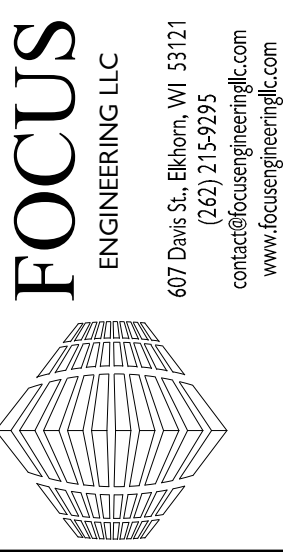


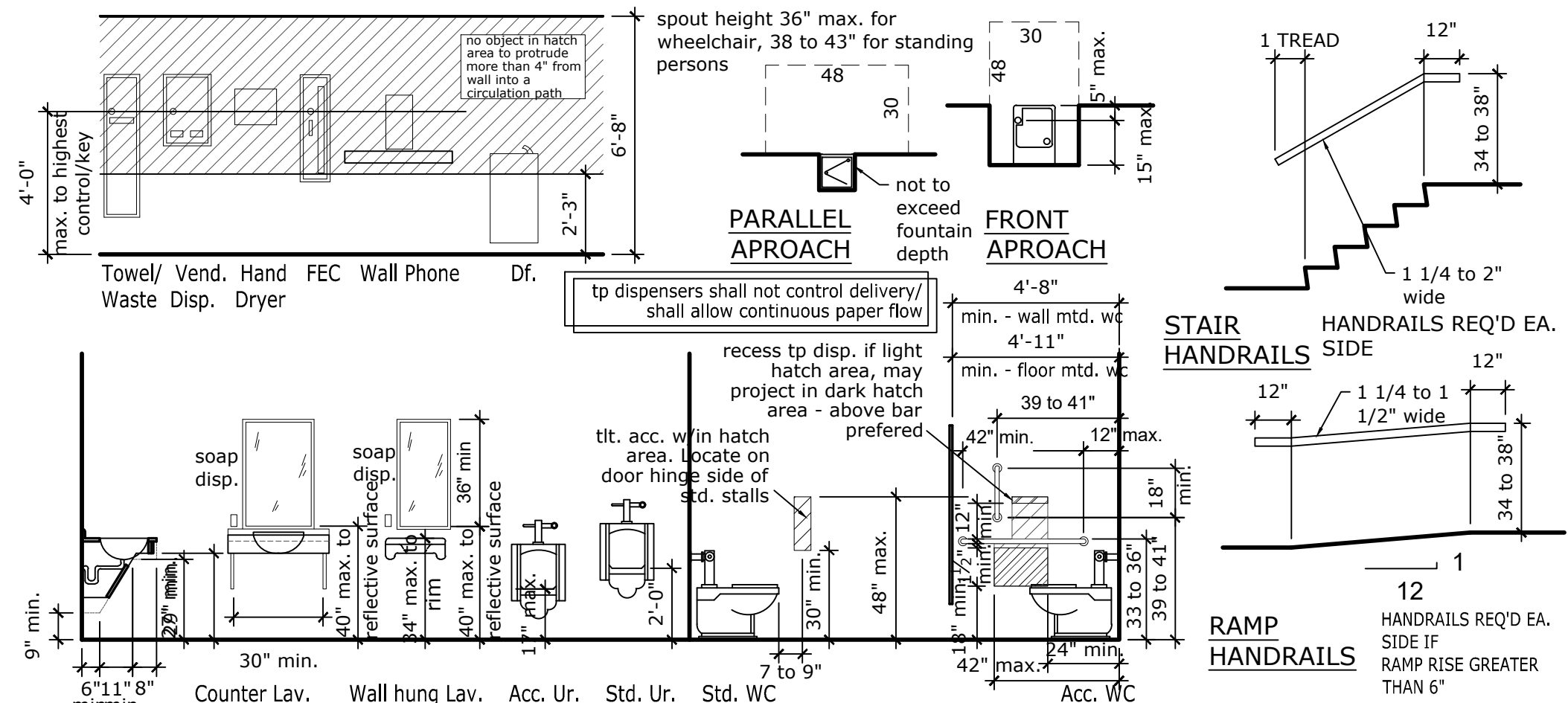
# SPRING CITY AVIATION - NOVO EAST HANGER

WAUKESHA COUNTY AIRPORT  
WAUKESHA, WI 53188



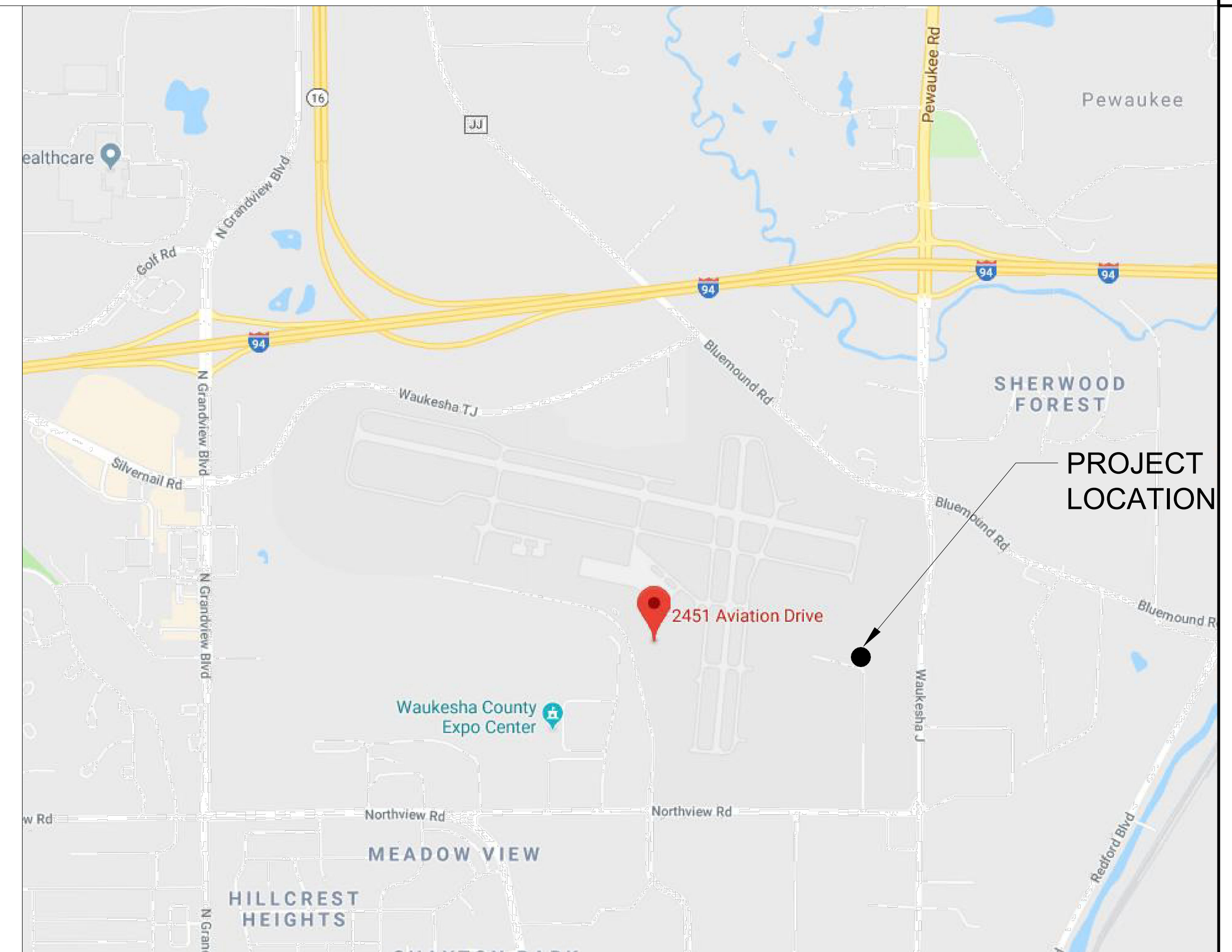
SPRING CITY HANGAR - NOVO EAST  
2451 AVIATION RD., WAUKESHA WI 53188-6900

## ACCESSIBILITY STANDARDS (for common use areas)



## MOUNTING HEIGHT SCHEDULE

ITEM	HEIGHT FROM FINISHED FLOOR
LIGHT SWITCHES	48" TOP OF BOX (SEE ADJACENT)
ELECTRICAL RECEPTACLE	18" BOT. OF BOX (VERIFY WITH HVAC) (4" ABOVE BACKSLASH WHEN LOCATED ABOVE COUNTER)
FIRE ALARM PULL	48" TOP OF BOX (SEE ADJACENT)
FIRE ALARM HORN	80" BOT. OF BOX (OR 8" BELOW CEILING WHICHEVER IS LOWER)
WALL MNTD. PHONE	48" TOP OF BOX
THERMOSTAT	48" TOP OF BOX (OR 54" IF PARALLEL APPROACH)
DRAINING FOUNTAIN F.E.C.	SEE ELEVATION
GRAB BAR/HANDRAIL TP DISP.	60" TOP OF CABINET (48" MAX TO HANDLE/KEY)
LAVATORY MIRROR	34 TO 38" TO TOP (15" MIN./48" MAX. ABOVE FLOOR) 38" MAX. TO LOWEST REFLECTIVE SURFACE, 7'-4" MIN. TO TOP



AREA MAP  
SCALE: N.T.S.

## BLDG., PLUMB., ACC., ENERGY CONS. CODE INFORMATION (IBC/2015, IECC/2015)

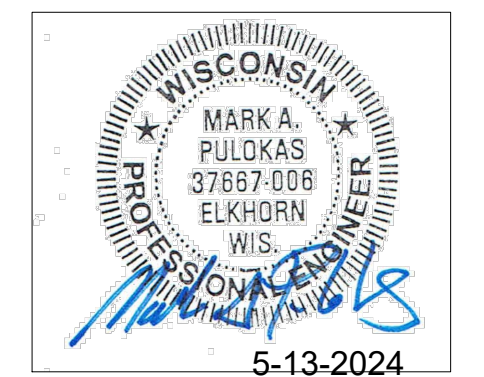
1. TYPE OF PROJECT: NEW CONSTRUCTION - AVIATION HANGER  
2. TYPE OF CONSTRUCTION, FIRE RATINGS OF STRUCTURAL FRAME:  
3. OCCUPANCY(IES), HEIGHT/AREA:  
4. EXTERIOR WALL FIRE RATINGS BASED UPON SEPARATION DISTANCE:  
5. FIRE SUPPRESSION:  
6. FIRE ALARM AND DETECTION (907.2):  
7. INCIDENTAL ACCESSORY OCCUPANCY AREAS:  
8. OTHER FIRE RESISTIVE ASSEMBLIES:  
9. PENETRATIONS, JOINTS AND OPENINGS (714, 715, 716):  
10. INTERIOR FINISH CLASS (7803.11.1):

11. OCCUPANT LOAD (1004.1) (SEE PLANS)  
12. EGRESS WIDTH (PER FLOOR)(1005.1, 1010.5, 1011.2):  
13. NUMBER OF EXITS (1006):  
14. EXIT ACCESS TRAVEL DISTANCE/REMOVEDNESS (1010.7.2):  
15. MISC. ROOM AND ASSEMBLY SPACE EGRESS:  
16. DOOR SIZE, SWING, HORIZONTAL CLEARANCE:  
17. ATTIC AND UNDERFLOOR VENTILATION (1203.2 AND 1203.3):  
18. DRAFTSTOPPING:  
19. RESTROOMS:  
20. ACCESSIBILITY (CHAPTER 11 AND ICC/ANSI 117.1):

21. ENERGY CONSERVATION (IECC CHAPTER 5 BUILDING ENVELOPE PRESCRIPTIVE):  
22. BUILDING DESIGN LOADS:  
23. SHEET INDEX:

24. BUILDING DESIGN LOADS (continued):  
25. SHEET INDEX (continued):

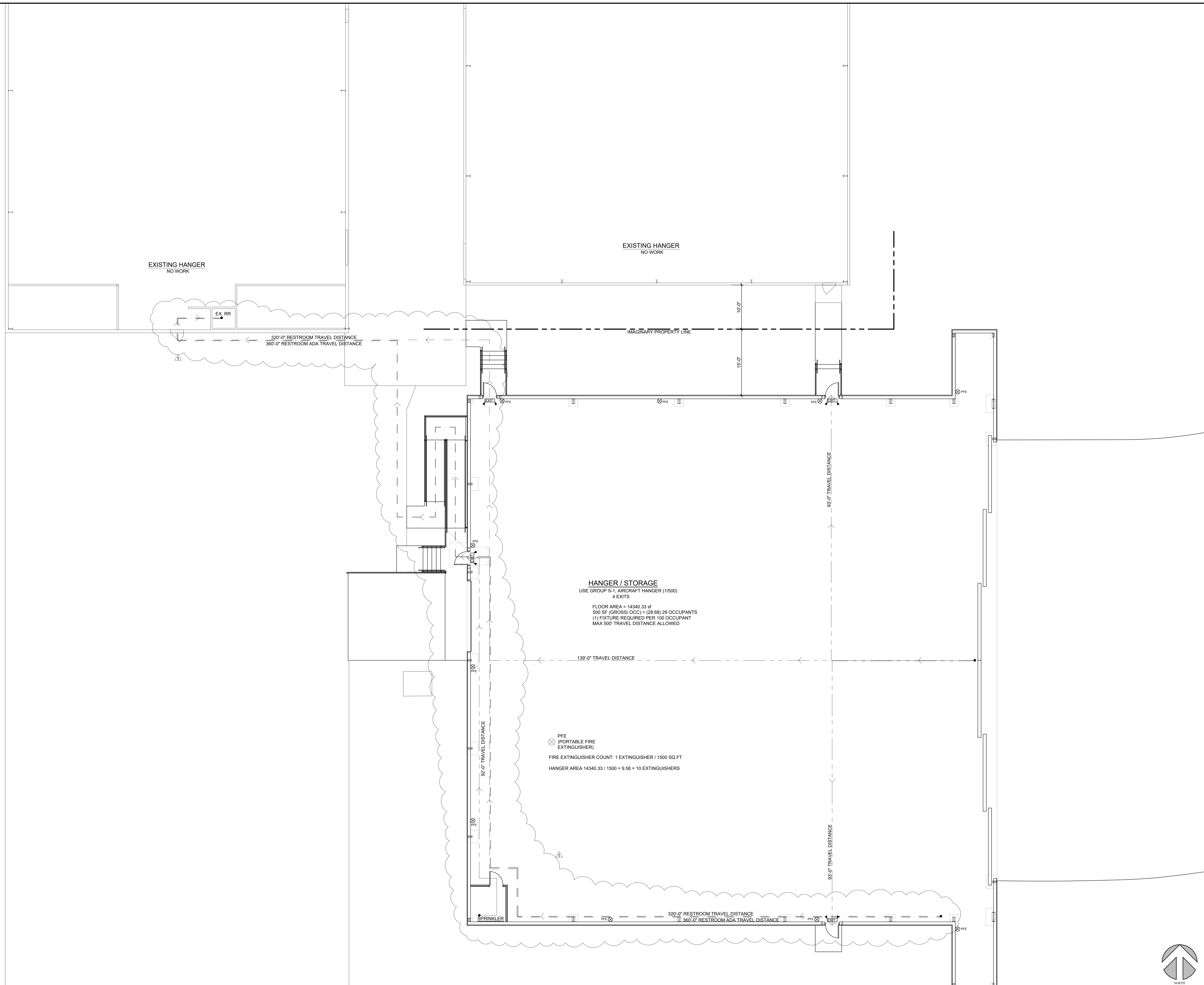
DEAD (D)	
FLOOR (NA)	
ROOF	25 PSF
SUSPENDED CEILING	4 PSF
APPLIED LIVE	
FLOOR (L)	100 PSF
APPLIED SNOW (S)	
GROUND SNOW LOAD (Pg)	30 PSF
FLAT ROOF SNOW LOAD (Pf)	21 PSF
SNOW EXPOSURE FACTOR (Ce)	0.9
SNOW LOAD IMPORTANCE (Is)	1.0
THERMAL FACTOR (Ct)	1.1
APPLIED WIND (W)	
BASIC WIND SPEED (3 sec. GUST)	115 MPH
EXPOSURE CATEGORY	C
WIND IMPORTANCE FACTOR (Iw)	1.0
APPLIED RAIN (R)	
RAINFALL INTENSITY (i)	3 in/hr
DRAIN DISCHARGE FLOW RATE (Q)	144 gal/min
WATER DEPTH (ds + dn)	7"
RAIN LOAD (Rr)	40 PSF (max)



