ROOF AREA B ACCESS STAIR DESIGN

CENTER BUILDING

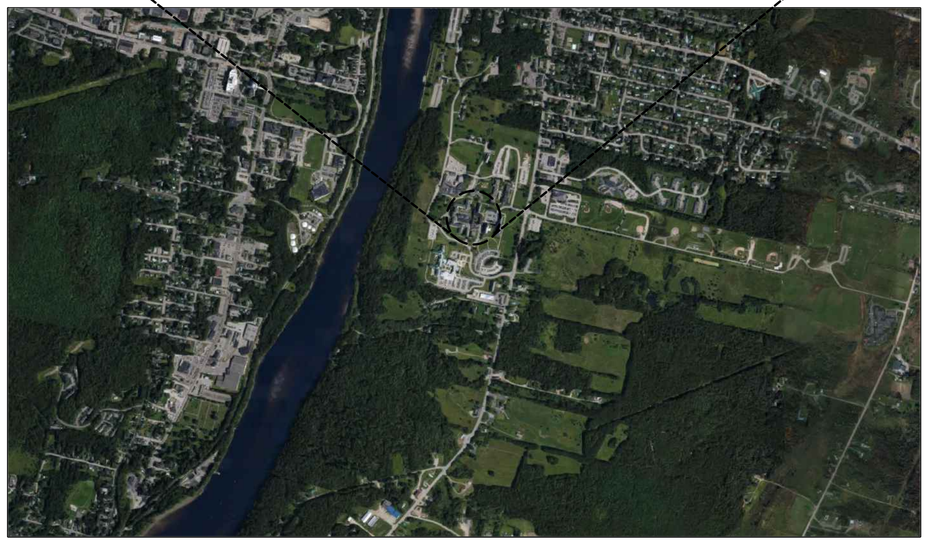
67 INDEPENDENCE DRIVE
AUGUSTA, MAINE 04330

PREPARED FOR

STATE OF MAINE BUREAU OF GENERAL SERVICES
111 SEWALL STREET, 77 STATE HOUSE STATION
AUGUSTA, MAINE 04333

DRAWING NO	TITLE
G100	COVER SHEET
S001	STRUCTURAL NOTES
S100	ROOF ACCESS STAIR PLANS
S301	ROOF ACCESS STAIR SECTION
S302	ROOF ACCESS STAIR SECTION
S501	ROOF ACCESS STAIR DETAILS
S502	ROOF ACCESS STAIR DETAILS

SITE MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

GALE

Gale Associates, Inc.
Engineers and Planners

5 Moulton Street Portland, ME 04101
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Boston Baltimore Orlando Hartford
Manchester Portland

100% CONSTRUCTION DOCUMENTS

PROJECT
CENTER BUILDING ROOF AREA B ACCESS STAIR
AT THE STONE BUILDING
67 INDEPENDENCE DRIVE
AUGUSTA, ME 04330

OWNER
STATE OF MAINE BUREAU OF GENERAL SERVICES
111 SEWALL STREET, 77 STATE HOUSE STATION
AUGUSTA, ME 04333

NO.	DATE	DESCRIPTION	BY

PROJECT NO.	839100
CADD FILE	839100 G100
DESIGNED BY	MCC/AMV
DRAWN BY	MCC
CHECKED BY	AMV/AEO
DATE	6/16/2025
DRAWING SCALE	NOT TO SCALE

GRAPHIC SCALE

SHEET TITLE

COVER SHEET

DRAWING NO.
G100
OF

GENERAL STRUCTURAL NOTES

1. STRUCTURAL DRAWINGS ARE ONLY PART OF THE CONTRACT DOCUMENTS AND SHALL BE USED IN CONJUNCTION WITH PROJECT DRAWINGS.
2. ALL DIMENSIONS, ELEVATIONS AND CONDITIONS RELATED TO EXISTING CONDITIONS MUST BE FIELD VERIFIED, AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
3. THE DRAWINGS ARE NOT TO BE SCALED IN FIELD OR FROM ELECTRONIC FILES. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER DRAWN DIMENSIONS. VERIFY ALL DISCREPANCIES AND CONFLICTING INFORMATION ON DRAWINGS AND/OR SURVEY WITH THE ARCHITECT AND ENGINEER.
4. SHOP DRAWINGS PREPARED BY CONTRACTORS, SUPPLIERS, ETC. SHALL BE PROVIDED TO THE ARCHITECT AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND/OR CONSTRUCTION. GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTING TO THE ARCHITECT AND ENGINEER.
5. THE CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION METHODS USED WILL NOT CAUSE DAMAGE TO ADJACENT BUILDINGS, UTILITIES, OR OTHER PROPERTY.
6. STRUCTURAL STABILITY OF THE BUILDING RELIES ON THE FINISHED CONSTRUCTION WITH COMPLETED FRAMING AND CONNECTIONS. TEMPORARY BRACING AND SHORING SHALL BE PROVIDED BY THE CONTRACTOR TO ENSURE STABILITY OF THE STRUCTURE DURING CONSTRUCTION.
7. TEMPORARY BRACING, SHORING, OR ANY WORK THAT MAY BE REQUIRED TO PROTECT THE EXISTING SURROUNDING PROPERTIES, BUILDINGS, UTILITIES, ETC. SHALL BE PROVIDED BY THE CONTRACTOR.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EFFECTS ON SURROUNDING EXISTING STRUCTURES FROM GROUND VIBRATIONS INDUCED BY THE CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL DETERMINE THE NEED TO PROVIDE A PRE-CONSTRUCTION SURVEY, PROTECTION AND/OR MONITORING OF VIBRATIONS.
9. DETAILS, SECTIONS AND NOTES ON THE DRAWINGS ARE INTENDED TO BE APPLIED TO SIMILAR CONDITIONS ELSEWHERE UNLESS NOTED OTHERWISE.
10. JOB SITE SAFETY IS THE CONTRACTOR'S RESPONSIBILITY. GALE REPRESENTATIVES, INCLUDING SUBCONSULTANTS RETAINED BY GALE, MAY VISIT THE JOB SITE FROM TIME TO TIME. THESE VISITS ARE FOR CLARIFICATIONS OF SPECIFIC DESIGN RELATED ISSUES ONLY AND ARE NOT FOR THE PURPOSES OF JOB SITE SAFETY. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COMPLY WITH ALL SITE SAFETY APPLICABLE REQUIREMENTS.
11. CONTRACTOR SHALL SUBMIT DRAWINGS AND CALCULATIONS PREPARED AND STAMPED BY A REGISTERED STRUCTURAL ENGINEER IN THE STATE OF MAINE FOR ALL PRE-FABRICATED OR PRE-ENGINEERED ELEMENTS INCLUDING, BUT NOT LIMITED TO, STRUCTURAL STEEL CONNECTIONS, STEEL STAIRS AND RAILINGS, ETC.

CODE INFORMATION

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING BUILDING CODES AND STANDARDS:
   - MAINE UNIFORM BUILDING AND ENERGY CODE (MUBEC).
   - 2021 INTERNATIONAL BUILDING CODE (IBC).
   - ACI 318-19 - BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE
   - AISC 360-16 - SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
2. DESIGN LOADS

STAIRS:

DEAD LOADS:	
STRUCTURE	ACTUAL WEIGHT
LIVE LOADS:	
STAIRS	100 PSF OR 300 LBS (CONCENTRATED)
SNOW LOADS:	
GROUND SNOW LOAD	70 PSF
IMPORTANCE FACTOR, IS	1.0
EXPOSURE FACTOR, CE	1.0
THERMAL FACTOR, CT	1.2

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL MATERIALS, WORKMANSHIP, AND DETAILS, SHALL CONFORM TO THE LATEST EDITION OF THE ANSI/AISC 360 ''SPECIFICATION FOR THE STRUCTURAL STEEL BUILDINGS'' AND AISC ''CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES''.
2. ALL STRUCTURAL STEEL SHALL BE NEW STEEL CONFORMING TO THE FOLLOWING SPECIFICATIONS.

