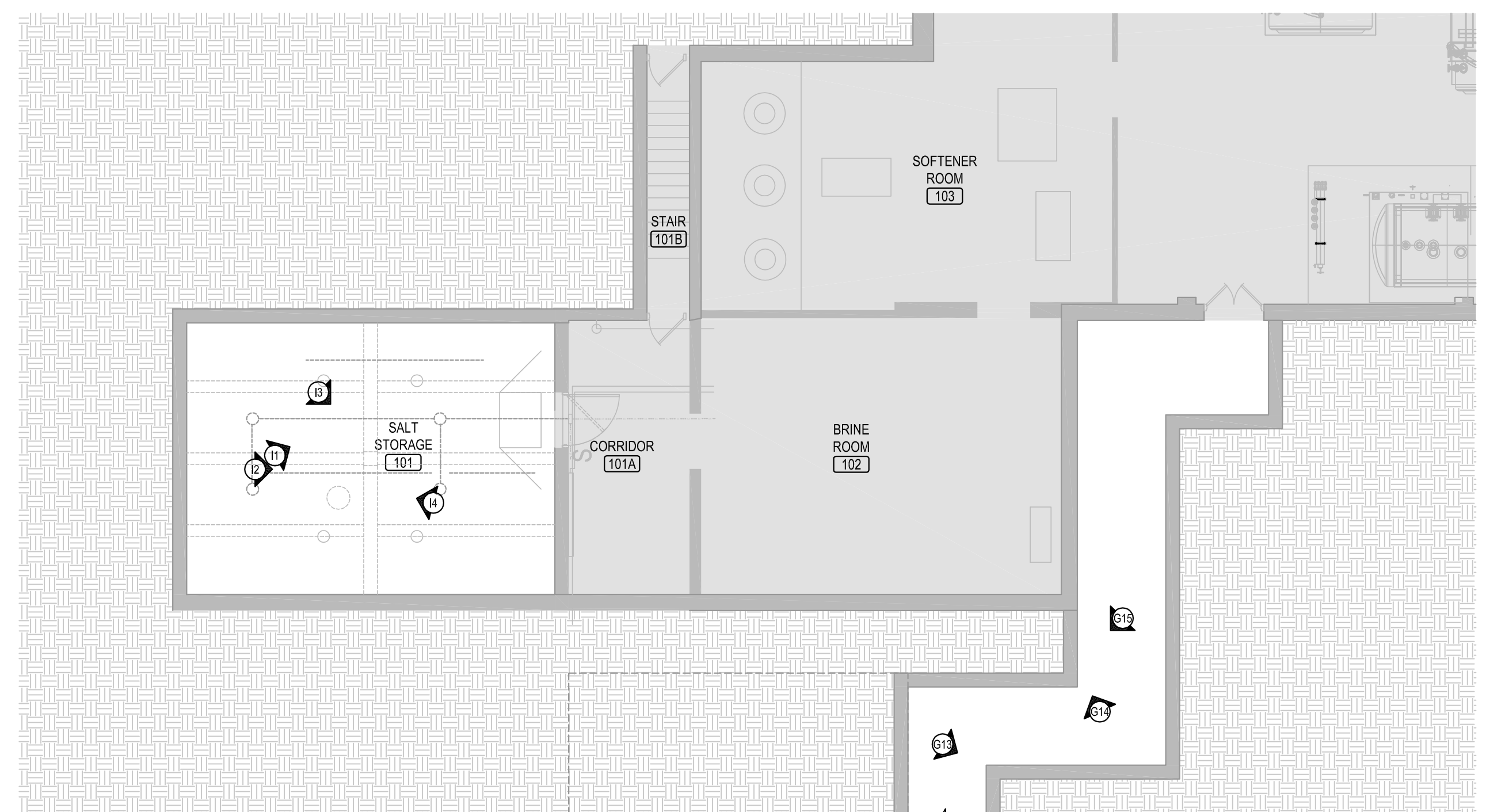


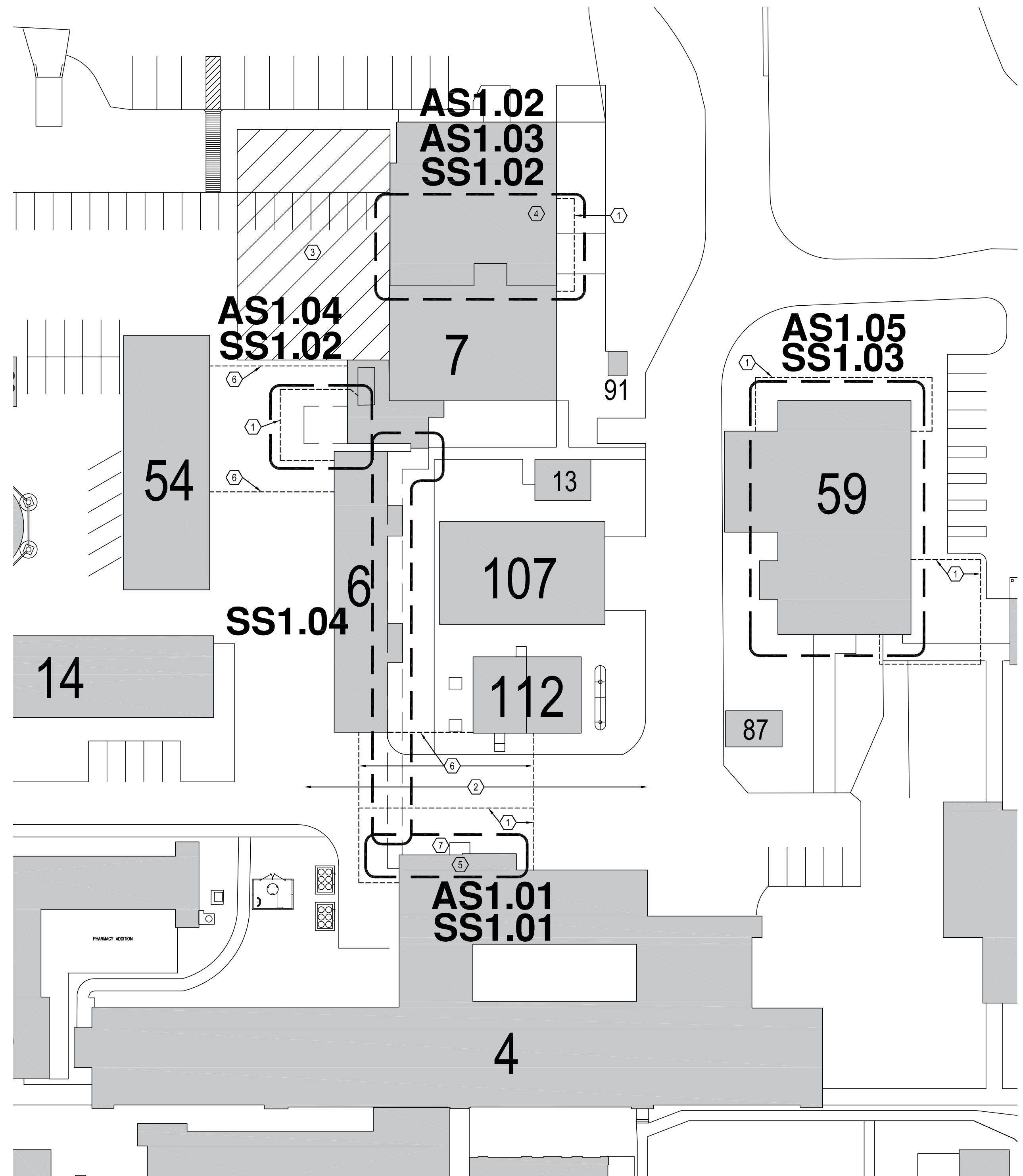
D1 PHOTO KEY PLAN - BUILDING 7
1/4" = 1'-0"

