









**BUILDING INFORMATION**

SITE AREA: SEE CIVIL  
 BUILDING FOOTPRINT: 58,125 SF  
 BUILDING AREA: 60,274 SF

**BUILDING CODE DATA**

BASED ON THE 2019 OREGON STRUCTURAL SPECIALTY CODE

GENERAL CODE ANALYSIS:

CONSTRUCTION TYPE: III-B, TWO STORIES

FIRE PROTECTION:

AUTOMATIC FIRE SPRINKLER SYSTEM THROUGHOUT (ESFR)  
 BUILDING IS DESIGNED WITH AN ESFR SPRINKLERED SYSTEM FOR CLASS I-V NON ENCAPSULATED COMMODITIES PER NFPA 13. SEE FIRE PROTECTION SPECIFICATIONS. FIRE PUMP IS PROPOSED.

OCCUPANCIES:

B AND S-1  
 - BASED ON NON SPERATED USE PER 508.3

AREA	GROSS SQUARE FEET
BUILDING	62,107 SF
FLOOR 1: WAREHOUSE	58,125 SF
FLOOR 2: STORAGE	2,149 SF
FUTURE STORAGE	(1,833 SF)

**BUILDING HEIGHT AND STORIES (TABLES 504.3 AND 504.4):**

ALLOWABLE: 60'-0" / 2 STORIES  
 PROVIDED: 46'-6" / 2 STORIES

**UNLIMITED AREA BUILDING (SEE SECTION 507.4):**

THE BUILDING, TWO STORIES, FULLY SPRINKLERED, UNLIMITED AREA ALLOWED PER SECTION 507.4, SURROUNDED BY A BUFFER OF 60'-0" FEET OR MORE ON 4 SIDES.

**BUILDING FIRE RESISTIVE REQUIREMENTS (SEE SECTION 601):**

STRUCTURAL FRAME:	NR
BEARING WALLS - EXTERIOR:	NR
BEARING WALLS - INTERIOR:	NR
NON-BEARING WALLS - EXTERIOR:	NR
NON-BEARING WALLS - INTERIOR:	NR
FLOOR:	NR
ROOF:	NR
SHAFTS (707.3.1)	NONE
STAIRS (1018.1)	NONE
ELECTRICAL ROOM (Table 509)	NR
FIRE PUMP ROOM (913.2.1.1)	1-HR FIRE BARRIER

ELECTRICAL ROOM REQUIREMENTS PER 509 INCIDENTAL USES  
 TABLE 509 ELECTRICAL INSTALLATIONS AND TRANSFORMERS REQUIREMENTS REFERENCES SEPARATION AND/OR PROTECTION PER ELECTRICAL CODE SECTIONS 110.26-110.34 AND 450.8-450.48.  
 PER ELECTRICAL DRAWINGS TRANSFORMER VAULTS ARE LOCATED AT EXTERIOR AND NOT WITHIN THE ELECTRICAL ROOM.  
 PER ELECTRICAL DRAWINGS DRY-TYPE TRANSFORMERS INSTALLED INDOORS ARE LESS THAN 112.5 KVA AND DOES NOT REQUIRE TO BE LOCATED IN A ROOM WITH RATED CONSTRUCTION PER OESC 450.21.A.

ELECTRICAL ROOM WILL NOT HOUSE BATTERY STORAGE

FIRE BARRIERS SHALL MEET ALL CONTINUITY REQUIREMENTS PER 707.5.

PENETRATIONS THROUGH FIRE BARRIER WALLS SHALL MEET ALL REQUIREMENTS PER SECTION 714 AS WELL AS FIRE RESISTANCE RATED WALLS TO MEET FIRE STOPPING PER SPECIFICATION 07.84.00.

FIRE BARRIERS SHALL MEET ALL DUCT AND AIR TRANSFER OPENING REQUIREMENTS PER 707.10

**FIRE SEPARATION DISTANCE (TABLE 602):**

III-B	NORTH	EAST	SOUTH	WEST
WAREHOUSE	100'	33'	104'	635'

• FULLY SPRINKLERED ESFR FIRE SYSTEM  
 • PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED THROUGHOUT BASED ON 2019 OREGON FIRE CODE

**DOORS (SECTION 1010)**

RATED, SIZED, AND HARDWARE PROVIDED TO MEET SECTION 1010 - SEE INDIVIDUAL FLOOR PLANS AND SPECIFICATIONS.

• PROVIDE PANIC HARDWARE AT ELECTRICAL ROOM (1010.1.9)

**MEANS OF EGRESS ILLUMINATION (SECTION 1008)**

ILLUMINATION SHALL BE PROVIDED IN THE MEANS OF EGRESS IN ACCORDANCE WITH SECTION 1008.2. UNDER EMERGENCY POWER, MEANS OF EGRESS ILLUMINATION SHALL COMPLY WITH SECTION 1008.3.

**FIRE PROTECTION - CHAPTER 9**

BASED ON 2019 OREGON FIRE CODE  
**OFC SECTION 508.1**

ROOMS CONTAINING CONTROLS FOR AIR CONTAINING SYSTEMS, SPRINKLER RISERS AND VALVES, OR OTHER FIRE DETECTION, SUPPRESSION OR CONTROL ELEMENTS SHALL BE IDENTIFIED FOR THE USE OF THE FIRE DEPARTMENT.

SIGNS REQUIRED TO IDENTIFY FIRE PROTECTION EQUIPMENT AND EQUIPMENT LOCATIONS TO BE APPROVED BY THE FIRE CODE OFFICIAL.

WHERE REQUIRED AND APPROVED BY THE FIRE CODE OFFICIAL UTILITIES ARE TO BE LEGIBLY MARKED TO IDENTIFY THE JANITOR SPACE IT SERVES.

PENETRATIONS THROUGH FIRE RESISTANCE RATED WALLS SHALL MEET ALL REQUIREMENTS PER SECTION 714 AS WELL AS FIRE RESISTANCE RATED WALLS TO MEET FIRE STOPPING PER SPECIFICATION 07.84.00

**SECTION 903 - AUTOMATIC SPRINKLER SYSTEMS**  
 FULLY SPRINKLERED NFPA-13 ESFR FIRE SYSTEM

**SECTION 906 PORTABLE FIRE EXTINGUISHERS**  
 PROVIDE (1) FIRE EXTINGUISHERS WITH RATINGS OF NOT LESS THAN 2-A:10-B:C FOR EACH 3,000 SF OF FLOOR AREA. TRAVEL FROM ANY PORTION OF BUILDING NOT TO EXCEED 75'. FIRE EXTINGUISHERS LOCATED WITH OFFICE AREA TO BE SEMI-RECESSED CABINETS.

**OFC APPENDIX D FIRE APPARATUS ACCESS ROADS**  
 SEE SHEET C1.00 FOR AERIAL FIRE APPARATUS ACCESS.

**OFC CHAPTER 32 - HIGH-PILED COMBUSTIBLE STORAGE**  
 BUILDING IS DESIGNED TO ACCOMMODATE HIGH-PILED STORAGE TYPE I/IV UNENCAPSULATED COMMODITIES UP TO 36' HIGH-PILED STORAGE PER OFC TABLE 3206.2

• AN AUTOMATIC SPRINKLER SYSTEM IS PROVIDED IN ACCORDANCE WITH OFC SECTION 3206.4

• FIRE DETECTION SYSTEM IS NOT REQUIRED PER TABLE 3206.2

• BUILDING ACCESS IS PROVIDED PER OFC SECTION 3206.6

• SMOKE AND HEAT REMOVAL IS REQUIRED PER TABLE 3206.6

• FOOTNOTE I: AUTOMATIC FIRE EXTINGUISHING SYSTEM PROVIDED IN ACCORDANCE WITH OFC 3207 AND 3209

• MAX PILE DIMENSIONS - 120' LONG x 40' HIGH

• MAX PILE VOLUME - 400,000 CUBIC FEET

**MEANS OF EGRESS**

**SECTION 1008 - MEANS OF EGRESS ILLUMINATION**

• PROVIDE MEANS OF EGRESS ILLUMINATION AT A MINIMUM OF ONE FOOT CANDLE AT PATH OF EGRESS TO MEET SECTION 1008. EXTEND 5'-0" OUTSIDE EGRESS DOORS.

• WAREHOUSE OFFICE PROVIDE EMERGENCY POWER FOR MIN 90 MINUTES (BATTERY BACK-UP)

- AVERAGE INITIAL ILLUMINATION OF 1 FOOT-CANDLE(11 LUX)

- MAXIMUM UNIFORMITY RATIO OF 40:1

- SEE FLOOR PLANS FOR PATH

**SECTION 1010 - DOORS, GATES AND TURNSTILES**

• EXTERIOR DOORS SIZED AND HARDWARE PROVIDED TO MEET SECTION. SEE FLOOR PLAN AND DOOR HARDWARE. ALL DOOR HARDWARE TO COMPLY WITH ADA REQUIREMENTS. SEE SPECS.

• THRESHOLDS TO COMPLY WITH 1010.1.7

• HARDWARE ON DOORS REQUIRED TO BE ACCESSIBLE SHALL COMPLY WITH 1008.1.9.1

• HARDWARE HEIGHT TO COMPLY WITH 1010.1.9.2

• LOCKS AND LATCHES TO COMPLY 1010.1.9.4

• BOLT LOCKS ARE NOT PERMITTED UNLESS MEETING 1010.1.9.5 EXCEPTIONS

• THE UNLATCHING OF ANY DOOR OR LEAF SHALL COMPLY 1010.1.9.6

**SECTION 1013 - EXIT SIGNS**

• PROVIDE EXIT SIGNAGE TO MEET SECTION 1013.1.

**SECTION 1028 - EXIT DISCHARGE**

• ALL EXITS DISCHARGE AT GROUND LEVEL

**CODE PLAN - SECOND FLOOR**

1" = 10'-0"

**GENERAL NOTES**

A. THIS SHEET IS MEANT FOR CODE REVIEW PURPOSES ONLY.

B. SEE SHEET A1.10 FOR ADDITIONAL PLAN INFORMATION.

C. EMERGENCY LIGHTING ALONG THE EGRESS PATH SHALL NOT BE LESS THAN 1 FOOT-CANDLE AT THE FLOOR LEVEL AT ALL POINTS ALONG THE EGRESS PATH. A MAXIMUM-TO-MINIMUM ILLUMINATION UNIFORMITY RATIO OF 40:1 SHALL NOT BE EXCEEDED TO MEET ALL REQUIREMENTS OF SECTION 1008.

D. SECTION 1010.1.1 REQUIRES A CLEAR DOOR WIDTH OF 32". ALL PROVIDED DOORS COMPLY.

**GOVERNING CODES**

2019 OREGON STRUCTURAL SPECIALTY CODE  
 2021 OREGON ENERGY EFFICIENCY CODE  
 2019 OREGON MECHANICAL SPECIALTY CODE  
 2021 OREGON ELECTRICAL SPECIALTY CODE  
 2021 OREGON PLUMBING SPECIALTY CODE  
 2019 OREGON FIRE CODE  
 ICC A117.1-2009 ACCESSIBILITY

**LEGEND**

DOCK HIGH OVERHEAD DOOR

DRIVE IN OVERHEAD DOOR

FIRE EXTINGUISHER LOCATION (75' CLEARANCE RADIUS)

EXITS

FIRE ACCESS DOOR

PROVIDE EMERGENCY ILLUMINATED EXIT SIGNS PER THESE LOCATIONS

MAXIMUM TRAVEL DISTANCE

**WALL TYPES**

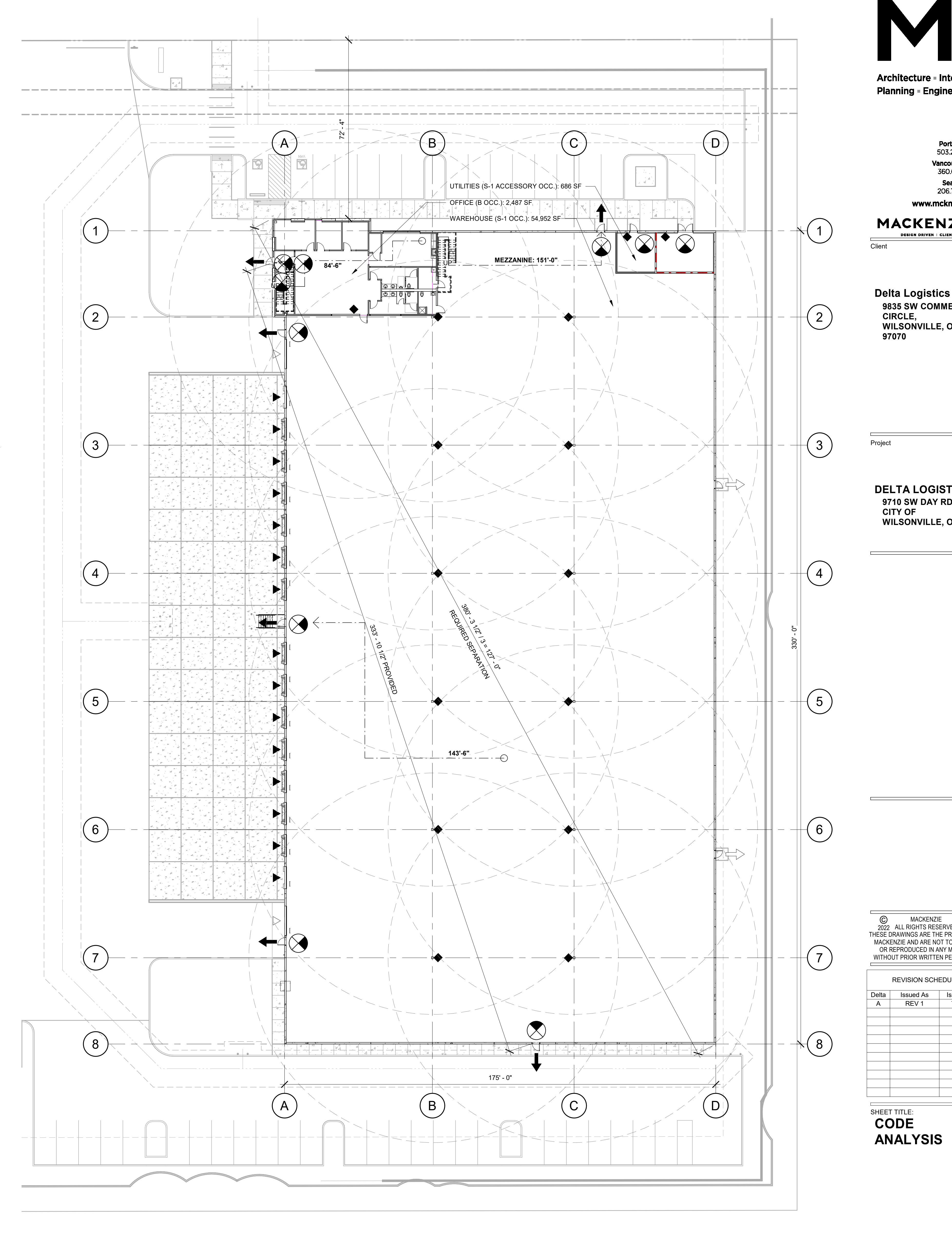
CONCRETE TILT PANEL - SEE STRUCTURAL ELEVATIONS FOR THICKNESSES

1HR RATED WALL PER 11/A5.20

FULL HEIGHT WALL PER 12/A5.20

STICK-PIN INSULATION 10/A5.20

INTERIOR PARTITION PER 13/15/A5.20



**CODE PLAN - FIRST FLOOR**

1" = 20'-0"

USE	OCCUPANCY				WATER CLOSETS			LAVATORIES			DRINKING FOUNTAINS			
	OCCUPANCY TYPE	LOAD FACTOR 1004.1.2	AREA	OCCUPANCY LOAD	RATIO	MEN'S WATER CLOSETS	WOMEN'S WATER CLOSETS	UNISEX WATER CLOSETS	RATIO	MEN'S LAVATORIES	WOMEN'S LAVATORIES	UNISEX LAVATORIES	RATIO	RATIO
OFFICE	B		2,443.00	60	1 PER 25 ≤ 50, 1 PER 50 REMAINDER	1.20	1.20	-	1 PER 40 ≤ 80, 1 PER 80 REMAINDER	0.75	0.75	-	-	N/A
OFFICE (150LOAD FACTOR)		150	1,693.00	12										
OFFICE (15 LOAD FACTOR)		15	590.00	40										
STORAGE	S-1		2,149.00	8										
WAREHOUSE	S-1		55,682.00	112	1 PER 100	0.56	0.56	-	1 PER 100	0.56	0.56	-	-	N/A
SUBTOTALS						1.76	1.76	-		1.31	1.31	-	-	-
REQUIRED TOTALS			60,274.00			2	2	-		2	2	-	-	-
PROVIDED						2	2	1		2	2	1		

CODE SECTION	OCCUPANCY				1005			1006.2.1		1006.2.1		1017		1006	
	OCCUPANCY TYPE (CHAP. 3)	LOAD FACTOR 1004.1.2	AREA	OCCUPANT LOAD (1004.1.1)	EGRESS WIDTH FACTOR	EGRESS WIDTH	WIDTH PROVIDED	COMMON PATH REQUIRED	COMMON PATH PROVIDED	MIN. EXIT DISTANCE	EXIT DISTANCE PROVIDED	MAX TRAVEL DISTANCE	TRAVEL DISTANCE PROVIDED	EXITS REQUIRED	EXITS PROVIDED
BUSINESS AREAS	B	150	1,853	13	0.2	3"		100'-0"	44'-0"	32'-4"	64'-8"	200'-0"	84'-6"	1	2
100 VESTIBULE			100												
101 OPEN OFFICE			1,040												
107 WOMENS			175												
106 MENS			175												
108 JAN.			55												
109 W/C			58												
103 OFFICE			125												
104 OFFICE			125												
UNCONCENTRATED	B	15	590	40	0.2	8"		100'-0"	44'-0"	N/A	N/A			1	1
105 BREAK			315												
105A DATA			40												
102 CONFERENCE			235												
WAREHOUSE	S-1	500	54,985	110	0.2	22"		100'-0"	N/A	211'-4"		250'-0"	143'-6"	2	5
001 WAREHOUSE			54,985												
STORAGE	S-1	300	2,846	10	0.2	2"		100'-0"	N/A	211'-4"		250'-0"	151'-0"	2	2
002 ELECTRICAL			280												
005 FIRE PUMP			417												
200 STORAGE			2,149												
BUILDING TOTAL			60,274	163		33"	216"								



Architecture • Interiors  
 Planning • Engineering

Portland, OR 503.224.9560  
 Vancouver, WA 360.695.7879  
 Seattle, WA 206.749.9993  
 www.mcknzie.com

**MACKENZIE**  
 DESIGN DRIVEN • CLIENT FOCUSED

Client

**Delta Logistics**  
 9835 SW COMMERCE CIRCLE,  
 WILSONVILLE, OR 97070

Project

**DELTA LOGISTICS**  
 9710 SW DAY RD.  
 CITY OF WILSONVILLE, OR

REVISION SCHEDULE

Delta	Issued As	Issue Date
A	REV 1	7/26/22

SHEET TITLE:  
**CODE ANALYSIS**

DRAWN BY: ADG  
 CHECKED BY: SJM  
 SHEET

**G1.10**

JOB NO. **2200502.00**





COMcheck Software Version COMcheckWeb  
Envelope Compliance Certificate

**Project Information**

Energy Code: 90.1 (2019) Standard  
 Project Title: Delta Logistics - Wilsonville  
 Location: Wilsonville, Oregon  
 Climate Zone: 4c  
 Project Type: New Construction  
 Vertical Glazing / Wall Area: 5%  
 Performance Sim. Specs: EnergyPlus 8.1.0.009 (EPW: USA\_OR\_Portland.Intl.AP.726980\_TMY3.epw)

Construction Site: 9710 SW Day Road, Wilsonville, Oregon 97070  
 Owner/Agent: Igor Nichiporichik, Delta Logistics, 9835 SW Commerce Circle, Wilsonville, Oregon 97070, 503-460-2200, igor@deltagov.com  
 Designer/Contractor: Adam Goldberg, Mackenzie, 1515 SE Water Ave, Suite 100, Portland, Oregon 97214, 8476481212, agoldberg@mcknz.com

Building Area	Floor Area
1-Warehouse - Semiheated	55682
2-Office - Nonresidential	2443

**Envelope Assemblies**

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Roof: Insulation Entirely Above Deck, [Bldg. Use 1 - Warehouse]	55682	---	20.0	0.048	0.093
Skylight: Metal Frame: Plastic, with Curb, Perf. Specs.: Product ID N/A, SHGC 0.35, VT 0.64, [Bldg. Use 1 - Warehouse] (b)	576	---	---	0.450	0.750
Roof: Insulation Entirely Above Deck, [Bldg. Use 2 - Office]	2443	---	20.0	0.048	0.032
OFFICE SLAB: Unheated Slab-On-Grade, [Bldg. Use 2 - Office] (c)	112	---	---	0.730	0.520
WAREHOUSE SLAB: Unheated Slab-On-Grade, [Bldg. Use 1 - Warehouse] (c)	911	---	---	0.730	0.730
<b>NORTH</b>					
TILT WALL - (furring at office) NORTH: Solid Concrete, 12in. Thickness, Normal Density, Furring: Metal, [Bldg. Use 2 - Office]	394	13.0	0.0	0.138	0.104
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.40, VT 0.50, [Bldg. Use 2 - Office] (b)	140	---	---	0.450	0.360
TILT WALL - (stickpin at office): Solid Concrete, 10in. Thickness, Normal Density, Furring: None, [Bldg. Use 2 - Office]	952	---	13.0	0.067	0.104
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.40, VT 0.50, [Bldg. Use 2 - Office] (b)	224	---	---	0.450	0.360
TILT WALL - NORTH: Solid Concrete, Bin. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - Warehouse]	2637	---	0.0	0.740	0.580
Man Door: Insulated Metal, Swinging, [Bldg. Use 1 - Warehouse]	21	---	---	0.130	0.370
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.40, VT 0.50, [Bldg. Use 1 - Warehouse] (b)	315	---	---	0.450	0.500
TILT WALL - (furring at office) NORTH: Solid Concrete, Bin.	295	13.0	0.0	0.142	0.104

Project Title: Delta Logistics - Wilsonville Report date: 03/24/22  
 Data filename: Page 1 of 12

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Thickness, Normal Density, Furring: Metal, [Bldg. Use 2 - Office]					
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.40, VT 0.50, [Bldg. Use 2 - Office] (b)	97	---	---	0.450	0.360
TILT WALL - (stickpin at office) NORTH: Solid Concrete, Bin. Thickness, Normal Density, Furring: None, [Bldg. Use 2 - Office]	706	---	13.0	0.068	0.104
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.40, VT 0.50, [Bldg. Use 2 - Office] (b)	105	---	---	0.450	0.360
TILT WALL - (furring at riser) NORTH: Solid Concrete, Bin. Thickness, Normal Density, Furring: Metal, [Bldg. Use 1 - Warehouse]	453	13.0	0.0	0.142	0.580
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Warehouse]	63	---	---	0.130	0.370
Ext. Wall: Solid Concrete, Bin. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - Warehouse]	1037	---	13.0	0.068	0.580
<b>EAST</b>					
TILT WALL (furring at riser) - EAST: Solid Concrete, Bin. Thickness, Normal Density, Furring: Metal, [Bldg. Use 1 - Warehouse]	160	13.0	0.0	0.142	0.580
TILT WALL (stickpin at riser) - EAST: Solid Concrete, Bin. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - Warehouse]	429	---	13.0	0.068	0.580
TILT WALL - EAST: Solid Concrete, Bin. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - Warehouse]	11516	---	0.0	0.740	0.580
Man Door: Insulated Metal, Swinging, [Bldg. Use 1 - Warehouse]	42	---	---	0.130	0.370
<b>SOUTH</b>					
TILT WALL - SOUTH: Solid Concrete, Bin. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - Warehouse]	6071	---	0.0	0.740	0.580
Man Door: Insulated Metal, Swinging, [Bldg. Use 1 - Warehouse]	21	---	---	0.130	0.370
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.40, VT 0.50, [Bldg. Use 1 - Warehouse] (b)	525	---	---	0.450	0.500
<b>WEST</b>					
TILT WALL - WEST: Solid Concrete, Bin. Thickness, Normal Density, Furring: None, [Bldg. Use 1 - Warehouse]	9747	---	0.0	0.740	0.580
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.40, VT 0.50, [Bldg. Use 1 - Warehouse] (b)	148	---	---	0.450	0.500
Man Door: Insulated Metal, Swinging, [Bldg. Use 1 - Warehouse]	63	---	---	0.130	0.370
Roll-Up Door: Insulated Metal, Non-Swinging, [Bldg. Use 1 - Warehouse]	1686	---	---	0.130	0.360
TILT WALL - (furring office) WEST: Solid Concrete, 12in. Thickness, Normal Density, Furring: Metal, [Bldg. Use 2 - Office]	438	13.0	0.0	0.138	0.104
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.40, VT 0.50, [Bldg. Use 2 - Office] (b)	141	---	---	0.450	0.360
TILT WALL - (stickpin at office) WEST: Solid Concrete, 10in. Thickness, Normal Density, Furring: None, [Bldg. Use 2 - Office]	1006	---	13.0	0.067	0.104
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.40, VT 0.50, [Bldg. Use 2 - Office] (b)	225	---	---	0.450	0.360

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.  
 (b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.  
 (c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Project Title: Delta Logistics - Wilsonville Report date: 03/24/22  
 Data filename: Page 2 of 12

Envelope PASSES: Design 1% better than code

**Envelope Compliance Statement**

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2019) Standard requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title Signature Date

Project Title: Delta Logistics - Wilsonville Report date: 03/24/22  
 Data filename: Page 3 of 12



Architecture - Interiors  
 Planning - Engineering

Portland, OR  
 503.224.9560  
 Vancouver, WA  
 360.695.7879

Seattle, WA  
 206.749.9993  
 www.mcknz.com



Client

Delta Logistics  
 9835 SW COMMERCE  
 CIRCLE,  
 WILSONVILLE, OR  
 97070

DELTA LOGISTICS  
 9710 SW DAY RD.  
 CITY OF  
 WILSONVILLE, OR



© MACKENZIE  
 2022 ALL RIGHTS RESERVED  
 THESE DRAWINGS ARE THE PROPERTY OF  
 MACKENZIE AND ARE NOT TO BE USED  
 OR REPRODUCED IN ANY MANNER  
 WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:  
**ENERGY CODE COMPLIANCE**

DRAWN BY: ADG  
 CHECKED BY: SJM  
 SHEET

**G1.11**

JOB NO. **2200502.00**









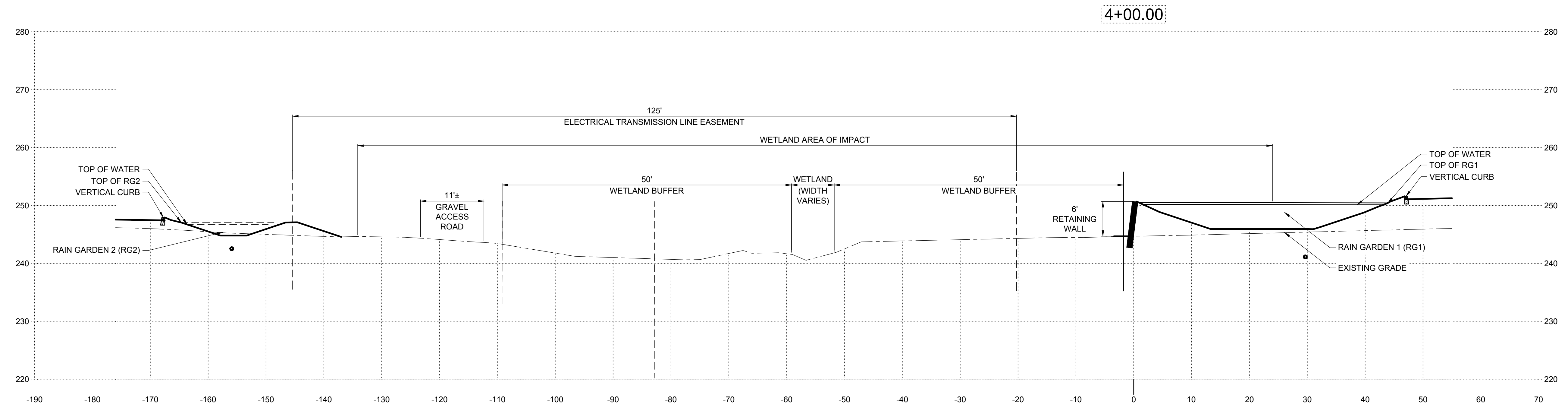




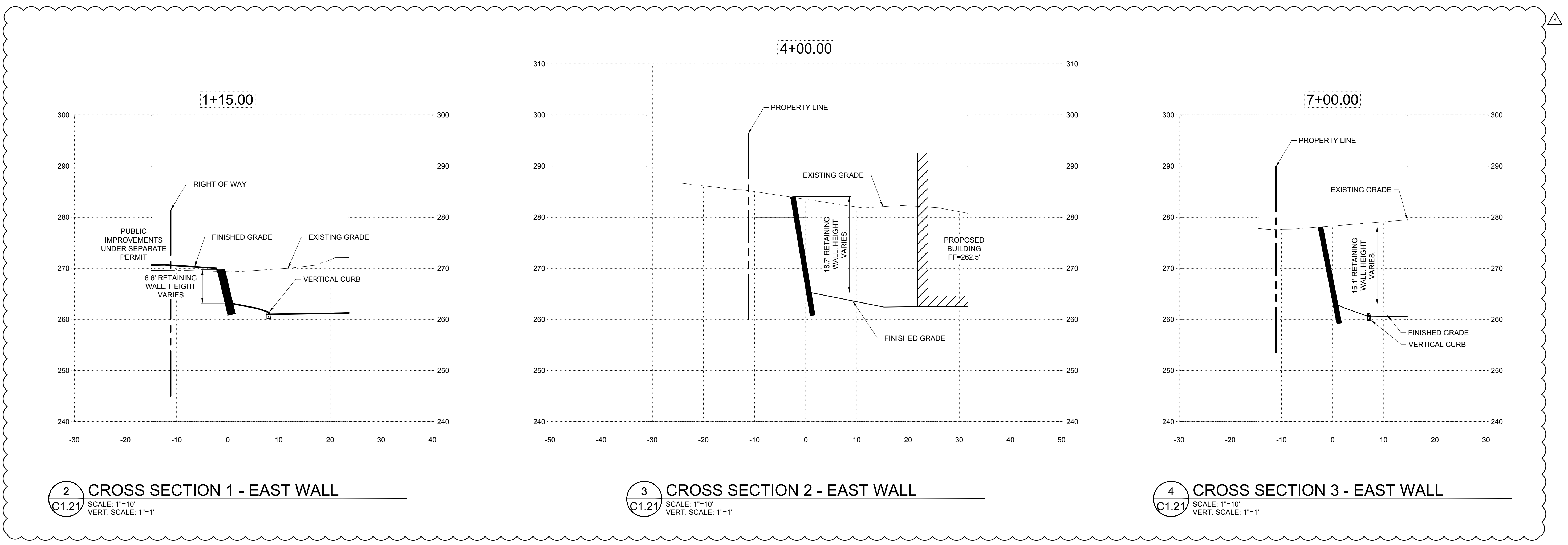








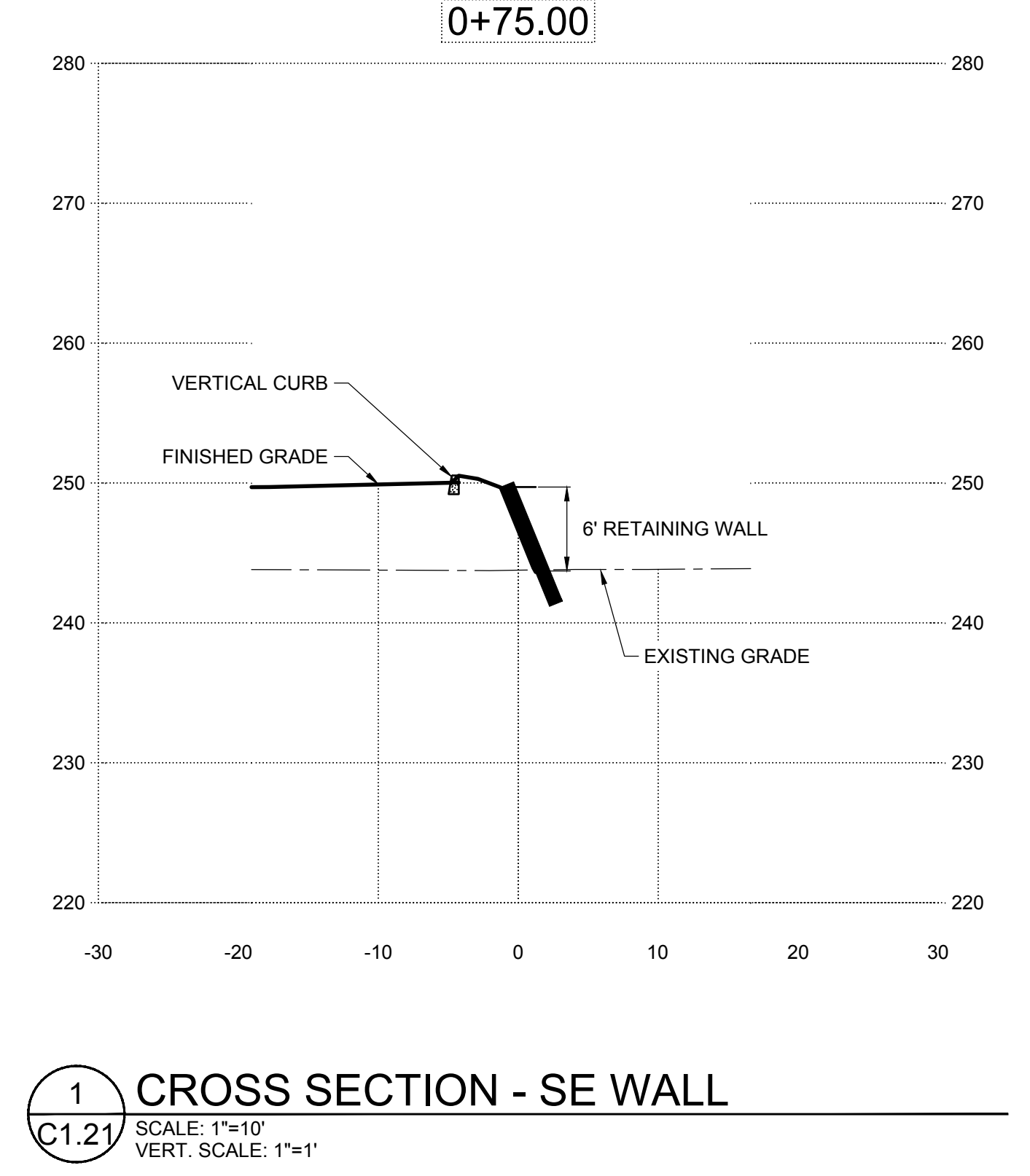
**1** CROSS SECTION - NORTHWEST WALL  
 SCALE: 1"=10'  
 VERT. SCALE: 1"=1'



**2** CROSS SECTION 1 - EAST WALL  
 SCALE: 1"=10'  
 VERT. SCALE: 1"=1'

**3** CROSS SECTION 2 - EAST WALL  
 SCALE: 1"=10'  
 VERT. SCALE: 1"=1'

**4** CROSS SECTION 3 - EAST WALL  
 SCALE: 1"=10'  
 VERT. SCALE: 1"=1'



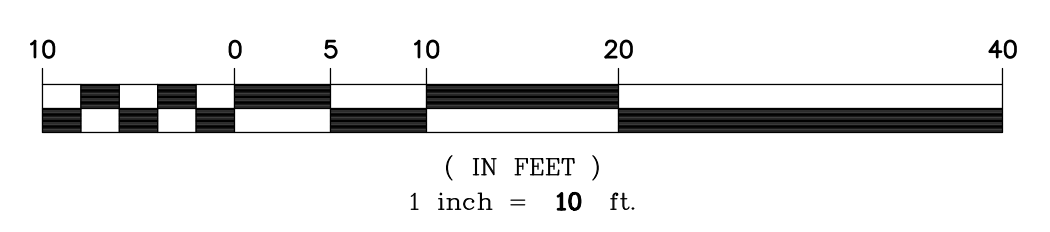
**1** CROSS SECTION - SE WALL  
 SCALE: 1"=10'  
 VERT. SCALE: 1"=1'

© MACKENZIE 2022  
 ALL RIGHTS RESERVED  
 THESE DRAWINGS ARE THE PROPERTY OF  
 MACKENZIE AND ARE NOT TO BE USED  
 OR REPRODUCED IN ANY MANNER  
 WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date
1	PLAN CHECK	07/14/2022

SHEET TITLE:  
**GRADING  
 CROSS  
 SECTIONS**

DRAWN BY: AOC, BMR  
 CHECKED BY: BMR, BDN  
 SHEET



**C1.21**





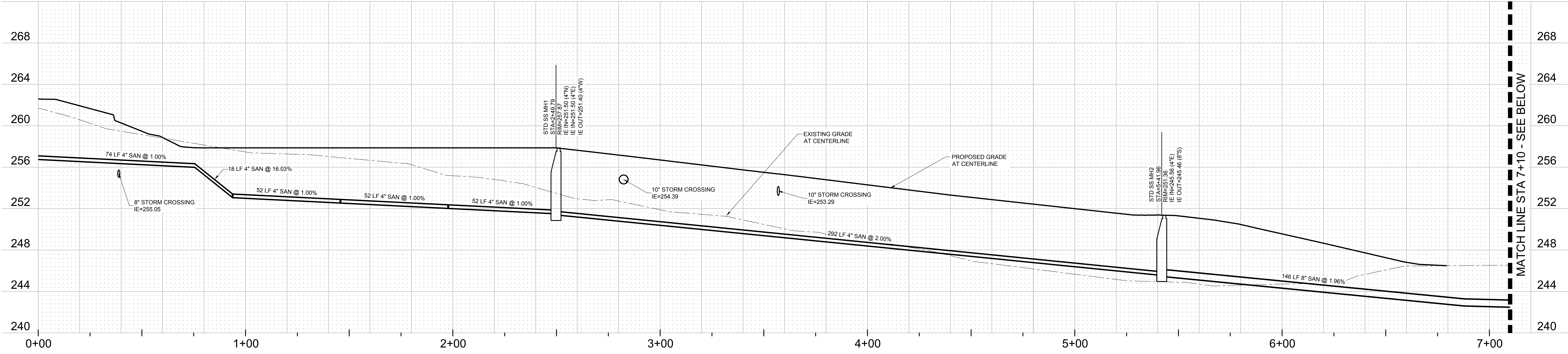




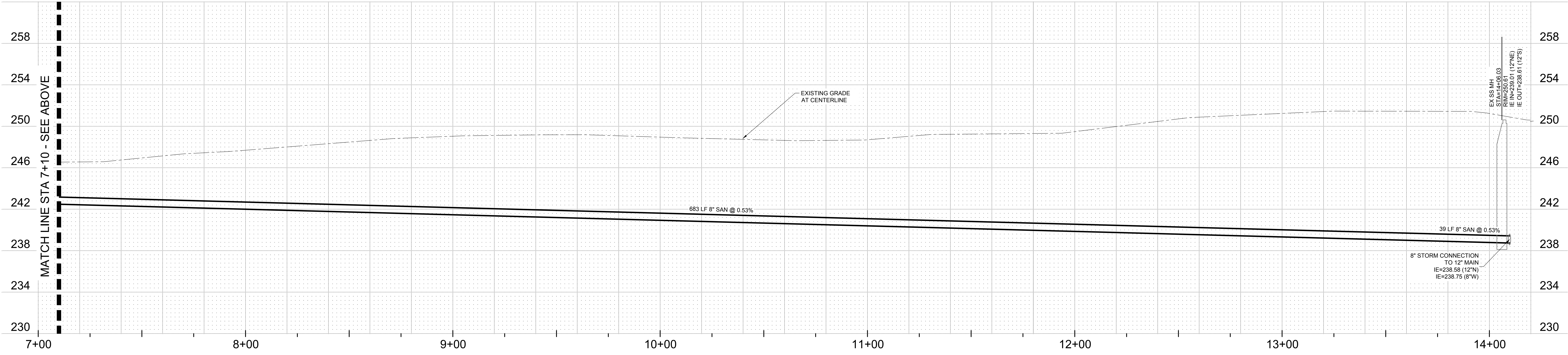








**1 SANITARY PROFILE**  
 C1.32  
 HORZ. SCALE 1"=20'  
 VERT. SCALE 1"=5'



**2 SANITARY PROFILE**  
 C1.32  
 HORZ. SCALE 1"=20'  
 VERT. SCALE 1"=5'

© MACKENZIE 2022  
 ALL RIGHTS RESERVED  
 THESE DRAWINGS ARE THE PROPERTY OF  
 MACKENZIE AND ARE NOT TO BE USED  
 OR REPRODUCED IN ANY MANNER  
 WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

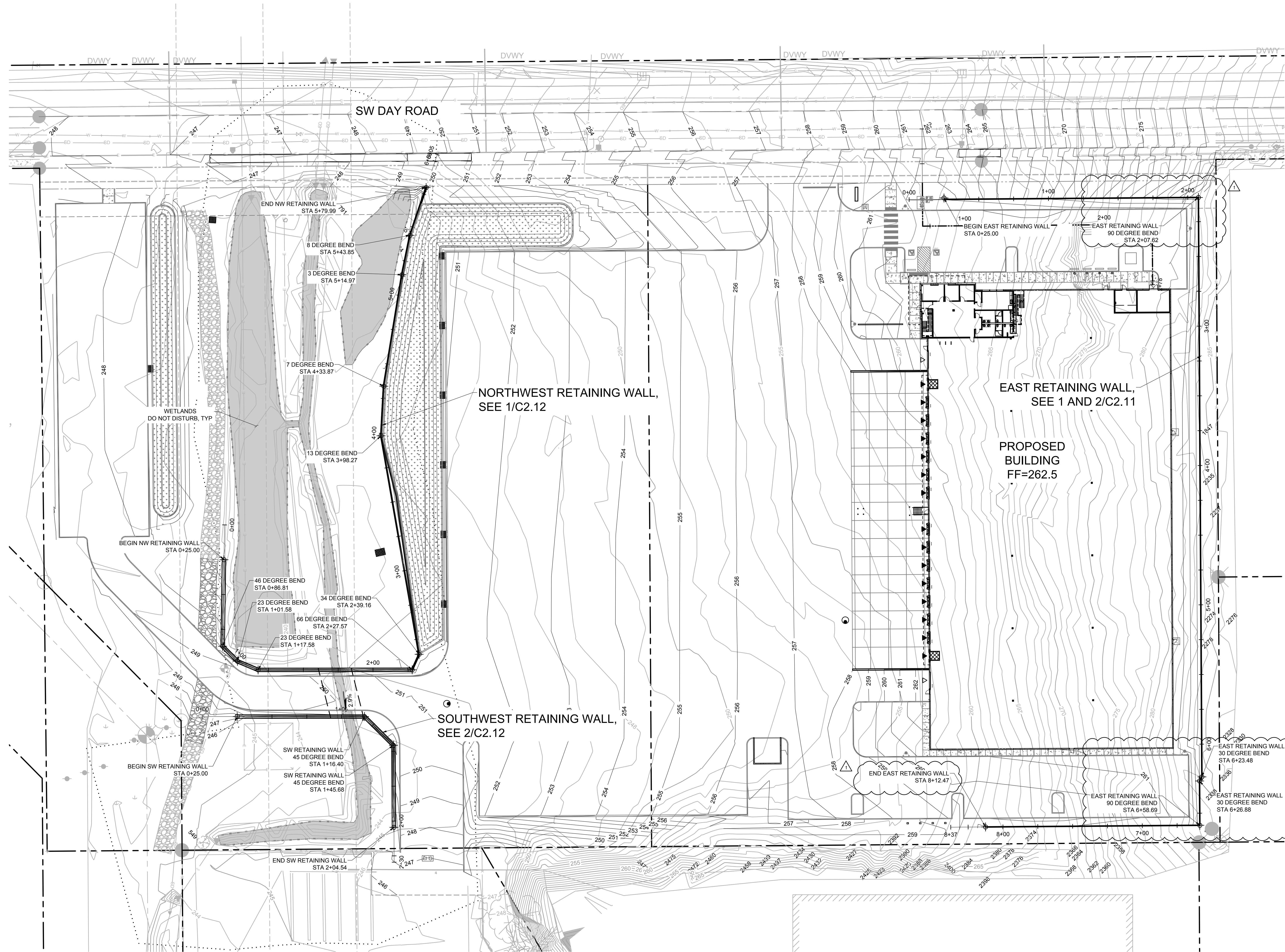
SHEET TITLE:  
**SANITARY PROFILE**

DRAWN BY: BMR  
 CHECKED BY: BMR, BDN  
 SHEET

**C1.32**

JOB NO. **2200502.04**





**1**  
**C2.10**  
**OVERALL SITE PLAN - RETAINING WALL**  
1 inch = 30 ft.

**LEGEND**

	EXISTING	PROPOSED
RIGHT-OF-WAY	---	---
MAJOR CONTOUR	---	---
MINOR CONTOUR	---	---

**NOTE:**

WALL ELEVATIONS ARE PROVIDED FOR CONTRACTOR COORDINATION ONLY. WALL FINAL DESIGN TO BE DESIGN-BUILD. REFER TO DESIGN-BUILD PLANS FOR WALL DETAILS, BLOCK LAYOUT, REINFORCING, AND OTHER DETAILS.

© MACKENZIE 2022  
ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date
1	PLAN CHECK	07/14/2022

SHEET TITLE:  
**OVERALL  
RETAINING  
WALL PLAN**

DRAWN BY: BMR  
BMR, BDN  
CHECKED BY:

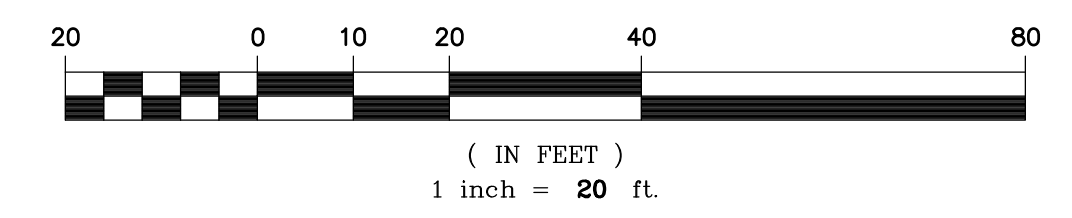
SHEET

**C2.11**

JOB NO. **2200502.04**

**DESIGN REVIEW SET 07/29/2022**





Portland, OR  
503.224.9560  
Vancouver, WA  
360.695.7879  
Seattle, WA  
206.749.9993  
www.mcknze.com

**MACKENZIE**  
DESIGN REVIEW - CLIENT PROVIDED

Client

**DELTA LOGISTICS**  
9835 SW COMMERCE  
CIRCLE  
WILSONVILLE, OR  
97070

Project

**DELTA LOGISTICS**  
SITE EXPANSION  
9710 SW DAY RD.  
CITY OF  
WILSONVILLE, OR

© MACKENZIE 2022  
ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date
1	PLAN CHECK	07/14/2022

SHEET TITLE:

**EAST  
RETAINING  
WALL PROFILE**

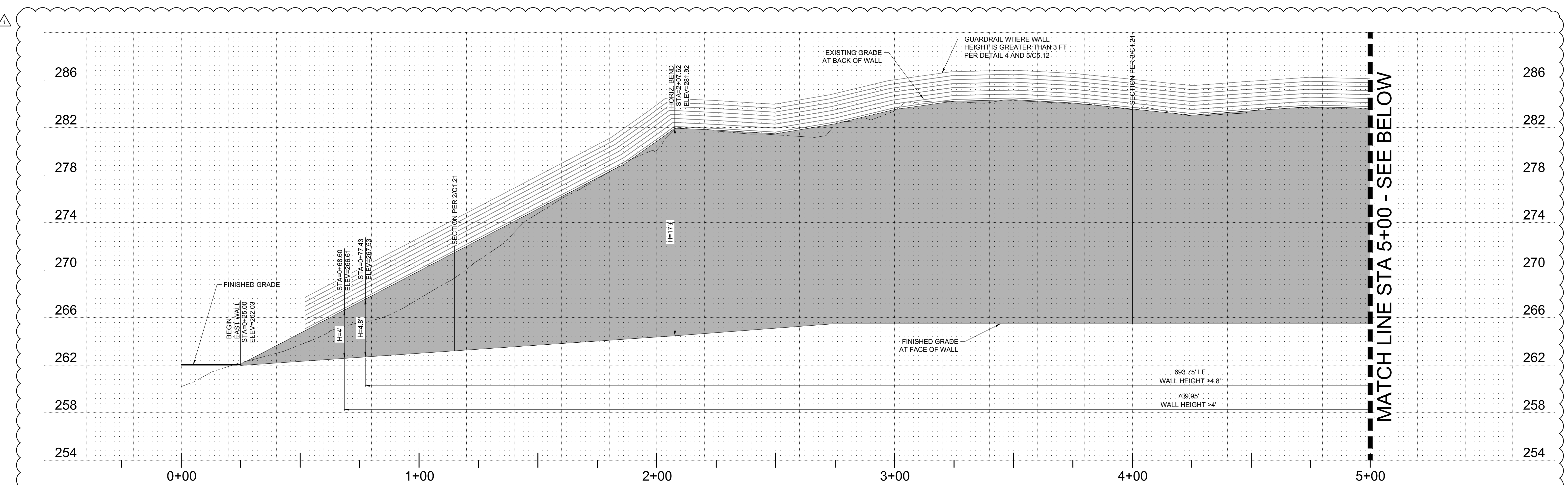
DRAWN BY: AOC, BMR

CHECKED BY: BMR, BDN

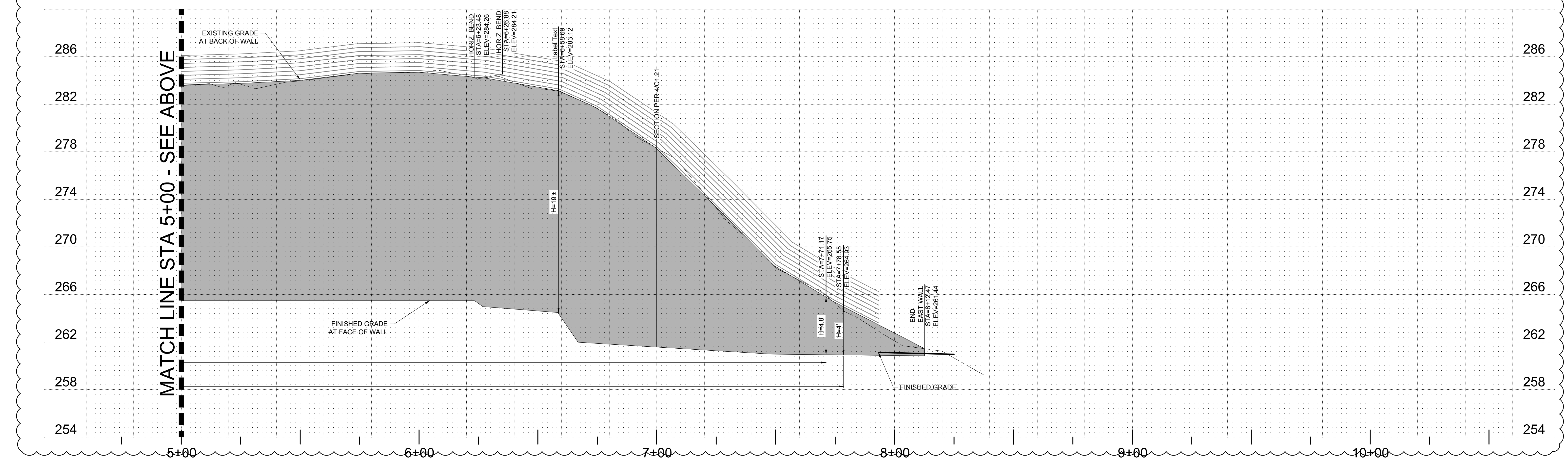
SHEET

**C2.11**

JOB NO. **2200502.04**



**1 EAST RETAINING WALL PROFILE**  
C2.11 HORZ. SCALE 1"=20'  
VERT. SCALE 1"=5'



**2 EAST RETAINING WALL PROFILE**  
C2.11 HORZ. SCALE 1"=20'  
VERT. SCALE 1"=5'

**LEGEND**

RIGHT-OF-WAY	EXISTING	PROPOSED
MAJOR CONTOUR	590	590
MINOR CONTOUR	591	591

**ABBREVIATIONS**

FW	GROUND ELEVATION AT FACE OF WALL
BW	GROUND ELEVATION AT BACK OF WALL

**NOTE:**

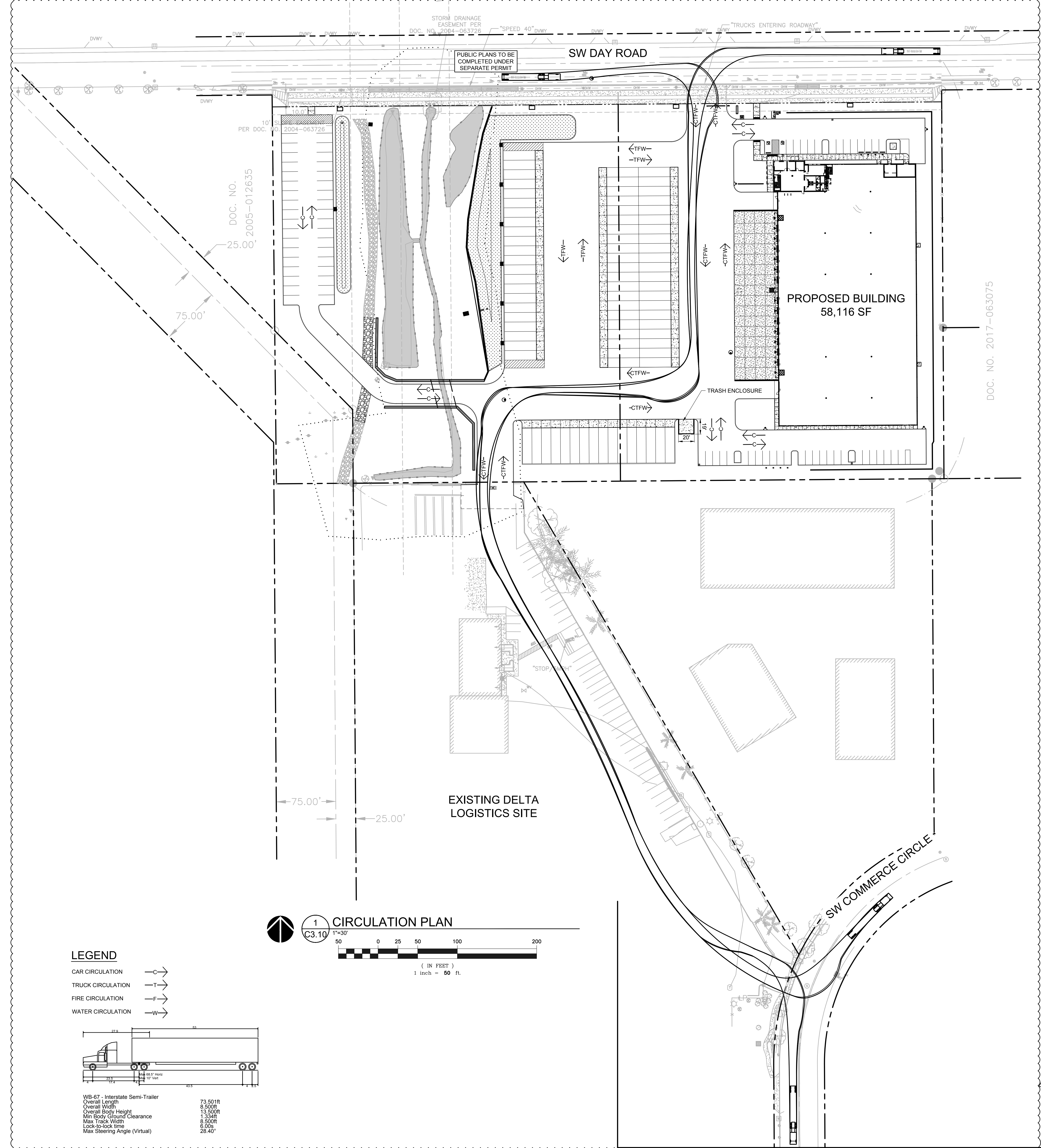
WALL ELEVATIONS ARE PROVIDED FOR CONTRACTOR  
COORDINATION ONLY. WALL FINAL DESIGN TO BE DESIGN-BUILD.  
REFER TO DESIGN-BUILD PLANS FOR WALL DETAILS, BLOCK LAYOUT,  
REINFORCING, AND OTHER DETAILS.







REVISION SCHEDULE		
Delta	Issued As	Issue Date
1	PLAN CHECK	06/10/2022
2	LAND USE	11/15/2022







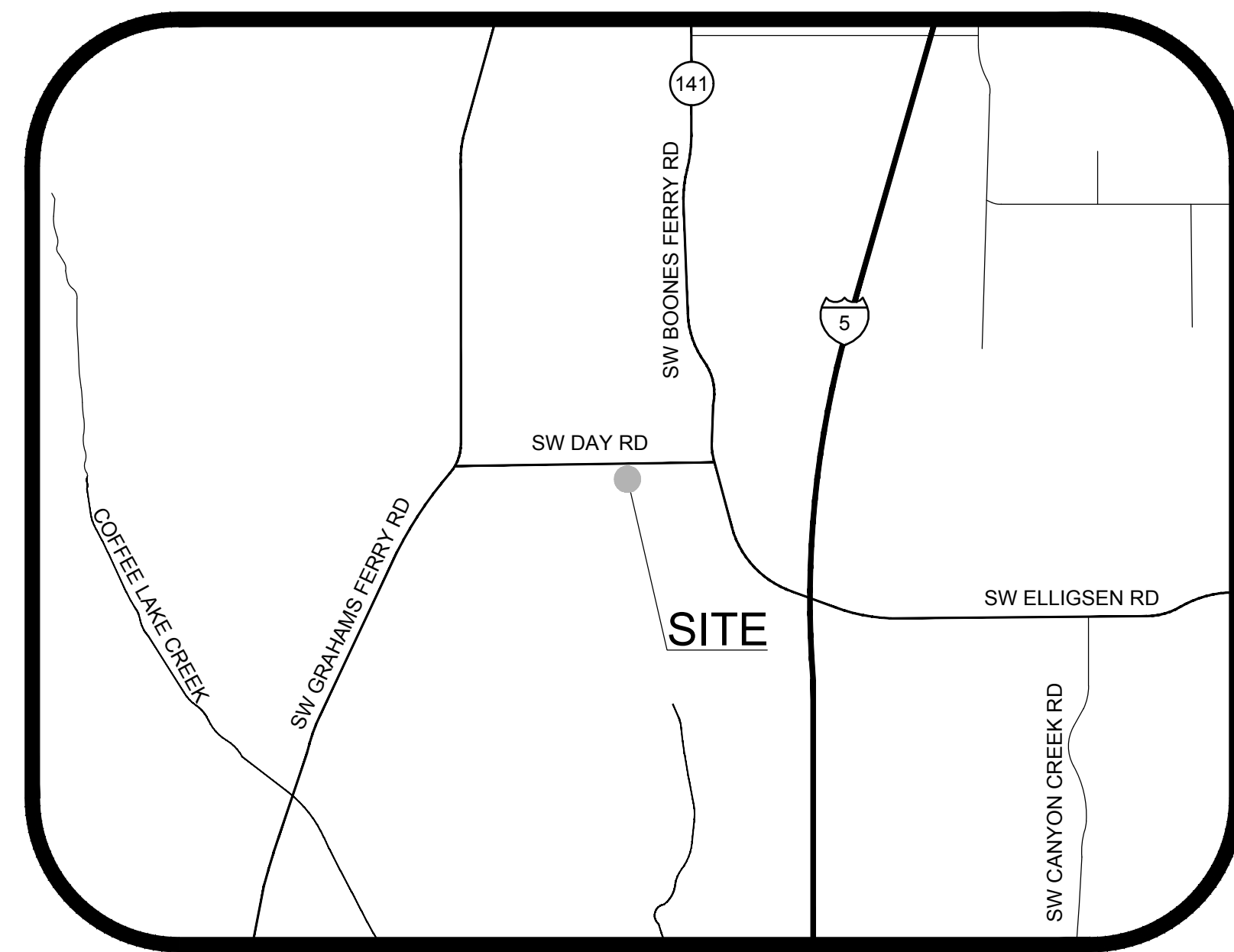
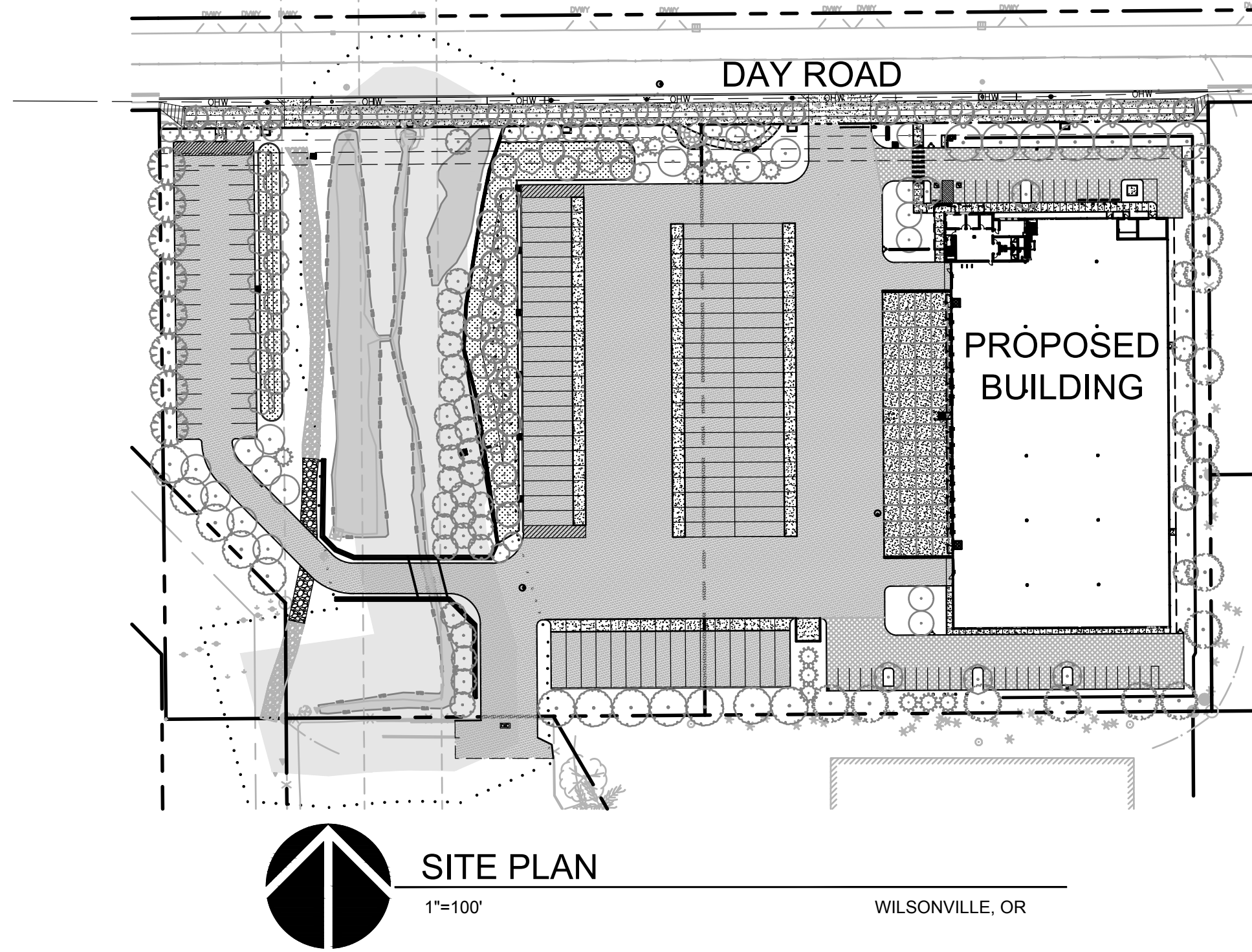


# DELTA LOGISTICS SITE EXPANSION EROSION AND SEDIMENT CONTROL PLAN

## WILSONVILLE, OR

TAX LOTS 600, 601 3S102B000601, 3S102B000600

CLACKAMAS COUNTY, OREGON



**PROJECT LOCATION:** ALONG SW DAY ROAD BETWEEN SW GRAHAM'S FERRY ROAD AND SW BOONES FERRY ROAD WILSONVILLE, OR 97223  
**PROPERTY DESCRIPTION:** PHYSICAL DESCRIPTION: ALONG SW DAY ROAD BETWEEN SW GRAHAM'S FERRY ROAD AND SW BOONES FERRY ROAD  
TAX LOTS: 600, 601  
TOWNSHIP 3 SOUTH, RANGE 1 WEST  
CLACKAMAS COUNTY, OREGON

**ATTENTION EXCAVATORS:** OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 852-001-0010 THROUGH OAR 852-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.

**GENERAL NOTE:** THIS PLAN SHOWS THE MINIMUM SUGGESTED LEVEL OF EROSION AND SEDIMENT CONTROL PROTECTION REQUIRED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT ADDITIONAL MEASURES AS NECESSARY TO COMPLY WITH ALL PERMITS, LOCAL, AND STATE REQUIREMENTS.

**CLIENT**  
DELTA LOGISTICS  
CONTACT: IGOR NICHIPORCHIK  
9835 SW COMMERCE CIR  
WILSONVILLE, OR  
PHONE: (503) 665-2200  
IGOR@DELTAFREIGHTINC.COM

**CIVIL ENGINEERING**  
MACKENZIE  
CONTACT (PUBLIC): GREG MINO  
1515 SE WATER AVE  
PORTLAND, OR 97214  
PHONE: (971) 346-3702  
GMINO@MCKNZE.COM

CONTACT (PRIVATE): BREEZY RINEHART  
1515 SE WATER AVE  
PORTLAND, OR 97214  
PHONE: (971) 346-3761  
BRINEHART@MCKNZE.COM

**SURVEYOR**  
WEDDLE SURVEYING INC.  
CONTACT: MICHAEL RENNICK  
6990 SW HAMPTON ST, STE 170,  
TIGARD, OR 97223  
PHONE: 503-941-8585  
XXXX@WEDDLESURVEYING.COM

**PLANNING**  
MACKENZIE  
CONTACT: LEE LEIGHTON  
1515 SE WATER AVE  
PORTLAND, OR 97214  
PHONE: 503-224-9560  
LLEIGHTON@MCKNZE.COM

### STANDARD EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES:

- ONCE KNOWN, INCLUDE A LIST OF ALL CONTRACTORS THAT WILL ENGAGE IN CONSTRUCTION ACTIVITIES ON SITE, AND THE AREAS OF THE SITE WHERE THE CONTRACTOR(S) WILL ENGAGE IN CONSTRUCTION ACTIVITIES. REVISE THE LIST AS APPROPRIATE UNTIL PERMIT COVERAGE IS TERMINATED (SECTION 4.4.C.I). IN ADDITION, INCLUDE A LIST OF ALL PERSONNEL (BY NAME AND POSITION) THAT ARE RESPONSIBLE FOR THE DESIGN, INSTALLATION AND MAINTENANCE OF STORMWATER CONTROL MEASURES (E.G. ESCP DEVELOPER, BMP INSTALLER (SEE SECTION 4.10), AS WELL AS THEIR INDIVIDUAL RESPONSIBILITIES. (SECTION 4.4.C.II)
- VISUAL MONITORING INSPECTION REPORTS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS. (SECTION 6.5)
- INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS. (SECTION 6.5)
- RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. (SECTION 4.7)
- THE PERMIT REGISTRANT MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (SECTIONS 4 AND 4.11)
- THE ESCP MUST BE ACCURATE AND REFLECT SITE CONDITIONS. (SECTION 4.8)
- SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT WITHIN 10 DAYS. (SECTION 4.9)
- SEQUENCE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (SECTION 2.2.2)
- CREATE SMOOTH SURFACES BETWEEN SOIL SURFACE AND EROSION AND SEDIMENT CONTROLS TO PREVENT STORMWATER FROM BYPASSING CONTROLS AND PONDING. (SECTION 2.2.3)
- IDENTIFY, MARK, AND PROTECT (BY CONSTRUCTION FENCING OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (SECTION 2.2.1)
- PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (SECTION 2.2.5)
- MAINTAIN AND DELINEATE ANY EXISTING NATURAL BUFFER WITHIN THE 50-FEET OF WATERS OF THE STATE. (SECTION 2.2.4)
- INSTALL PERIMETER SEDIMENT CONTROL, INCLUDING STORM DRAIN INLET PROTECTION AS WELL AS ALL SEDIMENT BASINS, TRAPS, AND BARRIERS PRIOR TO LAND DISTURBANCE. (SECTIONS 2.1.3)
- CONTROL BOTH PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND DOWNSTREAM CHANNELS AND STREAMBANKS. (SECTIONS 2.1.1 AND 2.2.16)
- CONTROL SEDIMENT AS NEEDED ALONG THE SITE PERIMETER AND AT ALL OPERATIONAL INTERNAL STORM DRAIN INLETS AT ALL TIMES DURING CONSTRUCTION, BOTH INTERNALLY AND AT THE SITE BOUNDARY. (SECTIONS 2.2.8 AND 2.2.13)
- ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SECTION 2.2.14)
- APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES. TEMPORARY OR PERMANENT STABILIZATION MEASURES ARE NOT REQUIRED FOR AREAS THAT ARE INTENDED TO BE LEFT UNVEGETATED, SUCH AS DIRT ACCESS ROADS OR UTILITY POLE PADS. (SECTIONS 2.2.20 AND 2.2.21)
- ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SECTION 2.3.7)
- KEEP WASTE CONTAINER LIDS CLOSED WHEN NOT IN USE AND CLOSE LIDS AT THE END OF THE BUSINESS DAY FOR THOSE CONTAINERS THAT ARE ACTIVELY USED THROUGHOUT THE DAY. FOR WASTE CONTAINERS THAT DO NOT HAVE LIDS, PROVIDE EITHER (1) COVER (E.G., A TARP, PLASTIC SHEETING, TEMPORARY ROOF) TO PREVENT EXPOSURE OF WASTES TO PRECIPITATION, OR (2) A SIMILARLY EFFECTIVE MEANS DESIGNED TO PREVENT THE DISCHARGE OF POLLUTANTS (E.G., SECONDARY CONTAINMENT). (SECTION 2.3.7)
- PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPs SUCH AS: CONSTRUCTION ENTRANCE, GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVELED UNPAVED ROADS LOCATED ON-SITE, OR USE AN EXIT TIRE WASH. THESE BMPs MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES. (SECTION 2.2.7)
- WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SECTION 2.2.7.F)
- CONTROL PROHIBITED DISCHARGES FROM LEAVING THE CONSTRUCTION SITE, I.E., CONCRETE WASH-OUT, WASTEWATER FROM CLEANOUT OF STUCCO, PAINT AND CURING COMPOUNDS. (SECTIONS 1.5 AND 2.3.9)
- ENSURE THAT STEEP SLOPE AREAS WHERE CONSTRUCTION ACTIVITIES ARE NOT OCCURRING ARE NOT DISTURBED. (SECTION 2.2.10)
- PREVENT SOIL COMPACTION IN AREAS WHERE POST-CONSTRUCTION INFILTRATION FACILITIES ARE TO BE INSTALLED. (SECTION 2.2.12)
- USE BMPs TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANTS FROM SPILLS, VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUELS, OILS, OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, FERTILIZER, PESTICIDES AND HERBICIDES, PAINTS, SOLVENTS, CURING COMPOUNDS AND ADHESIVES FROM CONSTRUCTION OPERATIONS. (SECTIONS 2.2.15 AND 2.3)
- PROVIDE PLANS FOR SEDIMENTATION BASINS THAT HAVE BEEN DESIGNED PER SECTION 2.2.17 AND STAMPED BY AN OREGON PROFESSIONAL ENGINEER. (SEE SECTION 2.2.17.A)
- IF ENGINEERED SOILS ARE USED ON SITE, A SEDIMENTATION BASIN/IMPOUNDMENT MUST BE INSTALLED. (SEE SECTIONS 2.2.17 AND 2.2.18)
- PROVIDE A DEWATERING PLAN FOR ACCUMULATED WATER FROM PRECIPITATION AND UNCONTAMINATED GROUNDWATER SEEPAGE DUE TO SHALLOW EXCAVATION ACTIVITIES. (SEE SECTION 2.4)
- IMPLEMENT THE FOLLOWING BMPs WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (SECTION 2.3)
- USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SECTION 2.2.9)
- THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (SECTION 2.3.5)
- IF AN ACTIVE TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN ENVIRONMENTAL MANAGEMENT PLAN APPROVAL FROM DEQ BEFORE OPERATING THE TREATMENT SYSTEM, OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (SECTION 1.2.9)
- TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (SECTION 2.2)
- AS NEEDED BASED ON WEATHER CONDITIONS, AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPs MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (SECTION 2.2.8)
- SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (SECTION 2.1.5.B)
- OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT AND BEFORE BMP REMOVAL. (SECTION 2.1.5.C)
- CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENT BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SECTION 2.1.5.D)
- WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A REOCCURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEANUP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DEPARTMENT OF STATE LANDS REQUIRED TIMEFRAME. (SECTION 2.2.19.A)
- THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGEWAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (SECTION 2.2.19)
- DOCUMENT ANY PORTION(S) OF THE SITE WHERE LAND DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED OR WILL BE TEMPORARILY INACTIVE FOR 14 OR MORE CALENDAR DAYS. (SECTION 6.5.F)
- PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SECTION 2.2.20)
- DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, ALL TEMPORARY EROSION CONTROLS AND RETAINED SOILS MUST BE REMOVED AND DISPOSED OF PROPERLY, UNLESS NEEDED FOR LONG TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE. (SECTION 2.2.21)

### BMP MATRIX FOR CONSTRUCTION PHASES

REFER TO DEQ GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE BMPs.

	DEMOLITION	CLEARING	MASS GRADING	UTILITY INSTALLATION	STREET CONSTRUCTION	FINAL STABILIZATION	WET WEATHER (OCT. 1 - MAY 31ST)
<b>EROSION PREVENTION</b>							
PRESERVE NATURAL VEGETATION	**X	X				X	X
GROUND COVER						X	X
HYDRAULIC APPLICATIONS			X	X	X		
PLASTIC SHEETING			X	X	X		X
STRAW MULCH COVER	X						X
ROCK COVER							
DUST CONTROL	X	X	X	X	X		
TEMPORARY/PERMANENT SEEDING	X		X	X	X	X	X
BUFFER ZONE	**X	X	X	X	X	X	X
<b>OTHER:</b>							
<b>SEDIMENT CONTROL</b>							
SEDIMENT FENCE (INTERIOR)	**X	**X	X	X	X	X	X
STRAW WATTLES	**X	**X	X	X	X	X	X
FILTER BERM				X			
INLET PROTECTION	**X	**X	X	X	X	X	X
DEWATERING				X			
SEDIMENT TRAP							
NATURAL BUFFER ENCROACHMENT	X	X	X	X	X	X	X
<b>OTHER:</b>							
<b>RUNOFF CONTROL</b>							
CONSTRUCTION ENTRANCE	**X	**X	X	X			X
PIPE SLOPE DRAIN				X			
OUTLET PROTECTION				X			
SURFACE ROUGHENING			X	X	X	X	X
CHECK DAMS		X		X			X
<b>OTHER:</b>							
<b>POLLUTION PREVENTION</b>							
PROPER SIGNAGE	X	X	X	X	X	X	X
HAZ WASTE MGMT	X	X	X	X	X	X	X
SPILL KIT ON-SITE	X	X	X	X	X	X	X
CONCRETE WASHOUT AREA	X	X	X	X	X	X	X
<b>OTHER:</b>							

\* SIGNIFIES ADDITIONAL BMPs REQUIRED FOR WORK WITHIN 50' OF WATER OF THE STATE.  
\*\* SIGNIFIES BMP THAT WILL BE INSTALLED PRIOR TO ANY GROUND DISTURBING ACTIVITY.

### INSPECTION FREQUENCY TABLE

SITE CONDITION	MINIMUM FREQUENCY
1. ACTIVE PERIOD	ON INITIAL DATE THAT LAND DISTURBANCE ACTIVITIES COMMENCE. WITHIN 24 HOURS OF ANY STORM EVENT, INCLUDING RUNOFF FROM SNOWMELT, IS OCCURRING AND RESULTS IN DISCHARGE FROM THE SITE. AT LEAST ONCE EVERY FOURTEEN (14) DAYS, REGARDLESS OF WHETHER STORMWATER RUNOFF IS OCCURRING.
2. PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY.	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
3. INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS.	THE INSPECTOR MAY REDUCE THE FREQUENCY OF INSPECTIONS IN ANY AREA OF THE SITE WHERE THE STABILIZATION STEPS IN SECTION 2.2.20 HAVE BEEN COMPLETED TO TWICE PER MONTH FOR THE FIRST MONTH, NO LESS THAN 14 CALENDAR DAYS APART, THEN ONCE PER MONTH.
4. PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER.	IF SAFE, ACCESSIBLE, AND PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION OF THE RECEIVING WATERBODY.
5. PERIODS DURING WHICH CONSTRUCTION ACTIVITIES ARE SUSPENDED AND RUNOFF IS UNLIKELY DUE TO FROZEN CONDITIONS.	VISUAL MONITORING INSPECTIONS MAY BE TEMPORARILY SUSPENDED. IMMEDIATELY RESUME MONITORING UPON THAWING, OR WHEN WEATHER CONDITIONS MAKE DISCHARGES LIKELY.
6. PERIODS DURING WHICH CONSTRUCTION ACTIVITIES ARE CONDUCTED AND RUNOFF IS UNLIKELY DURING FROZEN CONDITIONS.	MONTHLY RESUME MONITORING IMMEDIATELY UPON MELT, OR WHEN WEATHER CONDITIONS MAKE DISCHARGES LIKELY.

- HOLD A PRE-CONSTRUCTION MEETING OF PROJECT PERSONNEL THAT INCLUDED THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS
- ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS
- INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS
- RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, RETAIN THE ESCP AT THE CONSTRUCTION SITE OR AT ANOTHER LOCATION.

THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200-C PERMIT. THIS ESCP AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200-C PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 1200-C PERMIT REQUIREMENTS SUPERCEDE REQUIREMENTS OF THIS PLAN.

### LOCAL AGENCY-SPECIFIC EROSION CONTROL NOTES:

- IF VEGETATIVE SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAN SEPTEMBER 1; THE TYPE AND PERCENTAGES OF SEED IN THE MIX MUST BE IDENTIFIED ON THE PLANS.
- ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE DISCHARGED OVER AN UNDISTURBED, PREFERABLY VEGETATED AREA, AND THROUGH A SEDIMENT CONTROL BMP (E. FILTER BAG).
- ALL EXPOSED SOILS MUST BE COVERED DURING THE WET WEATHER PERIOD, OCTOBER 01 - MAY 31.

