

ADDENDUM NO. 3
June 6, 2023

2023 RECONSTRUCT TERMINAL BUILDING
AIP No. 3-27-0025-20-2023
SKY HARBOR AIRPORT
DULUTH, MN

SEH No. DULAI 172133

From: Short Elliott Hendrickson Inc.
3535 Vadnais Center Drive
St. Paul, MN 55110-3507
651.490.2000

To: Document Holders

DOCUMENT HOLDERS on the above-named project are hereby notified that this document shall be appended to, take precedence over and become part of the original bidding documents dated May 17, 2023 and Addenda's dated May 31, 2023 and June 2, 2023 for this work. Bids submitted for the construction of this work shall conform to this document.

This addendum consists of 2 pages and Drawing Nos. G2.10, C3.00, C4.00, C5.01, A301, S101, S502, and S504.

Changes to Bidding Requirements: N/A

Changes to Specifications: N/A

Changes to Appendix: N/A

Changes to Drawings:

1. Drawing G2.10 – Statement of Quantities, DELETE in its entirety and REPLACE with the attached revised drawing.
 - Updated Quantities and Quantity Notes related to Item No. 39.
 - Quantities changed related to Item No.39, for shifting northside sloped walk to structural discipline and shall be covered under Item No. 59.
2. Drawing C3.00 – Typical Sections, Drawing C4.00 – Pavement Plan, DELETE in its entirety and REPLACE with the attached revised drawing.
 - Updated typical section for sloped sidewalk.
3. Drawing C4.00 – Pavement Plan, DELETE in its entirety and REPLACE with the attached revised drawing.
 - Revised pavement plan limits for concrete sloped walk, related to structural drawings. Northside sloped walk will be covered under structural and building construction item.
4. Drawing C5.01 – Grading Plan, DELETE in its entirety and REPLACE with the attached revised drawing.
 - Revised pavement plan limits for concrete walk, related to structural drawings. Northside sloped walk will be covered under structural and building construction item.
5. DELETE the following drawings and REPLACE in their entirety with the attached revised drawings:
 - A301, S101, S502, and S504.
 - i. Added detail related to thickened edge for sloped walk on northside of building.

Product Substitution Request Log: N/A

Note: Receipt of this Addendum No. 3, dated June 6, 2023, shall be acknowledged on Bid Express. Failure to do so will not allow Bidder to submit Bid.

END OF ADDENDUM

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STATEMENT OF ESTIMATED QUANTITIES

BASE BID SCHEDULE A - CONSTRUCT SITE WORK (FAA ELIGIBLE)

LINE NO.	ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
1	C-105	MOBILIZATION (10% OF OVERALL BID SCHEDULE A)	LS	1	
2	70-08	TRAFFIC PROVISIONS/AIRPORT SECURITY & DEVICES/PHASING	LS	1	
3	70-08	ORANGE CONSTRUCTION FENCE	LF	150	
4	01 51 00	TEMPORARY UTILITIES	LS	1	
5	01 55 15	MAINTENANCE AND RESTORATION OF HAUL ROADS	LS	1	
6	01 58 13	CONSTRUCTION PROJECT SIGN (\$1,000 MAXIMUM ALLOWED)	LS	1	
7	01 71 23	FIELD ENGINEERING	LS	1	
8	02 41 33	REMOVE AND SALVAGE EXISTING SIGN AND POST	LS	3	
9	02 41 33	REMOVE AND SALVAGE EXISTING 6-FT CHAIN-LINK FENCE (BY ENTRANCE GATE)	LF	15	
10	02 41 33	REMOVE EXISTING 6-FT CHAIN-LINK FENCE (BY TRAIL)	LF	25	
11	2540.602	RELOCATE MAIL BOX SUPPORT	EACH	1	
12	02 41 33	REMOVE SEWER PIPE (SANITARY)	LF	15	
13	02 41 33	REMOVE WATER SERVICE PIPE (INCLUDING DISCONNECTION OF CURB STOP & CAPPING)	LF	25	
14	02 41 33	REMOVE CONCRETE SIDEWALK, PATIO & APPROACH	SF	475	
15	02 41 33	REMOVE DRY WELL	LS	1	
16	02 41 33	REMOVE & RELOCATE TELEPHONE LINE	LS	1	
17	02 41 33	REMOVE ELECTRICAL HANDHOLE	EACH	1	
18	02 41 33	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LF	245	
19	02 41 33	REMOVE BITUMINOUS PAVEMENT (6.5" THICK)	SY	300	
20	02 41 13	SELECTIVE DEMOLITION	LS	1	
21	02 41 13	REGULATED WASTE REMOVAL	LS	1	
22	02 82 20	REGULATED ABESTOS REMOVAL	LS	1	
23	P-152	COMMON EXCAVATION (EV)	CY	135	
24	P-152	UNCLASSIFIED OVER EXCAVATION (EV)	CY	50	
25	P-152	BORROW (EV) (OFFSITE)	CY	50	
26	31 25 10	ROCK CONSTRUCTION ENTRANCE (INCLUDES MAINTENANCE AND REMOVAL)	EACH	1	
27	31 25 10	SILT FENCE, TYPE PREASSEMBLED (INCLUDES MAINTENANCE AND REMOVAL)	LF	835	
28	31 25 10	SEDIMENT CONTROL LOG (INCLUDES MAINTENANCE AND REMOVAL)	LF	225	
29	31 34 10	GEOTEXTILE FABRIC, TYPE 7 (SEPARATION FABRIC)	SY	250	
30	32 10 22	SUBBASE MATERIAL (SELECT GRANULAR MATERIAL) (CV)	CY	85	
31	32 11 22	AGGREGATE BASE (CLASS 5) (CV)	CY	60	
32	32 12 13	BITUMINOUS MATERIAL FOR TACK COAT	GAL	10	
33	32 12 16	BITUMINOUS 1.75" (SPWEA340C)	TON	30	
34	32 12 16	BITUMINOUS 2.25" (SPNWB330C)	TON	40	
35	32 13 10	6" CONCRETE PAVEMENT (HANGAR APPROACH)	SY	15	
36	32 16 20	CONCRETE CURBING (6" HEIGHT - V CURB)	LF	110	
37	32 17 23	PAVEMENT MARKING LINEAR, 4-INCH WIDTH, WHITE TYPE I (EPOXY)	LF	140	
38	32 17 23	PAVEMENT MARKING MESSAGES, HANDICAP SYMBOL & NO PARKING, WHITE TYPE I (EPOXY)	EACH	2	
39	32 18 20	4-INCH CONCRETE SIDEWALK (5-FOOT WIDE, INCLUDING SLOPED WALK)	SF	100	
40	32 18 20	DETECTABLE WARNING PANELS	SF	15	
41	32 40 00	HANDICAP PARKING AND NO PARKING SIGNS (INCLUDING POST AND FASTENERS)	EACH	2	
42	2503.603	4" PVC SANITARY SERVICE PIPE (SDR 35)	LF	75	
43	2503.603	4" PVC SANITARY CLEANOUT (INCLUDING BENDS AND FITTINGS)	EACH	2	
44	33 36 10	INSTALL 1,000 GALLON SEPTIC HOLDING TANK (FOR HANGAR FLOOR DRAINS)	LS	1	
45	33 36 10	UPGRADES TO EXISTING 1,500 SEPTIC TANK	LS	1	
46	2504.602	8" x 2" TAPPING TEE W/ ELECTROFUSION SADDLE	EACH	1	
47	2504.602	2" CURB STOP AND BOX	EACH	1	
48	2504.602	WATER TRACER BOX	EACH	1	
49	2504.603	2" HDPE SDR 11 SERVICE PIPE (INCLUDING FITTINGS AND TRACE WIRE)	LF	20	
50	F-162.5.1	CHAIN-LINK FENCE, 6-FT HEIGHT (REINSTALL SALVAGED)	LF	15	
51	32 90 00	LANDSCAPING (INCLUDES ROCK & FABRIC)	SF	800	
52	T-901.5.1	TURF ESTABLISHMENT (INCLUDES FERTILIZER, SEED, MULCHING AND STABILIZATION)	LS	1	
53	T-905.5.1	SELECT TOPSOIL BORROW (SALVAGED) (CV)	CY	75	

BASE BID SCHEDULE B - CONSTRUCT TERMINAL BUILDING (PRORATED - FAA ATP ELIGIBLE)

LINE NO.	ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
54	GENERAL	GENERAL CONDITIONS	LS	1	
55	01 71 23	FIELD ENGINEERING	LS	1	
56	31 22 20	STRUCTURE EXCAVATION	CY	675	
57	31 22 30	STRUCTURE BACKFILL (ENGINEERED FILL)	CY	675	
58	P-152	UNCLASSIFIED OVER EXCAVATION (EV)	CY	100	
59	ARCH/STRC.	BUILDING CONSTRUCTION	LS	1	
60	MECH.	BUIDLING PLUMBING AND HVAC	LS	1	
61	ELEC.	BUILDING ELECTRICAL AND UTILITIES	LS	1	

ALTERNATE A - CONSTRUCT BUILDING ELEMENTS (FAA INELIGIBLE)

LINE NO.	ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
62	GENERAL	GENERAL CONDITIONS	LS	1	
63	ARCH.	KITCHNETTE AREA (COUNTERTOP, BASE CABINETS, SINK, AND ASSOCIATED PLUMBING TO KITCHENTTE SINK)	LS	1	
64	ELEC.	CONDUIT & WIRING INSTALLATION FOR FUTURE SECURITY CAMERAS	LS	1	
65	ELEC.	ELECTRICAL PEDESTAL FOR EXTERIOR VENDING TRUCK (INCLUDING CONDUIT & WIRING)	LS	1	
66	32 18 20	EXTERIOR 5" CONCRETE SLAB (8' x 14')	SF	112	
67	31 34 10	GEOTEXTILE FABRIC, TYPE 7 (SEPARATION FABRIC)	SY	25	
68	32 10 22	SUBBASE MATERIAL (SELECT GRANULAR MATERIAL) (CV)	CY	10	
69	32 11 22	AGGREGATE BASE (CLASS 5) (CV)	CY	10	
70	32 93 12	LANDSCAPE PLANTING, SIZE 5 GALLON (DECIDUOUS SHRUB)	EACH	17	
71	T-905.5.2	SELECT TOPSOIL BORROW (IMPORTED) (CV)	CY	5	

ALTERNATE B - RECONSTRUCT AUTO PARKING AREA (FAA BIL ELIGIBLE)

LINE NO.	ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
72	C-105	MOBILIZATION (10% OF OVERALL BID SCHEDULE ALTERNATE B)	LS	1	
73	70-08	TRAFFIC PROVISIONS/AIRPORT SECURITY & DEVICES/PHASING	LS	1	
74	01 71 23	FIELD ENGINEERING	LS	1	
75	02 41 33	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LF	130	
76	02 41 33	REMOVE BITUMINOUS PAVEMENT (6.5" THICK)	SY	350	
77	P-152	COMMON EXCAVATION (EV)	CY	205	
78	31 34 10	GEOTEXTILE FABRIC, TYPE 7 (SEPARATION FABRIC)	SY	385	
79	32 10 22	SUBBASE MATERIAL (GRANULAR) (CV)	CY	145	
80	32 11 22	AGGREGATE BASE (CLASS 5) (CV)	CY	100	
81	32 12 13	BITUMINOUS MATERIAL FOR TACK COAT	GAL	20	
82	32 12 16	BITUMINOUS 1.75" (SPNWB330B)	TON	50	
83	32 12 16	BITUMINOUS 2.25" (SPWEA340B)	TON	65	
84	32 17 23	PAVEMENT MARKING LINEAR, 4-INCH WIDTH, WHITE TYPE I (EPOXY)	LF	550	
85	32 17 23	PAVEMENT MARKING MESSAGE, NO PARKING, WHITE TYPE 1 (EPOXY)	EACH	1	
86	32 92 12	TURF ESTABLISHMENT (INCLUDES FERTILIZER, SEED, MULCHING AND STABILIZATION)	LS	1	
87	T-905.5.1	SELECT TOPSOIL BORROW (SALVAGED) (CV)	CY	20	

ALTERNATE C - REPLACE EXISTING HANGAR ROOFING AND SIDING (FAA BIL ELIGIBLE)

LINE NO.	ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
88	GENERAL	GENERAL CONDITIONS	LS	1	
89	ARCH.	REMOVE EXISTING HANGAR ROOFING AND SIDING	LS	1	
90	ARCH.	INSTALL METAL ROOFING	LS	1	
91	ARCH.	INSTALL METAL WALL PANEL SIDING	LS	1	

ALTERNATE D - PROVIDE INTERIM TERMINAL FACILITY AND TOILET FACILITIES (FAA ATP ELIGIBLE)

LINE NO.	ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY
92	C-105	MOBILIZATION (10% OF OVERALL BID SCHEDULE ALTERNATE D)	LS	1	
93	01 52 13	ADA ACCESSIBLE INTERIM TERMINAL FACILITY	LS	1	
94	01 52 13	ADA ACCESSIBLE TEMPORARY SANITARY FACILITIES	LS	1	

STATEMENT OF ESTIMATE QUANTITY NOTES:

ITEMS NO. 1/72/92: LIMITED TO 10% OF THE TOTAL PROJECT COSTS RELATED TO THE BID SCHEDULE.
ITEM NO.2: INCLUDES INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL SIGNAGE, BARRICADES, TEMPORARY FENCING, AND TRAFFIC CONTROL DEVICES.
ITEM NO.4: PROVIDE TEMPORARY UTILITIES FOR FUELING MONITORING EQUIPMENT, FUEL SYSTEM, AWOS, SECURITY GATE, AND CAMERA OBSERVATION SETUP.
ITEM NO. 7: PROVIDING CONSTRUCTION SURVEY THROUGHOUT THE PROJECT, INCLUDING DOCUMENTING ELEVATIONS OF STRUCTURE EXCAVATION, STRUCTURAL FILL, SUBGRADE, BASE COURSE AND OTHER QUANTITY SURVEYS SUPPLIED TO THE ENGINEER FOR PAYMENT.
ITEM NO. 11: COORDINATION WITH USPS TO RELOCATE MAILBOX AND TEMPORARILY SET UP LOCATION FOR DURATION OF PROJECT.
ITEM NO. 14 REMOVING CONCRETE SIDEWALK, CONCRETE PATIO AND ASSOCIATED LANDSCAPING ADJACENT TO THE SIDEWALK.
ITEM NO. 16: COORDINATION WITH LOCAL PROVIDER TO RELOCATE EXISTING TELEPHONE LINE OUTSIDE BUILDING FOOTPRINT.
ITEM NO. 36: PROVIDING CONCRETE PAVEMENT THAT WAS REMOVED FOR INSTALLATION OF FOUNDATION AND STAIRS NEXT TO EXISTING HANGAR APPROACH. THIS ITEM INCLUDES PROVIDING AND INSTALLING TIE BARS AND NECESSARY DRILLING TO EXISTING CONCRETE PAVEMENT.
ITEM NO. 39: CONSTRUCTING SLOPED SIDEWALK INCLUDING REINFORCEMENT.
ITEMS NO. 42/43: PROVIDING SANITARY SERVICE TO THE TERMINAL BUILDING. ITEMS INCIDENTAL TO THE WORK INCLUDE TRACER WIRE, PVC FITTINGS, TESTING AND OTHER APPLICABLE CITY OF DULUTH SPECIFICATION REQUIREMENTS.
ITEM NO. 44: PROVIDING SEPTIC HOLDING TANK FOR EXISTING HANGAR DRAINS, INCLUDING CONNECTIONS, PERMITTING, OVERFILL ALARM, EQUIPMENT AND ACCESSORIES TO MAKE AN OPERABLE SYSTEM.
ITEM NO. 45: PROVIDING UPGRADES TO EXISTING SEPTIC SYSTEM TANK, INCLUDING REPLACING PUMP, FLOAT, REMOVING EXISTING ELECTRICAL SERVICE, OVERFILL ALARM AND ACCESSORIES TO MAKE AN OPERABLE SYSTEM.
ITEMS NO. 46-49: PROVIDING WATER SERVICE TO THE TERMINAL BUILDING. ITEMS INCIDENTAL TO THE WORK INCLUDE TRACER WIRE, FITTINGS, BACKFILL, TRENCHING, TESTING, AND OTHER APPLICABLE CITY OF DULUTH SPECIFICATION REQUIREMENTS.
ITEM NO. 50: REINSTALLING SALVAGED 6-FT HIGH FENCE, POSTS, FABRIC AND FASTENERS.
ITEM NO. 51: INSTALLING LANDSCAPE ROCK AND WEED BARRIER FABRIC.
ITEMS NO. 54/62/88: THE TERM "GENERAL CONDITIONS" IS USED TO DESCRIBE EXPENSES THAT SUPPORT A PROJECT WITHOUT DIRECTLY RELATING TO JOBSITE ACTIVITIES, INCLUDING BUT NOT LIMITED TO SITE MANAGEMENT, PERMITTING, PROJECT MANAGEMENT AND COORDINATION FOR EACH SCHEDULE.
ITEM NO 63: PROVIDING AND INSTALLING BASE CABINETS, COUNTERTOP AND SINK IN KITCHENETTE AREA AND INSTALLING ASSOCIATED PLUMBING TO SUPPLY THE SINK.
ITEM NO. 64: PROVIDING CONDUIT AND WIRING FOR FUTURE INSTALLATION OF SECURITY CAMERAS.
ITEM NO. 65: PROVIDING ELECTRICAL PEDESTAL FOR EXTERIOR VENDING TRUCK, WHICH INCLUDES CONDUIT, WIRING AND BORING (IF EXISTING DUCT IS NOT SUITABLE) TO MAKE AN OPERABLE SYSTEM.
ITEM NO. 66: PROVIDING CONCRETE SLAB ON AIRSIDE OF BUILDING SITE, INCLUDING REINFORCEMENT AND THICKENED EDGE.
ITEM NO. 70/71: PROVIDING LANDSCAPE PLANTING ALONG THE TERMINAL BUILDING AND IMPORTED TOPSOIL FOR PLANTING MIX.
ITEM NO. 93: PROVIDING ADA-COMPLIANT INTERIM TERMINAL AND OTHER ITEMS TO SET UP THE FACILITY.
ITEM NO. 94: PROVIDING TEMPORARY TOILET FACILITIES FOR DURATION OF PROJECT (ADA-COMPLIANT AND NON-ADA COMPLIANT).