- KEY PLAN GENERAL NOTES**
- REFER TO SPECIFICATION SECTION 00 31 10 - AVAILABLE PROJECT INFORMATION FOR PHOTOGRAPHS OF KEYED LOCATIONS.
 - PHOTOGRAPHS REPRESENT CONDITIONS AT THE TIME THE PHOTOGRAPHS WERE TAKEN, AND MAY NOT NECESSARILY REPRESENT EXISTING CONDITIONS AT THE TIME OF CONSTRUCTION.
 - STOCKPILING OF REMOVALS IS NOT PERMITTED.
- PHASING KEYED NOTES**
- APPROXIMATE LOCATION OF CONSTRUCTION FENCING; COORDINATE EXACT LOCATION WITH COR.
 - MAINTAIN MINIMUM 12' WIDE, 1 WAY TRAFFIC DURING CONSTRUCTION, EXCEPT FOR MAXIMUM 2 WEEK PERIOD DURING EXCAVATION, WATERPROOFING, BACKFILL, AND PAVING OPERATIONS AT TUNNEL. COORDINATE 2 WEEK CLOSURE WITH COR.
 - APPROXIMATE LOCATION OF UNDERGROUND FUEL STORAGE TANKS - SET-UP OF CRANES AND OTHER HEAVY EQUIPMENT IS RESTRICTED FROM THIS AREA.
 - EMERGENCY GENERATOR MUST BE OPERATIONAL AT ALL TIMES. CONTRACTOR SHALL MODIFY EXISTING GENERATOR CONTROLS AS NECESSARY TO MAINTAIN FUNCTIONALITY THROUGHOUT CONSTRUCTION OPERATIONS. CONTRACTOR SHALL TEST EMERGENCY GENERATOR AFTER REMOVAL OF LOUVERS AND AFTER RE-INSTALLATION OF LOUVERS AT COMPLETION OF CONSTRUCTION OPERATIONS.
 - WORK WITHIN BUILDING 4 MECHANICAL ROOM IS LIMITED TO NON-HEATING MONTHS (JUNE 1 THROUGH SEPTEMBER 1). CONTRACTOR SHALL NOT TAKE EXISTING MECHANICAL SYSTEMS OFF LINE PRIOR TO JUNE 1, 2024 AND MUST ASSURE MECHANICAL SYSTEMS ARE OPERATIONAL PRIOR TO SEPTEMBER 1, 2024.
 - PROVIDE TEMPORARY CONSTRUCTION FENCING FOR THE FULL DURATION THAT CRANE IS ON SITE; COORDINATE EXACT LOCATION AND ALLOWABLE DURATION WITH COR.
 - PROVIDE TEMPORARY WATER-TIGHT ENCLOSURE FOR DURATION THAT BUILDING 4 MECHANICAL ROOM IS NOT FULLY ENCLOSED.

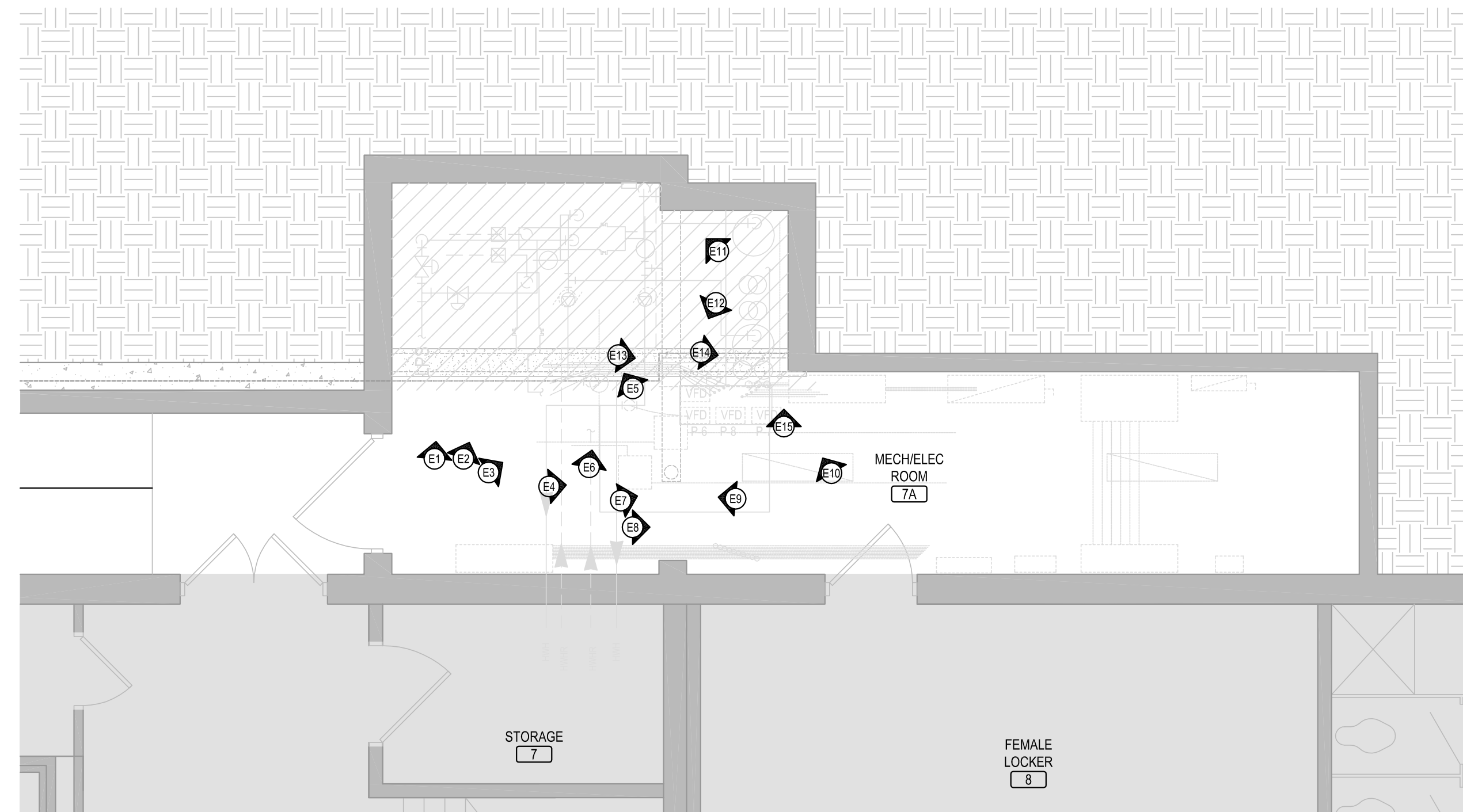
C5 PHOTO KEY PLAN - BUILDING 7 SALT ROOM SITE
1/8" = 1'-0"