### EROSION AND SEDIMENT CONTROL PLANS SHEET INDEX

C4.00	EROSION AND SEDIMENT CONTROL COVER SHEET
C4.10	DEMOLITION ESC PLAN
C4.20	CLEARING ESC PLAN
C4.30	MASS GRADING AND STABILIZATION CONSTRUCTION ESC PLAN
C4.40	MASS GRADING AND STABILIZATION RUNOFF CONTROL PLAN
C4.50	UTILITY CONSTRUCTION ESC PLAN
C4.60	FOUNDATION ESC PLAN
C4.70	EROSION AND SEDIMENT CONTROL PLAN DETAILS

GENERAL PERMIT  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
STORMWATER DISCHARGE PERMIT  
DATE: 09/15/2020  
FILE NO. 127017  
EPA NO. ORR105282

**DELTA LOGISTICS**  
9835 SW COMMERCE  
CIRCLE  
WILSONVILLE, OR  
97070

**DELTA LOGISTICS**  
SITE EXPANSION  
9710 SW DAY RD.  
CITY OF  
WILSONVILLE, OR

© MACKENZIE 2022  
ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:  
**EROSION AND  
SEDIMENT  
CONTROL  
COVER SHEET**

DRAWN BY: AOC

CHECKED BY: BMR

SHEET

**C4.00**

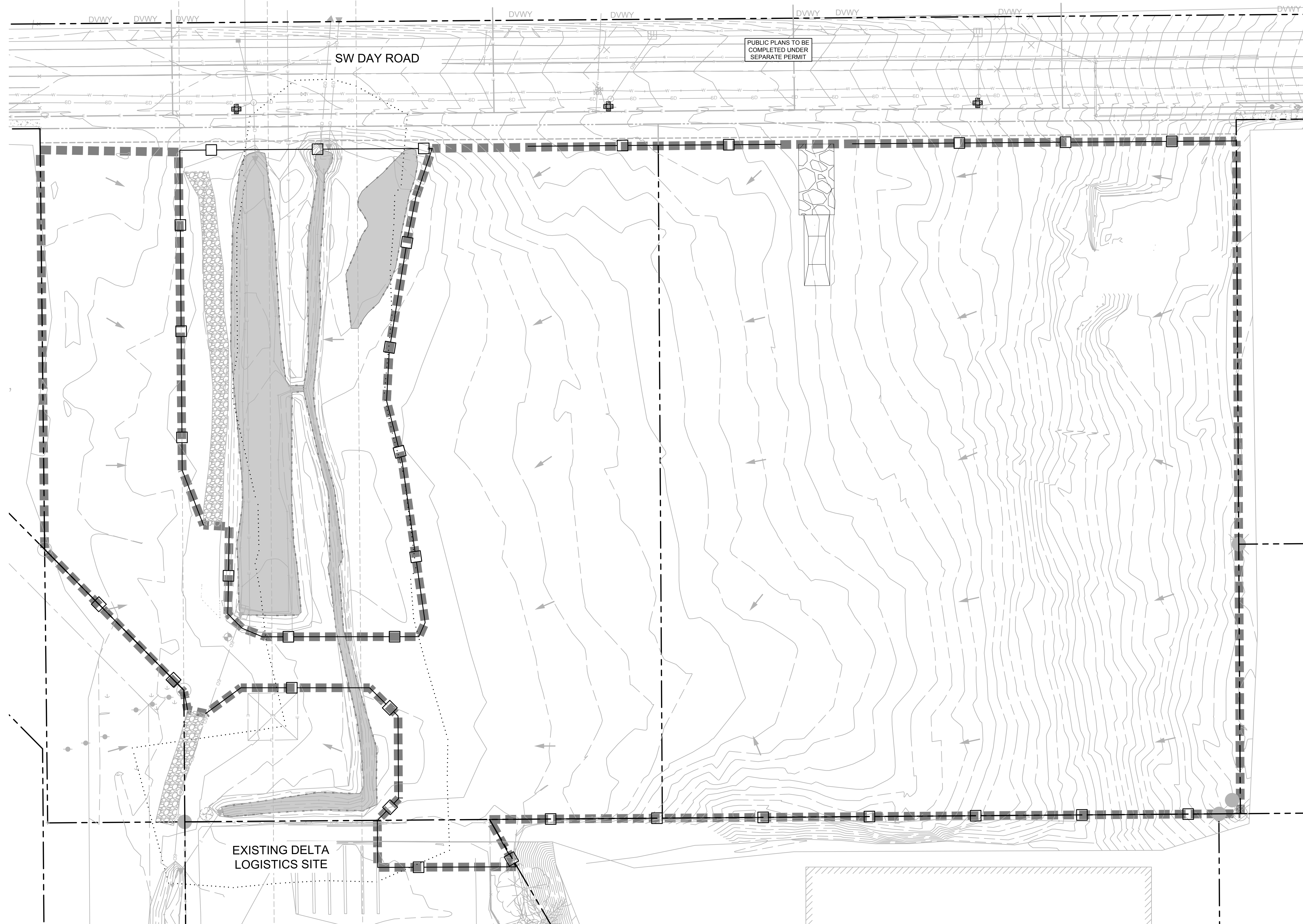
JOB NO. **2200502.04**







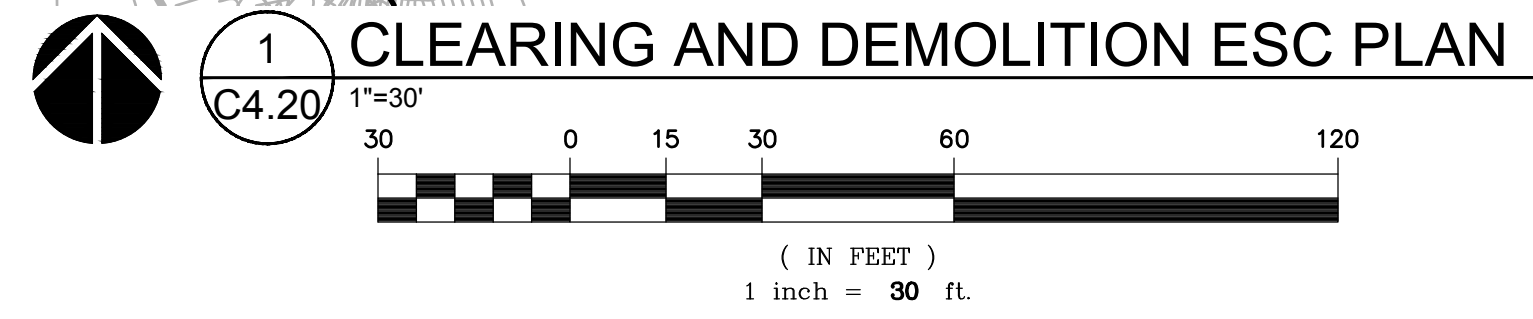
REVISION SCHEDULE		
Delta	Issued As	Issue Date



PUBLIC PLANS TO BE COMPLETED UNDER SEPARATE PERMIT

SW DAY ROAD

EXISTING DELTA LOGISTICS SITE



**PRE-CONSTRUCTION, CLEARING, AND DEMOLITION NOTES:**

- ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS, CONSTRUCTED OUT OF MULCH, CHIPPINGS OR OTHER SUITABLE MATERIAL, STRAW WATTLES, OR OTHER APPROVED MATERIALS.
- SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAINS (WITH OUTLET PROTECTION), CHECK DAMS, SURFACE ROUGHENING, AND BANK STABILIZATION.
- ADDITIONAL EROSION CONTROL MEASURES AND DETAILS CAN BE FOUND IN THE CLEAN WATER SERVICES'S CONSTRUCTION AND DESIGN STANDARDS, 2017.

**LEGEND**

- EXISTING DRAINAGE FLOW DIRECTION
- SEDIMENT FENCE/STRAW WATTLE, PER DETAIL 4/C4.70
- LIMIT OF DISTURBANCE
- INLET PROTECTION, PER DETAIL 2/C4.70
- GRAVEL CONSTRUCTION ENTRANCE, PER DETAIL 3/C4.70
- WHEEL WASH, PER DETAIL 1/C4.70

STAGING AND STOCKPILE AREAS ARE TO BE DETERMINED BY THE CONTRACTOR AND ADJUSTED TO ACCOMMODATE THE PROGRESS OF CONSTRUCTION. THE OWNER'S EROSION CONTROL INSPECTOR SHALL BE MADE AWARE OF ALL CHANGES AND CONSULTED FOR BMP IMPLEMENTATIONS THAT MAY BE NECESSARY TO ACCOMMODATE THE SELECTED LOCATIONS.

THIS PLAN IS INTENDED TO BE ONLY A BASELINE APPROACH TO EROSION AND SEDIMENT CONTROL FOR THE PROJECT SITE. THE OWNER'S EROSION AND SEDIMENT CONTROL INSPECTOR SHALL BE RESPONSIBLE FOR INSTRUCTING THE CONTRACTOR TO ADJUST BMP'S AS NECESSARY TO PROPERLY MANAGE THE VARIOUS PHASES OF CONSTRUCTION AND ANY UNFORESEEN CONDITIONS REQUIRING DIFFERENT OR ADDITIONAL BMP'S TO MANAGE.

SEE SHEETS C4.70 FOR EROSION AND SEDIMENT CONTROL DETAILS















REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:

**FOUNDATION  
ESC PLAN**

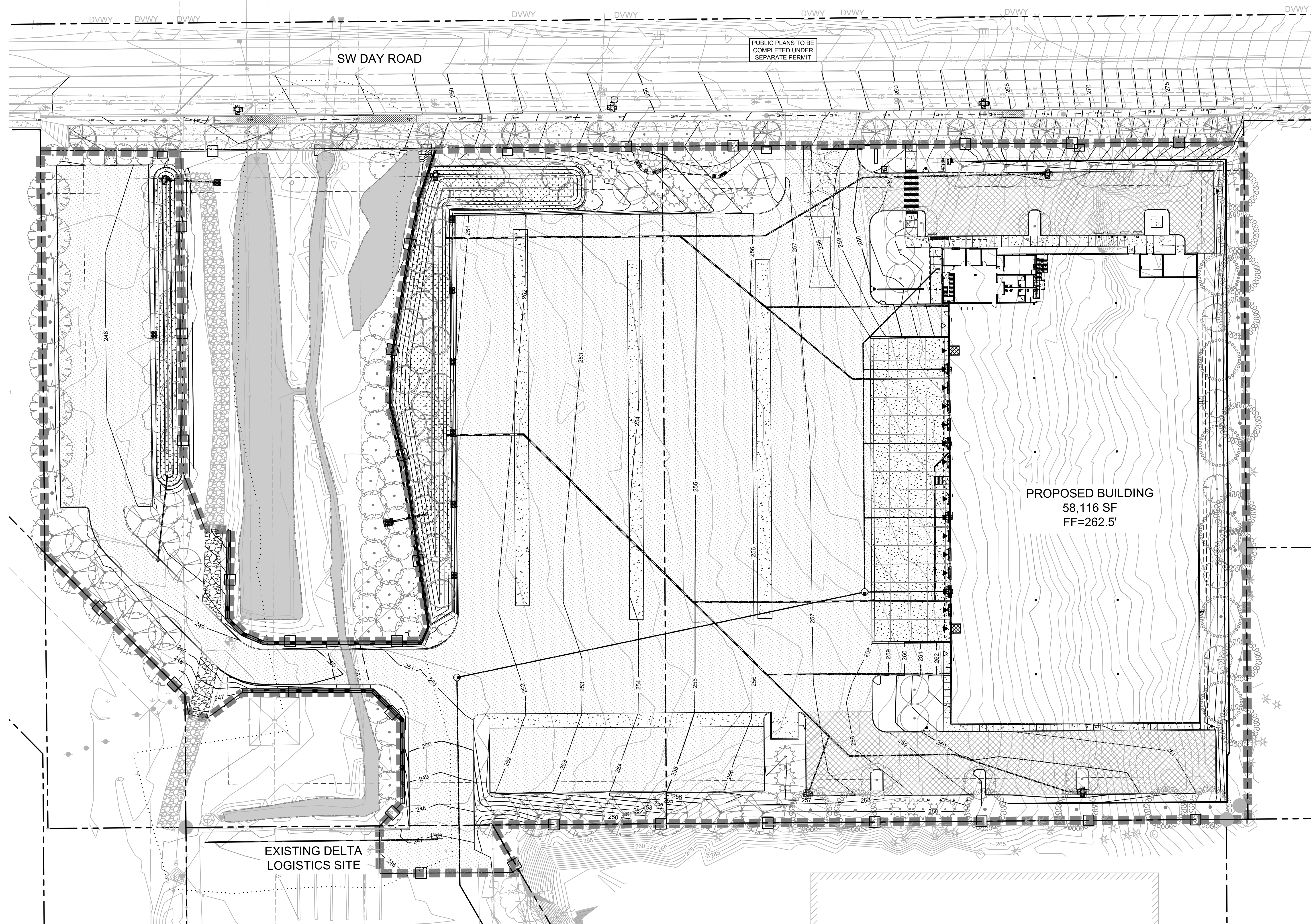
DRAWN BY: AOC

CHECKED BY: BMR

SHEET

**C4.60**

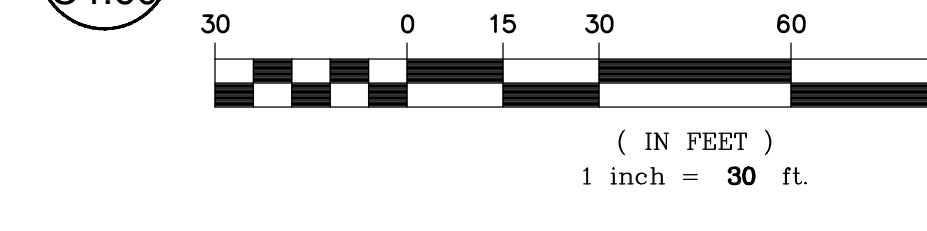
JOB NO. **2200502.04**



**EROSION CONTROL GENERAL NOTES**

- SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING MIXTURES, UNLESS OTHERWISE AUTHORIZED:  
A. VEGETATED CORRIDOR AREAS REQUIRE NATIVE SEED MIXES. SEE RESTORATION PLAN FOR APPROPRIATE SEED MIX.  
B. DWARF GRASS MIX (MIN. 100 LB./AC.)  
1. DWARF PERENNIAL RYEGRASS (80% BY WEIGHT)  
2. CREEPING RED FESCUE (20% BY WEIGHT)  
C. STANDARD HEIGHT GRASS MIX (MIN. 100 LB./AC.)  
1. ANNUAL RYEGRASS (40% BY WEIGHT)  
2. TURF-TYPE FESCUE (60% BY WEIGHT)
- SLOPE TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.
- LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE.
- TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES.
- STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION DURING "WET WEATHER" PERIODS. STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.
- EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
- AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.
- SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.
- AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.
- SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.
- AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.
- USE BMPs SUCH AS CHECK-DAMS, BERMS, AND INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.
- COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.

**1 FOUNDATION ESC PLAN**



**EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION**

- ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- ALL "SEDIMENT BARRIERS" (TO BE INSTALLED AFTER GRADING) SHALL BE INSTALLED IMMEDIATELY FOLLOWING ESTABLISHMENT OF FINISHED GRADE AS SHOWN ON THESE PLANS.
- LONG TERM SLOPE STABILIZATION MEASURES "INCLUDING MATTING" SHALL BE IN PLACE OVER ALL EXPOSED SOILS BY OCTOBER 1.
- THE STORM WATER FACILITY SHALL BE CONSTRUCTED PRIOR TO THE STORM WATER SYSTEM FUNCTIONING AND SITE PAVING.
- INLET PROTECTION SHALL BE IN-PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.

**DEWATERING NOTE**

- CONTRACTOR SHALL MONITOR DEWATERING OPERATIONS WITH DAILY INSPECTIONS DURING DEWATERING OPERATIONS.
- DEWATERING TECHNIQUES SHALL INCLUDE A PUMP AND HOSE TO CONVEY THE DEWATERING FLOW TO APPROVED LOCATIONS. THE APPROVED LOCATIONS IS THE STORM FILTRATION BASIN.
- DEWATERING INTO THE STORM DETENTION WATER QUALITY BASIN MAY ONLY PROCEED ONCE THE DETENTION SYSTEM INLET RIP-RAP AND OUTLET APPURTENANCES AND RIP-RAP OUTFALL ARE INSTALLED AND PERMANENT SOIL STABILIZATION IS IN PLACE.
- TRENCH AND FOUNDATION EXCAVATIONS SHALL BE PROTECTED DURING WET WEATHER FROM OVER SATURATION.
- DEWATERING OPERATIONS LEFT OVERNIGHT SHALL BE INSPECTED IMMEDIATELY IN THE MORNING. IF DEWATERING OPERATIONS ARE LEFT IN OPERATION OVER WEEKENDS, HOLIDAYS OR MORE THAN 24 HOURS, THE CONTRACTOR SHALL PROVIDE DAILY INSPECTIONS AND PROVIDE FOR INSPECTION WITHIN 2 HOURS AFTER RAIN EVENTS PRODUCING MORE THAN 0.5-INCHES IN A 24-HOUR PERIOD.

**LEGEND**

- SEDIMENT FENCE/STRAW WATTLE, PER DETAIL 4/C4.70
- LIMIT OF DISTURBANCE
- INLET PROTECTION, PER DETAIL 2/C4.70
- GRAVEL CONSTRUCTION ENTRANCE, PER DETAIL 3/C4.70
- WHEEL WASH, PER DETAIL 1/C4.70

SPILL KIT AND SPILL RESPONSE PROCEDURES SHALL BE KEPT IN/ON THE JOBSITE TRAILER AT ALL TIMES AND ALL FIELD PERSONNEL SHALL BE MADE AWARE

STAGING AND STOCKPILE AREAS ARE TO BE DETERMINED BY THE CONTRACTOR AND ADJUSTED TO ACCOMMODATE THE PROGRESS OF CONSTRUCTION. THE OWNER'S EROSION CONTROL INSPECTOR SHALL BE MADE AWARE OF ALL CHANGES AND CONSULTED FOR BMP IMPLEMENTATIONS THAT MAY BE NECESSARY TO ACCOMMODATE THE SELECTED LOCATIONS.

THIS PLAN IS INTENDED TO BE ONLY A BASELINE APPROACH TO EROSION AND SEDIMENT CONTROL FOR THE PROJECT SITE. THE OWNER'S EROSION AND SEDIMENT CONTROL INSPECTOR SHALL BE RESPONSIBLE FOR INSTRUCTING THE CONTRACTOR TO ADJUST BMPs AS NECESSARY TO PROPERLY MANAGE THE VARIOUS PHASES OF CONSTRUCTION AND ANY UNFORESEEN CONDITIONS REQUIRING DIFFERENT OR ADDITIONAL BMPs TO MANAGE.

SEE SHEETS C4.70 FOR EROSION AND SEDIMENT CONTROL DETAILS















REVISION SCHEDULE		
Delta	Issued As	Issue Date
1	PLAN CHECK	06/10/2022
2	LAND USE	11/15/2022

SHEET TITLE:  
**CIVIL DETAILS**

DRAWN BY: AOC, BMR

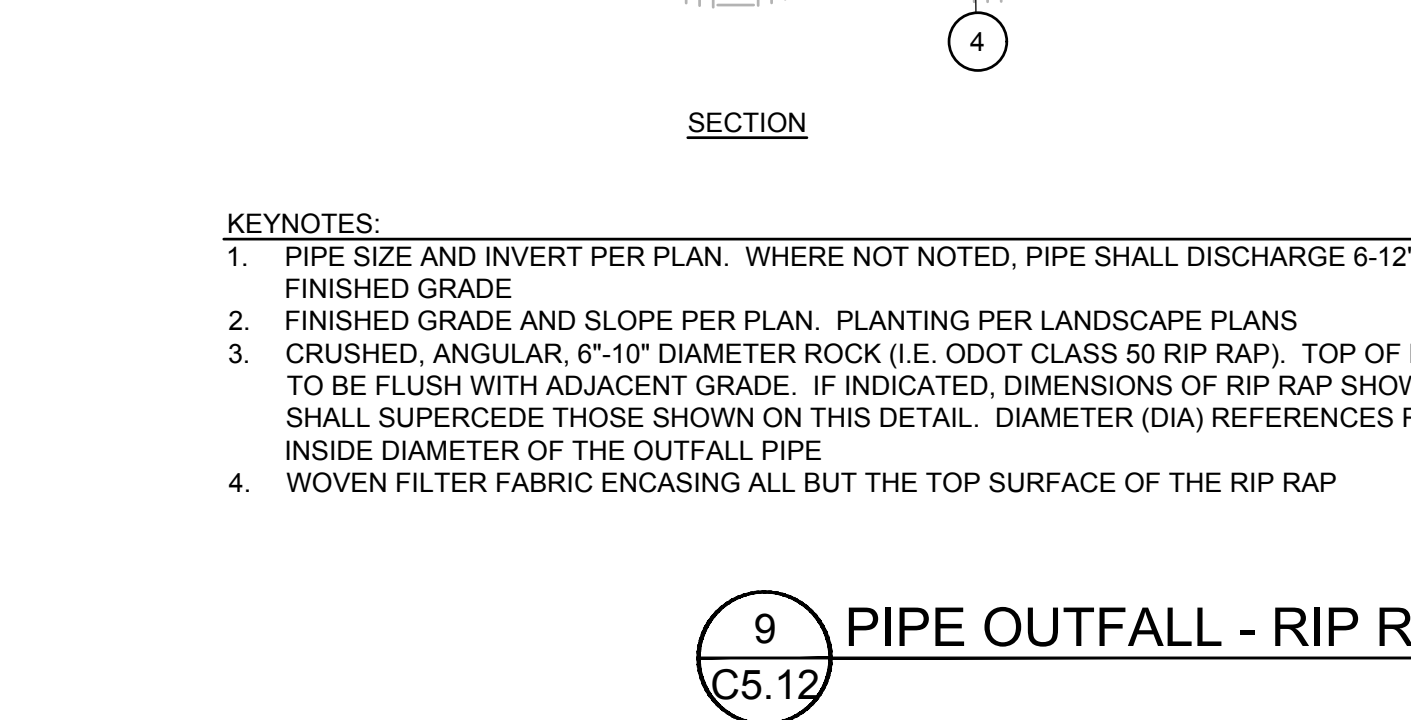
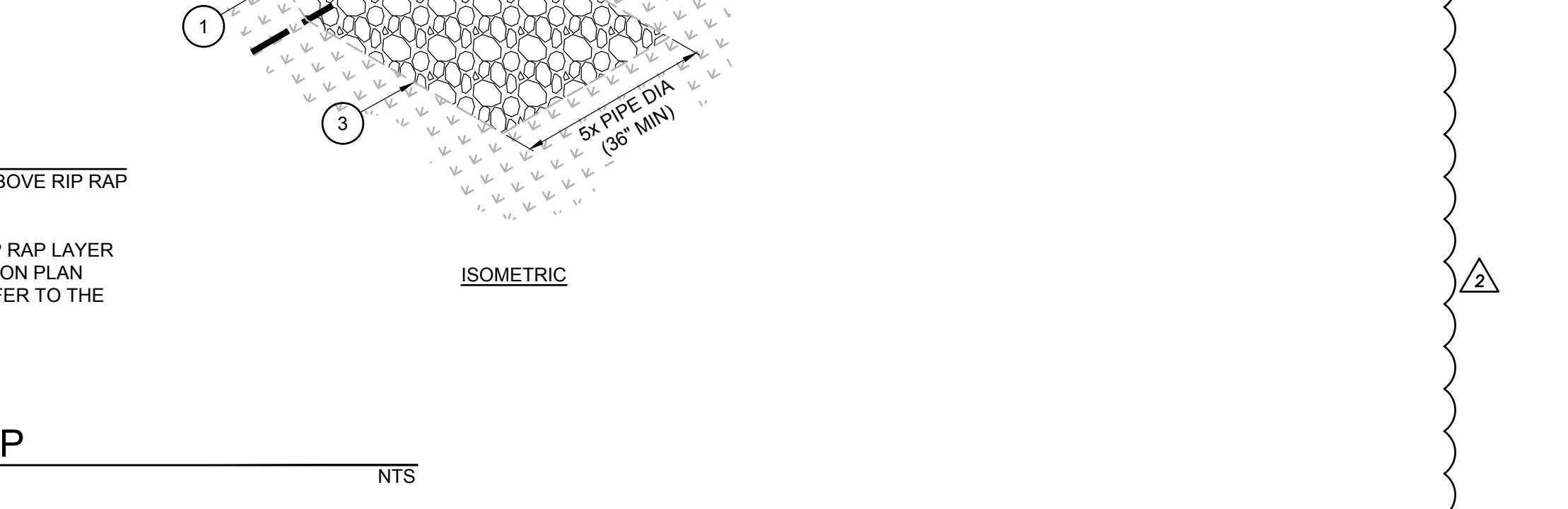
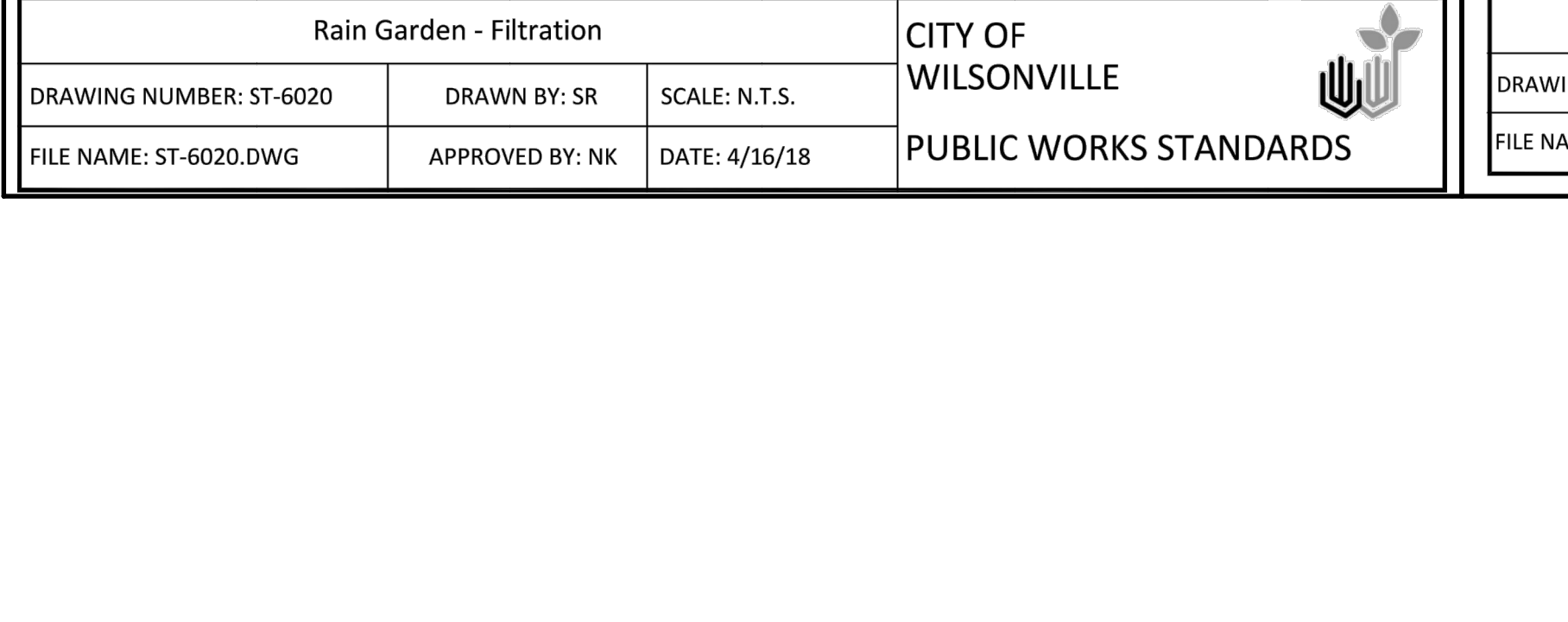
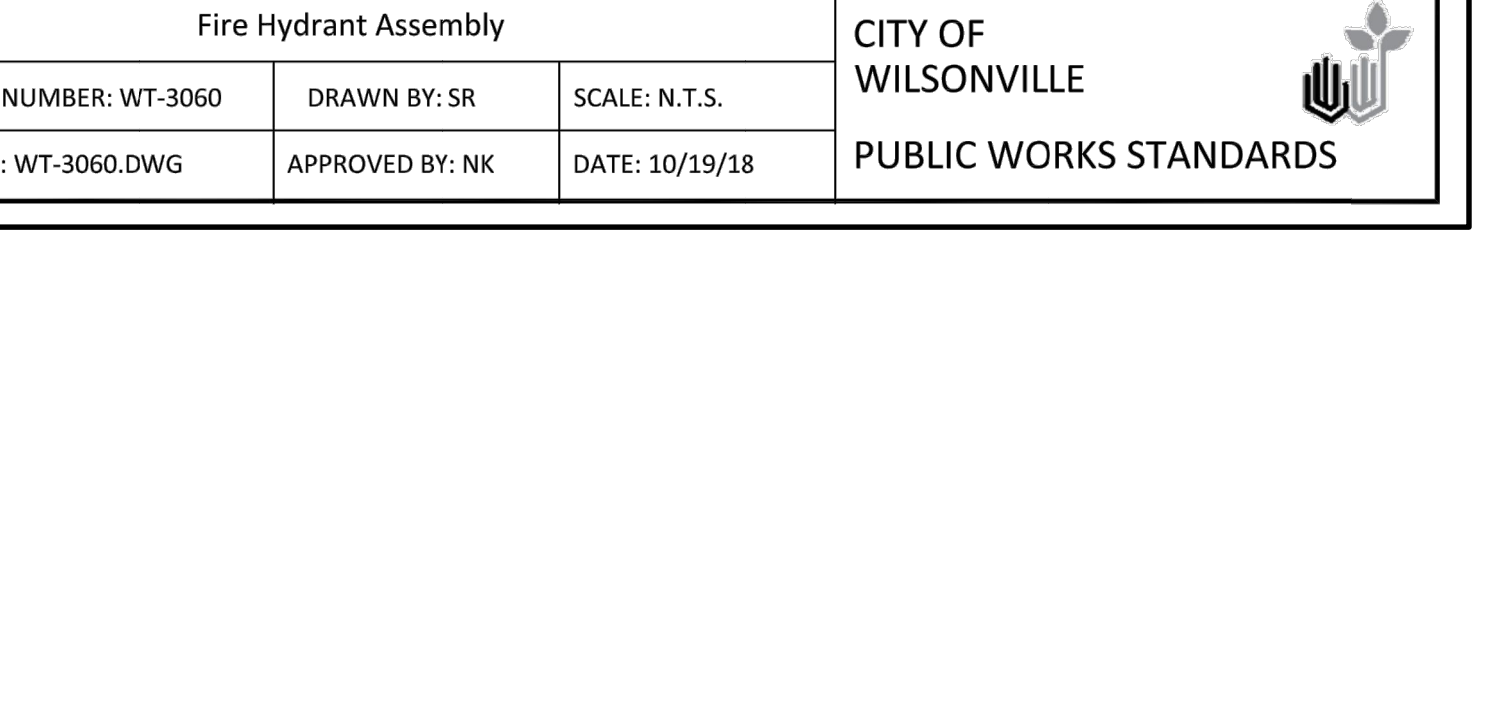
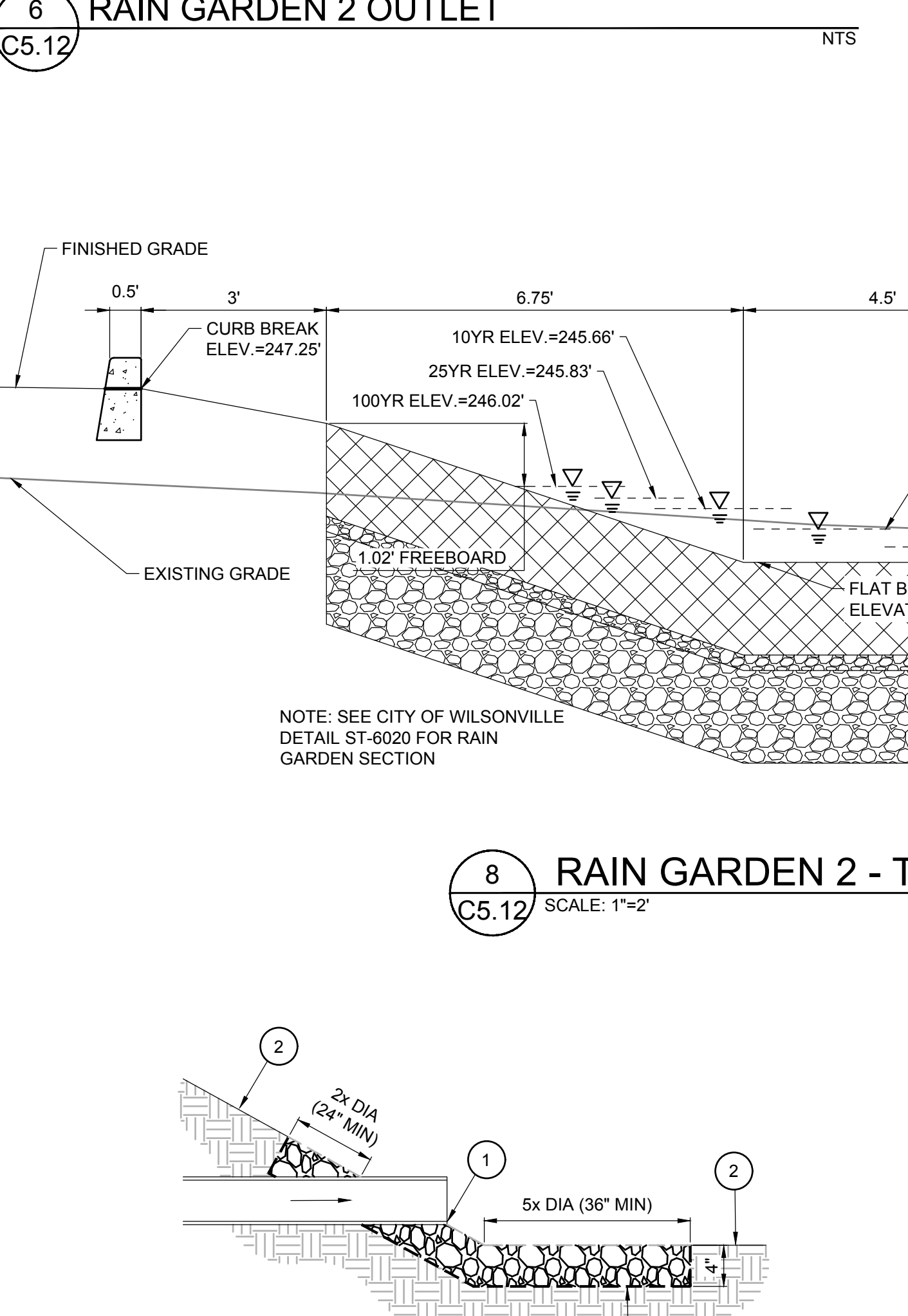
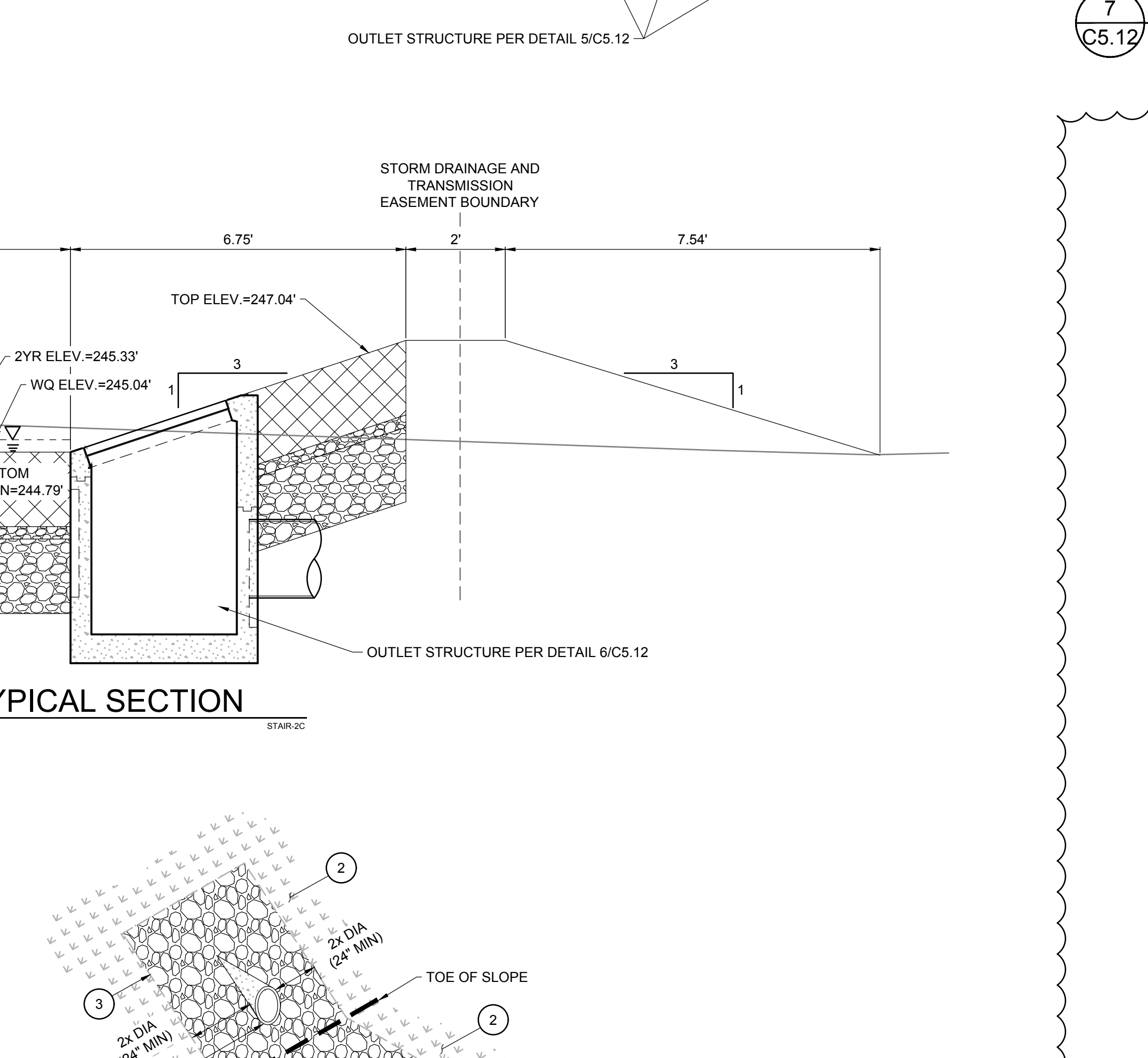
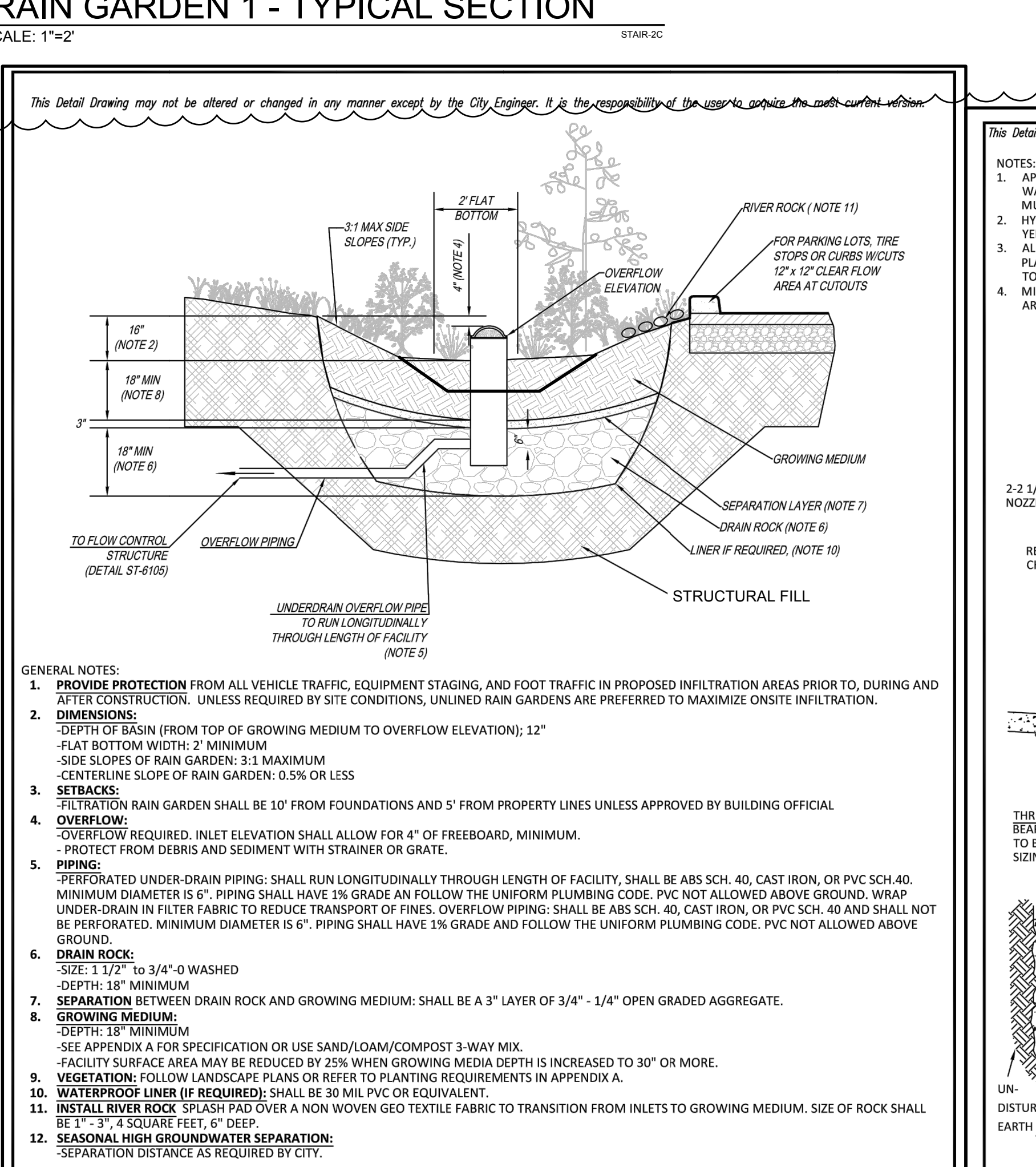
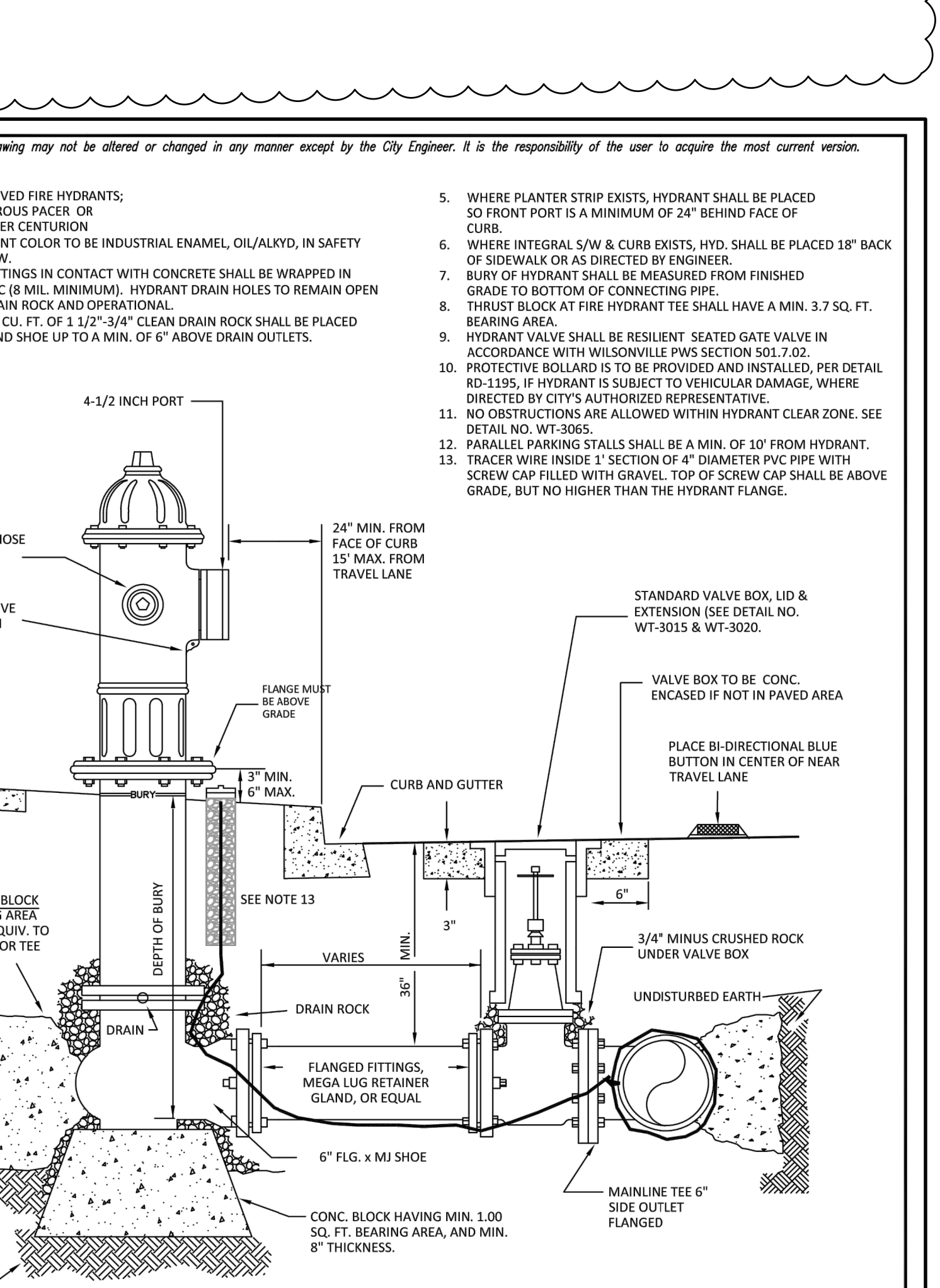
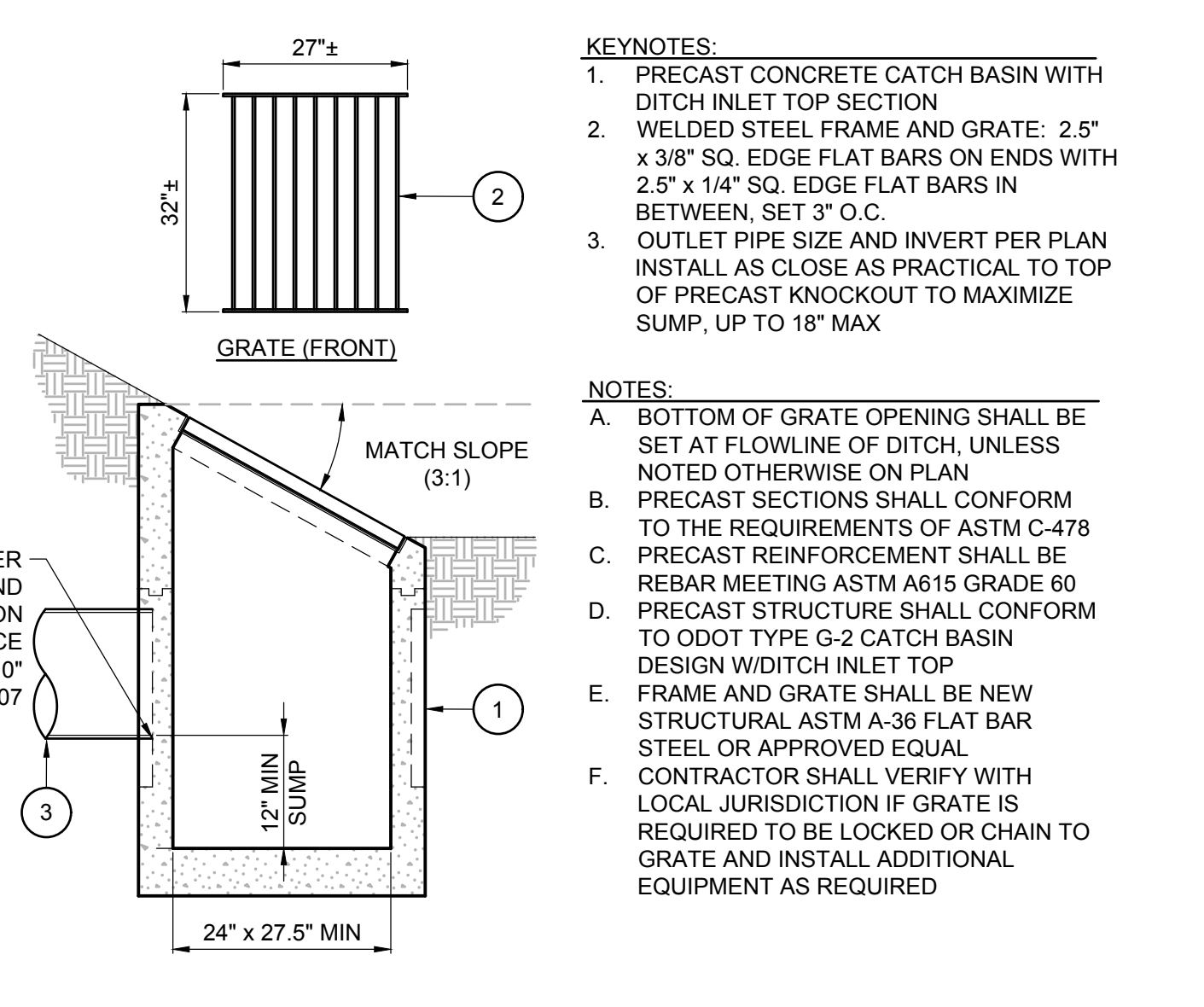
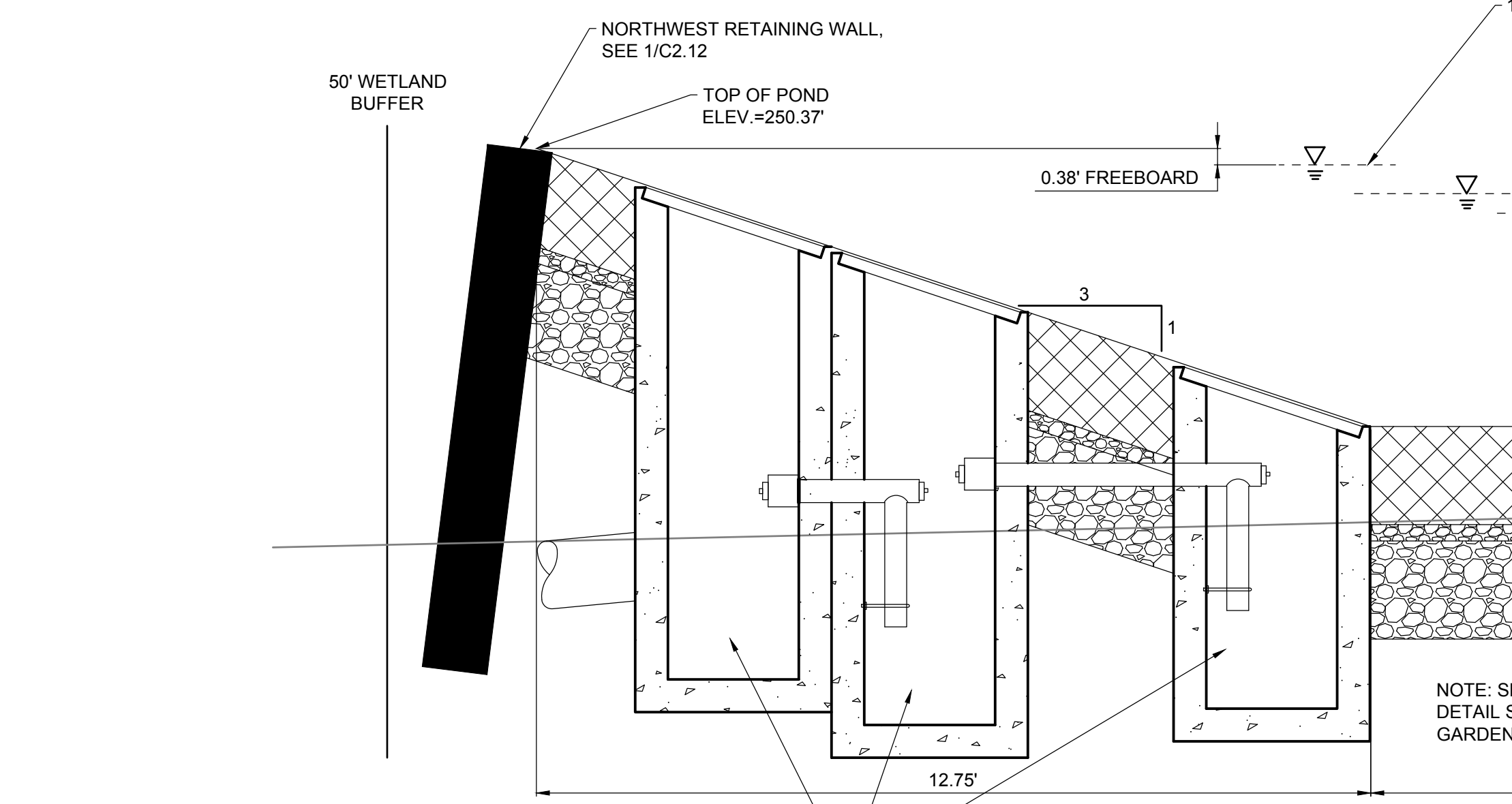
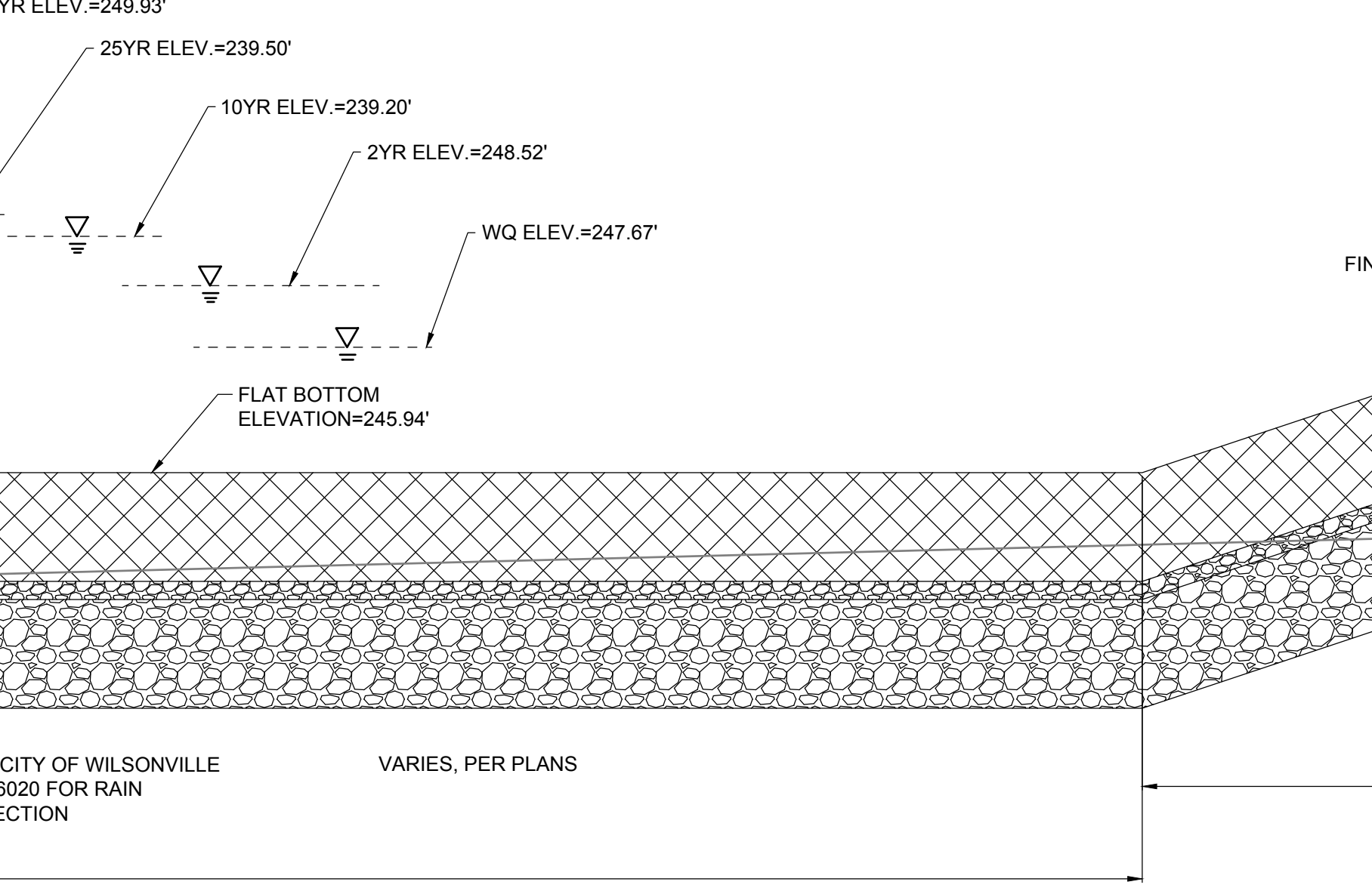
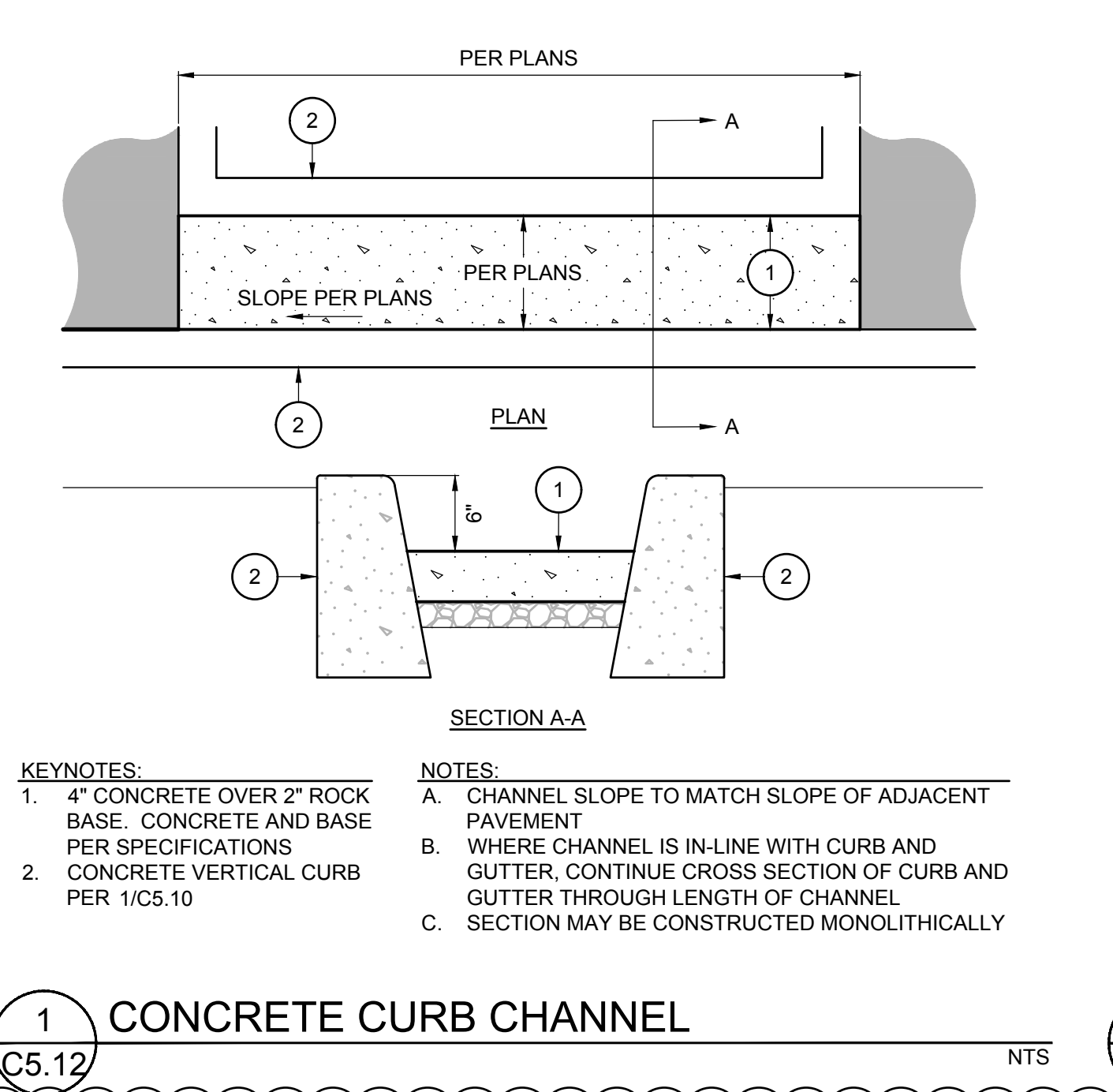
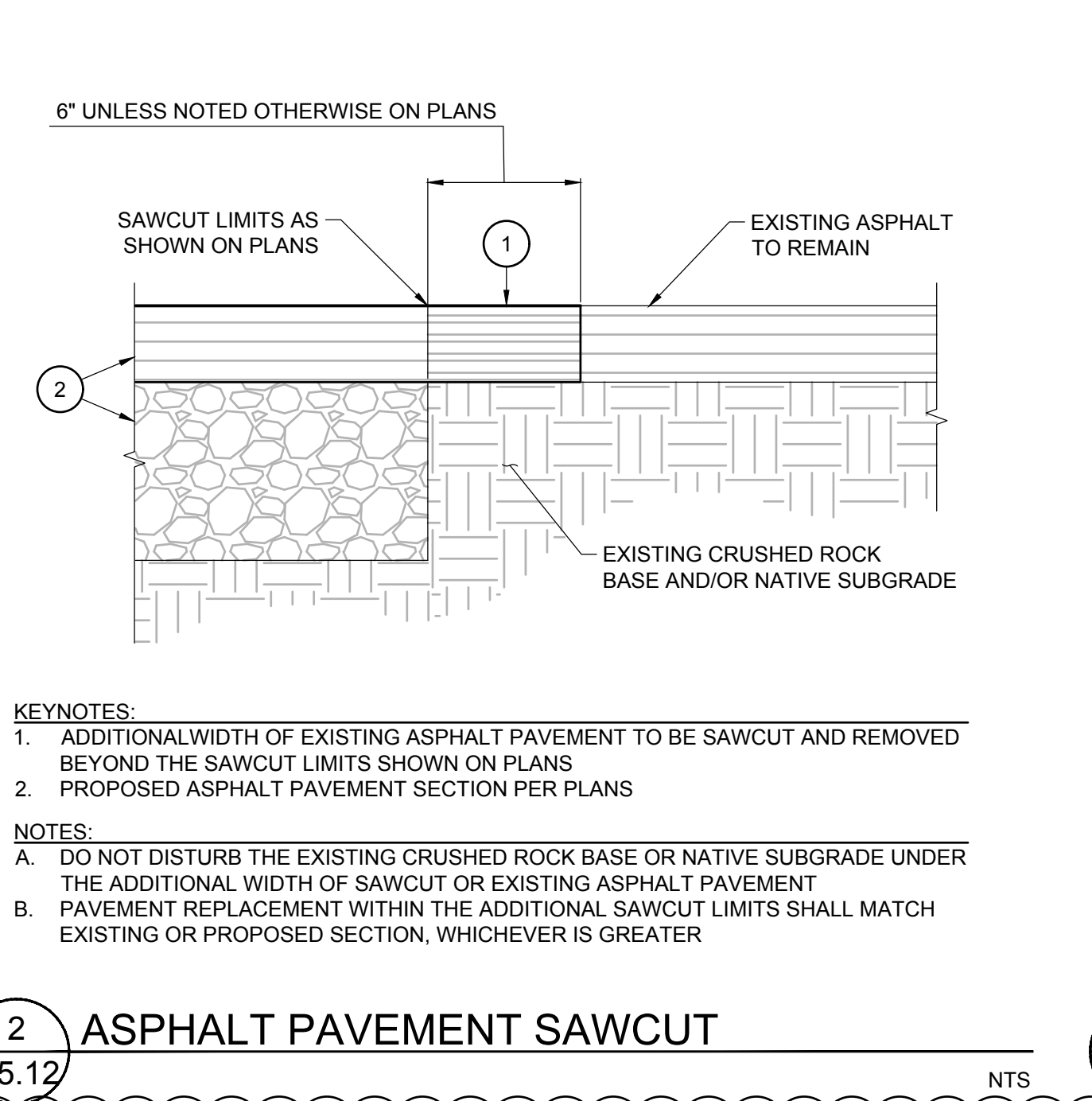
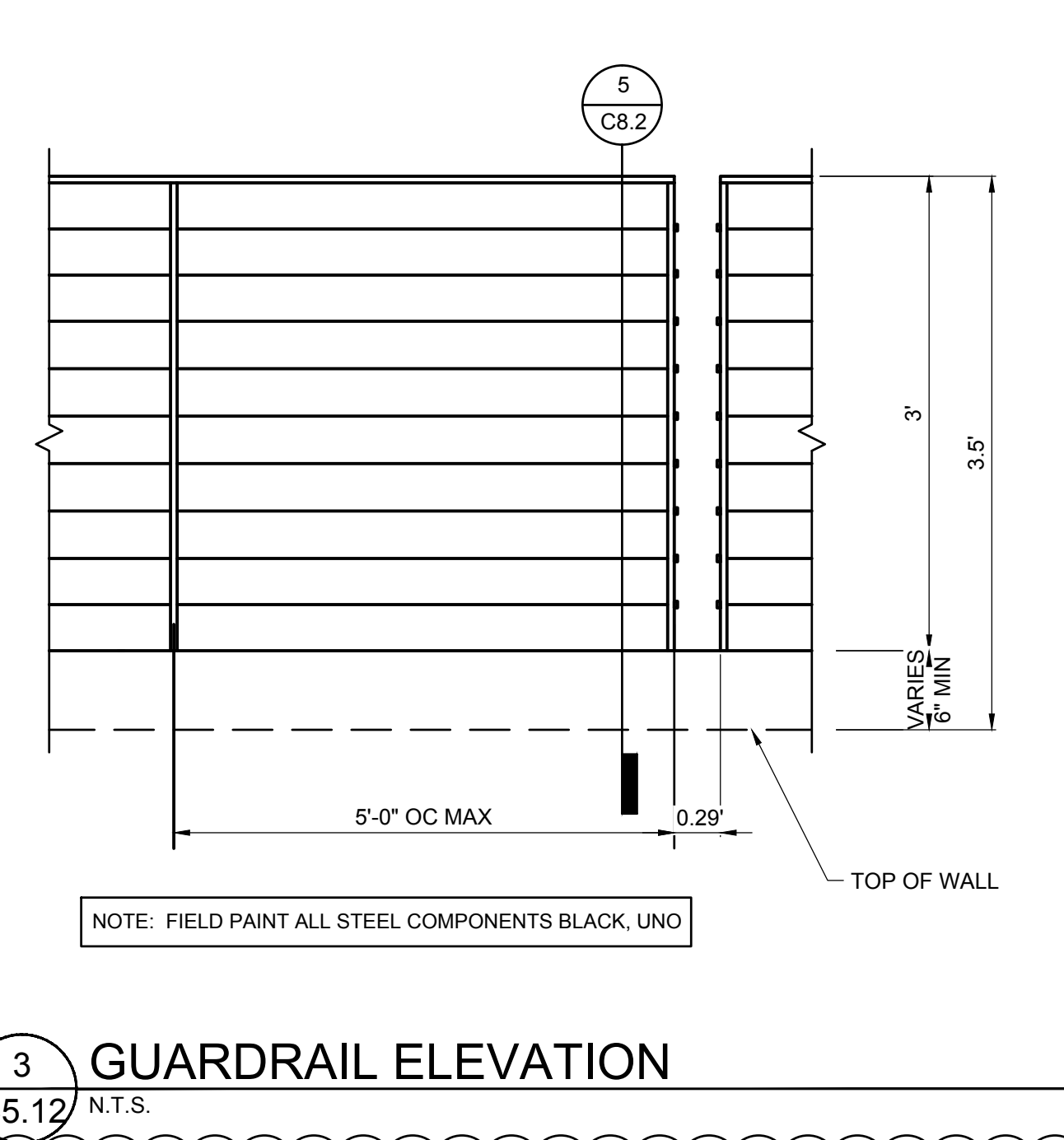
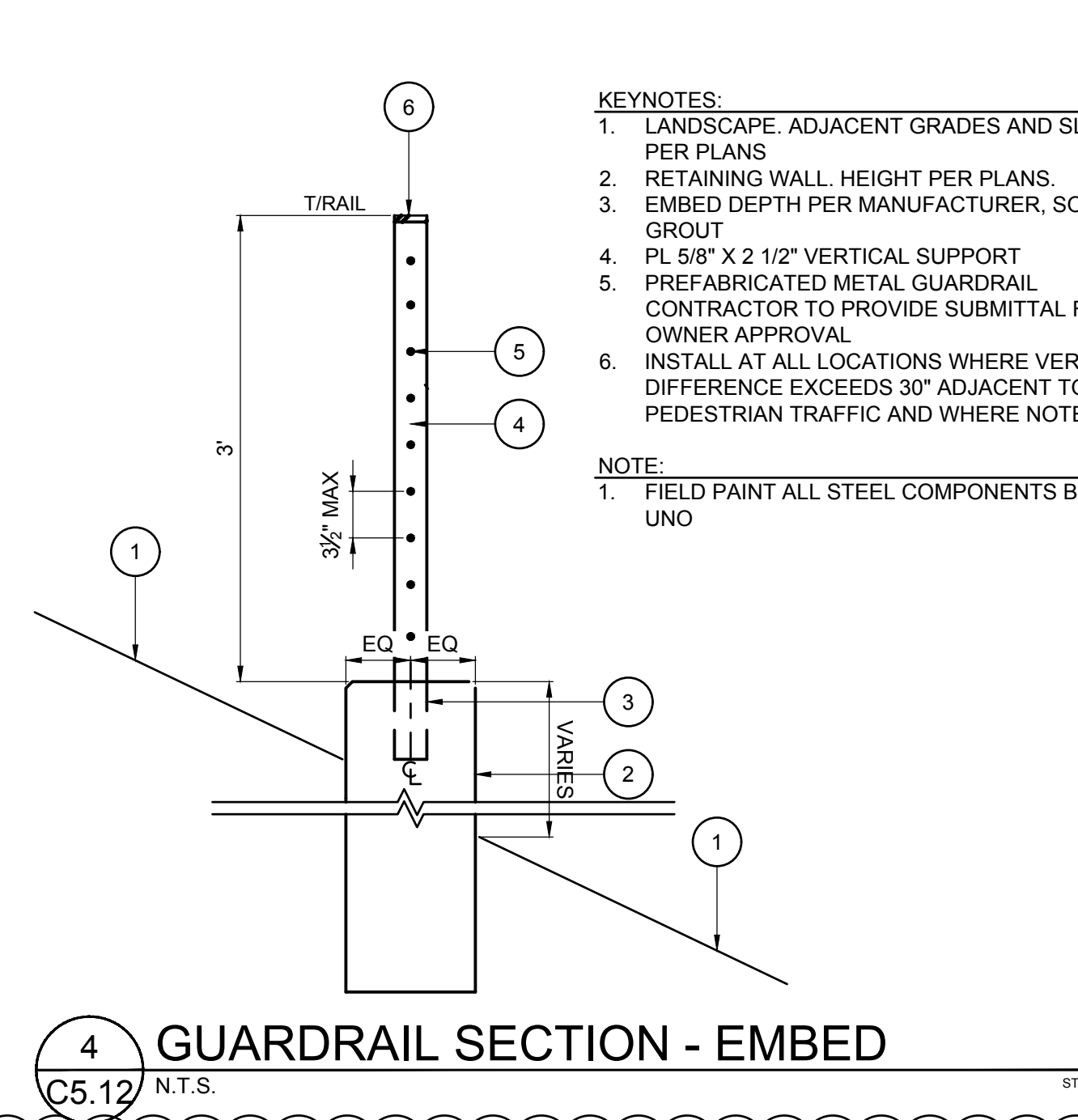
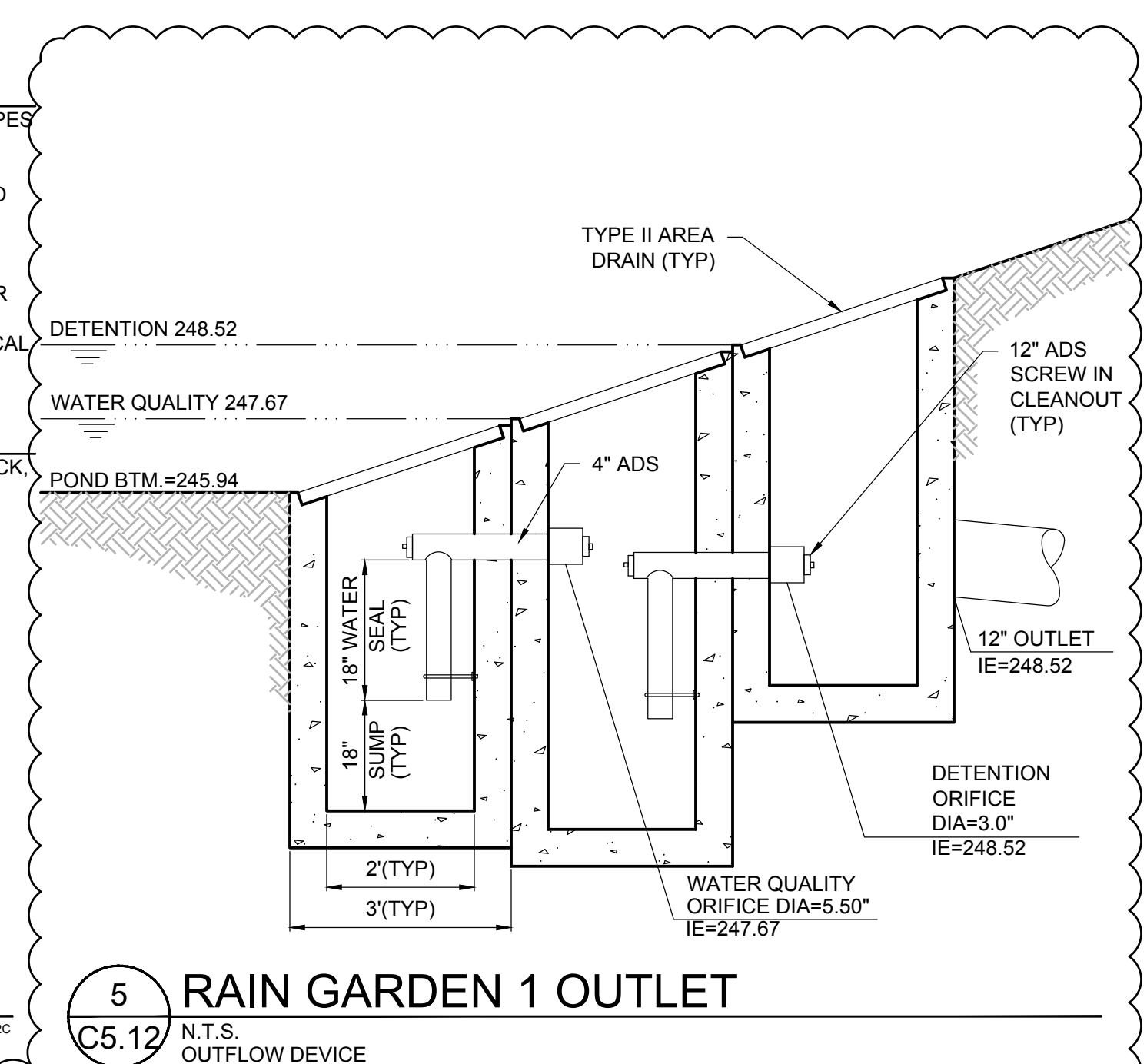
CHECKED BY: BMR, BDN

SHEET

**C5.12**

JOB NO. **2200502.04**

**DESIGN REVIEW SET 07/29/2022**  
2200502007 C:\TEMP\AC\PUBLISH\_21904\0204-C5.10-13-CIVIL DETAIL SHEET.DWG;C5.12 BMR 11/6/22 18:23 100

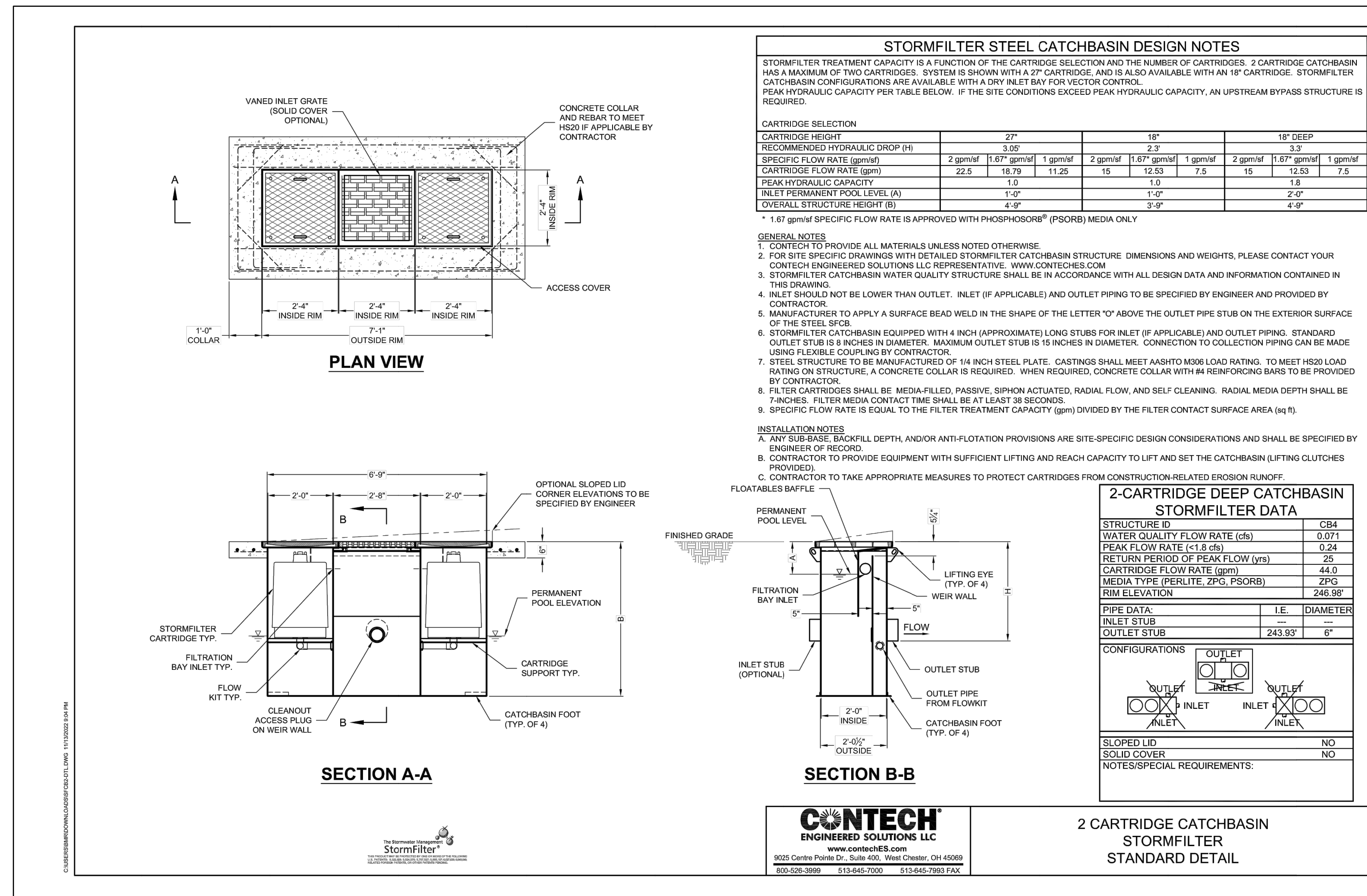


**C5.12**

JOB NO. **2200502.04**

**DESIGN REVIEW SET 07/29/2022**  
2200502007 C:\TEMP\AC\PUBLISH\_21904\0204-C5.10-13-CIVIL DETAIL SHEET.DWG;C5.12 BMR 11/6/22 18:23 100



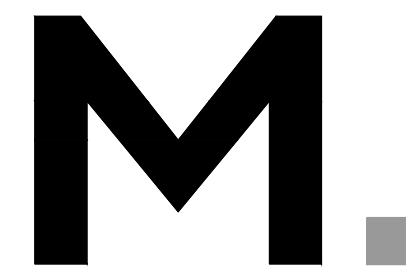


REVISION SCHEDULE		
Delta	Issued As	Issue Date
1	PLAN CHECK	11/15/2022









Architecture + Interiors  
Planning + Engineering

Portland, OR  
503.224.9560  
Vancouver, WA  
360.695.7879

Seattle, WA  
206.749.9993  
www.mcknze.com

**MACKENZIE**  
DESIGN DRIVEN + CLIENT FOCUSED

Client

**DELTA LOGISTICS**  
9835 SW COMMERCE  
CIRCLE  
WILSONVILLE, OR  
97070

Project

**DELTA LOGISTICS  
SITE EXPANSION  
FRONTAGE  
IMPROVEMENTS**  
9710 SW DAY RD.  
CITY OF  
WILSONVILLE, OR



© MACKENZIE 2021  
ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:

**NOTES,  
LEGEND, AND  
ABBREVIATIONS**

DRAWN BY: AOC, BMR

CHECKED BY: BMR, BDN

SHEET

**R0.01**

JOB NO. **2200502.04**

### GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND THE REQUIREMENTS OF CITY OF WILSONVILLE, CITY OF WILSONVILLE PUBLIC WORKS STANDARDS-2017 AND THE CURRENT AMERICAN PUBLIC WORKS ASSOCIATION STANDARDS FOR PUBLIC WORKS CONSTRUCTION.
- THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONENT PIECE, SECTION, JOINT OR FITTING REQUIRED TO COMPLETE THE PROJECT. ALL LOCATIONS FOR WORK SHALL BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD BEFORE BEGINNING CONSTRUCTION. EXISTING UNDERGROUND UTILITIES LAYING WITHIN THE LIMITS OF EXCAVATION SHALL BE VERIFIED AS TO CONDITION, SIZE AND LOCATION BY UNCOVERING, PROVIDING SUCH IS PERMITTED BY LOCAL PUBLIC AUTHORITIES WITH JURISDICTION, BEFORE BEGINNING CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER IF THERE ARE ANY DISCREPANCIES.
- EFFECTIVE EROSION CONTROL IS REQUIRED. EROSION CONTROL DEVICES MUST BE INSTALLED AND MAINTAINED TO MEET THE CITY REQUIREMENTS. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE EROSION CONTROL.
- EFFECTIVE DRAINAGE CONTROL IS REQUIRED. DRAINAGE SHALL BE CONTROLLED WITHIN THE WORK SITE AND SHALL BE ROUTED SO THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.
- CONTRACTOR SHALL ADJUST ALL STRUCTURES IMPACTED BY CONSTRUCTION IMPROVEMENTS TO NEW FINISH GRADES.
- EXCAVATION: EXCAVATE FOR SLABS, PAVING, AND OTHER IMPROVEMENTS TO SIZES AND LEVELS SHOWN OR REQUIRED. ALLOW FOR FORM CLEARANCE AND FOR PROPER COMPACTION OF REQUIRED BACKFILLING MATERIAL. EXCAVATOR(S) SHALL NOTIFY ALL UTILITY COMPANIES FOR LINE LOCATIONS SEVENTY-TWO (72) HOURS (MINIMUM) PRIOR TO START OF WORK. DAMAGE TO UTILITIES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- WHERE CONNECTING TO AN EXISTING PIPE, AND PRIOR TO ORDERING MATERIALS, THE CONTRACTOR SHALL EXPOSE THE END OF THE EXISTING PIPE VERIFY THE LOCATION, SIZE, AND ELEVATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.