T1.0 COVER SHEET AND CODE REVIEW	
LS1.0 LIFE SAFETY PLAN	
C1.0 SITE AND GRADING PLAN	
C1.1 AREA OVERVIEW PLAN	
S1.0 FOUNDATION PLAN	
S1.1 SLAB AND GRADE BEAM PLAN	
S2.1 FOUNDATION DETAILS	
S2.2 FOUNDATION DETAILS	
A1.0 OVERALL BUILDING PLANS	
A1.1 HANGER FLOOR PLAN	
A2.1 EXTERIOR ELEVATIONS	
A2.2 EXTERIOR ELEVATIONS	
A3.1 BUILDING SECTIONS	

NUMBER	DESCRIPTION	DATE
1	AS-BUILT ROUTE SPRINKLER ROOM	05-13-2024

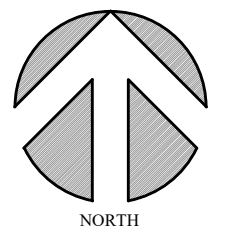
T1.0



**HANGER / STORAGE**  
USE GROUP S-1, AIRCRAFT HANGER (1/1500)  
4 EXITS  
FLOOR AREA = 14340.33 sf  
500 SF (GROSS/ OCC) = (28.68) 29 OCCUPANTS  
(1) FIXTURE REQUIRED PER 100 OCCUPANT  
MAX 500' TRAVEL DISTANCE ALLOWED

⊗ PFE  
(PORTABLE FIRE EXTINGUISHER)  
FIRE EXTINGUISHER COUNT: 1 EXTINGUISHER / 1500 SQ FT  
HANGER AREA 14340.33 / 1500 = 9.56 = 10 EXTINGUISHERS

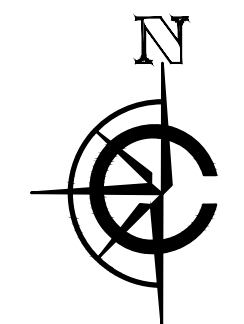
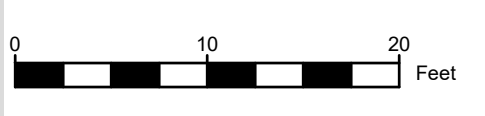
**LIFE SAFETY PLAN**  
SCALE: 1/8" = 1'-0"



REVISIONS	NUMBER	DESCRIPTION	DATE
1	ADDED ADA ROUTE, SPRINKLER ROOM	8-8-2024	

Date: 05-13-2024  
Project: 2023-10.011  
Drawn by: SLR  
Checked by: MAP  
SHEET NUMBER

**LS1.0**



**LEGEND**

- EXISTING BUILDING
- EXISTING ASPHALT
- EXISTING CONCRETE
- REMOVE EXISTING ASPHALT
- PROPOSED BUILDING
- PROPOSED ASPHALT
- SF PROPOSED SILT FENCE
- EXISTING TREE
- DEMO EXISTING TREE
- DITCH CHECK
- PROPOSED SWALE
- PROPOSED INLET PROTECTION TYPE 2

TOTAL LAND DISTURBANCE:  
30,262 SF (0.69 ACRES)

**RESTORATION NOTES:**

1. MINIMUM 4" TOPSOIL REQUIRED IN ALL LAWN AREAS.
2. UTILIZE WISDOT SEED MIXTURE No 40 OR AS RECOMMENDED BY LANDSCAPER PER LOCAL SOIL TEST.
3. UTILIZE WISDOT TYPE A FERTILIZER.
4. USE CLASS 1, URBAN, TYPE A ON ALL DISTURBED AREAS UNLESS SPECIFIED OTHERWISE.
5. UTILIZE TYPE B MATTING OF SAME CLASS 1 ALONG CENTERLINE OF SWALE AND UP MINIMUM 2FT VERTICAL OF SIDE SLOPES.
6. PROPERLY ANCHORED MULCH REQUIRED IN ALL AREA NOT STABILIZED WITH EROSION MATTING.
7. FOLLOW ALL EROSION CONTROL SEQUENCING, TRACKING PAD, SILT FENCE, DUST CONTROL, SEEDING, AND MATTING.

**GENERAL NOTE:**

CONTRACTOR RESPONSIBLE FOR VERIFYING GRADES SET IN RELATION TO GRADING PLAN SHOWN. CALCULATIONS FOR FLOOR AND EXTERIOR GRADES SET, COORDINATION WITH ARCHITECTURAL/STRUCTURAL PLANS, AND ANY DISCREPANCIES THEREIN. COMMENCING CONSTRUCTION IS ACCEPTANCE OF VERIFICATION AND INFORMATION SHOWN AND CARDINAL ENGINEERING SHALL BE HELD HARMLESS FOR ANY CHANGES REQUIRED FOR FURTHER REQUIRED DURING CONSTRUCTION.

FURTHER CALCULATIONS ARE REQUIRED BEYOND WHAT IS SHOWN ON THIS PLAN FOR WALLS IN OTHER LOCATIONS OF THE STRUCTURAL PLANS. CONTRACTOR IS RESPONSIBLE FOR THOSE CALCULATIONS. NO FOUNDATION PLANS PROVIDED, LATEST INFORMATION AVAILABLE AT THE DATE OF THIS SHEET RELEASE.

CLIENT

**WAUKESHA COUNTY AIRPORT HANGER**  
WAUKESHA COUNTY, WI  
**SITE AND GRADING PLAN**



**CARDINAL**  
PLAN-SURVEY-ENGINEER  
DESIGNING IN TRUE DIRECTIONS

1200 LA SALLE STREET,  
LAKE GENEVA, WI 53147  
262-757-8776  
PLANSURVEYENGINEER.COM

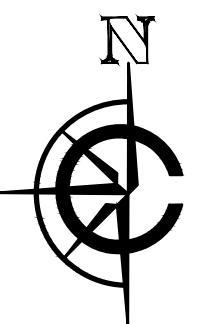
NO.	REVISION DESCRIPTION	REV DATE
1	ADA RAMP UPDATE	05/24/2024

SCALE	1 IN=10 FT
PROJECT NUMBER	23616
DATE	11/21/2023
PROJECT MGR	RYAN CARDINAL, PE
DRAWN BY	BDP
DESIGNED BY	BDP

SHEET NUMBER  
**1 OF 2**



0 40 80 Feet



LEGEND

- EXISTING BUILDING
- EXISTING ASPHALT
- EXISTING CONCRETE
- PROPOSED BUILDING
- PROPOSED ASPHALT

CLIENT

**WAUKESHA COUNTY AIRPORT HANGER**  
 WAUKESHA COUNTY, WI

**SITE AND GRADING PLAN**

PRELIMINARY



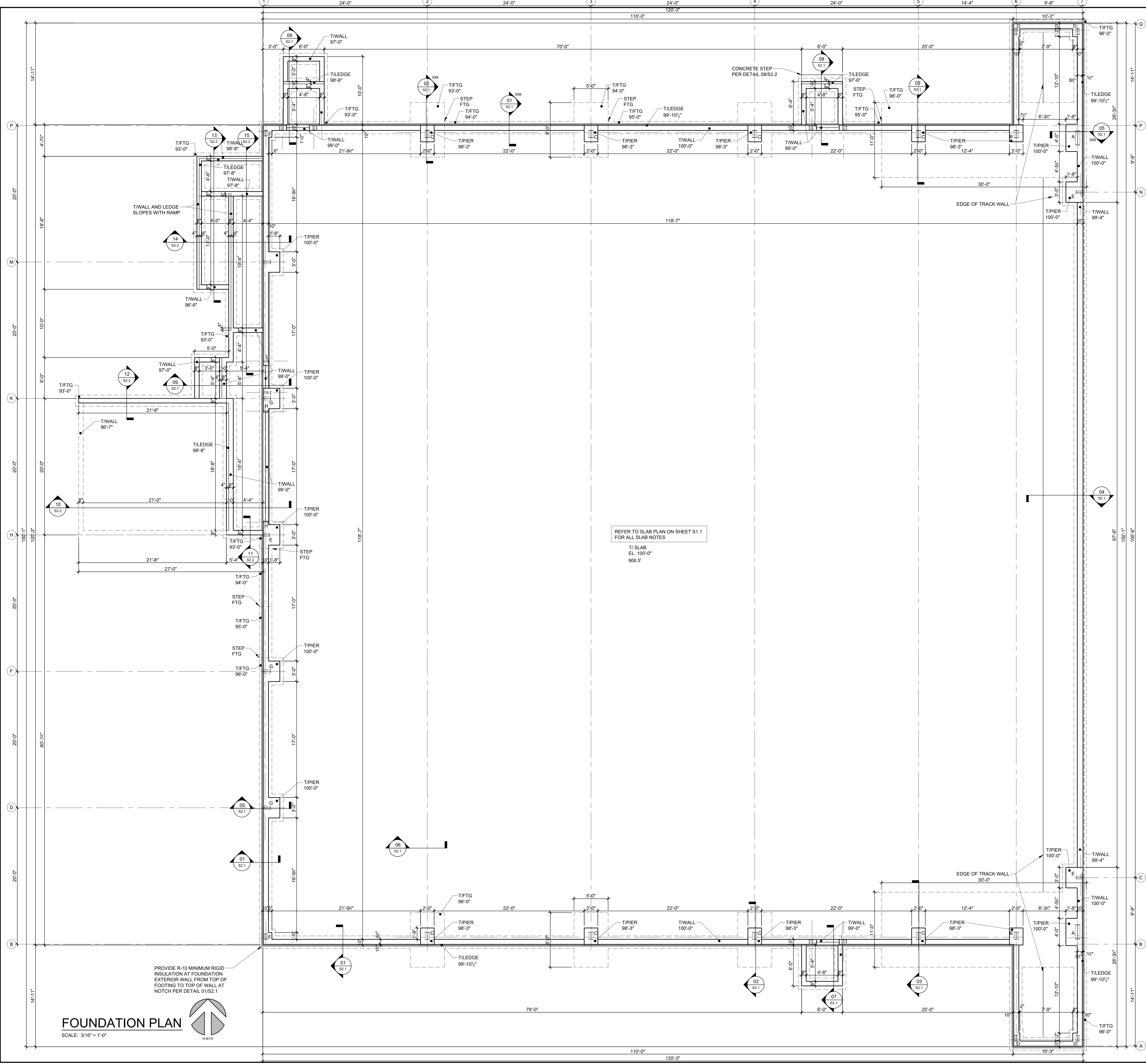
CARDINAL  
 PLAN-SURVEY-ENGINEER  
 DESIGNING IN TRUE DIRECTIONS

1200 LA SALLE STREET,  
 LAKE GENEVA, WI 53147  
 262-757-8776  
 PLANSURVEYENGINEER.COM

NO.	REVISION DESCRIPTION	REV DATE
1	ADA RAMP UPDATE	05/24/2024

SCALE	1 IN=40 FT
PROJECT NUMBER	23616
DATE	11/21/2023
PROJECT MGR	RYAN CARDINAL, PE
DRAWN BY	BDP
DESIGNED BY	BDP

SHEET NUMBER  
**2 OF 2**



- ### GENERAL CONSTRUCTION NOTES
- NO CHANGES ARE TO BE MADE TO THESE PLANS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE ENGINEER.
  - ALL DIMENSIONS CONTROLLED BY EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE.
  - CONSTRUCTION AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH ALL THE REQUIREMENTS OF ALL LEGALLY CONSTITUTED PUBLIC AUTHORITIES HAVING JURISDICTION ON THE PROJECT, INCLUDING ALL COUNTY AND LOCAL ORDINANCES, AND THE SAFETY ORDERS OF THE STATE INDUSTRIAL ACCIDENT COMMISSION (OSHA).
  - THE GENERAL CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES FOUND WITHIN THE CONTRACT DOCUMENTS.
  - ALL WORK PERFORMED SHALL CONFORM WITH THE REQUIREMENTS OF THE CURRENT BUILDING CODE AND OTHER APPLICABLE GOVERNING CODES AND BUILDING ORDINANCES. REFER TO BUILDING DESIGN LOADS FOR ADDITIONAL INFORMATION.
  - ALL STRUCTURAL MATERIALS SHALL BE FURNISHED AS SHOWN IN THESE PLANS UNLESS ALTERNATES ARE APPROVED IN WRITING BY THE ENGINEER.
  - THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING AND PROVIDING BRACING DURING CONSTRUCTION ERECTION TO SUPPORT ALL CONSTRUCTION LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED.
  - THE DRAWINGS AND SPECIFICATIONS REPRESENT THE COMPLETED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES, INCLUDING, BUT NOT LIMITED TO BRACING AND SHORING. OBSERVATION VISITS TO THE SITE BY FIELD REPRESENTATIVES OF THE ENGINEER SHALL NOT INCLUDE THE PURPOSES OF QUALITY CONTROL AND IN THE INTEREST OF ACHIEVING COMPLIANCE WITH THE CONTRACT DOCUMENTS. THEY DO NOT GUARANTEE THE CONTRACTORS PERFORMANCE AND SHALL NOT BE CONSTRUED AS CONSTRUCTION SUPERVISION.
  - THE SHOP DRAWING REVIEW PROCESS BY THE ENGINEER WILL ONLY COMMENCE AFTER THE PREPARATION OF SHOP DRAWINGS HAVE BEEN AS FOLLOWS:
    - INITIALLY REVIEWED AND ACCEPTED AS CONFORMING WITH THE CONSTRUCTION DRAWINGS BY THE RESPONSIBLE SUPERVISOR AND DRAWING CHECKER WITH THEIR SIGNATURES
    - APPROVED AND ACCEPTED WITH A STAMP FROM THE GENERAL CONTRACTOR AS CONFORMING TO THE CONSTRUCTION DOCUMENTS.
    - A MINIMUM OF 10 WORKING DAYS HAS BEEN ALLOCATED FOR THE REVIEW PROCESS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE SHOP DRAWING REVIEW SCHEDULE.
  - SEE THE SPECIFICATIONS PACKAGE PRODUCED FOR ADDITIONAL REQUIREMENTS, IF APPLICABLE.