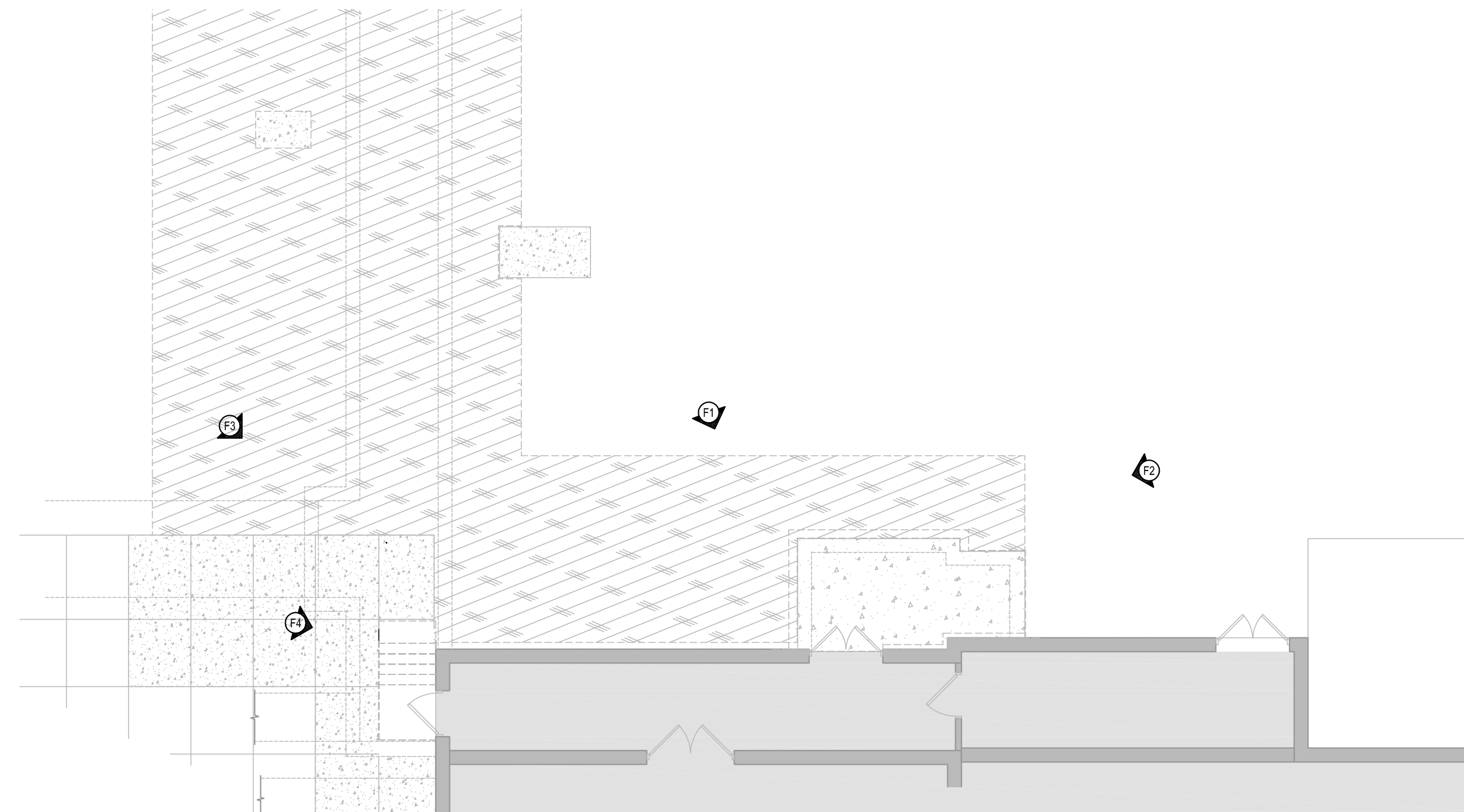
C5 PHOTO KEY PLAN - BUILDING 7 SALT ROOM
1/8" = 1'-0"



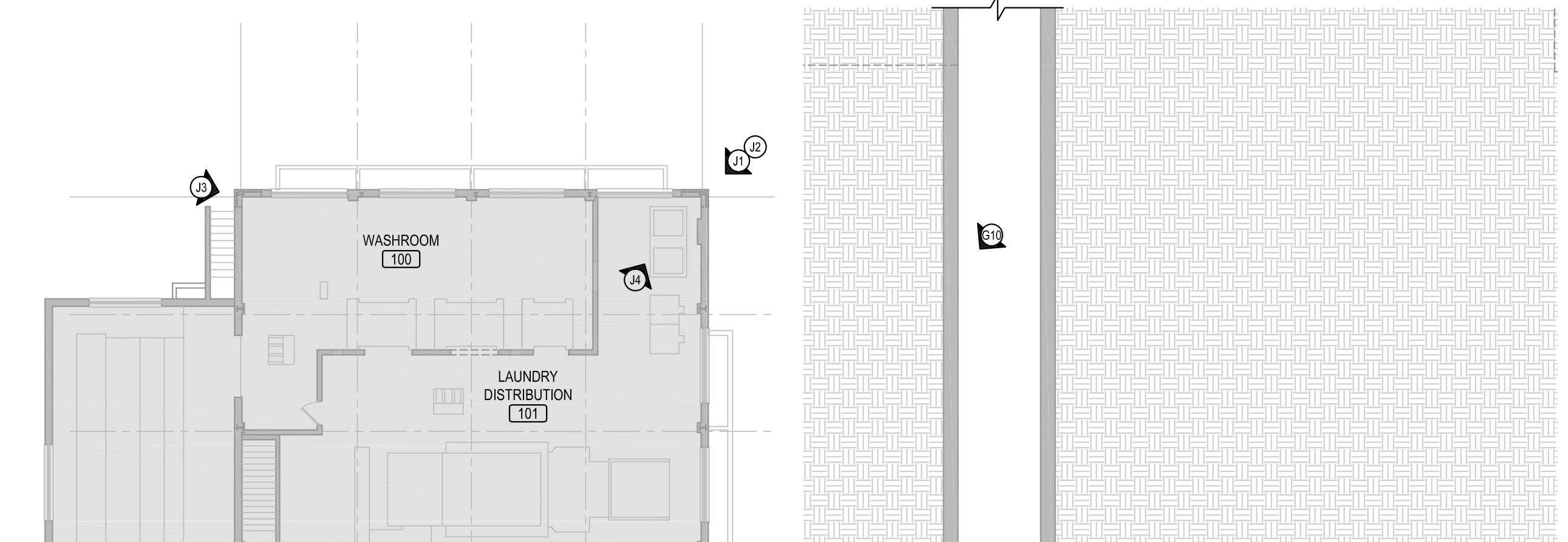
A1 SHEET INDEX / CONSTRUCTION PHASING KEY PLAN
NOT TO SCALE



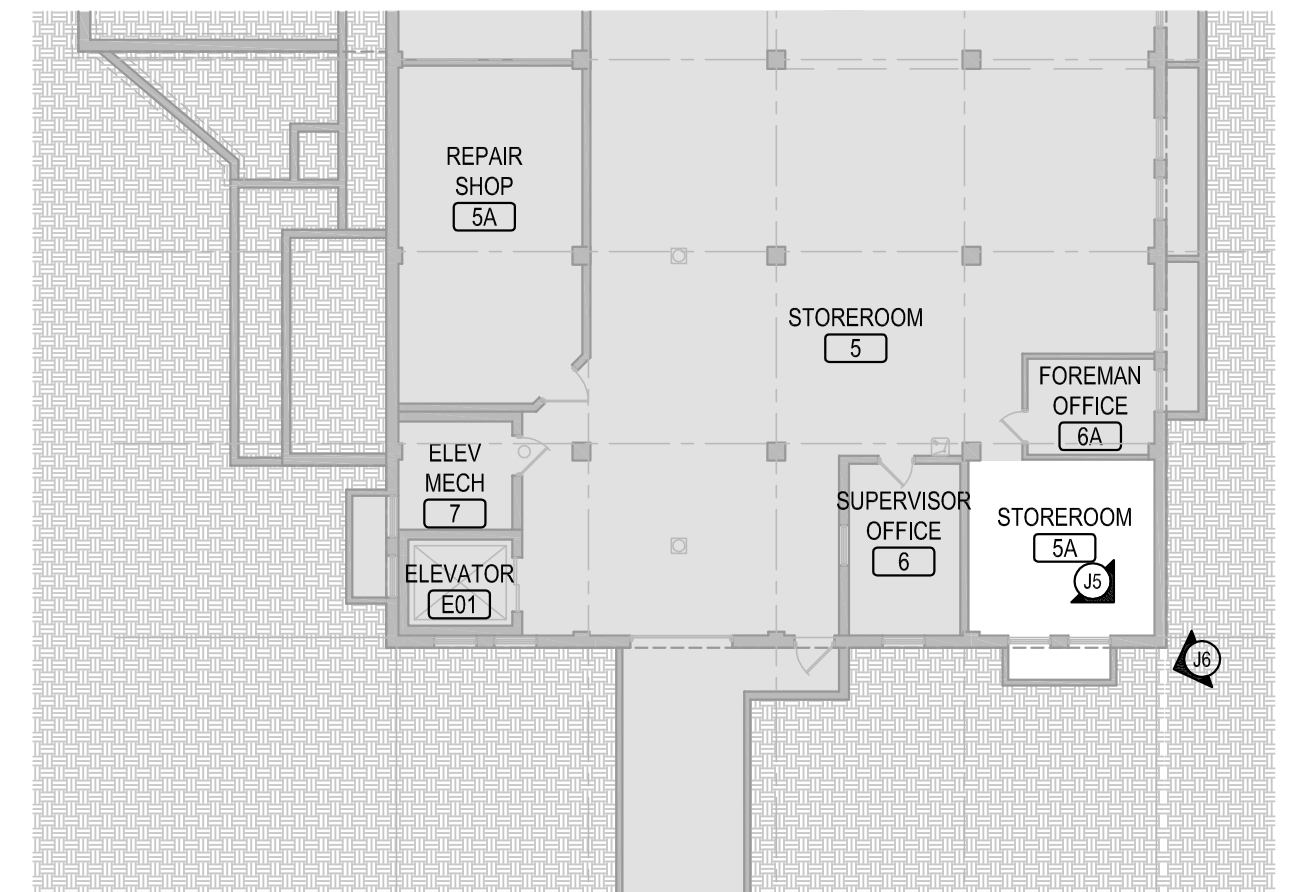
B3 PHOTO KEY PLAN - BUILDING 4 MECHANICAL ROOM
1/4" = 1'-0"



