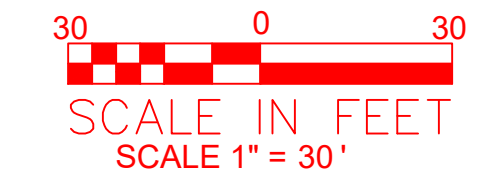


KANE COUNTY ROAD SHED

CONSTRUCTION DOCUMENTS

KANE COUNTY, UTAH



Building on Solid Foundations
 460 E. 300 SOUTH
 KANAB, UTAH 84741
 435-644-2031
 www.ironrockeng.com

PROJECT INFORMATION:
 PROJECT LOCATION: _____ KANE COUNTY, UTAH
 PARCEL NUMBER: _____ G-2-90-ANNEX
 ZONE: _____ MUNICIPALITY
 OWNER & DEVELOPER: _____ WESTERN KANE COUNTY SERVICES DISTRICT
 DESIGN SPECIFICATIONS: _____ KANE COUNTY ZONING ORDINANCE

KANE COUNTY ROAD SHED
COVER SHEET
 KANE COUNTY, UT 84741

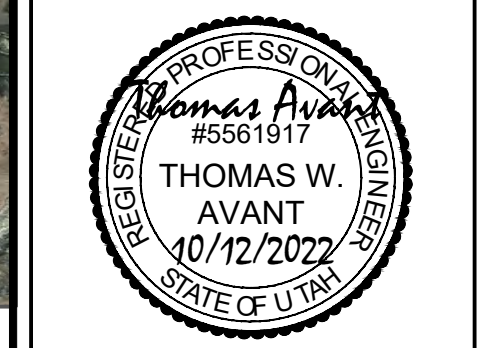
SHEET INDEX:

COVER SHEET	C001
SPECIFICATION SHEET	C002
SITE UTILITY PLAN	C200
GRADING PLAN	C300



VICINITY MAP

REV#	DATE	DESCRIPTION
1	10/12/2022	CLIENT REVISIONS



Know what's below. Call 811 before you dig.

BLUE STAKES OF UTAH
 UTILITY NOTIFICATION CENTER, INC.
 www.bluestakes.org
 1-800-662-4111

DRAWN BY: **RLB**
 SCALE: **1"=30'**
 SHEET: **C001**

GENERAL NOTES:

ALL MATERIALS WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF THE APPROPRIATE GOVERNING AGENCY, THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS, STANDARDS, AND SPECIFICATIONS AS APPROVED BY THE APPROPRIATE GOVERNING AGENCY.

THE CONTRACTOR SHALL OBTAIN, AT HIS OWN EXPENSE, ALL APPLICABLE CODES, LICENSES, STANDARDS, SPECIFICATIONS, PERMITS, BONDS, ETC. WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER OF ANY PROBLEMS IN CONFORMING TO THE APPROVED PLANS FOR ANY ELEMENT OF THE PROPOSED IMPROVEMENTS PRIOR TO ITS CONSTRUCTION.

SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN SECTION 3 OF THE KANE COUNTY STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOILS REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 96% OF MODIFIED PROCTOR MAXIMUM DENSITY PER AASHTO T180, METHOD D FOR A-1 SOILS AND AASHTO T99, METHOD D FOR OTHER SOILS FOR TRAVELED AREAS INCLUDING ROADS, SHOULDERS, PARKING LOTS, AND DRIVEWAYS AND 90% OF OF MODIFIED PROCTOR MAXIMUM DENSITY PER AASHTO T180, METHOD D FOR A-1 SOILS AND AASHTO T99, METHOD D FOR OTHER SOILS FOR NON-TRAVELED AREAS. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% PLUS OR MINUS OF OPTIMUM. PLACE BACKFILL AND EMBANKMENT MATERIALS IN LAYERS NOT EXCEEDING 12 INCHES NON-COMPACTIVE DEPTH. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED REGISTERED SOILS ENGINEER, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED, HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS & SPECS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT.

BACKFILL MATERIAL FOR UTILITY TRENCHES SHALL BE MATERIAL FREE OF RUBBISH, DEBRIS, ORGANIC MATERIAL, FROZEN MATERIAL, ROCKS EXCEEDING 12 INCHES, OR OTHER OBJECTIONABLE MATERIAL. BACKFILL FOR ELECTRICAL TRENCHES SHALL NOT INCLUDE ANY ROCKS EXCEEDING 3 INCHES IN SIZE. BROKEN PORTLAND CEMENT CONCRETE OR ASPHALT. PIPE BEDDING SHALL BE NATIVE OR IMPORTED SOIL, SAND, GRAVEL, CRUSHED ROCK OR OTHER MATERIAL NOT EXCEEDING 3/4 INCH MAXIMUM PARTICLE SIZE. FLOWABLE FILL CAN BE USED AS BEDDING. DO NOT PLACE ROCKS LARGER THAN 2.5 INCHES IN BACKFILL PLACED WITHIN 12 INCHES OF PAVEMENT SUBGRADE. BACKFILL TRENCHES AS SOON AS POSSIBLE. NO MORE THAN 500 LINEAR FEET OF OPEN TRENCH IS PERMITTED.

ANY CONSTRUCTION DEBRIS OR MUD DROPPED INTO MANHOLES, INLETS, PIPES OR TRACKED ONTO EXISTING ROADWAYS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY EXCAVATIONS OR PAVEMENT FAILURES CAUSED BY HIS CONSTRUCTION. THE CONTRACTOR SHALL PROPERLY BARRICADE THE CONSTRUCTION SITE UNTIL CONSTRUCTION IS COMPLETE

THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS SIGNS, BARRICADES, FLAGMEN, OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

ALL ROADWAY AREAS WILL HAVE STERILIZATION OF THE SOIL TO EPA STANDARDS AND USU EXTENSION RECOMMENDED PRODUCTS PRIOR TO PLACEMENT OF UBC ROAD BASE OR ASPHALT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE APPROPRIATE FIRE DEPARTMENT OF ALL STREET CLOSINGS AND EXISTING FIRE HYDRANTS TAKEN OUT OF SERVICE AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

THE CONTRACTOR SHALL NOTIFY ALL PUBLIC UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. ALL WORK PERFORMED IN THE AREA OF PUBLIC UTILITIES SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THESE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY EXISTING UTILITY (INCLUDING DEPTH) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL PROTECT, AT HIS OWN EXPENSE, ALL EXISTING UTILITIES AND BE RESPONSIBLE FOR THEIR REPAIR IF THEY ARE DAMAGED DURING CONSTRUCTION.

EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN.

IN COMPLIANCE WITH THE PROVISIONS OF THE FEDERAL WATER POLLUTION CONTROL ACT, THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION ACTIVITY STORMWATER DISCHARGE PERMIT THROUGH THE UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY, PRIOR TO CONSTRUCTION IN ACCORDANCE WITH THE UTAH STORMWATER GENERAL PERMIT UTR300000. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND REPORT. THE CONTRACTOR IS TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT.

THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM WATER AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER SHALL BE PROMPTLY DEWATERED AND RESTORED AT THE CONTRACTORS EXPENSE.

WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. WATER WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE WORK.

CONSTRUCTION SHALL BE CONDUCTED SUCH THAT ACCESS TO ALL DRIVEWAYS IS MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.

1. ALL CONSTRUCTION SHALL CONFORM TO THE "KANE COUNTY STANDARD SPECIFICATIONS AND DRAWING DETAILS FOR DESIGN AND CONSTRUCTION", "THE INTERNATIONAL PLUMBING CODE".

FOR FILL AREAS, SURFACE GRADES SHALL BE WITHIN ONE FOOT OF FINISHED GRADE AND VERIFICATION OF COMPACTION OBTAINED AND SUBMITTED TO THE APPROPRIATE GOVERNING AGENCY FOR THEIR REVIEW PRIOR TO PIPELINE INSTALLATION.

NO WORK SHALL BE BACKFILLED (INCLUDING BEDDING MATERIAL ABOVE THE SPRING LINE OF THE PIPE) UNTIL THE CONSTRUCTION HAS BEEN INSPECTED AND APPROVED FOR BACKFILLING BY THE APPROPRIATE GOVERNING AGENCY OR THE CONTRACTING OFFICER.

ALL BACKFILL MATERIAL SHALL BE COMPACTED IN ACCORDANCE WITH THE SOILS REPORT AND THE APPROPRIATE GOVERNING AGENCY. COMPACTION TESTS SHALL BE SUBMITTED TO THE APPROPRIATE GOVERNING AGENCY OR THE CONTRACTING OFFICER PRIOR TO THE FINAL ACCEPTANCE.

ALL SITE CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. ANY CONCRETE THAT HAS THE POSSIBILITY OF BEING SUBJECTED TO VEHICULAR LOADS, SUCH AS DRIVE APRONS OR SIDEWALKS IN FIRE LANES, SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4200 PSI.

ALL RIM ELEVATIONS OF MANHOLES, CLEANOUTS, VALVES, METERS, ETC. SHALL BE ADJUSTED TO FINISHED GRADE, UNLESS SPECIFICALLY DIRECTED OTHERWISE.

THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF THE GAS, SEWER, WATER AND STORM SEWER LINES FOR UP TO ONE (1) YEAR FROM THE DATE OF ACCEPTANCE OF THE LINES BY THE APPROPRIATE GOVERNING AGENCY OR BY THE FEDERAL GOVERNMENT. ANY MALFUNCTION DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE APPROPRIATE GOVERNING AGENCY AND OWNER AT NO EXPENSE TO THE AGENCY OR OWNER.

TEMPORARY FLOOD AND SEDIMENT CONTROL FACILITIES SHALL BE CONSTRUCTED OR PUT IN PLACE PRIOR TO THE COMMENCEMENT OF ANY GRADING OPERATIONS. THE CONTRACTOR WILL BE HELD LIABLE FOR ANY FLOOD DAMAGE DOWNSTREAM DUE TO RUNOFF FROM THE CONSTRUCTION SITE DURING CONSTRUCTION.

WATER NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO THE "KANE COUNTY STANDARD SPECIFICATIONS AND DRAWING DETAILS FOR DESIGN AND CONSTRUCTION", "THE INTERNATIONAL PLUMBING CODE".

2. CONTRACTOR SHALL POTHOLE ALL PIPELINES TO VERIFY DEPTH PRIOR TO PROCEEDING WITH ANY BUILDING OR PIPELINE CONSTRUCTION.

3. 12 GAUGE WIRE SHALL BE TAPED TO ALL WATER LINES FOR LOCATING PURPOSES. THE WIRE SHALL ALSO BE BROUGHT UP AT EACH VALVE BOX AND HYDRANT.

4. THRUST RESTRAINT ON THE NEW PIPELINE SHALL BE BELL AND SPIGOT JOINT RESTRAINT HARNESS OR CLAMP RATED AT PRESSURE CLASS OF PIPE OR GREATER. USE MEGA-LUG OR APPROVED EQUAL ON THE FITTINGS AND FIELD LOCK GASKETS ON THE REQUIRED LENGTH OF RESTRAINED PIPE.

5. ASPHALT REPLACED OVER THE PIPE TRENCHING IS TO MATCH EXISTING PAVEMENT DEPTHS WITH A 6" OVER CUT FROM THE EDGE OF THE TRENCH LINE ON EACH SIDE OF THE TRENCH. SEE DETAIL 4, SHEET C400.

7. ANY CHANGES MADE IN THE FIELD MUST BE FIRST APPROVED AND DOCUMENTED BY THE ENGINEER.

9. ALL WATER LINES TO BE 8" C-900 PIPE WITH BELL AND SPIGOT JOINTS WITH ELASTOMERIC GASKETS AND BEAR NSF LABEL. ALL FITTINGS SHALL BE CAST IRON OR DUCTILE IRON. ALL WATER LINES SHALL BE INSTALLED AND TESTED AS PER KANE COUNTY STANDARD SPECIFICATIONS.

10. ALL SERVICE LINE SHALL BE HDPE PIPE, 200 PSI, IRON PIPE SIZE WITH STAINLESS STEEL INSERT STIFFENERS AND MAINTAIN 5 FEET MINIMUM COVER TO TOP OF PIPE. TAP SADDLE, CORPORATION STOP, AND SERVICE METER PER KANE COUNTY STANDARD SPECIFICATIONS. INSTALL METER ON PUBLIC SIDE OF PROPERTY LINE AND WITHIN 2 FEET OF PROPERTY LINE.

11. ALL FIRE HYDRANTS SHALL BE AWWA C502, DRY BARREL TYPE WITH PRIMER AND TWO COATS OF RED ENAMEL WITH A MIN 6 FOOT BURY. HYDRANTS SHALL HAVE A 6" C-900 PIPE AND SHUT-OFF VALVE BETWEEN WATER SUPPLY AND HYDRANT AND INSTALLED AS PER KANE COUNTY STANDARD SPECIFICATIONS.

12. ALL WATER MAIN LINES TO BE INSTALLED A MINIMUM OF 10' HORIZONTALLY FROM ANY SEWER MAIN LINE AND 18" VERTICALLY ABOVE TOP OF SEWER MAIN LINE OR STORM DRAIN LINE AT ANY CROSSING. WHEN THE WATER MAIN CANNOT BE AS HIGH AS 18 INCHES ABOVE THE SEWER, THE SEWER SHALL BE CONSTRUCTED OF MATERIAL WITH PRESSURE CONDUIT STANDARDS FOR A DISTANCE OF 20 FEET ON EITHER SIDE OF THE CROSSING. ALL POTABLE AND FIRE WATER LINE TO MAINTAIN A MINIMUM DEPTH OF 60" BELOW FINISHED GRADE TO TOP OF PIPE.

13. ALL TEES, BENDS PLUGS AND HYDRANTS SHALL BE PROVIDED WITH REACTION BLOCKING, TIE RODS OR JOINTS DESIGNED TO PREVENT MOVEMENT.

14. ALL VALVES SHALL BE AWWA C509 IRON BODY GATE VALVES WITH BRONZE TRIM, NON-RISING STEM WITH A 2" SQUARE OPERATING NUT, SINGLE WEDGE, RESILIENT SEAT, MECHANICAL JOINT ENDS. RATED FOR 200 POUNDS PER SQUARE INCH WORKING PRESSURE. VALVE BOX AND COVER SHALL BE CAST IRON EXTENSION SLEEVE TYPE WITH "WATER" CAST ON COVER WITH A CLASS AA(AE) REINFORCED CONCRETE.

WATER PIPE TESTING:

1. TEST WATER MAINS AT LESSER OF 200 PSI OR PRESSURE RATING OF PIPE. TEST SHALL BE WITNESSED BY A REPRESENTATIVE OF THE KANE COUNTY ENGINEER, OR KANE COUNTY WATER CONSERVANCY DISTRICT, AS APPLICABLE.

- A. FILL PIPE WITH WATER AND PLACE UNDER SLIGHT PRESSURE FOR AT LEAST 48 HOURS.
- B. BRING PIPE PRESSURE TO TEST PRESSURE AND MAINTAIN FOR 4 HOURS MIN.
- C. PROVIDE ACCURATE MEANS FOR MEASURING QUANTITY OF WATER NEEDED TO MAINTAIN TEST PRESSURE ON PIPE FOR TEST PERIOD.
- D. IF VOLUME OF WATER ADDED TO PIPE IS 10 GALLONS PER INCH OF PIPE DIAMETER PER MILE OF PIPE PER 24 HOURS OR LESS, PIPE PASSES TEST.
- E. IF PIPE DOES NOT PASS TEST, FIND SOURCE OF LEAKAGE, REPAIR OR REPLACE, AND RETEST. REPEAT UNTIL PIPE PASSES TEST.

2. BACTERIOLOGICAL TEST: AFTER FLUSHING CHLORINATED WATER FROM WATER LINES, TAKE SAMPLE FOR BACTERIOLOGICAL TEST. IF NECESSARY, RE-CHLORINATE UNTIL SATISFACTORY BACTERIOLOGICAL TEST IS OBTAINED. DO NOT PUT PIPING INTO SERVICE UNTIL TEST RESULTS ARE SATISFACTORY. THE FOLLOWING TEST PROTOCOL IS LISTED IN ANSI/AWWA STANDARD C651.

- A. COLLECT TWO SAMPLES FROM EACH SAMPLE LOCATION TAKEN AT LEAST 24 HRS. APART.
- B. COLLECT A SAMPLE FROM AT LEAST EVERY 1,200 FT OF NEW MAIN.
- C. COLLECT A SAMPLE FROM THE END OF THE LINE AND AT LEAST ONE FROM EACH BRANCH
- D. TEST SAMPLES FOR TOTAL COLIFORM BACTERIA IN ACCORDANCE WITH STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER. ADDITIONAL TESTS MAY BE REQUIRED INCLUDING: CHLORINE RESIDUAL, TURBIDITY, pH, AND HETEROTROPHOC PLAT COUNT (HPC).
- E. SPECIAL CONDITION. COLLECT ADDITIONAL SAMPLES AT INTERVALS OF APPROXIMATELY 200 FT IF TRENCH WATER HAS ENTERED THE NEW MAIN DURING CONSTRUCTION OR IF EXCESSIVE QUANTITIES OF DIRT OR DEBRIS HAVE ENTERED THE NEW MAIN. TAKE SAMPLES OF WATER THAT HAS STOOD IN THE NEW MAIN FOR AT LEAST 16 HOURS AFTER FINAL FLUSHING.
- F. COLLECT SAMPLES IN STERILE BOTTLES TREATED WITH SODIUM THIOSULFATE AS REQUIRED BY STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER DO NOT USE HOSE OR FIRE HYDRANTS FOR THE COLLECTION OF SAMPLES. ENSURE THAT THERE IS NO WATER IN THE TRENCH UP TO THE CONNECTION FOR SAMPLING. USE CLEAN AND DISINFECTED SAMPLING PIPE THAT HAS BEEN FLUSHED PRIOR TO SAMPLING. A CORPORATION COCK MAY BE INSTALLED IN THE MAIN WITH A COPPER TUBE GOOSENECK ASSEMBLY. THIS ASSEMBLY CAN BE REMOVED AFTER SAMPLING AND USED AGAIN.
- G. IF THE HPC TEST RESULTS ARE GREATER THAN 500 COLONY-FORMING UNITS(CFU) PER mL, FLUSH AND COLLECT A REPEAT SAMPLE UNTIL NO COLIFORMS ARE PRESENT AND HPC IS BELOW 500 CFU/mL.
- H. COLIFORM BACTERIA MUST BE ABSENT FROM THE SAMPLES AND THE BACTERIOLOGICAL QUALITY OF THE WATER EQUAL TO OR BETTER THAN THAT OF THE DISTRIBUTION SYSTEM.
- I. IF UNSATISFACTORY TEST RESULTS ARE OBTAINED, FLUSH THE MAIN AGAIN AND RESAMPLE. IF CHECK SAMPLES ALSO FAIL TO PRODUCE ACCEPTABLE RESULTS, RECHLORINATE THE MAIN BY THE CONTINUOUS-FEED OR SLUG METHOD UNTIL TWO CONSECUTIVE SETS OF ACCEPTABLE TESTS ARE TAKEN AT LEAST 24 HR APART. IN SOME CASES, IT MAY BE NECESSARY TO PIG OR PRESSURE WASH THE PIPE PRIOR TO RECHLORINATEING THE MAIN. IT IS ADVISABLE TO CHECK THE QUALITY OF THE WATER ENTERING THE NEW MAIN BECAUSE HIGH VELOCITIES USED FOR FLUSHING MAY HAVE DISTURBED SEDIMENT IN THE SUPPLY PIPING AND RESULTED IN POOR QUALITY FEED WATER.

WATER PIPE DISINFECTION

1. AFTER COMPLETING PRESSURE TESTING, FLUSH PIPE TO REMOVE DIRT OR OTHER FOREIGN OBJECTS.

2. ADD LIQUID CHLORINE OR LIQUID CALCIUM HYPOCHLORITE TO PIPE TO OBTAIN 50 PPM CONCENTRATION OF CHLORINE. MAINTAIN 25 PPM CHLORINE RESIDUAL AT THE END OF 24 HOURS. DISINFECTION PROCEDURES SHALL COMPLY WITH UTAH STATE RULES FOR PUBLIC DRINKING WATER SYSTEMS, PART 11 AND AWWA C651.

3. FLUSH CHLORINATED WATER FROM PIPE. DISPOSE OF DISCHARGED CHLORINATED WATER IN ACCEPTABLE MANNER AND IN CONFORMANCE WITH RULES OF UTAH WATER QUALITY BOARD (SEE R317 OF ADMINISTRATIVE CODE), AND/OR AWWA STANDARDS.

DRAINAGE NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO THE "KANE COUNTY STANDARD SPECIFICATIONS AND DRAWING DETAILS FOR DESIGN AND CONSTRUCTION".

2. ALL DRAINAGE PIPE SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE PIPE WITH SMOOTH LINING, GASKETED SPIGOT AND BELL ENDS AND SHALL CONFORM TO AASHTO M294 AND ASTM D3350.

3. VERIFY LOCATION AND ELEVATION OF ALL IMPROVEMENTS PRIOR TO PLACING DRAINAGE STRUCTURES.

4. INSTALL PIPE AND FITTINGS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. INSTALL PIPE STARTING AT DOWNSTREAM END. SECURE JOINTS WATER TIGHT.

LEGEND

IRON ROCK GROUP
Building on Solid Foundations
460 E. 300 SOUTH
KANAB, UTAH 84741
435-644-2031
www.ironrockeng.com

KANE COUNTY ROAD SHED SPECIFICATIONS SHEET

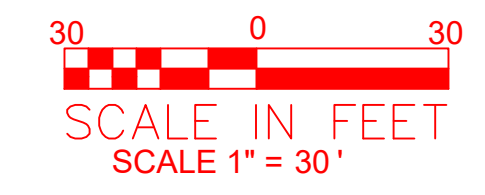
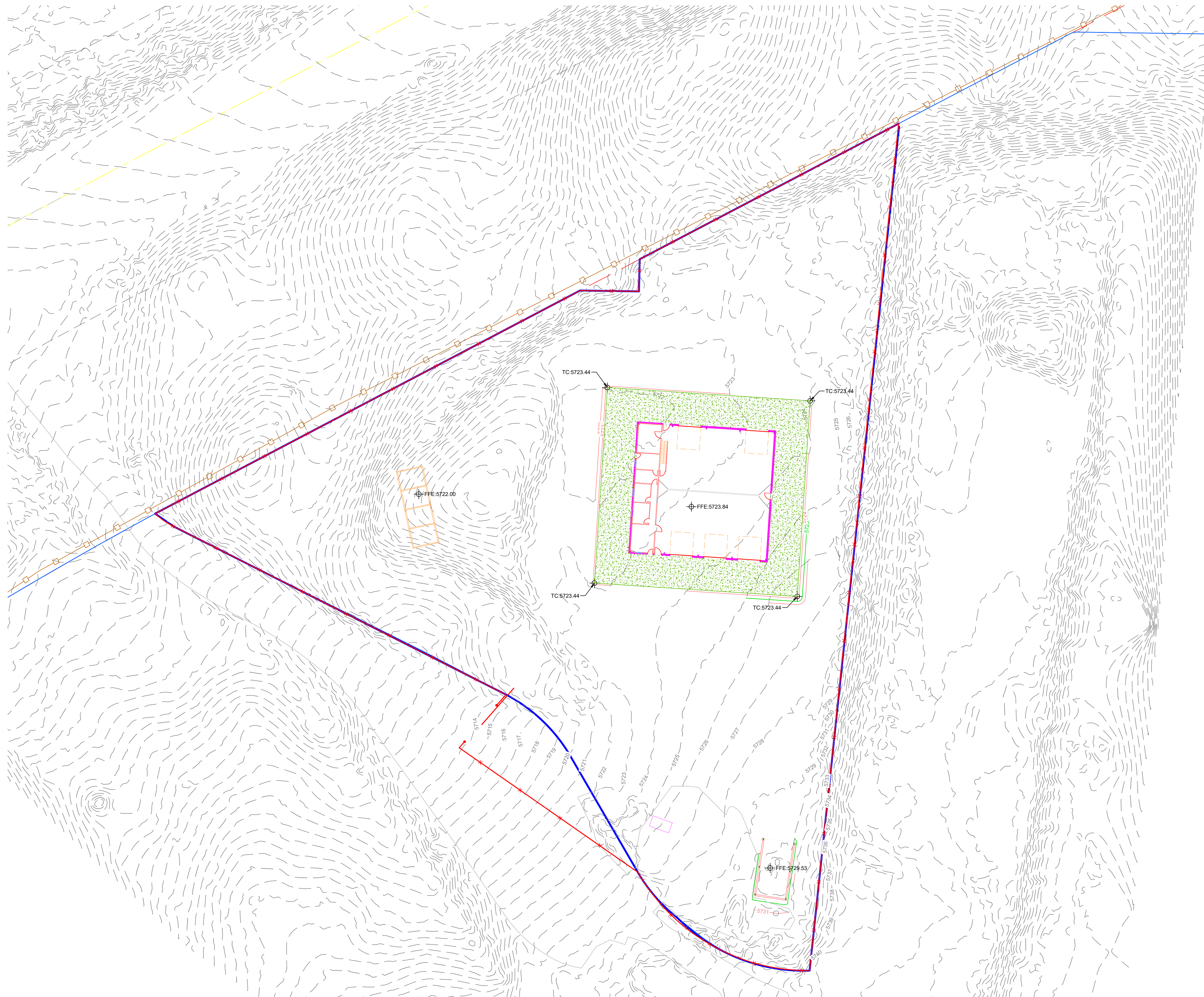
INITIAL SUBMITTAL:	10/12/2022
DATE:	10/12/2022
DESCRIPTION:	CLIENT REVISIONS
REV#:	1

DRAWN BY: **RLB**

SCALE: **NA**

SHEET: **C002**

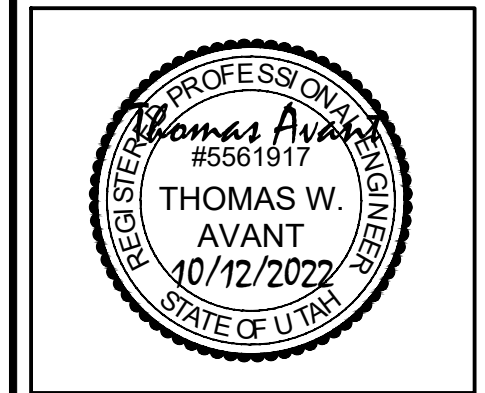
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 KANAB, UTAH 84741
 435-644-2031
 www.ironrockeng.com

KANE COUNTY ROAD SHED
GRADING SHEET
 KANE COUNTY, UT 84741

INITIAL SUBMITTAL:	10/12/2022
DATE:	10/12/2022
DESCRIPTION:	CLIENT REVISIONS
REV#:	



DRAWN BY: **RLB**
 SCALE: **1"=30'**
 SHEET: **C300**

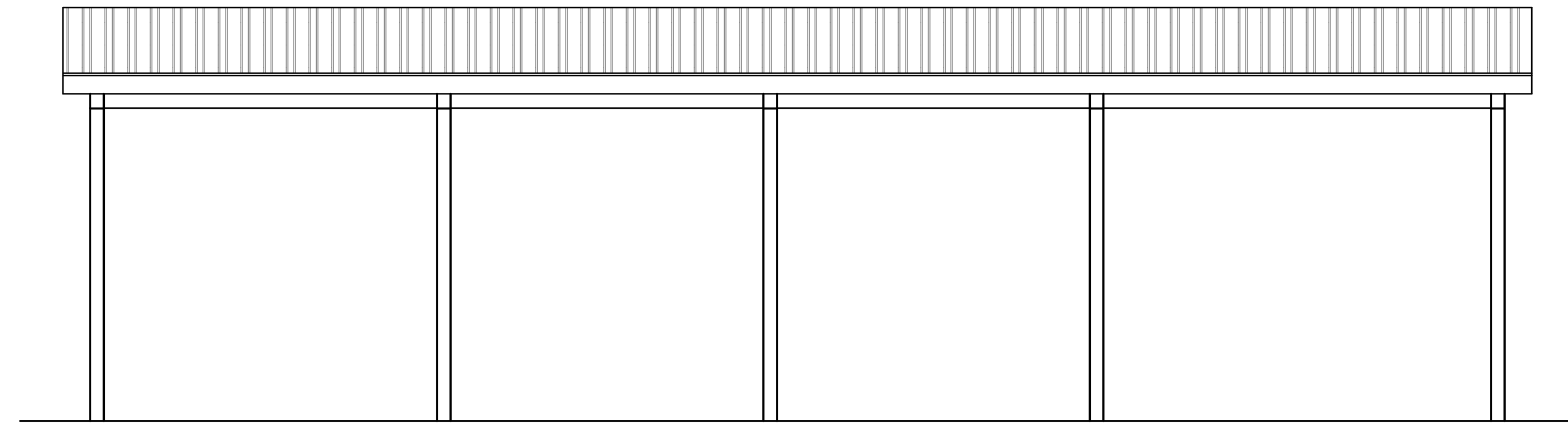
NOTE:
 EARTHWORK VOLUMES SHOWN REFLECT FINISHED GRADE CUT AND FILL. ADDITIONAL EXCAVATIONS FOR BUILDINGS, PAVING, OVER-EX, ETC. ARE NOT INCLUDED.