- ### FOUNDATION NOTES
- IF A SOILS REPORT IS AVAILABLE IT SHALL BE INCLUDED IN ITS ENTIRETY AS PART OF THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR AND CONCRETE SUBCONTRACTOR SHALL REVIEW AND FAMILIARIZE THEMSELVES WITH THE SOILS REPORT. WHEN A SOILS REPORT IS NOT PROVIDED, MINIMUM ASSUMED VALUES SHALL BE USED.
  - SOILS REPORT BY: N/A
  - SOIL DESIGN VALUES:
 

SOIL TYPE:	ASSUMED GW OR GP (SANDY GRAVEL OR GRAVEL)
CONTINUOUS FOOTINGS:	ASSUMED 3000 P.S.F.
ISOLATED PAD FOOTINGS:	ASSUMED 3000 P.S.F.
LATERAL PASSIVE PRESSURE:	ASSUMED 30 P.S.F. PER FT.
FROST PENETRATION LEVEL:	4'-0"
  - IF ACTUAL CONDITIONS ARE DIFFERENT (SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL, AND CLAYEY GRAVEL - TYPES SW, SP, SM, SC, GM, GC ...OR... CLAY, SANDY CLAY, SILTY CLAY, CLAYEY SILT, SILT AND SANDY SILT TYPES CL, ML, MH, CH) WITH LOWER BEARING CAPACITIES, NOTIFY ENGINEER IMMEDIATELY.
  - ALL FOOTINGS ARE INDICATED BY DASHED LINES. SEE DETAILS FOR SIZE AND TYP. REINFORCING.
  - FOOTINGS SHALL BE CAST ON UNDISTURBED SUBSOIL OR COMPACTED FILL.
  - UNSPECIFIED WALL FOOTINGS SHALL BE TWICE THE WIDTH OF THE SUPPORTED WALL AND AS DEEP AS THE WALL THICKNESS.
  - EXCAVATION DEPTHS FOR THE FOUNDATIONS SHOWN ON THE DRAWINGS ARE TO BE MEASURED FROM THE LOWEST ADJACENT UNDISTURBED SOIL GRADE OR APPROVED COMPACTED EARTH GRADE WITH AT LEAST 5'-0" MINIMUM HORIZONTAL DISTANCE TO DAYLIGHT AT BOTTOM OF FOUNDATION EXCAVATION, U.N.O.
  - TOPSOIL OR UNSUITABLE FILL BELOW SLABS ON GRADE SHALL BE REMOVED. BACK FILL UNDER SLABS AND AGAINST WALLS SHALL BE BANK-RUN GRAVEL, COMPACTED IN 4" LAYERS. SLABS ON GRADE SHALL BE CAST ON AT LEAST 6" OF COMPACTED GRAVEL.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING NECESSARY TO SUPPORT ANY CUT AND FILL BANKS DURING EXCAVATION, AND FOR FORMING AND PLACEMENT OF CONCRETE AND DRAINAGE.
  - FILLING AND BACK FILLING SHALL BE COMPACTED TO A MINIMUM OF 90% OR MORE IF SO NOTED, OF MAXIMUM DENSITY IN ACCORDANCE WITH THE SOILS REPORT AND ASTM TEST METHOD D-1557-78. FLOODING OF BACK FILL IS NOT PERMITTED.
  - ALL FILL AND BACK FILL MATERIAL SHALL BE APPROVED BY THE PROJECT SOILS ENGINEER WHERE APPLICABLE.
  - WATER SHALL BE REMOVED FROM FOUNDATION EXCAVATIONS PRIOR TO PLACEMENT OF CONCRETE. CARE SHALL BE TAKEN SO AS NOT TO DRY OUT THE UNDERLYING NATURAL SOILS.
  - UNLESS NOTED OTHERWISE, CURBS, GUTTERS, AND SIDEWALK AREAS OF THE SLABS MAY BE PLACED DIRECTLY ON APPROVED 90% MIN. COMPACTED FILL.
  - DO NOT BACK FILL AGAINST WALLS UNTIL THE STRUCTURAL FLOOR SLAB IS IN PLACE AND WALL IS CURED AT LEAST SEVEN (7) DAYS OR UNTIL THE WALL IS ADEQUATELY BRACED.

- ### CONCRETE NOTES:
- ALL CONCRETE DESIGN AND CONSTRUCTION SHALL CONFORM WITH THE CURRENT ADOPTED EDITION OF THE ACI CODE AND SPECIFICATIONS (ACI 318, ACI 301).
  - THE SPECIFIED COMPRESSIVE STRENGTH OF THE CONCRETE (f<sub>c</sub>) FOR EACH PORTION OF THE STRUCTURE SHALL BE AS DESIGNATED BELOW, UNLESS NOTED OTHERWISE ON THE PLANS. STRENGTH REQUIREMENTS SHALL BE BASED ON A 28-DAY COMPRESSIVE STRENGTH TEST.
 

CONCRETE DESIGN STRENGTH (f <sub>c</sub> )	
FOOTINGS:	3000 P.S.I.
SLABS:	2500 P.S.I.
WALLS:	4000 P.S.I.
  - AGGREGATE MUST HAVE A UNIFORM DISTRIBUTION OF PARTIAL SIZE RANGING FROM 0.118" TO 1" (TYP.) IN 4" WALLS MAXIMUM SIZE IS 3/4"
  - AT THE TIME OF PLACEMENT, CONCRETE USED IN WALLS SHOULD HAVE A SLUMP VALUE OF 4-6". PLACE CONCRETE IN MAXIMUM OF 4' LIFTS. CONTRACTOR SHALL CONSOLIDATE PLACED CONCRETE WITH AN INTERNAL VIBRATOR OR PROVIDE EXTERNAL VIBRATION WHICH IS PROVEN TO ELIMINATE VOIDS THOUGH TESTING.
  - CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 24 HOURS PRIOR TO PLACING CONCRETE.
  - DO NOT PLACE OR CUT HOLES IN CONCRETE SLABS, BEAMS, COLUMNS OR WALLS WITHOUT PRIOR APPROVAL OF THE ENGINEER.
  - ALL FOUNDATION WALL THICKNESS PER PLAN. SEE DETAILS FOR TYP. REINFORCING.
  - EXTERIOR EXPOSED CONCRETE SHALL BE AIR-ENTRAINED, MINIMUM CONTENT SHALL BE SIX PERCENT (6%).
  - ALLOW AT LEAST 24 HOURS BEFORE POURING ADJACENT WALL SECTIONS. BETWEEN CONSTRUCTION JOINTS, MAXIMUM LENGTH OF POUR TO BE 40 FEET, UNLESS CRACK INDUCERS ARE USED.
  - NO HOLES, TRENCHES, OR DISTURBANCES OF THE SOIL SHALL BE ALLOWED WITHIN THE VOLUME DESCRIBED BY 45 DEGREE LINES SLOPING FROM THE BOTTOM EDGE OF THE FOOTING, IF SUCH ARE REQUIRED, FOOTINGS MUST BE LOWERED.
  - PIPES AND CONDUITS EMBEDDED IN OR PASSING THROUGH STRUCTURAL MEMBERS MUST BE APPROVED BY THE ENGINEER. PIPE AND CONDUITS EMBEDDED IN CONCRETE SHALL NOT BE LARGER IN OUTSIDE DIAMETER AT ITS WIDEST POINT OR FITTING THAN 2" NOR 1/3 OF THE THICKNESS OF THE SLAB, BEAM OR WALL.
  - ELECTRICAL CONDUIT OR PIPES EMBEDDED IN OR PASSING THROUGH FLOORS, WALLS OR BEAMS SHALL BE LOCATED AND PLACED SO THAT:
    - THEY ARE NOT CLOSER THAN 3 DIAMETERS ON CENTER.
    - THE CONCRETE COVER IS NOT LESS THAN 1".
    - THEY RUN BETWEEN REINFORCING & DO NOT DISPLACE IT.
  - SLABS ON GRADE SHALL BE CAST ALLOWING A SUFFICIENT NUMBER OF JOINTS TO ADEQUATELY CONTROL SHRINKAGE CRACKING. SAW CUTTING SHALL BE DONE AS SOON AS SAW CUT WILL NOT RAVEL CONCRETE OR WITHIN 18 HOURS MAXIMUM OF INITIAL POURING OPERATION. MAXIMUM SIZE OF PANELS 12' X 12' UNLESS APPROVED BY THE ENGINEER.
  - SLABS ON GRADE SHALL BE THICKNESS AS NOTED ON DRAWINGS AND REINFORCED WITH #6X-10/10 WELDED WIRE MESH U.N.O.

- ### REINFORCING STEEL NOTES
- ALL REINFORCING STEEL SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH THE C.R.S.I. "MANUAL OF STANDARD PRACTICE" U.N.O.
  - REINFORCING STEEL FOR CAST-IN-PLACE CONCRETE SHALL BE ASTM A-615 GRADE 60 FOR ALL BAR SIZES U.N.O. ALL REINFORCING SHALL BE FROM IDENTIFIED STOCK WITH MILL ANALYSIS SUPPLIED.
  - ALL FIELD WELDED REINFORCING STEEL SHALL BE GRADE 60 AND CONFORM TO ASTM A-706 SPECIFICATIONS.
  - ALL WELDED WIRE REINFORCING MESH SHALL BE ASTM A-185.
  - BARs SHALL BE CLEAN OF RUST, GREASE OR OTHER MATERIAL LIKELY TO IMPAIR CONCRETE BONDING.
  - LAP ALL SPLICES 72 BAR DIAMETERS. LAP WELDED WIRE MESH 6" UNLESS OTHERWISE DETAILED.
  - REINFORCING STEEL SHALL HAVE CONCRETE COVER PROTECTION FOR REINFORCING BARS AS LISTED IN SECTION 7 OF ACI 318 UNLESS OTHERWISE DETAILED.
  - DOWELS SHALL BE PROVIDED AT CONSTRUCTION JOINTS AND SHALL BE THE SAME SIZE AND SPACING AS THE REINFORCING SHOWN FOR THE SUBSEQUENT CONCRETE CONSTRUCTION U.N.O.
  - PROVIDE 3/8" HOOK INTO INTERSECTING WALL AT ALL WALL CORNERS FROM HORIZONTAL REINFORCEMENT UNLESS OTHERWISE DETAILED.

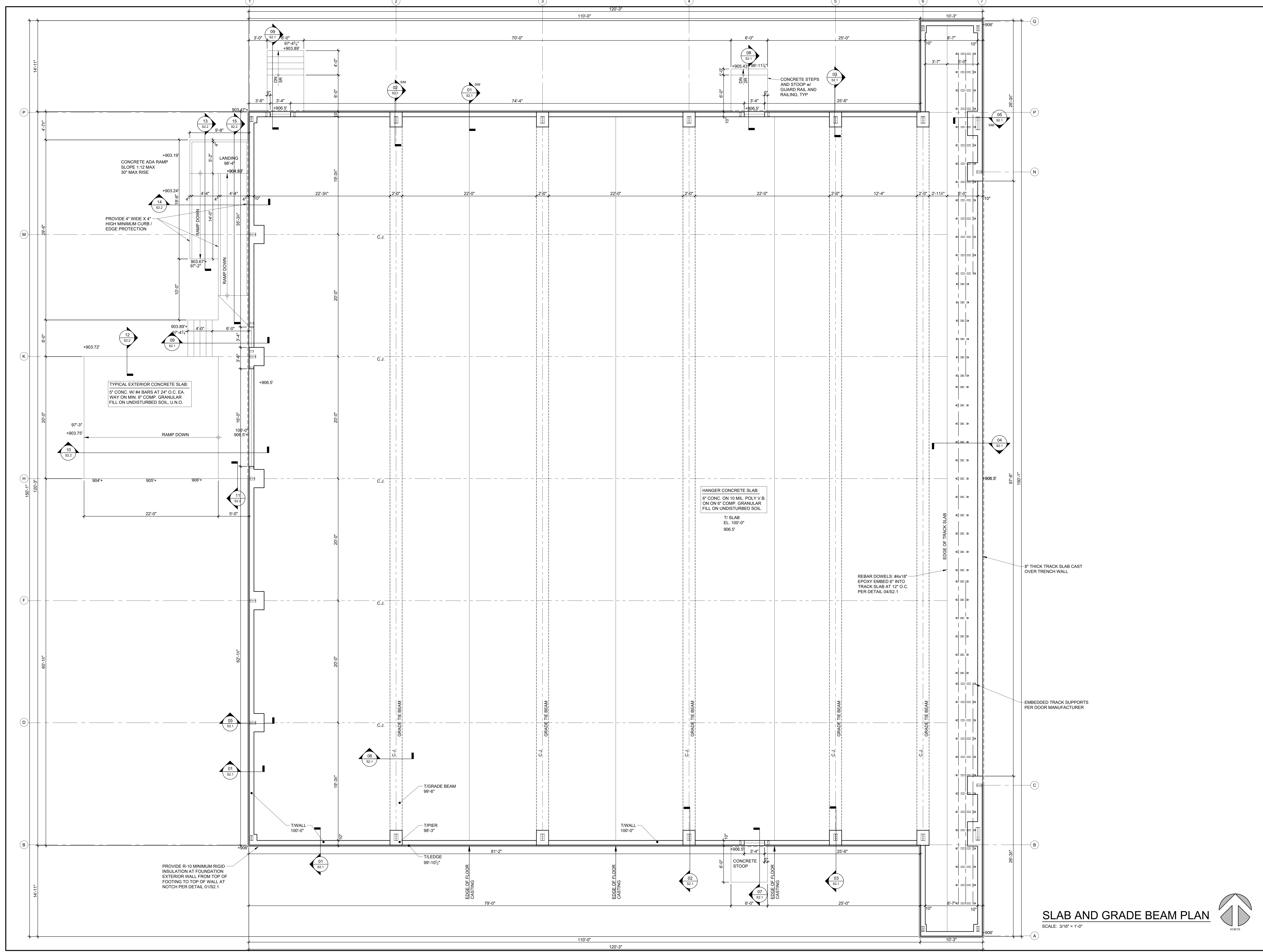
- ### ANCHORAGE
- ALL ANCHORAGE DESIGN AND CONSTRUCTION SHALL CONFORM WITH THE FOLLOWING ADOPTED STANDARDS AND AS MODIFIED HEREIN: AISC "STEEL CONSTRUCTION MANUAL", ACI 318 APPENDIX D, CODE REQUIREMENTS FOR STRUCTURAL CONCRETE APPENDIX D, AND BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.
  - ALL CAST-IN-PLACE EXPANSION AND ADHESIVE ANCHORS SHALL BE CODE APPROVED FOR THE TYPE AND INSTALLATION FOR ITS APPLICATION AND MATERIALS.
  - ALL CAST-IN-PLACE ANCHORS SHALL BE ASTM F1554 GR 36, TYPE, SIZE, EMBEDMENT IS INDICATED ON THE PLANS.
  - WASHERS USED IN ANCHORAGE APPLICATIONS SHALL BE OVERSIZED AND FURNISHED FROM ASTM A36 STEEL PLATE.
  - MINIMUM ANCHOR EMBEDMENT, EDGE DISTANCE AND MINIMUM SPACING ARE AS FOLLOWS, U.N.O.
- | EXPANSION ANCHORS |           |
|-------------------|-----------|
| BOLT DIAMETER     | EMBEDMENT |
| 1/4"              | 3/8"      |
| 3/8"              | 1 1/2"    |
| 1/2"              | 2"        |
| 5/8"              | 2 1/2"    |
| 3/4"              | 3"        |
| 1"                | 3 1/2"    |
| MIN. EDGE DIST.   |           |
| 1/4"              | 3"        |
| 3/8"              | 3"        |
| 1/2"              | 3"        |
| 5/8"              | 3"        |
| 3/4"              | 3"        |
| 1"                | 3"        |
| MIN. SPACING      |           |
| 1/4"              | 3"        |
| 3/8"              | 3"        |
| 1/2"              | 3"        |
| 5/8"              | 3"        |
| 3/4"              | 3"        |
| 1"                | 3"        |
- 
- | ADHESIVE ANCHORS |           |
|------------------|-----------|
| BOLT DIAMETER    | EMBEDMENT |
| 3/8"             | 1 1/2"    |
| 1/2"             | 2"        |
| 5/8"             | 2 1/2"    |
| 3/4"             | 3"        |
| 1"               | 3 1/2"    |
| MIN. EDGE DIST.  |           |
| 3/8"             | 3"        |
| 1/2"             | 3"        |
| 5/8"             | 3"        |
| 3/4"             | 3"        |
| 1"               | 3"        |
| MIN. SPACING     |           |
| 3/8"             | 3"        |
| 1/2"             | 3"        |
| 5/8"             | 3"        |
| 3/4"             | 3"        |
| 1"               | 3"        |
- 
- | CAST-IN-PLACE ANCHORS |           |
|-----------------------|-----------|
| BOLT DIAMETER         | EMBEDMENT |
| 3/8"                  | 1 1/2"    |
| 1/2"                  | 2"        |
| 5/8"                  | 2 1/2"    |
| 3/4"                  | 3"        |
| 1"                    | 3 1/2"    |
| MIN. EDGE DIST.       |           |
| 3/8"                  | 3"        |
| 1/2"                  | 3"        |
| 5/8"                  | 3"        |
| 3/4"                  | 3"        |
| 1"                    | 3"        |
| MIN. SPACING          |           |
| 3/8"                  | 3"        |
| 1/2"                  | 3"        |
| 5/8"                  | 3"        |
| 3/4"                  | 3"        |
| 1"                    | 3"        |