### UTILITY NOTES

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF CITY OF WILSONVILLE, DEPARTMENT OF ENVIRONMENTAL SERVICE, AND THE CURRENT EDITION OF THE UNIFORM PLUMBING CODE AND THE INTERNATIONAL BUILDING CODE. ALL WORK WITHIN THE PUBLIC R.O.W. REQUIRES A PUBLIC WORKS PERMIT.
- THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONENT PIECE, SECTION, JOINT OR FITTING REQUIRED TO COMPLETE THE PROJECT. ALL LOCATIONS FOR WORK SHALL BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD BEFORE BEGINNING CONSTRUCTION. EXISTING UNDERGROUND UTILITIES LAYING WITHIN THE LIMITS OF EXCAVATION SHALL BE VERIFIED AS TO CONDITION, SIZE AND LOCATION BY UNCOVERING, PROVIDING SUCH IS PERMITTED BY LOCAL PUBLIC AUTHORITIES WITH JURISDICTION, BEFORE BEGINNING CONSTRUCTION. CONTRACTOR TO NOTIFY ENGINEER IF THERE ARE ANY DISCREPANCIES.
- PROVIDE CLEANOUTS AS REQUIRED IN THE CURRENT EDITION OF THE UNIFORM PLUMBING CODE.
- ALL STORM PIPING IS SIZED FOR A MANNING'S "N" VALUE = 0.013 ALL STORM PIPING IS DESIGNED USING CONCENTRIC PIPE TO PIPE AND WYE FITTINGS, UNLESS OTHERWISE NOTED.
- VERIFY LOCATION, SIZE AND DEPTH OF EXISTING UTILITIES BY POTHOLING PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF DISCREPANCIES.
- THE SURVEY INFORMATION SHOWN AS A BACKGROUND SCREEN ON THIS SHEET IS BASED ON A SURVEY PREPARED BY WEDDLE SURVEYING, INC.
- CONTRACTOR TO PROVIDE POWER TO IRRIGATION CONTROLLER VIA DESIGN BUILD ELECTRICAL. SEE SPECIFICATIONS AND LANDSCAPE PLANS.
- SEE BUILDING PLUMBING DRAWINGS FOR PIPING WITHIN THE BUILDING AND UP TO 5' OUTSIDE THE BUILDING, INCLUDING ANY FOUNDATION DRAINAGE PIPING.
- CONTRACTOR TO MAINTAIN MINIMUM 3 FT OF COVER OVER ALL WATER LINE.

### GRADING NOTES

- ROUGH GRADING:** BRING ALL FINISH GRADES TO APPROXIMATE LEVELS INDICATED. WHERE GRADES ARE NOT OTHERWISE INDICATED, FINISH GRADES ARE TO BE THE SAME AS ADJACENT SIDEWALKS, CURBS, OR THE OBVIOUS GRADE OF ADJACENT STRUCTURE. GRADE TO UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE GRADES ARE GIVEN. ROUND OFF SURFACES, AVOID ABRUPT CHANGES IN LEVELS. ROUGH GRADE TO ALLOW FOR DEPTH OF CONCRETE SLABS, WALKS, AND THEIR BASE COURSES. GRADE FOR PAVED DRIVES AND PAVED PARKING AREAS AS INDICATED AND SPECIFIED HEREIN, AND PROVIDE FOR SURFACE DRAINAGE AS SHOWN, ALLOWING FOR THICKNESS OF SURFACING MATERIAL.  
**FINISH GRADING:** AT COMPLETION OF JOB AND AFTER BACKFILLING BY OTHER CRAFTS HAS BEEN COMPLETED, REFILL AND COMPACT AREAS WHICH HAVE SETTLED OR ERODED TO BRING TO FINAL GRADES.  
GRADING TOLERANCES:  
ROUGH GRADE AT PAVED OR LANDSCAPED AREAS: ±0.1 FT.  
FINISH GRADE PRIOR TO PLACING FINAL SURFACING: ±0.03 FT.
- EFFECTIVE EROSION PREVENTION AND SEDIMENT CONTROL IS REQUIRED. EROSION CONTROL DEVICES MUST BE INSTALLED AND MAINTAINED MEETING THE CITY AND DEQ REQUIREMENTS. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE EROSION CONTROL.
- EFFECTIVE DRAINAGE CONTROL IS REQUIRED. DRAINAGE SHALL BE CONTROLLED WITHIN THE WORK SITE AND SHALL BE SO ROUTED THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE GOVERNING JURISDICTION MAY, AT ANY TIME, ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.
- SITE TOPSOIL SHALL BE STOCKPILED DURING CONSTRUCTION AND USED FOR LANDSCAPING.
- THE SURVEY INFORMATION SHOWN AS A BACKGROUND SCREEN ON THIS SHEET IS BASED ON A SURVEY BY NORTHWEST SURVEYING INC. AND IS SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS WITH HIS OWN RESOURCES PRIOR TO START OF ANY CONSTRUCTION.
- CONTRACTOR TO COORDINATE GRADES AT ENTRANCE WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
- 2% MAXIMUM CROSS SLOPE AT ALL ADA-COMPLIANT PARKING SPACES AND LOADING ZONES.
- 5% MAX LONGITUDINAL SLOPE (EXCLUDING RAMPS) AT PEDESTRIAN SIDEWALK CONNECTIONS BETWEEN PUBLIC R.O.W. AND BUILDING ENTRANCES.
- WHERE SLOPES ARE STEEPER THAN 3:1, CONTRACTOR SHALL INSTALL JUTE MATTING. SLOPE SHALL BE PREPARED TO ENSURE COMPLETE AND DIRECT CONTACT OF MATTING WITH SOIL. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

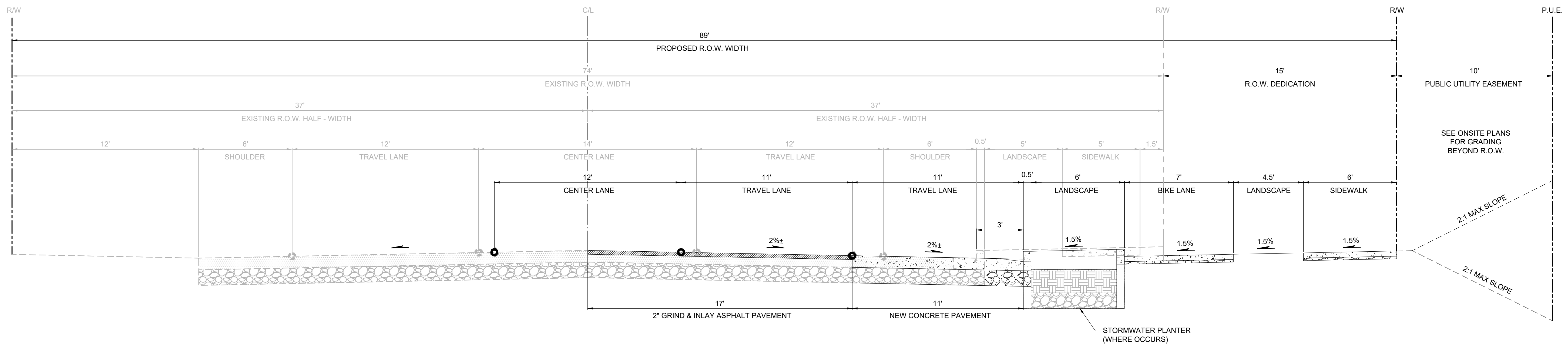
### LEGEND

	EXISTING	PROPOSED
CURBLINE AND GUTTER		
BRUSH LINE		
BUILDING EAVE		
BUILDING FOOTPRINT		
CENTERLINE		
EASEMENT LINE		
FENCE LINE		
GAS LINE		
OVERHEAD POWER		
STORM DRAIN LINE		
PERFORATED PIPE		
PROPERTY LINE		
R.O.W. LINE		
WATER LINE		
WETLANDS		
WETLANDS BUFFER		
CULVER INLET/OUTLET		
CURB INLET		
DECORATIVE SHRUB		
DOWNSPOUT		
FIRE HYDRANT		
GAS METER		
GAS RISER		
GATE POST		
GUY ANCHOR		
MAILBOX		
POWER METER		
SIGN "AS NOTED"		
SITE BENCHMARK		
STORM DRAIN MANHOLE		
SURVEY MONUMENTS FOUND		
SURVEY MONUMENTS SET		
UTILITY LID		
WATER METER		
WATER RISER		
WATER VALVE		
WATER VAULT		
WETLANDS BUFFER/ LINE STAKES		
POWER POLE		
SIDEWALK		
CONFEROUS TREE		
DECIDUOUS TREE		

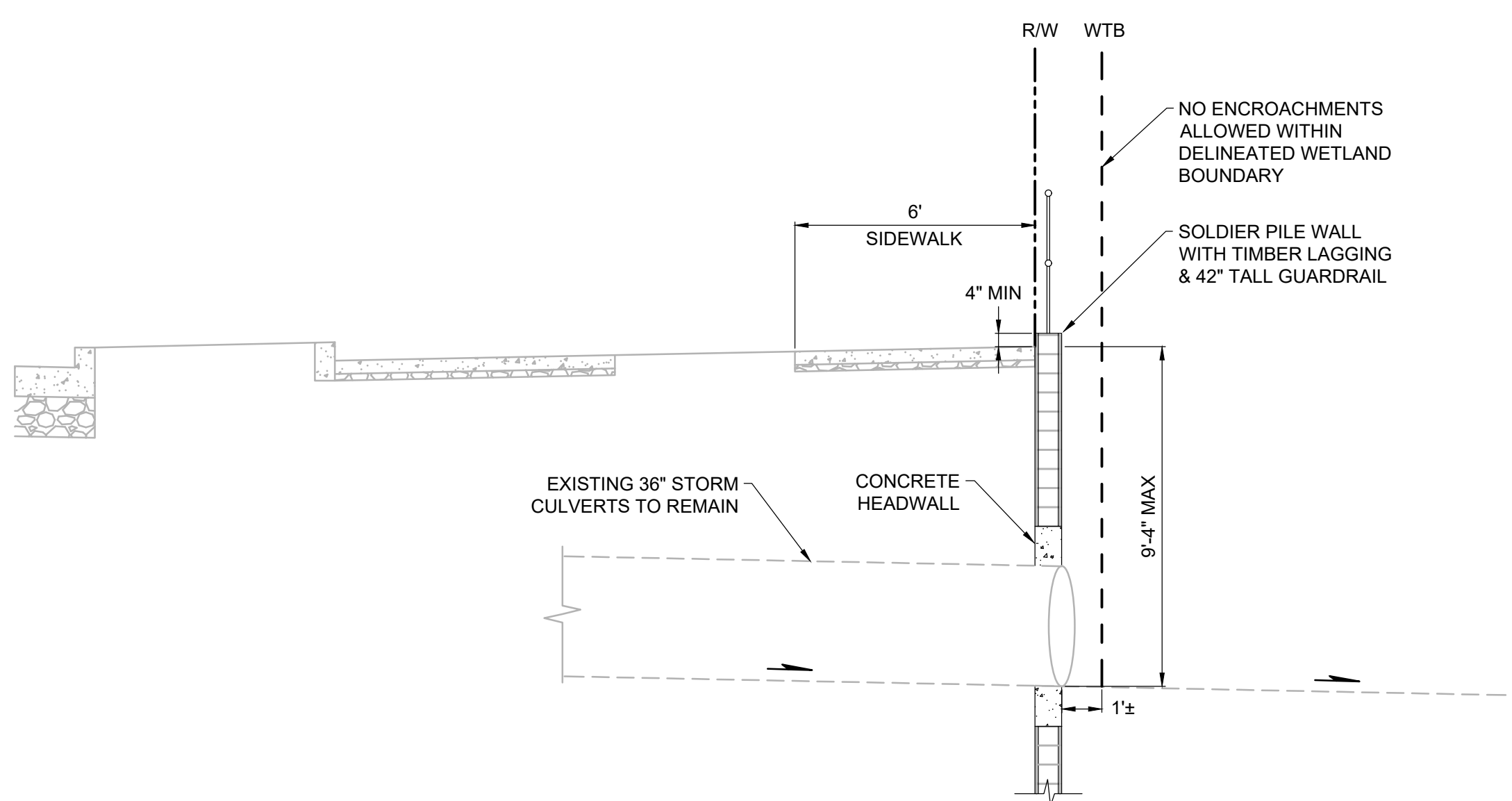
### ABBREVIATIONS

TC	TOP OF CURB	WM	WATER METER
AC	ASPHALT	OH	OVERHEAD WIRE
FH	FIRE HYDRANT	SSWR	SANITARY SEWER
FG	FINISHED GRADE	MH	MANHOLE
SW	SIDEWALK ELEVATION	IE	INVERT ELEVATION
TS	TOP OF STAIR	CB	CATCH BASIN
BS	BOTTOM OF STAIR	STM	STORM
TYP	TYPICAL	RD	ROOF DRAIN
R.O.W.	RIGHT OF WAY	FF/FFE	FINISHED FLOOR ELEVATION
LS	LANDSCAPE	NG	NATURAL GROUND
SROZ	SIGNIFICANT RESOURCE OVERLAY ZONE	CL	CENTERLINE
CO	CLEAN OUT	GPM	GALLONS PER MINUTE
INV	INVERT	FW	FIRE WATER
RD	ROOF DRAIN	PWS	PUBLIC WORKS STANDARDS
COW	CITY OF WILSONVILLE	PUE	PUBLIC UTILITY EASEMENT
		ELEV	ELEVATION

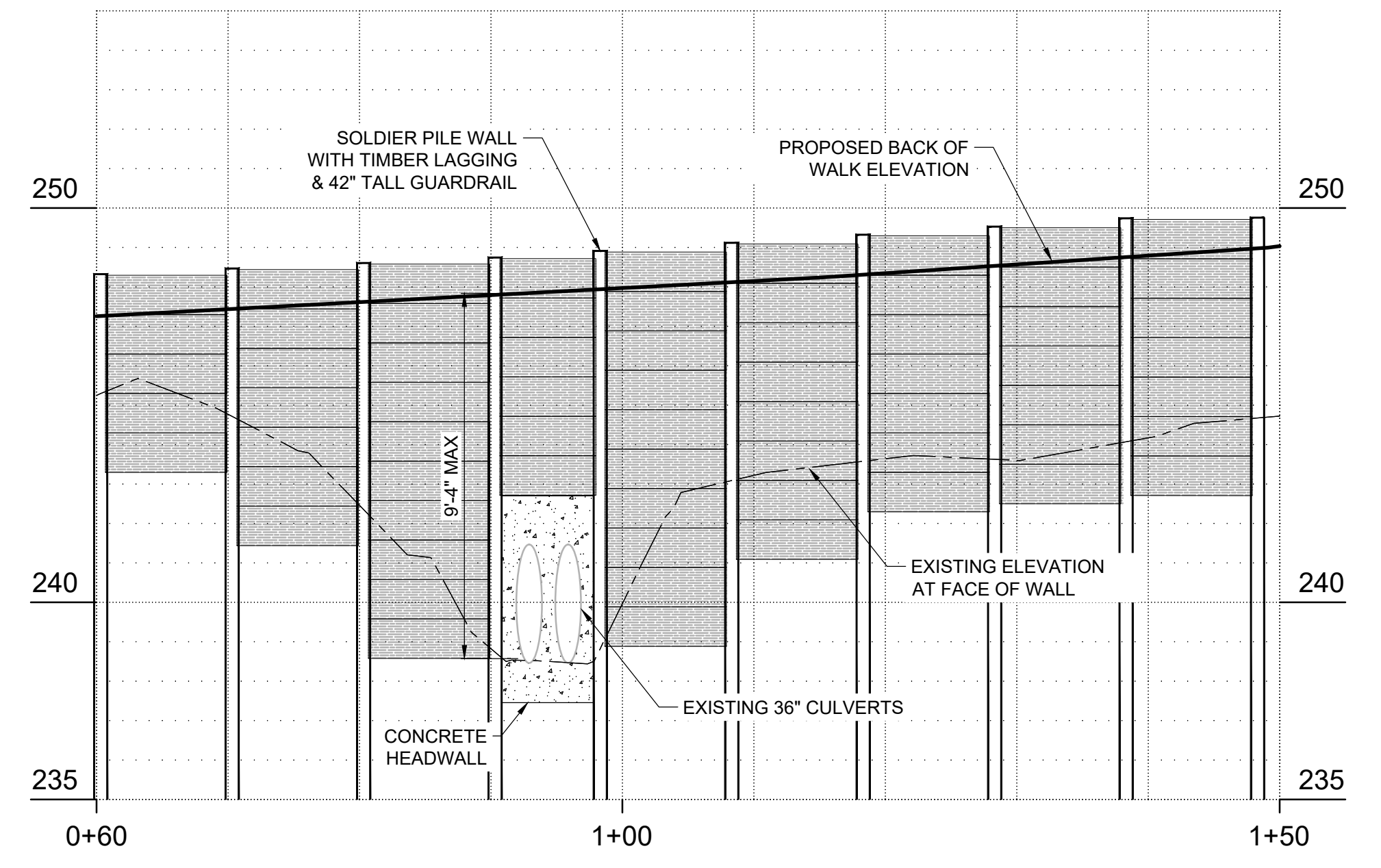




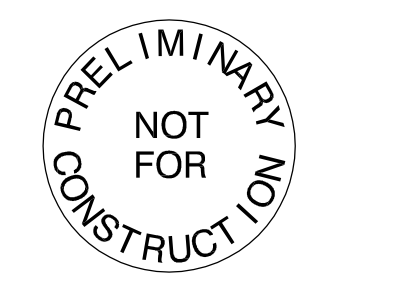
**1**  
 TYPICAL SECTION - DAY ROAD  
 R0.02 N.T.S.



**2**  
 CROSS SECTION - DAY ROAD (CULVERT)  
 R0.02 N.T.S.



**1**  
 ELEVATION - DAY ROAD (CULVERT)  
 R0.02 N.T.S.



© MACKENZIE 2021  
 ALL RIGHTS RESERVED  
 THESE DRAWINGS ARE THE PROPERTY OF  
 MACKENZIE AND ARE NOT TO BE USED  
 OR REPRODUCED IN ANY MANNER  
 WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:  
**CROSS SECTIONS**

DRAWN BY: CME  
 CHECKED BY: GIM  
 SHEET

**R0.02**

JOB NO. **2200502.04**

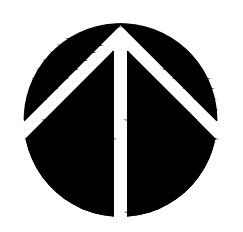
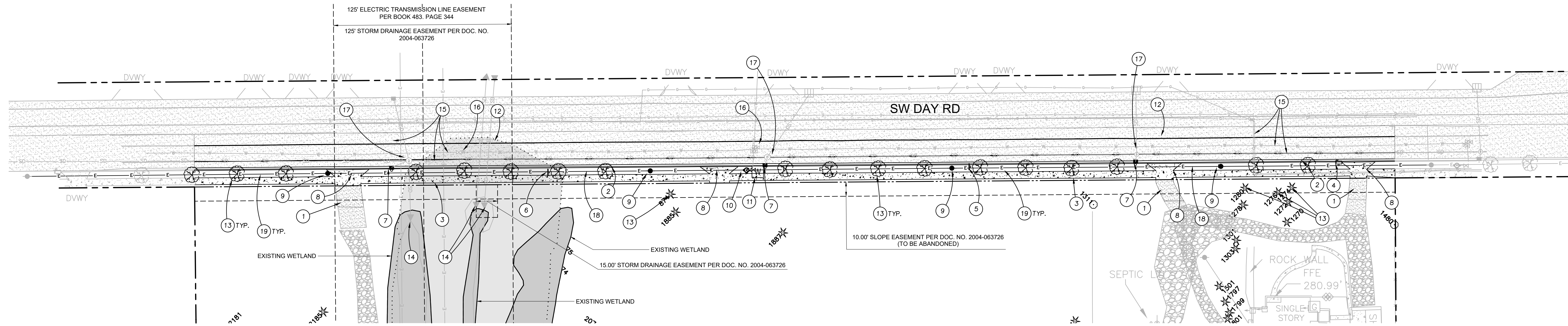




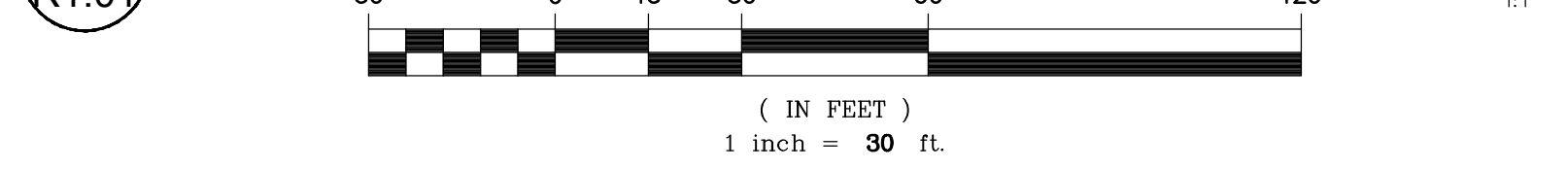








**1 FRONTAGE IMPROVEMENTS DEMOLITION PLAN**



**KEY NOTES**

1. REMOVE EXISTING ASPHALT PER SECTION 1/R0.02
2. REMOVE EXISTING CURB AND GUTTER
3. REMOVE EXISTING SIDEWALK
4. REMOVE EXISTING MAILBOX
5. RELOCATE EXISTING "TRUCKS ENTERING ROADWAY" SIGN
6. RELOCATE EXISTING "40 SPEED" SIGN
7. REMOVE EXISTING CATCH BASIN
8. REMOVE EXISTING DRIVEWAY
9. RELOCATE EXISTING POWER POLE
10. RELOCATE FIRE HYDRANT
11. REMOVE WATER METER AND SERVICE LATERAL TO MAINLINE
12. GRIND ASPHALT PAVEMENT PER SECTION 1/R0.02
13. REMOVE EXISTING TREE
14. PROTECT EXISTING STORM CULVERTS
15. PROTECT EXISTING UTILITIES AT THE SURFACE WITHIN THE GRINDING AREA
16. PROTECT VALVES AND ADJUST TO GRADE
17. PROTECT EXISTING MANHOLES IN GRINDING AREA, ADJUST TO GRADE
18. RELOCATE EXISTING OVERHEAD POWER LINES
19. REMOVE EXISTING HEDGE



© MACKENZIE 2021  
 ALL RIGHTS RESERVED  
 THESE DRAWINGS ARE THE PROPERTY OF  
 MACKENZIE AND ARE NOT TO BE USED  
 OR REPRODUCED IN ANY MANNER,  
 WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

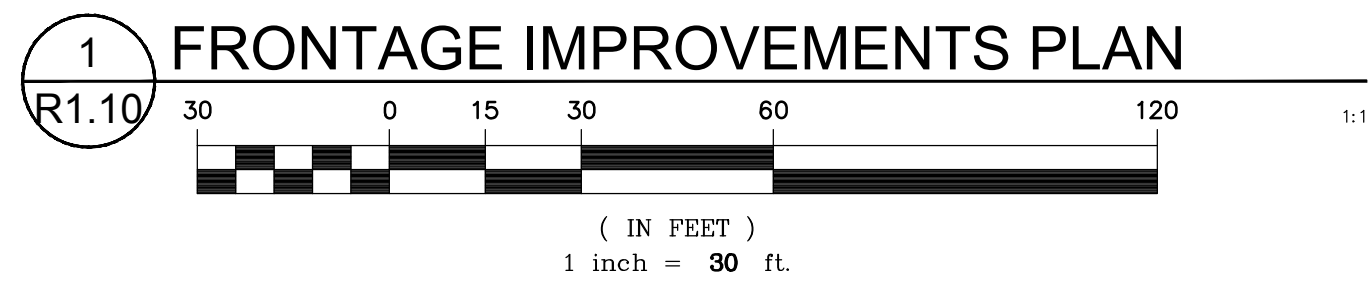
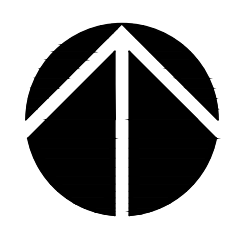
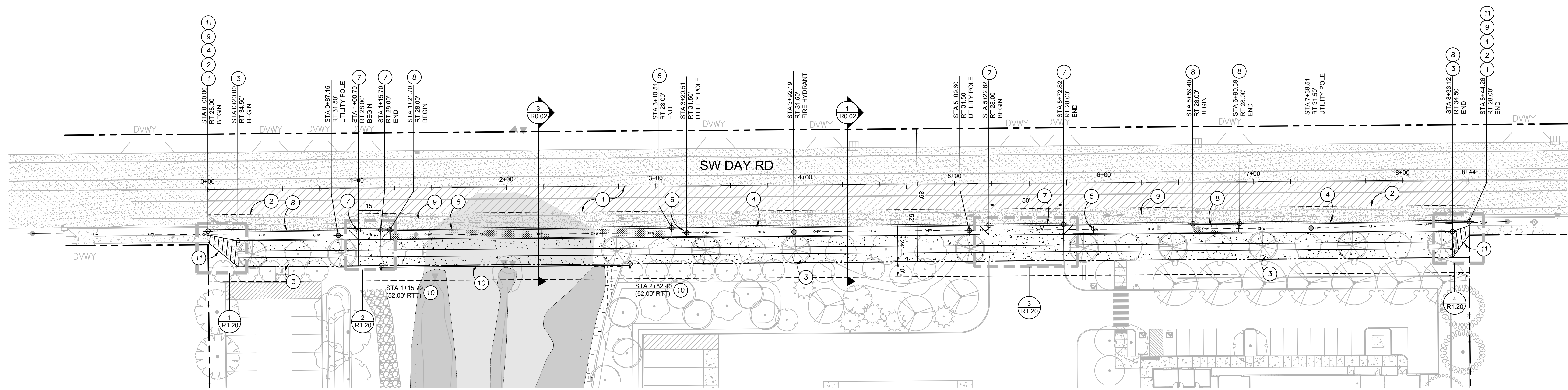
SHEET TITLE:  
**DEMOLITION  
 PLAN**

DRAWN BY: CME  
 CHECKED BY: GIM  
 SHEET

**R1.01**

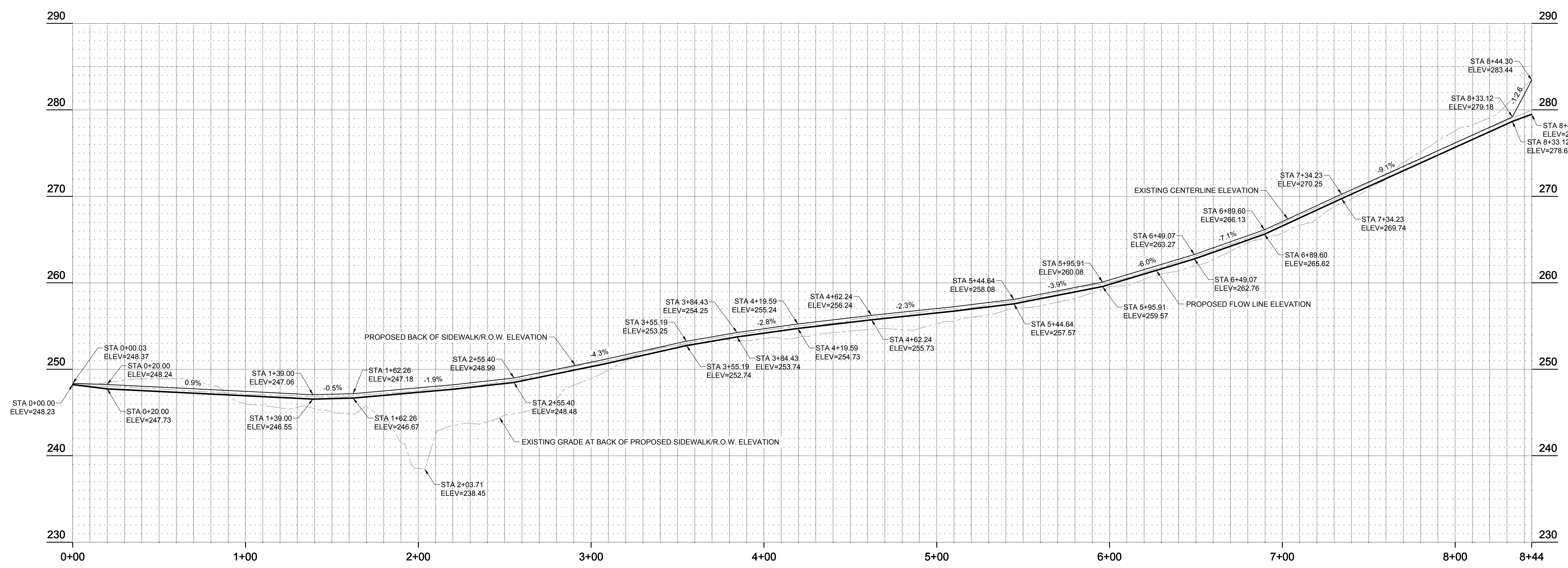
JOB NO. **2200502.04**



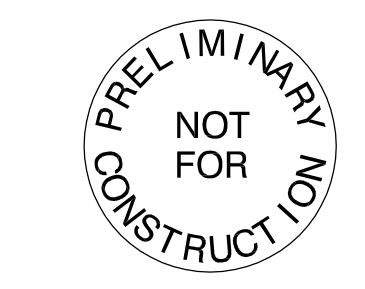


**KEY NOTES**

1. ASPHALT OVERLAY
2. SAWCUT EXISTING ASPHALT
3. SIDEWALK PER RD-1075/R0.03
4. VERTICAL CURB AND GUTTER PER RD-1060/R0.03
5. RELOCATED "TRUCKS ENTERING ROADWAY" SIGN
6. RELOCATED EXISTING "40 SPEED" SIGN
7. COMMERCIAL DRIVEWAY PER RD-1095/R0.03
8. STORMWATER PLANTER PER ST-6005/R0.03
9. CONCRETE PAVEMENT
10. RETAINING WALL
11. ASPHALT PAVING WITH CROSSWALK STRIPING FROM PROPOSED SIDEWALK TO EXISTING



**2 FRONTAGE IMPROVEMENTS PROFILE**  
HORIZONTAL SCALE: 1"=30'  
VERTICAL SCALE: 1"=5'



© MACKENZIE 2021  
ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

**REVISION SCHEDULE**

Delta	Issued As	Issue Date

SHEET TITLE:  
**PLAN AND PROFILE**

DRAWN BY: CME

CHECKED BY: GIM

SHEET

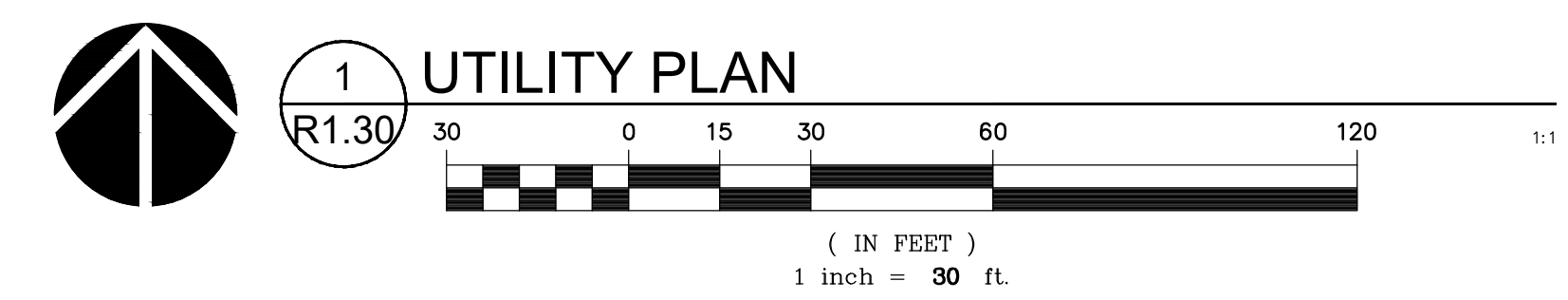
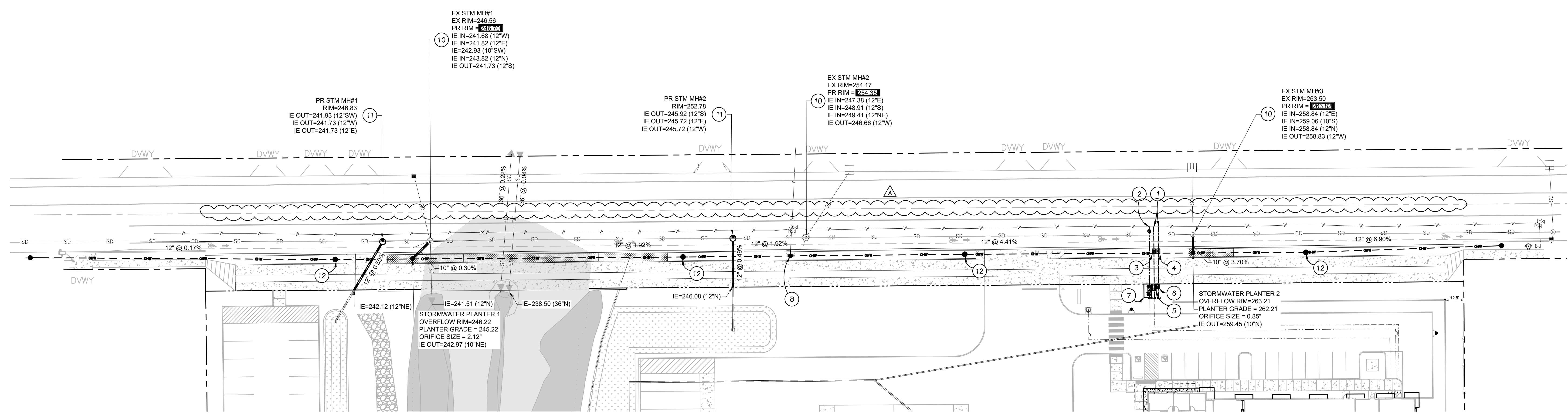
**R1.10**

JOB NO. 2200502.04









**KEY NOTES**

1. DOMESTIC/IRRIGATION WATER SERVICE CONNECTION PER DETAIL WT-3045/R0.03
2. FIRE WATER SERVICE CONNECTION
3. 3" DOMESTIC WATER METER. SEE DETAIL WT-3045/R0.03
4. 1.5" IRRIGATION WATER METER
5. 3" REDUCED PRESSURE BACKFLOW ASSEMBLY
6. 1.5" DOUBLE CHECK ASSEMBLY. SEE DETAIL WT-3045/R0.03
7. 12" DOUBLE CHECK DETECTOR ASSEMBLY
8. FIRE HYDRANT. SEE DETAIL WT-3060/R0.03
9. NOT USED
10. JOIN EXISTING STORM MANHOLE
11. STORM MANHOLE
12. RELOCATED UTILITY POLE WITH STREET LIGHT LUMINAIRE



© MACKENZIE 2021  
ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date
A	LAND USE	08/08/2022

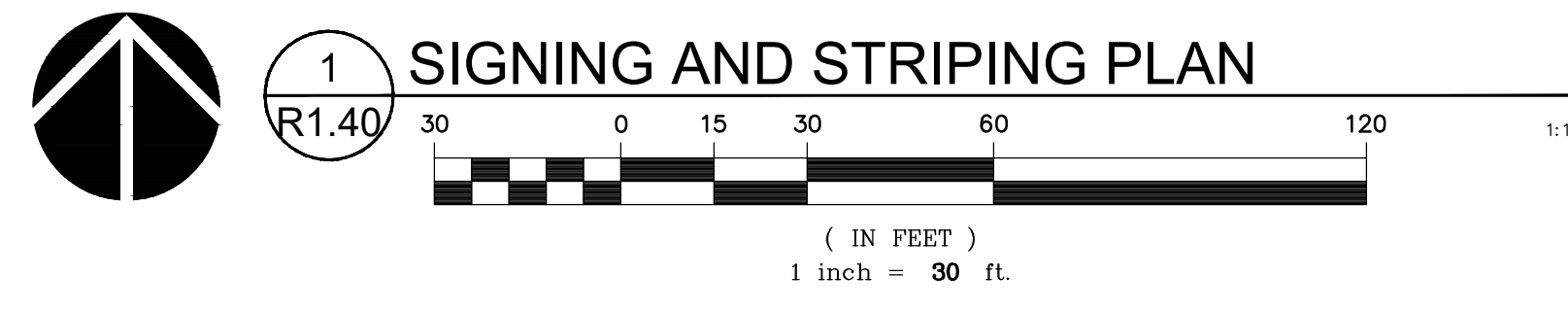
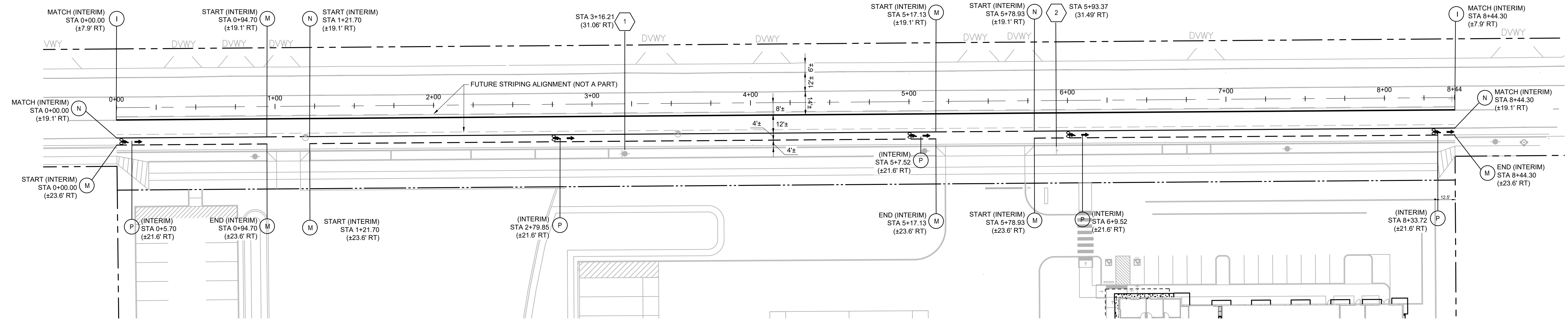
SHEET TITLE:  
**UTILITY PLAN**

DRAWN BY: CME  
CHECKED BY: GIM  
SHEET

**R1.30**

JOB NO. 2200502.04





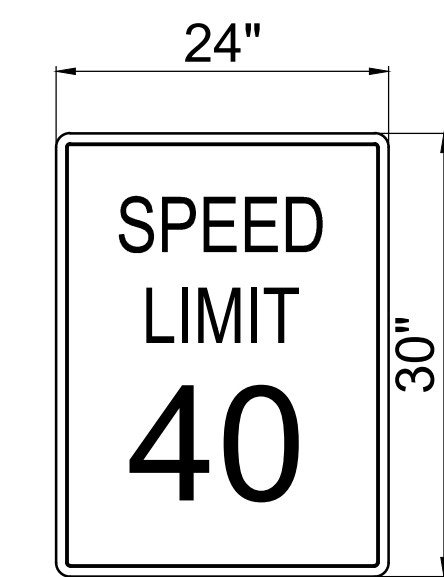
**SIGNING NOTES**

1. REFER TO THE CITY OF WILSONVILLE DWG. RD-1245/SHEET R1.41
2. POSTS SHALL BE INSTALLED WITH V-LOCK PER CITY OF WILSONVILLE DWG. RD-1250/SHEET R1.41

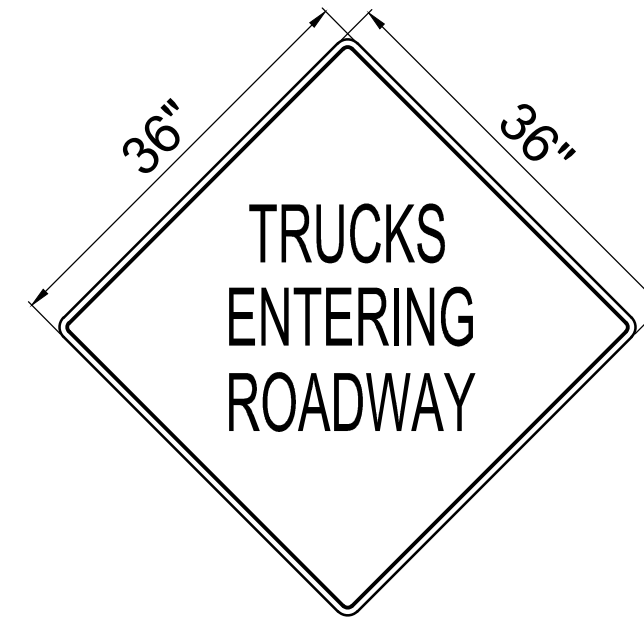
**STRIPING NOTES**

1. REFER TO THE CITY OF WILSONVILLE PAVEMENT MARKING NOTES ON CITY OF WILSONVILLE STD. DWG. RD-1280/SHEET R1.41
2. DO NOT PAINT CURBS MAINTAINED BY THE CITY OF WILSONVILLE. CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ANY PAINT ON CITY CURBS.

SIGN & SUPPORT DATA TABLE																
SIGN NO. (N)	QTY. USED	SIGN DIMENSION		SIGN CODE		TYPE OF SUPPORT					SIGN LEGEND / OTHER REMARKS					
		WIDTH (IN)	HEIGHT (IN)	MUTCD	ODOT	MOUNT	FOOTING TYPE									
								SINGLE PIPE POST	EXISTING PIPE POST	UTILITY POLE	LIGHT POLE	SIGNAL POLE	MODIFIED BIKE RACK	CANTILEVER	BREAKAWAY DOME ASSEMBLY	BREAKAWAY ANCHOR ASSEMBLY
1	1	24	30	R2-1 TYPE W1				X								[SPEED LIMIT 40] MOUNTED ON POLE
2	1	36	36				X									[TRUCKS ENTERING ROADWAY]



1 R2-1 TYPE W1 SIGN



2 "TRUCKS ENTERING ROADWAY" SIGN



© MACKENZIE 2021  
 ALL RIGHTS RESERVED  
 THESE DRAWINGS ARE THE PROPERTY OF MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:  
**STRIPING AND SIGNAGE PLAN**

DRAWN BY: CME  
 CHECKED BY: GIM  
 SHEET

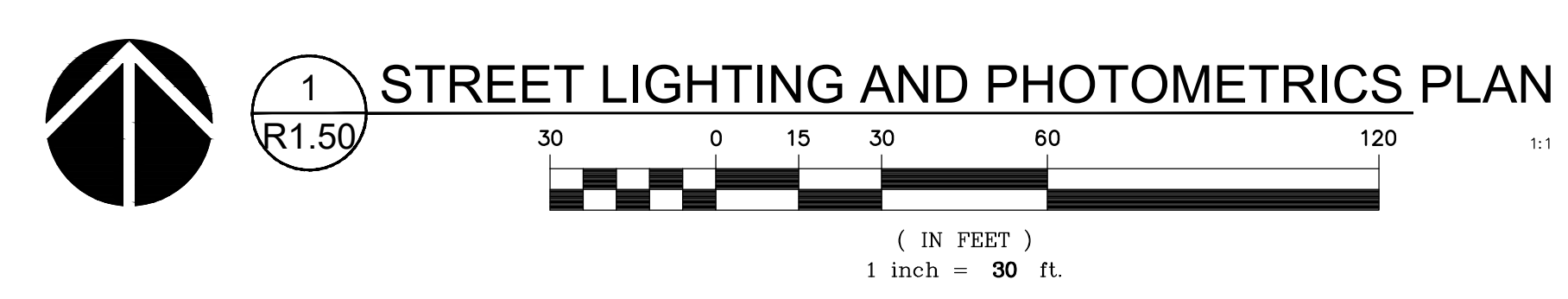
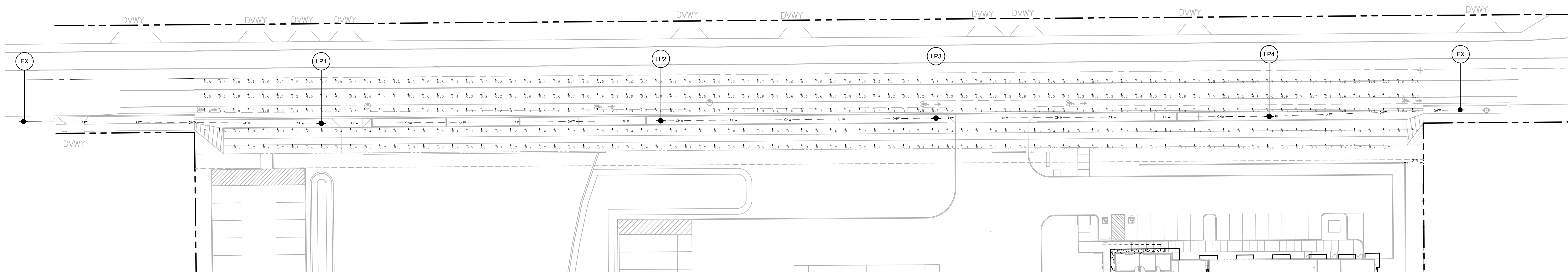
**R1.40**

JOB NO. 2200502.04









**LIGHTING NOTES**

- ALL MATERIALS AND WORKMANSHIP CONFORM TO CITY OF WILSONVILLE AND PGE OPTION B SPECIFICATIONS. ALL MATERIALS AND INSTALLATIONS SHALL BE APPROVED BY WILSONVILLE AND PGE.
- CONTRACTOR SHALL COORDINATE INSTALLATION OF STREET LIGHTS WITH PGE AND CITY FORCES. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- CONTRACTOR SHALL SUBMIT A LIGHTING SUBMITTAL OF ALL LIGHTING EQUIPMENT TO THE CITY OF WILSONVILLE AND HAVE APPROVED PRIOR TO ORDERING.
- CONTACT PGE AT (503) 323-6700 TO BEGIN A WORK ORDER REQUEST. VERIFY PROPOSED LIGHT POLE LOCATION WITH PGE AND CITY PRIOR TO ORDERING AND INSTALLATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- STREET LIGHTING SHALL BE PER PGE OPTION B; PGE MAINTAINS LUMINAIRES AND PROVIDES ELECTRICITY SERVICE TO LUMINAIRES THAT ARE PURCHASED AND OWNED BY THE OWNER AND INSTALLED ON UTILITY POLES.
- CONTRACTOR SHALL VERIFY LUMINAIRE CHARACTERISTICS AND CATALOG NUMBER, INCLUDING BUT NOT LIMITED TO EXTERIOR HOUSING COLOR, WITH PGE AND CITY FORCES PRIOR TO ORDERING.
- WIRES TO BE PROVIDED AND PULLED BY PGE.
- CONTRACTOR IS RESPONSIBLE FOR THE CORRECT OPERATION OF THE STREET LIGHT SYSTEM FOR THE FIRST YEAR AFTER BEING ENERGIZED BY PGE. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ANY POLES WHICH GO OUT OF PLUMB WITHIN THE FIRST YEAR. DURING THIS ACCEPTANCE PERIOD ANY REPAIRS OR POLE STRAIGHTENING PERFORMED ON THE INSTALLED SYSTEM BY PGE WILL BE BILLED TO THE DEVELOPER.

**STREET LIGHTING EQUIPMENT**

- LUMINAIRES SHALL BE:  
 LUM 1: LEOTEK GRAY LED:  
 GCL-80G-MV-WW-3R-GY-610-PCR7RWGWLFDPCGE

**LIGHTING LEGEND**

- (EX) EXISTING LIGHTPOLE
- (LP1) INSTALL LUMINAIRE POLE (30' MOUNTING HEIGHT) SEE FOOTING DETAIL RD-1335
- (N) POLE NUMBER (N), SEE POLE INFORMATION TABLE.

**ILLUMINATION DATA**

	SW DAY RD - COLLECTOR ROAD		
	AVERAGE (fc)	MINIMUM (fc)	AVERAGE/MINIMUM
DESIGNED	1.7	.2	8.7:1
RECOMMENDED MINIMUM VALUE	0.6	-	4.0:1

	SIDEWALK ALONG SW DAY RD - COLLECTOR ROAD		
	AVERAGE (fc)	MINIMUM (fc)	AVERAGE/MINIMUM
DESIGNED	0.3	0.1	2.5:1
RECOMMENDED MINIMUM VALUE	0.6	-	4.0:1

- NOTES:
- A LIGHT LOSS FACTOR OF 0.85 WAS USED FOR ALL LUMINAIRES
  - STREET LIGHTING WAS DESIGNED IN ACCORDANCE WITH THE MOST CURRENT AMERICAN STANDARD PRACTICE FOR ROADWAY LIGHTING (RP-8-14) PER CITY OF WILSONVILLE PUBLIC WORKS STANDARD
  - DESIGN ASSUMES A LOW PEDESTRIANS TRAFFIC AREA AND A R2/R3 PAVEMENT CLASSIFICATION



MACKENZIE 2021  
 ALL RIGHTS RESERVED  
 THESE DRAWINGS ARE THE PROPERTY OF  
 MACKENZIE AND ARE NOT TO BE USED  
 OR REPRODUCED IN ANY MANNER  
 WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:  
**STREET  
 LIGHTING AND  
 PHOTOMETRICS  
 PLAN**

DRAWN BY: CME  
 CHECKED BY: GIM  
 SHEET

**R1.50**

JOB NO. **2200502.04**



**ZONING COMPLIANCE LEGEND**

	<b>PRIMARY TREE</b> 2" CAL. MIN. FRAXINUS PENNSYLVANICA 'MARSHALL'S SEEDLESS' / MARSHALL'S SEEDLESS GREEN ASH PINUS PONDEROSA / PONDEROSA PINE PSEUDOTSUGA MENZIESII / DOUGLAS FIR QUERCUS GARRYANA / OREGON WHITE OAK ZELKOVA SERATA 'GREEN VASE' / GREEN VASE SABLEAF ZELKOVA
	<b>SECONDARY TREE</b> 1.75" - 2" CAL. MIN. CALOCEDRUS DECURRENS / INCENSE CEDAR TILIA TOMENTOSA 'STERLING' / STERLING SILVER LINDEN ULMUS X 'FRONTIER' / FRONTIER ELM
	<b>ACCENT TREE</b> 1.75" CAL. MIN. ACER RUBRUM 'BONMALL' / BONMALL RED MAPLE AMELANCHIER ALNIFOLIA 'AUTUMN BRILLIANCE' / SERVICEBERRY SINGLE STEM CORNUS KOUSA X NUTTALLII 'XNA-43' / STARLIGHT KOUSA DOGWOOD
	<b>STREET TREE</b> 3" CAL. MIN. ACER GRANDIDENTATUM 'SCHMIDT' TM / ROCKY MOUNTAIN GLOW MAPLE CORNUS KOUSA 'MILKY WAY' / MILKY WAY KOUSA DOGWOOD PARROTTIA PERATA 'JONES RUBY VASE' TM / RUBY VASE PERSIAN PARROTTIA
	<b>STORMWATER TREE</b> CORNUS X EDDIE'S 'WHITE WONDER' / EDDIE'S WHITE WONDER DOGWOOD FRAXINUS LATIFOLIA / OREGON ASH PSEUDOTSUGA MENZIESII / DOUGLAS FIR RHAMNUS PURSHIANA / CASCADIA BUCKTHORN
	<b>HIGH SCREEN STANDARD</b>
	<b>LOW SCREEN STANDARD</b>
	<b>PARKING LANDSCAPE</b>
	<b>STORMWATER</b>
	<b>GEN. LANDSCAPE REQ.</b>
	<b>STREET PLANTING</b>
	<b>WAYSIDE</b>
	<b>VEGETATION PROTECTION AREA</b>

**ZONING COMPLIANCE**

JURISDICTION	WILSONVILLE, OR
STORMWATER	CITY OF WILSONVILLE
<b>SECTION 4.155(03)</b>	
B. OFF-STREET PARKING LANDSCAPE REQS	
PARKING AREAS OVER 600 SF, EXCLUDING ACCESS AREAS, LOADING OR DELIVERY AREAS, SHALL BE LANDSCAPED TO 10% MIN. 1 TREE PER 8 STALLS AND ISLANDS SHALL BE AT LEAST 8 FT WIDE.	
TOTAL PARKING AREA	19,884 SF
PARKING LANDSCAPE (10% MIN)	3,160 SF (15.9%)
STALLS	41 STALLS
TREES (1 PER 8 STALLS = 6 TREES)	6 TREES
ISLANDS (8 FT WIDTH MIN)	8 WIDTH
<b>SECTION 4.176(02)</b>	
C. GENERAL LANDSCAPING STANDARD	
WHERE LANDSCAPE IS GREATER THAN 30 FT DEEP, PROVIDE 1 TREE PER 800 SF AND 2 HIGH SHRUBS OR 3 LOW SHRUBS PER 400 SF.	
APPLIES ALONG SW DAY ROAD EAST PARKING LOT PERIMETER	4,770 SF
LANDSCAPE AREA	8 TREES
TREES (1 PER 800 SF = 6 TREES)	147 SHRUBS
LOW SHRUBS (3 PER 400 SF = 36 SHRUBS)	
APPLIES ALONG SW DAY ROAD PERIMETER	1,938 SF
LANDSCAPE AREA	13 TREES
TREES (1 PER 800 SF = 3 TREES)	128 SHRUBS
LOW SHRUBS (3 PER 400 SF = 15 SHRUBS)	
APPLIES ALONG SOUTH SIDE OF LOADING DOCKS	1,906 SF
LANDSCAPE AREA	3 TREES
TREES (1 PER 800 SF = 3 TREES)	21 SHRUBS
LOW SHRUBS (3 PER 400 SF = 15 SHRUBS)	
<b>D. LOW SCREEN LANDSCAPING STANDARD</b>	
ONE TREE PER 30 LF, 3-FT HT EVERGREEN HEDGE, AND GROUNDCOVER TO FULL COVERAGE. A 3-FT HIGH MASONRY WALL OR BERM MAY REPLACE THE SHRUBS.	
APPLIES ALONG ADJACENT LOTS	1,600 LF
PERIMETER	55 TREES
TREES (1 PER 30 LF = 54 TREES)	3 FT EVERGREEN
SHRUBS	
<b>E. LOW BERM LANDSCAPING STANDARD</b>	
STANDARD NOT FEASIBLE ALONG SW DAY ROAD.	
<b>F. HIGH SCREEN LANDSCAPING STANDARD</b>	
WAYSIDE PERIMETER	127 LF
TREES (1 PER 30 LF = 6 TREES)	12 TREES
HEDGE	6 FT EVERGREEN
GROUNDCOVER	FULL COVERAGE
LOADING DOCKS	42 LF
TREES (1 PER 30 LF = 2 TREES)	3 TREES
ARCHITECTURAL SCREEN WALL	16 FT H X 32 FT W
GROUNDCOVER	FULL COVERAGE
TRASH ENCLOSURE	20 LF
TREES (1 PER 30 LF)	1 TREE
HEDGE	6 FT EVERGREEN
GROUNDCOVER	FULL COVERAGE
<b>SECTION 4.176(03)</b>	
LANDSCAPE AREA	
TOTAL SITE AREA	386,732 SF (8.9 AC)
15% MINIMUM	138,471 SF (35.8%)
<b>SECTION 4.176(04)</b>	
BUFFERING AND SCREENING	
SITE ZONING	INDUSTRIAL
ADJACENT ZONING	INDUSTRIAL
OUTDOOR STORAGE	NONE
SITE ZONING	INDUSTRIAL
FENCE	NONE
ADDITIONAL SCREENING	N/A
<b>SECTION 4.176(06)</b>	
A. SHRUBS AND GROUNDCOVER	
SHRUBS (2 GAL. MINIMUM)	2 GAL. MINIMUM
9 YEAR GROUND COVERAGE (80%)	80% MINIMUM
TURF OR LAWN (10% MAXIMUM)	0%
B. TREES	
DECIDUOUS (2" CAL. & 10' HEIGHT MINIMUM)	2" CAL. & 10' HT.
EVERGREEN (12 FT HEIGHT MINIMUM)	12 HT.
C. LARGER PLANT MATERIAL	
PROPOSED DEVELOPMENT IS GREATER THAN 50,000 SF IN FOOTPRINT AREA / LARGER THAN 24-FEET IN HEIGHT. AT MATURITY TREES WILL BE AT LEAST 50% THE HEIGHT OF THE BUILDING. DECIDUOUS TREES SHALL BE AT LEAST 10-FEET TALL AND 2-INCH CALIPER. EVERGREEN TREES MUST BE AT LEAST 12-FEET IN HEIGHT. LARGER PLANT MATERIAL HAS BEEN PROVIDED ALONG THE FRONTAGE.	
BUILDING HEIGHT	40 FT
SHORTEST MATURE TREE HEIGHT (50% OF BLDG HT MIN)	40 FT (100%)
DECIDUOUS TREES (10 FT HT, 2-INCH CAL AT INSTALL)	YES
EVERGREEN TREES (12 FT HT AT INSTALL)	YES
D. STREET TREES	
ARTERIAL TREES SHALL BE 3-INCH CALIPER. STREET TREES SPECIES IS SHORT ENOUGH FOR OVERHEAD ELECTRICAL WIRES AND TOLERANT OF WET SOIL.	
E. PLANT SPECIES	
THE LANDSCAPE CONSISTS OF EXISTING LANDSCAPING AND/OR NATIVE VEGETATION TO BE PROTECTED AND MAINTAINED DURING CONSTRUCTION AND NATIVE AND DROUGHT TOLERANT PLANT MATERIAL PROVIDED HAS BEEN CROSS-REFERENCED WITH THE CITY'S LIST OF PROHIBITED PLANT MATERIALS.	
F. TREE CREDITS	
SEE TREE PLANT SHEET L0.03. NONE REQUESTED.	
<b>SECTION 4.176(07)</b>	
INSTALLATION AND MAINTENANCE	
SEE PLANTING NOTES THIS SHEET. PLANT MATERIAL REQUIRED BY CODE SHALL BE CONTINUOUSLY MAINTAINED BY OWNER AND REPLACED IN KIND WITHIN ONE GROWN SEASON IF DEAD.	
IRRIGATION	
SEE IRRIGATION NOTES THIS SHEET. PERMANENT SYSTEM TO BE DESIGN BUILD.	
<b>SECTION 4.176(09)</b>	
PLANT MATERIAL LIST	
SEE PLANT SCHEDULE ON SHEET L0.02.	
CONDITION OF EXISTING PLANTINGS	
ALL VEGETATION IS PROPOSED FOR REMOVAL. OTHER THAN THAT WITHIN THE SIGNIFICANT RESOURCE OVERLAY ZONE. SEE ARBORIST REPORT FOR CONDITION OF EXISTING TREES TO REMAIN.	
WATER USAGE	
WATER USE CATEGORY	C
WAYSIDE AREA (8 TO 13 ACRES)	NATIVE/DROUGHT TOLERANT
COFFEE CREEK DESIGN GUIDELINES	
WAYSIDE ADDRESSING STREET	736 SF PROVIDED
WAYSIDE AREA (8 TO 13 ACRES, 600 SF MIN.)	
BUFFER DEPTH ON 3 SIDES (20 FT MIN)	20-30 LF PROVIDED
AMENITIES	18 LF SEATING
SEATING (1 LF PER 40 SF OF WAYSIDE = 18 LF)	7 FT WIDTH
PAVED WALKING SURFACE (5 FT MIN)	

**SHEET INDEX**

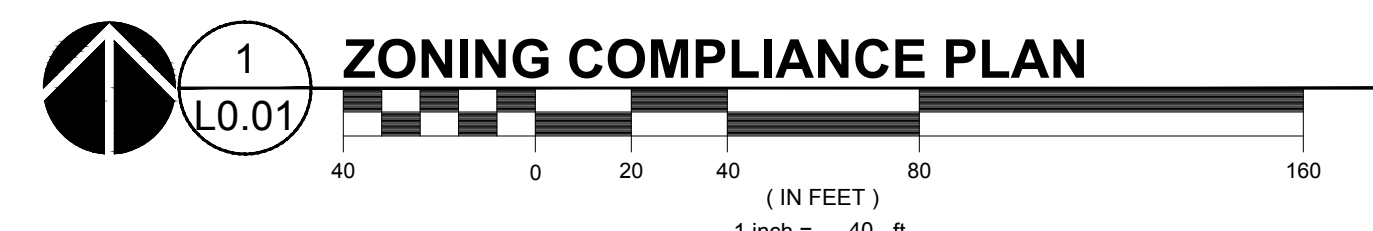
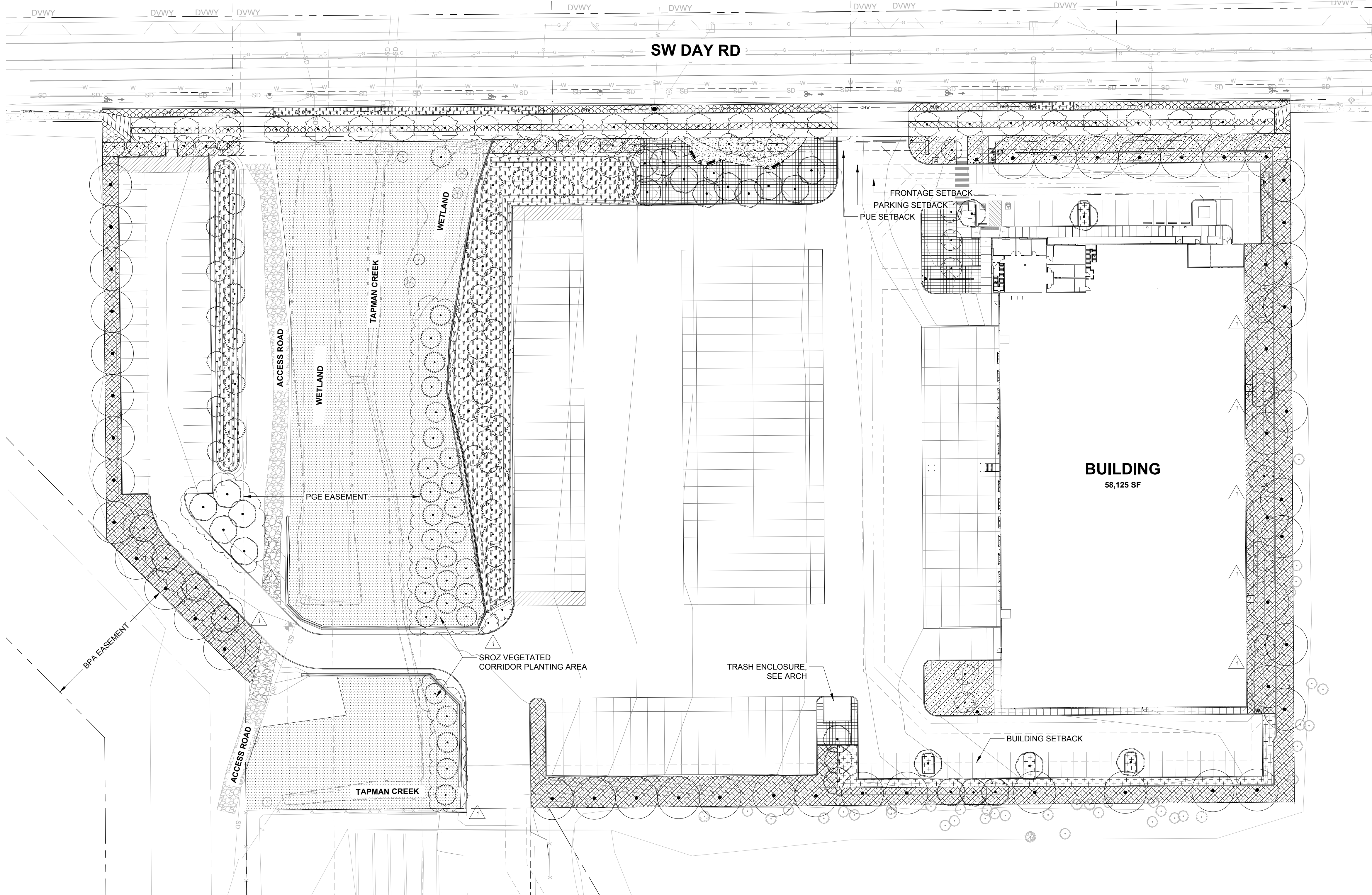
L0.01	GENERAL LANDSCAPE NOTES
L0.02	PLANT SCHEDULES AND STORMWATER NOTES
L0.03	TREE REMOVAL PLAN
L0.04	TREE MITIGATION PLAN
L0.05	VEGETATED CORRIDOR ENHANCEMENT PLANTING PLAN
L1.10	PLANTING PLAN - WEST
L1.11	PLANTING PLAN - EAST
L1.20	IRRIGATION PLAN - WEST
L1.21	IRRIGATION PLAN - EAST
L5.10	PLANTING DETAILS
L5.11	IRRIGATION DETAILS

**TABLE OF ABBREVIATIONS**

ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MAX	MAXIMUM
B&B	BALL AND BURLAP	MIN	MINIMUM
CAL	CALIPER	MIX	MIXTURE
CONC	CONCRETE	NTS	NOT TO SCALE
DEG	DEGREE	OC	ON CENTER
DIAMØ	DIAMETER	POC	POINT OF CONNECTION
DWCS	DRAWING	PVC	POLY VINYL CHLORIDE
ELL	ELBOW	SCH	SCHEDULE
EQ	EQUAL	SF	SQUARE FOOT
FT	FEET/FOOT	SPEC	SPECIFICATION
GAL	GALLON	TYP	TYPICAL
GALV	GALVANIZED	X	TIMES
HT	HEIGHT		

**LANDSCAPE NOTES**

- GENERAL**
- CONTRACTOR SHALL CONFIRM ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
  - CALL BEFORE YOU DIG. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF ALL UNDERGROUND UTILITIES AND NOTIFY LANDSCAPE ARCHITECT IF THERE ARE ANY DISCREPANCIES WITH PLANTING ROOT ZONES. TO REQUEST LOCATES FOR PROPOSED EXCAVATION CALL 1-800-332-2344 (OR 811) IN OREGON.
  - NOTIFY THE OWNER OR OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS WITH EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF ANY WORK.
  - LOCATION OF EXISTING TREES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORK.
  - DAMAGE TO EXISTING CONCRETE CURB, ASPHALT PAVING, OR OTHER STRUCTURE SHALL BE REPAIRED OR REPLACED TO PRE CONSTRUCTION CONDITIONS.
  - CONTRACTOR SHALL COORDINATE WITH THE OWNER ANY DISRUPTION TO VEHICULAR CIRCULATION PRIOR TO COMMENCEMENT OF ANY WORK.
- PLANTING**
- ALL EXISTING TREES, PLANTS, AND ROOTS SHALL BE PROTECTED FROM DAMAGE FROM ANY CONSTRUCTION PREPARATION, REMOVAL OR INSTALLATION ACTIVITIES WITHIN AND ADJACENT TO PROJECT LIMITS.
  - SHRUBS ADJACENT TO PARKING AREAS SHALL BE PLANTED 2 FT MINIMUM AWAY FROM THE BACK OF CURB. SHRUBS AND GROUNDCOVER ALONG OTHER PAVEMENT EDGES SHALL BE PLANTED A MINIMUM OF ONE HALF THEIR CENTER SPACING AWAY FROM PAVEMENT EDGE.
  - ALL PLANT MATERIAL SHALL BE HEALTHY NURSERY STOCK, WELL BRANCHED AND ROOTED, FULL FOLIAGE, FREE FROM INSECTS, DISEASES, WEEDS, WEED ROT, INJURIES AND DEFECTS WITH NO LESS THAN MINIMUMS SPECIFIED IN AMERICAN STANDARDS FOR NURSERY STOCK, ANSI Z60.1-2004.
  - TREES IN THE RIGHT OF WAY SHALL BE TALL ENOUGH TO BE LIMBED UP TO AT LEAST 8 FT ABOVE DRIVE SURFACE GRADE WHILE MAINTAINING ENOUGH BRANCHES TO SUPPORT HEALTHY GROWTH.
  - DO NOT PLANT TREES ABOVE WATERLINES, UTILITIES, OR OTHER UNDERGROUND PIPING.
  - IF DISTURBANCE IS NECESSARY AROUND EXISTING TREES, CONTRACTOR SHALL PROTECT THE CROWN AND ALL WORK WITHIN THE TREE DRIPZONE SHALL BE LIMITED TO THE USE OF HAND TOOLS AND MANUAL EQUIPMENT ONLY.
  - REPLACE, REPAIR AND RESTORE DISTURBED LANDSCAPE AREAS DUE TO GRADING, TRENCHING OR OTHER REASONS TO PRE-CONSTRUCTION CONDITION AND PROVIDE MATERIAL APPROVED BY THE OWNER AND OWNER'S REPRESENTATIVE.
  - EXISTING AREAS PROPOSED FOR NEW PLANT MATERIAL SHALL BE CLEARED AND LEGALLY DISPOSED UNLESS SO NOTED.
  - A SOILS ANALYSIS, BY AN INDEPENDENT SOILS TESTING LABORATORY RECOGNIZED BY THE STATE DEPARTMENT OF AGRICULTURE, SHALL BE USED TO RECOMMEND AN APPROPRIATE PLANTING SOIL AND/OR SPECIFIED SOIL AMENDMENTS.
  - TOPSOIL SHALL BE AMENDED AS RECOMMENDED BY AN INDEPENDENT SOILS TESTING LABORATORY AND AS OUTLINED IN THE SPECIFICATION.
  - ALL LANDSCAPED AREAS SHALL BE COVERED BY A LAYER OF ORGANIC MULCH TO A MINIMUM DEPTH OF 2-INCHES.
- IRRIGATION**
- UNLESS OTHERWISE INDICATED, ALL NEW LANDSCAPE AREAS TO BE IRRIGATED WITH A FULLY AUTOMATIC UNDERGROUND IRRIGATION SYSTEM. PROVIDE LOOP SYSTEM FOR OPTIMUM EFFICIENCY.
  - CONTRACTOR SHALL SUBMIT SHOP DRAWINGS (IRRIGATION PLANS) TO LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. DRAWINGS TO INDICATE HEAD TYPE, GALLONS PER MINUTE, LATERAL LINES, AND BE AT MINIMUM SCALE OF 1"=20'
  - CONTRACTOR TO DETERMINE STATIC WATER PRESSURE AT THE P.O.C. PRIOR TO PREPARING SHOP DRAWINGS.
  - CONTRACTOR SHALL ESTABLISH MINIMUM PRESSURE AND MAXIMUM DEMAND REQUIREMENTS FOR IRRIGATION SYSTEM DESIGN, AND PROVIDE INFORMATION IN AN IRRIGATION SCHEDULE.
  - IRRIGATION SYSTEM AS DESIGNED AND INSTALLED SHALL PERFORM WITHIN THE TOLERANCES AND SPECIFICATIONS OF THE SPECIFIED MANUFACTURERS.
  - SYSTEM SHALL BE DESIGNED TO SUPPLY MANUFACTURER'S SPECIFIED MINIMUM OPERATING PRESSURE TO FARTHEST EMITTER FROM WATER METER.
  - SYSTEM SHALL PROVIDE HEAD TO HEAD COVERAGE WITHOUT OVERSPRAY ONTO BUILDING, FENCES, SIDEWALKS, PARKING AREAS, OR OTHER NON-VEGETATED SURFACES.
  - ALL IRRIGATION PIPE MATERIAL AND INSTALLATION SHALL CONFORM TO APPLICABLE CODE FOR PIPING AND COMPONENT REQUIREMENTS.
  - PROVIDE SLEEVING AT ALL AREAS WHERE PIPE TRAVELS UNDER CONCRETE OR HARD SURFACING.
  - VALVES SHALL BE WIRED AND INSTALLED PER MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES AND CONNECTED TO THE IRRIGATION CONTROLLER.
  - REFER TO CIVIL DETAILS AND DETAILS ON L5.11 FOR POINT OF CONNECTION AND BACKFLOW PREVENTION INFORMATION.
  - MAINLINE LAYOUT IS DIAGRAMMATIC ONLY.
  - CONTROLLER TO BE MOUNTED WITHIN BUILDING INTERIOR. GENERAL CONTRACTOR TO COORDINATE LOCATION WITH OWNER'S REPRESENTATIVE.
  - ZONE THE FOLLOWING AREAS SEPARATELY: TEMPORARY AREAS, PERMANENT LANDSCAPE AREAS, AND TREES.
  - QUICK COUPLERS TO BE PLACED EVERY 300 LINEAR FEET MAX.
  - IRRIGATION SHALL BE WINTERIZED THROUGH LOW PRESSURE, HIGH VOLUME AIR BLOWOUT CONNECTION THROUGH QUICK COUPLER.
  - THE SYSTEM SHALL BE GRAVITY DRAINED. THE CONTRACTOR SHALL PROVIDE APPROPRIATE MANUAL DRAINS AT LOW POINTS.



**MACKENZIE**  
DESIGN REVIEW - CLIENT PROVIDED

**DELTA LOGISTICS**  
9835 SW COMMERCIAL CIRCLE  
WILSONVILLE, OR 97070

**DELTA LOGISTICS**  
SITE EXPANSION  
9710 SW DAY RD.  
CITY OF WILSONVILLE, OR



© MACKENZIE 2022  
ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date
1	PLAN CHECK	10/07/2022

SHEET TITLE:  
**GENERAL LANDSCAPE NOTES**

DRAWN BY: SKA, JWT

CHECKED BY: NRF

SHEET

**L0.01**

JOB NO. 2200502.04

**DESIGN REVIEW SET 07/29/2022**







**TREE PROTECTION NOTES**

SEE G0.01 FOR PROJECT ARBORIST CONTACT INFORMATION.

1. PROTECTION FENCING: ESTABLISH TREE PROTECTION FENCING IN THE LOCATIONS SHOWN. THE INTENT OF THE TREE PROTECTION FENCING IS TO PROTECT THE MINIMUM ROOT PROTECTION ZONES DETAILED IN FIGURE 1. NOTE THAT THE TREE PROTECTION FENCING MAY BE MOVED TO ALLOW CONSTRUCTION ACCESS TO THE SIDE OF THE PROPOSED BUILDING FOLLOWING APPROVAL BY THE PROJECT ARBORIST.
2. DIRECTIONAL FELLING - FELL THE TREES TO BE REMOVED AWAY FROM THE TREES TO BE RETAINED SO THEY DO NOT CONTACT OR OTHERWISE DAMAGE THE TRUNKS OR BRANCHES OF THE RETAINED TREES. NO VEHICLES OR HEAVY EQUIPMENT SHOULD BE PERMITTED WITHIN THE TREE PROTECTION ZONES DURING TREE REMOVAL OPERATIONS.
3. STUMP REMOVAL - THE STUMPS OF THE TREES TO BE REMOVED FROM WITHIN THE TREE PROTECTION ZONES SHALL BE RETAINED OR CAREFULLY STUMP GROUND SO AS NOT TO DISTURB THE ROOT SYSTEMS OF THE RETAINED TREES.
4. PERIODIC RISK ASSESSMENTS: CONDUCT RISK ASSESSMENTS PERIODICALLY THROUGHOUT CONSTRUCTION TO DOCUMENT WHETHER TREES ARE ADAPTING TO THE NEW SITE CONDITIONS AND RISKS ARE MITIGATED APPROPRIATELY WITH CITY APPROVAL. THE RETAINED TREES WERE PREVIOUSLY PROTECTED WITHIN A STAND OF SURROUNDING TREES. THE REMOVAL OF ADJACENT TREES WILL EXPOSE THE RETAINED TREES TO CHANGES IN WIND FORCES WHICH WILL INCREASE THEIR RISK OF WINDTHROW. THE PROJECT ARBORIST SHALL CONDUCT A TREE RISK ASSESSMENT IMMEDIATELY FOLLOWING SITE CLEARING TO IDENTIFY TREES THAT POSE SIGNIFICANT RISKS. FOR TREES THAT POSE SIGNIFICANT RISKS, CONSULT PROJECT ARBORIST FOR RETENTION STRATEGIES, SUCH AS PRUNING OR SNAG CREATION. ANY RECOMMENDED TREE REMOVAL OR SNAG CREATION REQUIRES REVIEW AND APPROVAL OF THE CITY OF WILSONVILLE.
5. CONSTRUCTION ACCESS: WHEN ACCESSING THE SIDES OF THE BUILDING IN THE MODIFIED TREE PROTECTION ZONE, SOIL COMPACTION PREVENTION SUCH AS THE PLACEMENT OF STEEL PLATES IS REQUIRED TO PROTECT THE ROOT ZONES OF THE ADJACENT TREES.
6. ONSITE SUPERVISION OF PROJECT ARBORIST: THE PROJECT ARBORIST SHALL BE ONSITE TO OVERSEE THE RETAINING WALL EXCAVATION AND FOUNDATION CONSTRUCTION WITHIN AND ADJACENT TO THE TREE PROTECTION ZONES OF TREES PERIMETER TREES.

7. PROTECT CROWNS OF TREES: THE CROWNS OF THE TREES MAY EXTEND BEYOND THE TREE PROTECTION FENCING. CARE WILL NEED TO BE TAKEN TO NOT CONTACT OR OTHERWISE DAMAGE THE CROWNS OF THE TREES DURING CONSTRUCTION ACTIVITIES. ANY REQUIRED PRUNING SHALL BE COMPLETED BY AN ISA CERTIFIED ARBORIST CONSISTENT WITH ANSI A300 PRUNING STANDARDS AS DIRECTED BY THE PROJECT ARBORIST.
8. SEDIMENT FENCING: SEDIMENT FENCING SHALL BE INSTALLED OUTSIDE THE PROTECTION ZONES OF THE TREES TO BE RETAINED TO MINIMIZE ROOT DISTURBANCES. IF EROSION CONTROL IS REQUIRED INSIDE THE ROOT ZONES, STRAW WATTLES SHALL BE USED ON THE SOIL SURFACE.

**BEFORE CONSTRUCTION BEGINS**

1. NOTIFY ALL CONTRACTORS OF TREE PROTECTION PROCEDURES. FOR SUCCESSFUL TREE PROTECTION ON A CONSTRUCTION SITE, ALL CONTRACTORS MUST KNOW AND UNDERSTAND THE GOALS OF TREE PROTECTION.
  - a. HOLD A TREE PROTECTION MEETING WITH ALL CONTRACTORS TO EXPLAIN THE GOALS OF TREE PROTECTION.
  - b. HAVE ALL CONTRACTORS SIGN MEMORANDA OF UNDERSTANDING REGARDING THE GOALS OF TREE PROTECTION. THE MEMORANDA SHOULD INCLUDE A PENALTY FOR VIOLATING THE TREE PROTECTION PLAN. THE PENALTY SHOULD EQUAL THE RESULTING FINES ISSUED BY THE LOCAL JURISDICTION PLUS THE APPRAISED VALUE OF THE TREE(S) WITHIN THE VIOLATED TREE PROTECTION ZONE PER THE CURRENT TRUNK FORMULA METHOD AS OUTLINED IN THE CURRENT EDITION OF THE 'GUIDE FOR PLANT APPRAISAL' BY THE COUNCIL OF TREE AND LANDSCAPE APPRAISERS. THE PENALTY SHOULD BE PAID TO THE OWNER OF THE PROPERTY.
2. FENCING
  - a. TREE PROTECTION FENCING MAY BE SET AS SHOWN ON THE TREE PLAN.
  - b. THE FENCING SHOULD BE PUT IN PLACE BEFORE THE GROUND IS CLEARED TO PROTECT THE TREES AND THE SOIL AROUND THE TREE FROM DISTURBANCES.
  - c. FENCING SHOULD CONSIST OF 4-FOOT HIGH STEEL FENCING ON CONCRETE BLOCKS OR OTHER ANCHORING DEVICES, OR 4-FOOT METAL FENCING SECURED TO THE GROUND WITH 6-FOOT METAL POSTS TO PREVENT IT FROM BEING MOVED BY CONTRACTORS, SAGGING, OR FALLING DOWN.

- d. FENCING SHOULD REMAIN IN THE POSITION THAT IS ESTABLISHED BY THE PROJECT ARBORIST AND NOT BE MOVED WITHOUT APPROVAL FROM THE PROJECT ARBORIST UNTIL FINAL PROJECT APPROVAL.
2. SIGNAGE
  - a. ALL TREE PROTECTION FENCING SHOULD HAVE SIGNAGE AS FOLLOWS SO THAT ALL CONTRACTORS UNDERSTAND THE PURPOSE OF THE FENCING.

**TREE PROTECTION ZONE**

**DO NOT REMOVE OR ADJUST THE LOCATION OF THIS TREE PROTECTION FENCING. UNAUTHORIZED ENCROACHMENT MAY RESULT IN FINES.**

Please contact the project arborist if alterations to the location of the tree protection fencing are necessary.