• STRUCTURAL STEEL TUBES	ASTM A500, GRADE C
• STRUCTURAL STEEL PLATES	ASTM A36 MIN.
• ANGLES & RODS	ASTM A572 GR. 50
• CHANNELS	ASTM A992 GR.50

3. ALL SHOP CONNECTIONS SHALL BE WELDED TO CONFORM TO "STRUCTURAL WELDING CODE", AWS D1.1, LATEST EDITION OF THE AMERICAN WELDING SOCIETY, E70 SERIES. OR BOLTED.
4. ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS. CERTIFICATIONS MUST BE CURRENT WHEN WELDING IS PERFORMED.
5. ALL BOLTED CONNECTIONS SHALL BE HIGH STRENGTH BOLTED TO CONFORM TO ASTM A325-N, UNO. WHERE WELDING IS SPECIFIED, WELDING PER NOTE ABOVE SHALL APPLY.
6. PROVIDE A MINIMUM OF 1/4" FILLET WELDS (ALL AROUND) AT WELDED CONNECTIONS, U.N.O.
7. BOLTED FIELD CONNECTIONS SHALL BE BEARING TYPE CONNECTIONS MADE WITH 1/2" DIAMETER A325 BOLTS, UNLESS NOTED OTHERWISE.
8. PROVIDE 1/4" LEVELING PLATES AND 1" THICK NONSHRINK GROUT UNDER ALL COLUMN BASE PLATES SUPPORTED ON CONCRETE. LEVELING PLATES SHALL BE SET, LEVELED AND GROUTED SOLID BEFORE ERECTION OF COLUMN.
9. ALL STEEL SHALL BE NEW STEEL CONFORMING TO THE AISC SPECIFICATIONS FOR DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
10. ALL WELDS SHALL DEVELOP THE FULL STRENGTH OF THE MATERIAL BEING WELDED. USE EXX 70 ELECTRODES.
11. CONTRACTOR SHALL SUBMIT STRUCTURAL STEEL SHOP DRAWINGS (HARD COPY OR PDF) TO THE ENGINEER A MINIMUM OF 4 WEEKS PRIOR TO THE START OF CONSTRUCTION TO AVOID DELAYS.
12. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONNECTIONS AT ALL MATERIAL INTERFACES FOR EACH STEEL ELEMENT PRIOR TO SUBMITTING SHOP DRAWINGS.
13. NO PERMANENT CONNECTIONS SHOULD BE MADE UP UNTIL THE STRUCTURE HAS BEEN PROPERLY ALIGNED. PROVIDE TEMPORARY BRACING AS REQUIRED.
14. SUBMIT SHOP DRAWINGS TO THE ENGINEER SHOWING SETTING PLANS, ERECTION PLANS, ALL DETAILS AND SIZES OF MEMBERS INCLUDING CONNECTIONS AND ALL STAMPED ENGINEERING CALCULATIONS. STEEL FABRICATOR IS RESPONSIBLE FOR FINAL CONNECTION DETAILS AND DESIGN IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF THE LATEST EDITION OF THE AISC DETAILING MANUAL.
15. PROVIDE A 1/2" DIAMETER WEEPHOLE AT THE BASE OF ALL TUBE AND PIPE COLUMNS.
16. ALL STRUCTURAL STEEL SHAPES AND PLATES SHALL BE HOP-DIP GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A123/A123M. UNLESS OTHERWISE NOTED, ALL STEEL HARDWARE, INCLUDING ANCHOR BOLTS, SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A153/A153M. TOUCH UP ALL FIELD WELDS, SCRATCHES, OR SCRAPES WITH ZINC-RICH PAINT IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A780.

