical dust suppressants using the admix method, blending the product with the top few inches of surface material. Suppressants may also be applied as surface treatments.
 - Limit dust-causing work on windy days.
 - Pave unpaved permanent roads and other trafficked areas.

Maintenance Standards

Respray area as necessary to keep dust to a minimum.

BMP C150: Materials on Hand

Purpose

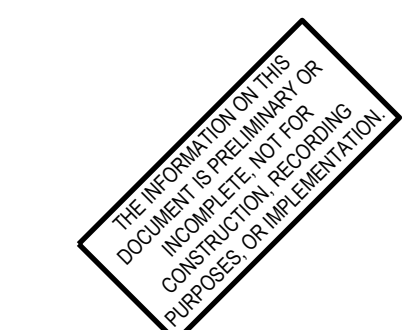
Keep quantities of erosion prevention and sediment control materials on the project site at all times to be used for regular maintenance and emergency situations such as unexpected heavy rains. Having these materials on-site reduces the time needed to replace existing or implement new BMPs when inspections indicate that existing BMPs are not meeting the Construction SWPPP requirements. In addition, contractors can save money by buying some materials in bulk and storing them at their office or yard.

Conditions of Use

- Construction projects of any size or type can benefit from having materials on hand. A small commercial development project could have a roll of plastic and some gravel available for immediate protection of bare soil and temporary berm construction. A large earthwork project, such as highway construction, might have several tons of straw, several rolls of plastic, flexible



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PROJECT PENINSULA
WEDGEWOOD DR.,
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Revisions / Submissions		
ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/18

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Drawn By: HS
Checked By: CG

Date: 04/18/2025
Issue: NOT FOR CONSTRUCTION

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Figure II-3.8: Concrete Washout Area with Straw Bales

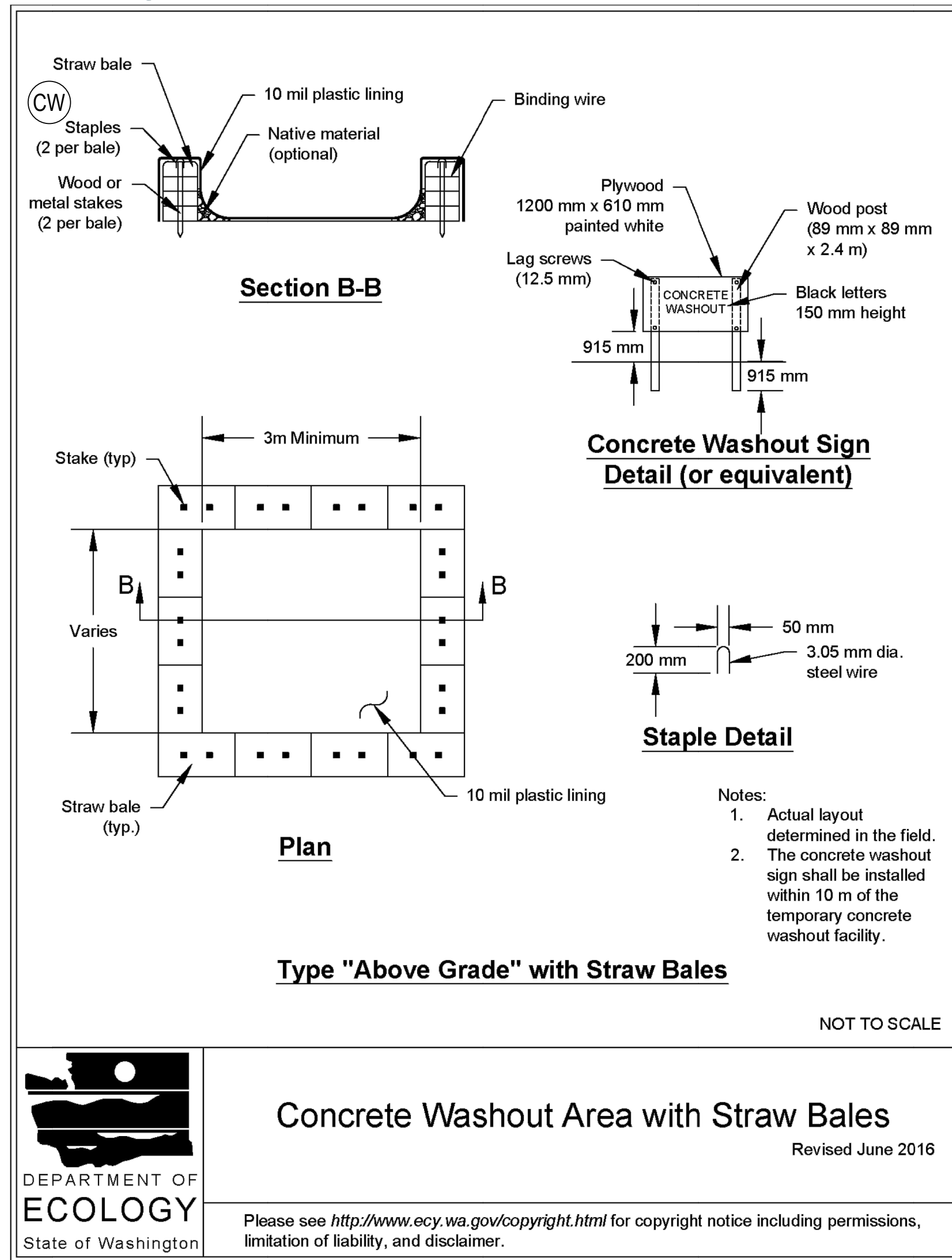


Figure II-3.22: Silt Fence

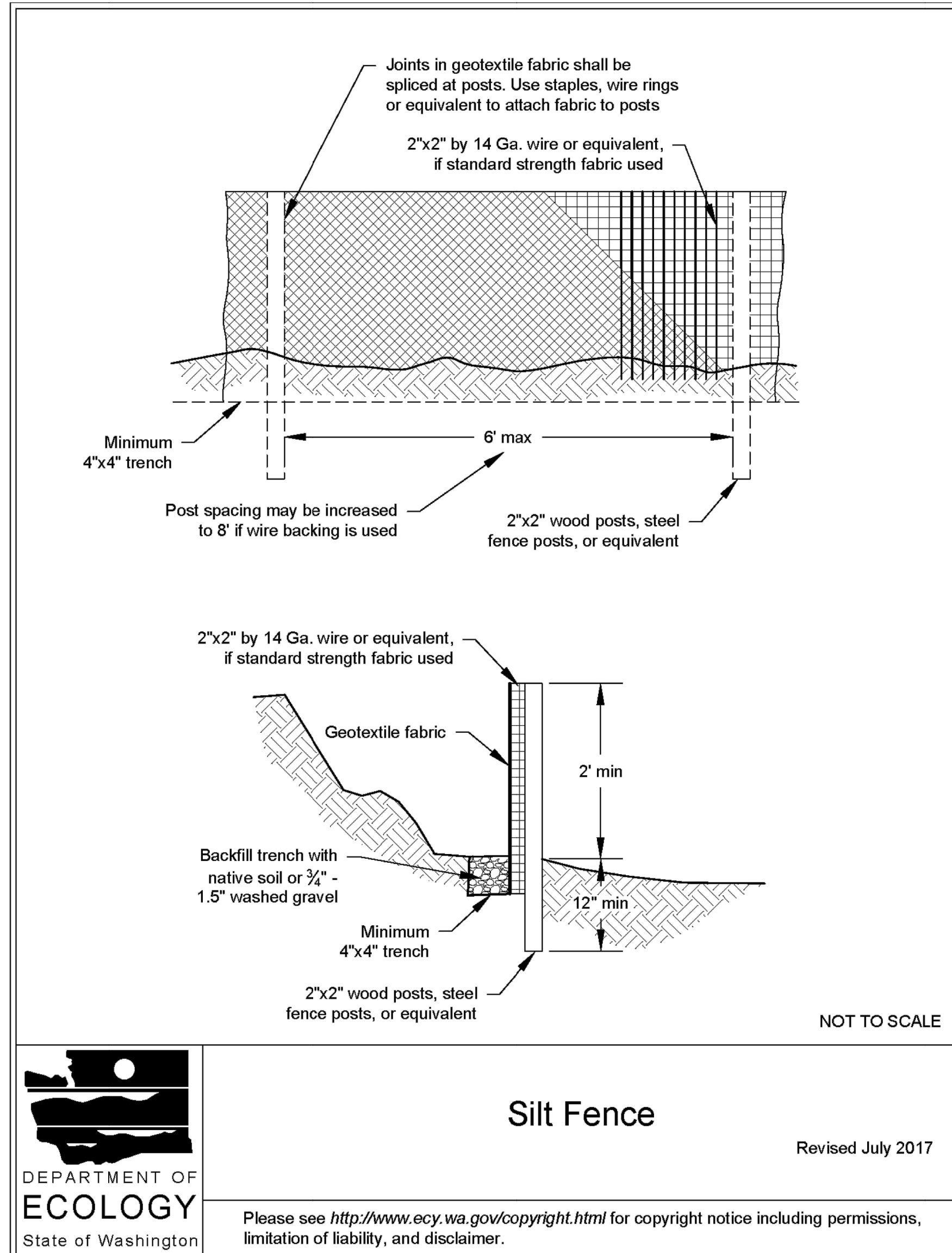


Figure II-3.17: Block and Gravel Filter

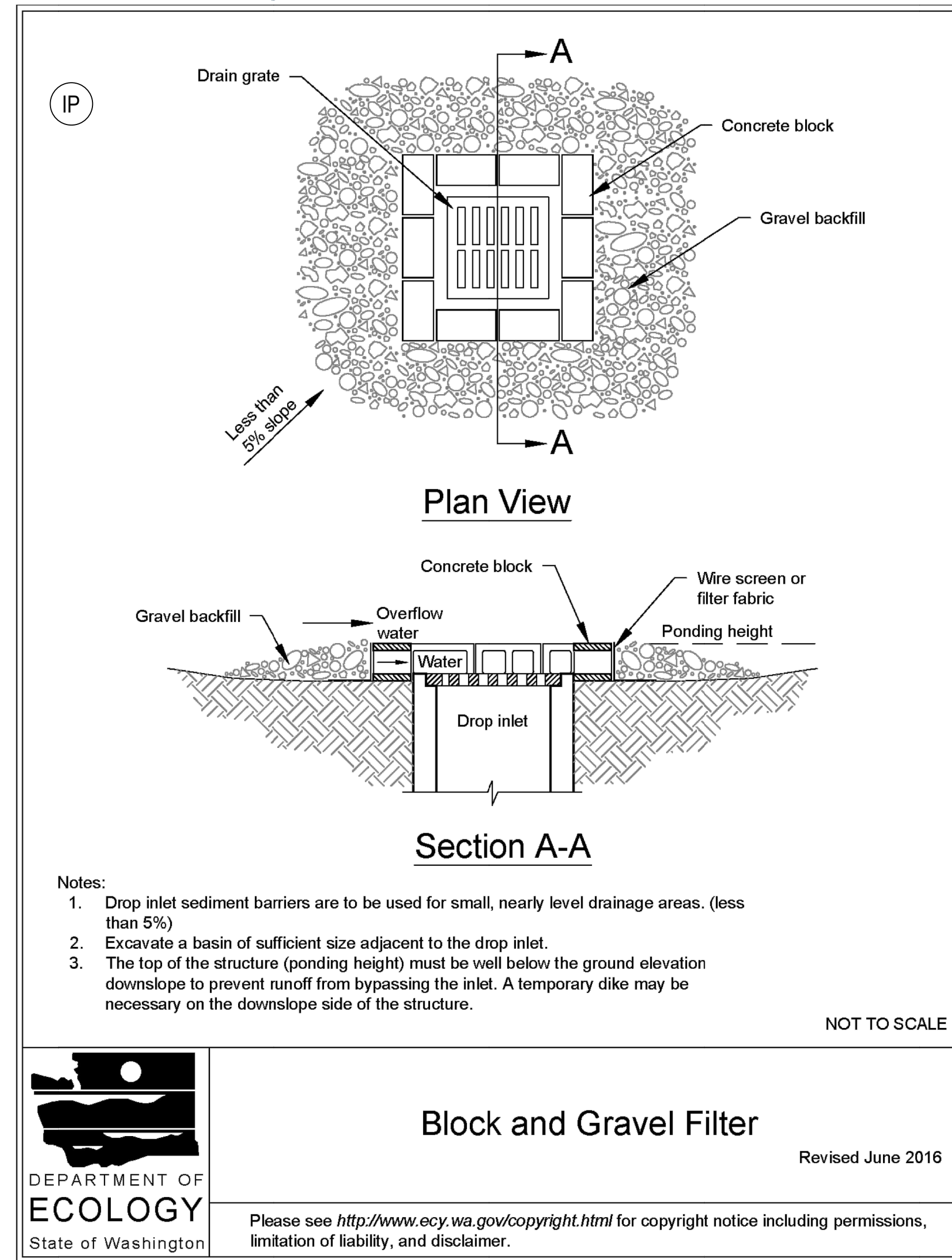
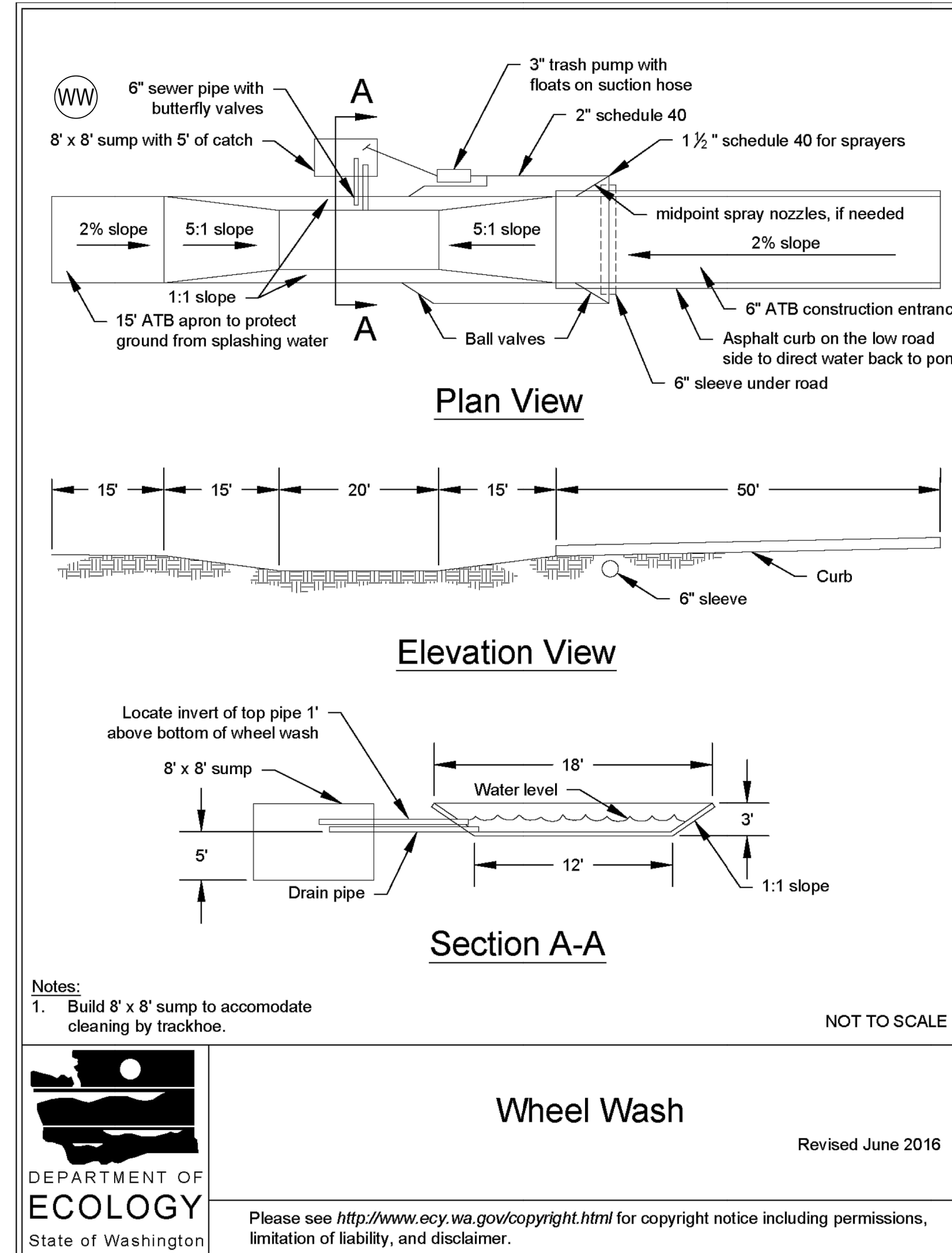


Figure II-3.2: Wheel Wash

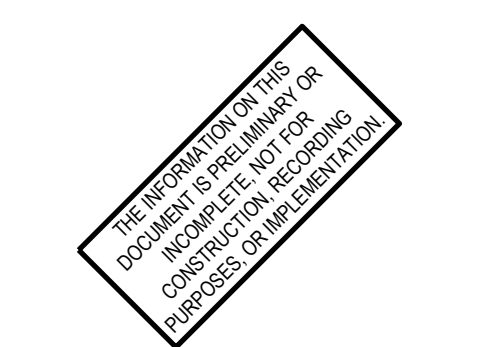
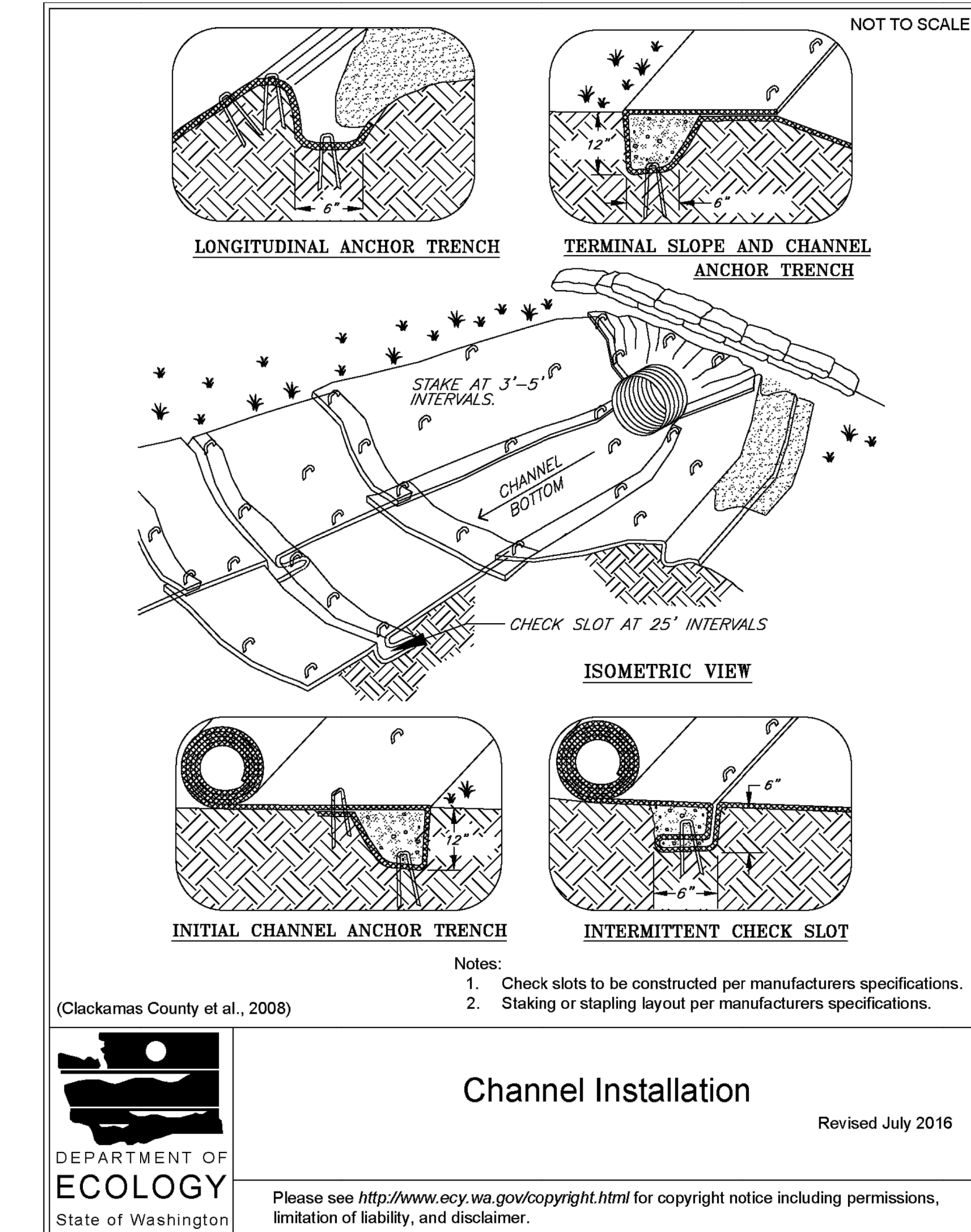


Construction SWPPP Narrative

The author of the Construction SWPPP should evaluate the following subject areas for inclusion in the Construction SWPPP narrative. The subject areas below are not an outline for the Construction SWPPP narrative. Not all items listed below are applicable to all construction projects. The author of the Construction SWPPP should ensure that the applicable sections are addressed.

- General Information on the Existing Site and Project
 - Project description: Describe the nature and purpose of the construction project. Include the total size of the area, any increase in existing impervious area; the total area expected to be disturbed by clearing, grading, excavation or other construction activities, including off-site borrow and fill areas; and the volumes of grading cut and fill that are proposed.
 - Existing site conditions: Describe the existing topography, vegetation, and drainage. Include a description of any structures or development on the parcel including the area of existing impervious surfaces.
 - Adjacent areas: Describe adjacent areas, including streams, lakes, wetlands, residential areas, and roads that the construction project might affect. Describe how upstream drainage areas may affect the site. Provide a description of the upstream drainage leading to the site and the downstream drainage leading from the site to the receiving body of water.
 - Critical areas: Describe areas on or adjacent to the site that are classified as critical areas. Critical areas that receive runoff from the site shall be described up to 1/4 mile away. The local permitting authority may increase the distance. Describe special requirements for working near or within these areas.
 - Soil: Describe the soil on the site, giving such information as soil names, mapping unit, erodibility, settleability, permeability, depth, depth to ground water, texture, and soil structure.
 - Potential erosion problem areas: Describe areas on the site that have potential erosion problems.
- 13 Elements: Describe how the Construction SWPPP addresses each of the 13 required elements (see I-3.4.2 MR2: [Construction Stormwater Pollution Prevention Plan \(SWPPP\)](#)). Include the type and location of BMPs used to satisfy the required element. Often using a combination of BMPs is the best way to satisfy required elements. If an element is not applicable to a project, provide a written justification for why it is not applicable.
 - If you propose to use a permanent BMP as temporary storage, provide the plan to return the BMP to the designed condition prior to leaving the site.
- Construction Schedule and Phasing: Describe the construction schedule. If the schedule extends into the wet season, describe what activities will continue during the wet season and how the transport of sediment from the construction site to receiving waters will be prevented. Describe the intended sequence and timing of construction activities and any proposed construction phasing.

Figure II-3.3: Channel Installation



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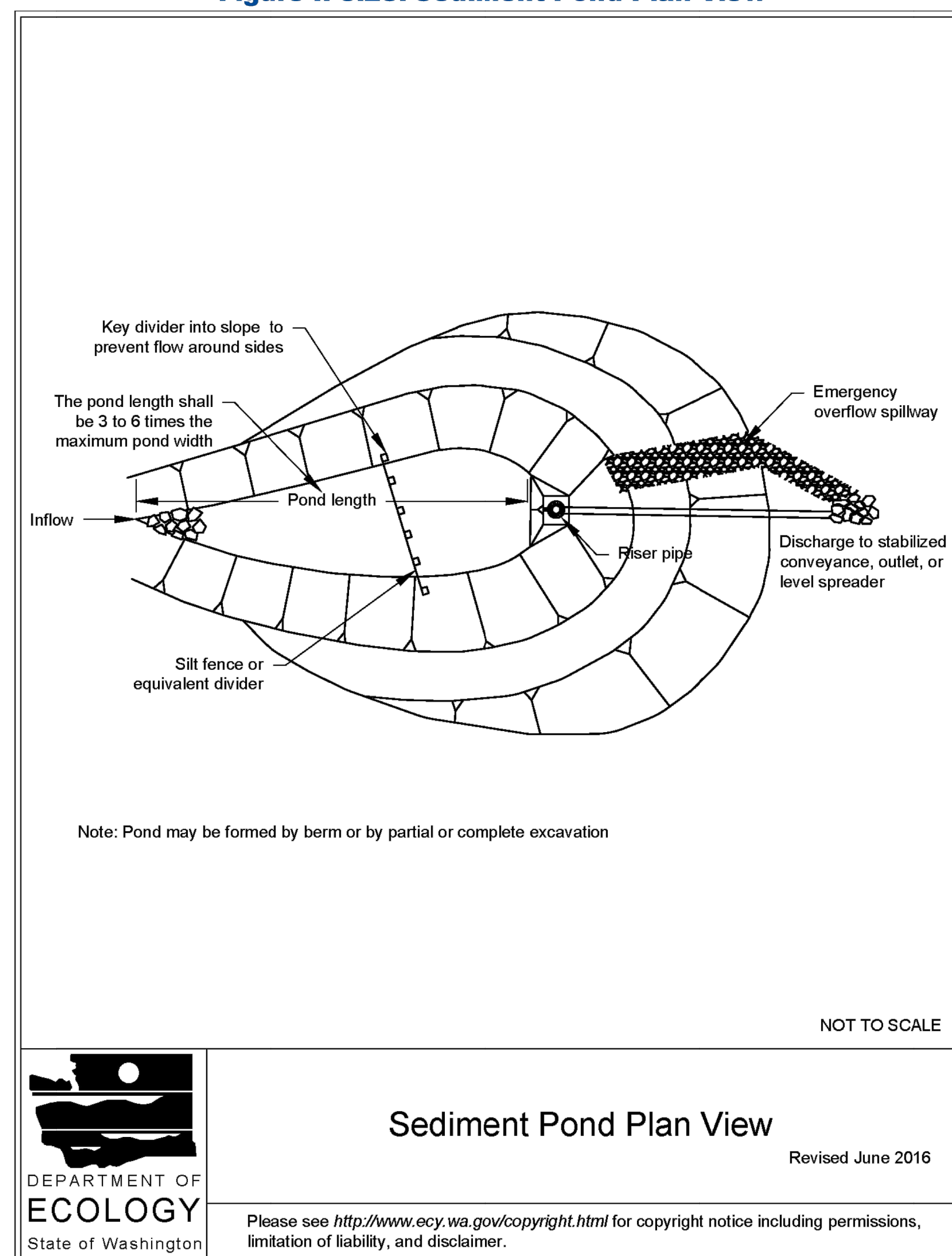
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Figure II-3.28: Sediment Pond Plan View



OP

and staples.