REFER TO SLAB PLAN ON SHEET S1.1 FOR ALL SLAB NOTES

T/SLAB EL. 100'-0" 906.5

PROVIDE R-10 MINIMUM RIGID INSULATION AT FOUNDATION EXTERIOR WALL FROM TOP OF FOOTING TO TOP OF WALL AT NOTCH PER DETAIL 01/S2.1

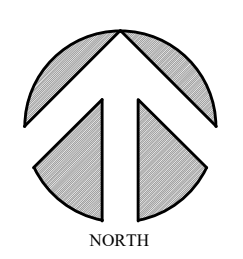
**FOUNDATION PLAN**  
SCALE: 3/16" = 1'-0"



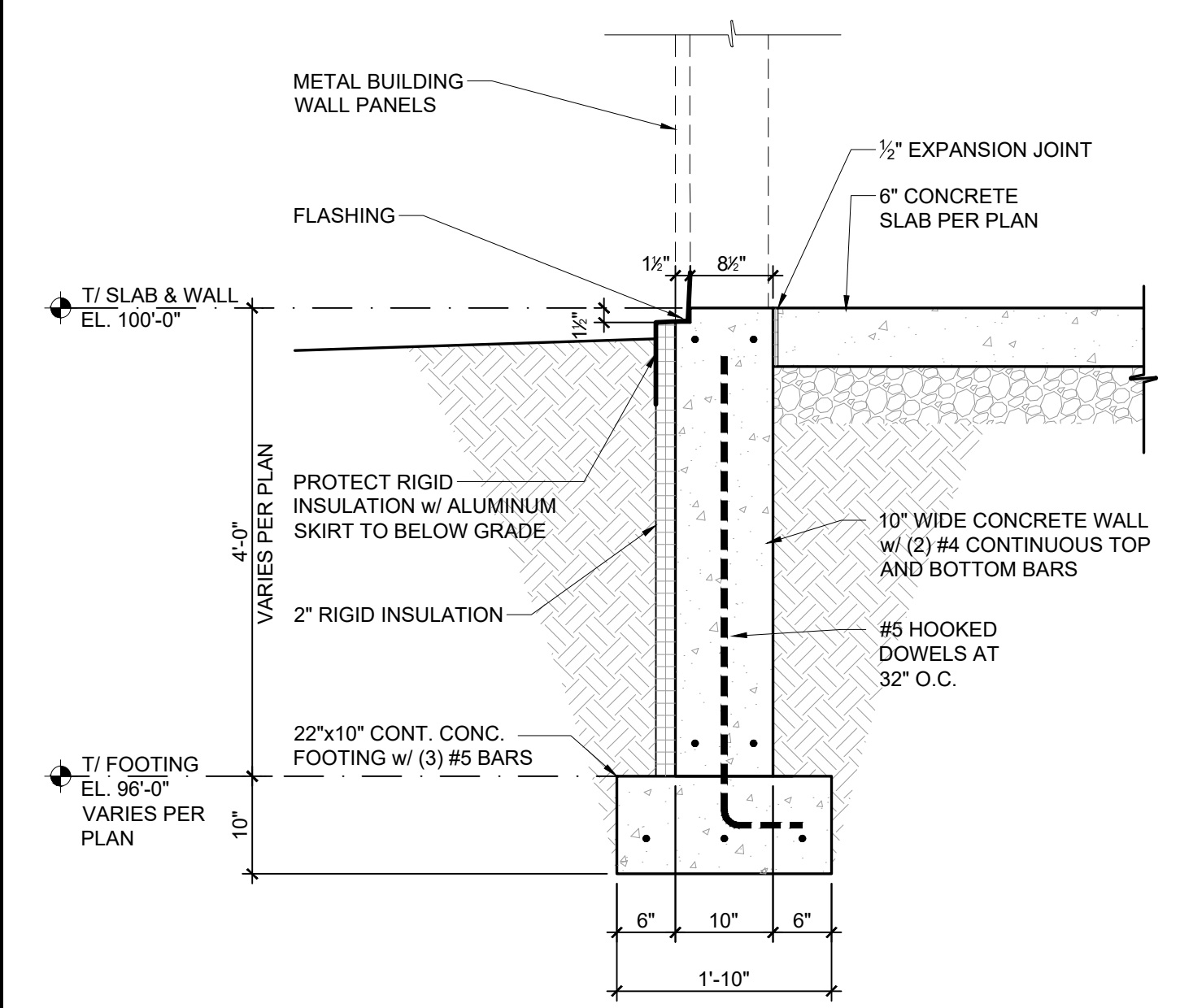
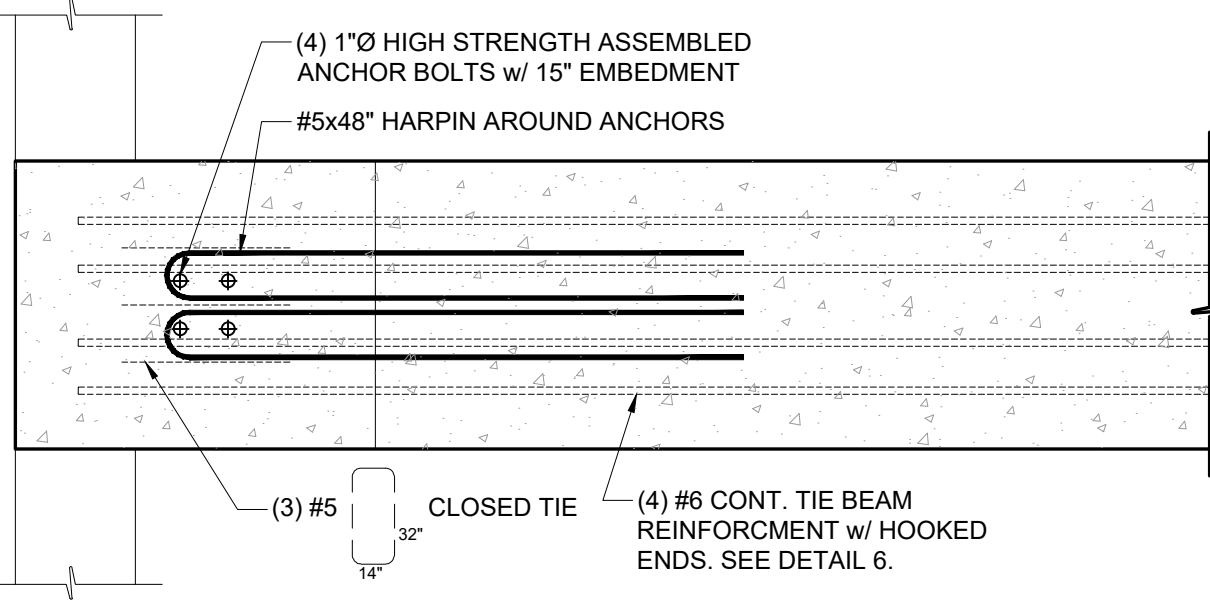
REVISIONS	DATE	DESCRIPTION
1	05-13-2024	ADDED ADA RAMP ROUTE, SPRINKLER ROOM

Date: 05-13-2024  
Project: 2023-10.011  
Drawn by: SLR  
Checked by: MAP  
SHEET NUMBER

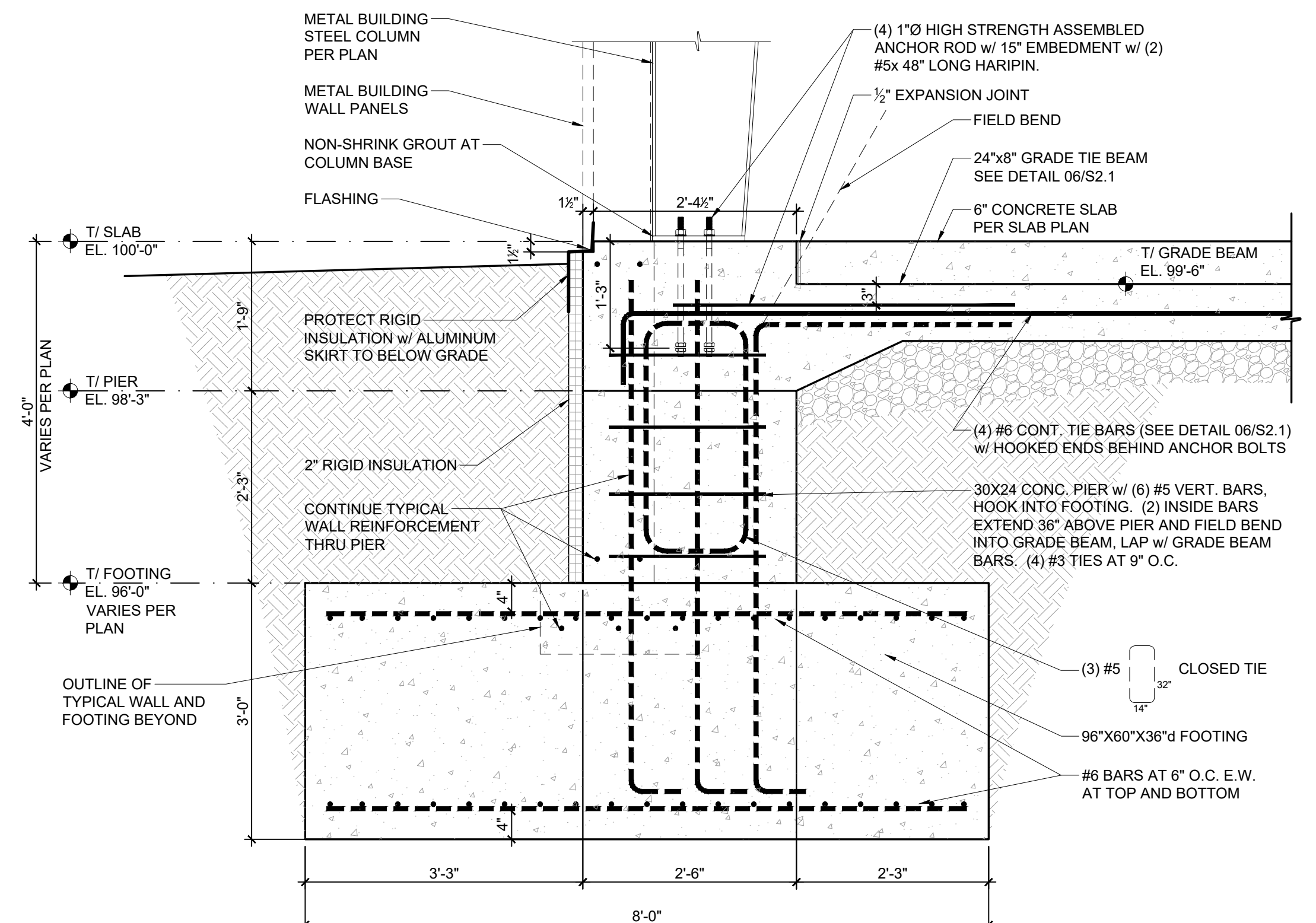
**SLAB AND GRADE BEAM PLAN**  
SCALE: 3/16" = 1'-0"