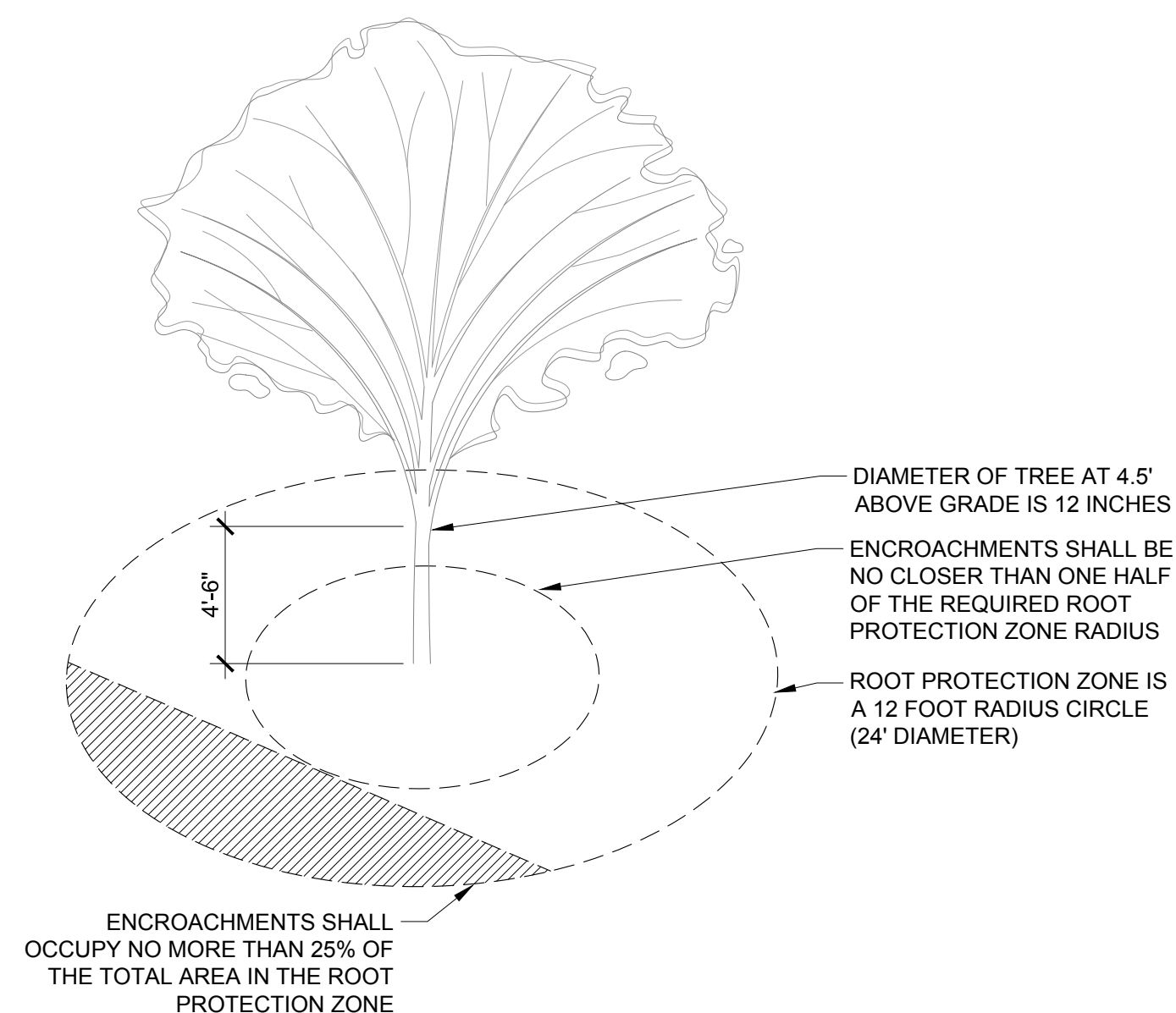
Project Arborist: Teregan & Associates, Inc. (503) 697-1975

- b. SIGNAGE SHOULD BE PLACED EVERY 75-FEET OR LESS.
- DURING CONSTRUCTION**
1. PROTECTION GUIDELINES WITHIN THE TREE PROTECTION ZONES:
    - a. NO NEW BUILDINGS, GRADE CHANGES OR CUT AND FILL, DURING OR AFTER CONSTRUCTION, NEW IMPERVIOUS SURFACES, OR UTILITY OR DRAINAGE FILED PLACEMENT SHOULD BE ALLOWED WITHIN THE TREE PROTECTION ZONES.
    - b. NO TRAFFIC SHOULD BE ALLOWED WITHIN THE TREE PROTECTION ZONES. THIS INCLUDES BUT IS NOT LIMITED TO VEHICLE, HEAVY EQUIPMENT, OR EVEN REPEATED FOOT TRAFFIC.
    - c. NO STORAGE OF MATERIALS INCLUDING BUT NOT LIMITED TO SOIL, ON STRUCTION MATERIALS, OR WASTE FROM THE SITE SHOULD BE PERMITTED WITHIN THE TREE PROTECTION ZONES. WASTE INCLUDES BUT IS NOT LIMITED TO CONCRETE WASH OUT, GASOLINE, DIESEL, PAINT, CLEANER, THINNERS, ETC.
    - d. CONSTRUCTION TRAILERS SHOULD NOT BE PARKED/PLACED WITHIN THE TREE PROTECTION ZONES.

6. NO VEHICLES SHOULD BE ALLOWED TO PARK WITHIN THE TREE PROTECTION ZONES.
7. NO OTHER ACTIVITIES SHOULD BE ALLOWED THAT WILL CAUSE SOIL COMPACTIONS WITHIN THE TREE PROTECTION ZONES.
8. THE TREES SHOULD BE PROTECTED FROM ANY CUTTING, SKINNING, OR BREAKING OF BRANCHES, TRUNKS OR WOODY ROOTS.
9. THE PROJECT ARBORIST SHOULD BE NOTIFIED PRIOR TO THE CUTTING OF WOODY ROOTS FROM TREES THAT ARE TO BE RETAINED TO EVALUATE AND OVERSEE THE PROPER CUTTING OF ROOTS WITH SHARP CUTTING TOOLS. CUT ROOTS SHOULD BE IMMEDIATELY COVERED WITH SOIL OR MULCH TO PREVENT THEM FROM DRYING OUT.
10. TREES THAT HAVE WOODY ROOTS CUT SHOULD BE PROVIDED SUPPLEMENTAL WATER DURING THE SUMMER MONTHS.
11. ANY NECESSARY PASSAGE OF UTILITIES WITHIN THE TREE PROTECTION ZONES SHOULD BE BY MEANS OF TUNNELING UNDER WOODY ROOTS BY HAND DIGGING OR BORING WITH OVERSIGHT BY THE PROJECT ARBORIST.
12. ANY DEVIATION FROM THE RECOMMENDATIONS IN THIS SECTION SHOULD RECEIVE PRIOR APPROVAL FROM THE PROJECT ARBORIST.

**AFTER CONSTRUCTION**

1. CAREFULLY LANDSCAPE THE AREAS WITHIN THE TREE PROTECTION ZONES. DO NOT ALLOW TRENCHING FOR IRRIGATION OR OTHER UTILITIES WITHIN THE TREE PROTECTION ZONES.
2. CAREFULLY PLANT NEW PLANTS WITHIN THE TREE PROTECTION ZONES. AVOID CUTTING THE WOODY ROOTS OF TREES THAT ARE RETAINED.
3. DO NOT INSTALL PERMANENT IRRIGATION WITHIN THE TREE PROTECTION ZONES UNLESS IT IS DRIP IRRIGATION TO SUPPORT A SPECIFIC PLANTING OR THE IRRIGATION IS APPROVED BY THE PROJECT ARBORIST.
4. PROVIDE ADEQUATE DRAINAGE WITHIN THE TREE PROTECTION ZONES AND DO NOT ALTER SOIL HYDROLOGY SIGNIFICANTLY FROM EXISTING CONDITIONS FOR THE TREES TO BE RETAINED.
5. PROVIDE FOR THE ONGOING INSPECTION AND TREATMENT OF INSECT AND DISEASE POPULATIONS THAT CAN DAMAGE THE RETAINED TREES AND PLANTS.
6. THE RETAINED TREES MAY NEED TO BE FERTILIZED IF RECOMMENDED BY THE PROJECT ARBORIST.
7. ANY DEVIATION FROM THE RECOMMENDATIONS IN THIS SECTION SHOULD RECEIVE PRIOR APPROVAL FROM THE PROJECT ARBORIST.



**1 ROOT PROTECTION ZONE** SCALE: NTS

**TREE DATA**

ALL TREES (257 TREES)	QTY	RETAIN	REMOVE	MITIGATION
ON SITE < 6" DBH	200	11	189	189
PUBLIC < 6" DBH	21	0	21	21
OFF SITE < 6" DBH	36	36	0	0
<b>TOTAL</b>	<b>257</b>	<b>47</b>	<b>210</b>	<b>210</b>

**TREE INVENTORY - ON SITE AND PUBLIC**

EXISTING	BOTANICAL / COMMON NAME	QTY
+	DOUGLAS FIR TO REMOVE	190
•	DOUGLAS FIR TO REMAIN	5
•	ENGLISH HAWTHORN TO REMAIN	1
•	OREGON ASH TO REMAIN	3
+	STREET TREES TO REMOVE	18
+	SWEET CHERRY TO REMOVE	2
•	WILLOW TO REMAIN	2

**TREE INVENTORY - OFF SITE PRIVATE**

EXISTING	BOTANICAL / COMMON NAME	QTY
•	BIGLEAF MAPLE TO REMAIN	1
•	DOUGLAS FIR TO REMAIN	33
•	OREGON WHITE OAK TO REMAIN	1
•	PACIFIC MADRONE TO REMAIN	1

**M**  
 Architecture • Interiors  
 Planning • Engineering  
 Portland, OR  
 503.224.9560  
 Vancouver, WA  
 360.695.7879  
 Seattle, WA  
 206.749.9993  
 www.mckenzie.com  
**MACKENZIE**  
 DESIGN REVIEW • CLIENT PROVIDED

Client: **DELTA LOGISTICS**  
 9835 SW COMMERCE CIRCLE  
 WILSONVILLE, OR 97070



- WALL, SEE CIVIL
- TREE PROTECTION FENCING, SEE 5L.5.10
- FULL ROOT PROTECTION ZONE
- MINIMUM CONSTRUCTION SETBACK RADIUS



Project: **DELTA LOGISTICS SITE EXPANSION**  
 9835 SW DAY RD.  
 CITY OF WILSONVILLE, OR

PRELIMINARY  
 NOT FOR  
 CONSTRUCTION

© MACKENZIE 2022  
 ALL RIGHTS RESERVED  
 THESE DRAWINGS ARE THE PROPERTY OF MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE

Delta	Issued As	Issue Date
1	PLAN CHECK	10/07/2022

SHEET TITLE:  
**TREE REMOVAL PLAN**

DRAWN BY: SKA  
 CHECKED BY: NRF  
 SHEET

**L0.03**  
 JOB NO. **2200502.04**



**MITIGATION REQUIREMENTS**

REPLACE LIVING TREES 6-INCH IN DBH OR LARGER WITH A 2-INCH CALIPER TREE OR LARGER OF SIMILAR MATURE CANOPY SIZE AND STRUCTURE.

TOTAL TREES REQUIRING MITIGATION	210
TOTAL 2" CAL. TREES IN PLAN	210
TOTAL TREES REQUIRING FEE IN LIEU	0

TREE CREDITS (SECTION 4.176.06 F)  
 DBH IS 18-24" 3 TREE CREDITS  
 DBH IS 25-31" 4 TREE CREDITS  
 DBH IS 32" OR GREATER 5 TREE CREDITS

FOR FULL LIST OF TREES TO BE REMOVED SEE EXHIBIT D ARBORIST'S REPORT.

TREES TO BE RETAINED	DBH	CREDITS	CONDITION
549 CRATAEGUS MONOGYNA	5"	0	FAIR
791 WILLOW / SALIX	20"	0	POOR
1847 DOUGLAS-FIR / PSEUDOTSUGA MENZIESII	22"	0	FAIR
2072 OREGON ASH / FRAXINUS LATIFOLIA	11"	0	POOR
2073 WILLOW / SALIX	14"	0	DEAD
2074 OREGON ASH / FRAXINUS LATIFOLIA	20"	0	POOR
2075 OREGON ASH / FRAXINUS LATIFOLIA	14"	0	FAIR
2278 DOUGLAS-FIR / PSEUDOTSUGA MENZIESII	14"	0	POOR
2340 DOUGLAS-FIR / PSEUDOTSUGA MENZIESII	22"	0	GOOD
2366 DOUGLAS-FIR / PSEUDOTSUGA MENZIESII	13"	0	POOR
2374 DOUGLAS-FIR / PSEUDOTSUGA MENZIESII	12"	0	GOOD

TOTAL TREE CREDITS 0 TREES

**EXISTING TREE INVENTORY**

EXISTING	BOTANICAL / COMMON NAME	QTY
●	DOUGLAS FIR TO REMAIN	5
●	ENGLISH HAWTHORN TO REMAIN	1
●	OREGON ASH TO REMAIN	3
●	WILLOW TO REMAIN	2

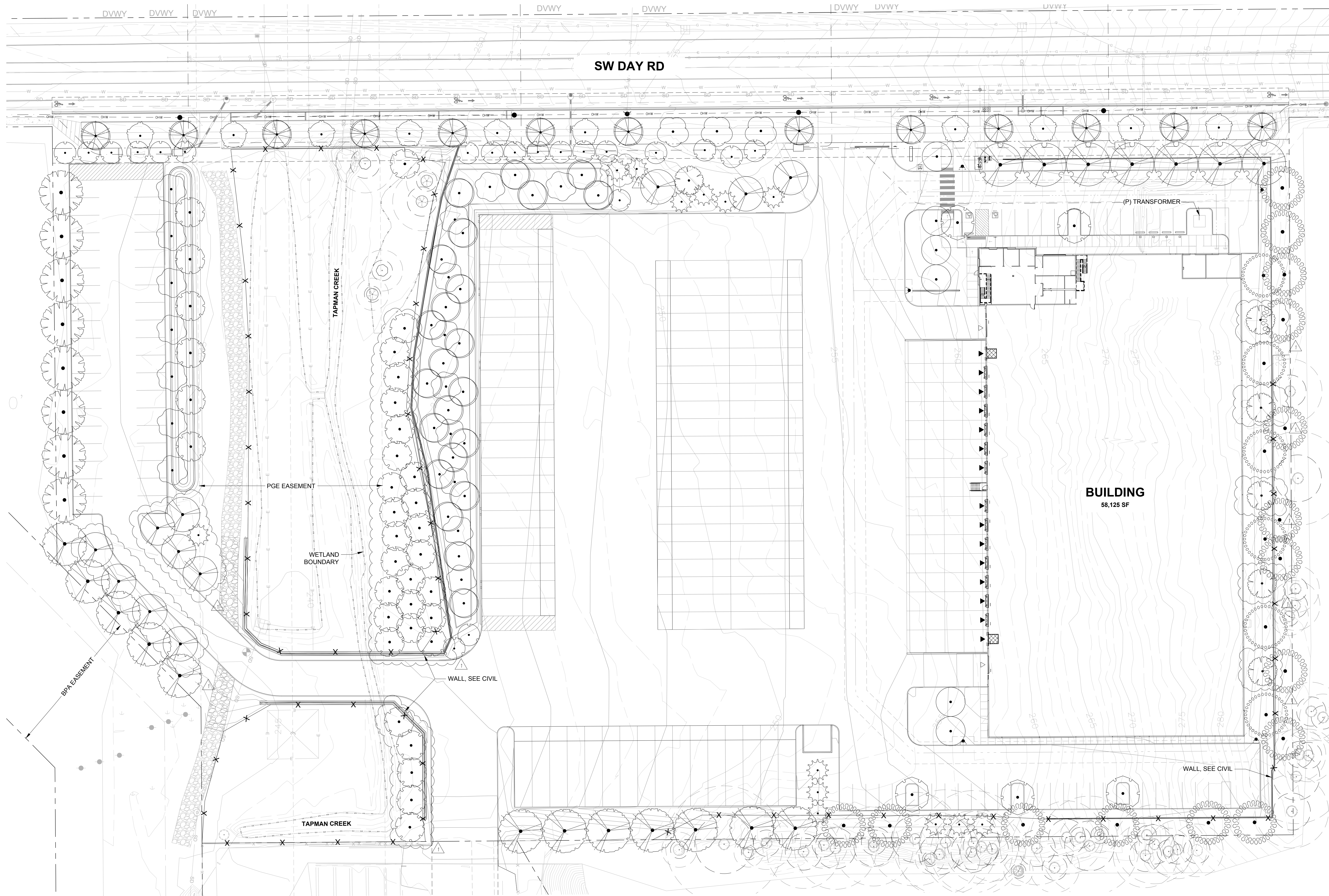
**PROPOSED TREES**

ACCENT TREES	QTY	BOTANICAL / COMMON NAME
●	6	ACER RUBRUM 'BOHALL' BOHALL RED MAPLE
●	20	AMELANCHIER ALNIFOLIA 'AUTUMN BRILLIANCE' SERVICEBERRY
●	6	CORNUS KOUSA X NUTTALLII 'KN4-43' STARLIGHT KOUSA DOGWOOD
PRIMARY TREES	QTY	BOTANICAL / COMMON NAME
●	7	FRAXINUS PENNSYLVANICA 'MARSHALL'S SEEDLESS' MARSHALL'S SEEDLESS GREEN ASH
●	6	PINUS PONDEROSA PONDEROSA PINE
●	15	PSEUDOTSUGA MENZIESII DOUGLAS FIR
●	12	QUERCUS GARRYANA OREGON WHITE OAK
●	8	ZELKOVA SERRATA 'GREEN VASE' GREEN VASE SAWLEAF ZELKOVA
SECONDARY TREES	QTY	BOTANICAL / COMMON NAME
●	13	CALOCEDRUS DECURRENS INCENSE CEDAR
●	11	TILIA TOMENTOSA 'STERLING' STERLING SILVER LINDEN
●	5	ULMUS X 'FRONTIER' FRONTIER ELM
STORMWATER TREES	QTY	BOTANICAL / COMMON NAME
●	17	CORNUS X 'EDDIE'S WHITE WONDER' EDDIE'S WHITE WONDER DOGWOOD
●	35	FRAXINUS LATIFOLIA OREGON ASH
●	23	RHAMNUS PURSHIANA CASCARA BUCKTHORN
STREET TREES	QTY	BOTANICAL / COMMON NAME
●	13	ACER GRANDIDENTATUM 'SCHMIDT' TM ROCKY MOUNTAIN GLOW MAPLE
●	3	CORNUS KOUSA 'MILKY WAY' MILKY WAY KOUSA DOGWOOD
●	10	PARROTIA PERSICA 'INGE'S RUBY VASE' TM RUBY VASE PERSIAN PARROTIA

**NOTE**

1. OFFSITE TREES IMPACTED BY ONSITE IMPROVEMENT ON ADJACENT PRIVATE PROPERTY ARE RECOMMENDED FOR REMOVAL AND MITIGATION CONTINGENT UPON APPROVAL OF ADJACENT PROPERTY OWNER.

FULL ROOT PROTECTION ZONE  
 MINIMUM CONSTRUCTION SETBACK RADIUS



**DELTA LOGISTICS**  
 9835 SW COMMERCE  
 CIRCLE  
 WILSONVILLE, OR  
 97070

Project  
**DELTA LOGISTICS**  
 SITE EXPANSION  
 9710 SW DAY RD.  
 CITY OF  
 WILSONVILLE, OR



© MACKENZIE 2022  
 ALL RIGHTS RESERVED  
 THESE DRAWINGS ARE THE PROPERTY OF  
 MACKENZIE AND ARE NOT TO BE USED  
 OR REPRODUCED IN ANY MANNER  
 WITHOUT PRIOR WRITTEN PERMISSION

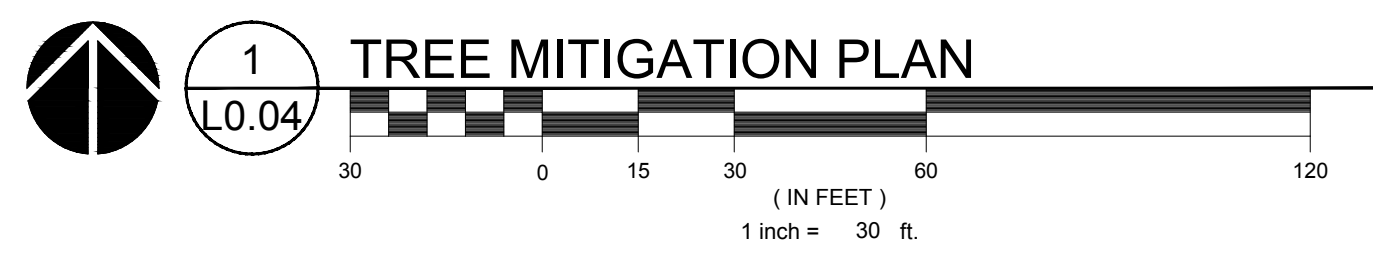
REVISION SCHEDULE		
Delta	Issued As	Issue Date
1	PLAN CHECK	10/06/2022

SHEET TITLE:  
**TREE MITIGATION PLAN**

DRAWN BY: AEZ, JWT  
 CHECKED BY: NRF  
 SHEET

**L0.04**

JOB NO. 2200502.04





**MITIGATION PLANTING NOTES**

NOTES PER EXHIBIT C NATURAL RESOURCE ASSESSMENT FOR 9710 SW DAY ROAD PREPARED BY SCHOTT AND ASSOCIATES (2022).

**SITE PREPARATION**  
PRIOR TO ANY SITE CLEARING, GRADING OR CONSTRUCTION, THE SROZ AREA SHALL BE STAKED, AND FENCED PER APPROVED PLAN. DURING CONSTRUCTION, THE SROZ AREA SHALL REMAIN FENCED AND UNDISTURBED EXCEPT AS ALLOWED BY AN APPROVED DEVELOPMENT PERMIT.

**PROPOSED ENCROACHMENTS**  
ENCROACHMENTS ARE PROPOSED TO THE VEGETATED CORRIDOR AND IMPACT AREA.

- ENCROACHMENTS WILL OCCUR IN THE NORTHERN PORTION OF THE VEGETATED CORRIDOR FOR THE CITY REQUIRED WIDENING OF SW DAY RD AND IN THE SOUTHERN PORTION FOR THE TAPMAN CREEK CROSSING. THESE AREAS ARE VEGETATED ENTIRELY BY INVASIVE SPECIES INCLUDING HIMALAYAN BLACKBERRY AND REED CANARY GRASS. NO TREES OR NATIVE SPECIES WILL BE REMOVED AS A RESULT OF CONSTRUCTION.
- ENCROACHMENTS WILL OCCUR ON BOTH SIDES OF THE CREEK FOR THE ROAD CROSSING AND ALONG THE EASTERN PORTION OF THE IMPACT AREA FOR THE ROAD WIDENING, CREEK CROSSING, AND CONSTRUCTION OF A VEGETATED WATER QUALITY AND STORMWATER DETENTION FACILITY. NO ENCROACHMENTS TO TAPMAN CREEK OR THE WETLANDS ARE PROPOSED. NO TREES WILL BE REMOVED FROM THE SROZ.
- DEVELOPMENT ACTIVITY HAS BEEN LIMITED TO THE IMPACT AREA WHERE PRACTICAL EXCEPT WHERE NECESSARY TO WIDEN SW DAY ROAD AND CROSS TAPMAN CREEK TO ACCESS THE WESTERN PORTION OF THE SITE.

**MITIGATION PLANTING**  
THE MITIGATION PLANTING PLAN WAS DESIGNED ACCORDING SECTION 4.139.07.(02)(E) AND SHALL MEET THE FOLLOWING:

- THE PLANTING PLAN SHALL BE IMPLEMENTED PRIOR TO OR AT THE SAME TIME AS THE IMPACT ACTIVITY IS CONDUCTED.
- ALL TREES, SHRUBS AND GROUND COVER SHALL BE NATIVE VEGETATION.
- TREES AND SHRUBS SHALL BE AT LEAST ONE-GALLON IN SIZE AND SHALL BE AT LEAST TWELVE (12) INCHES IN HEIGHT.
- TREES SHALL BE PLANTED BETWEEN EIGHT (8) AND TWELVE (12) FEET ON CENTER, AND SHRUBS SHALL BE PLANTED BETWEEN FOUR (4) AND FIVE (5) FEET ON CENTER, OR CLUSTERED IN SINGLE SPECIES GROUPS OF NO MORE THAN FOUR (4) PLANTS, WITH EACH CLUSTER PLANTED BETWEEN EIGHT (8) AND TEN (10) FEET ON CENTER, WHEN PLANTING NEAR EXISTING TREES, THE DRIP LINE OF THE EXISTING TREE SHALL BE THE STARTING POINT FOR PLANT SPACING MEASUREMENTS.
- SHRUBS SHALL CONSIST OF AT LEAST TWO (2) DIFFERENT SPECIES. IF FIVE (5) TREES OR MORE ARE PLANTED, THEN NO MORE THAN FIFTY (50) PERCENT OF THE TREES MAY BE OF THE SAME GENUS.
- INVASIVE NON-NATIVE OR NOXIOUS VEGETATION SHALL BE REMOVED WITHIN THE MITIGATION AREA PRIOR TO PLANTING AND SHALL BE REMOVED OR CONTROLLED FOR FIVE (5) YEARS FOLLOWING THE DATE THAT THE MITIGATION PLANTING IS COMPLETED.

**MITIGATION GOALS AND PERFORMANCE STANDARDS**  
THE MITIGATION SITE GOAL IS AS FOLLOWS:

ENHANCE 32,890 SQ. FT. OF VEGETATED CORRIDOR TO IMPROVE RIPARIAN CORRIDOR, WATER QUALITY PROTECTION, ECOLOGICAL INTEGRITY AND WILDLIFE HABITAT FUNCTIONS BY REMOVING INVASIVE SPECIES AND MAINTAINING A NATIVE, WOODY-DOMINATED PLANT COMMUNITY.

PERFORMANCE STANDARDS ARE BASED ON METRO'S TITLE 3 WATER QUALITY PERFORMANCE STANDARDS TO PROTECT AND IMPROVE WATER QUALITY AND PROTECT THE FUNCTIONS AND VALUES OF WATER QUALITY RESOURCE AREAS (METRO 2018). THIS PLAN'S PERFORMANCE STANDARDS FOR FOREST AND/OR SHRUB DOMINATED AREAS AND SHALL CONSIST OF THE FOLLOWING:

- ESTABLISHMENT OF PERMANENT MONITORING LOCATIONS DURING THE FIRST ANNUAL MONITORING.
- COVER OF NATIVE HERBACEOUS SPECIES IS AT LEAST 60%.
- COVER OF INVASIVE SPECIES IS NO MORE THAN 10%. AFTER THE SITE HAS MATURED TO THE STAGE WHEN DESIRABLE CANOPY SPECIES REACH 50% COVER, THE COVER OF INVASIVE SPECIES MAY INCREASE BUT MAY NOT EXCEED 30%.
- BARE SUBSTRATE REPRESENTS NO MORE THAN 20% COVER.
- DENSITY OF WOODY VEGETATION IS AT LEAST 1,000 LIVE TREES OR SHRUBS PER ACRE OR THE COVER OF NATIVE WOODY VEGETATION ON SITE IS AT LEAST 50%. NATIVE VOLUNTEER SPECIES MAY BE INCLUDED IN THE COVER OR DENSITY ESTIMATE.
- BY YEAR 3 AND THEREAFTER, AT LEAST 6 DIFFERENT NATIVE SPECIES MUST BE PRESENT, TO QUALIFY, A SPECIES MUST HAVE AT LEAST 5% AVERAGE COVER IN THE HABITAT CLASS AND OCCUR IN AT LEAST 10% OF THE PLOTS SAMPLED.
- BY YEAR 5, A MINIMUM OF EIGHTY (80) PERCENT OF THE TREES AND SHRUBS INITIALLY REQUIRED SHALL REMAIN ALIVE.

**MAINTENANCE AND MONITORING**

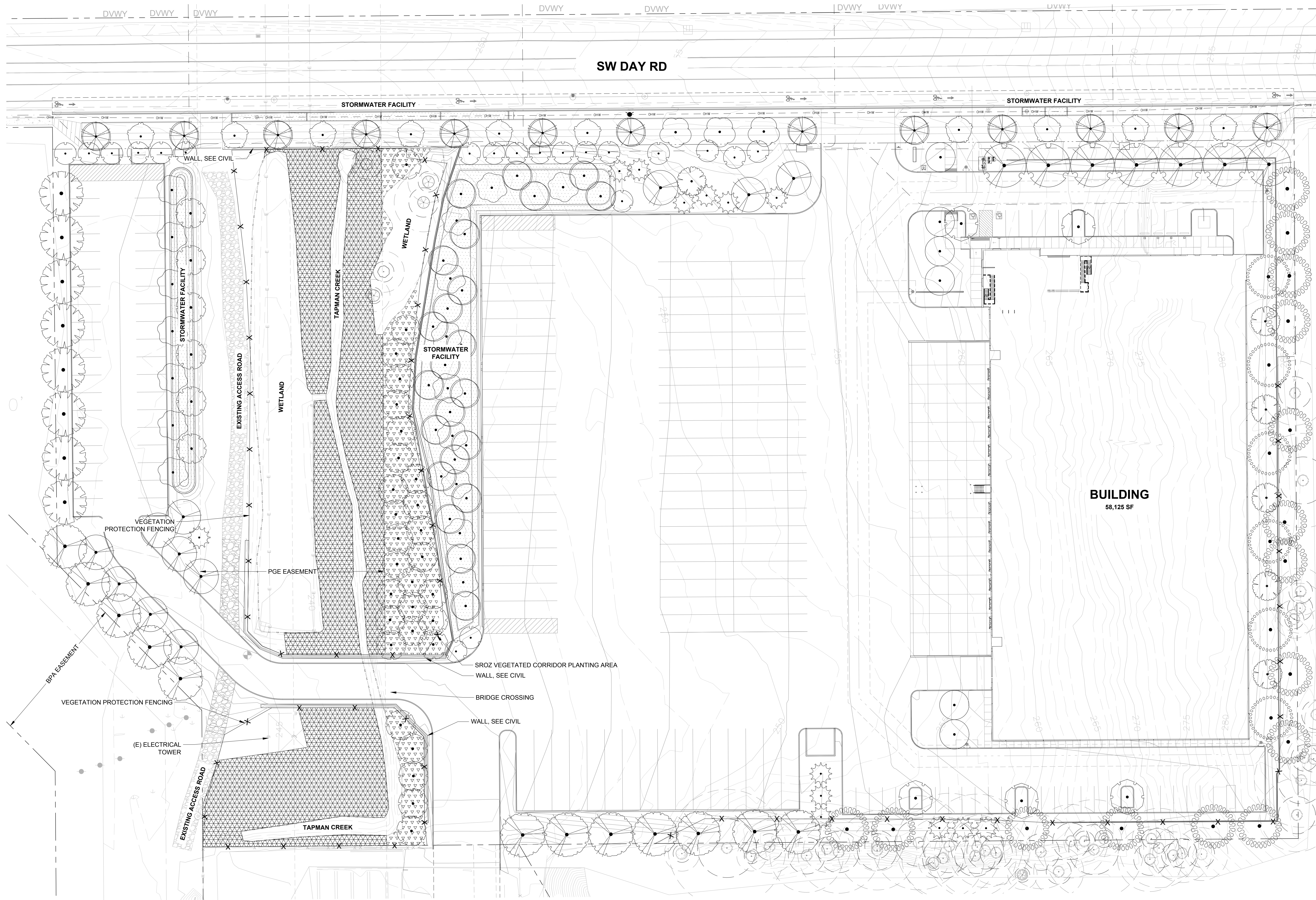
MONITORING WILL OCCUR ANNUALLY OVER A 5-YEAR MONITORING PERIOD TO ASSESS CONDITION OF PLANTINGS, IRRIGATION, MULCH ETC. MONITORING WILL BE CONDUCTED BY QUALIFIED PERSONNEL DURING PEAK GROWING SEASON (JULY-AUGUST). ANNUAL MONITORING REPORTS WILL BE PROVIDED TO THE PLANNING DIRECTOR FOR REVIEW BY DECEMBER OF EACH MONITORING YEAR. THE REPORT SHALL CONTAIN, AT A MINIMUM, PHOTOGRAPHS FROM ESTABLISHED PHOTO POINTS, QUANTITATIVE MEASURE OF SUCCESS CRITERIA, INCLUDING PLANT SURVIVAL AND VIGOR. THE YEAR 1 ANNUAL REPORT SHALL BE SUBMITTED ONE YEAR FOLLOWING MITIGATION ACTION IMPLEMENTATION. THE FINAL ANNUAL REPORT (YEAR 5 REPORT) SHALL DOCUMENT SUCCESSFUL SATISFACTION OF MITIGATION GOALS, AS PER THE STATED PERFORMANCE STANDARDS.

THE APPLICANT WILL BE RESPONSIBLE FOR COORDINATING ONGOING MAINTENANCE AND MANAGEMENT. IF THE OWNERSHIP OF THE MITIGATION SITE PROPERTY CHANGES, THE NEW OWNERS WILL HAVE THE CONTINUED RESPONSIBILITIES MAINTENANCE ACTIVITIES INCLUDING MULCHING, WEED REMOVAL, HERBIVORY CONTROL, AND SUPPLEMENTAL PLANTING WILL BE CONDUCTED BY A QUALIFIED CONTRACTOR AT LEAST TWICE PER GROWING SEASON AND ONCE PRIOR TO THE GROWING SEASON OR MORE FREQUENTLY AS INDICATED BY MONITORING RESULTS. ANY FAILED PLANTS WILL BE REPLACED IN-KIND WITH THE CAUSE OF LOSS WILDLIFE DAMAGE, POOR PLANT STOCK, DROUGHT, WEED OVERGROWTH, ETC.) DOCUMENTED AND ADDITIONAL MAINTENANCE DONE TO ADDRESS THE CAUSE OF LOSS AND ENSURE FUTURE PLANT SURVIVAL.

**MITIGATION PLANT SCHEDULE PER SRIR**

RIPARIAN FOREST COMMUNITY: 8,600 SQ. FT.					
SPECIES	TYPE	MIN SIZE*	SPACING	QTY	TOTAL
OREGON ASH	TREE	2 GAL	8'0C	19	28
FRAXINUS LATIFOLIA	TREE	2 GAL OR BARE ROOT	8'0C	37	37
SCOULE'S WILLOW	TREE	2 GAL OR BARE ROOT	8'0C	60	134
SALIX SCOULEIANA	TREE	2 GAL OR BARE ROOT	8'0C	60	134
WESTERN REDCEDAR	TREE	2 GAL OR BARE ROOT	8'0C	60	134
THUJA PLICATA	TREE	2 GAL OR BARE ROOT	8'0C	60	134
REDOSBIER DOGWOOD	SHRUB	1 GAL OR BARE ROOT	5'0C	86	86
CORNUS STOLONIFERA	SHRUB	1 GAL OR BARE ROOT	5'0C	86	86
RED ELDERBERRY	SHRUB	1 GAL OR BARE ROOT	5'0C	86	86
SAMBUCUS RACEMOSA	SHRUB	1 GAL OR BARE ROOT	5'0C	86	86
SNOWBERRY	SHRUB	1 GAL OR BARE ROOT	5'0C	86	86
SYMPHORICARPOS ALBUS	SHRUB	1 GAL OR BARE ROOT	5'0C	86	86
RUBUS SPECTABILIS	SHRUB	1 GAL OR BARE ROOT	5'0C	86	86
SWAMP ROSE	SHRUB	1 GAL OR BARE ROOT	5'0C	86	86
ROSA PISOCARPA	SHRUB	1 GAL OR BARE ROOT	5'0C	86	86
RIPARIAN SHRUB COMMUNITY: 24,283 SQ. FT.					
SPECIES	TYPE	MIN SIZE*	SPACING	QTY	TOTAL
REDOSBIER DOGWOOD	SHRUB	1 GAL OR BARE ROOT	5'0C	200	200
CORNUS STOLONIFERA	SHRUB	1 GAL OR BARE ROOT	5'0C	200	200
RED ELDERBERRY	SHRUB	1 GAL OR BARE ROOT	5'0C	200	200
SAMBUCUS RACEMOSA	SHRUB	1 GAL OR BARE ROOT	5'0C	213	213
SNOWBERRY	SHRUB	1 GAL OR BARE ROOT	5'0C	200	200
SYMPHORICARPOS ALBUS	SHRUB	1 GAL OR BARE ROOT	5'0C	200	200
SALMONBERRY	SHRUB	1 GAL OR BARE ROOT	5'0C	200	200
RUBUS SPECTABILIS	SHRUB	1 GAL OR BARE ROOT	5'0C	200	200
SWAMP ROSE	SHRUB	1 GAL OR BARE ROOT	5'0C	200	200
ROSA PISOCARPA	SHRUB	1 GAL OR BARE ROOT	5'0C	200	200
INDIAN PLUM	SHRUB	1 GAL OR BARE ROOT	5'0C	200	1,843
OEMLERIA CERASIFORMIS	SHRUB	1 GAL OR BARE ROOT	5'0C	200	1,843
PROTOME 402*	HERB	25 LBS PER ACRE			17.5 LBS

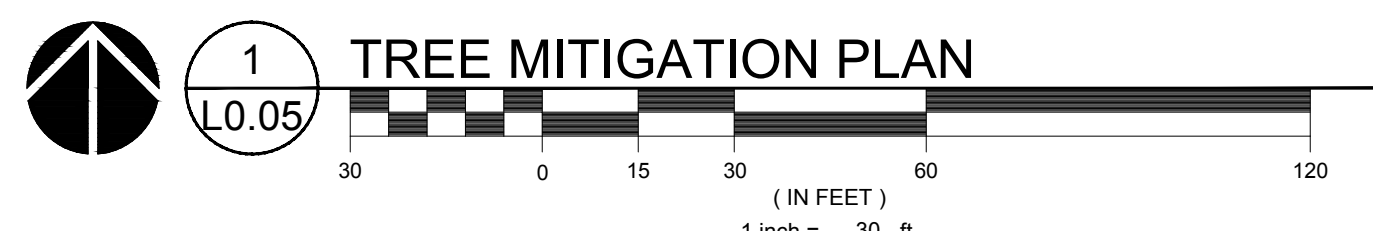
\*NATIVE RIPARIAN MIX INCLUDES BLUE WILDRYE (ELYMUS GLAUCUS), MEADOW BARLEY (HORDEUM BRACHYANTHERUM), AND TUFTED HAIRGRASS (DESCHAMPSIA CESPITOSA)



**PROPOSED PLANT LIST (REMAINDER OF SITE)**

IN COMPLIANCE WITH THE MITIGATION REQUIREMENTS, NATIVE AND DROUGHT TOLERANT VEGETATION IS USED THROUGHOUT THE SITE.

PLANT NAME	NATIVE STATUS
<b>ACCENT TREES</b>	
ACER RUBRUM 'BOVHALL'	NATIVE CULTIVAR
AMELANCHIER ALNIFOLIA 'AUTUMN BRILLIANCE'	NATIVE CULTIVAR
CORNUS KOUSA X NUTTALLII 'KW4-43'	NATIVE CULTIVAR
<b>PRIMARY TREES</b>	
FRAXINUS PENNSYLVANICA 'MARSHALL'S SEEDLESS'	NATIVE
FRAXINUS PONDEROSA	NATIVE
PSUEDOTSUGA MENZIESII	NATIVE
QUERCUS GARRYANA	NATIVE
ZELKOVA SERRATA 'GREEN VASE'	NATIVE
<b>SECONDARY TREES</b>	
CALOCEDRUS DECCURRENS	NATIVE
TILIA TOMENTOSA 'STERLING'	NATIVE
ULMUS X 'FRONTIER'	NATIVE
<b>STORMWATER TREES</b>	
CORNUS X 'EDDIE'S WHITE WONDER'	NATIVE CULTIVAR
FRAXINUS LATIFOLIA	NATIVE
RHAMNUS PURSHIANA	NATIVE
<b>STREET TREES</b>	
ACER GRANDIDENTATUM 'SCHMIDT' TM	
CORNUS KOUSA 'MILKY WAY'	
PARROTTIA PERSICA 'INGE'S RUBY VASE' TM	
<b>SHRUBS</b>	
ARBUTUS UNEDO 'COMPACTA'	NATIVE CULTIVAR
CORNUS SERICEA 'KELSEY'	NATIVE
DEUTZIA GRACILIS 'NINKO'	NATIVE
GAULTHERIA SHALLOM	NATIVE CULTIVAR
MAHONIA AQUIFOLIUM	NATIVE CULTIVAR
MAHONIA AQUIFOLIUM 'COMPACTA'	NATIVE
MIRICA CALIFORNICA	NATIVE
RIBES SANGUINEUM	NATIVE CULTIVAR
SPIRAEA BETULIFOLIA 'TOR'	NATIVE
SYMPHORICARPOS ALBUS	NATIVE CULTIVAR
VACCINIUM OVATUM	NATIVE
VIBURNUM DAVIDII	NATIVE
VIBURNUM TINUS 'SPRING BOUQUET'	NATIVE
<b>PERENNIALS</b>	
ACHILLEA MILLIFOLIUM 'ALABASTER'	NATIVE CULTIVAR
ASTER SUBSPICATUS	NATIVE
POLYSTICHUM MUNITUM	NATIVE
PTERIDIUM AQUILINUM	NATIVE
SALVIA X SUPERBA 'CARADONNA'	NATIVE
<b>STORMWATER SHRUBS</b>	
CORNUS SERICEA	NATIVE
HOLCOXISUS DISCOLOR	NATIVE
MAHONIA AQUIFOLIUM	NATIVE
RIBES SANGUINEUM	NATIVE
ROSA PISOCARPA	NATIVE
RUBUS SPECTABILIS	NATIVE CULTIVAR
SPIRAEA BETULIFOLIA 'TOR'	NATIVE
SPIRAEA DOUGLASSII	NATIVE
SYMPHORICARPOS ALBUS	NATIVE
<b>GROUND COVERS</b>	
ARCTOSTAPHYLOS UVA-URSI	NATIVE
BOUTELOUJA GRACILIS 'BLONDE AMBITION'	NATIVE
CRUSHED GRAVEL	NATIVE
FESTUCA OCCIDENTALIS	NATIVE
GERANIUM X CANTABRIGIENSE 'BIOKOVO'	NATIVE
MAHONIA REPENS	NATIVE
'PROTOME 402' NATIVE RIPARIAN MIX	NATIVE
SEED MIX NATIVE POLLINATOR MEADOW MIX	NATIVE
SEED MIX NATIVE UPLANDS MEADOW MIX	NATIVE
<b>STORMWATER PLANTING</b>	
CAREX BENSIA	NATIVE
CAREX OBNUPTA	NATIVE
JUNCUS PATENS	NATIVE



**M**  
Architecture • Interiors  
Planning • Engineering  
Portland, OR  
503.224.9560  
Vancouver, WA  
360.695.7879  
Seattle, WA  
206.749.9993  
www.mckenzie.com  
**MACKENZIE**  
DESIGN REVIEW • CLIENT PROVIDED  
Client:

**DELTA LOGISTICS**  
9835 SW COMMERCE  
CIRCLE  
WILSONVILLE, OR  
97070

Project  
**DELTA LOGISTICS**  
SITE EXPANSION  
9710 SW DAY RD.  
CITY OF  
WILSONVILLE, OR



© MACKENZIE 2022  
ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

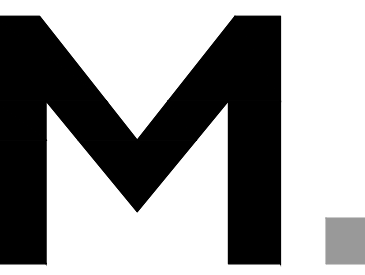
REVISION SCHEDULE		
Delta	Issued As	Issue Date
1	PLAN CHECK	10/06/2022

SHEET TITLE:  
**VEGETATED  
CORRIDOR  
ENHANCEMENT  
PLANTING PLAN**

DRAWN BY: AEZ, LJM, JWT  
CHECKED BY: NRF  
SHEET

**L0.05**  
JOB NO. 2200502.04





Architecture - Interiors  
Planning - Engineering

Portland, OR  
503.224.9560  
Vancouver, WA  
360.695.7879  
Seattle, WA  
206.749.9983  
www.mcknize.com

**MACKENZIE**  
DESIGN REVIEW - CLIENT PROVIDED

Client

**DELTA LOGISTICS**  
9835 SW COMMERCE  
CIRCLE  
WILSONVILLE, OR  
97070

Project

**DELTA LOGISTICS**  
SITE EXPANSION  
9710 SW DAY RD.  
CITY OF  
WILSONVILLE, OR



© MACKENZIE 2022  
ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date
1	PLANCHECK	10/06/2022

SHEET TITLE:  
**PLANTING PLAN  
- WEST**

DRAWN BY: SKA

CHECKED BY: NRF

SHEET

**L1.10**

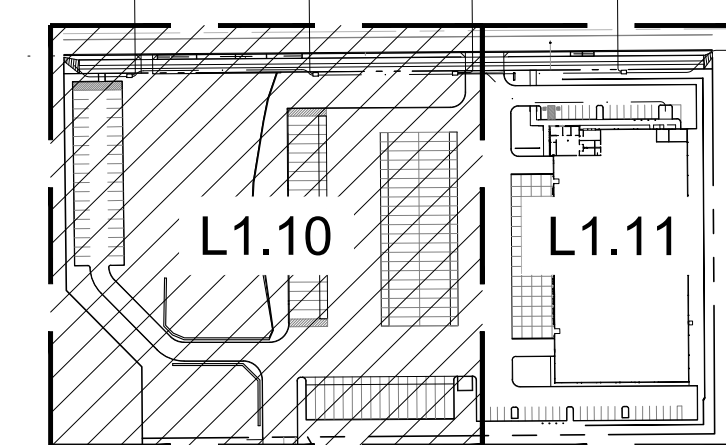
JOB NO. **2200502.04**

**PLANT KEY LEGEND**

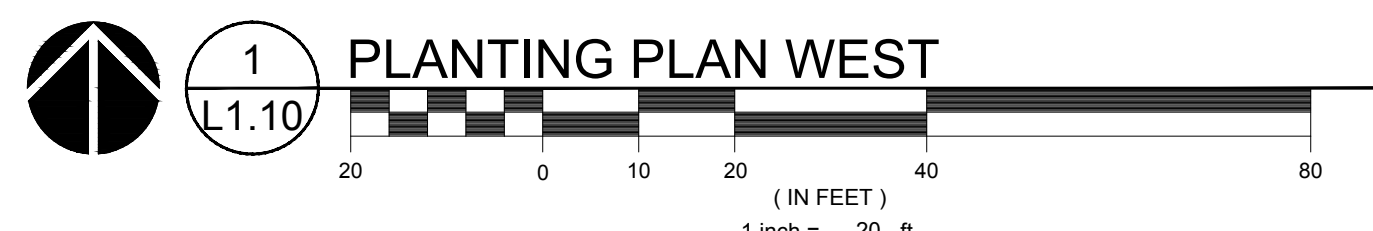
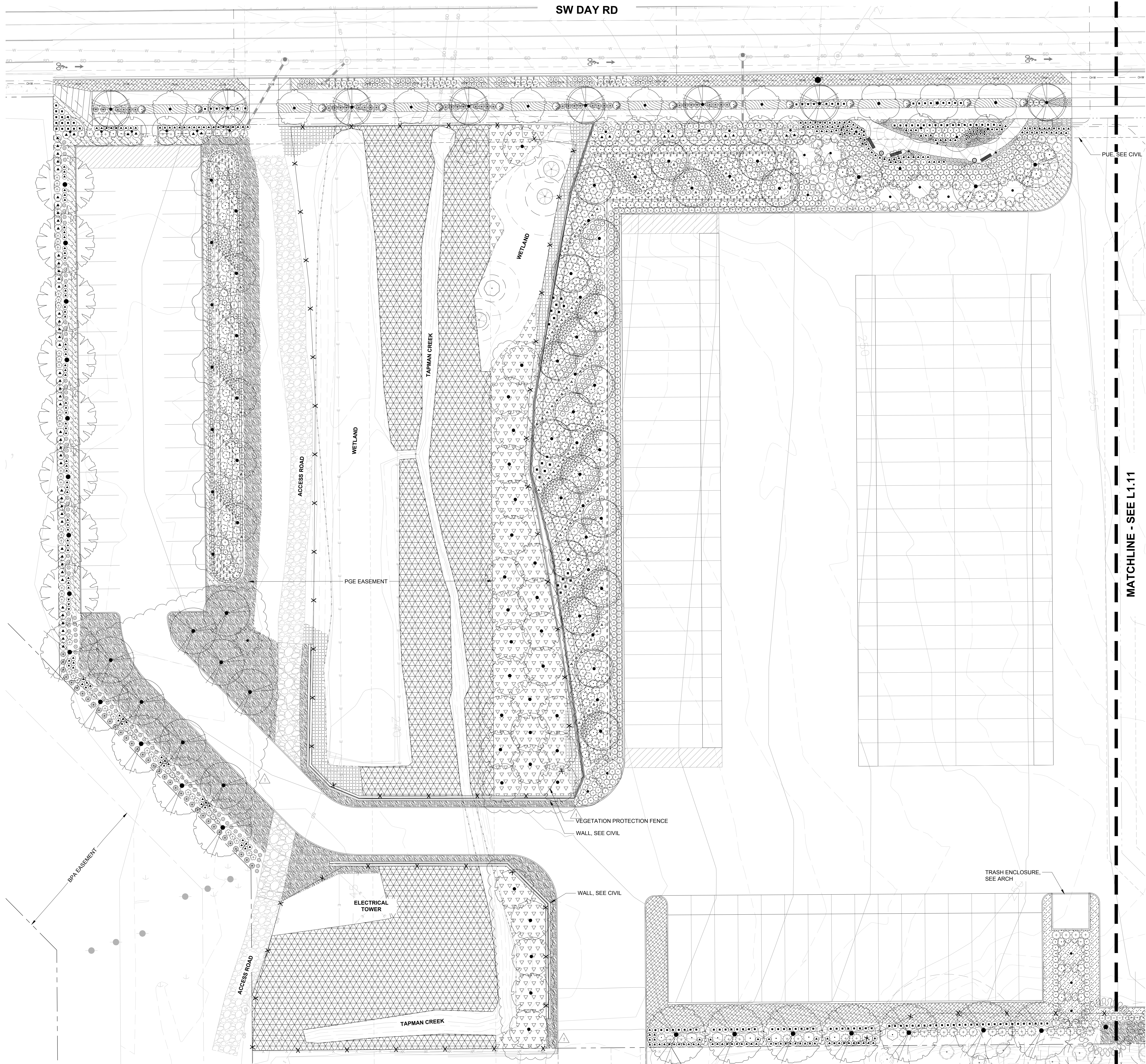
ACCENT TREES	BOTANICAL / COMMON NAME
	AMELANCHIER ALNIFOLIA "AUTUMN BRILLIANCE" SERVICEBERRY
	CORNUS KOUSA & NUTTALLII 'M4-43' STARLIGHT KOUSA DOGWOOD
	PSEUDOTSUGA MENZIESII DOUGLAS FIR
	QUERCUS GARRYANA OREGON WHITE OAK
	ZELKOVA SERRATA "GREEN VASE" GREEN VASE SAWLEAF ZELKOVA
PRIMARY TREES	BOTANICAL / COMMON NAME
	CALOCEDRUS DECURRENS INCENSE CEDAR
	TILIA TOMENTOSA "STERLING" STERLING SILVER LINDEN
STORMWATER TREES	BOTANICAL / COMMON NAME
	CORNUS X "EDDIE'S WHITE WONDER" EDDIE'S WHITE WONDER DOGWOOD
	FRAXINUS LATIFOLIA OREGON ASH
	RHAMNUS PURSHIANA CASCARA BUCKTHORN
STREET TREES	BOTANICAL / COMMON NAME
	ACER GRANDIDENTATUM "SCHMIDT" TM ROCKY MOUNTAIN GLOW MAPLE
	CORNUS KOUSA "MILKY WAY" MILKY WAY KOUSA DOGWOOD
	PARROTTIA PERSICA "RUBY VASE" TM RUBY VASE PERSIAN PARROTTIA
SHRUBS	BOTANICAL / COMMON NAME
	ARBUTUS UNEDO "COMPACTA" DWARF STRAWBERRY TREE
	CORNUS SERICEA "KELSEY" KELSEY DWARF REDTIG DOGWOOD
	DEUTZIA GRACILIS "NIKKO" SLIMMER DEUTZIA
	GAULTHERIA SHALLON SALAL
	MAHONIA AQUIFOLIUM OREGON GRAPE
	MAHONIA AQUIFOLIUM "COMPACT" COMPACT OREGON GRAPE
	MYRICA CALIFORNICA PACIFIC WHIPPLE
	RIBES SANGUINEUM RED FLOWERING CURRANT
	SPIRAEA BETULIFOLIA "TOR" BIRCHLEAF SPIREA
	SYMPHORICARPOS ALBUS COMMON WHITE SNOWBERRY
	VACCINIUM OVATUM EVERGREEN HUCKLEBERRY
	VACCINIUM OVATUM "SCARLET OVATION" SCARLET OVATION EVERGREEN HUCKLEBERRY
	VIBURNUM DAVIDII DAVID VIBURNUM
	VIBURNUM TINUS "SPRING BOUQUET" SPRING BOUQUET LAURUSTRUS
PERENNIALS	BOTANICAL / COMMON NAME
	ACHILLEA MILLEFOLIUM "ALABASTER" ALABASTER YARROW
	ASTER SUBSPICATUS DOUGLAS ASTER
	POLYSTICHUM MUNITUM WESTERN SWORD FERN
	PTERIDIUM AQUILINUM WESTERN BRACKENFERN
STORMWATER SHRUBS	BOTANICAL / COMMON NAME
	CORNUS SERICEA RED TIG DOGWOOD
	HOLOCHEILUS DISCOLOR OCEAN SPRAY
	MAHONIA AQUIFOLIUM OREGON GRAPE
	RIBES SANGUINEUM RED FLOWERING CURRANT
	ROSA PISOCARPA CLUSTERED WILD ROSE
	RUBUS SPECTABILIS SALMONBERRY
	SPIRAEA BETULIFOLIA "TOR" TOR BIRCHLEAF SPIREA
	SPIRAEA DOUGLASSII WESTERN SPIREA
	SYMPHORICARPOS ALBUS COMMON WHITE SNOWBERRY
GROUND COVERS	BOTANICAL / COMMON NAME
	ARCTOSTAPHYLOS UVA-URSI KINWINKNICK
	ROTTBOELLIA GRACILIS "BLONDE AMBITION" BLONDE AMBITION BLUE GRAMA
	FESTUCA OCCIDENTALIS WESTERN FESCUE GRASS
	MAHONIA REPENS CREeping MAHONIA
	PROTIMEX 402 NATIVE RIPARIAN MIX PROTIMEX SEEDS
	SEED MIX NATIVE POLLINATOR MEADOW MIX SUNMARK SEEDS
	SEED MIX NATIVE UPLANDS MEADOW MIX SUNMARK SEEDS
STORMWATER PLANTING	BOTANICAL / COMMON NAME
	CAREX DENSa DENSE SEDGE
	CAREX OENANTHA SLOUGH SEDGE
	JUNCUS PATENS CALIFORNIA GRAY RUSH

**REFERENCE NOTES**

1. PLANT SIZE, SPACING, AND QUANTITY. SEE PLANT SCHEDULE L0.02
2. PROPOSED LITING BOX. AVOID PLANTING WITHIN DEFINED ACCESS ZONE.
3. COORDINATE SHRUB LAYOUT WITH EXISTING UTILITIES. REPORT CONFLICTS TO LANDSCAPE ARCHITECT.

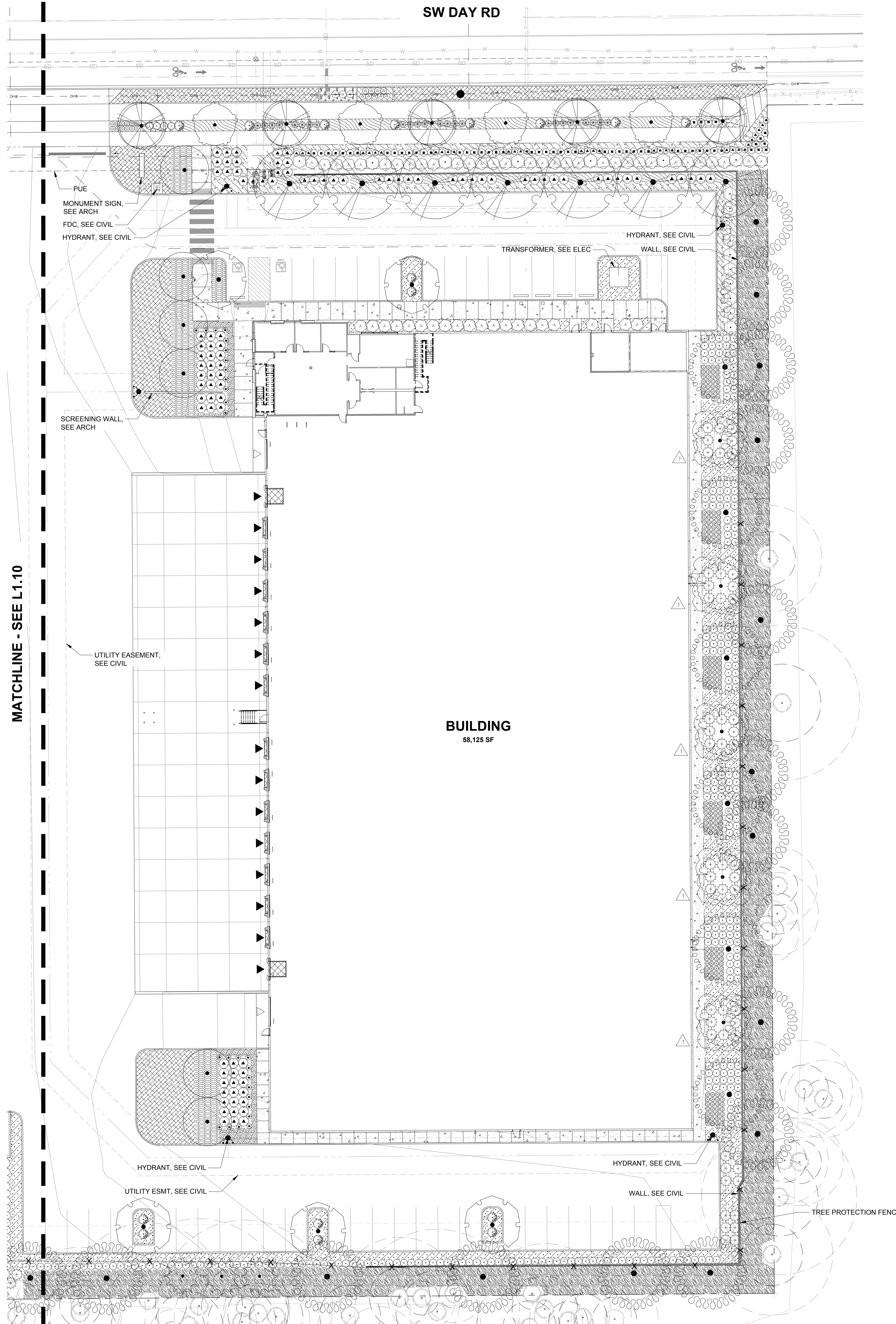


**KEY MAP**  
SCALE: NTS



**1**  
**L1.10**  
**PLANTING PLAN WEST**  
0 10 20 40 80  
(IN FEET)  
1 inch = 20 ft.



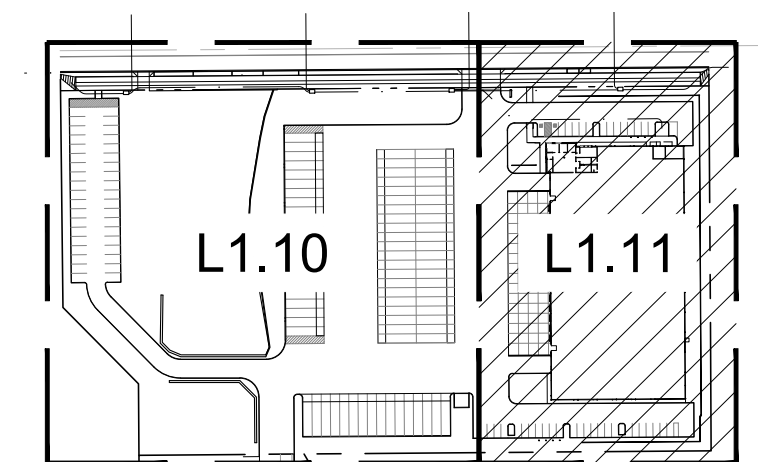


**PLANT KEY LEGEND**

<b>ACCENT TREES</b>	<b>BOTANICAL / COMMON NAME</b>
	ACER RUBRUM 'BOWHALL' BOWHALL RED MAPLE
	CORNUS KOUSA X NUTTALLII 'KN4-43' STARLIGHT KOUSA DOGWOOD
<b>PRIMARY TREES</b>	<b>BOTANICAL / COMMON NAME</b>
	FRAXINUS PENNSYLVANICA 'MARSHALL'S SEEDLESS' MARSHALL'S SEEDLESS GREEN ASH
	PINUS PONDEROSA PONDEROSA PINE
	PSEUDOTSUGA MENZIESII DOUGLAS FIR
<b>SECONDARY TREES</b>	<b>BOTANICAL / COMMON NAME</b>
	CALOCEDRUS DECURRENS INCENSE CEDAR
	ULMUS X 'FRONTIER' FRONTIER ELM
<b>STREET TREES</b>	<b>BOTANICAL / COMMON NAME</b>
	ACER GRANDIDENTATUM 'SCHMIDT' TM ROCKY MOUNTAIN GLOW MAPLE
	PARROTTIA PERSICA 'INGE'S RUBY VASE' TM RUBY VASE PERSIAN PARROTTIA
<b>SHRUBS</b>	<b>BOTANICAL / COMMON NAME</b>
	ARBUTUS UNEDO 'COMPACTA' DWARF STRAWBERRY TREE
	CORNUS SERICEA 'KELSEY' KELSEY DWARF REDTIG DOGWOOD
	DEUTZIA GRACILIS 'NIKKO' SLENDER DEUTZIA
	GAULTHERIA SHALLON SALAL
	MAHONIA AQUIFOLIUM OREGON GRAPE
	MAHONIA AQUIFOLIUM 'COMPACTA' COMPACT OREGON GRAPE
	SPIRAEA BETULIFOLIA 'TOR' BIRCHLEAF SPIREA
	SYMPHORICARPOS ALBUS COMMON WHITE SNOWBERRY
	VACCINIUM OVATUM EVERGREEN HUCKLEBERRY
	VIBURNUM DAVIDII DAVID VIBURNUM
	VIBURNUM TINUS 'SPRING BOUQUET' SPRING BOUQUET LAURUSTINUS
<b>PERENNIALS</b>	<b>BOTANICAL / COMMON NAME</b>
	POLYSTICHUM MUNITUM WESTERN SWORD FERN
	SALVIA X SUPERBA 'CARADONNA' CARADONNA SAGE
<b>STORMWATER SHRUBS</b>	<b>BOTANICAL / COMMON NAME</b>
	SPIRAEA BETULIFOLIA 'TOR' TOR BIRCHLEAF SPIREA
	SYMPHORICARPOS ALBUS COMMON WHITE SNOWBERRY
<b>GROUND COVERS</b>	<b>BOTANICAL / COMMON NAME</b>
	ARCTOSTAPHYLOS UVA-URSI KINNIKINNICK
	BOUTELOUA GRACILIS 'BLONDE AMBITION' BLONDE AMBITION BLUE GRAMA
	CRUSHED GRAVEL QUARTER-TEN
	FESTUCA OCCIDENTALIS WESTERN FESCUE GRASS
	GERANIUM X CANTABRIGIENSE 'BIOKOVO' BIOKOVO CRANESBILL
	MAHONIA REPENS CREEPING MAHONIA
	SEED MIX NATIVE POLLINATOR MEADOW MIX SUNMARK SEEDS
	SEED MIX NATIVE UPLANDS MEADOW MIX SUNMARK SEEDS
<b>STORMWATER PLANTING</b>	<b>BOTANICAL / COMMON NAME</b>
	CAREX Densa DENSE SEDGE
	JUNCUS PATENS CALIFORNIA GRAY RUSH

**REFERENCE NOTES**

1. PLANT SIZE, SPACING, AND QUANTITY, SEE PLANT SCHEDULE L0.02
2. PROPOSED UTILITY BOX. AVOID PLANTING WITHIN DEFINED ACCESS ZONE.
3. COORDINATE SHRUB LAYOUT WITH EXISTING UTILITIES. REPORT CONFLICTS TO LANDSCAPE ARCHITECT.



**KEY MAP**  
SCALE: NTS



Portland, OR  
503.224.9560  
Vancouver, WA  
360.695.7879  
Seattle, WA  
206.749.9993  
www.mcknze.com

**MACKENZIE**  
DESIGN REVIEW | CLIENT PROVIDED

**DELTA LOGISTICS**  
9835 SW COMMERCE  
CIRCLE  
WILSONVILLE, OR  
97070

**DELTA LOGISTICS**  
SITE EXPANSION  
9710 SW DAY RD.  
CITY OF  
WILSONVILLE, OR



© MACKENZIE 2022  
ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

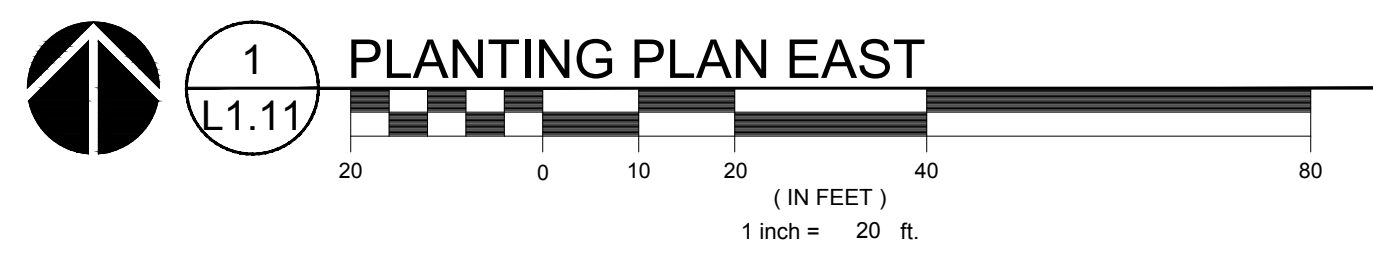
REVISION SCHEDULE		
Delta	Issued As	Issue Date
1	PLAN CHECK	10/06/2022

SHEET TITLE:  
**PLANTING PLAN - EAST**

DRAWN BY: SKA  
CHECKED BY: NRF  
SHEET

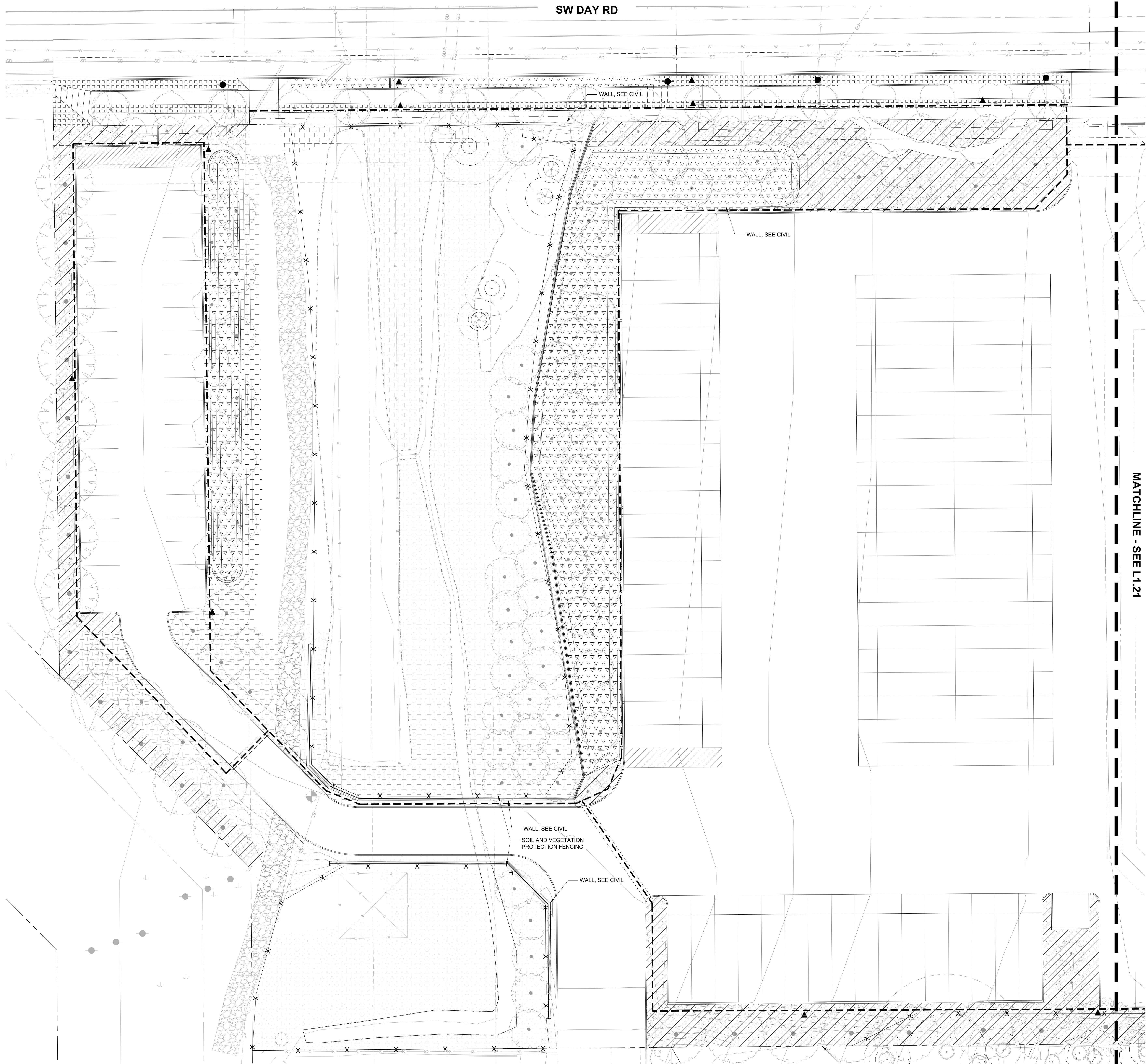
**L1.11**

JOB NO. **2200502.04**





SW DAY RD



**IRRIGATION LEGEND**

- POINT OF CONNECTION, INCLUDE DOUBLE CHECK BACKFLOW PREVENTOR, MASTER VALVE AND FLOW SENSOR - SEE DETAIL ON L5.11
- IRRIGATION CONTROLLER
- GATE VALVE
- QUICK COUPLER AT 150' (INTERVALS MAX)
- MAINLINE SLEEVE- DIAMETER AT LEAST TWICE DIAMETER OF PIPE BEING SLEEVED
- MAINLINE-SCHEDULE 40 PVC
- SHRUB AND GROUNDCOVER DRIP AREA
- SHRUB AND GROUNDCOVER SPRAY AREA
- STORMWATER AREA - ZONE SEPARATELY
- LAWN AREA - ZONE SEPARATELY
- TEMPORARY IRRIGATED AREA - ZONE SEPARATELY
- RIGHT-OF-WAY - ZONE SEPARATELY
- MEADOW AREA - ZONE SEPARATELY

**REFERENCE NOTES**

1. CAREFULLY EXCAVATE IRRIGATION TRENCHES IN VICINITY OF EXISTING TREES. SEE TREE PROTECTION NOTES L0.03 AND IN EXHIBIT D ARBORIST REPORT.



Architecture - Interiors  
Planning - Engineering

Portland, OR  
503.224.9560  
Vancouver, WA  
360.695.7879  
Seattle, WA  
206.749.9993  
www.mcknze.com

**MACKENZIE**  
DESIGN REVIEW - CLIENT PROVIDED

Client

**DELTA LOGISTICS**  
9835 SW COMMERCE  
CIRCLE  
WILSONVILLE, OR  
97070

Project

**DELTA LOGISTICS**  
SITE EXPANSION  
9710 SW DAY RD.  
CITY OF  
WILSONVILLE, OR



© MACKENZIE 2022  
ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:  
**IRRIGATION  
PLAN - WEST**

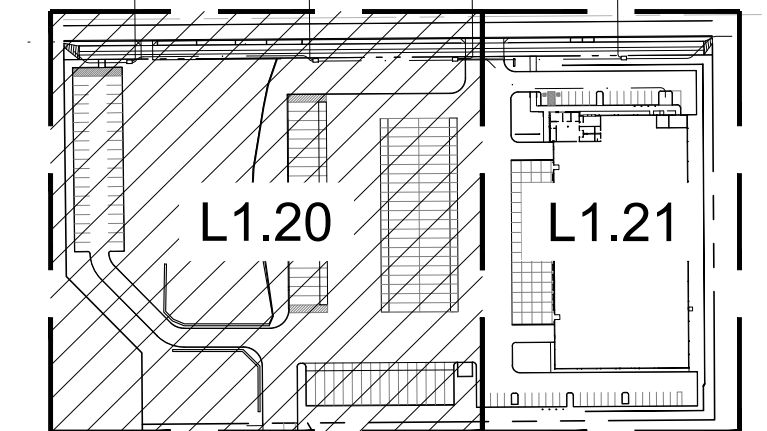
DRAWN BY: SKA

CHECKED BY: NRF

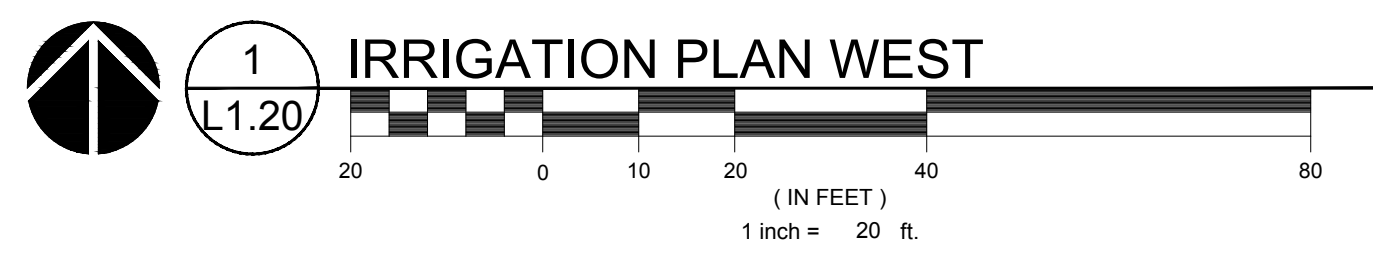
SHEET

**L1.20**

JOB NO. **2200502.04**

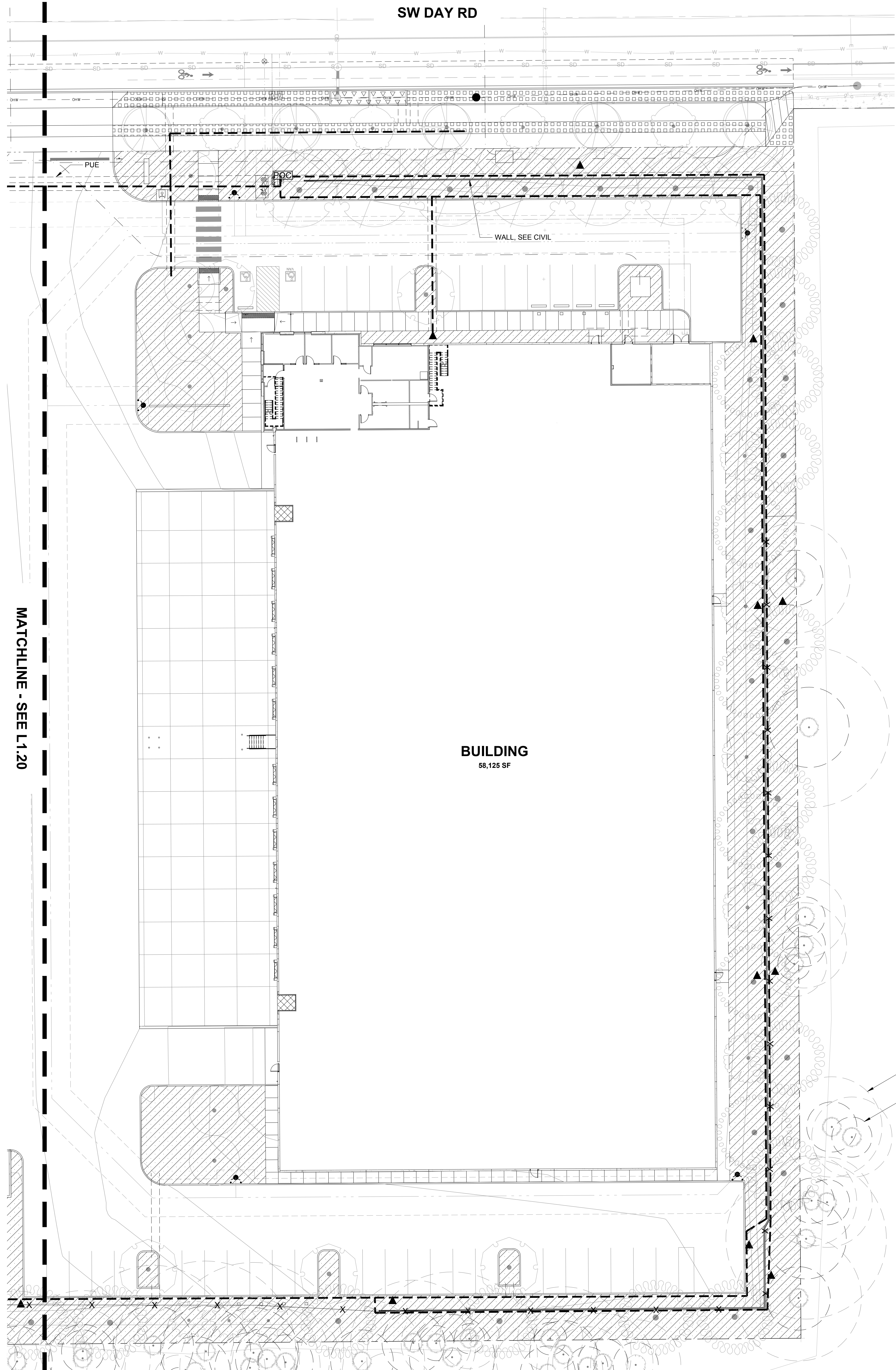


SCALE: NTS





SW DAY RD



MATCHLINE - SEE L1.20

BUILDING  
58,125 SF

FULL ROOT PROTECTION ZONE  
MINIMUM CONSTRUCTION SETBACK RADIUS

**IRRIGATION LEGEND**

- POINT OF CONNECTION, INCLUDE DOUBLE CHECK BACKFLOW PREVENTOR, MASTER VALVE AND FLOW SENSOR - SEE DETAIL ON L5.11
- IRRIGATION CONTROLLER
- GATE VALVE
- QUICK COUPLER AT 150' (INTERVALS MAX)
- MAINLINE SLEEVE- DIAMETER AT LEAST TWICE DIAMETER OF PIPE BEING SLEEVED
- MAINLINE-SCHEDULE 40 PVC
- SHRUB AND GROUNDCOVER DRIP AREA
- SHRUB AND GROUNDCOVER SPRAY AREA
- STORMWATER AREA - ZONE SEPARATELY
- LAWN AREA - ZONE SEPARATELY
- TEMPORARY IRRIGATED AREA - ZONE SEPARATELY
- RIGHT-OF-WAY - ZONE SEPARATELY
- MEADOW AREA - ZONE SEPARATELY

**REFERENCE NOTES**

1. CAREFULLY EXCAVATE IRRIGATION TRENCHES IN VICINITY OF EXISTING TREES. SEE TREE PROTECTION NOTES L0.03 AND IN EXHIBIT D ARBORIST REPORT.