CONCRETE NOTES

1. CONCRETE SHALL BE TESTED BY AN INDEPENDENT TESTING AGENCY AS SPECIFIED.
2. CONCRETE SHALL BEAR UNIFORMLY ON SPECIFIED CRUSHED STONE ATOP UNDISTURBED SOIL OR STRUCTURAL COMPACTED FILL.
3. ALL FILL UNDER ANY PORTION OF THE CRUSHED STONE LAYER SHALL BE COMPACTED IN 4" LOOSE LIFTS OF 95% MODIFIED PROCTOR (ASTM D1557) COMPACTED MATERIAL AS APPROVED BY THE ENGINEER AND GEOTECHNICAL ENGINEER/TESTING LABORATORY.
4. THE STRUCTURAL ENGINEER ASSUMES NO RESPONSIBILITY FOR THE VALIDITY OF THE SUBSURFACE CONDITIONS. A GEOTECHNICAL ENGINEER AND TESTING LAB SHALL BE HIRED BY THE OWNER TO PROVIDE FIELD REVIEW SERVICES, SIEVE ANALYSIS AND COMPACTION TESTING.
5. ALL CONCRETE SHALL BE PROTECTED AGAINST FROST UNTIL CONCRETE IS FULLY CURED AND THE PROJECT IS COMPLETED. NO CONCRETE SHALL BE PLACED IN WATER OR ON FROZEN GROUND.
6. CONCRETE WORK SHALL CONFORM TO ACI318-19 AMERICAN CONCRETE INSTITUTE CODE FOR "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE."
7. CONTRACTOR IS REQUIRED TO FOLLOW ALL CURRENT ACI COLD AND HOT WEATHER CONCRETING SPECIFICATIONS, RECOMMENDATIONS AND GUIDELINES TO COMPLETE THE WORK. SUBMIT THE PROPOSED MEANS AND METHODS FOR CONCRETING TO THE ENGINEER FOR APPROVAL PRIOR TO INITIATING THE WORK.
8. CEMENT SHALL BE TYPE I OR II PORTLAND CEMENT. CONCRETE SHALL NOT CONTAIN SLAG. MAXIMUM FLY-ASH, IF USED, SHALL BE 20% OF CEMENT QUANTITY. MAXIMUM AGGREGATE SIZE IN FOUNDATION CONCRETE SHALL BE 1½". MAXIMUM AGGREGATE SIZE IN SLAB CONCRETE SHALL BE ¾".
9. FOOTING CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS WITH A SLUMP OF NO MORE THAN 4 INCHES AND AIR ENTRAINMENT (AT POINT OF PLACEMENT) OF 6% ± 1.5%. THE USE OF CALCIUM CHLORIDE IS NOT PERMITTED. PROVIDE PROPER CONCRETE PROTECTION OR HEAT IN COLD WEATHER AND MAINTAIN PROPER CURING PROCEDURES IN ACCORDANCE WITH ALL CURRENT AMERICAN CONCRETE INSTITUTE (ACI) STANDARDS. USE OF WATER REDUCERS MAY ALTER SPECIFIED SLUMP AS APPROVED BY THE ENGINEER.
10. ALL CONCRETE SHALL BE READI-MIXED AT PLANT COMPLYING WITH ASTM C94 AND ASTM C1116. SITE MIXING IS NOT ALLOWED.
11. ADDITION OF WATER TO CONCRETE MIXES AT THE SITE IS NOT ALLOWED UNLESS SPECIFICALLY IDENTIFIED IN CONCRETE MIX DESIGN SUBMITTAL DUE TO WATER REDUCER ADMIX. ANY OTHER ADDITION OF WATER TO CONCRETE ON SITE SHALL BE GROUNDS FOR IMMEDIATE REJECTION.
12. ALL CONCRETE SHALL BE REINFORCED AS SHOWN ON THE DRAWINGS. PROVIDE SUFFICIENT CHAIR OR SUPPORT BARS AS NECESSARY TO PROPERLY POSITION REINFORCING STEEL. PULL UP OF MESH OR UNSUPPORTED MESH, IF USED, WILL NOT BE ALLOWED.
13. STEEL REINFORCEMENT SHALL CONFORM TO ASTM 615, GRADE 60, DEFORMED BARS.
14. REINFORCING MUST HAVE CLEAR COVER OF 2" FOR FORMED SURFACES AND 3" FOR CONCRETE CAST AGAINST EARTH.
15. NOTIFY ENGINEER FOR INSPECTION OF COMPLETED INSTALLATION OF REINFORCEMENT AT LEAST TWO (2) WORK DAYS PRIOR TO SCHEDULED PLACEMENT OF CONCRETE.
16. CONCRETE USED FOR ALL FOUNDATIONS SHALL BE TESTED BY AN INDEPENDENT ACI CERTIFIED TESTING LAB, HIRED, AND PAID FOR BY THE OWNER. THE CONTRACTOR IS REQUIRED TO CONTACT AND COORDINATE THE TESTING LAB SERVICES. THE FOLLOWING MINIMUM TESTING SHALL BE PERFORMED, AND FIELD/ LAB-RESULT REPORTS SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL:
    - AIR ENTRAINMENT AT PLACEMENT - ASTM C-231-97
    - SLUMP - ASTM C-143
    - COMPRESSIVE STRENGTH - ASTM C-39
17. CONCRETE CYLINDER SAMPLES SHALL BE OBTAINED FROM EACH CONCRETE DELIVERY TRUCK FOR COMPRESSIVE STRENGTH TESTING. FIVE (5) CYLINDERS SHALL BE MADE FROM EACH SAMPLE. EACH CYLINDER SHALL BE STANDARD 6" DIAMETER BY 12" TALL. ONE (1) CYLINDER WILL BE TESTED AT 7-DAY CURE, AND THREE (3) CYLINDERS WILL BE TESTED AT 28-DAY CURE TO DETERMINE COMPRESSIVE STRENGTH OF THE CONCRETE IN ACCORDANCE WITH ASTM C-39. AIR ENTRAINMENT AND SLUMP WILL BE TESTED AT EACH SAMPLE AS WELL. RETAIN THE FIFTH CYLINDER SAMPLE FOR POTENTIAL 56 DAY COMPRESSIVE TESTING AND/OR PETROGRAPHIC EXAMINATION. TEST RESULTS WHICH ARE DETERMINED BY GALE TO BE DEFICIENT OR QUESTIONABLE WILL REQUIRE THAT THE CONTRACTOR PAY FOR ADDITIONAL TESTING AND CORING OF THE IN-PLACE CONCRETE, INCLUDING PETROGRAPHIC EXAMINATION WITH REPORT AS DIRECTED BY GALE. CONCRETE DETERMINED BY GALE TO REMAIN DEFICIENT AFTER FINAL TESTING SHALL BE ENTIRELY REMOVED AND REPLACED AT NO ADDITIONAL COST.
18. ALL EXTERIOR FOUNDATIONS SHALL BE PLACED AT OR BELOW THE FROST DEPTH OF 4'-0" FROM THE ADJACENT FINISHED GRADE UNLESS NOTED OTHERWISE.
19. CONCRETE FOUNDATIONS AND SLABS-ON-GRADE SHALL BE PLACED UPON A MINIMUM 12" (REFER TO DWG. DETAILS) THICK BED OF 3/4" CRUSHED, WASHED STONE COMPACTED TO A STABLE AND UNYIELDING STATE, IN 6" (MAX.) LIFTS, UNLESS OTHERWISE SPECIFIED. ALL STONE BED SUB-BASE COMPACTED MATERIALS SHALL BE PLACED ATOP SPECIFIED COMPACTED STRUCTURAL FILL AND PROOF-ROLLED, ACCEPTABLE (AS DETERMINED BY GEOTECHNICAL ENGINEER) MATERIALS.
20. FOUNDATION DESIGN IS BASED ON A MINIMUM SOIL BEARING CAPACITY OF 1000 PSF. FINAL SOIL BEARING CAPACITIES SHALL BE FIELD VERIFIED BY A QUALIFIED TESTING AGENCY RETAINED BY THE CONTRACTOR PRIOR TO CONCRETE PLACEMENT.
21. IF BEARING MATERIALS WITH A LOWER BEARING CAPACITY THAN 1000 PSF ARE ENCOUNTERED (AS DETERMINED BY THE GEOTECHNICAL ENGINEER), AT THE SPECIFIED ELEVATIONS, THE UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL TO BE APPROVED BY THE STRUCTURAL AND GEOTECHNICAL ENGINEER.