ALTERNATE A: SCHEDULE IS TO INSTALL FAA INELIGIBLE BUILDING ELEMENTS FOR THE TERMINAL BUILDING.
ALTERNATE B: SCHEDULE IS TO CONSTRUCT AN FAA INELIGIBLE ADDITIONAL PARKING AREA FOR AUTO PARKING SPOTS.
ALTERNATE C: SCHEDULE IS TO REMOVE AND REPLACE SIDING AND ROOFING ASSOCIATED WITH THE EXISTING HANGAR.
ALTERNATE D: SCHEDULE IS TO PROVIDE TEMPORARY INTERIM TERMINAL FACILITY AND TOILET FACILITIES.



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Ryan Falch
RYAN FALCH, P.E.
DATE 06/17/2023 LICENSE NO. 60494



SKY HARBOR AIRPORT
2023 RECONSTRUCT TERMINAL BUILDING
DULUTH, MN

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SEH Project DULAL172133
Checked By RF
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Project Status Issue Date
CONSTRUCTION 05/17/2023
PLANS

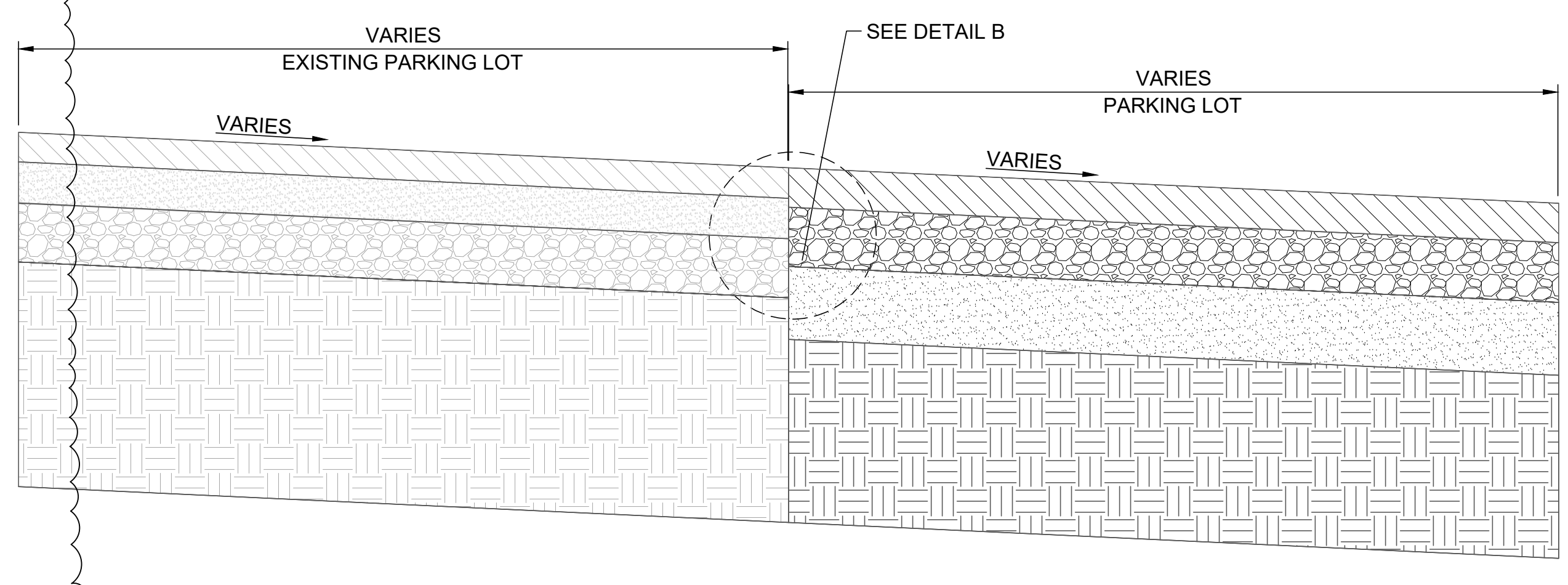
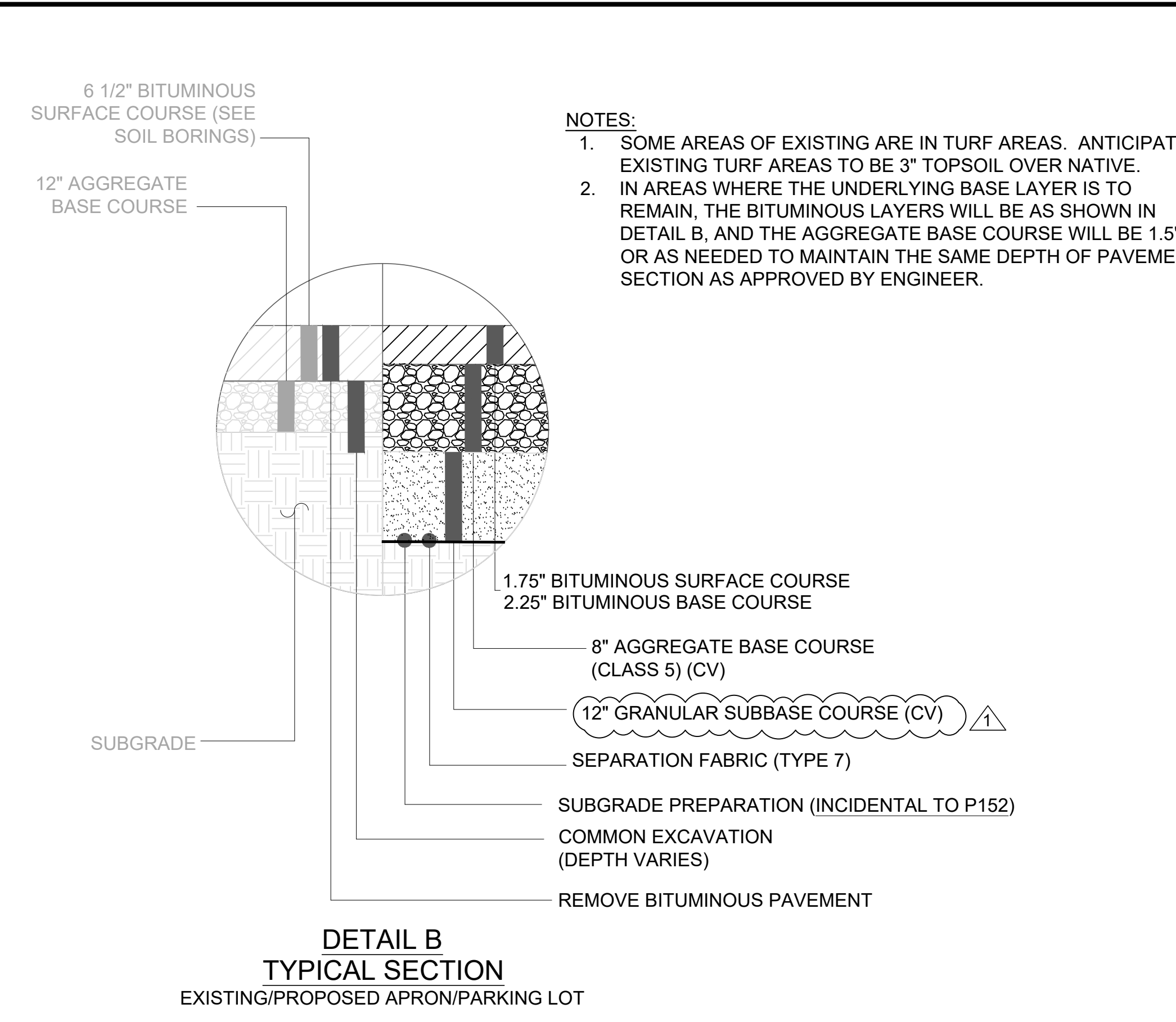
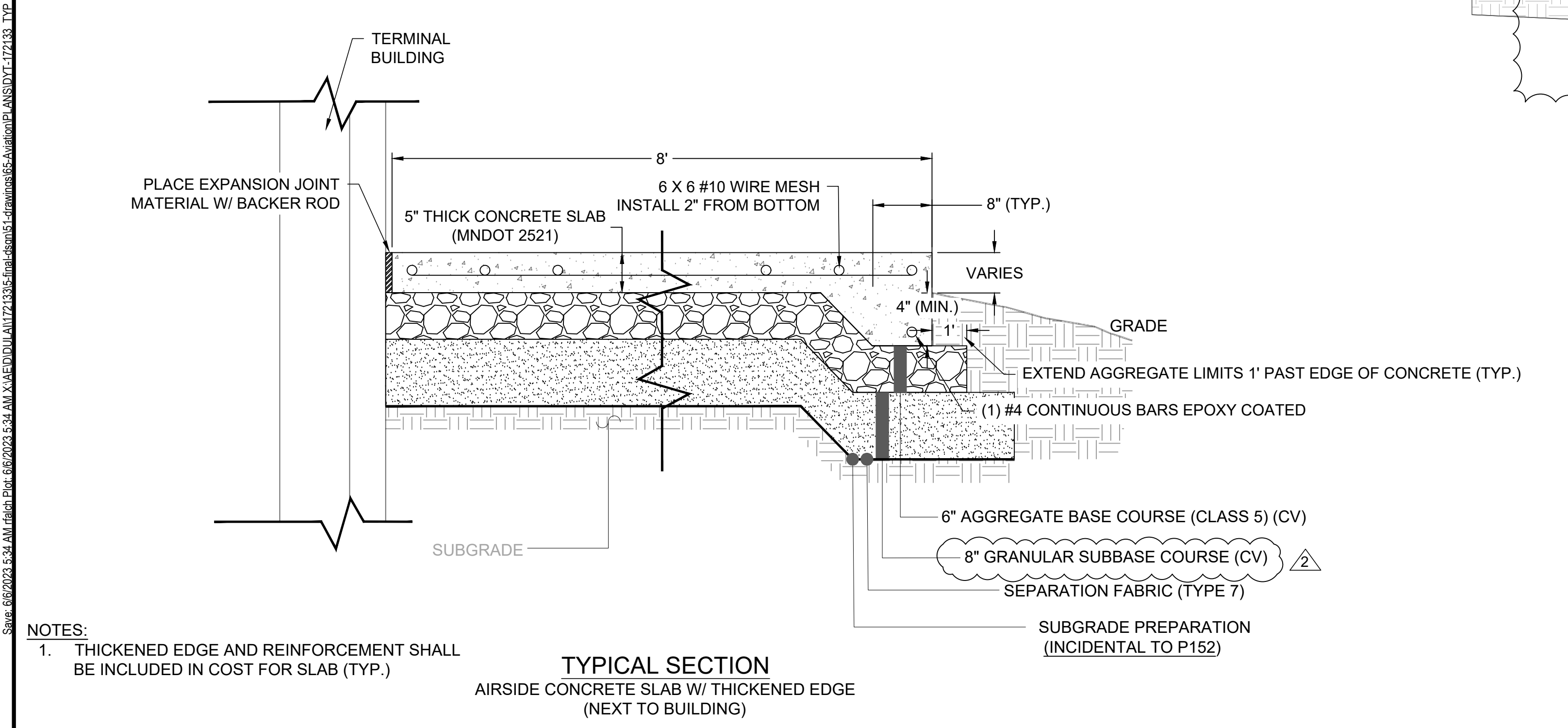
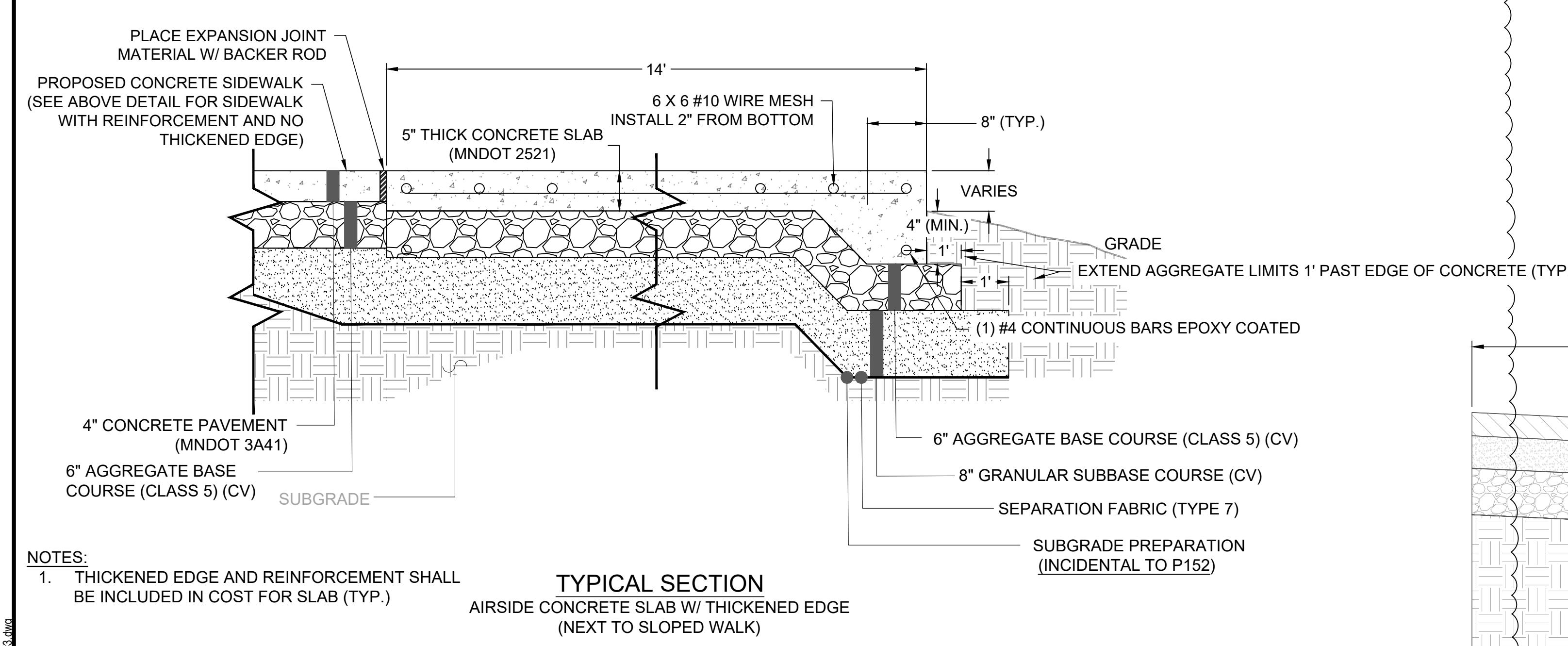
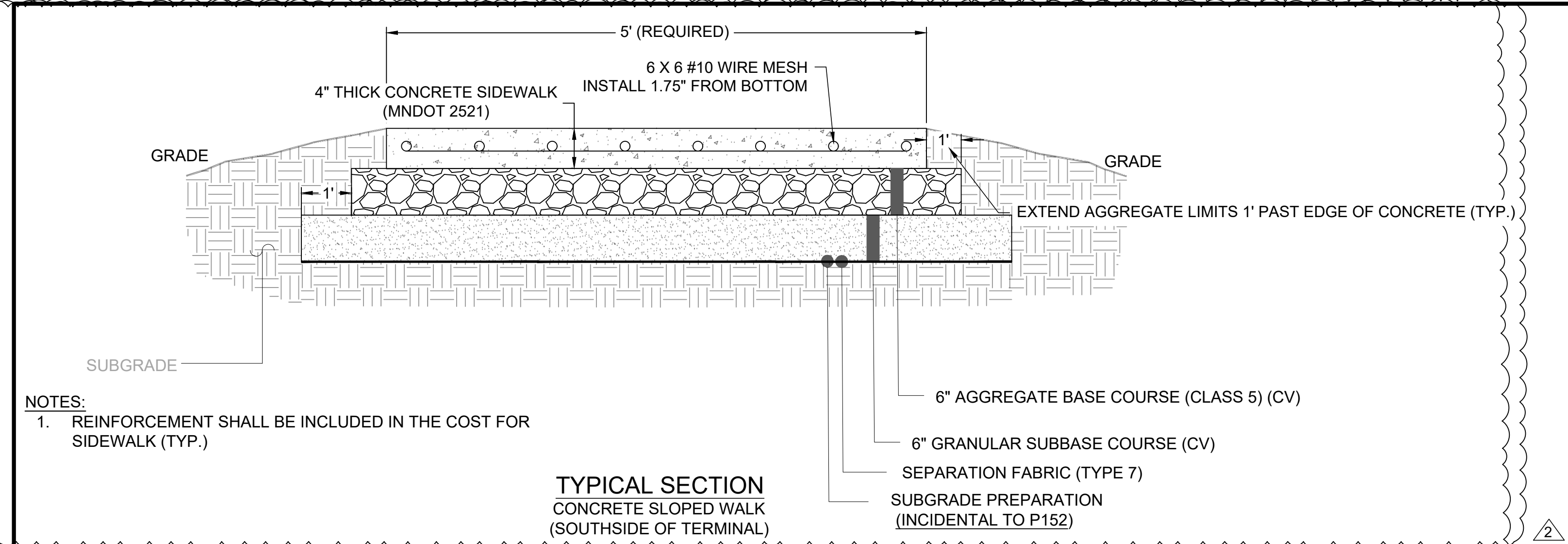
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REV. #	DESCRIPTION	DATE
△1	ADDENDUM #1	5/30/2023
△2	ADDENDUM #2	6/2/2023
△3	ADDENDUM #3	6/6/2023