- In the case of grass-lined ditches and swales, check dams and accumulated sediment shall be removed when the grass has matured sufficiently to protect the ditch or swale unless the slope of the swale is greater than 4 percent. The area beneath the check dams shall be seeded and mulched immediately after dam removal.

Maintenance Standards

- Inspect TSDs for performance and sediment accumulation during and after each rainfall that produces runoff. Remove sediment when it reaches one half the height of the TSD.
- Anticipate submergence and deposition above the TSD and erosion from high flows around the edges of the TSD. Immediately repair any damage or any undercutting of the TSD.

BMP C209: Outlet Protection

Purpose

Outlet protection prevents scour at conveyance outlets and minimizes the potential for downstream erosion by reducing the velocity of concentrated stormwater flows.

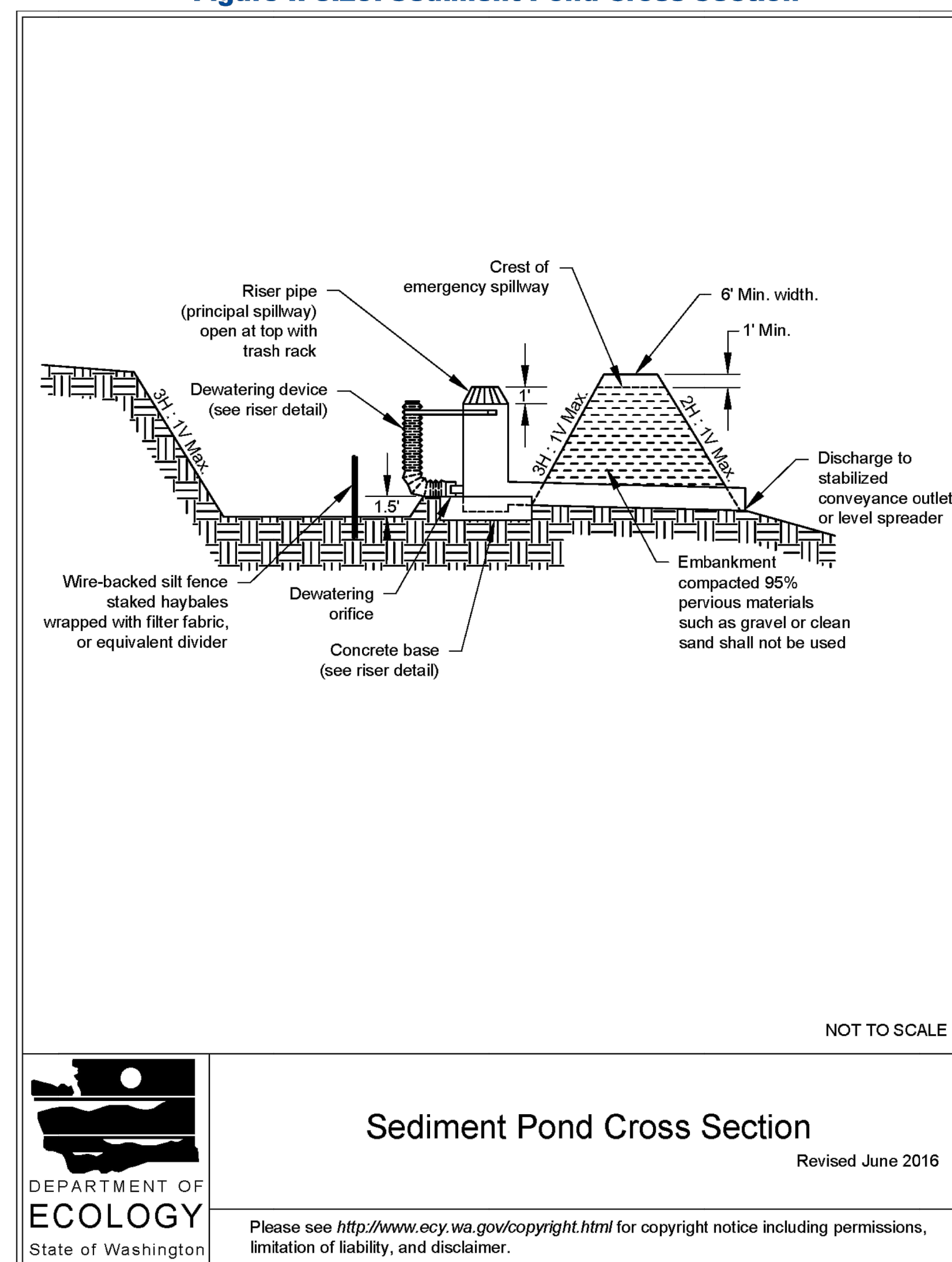
Conditions of Use

Use outlet protection at the outlets of all ponds, pipes, ditches, or other conveyances that discharge to a natural or manmade drainage feature such as a stream, wetland, lake, or ditch.

Design and Installation Specifications

- The receiving channel at the outlet of a pipe shall be protected from erosion by lining a minimum of 6 feet downstream and extending up the channel sides a minimum of 1-foot above the maximum tailwater elevation, or 1-foot above the crown, whichever is higher. For pipes larger than 18 inches in diameter, the outlet protection lining of the channel shall be four times the diameter of the outlet pipe.
- Standard wingwalls, tapered outlets, and paved channels should also be considered when appropriate for permanent culvert outlet protection ([WSDOT, 2015](#)).
- [BMP C122: Nets and Blankets](#) or [BMP C202: Riprap Channel Lining](#) provide suitable options for lining materials.
- With low flows, [BMP C201: Grass-Lined Channels](#) can be an effective alternative for lining material.
- The following guidelines shall be used for outlet protection with riprap:
 - If the discharge velocity at the outlet is less than 5 fps, use 2-inch to 8-inch riprap. Minimum thickness is 1-foot.
 - For 5 to 10 fps discharge velocity at the outlet, use 24-inch to 48-inch riprap. Minimum

Figure II-3.29: Sediment Pond Cross Section



thickness is 2 feet.

- For outlets at the base of steep slope pipes (pipe slope greater than 10 percent), use an engineered energy dissipator.
- Filter fabric or erosion control blankets should always be used under riprap to prevent scour and channel erosion. See [BMP C122: Nets and Blankets](#).
- Bank stabilization, bioengineering, and habitat features may be required for disturbed areas. This work may require a Hydraulic Project Approval (HPA) from the Washington State Department of Fish and Wildlife. See [I-2.11 Hydraulic Project Approvals](#).

Maintenance Standards

- Inspect and repair as needed.
- Add rock as needed to maintain the intended function.
- Clean energy dissipator if sediment builds up.

BMP C220: Inlet Protection

Purpose

Inlet protection prevents coarse sediment from entering drainage systems prior to permanent stabilization of the disturbed area.

Conditions of Use

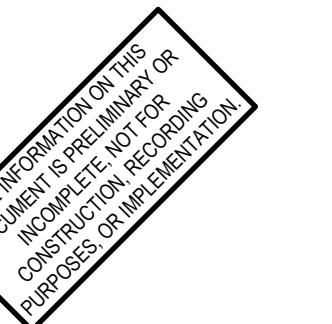
Use inlet protection at inlets that are operational before permanent stabilization of the disturbed areas that contribute runoff to the inlet. Provide protection for all storm drain inlets downslope and within 500 feet of a disturbed or construction area, unless those inlets are preceded by a sediment trapping BMP.

Also consider inlet protection for lawn and yard drains on new home construction. These small and numerous drains coupled with lack of gutters can add significant amounts of sediment into the roof drain system. If possible, delay installing lawn and yard drains until just before landscaping, or cap these drains to prevent sediment from entering the system until completion of landscaping. Provide 18-inches of sod around each finished lawn and yard drain.

[Table II-3.10: Storm Drain Inlet Protection](#) lists several options for inlet protection. All of the methods for inlet protection tend to plug and require a high frequency of maintenance. Limit contributing drainage areas for an individual inlet to one acre or less. If possible, provide emergency overflows with additional end-of-pipe treatment where stormwater ponding would cause a hazard.



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APPENDIX C
CORRESPONDENCE

APPENDIX D
SITE INSPECTION FORM

Construction Stormwater Site Inspection Form

Project Name _____ **Permit #** _____ **Inspection Date** _____ **Time** _____

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: _____

Approximate rainfall amount since the last inspection (in inches): _____

Approximate rainfall amount in the last 24 hours (in inches): _____

Current Weather Clear Cloudy Mist Rain Wind Fog

A. Type of inspection: Weekly Post Storm Event Other

B. Phase of Active Construction (check all that apply):

Pre Construction/installation of erosion/sediment controls	<input type="checkbox"/>	Clearing/Demo/Grading	<input type="checkbox"/>
Concrete pours	<input type="checkbox"/>	Vertical Construction/buildings	<input type="checkbox"/>
Offsite improvements	<input type="checkbox"/>	Site temporary stabilized	<input type="checkbox"/>
		Infrastructure/storm/roads	<input type="checkbox"/>
		Utilities	<input type="checkbox"/>
		Final stabilization	<input type="checkbox"/>

C. Questions:

- | | | | |
|--|-----|----|--|
| 1. Were all areas of construction and discharge points inspected? | Yes | No | |
| 2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen | Yes | No | |
| 3. Was a water quality sample taken during inspection? (<i>refer to permit conditions S4 & S5</i>) | Yes | No | |
| 4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* | Yes | No | |
| 5. If yes to #4 was it reported to Ecology? | Yes | No | |
| 6. Is pH sampling required? pH range required is 6.5 to 8.5. | Yes | No | |

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: _____ Date: _____

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				
pH	Paper, kit, meter				

Construction Stormwater Site Inspection Form

D. Check the observed status of all items. Provide "Action Required" details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)						
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?						
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.						
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?						
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?						
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).						
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.						
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.						
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?						

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?						
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?						
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?						
	Is off-site storm water managed separately from stormwater generated on the site?						
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?						
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?						
7 Drain Inlets	Storm drain inlets made operable during construction are protected.						
	Are existing storm drains within the influence of the project protected?						
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?						
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?						
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?						
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?						
	Has secondary containment been provided capable of containing 110% of the volume?						
	Were contaminated surfaces cleaned immediately after a spill incident?						
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?						

Construction Stormwater Site Inspection Form

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.						
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.						
	Dewatering has been done to an approved source and in compliance with the SWPPP.						
	Were there any clean non turbid dewatering discharges?						
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?						
12 Manage the Project	Has the project been phased to the maximum degree practicable?						
	Has regular inspection, monitoring and maintenance been performed as required by the permit?						
	Has the SWPPP been updated, implemented and records maintained?						
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?						
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?						
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.						
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?						
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.						

E. Check all areas that have been inspected. ✓

All in place BMPs All disturbed soils All concrete wash out area All material storage areas
 All discharge locations All equipment storage areas All construction entrances/exits

Construction Stormwater Site Inspection Form

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

Sign the following certification:

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

Inspected by: (print) _____ (Signature) _____ Date: _____

Title/Qualification of Inspector: _____

APPENDIX E
CONSTRUCTION STORMWATER GENERAL
PERMIT (CSGP)

Issuance Date: November 18, 2020
Effective Date: January 1, 2021
Expiration Date: December 31, 2025

CONSTRUCTION STORMWATER GENERAL PERMIT

National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge
General Permit for Stormwater Discharges Associated with Construction Activity

State of Washington
Department of Ecology
Olympia, Washington 98504

In compliance with the provisions of
Chapter 90.48 Revised Code of Washington
(State of Washington Water Pollution Control Act)
and
Title 33 United States Code, Section 1251 et seq.
The Federal Water Pollution Control Act (The Clean Water Act)

Until this permit expires, is modified, or revoked, Permittees that have properly
obtained coverage under this general permit are authorized to discharge in accordance
with the special and general conditions that follow.



Vincent McGowan, P.E.
Water Quality Program Manager
Washington State Department of Ecology

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SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions within this permit for additional submittal requirements. Appendix A provides a list of definitions. Appendix B provides a list of acronyms.

Table 1 Summary of Required Submittals

Permit Section	Submittal	Frequency	First Submittal Date
S5.A and S8	High Turbidity/Transparency Phone Reporting	As Necessary	Within 24 hours
S5.B	Discharge Monitoring Report	Monthly*	Within 15 days following the end of each month
S5.F and S8	Noncompliance Notification – Telephone Notification	As necessary	Within 24 hours
S5.F	Noncompliance Notification – Written Report	As necessary	Within 5 Days of non-compliance
S9.D	Request for Chemical Treatment Form	As necessary	Written approval from Ecology is required prior to using chemical treatment (with the exception of dry ice, CO ₂ or food grade vinegar to adjust pH)
G2	Notice of Change in Authorization	As necessary	
G6	Permit Application for Substantive Changes to the Discharge	As necessary	
G8	Application for Permit Renewal	1/permit cycle	No later than 180 days before expiration
S2.A	Notice of Permit Transfer	As necessary	
G19	Notice of Planned Changes	As necessary	
G21	Reporting Anticipated Non-compliance	As necessary	

NOTE: *Permittees must submit electronic Discharge Monitoring Reports (DMRs) to the Washington State Department of Ecology monthly, regardless of site discharge, for the full duration of permit coverage. Refer to Section S5.B of this General Permit for more specific information regarding DMRs.

Table 2 Summary of Required On-site Documentation

Document Title	Permit Conditions
Permit Coverage Letter	See Conditions S2, S5
Construction Stormwater General Permit (CSWGP)	See Conditions S2, S5
Site Log Book	See Conditions S4, S5
Stormwater Pollution Prevention Plan (SWPPP)	See Conditions S5, S9
Site Map	See Conditions S5, S9

SPECIAL CONDITIONS

S1. PERMIT COVERAGE

A. Permit Area

This Construction Stormwater General Permit (CSWGP) covers all areas of Washington State, except for federal operators and Indian Country as specified in Special Condition S1.E.3 and 4.

B. Operators Required to Seek Coverage Under this General Permit

1. Operators of the following construction activities are required to seek coverage under this CSWGP:
 - a. Clearing, grading and/or excavation that results in the disturbance of one or more acres (including off-site disturbance acreage related to construction-support activity as authorized in S1.C.2) and discharges stormwater to surface waters of the State; and clearing, grading and/or excavation on sites smaller than one acre that are part of a larger common plan of development or sale, if the common plan of development or sale will ultimately disturb one acre or more and discharge stormwater to surface waters of the State.
 - i. This category includes forest practices (including, but not limited to, class IV conversions) that are part of a construction activity that will result in the disturbance of one or more acres, and discharge to surface waters of the State (that is, forest practices that prepare a site for construction activities); and
 - b. Any size construction activity discharging stormwater to waters of the State that the Washington State Department of Ecology (Ecology):
 - i. Determines to be a significant contributor of pollutants to waters of the State of Washington.
 - ii. Reasonably expects to cause a violation of any water quality standard.
2. Operators of the following activities are not required to seek coverage under this CSWGP (unless specifically required under Special Condition S1.B.1.b, above):
 - a. Construction activities that discharge all stormwater and non-stormwater to groundwater, sanitary sewer, or combined sewer, and have no point source discharge to either surface water or a storm sewer system that drains to surface waters of the State.
 - b. Construction activities covered under an Erosivity Waiver (Special Condition S1.F).
 - c. Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

C. Authorized Discharges

1. **Stormwater Associated with Construction Activity.** Subject to compliance with the terms and conditions of this permit, Permittees are authorized to discharge stormwater associated with construction activity to surface waters of the State or to a storm sewer system that drains to surface waters of the State. (Note that “surface waters of the

State” may exist on a construction site as well as off site; for example, a creek running through a site.)

2. **Stormwater Associated with Construction Support Activity.** This permit also authorizes stormwater discharge from support activities related to the permitted construction site (for example, an on-site portable rock crusher, off-site equipment staging yards, material storage areas, borrow areas, etc.) provided:
 - a. The support activity relates directly to the permitted construction site that is required to have an NPDES permit; and
 - b. The support activity is not a commercial operation serving multiple unrelated construction projects, and does not operate beyond the completion of the construction activity; and
 - c. Appropriate controls and measures are identified in the Stormwater Pollution Prevention Plan (SWPPP) for the discharges from the support activity areas.
3. **Non-Stormwater Discharges.** The categories and sources of non-stormwater discharges identified below are authorized conditionally, provided the discharge is consistent with the terms and conditions of this permit:
 - a. Discharges from fire-fighting activities.
 - b. Fire hydrant system flushing.
 - c. Potable water, including uncontaminated water line flushing.
 - d. Hydrostatic test water.
 - e. Uncontaminated air conditioning or compressor condensate.
 - f. Uncontaminated groundwater or spring water.
 - g. Uncontaminated excavation dewatering water (in accordance with S9.D.10).
 - h. Uncontaminated discharges from foundation or footing drains.
 - i. Uncontaminated or potable water used to control dust. Permittees must minimize the amount of dust control water used.
 - j. Routine external building wash down that does not use detergents.
 - k. Landscape irrigation water.

The SWPPP must adequately address all authorized non-stormwater discharges, except for discharges from fire-fighting activities, and must comply with Special Condition S3. At a minimum, discharges from potable water (including water line flushing), fire hydrant system flushing, and pipeline hydrostatic test water must undergo the following: dechlorination to a concentration of 0.1 parts per million (ppm) or less, and pH adjustment to within 6.5 – 8.5 standard units (su), if necessary.

D. Prohibited Discharges

The following discharges to waters of the State, including groundwater, are prohibited:

1. Concrete wastewater
2. Wastewater from washout and clean-up of stucco, paint, form release oils, curing compounds and other construction materials.
3. Process wastewater as defined by 40 Code of Federal Regulations (CFR) 122.2 (See Appendix A of this permit).
4. Slurry materials and waste from shaft drilling, including process wastewater from shaft drilling for construction of building, road, and bridge foundations unless managed according to Special Condition S9.D.9.j.
5. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
6. Soaps or solvents used in vehicle and equipment washing.
7. Wheel wash wastewater, unless managed according to Special Condition S9.D.9.
8. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed according to Special Condition S9.D.10.

E. Limits on Coverage

Ecology may require any discharger to apply for and obtain coverage under an individual permit or another more specific general permit. Such alternative coverage will be required when Ecology determines that this CSWGP does not provide adequate assurance that water quality will be protected, or there is a reasonable potential for the project to cause or contribute to a violation of water quality standards.

The following stormwater discharges are not covered by this permit:

1. Post-construction stormwater discharges that originate from the site after completion of construction activities and the site has undergone final stabilization.
2. Non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance, from which there is natural runoff as excluded in 40 CFR Subpart 122.
3. Stormwater from any federal operator.
4. Stormwater from facilities located on **Indian Country** as defined in 18 U.S.C. §1151, except portions of the Puyallup Reservation as noted below.

Indian Country includes:

- a. All land within any Indian Reservation notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation. This includes all federal, tribal, and Indian and non-Indian privately owned land within the reservation.
- b. All off-reservation Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.
- c. All off-reservation federal trust lands held for Native American Tribes.

Puyallup Exception: Following the *Puyallup Tribes of Indians Land Settlement Act of 1989*, 25 U.S.C. §1773; the permit does apply to land within the Puyallup Reservation except for discharges to surface water on land held in trust by the federal government.

5. Stormwater from any site covered under an existing NPDES individual permit in which stormwater management and/or treatment requirements are included for all stormwater discharges associated with construction activity.
6. Stormwater from a site where an applicable Total Maximum Daily Load (TMDL) requirement specifically precludes or prohibits discharges from construction activity.

F. Erosivity Waiver

Construction site operators may qualify for an Erosivity Waiver from the CSWGP if the following conditions are met:

1. The site will result in the disturbance of fewer than five (5) acres and the site is not a portion of a common plan of development or sale that will disturb five (5) acres or greater.
2. Calculation of Erosivity “R” Factor and Regional Timeframe:
 - a. The project’s calculated rainfall erosivity factor (“R” Factor) must be less than five (5) during the period of construction activity, (See the CSWGP homepage <http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html> for a link to the EPA’s calculator and step by step instructions on computing the “R” Factor in the *EPA Erosivity Waiver Fact Sheet*). The period of construction activity starts when the land is first disturbed and ends with final stabilization. In addition:
 - b. The entire period of construction activity must fall within the following timeframes:
 - i. For sites west of the Cascades Crest: June 15 – September 15.
 - ii. For sites east of the Cascades Crest, excluding the Central Basin: June 15 – October 15.
 - iii. For sites east of the Cascades Crest, within the Central Basin: no timeframe restrictions apply. The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches. For a map of the Central Basin (Average Annual Precipitation Region 2), refer to: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/resourcesguidance.html>.
3. Construction site operators must submit a complete Erosivity Waiver certification form at least one week before disturbing the land. Certification must include statements that the operator will:
 - a. Comply with applicable local stormwater requirements; and
 - b. Implement appropriate erosion and sediment control BMPs to prevent violations of water quality standards.
4. This waiver is not available for facilities declared significant contributors of pollutants as defined in Special Condition S1.B.1.b or for any size construction activity that could

reasonably expect to cause a violation of any water quality standard as defined in Special Condition S1.B.1.b.ii.

5. This waiver does not apply to construction activities which include non-stormwater discharges listed in Special Condition S1.C.3.
6. If construction activity extends beyond the certified waiver period for any reason, the operator must either:
 - a. Recalculate the rainfall erosivity “R” factor using the original start date and a new projected ending date and, if the “R” factor is still under 5 *and* the entire project falls within the applicable regional timeframe in Special Condition S1.F.2.b, complete and submit an amended waiver certification form before the original waiver expires; *or*
 - b. Submit a complete permit application to Ecology in accordance with Special Condition S2.A and B before the end of the certified waiver period.

S2. APPLICATION REQUIREMENTS

A. Permit Application Forms

1. *Notice of Intent Form*

- a. Operators of new or previously unpermitted construction activities must submit a complete and accurate permit application (Notice of Intent, or NOI) to Ecology.
- b. Operators must apply using the electronic application form (NOI) available on Ecology’s website (<http://ecy.wa.gov/programs/wq/stormwater/construction/index.html>). Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper NOI.

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, Washington 98504-7696

- c. The operator must submit the NOI at least 60 days before discharging stormwater from construction activities and must submit it prior to the date of the first public notice (See Special Condition S2.B, below, for details). The 30-day public comment period begins on the publication date of the second public notice. Unless Ecology responds to the complete application in writing, coverage under the general permit will automatically commence on the 31st day following receipt by Ecology of a *completed* NOI, or the issuance date of this permit, whichever is later; unless Ecology specifies a later date in writing as required by WAC173-226-200(2). See S8.B for Limits on Coverage for New Discharges to TMDL or 303(d)-Listed Waters.
- d. If an applicant intends to use a Best Management Practice (BMP) selected on the basis of Special Condition S9.C.4 (“demonstrably equivalent” BMPs), the applicant must notify Ecology of its selection as part of the NOI. In the event the applicant selects BMPs after submission of the NOI, the applicant must provide notice of the

selection of an equivalent BMP to Ecology at least 60 days before intended use of the equivalent BMP.

- e. Applicants must notify Ecology if they are aware of contaminated soils and/or groundwater associated with the construction activity. Provide detailed information with the NOI (as known and readily available) on the nature and extent of the contamination (concentrations, locations, and depth), as well as pollution prevention and/or treatment BMPs proposed to control the discharge of soil and/or groundwater contaminants in stormwater. Examples of such detail may include, but are not limited to:
 - i. List or table of all known contaminants with laboratory test results showing concentration and depth,
 - ii. Map with sample locations,
 - iii. Related portions of the Stormwater Pollution Prevention Plan (SWPPP) that address the management of contaminated and potentially contaminated construction stormwater and dewatering water,
 - iv. Dewatering plan and/or dewatering contingency plan.