STAIR, METAL GRATES, AND RAILING NOTES

1. STAIR STEEL RAILING AND GRATING DETAILS INDICATED ON THE DESIGN DRAWINGS ARE FOR SCHEMATIC REPRESENTATION AND BID PURPOSES ONLY. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL SPECIALTY STRUCTURAL ENGINEER (SSE) LICENSED IN THE STATE OF MAINE TO DESIGN ALL STAIRS, RAILING AND GRATING IN ACCORDANCE WITH THE INDICATED DESIGN LOADS AND CRITERIA IN THE FOLLOWING NOTES AND THE DESIGN LOAD REQUIREMENTS INCLUDED IN THE GENERAL NOTES SECTION. CONCEPTUAL DETAILS ARE PROVIDED ON THE FOLLOWING SHEET TO PORTRAY THE DESIGN INTENT TO THE CONTRACTOR AND SSE. THE ACTUAL DETAILS AND DESIGN PORTRAYING MEMBER SIZES, LOCATIONS, REQUIRED BRIDGING, CONNECTIONS, LAYOUTS, ETC., SHALL BE IN ACCORDANCE WITH THE SSE SIGNED AND SEALED SHOP DRAWINGS.
2. WELDED STEEL GRATES AND FRAMES SHALL CONFORM TO THE MEMBER SIZE, DIMENSIONS AND DETAILS PER THE SELECT GRATE TYPE. STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION: A36.
3. ALL STEEL STAIRS, GRATES, AND RAILINGS SHALL BE HOT-DIP GALVANIZED. TOUCH UP ALL FIELD WELDS, SCRATCHES, OR SCAPRES WITH ZINC-RICH PAINT IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A780. ALL HARDWARE, INCLUDING ANCHOR BOLTS, SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A153/A153M.
4. FIELD MEASUREMENTS: VERIFY ACTUAL LOCATIONS OF WALLS AND OTHER CONSTRUCTION CONTIGUOUS WITH METAL FABRICATIONS BY FIELD MEASUREMENTS PRIOR TO PREPARATION OF SHOP DRAWINGS AND FABRICATION.STEEL GRATING SHALL BE ANTI SLIP AND COMPLY WITH APPLICABLE PROVISIONS AND RECOMMENDATIONS OF THE LATEST NAAMM METAL BAR GRATING MANUAL: ANSI/NAAMM MBG 531.
5. FOR GRATING CROSS-SECTION, SUBMIT PRODUCT DATA INDICATING DIMENSIONAL INFORMATION, SPAN, LOAD CAPACITY, AND DEFLECTION LIMITATIONS.SUBMIT METAL GRATING SHOP DRAWINGS FOR APPROVAL. INCLUDE FABRICATION AND INSTALLATION DETAILS, INCLUDING PLANS AND SECTIONS, DRAWN TO SCALE. INCLUDE SCALED LAYOUT AND RELATIONSHIPS BETWEEN GRATING AND ADJACENT STRUCTURAL ELEMENTS.
6. INSTALL GRATING ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON THE CONSTRUCTION DRAWINGS.
7. POSITION GRATING SECTIONS FLAT AND SQUARE WITH ENDS BEARING A MINIMUM 1" ON THE UPPORTING STRUCTURE. CONNECTION TO STRUCTURAL STEEL PER MANUFACTURER.ALLOW CLEARANCE AT JOINTS BETWEEN ADJACENT GRATING PANELS OF 1/4" (MAX.) AND 3/8" (MAX.) AT ENDS.
8. JOIN ABUTTING METAL GRATING PLATFORM SECTIONS WITH MANUFACTURER SUPPLIED SPLICE PLATES; BOLTED OR WELDED AS SPECIFIED. UNIFORM DESIGN LIVE LOADING FOR TRUCTURAL GRATING IS 40 PSF. MAXIMUM ALLOWABLE CONCENTRATED DESIGN LOAD ON RATING IS 300 LBS.
9. STRUCTURAL PERFORMANCE: RAILINGS, INCLUDING ATTACHMENTS TO BUILDING CONSTRUCTION, SHALL WITHSTAND THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED:
   HANDRAILS AND TOP RAILS OF GUARDS:
   A. UNIFORM LOAD OF 50 LBF/ FT (0.73 KN/M) APPLIED IN ANY DIRECTION.
   B. CONCENTRATED LOAD OF 200 LBF (0.89 KN/M) APPLIED IN ANY DIRECTION.
   C. UNIFORM AND CONCENTRATED LOADS NEED NOT BE ASSUMED TO ACT CONCURRENTLY.
   MATERIALS:
   STEEL AND IRON
   A. TUBING: ASTM A 500 (COLD FORMED) OR ASTM A 513. GALVANIZED FINISH.
   B. PIPE: ASTM A 53/ A 53M. TYPE F OR TYPE S, GRADE A, STANDARD WEIGHT (SCHEDULE 40), UNLESS ANOTHER GRADE AND WEIGHT ARE REQUIRED BY STRUCTURAL LOADS. PROVIDE GALVANIZED FINISH.
   C. PLATES, SHAPES, AND BARS: ASTM A 36/ A 36M. GALVANIZED FINISH.
   FASTENERS:
   PROVIDE THE FOLLOWING:
   A. HOT-DIP GALVANIZED RAILINGS: TYPE 304 STAINLESS STEEL OR HOT-DIP ZINC-COATED STEEL FASTENERS COMPLYING WITH ASTM A 153/ A 153M OR ASTM F 2329 FOR ZINC COATING.
   B. PROVIDE EXPOSED FASTENERS WITH FINISH MATCHING APPEARANCE, INCLUDING COLOR AND TEXTURE, OF RAILINGS.
   CONNECTIONS:
   A. FABRICATE RAILINGS WITH WELDED CONNECTIONS UNLESS OTHERWISE INDICATED.
   B. WELDED CONNECTIONS: COPE COMPONENTS AT CONNECTIONS TO PROVIDE CLOSE FIT, OR USE FITTINGS DESIGNATED FOR THIS PURPOSE. WELD ALL AROUND AT CONNECTIONS, INCLUDING AT FITTINGS. STEEL AND IRON FINISHES:GALVANIZED
   RAILINGS:
   A. HOT-DIP GALVANIZE EXTERIOR STEEL RAILINGS, INCLUDING HARDWARE, AFTER FABRICATIONS.
   B. COMPLY WITH ASTM A 123/A 123M FOR HOT-DIP GALVANIZED RAILINGS.
   C. COMPLY WITH ASTM A 153/A 153M FOR HOT-DIP GALVANIZED HARDWARE.
   D. DO NO QUENCH OR APPLY POST GALVANIZING TREATMENTS THAT MIGHT INTERFERE WITH PAINT ADHESIONS. FOR GALVANIZED RAILINGS, PROVIDE HOT-DIP GALVANIZED FITTINGS, BRACKETS, FASTENERS, SLEEVES, AND OTHER FERROUS COMPONENTS.
   ATTACHED RAILINGS
   A. ANCHOR RAILING ENDS AT WALLS WITH ROUND FLANGES ANCHORED TO WALL CONSTRUCTION AND WELDED TO RAILING ENDS.
   B. ANCHOR RAILING ENDS TO METAL SURFACES WITH FLANGES BOLTED TO METAL SURFACES AND WELDED TO RAILING ENDS.
   C. ATTACH RAILINGS TO WALL WITH WALL BRACKETS. LOCATE BRACKETS AS INDICATED OR, IF NOT INDICATED, AT SPACING REQUIRED TO SUPPORT STRUCTURAL LOADS.
   D. SECURE WALL BRACKETS AND RAILING END FLANGES TO BUILDING CONSTRUCTION AS FOLLOWS:
      - FOR CONCRETE AND SOLID MASONRY ANCHORAGE, USE DRILLED-IN EXPANSION SHIELDS AND HANGERS OR LAG BOLTS.
      - FOR HOLLOW MASONRY ANCHORAGE, USE TOGGLE BOLTS.
   E. ALL STEEL PIPE POSTS AND RAILS SHALL BE ASTM A53 GRADE B SCHEDULE 40 PIPE MINIMUM. RAILINGS SHALL BE OSHA-COMPLIANT WITH POWDER COATED GALVANIZED STEEL FINISH. GUARDRAIL SHALL HAVE A MINIMUM HEIGHT OF 42" ABOVE THE FINISHED WALKING SURFACE. PIPE RAILINGS SHALL HAVE A MINIMUM NOMINAL DIAMETER OF 1-1/2". RAILING COMPONENTS SHALL BE WELDED SCHEDULE 40 PIPE.