STATEMENT OF ESTIMATED QUANTITIES

G2.10

3 2 1

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RYAN FALCH
DATE 06/17/2023 LICENSE NO. 60494



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2023 RECONSTRUCT TERMINAL BUILDING
DULUTH, MN

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DULAL172133
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Project Status
CONSTRUCTION
PLANS

Issue Date
05/17/2023

REVISION SCHEDULE		
REV. #	DESCRIPTION	DATE
1	ADDENDUM #2	6/2/2023
2	ADDENDUM #3	6/6/2023

TYPICAL SECTIONS

C3.00



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Ryan Falch
RYAN FALCH, P.E.
DATE 06/17/2023 LICENSE NO. 60494



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2023 RECONSTRUCT TERMINAL BUILDING
DULUTH, MN

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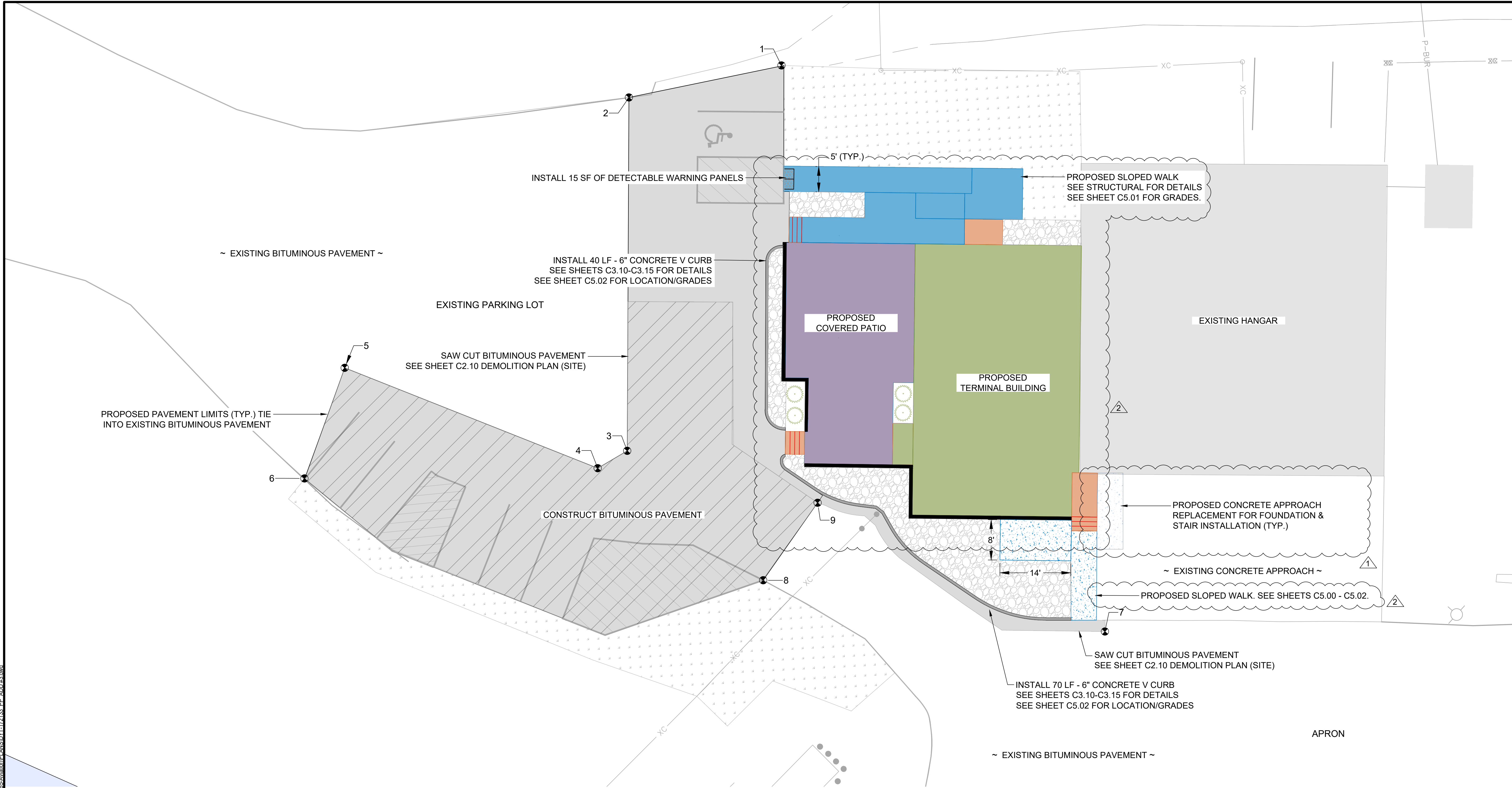
Project Status
CONSTRUCTION
PLANS

Issue Date
5/17/2023

REVISION SCHEDULE		
REV. #	DESCRIPTION	DATE
1	ADDENDUM #2	6/2/2023
2	ADDENDUM #3	6/6/2023

PAVEMENT PLAN

C4.00



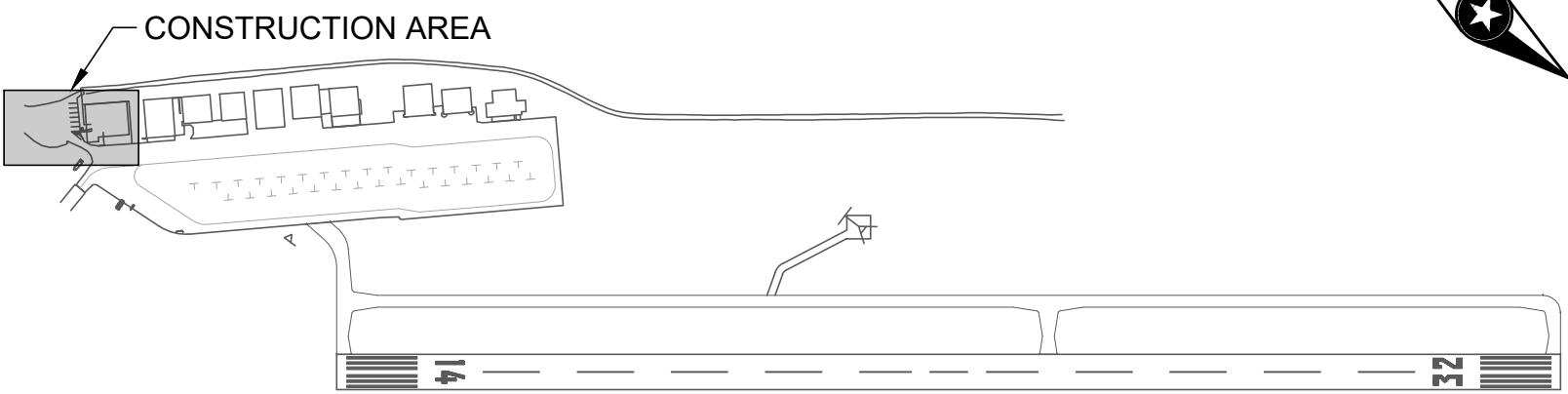
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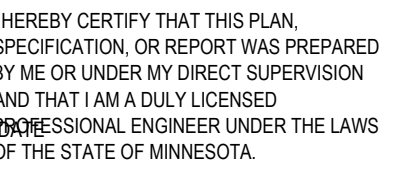
- PROPOSED TERMINAL BUILDING (SEE ARCHITECTURAL)
- CONCRETE SLOPED WALK & SLAB (SEE TYPICAL SECTIONS)
- BITUMINOUS PAVEMENT - ELIGIBLE (SEE TYPICAL SECTIONS)
- ALTERNATE - BITUMINOUS PAVEMENT - INELIGIBLE (SEE TYPICAL SECTIONS)
- CONCRETE STOOP (SEE STRUCTURAL)
- PATIO (SEE STRUCTURAL)
- CONCRETE APPROACH (SEE TYPICAL SECTIONS)
- CONCRETE SLOPED WALK (SEE STRUCTURAL)


Point Table

Point #	Northing	Easting	Latitude	Longitude	Raw Description
1	128407.0295	601085.0083	N46° 43' 37.82"	W92° 02' 49.08"	PAVEMENT LIMITS
2	128425.1094	601060.2916	N46° 43' 37.99"	W92° 02' 49.43"	PAVEMENT LIMITS
3	128378.9051	601008.3880	N46° 43' 37.54"	W92° 02' 50.18"	PAVEMENT LIMITS
4	128380.9405	601001.9705	N46° 43' 37.56"	W92° 02' 50.27"	PAVEMENT LIMITS
5	128431.1090	600983.4067	N46° 43' 38.06"	W92° 02' 50.53"	PAVEMENT LIMITS
6	128422.4455	600961.9371	N46° 43' 37.97"	W92° 02' 50.84"	PAVEMENT LIMITS
7	128285.3385	601044.7350	N46° 43' 36.62"	W92° 02' 49.66"	PAVEMENT LIMITS
8	128342.0269	601007.3250	N46° 43' 37.18"	W92° 02' 50.20"	PAVEMENT LIMITS
9	128344.2471	601025.8181	N46° 43' 37.20"	W92° 02' 49.93"	PAVEMENT LIMITS

KEYMAP






RYAN FALCH, PE



SKY HARBOR AIRPORT 2023 RECONSTRUCT TERMINAL BUILDING

DULCIFICATION, MIN

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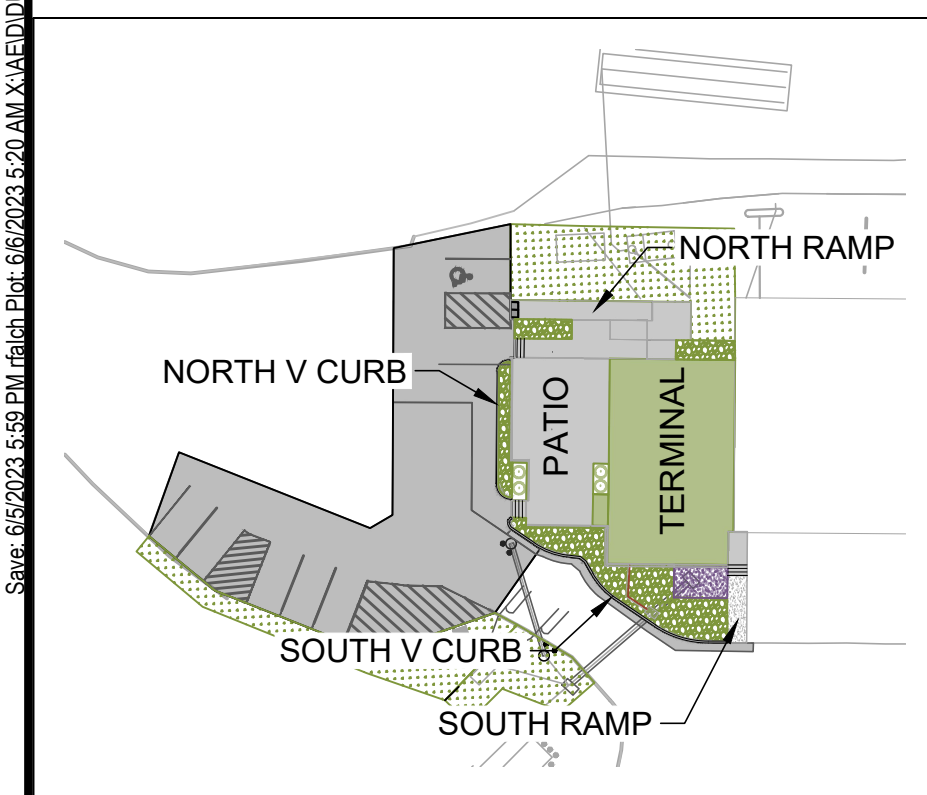
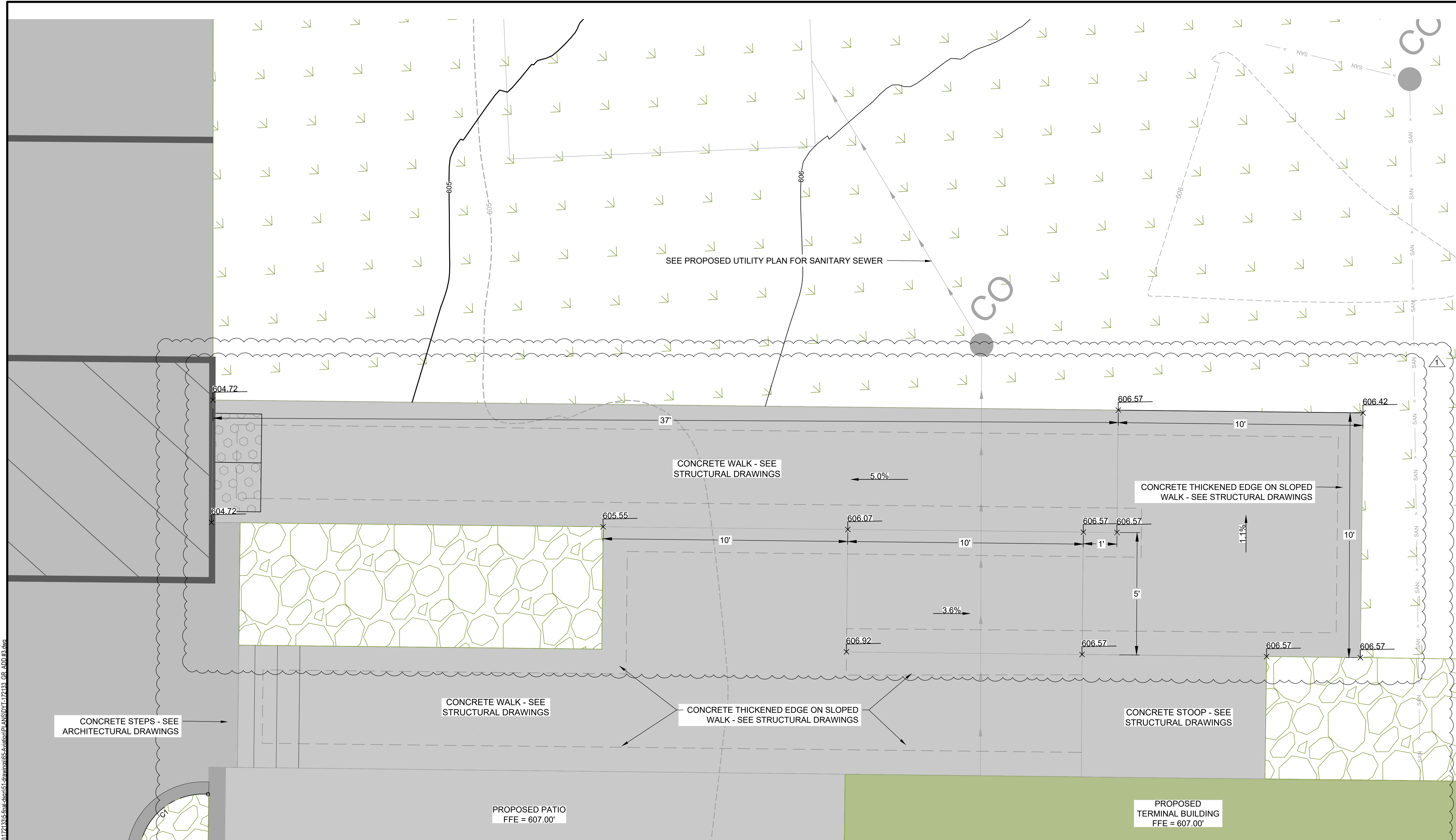
SEH Project	DULAI_17213
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Drawn By	AL