NAME	CUT FACTOR	FILL FACTOR	2D AREA	CUT	FILL	NET
SHED VOLUME	1.000	1.200	16458.64 SQ. FT.	145.35 CU. YD.	506.97 CU. YD.	361.62 CU. YD. <FILL>
SALT SHED VOLUME	1.000	1.200	1180.15 SQ. FT.	43.88 CU. YD.	0.01 CU. YD.	43.87 CU. YD. <CUT>

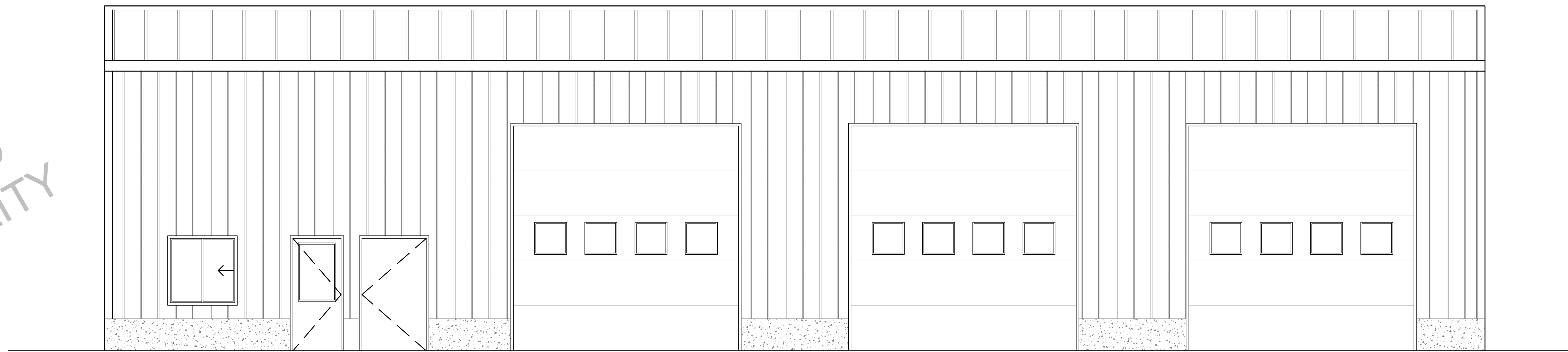
- NOTE LEGEND:**
- TBC - TOP BACK OF CURB
 - TC - TOP OF CONCRETE
 - ME - MATCH EXISTING
 - TS - TOP OF STAIRS
 - BS - BOTTOM OF STAIRS
 - PC - POINT OF CURVATURE
 - PT - POINT OF TANGENCY
 - GB - GRADE BREAK
 - PRC - POINT OF REVERSE CURVE
 - LP - LOW POINT
 - HP - HIGH POINT
 - AP - ANGLE POINT
 - FFE - FINISH FLOOR ELEVATION
 - BP - BOTTOM OF POND
 - INV - INVERT
 - FG - FINISH GRADE
 - TA - TOP OF ASPHALT
 - TG - TOP OF GRAVEL
 - FL - FLOW LINE
 - TW - TOP OF WALL
 - BW - BOTTOM OF WALL

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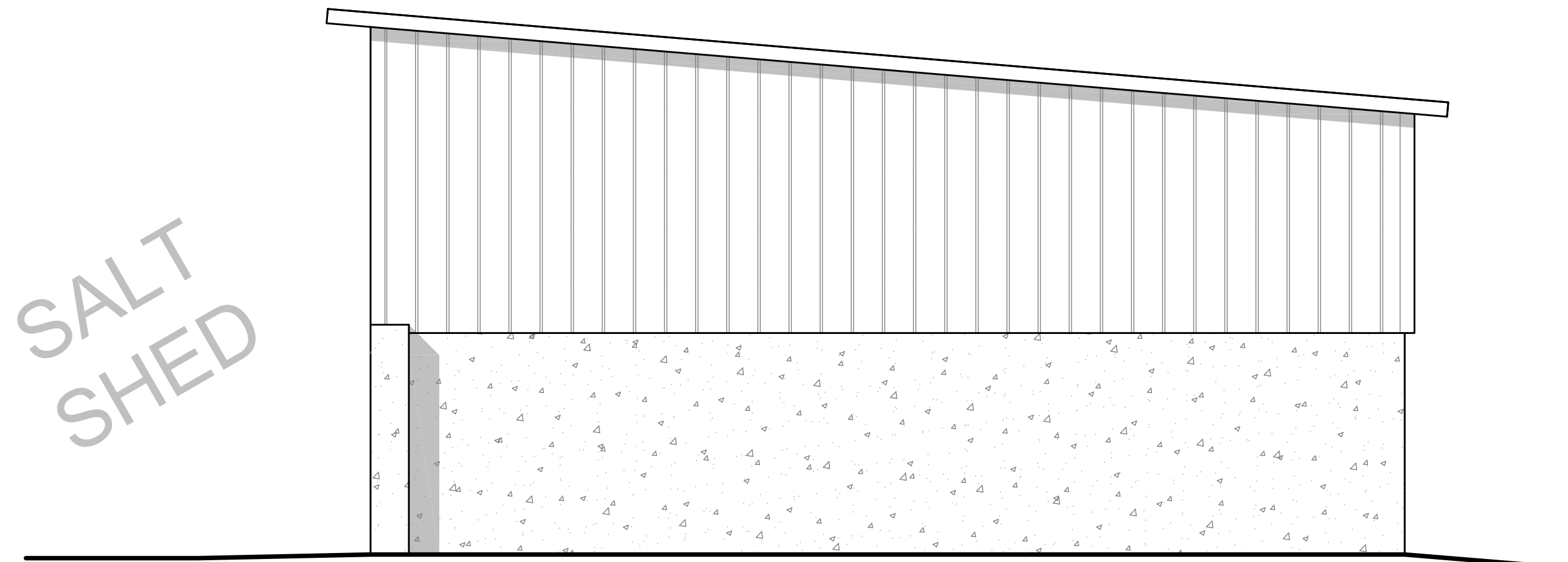
SANDER RACK



ROAD FACILITY



SALT SHED



PROJECT INFORMATION

CONSTRUCTION TYPE: TYPE I
 OCCUPANCY TYPE: GROUP F-1
 NUMBER OF STORIES: 1 STORY W/ MEZZANINE

STANDARD LOADINGS:
 SNOW LOAD (GROUND): 41 PSF
 ROOF DEAD LOAD: PER METAL BLDG. MFR.
 ROOF LIVE LOAD: 20 PSF
 WIND LOAD: 101 MPH, EXP. C
 SEISMIC DESIGN: RISK CATEGORY II
 SEISMIC SITE D

BUILDING AREAS:
 ROAD FACILITY BUILDING AREA: 6,980 SQ. FT.
 SALT SHED AREA: 725 SQ. FT.
 EQUIPMENT STORAGE RACK AREA: NA

OCCUPANT LOAD* (IBC TABLE 1004.5):
 BUSINESS AREA: 6
 (UNCONCENTRATED - 900 SQ. FT. / 150 SQ. FT. / OCC)
 ACCESSORY STORAGE AREA: 1
 (ACCESSORY AREAS - 282 SQ. FT. / 300 SQ. FT. / OCC)
 INDUSTRIAL AREA: 57
 (INDUSTRIAL AREAS - 5727 SQ. FT. / 100 SQ. FT. / OCC)
 TOTAL OCCUPANT LOAD: 64

*OCCUPANT LOAD REQUIRED FOR ROAD FACILITY BUILDING ONLY. SALT SHED & EQUIPMENT STORAGE RACK ARE NON-OCCUPIED STRUCTURES

CODE REQUIREMENTS:
 *BUILDINGS CONSTRUCTED AS SINGLE USE, NON-SEPARATED OCCUPANCY
 *NON-SPRINKLED

OWNER REPRESENTATIVE:
 BERT HARRIS
 MAINTENANCE DIRECTOR
 KANE COUNTY ROADS

PROJECT LOCATION:
 US-89
 KANE COUNTY, UT 84741

DEFERRED SUBMITTALS:
 * METAL BUILDING PLANS AND CALCULATIONS

SPECIAL INSPECTION REQUIREMENTS:
 * SPECIAL INSPECTION OF ALL EPOXY APPLICATIONS REQ'D
 * SPECIAL INSPECTION OF SHOP AND FIELD WELDS
 * SPECIAL INSPECTION OF HIGH STRENGTH BOLTS
 * SPECIAL INSPECTION OF CONCRETE REBAR AND STRENGTH

ALL CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING CODES:
 * THE 2018 INTERNATIONAL PLUMBING CODE (IPC)
 * THE 2018 INTERNATIONAL MECHANICAL CODE (IMC)
 * THE 2018 INTERNATIONAL BUILDING CODE (IBC)
 * THE 2018 INTERNATIONAL FIRE CODE (IFC)
 * 2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
 * 2017 NATIONAL ELECTRIC CODE (NEC)
 * 2003 ANSI 117.1

SHEET INDEX

#	SHEET TITLE
	TITLE SHEET
A001	TITLE SHEET
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A101	ROAD FACILITY - MEZZANINE FLOOR PLAN
A200	ROAD FACILITY - BUILDING ELEVATIONS
A300	ROAD FACILITY - BUILDING CROSS SECTIONS
A400	ACCESSORY STRUCTURE - SALT SHED
A401	ACCESSORY STRUCTURE - SANDER RACK
S0.1	STRUCTURAL SPECIFICATIONS
S1.0	FOUNDATION PLAN - OFFICE-SHOP
S1.1	FOUNDATION PLAN - SALT SHED-SANDER RACK
S2.0	FOUNDATION DETAILS
S2.1	FOUNDATION DETAILS

KANE COUNTY ROAD FACILITY

TITLE SHEET

1125 S. HWY US-89
 GLENDALE, UT 84729

INITIAL SUBMITTAL: 10/6/2022

REV#: DATE: DESCRIPTION:



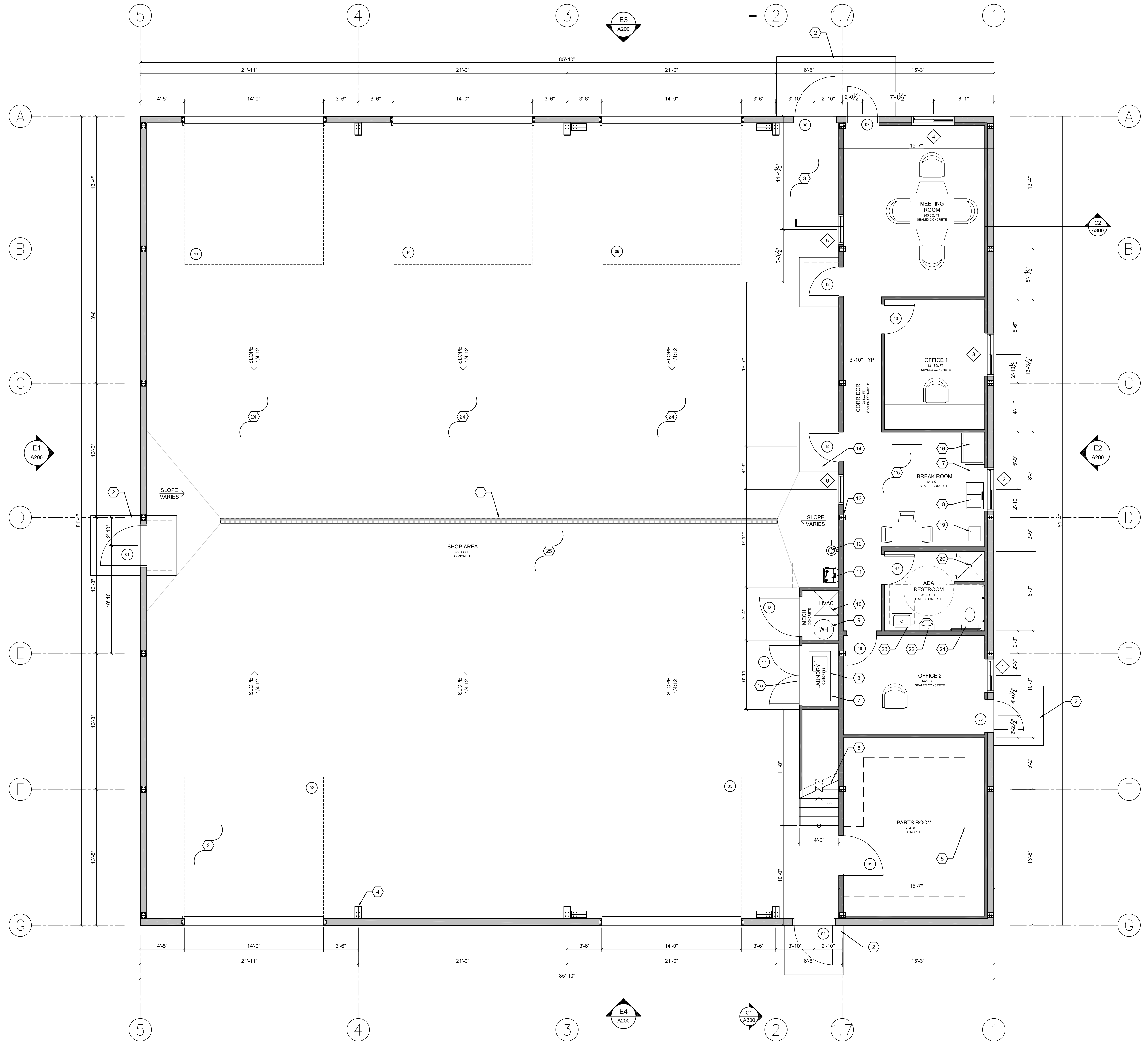
ALL PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS, MEASUREMENTS, MATERIALS, METHODS, AND SO ON SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE REGISTERED PROFESSIONAL ENGINEER AND ANY APPROVALS THEREON SHALL BE VOID WITHOUT THE SIGNATURE AND SEAL OF THE REGISTERED PROFESSIONAL ENGINEER. THE REGISTERED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE PUBLIC INTEREST. THE REGISTERED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE PUBLIC INTEREST. THE REGISTERED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE PUBLIC INTEREST.

DRAWN BY: M.H.
 SCALE: NTS
 SHEET:

A001

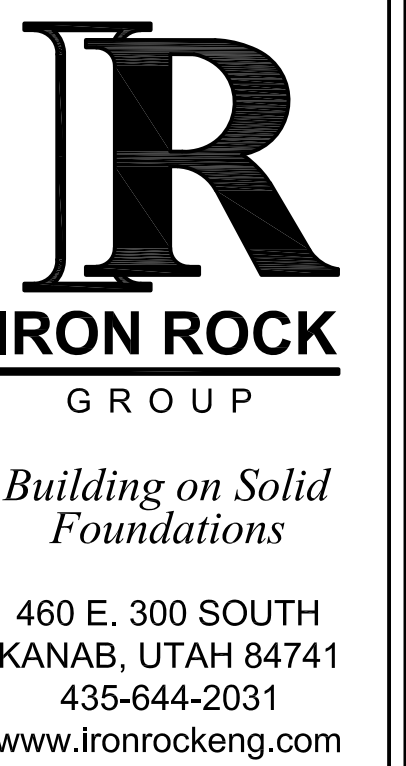
PLAN KEYNOTE LEGEND

- 1 TRENCH DRAIN. SEE CIVIL FOR DRAINAGE AND SIZING CONNECTIONS
- 2 PROVIDE FLATWORK @ EXTERIOR MAN DOORS
- 3 CONTRACTOR TO PROVIDE (2) SUSPENDED GAS CEILING UNIT HEATERS PER OWNER SPECIFICATION IN GARAGE SPACE
- 4 DENOTES METAL BUILDING STRUCTURAL MEMBER
- 5 PARTS SHELVING SYSTEMS PROVIDED BY OWNER
- 6 WOOD-FRAMED STAIRS TO MEZZANINE ABOVE. PROVIDE MIN. 42" HIGH CONTINUOUS GUARD @ MEZZANINE W/ 36" HANDRAIL AT STAIRS
- 7 ELECTRIC DRYER
- 8 CLOTHES WASHING MACHINE
- 9 50 GAL. ELECTRIC WATER HEATER
- 10 HEAT PUMP AIR HANDLER FOR DUCTED SYSTEM TO HEAT/COOL ADMINISTRATIVE OFFICES/SPACES UNDER MEZZANINE
- 11 WALL MOUNTED DRINKING FOUNTAIN W/ BOTTLE FILLING STATION (SEE ACCESSIBILITY DETAILS A300)
- 12 EMERGENCY EYE WASH STATION
- 13 FINISH INTERIOR GYP. DIRECTLY TO EXPOSED COLUMNS. TYP. PAINT AND FINISH COLUMNS TO MATCH ADJACENT SURFACES
- 14 INTERIOR MAN DOOR LANDING, WHERE LANDING CREATES AN INCONSISTENT STEP AT SLOPED FLOOR, MARK EDGES WITH 6" YELLOW PAINT
- 15 PROVIDE LEVEL CONCRETE SLAB @ LAUNDRY AND MECH. CLOSETS
- 16 REFRIGERATOR
- 17 CASEWORK AND COUNTERTOPS PER OWNER SPECIFICATION
- 18 STAINLESS STEEL UNDER MOUNT DOUBLE BAY SINK PER OWNER SPECIFICATION
- 19 COUNTERTOP MICROWAVE SUPPLIED BY OWNER
- 20 36" WALK-IN SHOWER INSERT
- 21 LOW-FLUSH EFFICIENT TOILET W/ ADA GRAB BARS (SEE ACCESSIBILITY DETAILS A300)
- 22 URINAL
- 23 WALL-MOUNTED ACCESSIBLE LAVATORY (SEE ACCESSIBILITY DETAILS A300)
- 24 FIELD LOCATE (3) 20 AMP ELECTRICAL WHIPS SUSPENDED FROM CEILING
- 25 PROVIDE LED LIGHTING OPTIONS FOR ALL SPACES. CONTRACTOR TO FIELD LOCATE ALL LIGHTING BASED ON OWNER EQUIPMENT REQUIREMENTS



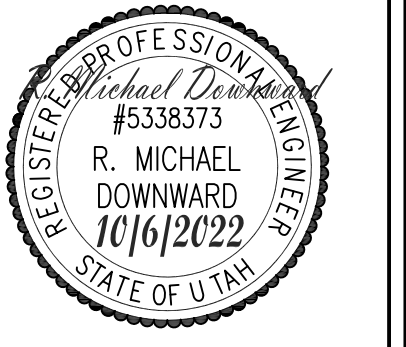
DOOR SCHEDULE				
MARK	SIZE		STYLE	NOTES
	WD	HGT		
1	4'-0"	7'-0"	HINGED - SINGLE - EXTERIOR	LOCKING - SELF CLOSING
2	14'-0"	14'-0"	OVERHEAD - SECTIONAL	INSULATED - LITES PER ELEVATION
3	14'-0"	14'-0"	OVERHEAD - SECTIONAL	INSULATED - LITES PER ELEVATION
4	4'-0"	7'-0"	HINGED - SINGLE - EXTERIOR	LOCKING - SELF CLOSING
5	4'-0"	7'-0"	HINGED - SINGLE	SELF CLOSING
6	3'-0"	7'-0"	HINGED - SINGLE - EXTERIOR	LOCKING - SELF CLOSING
7	3'-0"	7'-0"	HINGED - SINGLE - EXTERIOR	LOCKING - SELF CLOSING
8	4'-0"	7'-0"	HINGED - SINGLE - EXTERIOR	LOCKING - SELF CLOSING
9	14'-0"	14'-0"	OVERHEAD - SECTIONAL	INSULATED - LITES PER ELEVATION
10	14'-0"	14'-0"	OVERHEAD - SECTIONAL	INSULATED - LITES PER ELEVATION
11	14'-0"	14'-0"	OVERHEAD - SECTIONAL	INSULATED - LITES PER ELEVATION
12	3'-0"	7'-0"	HINGED - SINGLE	SELF CLOSING
13	3'-0"	7'-0"	HINGED - SINGLE	LOCKING
14	3'-0"	7'-0"	HINGED - SINGLE	SELF CLOSING
15	3'-0"	7'-0"	HINGED - SINGLE	PRIVACY
16	3'-0"	7'-0"	HINGED - SINGLE	LOCKING - PRIVACY
17	6'-0"	7'-0"	HINGED - DOUBLE	STEEL INSULATED
18	4'-0"	7'-0"	HINGED - SINGLE	STEEL INSULATED

WINDOW SCHEDULE					
MARK	SIZE		HEAD HGT	TYPE	NOTES
	WD	HGT			
1	3'-0"	3'-6"	7'-0"	SLIDER	--
2	4'-0"	3'-6"	7'-0"	SLIDER	--
3	4'-0"	3'-6"	7'-0"	SLIDER	--
4	4'-0"	4'-0"	7'-0"	SLIDER	--
5	3'-0"	4'-0"	7'-0"	FIXED	--
6	3'-0"	4'-0"	7'-0"	FIXED	--