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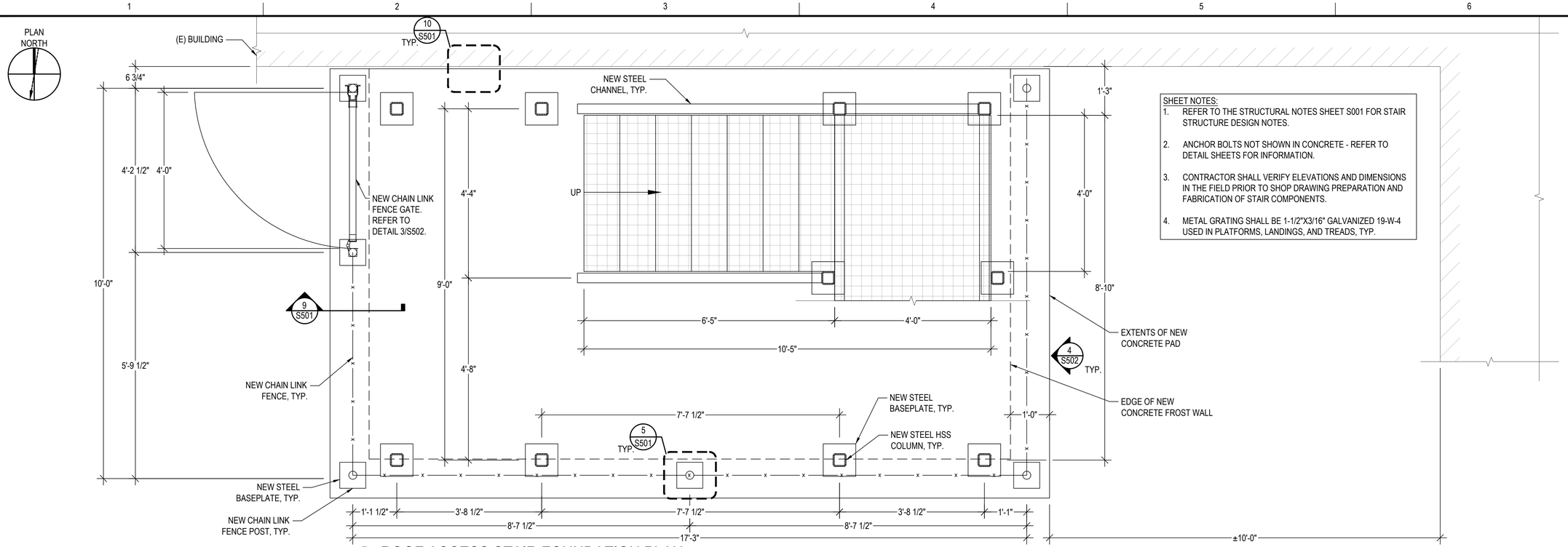
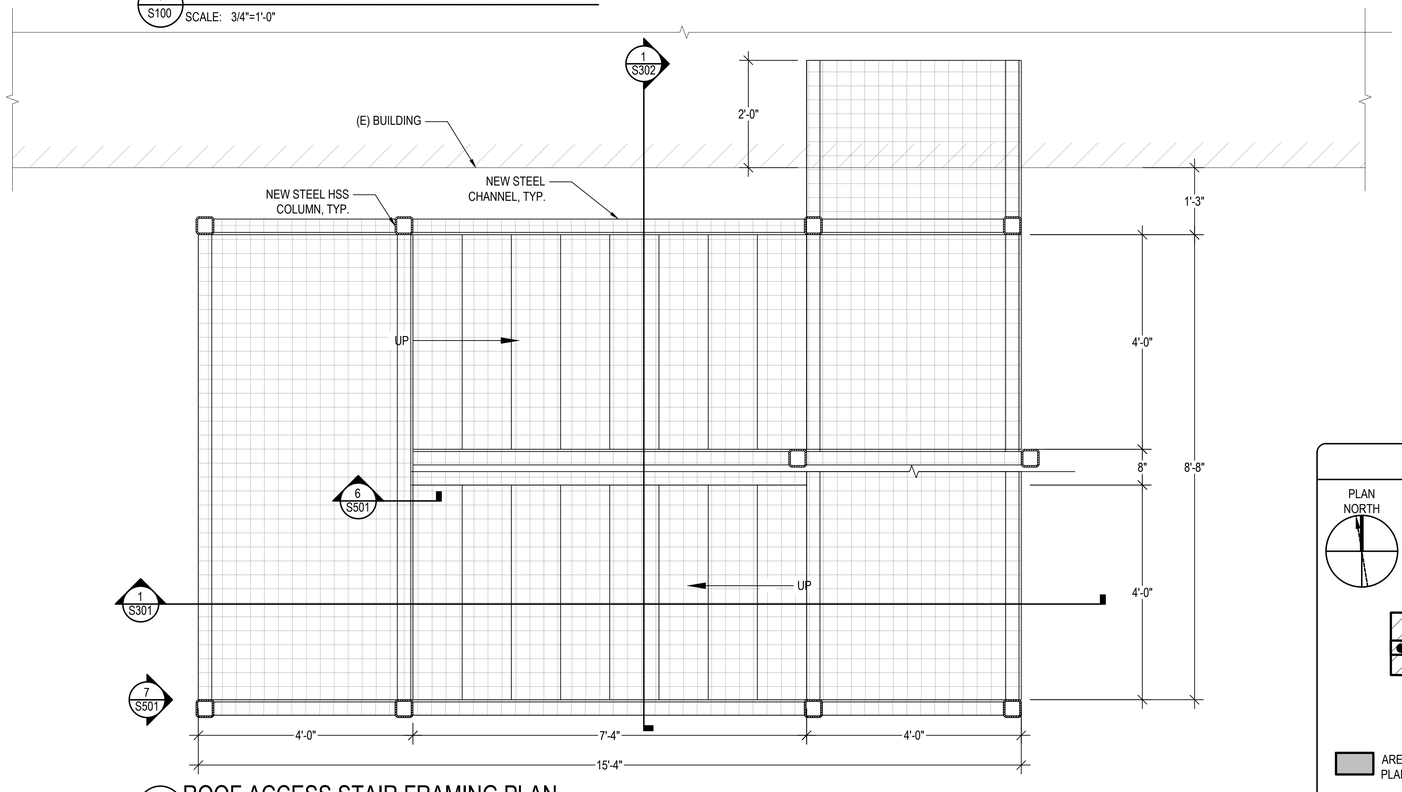


1 S100 ROOF ACCESS STAIR FOUNDATION PLAN

SCALE: 3/4"=1'-0"

SHEET NOTES:

1. REFER TO THE STRUCTURAL NOTES SHEET S001 FOR STAIR STRUCTURE DESIGN NOTES.
2. ANCHOR BOLTS NOT SHOWN IN CONCRETE - REFER TO DETAIL SHEETS FOR INFORMATION.
3. CONTRACTOR SHALL VERIFY ELEVATIONS AND DIMENSIONS IN THE FIELD PRIOR TO SHOP DRAWING PREPARATION AND FABRICATION OF STAIR COMPONENTS.
4. METAL GRATING SHALL BE 1-1/2"X3/16" GALVANIZED 19-W-4 USED IN PLATFORMS, LANDINGS, AND TREADS, TYP.

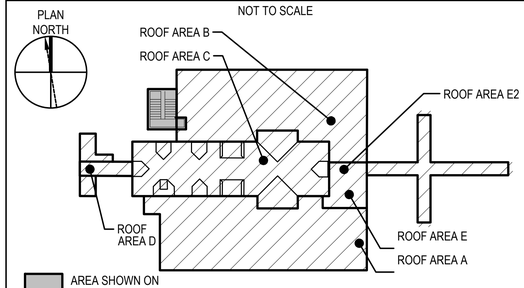


2 S100 ROOF ACCESS STAIR FRAMING PLAN

SCALE: 3/4"=1'-0"

KEY PLAN

NOT TO SCALE



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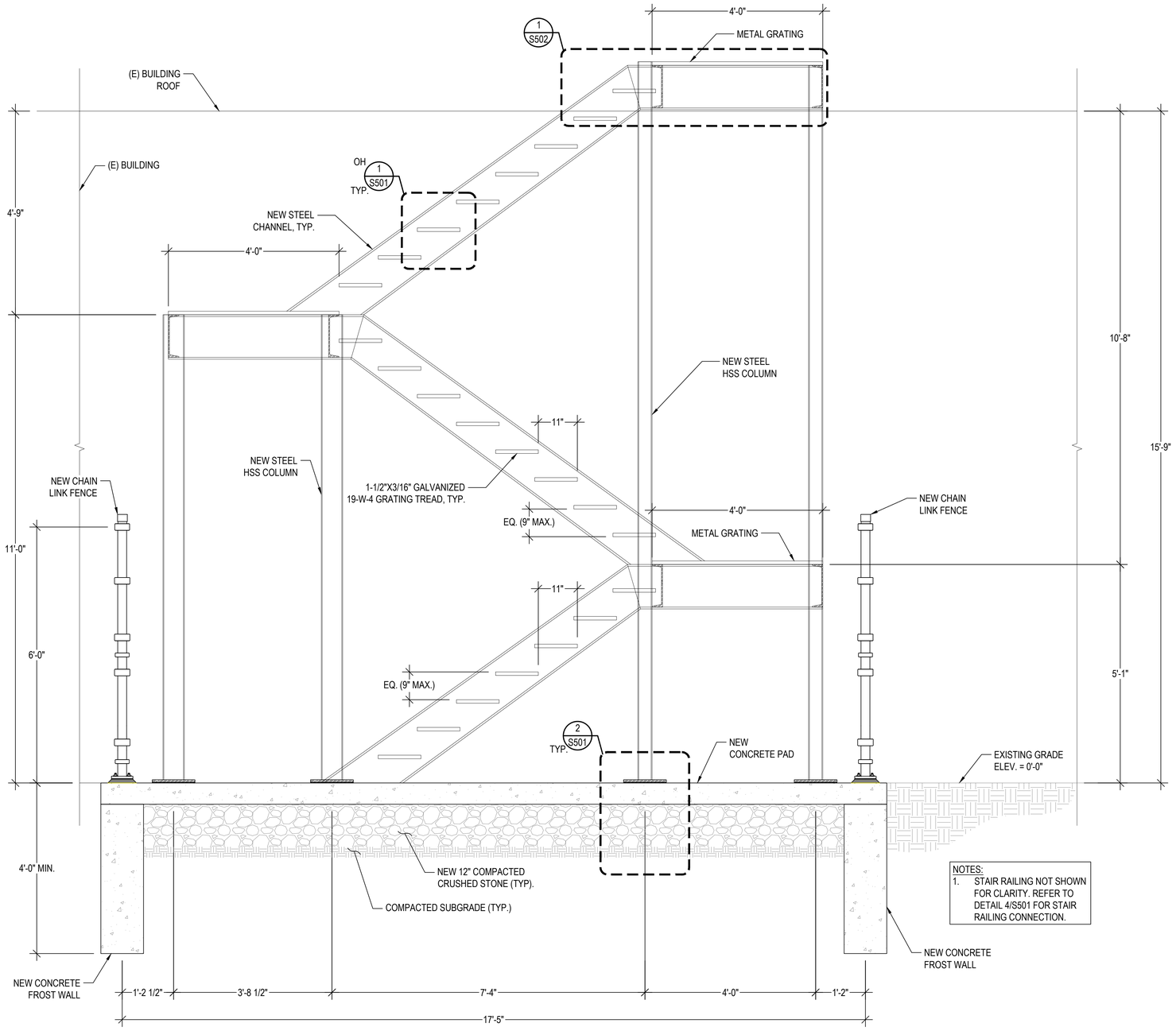