Project Status	Issue Date
CONSTRUCTION	05/17/2022
PLANS	







REVISION SCHEDULE		
REV. #	DESCRIPTION	DATE
1	ADDENDUM #2	6/2/2023
2	ADDENDUM #3	6/6/2023

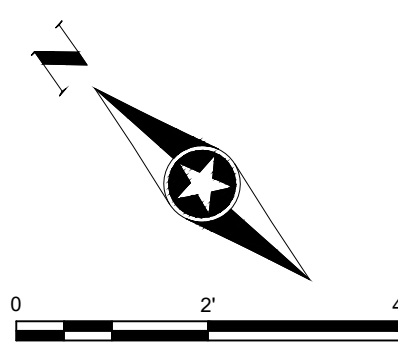
GRADING PLAN (AIRSIDE
SLAB & SLOPED WALKWAY)

C5.01

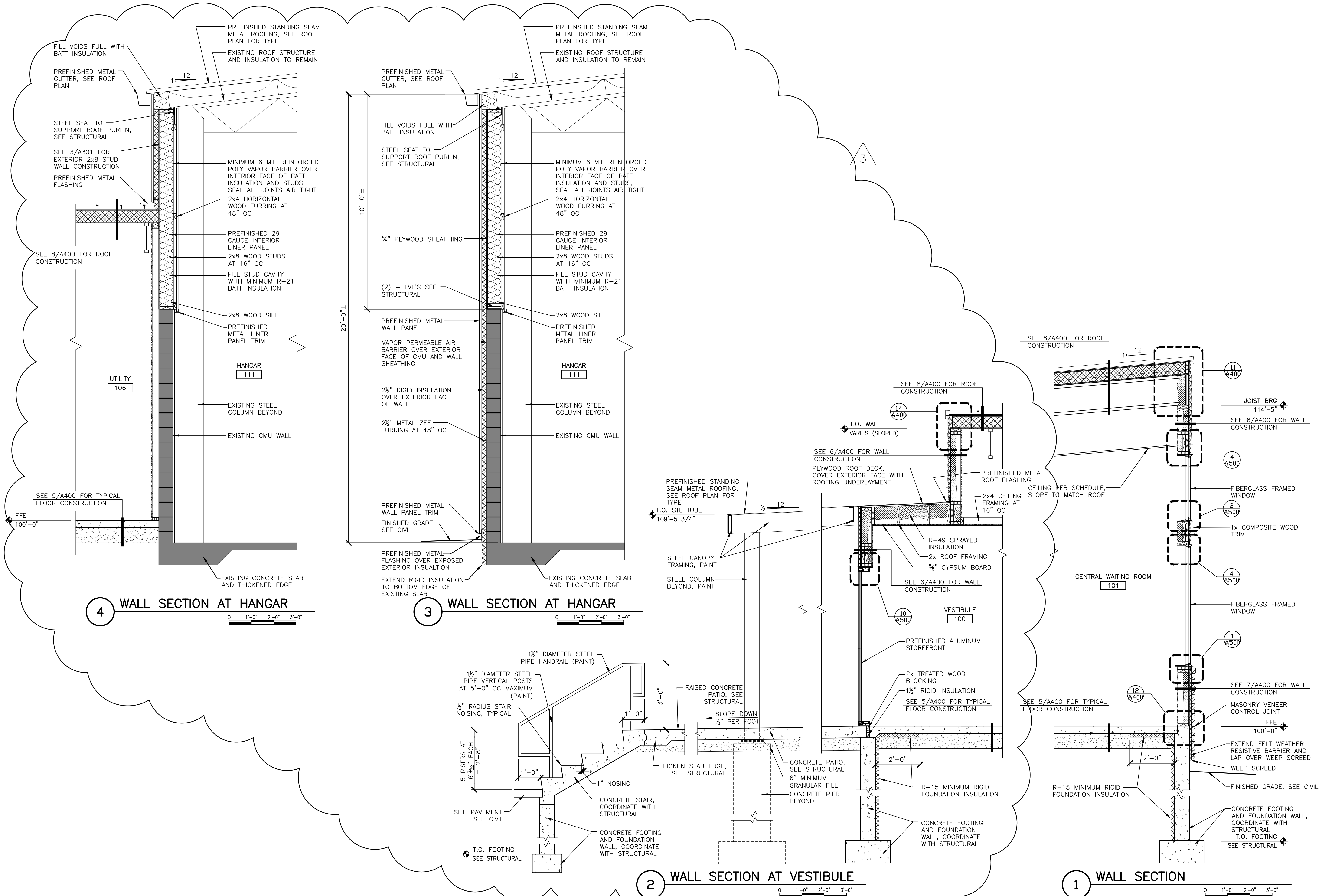


LEGEND

- | | |
|---|--|
|  | PROPOSED TERMINAL BUILDING |
|  | PROPOSED CONCRETE SIDEWALK (SEE STRUCTURAL) |
|  | PROPOSED BITUMINOUS PAVEMENT (SEE TYPICAL SECTIONS) |
|  | PROPOSED TURF ESTABLISHMENT |
|  | PROPOSED LANDSCAPE AREA (INCLUDES 4" THICK OF ROCK & WEED BARRIER) |
| x 995.50 | PROPOSED ELEVATION |
| 1.50%  | PROPOSED SLOPE AND DIRECTION |



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COLUMN SCHEDULE					
MARK	DESIGNATION	BASE PLATE	ANCHOR RODS	TOP PLATE	NOTES
C1	HSS8x8x1/4	14"x14"x1/2" THICK	(4) 3/4"Ø	N/A	SEE DETAILS
C2	HSS8x4x1/4	SEE DETAILS	(4) 3/4"Ø	N/A	SEE DETAILS

FOOTING SCHEDULE		
MARK	SIZE	REINFORCING
F1	CONT. 1'-4" x 10" DEEP	(2) CONT. #4 REBAR, BOTTOM
F2	CONT. 2'-0" x 1'-0" DEEP	(3) CONT. #5 REBAR, BOTTOM
F3	CONT. 3'-0" x 1'-0" DEEP	(4) CONT. #5 REBAR, BOTTOM
F4	2'-6" x 2'-6" x 1'-0" DEEP	(4) #5 REBAR EACH WAY, BOTTOM
F5	3'-0" x 3'-0" x 1'-0" DEEP	(4) #5 REBAR EACH WAY, BOTTOM

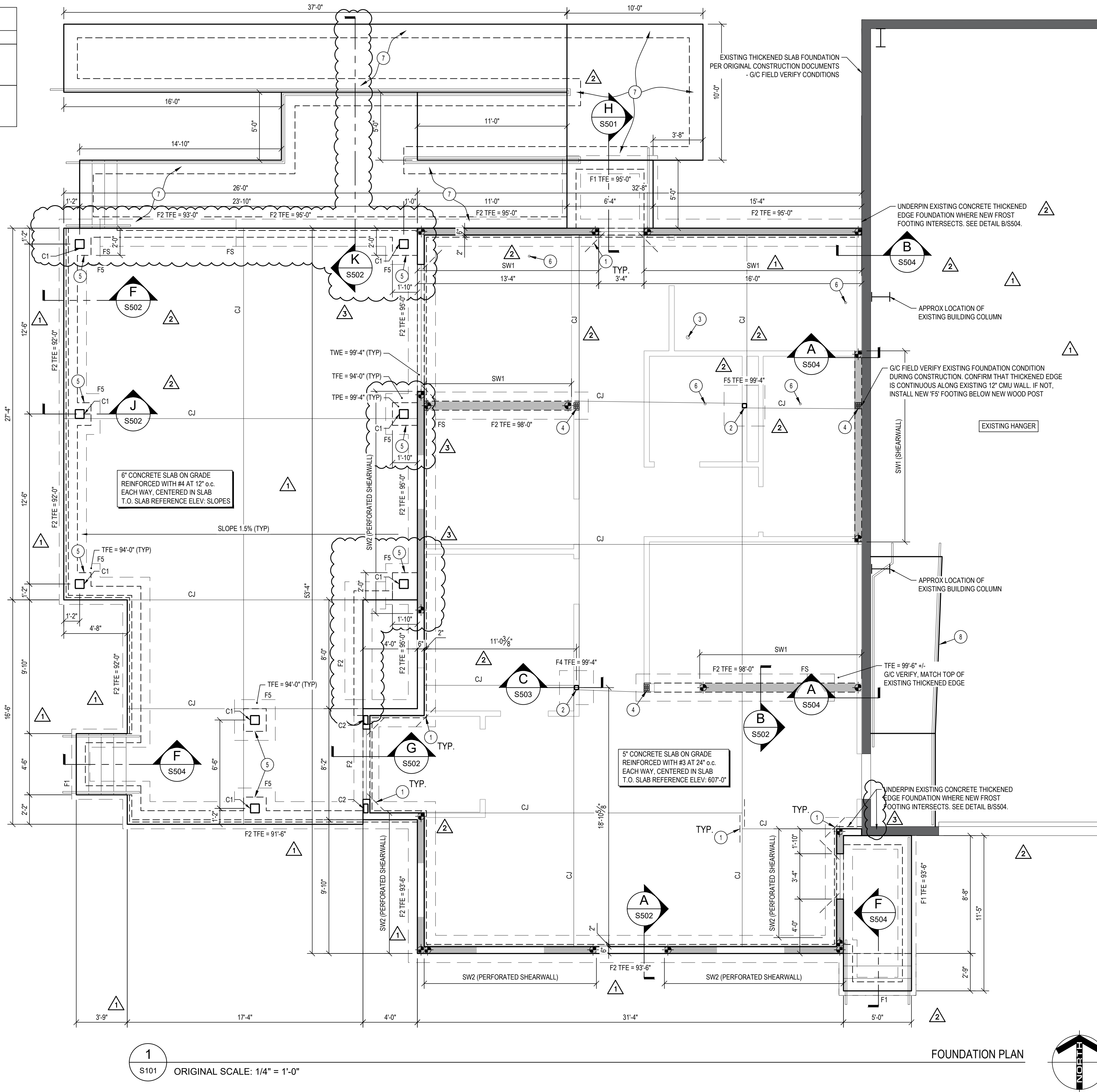
FOUNDATION PLAN NOTES:

(TYPICAL UNLESS NOTED OTHERWISE)