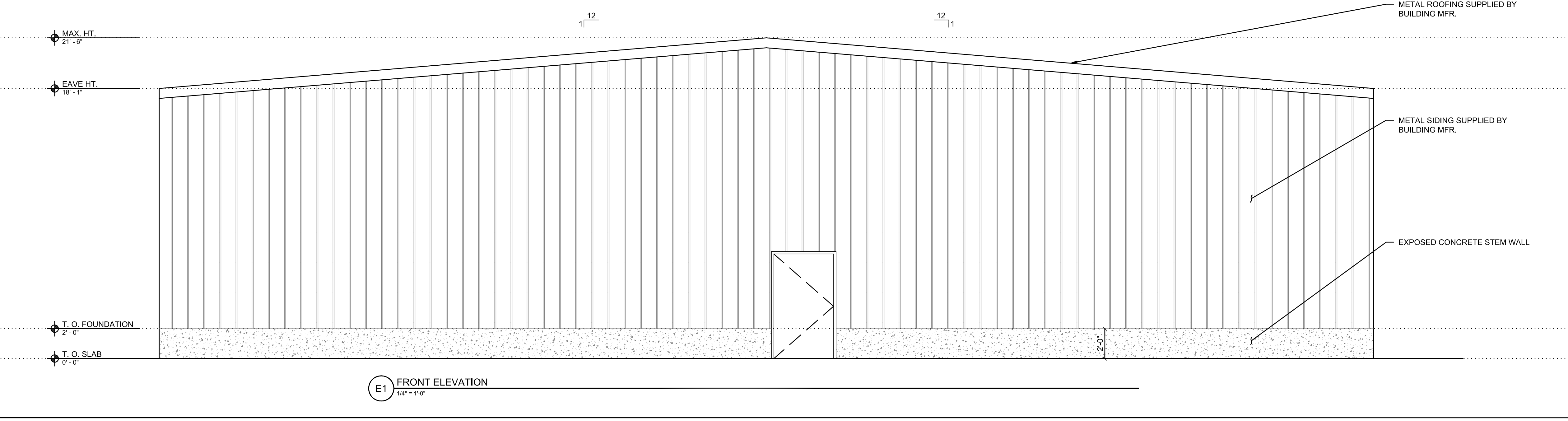
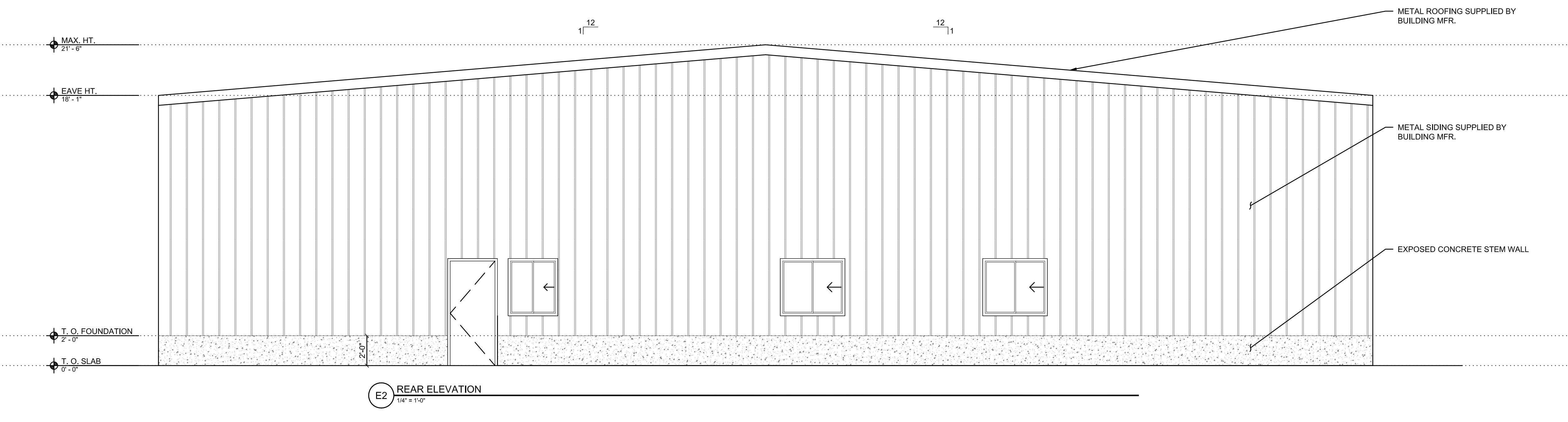
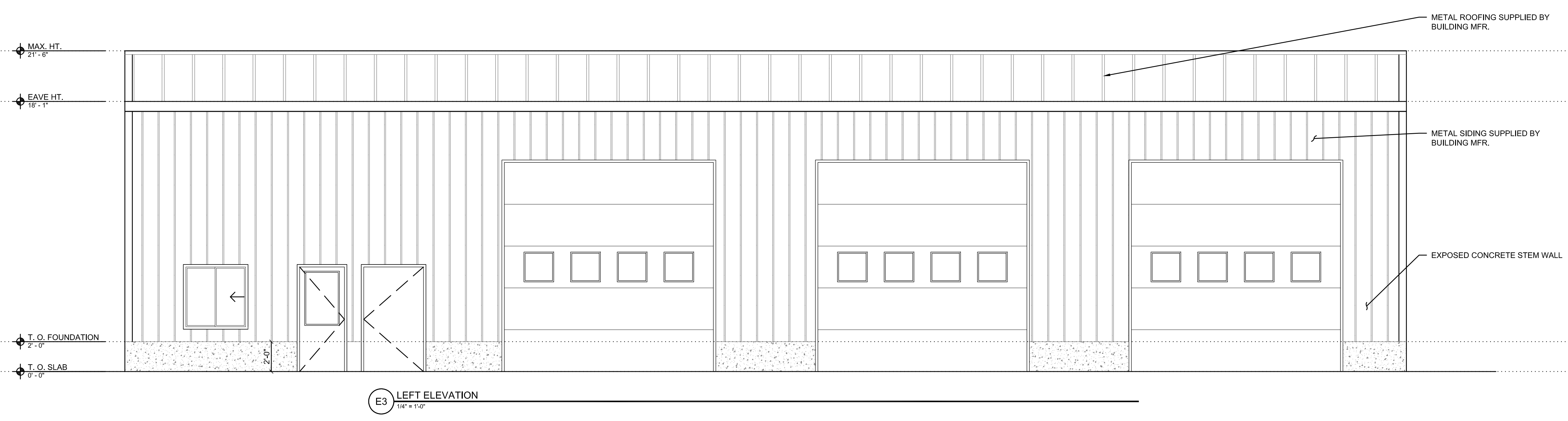
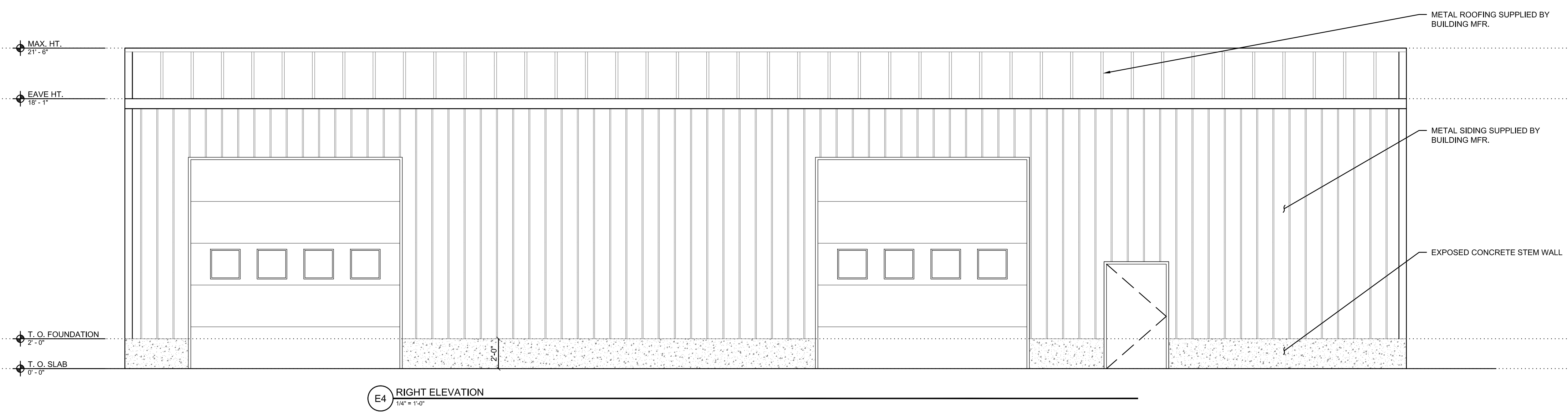
**KANE COUNTY ROAD FACILITY
ROAD FACILITY
MAIN FLOOR PLAN**

INITIAL SUBMITTAL: 10/6/2022

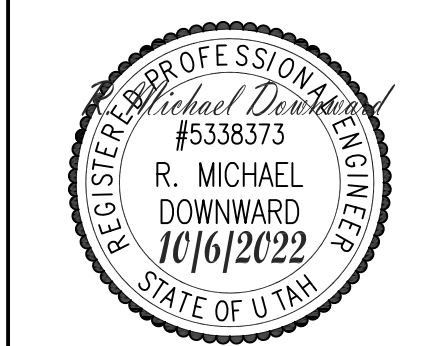


DRAWN BY: M.H.
SCALE: 1/4" = 1'
SHEET:

A100

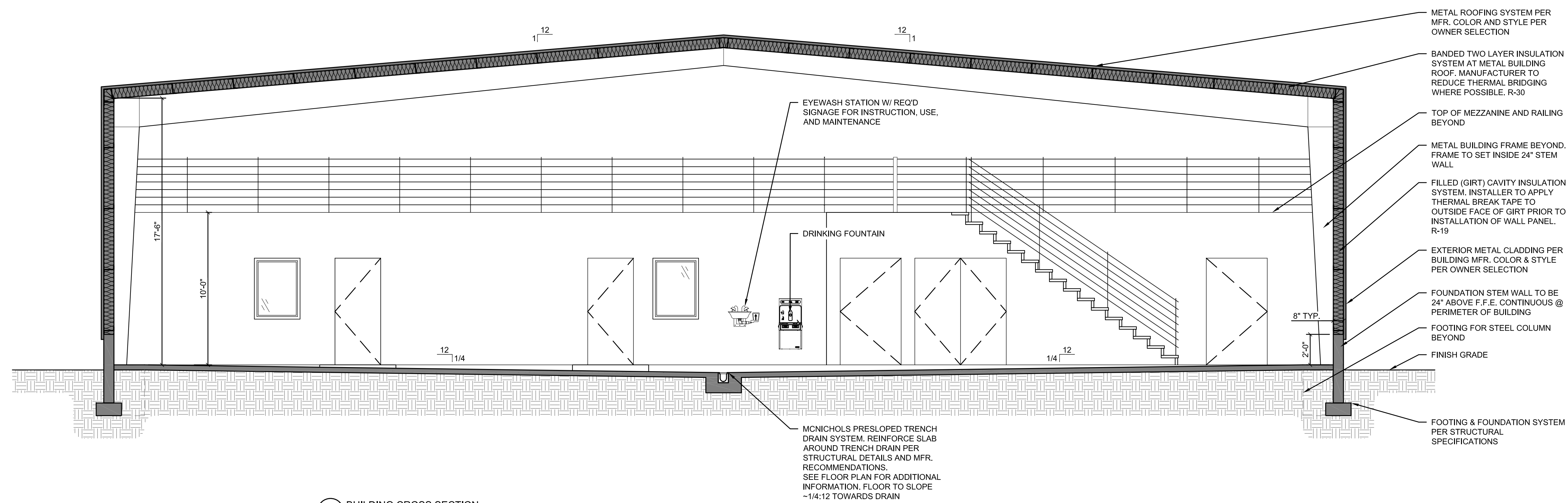


INITIAL SUBMITTAL	DATE	DESCRIPTION

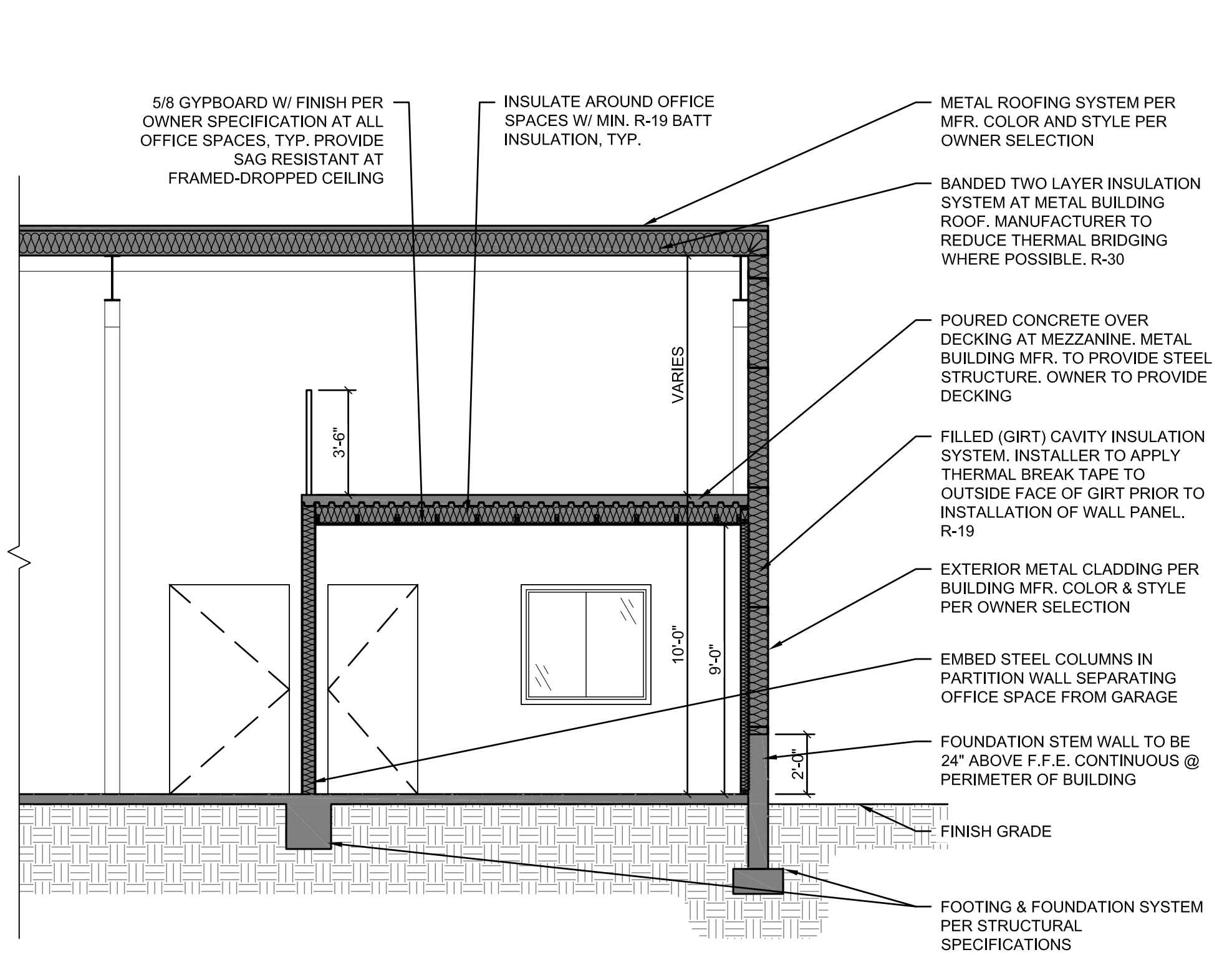


ALL PLANS, CONNECTIONS, DIMENSIONS, REFERENCES, NOTES, SPECIFICATIONS, AND SO ON SHALL BE SUBJECT TO THE DESIGN AND CONSTRUCTION OF THE PROJECT BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONTRACTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS.

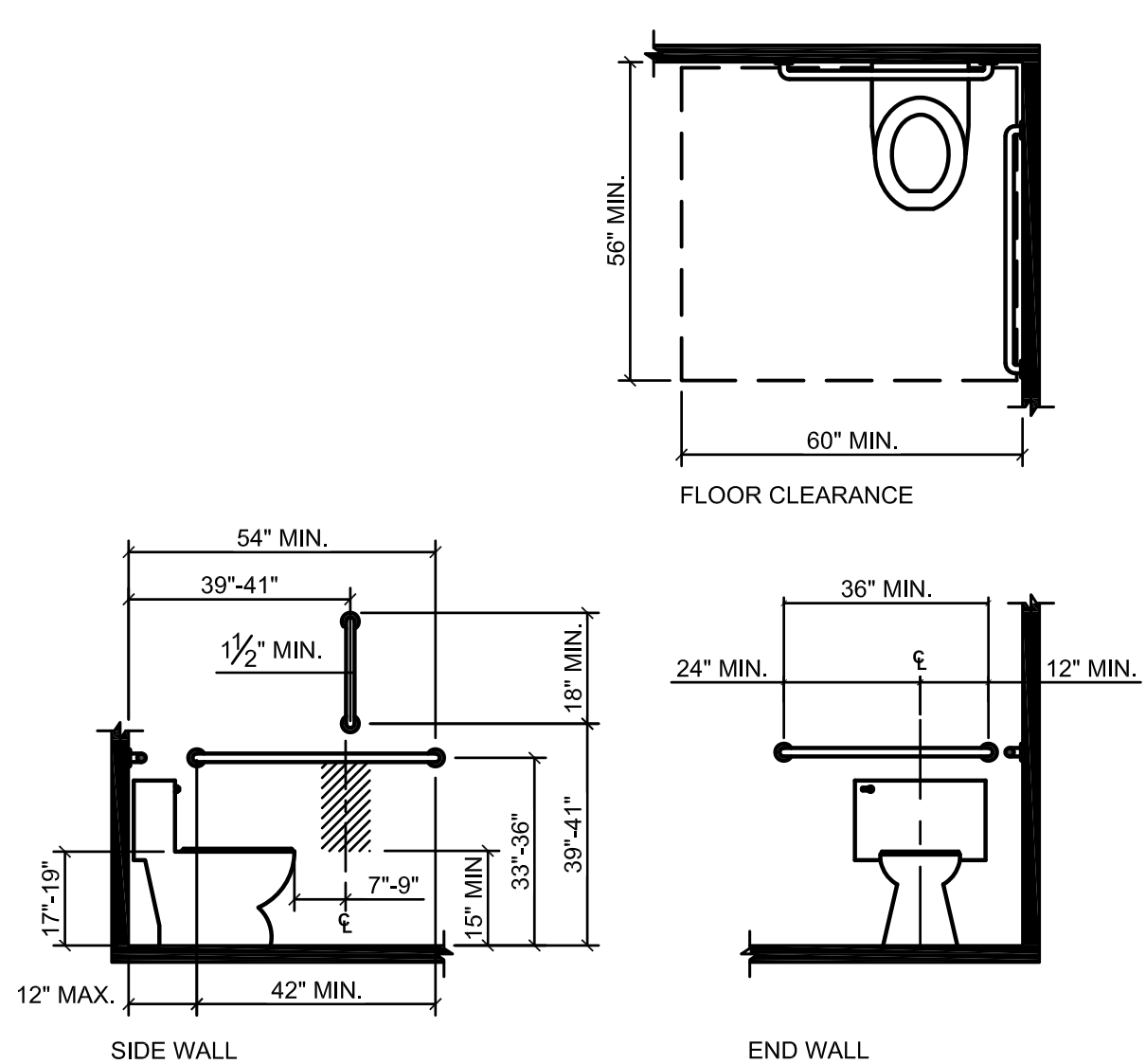
DRAWN BY: M.H.
 SCALE: AS NOTED
 SHEET:



C1 BUILDING CROSS SECTION
14' x 1'-0"



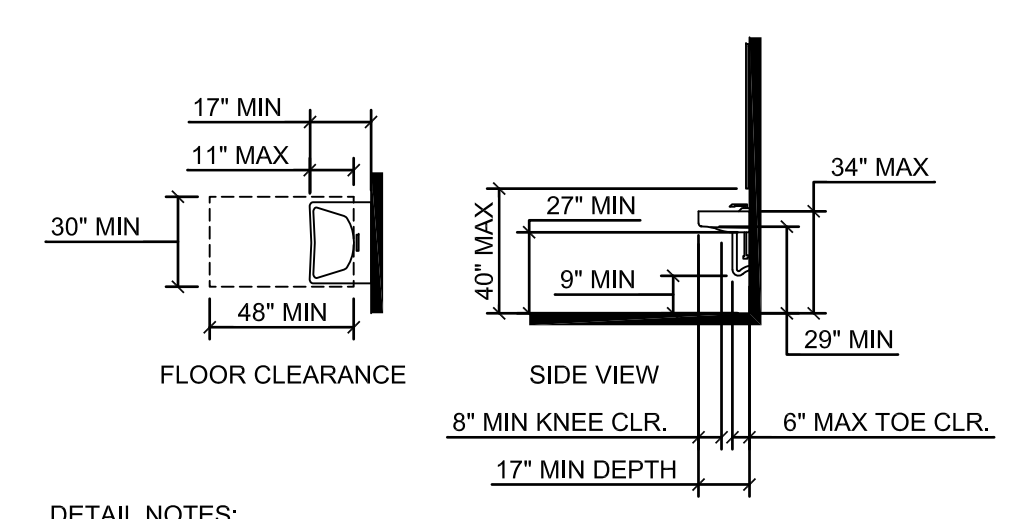
C2 MEZZANINE CROSS SECTION
14' x 1'-0"



D1 ACC. WATER CLOSET - TYP. SIZE & CLEARANCE (604)

DETAIL NOTES:
 • REINFORCEMENT MUST BE SUFFICIENT TO PERMIT THE INSTALLATION OF REAR AND SIDE WALL GRAB BARS THAT FULLY MEET ALL ACCESSIBILITY REQUIREMENTS INCLUDING LENGTH, HEIGHT, AND STRUCTURAL STRENGTH
 • FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC, HAND OPERATED FLUSH CONTROLS SHALL BE LOCATED ON THE OPEN SIDE OF THE WATER CLOSET.
 • WHERE AN ADMINISTRATIVE AUTHORITY REQUIRES FLUSH CONTROLS FOR FLUSH VALVES TO BE LOCATED IN A POSITION THAT CONFLICTS WITH THE LOCATION OF THE REAR GRAB BAR, THEN THE REAR GRAB BAR SHALL BE PERMITTED TO BE SPLIT OR SHIFTED TO THE OPEN SIDE OF THE TOILET AREA.
 • DISPENSERS SHALL NOT BE OF A TYPE THAT CONTROLS DELIVERY OR THAT DOES NOT ALLOW CONTINUOUS PAPER FLOW.
 • TOILET SHALL BE EQUIPPED WITH A SEAT OF SMOOTH, NON-ABSORBANT MATERIAL. SEAT SHALL BE OF THE HINGED OPEN-FRONT TYPE. INTEGRAL SEATS SHALL BE OF THE SAME MATERIAL AS THE FIXTURE.

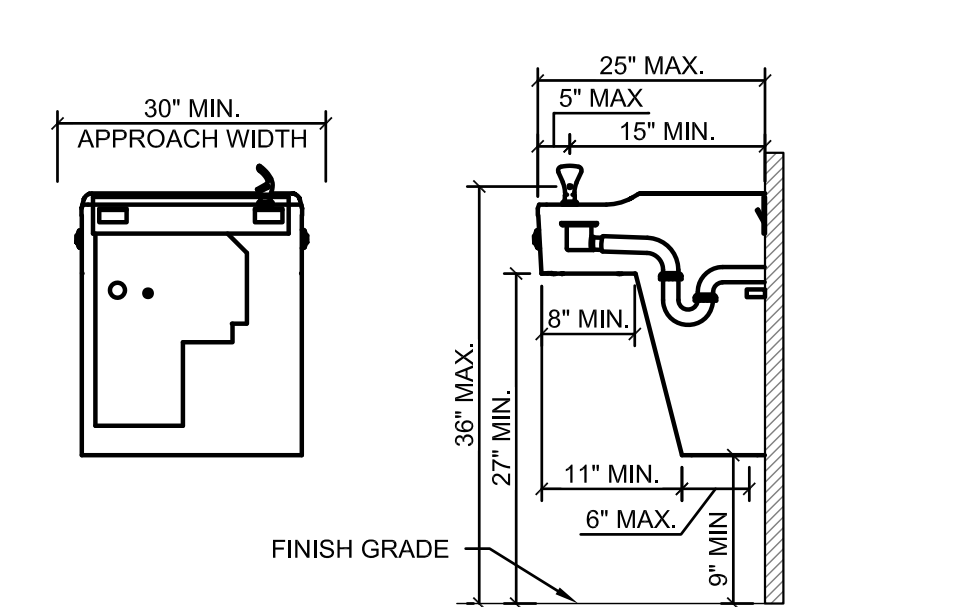
D1 ACC. WATER CLOSET - TYP. SIZE & CLEARANCE (604)
NTS



D2 ACC. LAVATORY - TYP. SIZE & CLEARANCE (606)

DETAIL NOTES:
 1. LAVATORY FAUCET AND SOAP DISPENSER CONTROLS SHALL HAVE A MAXIMUM REACH DEPTH OF 11"
 2. INSULATE ALL EXPOSED DRAIN PIPES TO PROTECT AGAINST CONTACT
 3. CABINETS IN RESIDENTIAL DWELLING UNITS MAY BE PERMITTED IF THE FOLLOWING CRITERIA ARE MET:
 • a. CABINETS CAN BE REMOVED WITHOUT REMOVAL OR REPLACEMENT OF THE FIXTURE
 • b. THE FINISH FLOOR EXTENDS UNDER THE CABINETS
 • c. THE WALLS BEHIND AND SURROUNDING THE CABINETS ARE FINISHED

D2 ACC. LAVATORY - TYP. SIZE & CLEARANCE (606)
NTS



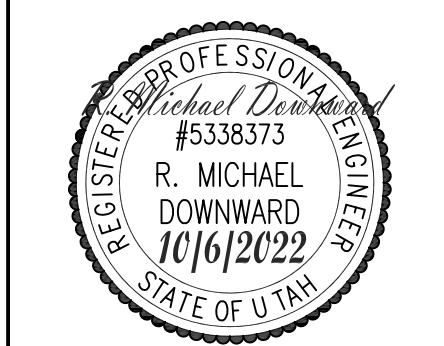
D3 TYP. ADA DRINKING FOUNTAIN

DETAIL NOTES:
 1. SPOUT SHALL PROVIDE A FLOW OF WATER 4" HIGH MAXIMUM.
 2. WHERE THE SPOUT IS LOCATED LESS THAN 3" FROM FRONT OF UNIT, THE ANGLE OF THE STREAM SHALL BE 30 DEGREES MAXIMUM. WHERE THE SPOUT IS LOCATED BETWEEN 3" AND 5" FROM FRONT OF UNIT, THE ANGLE OF THE STREAM SHALL BE 15 DEGREES MAXIMUM.

D3 TYP. ADA DRINKING FOUNTAIN
NTS

INITIAL SUBMITTAL: 10/6/2022

REV#: DATE: DESCRIPTION:



ALL PLANS, SPECIFICATIONS, CONTRACTS, AGREEMENTS, AND/OR CORRECTIONS SHALL BE THE PROPERTY OF IRON ROCK ENGINEERING AND MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF IRON ROCK ENGINEERING. THIS AGREEMENT IS VOID IF ANY OTHER DOCUMENTS OR AGREEMENTS CONFLICT WITH THE TERMS OF THIS AGREEMENT.