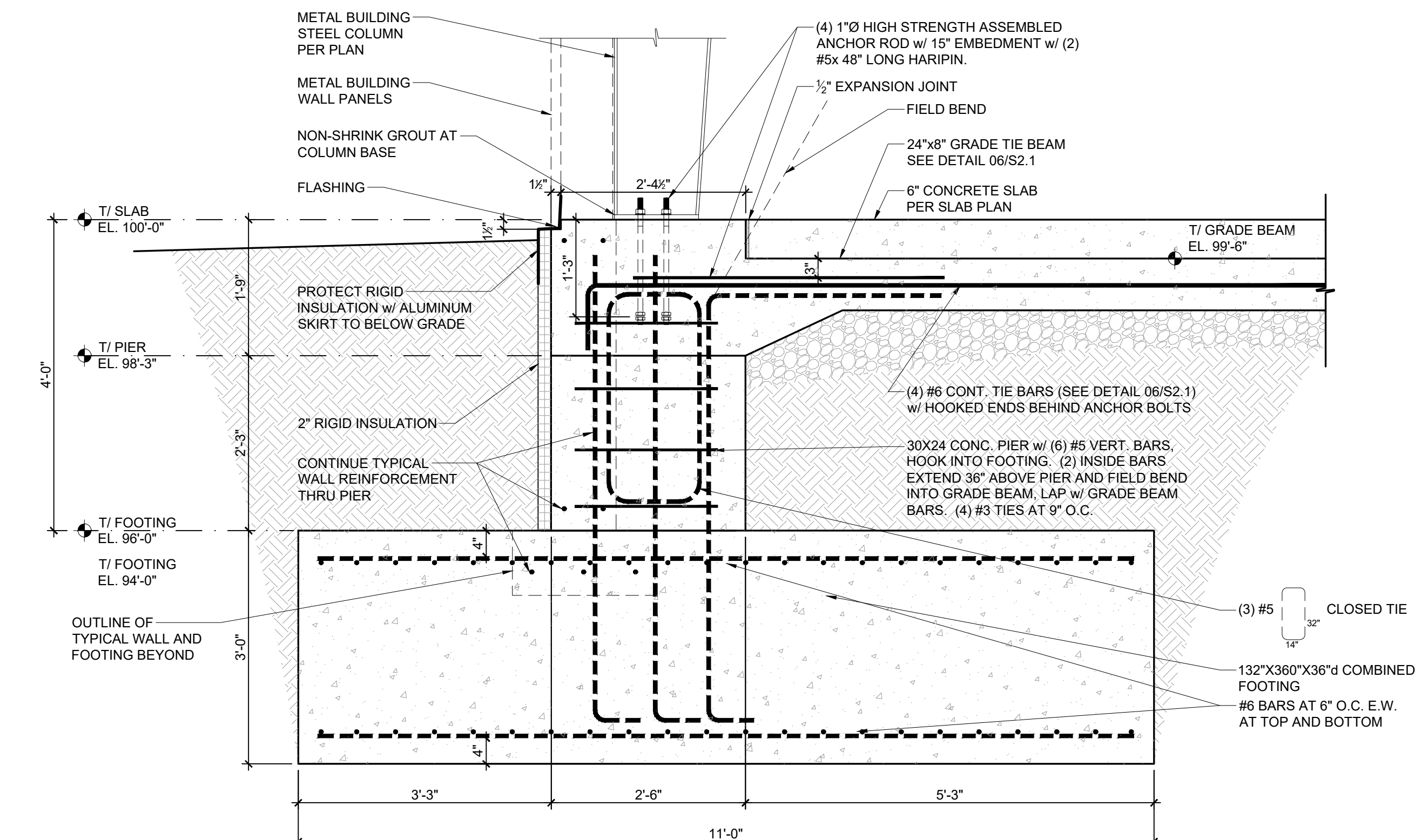
**GRADE BEAM PLAN**



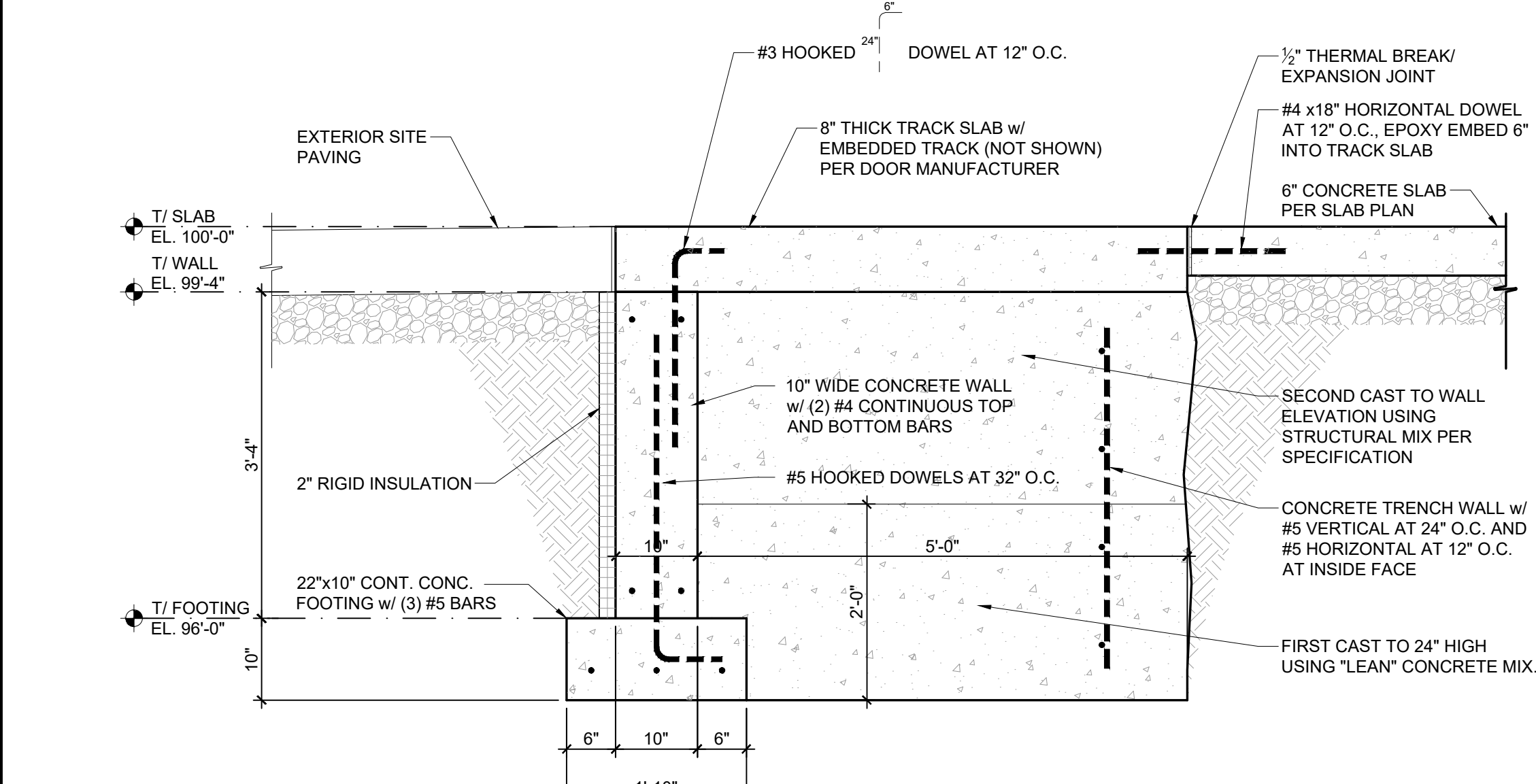
**01 TYPICAL FOUNDATION WALL**  
SCALE: 3/4" = 1'-0"



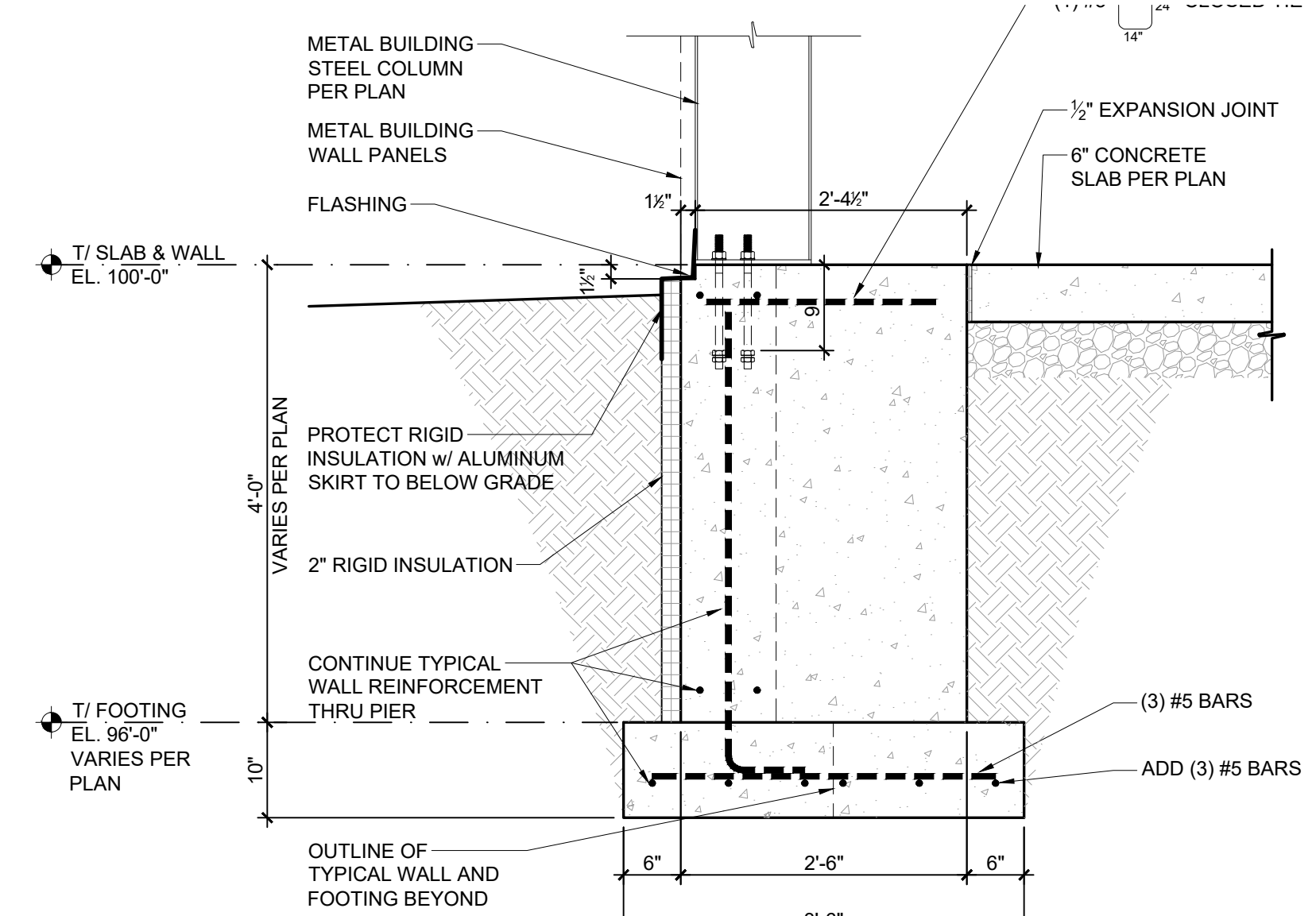
**02 FRAME COLUMN PILASTER AT GRID LINES 2,3,4**  
SCALE: 3/4" = 1'-0"



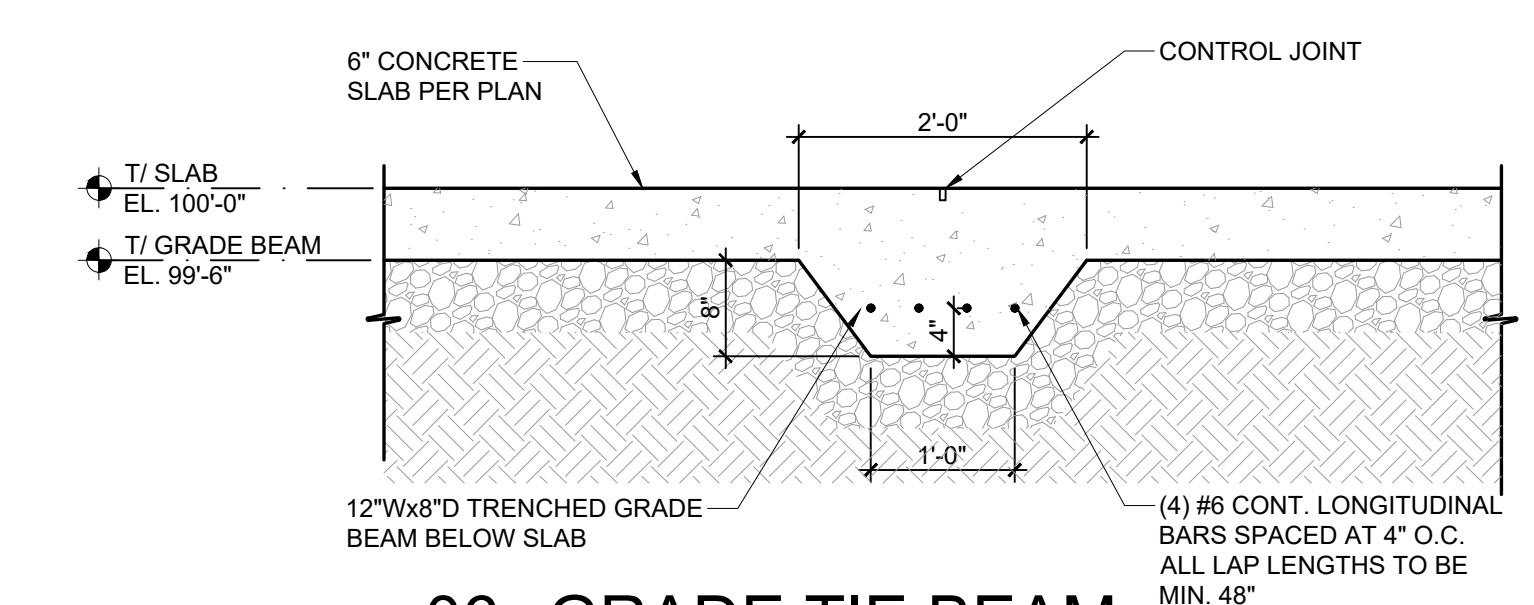
**03 FRAME COLUMN PILASTER AT GRID LINES 5,6**  
SCALE: 3/4" = 1'-0"



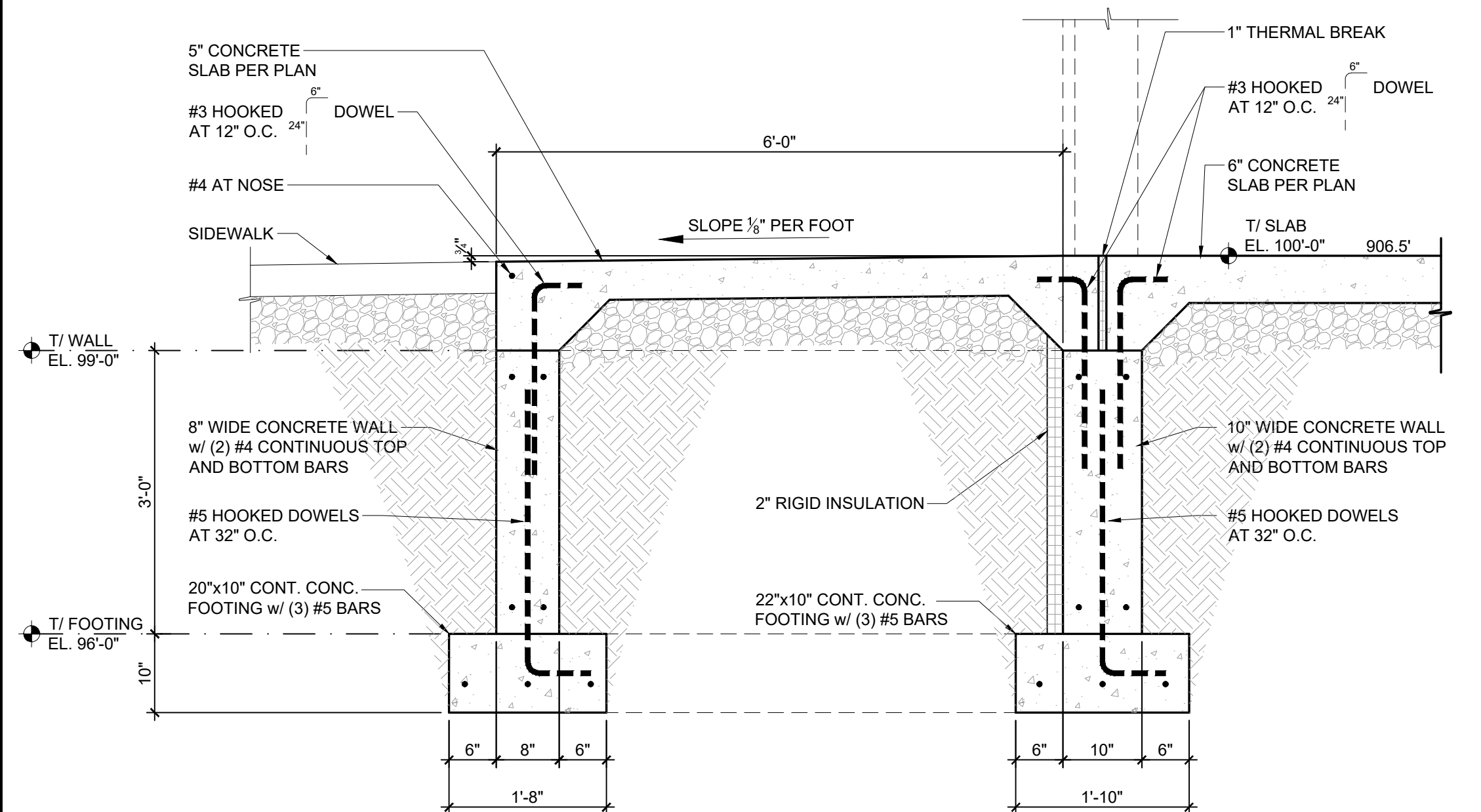
**04 TRENCH WALL AT HANGER DOOR**  
SCALE: 3/4" = 1'-0"



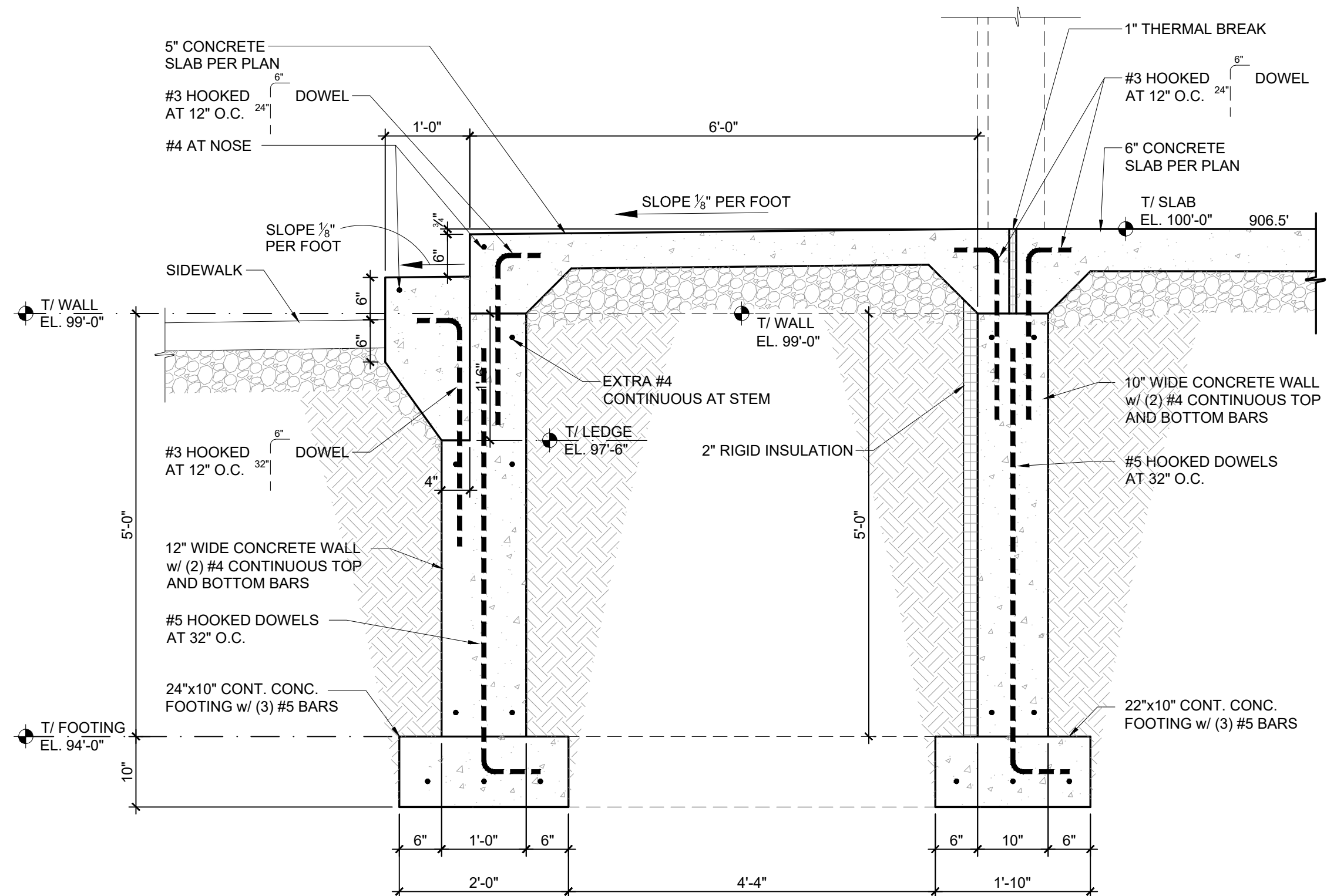
**05 STEEL COLUMN AT END WALL**  
SCALE: 3/4" = 1'-0"