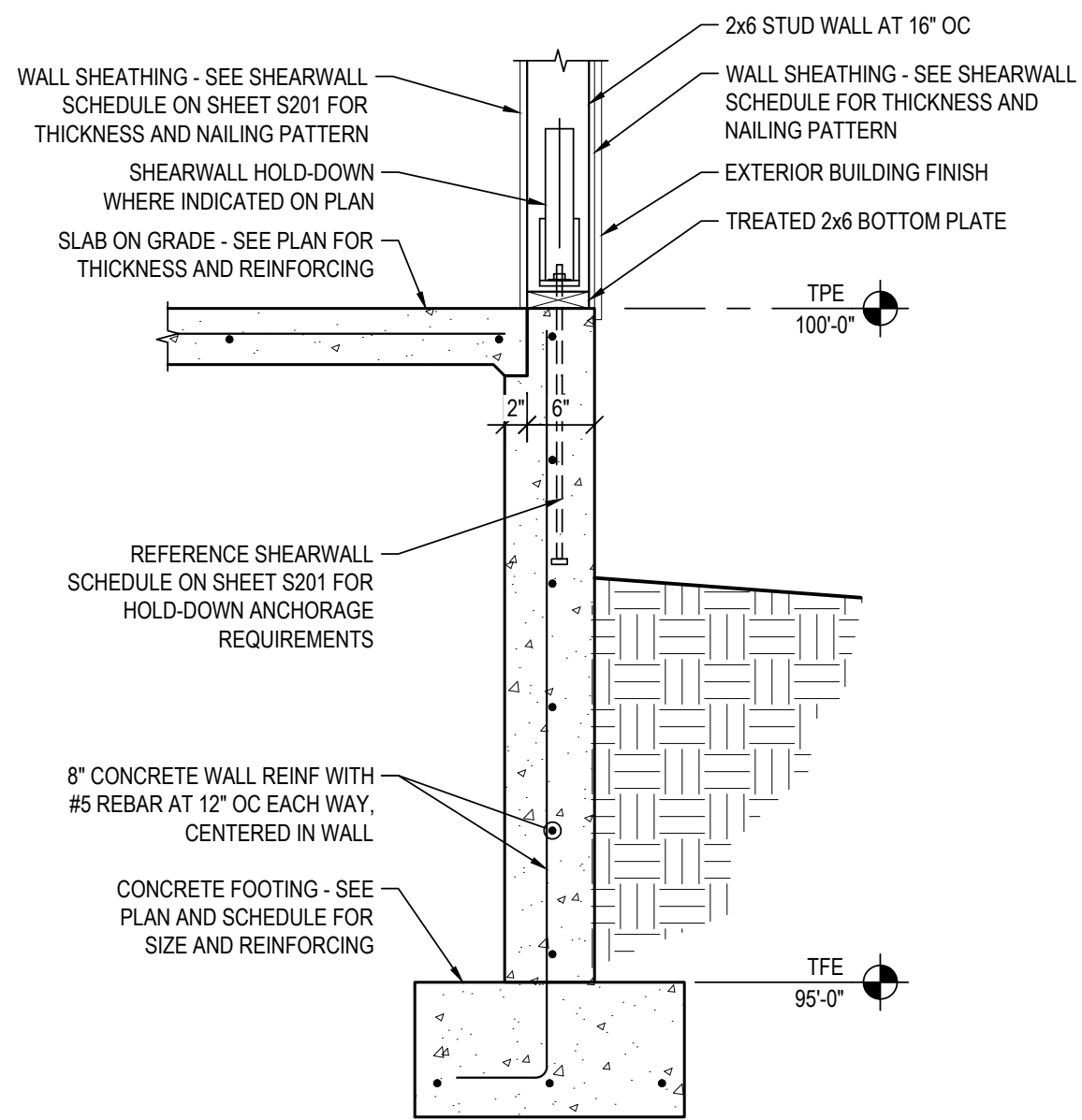
- FINISH LOWER LEVEL ELEVATION = 100'-0" (U.N.O.) (ELEVATIONS AT PERIMETER - SEE CIVIL FOR SPOT ELEVATIONS)
- FORM CONTRACTION JOINTS (C.J.) OR SAWCUT WITHIN 18 HOURS OF CONCRETE PLACEMENT - SEE D/S501
MAXIMUM SPACING OF CONTRACTION JOINTS TO BE 15'-0"
- VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
- VERIFY ALL SIZES AND LOCATIONS OF OPENINGS WITH ARCHITECTURAL DRAWINGS.
- TOP OF FOOTING ELEVATION (TFE) =
INTERIOR: 98'-0" U.N.O.
EXTERIOR: 95'-0" U.N.O.
- DESIGN ALLOWABLE SOIL BEARING CAPACITY: (REF. GEOTECH REPORT)
MAIN BUILDING ELEMENTS: 2,500 psf
- STEPPED FOOTING DETAIL - SEE C/S501. USE WHERE NEEDED TO MAINTAIN BOTTOM OF FOOTING DEPTH OF 5'-0" MIN. BELOW GRADE.
- CONTRACTOR OPTIONS AT MECHANICAL & ELECTRICAL LINES THROUGH FOUNDATION - SEE A/S501 AND B/S501.
- TFE= TOP OF FOOTING ELEVATION
TSE= TOP OF SLAB ELEVATION
TPE= TOP OF PIER ELEVATION
TWE= TOP OF WALL ELEVATION
FS= FOOTING STEP
CJ= CONTROL JOINT
- Fx DENOTES FOOTING TYPE.
REF. SCHEDULES ON THIS SHEET AND DETAILS.
- CONTRACTOR TO IMMEDIATELY CONTACT STRUCTURAL ENGINEER FOR FIELD VERIFICATION IF EXISTING CONDITIONS VARY FROM THOSE INDICATED IN THESE DOCUMENTS. ASSUMPTIONS MADE HERE WITHIN HAVE BEEN BASED UPON LIMITED EXISTING DOCUMENTATION.
- SEE DETAIL H/S501 FOR TYPICAL STOOP DETAIL.
- SEE DETAIL G/S501 FOR TYPICAL CONCRETE WALL CORNER REINFORCING.
- SEE DETAIL F/S501 FOR TYPICAL REINFORCING AT PENETRATION CAST INTO CONCRETE WALL OR SLAB.
- DESIGNATED SHEARWALL HOLD-DOWN TO FOUNDATION WALL - SEE FRAMING PLAN AND SHEARWALL SECTIONS AND DETAILS.

FOUNDATION PLAN KEYNOTES:

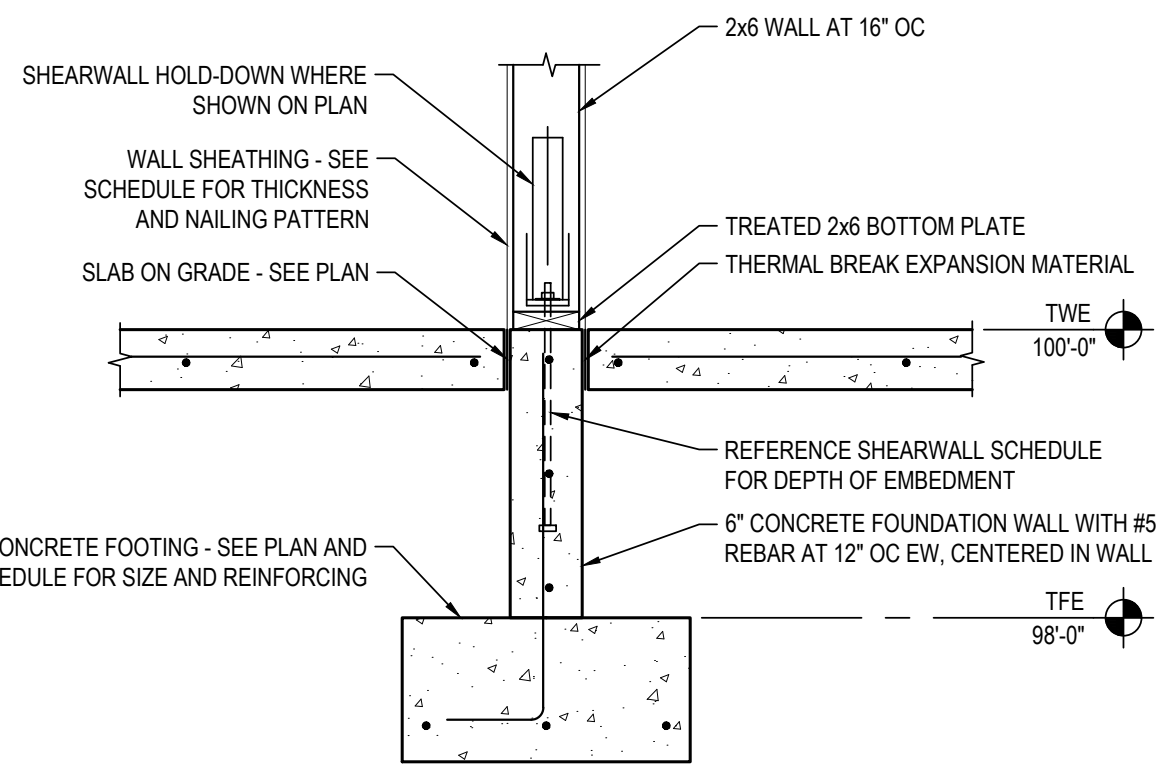
- PROVIDE (1) #4 REBAR x 2'-0" LONG AT EACH RE-ENTRANT CORNER AND WHERE CONTROL JOINTS TERMINATE AWAY FROM SLAB EDGE. SEE DETAIL E/S501.
- HSS4x4x3/8 POST.
- DRAIN LOCATION FOR SERVICE BASIN - SEE PLUMBING AND ARCHITECTURAL DRAWINGS.
- (3) 2x6 POST.
- TYPICAL PATIO PIERS: 1'-8" x 1'-8" CONCRETE PIER (MINIMUM - OVERSIZE TO INTERSECT BUILDING WALLS OR EDGE OF PATIO AS APPROPRIATE) EXTEND TO FROST FOOTING EL. (AS SHOWN ON PLAN)
(8) #6 REBAR VERTICAL
#3 TIES AT 12" OC PLUS (3) AT 2" OC AT TOP
- FLOOR DRAIN - SEE MECHANICAL DRAWINGS.
- 6" CONCRETE RAMP AND STAIR ON GRADE. REINFORCE WITH #4 REBAR AT 12" OC EW. PROVIDE MIN. 12" WIDE THICKENED EDGES AT ALL EDGES OF RAMP AND AT HEIGHT TRANSITIONS. THICKENED EDGE SHALL EXTEND MIN. 12" BELOW ADJACENT FINISHED GRADE OR AT TOP OF SLAB, WHICHEVER IS LOWER. REINFORCE THICKENED EDGE WITH (2) #5 REBAR TOP AND BOTTOM. SEE DETAIL K/S502.
- 4" CONCRETE LANDING AND RAMP WITH 6" EDGE WALLS. RIGID INSULATION TO FILL BETWEEN EXISTING SLAB AND CONCRETE. REINFORCE WITH #4 REBAR AT 12" OC EACH WAY, DOWELED TO SLAB AT EDGES. CUT EXISTING SLAB DOWN 2" AT BASE OF RAMP TO CREATE SMOOTH TRANSITION. SEE ARCH SECTION.



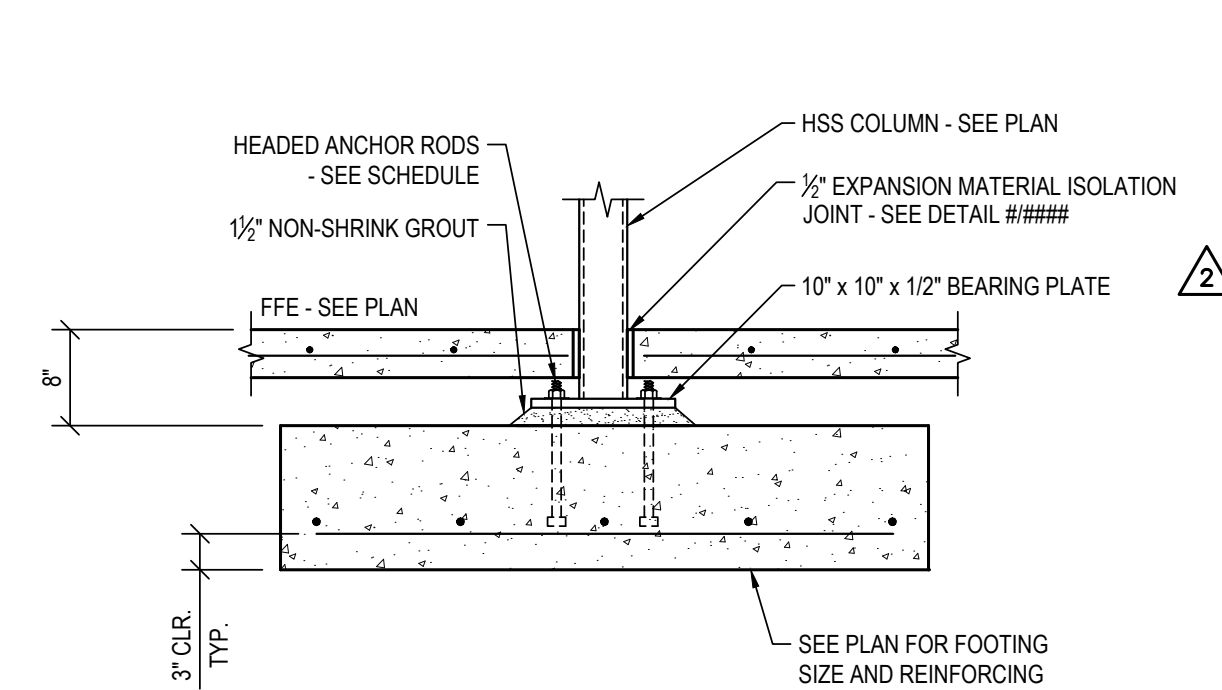
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REV. #	DESCRIPTION	DATE
1	ADDENDUM #1	5.30.2023
2	ADDENDUM #2	6.1.2023
3	ADDENDUM #3	6.6.2023



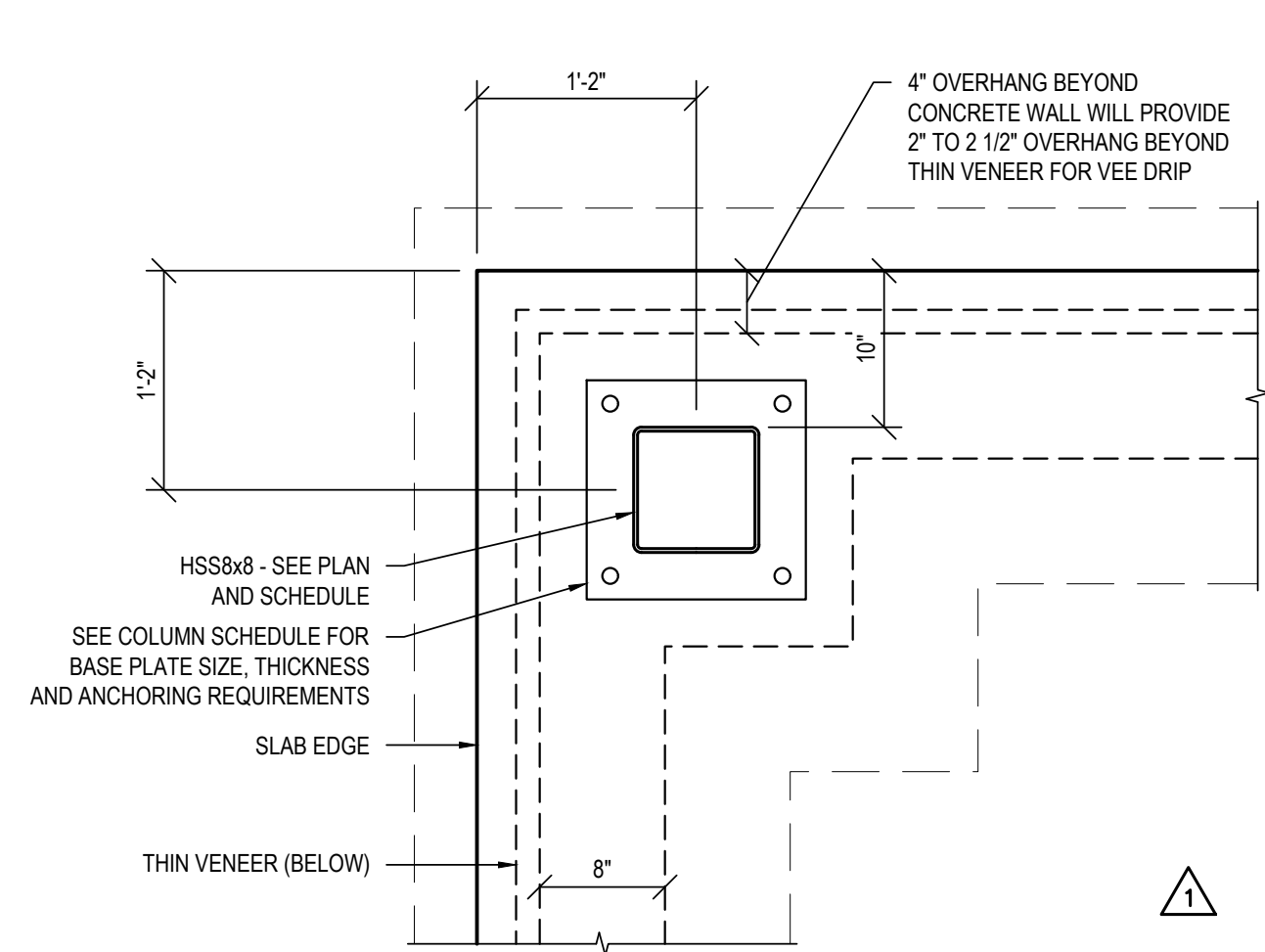
A TYPICAL FOUNDATION WALL SECTION
S502 ORIGINAL SCALE: 3/4" = 1'-0"



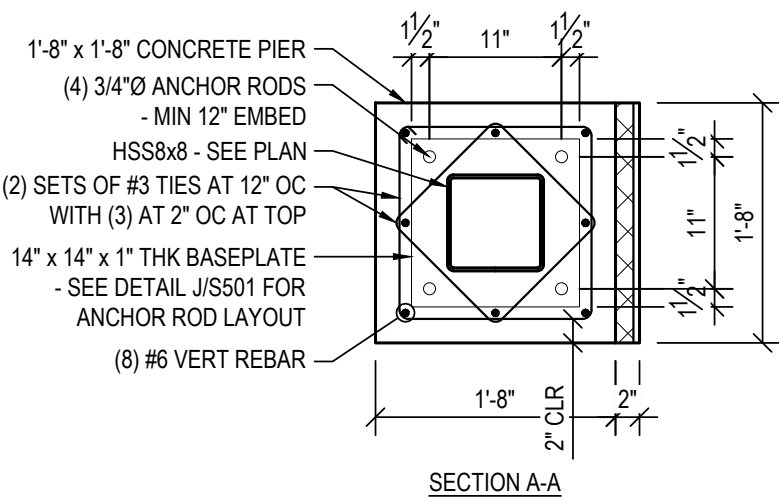
B FOUNDATION WALL SECTION - INTERIOR
S502 ORIGINAL SCALE: 3/4" = 1'-0"