DRAWN BY: M.H.
SCALE: AS NOTED
SHEET:

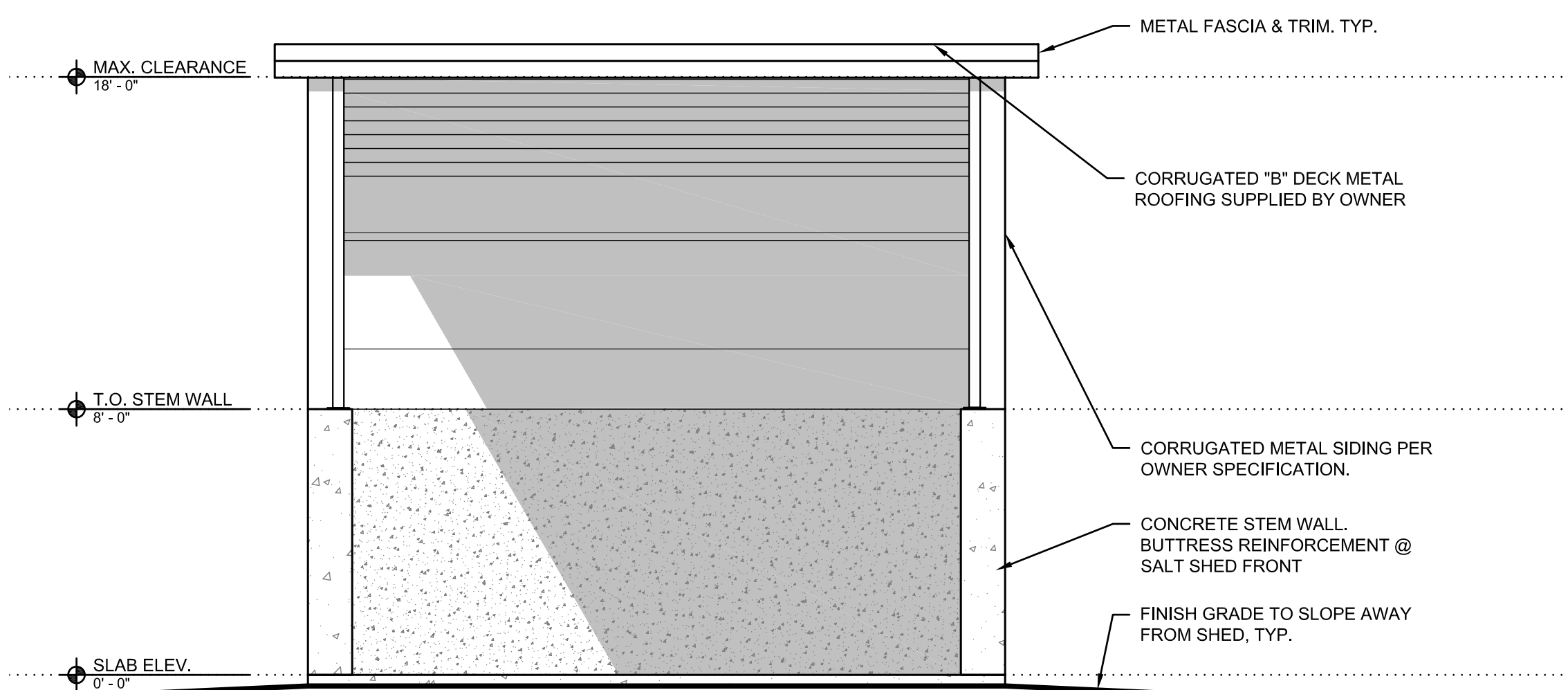


IRON ROCK GROUP

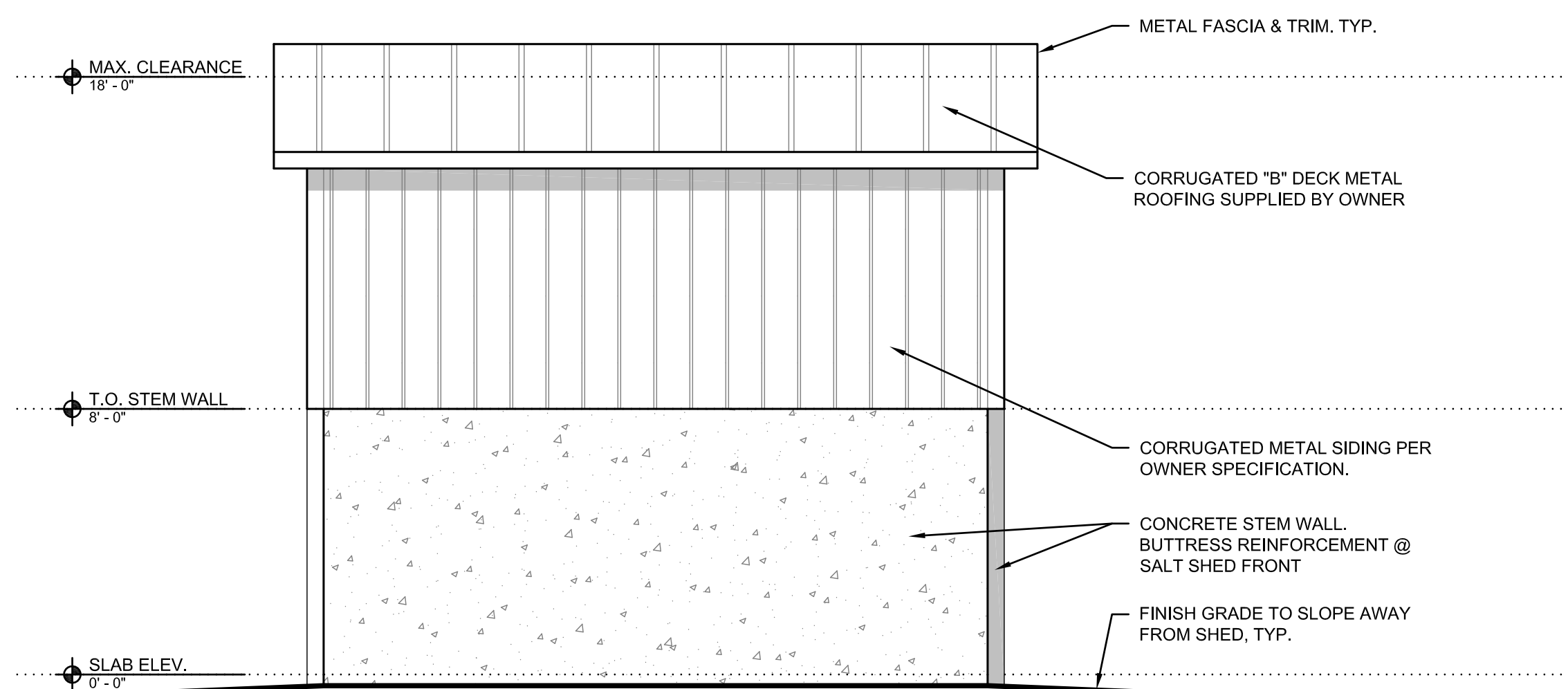
Building on Solid Foundations

460 E. 300 SOUTH
KANAB, UTAH 84741
435-644-2031
www.ironrockeng.com

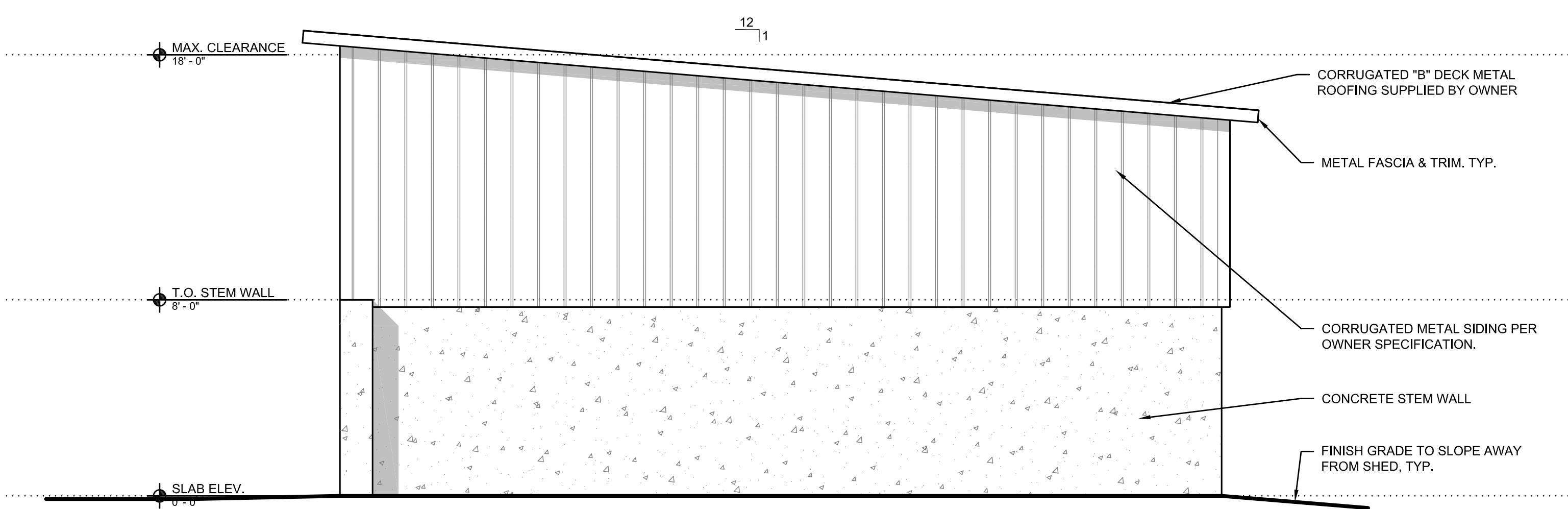
KANE COUNTY ROAD FACILITY
**ACCESSORY STRUCTURE
SALT SHED**
1125 S. HWY US-89
GLENDALE, UT 84729



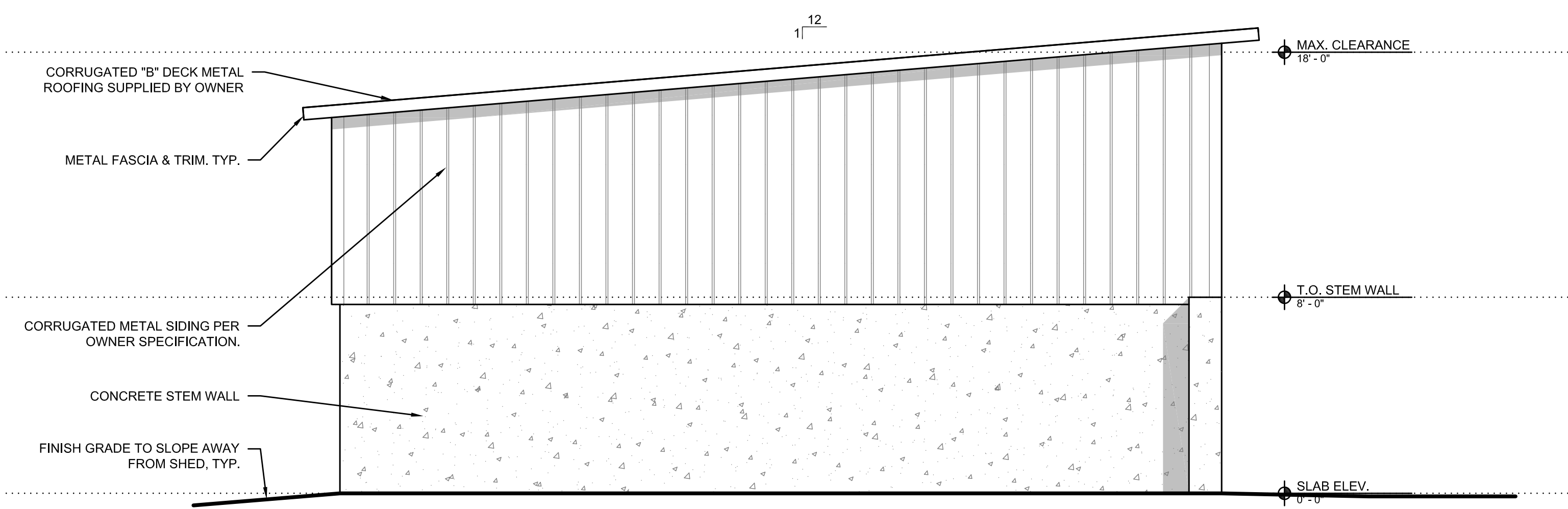
E1 BUILDING ELEVATION: FRONT
1/4" = 1'-0"



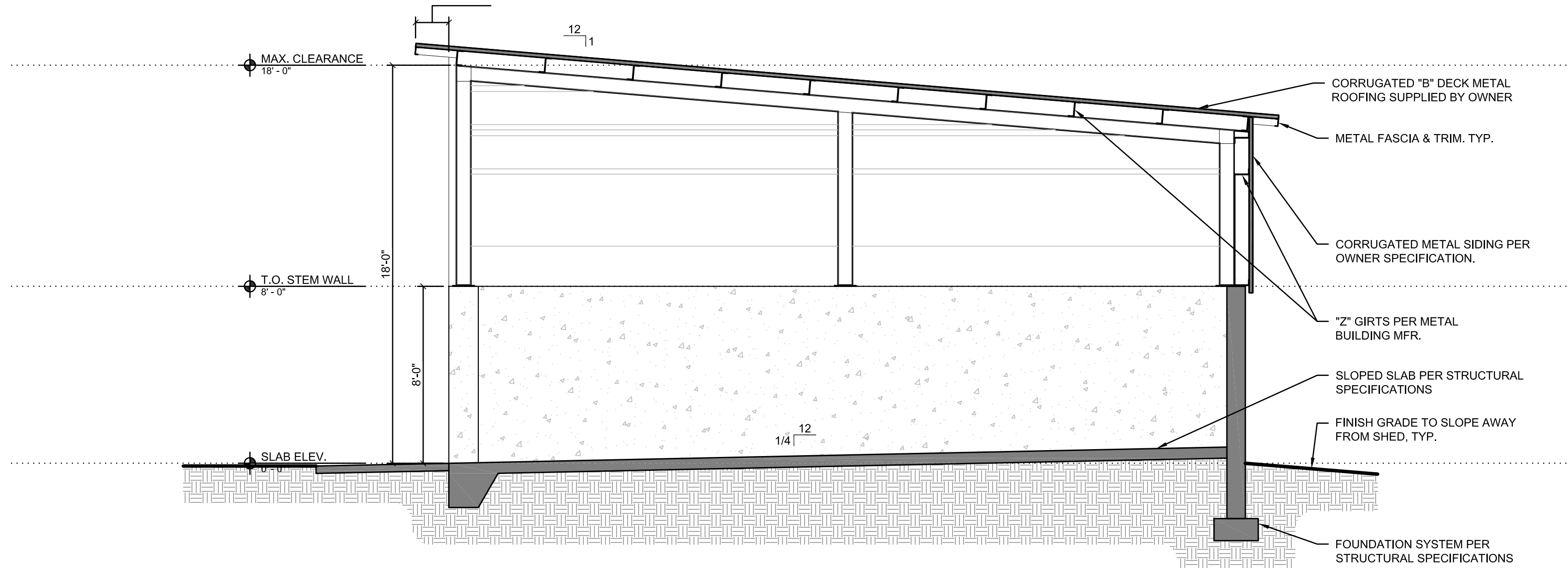
E2 BUILDING ELEVATION: REAR
1/4" = 1'-0"



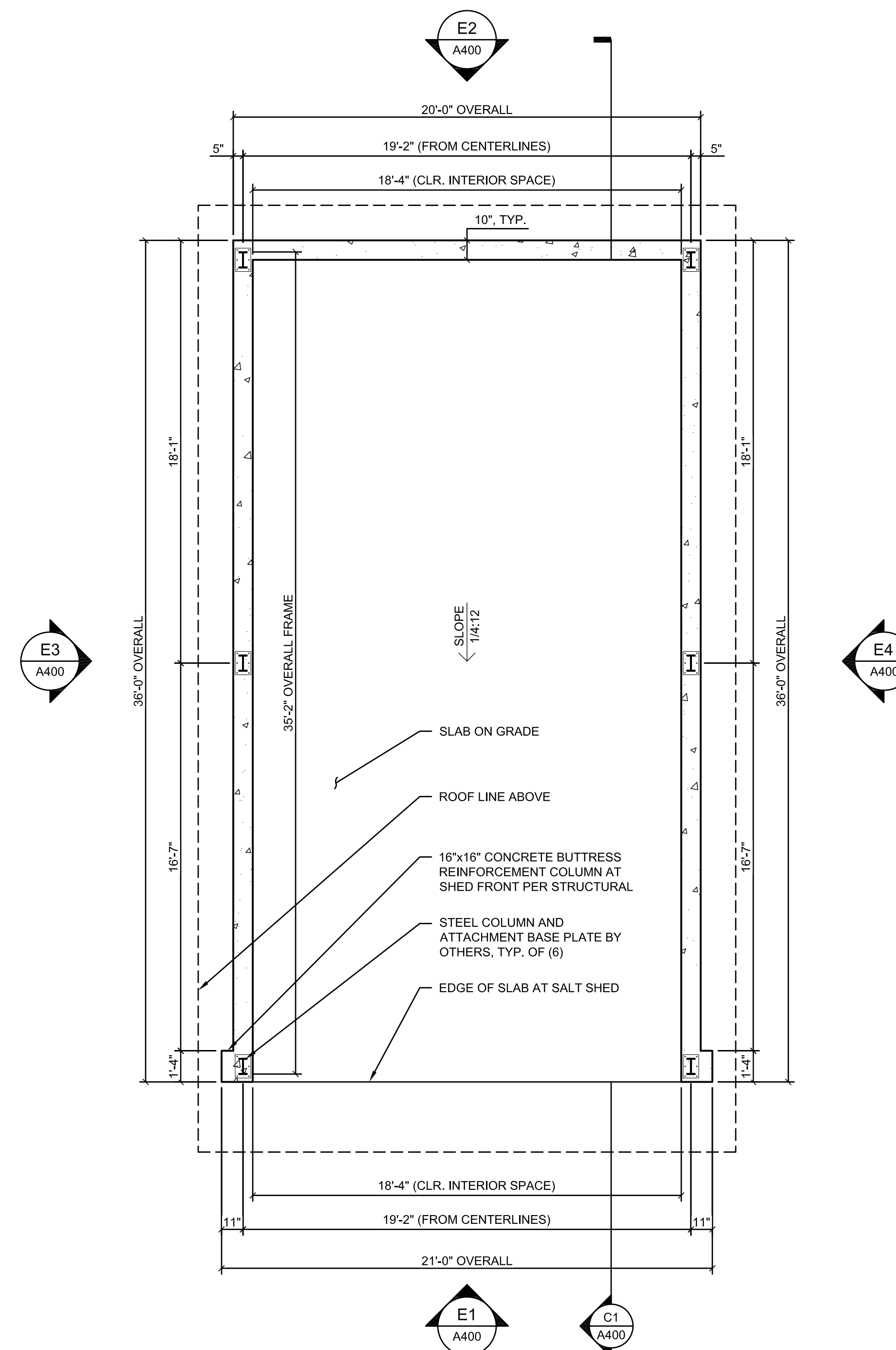
E4 BUILDING ELEVATION: RIGHT
1/4" = 1'-0"



E3 BUILDING ELEVATION: LEFT
1/4" = 1'-0"



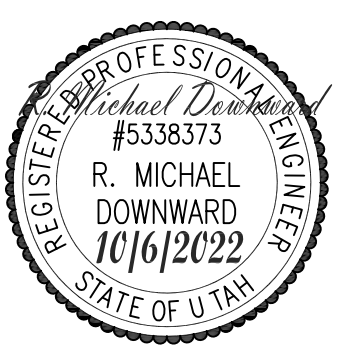
C1 BUILDING CROSS SECTION
1/4" = 1'-0"



1 FLOOR PLAN: SALT SHED
1/4" = 1'-0"

INITIAL SUBMITTAL: 10/6/2022

REV#: DATE: DESCRIPTION:



DRAWN BY: M.H.

SCALE: AS NOTED

SHEET:

A400

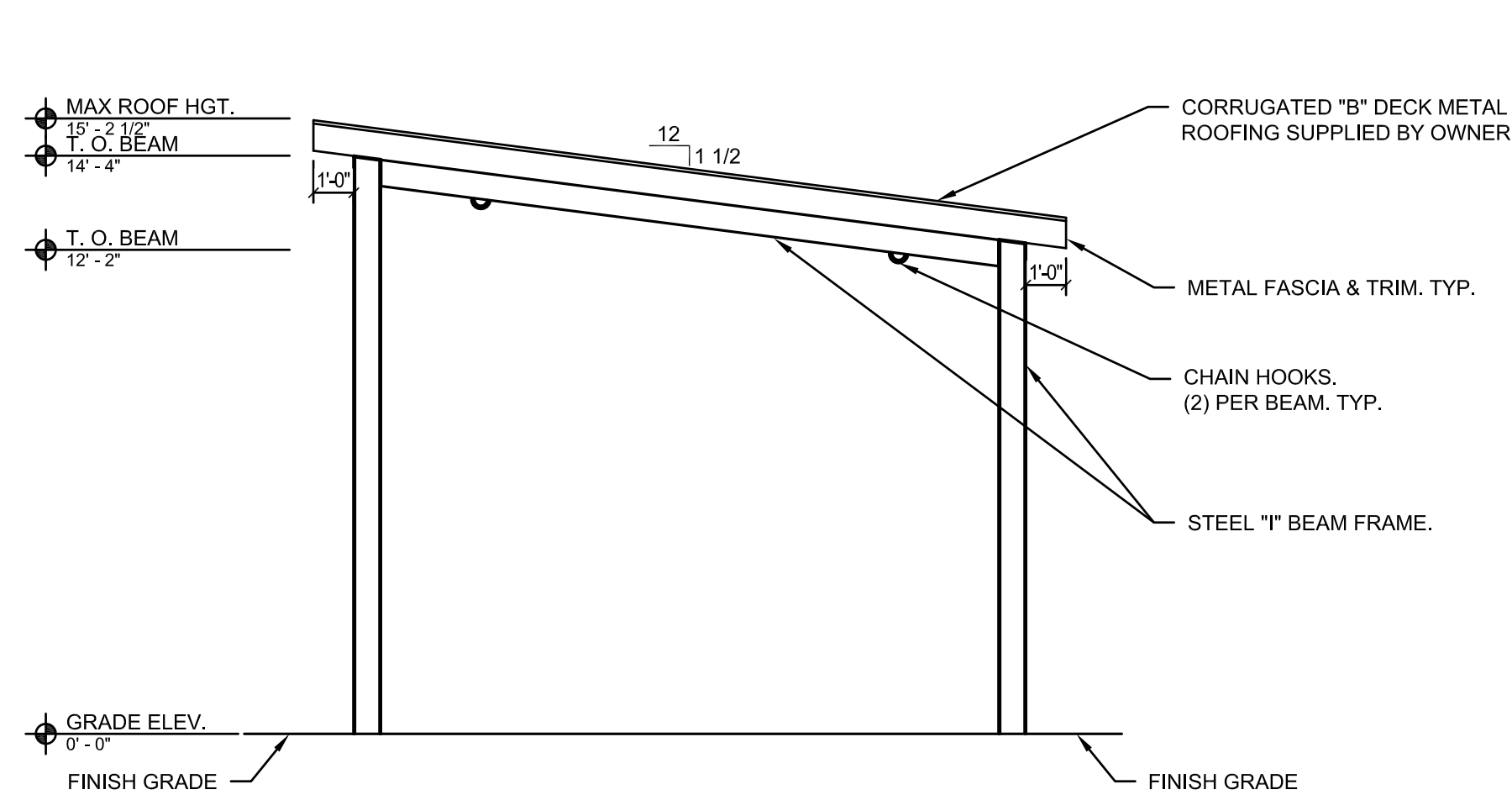


IRON ROCK
GROUP

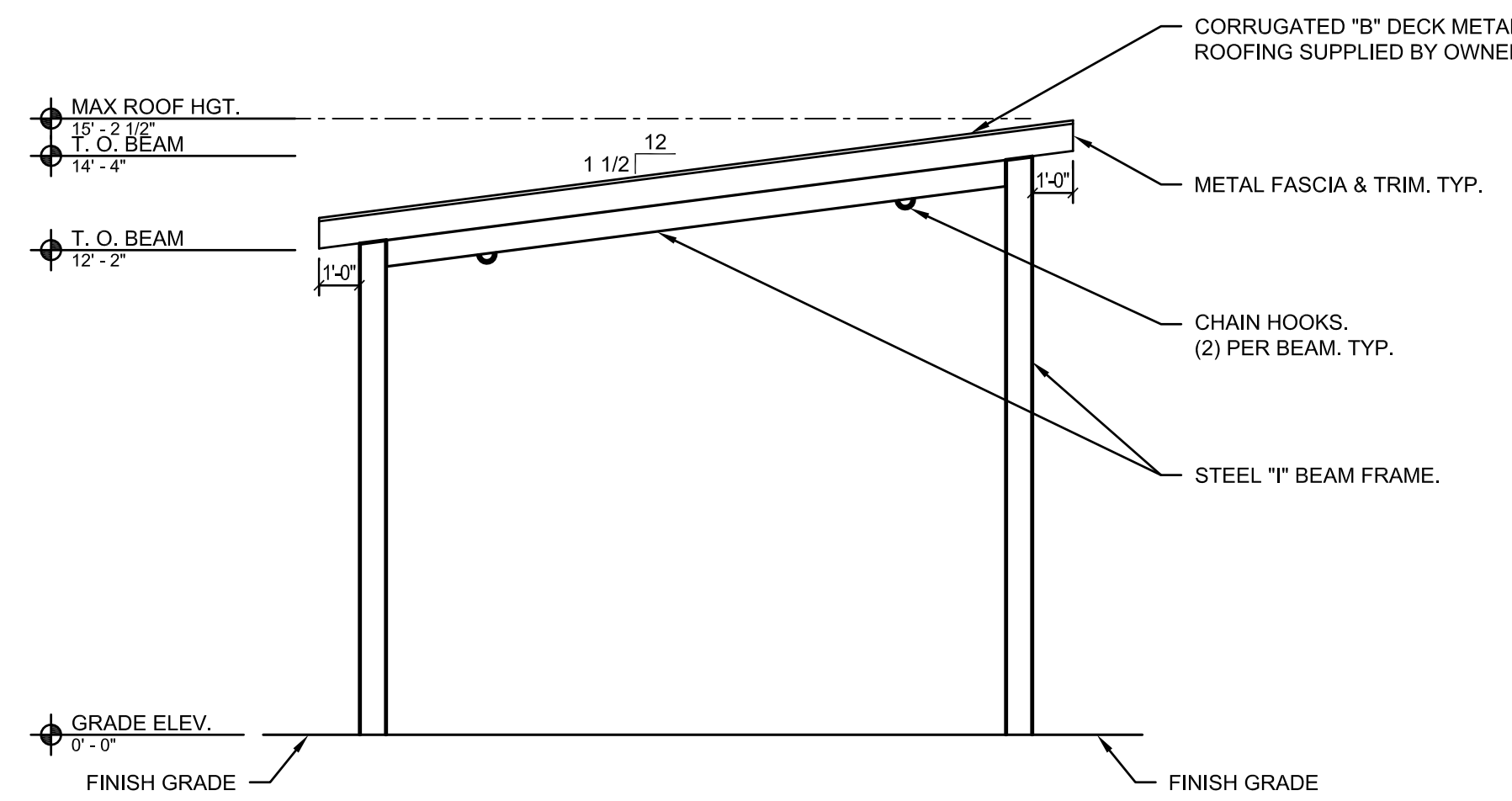
Building on Solid Foundations

460 E. 300 SOUTH
KANAB, UTAH 84741
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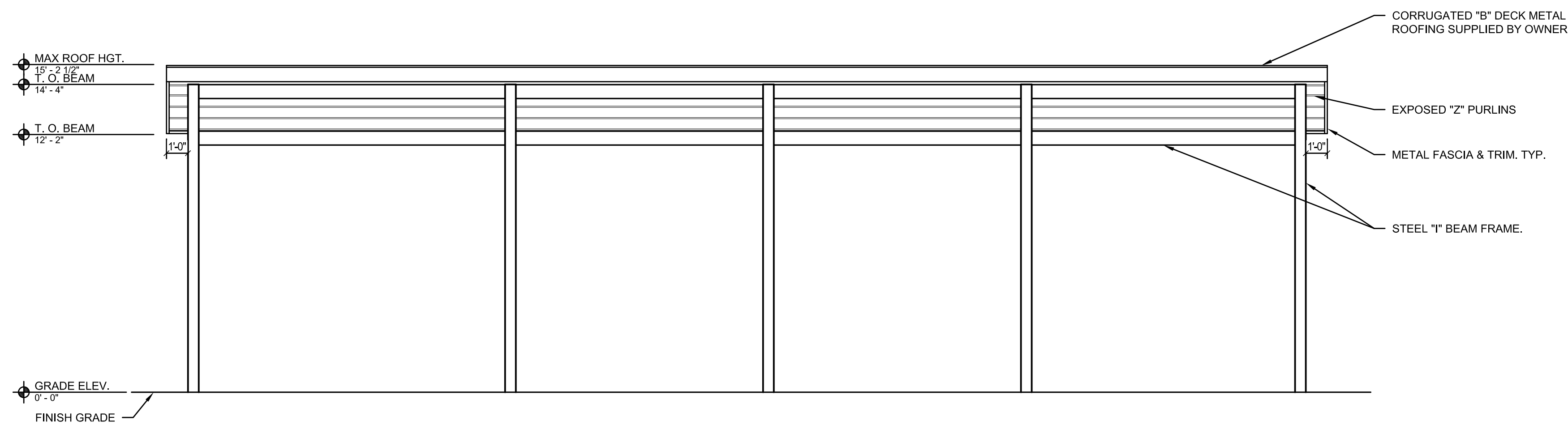
KANE COUNTY ROAD FACILITY
**ACCESSORY STRUCTURE
STORAGE RACK**
1125 S. HWY US-89
GLENDALE, UT 84729



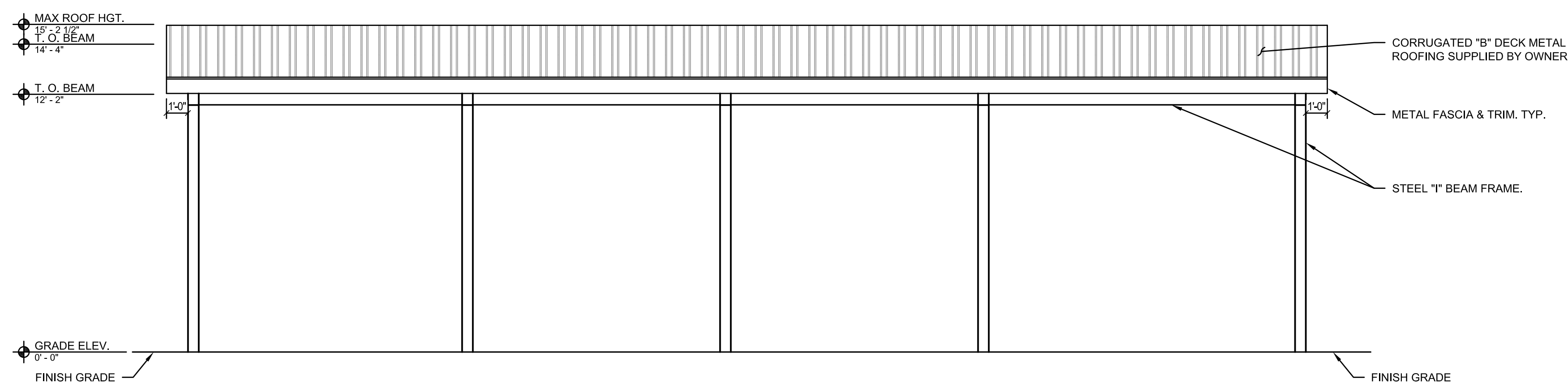
E2 EQUIPMENT RACK: RIGHT ELEVATION
1/4" = 1'-0"



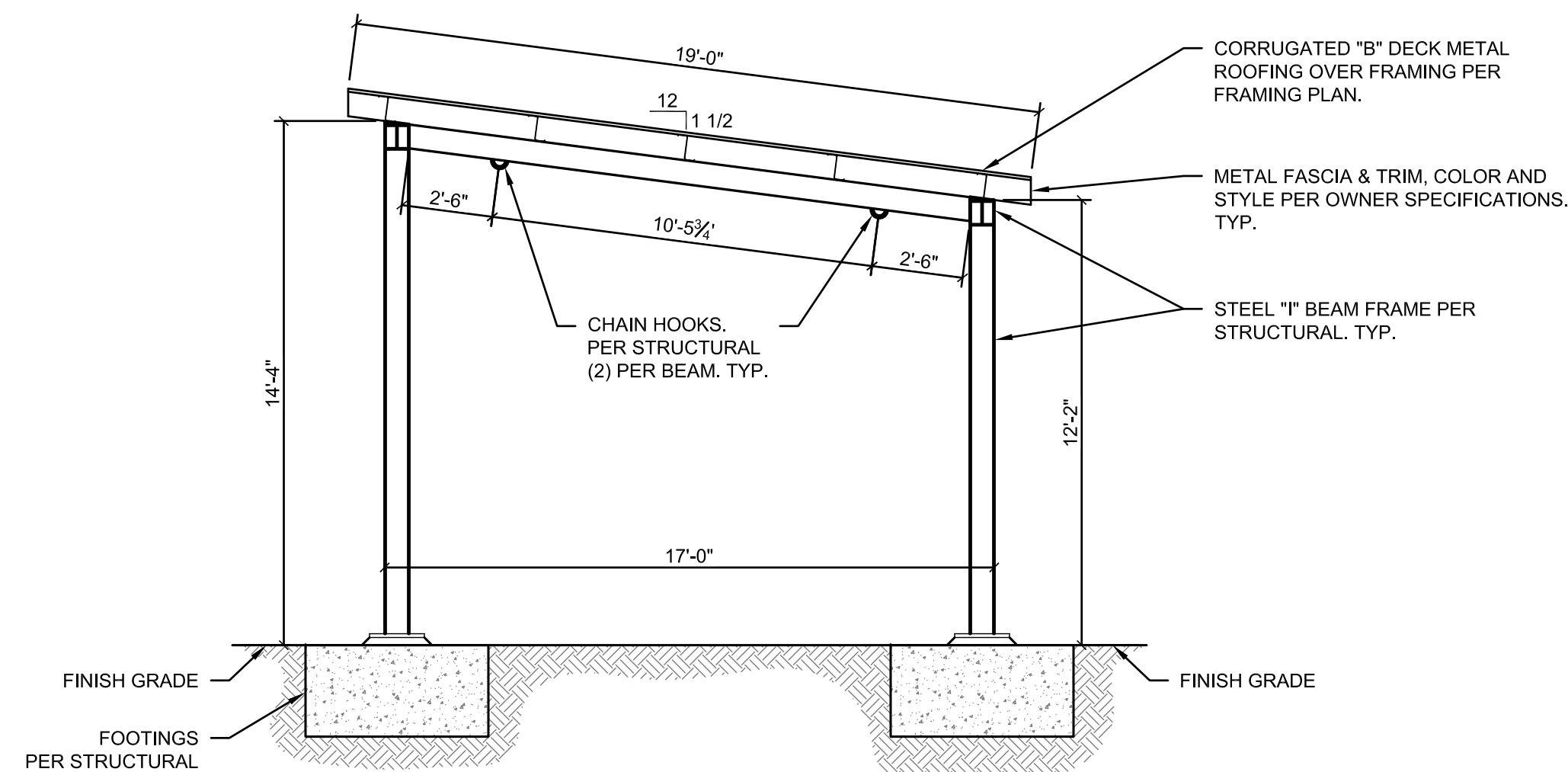
E4 EQUIPMENT RACK: LEFT ELEVATION
1/4" = 1'-0"



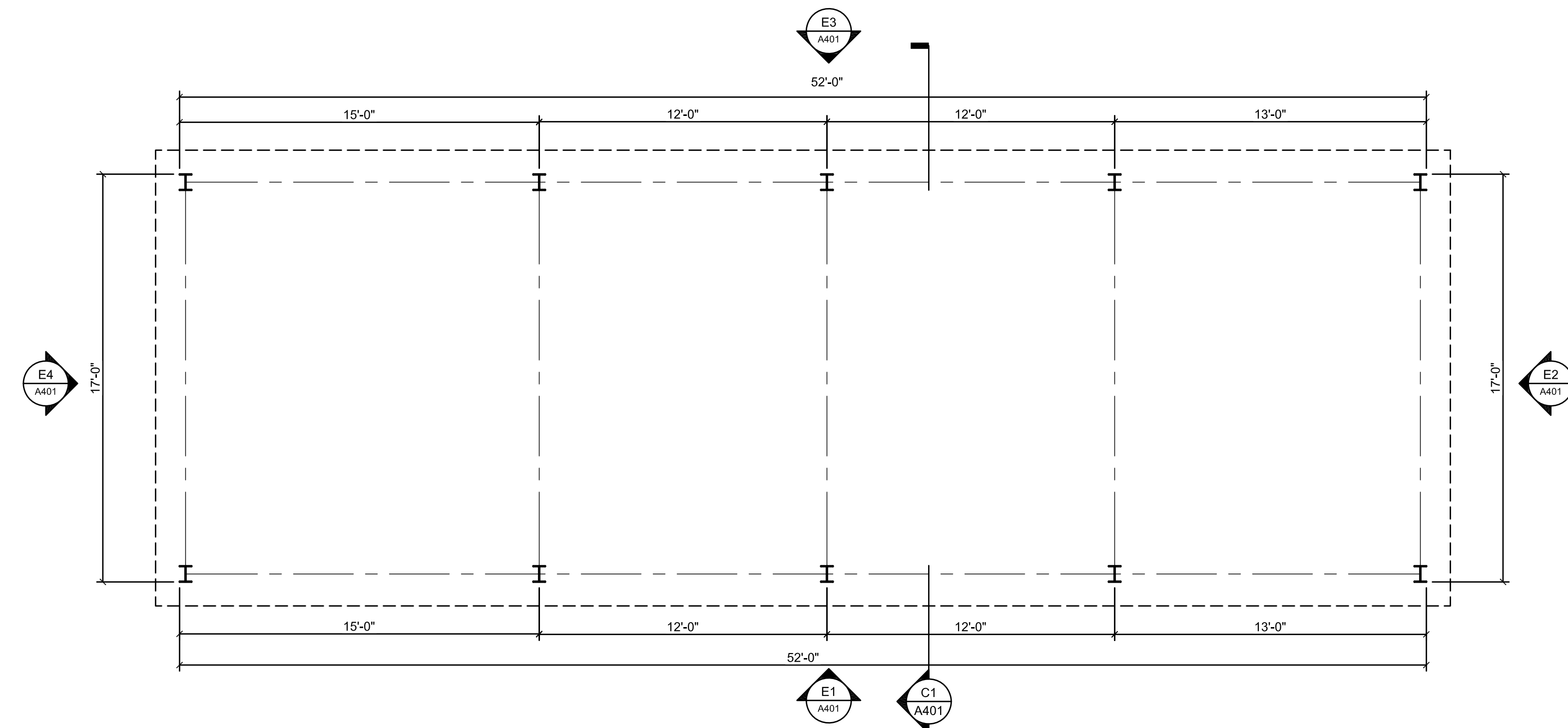
E1 EQUIPMENT RACK: REAR ELEVATION
1/4" = 1'-0"



E3 EQUIPMENT RACK: REAR ELEVATION
1/4" = 1'-0"



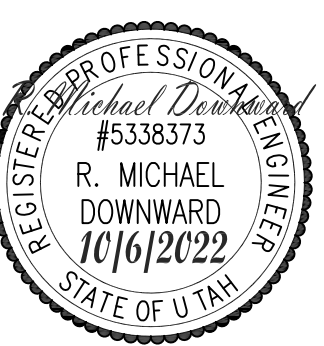
C1 EQUIPMENT RACK CROSS SECTION
1/4" = 1'-0"



1 FLOOR PLAN: EQUIPMENT RACK
1/4" = 1'-0"

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DRAWN BY: M.H.

SCALE: AS NOTED

SHEET:

A401

GENERAL NOTES

- DESIGN ROOF LOADS:
GROUND SNOW LOAD = 41 PSF
ROOF LIVE = 20 PSF
IMPORTANCE FACTOR = 1.0

BASIS FOR WIND DESIGN:
2018 INTERNATIONAL BUILDING CODE / ASCE 7-16
WIND = 105 MPH (V_{ult}) BASIC WIND SPEED, EXPOSURE C.
WIND USE GROUP = II

SEISMIC – SITE CLASS D
SEISMIC DESIGN CATEGORY D
S_s = 0.478 S_{ds} = 0.452
S₁ = 0.160 S_{d1} = 0.243

LATERAL FORCE RESISTING SYSTEM:
PER METAL BUILDING MFR. SPECIFICATION
- THESE STRUCTURAL NOTES DO NOT SUPERSEDE THE PLAN NOTES. CONSULT THE PLAN NOTES SPECIFIC TO FOUNDATION AND FRAMING FOR ADDITIONAL REQUIREMENTS IN EACH SECTION. IF CONFLICT BETWEEN NOTES AND SPECIFICATIONS OCCURS, THE MOST STRINGENT REQUIREMENT GOVERNS. NOTES AND DETAILS ON DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES, TYPICAL DETAILS, AND SPECIFICATIONS.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. DURING CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR CONSTRUCTION IN ANY AREA. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES, OMISSIONS, OR INCONSISTENCIES. IN CASE OF CONFLICT, FOLLOW THE MOST STRINGENT REQUIREMENTS AS DIRECTED BY THE ARCHITECT AND ENGINEER WITHOUT ADDITIONAL COST TO THE OWNER. DO NOT SCALE DRAWINGS!
- ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE, ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK, AND THE CODES AND STANDARDS LISTED IN THESE NOTES AND SPECIFICATIONS. ALL SPECIFICATIONS NOTED SHALL BE THE LATEST APPROVED REVISION OR EDITION. THE GENERAL CONTRACTOR SHALL REVIEW AND APPROVE ALL SHOP DRAWINGS PRIOR TO SUBMITTING THEM TO THE ARCHITECT. A REVIEWED COPY OF ALL SHOP DRAWINGS SHALL BE KEPT AT THE CONSTRUCTION SITE FOR REFERENCE. THE SHOP DRAWING REVIEW SHALL NOT RELIEVE THE GENERAL CONTRACTOR OF ANY RESPONSIBILITY FOR COMPLETION OF THE PROJECT ACCORDING TO THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL INVESTIGATE THE SITE DURING CLEARING, EXCAVATION OR OTHER EARTH WORK OPERATIONS FOR FILLED EXCAVATIONS, BURIED STRUCTURES OR UNNATURAL SOIL CONDITIONS.
- STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, NOT THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO: BRACING, SHORING, ETC. SHORING AND BRACING SHALL REMAIN IN PLACE UNTIL ALL PERMANENT MEMBERS ARE IN PLACE AND CONNECTIONS COMPLETE. OBSERVATION VISITS TO THE SITE BY THE ENGINEER OR HIS REPRESENTATIVE SHALL NOT INCLUDE INSPECTION OF THESE ITEMS. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS OR ROOF. LOADS SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.
- THE STRUCTURAL DRAWINGS ARE A PORTION OF THE COMPLETE SET OF CONSTRUCTION DOCUMENTS AND ARE NOT INTENDED TO CONVEY ABSOLUTELY ALL INFORMATION RELATED TO THE PRIMARY STRUCTURE AS AN INDEPENDENT SET OF DOCUMENTS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE WITH ALL TRADES, ANY AND ALL, ITEMS THAT ARE TO BE INTEGRATED INTO THE STRUCTURAL SYSTEM.
- SEE METAL BUILDING DRAWINGS FOR THE FOLLOWING: (UNLESS NOTED SPECIFICALLY ON FOUNDATION DRAWINGS)
– SIZE AND LOCATION OF DOOR, WINDOW, FLOOR, AND ROOF OPENINGS
– SIZE AND LOCATION OF ALL INTERIOR AND EXTERIOR NON-BEARING PARTITIONS
– FLOOR AND ROOF FINISHES
– STAIR FRAMING AND DETAILS (EXCEPT AS SHOWN).
– DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS
- SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR THE FOLLOWING: (UNLESS SHOWN OR NOTED)
– PIPE RUNS, SLEEVES, TRENCHES, HANGERS, WALL AND SLAB OPENINGS, ETC.
– ELECTRICAL CONDUITS, BOXES, AND OUTLETS IN WALLS AND SLABS.
– CONCRETE INSERT REQUIREMENTS FOR MECHANICAL AND ELECTRICAL.
– SIZE AND LOCATION OF MACHINE OR EQUIP. BASES, ANCHOR BOLT REQUIREMENTS, ETC.
- OPENINGS LARGER THAN 6 IN. SHALL NOT BE PLACED IN SLABS, DECKS, WALLS, ETC., UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW ABOVE CONDITIONS LOCATED IN STRUCTURAL MEMBERS.
- OBSERVATION VISITS BY THE ENGINEER OR HIS REPRESENTATIVE SHALL NEITHER BE CONSTRUED AS INSPECTION NOR APPROVAL OF CONSTRUCTION.

FOUNDATIONS

- FOUNDATION AND FOOTINGS ARE DESIGNED BASED ON A BEARING PRESSURE OF 1500 PSF AS PER 2018 IBC RECOMMENDATIONS. FOUNDATION DESIGNED FOR NON-EXPANSIVE SOIL. IF IT IS DISCOVERED EXPANSIVE SOILS EXISTING ON SITE, CONTRACT ENGINEER OF RECORD FOR RE-EVALUATION
- THE CONTRACTOR SHALL PROVIDE FOR PROPER DE-WATERING OF ANY AND ALL EXCAVATIONS IF REQUIRED.
- THE CONTRACTOR SHALL PROVIDE FOR THE DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING, AND SHORING REQUIRED TO SAFELY AND ADEQUATELY RETAIN ANY EXCAVATIONS.
- ALL RETAINING WALLS, BUILDING WALLS, PITS, ETC. MUST HAVE ATTAINED THEIR DESIGN STRENGTH AND/OR SUPPORT PRIOR TO BACKFILLING. EXCEPTION – IF BRACING IS TO BE USED TO SUPPORT WALLS AND ETC. FOR EARLY BACKFILLING, CONTRACTOR IS RESPONSIBLE FOR DESIGN, PERMITS AND INSTALLATION OF SUCH BRACING.
- GRADING SHALL ALLOW FOR POSITIVE DRAINAGE (2 PERCENT MINIMUM) AWAY FROM THE BUILDING, OTHER FOOTINGS AND FOUNDATIONS, DRIVES AND SIDEWALKS. ALL DOWN SPOUTS SHALL DRAIN ONTO 3 FOOT LONG SPLASH BLOCKS SLOPING AWAY FROM FOUNDATIONS.
- EXCESSIVE WETTING OR DRYING OF THE FOUNDATION EXCAVATION AND THE FLOOR SLAB AREAS SHOULD BE AVOIDED DURING CONSTRUCTION.
- ALL FILL SUPPORTING CONCRETE SLABS, FOOTINGS, OR ETC. SHALL BE MOISTENED AND COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 (MODIFIED PROCTOR). ALL OTHER FILL SHALL BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF NINETY (90) PERCENT OF MAXIMUM DRY DENSITY. COMPACTION TESTING SHALL BE PERFORMED BY AN APPROVED TESTING AGENCY AND THE RESULTS SUBMITTED TO THE STRUCTURAL ENGINEER. SUFFICIENT FIELD DENSITY TESTS SHALL BE PERFORMED TO CERTIFY BUILDING PADS ARE CONFORMING TO THE SPECIFICATIONS.
- FOOTINGS SHALL BE PLACED ON A MINIMUM OF 24" OF STRUCTURAL FILL COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY MODIFIED PROCTOR ASTM D-1557, UNLESS NOTED OTHERWISE ON THE SOILS REPORT.

CONCRETE

- ALL PHASES OF WORK PERTAINING TO THE CONCRETE CONSTRUCTION SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318) AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 318) LATEST APPROVED EDITIONS, WITH MODIFICATIONS AS NOTED IN THE DRAWINGS OR SPECIFICATIONS.
- CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY. ALL CONCRETE IN CONTACT WITH THE EARTH SHALL CONTAIN TYPE V PORTLAND CEMENT UNLESS NOTED OTHERWISE (UNO). ALL CONCRETE SHALL BE AIR ENTRAINED BY 5% +/- 1%.
- CALCIUM CHLORIDE SHALL NOT BE USED.
- CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS WITHIN 28 DAYS AFTER PLACEMENT (UNO):

FOOTINGS 3,000 psi
FOUNDATION (PIERS/PEDESTALS SUPPORTING STEEL COLUMNS) 4,000 psi
INTERIOR FLATWORK 4,000 psi
ALL EXTERIOR CONCRETE 4,500 psi
- MAXIMUM CONCRETE SLUMP SHALL NOT EXCEED 4 INCHES +/- 1".
- ALL CONCRETE SHALL BE THOROUGHLY CURED ACCORDING TO ACI RECOMMENDATIONS. FOLLOW ACI 306R "COLD WEATHER CONCRETING" AND ACI 305R "HOT WEATHER CONCRETING" FOR ALL CONCRETE AND MASONRY WORK WHEN REQUIRED BY CURRENT WEATHER CONDITIONS.
- CONDUITS AND PIPES EMBEDDED IN CONCRETE SHALL CONFORM TO THE REQUIREMENTS IN SECTION 1906.3 OF THE INTERNATIONAL BUILDING CODE.
- NO ALUMINUM OR ANY METAL INJURIOUS TO CONCRETE SHALL BE EMBEDDED IN CONCRETE.
- BOTH INTERIOR AND EXTERIOR CONCRETE SLABS-ON-GRADE SHALL BE A MINIMUM OF 4 INCHES IN THICKNESS UNO, WITH SAWN OR TOOLED JOINTS A MAXIMUM 12 FEET IN EACH DIRECTION. SAWN JOINTS SHALL BE 1/4 SLAB THICKNESS IN DEPTH AND SHALL BE CUT AS SOON AS SURFACE ALLOWS AND NOT MORE THAN 12 HOURS AFTER CONCRETE PLACEMENT. CONSTRUCTION JOINTS SHALL BE MADE AND LOCATED AS TO LEAST IMPAIR ALL REINFORCING, AND BARS SHALL BE CONTINUOUS THROUGH JOINTS (UNO).
- CLEAR COVERAGE OF CONCRETE OVER OUTER REINFORCEMENT BARS SHALL BE AS FOLLOWS (UNO):
– FOR CONCRETE PLACED DIRECTLY AGAINST EARTH, 3 IN. COVER
– FOR CONCRETE SURFACES EXPOSED TO WEATHER, 1 1/2 IN. COVER
– FOR CONCRETE SURFACES EXPOSED TO GROUND AFTER REMOVAL OF FORMS, 2" COVER.
– FOR CONCRETE SURFACES NOT EXPOSED TO THE GROUND OR WEATHER: SLABS AND WALLS, 3/4 IN. COVER; JOISTS OR WAFFLE BEAMS, 1 IN. COVER; BEAMS, PIERS, AND COLUMNS, 1 1/2 IN. COVER.
- WHERE CONCRETE GIRTHS, BEAMS, OR WALLS ARE CONTINUOUS AROUND A CORNER, ADD CORNER BARS TO LAP 40 BAR DIAMETERS IN EACH DIRECTION. REINFORCING BARS IN THE INTERIOR FACES SHALL EXTEND TO WITHIN 2 IN. OF THE OUTER FACE AND SHALL TERMINATE IN A STANDARD HOOK OR BEND.
- AROUND OPENINGS IN CONCRETE SLABS, UNLESS OTHERWISE SCHEDULED, ADD REINFORCING EQUIVALENT TO BARS CUT BY OPENING. THE BARS PARALLEL TO THE MAIN REINFORCEMENT SHALL RUN THE FULL LENGTH OF THE SPAN. THE BARS PARALLEL TO THE TEMPERATURE STEEL SHALL RUN 40 BAR DIAMETERS EACH WAY BEYOND THE OPENING.