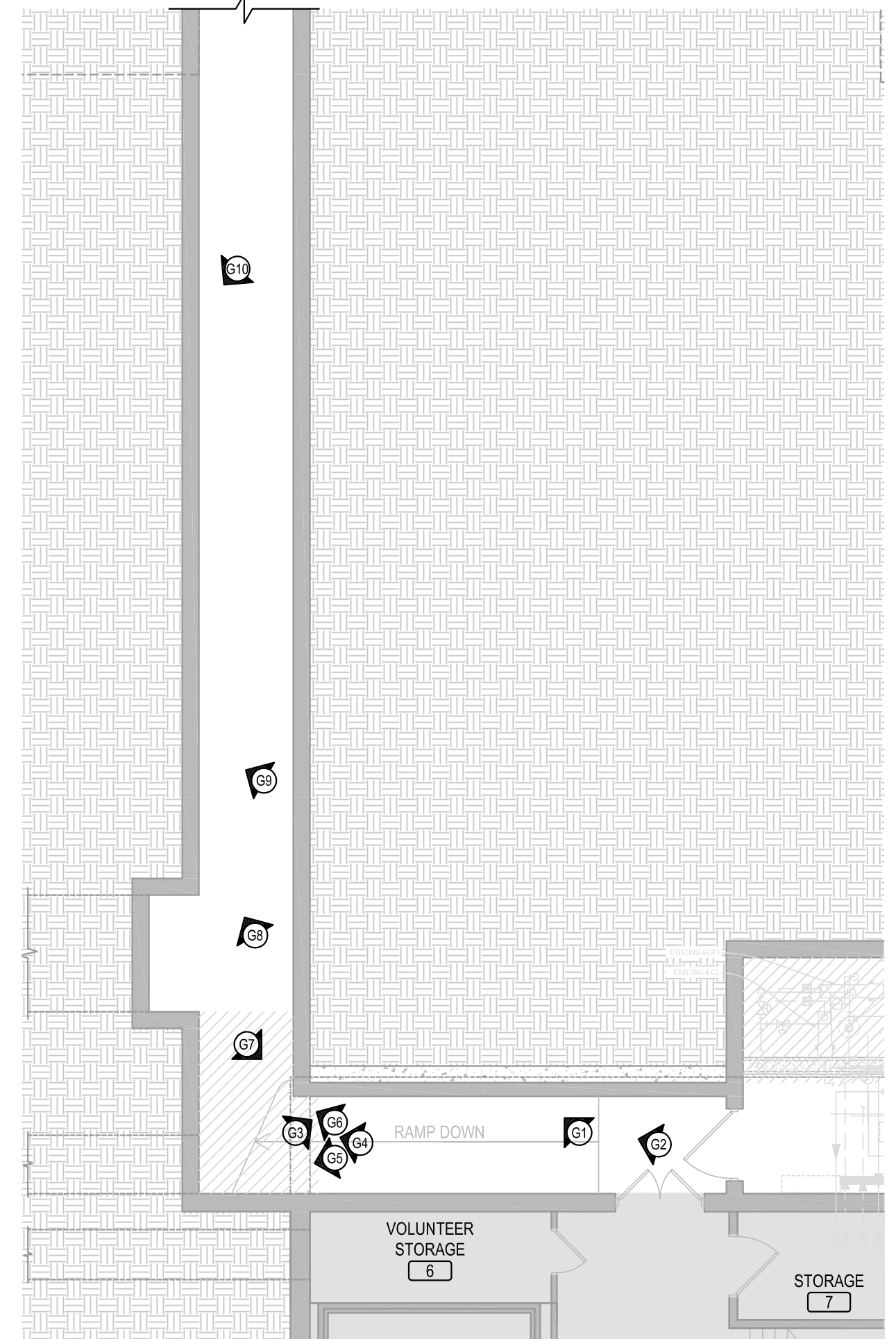
A3 PHOTO KEY PLAN - BUILDING 4 LOADING DOCK
1/8" = 1'-0"



B5 PHOTO KEY PLAN - BUILDING 59 FIRST FLOOR
1/16" = 1'-0"



A5 PHOTO KEY PLAN - BUILDING 59 LOWER LEVEL
1/16" = 1'-0"



A6 PHOTO KEY PLAN - TUNNEL
1/8" = 1'-0"

NO.	REVISION	DATE



3433 BROADWAY
STREET NE, SUITE 220,
MINNEAPOLIS, MN 55413

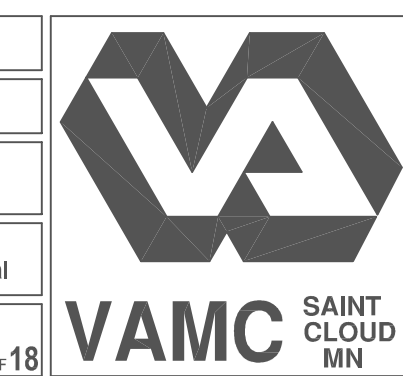


701 Washington Ave North, Suite 200 | Minneapolis, MN 55401 | 612.338.2029

I HEREBY CERTIFY that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.
SIGNATURE: *[Signature]*
TYPED OR PRINTED NAME: **Daniel Maldonado**
DATE: **10/24/2023**, REG. NO.: **47352**

APPROVED SERVICE LINE DIRECTOR	DATE	APPROVED INFECTION CONTROL NURSE	DATE
APPROVED GENI COORDINATOR	DATE	APPROVED PATIENT SAFETY	DATE
APPROVED PROJECTS SECTION MANAGER	DATE	APPROVED CHIEF OF POLICE	DATE
APPROVED DIRECTOR PAB	DATE	APPROVED SAFETY MANAGER	DATE

KEY PLANS		PROJECT TITLE 656-14-247 REPAIR FOUNDATIONS BUILDINGS 4, 7, 59 St. Cloud VA Health Care System Main Campus, St. Cloud, Minnesota	DATE 10/24/2023
APPROVED CHIEF OF STAFF	DATE	ISSUE NO. 230297	PROJECT SCALE As Indicated
APPROVED MEDICAL CENTER DIRECTOR	DATE	ISSUE NO. 230297 General	PROJECT NO. 230297
DRAWING TITLE		ISSUE NO. G11.02	DATE 10/24/2023
PROJECT NO.		ISSUE NO. G11.02	DATE 10/24/2023
PROJECT NO. 4, 7, 59		ISSUE NO. 230297	DATE 10/24/2023
PROJECT NO. DAM		ISSUE NO. NRP	DATE 10/24/2023
PROJECT NO. 230297		ISSUE NO. General	DATE 10/24/2023
PROJECT NO. ST. CLOUD, MN 56303		ISSUE NO. G11.02	DATE 10/24/2023



BUILDING 4 / TUNNEL GENERAL NOTES

A. UTILITIES SHOWN ARE APPROXIMATE LOCATIONS ONLY, AND MAY NOT REFLECT ALL BURIED UTILITIES IN THE AREA. CONTRACTOR SHALL LOCATE ALL BURIED UTILITIES PRIOR TO BEGINNING EXCAVATION, AND PROTECT UTILITIES IN-PLACE DURING CONSTRUCTION OPERATIONS.