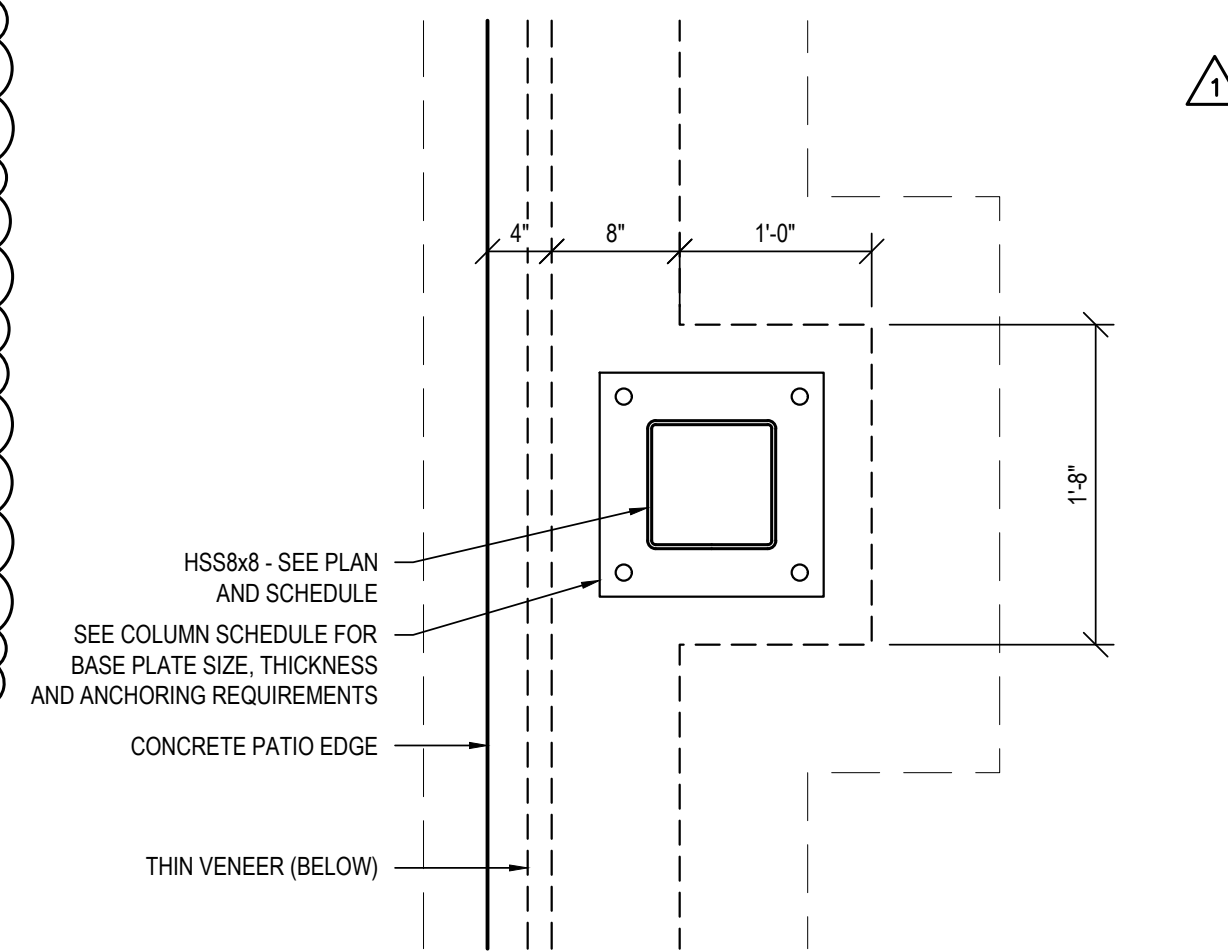
C INTERIOR COLUMN FOOTING DETAIL
S502 ORIGINAL SCALE: 3/4" = 1'-0"



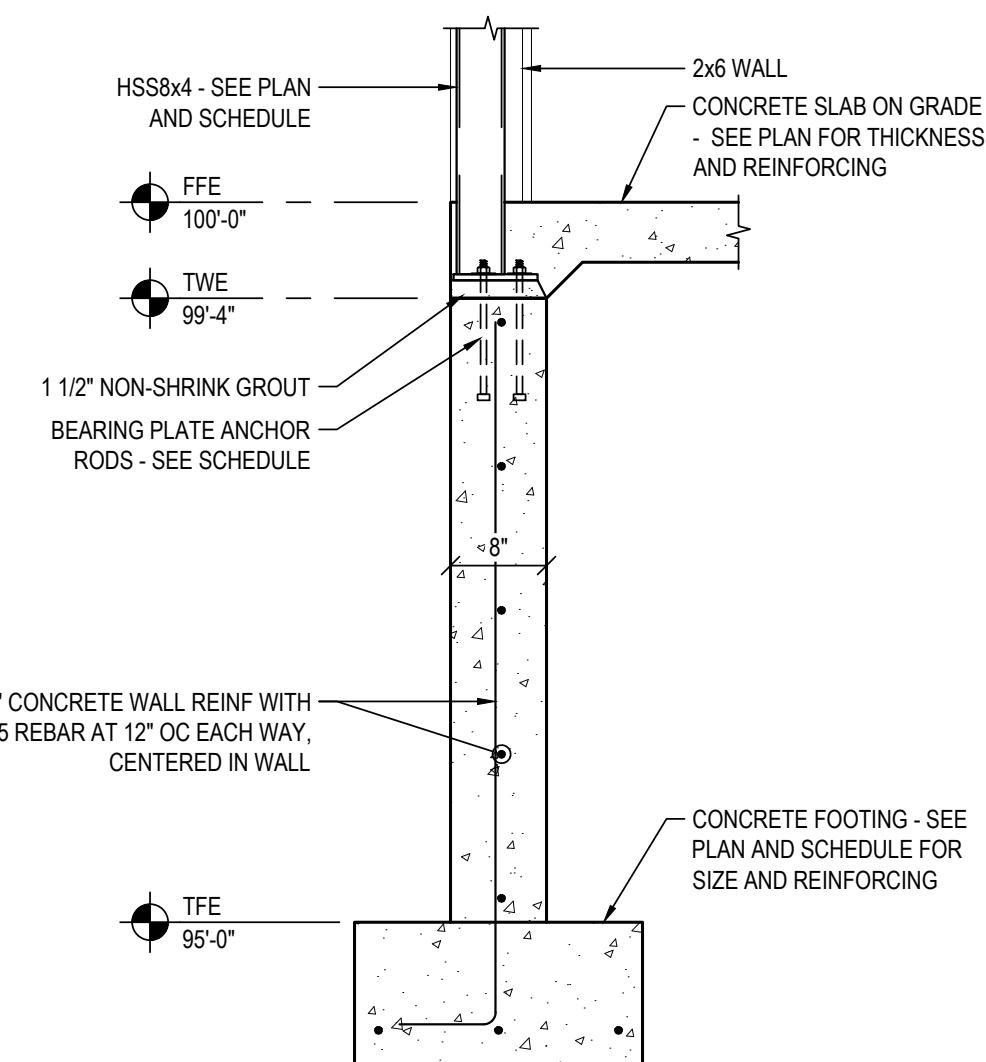
D ENLARGED PATIO COLUMN AT CORNER DETAIL
S502 ORIGINAL SCALE: 1" = 1'-0"



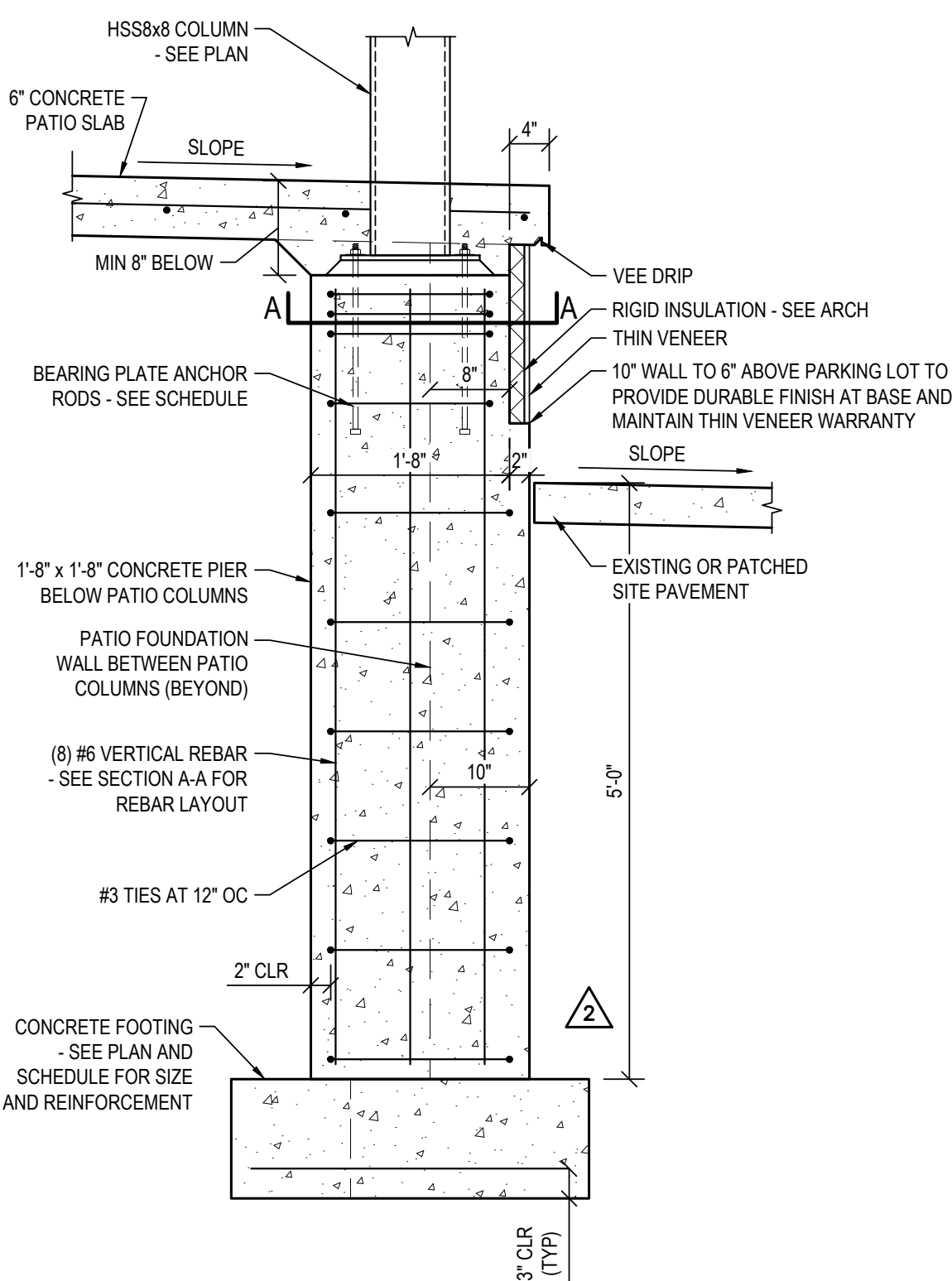
K SECTION THROUGH CONCRETE SLOPED WALK AND SLAB
S502 ORIGINAL SCALE: 1/2" = 1'-0"



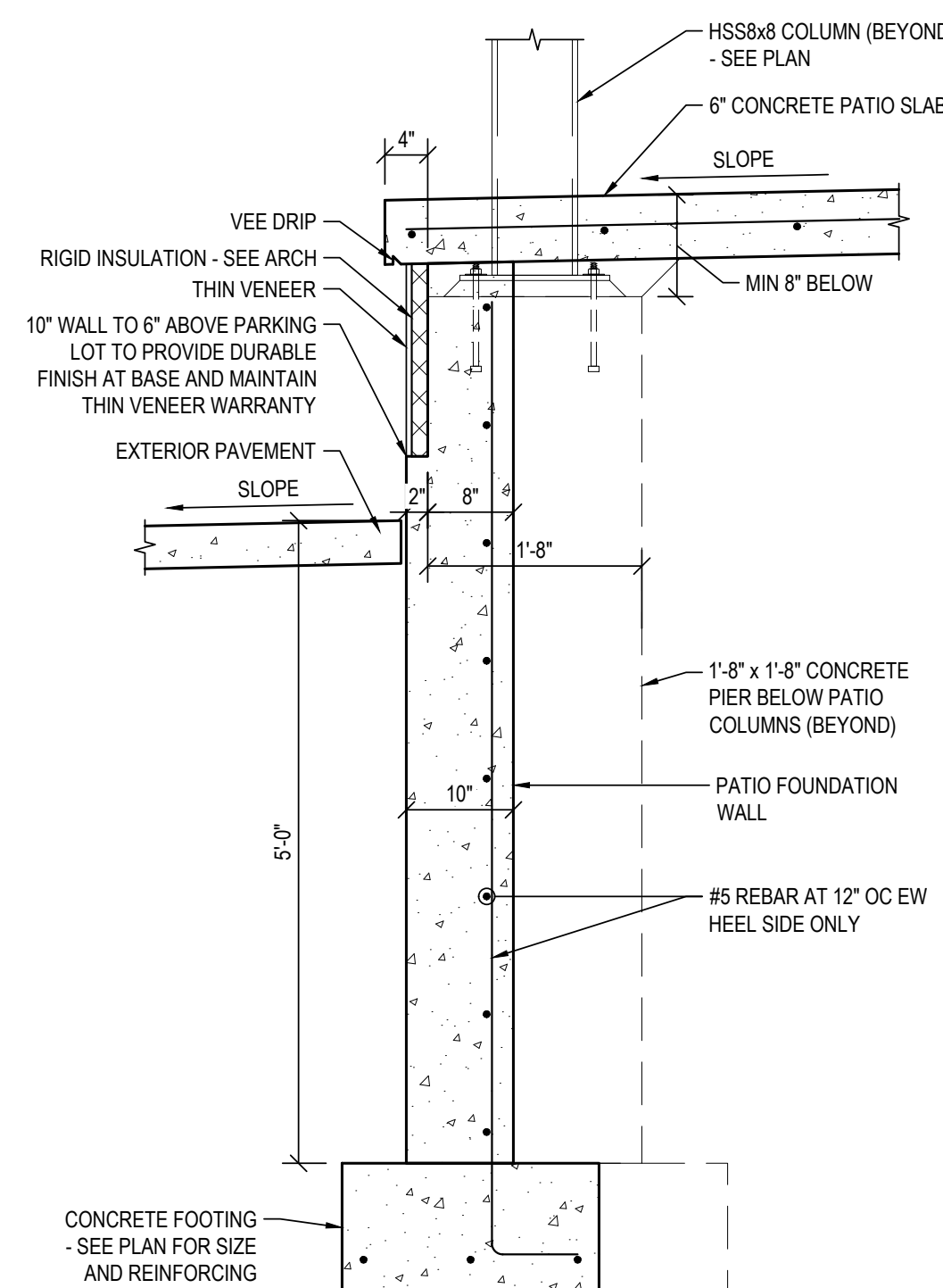
E ENLARGED PATIO COLUMN DETAIL
S502 ORIGINAL SCALE: 1" = 1'-0"