1 S301 ROOF ACCESS STAIR SECTION

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2. ANCHOR BOLTS NOT SHOWN IN CONCRETE - REFER TO DETAIL SHEETS FOR INFORMATION.
3. CONTRACTOR SHALL VERIFY ELEVATIONS AND DIMENSIONS IN THE FIELD PRIOR TO SHOP DRAWING PREPARATION AND FABRICATION OF STAIR COMPONENTS.
4. METAL GRATING SHALL BE 1-1/2"X3/16" GALVANIZED 19-W-4 USED IN PLATFORMS, LANDINGS, AND TREADS, TYP.

NOTES:
1. STAIR RAILING NOT SHOWN FOR CLARITY. REFER TO DETAIL 4/S501 FOR STAIR RAILING CONNECTION.

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Engineers and Planners

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100% CONSTRUCTION DOCUMENTS

PROJECT
CENTER BUILDING ROOF AREA B ACCESS STAIR
AT THE STONE BUILDING
67 INDEPENDENCE DRIVE
AUGUSTA, ME 04330

OWNER
STATE OF MAINE BUREAU OF GENERAL SERVICES
111 SEWALL STREET, 77 STATE HOUSE STATION
AUGUSTA, ME 04333

NO.	DATE	DESCRIPTION	BY

PROJECT NO.	839100
CADD FILE	839100 S100s
DESIGNED BY	MCC/AMV
DRAWN BY	MCC
CHECKED BY	AMV/AEO
DATE	6/16/2025
DRAWING SCALE	

GRAPHIC SCALE

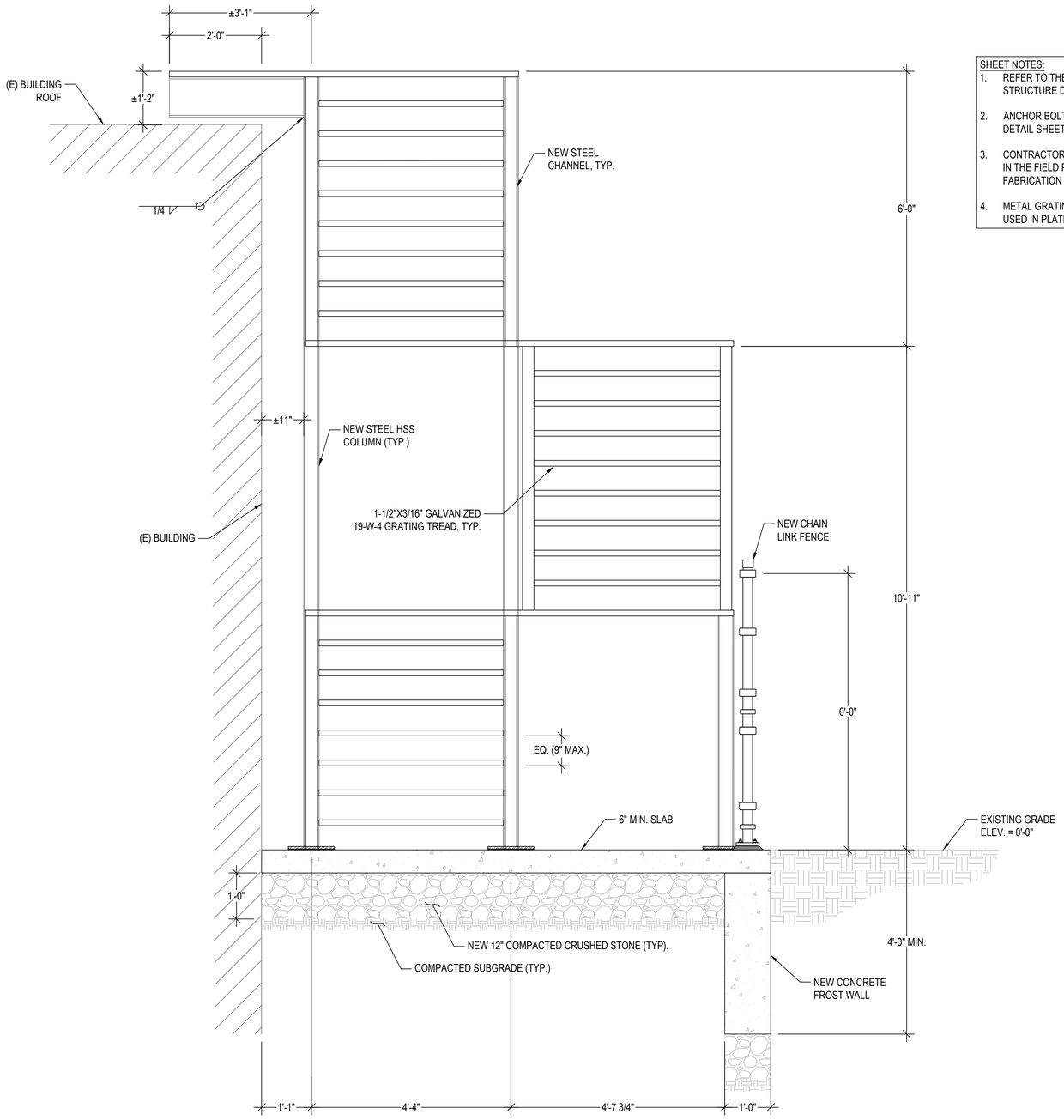
SHEET TITLE

ROOF ACCESS STAIR SECTION

DRAWING NO.

S301

OF



1 S302 ROOF ACCESS STAIR SECTION

SCALE: 3/4"=1'-0"

SHEET NOTES:

1. REFER TO THE STRUCTURAL NOTES SHEET S001 FOR STAIR STRUCTURE DESIGN NOTES.
2. ANCHOR BOLTS NOT SHOWN IN CONCRETE - REFER TO DETAIL SHEETS FOR INFORMATION.
3. CONTRACTOR SHALL VERIFY ELEVATIONS AND DIMENSIONS IN THE FIELD PRIOR TO SHOP DRAWING PREPARATION AND FABRICATION OF STAIR COMPONENTS.
4. METAL GRATING SHALL BE 1-1/2"X3/16" GALVANIZED 19-W-4 USED IN PLATFORMS, LANDINGS, AND TREADS, TYP.