2. ***Transfer of Coverage Form***

The Permittee can transfer current coverage under this permit to one or more new operators, including operators of sites within a Common Plan of Development, provided:

- i. The Permittee submits a complete Transfer of Coverage Form to Ecology, signed by the current and new discharger and containing a specific date for transfer of permit responsibility, coverage and liability (including any Administrative Orders associated with the permit); and
- ii. Ecology does not notify the current discharger and new discharger of intent to revoke coverage under the general permit. If this notice is not given, the transfer is effective on the date specified in the written agreement.

When a current discharger (Permittee) transfers a portion of a permitted site, the current discharger must also indicate the remaining permitted acreage after the transfer. Transfers do not require public notice.

3. ***Modification of Coverage Form***

Permittees must notify Ecology regarding any changes to the information provided on the NOI by submitting an Update/Modification of Permit Coverage form in accordance with General Conditions G6 and G19. Examples of such changes include, but are not limited to:

- i. Changes to the Permittee's mailing address,
- ii. Changes to the on-site contact person information, and
- iii. Changes to the area/acreage affected by construction activity.

B. Public Notice

For new or previously unpermitted construction activities, the applicant must publish a public notice at least one time each week for two consecutive weeks, at least 7 days apart, in a newspaper with general circulation in the county where the construction is to take place. The notice must be run after the NOI has been submitted and must contain:

1. A statement that *“The applicant is seeking coverage under the Washington State Department of Ecology’s Construction Stormwater NPDES and State Waste Discharge General Permit.”*
2. The name, address, and location of the construction site.
3. The name and address of the applicant.
4. The type of construction activity that will result in a discharge (for example, residential construction, commercial construction, etc.), and the total number of acres to be disturbed over the lifetime of the project.
5. The name of the receiving water(s) (that is, the surface water(s) to which the site will discharge), or, if the discharge is through a storm sewer system, the name of the operator of the system and the receiving water(s) the system discharges to.
6. The statement: *Any persons desiring to present their views to the Washington State Department of Ecology regarding this application, or interested in Ecology’s action on this application, may notify Ecology in writing no later than 30 days of the last date of publication of this notice. Ecology reviews public comments and considers whether discharges from this project would cause a measurable change in receiving water quality, and, if so, whether the project is necessary and in the overriding public interest according to Tier II antidegradation requirements under WAC 173-201A-320. Comments can be submitted to: Department of Ecology, PO Box 47696, Olympia, Washington 98504-7696 Attn: Water Quality Program, Construction Stormwater.*

S3. COMPLIANCE WITH STANDARDS

- A. **Discharges must not** cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), groundwater quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the Federal water quality criteria applicable to Washington. (40 CFR Part 131.45) Discharges that are not in compliance with these standards are prohibited.
- B. **Prior to the discharge** of stormwater and non-stormwater to waters of the State, the Permittee must apply All Known, Available, and Reasonable methods of prevention, control, and Treatment (AKART). This includes the preparation and implementation of an adequate SWPPP, with all appropriate BMPs installed and maintained in accordance with the SWPPP and the terms and conditions of this permit.
- C. **Ecology presumes** that a Permittee complies with water quality standards unless discharge monitoring data or other site-specific information demonstrates that a discharge causes or contributes to a violation of water quality standards, when the Permittee complies with the following conditions. The Permittee must fully:

1. Comply with all permit conditions, including; planning, sampling, monitoring, reporting, and recordkeeping conditions.
 2. Implement stormwater BMPs contained in stormwater management manuals published or approved by Ecology, or BMPs that are demonstrably equivalent to BMPs contained in stormwater management manuals published or approved by Ecology, including the proper selection, implementation, and maintenance of all applicable and appropriate BMPs for on-site pollution control. (For purposes of this section, the stormwater manuals listed in Appendix 10 of the *Phase I Municipal Stormwater Permit* are approved by Ecology.)
- D. Where construction sites** also discharge to groundwater, the groundwater discharges must also meet the terms and conditions of this CSWGP. Permittees who discharge to groundwater through an injection well must also comply with any applicable requirements of the Underground Injection Control (UIC) regulations, Chapter 173-218 WAC.

S4. MONITORING REQUIREMENTS, BENCHMARKS, AND REPORTING TRIGGERS

A. Site Log Book

The Permittee must maintain a site log book that contains a record of the implementation of the SWPPP and other permit requirements, including the installation and maintenance of BMPs, site inspections, and stormwater monitoring.

B. Site Inspections

Construction sites one (1) acre or larger that discharge stormwater to surface waters of the State must have site inspections conducted by a Certified Erosion and Sediment Control Lead (CESCL). Sites less than one (1) acre may have a person without CESCL certification conduct inspections. (See Special Conditions S4.B.3 and B.4, below, for detailed requirements of the Permittee's CESCL.)

Site inspections must include all areas disturbed by construction activities, all BMPs, and all stormwater discharge points under the Permittee's operational control.

1. The Permittee must have staff knowledgeable in the principles and practices of erosion and sediment control. The CESCL (sites one acre or more) or inspector (sites less than one acre) must have the skills to assess the:
 - a. Site conditions and construction activities that could impact the quality of stormwater; and
 - b. Effectiveness of erosion and sediment control measures used to control the quality of stormwater discharges. The SWPPP must identify the CESCL or inspector, who must be present on site or on-call at all times. The CESCL (sites one (1) acre or more) must obtain this certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology. (See BMP C160 in the manual, referred to in Special Condition S9.C.1 and 2.)
2. The CESCL or inspector must examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen. BMP effectiveness must be evaluated to

determine if it is necessary to install, maintain, or repair BMPs to improve the quality of stormwater discharges.

Based on the results of the inspection, the Permittee must correct the problems identified, by:

- a. Reviewing the SWPPP for compliance with Special Condition S9 and making appropriate revisions within 7 days of the inspection.
 - b. Immediately beginning the process of fully implementing and maintaining appropriate source control and/or treatment BMPs, within 10 days of the inspection. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.
 - c. Documenting BMP implementation and maintenance in the site log book.
3. The CESCL or inspector must inspect all areas disturbed by construction activities, all BMPs, and all stormwater discharge points at least once every calendar week and within 24 hours of any discharge from the site. (For purposes of this condition, individual discharge events that last more than one (1) day do not require daily inspections. For example, if a stormwater pond discharges continuously over the course of a week, only one (1) inspection is required that week.) Inspection frequency may be reduced to once every calendar month for inactive sites that are temporarily stabilized.
4. The Permittee must summarize the results of each inspection in an inspection report or checklist and enter the report/checklist into, or attach it to, the site log book. At a minimum, each inspection report or checklist must include:
- a. Inspection date and time.
 - b. Weather information.
 - c. The general conditions during inspection.
 - d. The approximate amount of precipitation since the last inspection.
 - e. The approximate amount of precipitation within the last 24 hours.
 - f. A summary or list of all implemented BMPs, including observations of all erosion/sediment control structures or practices.
 - g. A description of:
 - i. BMPs inspected (including location).
 - ii. BMPs that need maintenance and why.
 - iii. BMPs that failed to operate as designed or intended, and
 - iv. Where additional or different BMPs are needed, and why.
 - h. A description of stormwater discharged from the site. The Permittee must note the presence of suspended sediment, turbidity, discoloration, and oil sheen, as applicable.

- i. Any water quality monitoring performed during inspection.
- j. General comments and notes, including a brief description of any BMP repairs, maintenance, or installations made following the inspection.
- k. An implementation schedule for the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the SWPPP and the permit.
- l. A summary report of the inspection.
- m. The name, title, and signature of the person conducting the site inspection, a phone number or other reliable method to reach this person, and the following statement:
I certify that this report is true, accurate, and complete to the best of my knowledge and belief.

Table 3 Summary of Primary Monitoring Requirements

Size of Soil Disturbance ¹	Weekly Site Inspections	Weekly Sampling w/ Turbidity Meter	Weekly Sampling w/ Transparency Tube	Weekly pH Sampling ²	CESCL Required for Inspections?
Sites that disturb less than 1 acre, but are part of a larger Common Plan of Development	Required	Not Required	Not Required	Not Required	No
Sites that disturb 1 acre or more, but fewer than 5 acres	Required	Sampling Required – either method ³		Required	Yes
Sites that disturb 5 acres or more	Required	Required	Not Required ⁴	Required	Yes

¹ Soil disturbance is calculated by adding together all areas that will be affected by construction activity. Construction activity means clearing, grading, excavation, and any other activity that disturbs the surface of the land, including ingress/egress from the site.

² If construction activity results in the disturbance of 1 acre or more, and involves significant concrete work (1,000 cubic yards of concrete or recycled concrete placed or poured over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer stormwater collection system that drains to other surface waters of the State, the Permittee must conduct pH sampling in accordance with Special Condition S4.D.

³ Sites with one or more acres, but fewer than 5 acres of soil disturbance, must conduct turbidity or transparency sampling in accordance with Special Condition S4.C.4.a or b.

⁴ Sites equal to or greater than 5 acres of soil disturbance must conduct turbidity sampling using a turbidity meter in accordance with Special Condition S4.C.4.a.

C. Turbidity/Transparency Sampling Requirements

1. Sampling Methods

- a. If construction activity involves the disturbance of five (5) acres or more, the Permittee must conduct turbidity sampling per Special Condition S4.C.4.a, below.
- b. If construction activity involves one (1) acre or more but fewer than five (5) acres of soil disturbance, the Permittee must conduct either transparency sampling *or* turbidity sampling per Special Condition S4.C.4.a or b, below.

2. Sampling Frequency

- a. The Permittee must sample all discharge points at least once every calendar week when stormwater (or authorized non-stormwater) discharges from the site or enters any on-site surface waters of the state (for example, a creek running through a site); sampling is not required on sites that disturb less than an acre.
- b. Samples must be representative of the flow and characteristics of the discharge.
- c. Sampling is not required when there is no discharge during a calendar week.
- d. Sampling is not required outside of normal working hours or during unsafe conditions.
- e. If the Permittee is unable to sample during a monitoring period, the Permittee must include a brief explanation in the monthly Discharge Monitoring Report (DMR).
- f. Sampling is not required before construction activity begins.
- g. The Permittee may reduce the sampling frequency for temporarily stabilized, inactive sites to once every calendar month.

3. Sampling Locations

- a. Sampling is required at all points where stormwater associated with construction activity (or authorized non-stormwater) is discharged off site, including where it enters any on-site surface waters of the state (for example, a creek running through a site).
- b. The Permittee may discontinue sampling at discharge points that drain areas of the project that are fully stabilized to prevent erosion.
- c. The Permittee must identify all sampling point(s) in the SWPPP and on the site map and clearly mark these points in the field with a flag, tape, stake or other visible marker.
- d. Sampling is not required for discharge that is sent directly to sanitary or combined sewer systems.
- e. The Permittee may discontinue sampling at discharge points in areas of the project where the Permittee no longer has operational control of the construction activity.

4. Sampling and Analysis Methods

- a. The Permittee performs turbidity analysis with a calibrated turbidity meter (turbidimeter) either on site or at an accredited lab. The Permittee must record the results in the site log book in nephelometric turbidity units (NTUs).
- b. The Permittee performs transparency analysis on site with a 1¾ inch diameter, 60 centimeter (cm)-long transparency tube. The Permittee will record the results in the site log book in centimeters (cm).

Table 4 Monitoring and Reporting Requirements

Parameter	Unit	Analytical Method	Sampling Frequency	Benchmark Value
Turbidity	NTU	SM2130	Weekly, if discharging	25 NTUs
Transparency	Cm	Manufacturer instructions, or Ecology guidance	Weekly, if discharging	33 cm

5. Turbidity/Transparency Benchmark Values and Reporting Triggers

The benchmark value for turbidity is 25 NTUs. The benchmark value for transparency is 33 centimeters (cm). Note: Benchmark values do not apply to discharges to segments of water bodies on Washington State’s 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus; these discharges are subject to a numeric effluent limit for turbidity. Refer to Special Condition S8 for more information and follow S5.F – Noncompliance Notification for reporting requirements applicable to discharges which exceed the numeric effluent limit for turbidity.

- a. Turbidity 26 – 249 NTUs, or Transparency 32 – 7 cm:

If the discharge turbidity is 26 to 249 NTUs; or if discharge transparency is 32 to 7 cm, the Permittee must:

- i. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs, and no later than 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.
- ii. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
- iii. Document BMP implementation and maintenance in the site log book.

- b. Turbidity 250 NTUs or greater, or Transparency 6 cm or less:

If a discharge point’s turbidity is 250 NTUs or greater, or if discharge transparency is less than or equal to 6 cm, the Permittee must complete the reporting and adaptive

management process described below. For discharges which are subject to a numeric effluent limit for turbidity, see S5.F – Noncompliance Notification.

- i. Within 24 hours, telephone or submit an electronic report to the applicable Ecology Region’s Environmental Report Tracking System (ERTS) number (or through Ecology’s Water Quality Permitting Portal [WQWebPortal] – Permit Submittals when the form is available), in accordance with Special Condition S5.A.
 - **Central Region** (Okanogan, Chelan, Douglas, Kittitas, Yakima, Klickitat, Benton): (509) 575-2490
 - **Eastern Region** (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman): (509) 329-3400
 - **Northwest Region** (Kitsap, Snohomish, Island, King, San Juan, Skagit, Whatcom): (425) 649-7000
 - **Southwest Region** (Grays Harbor, Lewis, Mason, Thurston, Pierce, Clark, Cowlitz, Skamania, Wahkiakum, Clallam, Jefferson, Pacific): (360) 407-6300

These numbers and a link to the ERTS reporting page are also listed at the following website: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>.

- ii. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.
- iii. Sample discharges daily until:
 - a) Turbidity is 25 NTUs (or lower); or
 - b) Transparency is 33 cm (or greater); or
 - c) The Permittee has demonstrated compliance with the water quality standard for turbidity:
 - 1) No more than 5 NTUs over background turbidity, if background is less than 50 NTUs, or
 - 2) No more than 10% over background turbidity, if background is 50 NTUs or greater; or

*Note: background turbidity in the receiving water must be measured immediately upstream (upgradient) or outside of the area of influence of the discharge.
 - d) The discharge stops or is eliminated.
- iv. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within seven (7) days of the date the discharge exceeded the benchmark.

- v. Document BMP implementation and maintenance in the site log book.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with permit benchmarks.

D. pH Sampling Requirements – Significant Concrete Work or Engineered Soils

If construction activity results in the disturbance of 1 acre or more, *and* involves significant concrete work (significant concrete work means greater than 1000 cubic yards placed or poured concrete or recycled concrete used over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer system that drains to surface waters of the State, the Permittee must conduct pH sampling as set forth below. Note: In addition, discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for high pH are subject to a numeric effluent limit for pH; refer to Special Condition S8.

1. The Permittee must perform pH analysis on site with a calibrated pH meter, pH test kit, or wide range pH indicator paper. The Permittee must record pH sampling results in the site log book.
2. During the applicable pH monitoring period defined below, the Permittee must obtain a representative sample of stormwater and conduct pH analysis at least once per week.
 - a. For sites with significant concrete work, the Permittee must begin the pH sampling period when the concrete is first placed or poured and exposed to precipitation, and continue weekly throughout and after the concrete placement, pour and curing period, until stormwater pH is in the range of 6.5 to 8.5 (su).
 - b. For sites with recycled concrete where monitoring is required, the Permittee must begin the weekly pH sampling period when the recycled concrete is first exposed to precipitation and must continue until the recycled concrete is fully stabilized with the stormwater pH in the range of 6.5 to 8.5 (su).
 - c. For sites with engineered soils, the Permittee must begin the pH sampling period when the soil amendments are first exposed to precipitation and must continue until the area of engineered soils is fully stabilized.
3. The Permittee must sample pH in the sediment trap/pond(s) or other locations that receive stormwater runoff from the area of significant concrete work or engineered soils before the stormwater discharges to surface waters.
4. The benchmark value for pH is 8.5 standard units. Anytime sampling indicates that pH is 8.5 or greater, the Permittee must either:
 - a. Prevent the high pH water (8.5 or above) from entering storm sewer systems or surface waters of the state; *or*
 - b. If necessary, adjust or neutralize the high pH water until it is in the range of pH 6.5 to 8.5 (su) using an appropriate treatment BMP such as carbon dioxide (CO₂) sparging, dry ice or food grade vinegar. The Permittee must obtain written approval from Ecology before using any form of chemical treatment other than CO₂ sparging, dry ice or food grade vinegar.

S5. REPORTING AND RECORDKEEPING REQUIREMENTS

A. High Turbidity Reporting

Anytime sampling performed in accordance with Special Condition S4.C indicates turbidity has reached the 250 NTUs or more (or transparency less than or equal to 6 cm), high turbidity reporting level, the Permittee must notify Ecology within 24 hours of analysis either by calling the applicable Ecology Region's Environmental Report Tracking System (ERTS) number by phone or by submitting an electronic ERTS report (through Ecology's Water Quality Permitting Portal (WQWebPortal) – Permit Submittals when the form is available). See the CSWGP website for links to ERTS and the WQWebPortal. (<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>) Also, see phone numbers in Special Condition S4.C.5.b.i.

B. Discharge Monitoring Reports (DMRs)

Permittees required to conduct water quality sampling in accordance with Special Conditions S4.C (Turbidity/Transparency), S4.D (pH), S8 (303[d]/TMDL sampling), and/or G12 (Additional Sampling) must submit the results to Ecology.

Permittees must submit monitoring data using Ecology's WQWebDMR web application accessed through Ecology's Water Quality Permitting Portal.

Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper copy DMR at:

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, WA 98504-7696

Permittees who obtain a waiver not to use WQWebDMR must use the forms provided to them by Ecology; submittals must be mailed to the address above. Permittees must submit DMR forms to be received by Ecology within 15 days following the end of each month.

If there was no discharge during a given monitoring period, all Permittees must submit a DMR as required with "no discharge" entered in place of the monitoring results. DMRs are required for the full duration of permit coverage (from the first full month following the effective date of permit coverage up until Ecology has approved termination of the coverage). For more information, contact Ecology staff using information provided at the following website: www.ecy.wa.gov/programs/wq/permits/paris/contacts.html.

C. Records Retention

The Permittee must retain records of all monitoring information (site log book, sampling results, inspection reports/checklists, etc.), Stormwater Pollution Prevention Plan, copy of the permit coverage letter (including Transfer of Coverage documentation) and any other documentation of compliance with permit requirements for the entire life of the construction project and for a minimum of five (5) years following the termination of permit coverage. Such information must include all calibration and maintenance records, and records of all data used to complete the application for this permit. This period of retention must be extended during

the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

D. Recording Results

For each measurement or sample taken, the Permittee must record the following information:

1. Date, place, method, and time of sampling or measurement.
2. The first and last name of the individual who performed the sampling or measurement.
3. The date(s) the analyses were performed.
4. The first and last name of the individual who performed the analyses.
5. The analytical techniques or methods used.
6. The results of all analyses.

E. Additional Monitoring by the Permittee

If the Permittee samples or monitors any pollutant more frequently than required by this permit using test procedures specified by Special Condition S4 of this permit, the sampling results for this monitoring must be included in the calculation and reporting of the data submitted in the Permittee's DMR.

F. Noncompliance Notification

In the event the Permittee is unable to comply with any part of the terms and conditions of this permit, and the resulting noncompliance may cause a threat to human health or the environment (such as but not limited to spills or fuels or other materials, catastrophic pond or slope failure, and discharges that violate water quality standards), or exceed numeric effluent limitations (see S8 – Discharges to 303(d) or TMDL Waterbodies), the Permittee must, upon becoming aware of the circumstance:

1. Notify Ecology within 24 hours of the failure to comply by calling the applicable Regional office ERTS phone number (refer to Special Condition S4.C.5.b.i, or go to <https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue> to find contact information for the regional offices.)
2. Immediately take action to prevent the discharge/pollution, or otherwise stop or correct the noncompliance, and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to Ecology within five (5) days of becoming aware of the violation (See S5.F.3, below, for details on submitting results in a report).
3. Submit a detailed written report to Ecology within five (5) days of the time the Permittee becomes aware of the circumstances, unless requested earlier by Ecology. The report must be submitted using Ecology's Water Quality Permitting Portal (WQWebPortal) – Permit Submittals, unless a waiver from electronic reporting has been granted according to S5.B. The report must contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Permittee must report any unanticipated bypass and/or upset that exceeds any effluent limit in the permit in accordance with the 24-hour reporting requirement contained in 40 C.F.R. 122.41(l)(6).

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply. Upon request of the Permittee, Ecology may waive the requirement for a written report on a case-by-case basis, if the immediate notification is received by Ecology within 24 hours.

G. Access to Plans and Records

1. The Permittee must retain the following permit documentation (plans and records) on site, or within reasonable access to the site, for use by the operator or for on-site review by Ecology or the local jurisdiction:
 - a. General Permit
 - b. Permit Coverage Letter
 - c. Stormwater Pollution Prevention Plan (SWPPP)
 - d. Site Log Book
 - e. Erosivity Waiver (if applicable)
2. The Permittee must address written requests for plans and records listed above (Special Condition S5.G.1) as follows:
 - a. The Permittee must provide a copy of plans and records to Ecology within 14 days of receipt of a written request from Ecology.
 - b. The Permittee must provide a copy of plans and records to the public when requested in writing. Upon receiving a written request from the public for the Permittee's plans and records, the Permittee must either:
 - i. Provide a copy of the plans and records to the requester within 14 days of a receipt of the written request; *or*
 - ii. Notify the requester within 10 days of receipt of the written request of the location and times within normal business hours when the plans and records may be viewed; and provide access to the plans and records within 14 days of receipt of the written request; *or*

Within 14 days of receipt of the written request, the Permittee may submit a copy of the plans and records to Ecology for viewing and/or copying by the requester at an Ecology office, or a mutually agreed location. If plans and records are viewed and/or copied at a location other than at an Ecology office, the Permittee will provide reasonable access to copying services for which a reasonable fee may be charged. The Permittee must notify the requester within 10 days of receipt of the request where the plans and records may be viewed and/or copied.

S6. PERMIT FEES

The Permittee must pay permit fees assessed by Ecology. Fees for stormwater discharges covered under this permit are established by Chapter 173-224 WAC. Ecology continues to assess permit fees until the permit is terminated in accordance with Special Condition S10 or revoked in accordance with General Condition G5.

S7. SOLID AND LIQUID WASTE DISPOSAL

The Permittee must handle and dispose of solid and liquid wastes generated by construction activity, such as demolition debris, construction materials, contaminated materials, and waste materials from maintenance activities, including liquids and solids from cleaning catch basins and other stormwater facilities, in accordance with:

- A. Special Condition S3, Compliance with Standards.
- B. WAC 173-216-110.
- C. Other applicable regulations.

S8. DISCHARGES TO 303(d) OR TMDL WATERBODIES

A. Sampling and Numeric Effluent Limits For Certain Discharges to 303(d)-Listed Water Bodies

1. Permittees who discharge to segments of water bodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH, or phosphorus, must conduct water quality sampling according to the requirements of this section, and Special Conditions S4.C.2.b-f and S4.C.3.b-d, and must comply with the applicable numeric effluent limitations in S8.C and S8.D.
2. All references and requirements associated with Section 303(d) of the Clean Water Act mean the most current listing by Ecology of impaired waters (Category 5) that exists on January 1, 2021, or the date when the operator's complete permit application is received by Ecology, whichever is later.

B. Limits on Coverage for New Discharges to TMDL or 303(d)-Listed Waters

Construction sites that discharge to a TMDL or 303(d)-listed waterbody are not eligible for coverage under this permit *unless* the operator:

1. Prevents exposing stormwater to pollutants for which the waterbody is impaired, and retains documentation in the SWPPP that details procedures taken to prevent exposure on site; *or*
2. Documents that the pollutants for which the waterbody is impaired are not present at the site, and retains documentation of this finding within the SWPPP; *or*
3. Provides Ecology with data indicating the discharge is not expected to cause or contribute to an exceedance of a water quality standard, and retains such data on site with the SWPPP. The operator must provide data and other technical information to Ecology that sufficiently demonstrate:
 - a. For discharges to waters without an EPA-approved or -established TMDL, that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; *or*
 - b. For discharges to waters with an EPA-approved or -established TMDL, that there is sufficient remaining wasteload allocation in the TMDL to allow construction stormwater discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.