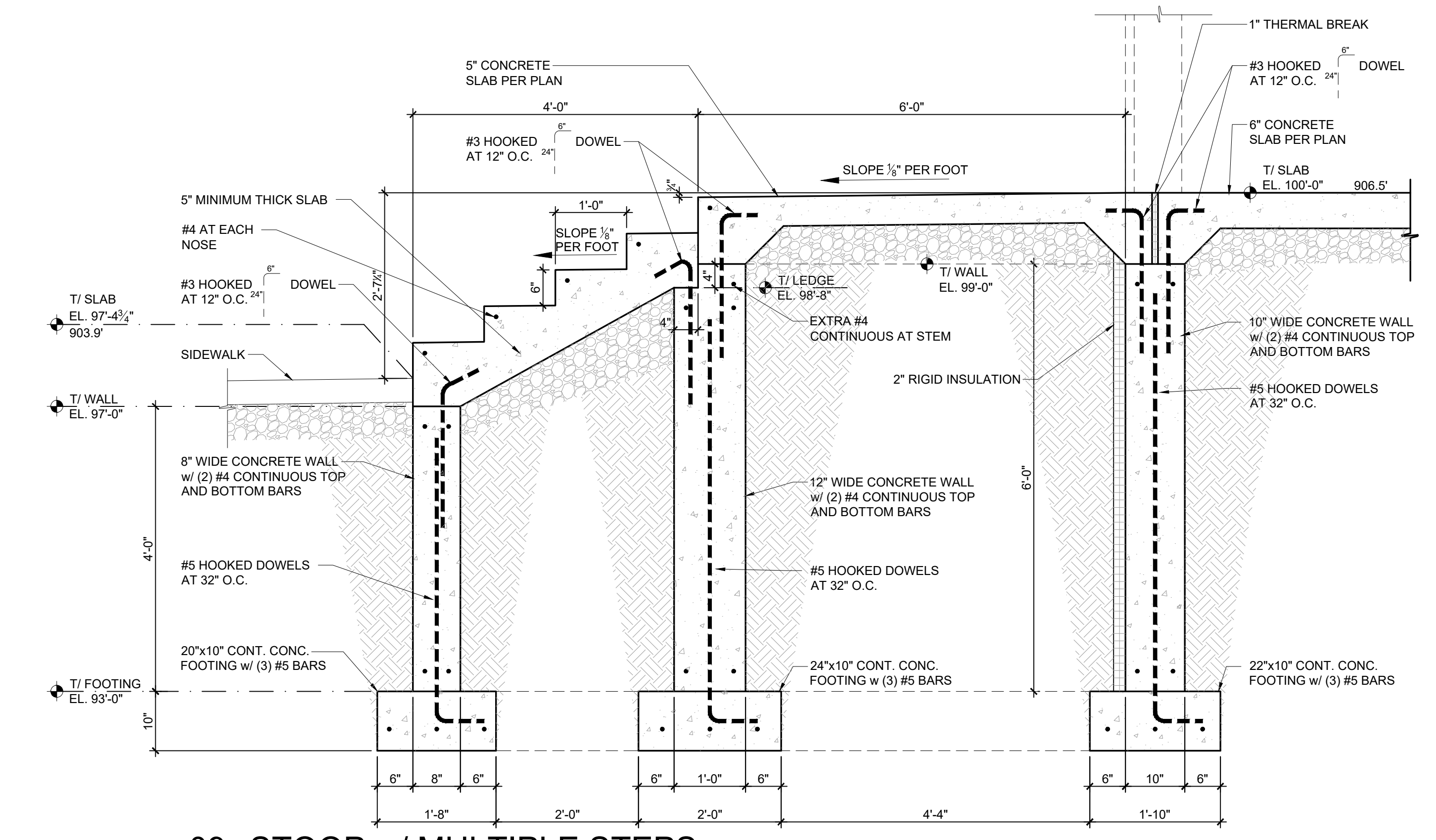
**06 GRADE TIE BEAM**  
SCALE: 3/4" = 1'-0"