WARNING
 LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR.
 CALL BEFORE YOU DIG
 MINNESOTA
 ONE-CALL SYSTEM
 1-800-252-1166
 REQUIRED BY
 MN STATUTE 216D

B. ORIGINAL INSTALLATION PIPING PLANS, DETAILS, SCHEMATICS AND SCHEDULES ARE PROVIDED IN SPECIFICATIONS.

7 BUILDING 4 / TUNNEL KEYED NOTES

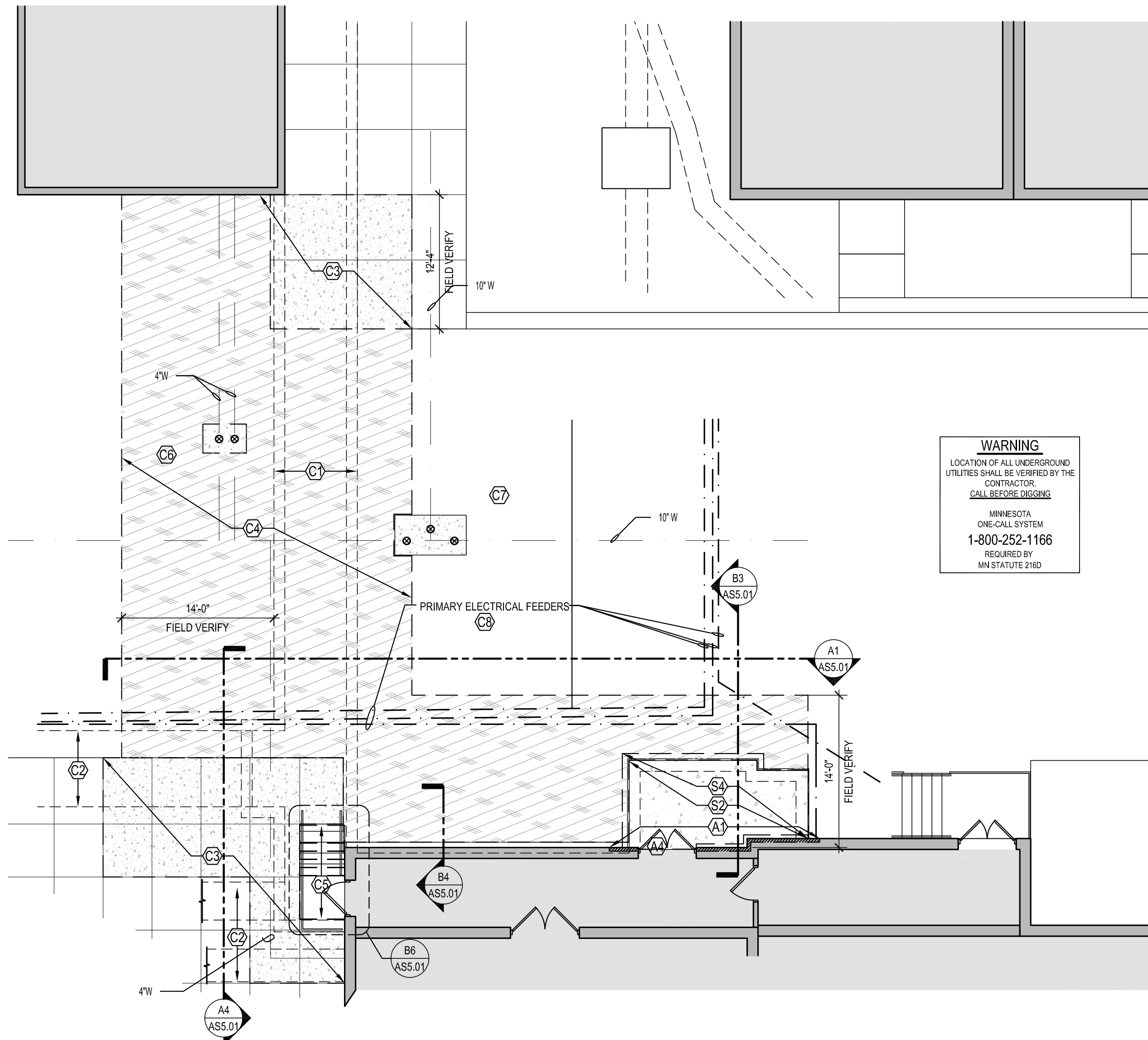
- A1. REMOVE EXISTING BRICK SOLDIER COURSE BASE AND BOTTOM COURSES OF FACE BRICK. INSTALL FLASHING AND NEW BRICK TO MATCH EXISTING. REFER TO SECTIONS AND DETAILS FOR ADDITIONAL INFORMATION.
- A2. REMOVE EXISTING WATERPROOF MEMBRANE. EXISTING MEMBRANE ASSUMED TO CONTAIN ASBESTOS; CONTRACT WITH ABATEMENT CONTRACTOR TO COORDINATE TEST PRIOR TO REMOVAL AND COORDINATE REMOVAL WITH ASBESTOS CONTRACTOR AS REQUIRED.
- A3. NEW FIRE-RATED SOFFIT AT NEW BEAM ABOVE; REFER TO SECTION AND DETAILS.
- A4. REMOVE EXISTING THRESHOLD AND DOOR SWEEPS; INSTALL NEW THERMALLY BROKEN THRESHOLD AND DOOR SWEEPS; REFER TO DETAIL FOR ADDITIONAL INFORMATION.
- A5. FOLLOWING REMOVAL OF EXISTING MEMBRANE, APPLY NEW WATERPROOF MEMBRANE TO FACE OF EXISTING TUNNEL WALL; REFER TO SECTIONS AND DETAILS FOR ADDITIONAL INFORMATION.

- C1. LINE OF UNDERGROUND PRIMARY UTILITY TUNNEL.
- C2. LINE OF UNDERGROUND SECONDARY UTILITY TUNNEL(S).
- C3. SAW-CUT EXISTING CONCRETE PAVEMENT ALONG EXISTING SCORE LINES; PROVIDE NEW CONCRETE PAVEMENT TO MATCH EXISTING PATTERN AFTER COMPLETION OF WATERPROOFING OPERATIONS.
- C4. SAW-CUT EXISTING BITUMINOUS PAVEMENT FOR ACCESS TO TUNNEL WALL AND LID; PROVIDE NEW BITUMINOUS PAVEMENT AFTER COMPLETION OF WATERPROOFING OPERATIONS.
- C5. REMOVE EXISTING CONCRETE STAIR; REFER TO ENLARGED PLAN FOR NEW STAIR; REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION.
- C6. EXISTING UTILITY VALVE ACCESS AND CONCRETE APRON; COORDINATE PROTECTION AND/OR REMOVAL AND REPLACEMENT OF CONCRETE APRON AS REQUIRED TO COMPLETE WATERPROOFING OPERATIONS.
- C7. EXISTING UTILITY VALVE ACCESS AND CONCRETE APRON TO REMAIN; PROTECT FROM DAMAGE.
- C8. FOR BIDDING PURPOSES, ASSUME 13 CONDUITS.