Portland, OR  
503.224.9560  
Vancouver, WA  
360.695.7879  
Seattle, WA  
206.749.9993  
www.mcknze.com

**MACKENZIE**  
DESIGN REVIEW | CLIENT PROVIDED

Client

**DELTA LOGISTICS**  
9835 SW COMMERCE  
CIRCLE  
WILSONVILLE, OR  
97070

Project

**DELTA LOGISTICS**  
SITE EXPANSION  
9710 SW DAY RD.  
CITY OF  
WILSONVILLE, OR



© MACKENZIE 2022  
ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

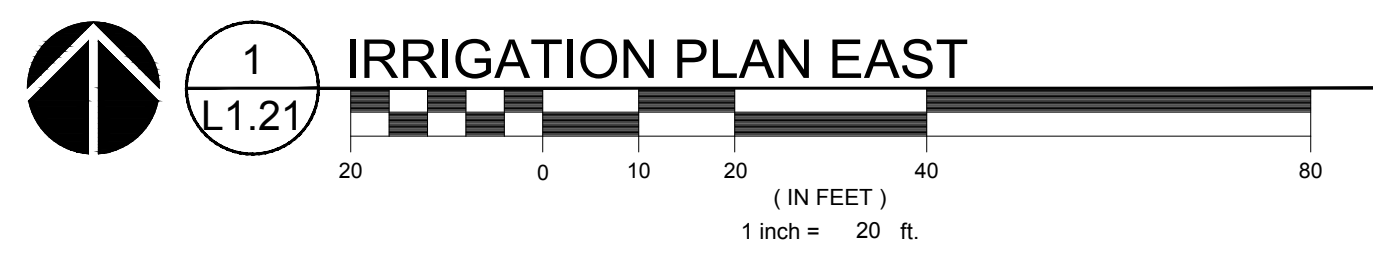
REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:  
**IRRIGATION  
PLAN - EAST**

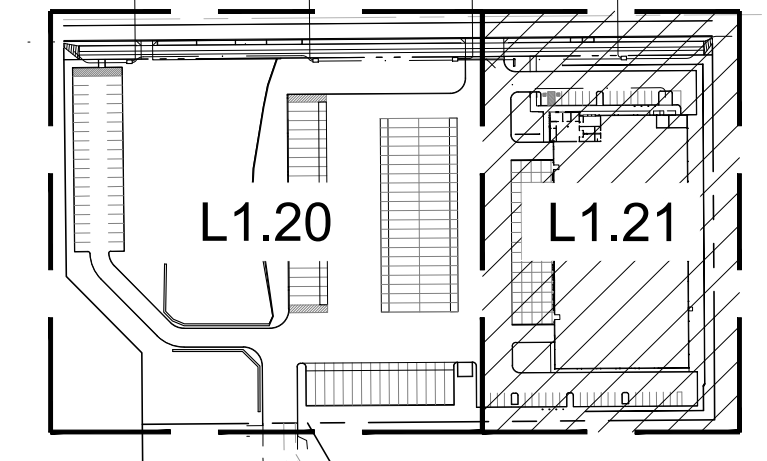
DRAWN BY: SKA  
CHECKED BY: NRF  
SHEET

**L1.21**

JOB NO. **2200502.04**



**KEY MAP**  
SCALE: NTS











© MACKENZIE 2022  
 ALL RIGHTS RESERVED  
 THESE DRAWINGS ARE THE PROPERTY OF  
 MACKENZIE AND ARE NOT TO BE USED  
 OR REPRODUCED IN ANY MANNER  
 WITHOUT PRIOR WRITTEN PERMISSION

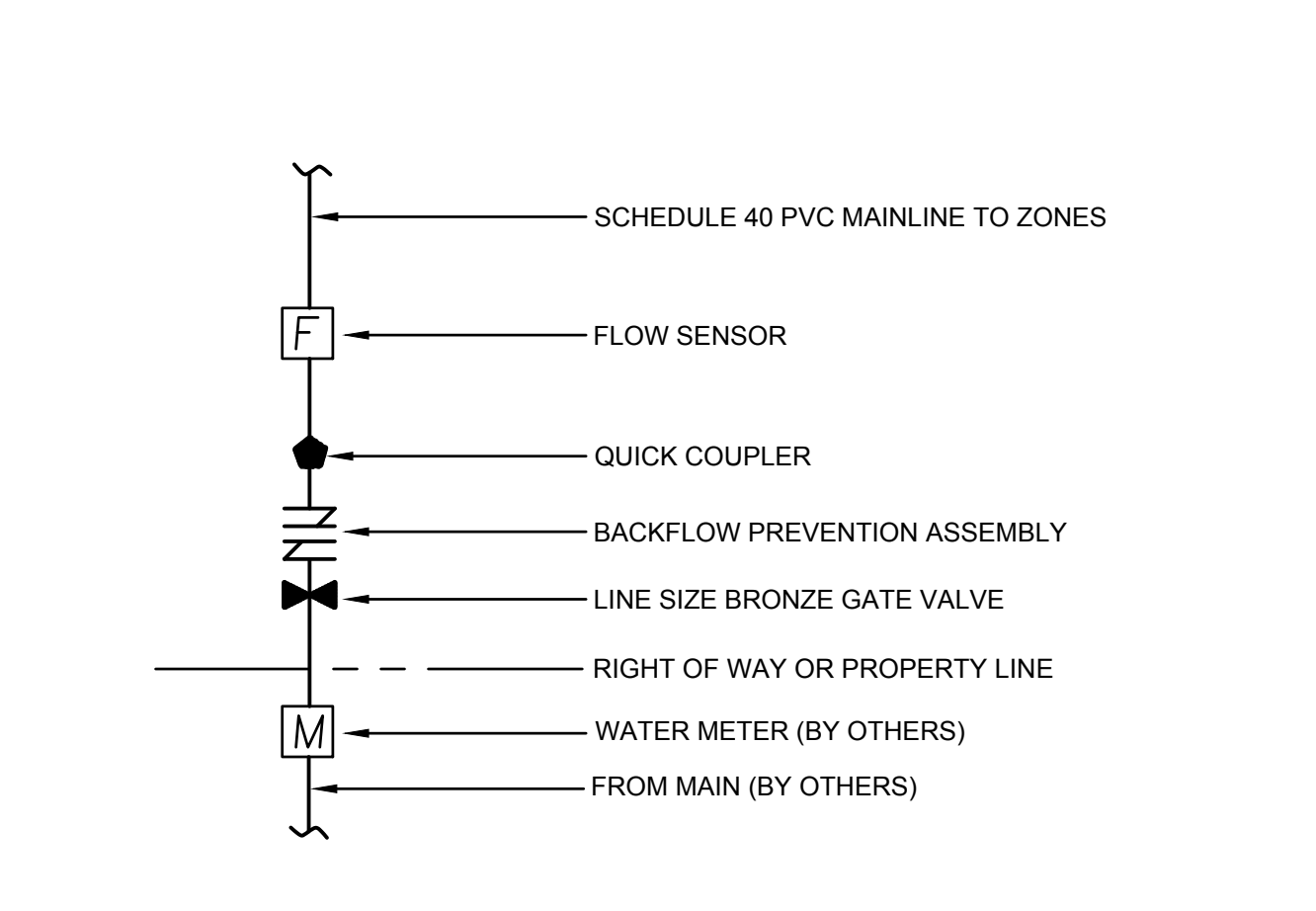
REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:  
**IRRIGATION**  
**DETAILS**

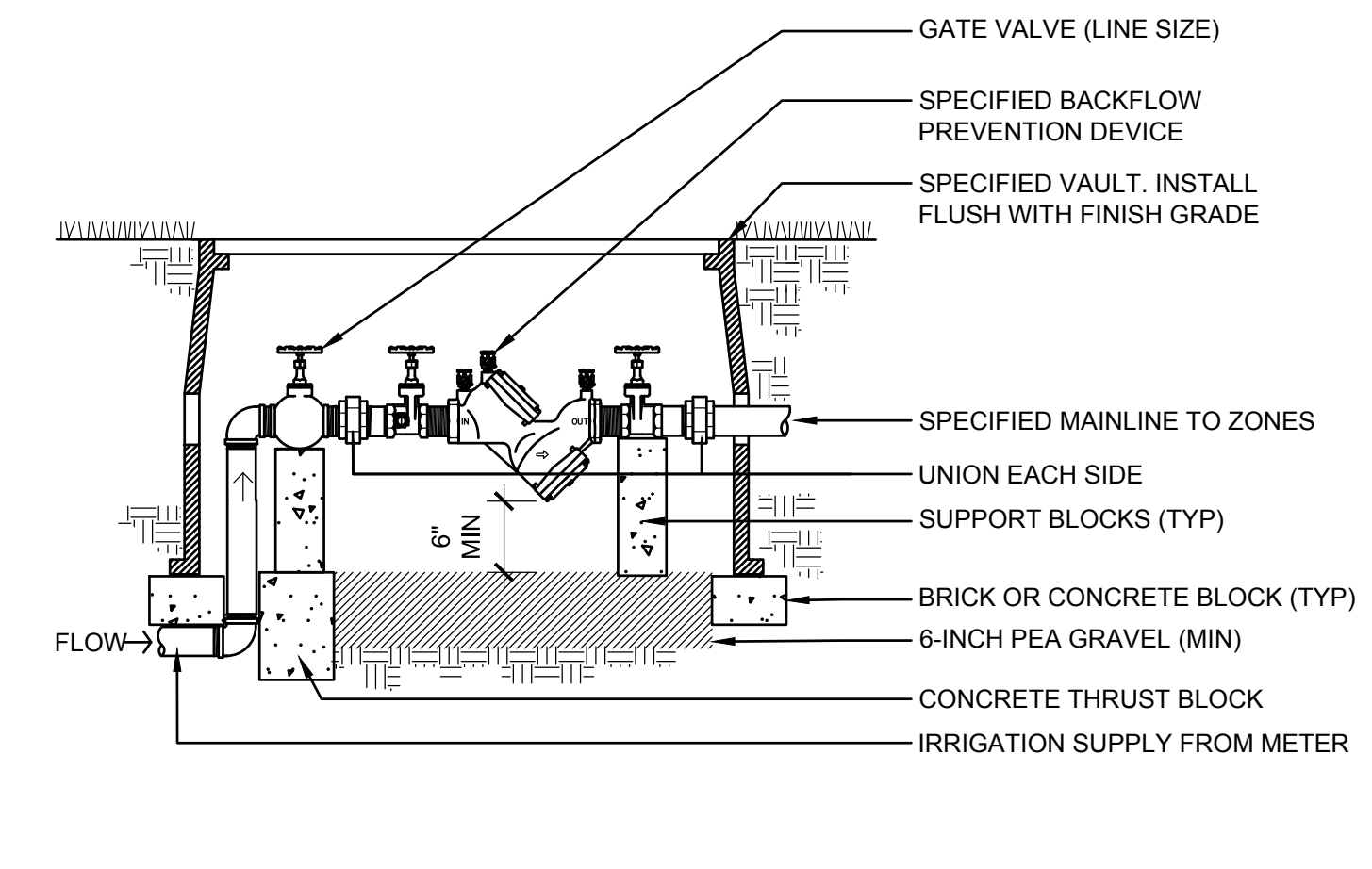
DRAWN BY: SKA  
 CHECKED BY: NRF  
 SHEET

**L5.11**

JOB NO. **2200502.04**

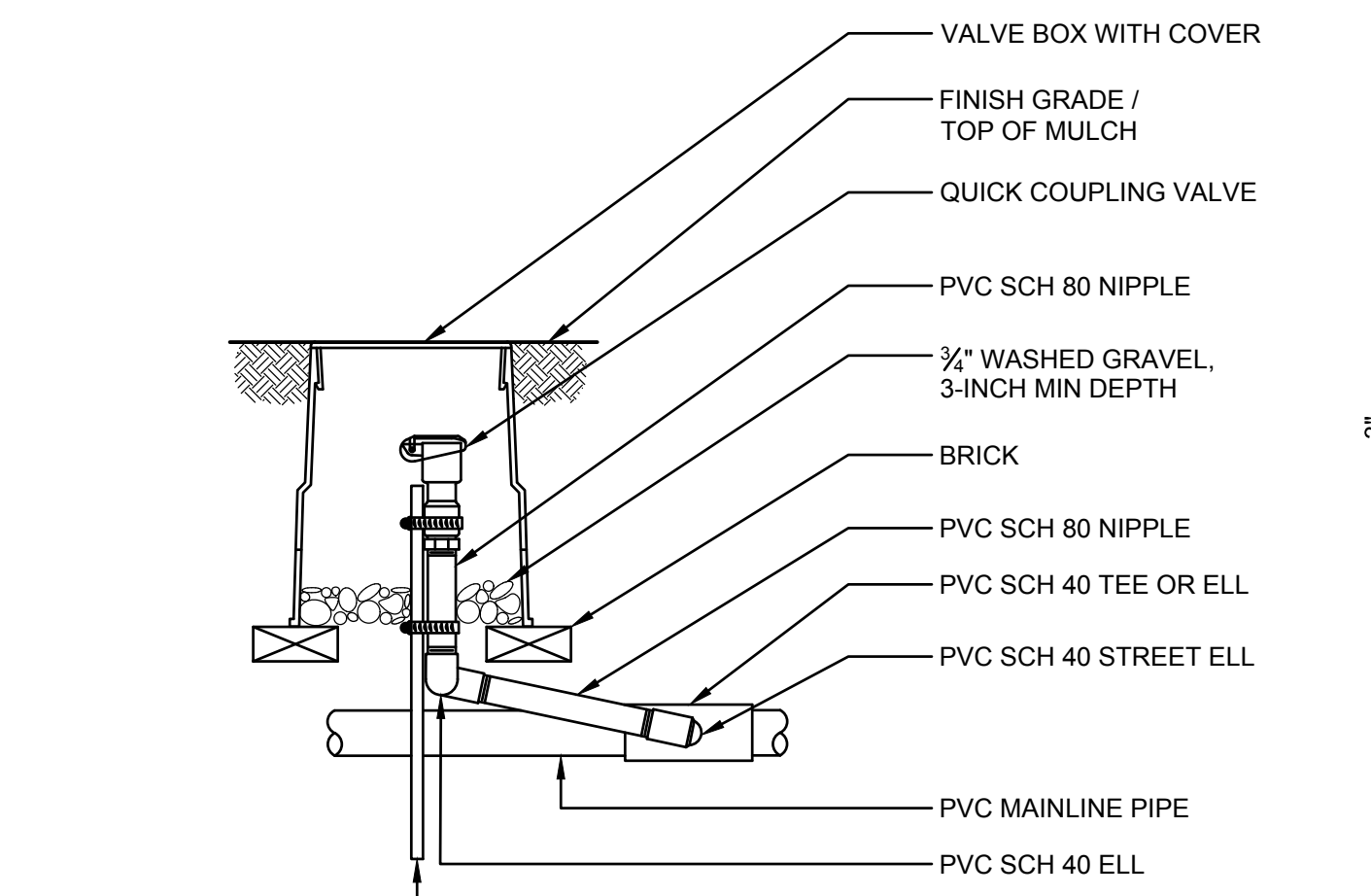


**1 POINT OF CONNECTION**  
 SCALE: NTS

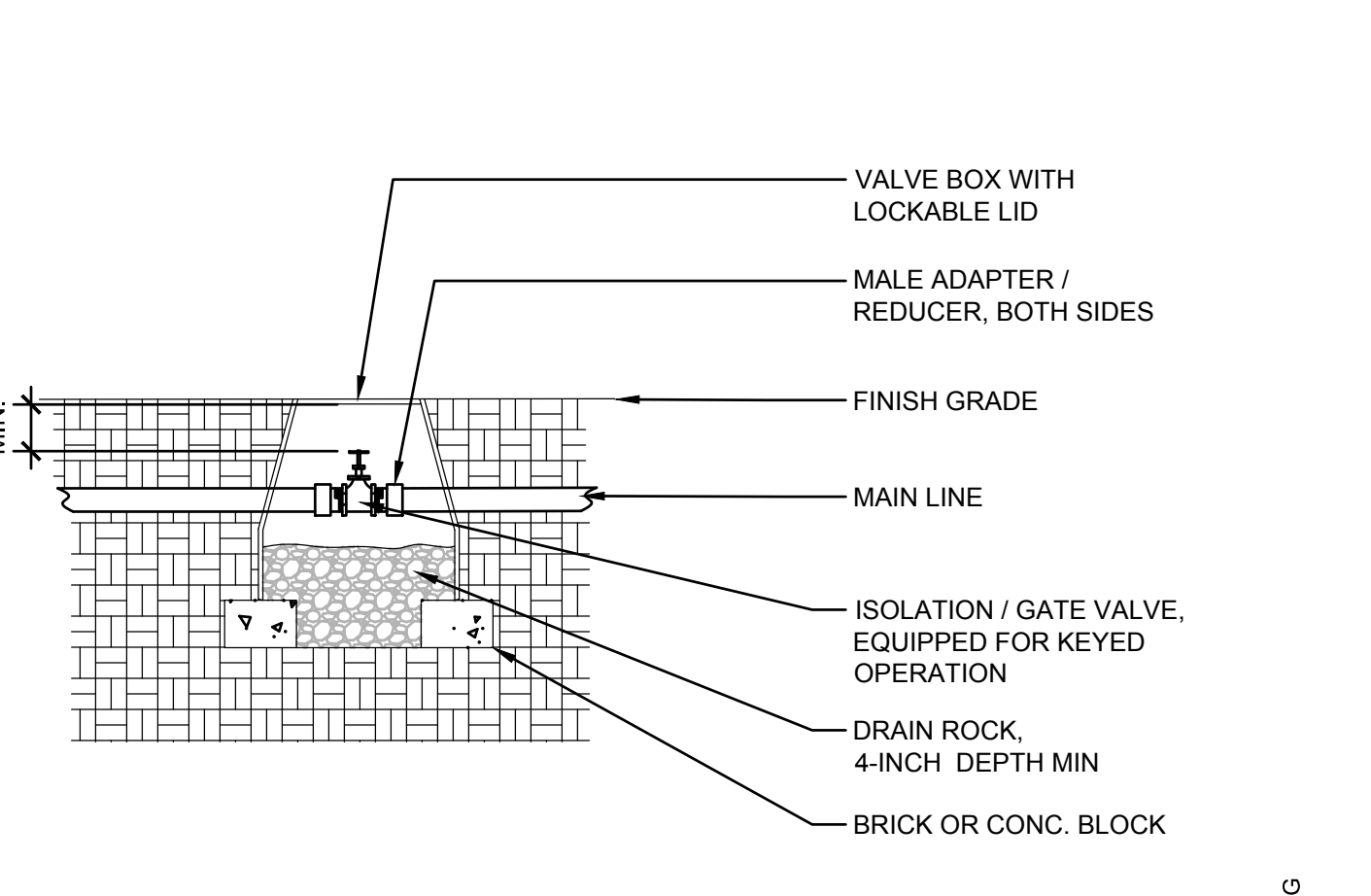


**NOTE:**  
 INSTALL BACKFLOW PREVENTOR PER CODE AND REQUIREMENTS OF PREVAILING JURISDICTIONS.

**2 DOUBLE CHECK VALVE**  
 BACKFLOW PREVENTOR (BELOW GRADE)  
 SCALE: NTS

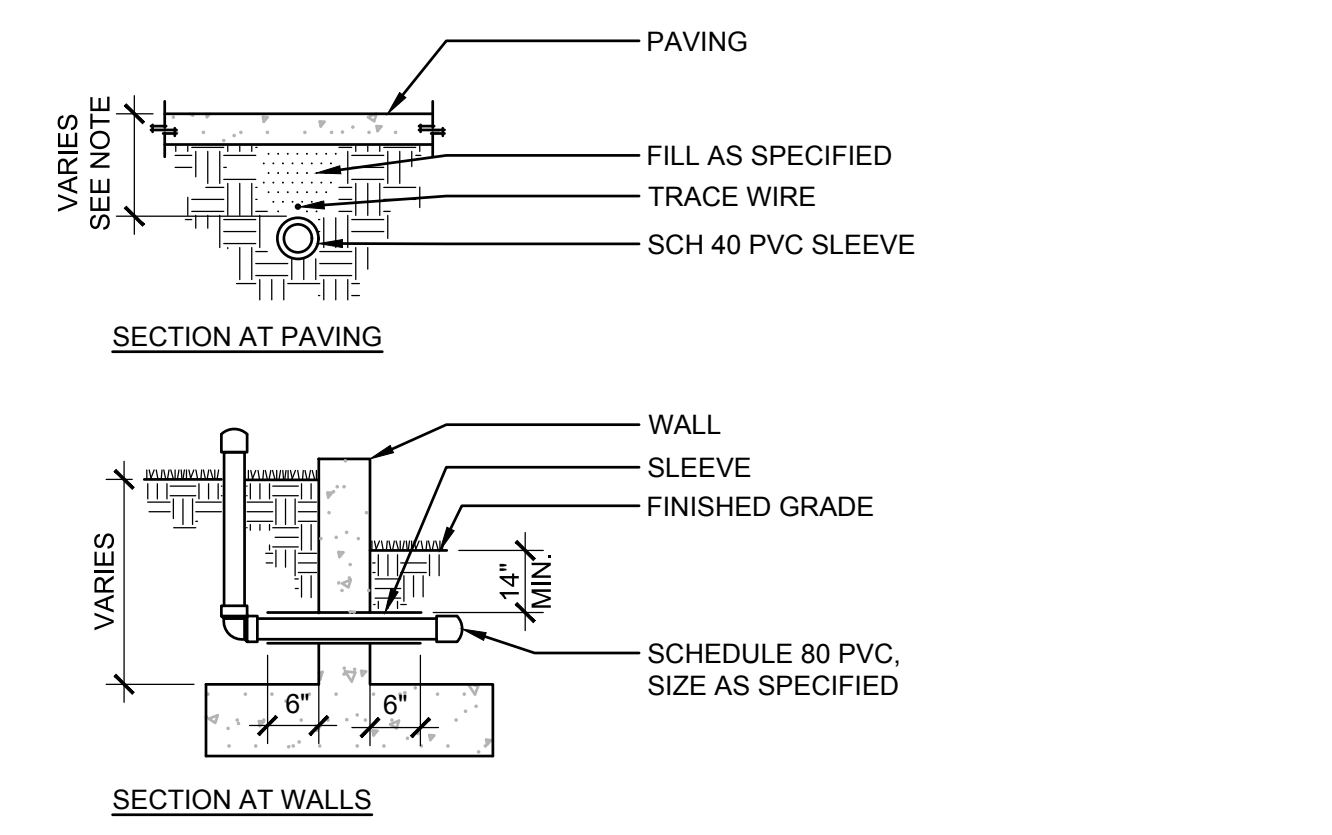


**3 QUICK COUPLER VALVE**  
 SCALE: NTS



**NOTES:**  
 1. SCH 80 ADAPTER AND FITTINGS TO BE SAME SIZE AS ISOLATION VALVE

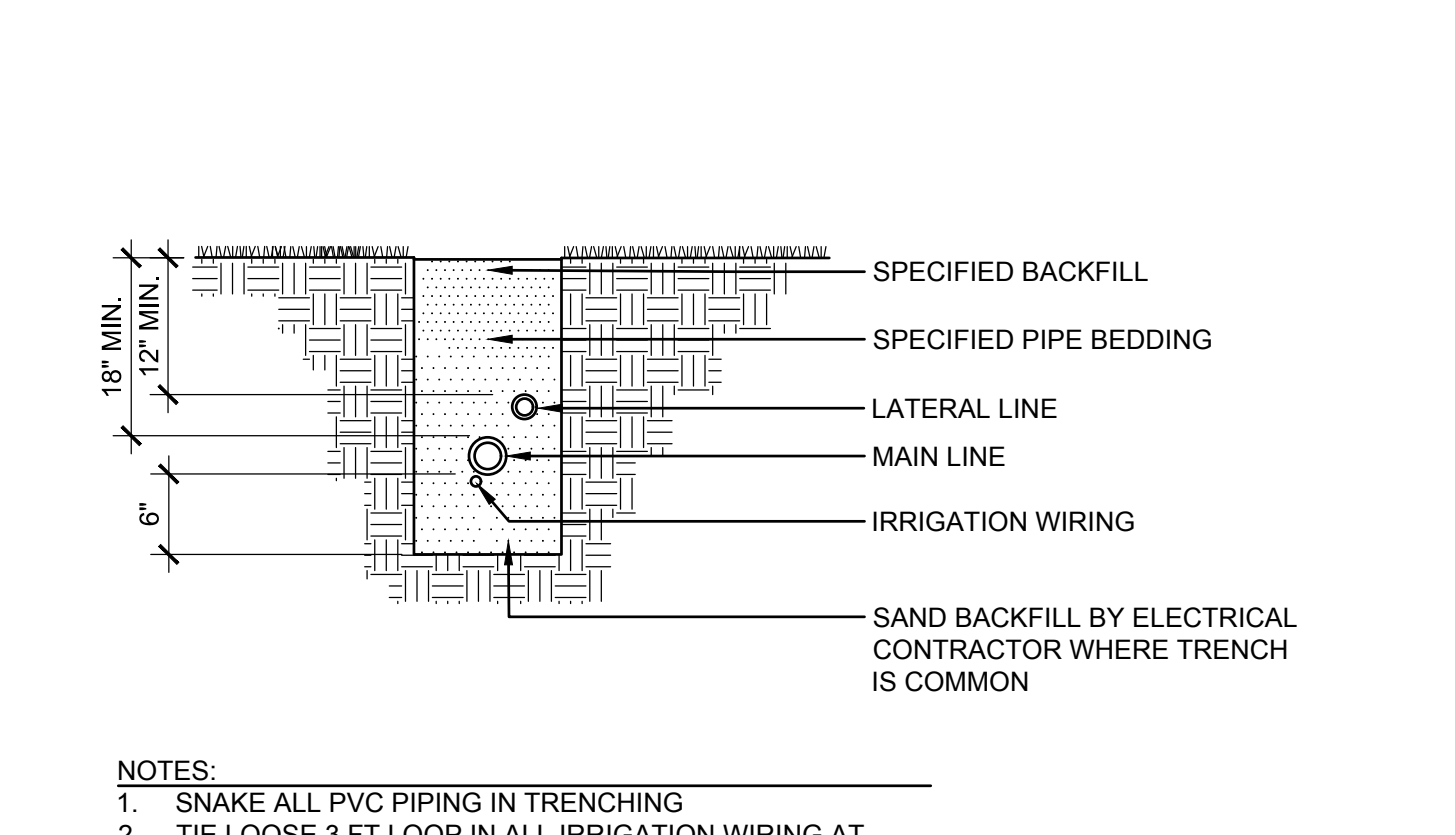
**4 ISOLATION / GATE VALVE**  
 SCALE: NTS



**MIN DEPTH OF PIPE**  
 MAINLINE 18"  
 LATERAL AT PAVING 14"  
 AT DRIVING SURFACE 24"

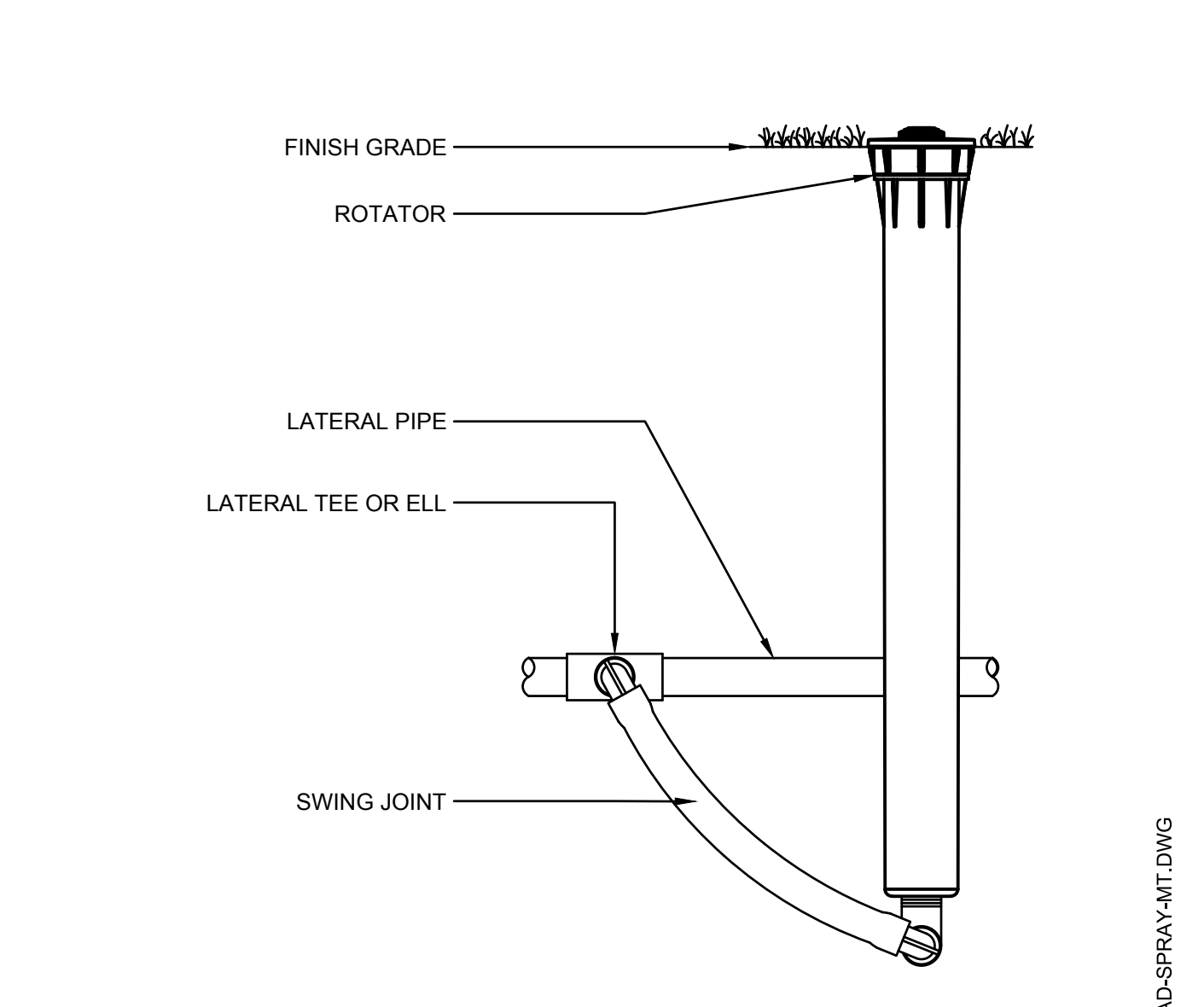
**NOTES:**  
 1. SLEEVES TO BE TWICE DIAMETER OF LINE OR LINES PASSING THROUGH.  
 2. EXTEND IRRIGATION SLEEVE 6-INCHES BEYOND EDGE OF PAVING, EACH SIDE.  
 3. INSTALL SLEEVES AT SAME TIME AS WALL OR PAVING INSTALLATION.  
 4. INSTALL PIPE IN SLEEVE BEFORE BACKFILLING AND CAP BOTH ENDS WITHOUT GLUE.

**5 IRRIGATION SLEEVES**  
 SCALE: NTS



**NOTES:**  
 1. SNAKE ALL PVC PIPING IN TRENCHING  
 2. TIE LOOSE 3 FT LOOP IN ALL IRRIGATION WIRING AT CHANGES IN DIRECTION GREATER THAN 30 DEGREES. UNTIE AFTER ALL CONNECTIONS HAVE BEEN MADE.  
 3. WHERE ELECTRICAL WIRING DOES NOT SHARE COMMON TRENCH, OVER EXCAVATE TRENCH 2 INCHES MIN AND BACKFILL WITH SPECIFIED BEDDING MATERIAL.  
 4. LOCATE ALL WIRING NOT IN COMMON TRENCHES ACCURATELY ON RECORD DRAWINGS.

**6 IRRIGATION TRENCHING (TYP)**  
 SCALE: NTS



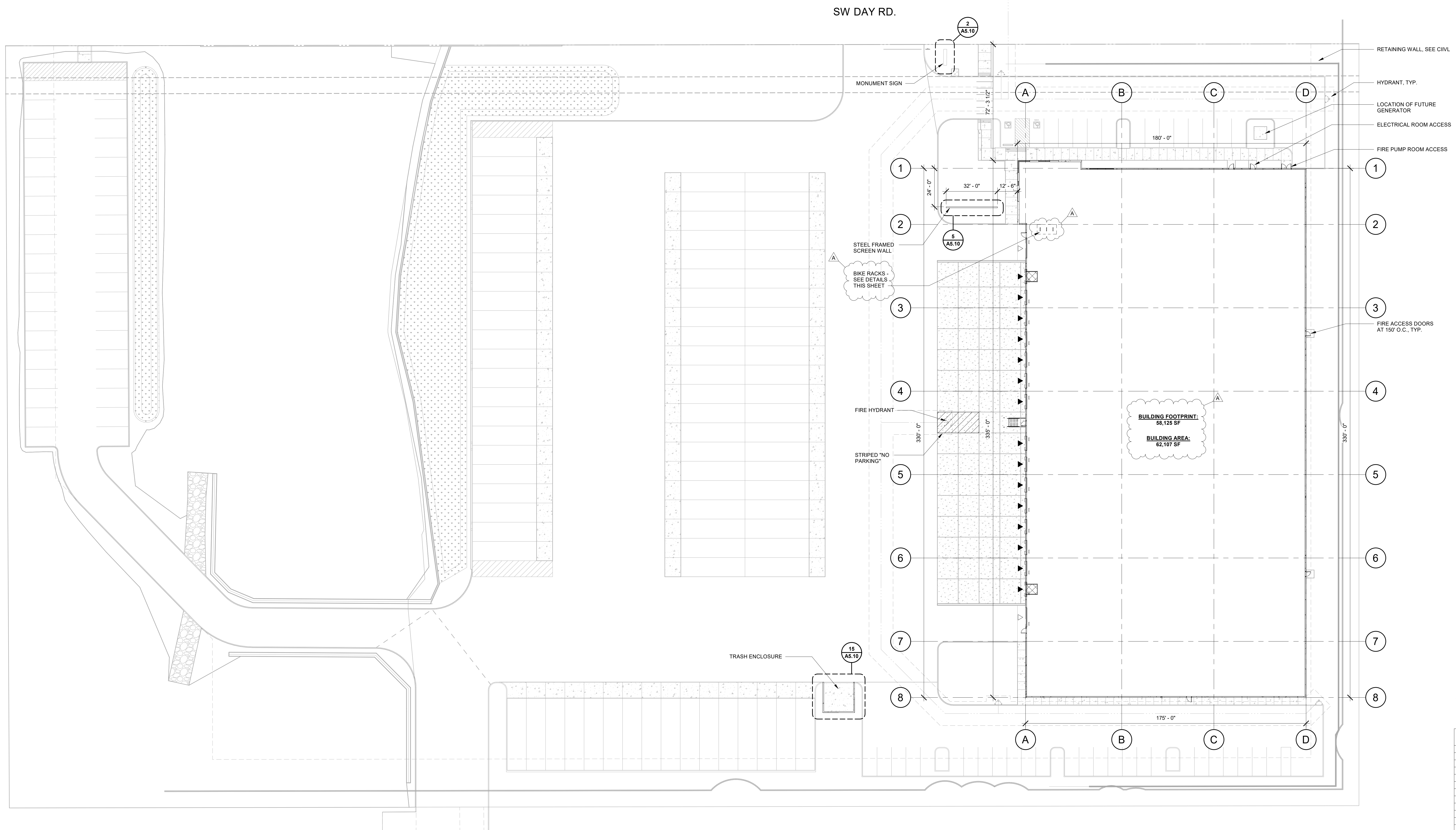
**7 MULTI-TRAJECTORY SPRAY HEAD**  
 DETAIL-SUBTITLE  
 SCALE: NTS



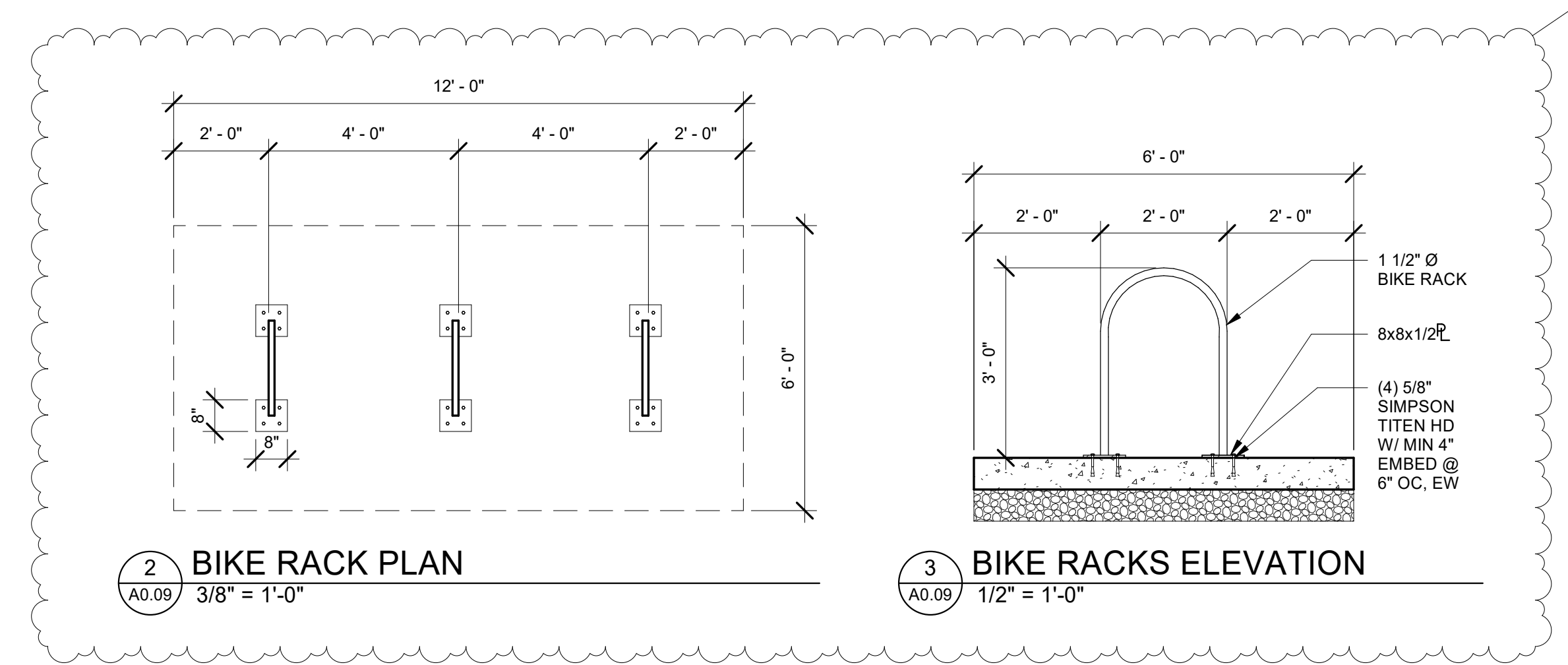




REVISION SCHEDULE		
Delta	Issued As	Issue Date
A	REV 1	7/26/22



**1 SITE PLAN**  
A0.09 1:300



**2 BIKE RACK PLAN**  
A0.09 3/8" = 1'-0"

**3 BIKE RACKS ELEVATION**  
A0.09 1/2" = 1'-0"





© MACKENZIE  
2022 ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:  
**OVERALL FLOOR & ROOF PLANS**

DRAWN BY: ADG

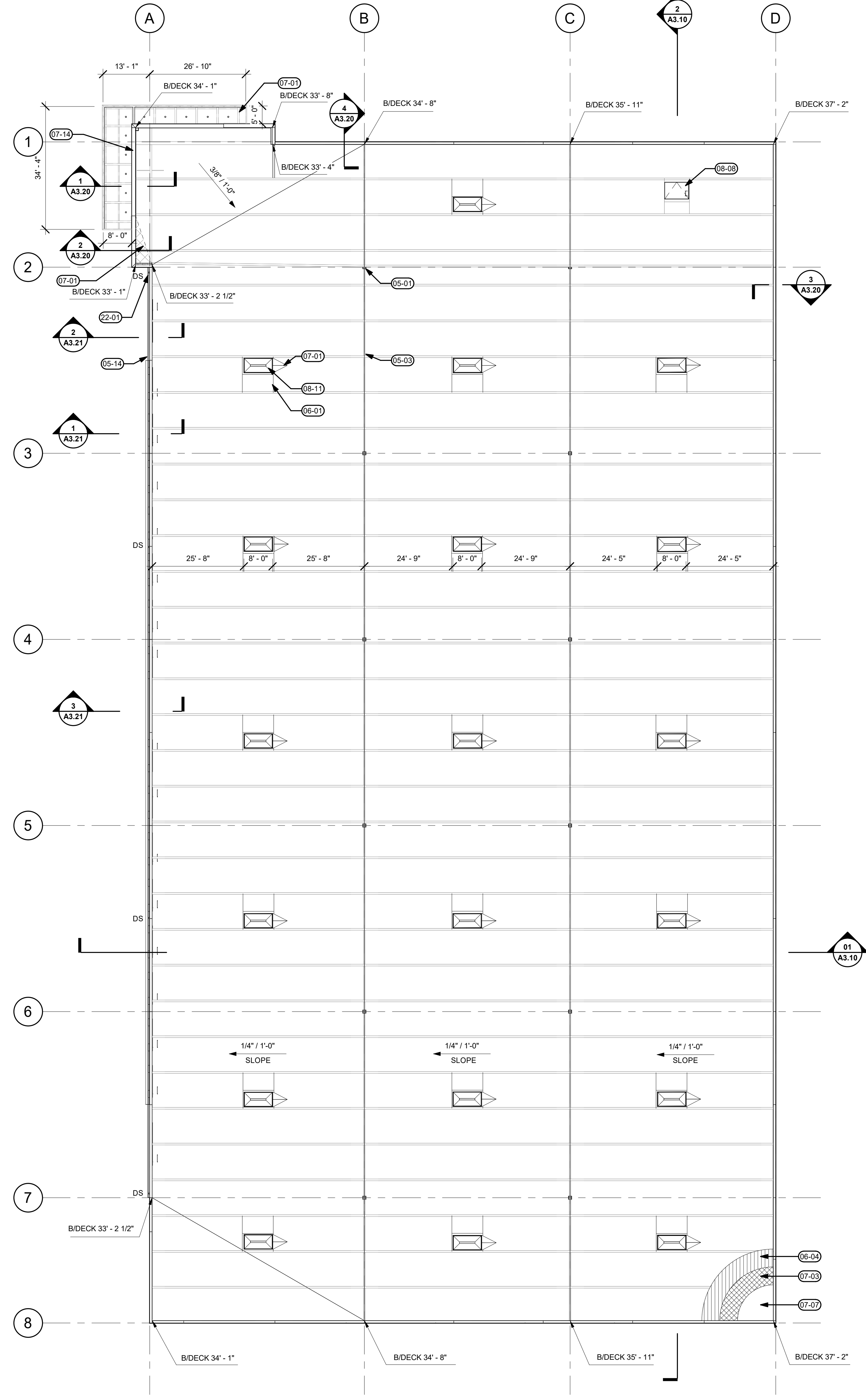
CHECKED BY: SJM

SHEET

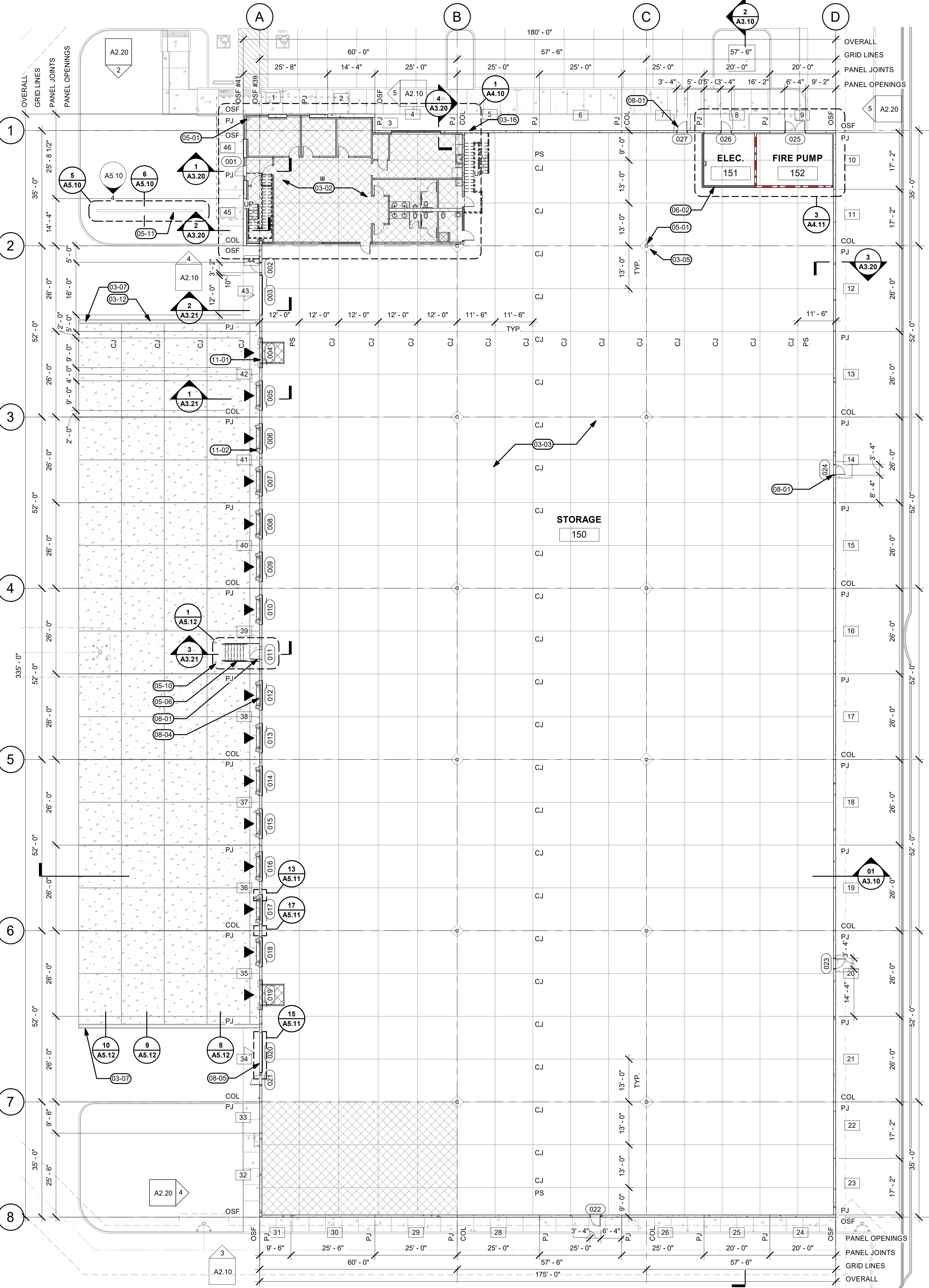
**A1.10**

JOB NO. **2200502.00**

**LAND USE RESUBMITTAL 07/26/22**



**2 OVERALL ROOF PLAN**  
1/16" = 1'-0"



**1 OVERALL FLOOR PLAN**  
1/16" = 1'-0"

**PROJECT INFORMATION**

- BUILDING AREA: 58,125 SF
- CLEAR HEIGHT: 30' CLEAR
- DOCK DOORS: 15 POSITIONS
- DRIVE IN DOORS: 2 POSITIONS
- WALL TYPES**
- CONCRETE TILT PANEL - SEE STRUCTURAL ELEVATIONS FOR THICKNESSES
- 1HR RATED WALL PER 11/A5.20
- FULL HEIGHT WALL PER 12/A5.20
- STICK-PIN INSULATION 10/A5.20
- INTERIOR PARTITION PER 13/15/A5.20

**GENERAL NOTES - ARCH**

- A. VERIFY AND CONFIRM ALL DIMENSIONS AND CONDITIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION.
- B. SEE STRUCTURAL FOR ADDITIONAL INFORMATION.
- C. SEE DETAIL 4/A5.11 FOR SLAB JOINT DETAILS.
- D. INSTALL DOOR ARMOR PER 14/A5.11 AT ALL GRADE ACCESS AND DOCK-HIGH OVERHEAD DOORS.
- E. CAULK FLOOR JOINT PER DETAIL 18/A5.11.
- F. CAULK DOCK APRON JOINTS PER DETAIL 13/A5.12.
- G. SITE IS SHOWN FOR REFERENCE ONLY. SEE CIVIL.
- H. SEE ELEVATIONS AND STRUCTURAL FOR ADDITIONAL INFORMATION FOR FUTURE OPENINGS.
- I. PROVIDE DOWNSPOUT GUARDS AT ALL LOCATION ALONG BUILDING SOUTH FACE. SEE DETAIL 17/A5.11.
- J. PROVIDE SIGNAGE AS REQUIRED BY LOCAL JURISDICTION, FIRE MARSHAL AND EMERGENCY SERVICES.
- K. PROVIDE DOCK DOOR BUMPERS AT ALL 9'X10' DOCK DOORS.

**GENERAL NOTES - ROOF**

- A. VERIFY AND CONFIRM ALL DIMENSIONS AND CONDITIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION.
- B. ALL ROOF ELEVATION SHOWN AT DISTANCE ABOVE FINISH FLOOR AND BASED ON FINISH FLOOR ELEVATION OF 0'-0".
- C. PROVIDE 30'-0" CLEAR MINIMUM TO ALL STRUCTURAL MEMBERS, ELECTRICAL FIXTURES, MECHANICAL UNITS AND FIRE SPRINKLERS LINES. SEE BUILDING SECTIONS.
- D. PROVIDE FRAMING FOR ROOF ACCESSORIES (SKYLIGHTS, ROOF HATCH AND MECHANICAL) AS REQUIRED IN ACCORDANCE WITH STRUCTURAL.
- E. ROOF STRUCTURE SHOWN FOR REFERENCE ONLY. SEE STRUCTURAL.
- F. SEE DETAIL XXXX FOR PIPE PENETRATION.
- G. SEE DETAIL XXXX FOR MECHANICAL UNIT CURBING INSTALLATION.
- H. SEE DETAIL XXXX FOR TYPICAL ROOF ASSEMBLY.
- I. MAINTAIN 1/4" MIN SLOPE THROUGHOUT ROOF.
- J. ALL ROOF ELEVATIONS ARE TO BOTTOM OF DECK UNLESS NOTED OTHERWISE.
- K. BUILDING IS DESIGNED WITH AN ESFR SPRINKLER SYSTEM FOR CLASS I/IV NON ENCAPSULATED COMMODITIES PER NFPA 13. SEE FIRE PROTECTION SPECIFICATIONS. FIRE PUMP IS PROPOSED.
- L. CONTRACTOR TO PROVIDE COVERS, ENCLOSURES AND/OR SEALANTS AT ALL ROOF PENETRATIONS, PIPES, CURBS DUCTS, AND CONNECTIONS. GC TO COORDINATE WITH MEP DESIGN BUILD DISCIPLINES.
- M. PROVIDE SPLASH BLOCKS AT DOWNSPOUTS OF ALL ROOF ACCESSORY STRUCTURES.

**SYMBOLS LEGEND**

- CONTROL JOINT
- CONSTRUCTION JOINT
- PANEL JOINT
- DOWNSPOUT
- POUR STRIP
- DOCK OVERHEAD DOOR
- DOCK DRIVE-IN DOOR
- PANEL NUMBER, SEE STRUCTURAL
- UNDERSLAB VAPOR BARRIER

**KEYNOTES**

- 03-02 UNDERSLAB VAPOR BARRIER, EXTENTS PER HATCHED AREA. SEE SPECIFICATIONS
- 03-03 6" CONCRETE SLAB ON GRADE. SEE STRUCTURAL
- 03-05 CONCRETE COLUMN BLOCKOUT. SEE STRUCTURAL
- 03-07 MOUNTABLE CONCRETE CURB AT FINAL 5'-0" OF RETAINING WALL
- 03-12 CONCRETE RETAINING WALL WITH MOUNTABLE CURB. SEE DETAILS 7-11/A5.12
- 03-16 TILT-UP CONCRETE PANEL. SEE STRUCTURAL
- 05-01 HSS COLUMN. SEE STRUCTURAL
- 05-03 STEEL GIRDER. SEE STRUCTURAL
- 05-06 STEEL ACCESS STAIRS. SEE DETAILS 14/A5.12
- 05-10 STEEL BOLLARD. SEE DETAIL 6/A5.12
- 05-11 PERFORATED ARCHITECTURAL METAL PANEL SCREENING WALL FASTENED TO HSS FRAME PER STRUCT. SEE DETAILS 4-6/A5.10
- 05-14 SHEET METAL GUTTER TO MATCH PARAPET COPING. SEE DETAIL 11/A5.13
- 06-01 FRAMING AT ALL ROOF HATCHES, SKYLIGHTS AND ACCESSORIES PER DETAILS. SEE STRUCTURAL
- 06-02 RATED WALL - SEE WALL TYPE LEGEND. EXTENDED TO UNDERSIDE OF ROOF DECK ABOVE.
- 06-04 WOOD ROOF DECK PER STRUCT.
- 07-01 CRICKET AS REQUIRED FOR MIN 1/4" PER FOOT SLOPE. SEE DETAIL 8/A5.13
- 07-03 RIGID INSULATION. SEE TYPICAL ROOF ASSEMBLY 3/A3.10
- 07-07 ROOF MEMBRANE. SEE TYPICAL ROOF ASSEMBLY 3/A3.10
- 07-14 SHEET METAL PARAPET FLASHING. SEE DETAIL 1/A5.13
- 08-01 INSULATED HM PERSONNEL DOOR. PAINT PER ELEVATIONS. SEE DOOR SCHEDULE
- 08-04 9'-0" X 10'-0" OHD INSULATED HIGH-LIFT DOCK DOOR. PAINT P-1. SEE DOOR SCHEDULE
- 08-05 12'-0" X 14'-0" OHD INSULATED DRIVE-IN DOOR WITH 3'-0" X 7'-0" PERSONNEL DOOR. PAINT P-1, WITH 1" INSULATED TRANSOM WINDOW ABOVE. SEE DOOR SCHEDULE
- 08-08 ROOF ACCESS. SEE DETAILS 14-15/A5.13
- 08-11 4'X8' SKYLIGHT WITH BURGLAR BAR. PROVIDE CRICKET AT HIGH SIDE W/ 1/2" MIN SLOPE. SEE DETAIL 3/A5.13. COORDINATE LAYOUT WITH SPRINKLER CONTRACTOR
- 11-01 DOCK PIT LEVELER. SEE SPECIFICATION & 8/A5.20 FOR PIT DETAIL
- 11-02 EDGE OF DOCK LEVELER. SEE SPECIFICATIONS
- 22-01 6" DIAMETER DOWNSPOUT. SEE DETAIL XXXX. PAINT TO MATCH BACKGROUND COLOR. SEE ELEVATIONS

















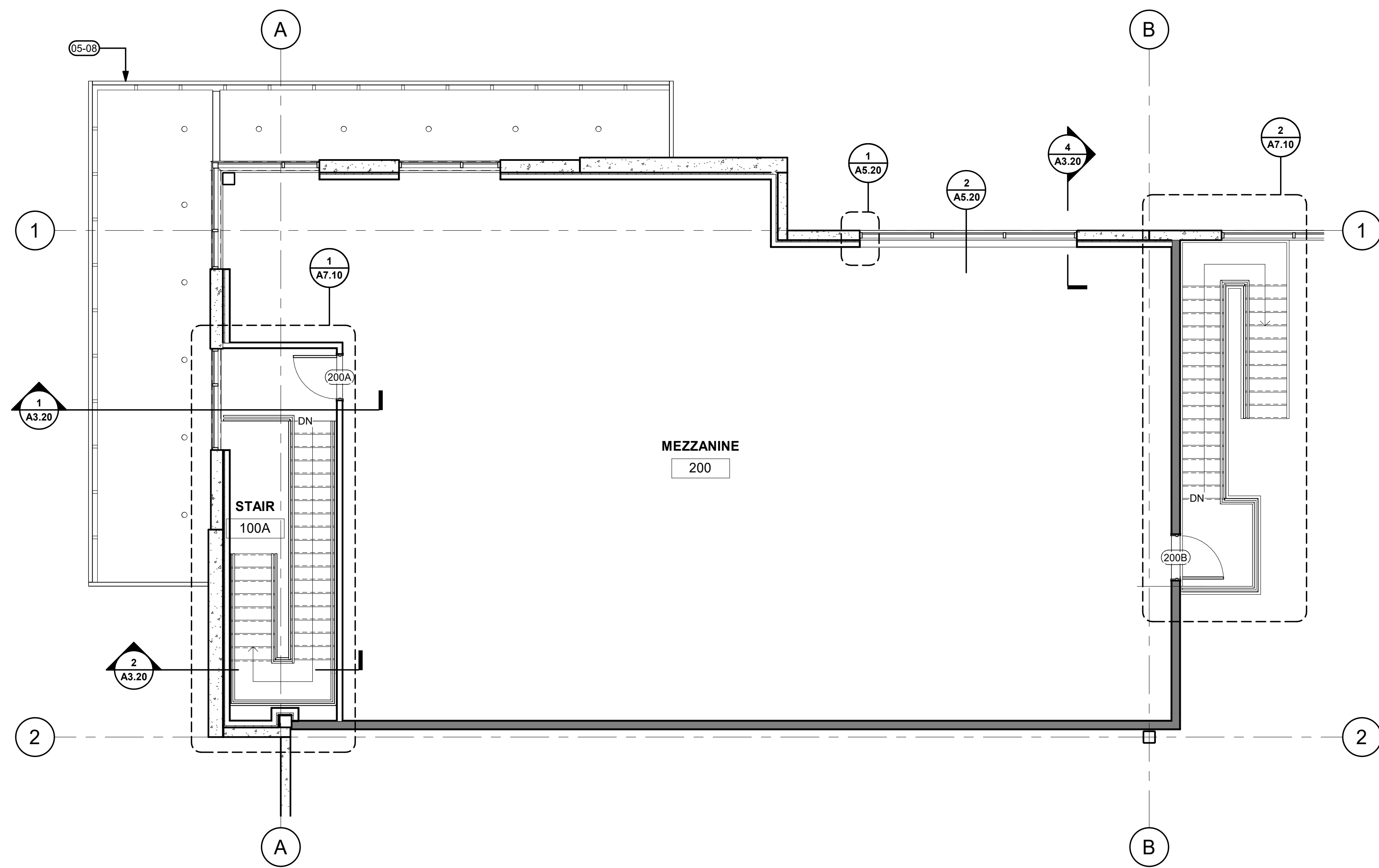




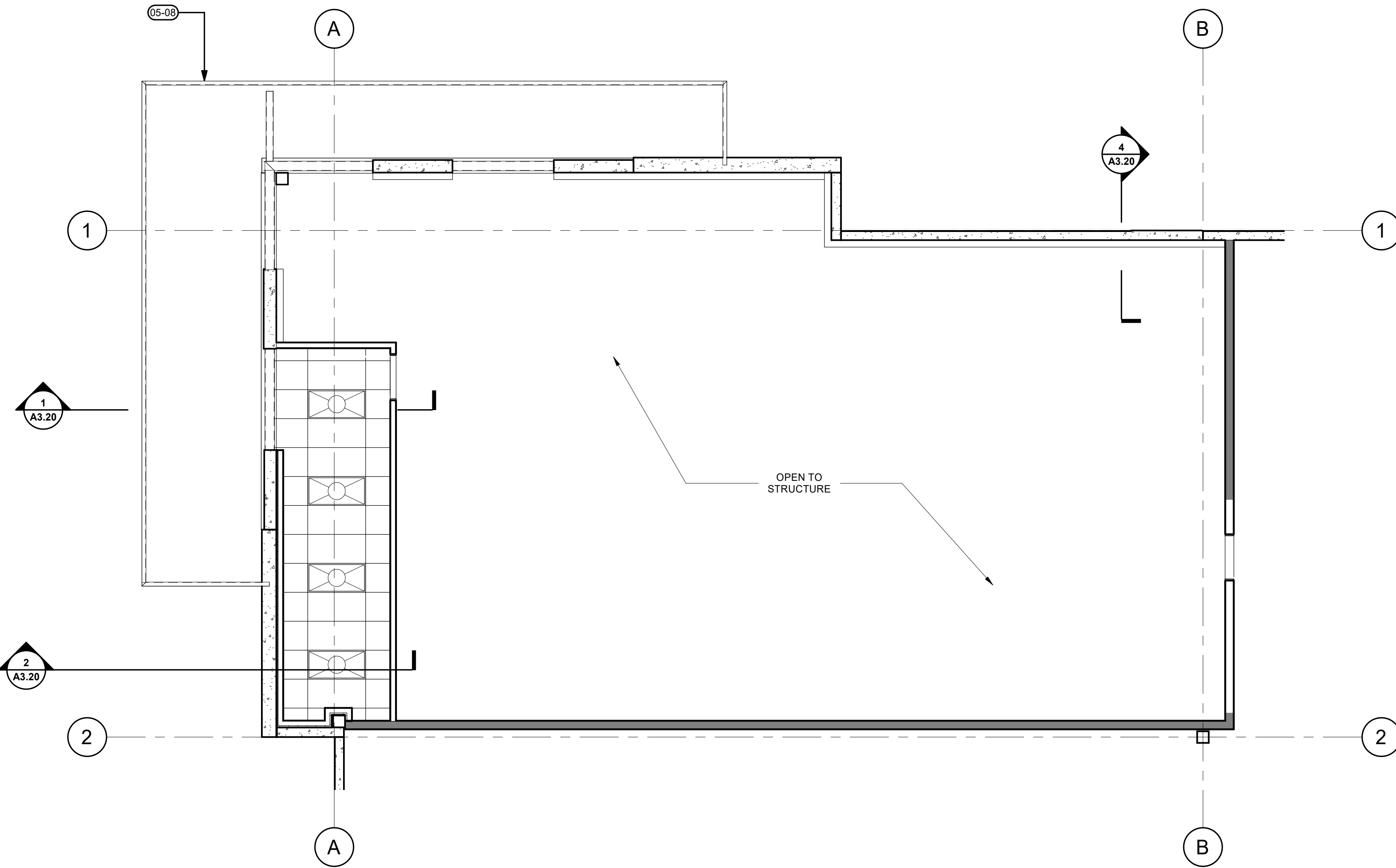




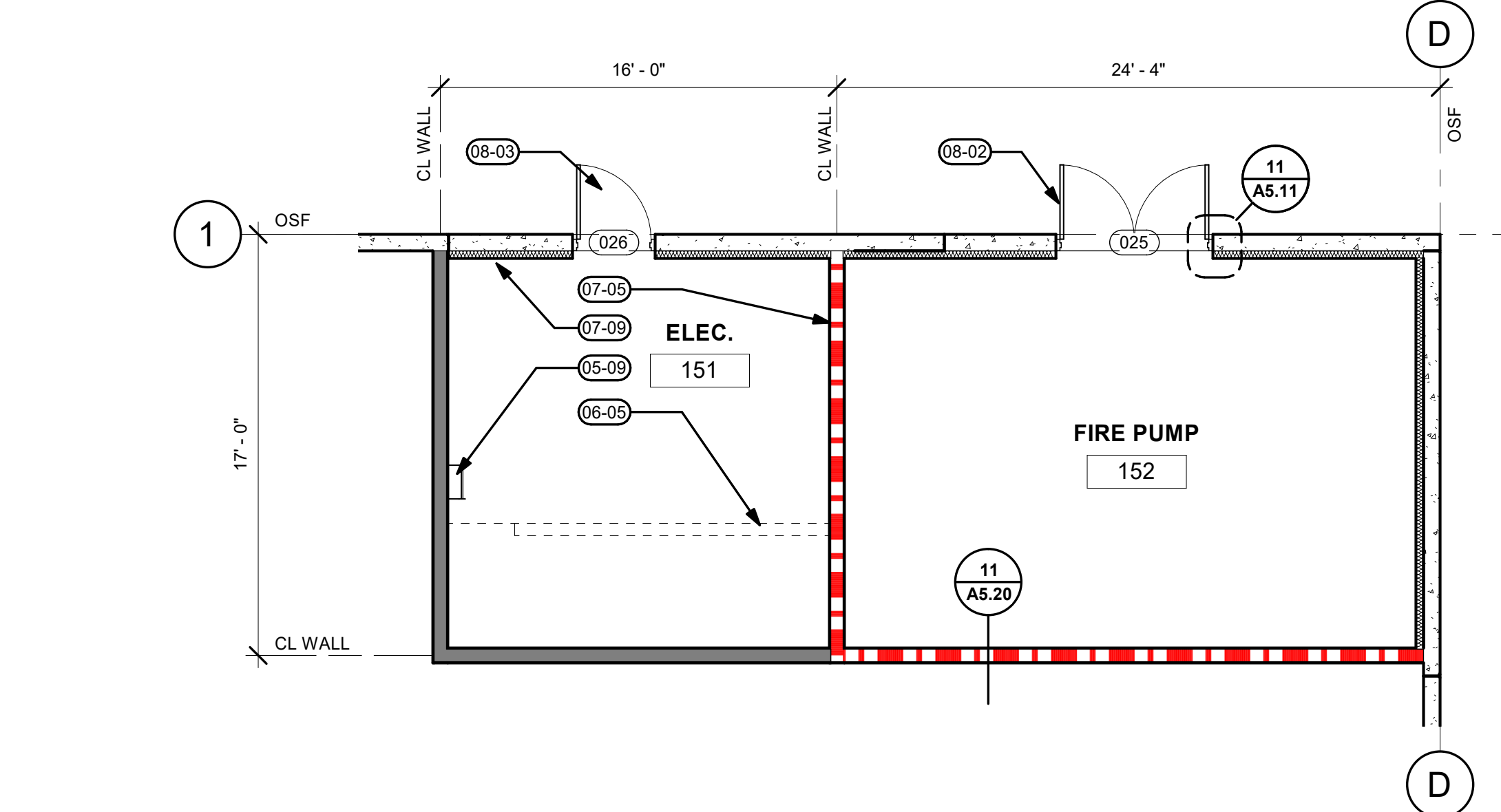




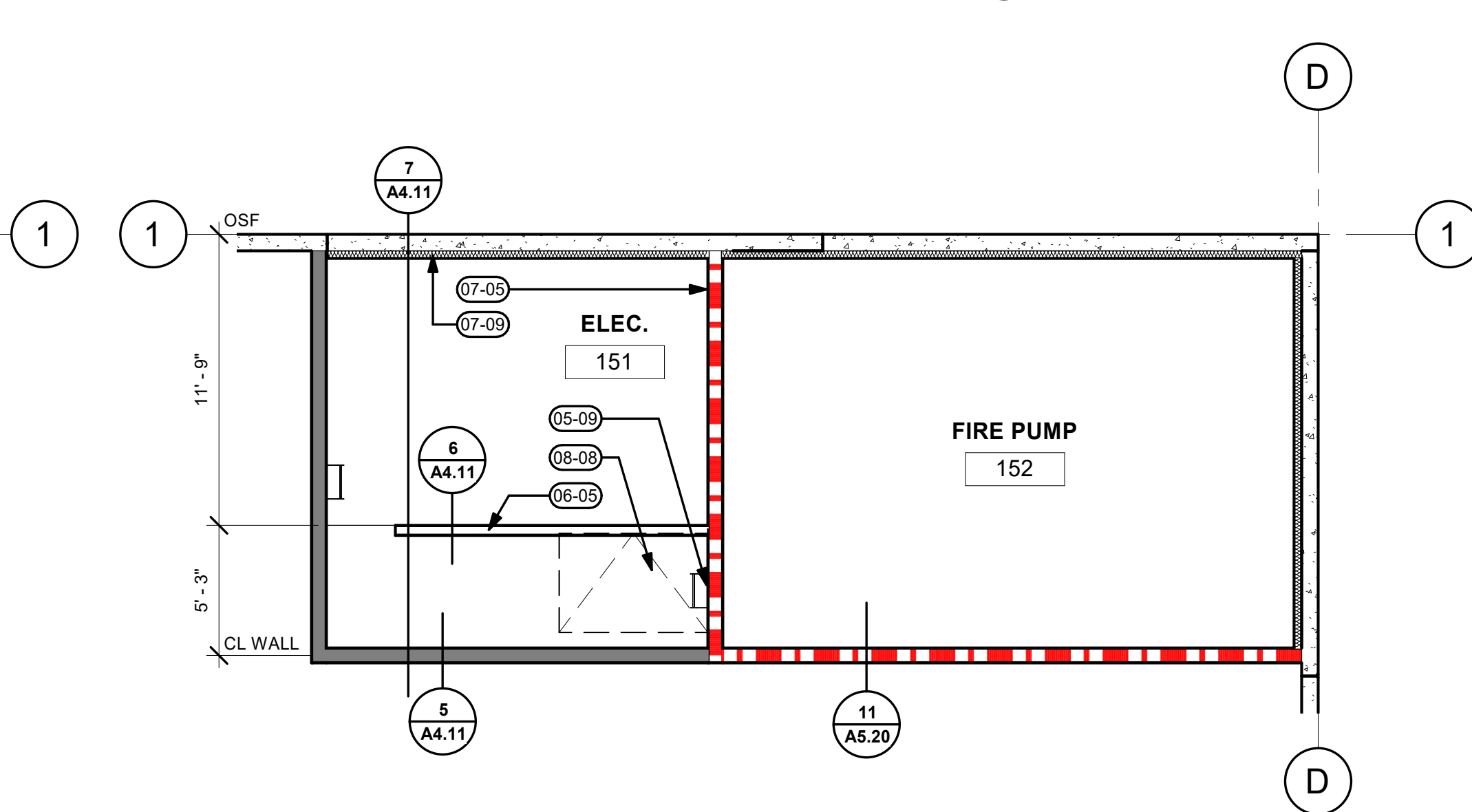
1 NW MEZZANINE FLOOR PLAN  
A4.11 3/16" = 1'-0"



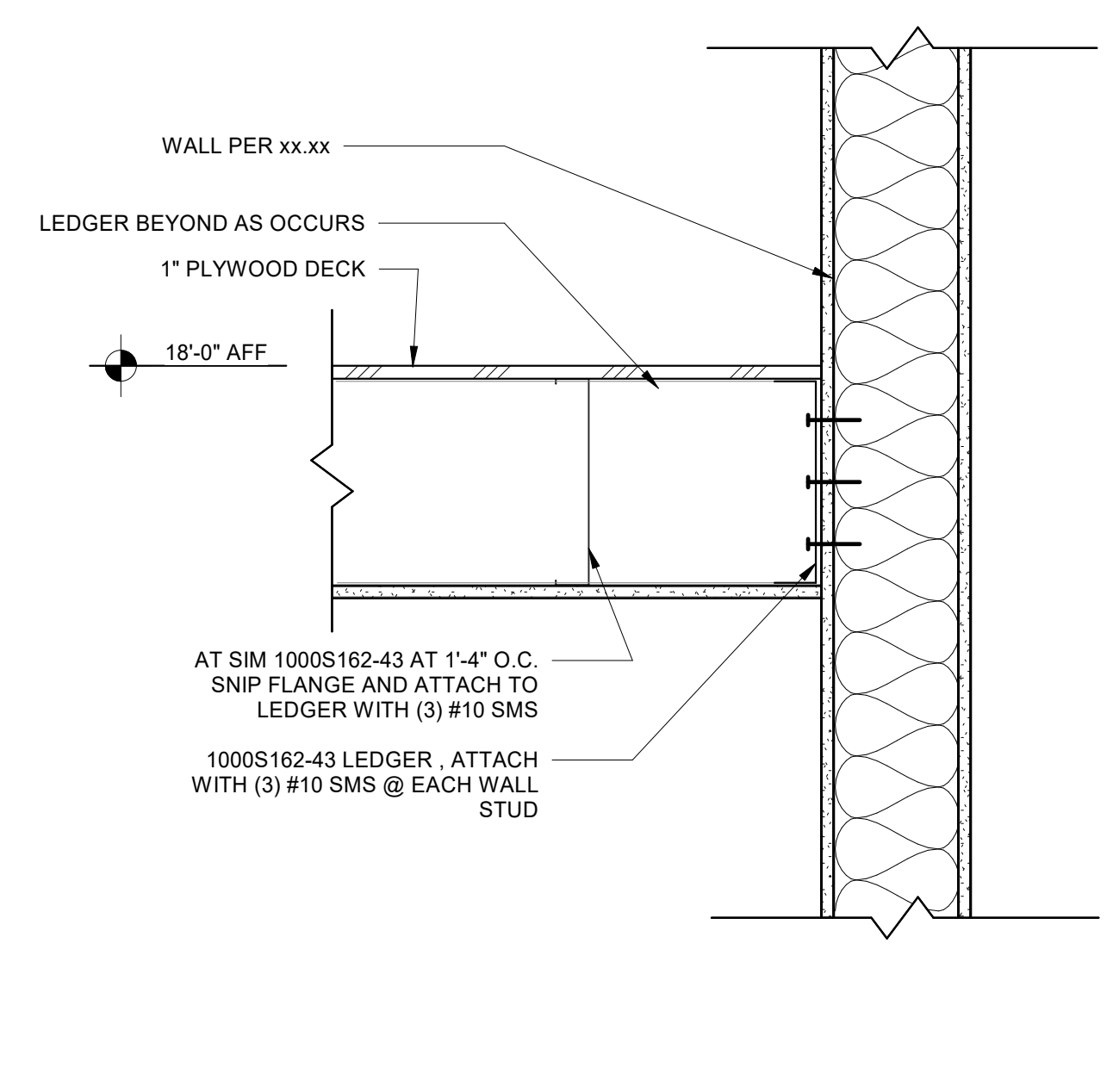
2 NW MEZZANINE RCP  
A4.11 3/16" = 1'-0"



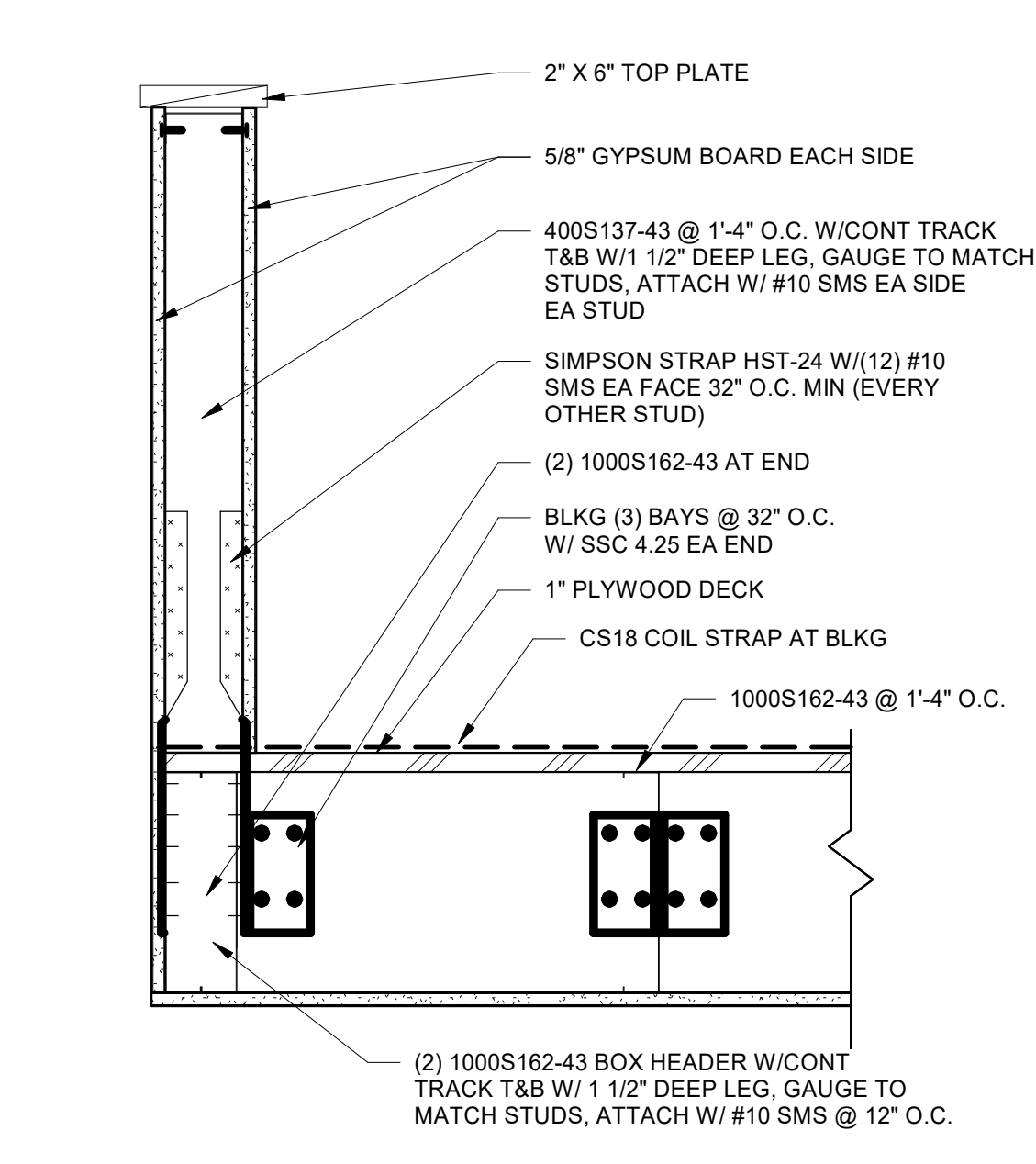
3 ENLARGED UTILITY ROOM PLANS  
A4.11 3/16" = 1'-0"



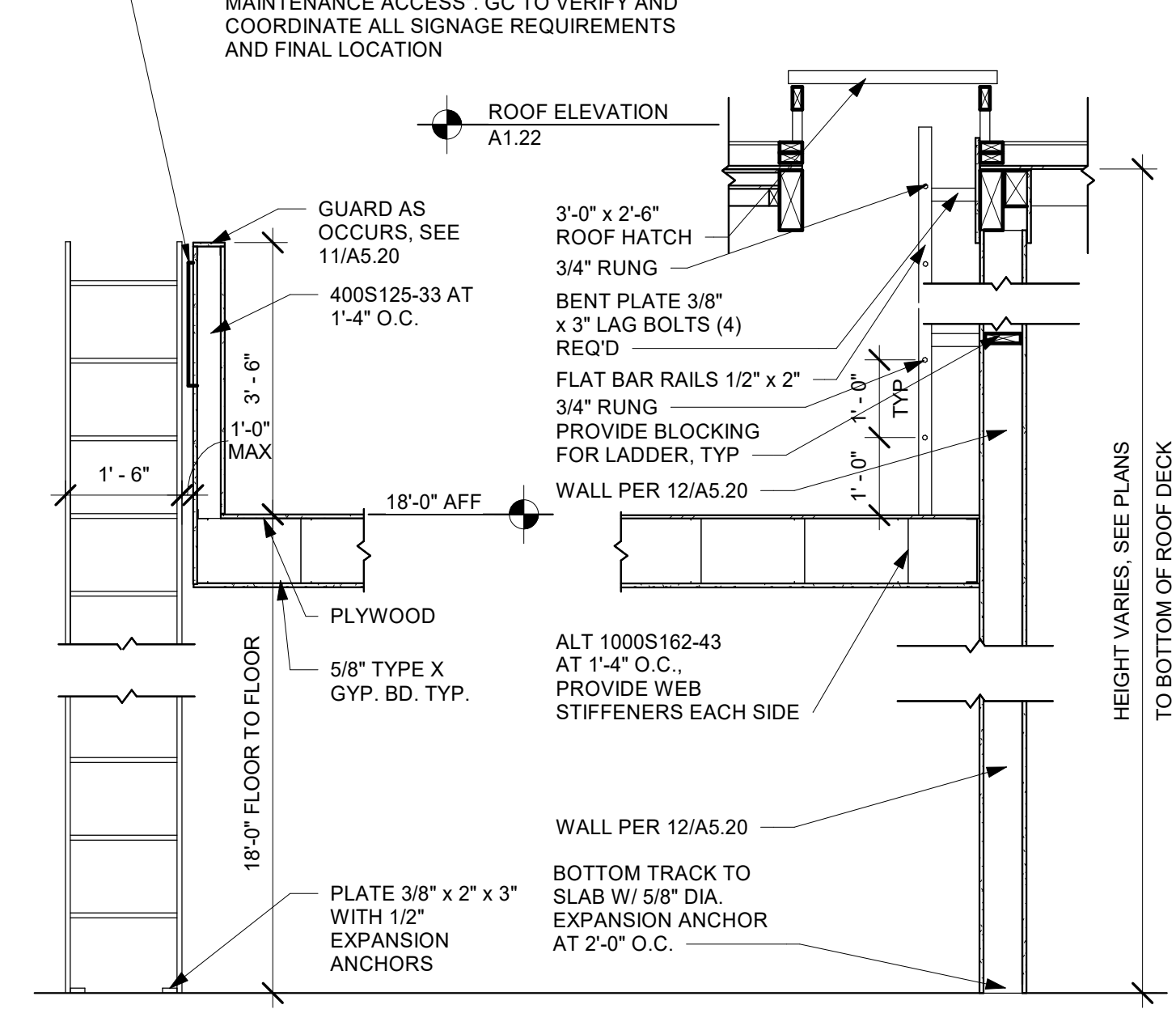
04 ENLARGED MEZZANINE PLAN  
A4.11 3/16" = 1'-0"



5 MEZZANINE DETAIL  
A4.11 1 1/2" = 1'-0"



6 MEZZANINE RAILING  
A4.11 1 1/2" = 1'-0"



7 ACCESS LADDER DETAIL  
A4.11 1/2" = 1'-0"

**GENERAL NOTES**

- A. SEE A0.01 FOR ADDITIONAL INFORMATION ON FIXTURE MOUNTING HEIGHTS. ALL REQUIRED ADA CLEARANCES ARE TO FACE OF FINISH UNLESS OTHERWISE NOTED.
- B. ALL DIMENSIONS IN THIS SHEET ARE TO FACE OF FINISH UNLESS OTHERWISE NOTED.
- C. CENTER ALL TOILETS/URINALS WITHIN STALL UNLESS OTHERWISE NOTED.
- D. INSULATE ALL UNDER COUNTER HOT WATER AND WASTE LINES.
- E. COORDINATION OF BLOCKING REQUIREMENTS FOR WALL-MOUNTED SPECIALTIES BY CONTRACTOR.
- F. CONFIRM REQUIREMENTS AND SIZES FOR ALL EQUIPMENT/APPLIANCES PRIOR TO CONSTRUCTION OF CABINETRY/COUNTERS.
- G. FINISH ENDS OF COUNTERS, DOORS, FACES, TYP.
- H. ALL EXPOSED EDGES AT DOORS AND SHELVING TO BE P-LAM TO MATCH ADJACENT VERTICAL SURFACES.
- I. SCRIBE TO FIT CASEWORK AT ALL WALLS.
- J. WRAP ALL EXPOSED EDGES WITH P-LAM UNLESS NOTED OTHERWISE.
- K. SHIM AS REQUIRED.