**07 TYPICAL STOOP**  
SCALE: 3/4" = 1'-0"

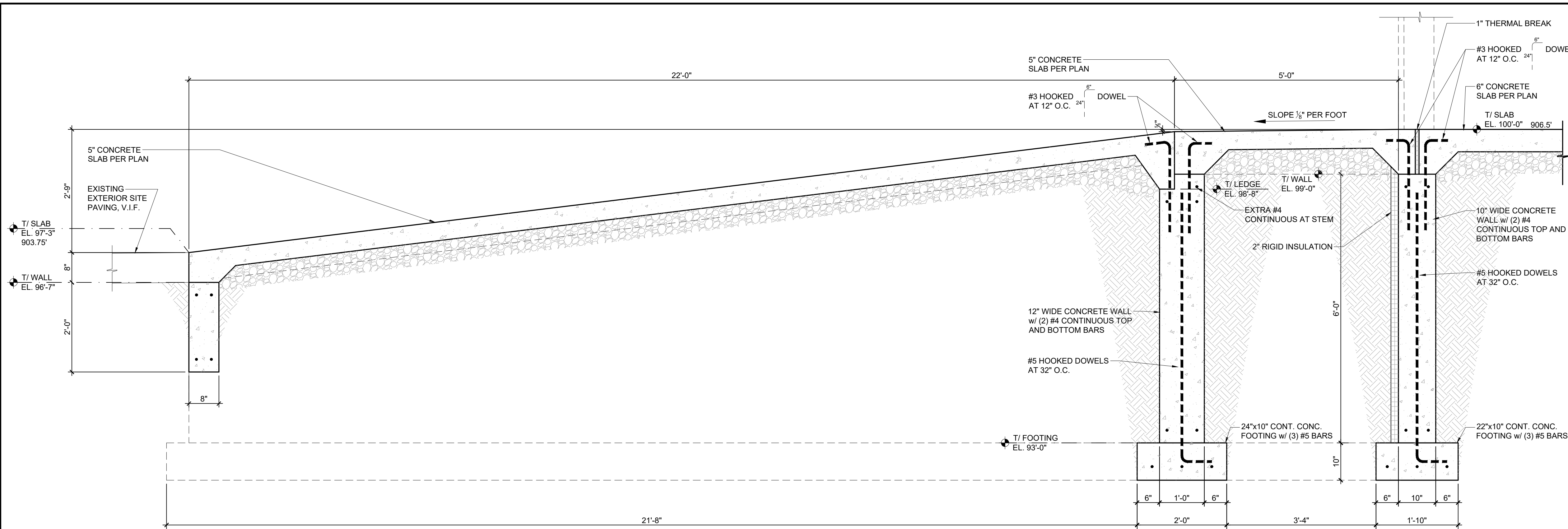


**08 STOOP w/ STEP**  
SCALE: 3/4" = 1'-0"

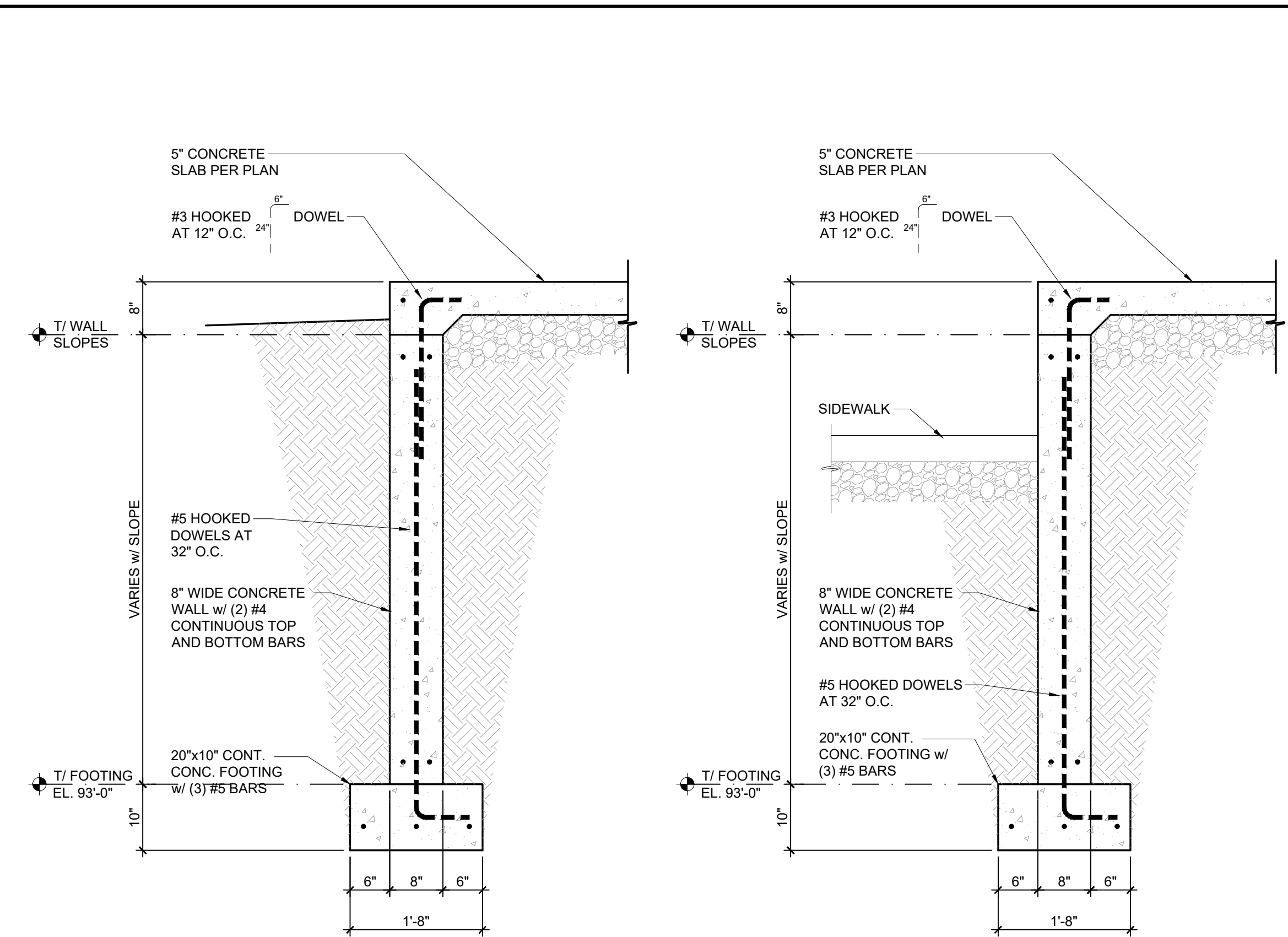


**09 STOOP w/ MULTIPLE STEPS**  
SCALE: 3/4" = 1'-0"

REVISIONS	NUMBER	DESCRIPTION	DATE
1	AS-BUILT	ADDED AIR ROUTE SPRINKLER ROOM	8-6-2024

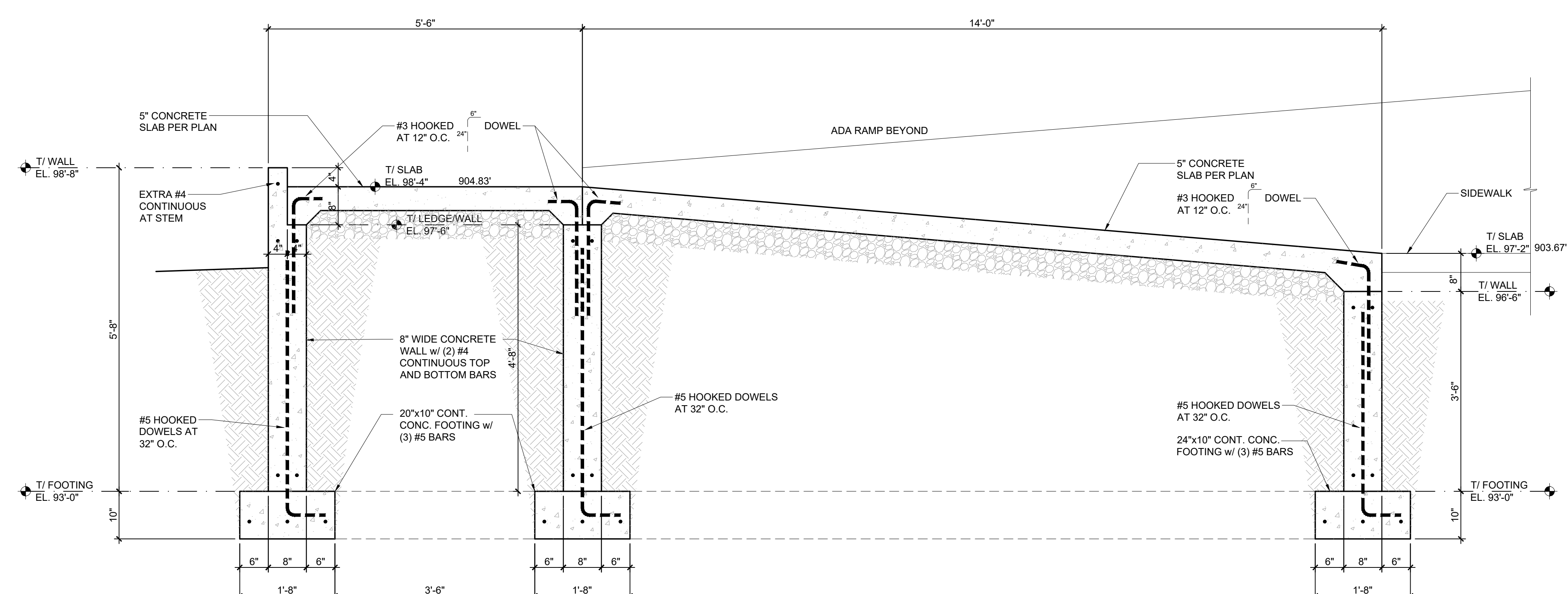


**10 SECTION AT SERVICE RAMP**  
SCALE: 3/4" = 1'-0"

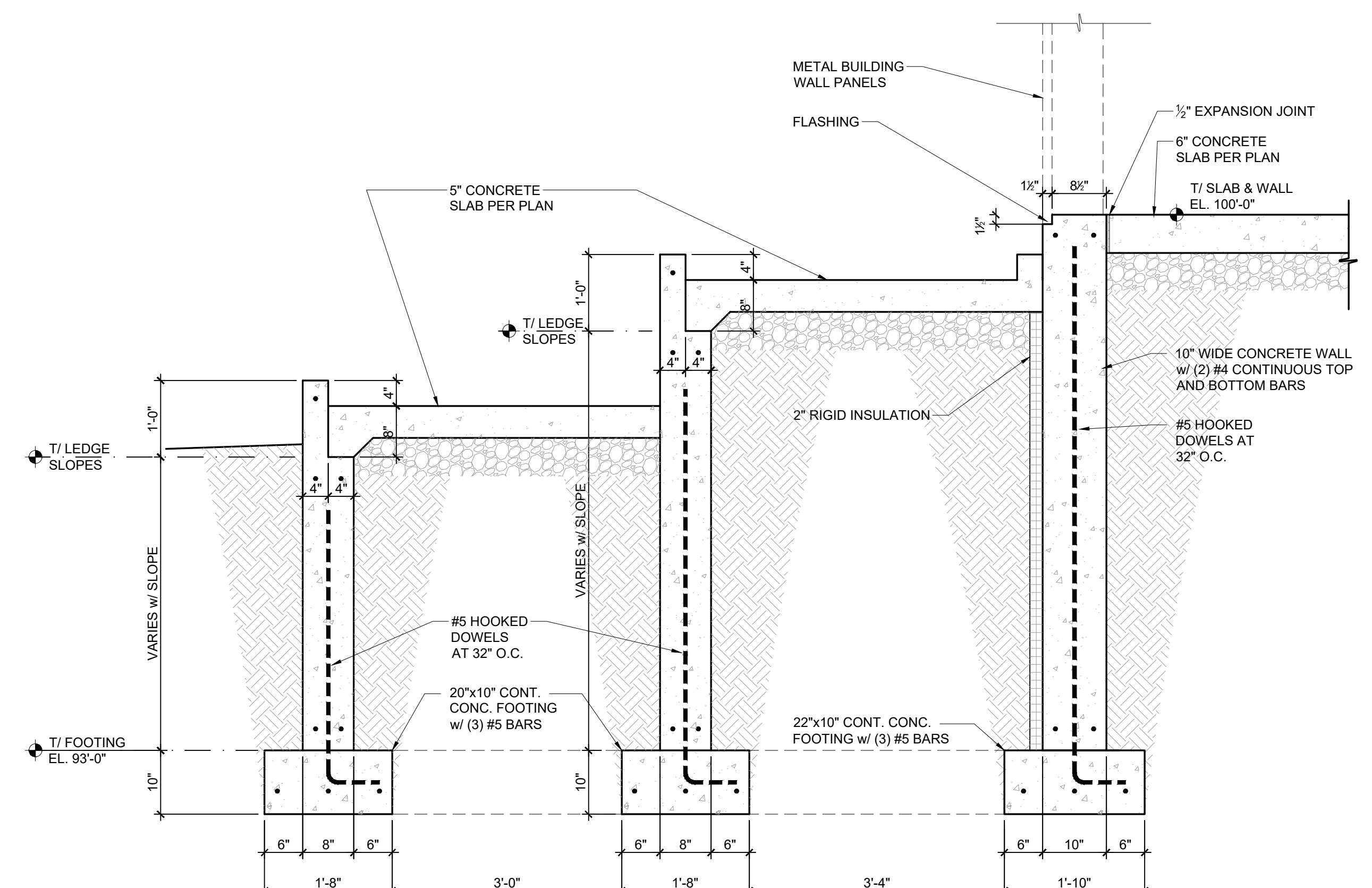


**11 SERVICE RAMP SIDE WALL AT GRADE**  
SCALE: 3/4" = 1'-0"

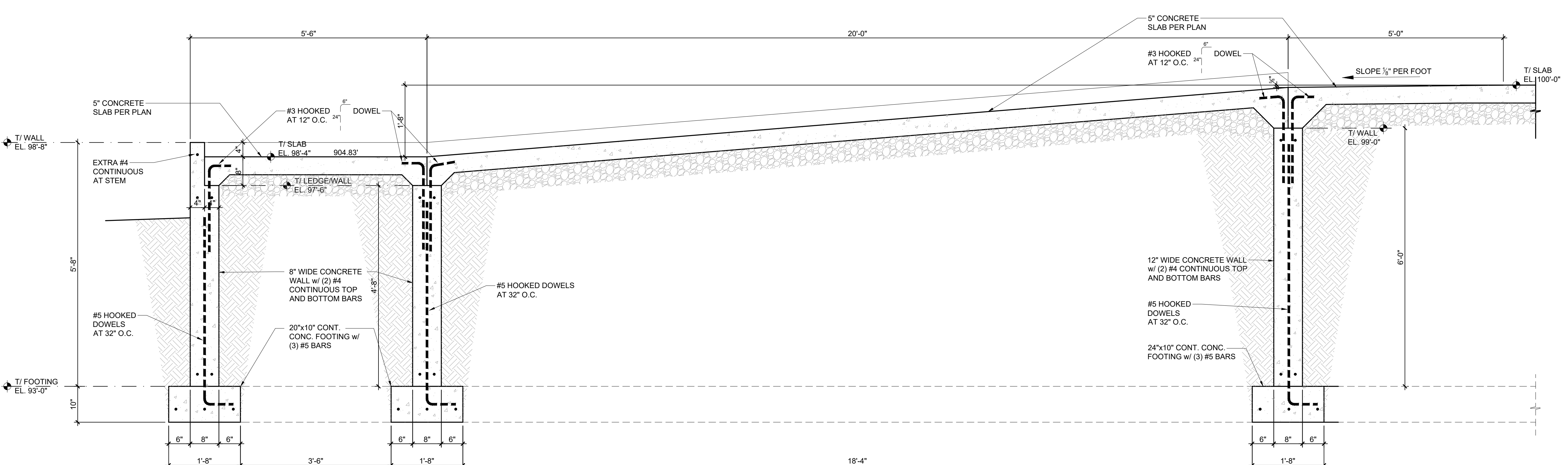
**12 SERVICE RAMP SIDE WALL AT SIDEWALK**  
SCALE: 3/4" = 1'-0"



**13 SECTION AT ADA RAMP**  
SCALE: 3/4" = 1'-0"



**14 SECTION AT ADA RAMP SIDE WALLS**  
SCALE: 3/4" = 1'-0"

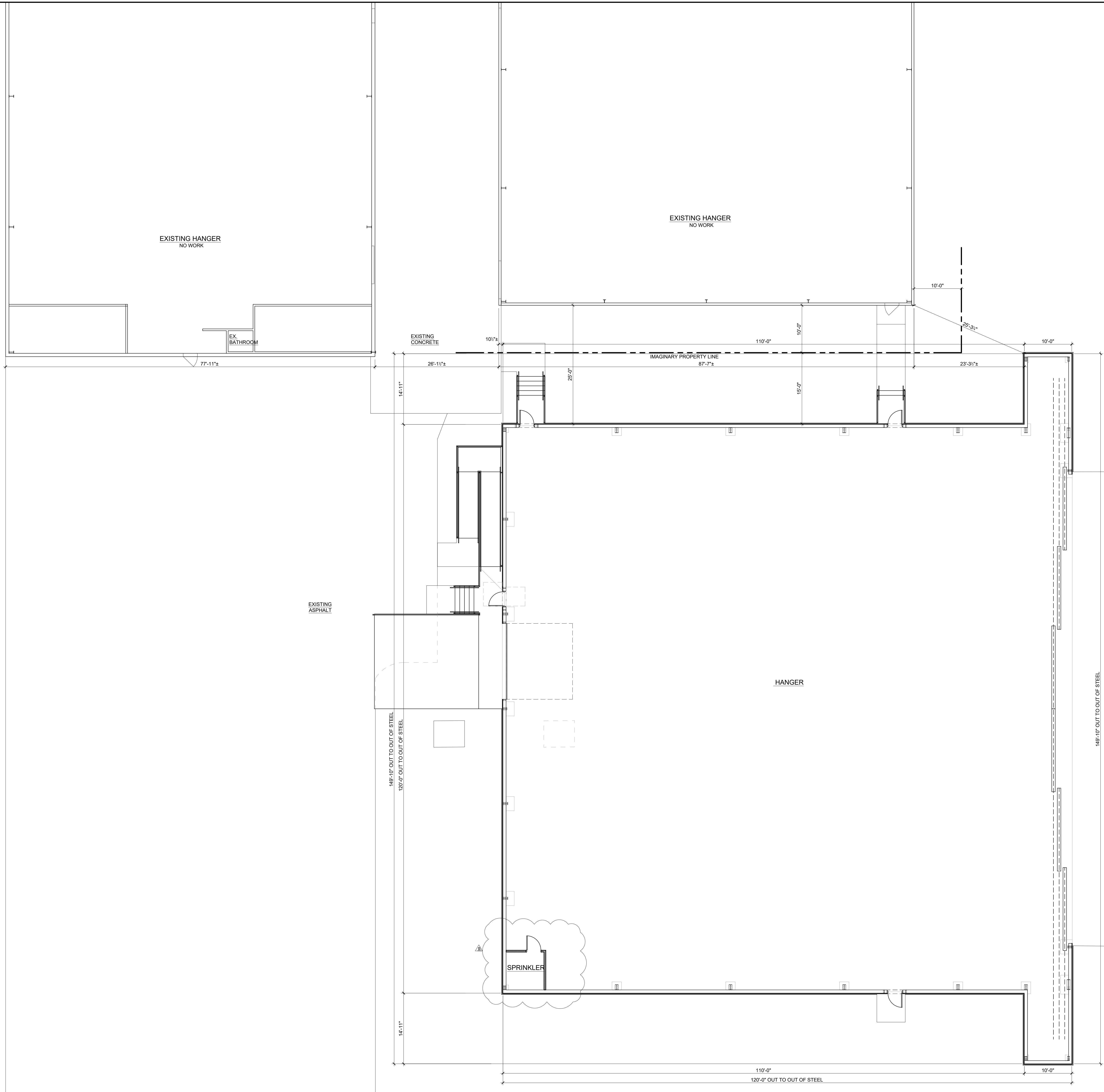


**15 SECTION AT ADA RAMP**  
SCALE: 3/4" = 1'-0"

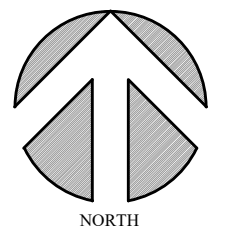
REVISIONS	NUMBER	DESCRIPTION	DATE
1	ADDED ADA ROUTE SPRINKLER ROOM	8-6-2024	

Date: 05-13-2024  
Project: 2023-10.011  
Drawn by: SLR  
Checked by: MAP  
SHEET NUMBER





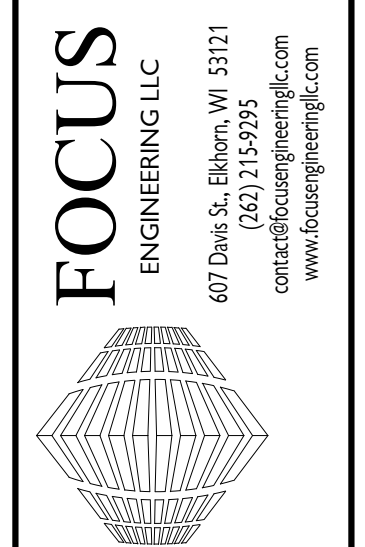
**OVERALL BUILDING PLAN**  
SCALE: 1/8" = 1'-0"



REVISIONS	NUMBER	DESCRIPTION	DATE
1	ADDED ADA RR ROUTE SPRINKLER ROOM	8-8-2024	

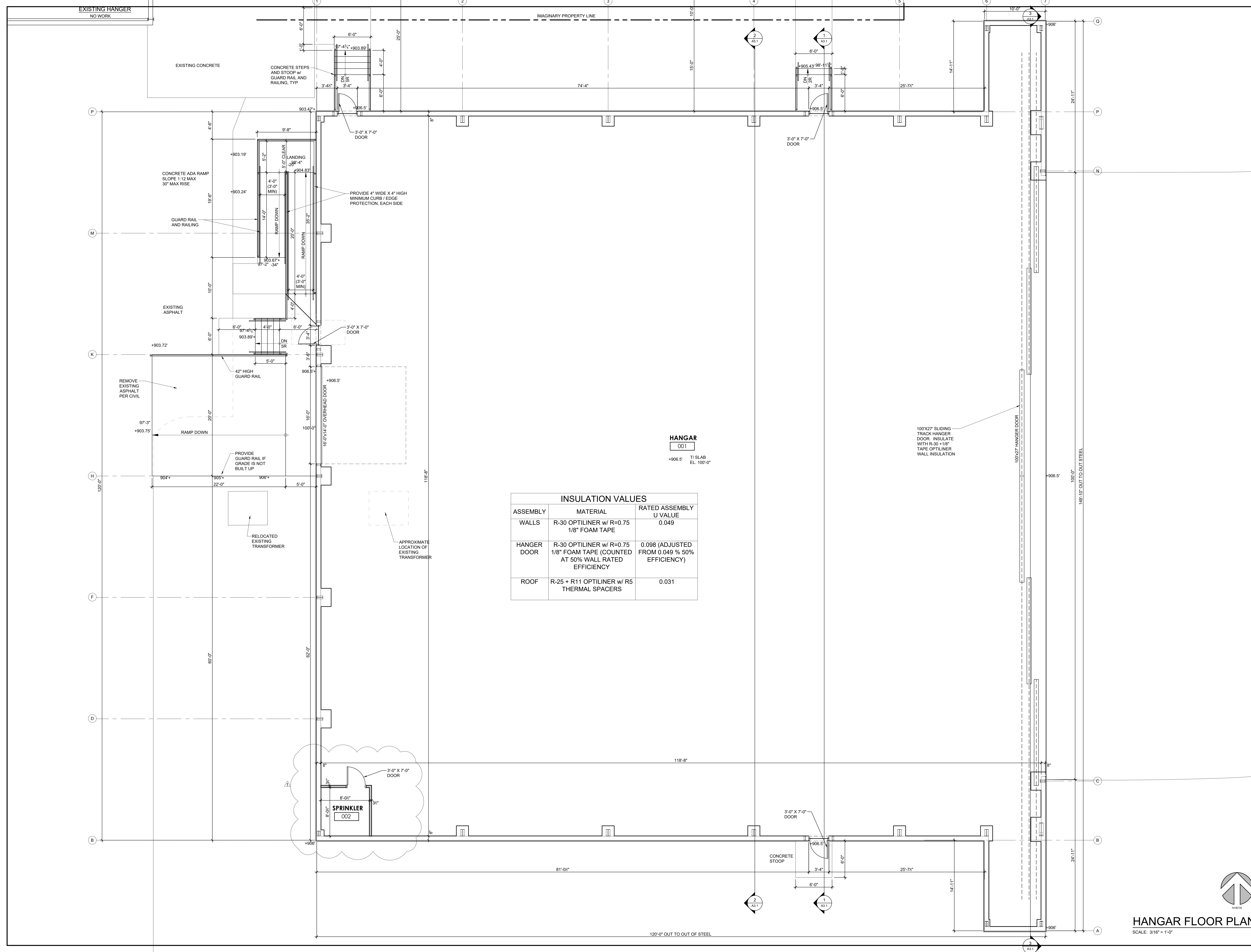
Date: 05-13-2024  
 Project: 2023-10.011  
 Drawn by: SLR  
 Checked by: MAP

SHEET NUMBER  
**A1.0**



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 2451 AVIATION RD., WAUKESHA WI 53188-6900