REINFORCING STEEL (FOR CONCRETE)

- ALL REINFORCING STEEL SHALL BE DETAILED AND PLACED IN CONFORMANCE WITH THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318 LATEST EDITION) AND THE MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION (1973 EDITION) BY THE CRSI AND THE WCRSI, AS MODIFIED BY THE PROJECT DRAWINGS AND SPECIFICATIONS.
- CHAIRS, SUPPORTS AND TIE BARS REQUIRED IN ADDITION TO THE SCHEDULED REINFORCING SHALL BE FURNISHED BY THE CONTRACTOR.
- ALL STEEL REINFORCEMENT SHALL CONFORM TO ASTM A615 GRADE 60 WITH A MINIMUM YIELD STRENGTH OF 60,000 psi, WITH THE FOLLOWING THREE EXCEPTIONS:

1. #3 AND #4 COLUMN TIES AND BEAM STIRRUPS AND BREAKOUT DOWELS SHALL BE GRADE 40 WITH A MINIMUM YIELD STRENGTH OF 40,000 psi.
2. ANY AND ALL REINFORCING THAT IS TO BE WELDED SHALL BE DEFORMED WELDABLE BAR (DWB) THAT CONFIRMS TO ASTM A706 GRADE 60.
3. UNLESS NOTED OTHERWISE (UNO) ON DRAWINGS.
- WELDING OF REINFORCING SHALL BE WITH LOW HYDROGEN ELECTRODES IN CONFORMANCE WITH RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL AMERICAN WELDING SOCIETY, AWS-D1.4.
- SPLICES OF REINFORCING BAR, IF REQUIRED, SHALL BE AVOIDED AT POINTS OF MAXIMUM STRESS. ALL SPLICES AND LAPS IN REINFORCING BARS SHALL CONFORM TO TYPICAL DETAIL B/SO.1. SPLICES SHALL BE MADE IN A REGION OF COMPRESSION, UNLESS SHOWN OTHERWISE.
- REINFORCING BARS SHALL NEITHER BE WELDED NOR BENT BY HEATING. WHERE INSERTS REQUIRE WELDING TO PLATES, ANGLES OR THE LIKE, DEFORMED WELDABLE BARS SHALL BE USED.
- ALL HOOKS IN REINFORCING BARS SHALL BE BENT 180 DEGREES WITH AN INSIDE DIAMETER OF 6 BAR DIAMETERS FOR BARS UP TO 1 IN. AND 8 BAR DIAMETERS FOR BARS OVER 1 IN. IN DIAMETER. EXTEND BARS A MINIMUM OF 4 BAR DIAMETERS BEYOND BEND. REFER TO STANDARD REBAR BEND DETAILS (A/SO.1) AND TYP. REBAR LAP LENGTH DETAILS (B/SO.1) FOR CLARIFICATION
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 WITH A YIELD STRENGTH OF 65000 psi, OR ASTM A497 WITH A YIELD STRENGTH OF 70000 psi.
- MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6 INCHES OR ONE FULL MESH AND ONE HALF, WHICHEVER IS GREATER.
- DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE, AND SPACING OR NUMBER AS THE VERTICAL REINFORCING, RESPECTIVELY, UNO.

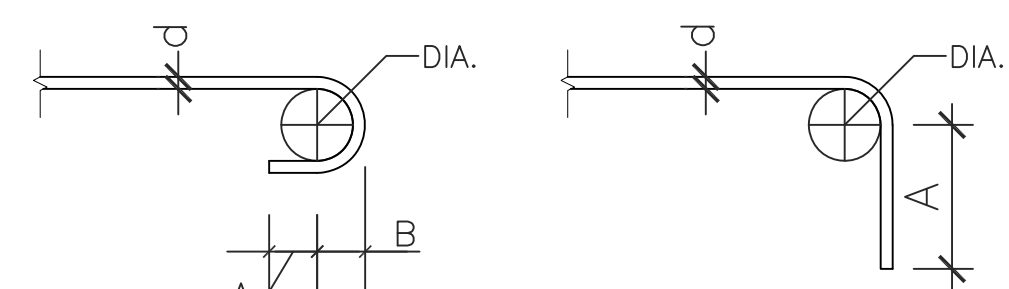
SPECIAL INSPECTION

- SPECIAL INSPECTION AND QUALITY ASSURANCE, AS REQUIRED BY SECTION 1704 THRU 1709 OF THE IBC, SHALL BE PROVIDED BY AN INDEPENDENT AGENCY EMPLOYED BY THE OWNER UNLESS WAIVED BY THE BUILDING OFFICIAL. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE REQUIRED INSPECTIONS. ALL TESTING AND INSPECTION REPORTS SHALL BE SENT WITHIN 24 HOURS OF THE TEST TO THE ARCHITECT, ENGINEER, BUILDING OFFICIAL AND CONTRACTOR FOR REVIEW. SPECIAL INSPECTION DURING FABRICATION IS NOT REQUIRED IF THE FABRICATOR IS REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. ITEMS REQUIRING SPECIAL INSPECTION AND QUALITY ASSURANCE ARE:

2. CONCRETE PLACEMENT (IBC 1704.4)
A. CONTINUOUS SPECIAL INSPECTION SHALL BE PROVIDED.
B. CYLINDERS, SLUMP, TEMPERATURE AND AIR-ENTRAINMENT SHALL BE DONE FOR EVERY 50 CUBIC YARDS OR EACH DAY'S PRODUCTION IF THE DAY'S PRODUCTION IS LESS THAN 50 CUBIC YARDS
C. PROTECTION OF CONCRETE DURING COLD AND HOT WEATHER.
- BOLTS INSTALLED IN CONCRETE (IBC 1704.4)
A. ALL BOLTS SHALL BE SPECIAL INSPECTED PRIOR TO AND DURING CONCRETE PLACEMENT.

SPECIAL INSPECTION (CONT'D)

- CONCRETE REINFORCING STEEL PLACEMENT (IBC 1704.4)
A. ALL REINFORCING SHALL BE SPECIAL INSPECTED PRIOR TO CONCRETE PLACEMENT.
- EPOXY ANCHORS (IBC 1704.13)
A. SPECIAL INSPECTION SHALL VERIFY ALL DRILLED HOLES' SIZE AND DEPTH PRIOR TO INSTALLATION OF EPOXY AND ANCHOR ROD.



BAR SIZE	d (BAR DIA.)	DIA.	180° HOOKS		90° BENDS
			A	B	A
#3	3/8"	2 1/4"	2 1/2"	1 1/2"	4 1/2"
#4	1/2"	3"	2 1/2"	2"	6"
#5	5/8"	3 3/4"	2 1/2"	2 1/2"	7 1/2"
#6	3/4"	4 1/2"	3"	3"	9"

A STANDARD REBAR BENDS DETAIL
NTS

BAR SIZE	d (BAR DIA.)	LAP LENGTH	HOOK EMBED
#3	3/8"	15"	6 1/2"
#4	1/2"	19 1/2"	8 1/2"
#5	5/8"	24"	10 1/2"
#6	3/4"	29"	12 1/2"

B TYP. REBAR LAP LENGTHS
NTS

IRON ROCK GROUP
Building on Solid Foundations
460 E. 300 SOUTH
KANAB, UTAH 84741
435-644-2031
www.ironrockeng.com

KANE COUNTY ROAD FACILITY

STRUCTURAL SPECIFICATIONS

1125 S. HWY US-89
GLENDALE, UT 84728

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Sheet List Table

Sheet Number	Sheet Title	DRAWN BY:	RMD
SO.1	STRUCTURAL SPECIFICATIONS	SCALE:	NTS
S1.0	FOUNDATION PLAN – OFFICE-SHOP	SHEET:	S0.1
S1.1	FOUNDATION PLAN – SALT SHED-SANDER RACK		
S2.0	FOUNDATION DETAILS		
S2.1	FOUNDATION DETAILS		

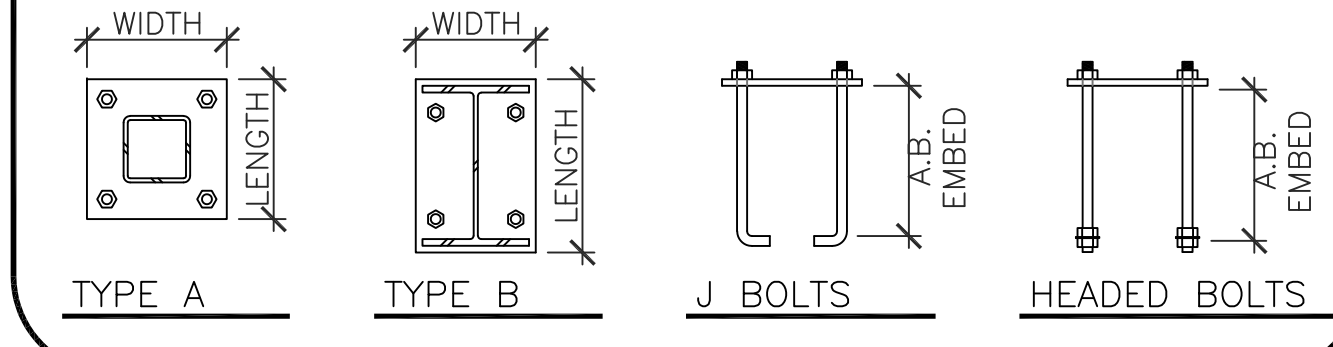
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- FOUNDATION PLAN NOTES:**
- TYP. MINIMUM EXTERIOR FOOTING EMBEDMENT SHALL BE 24" UNLESS NOTED OTHERWISE ON PLANS OR DETAILS
 - REFER TO GEOTECHNICAL SOILS REPORT REFERENCED IN STRUCTURAL SPECIFICATIONS FOR ALL PAD GRADING AND PREPARATION AS WELL AS COMPACTION REQUIREMENTS. WHERE SOILS REPORT DOES NOT SPECIFY SUBGRADE PREPARATION AND COMPACTION REQUIREMENTS, REFER TO FOUNDATION SECTION OF STRUCTURAL SPECIFICATIONS FOR MINIMUM REQUIREMENTS
 - TYP. SLAB AT SHOP AREA SHALL BE 6" THICK AND REINFORCEMENT SHALL BE #4 BARS AT 18" o.c. EACH WAY CENTERED IN SLAB THICKNESS UNLESS NOTED OTHERWISE ON PLANS OR DETAILS. TYP. SLAB AT OFFICE AREA SHALL BE 4" THICK AND REINFORCEMENT SHALL BE #3 BARS AT 24" o.c. EACH WAY CENTERED IN SLAB THICKNESS UNLESS NOTED OTHERWISE ON PLANS OR DETAILS. WELDED WIRE MESH PER STRUCTURAL SPECIFICATIONS MAY BE USED IN LIEU OF REBAR REINFORCEMENT
 - ALL INTERIOR SLABS ON GRADE TO BE CAST OVER MINIMUM 1/2" SAND OVER 6 MIL VISQUEUM OVER 6" TYPE II AGGREGATE BASE OR PROVIDE EQUIVALENT VAPOR/MOISTURE BARRIER, NOT REQ'D WHERE NO FLOOR COVERINGS TO BE APPLIED OR WHERE LOCAL BUILDING OFFICIAL WIVES REQUIREMENT
 - ALL CONCRETE SHALL BE TYPE V CONCRETE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS SPECIFIED IN THE CONCRETE SECTION OF THE STRUCTURAL SPECIFICATIONS
 - VERIFY ALL FOUNDATION AND SLAB DIMENSIONS w/ METAL BUILDING DRAWINGS. REFER TO METAL BUILDING DRAWINGS FOR BOLT DIAMETER AND LAYOUT FOR STEEL COLUMNS
 - CONTRACTOR TO VERIFY LOCATION OF ALL ANCHOR BOLTS, HOLDOWN ANCHORS, INSERTS, PLUMBING, ETC., PRIOR TO PLACING CONCRETE
 - VERIFY ALL DIMENSIONS w/ ARCH'L DRAWINGS PRIOR TO PLACING CONCRETE
 - REFER TO SHEET S0.1 FOR LAP SCHEDULE (B) AND STANDARD BENDS DETAIL (A)
 - CLEAR BUILDING PAD OF ALL LOOSE DEBRI, SHRUBS, ORGANIC MATERIAL, ETC., PRIOR TO PLACEMENT OF CONCRETE
 - REFER TO FOOTING SCHEDULE FOR FOOTING SIZE AND REINFORCEMENT. FOOTINGS REFERENCED ON PLAN AS F1, F2, F3
 - REFER TO BASEPLATE SCHEDULE FOR BASEPLATE AND ANCHOR BOLTS SIZES, THICKNESSES, ETC.. BASEPLATES REFERENCED ON PLAN AS B1, B2, B3.....
 - REFER TO FOOTING DETAIL 109/S2.0 FOR PEDESTAL SIZE AND CONFIGURATION AT METAL BUILDING COLUMNS. PEDESTALS REFERENCED ON PLAN AS P1, P2, P3.....
 - HOLDOWN ANCHORS AND ANCHOR BOLTS MAY BE POST INSTALLED WITH SIMPSON SET-35 EPOXY USING EMBED DEPTH AND ANCHOR BOLT SIZE AS LISTED FOR STANDARD INSTALLATION
 - REFER TO DETAIL 107/S2.0 FOR TREATMENT WHERE PIPE CROSSES PERPENDICULAR TO BUILDING PERIMETER FOOTINGS
 - REFER TO DETAIL 108/S2.0 FOR TREATMENT AT CONCRETE SLAB COLD JOINTS

FOOTING SCHEDULE				
FOOTING LABEL	FOOTING LENGTH/WIDTH	FOOTING THICKNESS	FOOTING EMBED	REQ'D REINFORCING
F1	2'-8" x 2'-8" SQ.	12"	24"	(4) #4 BARS E.W. BOTTOM OF FOOTING
F2	3'-6" x 3'-6" SQ.	12"	24"	(5) #4 BARS E.W. BOTTOM OF FOOTING
F3	4'-0" x 4'-0" SQ.	12"	PER DETAIL	(6) #4 BARS E.W. BOTTOM OF FOOTING
F4	5'-0" x 5'-0" SQ.	12"	24"	(7) #4 BARS E.W. BOTTOM OF FOOTING
F5	5'-6" x 5'-6" SQ.	12"	26"	(8) #4 BARS E.W. BOTTOM OF FOOTING

BASEPLATE SCHEDULE					
B.P. LABEL	B.P. TYPE	B.P. LENGTH/WIDTH	B.P. THICKNESS	ANCHOR BOLTS	A.B. EMBED DEPTH/TYP
B1	B	BY OTHERS	BY OTHERS	(4) 3/4" DIA.	10" J-BOLT
B2	B	BY OTHERS	BY OTHERS	(4) 3/4" DIA.	10" J-BOLT
B3	B	BY OTHERS	BY OTHERS	(4) 7/8" DIA.	16" HEADED BOLT

- ALL EDGE DISTANCE, END DISTANCE, AND BOLT SPACINGS SHALL BE PER MINIMUM AISC SPECIFICATIONS. MIN. CENTERLINE OF BOLT TO EDGE DISTANCE SHALL BE 1 1/2"
- ALL BOLT EMBED DEPTHS ARE TO BE MEASURED FROM TOP OF CONCRETE
- J-BOLTS AS SPECIFIED ON THE TABLE ABOVE MAY BE SUBSTITUTED WITH HEADED BOLTS OF EQUAL LENGTH AS DESIRED. HEADED BOLTS MAY NOT BE SUBSTITUTED WITH J-BOLTS
- EPOXY USED FOR EPOXY ANCHORS SHALL BE SIMPSON SET EPOXY OR APPROVED ALTERNATE AND SHALL BE INSTALLED PER MANUFACTURER RECOMMENDATION