**WALL TYPES**

- CONCRETE TILT PANEL - SEE STRUCTURAL ELEVATIONS FOR THICKNESSES
- 1HR RATED WALL PER 11/A5.20
- FULL HEIGHT WALL PER 12/A5.20
- STICK-PIN INSULATION 10/A5.20
- INTERIOR PARTITION PER 13/15/A5.20

**KEYNOTES**

- 05-08 STEEL FRAMED CANOPY, SEE DETAILS 9-10/A5.13
- 05-09 ROOF ACCESS LADDER BY DESIGN-BUILD
- 06-05 WOOD FRAMED EQUIPMENT PLATFORM, SEE DETAILS 9-11/A5.20
- 07-05 PROVIDE FIRESTOPPING WHERE RATED WALL MEETS UNDERSIDE OF ROOF DECK, SEE DETAIL XX.XX.
- 07-09 STICK-PIN INSULATION AT EXTERIOR WALL, SEE WALL TYPES, SHEET A1.10
- 08-02 INSULATED DOUBLE HM PERSONNEL DOOR, PAINT PER ELEVATIONS, SEE DOOR SCHEDULE
- 08-03 INSULATED HM PERSONNEL DOOR AT ELECTRICAL ROOM, PAINT PER ELEVATIONS, SEE DOOR SCHEDULE
- 08-08 ROOF ACCESS, SEE DETAILS 14-15/A5.13



© MACKENZIE 2022 ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF MACKENZIE AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

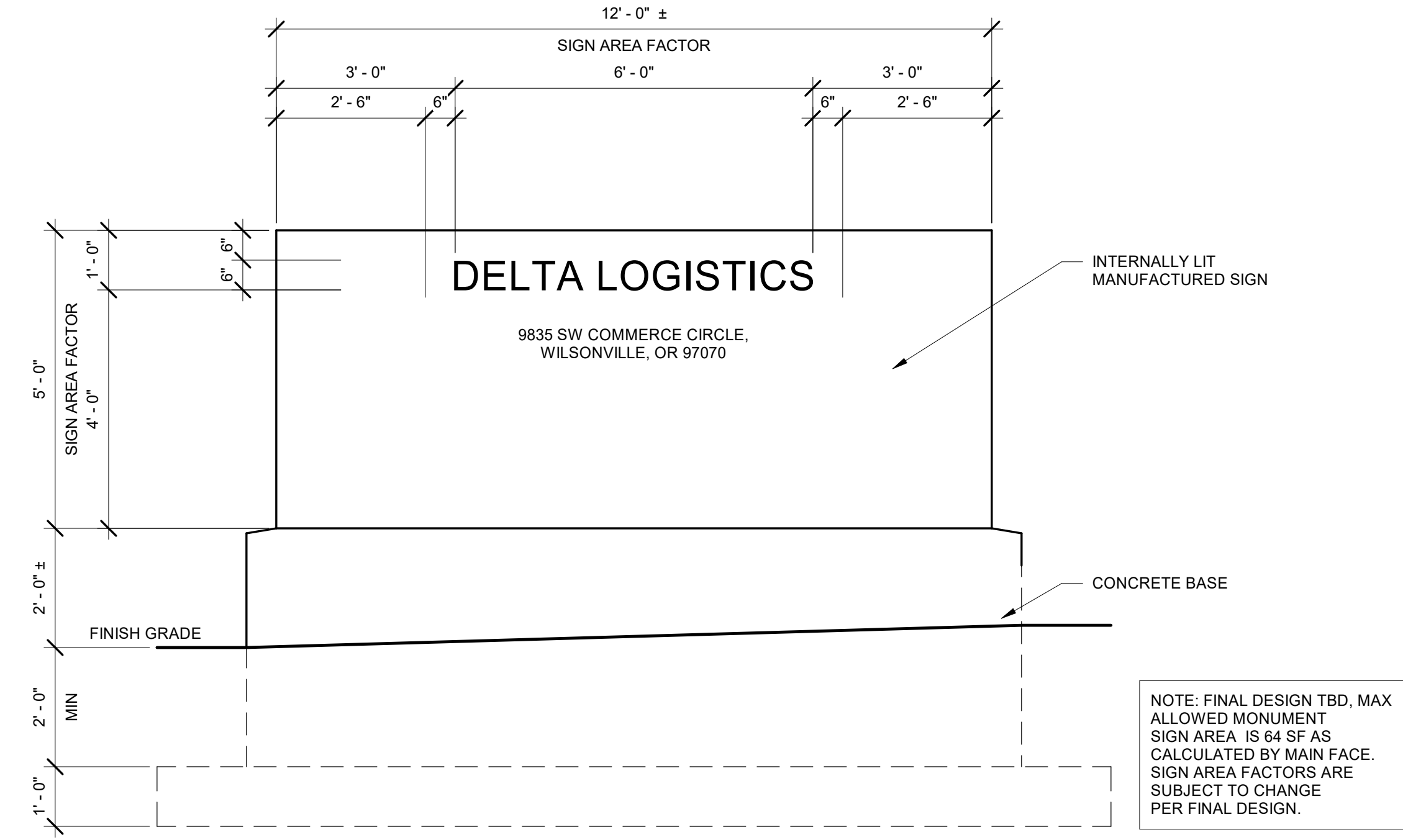
SHEET TITLE:  
**ENLARGED PLANS**

DRAWN BY: Author  
CHECKED BY: Checker  
SHEET

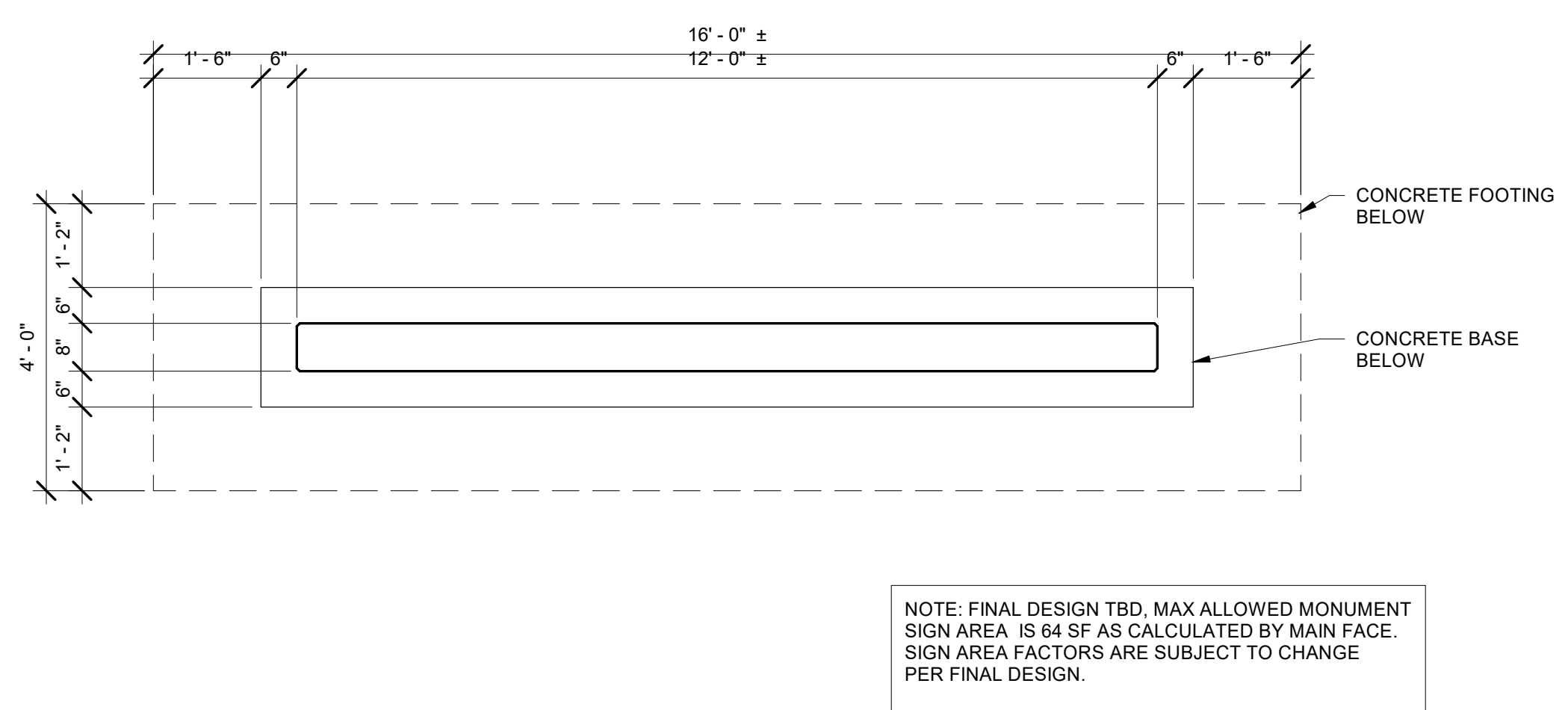
**A4.11**

JOB NO. **2200502.00**

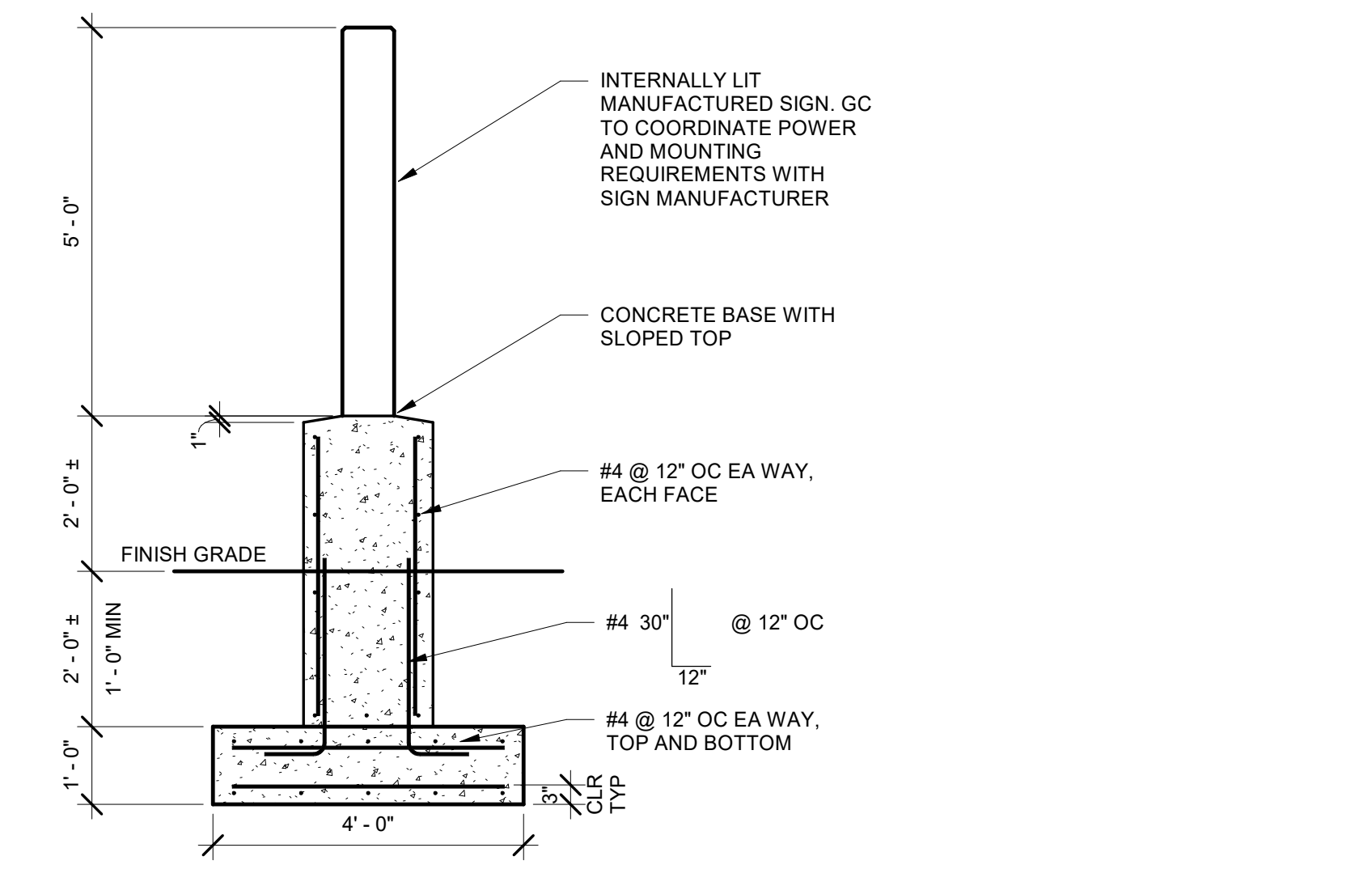




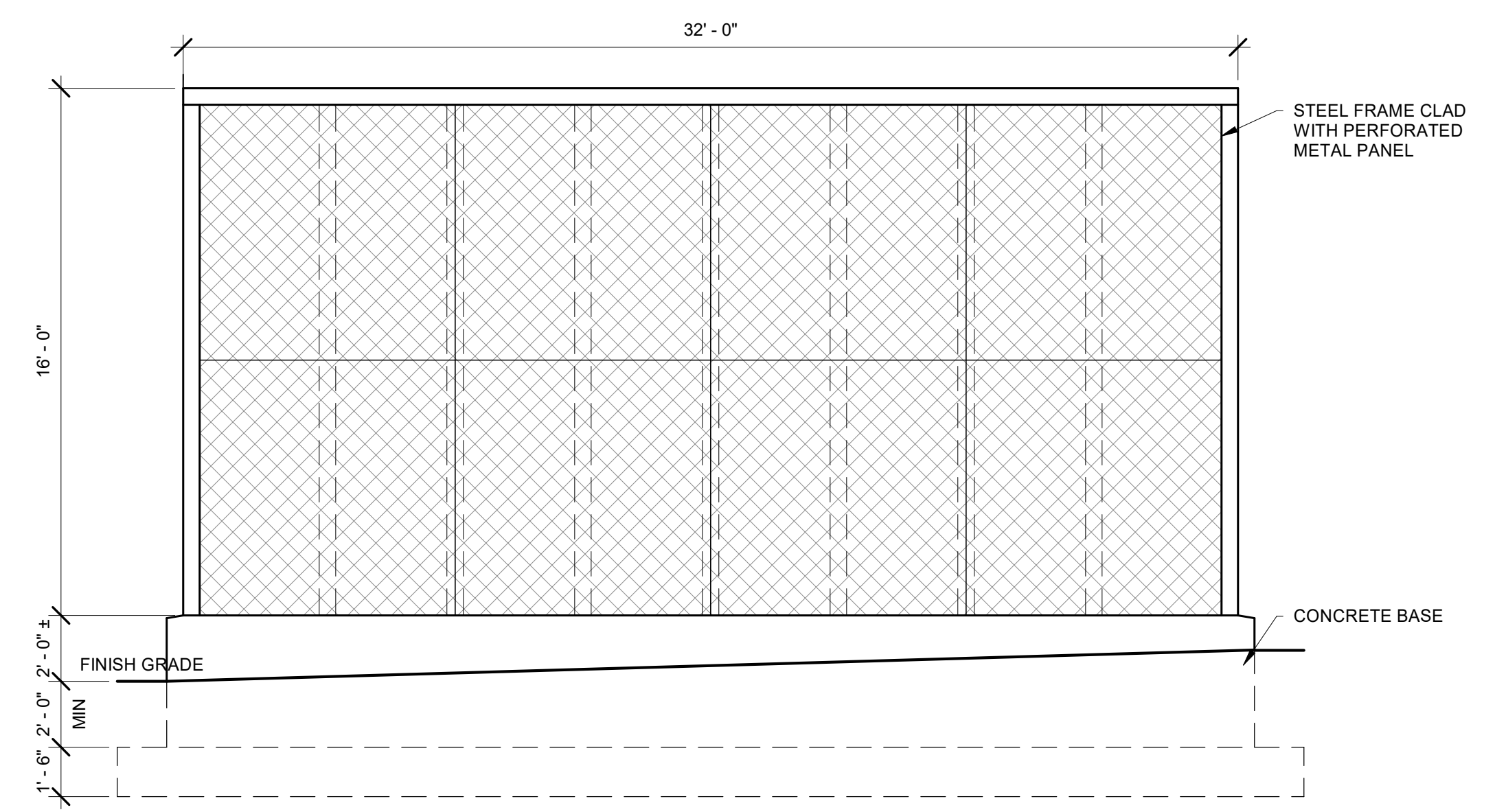
1 MONUMENT SIGN ELEVATION  
 A5.10 1/2" = 1'-0"



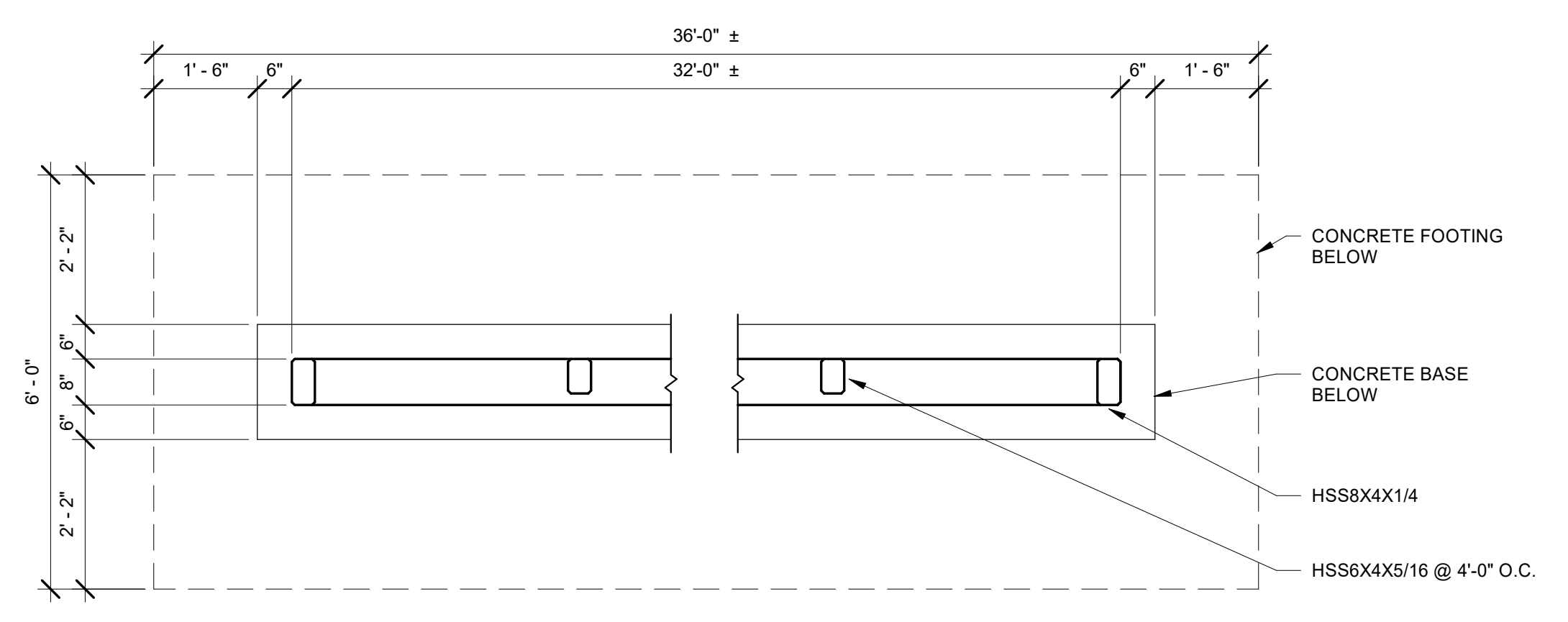
2 MONUMENT SIGN PLAN  
 A5.10 1/2" = 1'-0"



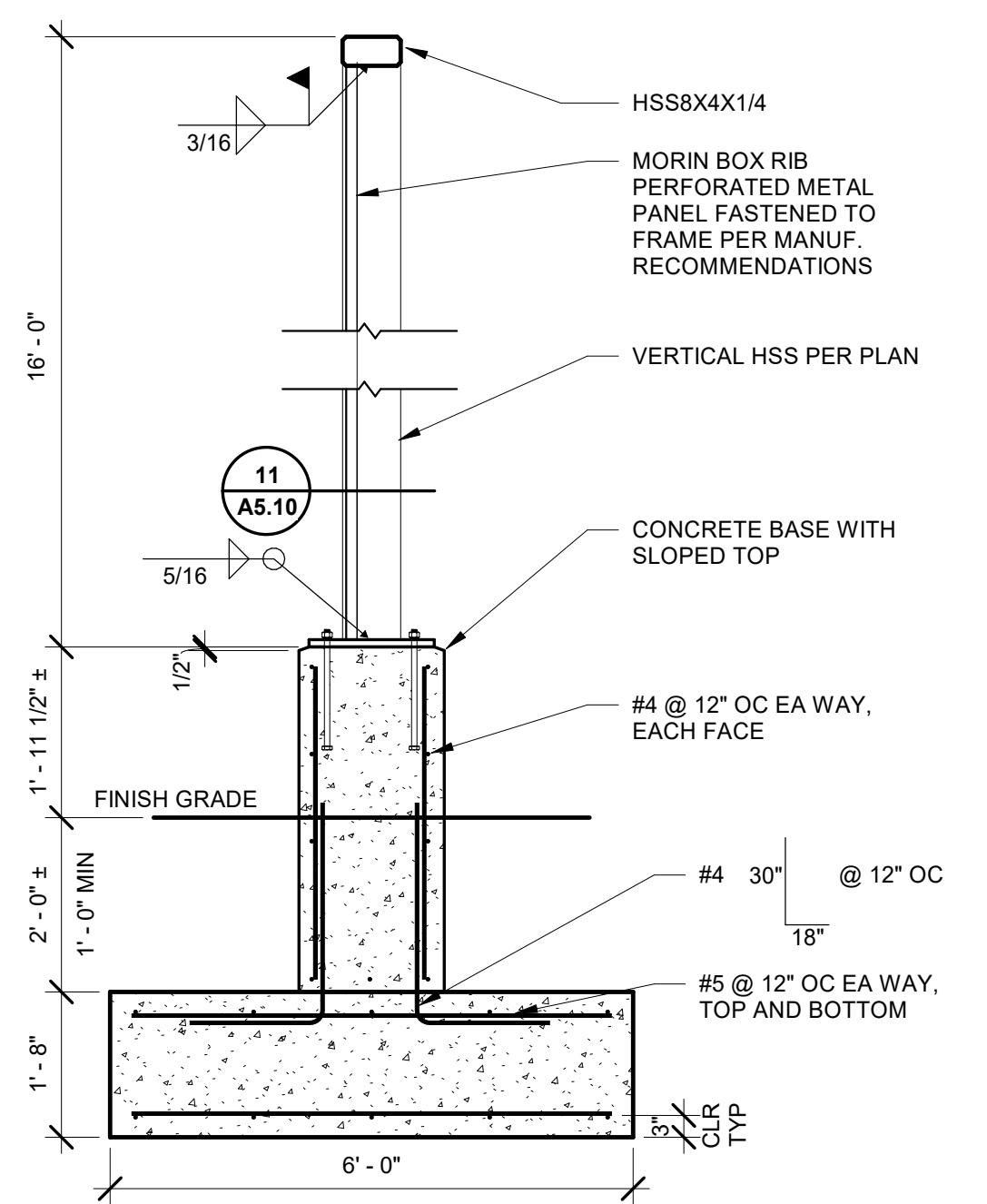
3 MONUMENT SIGN SECTION  
 A5.10 1/2" = 1'-0"



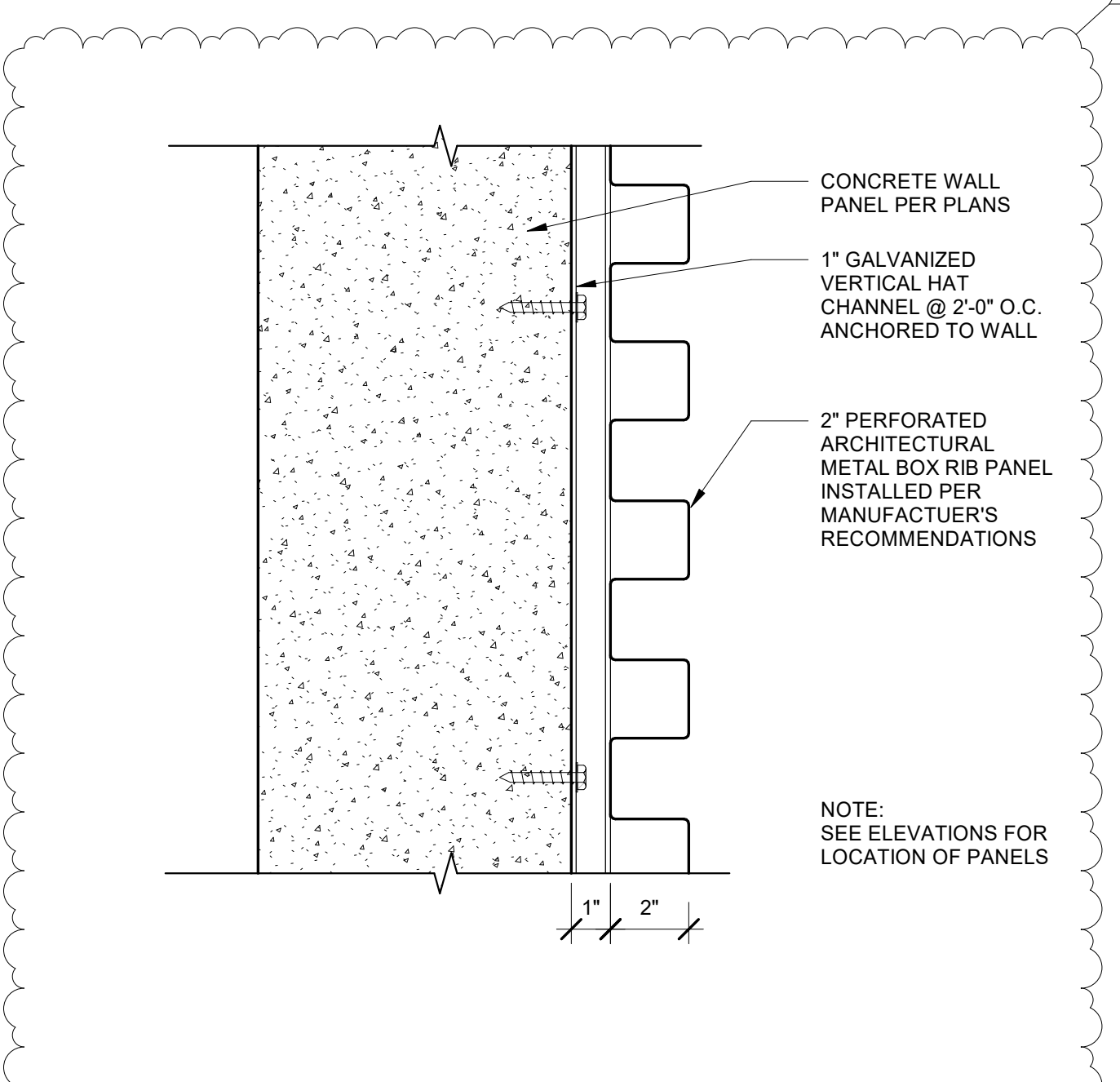
4 SCREENING WALL ELEVATION  
 A5.10 1/4" = 1'-0"



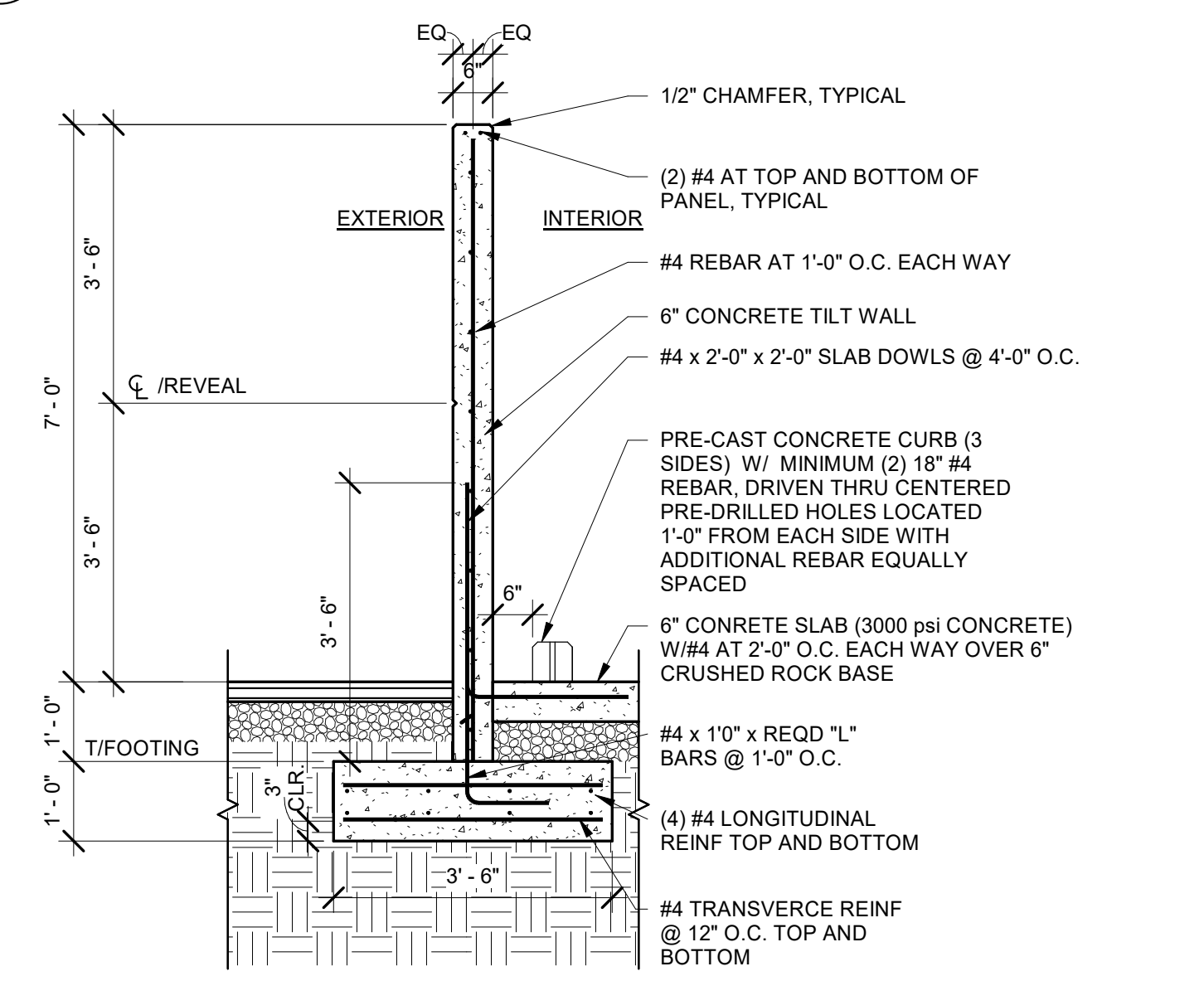
5 SCREENING WALL PLAN  
 A5.10 1/2" = 1'-0"



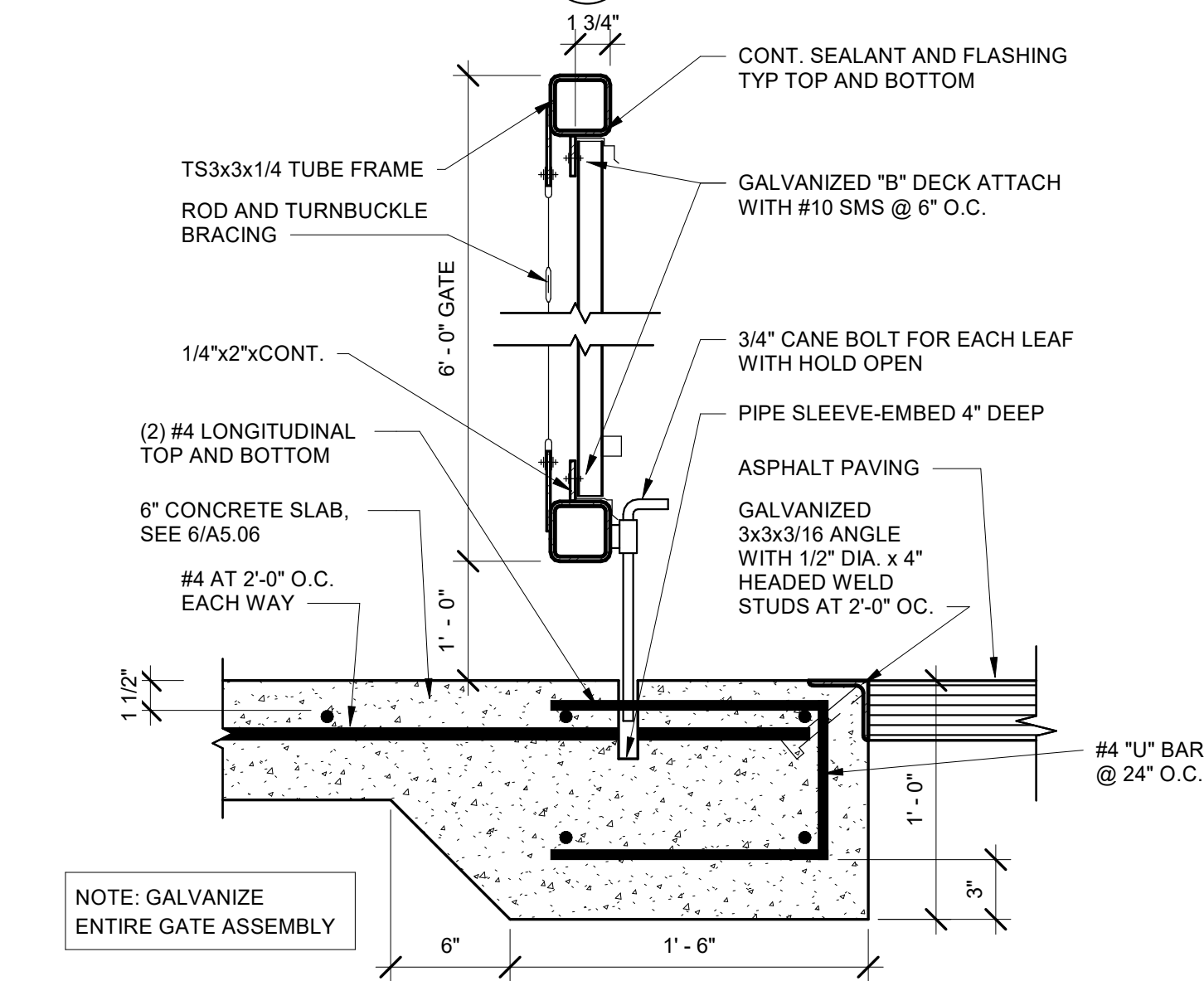
6 SCREENING WALL SECTION  
 A5.10 1/2" = 1'-0"



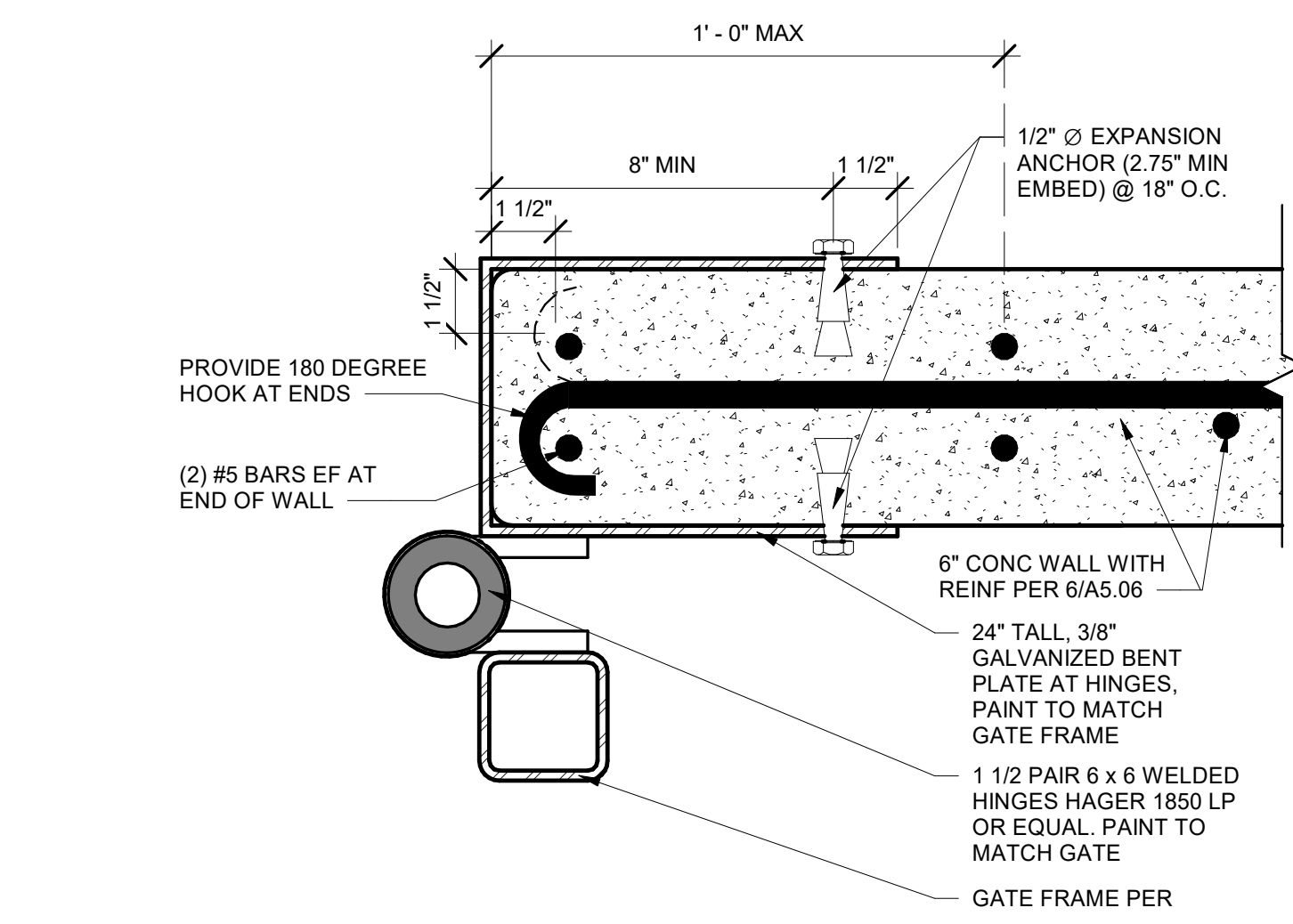
7 WALL PANEL APPLIQUE  
 A5.10 3" = 1'-0"



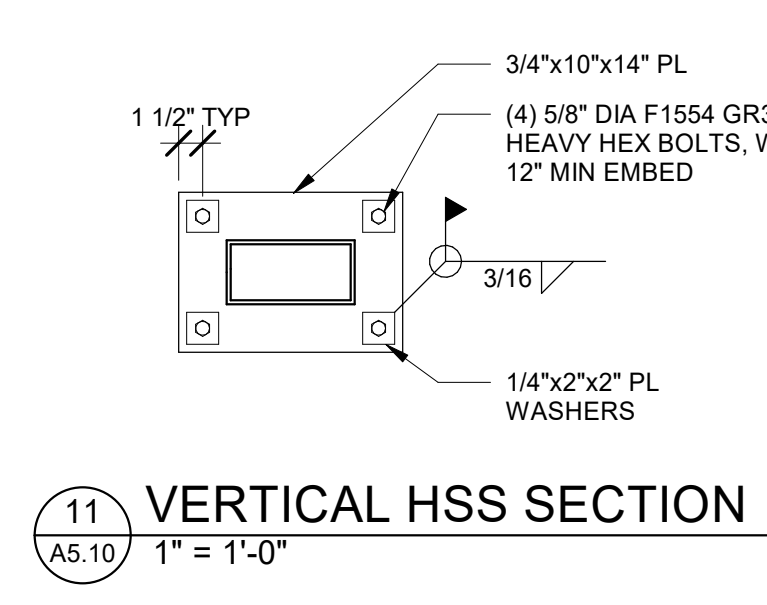
8 TRASH ENCLOSURE WALL  
 A5.10 1/2" = 1'-0"



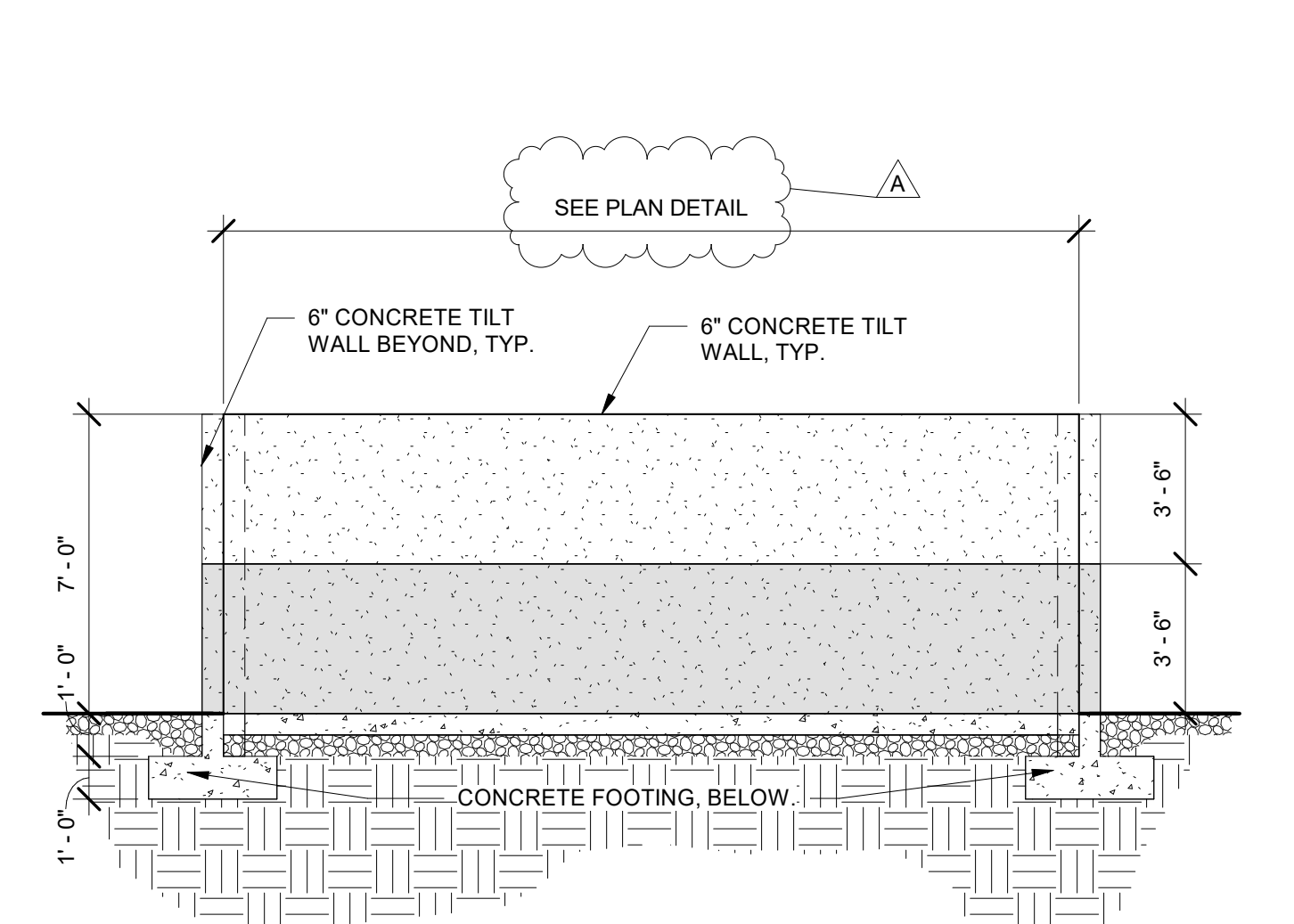
9 GATE SECTION  
 A5.10 1 1/2" = 1'-0"



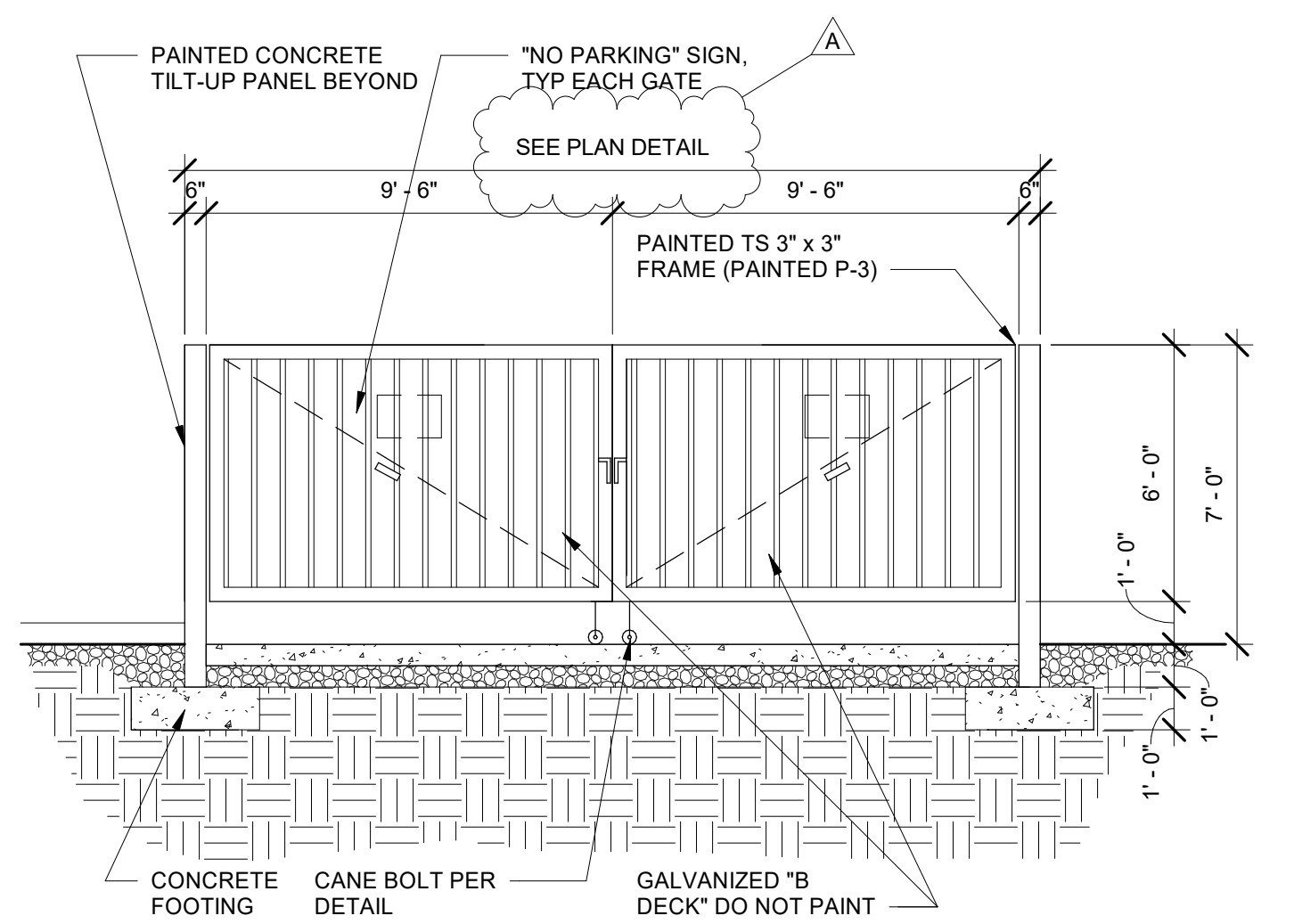
10 HINGE CONNECTION  
 A5.10 3" = 1'-0"



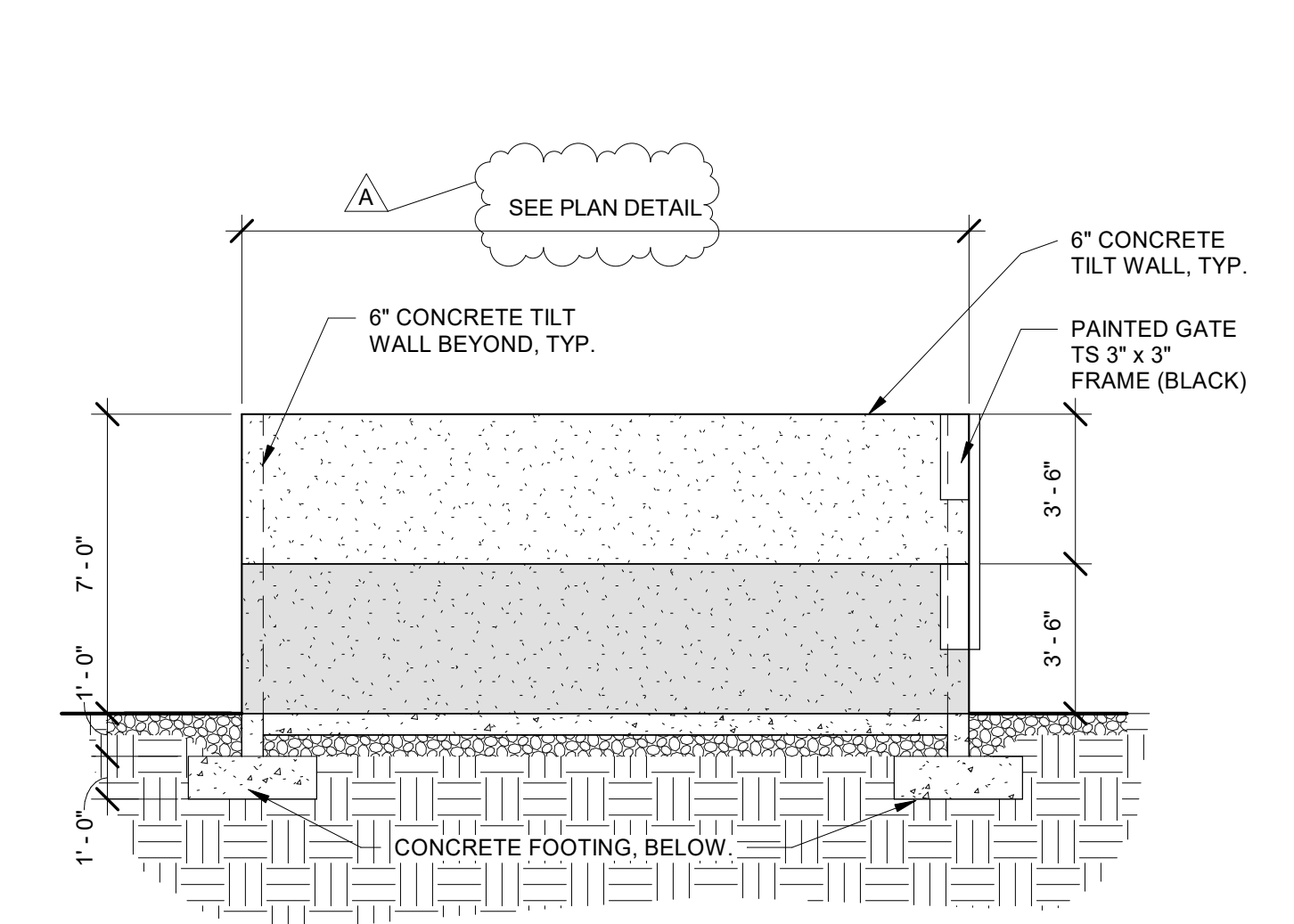
11 VERTICAL HSS SECTION  
 A5.10 1" = 1'-0"



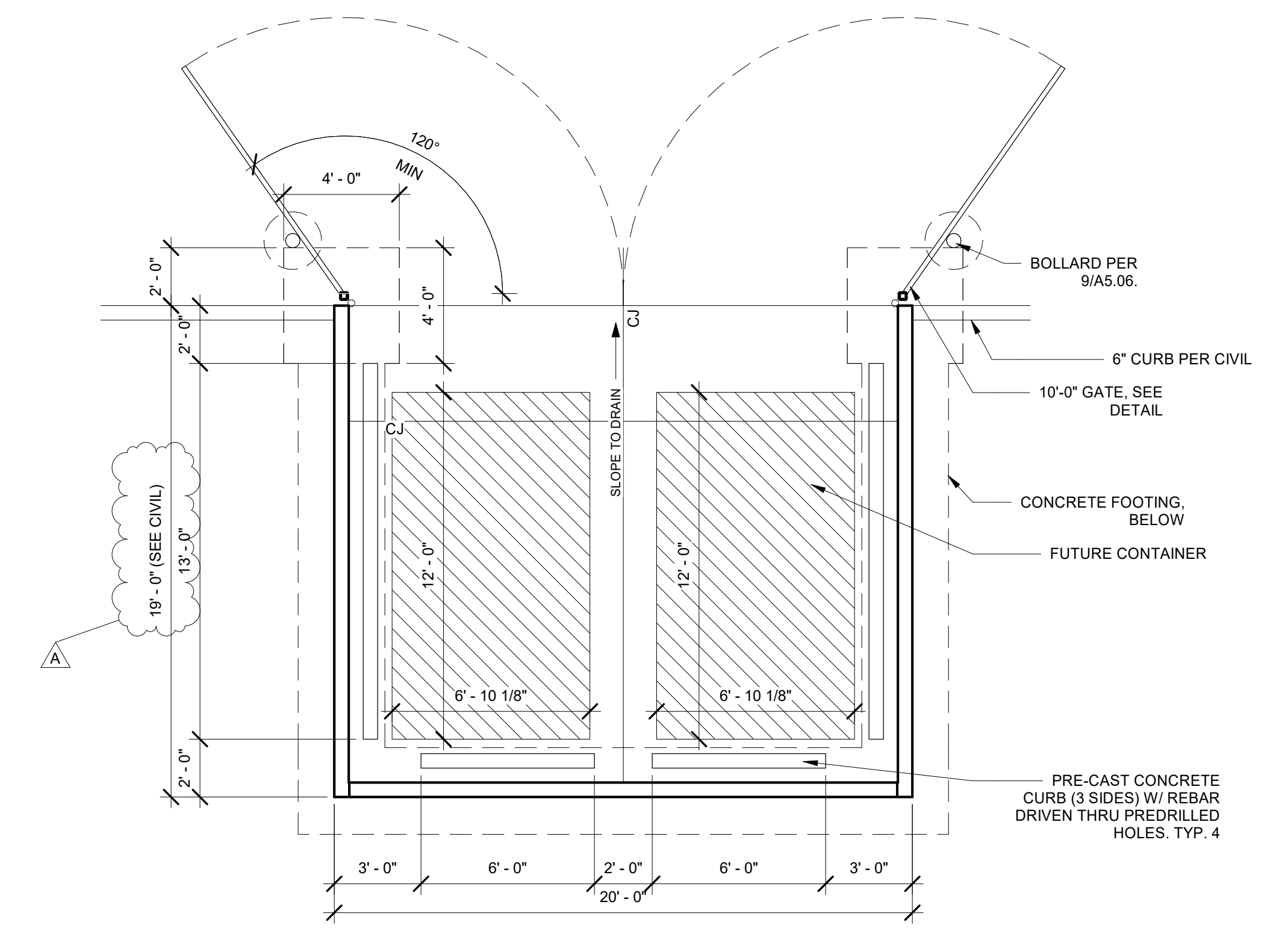
12 TRASH ENCLOSURE REAR ELEVATION  
 A5.10 1/4" = 1'-0"



13 TRASH ENCLOSURE FRONT ELEVATION  
 A5.10 1/4" = 1'-0"



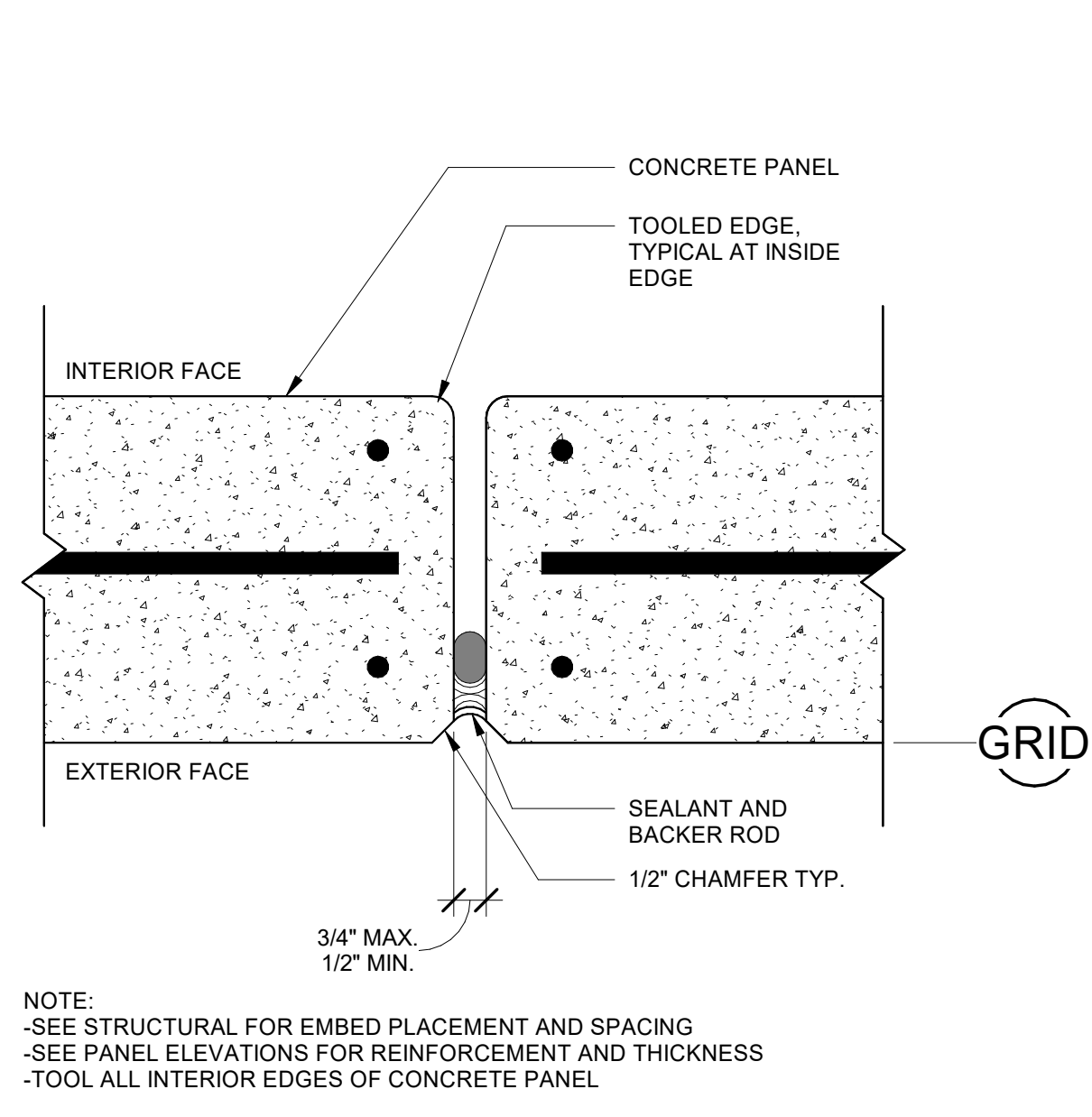
14 TRASH ENCLOSURE SIDE ELEVATION  
 A5.10 1/4" = 1'-0"



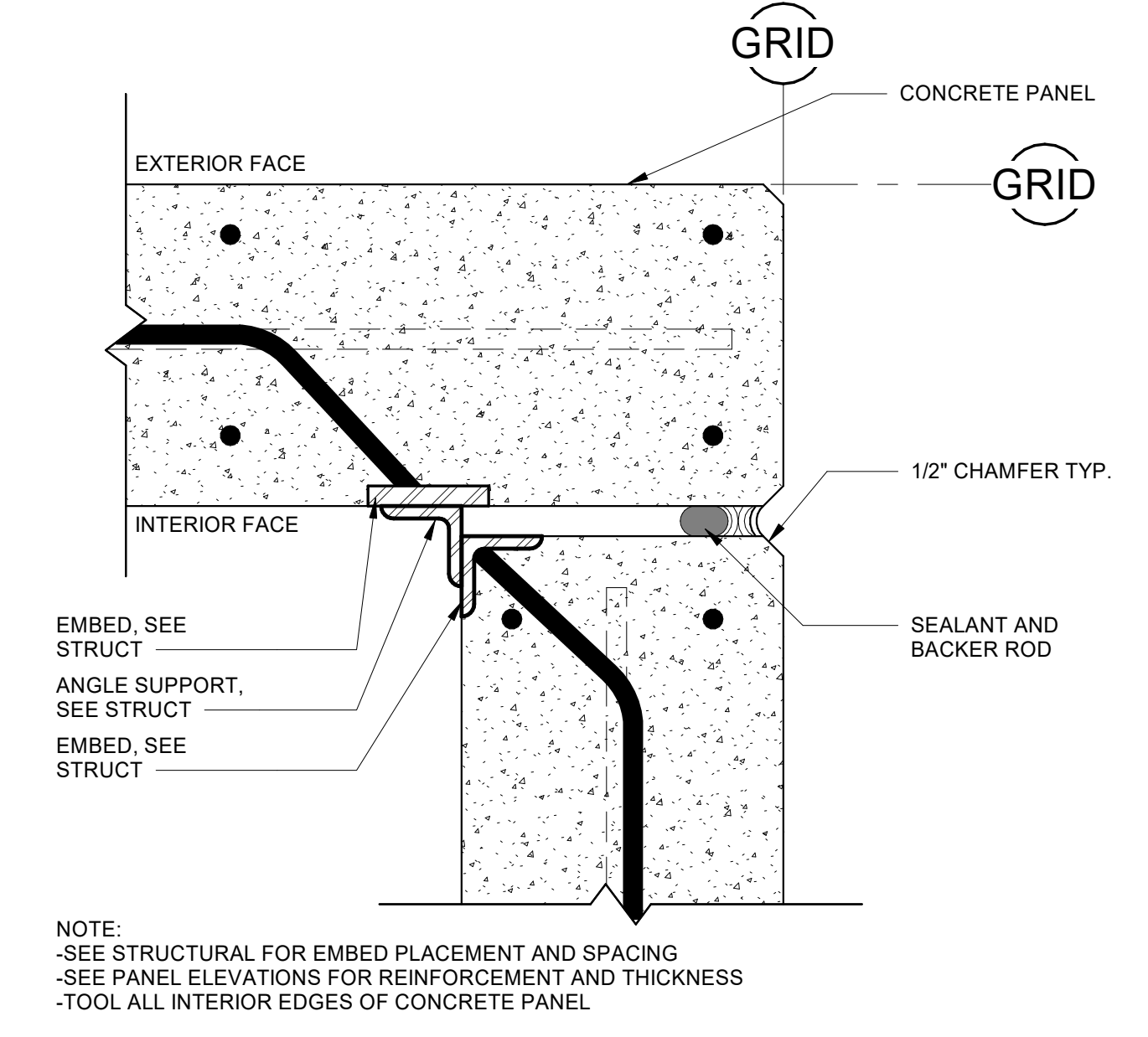
15 TRASH ENCLOSURE PLAN  
 A5.10 1/4" = 1'-0"

REVISION SCHEDULE		
Delta	Issued As	Issue Date
A	REV 1	7/26/22

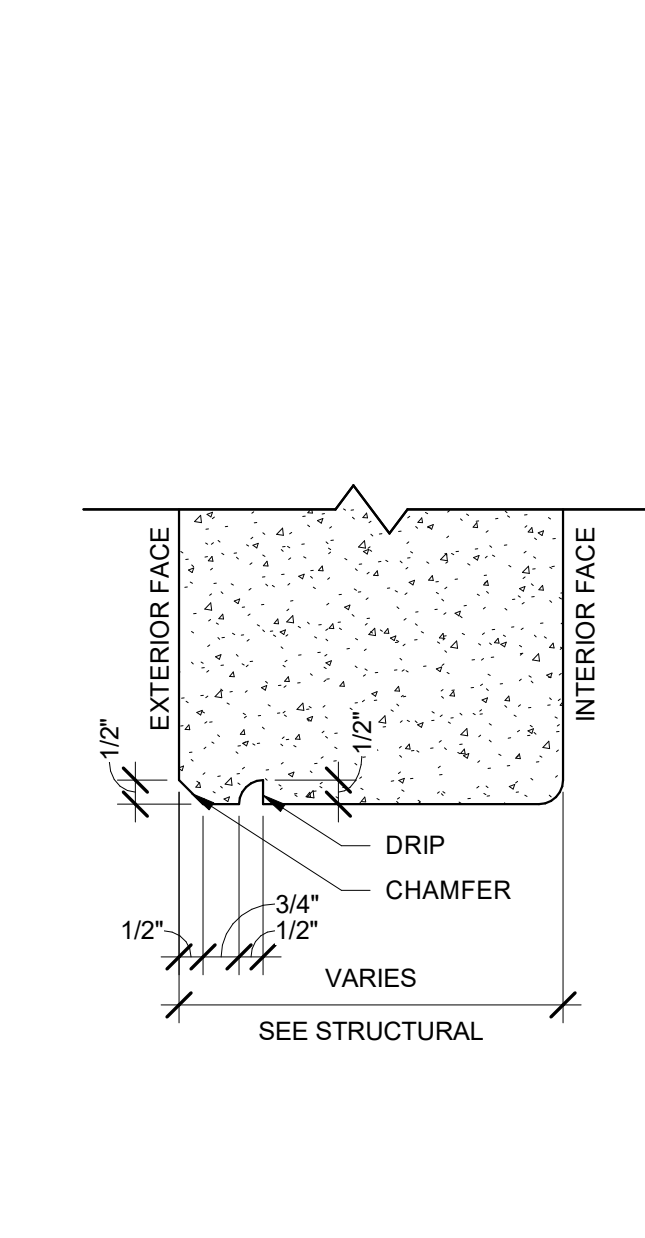




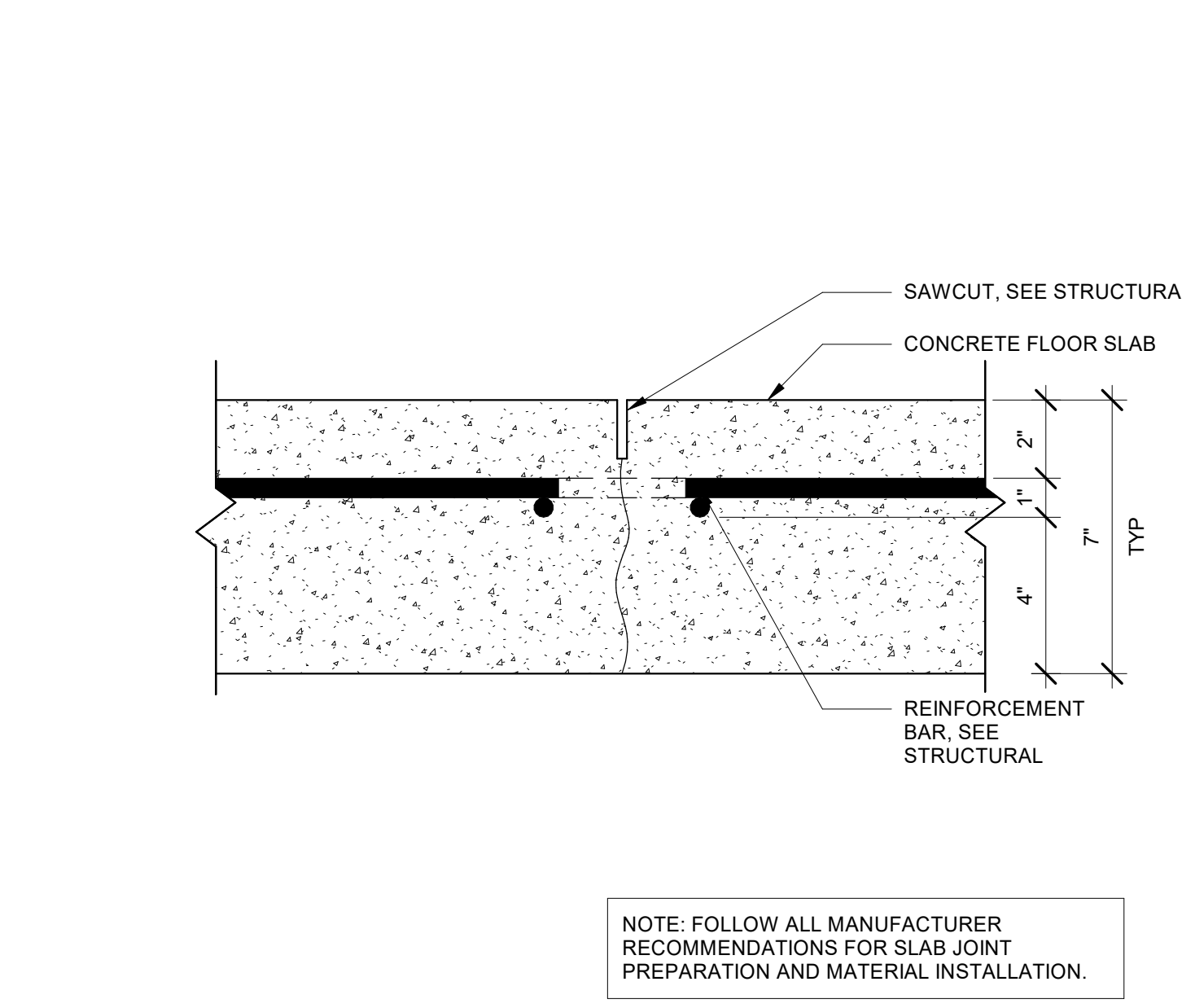
**1** END TO END CONNECTION  
A5.11 3\"/>



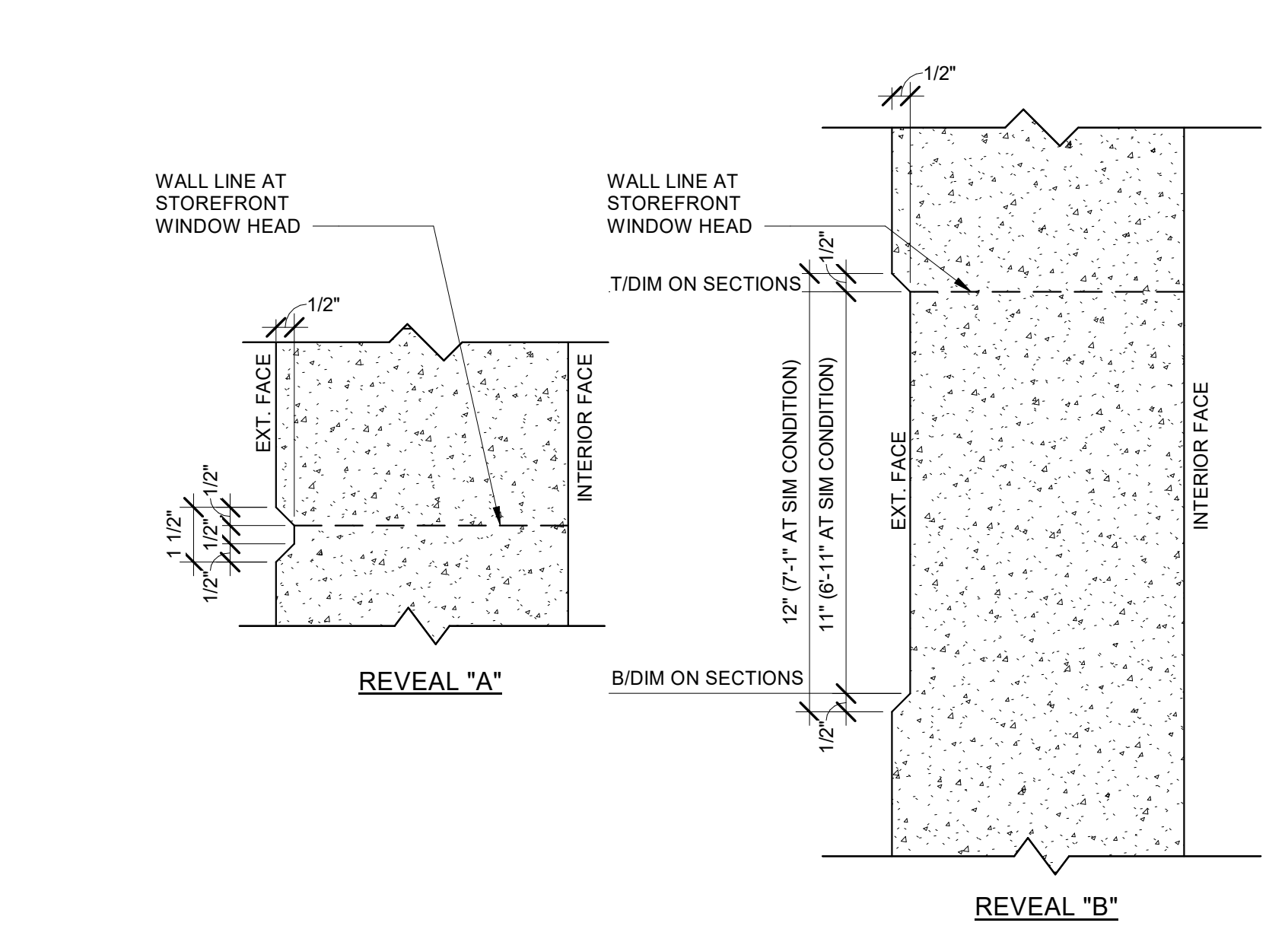
**2** CORNER CONNECTION  
A5.11 3\"/>



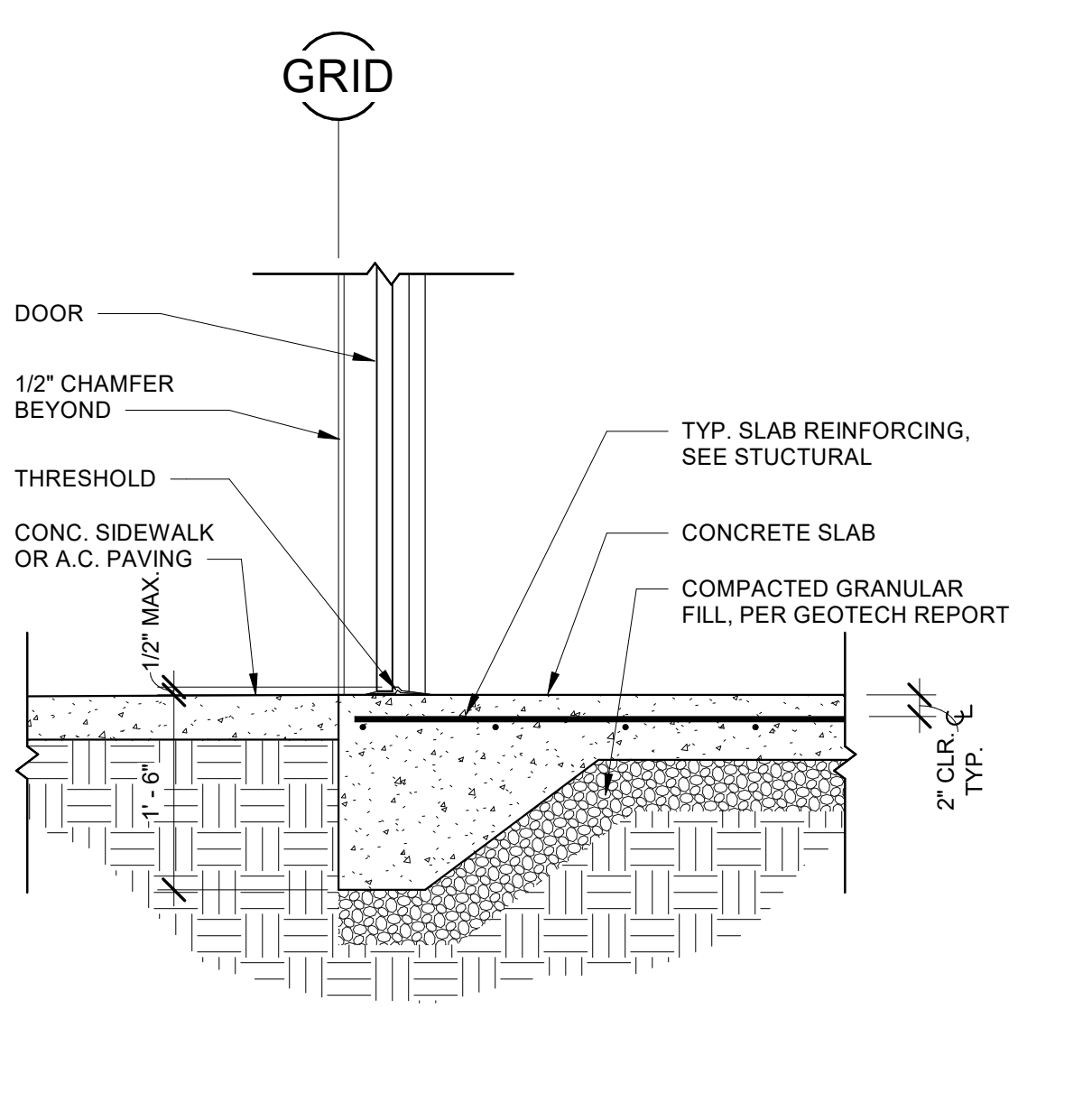
**3** DRIP EDGE  
A5.11 3\"/>



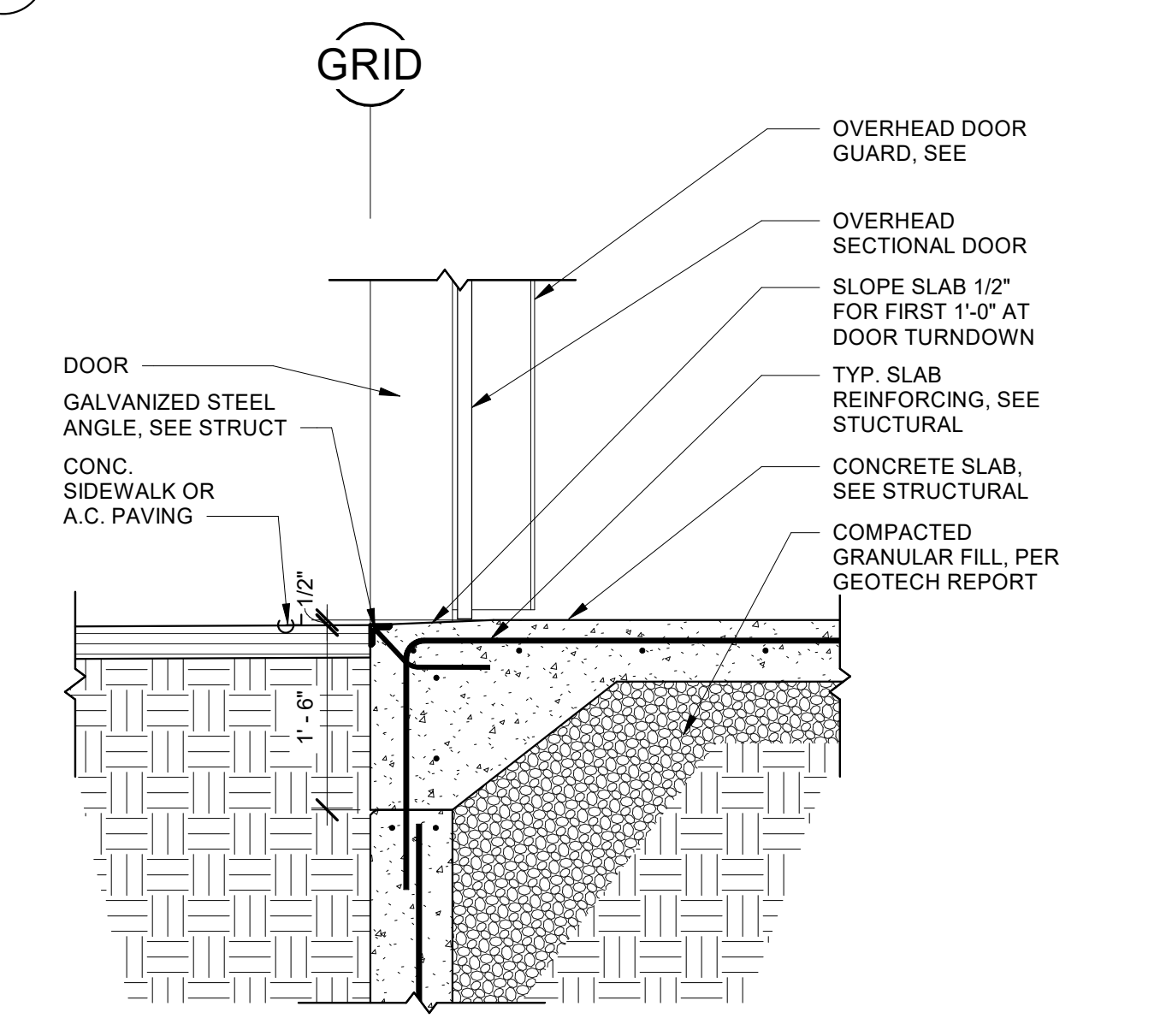
**4** FLOOR JOINT  
A5.11 3\"/>



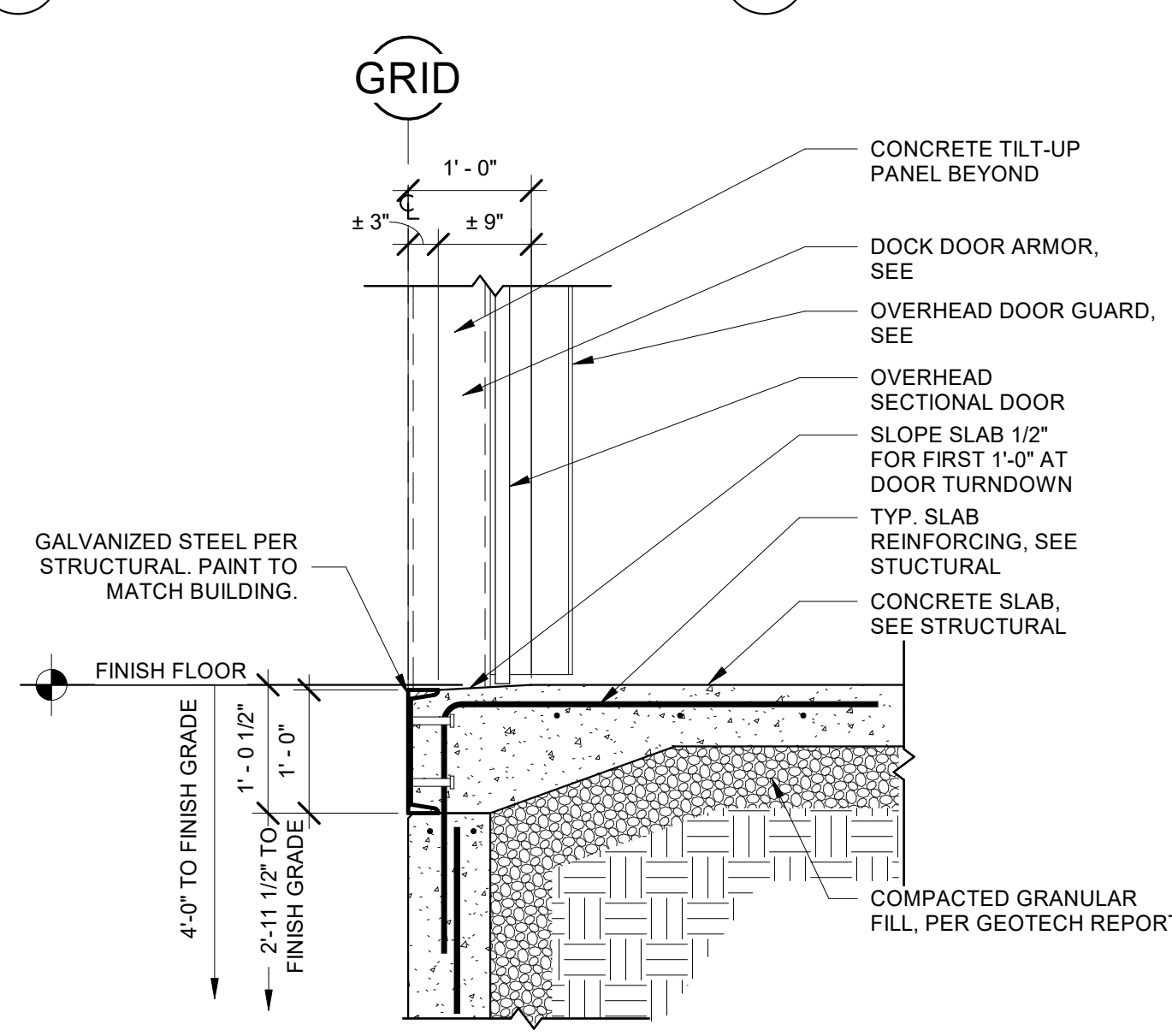
**5** CONCRETE REVEALS  
A5.11 3\"/>



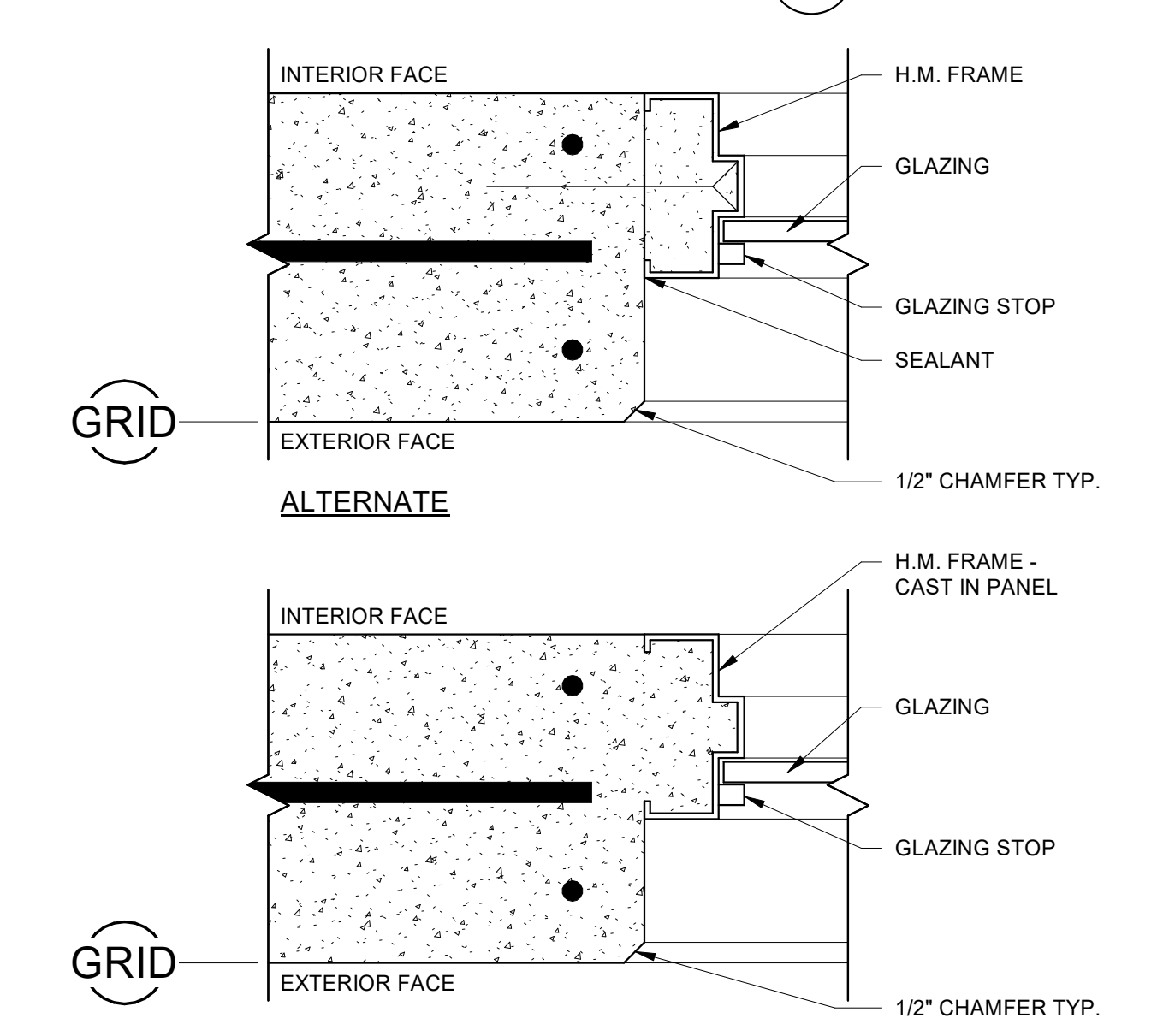
**6** SLAB AT PERSONNEL DOOR  
A5.11 3/4\"/>