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GRAPHIC SCALE

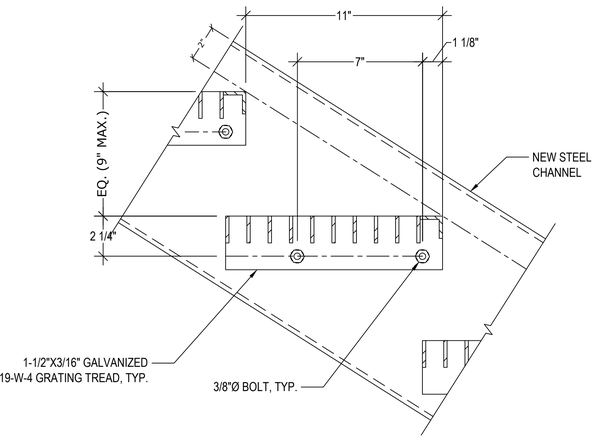
SHEET TITLE

ROOF ACCESS STAIR SECTION

DRAWING NO.

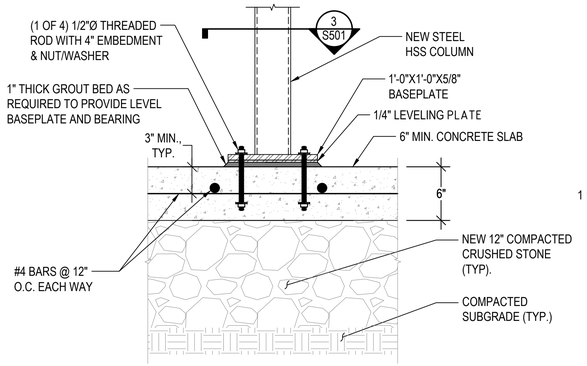
S302

OF



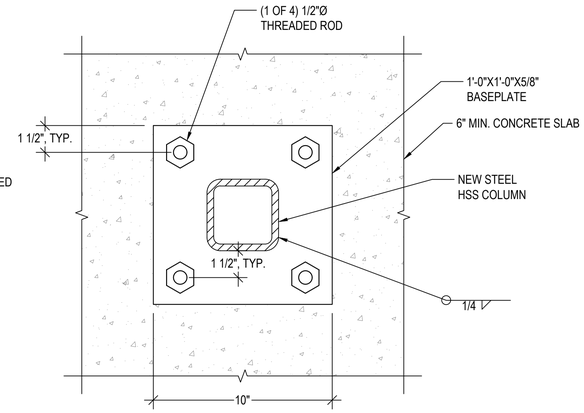
1 S501 NEW STAIR TREAD TO STRINGER CONNECTION

SCALE: 3"=1'-0"



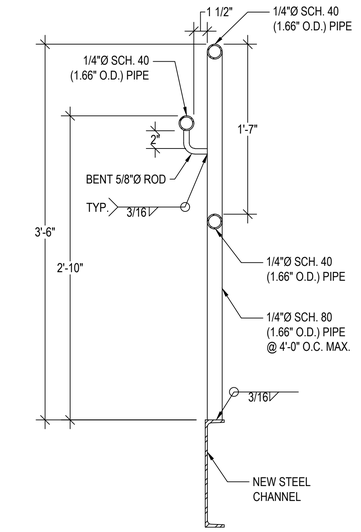
2 S501 NEW COLUMN BASE PLATE DETAIL

SCALE: 1-1/2"=1'-0"



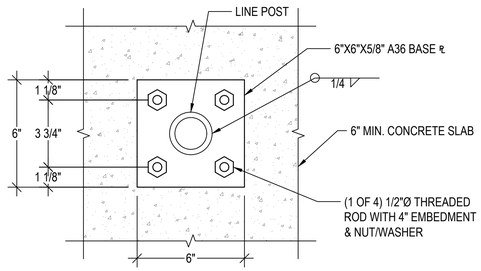
3 S501 NEW COLUMN BASE PLATE DETAIL - PLAN

SCALE: 3"=1'-0"



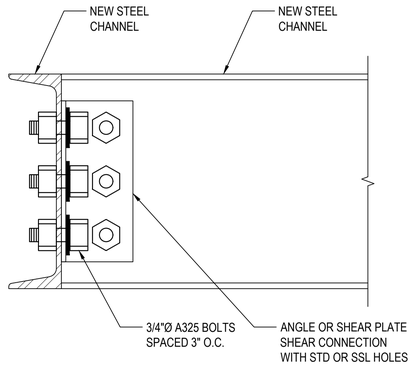
4 S501 TYPICAL STAIR HANDRAIL SECTION

SCALE: 1-1/2"=1'-0"



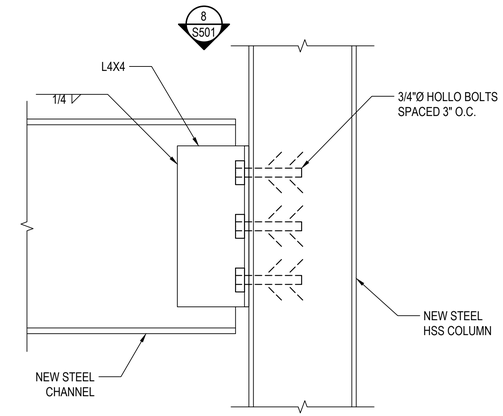
5 S501 NEW FENCE POST BASE PLATE DETAIL - PLAN

SCALE: 3"=1'-0"



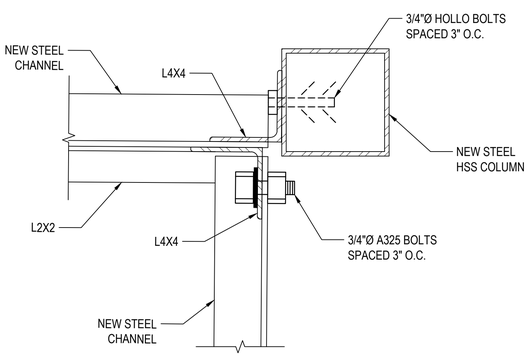
6 S501 TYPICAL CHANNEL SHEAR CONNECTION

SCALE: 3"=1'-0"



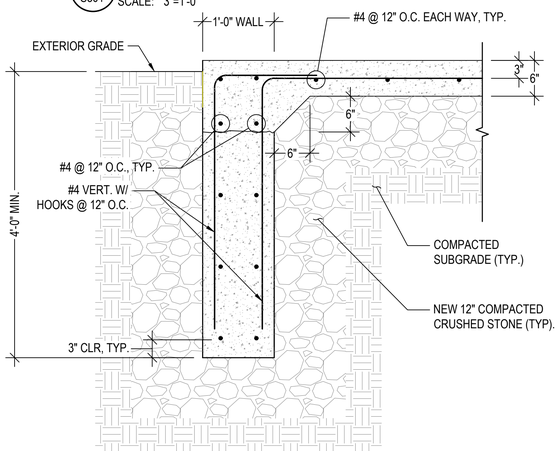
7 S501 TYPICAL BEAM TO COLUMN SHEAR CONNECTION

SCALE: 3"=1'-0"



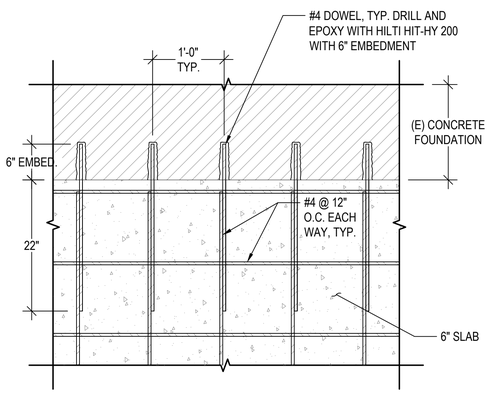
8 S501 TYPICAL COLUMN SHEAR CONNECTION - PLAN

SCALE: 3"=1'-0"



9 S501 TYPICAL FROST WALL DETAIL

SCALE: 1"=1'-0"



10 S501 TYPICAL DOWEL CONNECTION TO EXISTING CONCRETE FOUNDATION

SCALE: 1"=1'-0"

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ROOF ACCESS STAIR DETAILS

DRAWING NO.