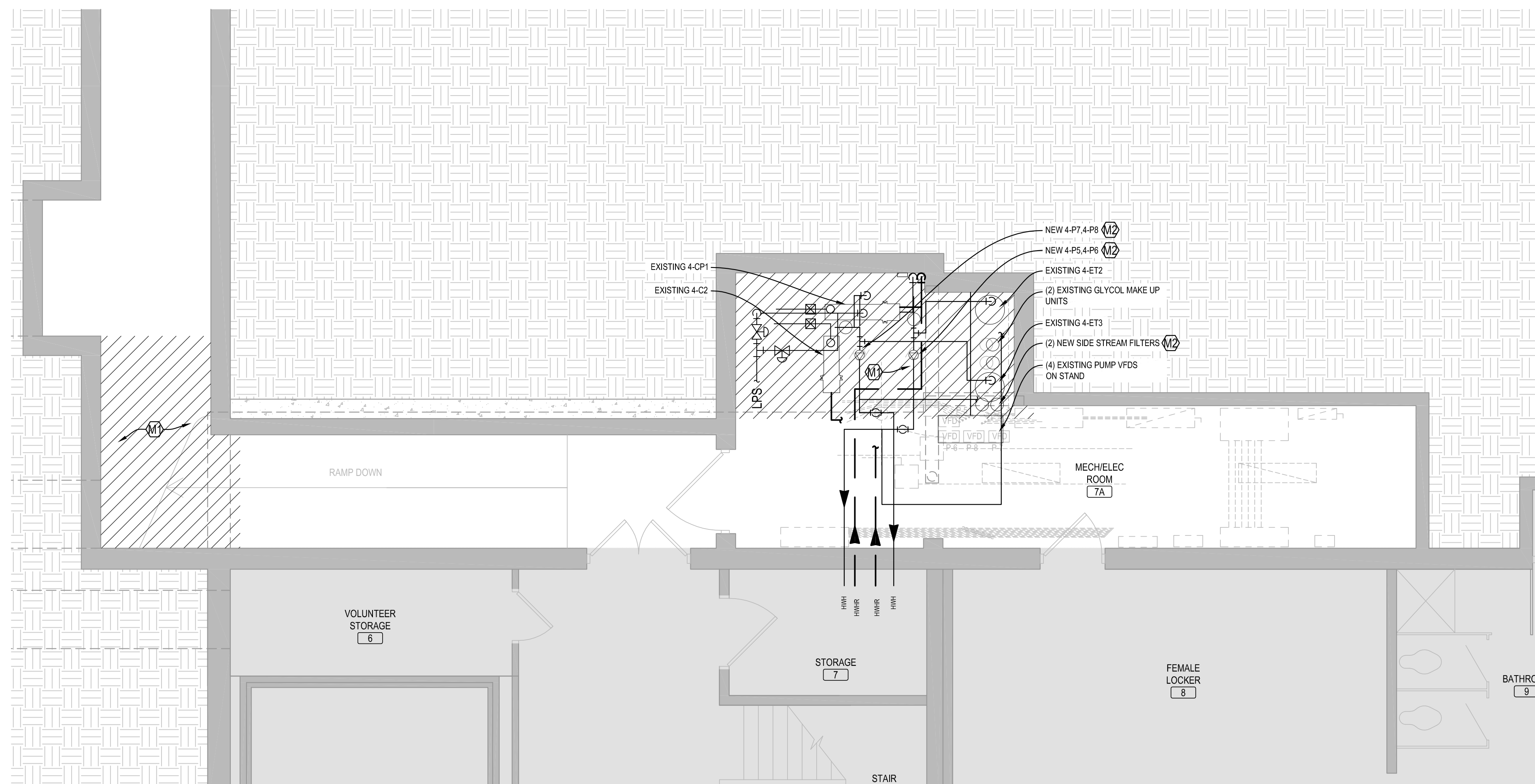
- E1. TO ACCOMMODATE NEW BEAM AND ROOF INSTALLATION
 - ALL EXISTING ELECTRICAL EQUIPMENT, CONDUIT AND CONDUCTORS AND CABLING, HANGERS, CONTROLS AND ACCESSORIES THAT ARE HUNG FROM EXISTING BEAMS AND/OR ROOF WITHIN THE HATCHED AREA SHALL BE TEMPORARILY SUPPORTED OR RELOCATED.
 - RESUPPORT AND/OR REINSTALL ALL EQUIPMENT, CONDUIT, CABLING, AND ACCESSORIES AFTER STRUCTURAL WORK IS COMPLETE.
 - PROVIDE A UNIT COST TO REPLACE CONDUIT, CONDUCTORS, AND CABLING WITH LIKE SIZE AND AMPACITY AND CONNECT TO ENSURE EXISTING BRANCH CIRCUITS AND FEEDERS ARE RETURNED TO OPERATING CONDITION AFTER STRUCTURAL REPAIRS ARE COMPLETE FOR LOCATIONS WHERE REPLACEMENT MAY BE REQUIRED TO COMPLETE THE WORK.
 - THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH STRUCTURAL WORK, FIELD VERIFY AND TRACE EXISTING CIRCUITS TO DETERMINE EXTENT OF DEMOLITION AND NEW WORK IS REQUIRED PRIOR TO STARTING DEMOLITION.
- E2. DISCONNECT EXISTING HOT WATER PUMPS 4-P5, 4-P6, 4-P7, AND 4-P8. REMOVE CONDUCTORS AND CONDUIT AS NECESSARY, AND CONNECT WITH LIKE CONDUCTORS AND CONDUIT TO REPLACEMENT PUMPS. COORDINATE WITH MECHANICAL CONTRACTOR.
- E3. PROTECT EXISTING CONDUITS; CLEAN AND APPLY COLD GALVANIZING AT LOCATIONS OF SIGNIFICANT EXISTING RUST / CORROSION.
- E4. EXISTING PULLBOX; TEMPORARILY SUPPORT, INCLUDING ASSOCIATED CONDUIT FOR BEAM REMOVAL ABOVE.
- E5. EXISTING PULLBOX AND ASSOCIATED CONDUIT TO REMAIN; TEMPORARILY SUPPORT AS NECESSARY; COORDINATE WITH STRUCTURAL.

- M1. TO ACCOMMODATE NEW BEAM AND ROOF INSTALLATION
 - ALL PIPING, EQUIPMENT, HANGERS, STANDS, CONTROLS AND ACCESSORIES THAT ARE HUNG FROM EXISTING BEAMS AND/OR ROOF WITHIN THE HATCHED AREA SHALL BE TEMPORARILY SUPPORTED, EXCEPT WHERE NOTED BELOW.
 - SYSTEMS ARE TO BE REBALANCED TO MEET MOST RECENT TAB REPORTS; PROVIDED IN SPECIFICATIONS.
 - ALL CONTROL POINTS ARE TO BE RE-CONNECTED AND RE-VERIFIED.
 - PROVIDE NEW INSULATION ON PIPING AND EQUIPMENT, WHERE EXISTING INSULATION IS REQUIRED TO BE REMOVED TO COMPLETE THE WORK.
- M2. HOT WATER PUMPS 4-P5, 4-P6, 4-P7, 4-P8, AND SIDE STREAM FILTERS SHALL BE REPLACED WITH NEW EQUIPMENT. REPLACEMENT SHALL BE OF CURRENT VERSION OF THE IDENTICAL MAKE/MODEL AND ACCESSORIES, AS NOTED IN ORIGINAL SHOP DRAWINGS PROVIDED IN SPECIFICATIONS. INSTALL NEW PUMPS AT LOWER ELEVATIONS, AS DIRECTED BY COR IN THE FIELD.