Operators of construction sites are eligible for coverage under this permit only after Ecology makes an affirmative determination that the *discharge will not cause or contribute to the existing impairment or exceed the TMDL.*

C. Sampling and Numeric Effluent Limits for Discharges to Water Bodies on the 303(d) List for Turbidity, Fine Sediment, or Phosphorus

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus must conduct turbidity sampling in accordance with Special Condition S4.C.2 and comply with either of the numeric effluent limits noted in Table 5 below.
2. As an alternative to the 25 NTUs effluent limit noted in Table 5 below (applied at the point where stormwater [or authorized non-stormwater] is discharged off-site), Permittees may choose to comply with the surface water quality standard for turbidity. The standard is: no more than 5 NTUs over background turbidity when the background turbidity is 50 NTUs or less, or no more than a 10% increase in turbidity when the background turbidity is more than 50 NTUs. In order to use the water quality standard requirement, the sampling must take place at the following locations:
 - a. Background turbidity in the 303(d)-listed receiving water immediately upstream (upgradient) or outside the area of influence of the discharge.
 - b. Turbidity at the point of discharge into the 303(d)-listed receiving water, inside the area of influence of the discharge.
3. Discharges that exceed the numeric effluent limit for turbidity constitute a violation of this permit.
4. Permittees whose discharges exceed the numeric effluent limit must sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

Table 5 Turbidity, Fine Sediment & Phosphorus Sampling and Limits for 303(d)-Listed Waters

Parameter identified in 303(d) listing	Parameter Sampled	Unit	Analytical Method	Sampling Frequency	Numeric Effluent Limit ¹
<ul style="list-style-type: none"> • Turbidity • Fine Sediment • Phosphorus 	Turbidity	NTU	SM2130	Weekly, if discharging	25 NTUs, at the point where stormwater is discharged from the site; <i>OR</i> In compliance with the surface water quality standard for turbidity (S8.C.2.a)

¹ Permittees subject to a numeric effluent limit for turbidity may, at their discretion, choose either numeric effluent limitation based on site-specific considerations including, but not limited to, safety, access and convenience.

D. Discharges to Water Bodies on the 303(d) List for High pH

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for high pH must conduct pH sampling in accordance with the table below, and comply with the numeric effluent limit of pH 6.5 to 8.5 su (Table 6).

Table 6 pH Sampling and Limits for 303(d)-Listed Waters

Parameter identified in 303(d) listing	Parameter Sampled/Units	Analytical Method	Sampling Frequency	Numeric Effluent Limit
High pH	pH /Standard Units	pH meter	Weekly, if discharging	In the range of 6.5 – 8.5 su

2. At the Permittee’s discretion, compliance with the limit shall be assessed at one of the following locations:
 - a. Directly in the 303(d)-listed waterbody segment, inside the immediate area of influence of the discharge; *or*
 - b. Alternatively, the Permittee may measure pH at the point where the discharge leaves the construction site, rather than in the receiving water.
3. Discharges that exceed the numeric effluent limit for pH (outside the range of 6.5 – 8.5 su) constitute a violation of this permit.
4. Permittees whose discharges exceed the numeric effluent limit must sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

E. Sampling and Limits for Sites Discharging to Waters Covered by a TMDL or another Pollution Control Plan

1. Discharges to a waterbody that is subject to a Total Maximum Daily Load (TMDL) for turbidity, fine sediment, high pH, or phosphorus must be consistent with the TMDL. Refer to <http://www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/TMDLbyWria.html> for more information on TMDLs.
 - a. Where an applicable TMDL sets specific waste load allocations or requirements for discharges covered by this permit, discharges must be consistent with any specific waste load allocations or requirements established by the applicable TMDL.
 - i. The Permittee must sample discharges weekly, unless otherwise specified by the TMDL, to evaluate compliance with the specific waste load allocations or requirements.
 - ii. Analytical methods used to meet the monitoring requirements must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.
 - iii. Turbidity and pH methods need not be accredited or registered unless conducted at a laboratory which must otherwise be accredited or registered.
 - b. Where an applicable TMDL has established a general waste load allocation for construction stormwater discharges, but has not identified specific requirements, compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.
 - c. Where an applicable TMDL has not specified a waste load allocation for construction stormwater discharges, but has not excluded these discharges, compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.
 - d. Where an applicable TMDL specifically precludes or prohibits discharges from construction activity, the operator is not eligible for coverage under this permit.

S9. STORMWATER POLLUTION PREVENTION PLAN

The Permittee must prepare and properly implement an adequate Stormwater Pollution Prevention Plan (SWPPP) for construction activity in accordance with the requirements of this permit beginning with initial soil disturbance and until final stabilization.

A. The Permittee's SWPPP must meet the following objectives:

1. To identify best management practices (BMPs) which prevent erosion and sedimentation, and to reduce, eliminate or prevent stormwater contamination and water pollution from construction activity.
2. To prevent violations of surface water quality, groundwater quality, or sediment management standards.
3. To control peak volumetric flow rates and velocities of stormwater discharges.

B. General Requirements

1. The SWPPP must include a narrative and drawings. All BMPs must be clearly referenced in the narrative and marked on the drawings. The SWPPP narrative must include documentation to explain and justify the pollution prevention decisions made for the project. Documentation must include:
 - a. Information about existing site conditions (topography, drainage, soils, vegetation, etc.).
 - b. Potential erosion problem areas.
 - c. The 13 elements of a SWPPP in Special Condition S9.D.1-13, including BMPs used to address each element.
 - d. Construction phasing/sequence and general BMP implementation schedule.
 - e. The actions to be taken if BMP performance goals are not achieved—for example, a contingency plan for additional treatment and/or storage of stormwater that would violate the water quality standards if discharged.
 - f. Engineering calculations for ponds, treatment systems, and any other designed structures. When a treatment system requires engineering calculations, these calculations must be included in the SWPPP. Engineering calculations do not need to be included in the SWPPP for treatment systems that do not require such calculations.
2. The Permittee must modify the SWPPP if, during inspections or investigations conducted by the owner/operator, or the applicable local or state regulatory authority, it is determined that the SWPPP is, or would be, ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site. The Permittee must then:
 - a. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the inspection or investigation.
 - b. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than 10 days from the inspection or investigation. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.
 - c. Document BMP implementation and maintenance in the site log book.

The Permittee must modify the SWPPP whenever there is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

C. Stormwater Best Management Practices (BMPs)

BMPs must be consistent with:

1. *Stormwater Management Manual for Western Washington* (most current approved edition at the time this permit was issued), for sites west of the crest of the Cascade Mountains; or

2. *Stormwater Management Manual for Eastern Washington* (most current approved edition at the time this permit was issued), for sites east of the crest of the Cascade Mountains; *or*
3. Revisions to the manuals listed in Special Condition S9.C.1 & 2, or other stormwater management guidance documents or manuals which provide an equivalent level of pollution prevention, that are approved by Ecology and incorporated into this permit in accordance with the permit modification requirements of WAC 173-226-230; *or*
4. Documentation in the SWPPP that the BMPs selected provide an equivalent level of pollution prevention, compared to the applicable stormwater management manuals, including:
 - a. The technical basis for the selection of all stormwater BMPs (scientific, technical studies, and/or modeling) that support the performance claims for the BMPs being selected.
 - b. An assessment of how the selected BMP will satisfy AKART requirements and the applicable federal technology-based treatment requirements under 40 CFR part 125.3.

D. SWPPP – Narrative Contents and Requirements

The Permittee must include each of the 13 elements below in Special Condition S9.D.1-13 in the narrative of the SWPPP and implement them unless site conditions render the element unnecessary and the exemption from that element is clearly justified in the SWPPP.

1. Preserve Vegetation/Mark Clearing Limits
 - a. Before beginning land-disturbing activities, including clearing and grading, clearly mark all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area.
 - b. Retain the duff layer, native topsoil, and natural vegetation in an undisturbed state to the maximum degree practicable.
2. Establish Construction Access
 - a. Limit construction vehicle access and exit to one route, if possible.
 - b. Stabilize access points with a pad of quarry spalls, crushed rock, or other equivalent BMPs, to minimize tracking sediment onto roads.
 - c. Locate wheel wash or tire baths on site, if the stabilized construction entrance is not effective in preventing tracking sediment onto roads.
 - d. If sediment is tracked off site, clean the affected roadway thoroughly at the end of each day, or more frequently as necessary (for example, during wet weather). Remove sediment from roads by shoveling, sweeping, or pickup and transport of the sediment to a controlled sediment disposal area.
 - e. Conduct street washing only after sediment removal in accordance with Special Condition S9.D.2.d.
 - f. Control street wash wastewater by pumping back on site or otherwise preventing it from discharging into systems tributary to waters of the State.

3. Control Flow Rates

- a. Protect properties and waterways downstream of construction sites from erosion and the associated discharge of turbid waters due to increases in the velocity and peak volumetric flow rate of stormwater runoff from the project site, as required by local plan approval authority.
- b. Where necessary to comply with Special Condition S9.D.3.a, construct stormwater infiltration or detention BMPs as one of the first steps in grading. Assure that detention BMPs function properly before constructing site improvements (for example, impervious surfaces).
- c. If permanent infiltration ponds are used for flow control during construction, protect these facilities from sedimentation during the construction phase.

4. Install Sediment Controls

The Permittee must design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, the Permittee must:

- a. Construct sediment control BMPs (sediment ponds, traps, filters, infiltration facilities, etc.) as one of the first steps in grading. These BMPs must be functional before other land disturbing activities take place.
- b. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.
- c. Direct stormwater runoff from disturbed areas through a sediment pond or other appropriate sediment removal BMP, before the runoff leaves a construction site or before discharge to an infiltration facility. Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but must meet the flow control performance standard of Special Condition S9.D.3.a.
- d. Locate BMPs intended to trap sediment on site in a manner to avoid interference with the movement of juvenile salmonids attempting to enter off-channel areas or drainages.
- e. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible.
- f. Where feasible, design outlet structures that withdraw impounded stormwater from the surface to avoid discharging sediment that is still suspended lower in the water column.

5. Stabilize Soils

- a. The Permittee must stabilize exposed and unworked soils by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, erosion

control fabrics and matting, soil application of polyacrylamide (PAM), the early application of gravel base on areas to be paved, and dust control.

- b. The Permittee must control stormwater volume and velocity within the site to minimize soil erosion.
- c. The Permittee must control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion.
- d. Depending on the geographic location of the project, the Permittee must not allow soils to remain exposed and unworked for more than the time periods set forth below to prevent erosion.

West of the Cascade Mountains Crest

During the dry season (May 1 - September 30): 7 days

During the wet season (October 1 - April 30): 2 days

East of the Cascade Mountains Crest, except for Central Basin*

During the dry season (July 1 - September 30): 10 days

During the wet season (October 1 - June 30): 5 days

The Central Basin*, East of the Cascade Mountains Crest

During the dry Season (July 1 - September 30): 30 days

During the wet season (October 1 - June 30): 15 days

***Note: The Central Basin** is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches.

- e. The Permittee must stabilize soils at the end of the shift before a holiday or weekend if needed based on the weather forecast.
- f. The Permittee must stabilize soil stockpiles from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.
- g. The Permittee must minimize the amount of soil exposed during construction activity.
- h. The Permittee must minimize the disturbance of steep slopes.
- i. The Permittee must minimize soil compaction and, unless infeasible, preserve topsoil.

6. Protect Slopes

- a. The Permittee must design and construct cut-and-fill slopes in a manner to minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (for example, track walking).
- b. The Permittee must divert off-site stormwater (run-on) or groundwater away from slopes and disturbed areas with interceptor dikes, pipes, and/or swales. Off-site stormwater should be managed separately from stormwater generated on the site.
- c. At the top of slopes, collect drainage in pipe slope drains or protected channels to prevent erosion.

- i. West of the Cascade Mountains Crest: Temporary pipe slope drains must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as "landscaped area."
 - ii. East of the Cascade Mountains Crest: Temporary pipe slope drains must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.
 - d. Place excavated material on the uphill side of trenches, consistent with safety and space considerations.
 - e. Place check dams at regular intervals within constructed channels that are cut down a slope.
- 7. Protect Drain Inlets
 - a. Protect all storm drain inlets made operable during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment.
 - b. Clean or remove and replace inlet protection devices when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).
- 8. Stabilize Channels and Outlets
 - a. Design, construct and stabilize all on-site conveyance channels to prevent erosion from the following expected peak flows:
 - i. West of the Cascade Mountains Crest: Channels must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate indicated by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the WWHM to predict flows, bare soil areas should be modeled as "landscaped area."
 - ii. East of the Cascade Mountains Crest: Channels must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.
 - b. Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches at the outlets of all conveyance systems.

9. Control Pollutants

Design, install, implement and maintain effective pollution prevention measures to minimize the discharge of pollutants. The Permittee must:

- a. Handle and dispose of all pollutants, including waste materials and demolition debris that occur on site in a manner that does not cause contamination of stormwater.
- b. Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. Minimize storage of hazardous materials on-site. Safety Data Sheets (SDS) should be supplied for all materials stored. Chemicals should be kept in their original labeled containers. On-site fueling tanks must include secondary containment. Secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume of the largest tank within the containment structure. Double-walled tanks do not require additional secondary containment.
- c. Conduct maintenance, fueling, and repair of heavy equipment and vehicles using spill prevention and control measures. Clean contaminated surfaces immediately following any spill incident.
- d. Discharge wheel wash or tire bath wastewater to a separate on-site treatment system that prevents discharge to surface water, such as closed-loop recirculation or upland land application, or to the sanitary sewer with local sewer district approval.
- e. Apply fertilizers and pesticides in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Follow manufacturers' label requirements for application rates and procedures.
- f. Use BMPs to prevent contamination of stormwater runoff by pH-modifying sources. The sources for this contamination include, but are not limited to: bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, recycled concrete stockpiles, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, concrete pumping and mixer washout waters. (Also refer to the definition for "concrete wastewater" in Appendix A – Definitions.)
- g. Adjust the pH of stormwater or authorized non-stormwater if necessary to prevent an exceedance of groundwater and/or surface water quality standards.
- h. Assure that washout of concrete trucks is performed off-site or in designated concrete washout areas only. Do not wash out concrete truck drums onto the ground, or into storm drains, open ditches, streets, or streams. Washout of small concrete handling equipment may be disposed of in a formed area awaiting concrete where it will not contaminate surface or groundwater. Do not dump excess concrete on site, except in designated concrete washout areas. Concrete spillage or concrete discharge directly to groundwater or surface waters of the State is

prohibited. At no time shall concrete be washed off into the footprint of an area where an infiltration BMP will be installed.

- i. Obtain written approval from Ecology before using any chemical treatment, with the exception of CO₂, dry ice or food grade vinegar, to adjust pH.
- j. Uncontaminated water from water-only based shaft drilling for construction of building, road, and bridge foundations may be infiltrated provided the wastewater is managed in a way that prohibits discharge to surface waters. Prior to infiltration, water from water-only based shaft drilling that comes into contact with curing concrete must be neutralized until pH is in the range of 6.5 to 8.5 (su).

10. Control Dewatering

- a. Permittees must discharge foundation, vault, and trench dewatering water, which have characteristics similar to stormwater runoff at the site, in conjunction with BMPs to reduce sedimentation before discharge to a sediment trap or sediment pond.
- b. Permittees may discharge clean, non-turbid dewatering water, such as well-point groundwater, to systems tributary to, or directly into surface waters of the State, as specified in Special Condition S9.D.8, provided the dewatering flow does not cause erosion or flooding of receiving waters. Do not route clean dewatering water through stormwater sediment ponds. Note that "surface waters of the State" may exist on a construction site as well as off site; for example, a creek running through a site.
- c. Other dewatering treatment or disposal options may include:
 - i. Infiltration
 - ii. Transport off site in a vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters.
 - iii. Ecology-approved on-site chemical treatment or other suitable treatment technologies (See S9.D.9.i, regarding chemical treatment written approval).
 - iv. Sanitary or combined sewer discharge with local sewer district approval, if there is no other option.
 - v. Use of a sedimentation bag with discharge to a ditch or swale for small volumes of localized dewatering.
- d. Permittees must handle highly turbid or contaminated dewatering water separately from stormwater.

11. Maintain BMPs

- a. Permittees must maintain and repair all temporary and permanent erosion and sediment control BMPs as needed to assure continued performance of their intended function in accordance with BMP specifications.
- b. Permittees must remove all temporary erosion and sediment control BMPs within 30 days after achieving final site stabilization or after the temporary BMPs are no longer needed.

12. Manage the Project

- a. Phase development projects to the maximum degree practicable and take into account seasonal work limitations.
- b. Inspect, maintain and repair all BMPs as needed to assure continued performance of their intended function. Conduct site inspections and monitoring in accordance with Special Condition S4.
- c. Maintain, update, and implement the SWPPP in accordance with Special Conditions S3, S4, and S9.

13. Protect Low Impact Development (LID) BMPs

The primary purpose of on-site LID Stormwater Management is to reduce the disruption of the natural site hydrology through infiltration. LID BMPs are permanent facilities.

- a. Permittees must protect all LID BMPs (including, but not limited to, Bioretention and Rain Garden facilities) from sedimentation through installation and maintenance of erosion and sediment control BMPs on portions of the site that drain into the Bioretention and/or Rain Garden facilities. Restore the BMPs to their fully functioning condition if they accumulate sediment during construction. Restoring the facility must include removal of sediment and any sediment-laden bioretention/ rain garden soils, and replacing the removed soils with soils meeting the design specification.
- b. Permittees must maintain the infiltration capabilities of LID BMPs by protecting against compaction by construction equipment and foot traffic. Protect completed lawn and landscaped areas from compaction due to construction equipment.
- c. Permittees must control erosion and avoid introducing sediment from surrounding land uses onto permeable pavements. Do not allow muddy construction equipment on the base material or pavement. Do not allow sediment-laden runoff onto permeable pavements or base materials.
- d. Permittees must clean permeable pavements fouled with sediments or no longer passing an initial infiltration test using local stormwater manual methodology or the manufacturer's procedures.
- e. Permittees must keep all heavy equipment off existing soils under LID BMPs that have been excavated to final grade to retain the infiltration rate of the soils.

E. SWPPP – Map Contents and Requirements

The Permittee's SWPPP must also include a vicinity map or general location map (for example, a USGS quadrangle map, a portion of a county or city map, or other appropriate map) with enough detail to identify the location of the construction site and receiving waters within one mile of the site.

The SWPPP must also include a legible site map (or maps) showing the entire construction site. The following features must be identified, unless not applicable due to site conditions.

1. The direction of north, property lines, and existing structures and roads.
2. Cut and fill slopes indicating the top and bottom of slope catch lines.

3. Approximate slopes, contours, and direction of stormwater flow before and after major grading activities.
4. Areas of soil disturbance and areas that will not be disturbed.
5. Locations of structural and nonstructural controls (BMPs) identified in the SWPPP.
6. Locations of off-site material, stockpiles, waste storage, borrow areas, and vehicle/equipment storage areas.
7. Locations of all surface water bodies, including wetlands.
8. Locations where stormwater or non-stormwater discharges off-site and/or to a surface waterbody, including wetlands.
9. Location of water quality sampling station(s), if sampling is required by state or local permitting authority.
10. Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.
11. Location or proposed location of LID facilities.

S10. NOTICE OF TERMINATION

Partial terminations of permit coverage are not authorized.

- A.** The site is eligible for termination of coverage when it has met any of the following conditions:
 1. The site has undergone final stabilization, the Permittee has removed all temporary BMPs (except biodegradable BMPs clearly manufactured with the intention for the material to be left in place and not interfere with maintenance or land use), and all stormwater discharges associated with construction activity have been eliminated; *or*
 2. All portions of the site that have not undergone final stabilization per Special Condition S10.A.1 have been sold and/or transferred (per Special Condition S2.A), and the Permittee no longer has operational control of the construction activity; *or*
 3. For residential construction only, the Permittee has completed temporary stabilization and the homeowners have taken possession of the residences.
- B.** When the site is eligible for termination, the Permittee must submit a complete and accurate Notice of Termination (NOT) form, signed in accordance with General Condition G2, to:

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, WA 98504-7696

When an electronic termination form is available, the Permittee may choose to submit a complete and accurate Notice of Termination (NOT) form through the Water Quality Permitting Portal rather than mailing a hardcopy as noted above.

The termination is effective on the 31st calendar day following the date Ecology receives a complete NOT form, unless Ecology notifies the Permittee that termination request is denied because the Permittee has not met the eligibility requirements in Special Condition S10.A.

Permittees are required to comply with all conditions and effluent limitations in the permit until the permit has been terminated.

Permittees transferring the property to a new property owner or operator/Permittee are required to complete and submit the Notice of Transfer form to Ecology, but are not required to submit a Notice of Termination form for this type of transaction.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this general permit must be consistent with the terms and conditions of this general permit. Any discharge of any pollutant more frequent than or at a level in excess of that identified and authorized by the general permit must constitute a violation of the terms and conditions of this permit.

G2. SIGNATORY REQUIREMENTS

- A.** All permit applications must bear a certification of correctness to be signed:
1. In the case of corporations, by a responsible corporate officer.
 2. In the case of a partnership, by a general partner of a partnership.
 3. In the case of sole proprietorship, by the proprietor.
 4. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.
- B.** All reports required by this permit and other information requested by Ecology (including NOIs, NOTs, and Transfer of Coverage forms) must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
1. The authorization is made in writing by a person described above and submitted to Ecology.
 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.
- C.** Changes to authorization. If an authorization under paragraph G2.B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph G2.B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D.** Certification. Any person signing a document under this section must make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G3. RIGHT OF INSPECTION AND ENTRY

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- A.** To enter upon the premises where a discharge is located or where any records are kept under the terms and conditions of this permit.
- B.** To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.
- C.** To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D.** To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G4. GENERAL PERMIT MODIFICATION AND REVOCATION

This permit may be modified, revoked and reissued, or terminated in accordance with the provisions of Chapter 173-226 WAC. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, the following:

- A.** When a change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this permit.
- B.** When effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of dischargers covered under this permit.
- C.** When a water quality management plan containing requirements applicable to the category of dischargers covered under this permit is approved, or
- D.** When information is obtained that indicates cumulative effects on the environment from dischargers covered under this permit are unacceptable.

G5. REVOCATION OF COVERAGE UNDER THE PERMIT

Pursuant to Chapter 43.21B RCW and Chapter 173-226 WAC, the Director may terminate coverage for any discharger under this permit for cause. Cases where coverage may be terminated include, but are not limited to, the following:

- A.** Violation of any term or condition of this permit.
- B.** Obtaining coverage under this permit by misrepresentation or failure to disclose fully all relevant facts.
- C.** A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.
- D.** Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- E.** A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations.
- F.** Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and Chapter 173-224 WAC.

- G.** Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable.

The Director may require any discharger under this permit to apply for and obtain coverage under an individual permit or another more specific general permit. Permittees who have their coverage revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within ninety (90) days from the time of revocation and is submitted along with a complete individual permit application form.

G6. REPORTING A CAUSE FOR MODIFICATION

The Permittee must submit a new application, or a supplement to the previous application, whenever a material change to the construction activity or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application must be submitted at least sixty (60) days prior to any proposed changes. Filing a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G7. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit will be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G8. DUTY TO REAPPLY

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit. The Permittee must reapply using the electronic application form (NOI) available on Ecology's website. Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper NOI.

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, WA 98504-7696

G9. REMOVED SUBSTANCE

The Permittee must not re-suspend or reintroduce collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to the final effluent stream for discharge to state waters.

G10. DUTY TO PROVIDE INFORMATION

The Permittee must submit to Ecology, within a reasonable time, all information that Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology, upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

G11. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G12. ADDITIONAL MONITORING

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G13. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment at the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G14. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in Special Condition S5.F, and; 4) the Permittee complied with any remedial measures required under this permit.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G15. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G16. DUTY TO COMPLY

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G17. TOXIC POLLUTANTS

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G18. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this condition, punishment shall be a fine of not more than \$20,000 per day of violation, or imprisonment of not more than four (4) years, or both.

G19. REPORTING PLANNED CHANGES

The Permittee must, as soon as possible, give notice to Ecology of planned physical alterations, modifications or additions to the permitted construction activity. The Permittee should be aware that, depending on the nature and size of the changes to the original permit, a new public notice and other permit process requirements may be required. Changes in activities that require reporting to Ecology include those that will result in:

- A.** The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).
- B.** A significant change in the nature or an increase in quantity of pollutants discharged, including but not limited to: a 20% or greater increase in acreage disturbed by construction activity.
- C.** A change in or addition of surface water(s) receiving stormwater or non-stormwater from the construction activity.
- D.** A change in the construction plans and/or activity that affects the Permittee's monitoring requirements in Special Condition S4.

Following such notice, permit coverage may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G20. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to Ecology, it must promptly submit such facts or information.

G21. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee must give advance notice to Ecology by submission of a new application or supplement thereto at least forty-five (45) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of

operation and degradation of effluent quality, must be scheduled during non-critical water quality periods and carried out in a manner approved by Ecology.

G22. REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT

Any discharger authorized by this permit may request to be excluded from coverage under the general permit by applying for an individual permit. The discharger must submit to the Director an application as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request. These reasons will fully document how an individual permit will apply to the applicant in a way that the general permit cannot. Ecology may make specific requests for information to support the request. The Director will either issue an individual permit or deny the request with a statement explaining the reason for the denial. When an individual permit is issued to a discharger otherwise subject to the construction stormwater general permit, the applicability of the construction stormwater general permit to that Permittee is automatically terminated on the effective date of the individual permit.

G23. APPEALS

- A.** The terms and conditions of this general permit, as they apply to the appropriate class of dischargers, are subject to appeal by any person within 30 days of issuance of this general permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.
- B.** The terms and conditions of this general permit, as they apply to an individual discharger, are appealable in accordance with Chapter 43.21B RCW within 30 days of the effective date of coverage of that discharger. Consideration of an appeal of general permit coverage of an individual discharger is limited to the general permit's applicability or nonapplicability to that individual discharger.
- C.** The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this general permit. If the terms and conditions of this general permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

G24. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

G25. BYPASS PROHIBITED

A. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited for stormwater events below the design criteria for stormwater management. Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, 3 or 4) is applicable.