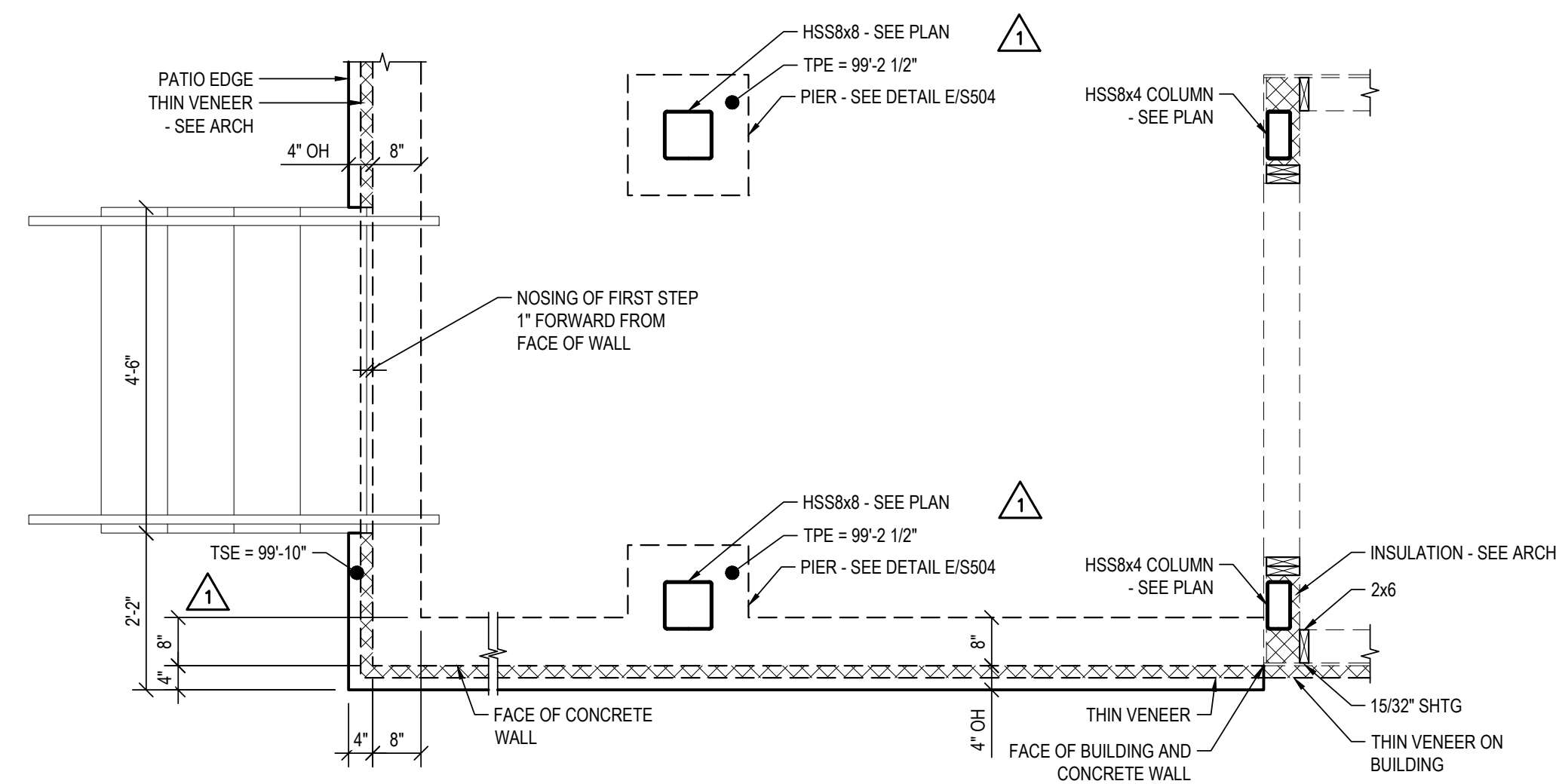
F FOUNDATION SECTION AT VESTIBULE
S502 ORIGINAL SCALE: 3/4" = 1'-0"



J PATIO PIER FOUNDATION SECTION
S502 ORIGINAL SCALE: 3/4" = 1'-0"



G PATIO FOUNDATION SECTION
S502 ORIGINAL SCALE: 3/4" = 1'-0"



H PATIO EDGE DETAIL AT FRONT ENTRY
S502 ORIGINAL SCALE: 1/2" = 1'-0"



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B. C. Wolf
BERKAMIN A. WOLF
DATE: 5.16.2023 LICENSE NO.: 40807



SKY HARBOR AIRPORT
2023 RECONSTRUCT TERMINAL BUILDING
DULUTH, MN

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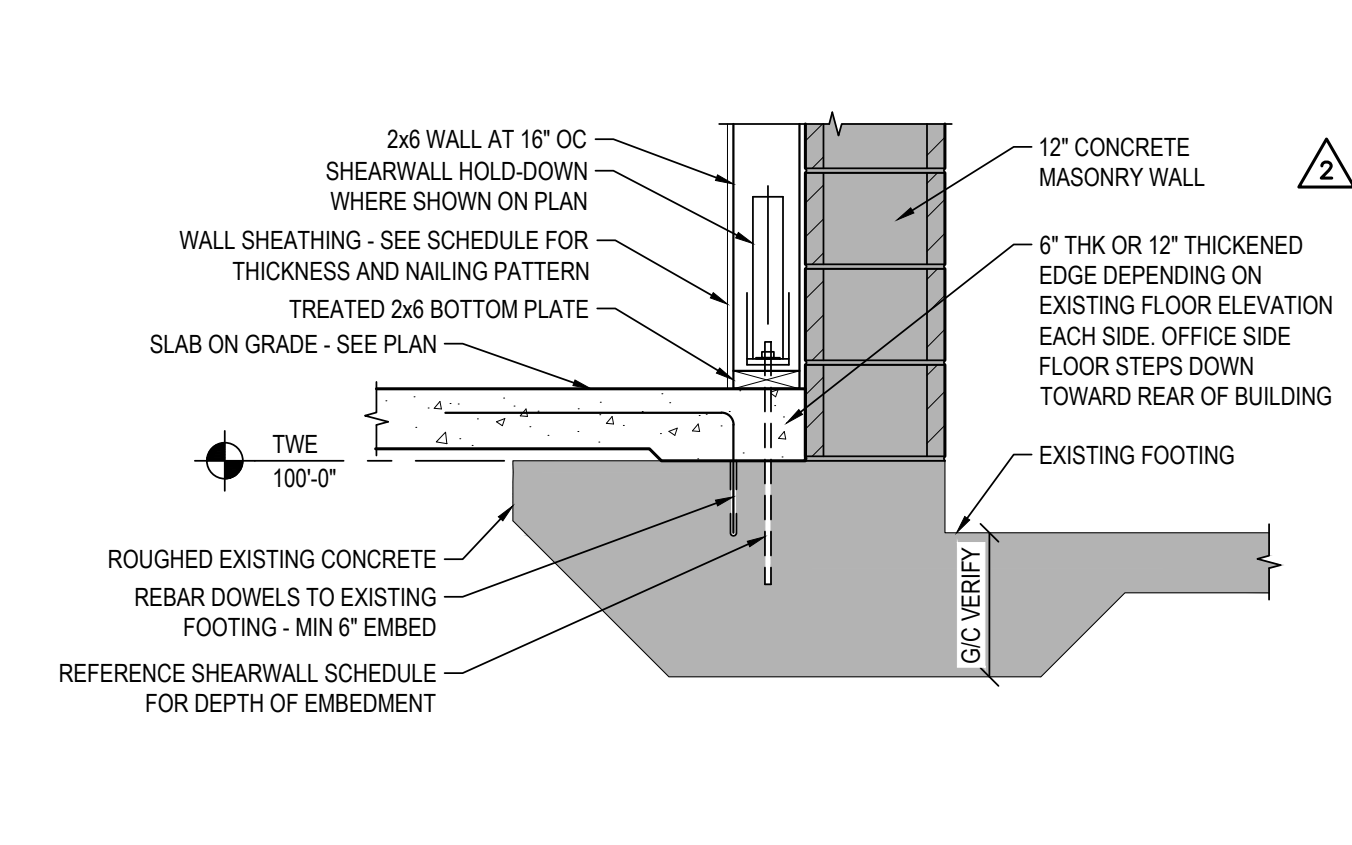
SEH Project: DULAL172133
Checked By: BW
Drawn By: JS

Project Status: CONSTRUCTION PLANS
Issue Date: 5.16.2023

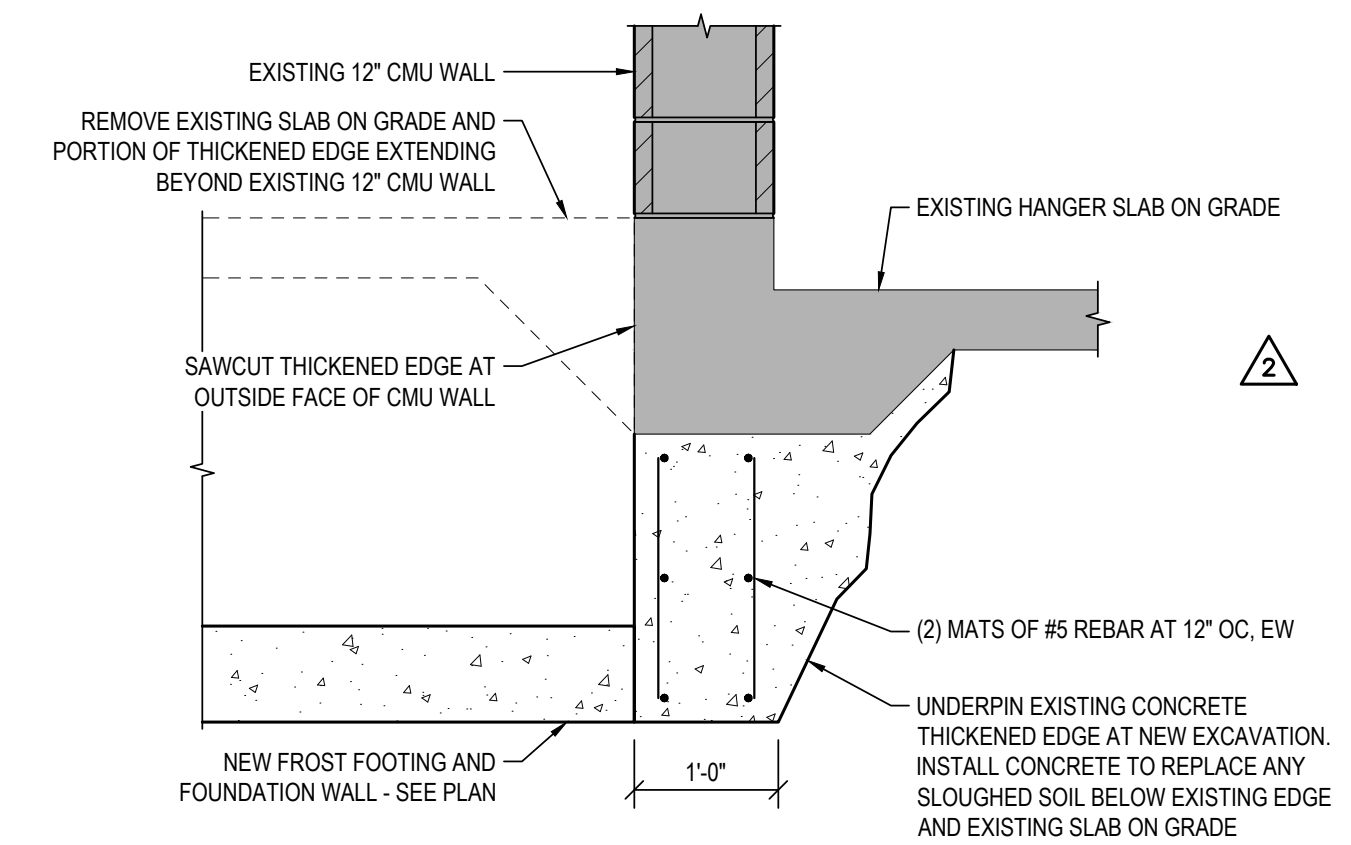
REVISION SCHEDULE		
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1	ADDENDUM #1	5.30.2023
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FOUNDATION DETAILS