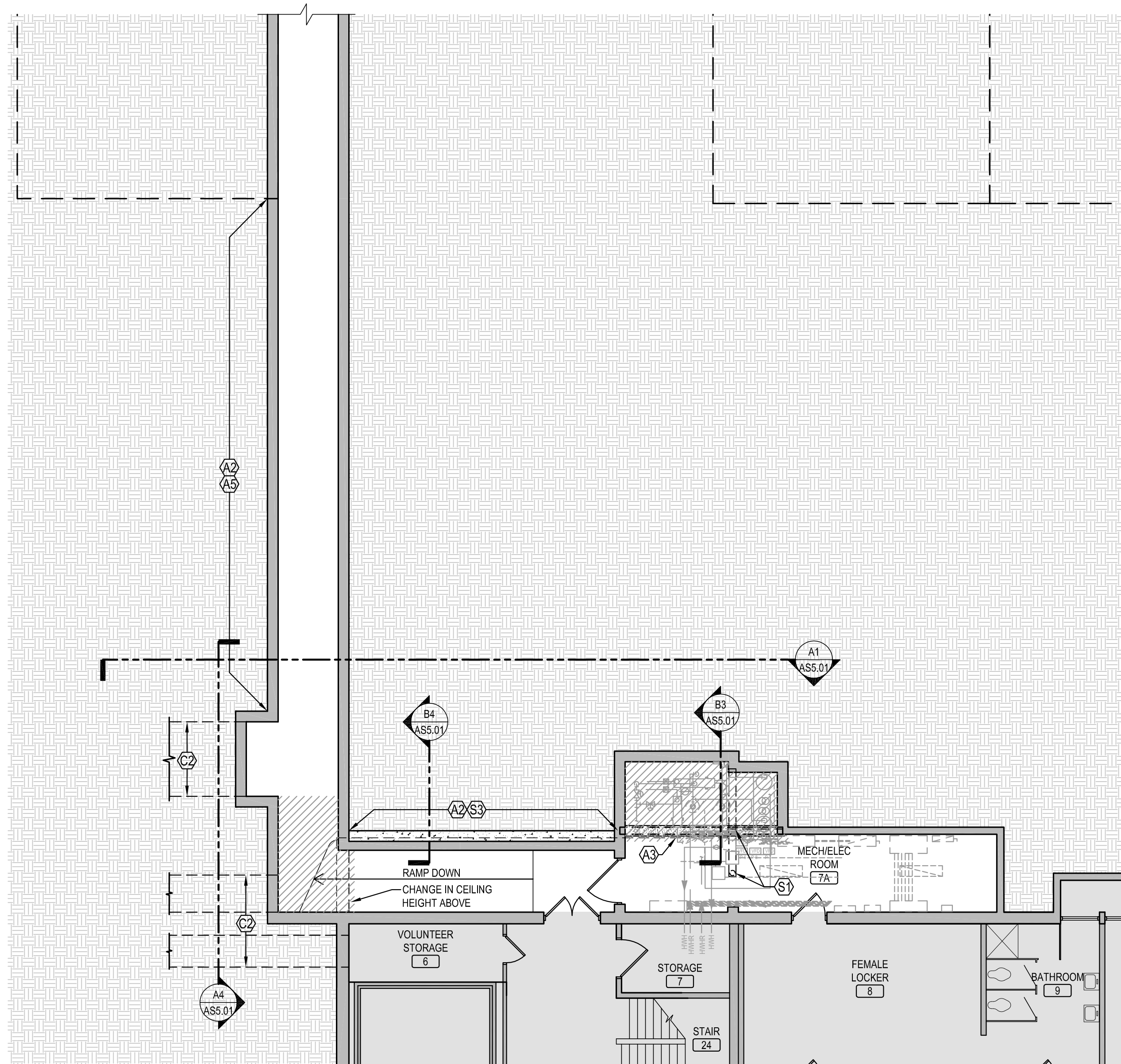
- S1. EXISTING STEEL COLUMN AND BEAM ABOVE TO BE REMOVED; REFER TO STRUCTURAL.
- S2. EXISTING LOADING DOCK PLATFORM STRUCTURE TO BE REMOVED; REFER TO STRUCTURAL.
- S3. NEW CONCRETE FOUNDATION WALL; REFER TO STRUCTURAL. APPLY NEW WATERPROOF MEMBRANE TO FACE OF FOUNDATION WALL; REFER TO SECTIONS AND DETAILS FOR ADDITIONAL INFORMATION.
- S4. NEW LOADING DOCK PLATFORM; REFER TO SECTIONS, DETAILS, AND STRUCTURAL.



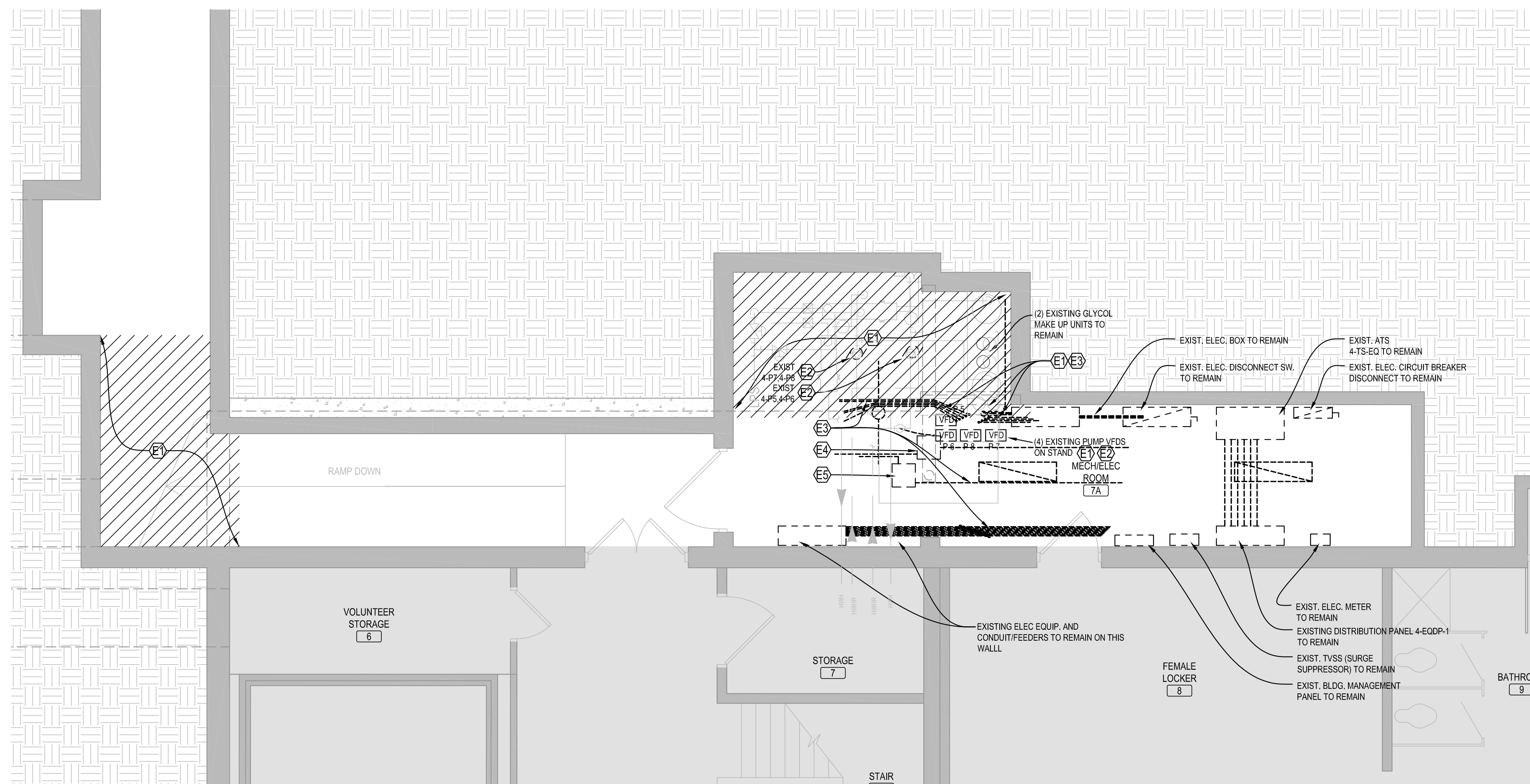
C1 BUILDING 4 / TUNNEL SITE PLAN
 1/8" = 1'-0"



C3 BUILDING 4 MECHANICAL PLAN
 1/4" = 1'-0"



A1 BUILDING 4 / TUNNEL FLOOR PLAN
 1/8" = 1'-0"



A3 BUILDING 4 ELECTRICAL PLAN
 1/4" = 1'-0"

No	REVISION	DATE

I HEREBY CERTIFY that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

SIGNATURE: *[Signature]*
 TYPED OR PRINTED NAME: **Daniel Maldonado**
 DATE: **10/24/2023** REG. NO.: **47352**