- 1. Bypass of stormwater is consistent with the design criteria and part of an approved management practice in the applicable stormwater management manual.
- 2. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health.

3. Bypass of stormwater is unavoidable, unanticipated, and results in noncompliance of this permit.

This bypass is permitted only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
 - b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.
 - c. Ecology is properly notified of the bypass as required in Special Condition S5.F of this permit.
4. A planned action that would cause bypass of stormwater and has the potential to result in noncompliance of this permit during a storm event.

The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:

- a. A description of the bypass and its cause
 - b. An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
 - c. A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
 - d. The minimum and maximum duration of bypass under each alternative.
 - e. A recommendation as to the preferred alternative for conducting the bypass.
 - f. The projected date of bypass initiation.
 - g. A statement of compliance with SEPA.
 - h. A request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated.
 - i. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
5. For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above must be considered during

preparation of the Stormwater Pollution Prevention Plan (SWPPP) and must be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

Ecology will consider the following before issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve, conditionally approve, or deny the request. The public must be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under RCW 90.48.120.

B. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

APPENDIX A – DEFINITIONS

AKART is an acronym for “All Known, Available, and Reasonable methods of prevention, control, and Treatment.” AKART represents the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants and controlling pollution associated with a discharge.

Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus, which was completed and approved by EPA before January 1, 2021, or before the date the operator’s complete permit application is received by Ecology, whichever is later. TMDLs completed after a complete permit application is received by Ecology become applicable to the Permittee only if they are imposed through an administrative order by Ecology, or through a modification of permit coverage.

Applicant means an *operator* seeking coverage under this permit.

Benchmark means a pollutant concentration used as a permit threshold, below which a pollutant is considered unlikely to cause a water quality violation, and above which it may. When pollutant concentrations exceed benchmarks, corrective action requirements take effect. Benchmark values are not water quality standards and are not numeric effluent limitations; they are indicator values.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control stormwater associated with construction activity, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Buffer means an area designated by a local jurisdiction that is contiguous to and intended to protect a sensitive area.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

Calendar Day A period of 24 consecutive hours starting at 12:00 midnight and ending the following 12:00 midnight.

Calendar Week (same as **Week**) means a period of seven consecutive days starting at 12:01 a.m. (0:01 hours) on Sunday.

Certified Erosion and Sediment Control Lead (CESCL) means a person who has current certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (See BMP C160 in the SWMM).

Chemical Treatment means the addition of chemicals to stormwater and/or authorized non-stormwater prior to filtration and discharge to surface waters.

Clean Water Act (CWA) means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

Combined Sewer means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

Common Plan of Development or Sale means a site where multiple separate and distinct construction activities may be taking place at different times on different schedules and/or by different contractors, but still under a single plan. Examples include: 1) phased projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (e.g., a development where lots are sold to separate builders); 2) a development plan that may be phased over multiple years, but is still under a consistent plan for long-term development; 3) projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility; and 4) linear projects such as roads, pipelines, or utilities. If the project is part of a common plan of development or sale, the disturbed area of the entire plan must be used in determining permit requirements.

Composite Sample means a mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquots).

Concrete Wastewater means any water used in the production, pouring and/or clean-up of concrete or concrete products, and any water used to cut, grind, wash, or otherwise modify concrete or concrete products. Examples include water used for or resulting from concrete truck/mixer/pumper/tool/chute rinsing or washing, concrete saw cutting and surfacing (sawing, coring, grinding, roughening, hydro-demolition, bridge and road surfacing). When stormwater combines with concrete wastewater, the resulting water is considered concrete wastewater and must be managed to prevent discharge to waters of the State, including groundwater.

Construction Activity means land disturbing operations including clearing, grading or excavation which disturbs the surface of the land (including off-site disturbance acreage related to construction-support activity). Such activities may include road construction, construction of residential houses, office buildings, or industrial buildings, site preparation, soil compaction, movement and stockpiling of topsoils, and demolition activity.

Construction Support Activity means off-site acreage that will be disturbed as a direct result of the construction project and will discharge stormwater. For example, off-site equipment staging yards, material storage areas, borrow areas, and parking areas.

Contaminant means any hazardous substance that does not occur naturally or occurs at greater than natural background levels. See definition of "hazardous substance" and WAC 173-340-200.

Contaminated soil means soil which contains contaminants, pollutants, or hazardous substances that do not occur naturally or occur at levels greater than natural background.

Contaminated groundwater means groundwater which contains contaminants, pollutants, or hazardous substances that do not occur naturally or occur at levels greater than natural background.

Demonstrably Equivalent means that the technical basis for the selection of all stormwater BMPs is documented within a SWPPP, including:

1. The method and reasons for choosing the stormwater BMPs selected.
2. The pollutant removal performance expected from the BMPs selected.

3. The technical basis supporting the performance claims for the BMPs selected, including any available data concerning field performance of the BMPs selected.
4. An assessment of how the selected BMPs will comply with state water quality standards.
5. An assessment of how the selected BMPs will satisfy both applicable federal technology-based treatment requirements and state requirements to use all known, available, and reasonable methods of prevention, control, and treatment (AKART).

Department means the Washington State Department of Ecology.

Detention means the temporary storage of stormwater to improve quality and/or to reduce the mass flow rate of discharge.

Dewatering means the act of pumping groundwater or stormwater away from an active construction site.

Director means the Director of the Washington State Department of Ecology or his/her authorized representative.

Discharger means an owner or operator of any facility or activity subject to regulation under Chapter 90.48 RCW or the Federal Clean Water Act.

Domestic Wastewater means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such groundwater infiltration or surface waters as may be present.

Ecology means the Washington State Department of Ecology.

Engineered Soils means the use of soil amendments including, but not limited, to Portland cement treated base (CTB), cement kiln dust (CKD), or fly ash to achieve certain desirable soil characteristics.

Equivalent BMPs means operational, source control, treatment, or innovative BMPs which result in equal or better quality of stormwater discharge to surface water or to groundwater than BMPs selected from the SWMM.

Erosion means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

Erosion and Sediment Control BMPs means BMPs intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, sediment traps, and ponds. Erosion and sediment control BMPs are synonymous with stabilization and structural BMPs.

Federal Operator is an entity that meets the definition of "Operator" in this permit and is either any department, agency or instrumentality of the executive, legislative, and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, performing construction activity for any such department, agency, or instrumentality.

Final Stabilization (same as **fully stabilized** or **full stabilization**) means the completion of all soil disturbing activities at the site and the establishment of permanent vegetative cover, or equivalent permanent stabilization measures (such as pavement, riprap, gabions, or geotextiles) which will prevent erosion. See the applicable Stormwater Management Manual for more information on vegetative cover expectations and equivalent permanent stabilization measures.

Groundwater means water in a saturated zone or stratum beneath the land surface or a surface waterbody.

Hazardous Substance means any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6), or any dangerous or extremely dangerous waste as designated by rule under chapter 70.105 RCW; any hazardous sub-stance as defined in RCW 70.105.010(14) or any hazardous substance as defined by rule under chapter 70.105 RCW; any substance that, on the effective date of this section, is a hazardous substance under section 101(14) of the federal cleanup law, 42U.S.C., Sec. 9601(14); petroleum or petroleum products; and any substance or category of substances, including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment. The term hazardous substance does not include any of the following when contained in an underground storage tank from which there is not a release: crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable federal, state, and local law.

Injection Well means a well that is used for the subsurface emplacement of fluids. (See **Well**.)

Jurisdiction means a political unit such as a city, town or county; incorporated for local self-government.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the State from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington State Department of Ecology.

Notice of Intent (NOI) means the application for, or a request for coverage under this general permit pursuant to WAC 173-226-200.

Notice of Termination (NOT) means a request for termination of coverage under this general permit as specified by Special Condition S10 of this permit.

Operator means any party associated with a construction project that meets either of the following two criteria:

- The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
- The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

Permittee means individual or entity that receives notice of coverage under this general permit.

pH means a liquid's measure of acidity or alkalinity. A pH of 7 is defined as neutral. Large variations above or below this value are considered harmful to most aquatic life.

pH Monitoring Period means the time period in which the pH of stormwater runoff from a site must be tested a minimum of once every seven days to determine if stormwater pH is between 6.5 and 8.5.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, and container from which pollutants are or may be discharged to surface waters of the State. This term does not include return flows from irrigated agriculture. (See the Fact Sheet for further explanation)

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of section 312 of the CWA, nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the CWA.

Pollution means contamination or other alteration of the physical, chemical, or biological properties of waters of the State; including change in temperature, taste, color, turbidity, or odor of the waters; or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the State as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish or other aquatic life.

Process Wastewater means any non-stormwater which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. If stormwater commingles with process wastewater, the commingled water is considered process wastewater.

Receiving Water means the waterbody at the point of discharge. If the discharge is to a storm sewer system, either surface or subsurface, the receiving water is the waterbody to which the storm system discharges. Systems designed primarily for other purposes such as for groundwater drainage, redirecting stream natural flows, or for conveyance of irrigation water/return flows that coincidentally convey stormwater are considered the receiving water.

Representative means a stormwater or wastewater sample which represents the flow and characteristics of the discharge. Representative samples may be a grab sample, a time-proportionate *composite sample*, or a flow proportionate sample. Ecology's Construction Stormwater Monitoring Manual provides guidance on representative sampling.

Responsible Corporate Officer for the purpose of signatory authority means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Sanitary Sewer means a sewer which is designed to convey domestic wastewater.

Sediment means the fragmented material that originates from the weathering and erosion of rocks or unconsolidated deposits, and is transported by, suspended in, or deposited by water.

Sedimentation means the depositing or formation of sediment.

Sensitive Area means a waterbody, wetland, stream, aquifer recharge area, or channel migration zone.

SEPA (State Environmental Policy Act) means the Washington State Law, RCW 43.21C.020, intended to prevent or eliminate damage to the environment.

Significant Amount means an amount of a pollutant in a discharge that is amenable to available and reasonable methods of prevention or treatment; or an amount of a pollutant that has a reasonable potential to cause a violation of surface or groundwater quality or sediment management standards.

Significant Concrete Work means greater than 1000 cubic yards placed or poured concrete or recycled concrete used over the life of a project.

Significant Contributor of Pollutants means a facility determined by Ecology to be a contributor of a significant amount(s) of a pollutant(s) to waters of the State of Washington.

Site means the land or water area where any "facility or activity" is physically located or conducted.

Source Control BMPs means physical, structural or mechanical devices or facilities that are intended to prevent pollutants from entering stormwater. A few examples of source control BMPs are erosion control practices, maintenance of stormwater facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the sanitary sewer or a dead end sump.

Stabilization means the application of appropriate BMPs to prevent the erosion of soils, such as, temporary and permanent seeding, vegetative covers, mulching and matting, plastic covering and sodding. See also the definition of Erosion and Sediment Control BMPs.

Storm Drain means any drain which drains directly into a *storm sewer system*, usually found along roadways or in parking lots.

Storm Sewer System means a means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains designed or used for collecting or conveying stormwater. This does not include systems which are part of a *combined sewer* or Publicly Owned Treatment Works (POTW), as defined at 40 CFR 122.2.

Stormwater means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface waterbody, or a constructed infiltration facility.

Stormwater Management Manual (SWMM) or Manual means the technical Manual published by Ecology for use by local governments that contain descriptions of and design criteria for BMPs to prevent, control, or treat pollutants in stormwater.

Stormwater Pollution Prevention Plan (SWPPP) means a documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of stormwater.

Surface Waters of the State includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Temporary Stabilization means the exposed ground surface has been covered with appropriate materials to provide temporary stabilization of the surface from water or wind erosion. Materials include, but are not limited to, mulch, riprap, erosion control mats or blankets and temporary cover crops. Seeding alone is not considered stabilization. Temporary stabilization is not a substitute for the more permanent "final stabilization."

Total Maximum Daily Load (TMDL) means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet state water quality standards. Percentages of the total maximum daily load are allocated to the various pollutant sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The TMDL calculations must include a "margin of safety" to ensure that the waterbody can be protected in case there are unforeseen events or unknown sources of the pollutant. The calculation must also account for seasonable variation in water quality.

Transfer of Coverage (TOC) means a request for transfer of coverage under this general permit as specified by Special Condition S2.A of this permit.

Treatment BMPs means BMPs that are intended to remove pollutants from stormwater. A few examples of treatment BMPs are detention ponds, oil/water separators, biofiltration, and constructed wetlands.

Transparency means a measurement of water clarity in centimeters (cm), using a 60 cm transparency tube. The transparency tube is used to estimate the relative clarity or transparency of water by noting the depth at which a black and white Secchi disc becomes visible when water is released from a value in the bottom of the tube. A transparency tube is sometimes referred to as a "turbidity tube."

Turbidity means the clarity of water expressed as nephelometric turbidity units (NTUs) and measured with a calibrated turbidimeter.

Uncontaminated means free from any contaminant. See definition of "contaminant" and WAC 173-340-200.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Waste Load Allocation (WLA) means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality based effluent limitation (40 CFR 130.2[h]).

Water-Only Based Shaft Drilling is a shaft drilling process that uses water only and no additives are involved in the drilling of shafts for construction of building, road, or bridge foundations.

Water Quality means the chemical, physical, and biological characteristics of water, usually with respect to its suitability for a particular purpose.

Waters of the State includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the State" as defined in Chapter 90.48 RCW, which include lakes, rivers, ponds, streams, inland waters, underground waters, salt

waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

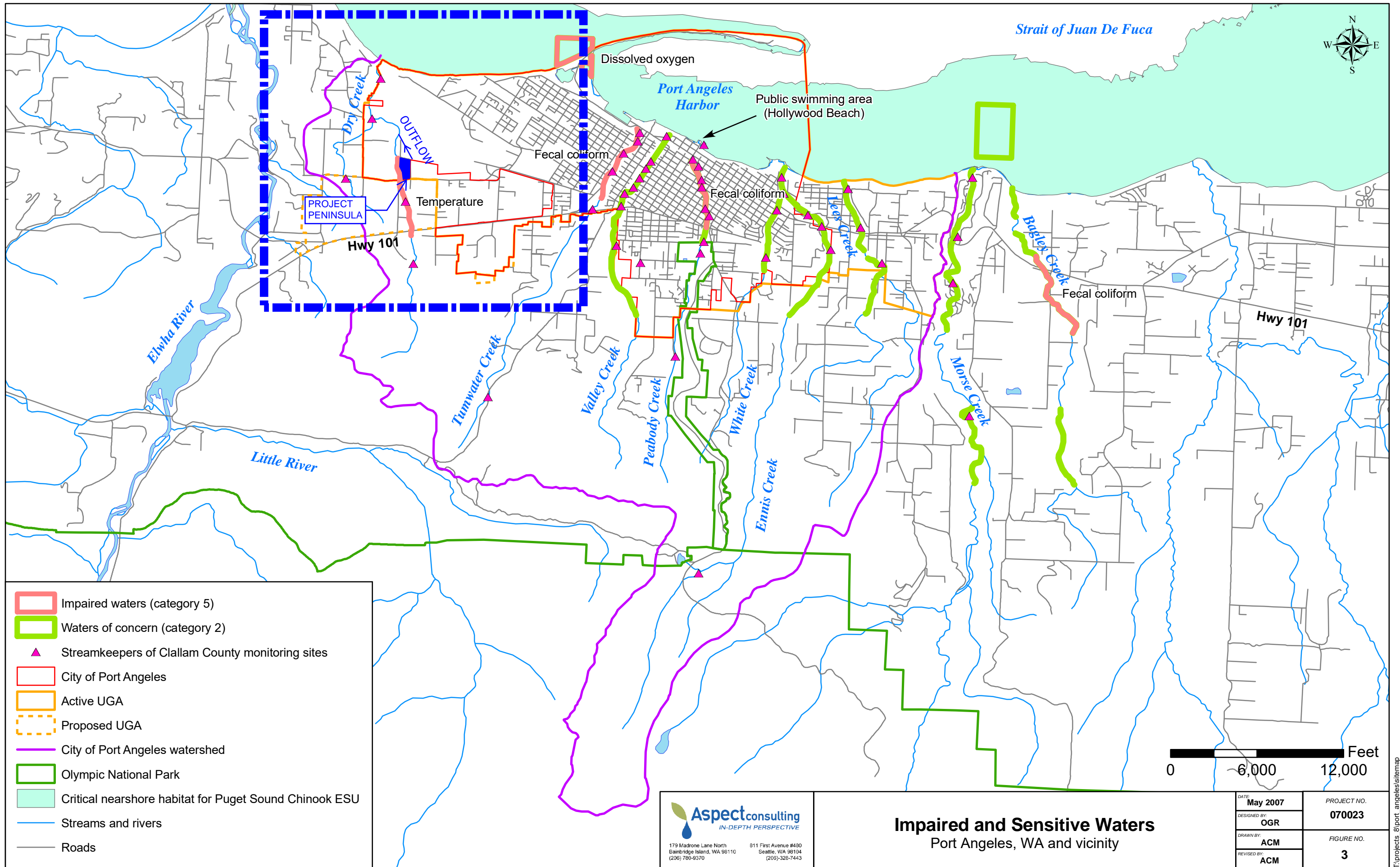
Well means a bored, drilled or driven shaft, or dug hole whose depth is greater than the largest surface dimension. (See **Injection Well**.)

Wheel Wash Wastewater means any water used in, or resulting from the operation of, a tire bath or wheel wash (BMP C106: Wheel Wash), or other structure or practice that uses water to physically remove mud and debris from vehicles leaving a construction site and prevent track-out onto roads. When stormwater combines with wheel wash wastewater, the resulting water is considered wheel wash wastewater and must be managed according to Special Condition S9.D.9.

APPENDIX B – ACRONYMS

AKART	All Known, Available, and Reasonable Methods of Prevention, Control, and Treatment
BMP	Best Management Practice
CESCL	Certified Erosion and Sediment Control Lead
CFR	Code of Federal Regulations
CKD	Cement Kiln Dust
cm	Centimeters
CPD	Common Plan of Development
CTB	Cement-Treated Base
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
ERTS	Environmental Report Tracking System
ESC	Erosion and Sediment Control
FR	Federal Register
LID	Low Impact Development
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SWMM	Stormwater Management Manual
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
UIC	Underground Injection Control
USC	United States Code
USEPA	United States Environmental Protection Agency
WAC	Washington Administrative Code
WQ	Water Quality
WWHM	Western Washington Hydrology Model

APPENDIX F
303(d) LIST WATER BODIES / TMDL
WATERBODIES INFORMATION



Aspect consulting
IN-DEPTH PERSPECTIVE

179 Madrone Lane North
Bainbridge Island, WA 98110
(206) 760-6370

811 First Avenue #430
Seattle, WA 98104
(206) 326-7443

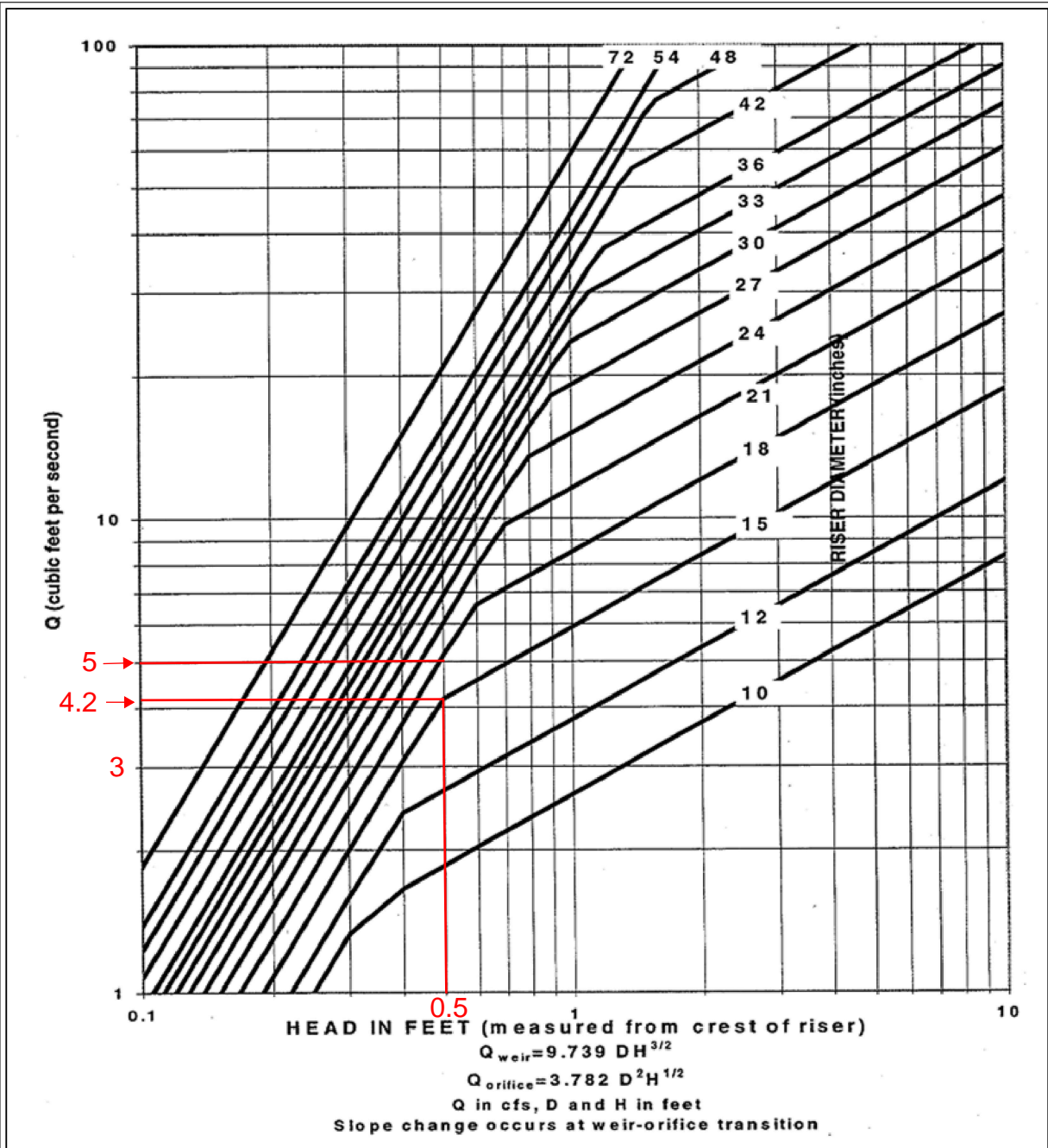
Impaired and Sensitive Waters
Port Angeles, WA and vicinity

T:\projects_8\port_angeles\sternmap

APPENDIX G
CONTAMINATED SITE INFORMATION

APPENDIX H
ENGINEERING CALCULATIONS

Figure II-3.31: Riser Inflow Curves



Riser Inflow Curves

Revised June 2016

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APPENDIX I:

PORT ANGELES WORKSHEETS FOR MR #5



Infeasibility Criteria

Minimum Requirement #5 (On-Site Stormwater Management)

The following tables summarize infeasibility criteria that can be used to justify not using various on-site stormwater management best management practices (BMPs) for consideration for Minimum Requirement #5. This information is also included under the detailed descriptions of each BMP in the Department of Ecology's Stormwater Management Manual for Western Washington (SWMMWW [2014]), but is provided here in this worksheet for ease of use and efficiency. Where any inconsistencies or lack of clarity exists, the requirements in the main text of the SWMMWW shall be applied. If a project is limited by one or more of the infeasibility criteria specified below, but an applicant is interested in implementing a specific BMP, a functionally equivalent design may be submitted to the City for review and approval.

HOW TO USE: **1)** Evaluate the feasibility of the BMPs in priority order based on List #1, #2, or #3 (Fact Sheet A). **2)** Select the first BMP that is considered feasible for each surface type. **3)** In the space provided below document the infeasibility (narrative description and rationale) for each BMP that was not selected. **Only one infeasibility criterion needs to be selected for a BMP before evaluating the next BMP on the list.** Attach additional pages for supporting information if necessary.

Lawn and Landscaped Areas		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
Post-construction Soil Quality and Depth <small>(SWMMWW Volume V, Section 5.3)</small> List #1, #2 and #3	<input type="checkbox"/> Lawn and landscape area is on till slopes greater than 33 percent. <input type="checkbox"/> Siting and design criteria cannot be achieved on site. See Worksheet D, Page 2.	
Roofs		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
Full Dispersion <small>SWMMWW Volume V, Section 5.3</small> List #1 and #2	<input type="checkbox"/> A 65 to 10 ratio of forested or native vegetation area to impervious area cannot be achieved. <input type="checkbox"/> A minimum forested or native vegetation flowpath length of 100 feet (25 feet for sheet flow from a non-native pervious surface) and protected by easement cannot be achieved. <input type="checkbox"/> Siting and design criteria cannot be achieved on site.	
Downspout Full Infiltration <small>SWMMWW Volume III, Section 3.1.1</small> List #1, #2 and #3	<input type="checkbox"/> The lot(s) or site does not have out-wash or loam soils, provide soils report. <input type="checkbox"/> There is not at least 3 feet or more of permeable soil from the proposed final grade to the seasonal high groundwater table or other impermeable layer. <input type="checkbox"/> There is not at least 1 foot or more of permeable soil from the proposed bottom of the infiltration system to the seasonal high groundwater table or other impermeable layer. <input type="checkbox"/> Slopes steeper than 25% or less than 200' from slope steeper than 40%. <input type="checkbox"/> Siting and design criteria cannot be achieved on site.	