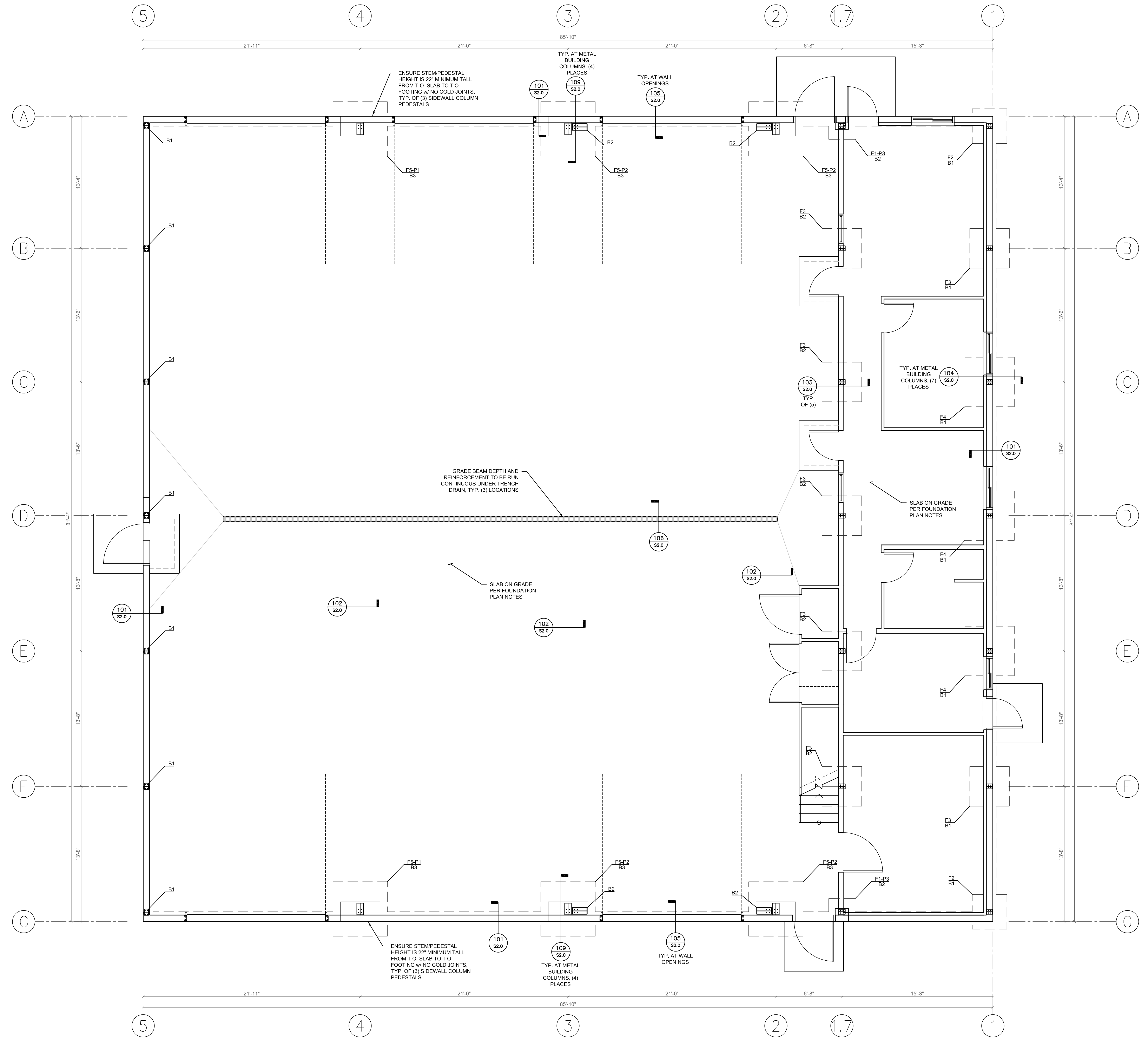
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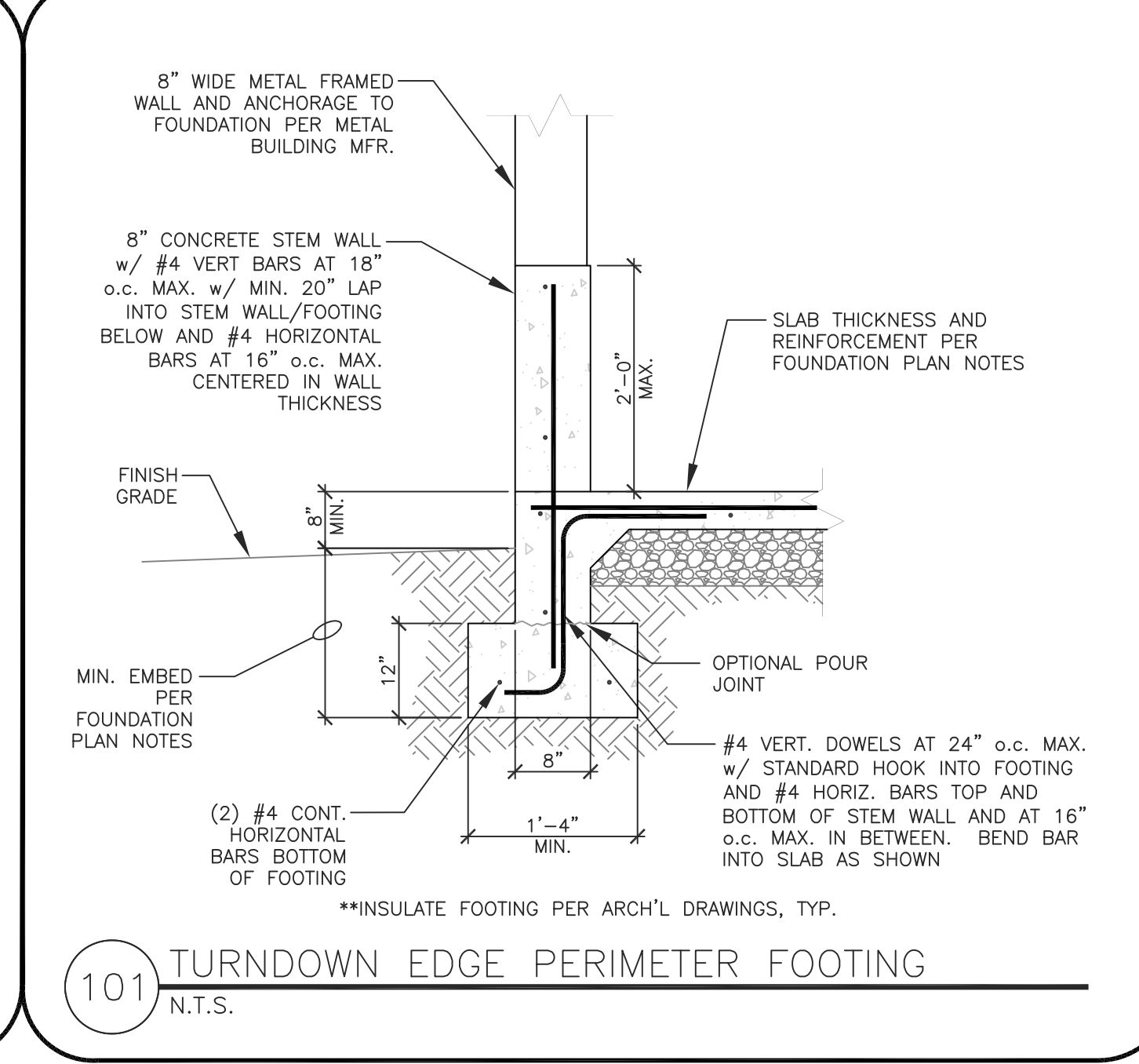
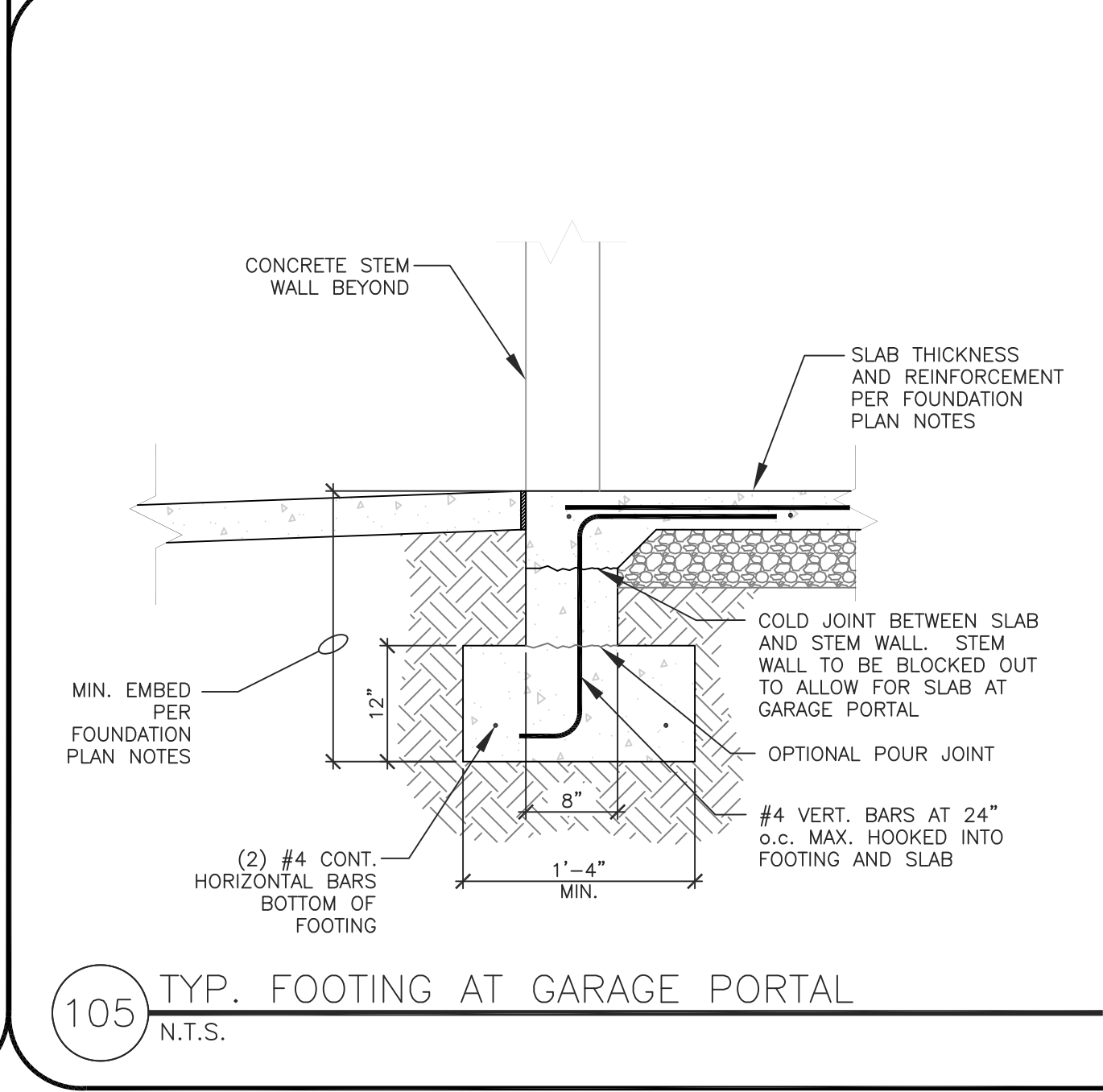
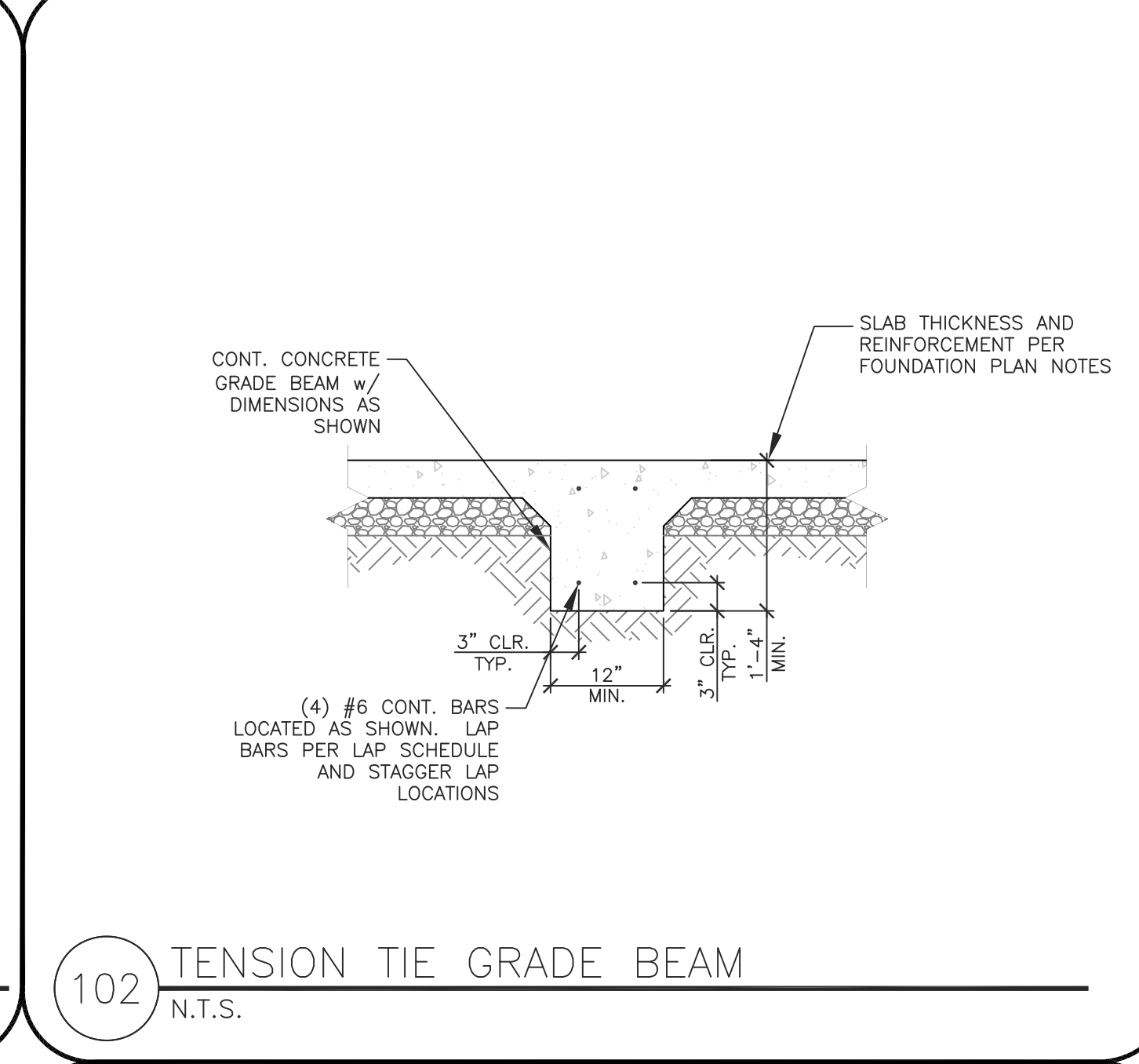
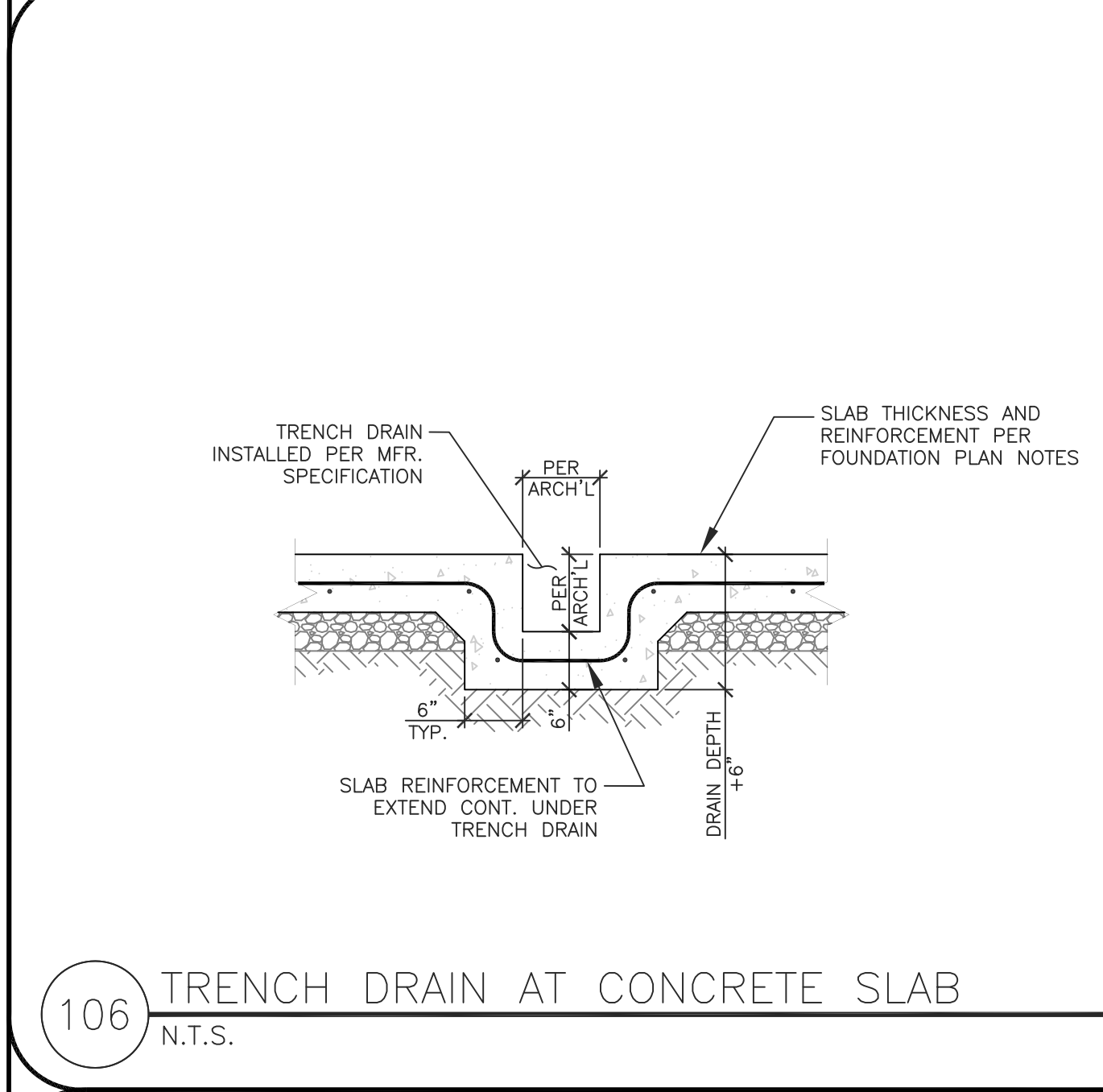
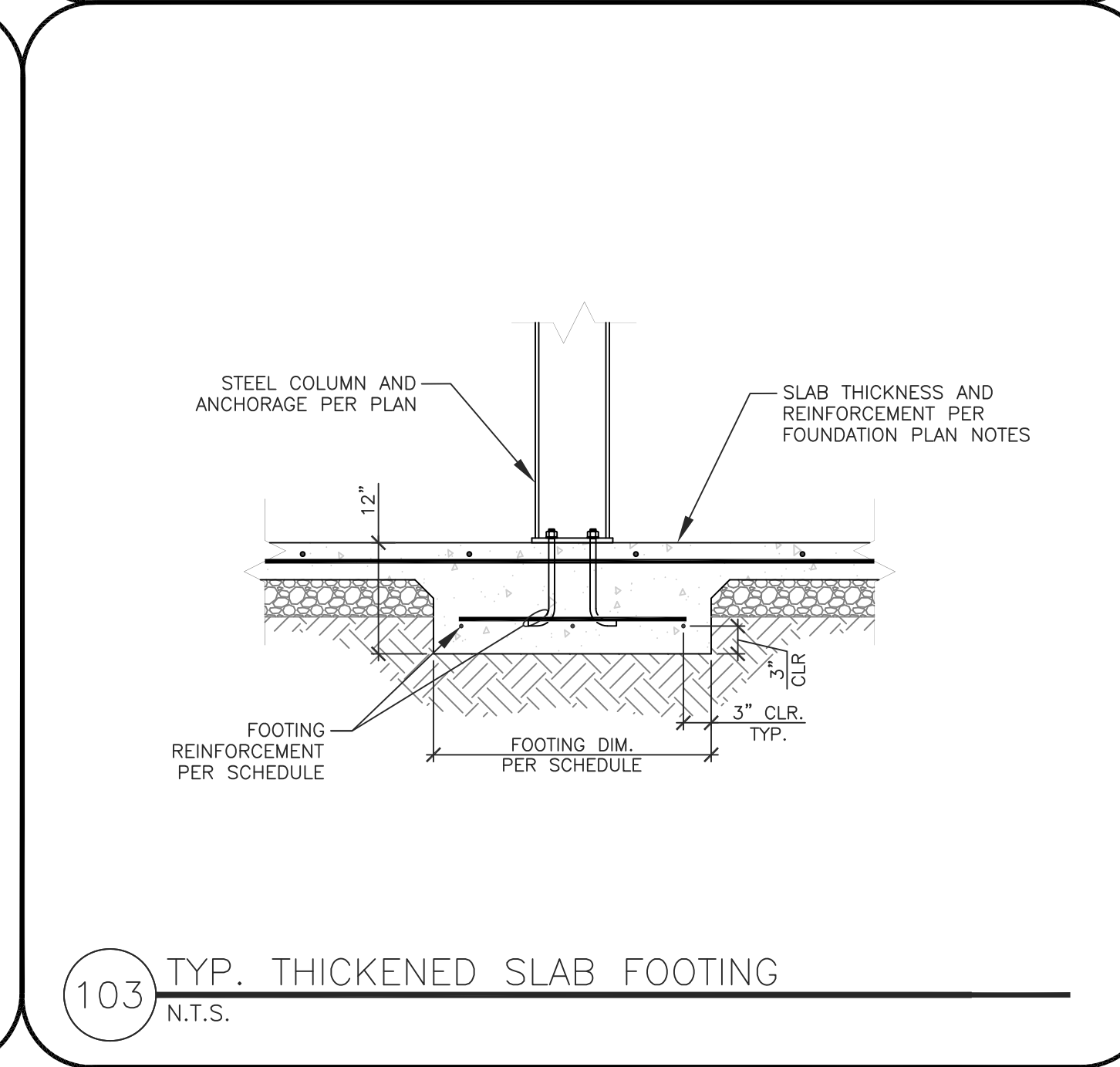
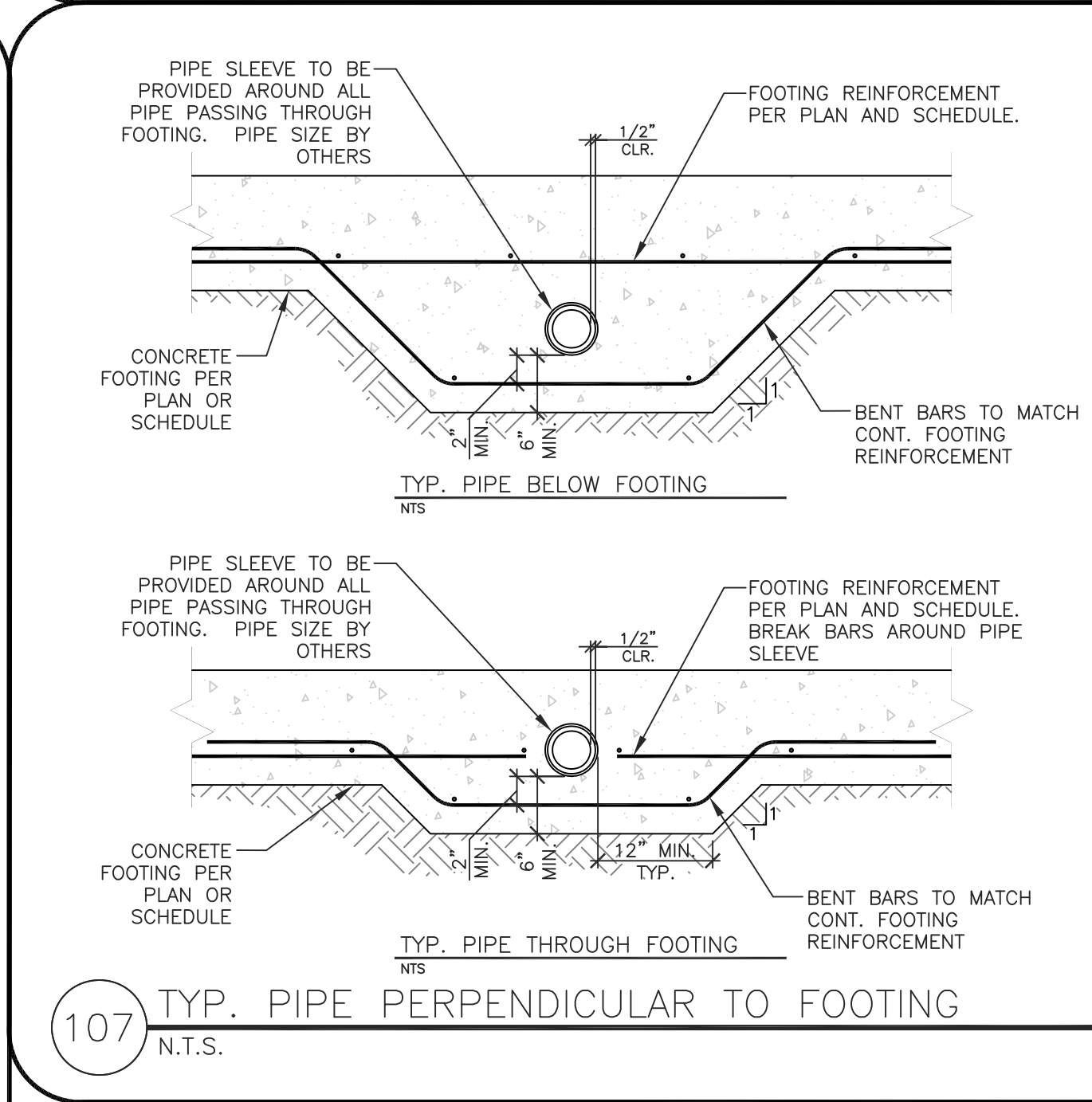
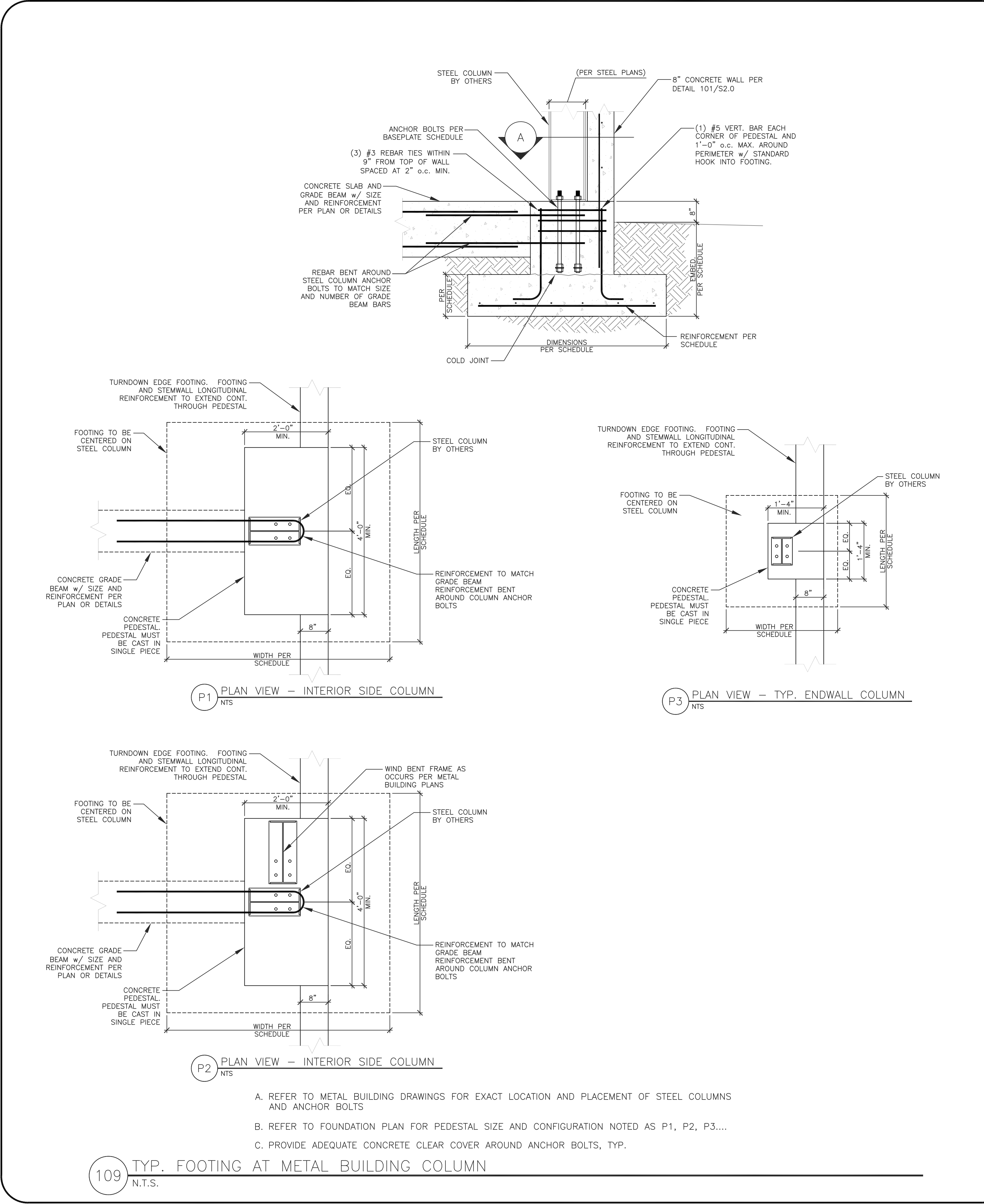
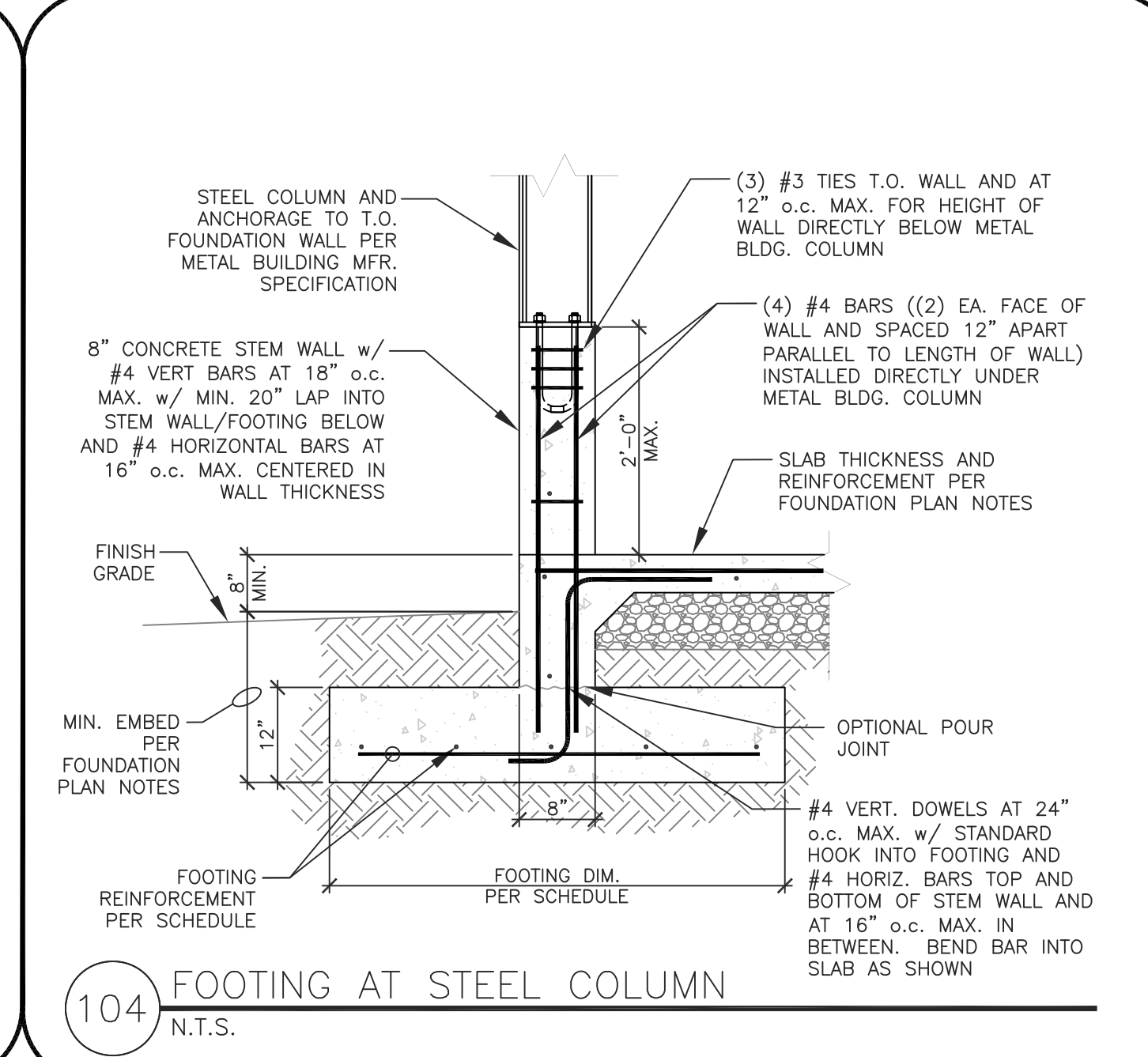
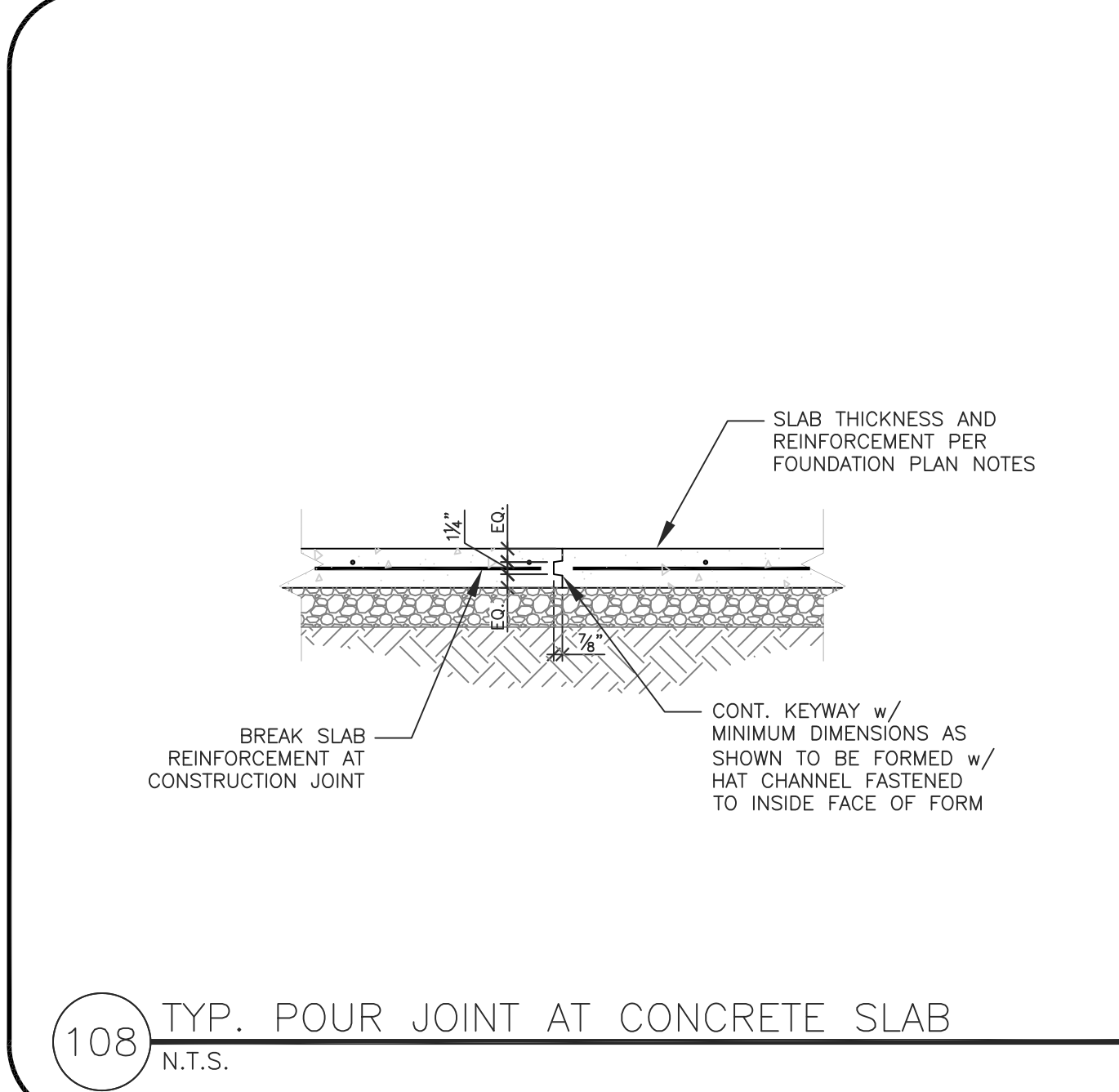


ALL PLANS, CONNECTIONS, DIMENSIONS, MATERIALS, SPECIFICATIONS, AND SO ON MUST BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE UTAH BUILDING CODE, UTAH STRUCTURAL STEEL CODE, AND UTAH CONCRETE CODE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL DIMENSIONS AND MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL BUILDING OFFICIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE AND BONDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY LABOR AND MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY EQUIPMENT AND TOOLS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY SAFETY AND PROTECTIVE EQUIPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY TRAINING AND CERTIFICATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL BUILDING OFFICIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE AND BONDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY LABOR AND MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY EQUIPMENT AND TOOLS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY SAFETY AND PROTECTIVE EQUIPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY TRAINING AND CERTIFICATION.