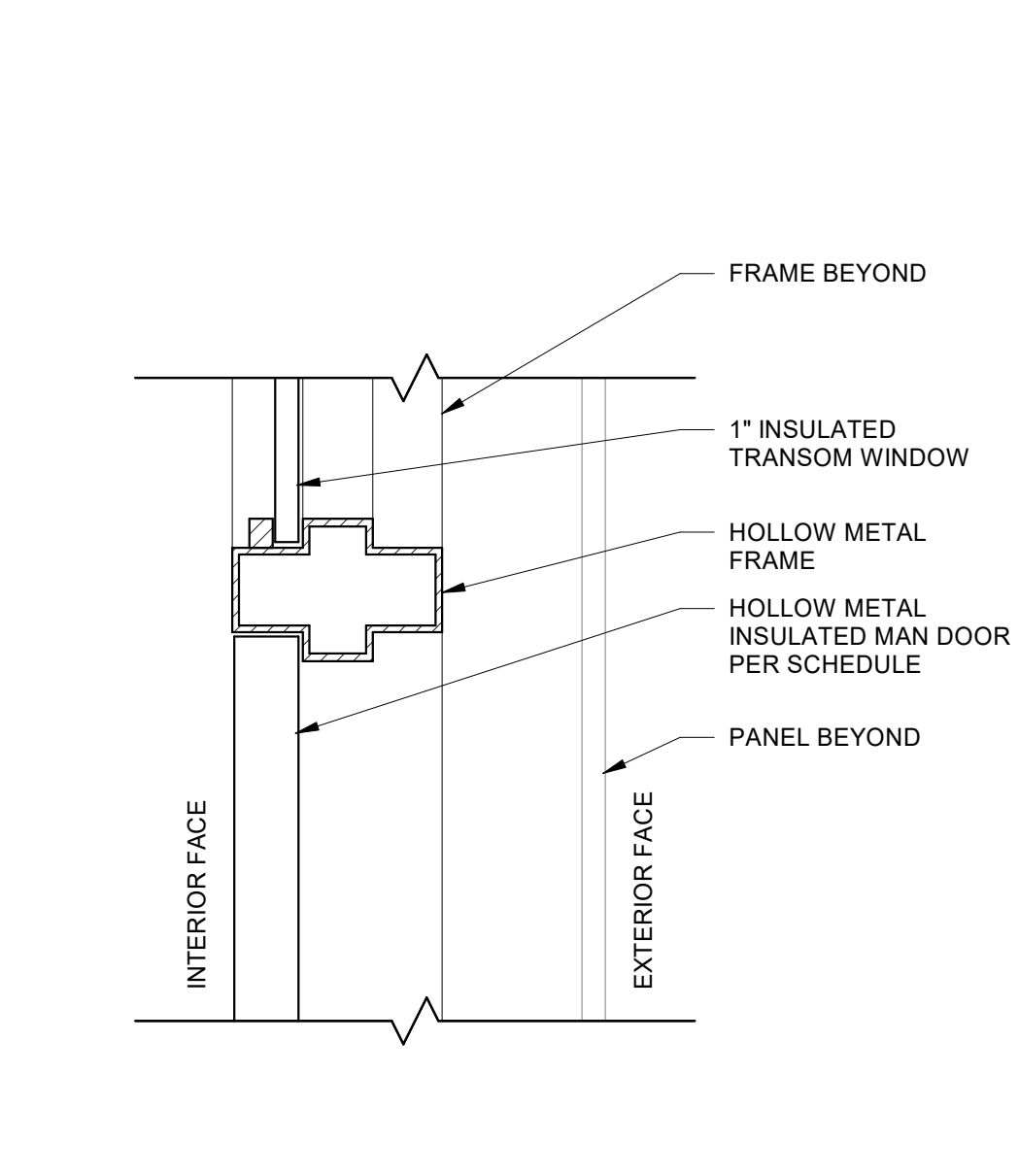
**7** SLAB AT DRIVE-IN DOOR  
A5.11 3/4\"/>



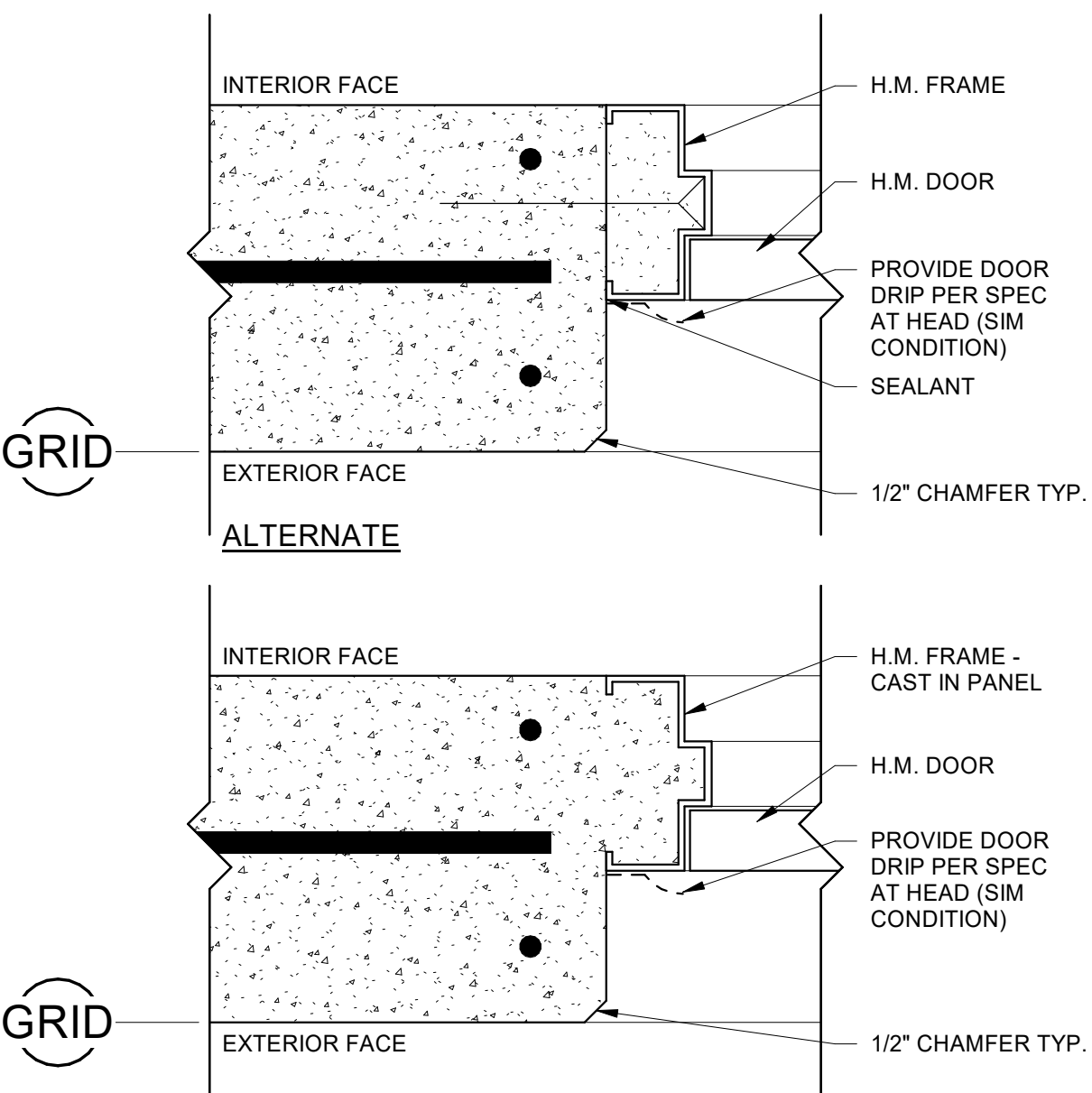
**8** TURN-DOWN SLAB EDGE AT DOCK DOOR  
A5.11 3/4\"/>



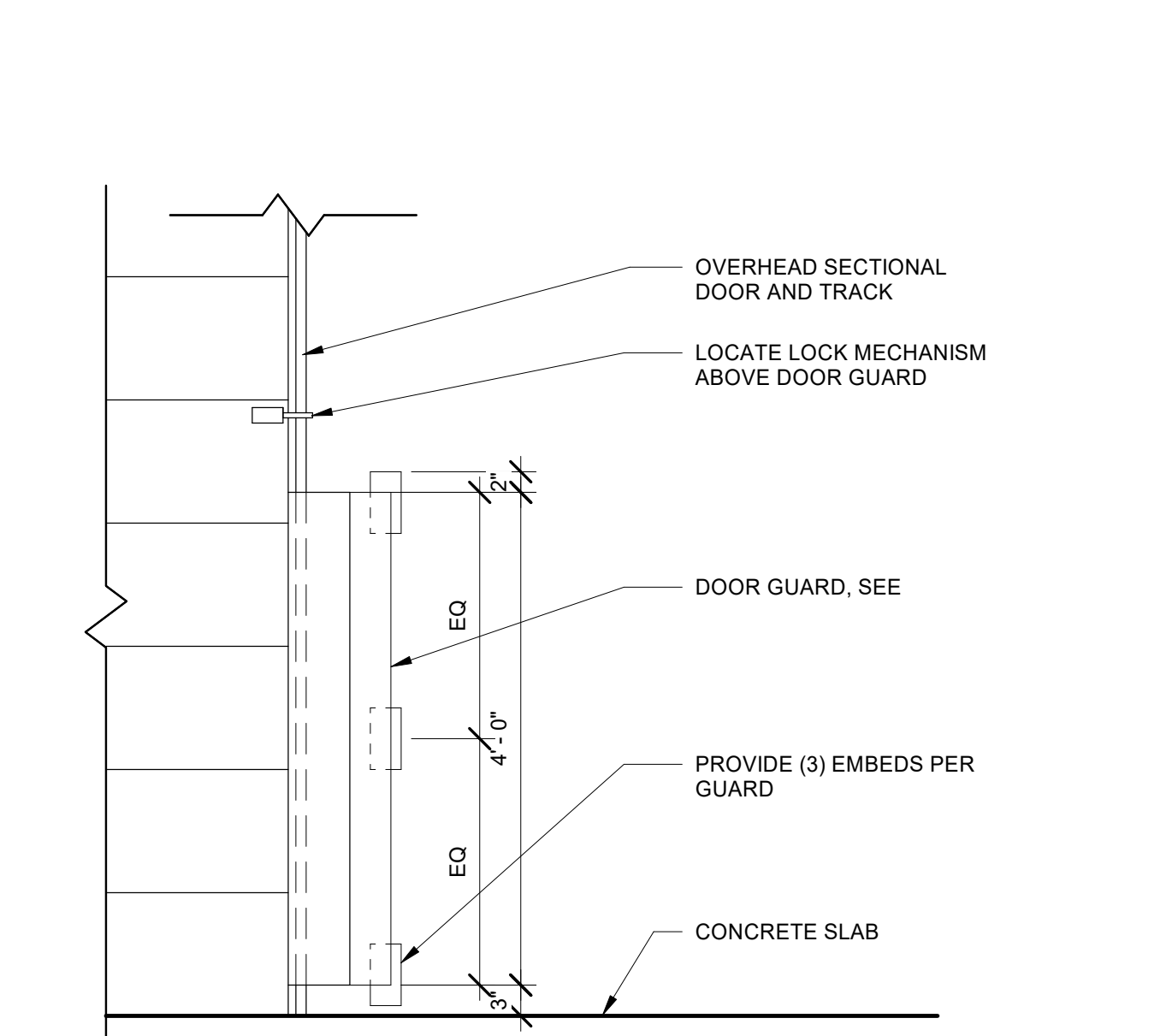
**9** EXTERIOR TRANSOM WINDOW  
A5.11 3\"/>



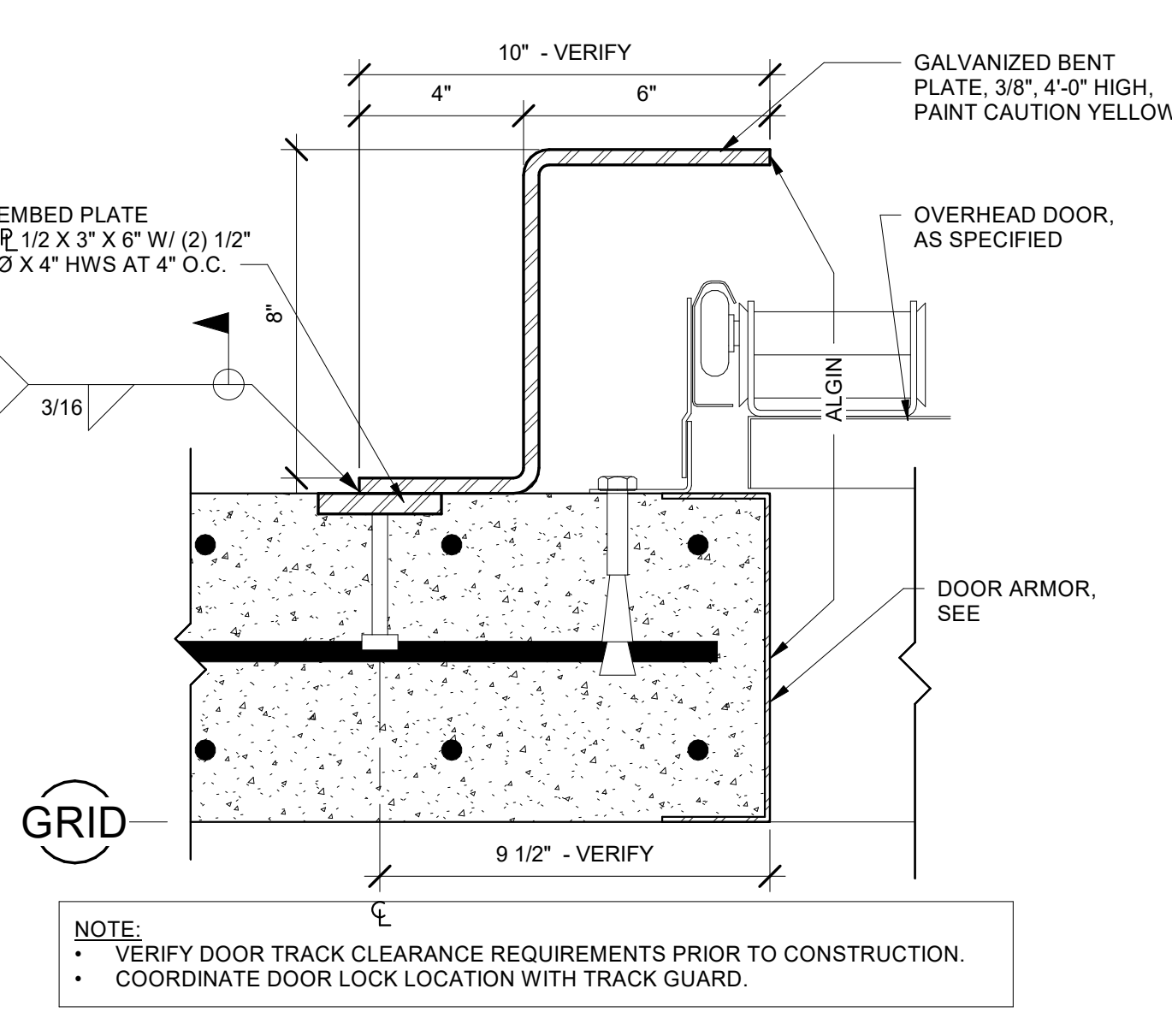
**10** EXT. TRANSOM WINDOW SECTION  
A5.11 3\"/>



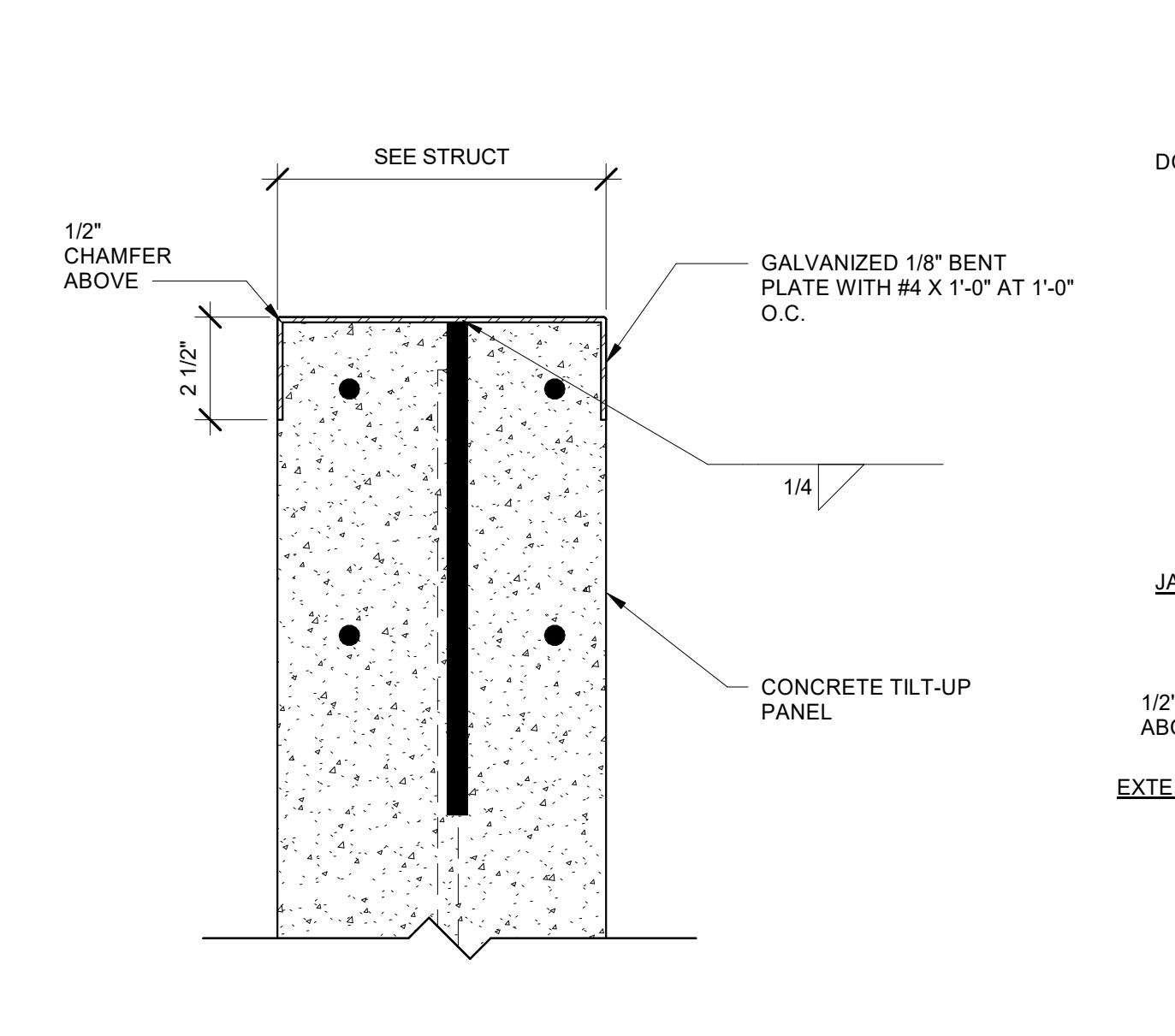
**11** EXT. DOOR JAMB/HEAD  
A5.11 3\"/>



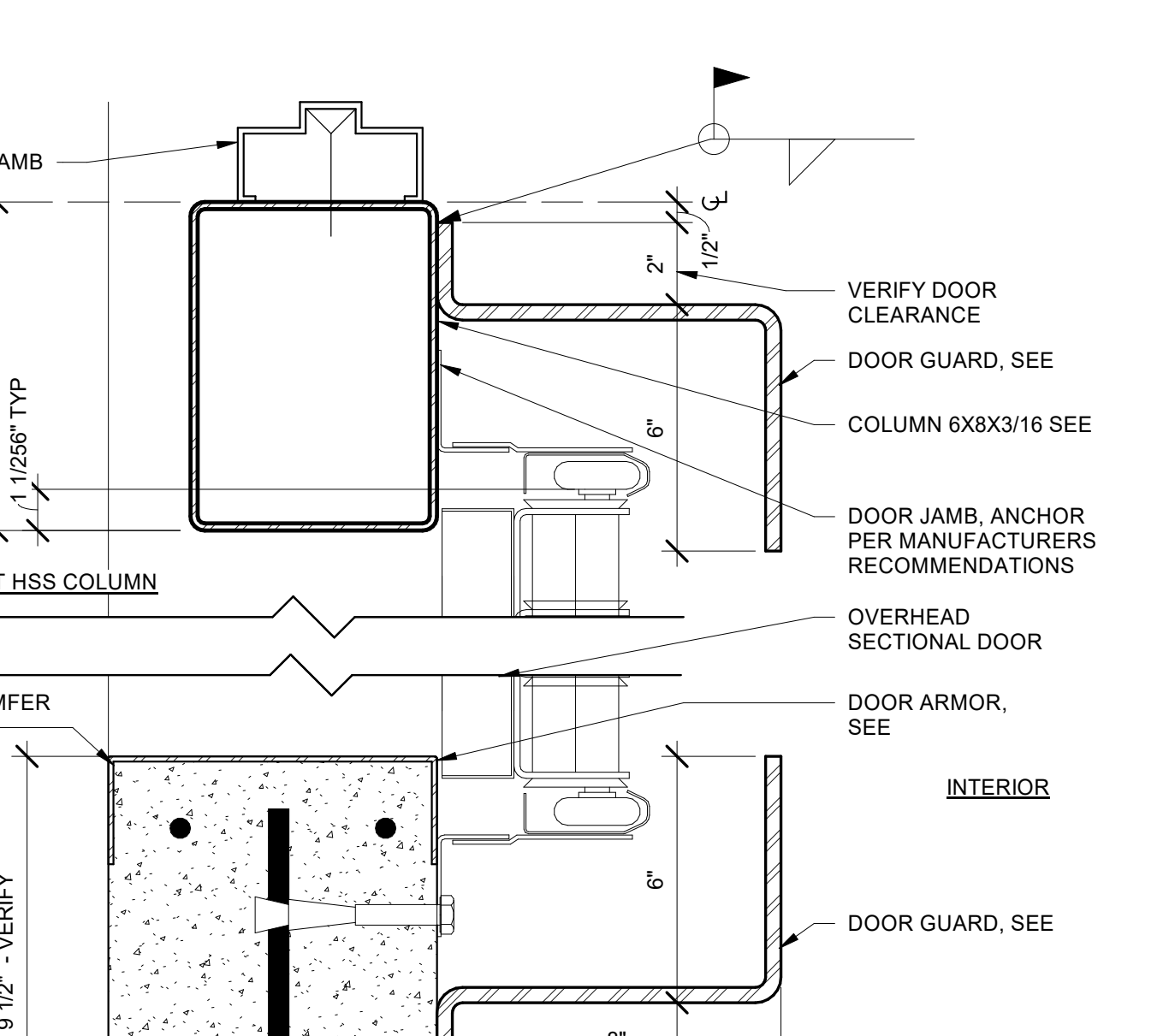
**12** OVERHEAD DOOR GUARD ELEVATION  
A5.11 3/4\"/>



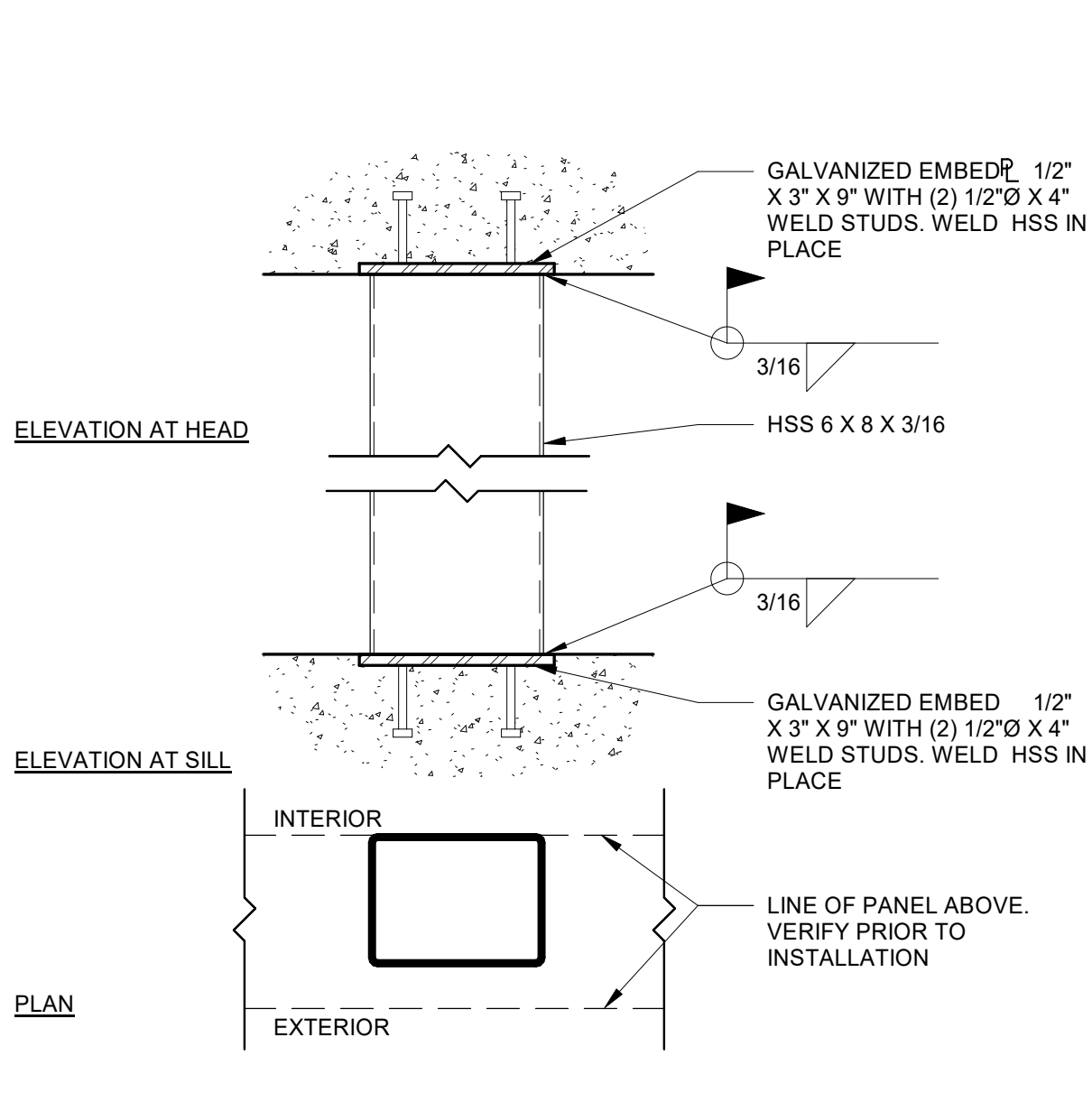
**13** OVERHEAD DOOR GUARD  
A5.11 3\"/>



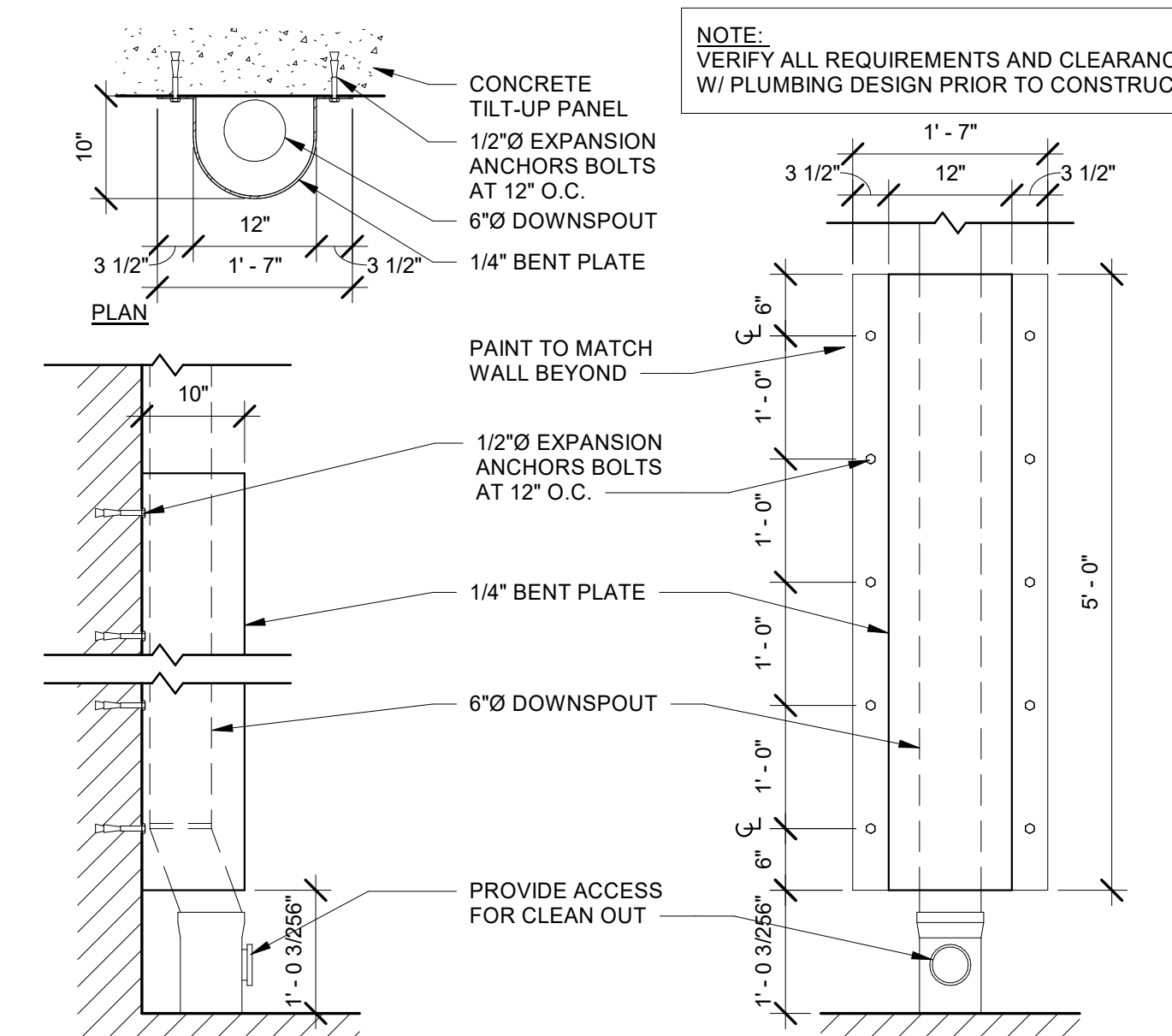
**14** DOOR ARMOR  
A5.11 3\"/>



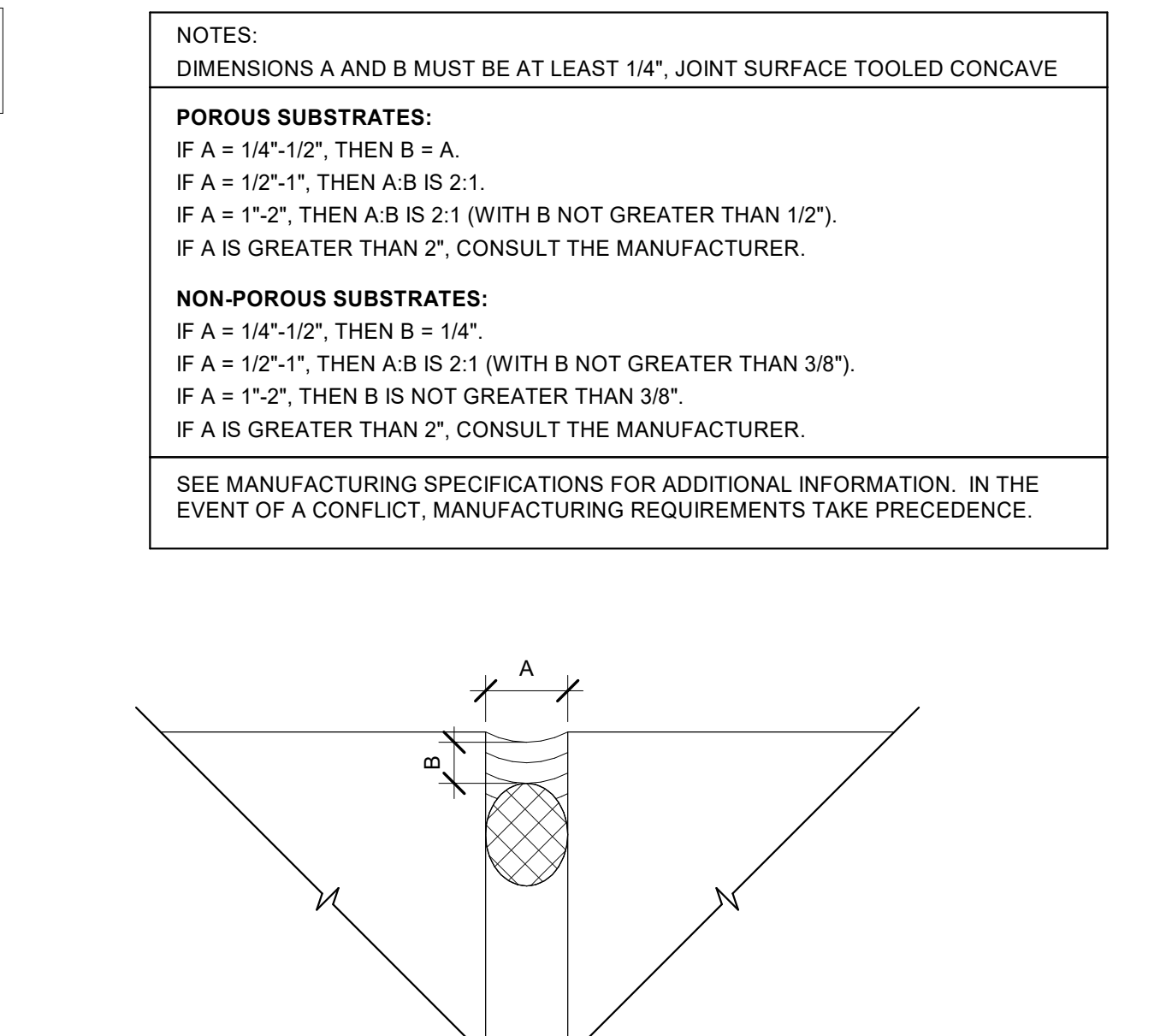
**15** DRIVE-IN DOOR JAMB  
A5.11 3\"/>



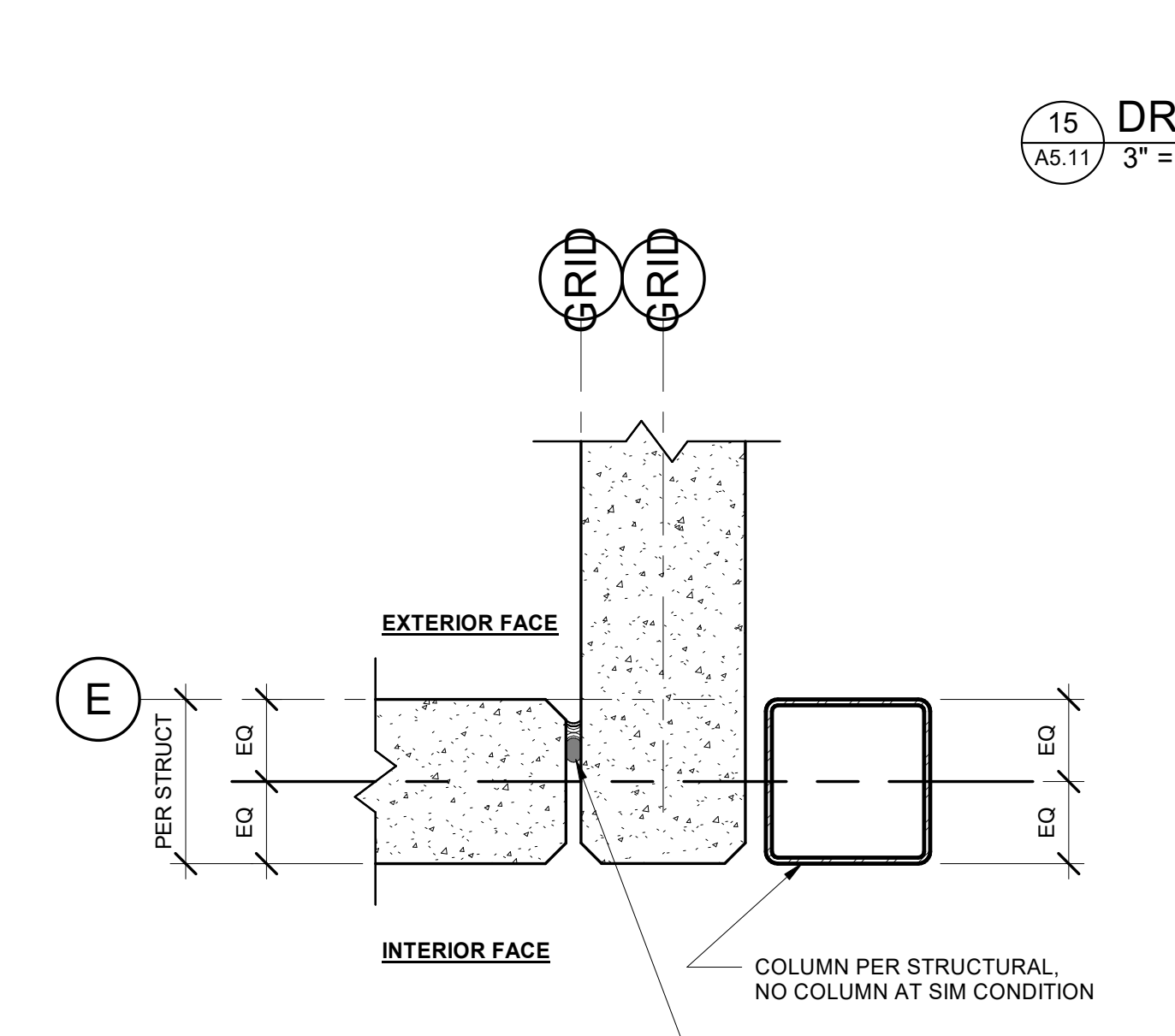
**16** HSS CONNECTION AT SLAB/PANEL  
A5.11 1 1/2\"/>



**17** DOWNSPOUT GUARD  
A5.11 3/4\"/>



**18** TYPICAL SEALANT JOINT  
A5.11 12\"/>



**19** COLUMN AT INSIDE CORNER  
A5.11 1 1/2\"/>

Project

PRELIMINARY  
NOT FOR  
CONSTRUCTION

© MACKENZIE  
2022 ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:  
**EXTERIOR DETAILS**

DRAWN BY: ADG  
CHECKED BY: SJM  
SHEET

**A5.11**

JOB NO. **2200502.00**





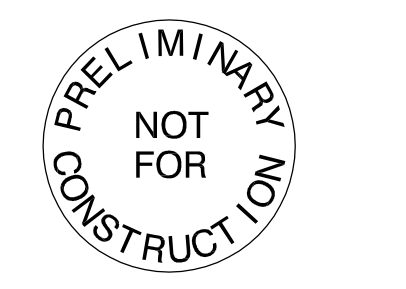












© MACKENZIE  
 2022 ALL RIGHTS RESERVED  
 THESE DRAWINGS ARE THE PROPERTY OF  
 MACKENZIE AND ARE NOT TO BE USED  
 OR REPRODUCED IN ANY MANNER  
 WITHOUT PRIOR WRITTEN PERMISSION