Infeasibility Criteria

Roofs (cont.)		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
<p>Bioretention or Rain Gardens</p> <p>SWMMWW Volume V, Section 7.4</p> <p>List #1 (both) and List #2 (bioretention only)</p>	<p><i>Note: Criteria with setback distances are as measured from the bottom edge of the bioretention soil mix.</i></p> <p>Citation of any of the following infeasibility criteria must be based on an evaluation of site-specific conditions and a written recommendation from an appropriate licensed professional (e.g., engineer, geologist, hydrogeologist):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Where professional geotechnical evaluation recommends infiltration not be used due to reasonable concerns about erosion, slope failure, or down-gradient flooding. <input type="checkbox"/> Within an area whose ground water drains into an erosion hazard, or landslide hazard area. <input type="checkbox"/> Where the only area available for siting would threaten the safety or reliability of pre-existing underground utilities, pre-existing underground storage tanks, pre-existing structures, or pre-existing road or parking lot surfaces. <input type="checkbox"/> Where the only area available for siting does not allow for a safe overflow pathway to stormwater drainage system or private storm sewer system. <input type="checkbox"/> Where there is a lack of usable space for bioretention areas at re-development sites, or where there is insufficient space within the existing public right-of-way on public road projects. <input type="checkbox"/> Where infiltrating water would threaten existing below grade basements. <input type="checkbox"/> Where infiltrating water would threaten shoreline structures such as bulkheads. <p>The following criteria can be cited as reasons for infeasibility without further justification (though some require professional services to make the observation):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Within setback provided for BMP T7.30 (SWMMWW Volume V, Section 7.4) <input type="checkbox"/> Where they are not compatible with surrounding drainage system as determined by the city (e.g., project drains to an existing stormwater collection system whose elevation or location precludes connection to a properly functioning bioretention area). 	



Infeasibility Criteria

Roofs (cont.)		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
<p>Bioretention or Rain Gardens (cont.)</p> <p>SWMMWW Volume V, Section 7.4</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Where land for bioretention is within an erosion hazard, or landslide hazard area (as defined by PAMC 15.20). <input type="checkbox"/> Where the site cannot be reasonably designed to locate bioretention areas on slopes less than 8 percent. <input type="checkbox"/> Within 50 feet from the top of slopes that are greater than 20 percent and over 10 feet of vertical relief. <input type="checkbox"/> For properties with known soil or groundwater contamination (typically federal Superfund sites or state cleanup sites under the Model Toxics Control Act [MTCA]): <ul style="list-style-type: none"> • Within 100 feet of an area known to have deep soil contamination. • Where groundwater modeling indicates infiltration will likely increase or change the direction of the migration of pollutants in the groundwater. • Wherever surface soils have been found to be contaminated unless those soils are removed within 10 horizontal feet from the infiltration area. <input type="checkbox"/> Within 100 feet of a closed or active landfill. <input type="checkbox"/> Within 10 feet of an underground storage tank and connecting underground pipes when the capacity of the tank and pipe system is 1,100 gallons or less. As used in these criteria, an underground storage tank means any tank used to store petroleum products, chemicals, or liquid hazardous wastes of which 10 percent or more of the storage volume (including volume in the connecting piping system) is beneath the ground surface. <input type="checkbox"/> Within 100 feet of an underground storage tank and connecting underground pipes when the capacity of the tank and pipe system is greater than 1,100 gallons. <input type="checkbox"/> Where the minimum vertical separation of 1 foot to the seasonal high groundwater or other impermeable layer would not be achieved below bioretention that would serve a drainage area less than the above thresholds 	



Infeasibility Criteria

Roofs (cont.)		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
<p>Bioretention or Rain Gardens (cont.)</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Where field testing indicates potential bioretention/rain garden sites have a measured (a.k.a., initial) native soil saturated hydraulic conductivity less than 0.30 inches per hour. A small-scale or large-scale PIT in accordance with SWMMWW Volume III, Section 3.3.6 (or an alternative small scale test specified by the local government) shall be used to demonstrate infeasibility of bioretention areas. If the measured native soil infiltration rate is less than 0.30 in/hour, bioretention/rain garden BMPs are not required to be evaluated as an option in List #1 or List #2. In these slow draining soils, a bioretention area with an underdrain may be used to treat pollution-generating surfaces to help meet Minimum Requirement #6, Runoff Treatment. If the underdrain is elevated within a base course of gravel, it will also provide some modest flow reduction benefit that will help achieve Minimum Requirement #7. <input type="checkbox"/> Where the minimum vertical separation of 3 feet to the seasonal high groundwater elevation or other impermeable layer would not be achieved below bioretention that would serve a drainage area that exceeds the following thresholds (and cannot reasonably be broken down into amounts smaller than indicated): <ul style="list-style-type: none"> o 5,000 square feet of pollution-generating impervious surface (PGIS) o 10,000 square feet of impervious area o 0.75 acres of lawn and landscape. <input type="checkbox"/> Any area where these facilities are prohibited by an approved cleanup plan under the state MTCA or Federal Superfund Law, or an environmental covenant under Chapter 64.70 RCW. <input type="checkbox"/> Within 100 feet of a drinking water well, or a spring used for drinking water supply. <input type="checkbox"/> Within 10 feet of small on-site sewage disposal drainfield, including reserve areas, and grey water reuse systems. For setbacks from a "large on-site sewage disposal system," see Chapter 246-272B WAC. 	



Infeasibility Criteria

Roofs (cont.)		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
<p>Downspout Dispersion Systems</p> <p>SWMMWW Volume III, Section 3.1.2</p> <p>List #1, #2 and #3</p>	<ul style="list-style-type: none"> <input type="checkbox"/> For splash blocks, a vegetated flowpath at least 50 feet in length from the downspout to the downstream property line, structure, stream, wetland, slope over 15 percent, or other impervious surface is not feasible. <input type="checkbox"/> For trenches, a vegetated flowpath of at least 25 feet in between the outlet of the trench and any property line, structure, stream, wetland, or impervious surface is not feasible. A vegetated flowpath of at least 50 feet between the outlet of the trench and any slope steeper than 15 percent is not feasible. <input type="checkbox"/> Siting and design criteria cannot be achieved on site. 	
<p>Perforated Stub-Out Connections</p> <p>SWMMWW Volume III, Section 3.1.3</p> <p>List #1, #2 and #3</p>	<p>For sites with septic systems, the only location available for the perforated portion of the pipe is located up-gradient of the drainfield primary and reserve areas. This requirement can be waived if site topography will clearly prohibit flows from intersecting the drainfield or where site conditions (soil permeability, distance between systems, etc.) indicate that this is unnecessary.</p> <ul style="list-style-type: none"> <input type="checkbox"/> There is not at least 1 foot of permeable soil from the proposed bottom (final grade) of the perforated stub-out connection trench to the highest estimated groundwater table or other impermeable layer. <input type="checkbox"/> The only location available for the perforated stub-out connection is under impervious or heavily compacted soils. <input type="checkbox"/> The only location available is on or above slopes greater than 20% <input type="checkbox"/> Siting and design criteria cannot be achieved on site. 	



Infeasibility Criteria

Other Hard Surfaces		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
<p>Full Dispersion SWMMWW Volume V, Section 5.3 List #1 and #2</p>	<ul style="list-style-type: none"> <input type="checkbox"/> A 65 to 10 ratio of forested or native vegetation area to impervious area cannot be achieved. <input type="checkbox"/> A minimum forested or native vegetation flowpath length of 100 feet (25 feet for sheet flow from a non-native pervious surface) cannot be achieved. <input type="checkbox"/> Siting and design criteria cannot be achieved on site. 	
<p>Permeable Pavement SWMMWW Volume V, Section 5.3 List #1 and #2</p>	<p>Citation of any of the following infeasibility criteria must be based on an evaluation of site-specific conditions and a written recommendation from an appropriate licensed professional (e.g., engineer, geologist, hydrogeologist):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Where professional geotechnical evaluation recommends infiltration not be used due to reasonable concerns about erosion, slope failure, or downgradient flooding. <input type="checkbox"/> Within an area whose ground water drains into an erosion hazard, or landslide hazard area. <input type="checkbox"/> Where infiltrating and ponded water below the new permeable pavement area would compromise adjacent impervious pavements. <input type="checkbox"/> Where infiltrating water below a new permeable pavement area would threaten existing below grade basements. <input type="checkbox"/> Where infiltrating water would threaten shoreline structures such as bulkheads. <input type="checkbox"/> Down slope of steep, erosion prone areas that are likely to deliver sediment. <input type="checkbox"/> Where fill soils are used that can become unstable when saturated. <input type="checkbox"/> Excessively steep slopes where water within the aggregate base layer or at the subgrade surface cannot be controlled by detention structures and may cause erosion and structural failure, or where surface runoff velocities may preclude adequate infiltration at the pavement surface. 	



Infeasibility Criteria

Other Hard Surfaces (cont.)		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
Permeable Pavement (cont.)	<p><input type="checkbox"/> Where permeable pavements cannot provide sufficient strength to support heavy loads at industrial facilities such as ports.</p> <p><input type="checkbox"/> Where installation of permeable pavement would threaten the safety or reliability of per-existing underground utilities, per-existing underground storage tanks, or per-existing road subgrades.</p> <p>The following criteria can be cited as reasons for infeasibility without further justification (though some require professional services to make the observation):</p> <p><input type="checkbox"/> Within an area designated as an erosion hazard, or landslide hazard.</p> <p><input type="checkbox"/> Within 50 feet from the top of slopes that are greater than 20 percent.</p> <p><input type="checkbox"/> For properties with known soil or groundwater contamination (typically federal Superfund sites or state cleanup sites under MTCA):</p> <ul style="list-style-type: none"> • Within 100 feet of an area known to have deep soil contamination. • Where groundwater modeling indicates infiltration will likely increase or change the direction of the migration of pollutants in the groundwater. • Wherever surface soils have been found to be contaminated unless those soils are removed within 10 horizontal feet from the infiltration area. • Any area where these facilities are prohibited by an approved cleanup plan under the state MTCA or Federal Superfund Law, or an environmental covenant under Chapter 64.70 RCW. <p><input type="checkbox"/> Within 100 feet of a closed or active landfill.</p> <p><input type="checkbox"/> Within 100 feet of a drinking water well, or a spring used for drinking water supply, if the pavement is a pollution-generating surface.</p>	



Infeasibility Criteria

Other Hard Surfaces (cont.)		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
Permeable Pavement (cont.)	<ul style="list-style-type: none"> <input type="checkbox"/> Within 10 feet of a small on-site sewage disposal drainfield, including reserve areas, and grey water reuse systems. For setbacks from a “large on-site sewage disposal system,” see Chapter 246-272B WAC. <input type="checkbox"/> Within 10 feet of any underground storage tank and connecting underground pipes, regardless of tank size. As used in these criteria, an underground storage tank means any tank used to store petroleum products, chemicals, or liquid hazardous wastes of which 10 percent or more of the storage volume (including volume in the connecting piping system) is beneath the ground surface. <input type="checkbox"/> At multi-level parking garages, and over culverts and bridges. <input type="checkbox"/> Where the site design cannot avoid putting pavement in areas likely to have long-term excessive sediment deposition after construction (e.g., construction and landscaping material yards). <input type="checkbox"/> Where the site cannot reasonably be designed to have a porous asphalt surface at less than 5 percent slope, or a pervious concrete surface at less than 10 percent slope, or a permeable interlocking concrete pavement surface (where appropriate) at less than 12 percent slope. Grid systems upper slope limit can range from 6 to 12 percent; check with manufacturer and local supplier. <input type="checkbox"/> Where the subgrade soils below a pollution-generating permeable pavement (e.g., road or parking lot) do not meet the soil suitability criteria for providing treatment. See soil suitability criteria for treatment in the SWMMWW Volume III, Section 3.3.7. Note: In these instances, the city may approve installation of a 6 inch sand filter layer meeting city specifications for treatment as a condition of construction. <input type="checkbox"/> Where underlying soils are unsuitable for supporting traffic loads when saturated. Soils meeting a California Bearing Ratio of 5 percent are considered suitable for residential access roads. <input type="checkbox"/> Where replacing existing impervious surfaces unless the existing surface is a non-pollution generating surface over an outwash soil with a saturated hydraulic conductivity of 4 inches per hour or greater. 	



Infeasibility Criteria

Other Hard Surfaces (cont.)		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
Permeable Pavement (cont.)	<ul style="list-style-type: none"> <input type="checkbox"/> Where appropriate field testing indicates soils have a measured (a.k.a., initial) subgrade soil saturated hydraulic conductivity less than 0.3 inches per hour. Only small-scale PIT or large-scale PIT methods in accordance with SWMMWW Volume III, Section 3.3.6 (or an alternative small scale test specified by the local government) shall be used to evaluate infeasibility of permeable pavement areas. (Note: In these instances, unless other infeasibility restrictions apply, roads and parking lots may be built with an underdrain, preferably elevated within the base course, if flow control benefits are desired.) <input type="checkbox"/> Roads that receive more than very low traffic volumes, and areas having more than very low truck traffic. Roads with a projected average daily traffic volume of 400 vehicles or less are very low volume roads (AASHTO 2001) (U.S. Department of Transportation, 2013). Areas with very low truck traffic volumes are roads and other areas not subject to through truck traffic but may receive up to weekly use by utility trucks (e.g., garbage, recycling), daily school bus use, and multiple daily use by pick-up trucks, mail/parcel delivery trucks, and maintenance vehicles. Note: This infeasibility criterion does not extend to sidewalks and other non-traffic bearing surfaces associated with the collector or arterial. <input type="checkbox"/> At sites defined as “high-use sites” (refer to the Glossary in the SWMMWW Volume I). <input type="checkbox"/> In areas with “industrial activity” as identified in 40 CFR 122.26(b)(14). <input type="checkbox"/> Where the risk of concentrated pollutant spills is more likely such as gas stations, truck stops, and industrial chemical storage sites. <input type="checkbox"/> Where routine, heavy applications of sand occur in frequent snow zones to maintain traction during weeks of snow and ice accumulation. <input type="checkbox"/> Where the seasonal high groundwater or an underlying impermeable/low permeable layer would create saturated conditions within 1 foot of the bottom of the lowest gravel base course. 	



Infeasibility Criteria

Other Hard Surfaces (cont.)		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
<p>Bioretention or Rain Gardens</p> <p>SWMMWW Volume V, Section 7.4</p> <p>List #1 (both) and List #2 (bioretention only)</p>	<p><i>Note: Criteria with setback distances are as measured from the bottom edge of the bioretention soil mix.</i></p> <p>Citation of any of the following infeasibility criteria must be based on an evaluation of site-specific conditions and a written recommendation from an appropriate licensed professional (e.g., engineer, geologist, hydrogeologist):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Where professional geotechnical evaluation recommends infiltration not be used due to reasonable concerns about erosion, slope failure, or down-gradient flooding. <input type="checkbox"/> Within an area whose ground water drains into an erosion hazard, or landslide hazard area. <input type="checkbox"/> Where the only area available for siting would threaten the safety or reliability of pre-existing underground utilities, pre-existing underground storage tanks, pre-existing structures, or pre-existing road or parking lot surfaces. <input type="checkbox"/> Where the only area available for siting does not allow for a safe overflow pathway to stormwater drainage system or private storm sewer system. <input type="checkbox"/> Where there is a lack of usable space for bioretention areas at re-development sites, or where there is insufficient space within the existing public right-of-way on public road projects. <input type="checkbox"/> Where infiltrating water would threaten existing below grade basements. <input type="checkbox"/> Where infiltrating water would threaten shoreline structures such as bulkheads. <p>The following criteria can be cited as reasons for infeasibility without further justification (though some require professional services to make the observation):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Within setback provided for BMP T7.30 (SWMMWW Volume V, Section 7.4) <input type="checkbox"/> Where they are not compatible with surrounding drainage system as determined by the city (e.g., project drains to an existing stormwater collection system whose elevation or location precludes connection to a properly functioning bioretention area). 	



Infeasibility Criteria

Other Hard Surfaces (cont.)		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
<p>Bioretention or Rain Gardens (cont.)</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Where land for bioretention is within an erosion hazard, or landslide hazard area (as defined by PAMC 15.20). <input type="checkbox"/> Where the site cannot be reasonably designed to locate bioretention areas on slopes less than 8 percent. <input type="checkbox"/> Within 50 feet from the top of slopes that are greater than 20 percent and over 10 feet of vertical relief. <input type="checkbox"/> For properties with known soil or groundwater contamination (typically federal Superfund sites or state cleanup sites under the Model Toxics Control Act [MTCA]): <ul style="list-style-type: none"> • Within 100 feet of an area known to have deep soil contamination. • Where groundwater modeling indicates infiltration will likely increase or change the direction of the migration of pollutants in the groundwater. • Wherever surface soils have been found to be contaminated unless those soils are removed within 10 horizontal feet from the infiltration area. <input type="checkbox"/> Within 100 feet of a closed or active landfill. <input type="checkbox"/> Within 10 feet of an underground storage tank and connecting underground pipes when the capacity of the tank and pipe system is 1,100 gallons or less. As used in these criteria, an underground storage tank means any tank used to store petroleum products, chemicals, or liquid hazardous wastes of which 10 percent or more of the storage volume (including volume in the connecting piping system) is beneath the ground surface. <input type="checkbox"/> Within 100 feet of an underground storage tank and connecting underground pipes when the capacity of the tank and pipe system is greater than 1,100 gallons. <input type="checkbox"/> Where the minimum vertical separation of 1 foot to the seasonal high groundwater or other impermeable layer would not be achieved below bioretention that would serve a drainage area less than the above thresholds 	



Infeasibility Criteria

Other Hard Surfaces (cont.)		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
<p>Bioretention or Rain Gardens (cont.)</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Where field testing indicates potential bioretention/rain garden sites have a measured (a.k.a., initial) native soil saturated hydraulic conductivity less than 0.30 inches per hour. A small-scale or large-scale PIT in accordance with SWMMWW Volume III, Section 3.3.6 (or an alternative small scale test specified by the local government) shall be used to demonstrate infeasibility of bioretention areas. If the measured native soil infiltration rate is less than 0.30 in/hour, bioretention/rain garden BMPs are not required to be evaluated as an option in List #1 or List #2. In these slow draining soils, a bioretention area with an underdrain may be used to treat pollution-generating surfaces to help meet Minimum Requirement #6, Runoff Treatment. If the underdrain is elevated within a base course of gravel, it will also provide some modest flow reduction benefit that will help achieve Minimum Requirement #7. <input type="checkbox"/> Where the minimum vertical separation of 3 feet to the seasonal high groundwater elevation or other impermeable layer would not be achieved below bioretention that would serve a drainage area that exceeds the following thresholds (and cannot reasonably be broken down into amounts smaller than indicated): <ul style="list-style-type: none"> o 5,000 square feet of pollution-generating impervious surface (PGIS) o 10,000 square feet of impervious area o 0.75 acres of lawn and landscape. <input type="checkbox"/> Any area where these facilities are prohibited by an approved cleanup plan under the state MTCA or Federal Superfund Law, or an environmental covenant under Chapter 64.70 RCW. <input type="checkbox"/> Within 100 feet of a drinking water well, or a spring used for drinking water supply. <input type="checkbox"/> Within 10 feet of small on-site sewage disposal drainfield, including reserve areas, and grey water reuse systems. For setbacks from a "large on-site sewage disposal system," see Chapter 246-272B WAC. 	



Infeasibility Criteria

Other Hard Surfaces (cont.)		
BMP and Applicable Lists	Infeasibility Criteria	Infeasibility Description and Rationale for each BMP Not Selected
<p>Sheet Flow Dispersion</p> <p>SWMMWW Volume V, Section 5.3</p> <p>List #1, #2 and #3</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Positive drainage for sheet flow runoff cannot be achieved. <input type="checkbox"/> Area to be dispersed (e.g., driveway, patio) cannot be graded to have less than a 15 percent slope. <input type="checkbox"/> For flat to moderately sloped areas, at least a 10 foot-wide vegetation buffer for dispersion of the adjacent 20 feet of contributing surface cannot be achieved. For variably sloped areas, at least a 25 foot vegetated flowpath between berms cannot be achieved. <input type="checkbox"/> Siting and design criteria cannot be achieved on site. 	
<p>Concentrated Flow Dispersion</p> <p>SWMMWW Volume V, Section 5.3</p> <p>List #1, #2 and #3</p>	<ul style="list-style-type: none"> <input type="checkbox"/> A minimum 3 foot length of rock pad and 50 foot flowpath OR a dispersion trench and 25 foot flowpath for every 700 sq. ft. of drainage area followed with applicable setbacks cannot be achieved. <input type="checkbox"/> More than 700 sq. ft. drainage area drains to any dispersion device. <input type="checkbox"/> Siting and design criteria cannot be achieved on site. 	



Post-Construction Soil Management

HTE # _____
Permit # _____

Benefits of Healthy Soils

- Reduced need for irrigation, fertilizers, and pesticides
- Decreased stormwater runoff
- Decreased erosion
- Improved plant health
- Marketable buildings and landscapes



Before



After

5 Step Implementation Process

Step 1 – Retain and protect native vegetation and soil

Identify areas of the site that will not be disturbed during construction (cleared, graded, or driven on). Fence those areas to prevent impacts during construction. If neither soils nor vegetation are disturbed, these areas do not require amendment.

Step 2 – Loosen compacted subsoil, if needed

In disturbed areas (compacted by construction traffic):

- Scarify the top 4 inches of subsoil
- Rip in the first lift of topsoil
- Rip site soils 12 inches deep before tilling compost in to an 8-inch depth

Step 3 – Restore soils that are disturbed during construction

Three options to restore disturbed soils include:

<input type="checkbox"/>	• Option 1: Till compost (1.75 inches for turf areas; 3 inches for planting beds) into existing soil, or
<input type="checkbox"/>	• Option 2: Stockpile and reuse existing topsoil (amend if needed to meet 5% organic matter content for turf areas; 10% organic matter content for planting beds), onsite soil test (bulk density & organic matter) required for this option, or
<input type="checkbox"/>	• Option 3: Import 8 inches of topsoil (with 5 to 10% organic content, soil portion must be sandy) and scarify or till into existing soil in two 3-inch lifts



Post-Construction Soil Management

5 Step Implementation Process (cont.)



Compost options require tilling to a depth of 8"

Step 4 – Add mulch to planting beds

Spread mulch (coarse bark or wood chips) in the spring or fall (after planting) to control weeds, reduce the need for irrigation, and prevent erosion. Apply 2 inches of mulch on planting beds and around shallow-rooted annuals. Apply 2 to 4 inches of mulch around trees and woody perennials, but make sure to keep mulch 1 inch away from tree trunks.

Step 5 – Protect restored soils from erosion and re-compaction

Prevent runoff from roads or open slopes onto amended soil areas. Compost blankets are an approved erosion control BMP that can be used during construction and then tilled into the existing soil at the end of the construction process prior to planting. Once soils have been amended, vehicle traffic should be prohibited to prevent re-compaction from occurring. In turf areas seed or lay sod to stabilize soils.