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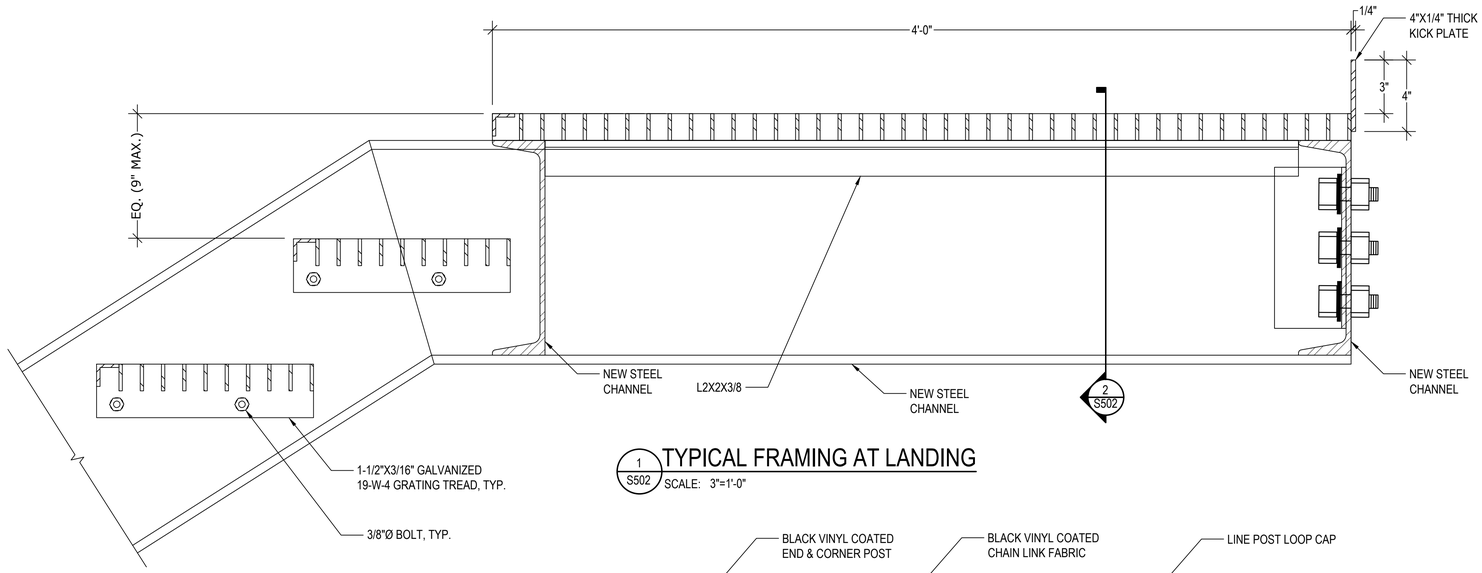
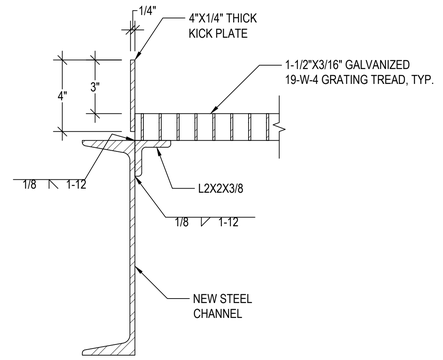


1 S502 TYPICAL FRAMING AT LANDING

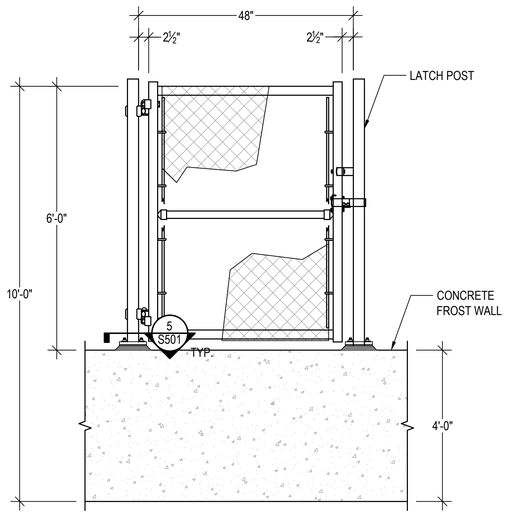
SCALE: 3"=1'-0"



2 S502 TYPICAL GRATING BEARING AT LANDING

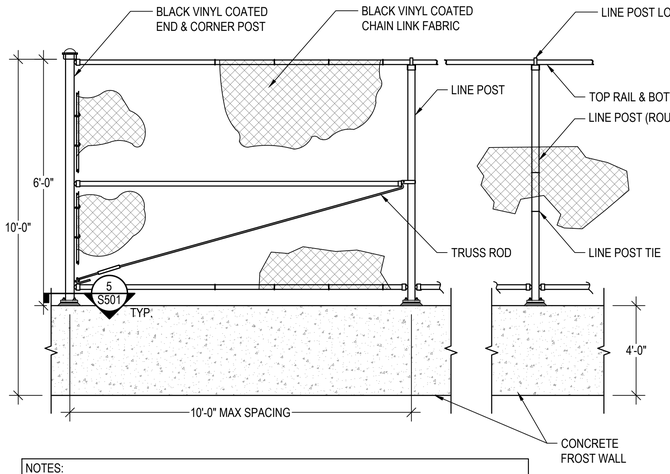
SCALE: 3"=1'-0"

GATE PLAN



3 S502 SINGLE LEAF GATE DETAIL

SCALE: N.T.S.

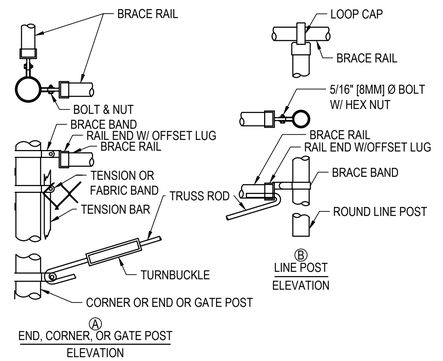


NOTES:

1. ALL CHAIN LINK FENCE FABRIC SHALL BE KNUCKLED (TOP AND BOTTOM)
2. ALL CHAIN LINK FENCE POSTS, FABRIC, TIES AND MATERIALS SHALL BE BLACK PVC COATED.
3. CENTER RAIL REQUIRED ON GATE LEAVE 6'-0" & HIGHER.
4. FENCE CAP SHALL BE ON ON ALL CHAIN LINK FENCE.
5. ALL CHAIN LINK FABRIC SHALL BE INSTALLED ON THE FIELD SIDE OF THE FENCE.

4 S502 CHAIN LINK FENCE

SCALE: N.T.S.



CHAIN LINK FENCE & GATE CONNECTION DETAIL

5 S502

SCALE: N.T.S

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GRAPHIC SCALE

SHEET TITLE

ROOF ACCESS
STAIR DETAILS

DRAWING NO.

S502

OF