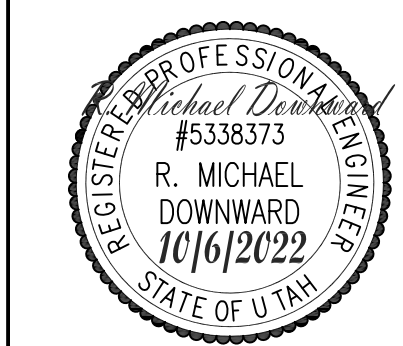
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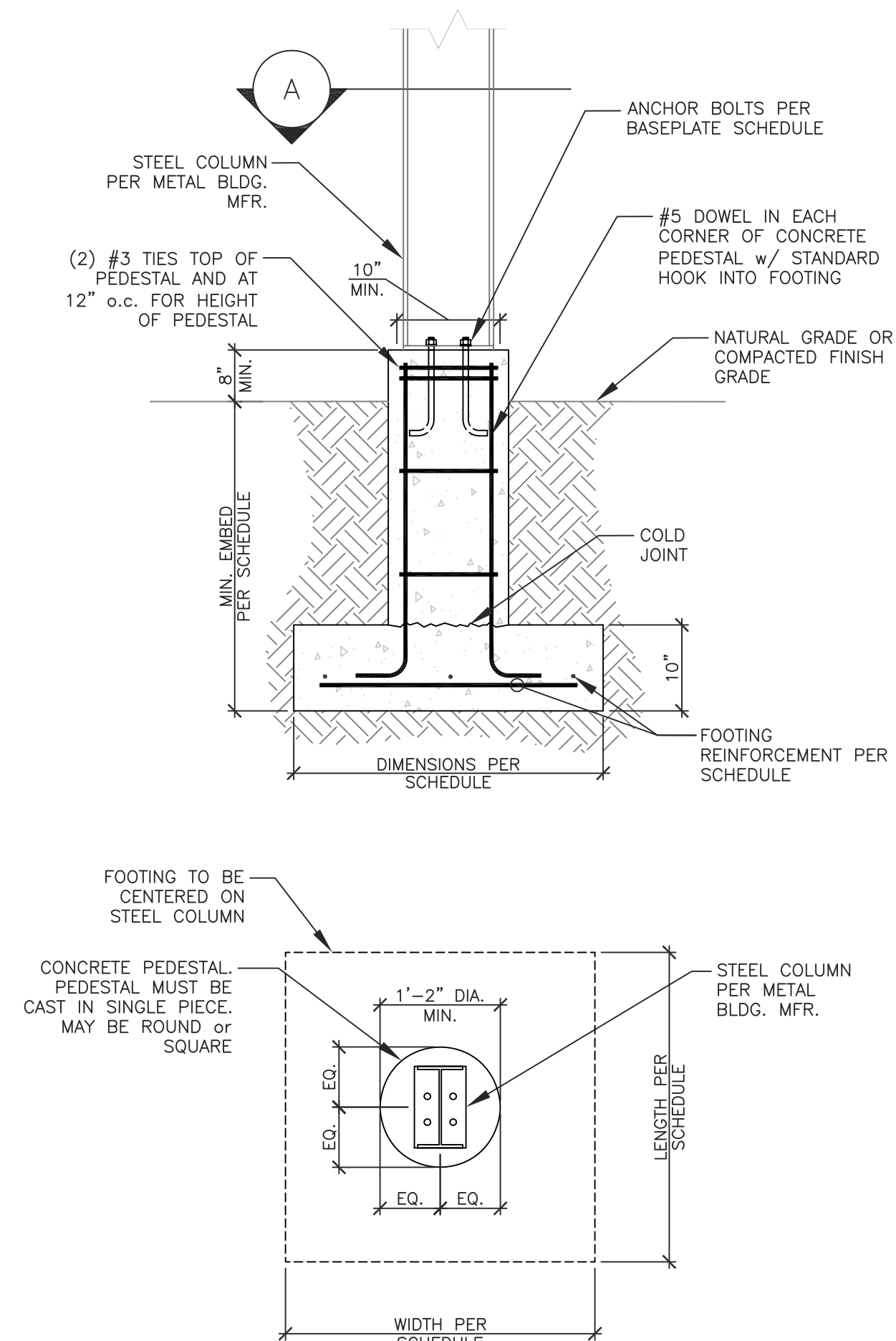


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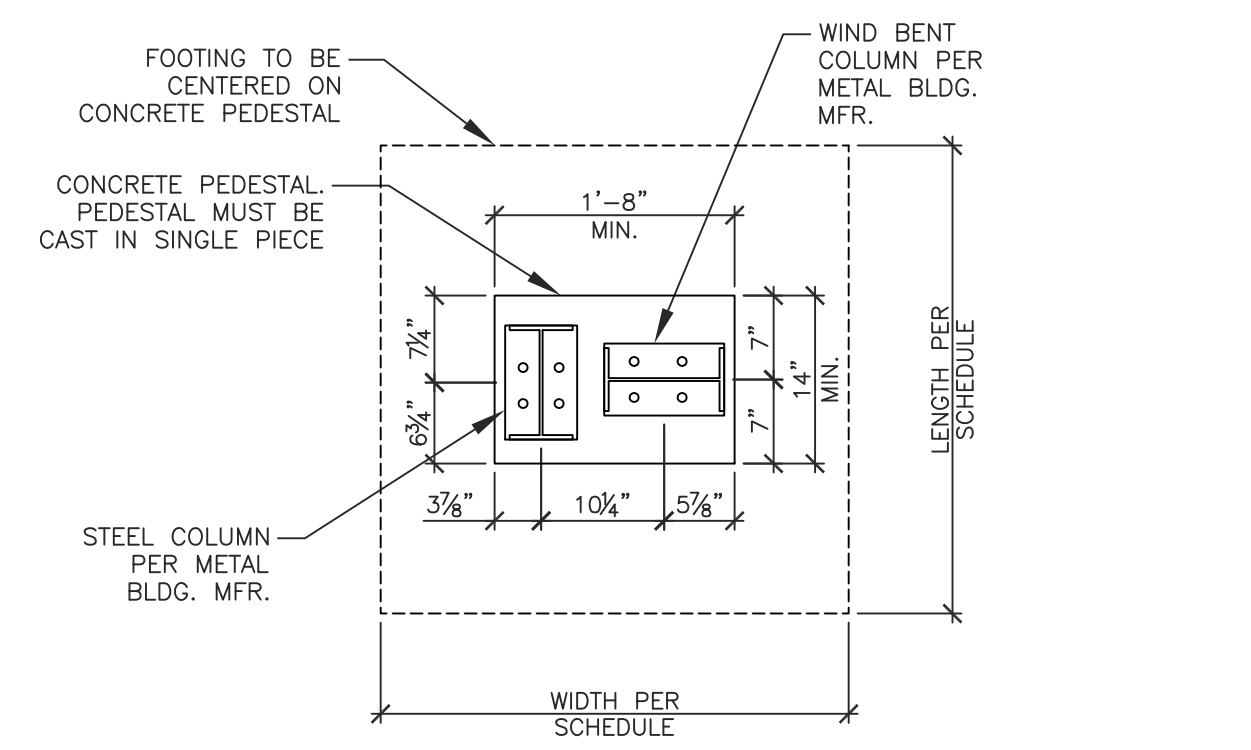


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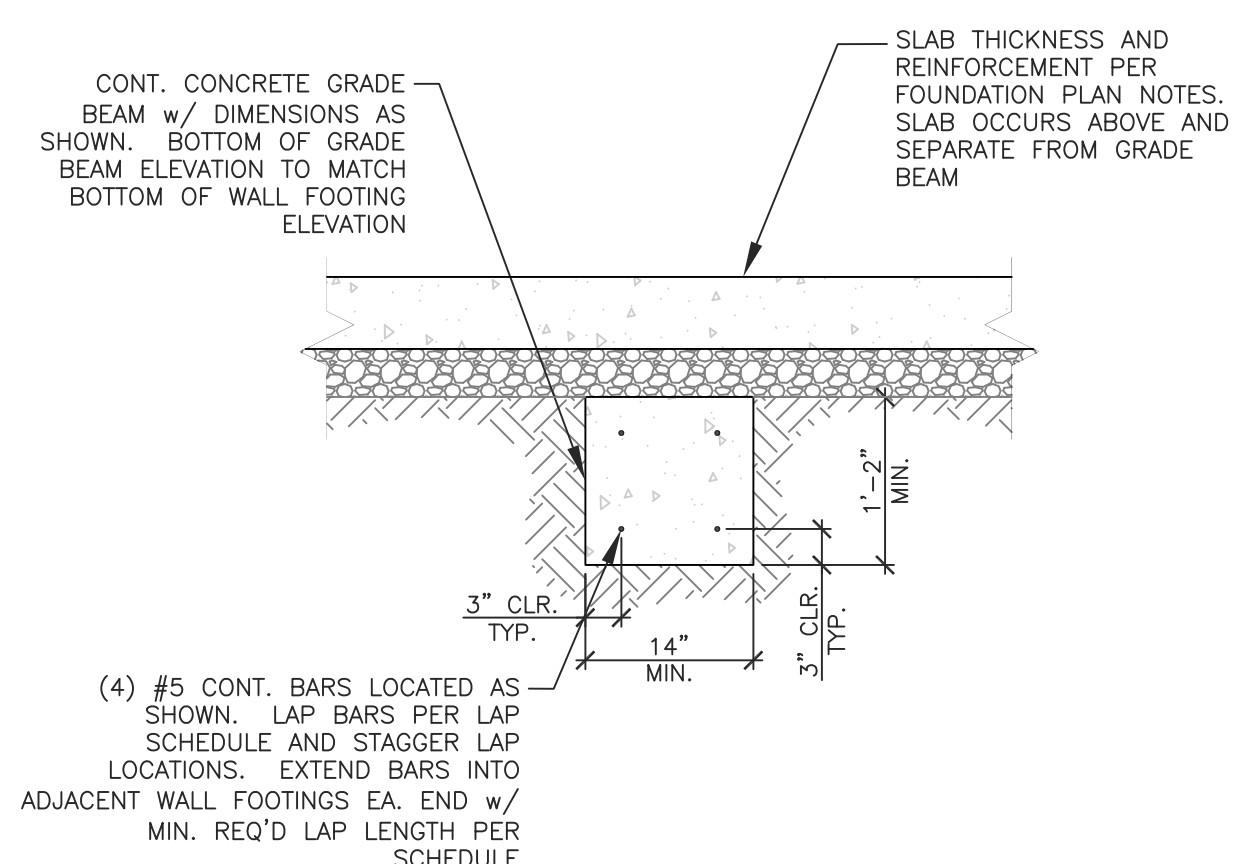
P1 PLAN VIEW - TYPICAL COLUMN
N.T.S.



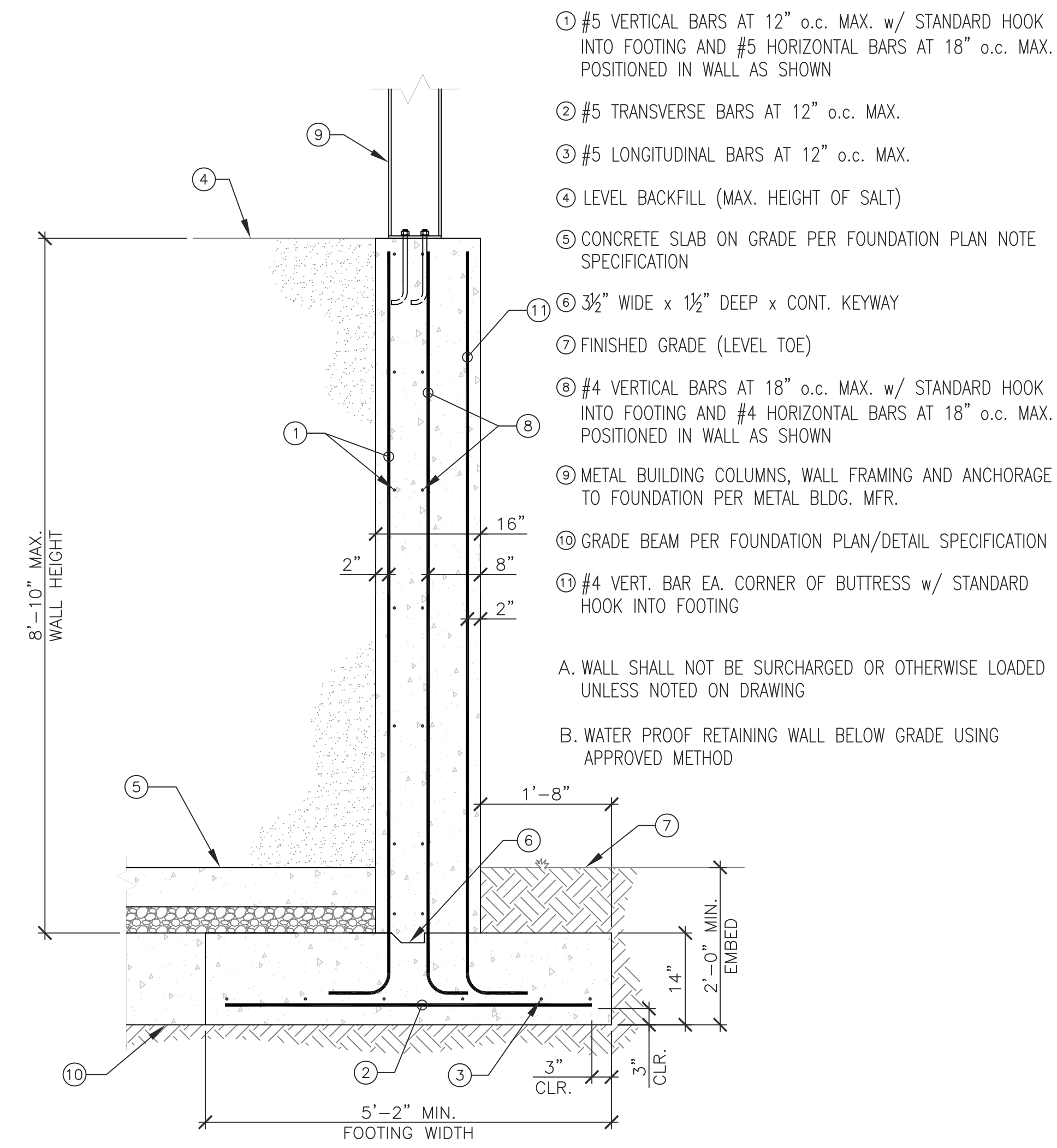
P2 PLAN VIEW - PEDESTAL AT WIND BENT
N.T.S.

- A. REFER TO METAL BUILDING DRAWINGS FOR EXACT LOCATION AND PLACEMENT OF STEEL COLUMNS AND ANCHOR BOLTS
- B. REFER TO FOUNDATION PLAN FOR PEDESTAL SIZE AND CONFIGURATION NOTED AS P1, P2, P3....
- C. PROVIDE ADEQUATE CONCRETE CLEAR COVER AROUND ANCHOR BOLTS, TYP.

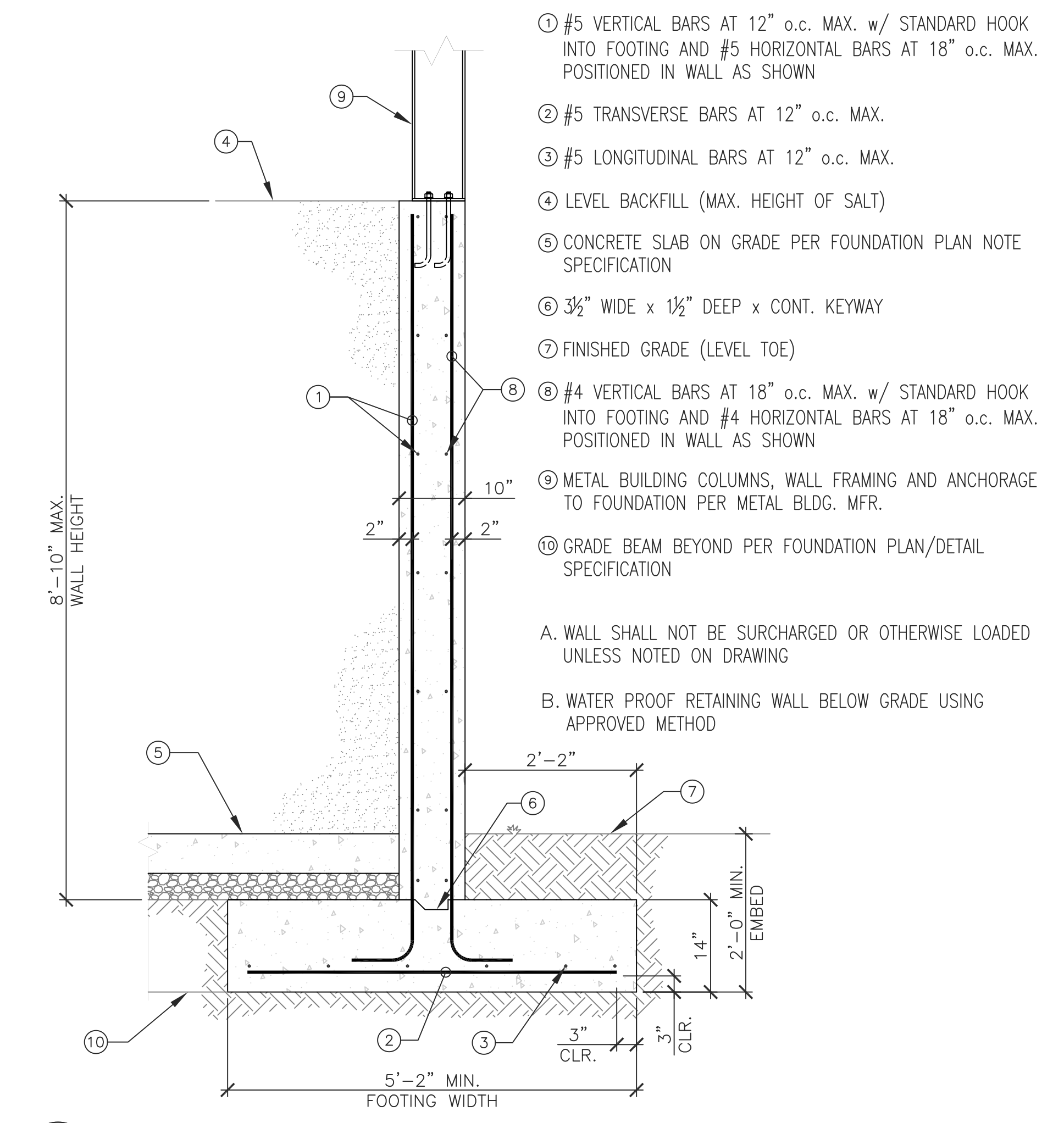
113 TYP. PIER FOOTING AT METAL BLDG COLUMN
N.T.S.



112 GRADE BEAM BELOW SLAB
N.T.S.



111 BUTTRESS AT CONCRETE FOUNDATION WALL
N.T.S.

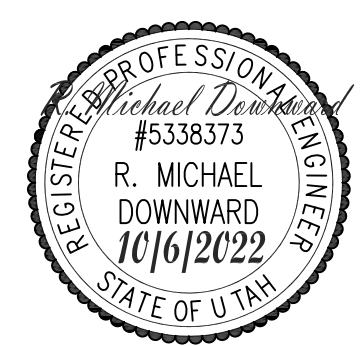


110 CONCRETE FOUNDATION WALL
N.T.S.

- ① #5 VERTICAL BARS AT 12" o.c. MAX. w/ STANDARD HOOK INTO FOOTING AND #5 HORIZONTAL BARS AT 18" o.c. MAX. POSITIONED IN WALL AS SHOWN
- ② #5 TRANSVERSE BARS AT 12" o.c. MAX.
- ③ #5 LONGITUDINAL BARS AT 12" o.c. MAX.
- ④ LEVEL BACKFILL (MAX. HEIGHT OF SALT)
- ⑤ CONCRETE SLAB ON GRADE PER FOUNDATION PLAN NOTE SPECIFICATION
- ⑥ 3 1/2" WIDE x 1 1/2" DEEP x CONT. KEYWAY
- ⑦ FINISHED GRADE (LEVEL TOE)
- ⑧ #4 VERTICAL BARS AT 18" o.c. MAX. w/ STANDARD HOOK INTO FOOTING AND #4 HORIZONTAL BARS AT 18" o.c. MAX. POSITIONED IN WALL AS SHOWN
- ⑨ METAL BUILDING COLUMNS, WALL FRAMING AND ANCHORAGE TO FOUNDATION PER METAL BLDG. MFR.
- ⑩ GRADE BEAM PER FOUNDATION PLAN/DETAIL SPECIFICATION
- ⑪ #4 VERT. BAR EA. CORNER OF BUTTRESS w/ STANDARD HOOK INTO FOOTING
- A. WALL SHALL NOT BE SURCHARGED OR OTHERWISE LOADED UNLESS NOTED ON DRAWING
- B. WATER PROOF RETAINING WALL BELOW GRADE USING APPROVED METHOD

- ① #5 VERTICAL BARS AT 12" o.c. MAX. w/ STANDARD HOOK INTO FOOTING AND #5 HORIZONTAL BARS AT 18" o.c. MAX. POSITIONED IN WALL AS SHOWN
- ② #5 TRANSVERSE BARS AT 12" o.c. MAX.
- ③ #5 LONGITUDINAL BARS AT 12" o.c. MAX.
- ④ LEVEL BACKFILL (MAX. HEIGHT OF SALT)
- ⑤ CONCRETE SLAB ON GRADE PER FOUNDATION PLAN NOTE SPECIFICATION
- ⑥ 3 1/2" WIDE x 1 1/2" DEEP x CONT. KEYWAY
- ⑦ FINISHED GRADE (LEVEL TOE)
- ⑧ #4 VERTICAL BARS AT 18" o.c. MAX. w/ STANDARD HOOK INTO FOOTING AND #4 HORIZONTAL BARS AT 18" o.c. MAX. POSITIONED IN WALL AS SHOWN
- ⑨ METAL BUILDING COLUMNS, WALL FRAMING AND ANCHORAGE TO FOUNDATION PER METAL BLDG. MFR.
- ⑩ GRADE BEAM BEYOND PER FOUNDATION PLAN/DETAIL SPECIFICATION
- A. WALL SHALL NOT BE SURCHARGED OR OTHERWISE LOADED UNLESS NOTED ON DRAWING
- B. WATER PROOF RETAINING WALL BELOW GRADE USING APPROVED METHOD

INITIAL SUBMITTAL:	10/6/2022
REV#:	DATE:
DESCRIPTION:	



DRAWN BY:	RMD
SCALE:	N.T.S.
SHEET:	