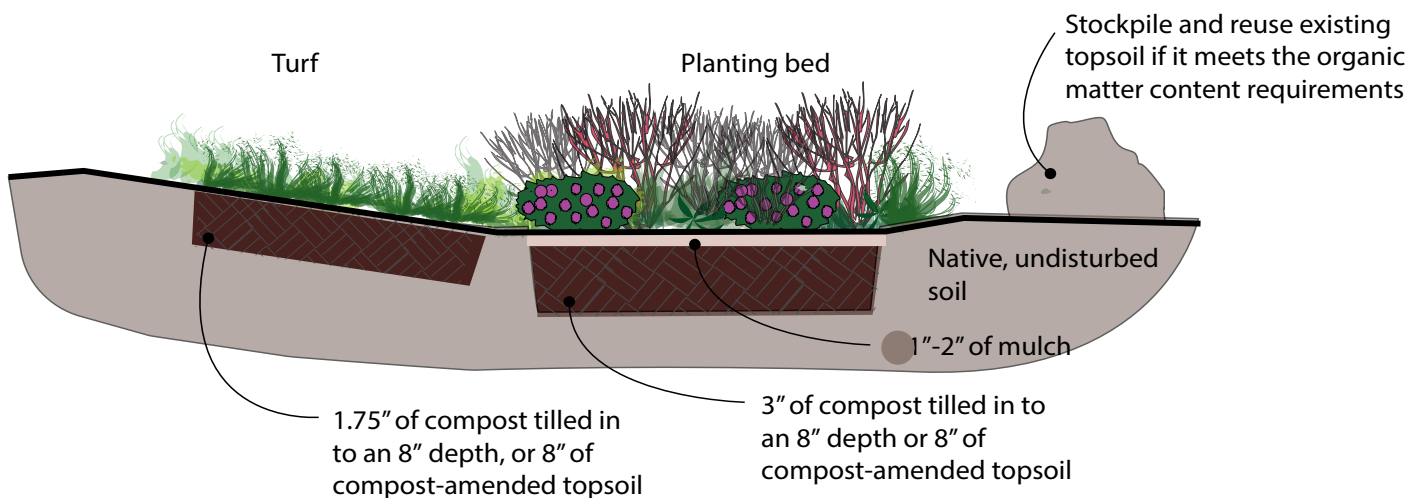
Exemptions

The following portions of the project area are exempt from soil amendment requirements:

- Areas covered by an impervious surface, or
- Areas incorporated into a drainage facility, or
- Structural fill or engineered slopes
- On till slopes greater than 33%



After soil amendment





Post-Construction Soil Management

Worksheet

Project Information

Page # ____ of ____ pages

Calculate the quantities needed for the entire site based on all of the areas identified on the Site Plan and the calculations on the following page(s)

Owner / Project Name: _____
Contractor Name: _____
Property Tax Account Number(s): _____
Site Address: _____

Attachments Required *(Check off required items that are attached)*

<input type="checkbox"/> Site Plan showing, to scale: <ul style="list-style-type: none"> <input type="checkbox"/> Areas of undisturbed native vegetation (no amendment required) <input type="checkbox"/> New planting beds (amendment required) <input type="checkbox"/> New turf areas (amendment required) <input type="checkbox"/> Other disturbed areas (amendment required) <input type="checkbox"/> Type of soil improvement proposed for each area
<input type="checkbox"/> Soil test results (required if reusing existing top soil or proposing custom amendment rates)
<input type="checkbox"/> Product test results for proposed amendments

Total Amendment / Topsoil / Mulch for All Areas

(Calculate the quantities needed for the entire site based on all of the areas identified on the Site Plan and the calculations on the following page(s))

Product	Total Quantity (CY)	Test Results
Product #1: Garden Glory Compost (Port Angeles Landfill Facility [PALF])	_____ CY	_____ % organic matter _____ C:N ratio "Stable"? <input type="checkbox"/> yes <input type="checkbox"/> no
Product #2: _____	_____ CY	_____ % organic matter _____ C:N ratio "Stable"? <input type="checkbox"/> yes <input type="checkbox"/> no
Product #3: _____	_____ CY	_____ % organic matter _____ C:N ratio "Stable"? <input type="checkbox"/> yes <input type="checkbox"/> no



**Best Management Practice (BMP)
Operations & Maintenance (O&M) Manual**

Delivery Station

W. Edgewood Drive

Port Angeles, WA

Date: April 2025

O&M Manual Contents:

- I. Owner Information**
- II. Site Stormwater Information**
- III. Inlet Maintenance**
- IV. Conveyances Maintenance (pipes, swales, ditches)**
- V. Wetpond Maintenance**
- VI. Detention Basin Maintenance**
- VII. Owner Agreement**

Appendix

- A. Site Drawings**
- B. Sample Maintenance and Inspection Report**
- C. Maintenance Standards**

Prepared By:

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Columbus, OH 43231

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www.cesoinc.com

Best Management Practice
Operation & Maintenance Manual
Delivery Station
W. Edgewood Drive
Port Angeles, WA

Section I Owner Information

Owner Name: Ambrose Property Group

Owner Address: 8888 Keystone Crossing, Suite 1150, Indianapolis, IN 46240

Contact Name: Eric Seamands

Contact Phone: (317) 490-0384

Contact Email: eseamands@ambrosepg.com

The BMP owner is responsible for all maintenance, including cost, associated with inspecting and maintaining the infrastructure included within this manual.

Section II Site Stormwater Information

The site is a +/- 58,394 sf Delivery Station located on W. Edgewood Drive in the City of Port Angeles, Washington. Stormwater infrastructure includes storm inlets, storm pipes, and combination wetpond and detention facilities for water quality and flow control. See **Appendix A** for site drawings.

Section III Inlet Maintenance

All inlet castings should be inspected minimum monthly and after each rainfall event. More frequent inspections should be performed in areas where there is higher potential for trash and/or litter (e.g. outdoor eating areas, smoking shelters, etc.) and during fall season when leaves and debris are present on the ground. Inlets should be inspected for sediment depths and the maximum allowable sediment depth should be no greater than 3-inches.

Waste, leaves, or any other miscellaneous debris collected during maintenance and inspections should be properly disposed of in accordance with local regulations. Removed sediment should be disposed of in the garbage. Water should be disposed of in the sanitary sewer after any oils have been removed.

Remove and replace or repair all necessary inlet features that are damaged.

A record log of all inlet inspections and cleaning activities should be maintained.

Representatives of the City of Port Angeles have the right to enter the property and perform inspections on BMPs at their discretion. If requested, the owner is required to perform maintenance specified by the City.

The maintenance standards contained in **Appendix C** are measures for determining if maintenance actions are required as identified through the annual inspection.

Section IV

Conveyances Maintenance (pipes, swales, ditches)

All storm sewer pipes should be inspected if a problem occurs. Prior to cleaning, storm sewers should be inspected for sediment depths and the maximum allowable sediment depth should be no greater than 3-inches. During cleaning, debris traps should be used where applicable to prevent sedimentation from entering the main storm sewer system. Larger obstructions (i.e. branches, trash, etc.) should be removed by hand or by mechanical methods.

Ditches should be properly maintained near outlets to prevent blockages. Remove trash and debris. In addition, limit vegetation growth to no more than 5-inches within the ditch. Any damage caused to vegetation during removal of trash and debris should be remediated immediately.

Waste, leaves, or any other miscellaneous debris collected during maintenance and inspections should be properly disposed of in accordance with local regulations. Removed sediment should be disposed of in the garbage.

Remove and replace or repair all necessary pipes that are damaged, and the pipe diameter has been compromised. Remove and replace deteriorated pipes.

A record log of all storm sewer pipe inspections and cleaning activities should be maintained.

Representatives of the City of Port Angeles have the right to enter the property and perform inspections on BMPs at their discretion. If requested, the owner is required to perform maintenance specified by the City.

The maintenance standards contained in **Appendix C** are measures for determining if maintenance actions are required as identified through the annual inspection.

Section V

Wetpond Maintenance

Maintenance is of primary importance if wetponds are to continue to function as originally designed. It is the responsibility of the Owner to maintain the structures and the impoundment area. See **Appendix B** for sample maintenance and inspection report. A specific maintenance plan shall be formulated outlining the schedule and scope for maintenance operations.

The wetpond should be inspected by the Owner annually. The maintenance standards contained in **Appendix C** are measures for determining if maintenance actions are required as identified through the annual inspection.

Site vegetation should be trimmed as necessary to keep the wetpond free of leaves and to maintain the aesthetic appearance of the site. Slope areas that have become bare should be revegetated and eroded areas should be regraded prior to being revegetated.

Sediment should be removed when the 1-foot sediment zone is full plus 6-inches. Sediments should be tested for toxicants in compliance with current disposal requirements. Sediments must be disposed in accordance with the current local health department requirements and the Minimum Functional Standards for Solid Waste Handling (Chapter 173-304 WAC).

Any standing water removed during the maintenance operation must be properly disposed of. The preferred disposal option is discharge to a sanitary sewer at an approved location. Other disposal options include discharge back into the wetpool BMP or the storm sewer system if certain conditions are met.

Miscellaneous debris collected during maintenance and inspections should be properly disposed of in accordance with local regulations.

A record log of all wetpond inspections and cleaning activities should be maintained.

Representatives of the City of Port Angeles have the right to enter the property and perform inspections on BMPs at their discretion. If requested, the owner is required to perform maintenance specified by the City.

Section VI

Detention Basin Maintenance

The detention basin shall be maintained as follows:

Access Easement - Ensure there are no encroachments into or damage to the easement that would prohibit equipment from reaching the basin to perform maintenance activities.

Sources of Inflow - For open channels, ensure there is no excessive erosion of the channel (e.g. headcutting, bank erosion, etc.). For storm sewers, check the condition of the pipe, headwall and outlet protection (e.g. rip rap apron).

Orifice and Weir Notch - Ensure there are no blockages of the orifice or weir notch caused by trash and debris build-up. If a reverse-flow pipe, hood, or a similar device is used to minimize the potential for floating debris from clogging the orifice, maintain a minimum 1-foot clearance between the bottom of the orifice and the top of the sediment layer.

Primary Outlet - Ensure there are no blockages caused by trash and debris build-up.

Emergency Spillway - Ensure there are no blockages caused by trash and debris build-up or illegal dumping. Ensure there is no erosion of the spillway bottom and side slopes.

Outlet Structure - Ensure there are no cracks, settling, heaving, pipe separation, or blockages within.

Outlet Pipe / Channel - Check the condition of the pipe and outlet protection. Ensure there is no erosion of the channel bottom, failure of side slopes, or any obstructions.

Main Pool Area - Monitor the accumulation of sediment and corresponding loss of storage capacity. Ensure there is an appropriate location to dispose of dredged sediments on or off the site.

Inside and Outside Slopes - Ensure adequate vegetative cover with no rills and gullies or slumping of side slopes.

Representatives of the City of Port Angeles have the right to enter the property and perform inspections on BMPs at their discretion. If requested, the owner is required to perform maintenance specified by the City.



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Best Management Practice
 Operation & Maintenance Manual
 Delivery Station
 W. Edgewood Drive
 Port Angeles, WA

Section VII Owner Agreement (“Agreement”)

The undersigned owner (“Owner”) hereby submits this Operation and Maintenance Manual (“Manual”) to the City of Port Angeles (“City”) as written acknowledgement of Owner’s warranty and agreement to institute, maintain, and follow the water quality Best Management Practices (“BMPs”) listed in this Manual, and to follow and abide by the inspection schedule and maintenance activities listed in this Manual. The Owner also hereby agrees to provide, at Owner’s cost, all additional maintenance, repair, and/or replacement services reasonably necessary to maintain the function and longevity of the BMPs from and including the date this Agreement is executed by Owner to and including the date on which a new Agreement is filed with the City by another party who assumes all of the obligations and responsibilities of Owner as set forth herein.

 Owner Signature

 Date

 Printed Name

 Company

STATE OF _____)
)
 COUNTY OF _____)

SS:

BEFORE ME, the undersigned a Notary Public in and for said County and State, personally appeared _____, Owner, subscribed and sworn before this _____ day of _____, 20_____.

 County of Residence

 Commission Expiration Date

 Signature

 Printed Name



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APPENDIX



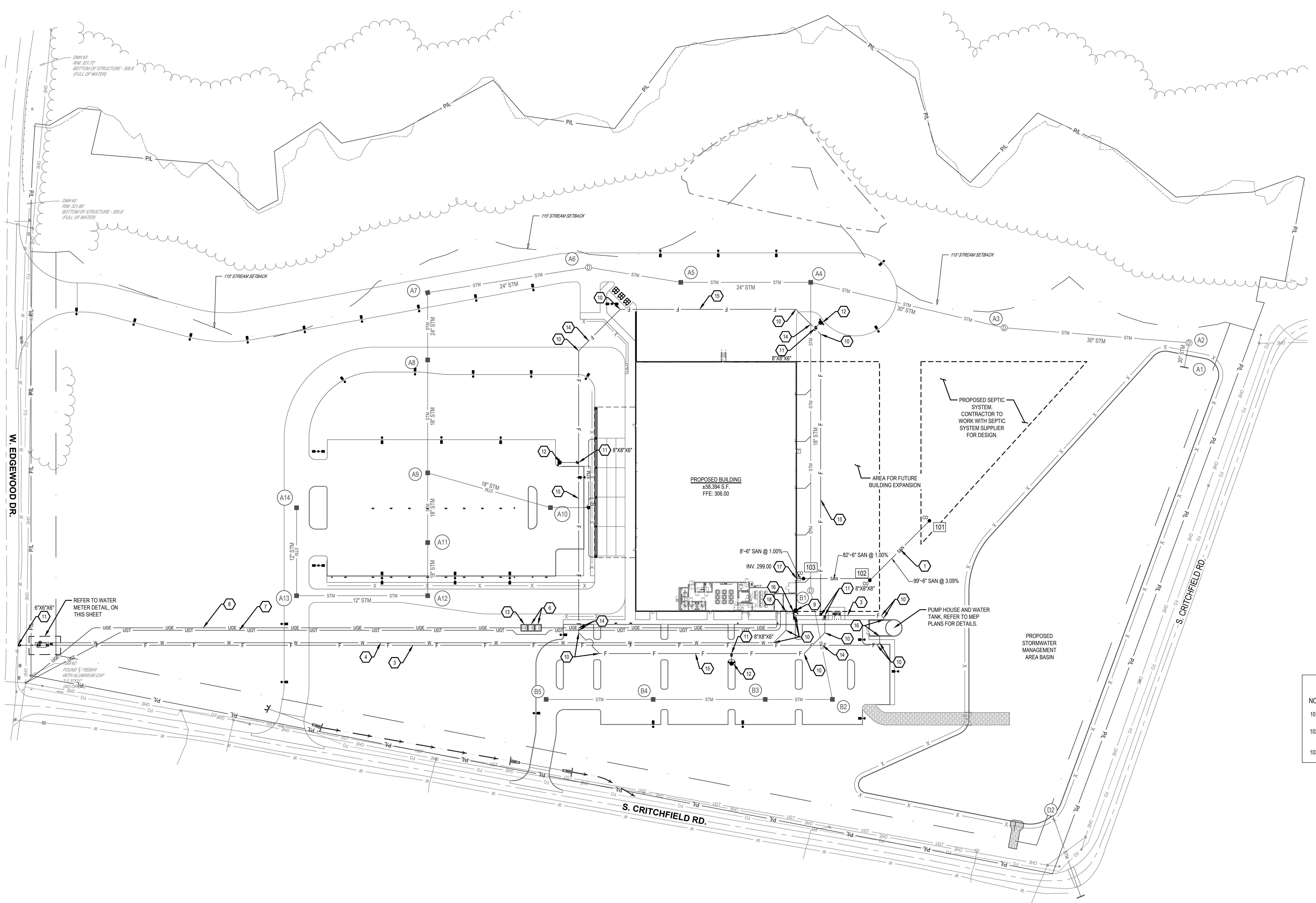
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APPENDIX A

SITE DRAWINGS

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UTILITY LEGEND

EXISTING
 REFER TO SURVEY FOR EXISTING FEATURES LEGEND

PROPOSED

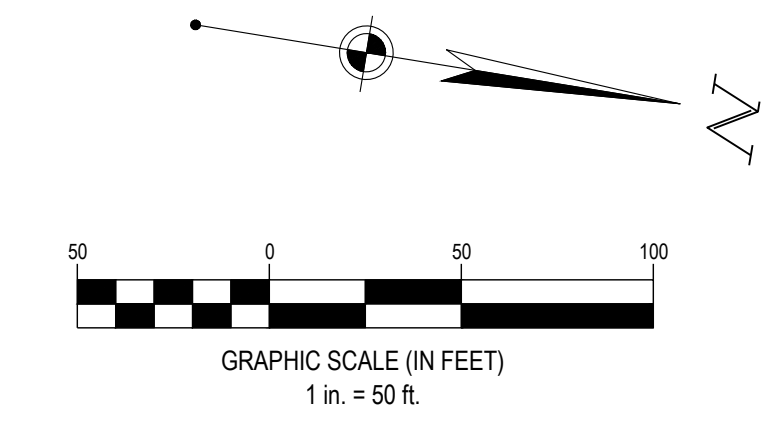
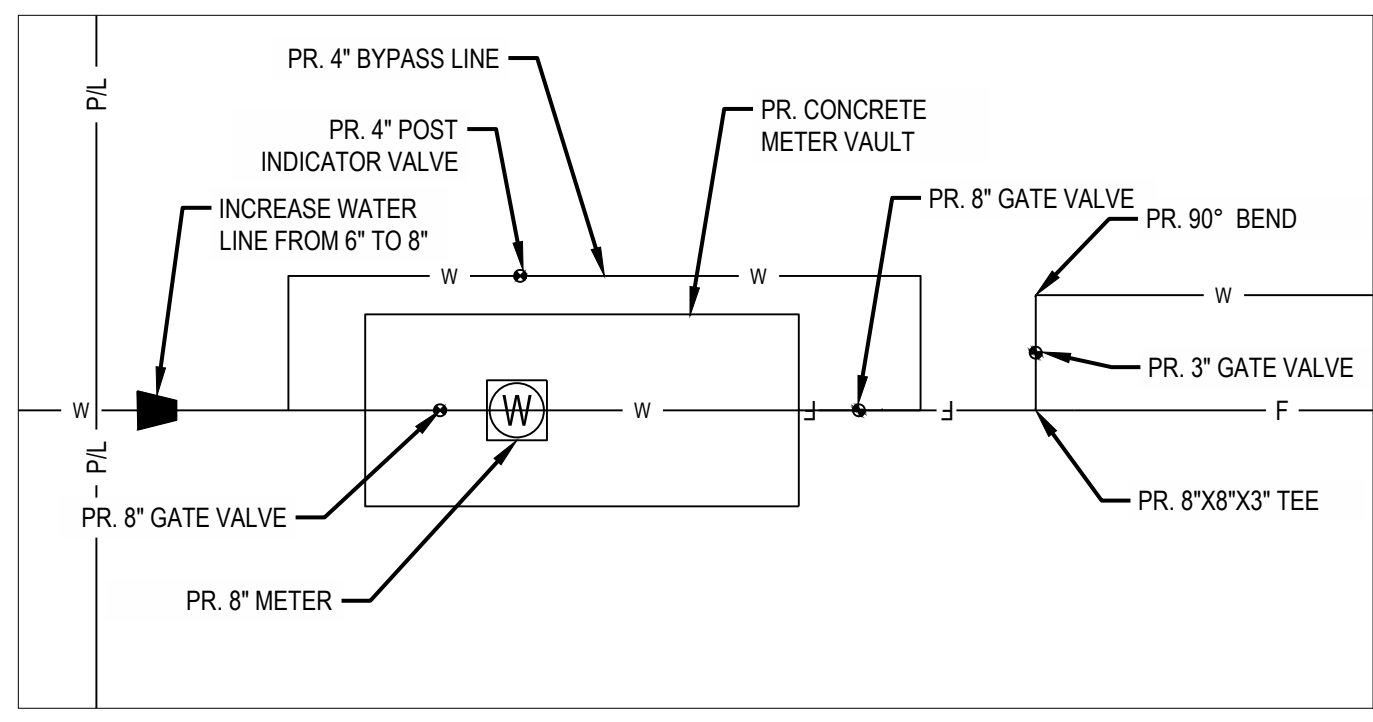
	BUILDING
	CONCRETE CURB
	PAVEMENT WALK
	STORM SEWER LINE
	SANITARY SEWER LINE
	DOMESTIC WATER SERVICE LINE
	GAS SERVICE LINE
	UNDERGROUND ELECTRIC LINE
	UNDERGROUND TELEPHONE LINE
	FIRE LINE
	CATCH BASIN
	STORM SEWER MANHOLE
	SANITARY SEWER MANHOLE
	CURB INLET
	CLEANOUT
	DOWNSPOUT
	ELECTRICAL TRANSFORMER PAD
	ELECTRICAL SWITCHGEAR PAD
	FIRE HYDRANT
	WATER VALVE
	FIRE DEPARTMENT CONNECTION

REFER TO SHEET C1.1 FOR GENERAL UTILITY NOTES
 REFER TO SHEET C1.1 FOR UTILITY DETAILS

- CODED NOTES:**
- PROPOSED 6" SANITARY SERVICE.
 - PROPOSED 6" FIRE LOOP, SHOWN FOR REFERENCE ONLY. FINAL DESIGN TO BE COORDINATED WITH FIRE PROTECTION ENGINEER.
 - PROPOSED 8" FIRE WATER SERVICE, SHOWN FOR REFERENCE ONLY. FINAL DESIGN TO BE COORDINATED WITH FIRE PROTECTION ENGINEER.
 - PROPOSED 3" DOMESTIC WATER SERVICE.
 - PROPOSED WATER METER VAULT WITH 6" METER PER CITY OF PORT ANGELES (COPA) MASTER WATER METER STANDARD DETAIL. CONTRACTOR MUST SUBMIT SHOP DRAWING TO COPA PRIOR TO ORDERING.
 - PROPOSED ELECTRICAL TRANSFORMER.
 - PROPOSED UNDERGROUND ELECTRICAL SERVICE.
 - PROPOSED COMMUNICATION SERVICE. CONTRACTOR TO PROVIDE 4-4" CONDUITS.
 - PROPOSED FIRE DEPARTMENT CONNECTION.
 - PROPOSED 45" BEND.
 - PROPOSED TEE AND GATE VALVE. SEE PLAN FOR SIZE.
 - PROPOSED FIRE HYDRANT ASSEMBLY WITH 6" SERVICE LINE AND 6" GATE VALVE. MATERIALS AND INSTALLATION PER CITY OF PORT ANGELES STANDARDS.
 - PROPOSED ELECTRICAL SWITCHGEAR.
 - PROPOSED UTILITY CROSSING. MAINTAIN 18" VERTICAL SEPARATION BETWEEN UTILITIES.
 - PROPOSED 12" FIRE LOOP.
 - PROPOSED FIRE SERVICE CONNECTION. COORDINATE WITH MEP PLANS.
 - PROPOSED SANITARY CONNECTION. COORDINATE WITH MEP PLANS.
 - PROPOSED DOMESTIC WATER CONNECTION. COORDINATE WITH ARCHITECTURAL AND MEP PLANS.

SANITARY SEWER STRUCTURE SCHEDULE

NO.	STRUCTURE	RIM	INVERT
101	6" CO	298.15	295.05 (6") SE
102	6" CO	302.80	298.10 (6") S 298.10 (6") NW
103	6" CO	305.87	296.92 (6") N 296.92 (6") S



WASHINGTON

FORTY-EIGHT (48) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: WASHINGTON UTILITIES PROTECTION SERVICE AT 811 OR 800-424-5555 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