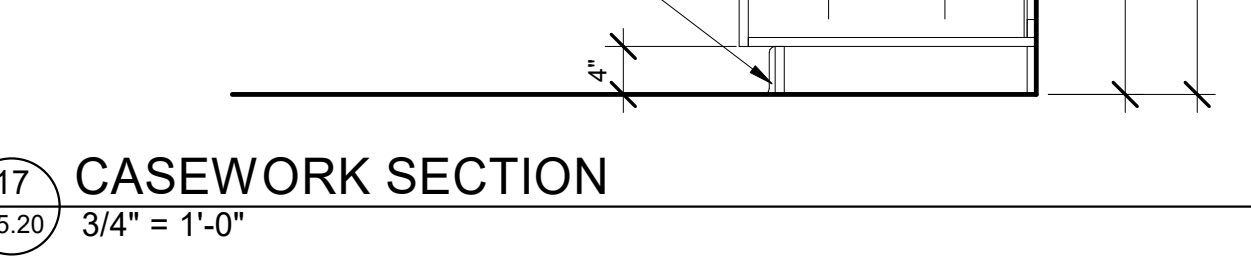
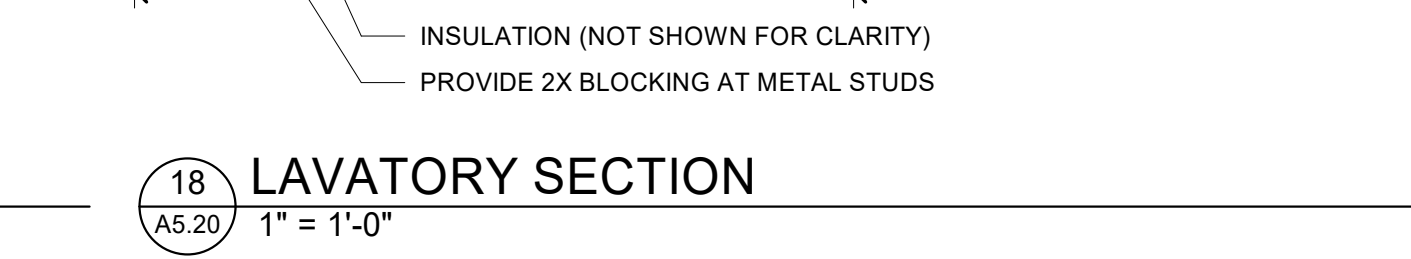
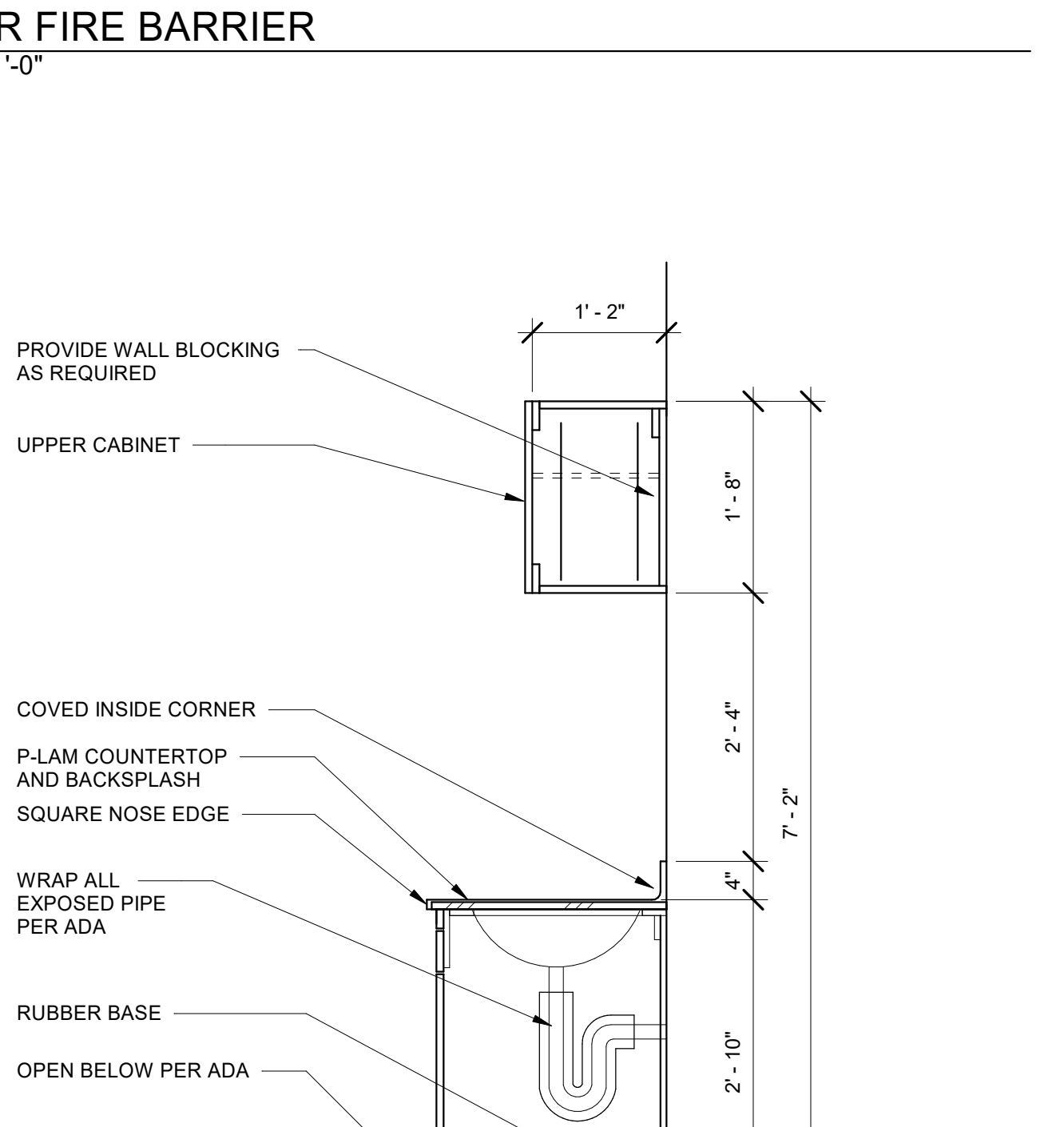
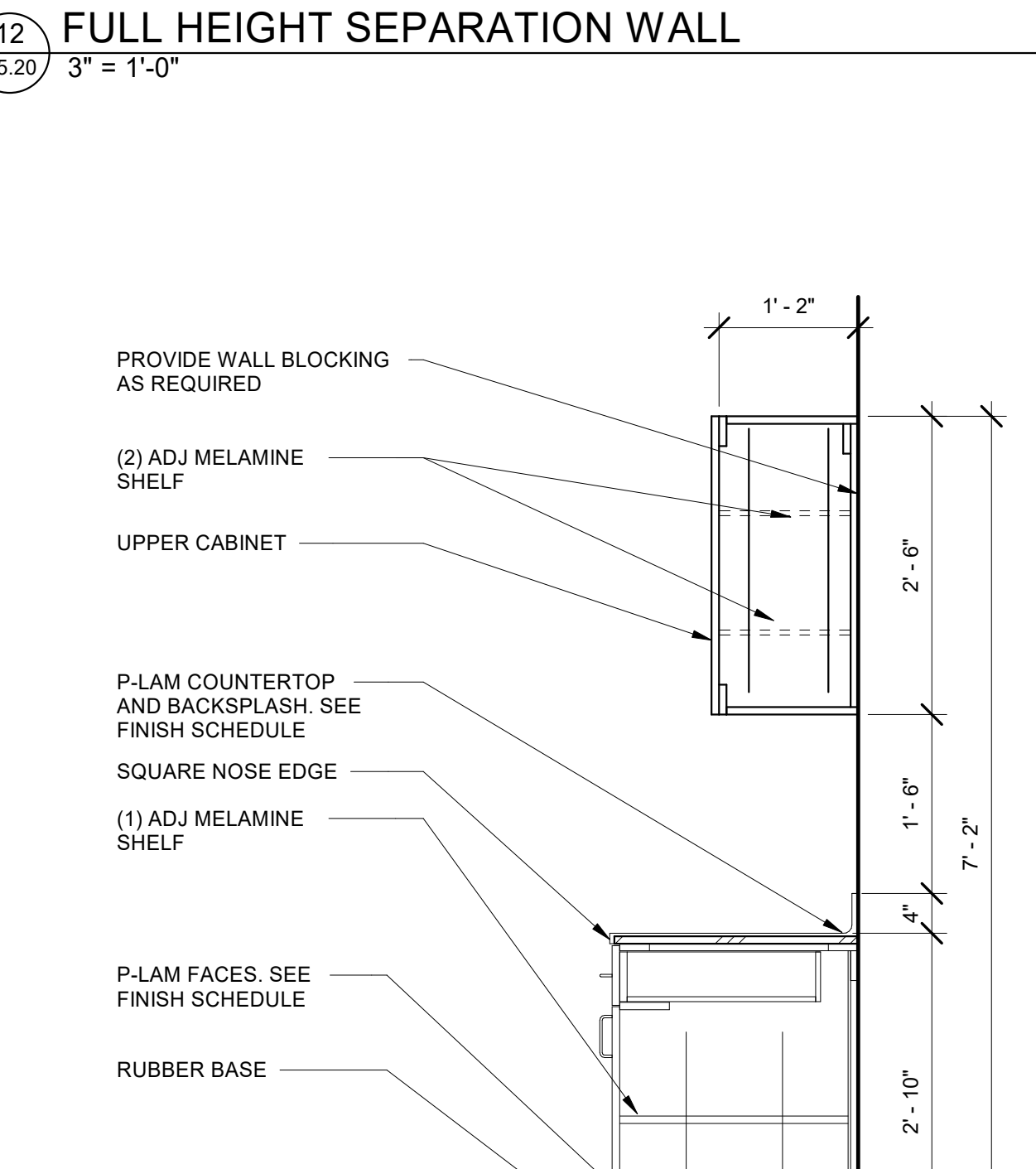
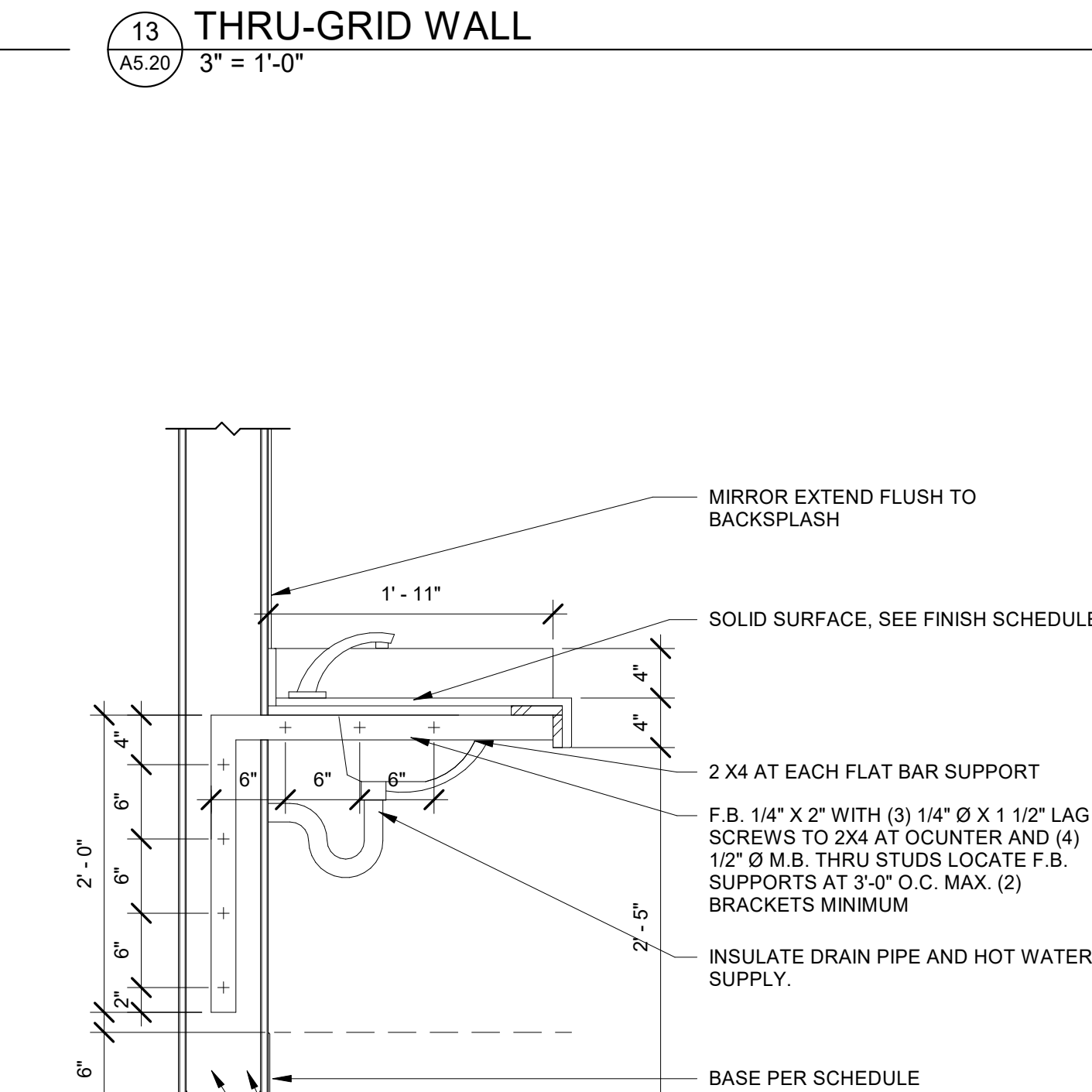
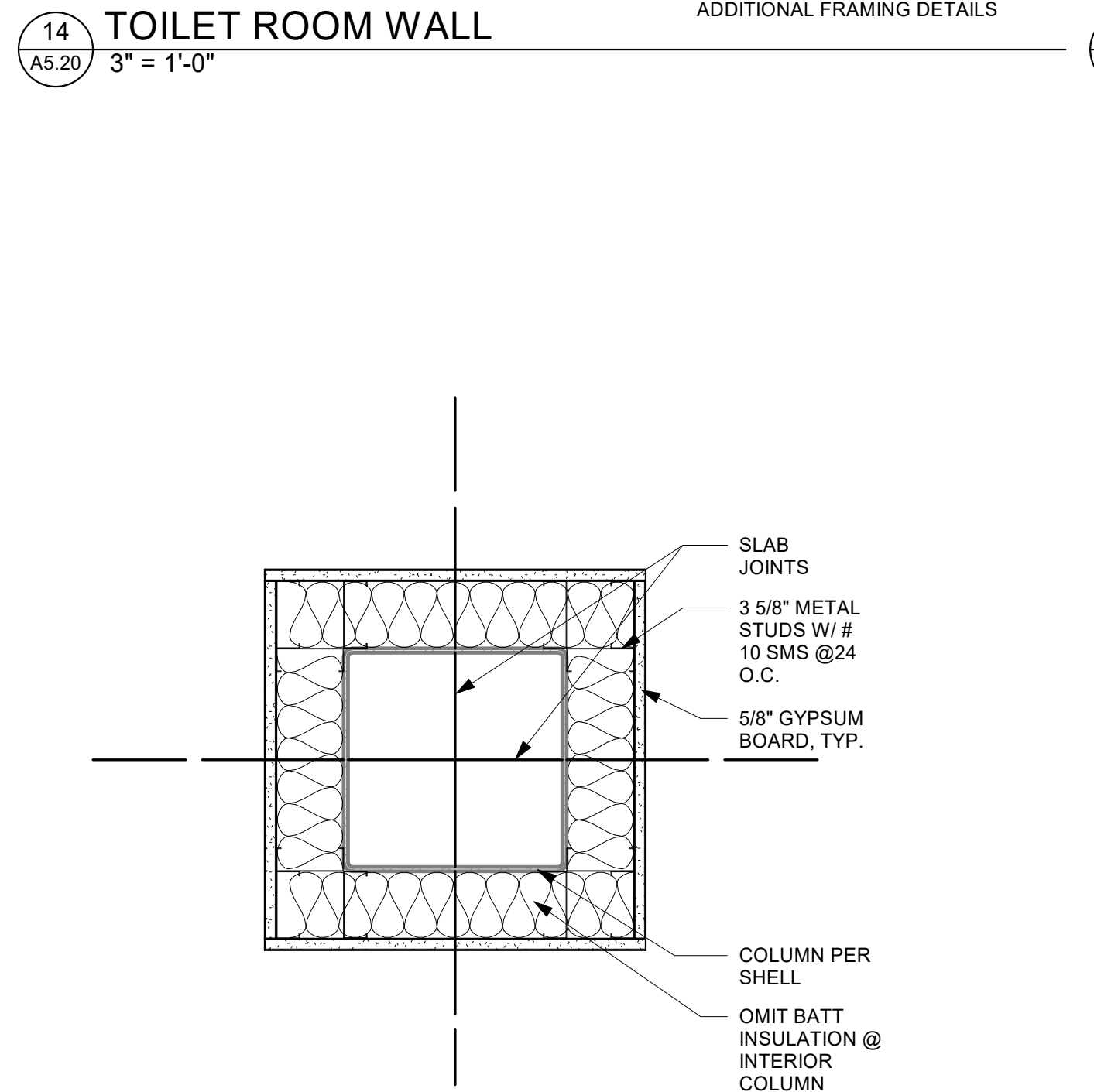
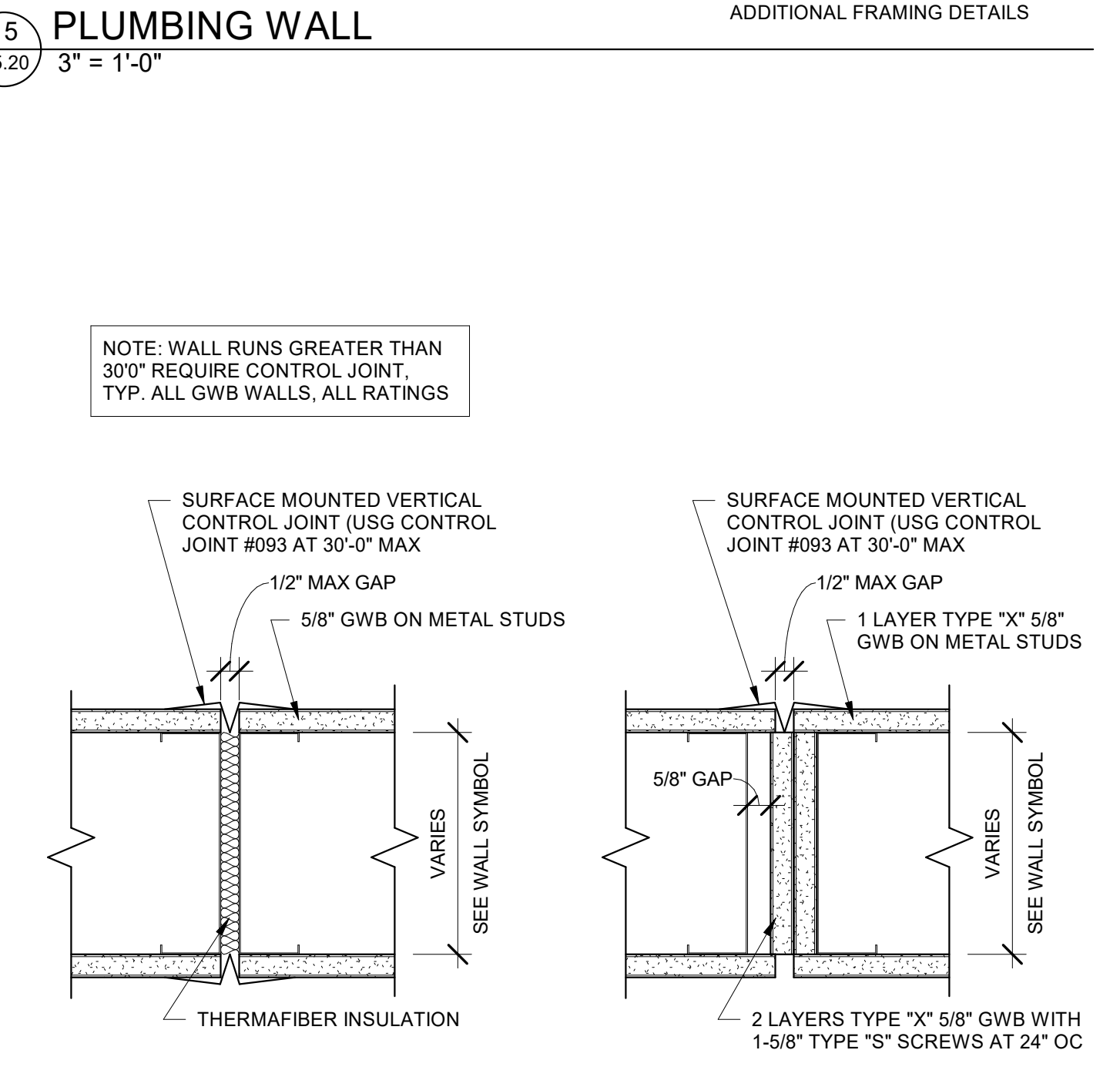
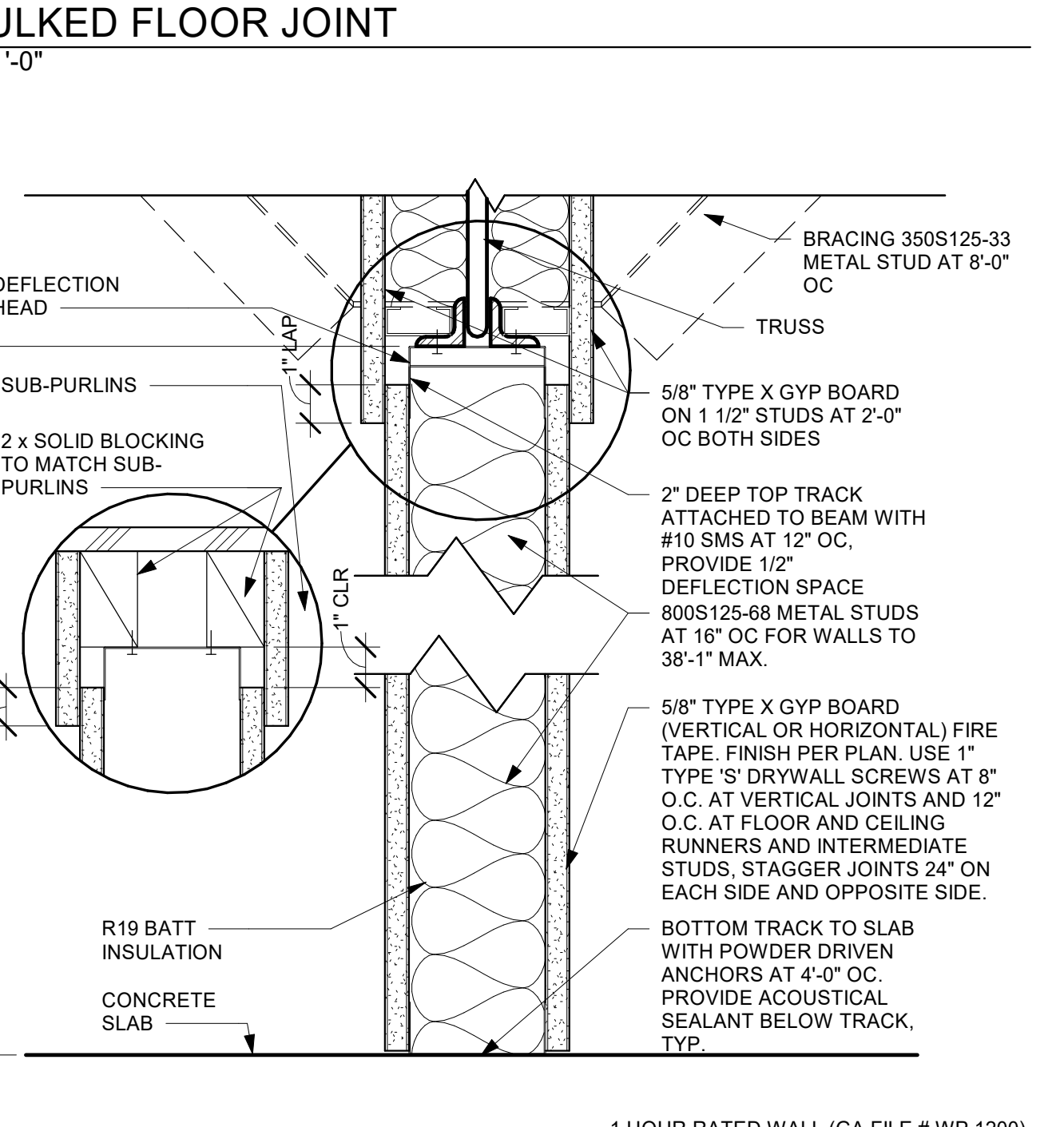
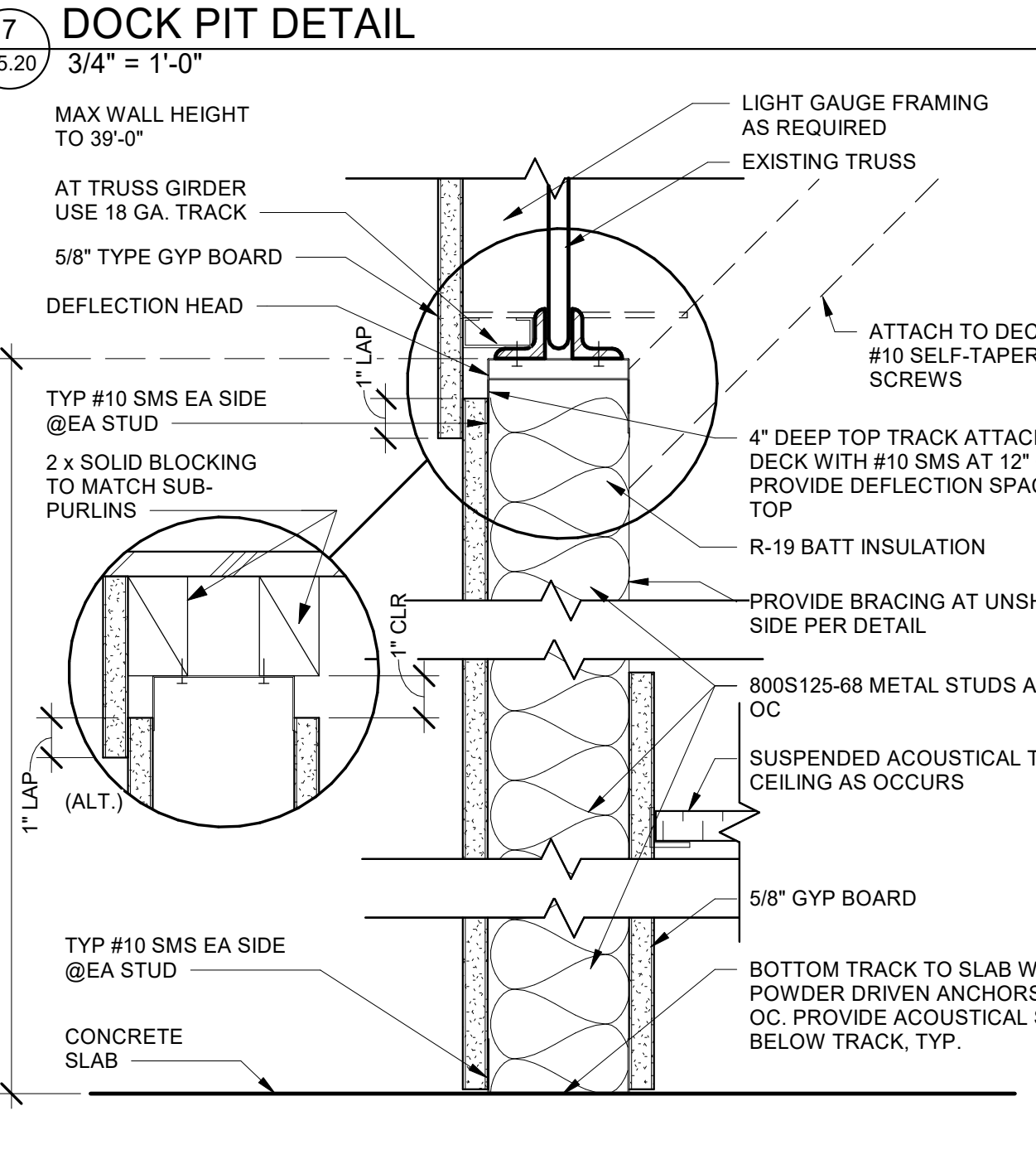
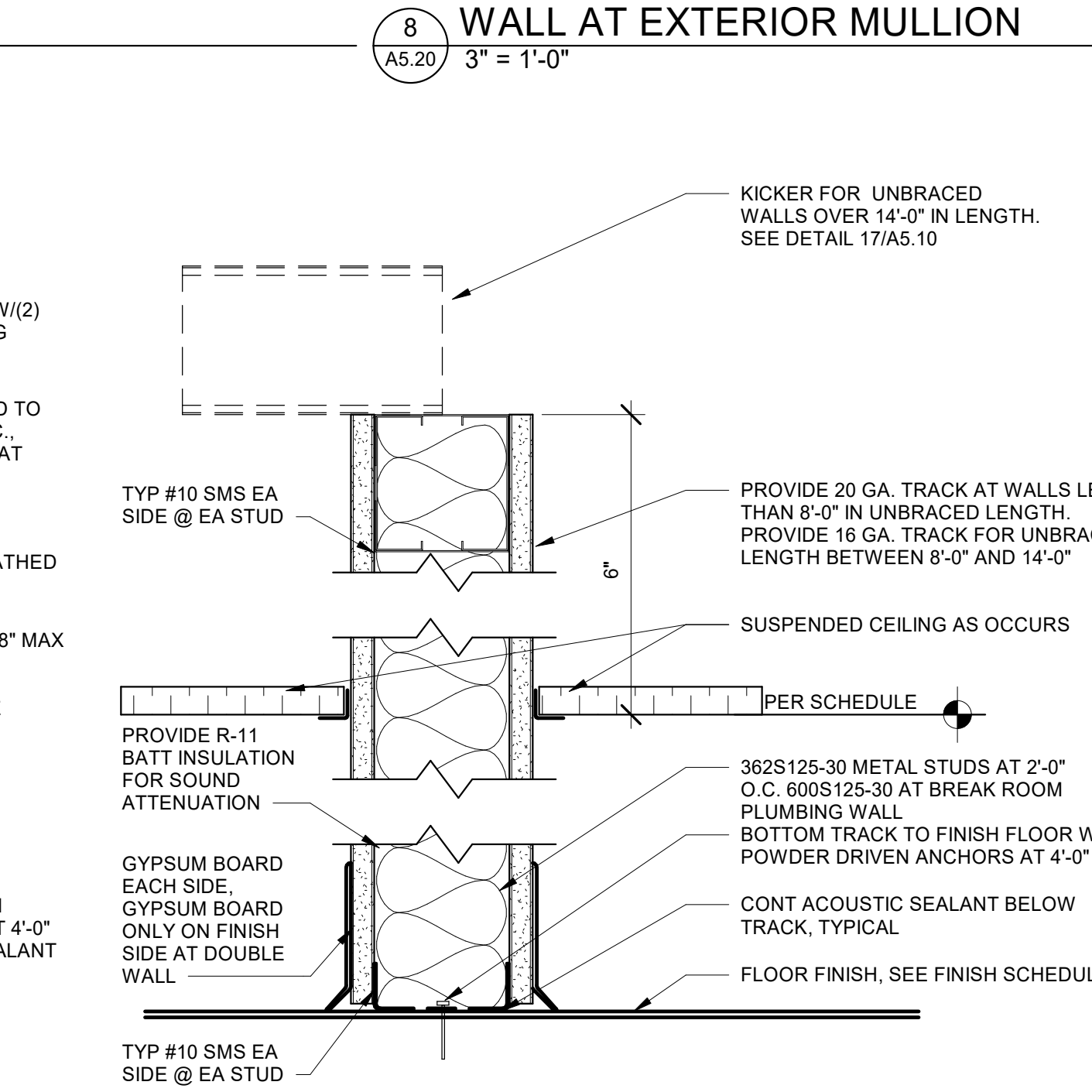
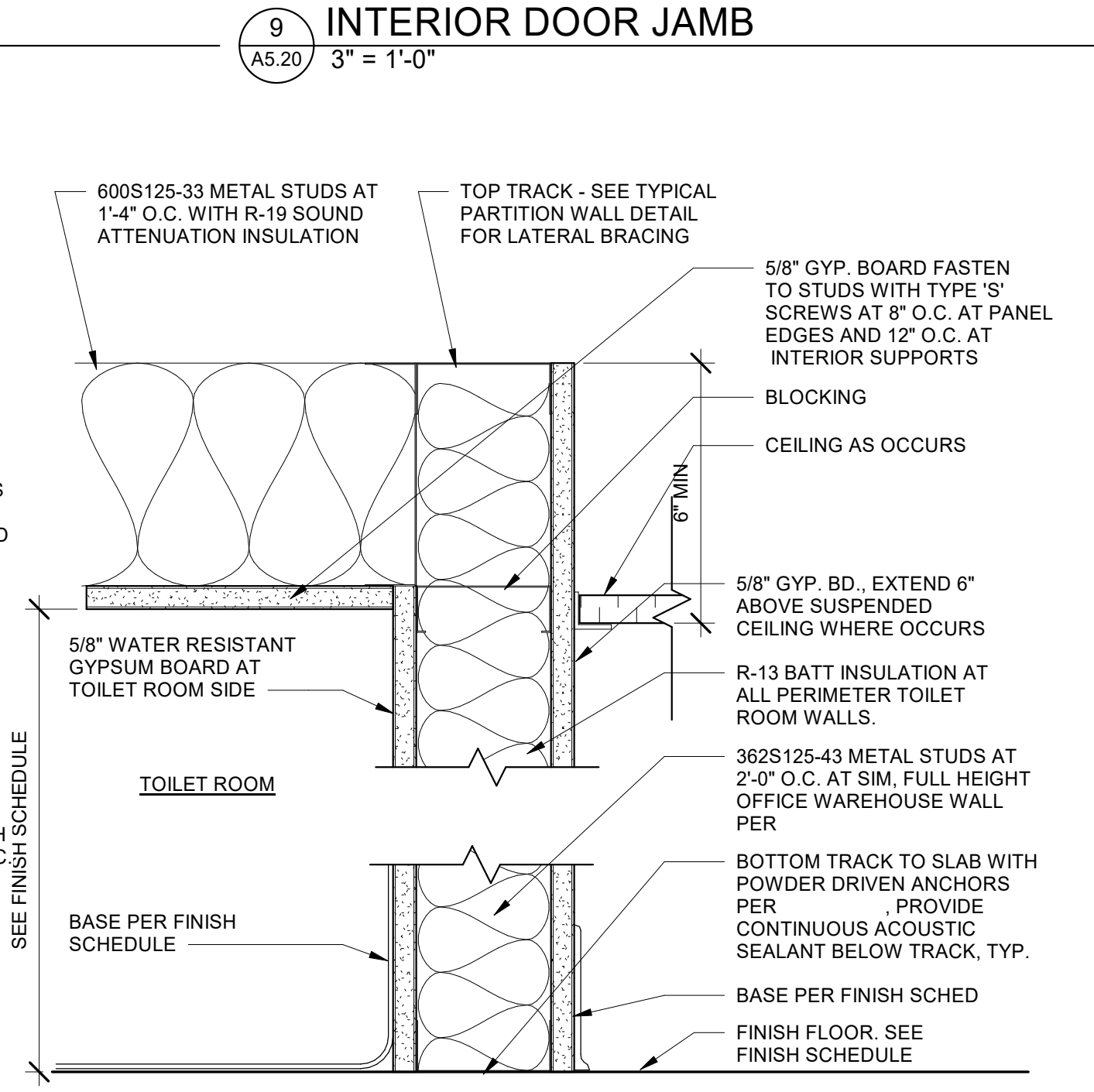
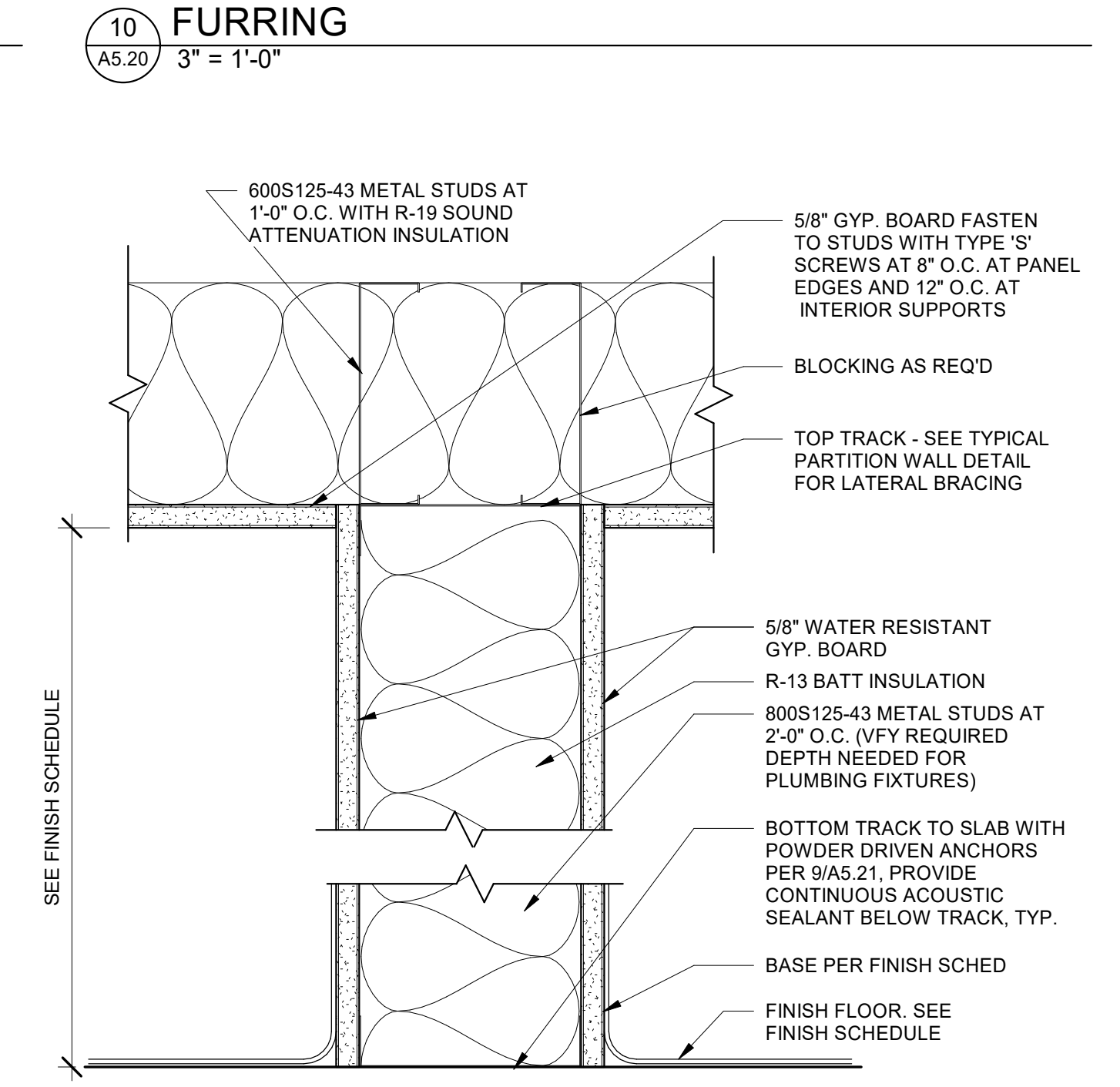
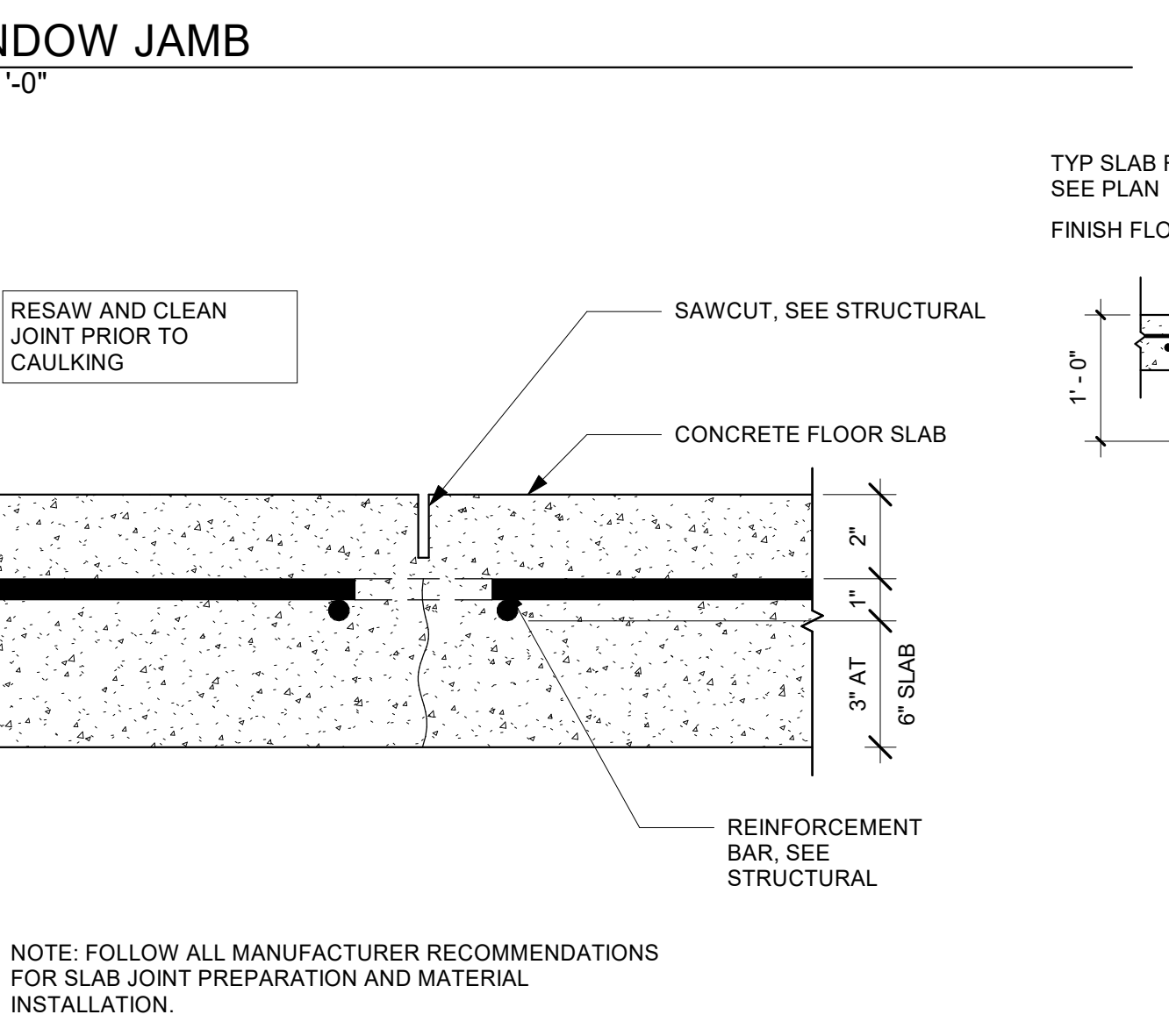
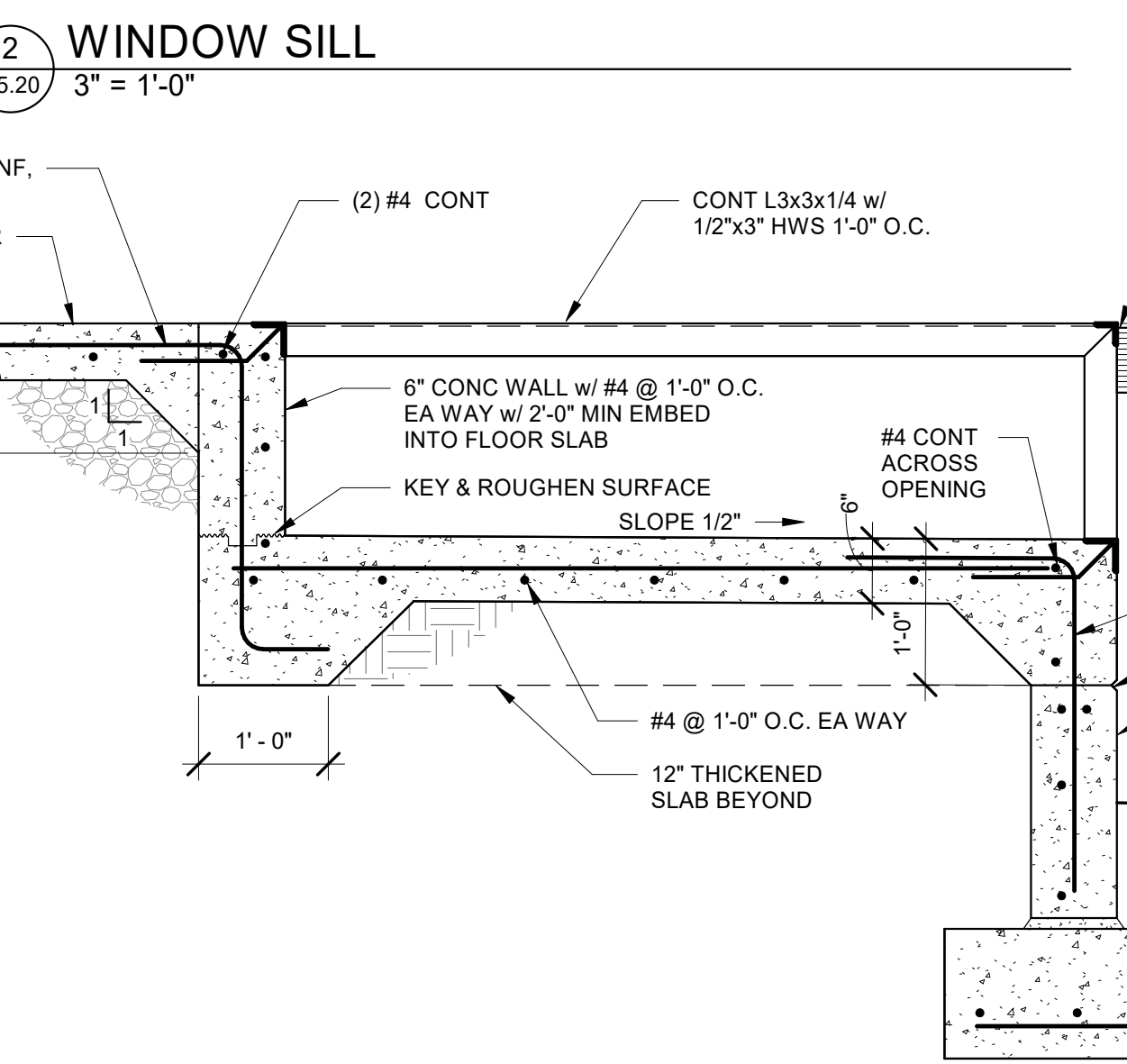
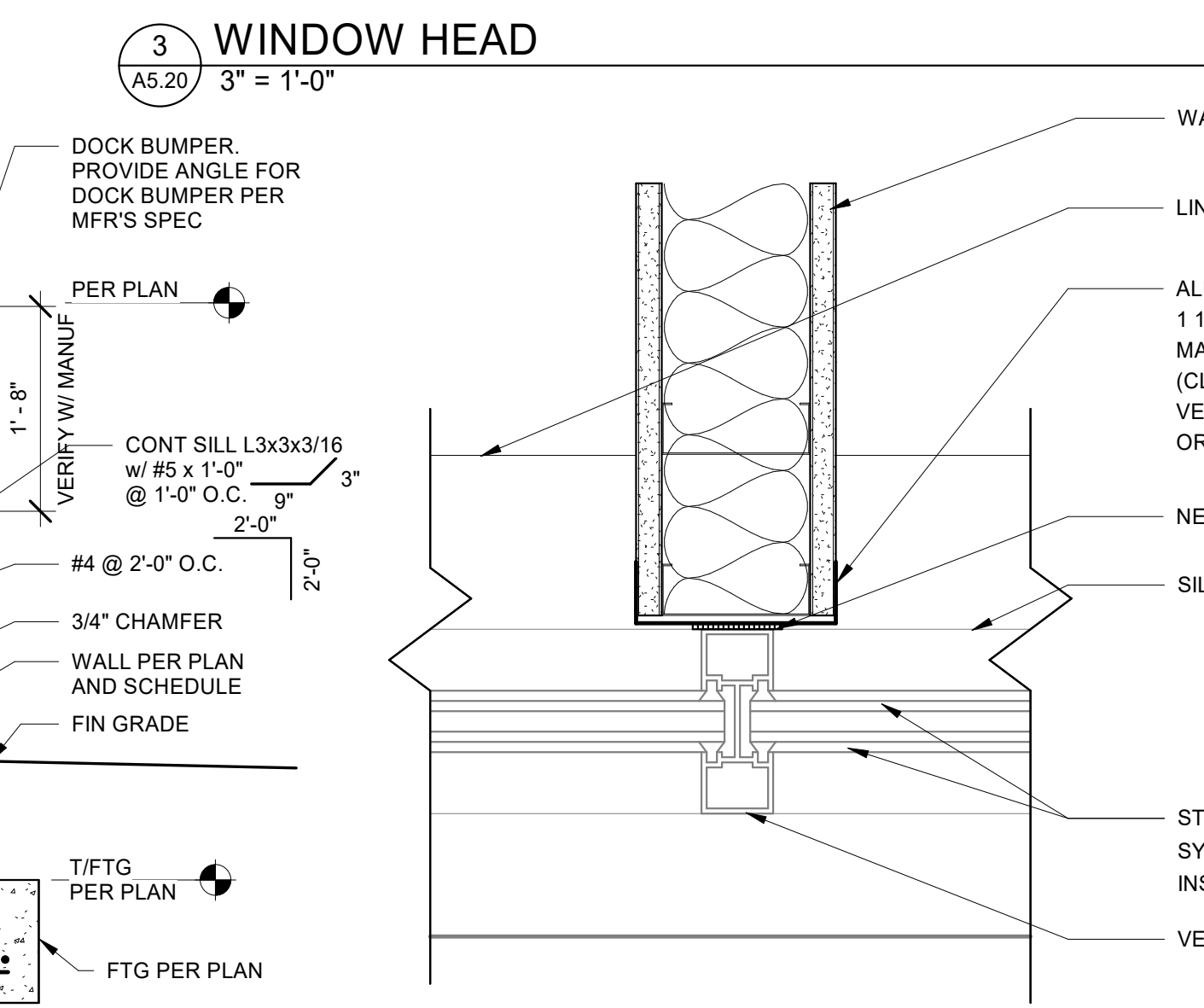
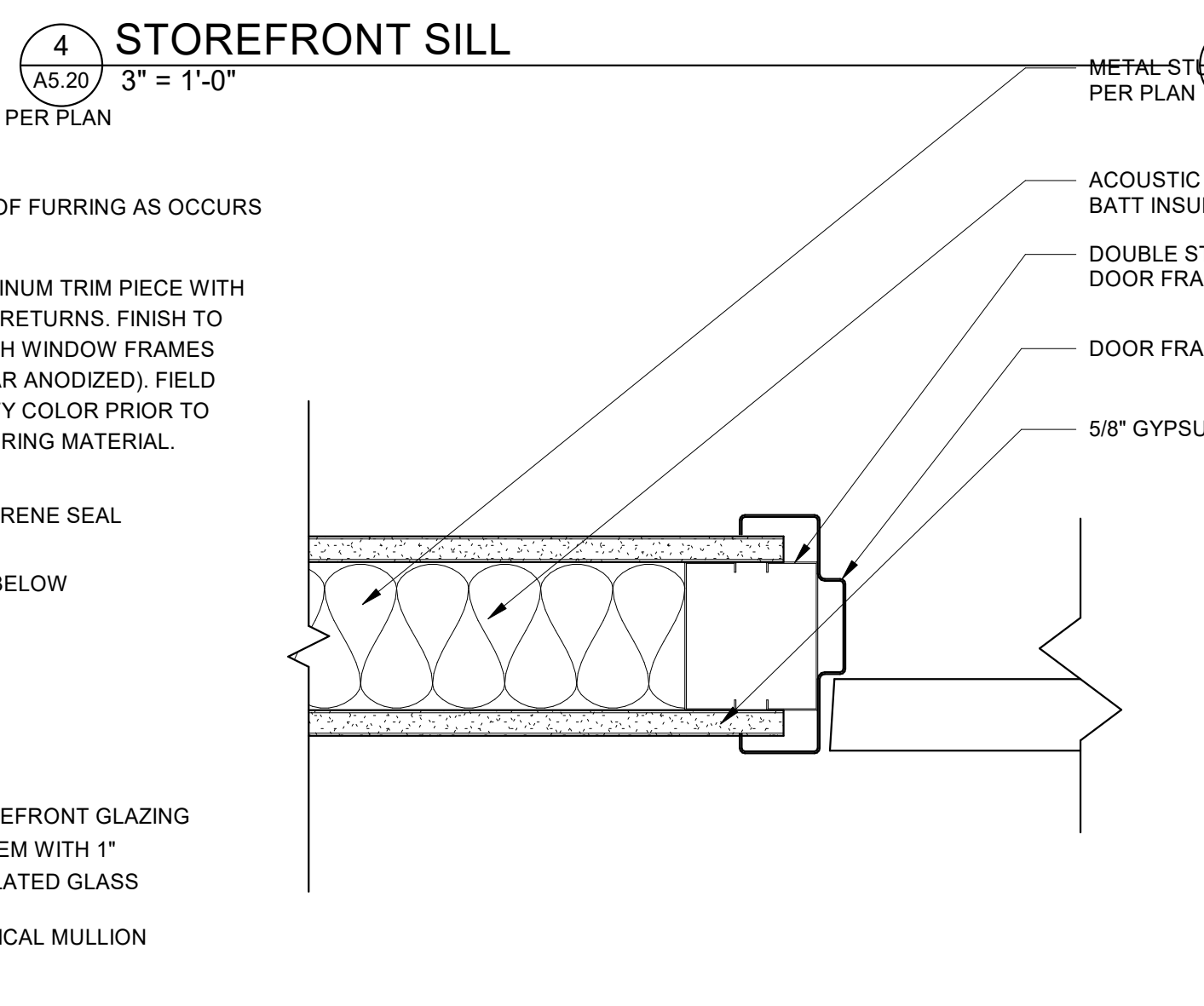
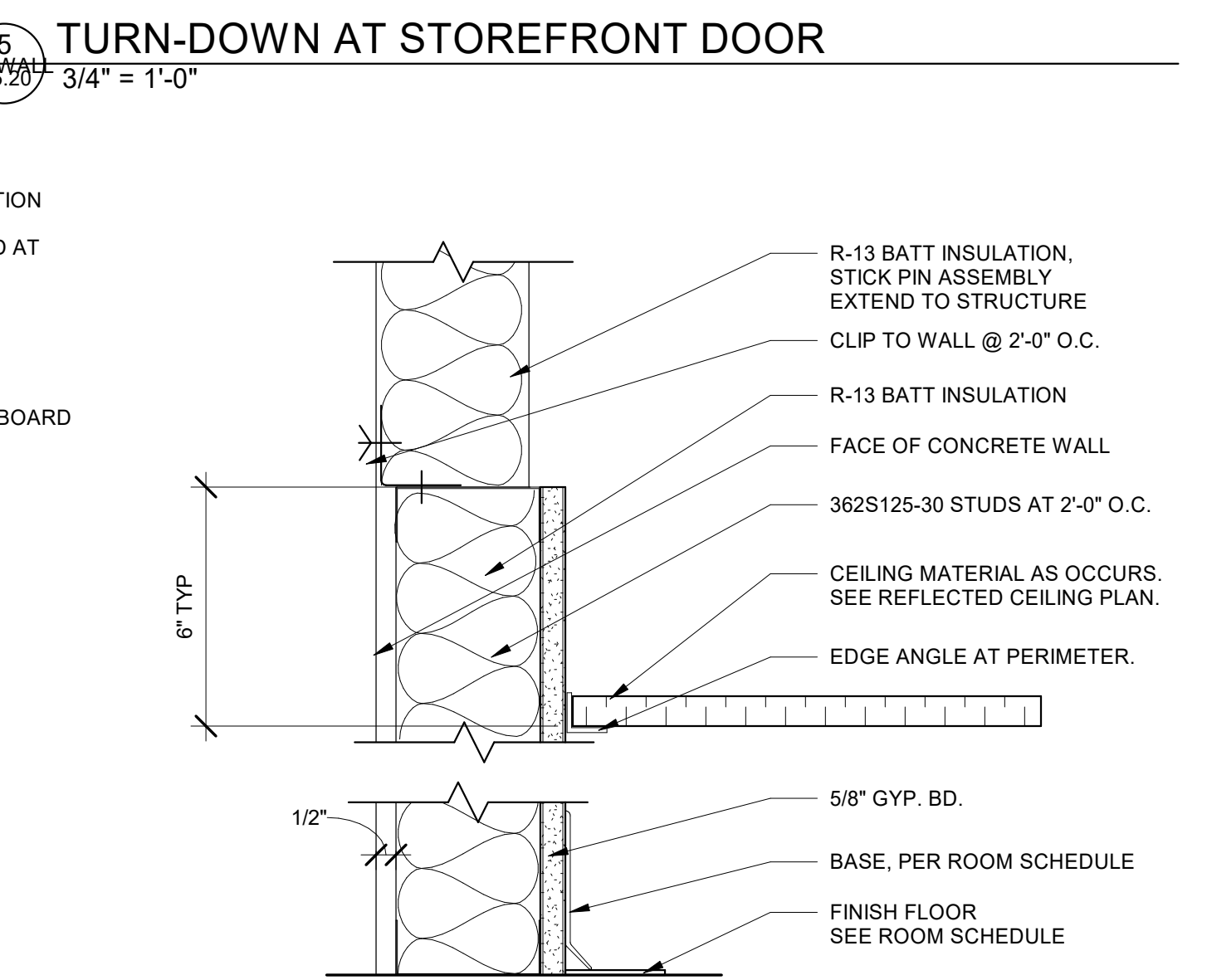
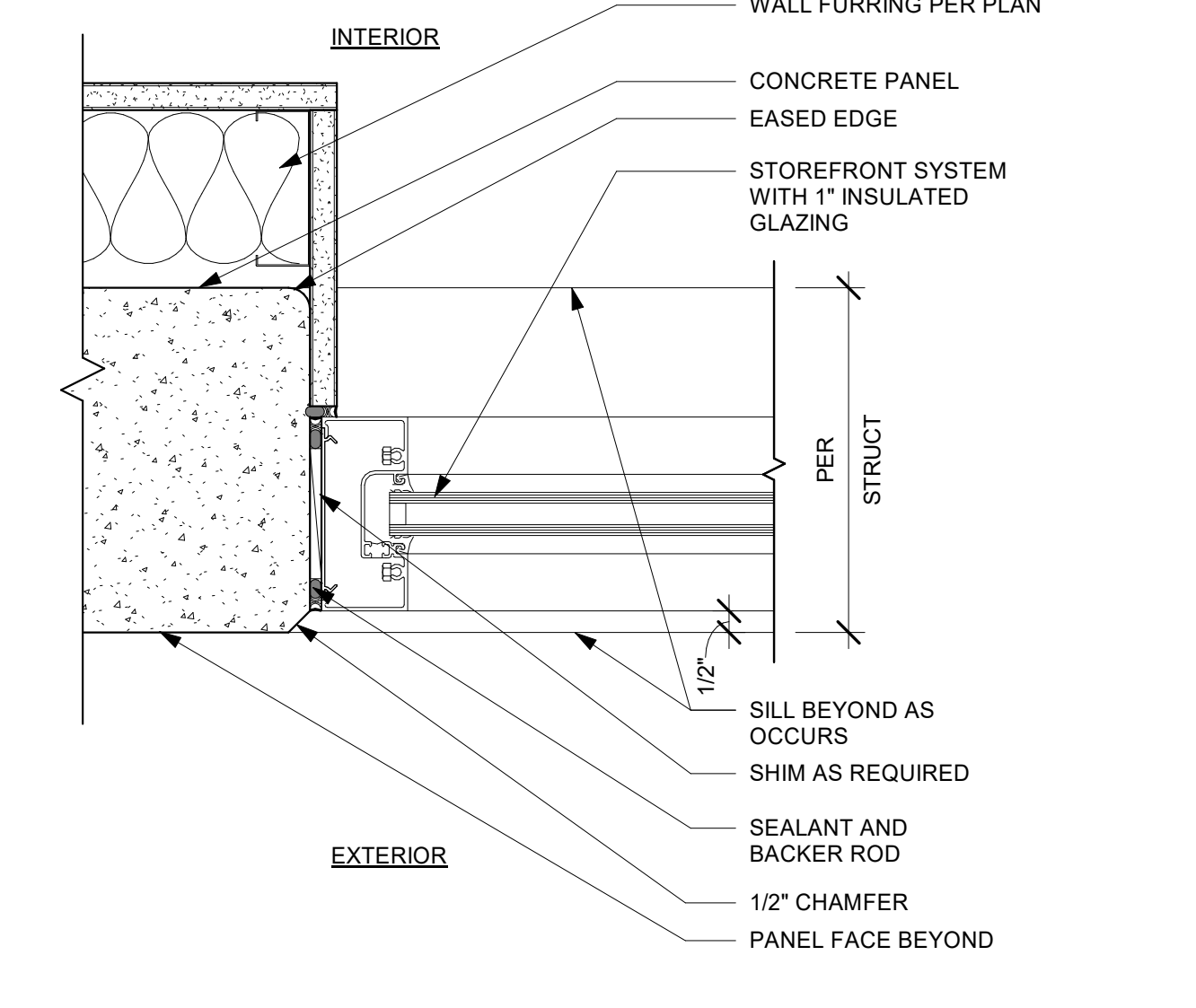
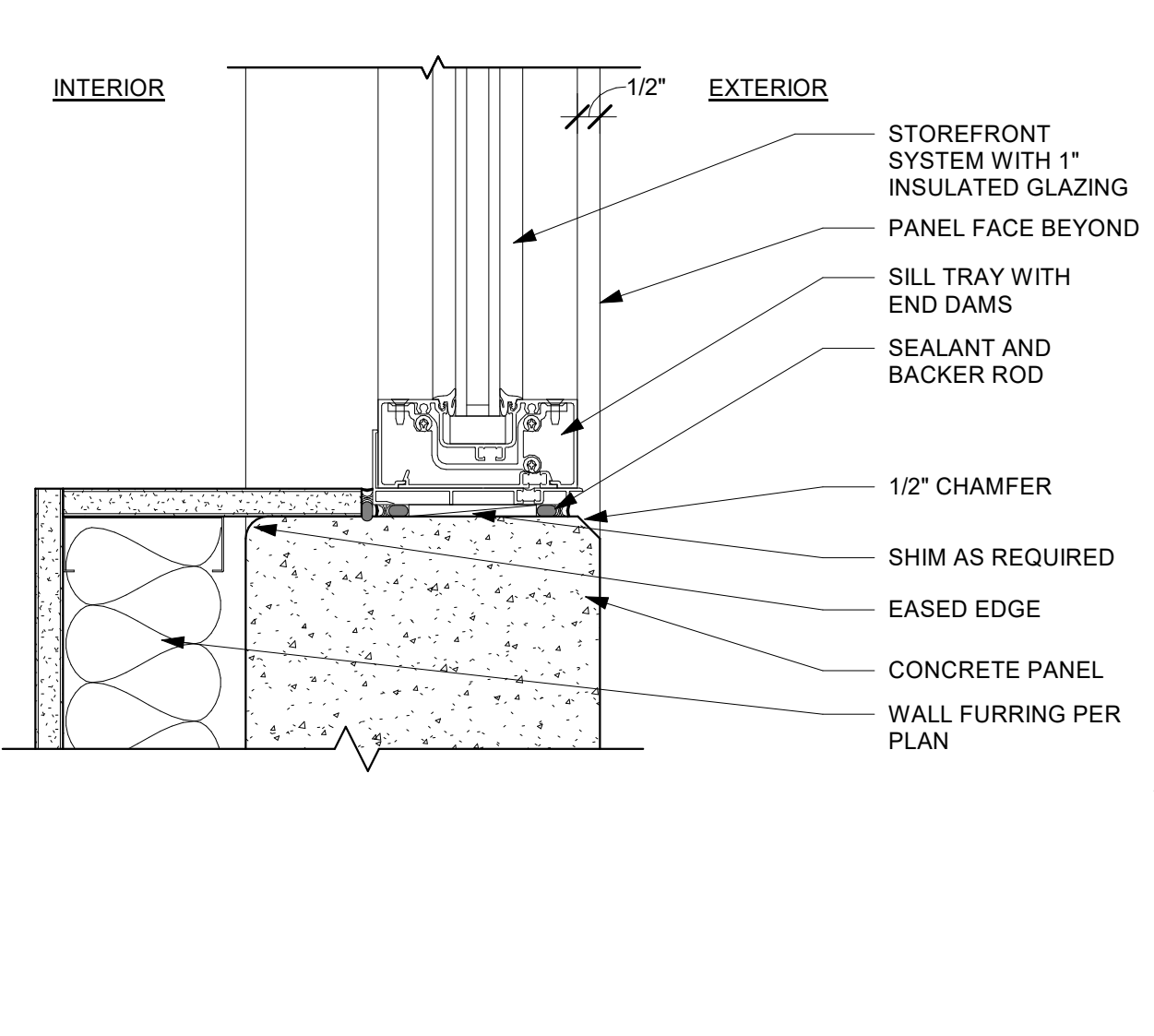
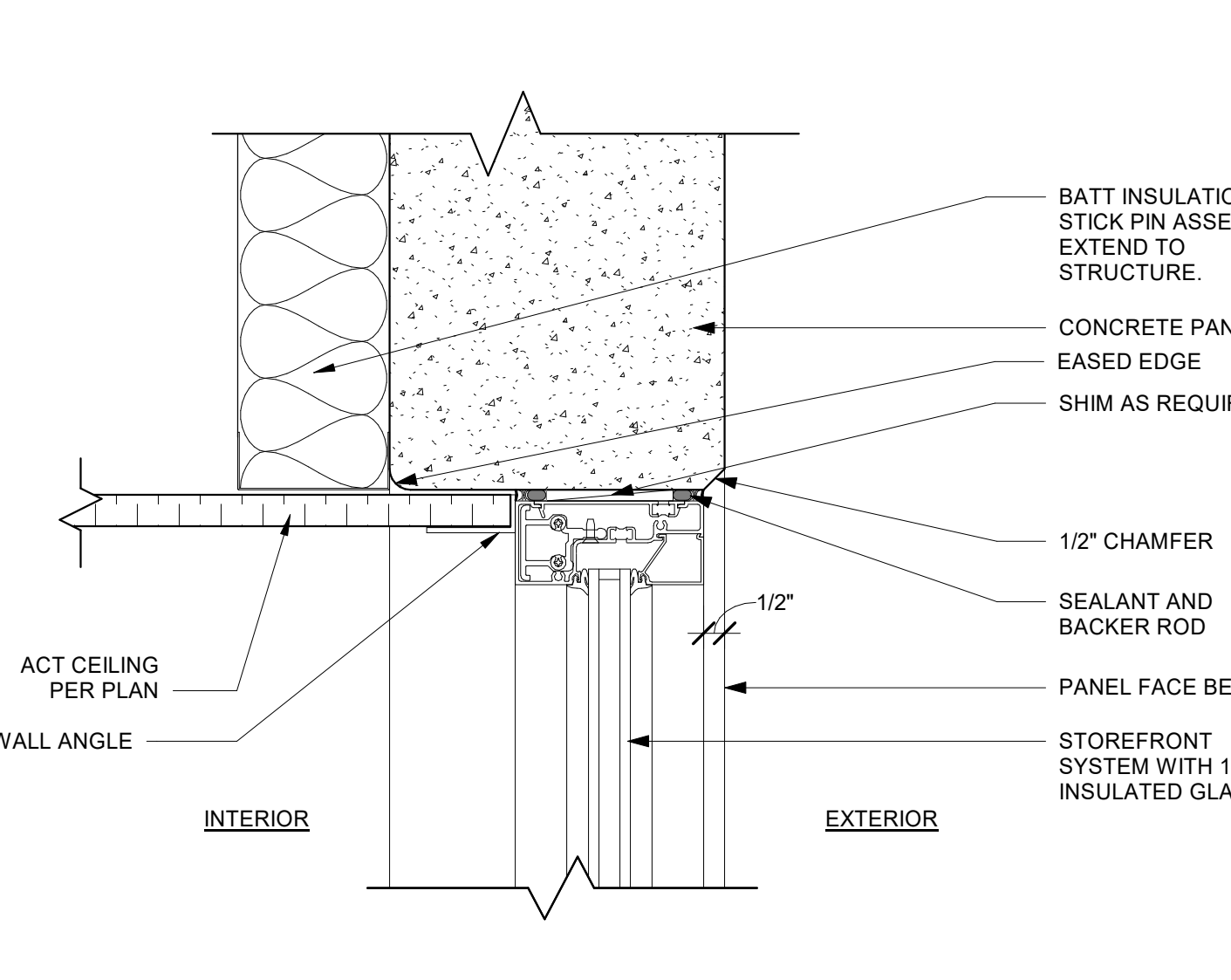
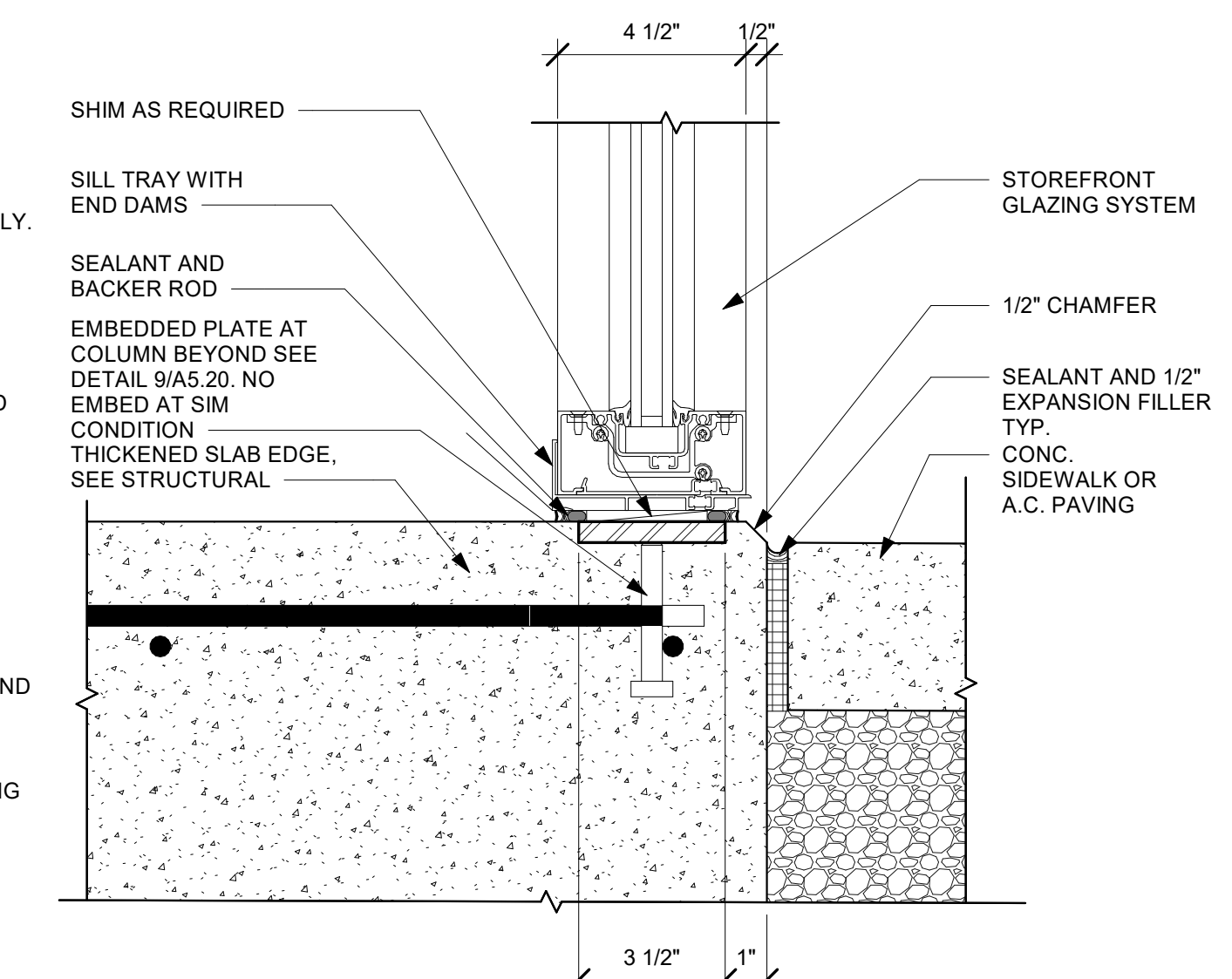
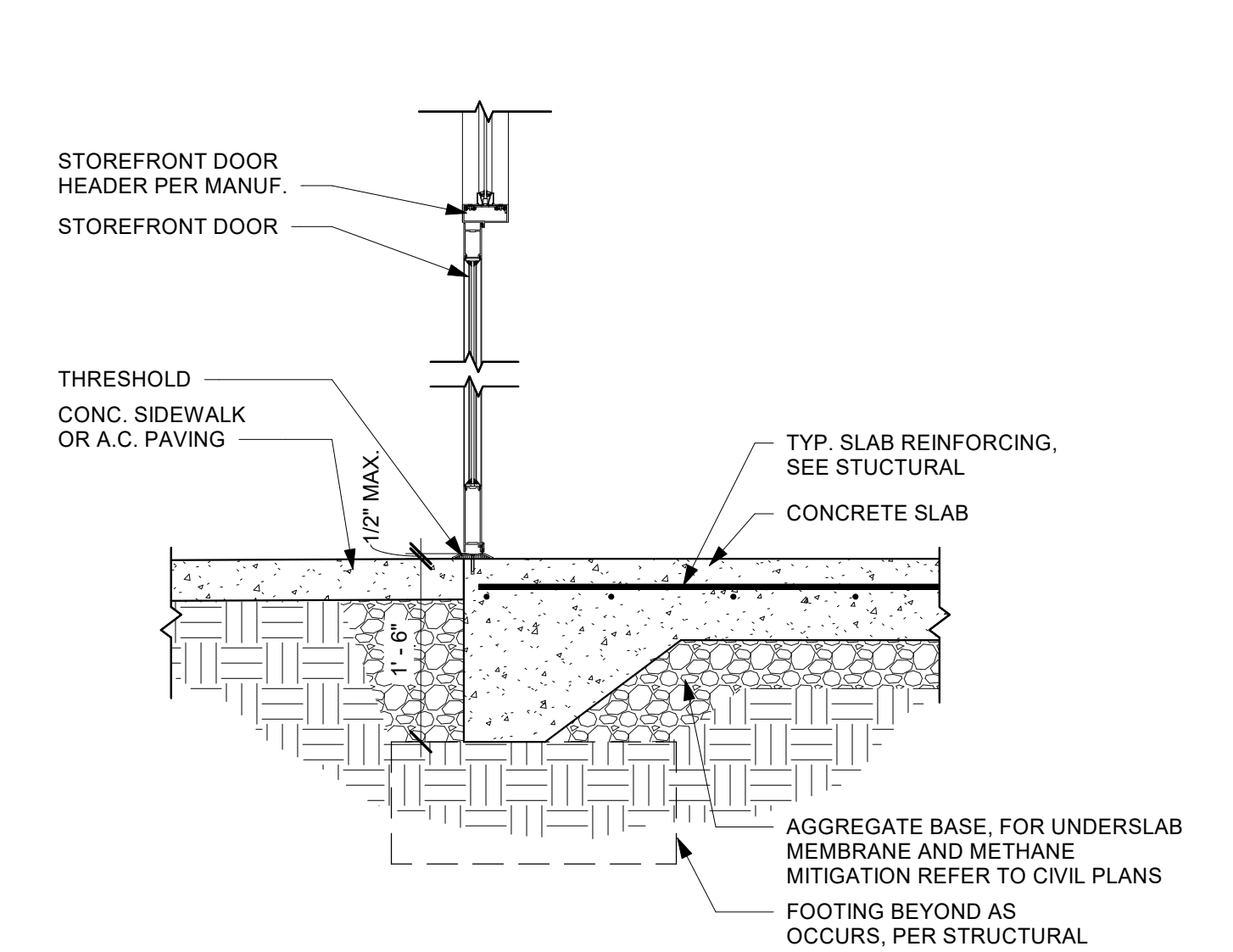
REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:  
**STOREFRONT & INTERIOR DETAILS**

DRAWN BY: Author  
 CHECKED BY: Checker  
 SHEET

**A5.20**

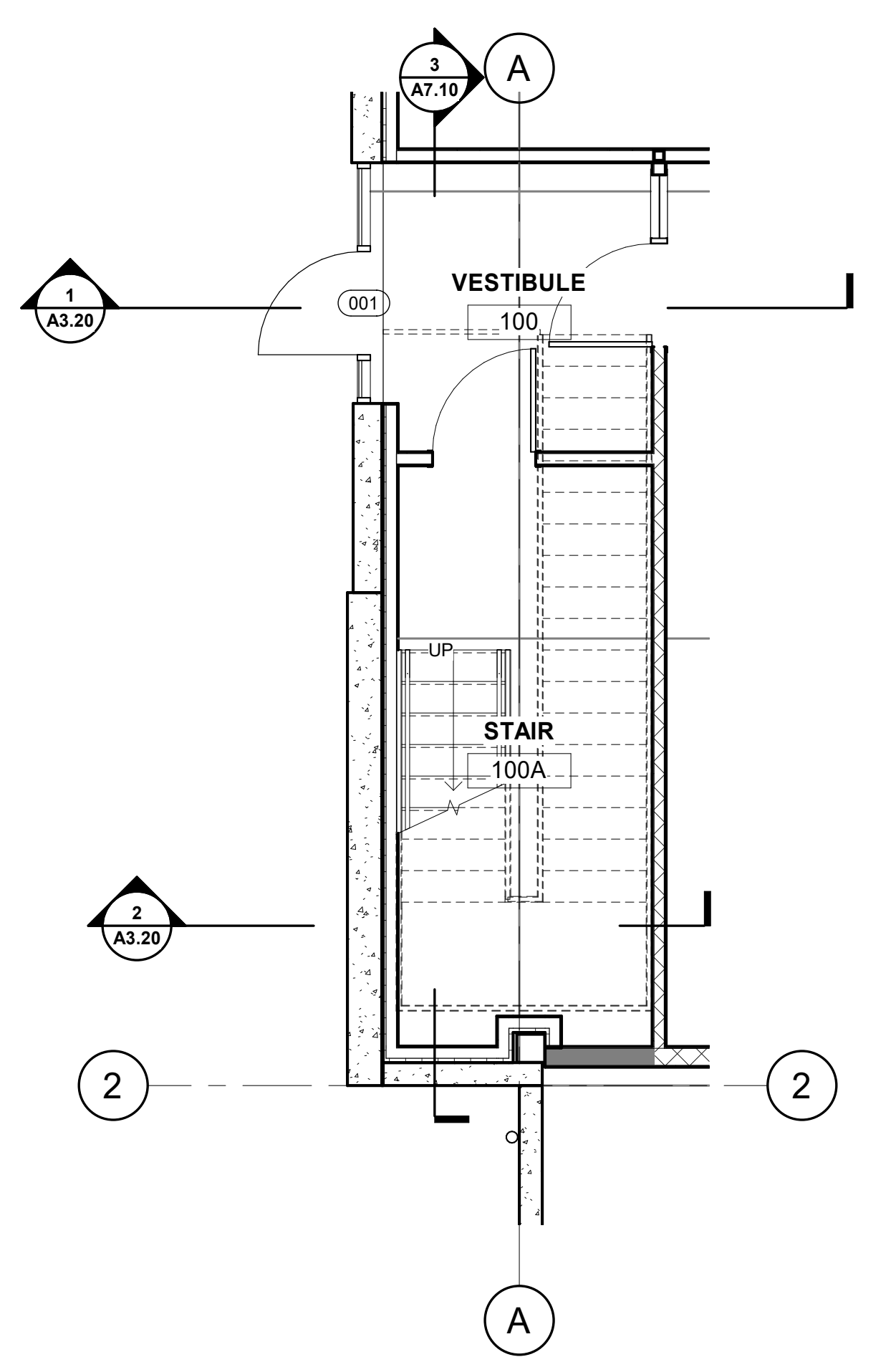
JOB NO. **2200502.00**



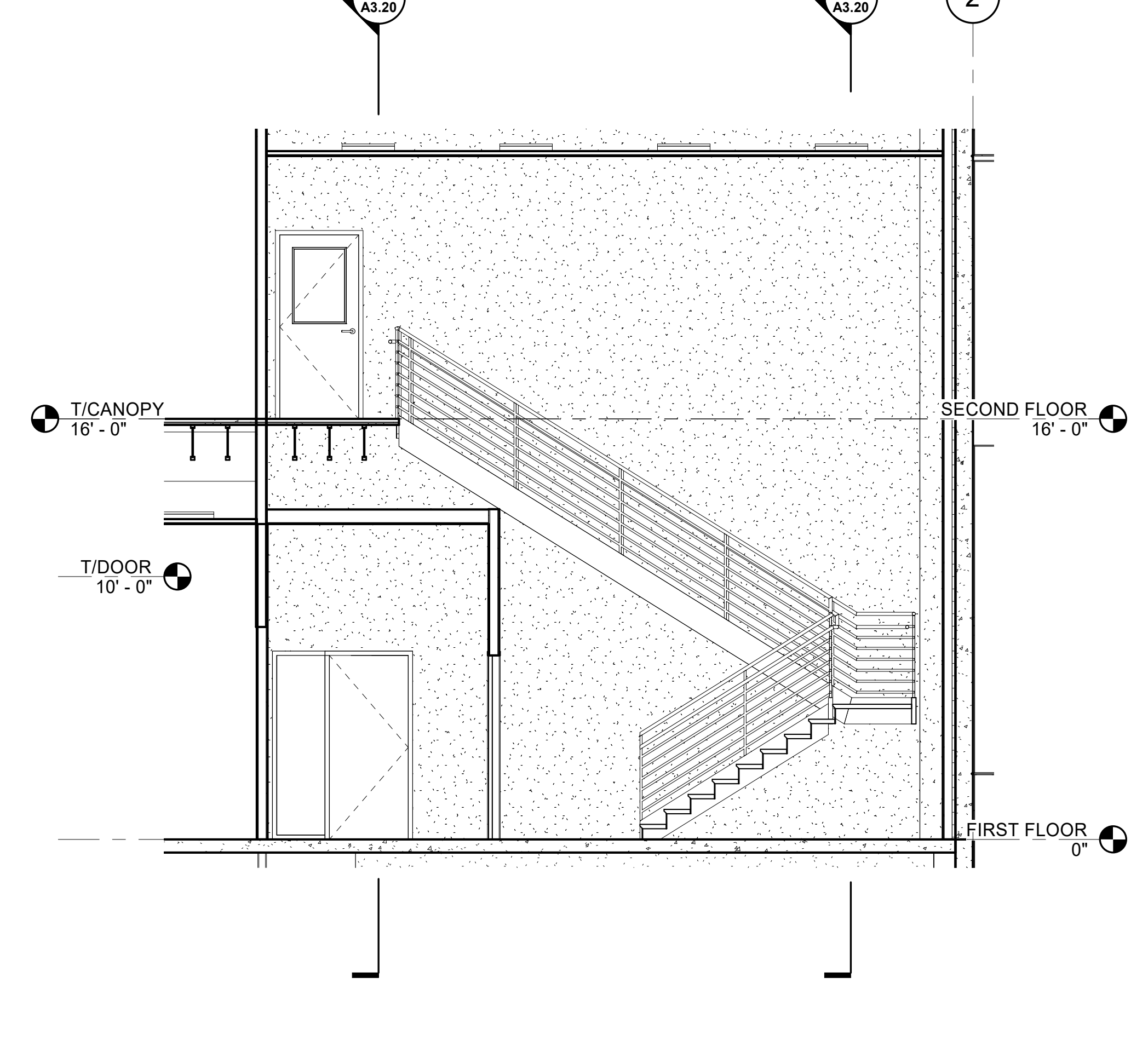




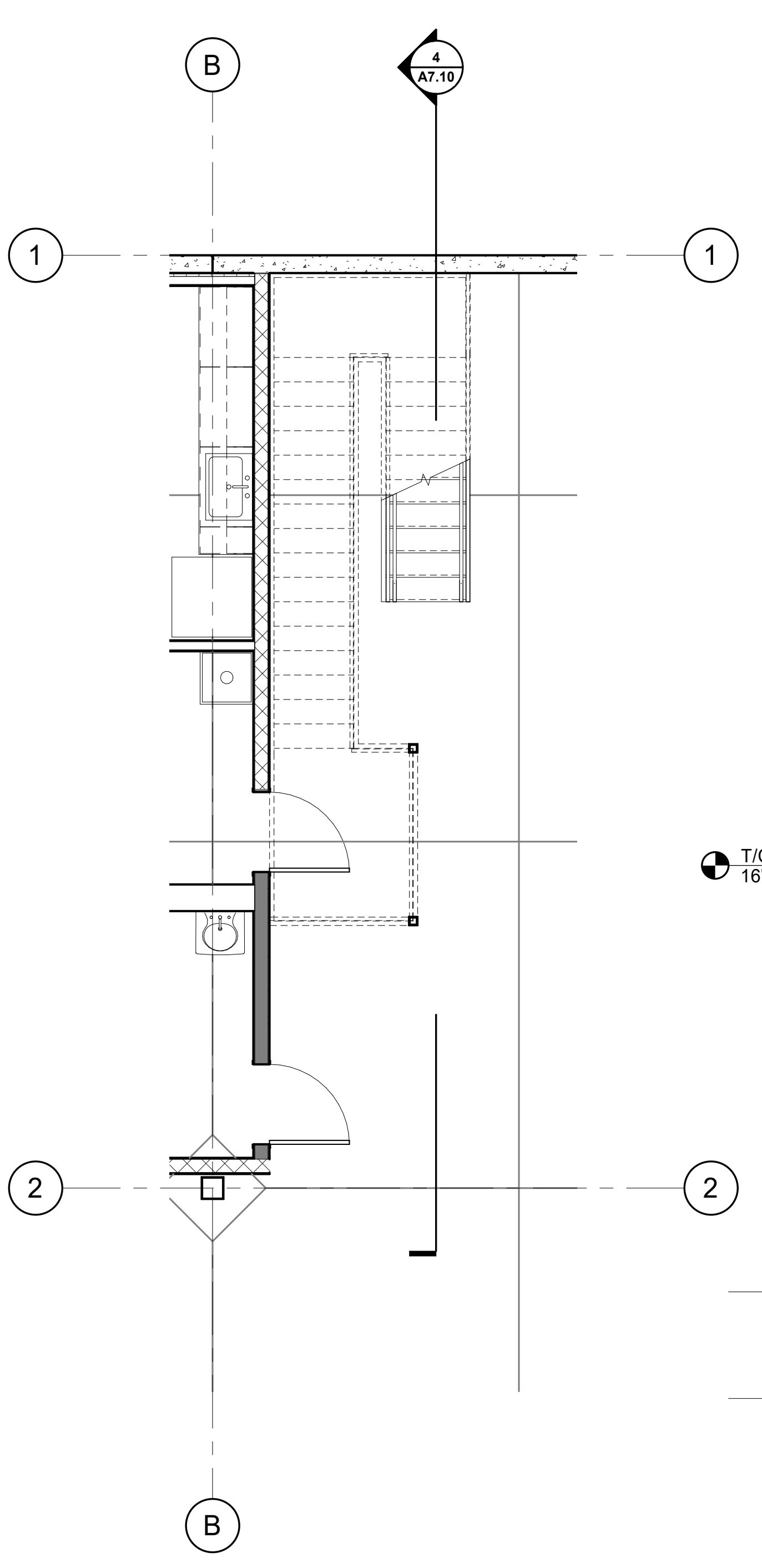




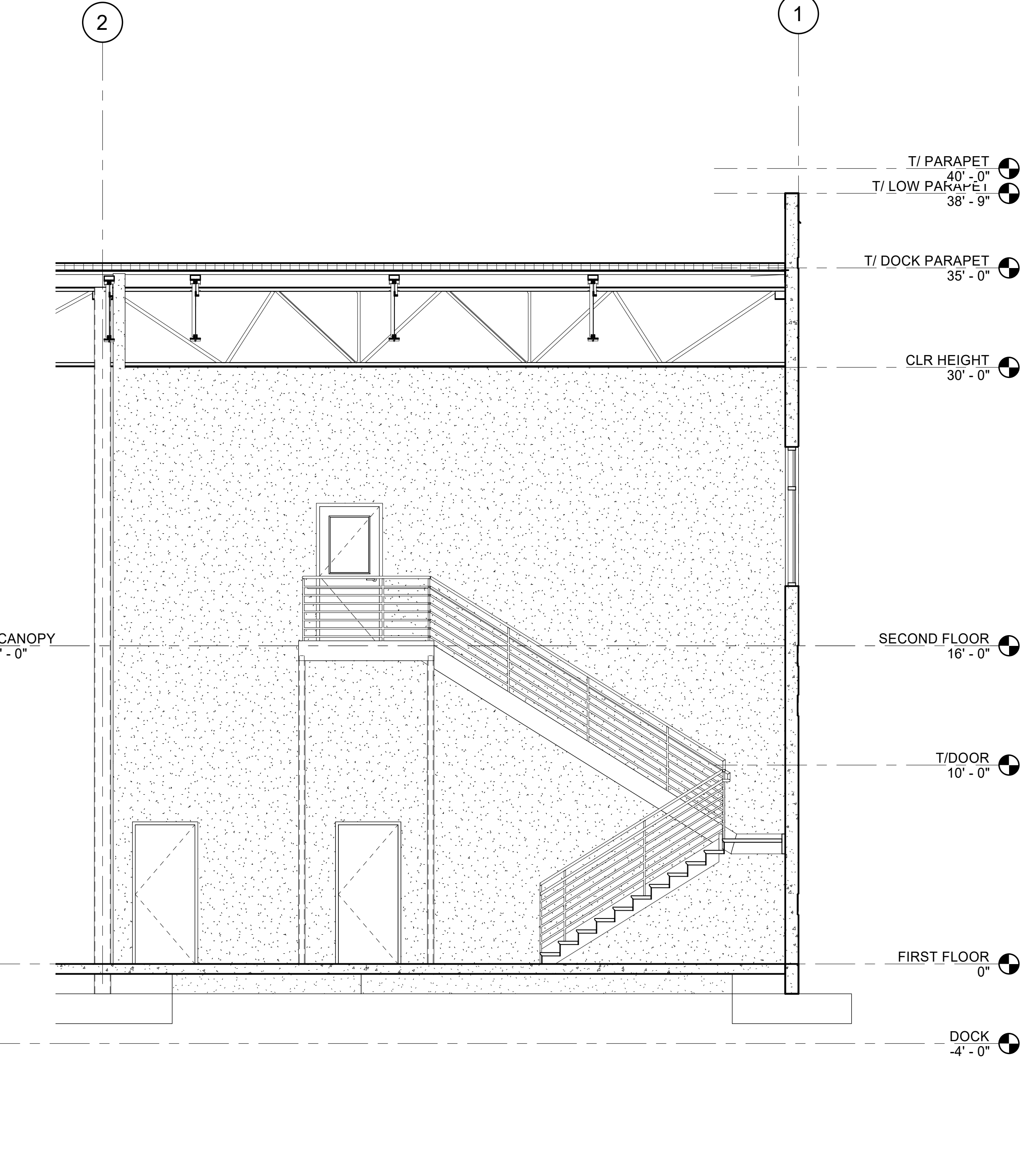
1 MAIN STAIR - ENLARGED PLAN  
A7.10 1/4" = 1'-0"



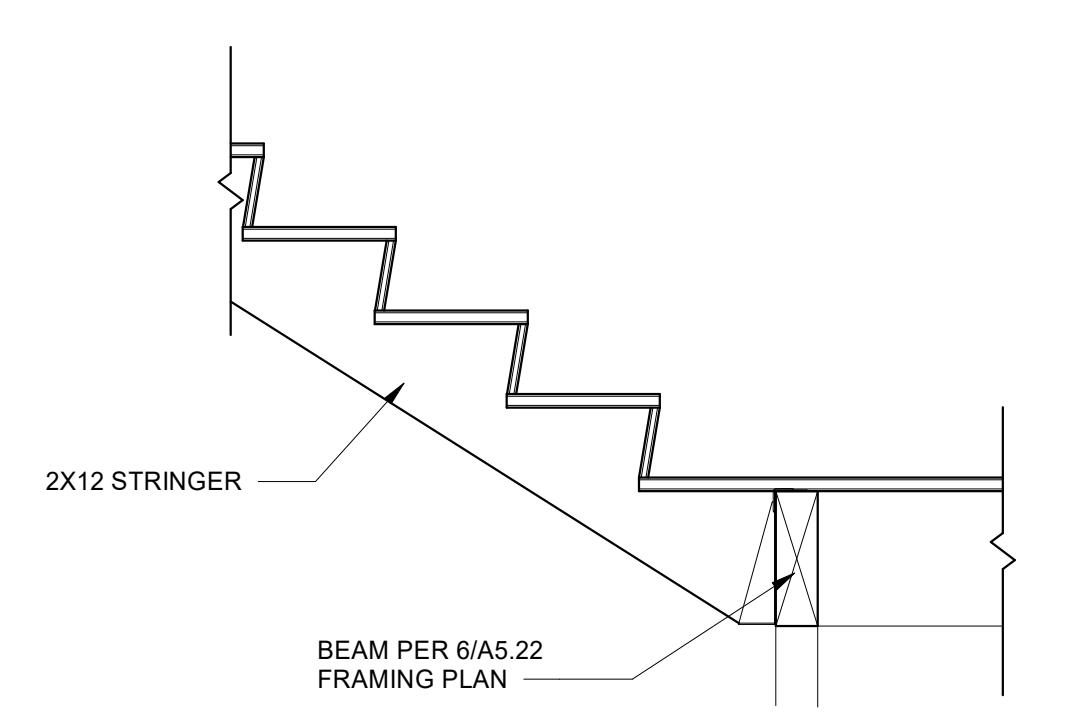
3 MAIN STAIR - SECTION  
A7.10 1/4" = 1'-0"



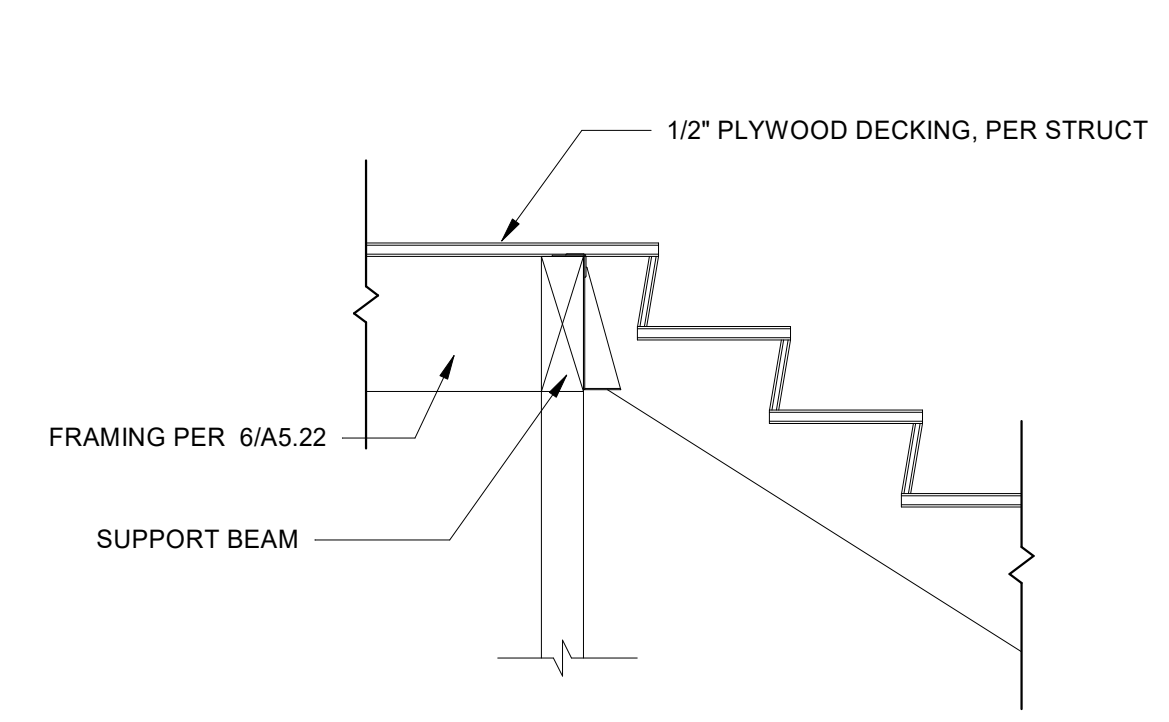
2 WAREHOUSE STAIR - ENLARGED PLAN  
A7.10 1/4" = 1'-0"



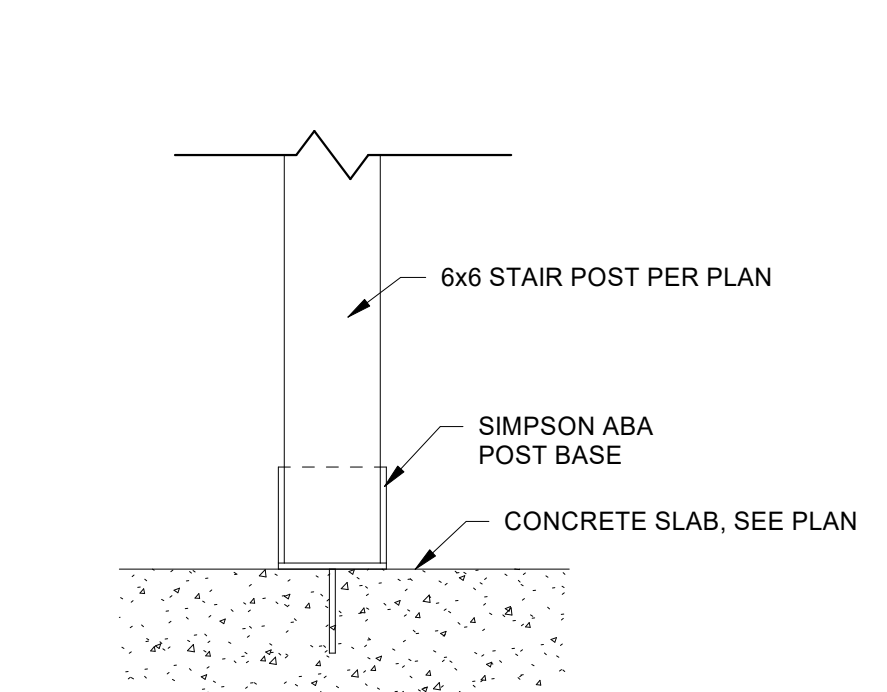
4 WAREHOUSE STAIR - SECTION  
A7.10 1/4" = 1'-0"



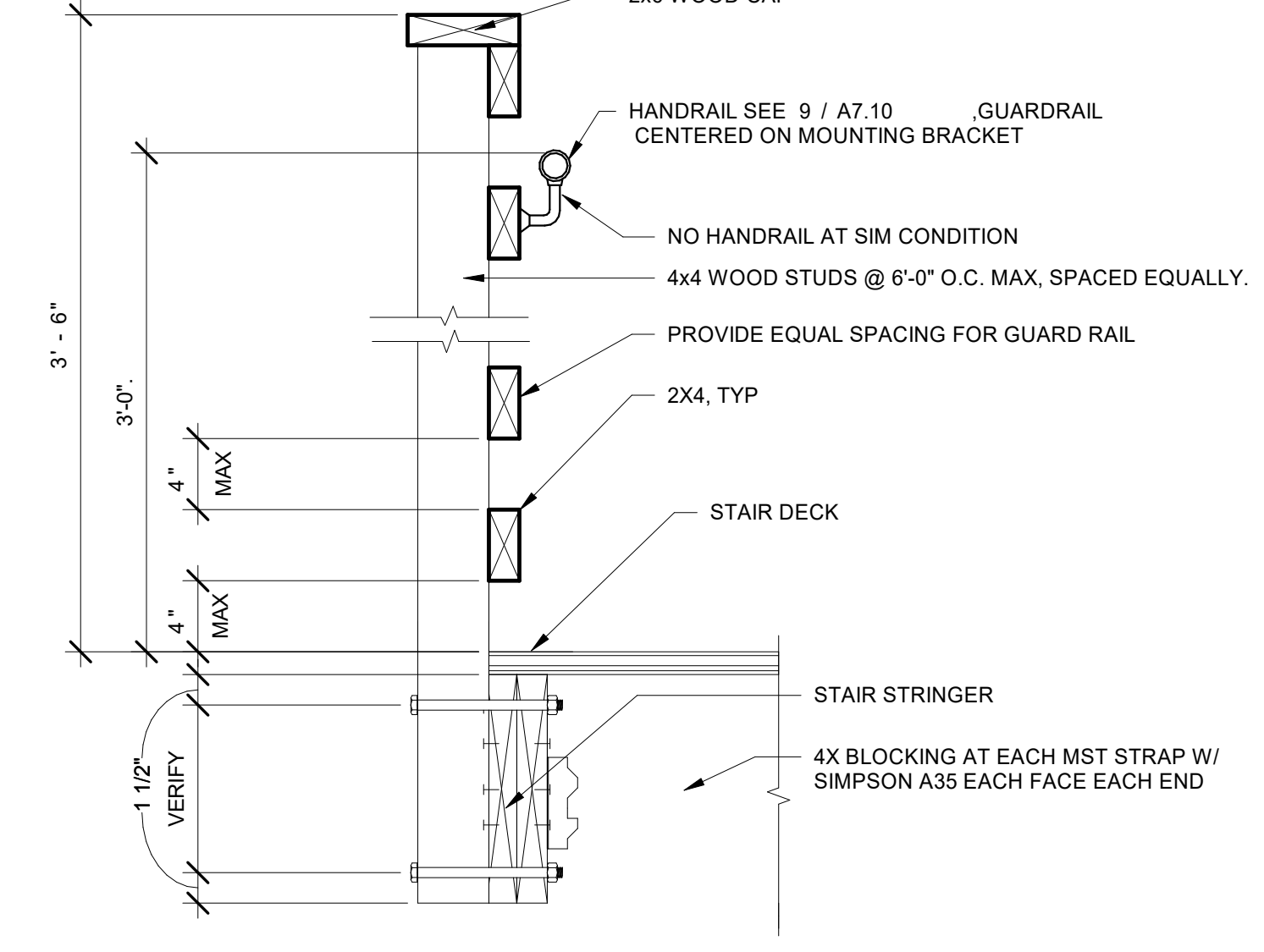
5 STAIR AT MID-LANDING  
A7.10 3/4" = 1'-0"



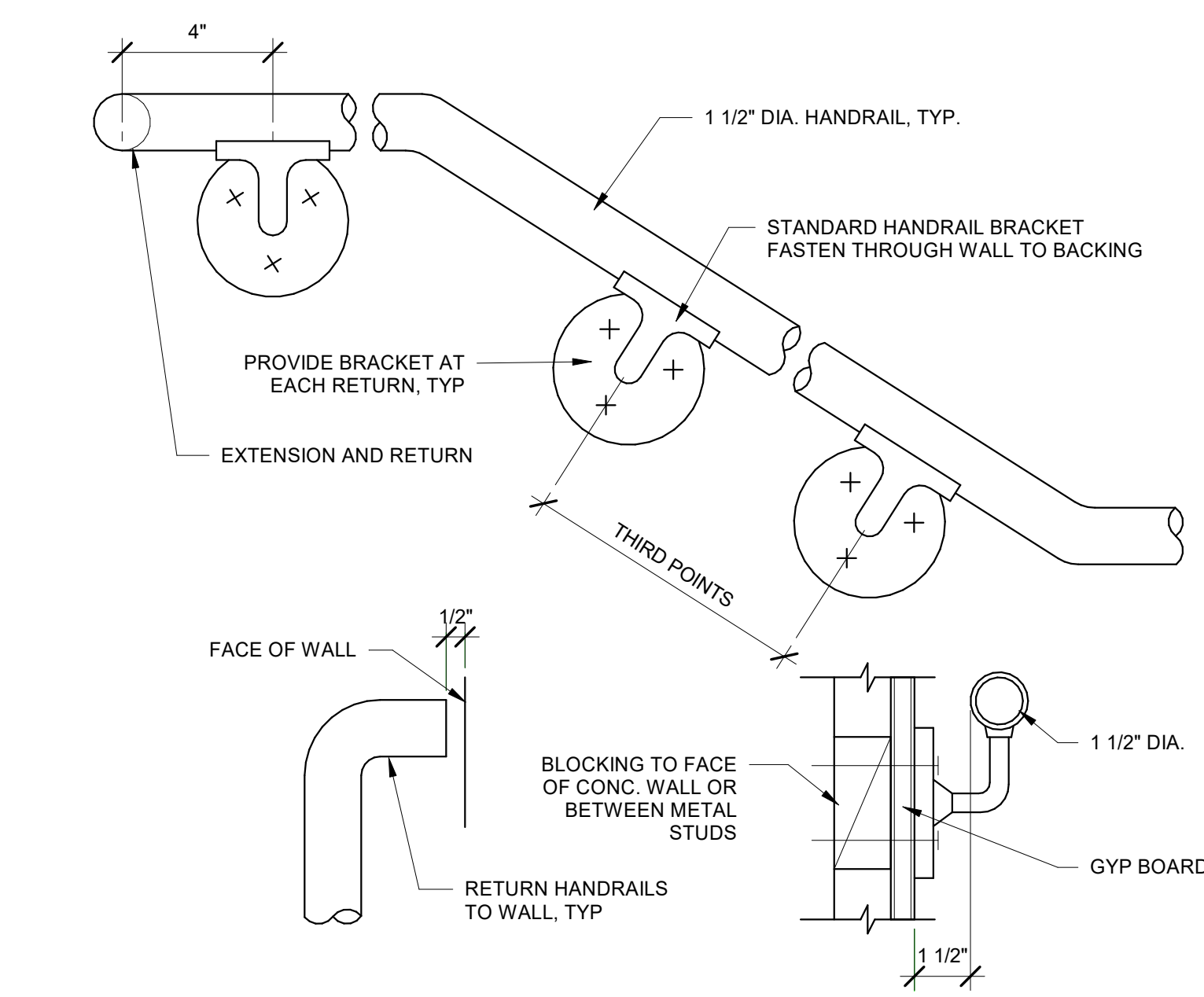
6 STAIR AT TOP LANDING  
A7.10 3/4" = 1'-0"



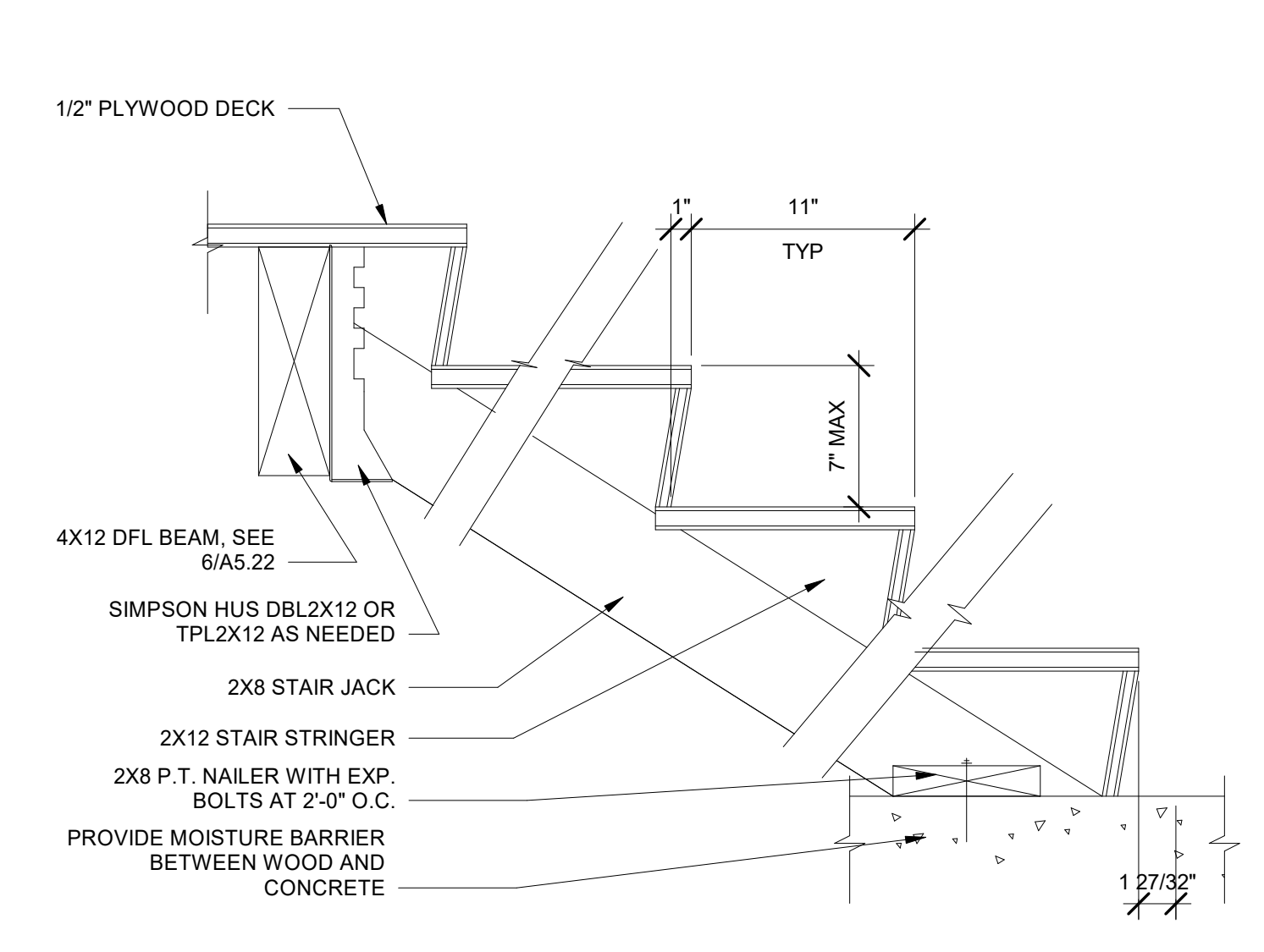
7 STAIR POST DETAIL  
A7.10 1 1/2" = 1'-0"



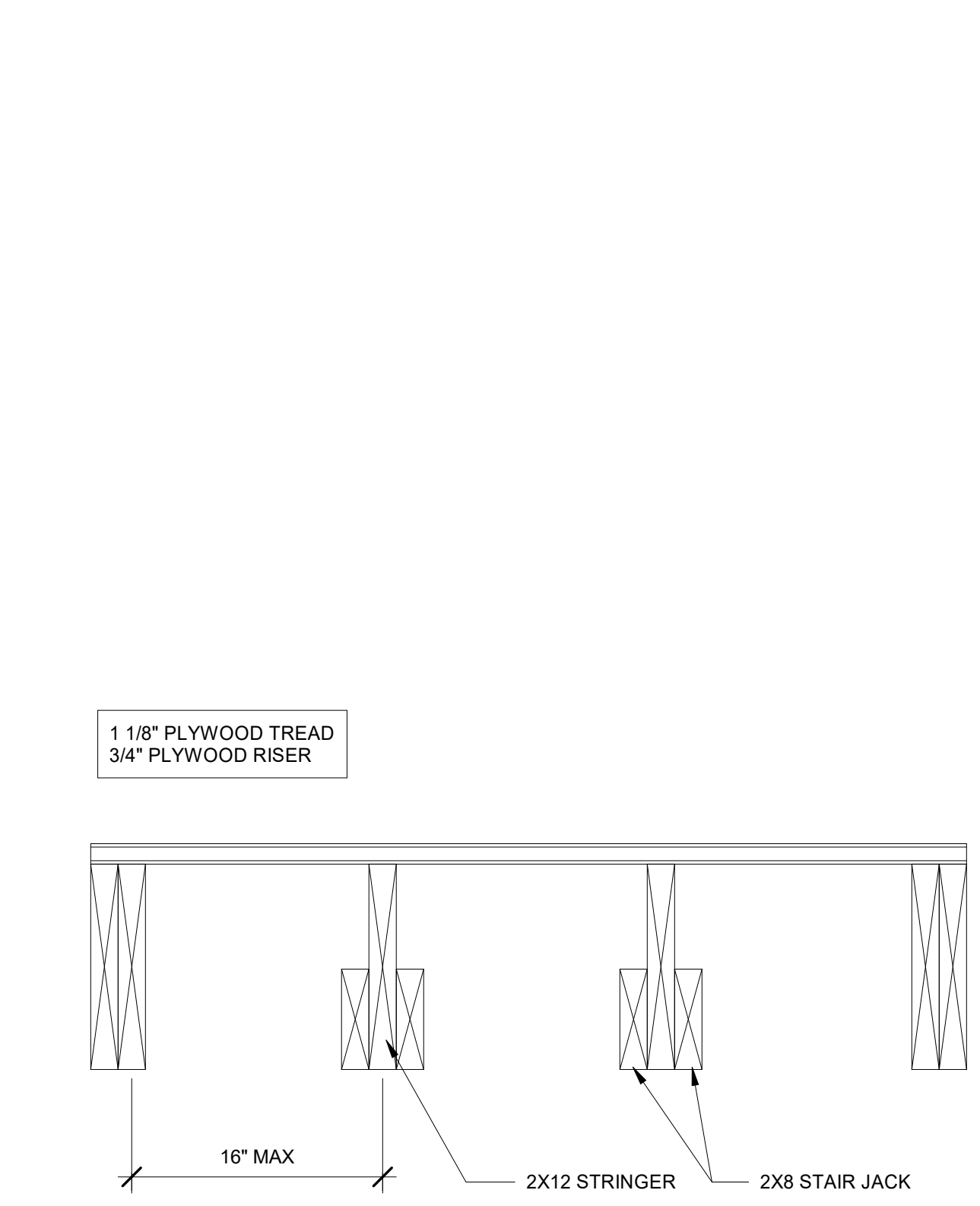
8 STAIRWAY GUARDRAIL  
A7.10 1 1/2" = 1'-0"



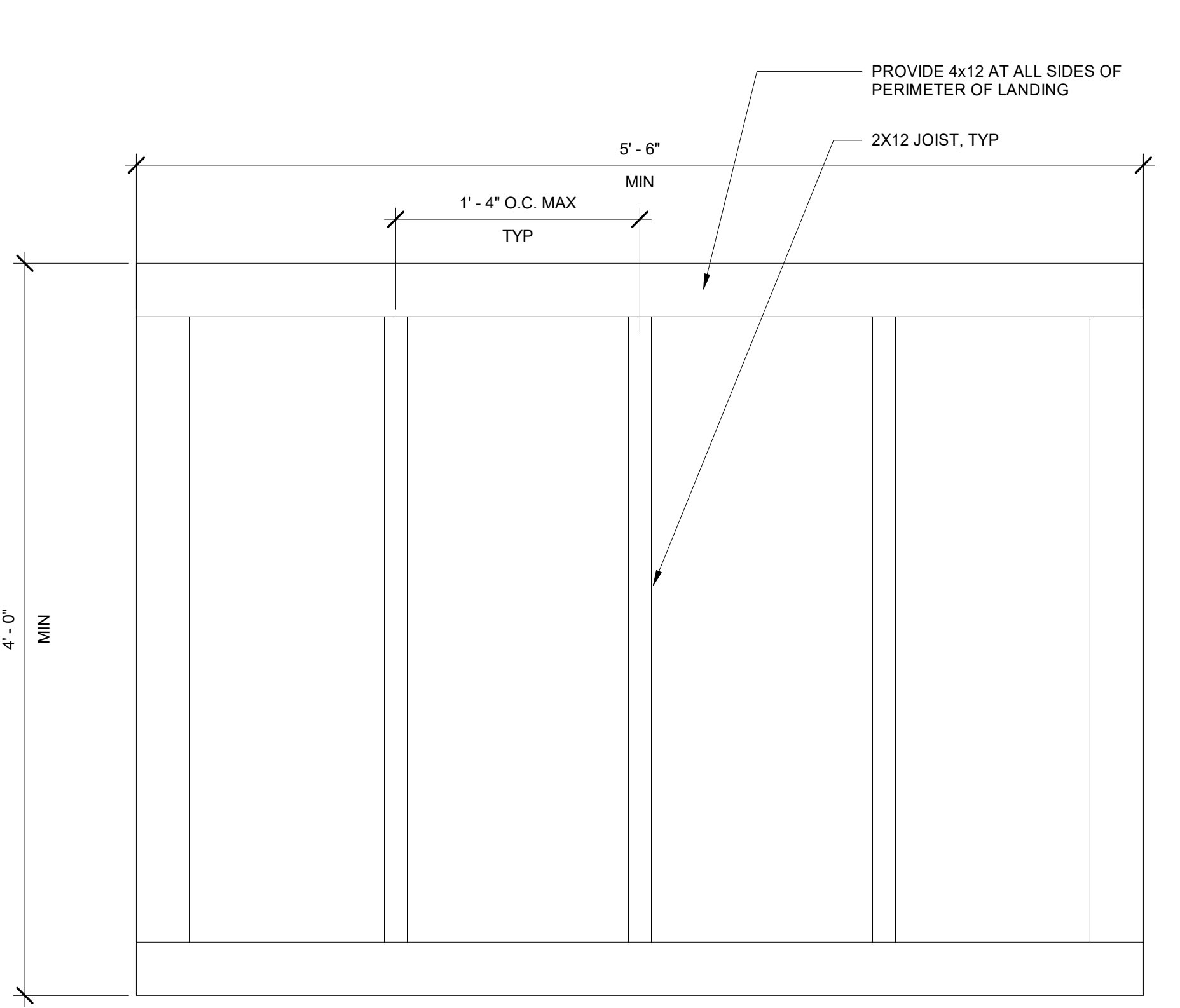
9 TYPICAL HANDRAIL  
A7.10 3" = 1'-0"



10 TYPICAL STAIR TREAD RISER  
A7.10 1 1/2" = 1'-0"



11 TYPICAL STAIR TREAD SECTION  
A7.10 1 1/2" = 1'-0"



12 TYPICAL STAIR LANDING FRAME  
A7.10 1 1/2" = 1'-0"

Project

PRELIMINARY  
NOT FOR  
CONSTRUCTION

© MACKENZIE  
2022 ALL RIGHTS RESERVED  
THESE DRAWINGS ARE THE PROPERTY OF  
MACKENZIE AND ARE NOT TO BE USED  
OR REPRODUCED IN ANY MANNER  
WITHOUT PRIOR WRITTEN PERMISSION

REVISION SCHEDULE		
Delta	Issued As	Issue Date

SHEET TITLE:  
**STAIR PLANS**

DRAWN BY: Author  
CHECKED BY: Checker  
SHEET

**A7.10**

JOB NO. **2200502.00**