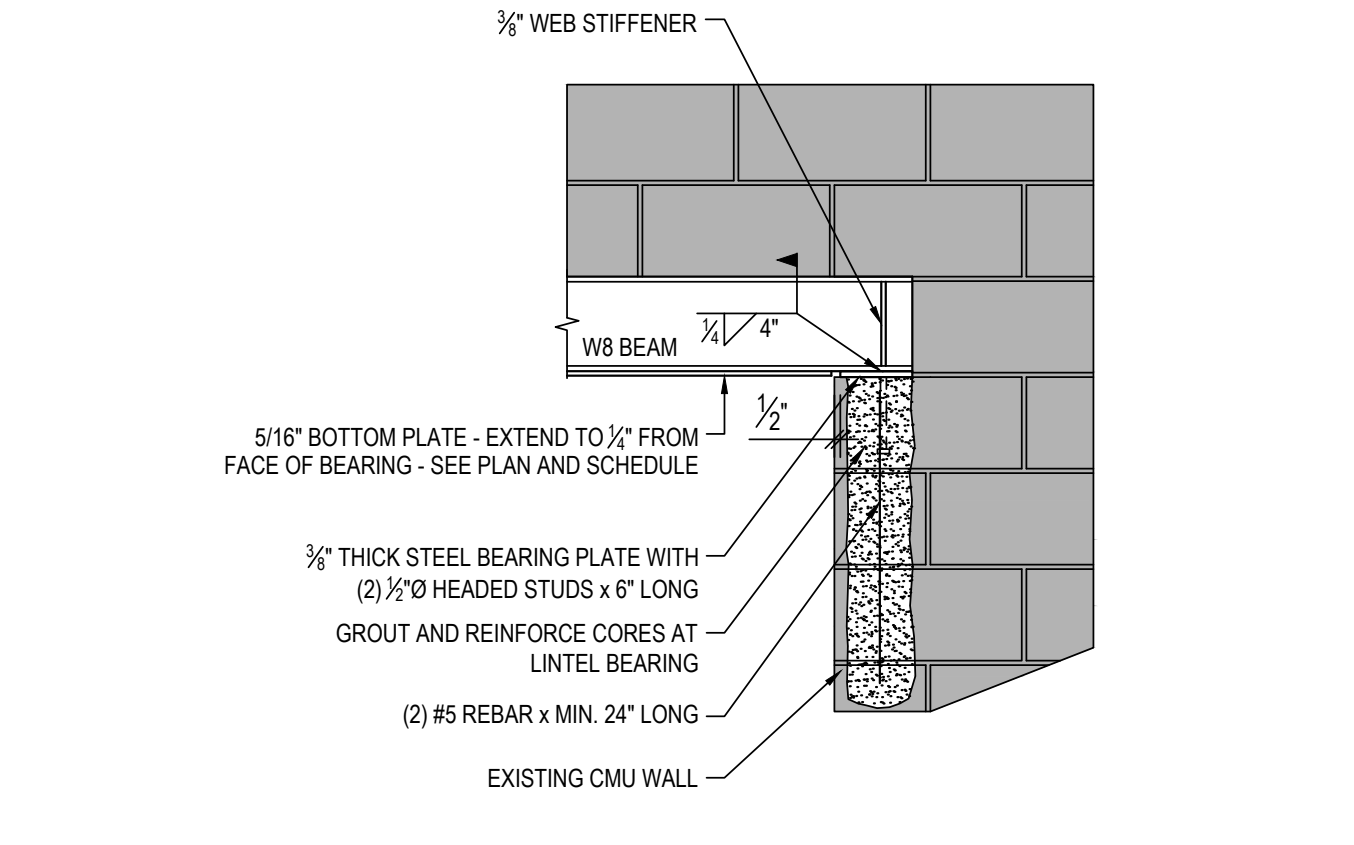
S502



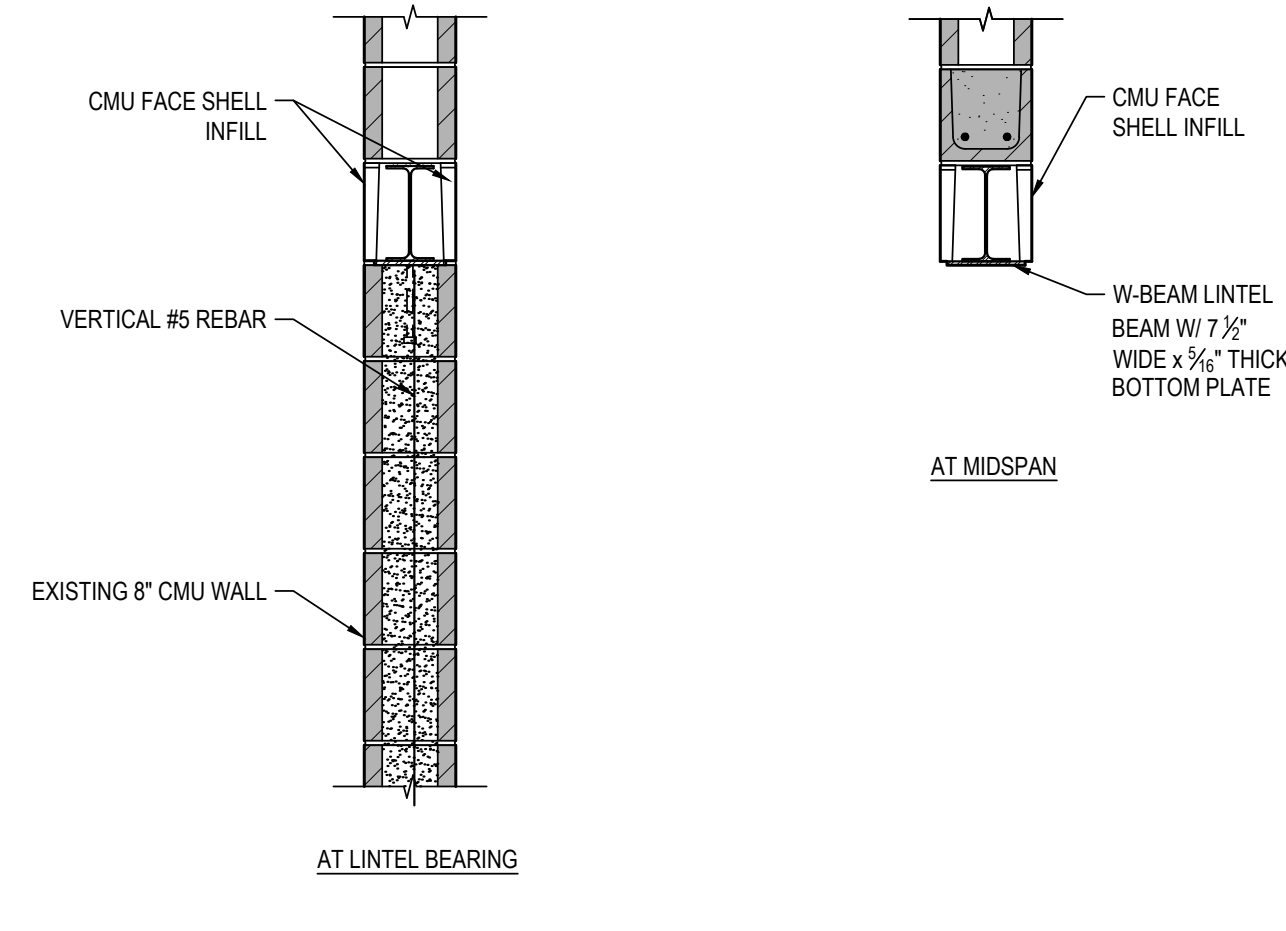
A TYPICAL FOUNDATION SECTION AT EAST WALL
S504 ORIGINAL SCALE: 3/4" = 1'-0"



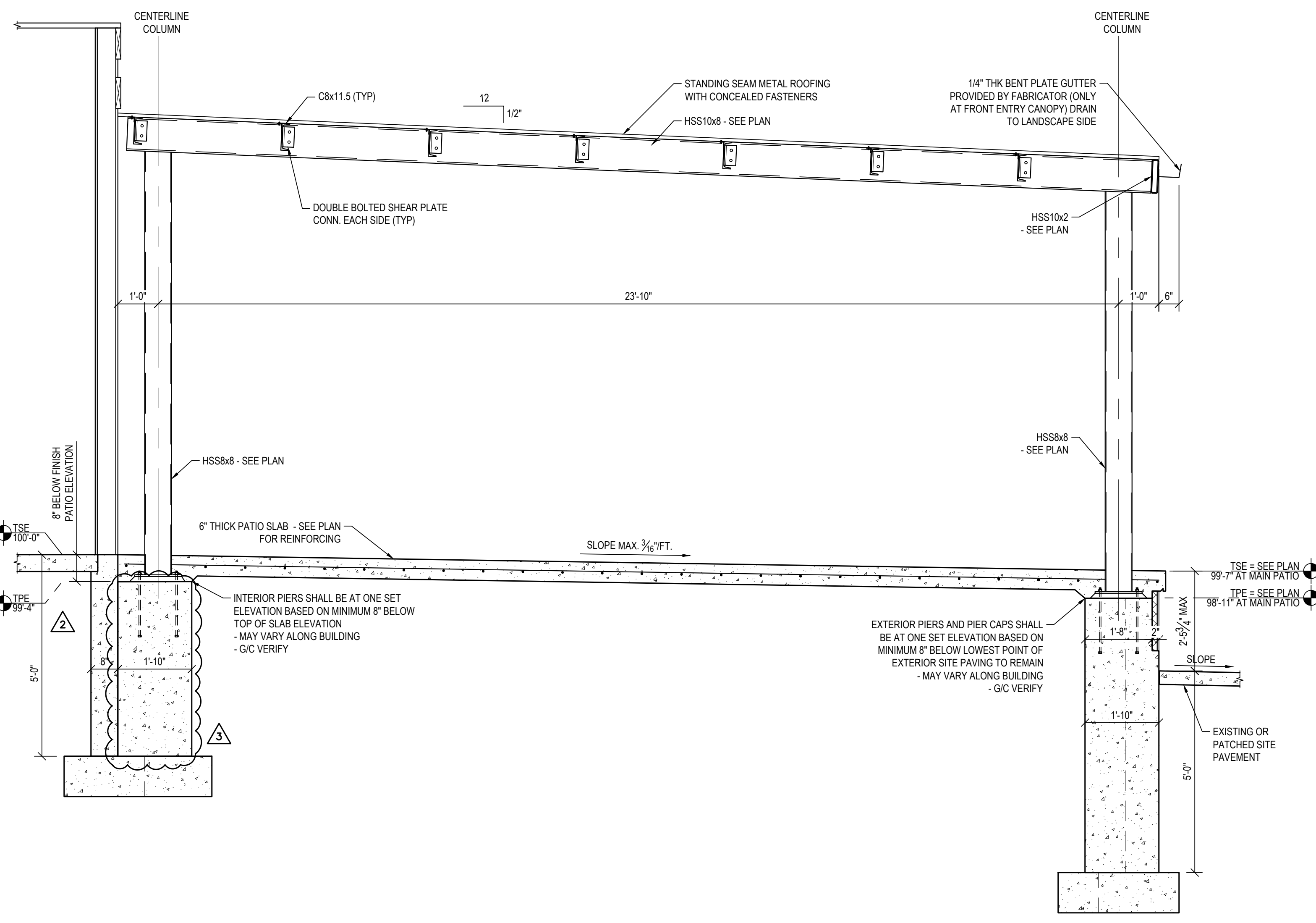
B CONCRETE FOOTING UNDERPIN DETAIL
S504 ORIGINAL SCALE: 3/4" = 1'-0"



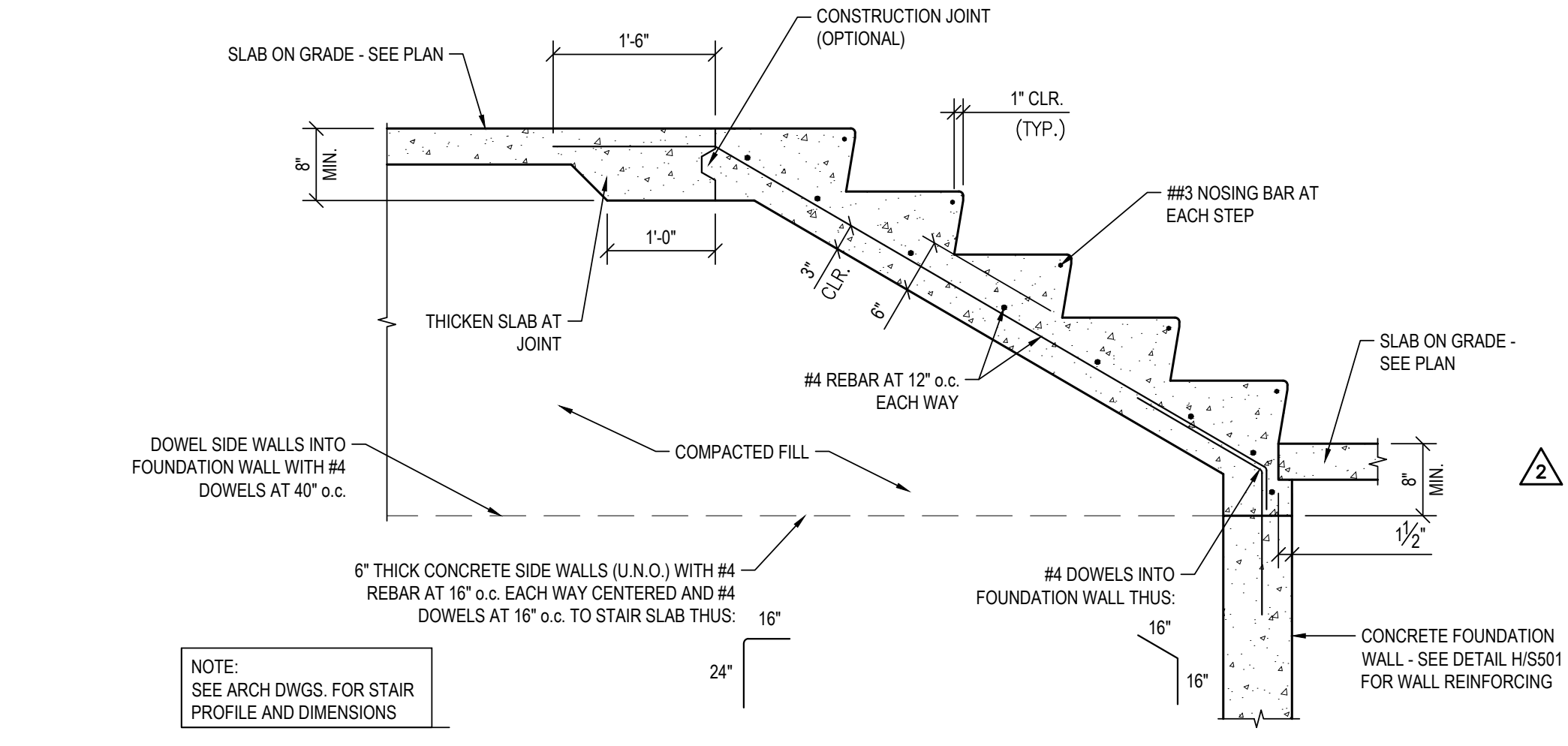
C STEEL LINTEL ELEVATION AT EXISTING PASSAGE DOOR TO HANGER
S504 ORIGINAL SCALE: 3/4" = 1'-0"



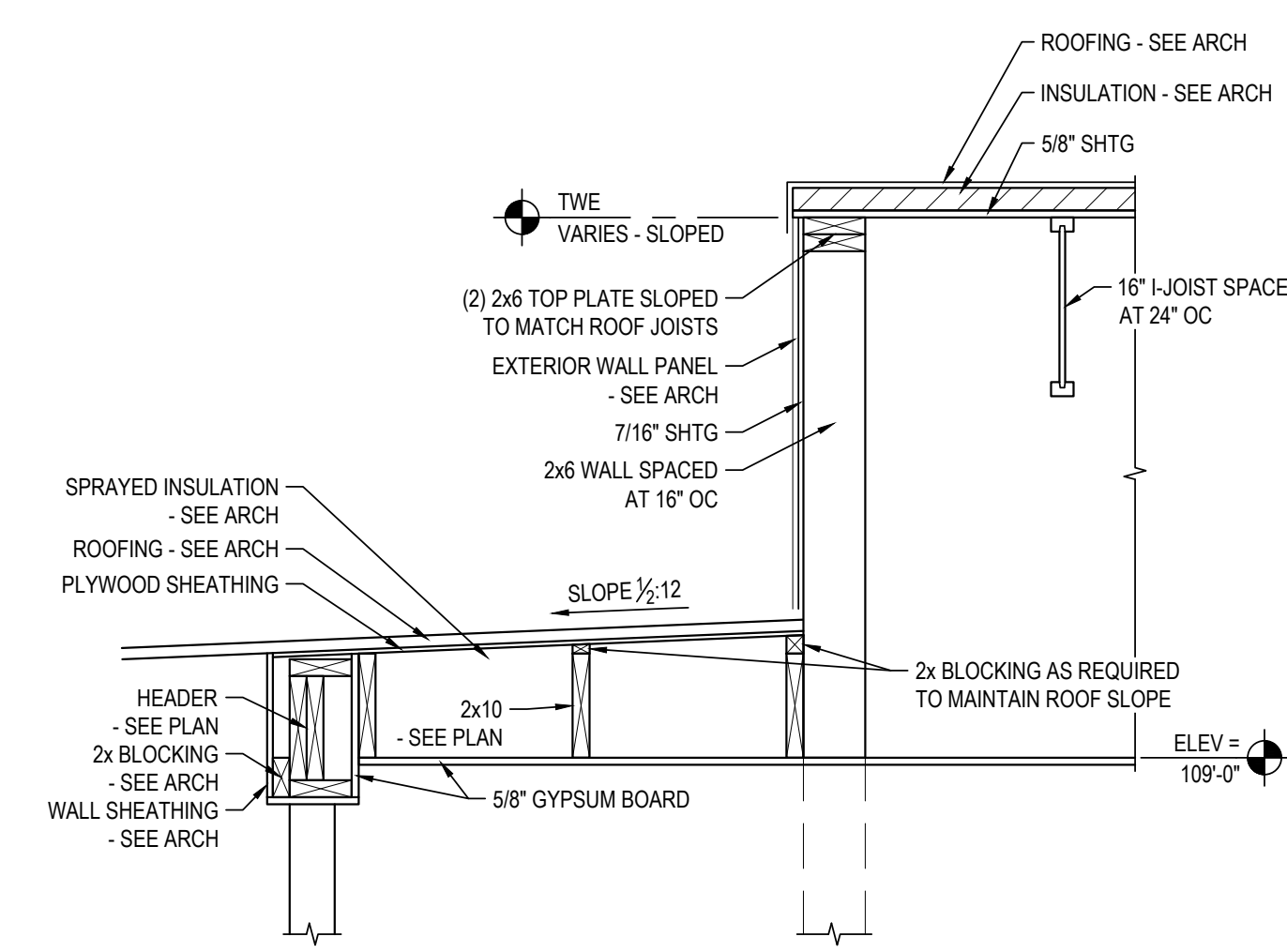
D STEEL LINTEL SECTIONS AT EXISTING HANGER
S504 ORIGINAL SCALE: 3/4" = 1'-0"



E SECTION THROUGH CANOPY
S504 ORIGINAL SCALE: 1/2" = 1'-0"



F CONCRETE STAIR ON GRADE
S504 ORIGINAL SCALE: 3/4" = 1'-0"



G VESTIBULE SECTION
S504 ORIGINAL SCALE: 3/4" = 1'-0"

ADDED SHEET AND REVISED SECTION THROUGH CANOPY



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B. C. Wolf
BERKAMIN A. WOLF
DATE 5.16.2023 LICENSE NO. 40807



DULUTH INTERNATIONAL AIRPORT

SKY HARBOR AIRPORT
2023 RECONSTRUCT TERMINAL BUILDING
DULUTH, MN

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1	ADDENDUM #1	5.30.2023
2	ADDENDUM #2	6.1.2023
3	ADDENDUM #3	6.6.2023

STRUCTURAL DETAILS

S504