AMBROSE PROPERTY GROUP

PROJECT PENINSULA
 WEDGEWOOD DR.,
 PORT ANGELES, WA 98363

Revisions / Submissions

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	20250418

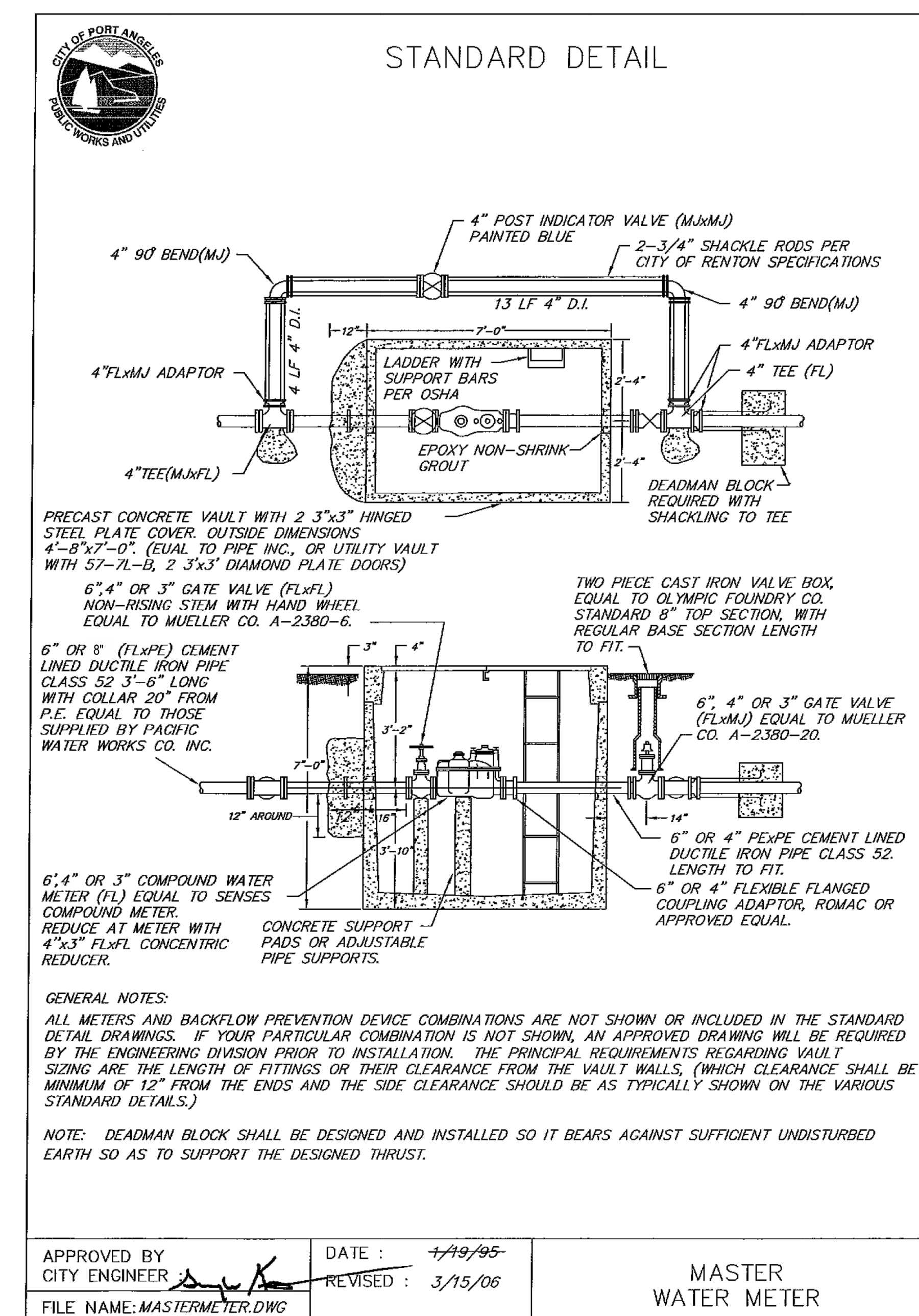
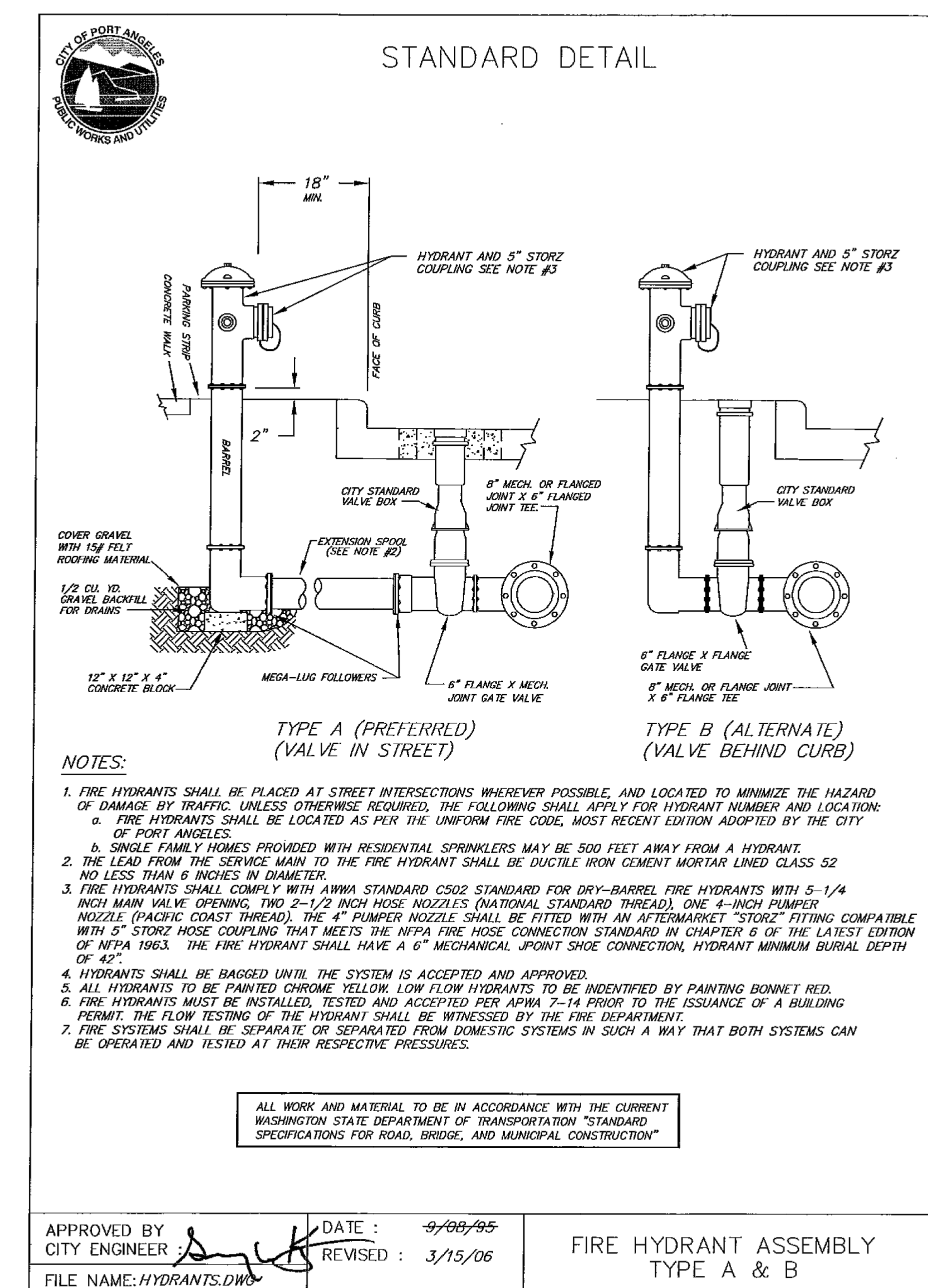
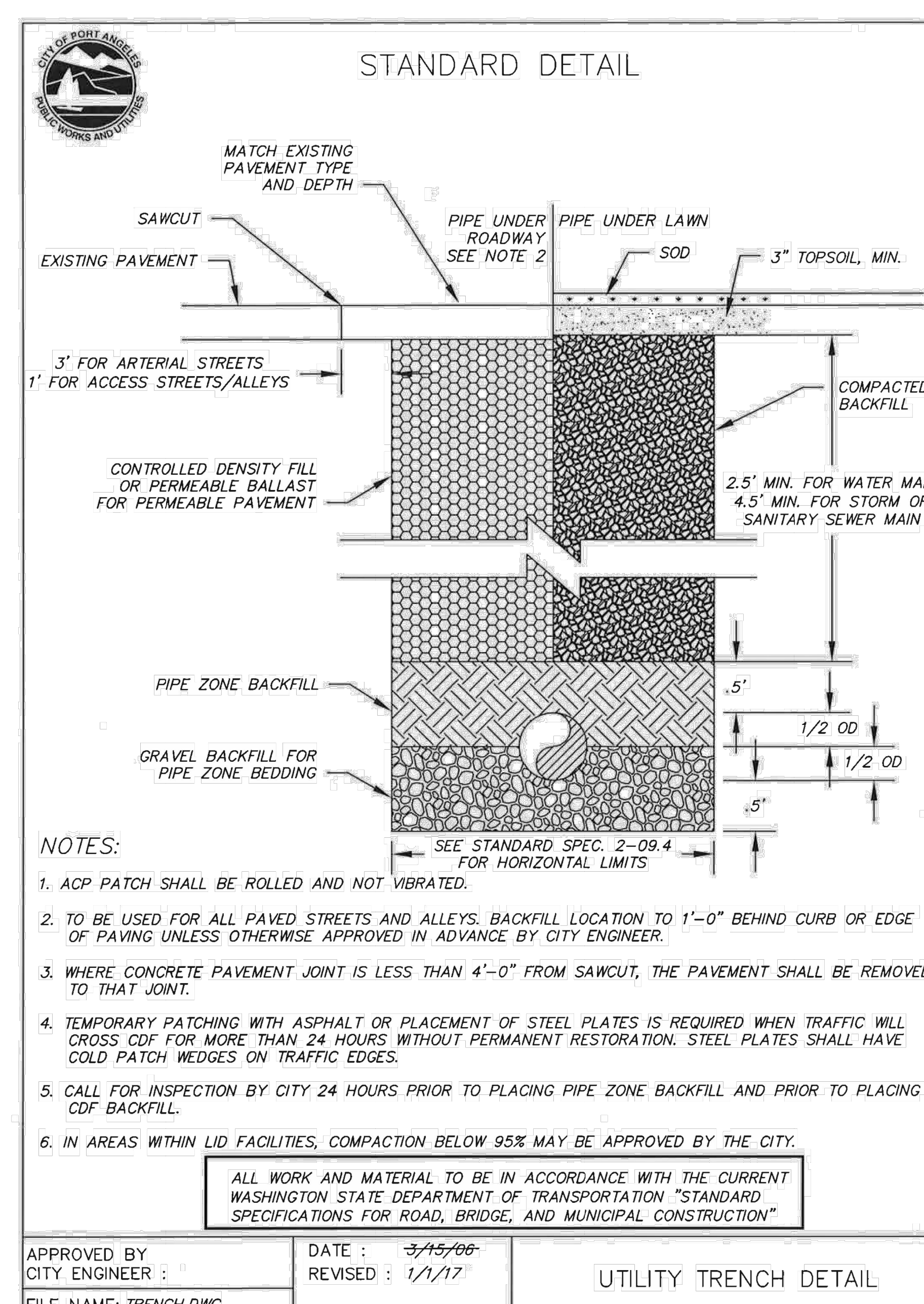
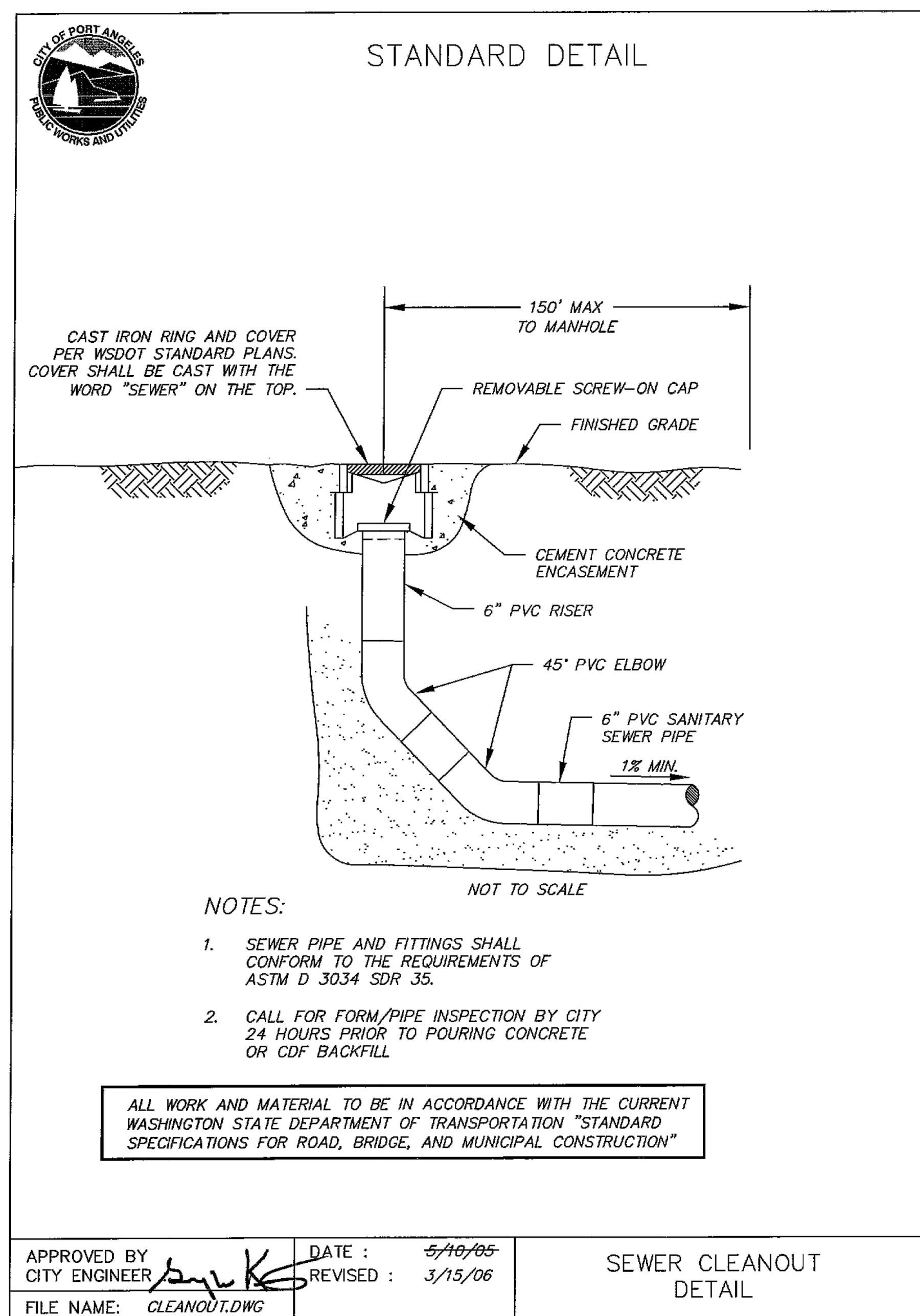
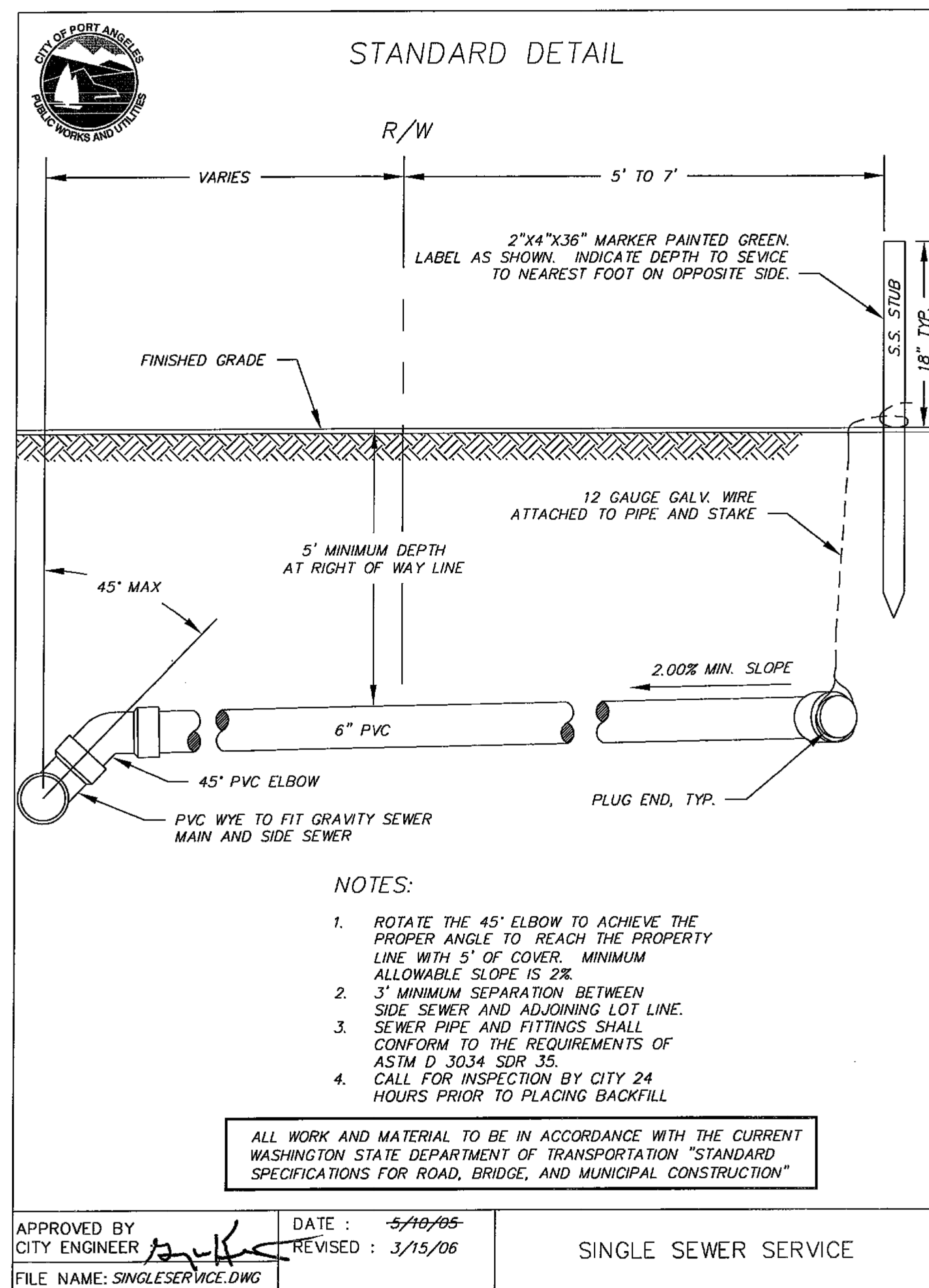
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Project Number: 763838
 Scale: AS SHOWN
 Drawn By: QSS
 Checked By: CG
 Date: 04/18/2025
 Issue: NOT FOR CONSTRUCTION

Drawing Title:
UTILITY PLAN

C6.0

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AMBROSE PROPERTY GROUP

PROJECT PENINSULA
 WEDGEWOOD DR.,
 PORT ANGELES, WA 98363

ID	Description	Date
1	BUILDING PERMIT SUBMISSION	2025/04/18

Revisions / Submissions	
Project Number:	763838
Scale:	AS SHOWN
Drawn By:	QSS
Checked By:	CG
Date:	04/18/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
UTILITY DETAILS



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APPENDIX B

SAMPLE MAINTENANCE AND INSPECTION REPORT



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Inspection Information

Site Name: _____

Owner changed since last inspection? Yes _____ No _____

Owner Name, Address, and Phone Number:

Inspector Name, Address, and Phone number:

Date: _____ Time: _____

Precipitation in Past 24 Hours? Yes _____ No _____



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Storm Inlet and Storm Sewer Operation, Maintenance, and Management Inspection Checklist

Structure Number: _____		Structure Type: _____		
Access to structure	Good	Fair	Poor	Needs replacement
Flow	None	Trickle	Steady	High
Condition of casting grate and frame	Good	Fair	Poor	Needs replacement
Condition of structure	Good	Poor	Poor	Needs replacement
Trash in structure	Yes	No	Source:	
Sediment in structure	Open	¼ Full (Requires Cleaning)	Exceeds 6" (Requires Cleaning)	Plugged (Requires cleaning)
Sediment around structure	Yes	No	Source:	
Erosion around structure	Yes	No	Source:	
Water seepage around structure	Yes	No	Source:	

Structure Number: _____		Structure Type: _____		
Access to structure	Good	Fair	Poor	Needs replacement
Flow	None	Trickle	Steady	High
Condition of casting grate and frame	Good	Fair	Poor	Needs replacement
Condition of structure	Good	Poor	Poor	Needs replacement
Trash in structure	Yes	No	Source:	
Sediment in structure	Open	¼ Full (Requires Cleaning)	Exceeds 6" (Requires Cleaning)	Plugged (Requires cleaning)
Sediment around structure	Yes	No	Source:	
Erosion around structure	Yes	No	Source:	
Water seepage around structure	Yes	No	Source:	

Detention BMP Inspection Checklist*

Project Location: _____

Date/Time: _____

Maintenance Item	Satisfactory/ Unsatisfactory	Recommended Inspection Frequency	Comments
Inlet/Outlet Pipes			
Structural integrity of inlet/outlet (Are any inlet pipes broken, crumbling, separated?) List Approximate Diameter and Type of Material of Inlet Pipes Inlet Pipe 1 _____ Inlet Pipe 2 _____ Inlet Pipe 3 _____ Outlet Pipe Size/Type _____		A	
Riprap at inlet pipe (Is the riprap still present? Is it visible and not covered with sediment?)		A	
Stone around outlet pipe (Is the stone clogged with debris and/or sediment?)		A	
Trash or debris blocking inlet/outlet (Inspect to ensure no major obstructions hindering general functionality)		M	
Inspect/clean catch basin upstream of the BMP if accessible.		A	
Inspect inlets and outlet for erosion (Are there eroded areas around the pipes?)		A	
Inspect overflow spillway for signs of erosion.			
Pretreatment (if applicable). This might include sediment forebay, upstream catch basin, bioswale, rain garden, swirl concentrator			
Device functioning to trap/collect sediment			
Remove accumulated sediment as appropriate for the pretreatment device. forebay		A	
Detention Pond		A	

Inspection frequency key — A = Annual, M = Monthly, S = After major storm

* It is recommended to review and inspect the basin with the engineering as-built plans.

Maintenance Item	Satisfactory/ Unsatisfactory	Recommended Inspection Frequency	Comments
Inspect side slopes, berms and emergency overflow for erosion		A	
Reestablish permanent native vegetation on eroded slopes		As Needed	
Inspect for excess sediment accumulation in pond if not pretreatment device is present		A	
Overall functionality			
Ensure pond is functioning properly (Professional Civil Engineer is recommended)		A	
Ensure the outlet is functioning properly (Professional Civil Engineer is recommended)		A	
Optional/Enhancements			
Maintain 15-20 feet "no mow and chemical free" zone		A	
Mow (or burn) the "no mow" zone		A	
Inspect basin and "no mow" zone for invasive species.		A	
Qualified professional applicator selectively herbicide invasive species		A	
Increase plant diversity by planting additional vegetation in and around pond.		A	
Complaints from residents (note on back)		S	
Encroachment on pond/no- mow zone.		A	
Unauthorized plantings		A	
Aesthetics (e.g., graffiti, unkempt maintenance)		A	

Inspection frequency key — A = Annual, M = Monthly, S = After major storm

* It is recommended to review and inspect the basin with the engineering as-built plans.

Summary

Inspector's remarks:

Overall condition of facility (acceptable or unacceptable): _____

Dates any maintenance must be completed by: _____

Storm Sewer Pipes Operation, Maintenance, and Management Inspection Checklist for BMP Owners

Project: _____ Owner Change since last inspection? Y N
 Owner Name, Address, Phone: _____
 Number: _____
 Location: _____
 Site Status _____
 Date: _____
 Time: _____
 Inspector: _____

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
Storm sewer pipes (Inspect annually and after major storms)		
1. Trash/Debris obstructing inflow		
Affected Pipes:		
2. Silt/Sediment accumulation		
Affected Pipes:		
3. Other (describe)		

Additional Comments:

Actions to be taken:	Timeframe:
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Storm Sewer Structure Operation, Maintenance, and Management Inspection Checklist for BMP Owners

Project: _____ Owner Change since last inspection? Y N

Owner Name, Address, Phone: _____

Number: _____

Location: _____

Site Status _____

Date: _____

Time: _____

Inspector: _____

Maintenance Item	Satisfactory/ Unsatisfactory	Comments
Storm Casting and Grate (Inspect monthly and after major storms)		
1. Trash/Debris obstructing inflow		
Affected Structures:		
2. Silt/Sediment accumulation		
Affected Pipes:		
3. Other (describe)		
Structure Sump (Inspect annually and after major storms)		
1. Sediment/Debris in sump		
Affected Structures:		
2. Other (describe)		
Headwall Structures (Inspect annually and after major storms)		
1. Vegetation around headwall		
2. Erosion around headwall		
3. Animal burrows		
4. Headwall clear of obstructions		
5. Sediment Accumulation		
Affected Structures:		
6. Other (describe)		

Additional Comments:

Actions to be taken:

Timeframe:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____



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APPENDIX C

MAINTENANCE STANDARDS

Stormwater Maintenance Standard

All stormwater ponds, ditches, swales, pipes, inlets, catch basins, manholes, flumes, pond inflow and outfall structures (including oil skimmers), discharge pipes and all other components of the stormwater management system should be inspected as identified in the maintenance schedule. An inspection report should be completed, and a copy filed.

1. Remove trash, litter, and debris from outlets, pipes, banks, catch basins, pond or swale beds, and all other components of the stormwater system.
2. Remove any sediment or silt that may inhibit flow. Make minor repairs as needed.
3. Mow or weed-eat banks and pond, ditch or swale bottom to maintain vegetative growth not to exceed 12 inches in height. Herbicide is not to be used to control growth of vegetation on banks or pond bottom except at inlet and outlet structures and to control exotic or nuisance vegetation.
4. Ensure that banks and slopes are vegetated with grasses. Bare spots, if they exist, should be sodded or reseeded using common seed mixture with fertilizers and soil amendments as acceptable to the owner. Newly seeded areas should be covered with erosion control fabric. Mulch or straw should not be used.
5. Erosion in vegetated areas should be repaired immediately by filling with soil, compacting new soil and sodding or seeding using approved seed mixture with fertilizers and soil amendments. Newly seeded areas should be covered with erosion control fabric. Mulch or straw should not be used.
6. Erosion at outlets should be repaired by back filling to grade, installation of erosion mat and rip rap of at least 3 inches in diameter. Rip rap should only be used to dissipate flow of water and must never be installed without erosion mat.
7. Inspect all outfalls, structures, swales and piping. Remove trash, debris, accumulated silt and sediment that may obstruct flow. Make minor repairs as needed. Minor repairs are defined as repairs that can be made during a regular maintenance event.
8. The outlet structure sump must be cleaned by vacuum truck as needed or as required by local regulation and site conditions. Debris removed from catch basins must be disposed of in accordance with Federal, State and local regulations at an approved disposal facility. Waste must be properly manifested if required.

A. **Pond:** In general, maintenance of the pond shall occur on a monthly basis during the growing season and shall include the following activities:

1. Remove sediment and debris from orifice and trash rack on overflow structure. If “draw down” from the orifice does not occur in 2-5 days following a rain event, there may be a clog in the system. The source of the clogging should be located and removed.
2. Nuisance aquatic vegetation such as woody vegetation, cattail, duckweed, algae and other invasive or nuisance growth must be removed and controlled. Growth over 24 inches tall must be manually cut. Approved aquatic herbicide may be used after manual removal has been done. **All cut and dead vegetation must be removed from ponds and banks.**
3. Maintain, rather than remove, wetland or littoral zone vegetation that was planted or naturally recruited at water’s edge.

B. **Swales:** In general, maintenance of Swales should occur on a monthly basis during the growing season and shall include the following activities:

1. Swales should not retain water.
2. Remove excess accumulation of sediment annually or as needed to maintain original contours and grading.
3. Remove trash, sediment, and debris as needed.

C. **Avoid Erosion or Siltation to Areas Beyond the Permitted Project Area:** During any repair or maintenance activity, Contractor must utilize Best Management Practices to avoid causing erosion or siltation to areas beyond the permitted project area. Contractor is required to sweep all areas of the parking lot and streets where “track out” has occurred as a result of maintenance or repair work conducted by the contractor.