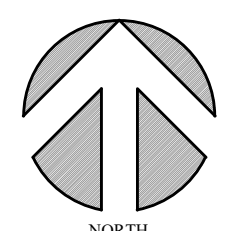


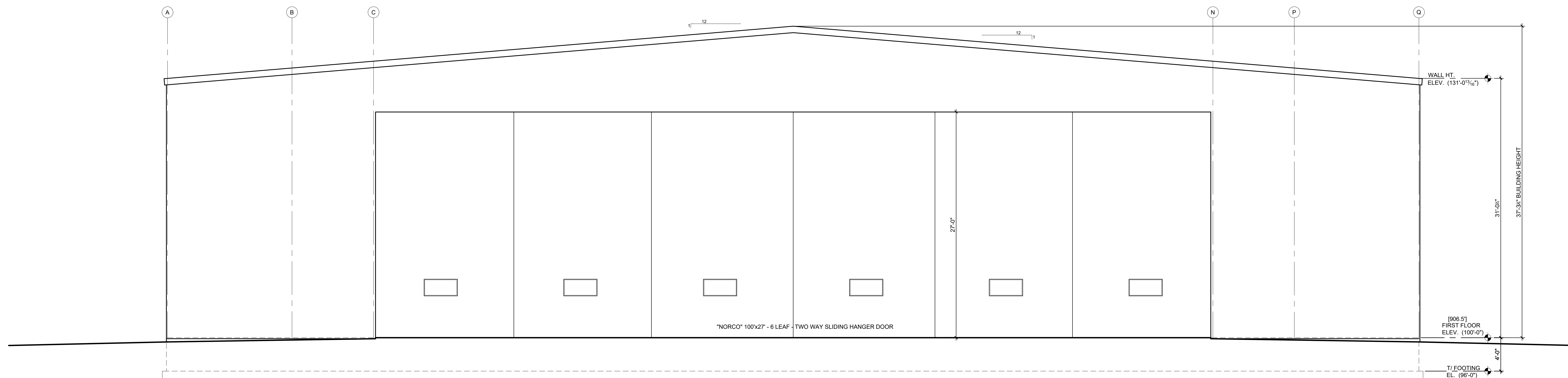
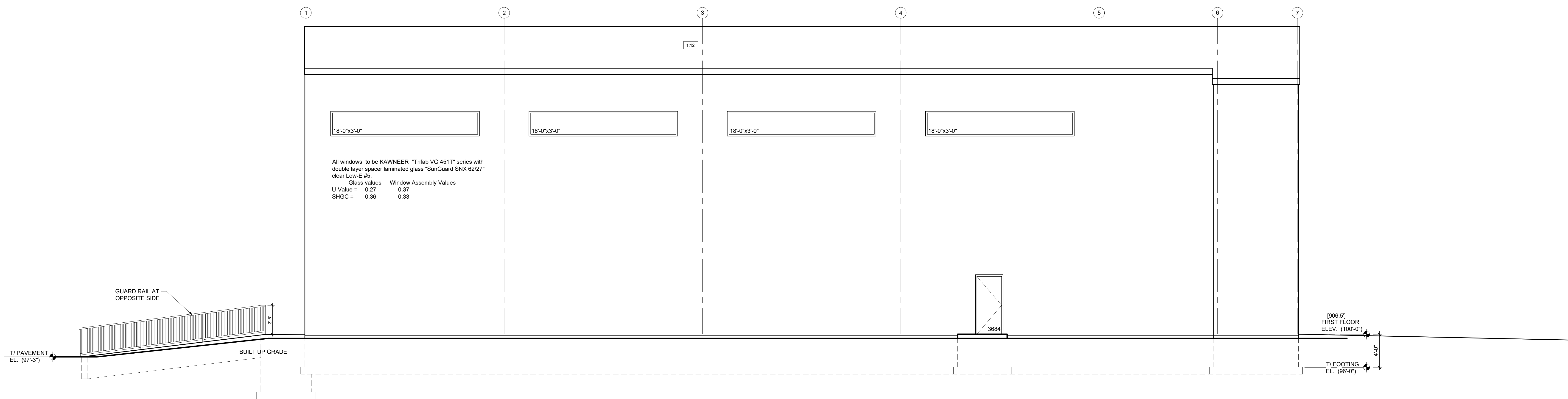
**INSULATION VALUES**

ASSEMBLY	MATERIAL	RATED ASSEMBLY U VALUE
WALLS	R-30 OPTILINER w/ R=0.75 1/8" FOAM TAPE	0.049
HANGER DOOR	R-30 OPTILINER w/ R=0.75 1/8" FOAM TAPE (COUNTED AT 50% WALL RATED EFFICIENCY)	0.098 (ADJUSTED FROM 0.049 % 50% EFFICIENCY)
ROOF	R-25 + R11 OPTILINER w/ R5 THERMAL SPACERS	0.031

**HANGAR**  
001  
+906.5' T/SLAB  
EL. 100'-0"

**HANGAR FLOOR PLAN**  
SCALE: 3/16" = 1'-0"





REVISIONS	
NUMBER	DESCRIPTION
1	ADDED ADA RR ROUTE SPRINKLER ROOM

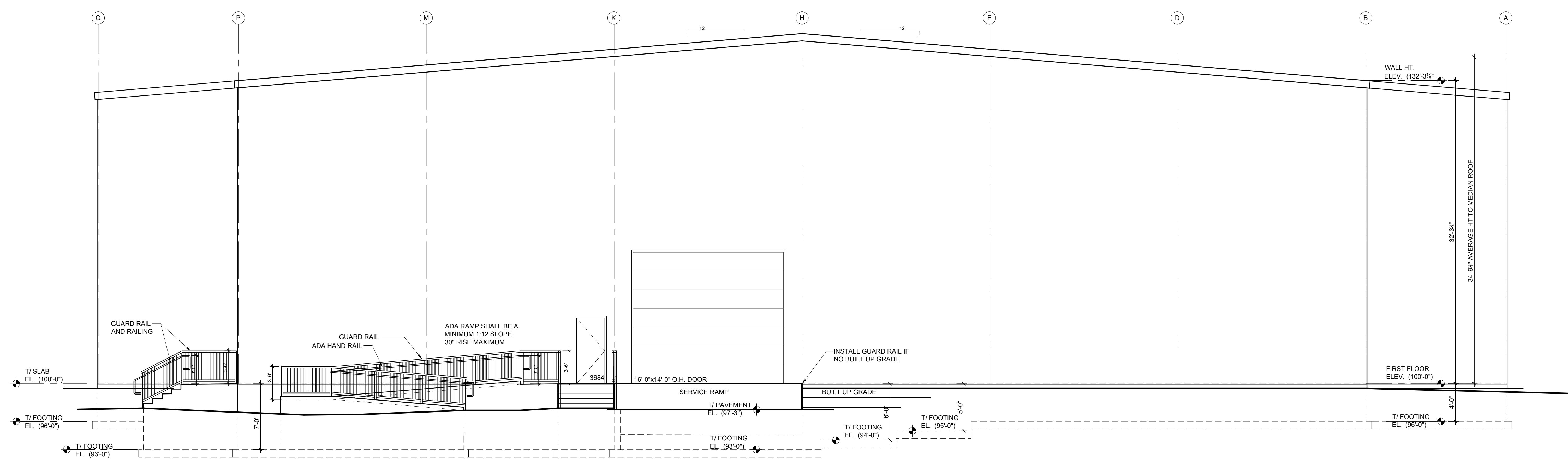
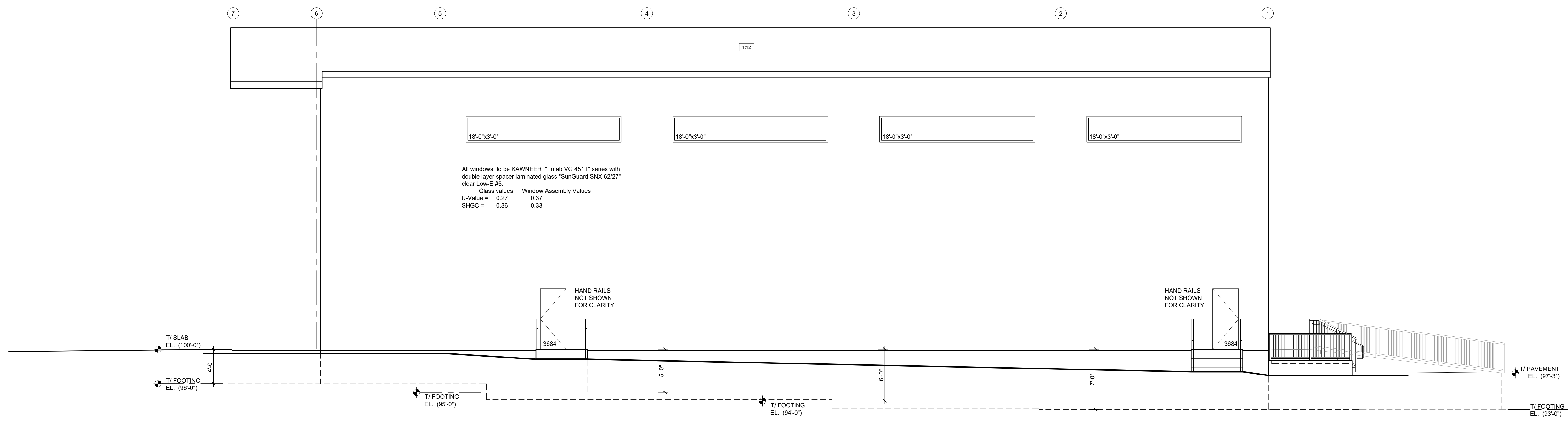
Date: 05-13-2024  
Project: 2023-10.011  
Drawn by: SLR  
Checked by: MAP

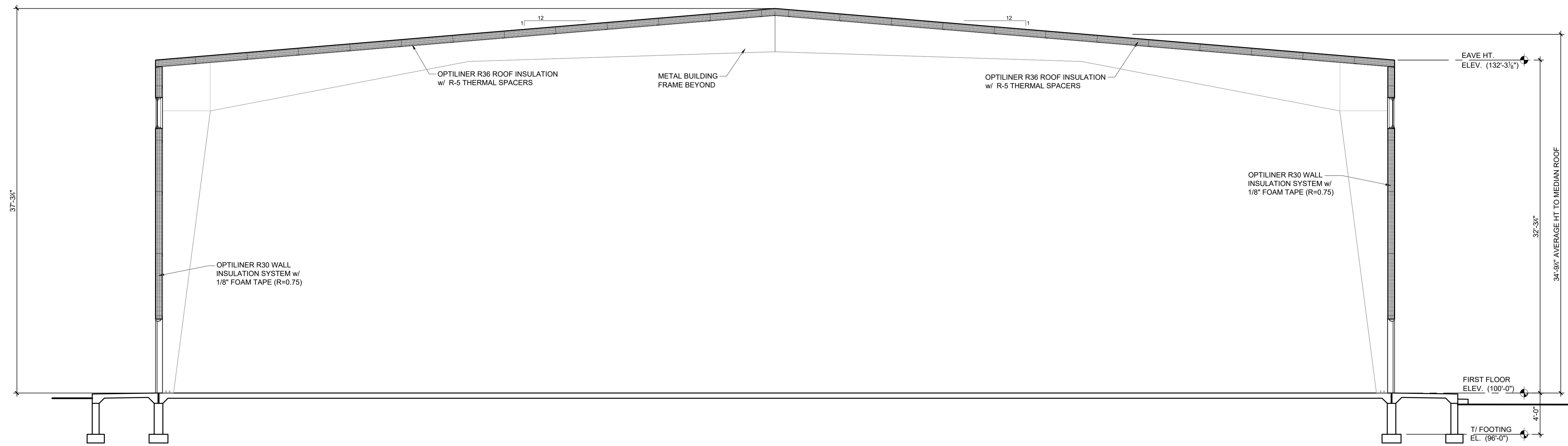
SHEET NUMBER

**A2.1**

REVISIONS	
NUMBER	DESCRIPTION
1	ADDED ADA RAMP ROUTE, SPRINKLER ROOM

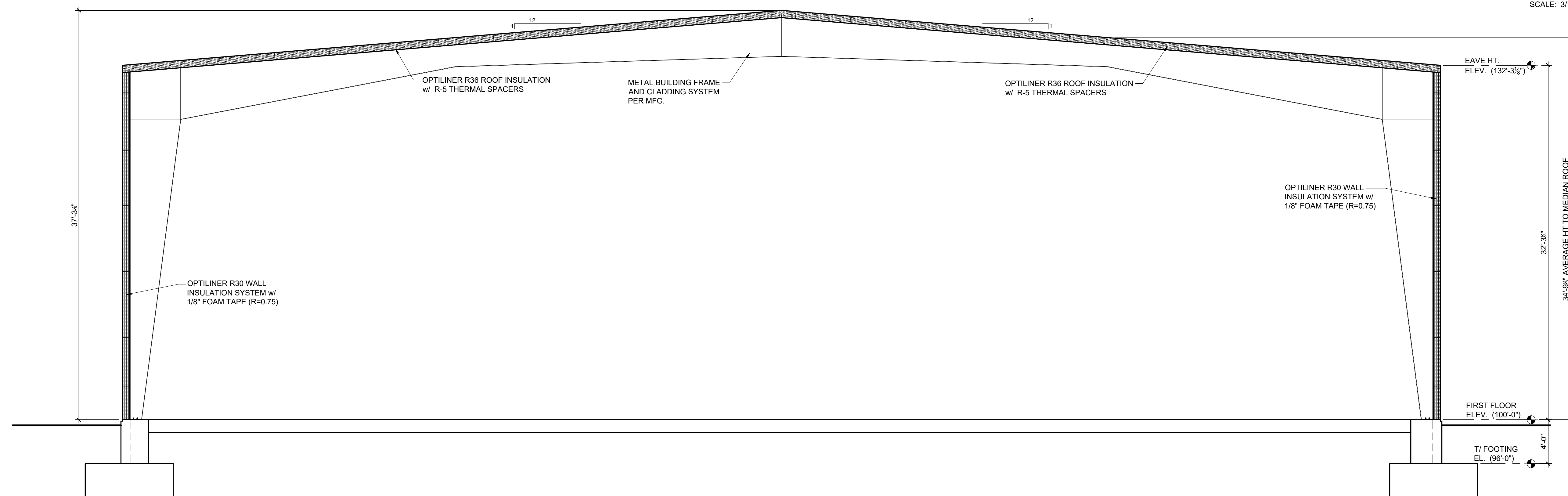
Date: 05-13-2024  
Project: 2023-10.011  
Drawn by: SLR  
Checked by: MAP  
SHEET NUMBER





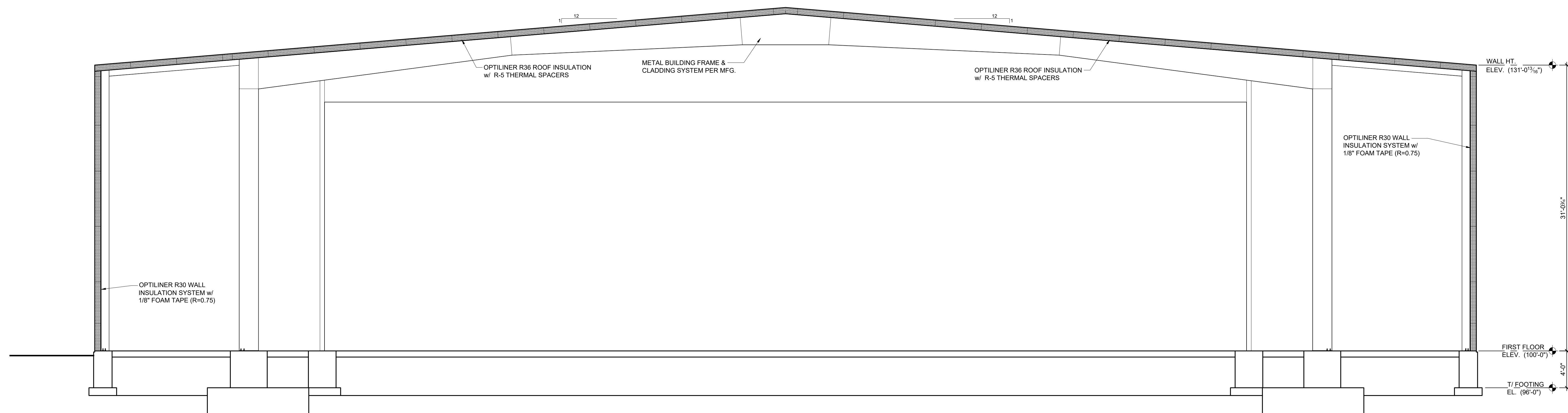
**1 TYPICAL BUILDING SECTION**

SCALE: 3/16" = 1'-0"



**2 BUILDING SECTION AT STEEL FRAME**

SCALE: 3/16" = 1'-0"



**3 BUILDING SECTION AT DOOR POCKET**

SCALE: 3/16" = 1'-0"

REVISIONS	
NUMBER	DESCRIPTION
1	ADDED ADA RR ROUTE SPRINKLER ROOM

Date: 05-13-2024  
Project: 2023-10.011  
Drawn by: SLR  
Checked by: MAP  
SHEET NUMBER