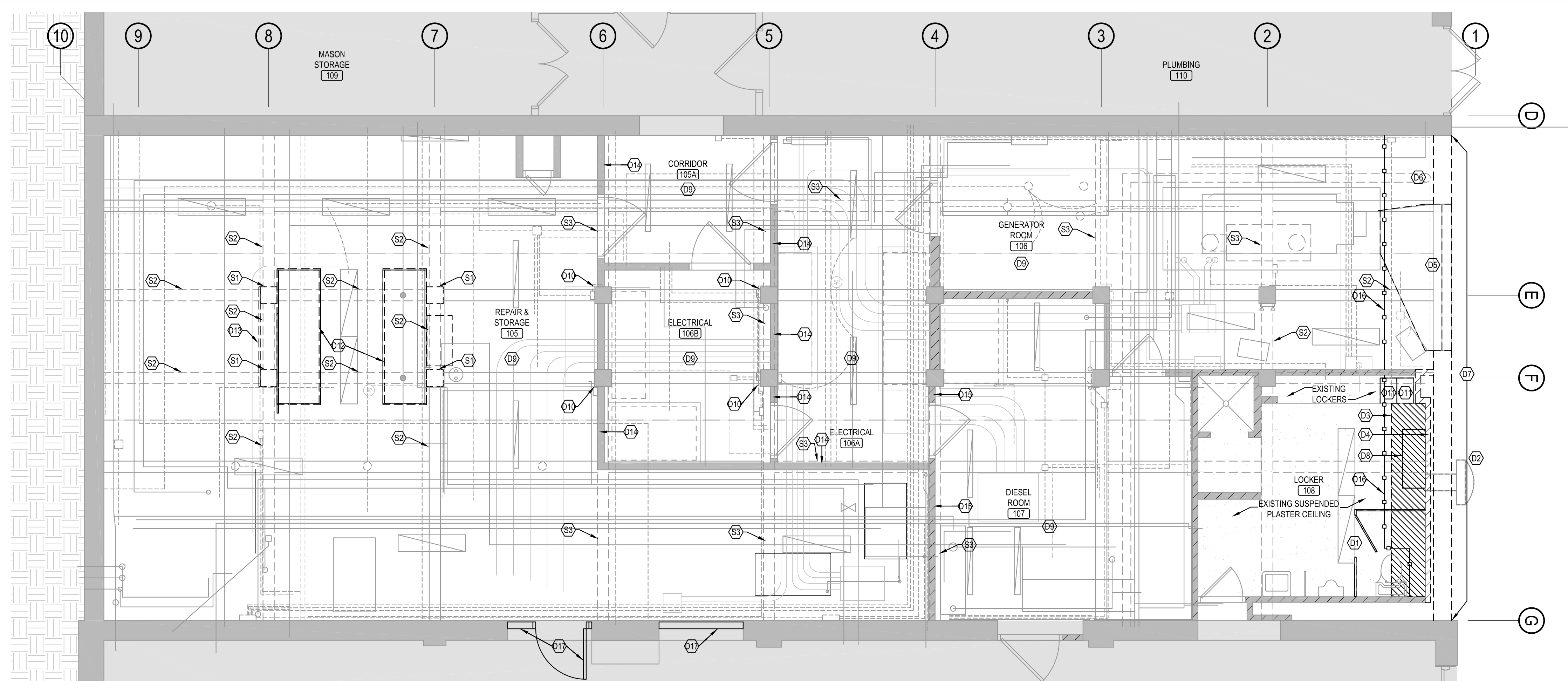
GRaEF 3433 BROADWAY STREET NE, SUITE 220, MINNEAPOLIS, MN 55413

LHB 701 Washington Ave North, Suite 200 | Minneapolis, MN 55401 | 612.338.2029

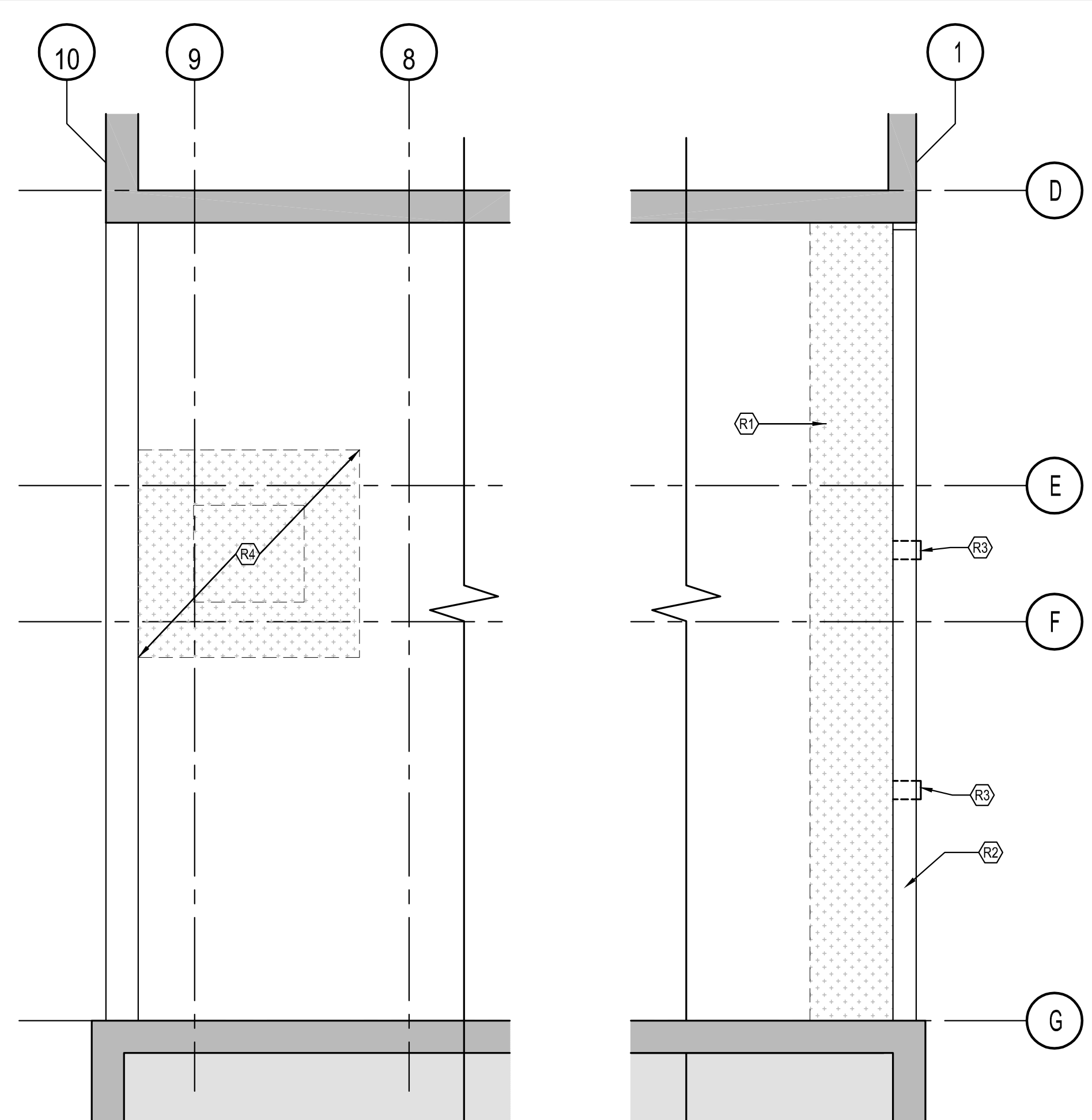
APPROVED: SERVICE UNIT DIRECTOR	DATE	APPROVED: INFECTION CONTROL NURSE	DATE
APPROVED: GENI COORDINATOR	DATE	APPROVED: PATIENT SAFETY	DATE
APPROVED: PROJECTS SECTION MANAGER	DATE	APPROVED: CHIEF OF POLICE	DATE
APPROVED: DIRECTOR PAB	DATE	APPROVED: SAFETY MANAGER	DATE

DRAWING TITLE BUILDING 4 / TUNNEL PLANS		PROJECT TITLE 656-14-247 REPAIR FOUNDATIONS BUILDINGS 4, 7, 9 St. Cloud VA Health Care System Main Campus, St. Cloud, Minnesota	DATE 10/24/2023
APPROVED: CHIEF OF STAFF	DATE	BUILDING NO. 4	PROJECT NO. 230297
APPROVED: MEDICAL CENTER DIRECTOR	DATE	DISCIPLINE DAM	ISSUE NO. NRP
DRAWING SCALE As Indicated		LOCATION VA MEDICAL CENTER ST. CLOUD, MN 56303	DATE 10/24/2023
DRAWING NO. AS1.01		DATE 10/24/2023	SCALE As Indicated

VAMC SAINT CLOUD MN



D1 BUILDING 7 DEMOLITION PLAN
AS1.02 1/4" = 1'-0"



D4 BUILDING 7 ROOF PLAN
AS1.02 1/4" = 1'-0"

BUILDING 7 GENERAL NOTES

- A. UTILITIES SHOWN ARE APPROXIMATE LOCATIONS ONLY, AND MAY NOT REFLECT ALL UTILITIES IN THE AREA. CONTRACTOR SHALL PROTECT UTILITIES IN-PLACE.
- B. PROTECT EXISTING EQUIPMENT TO REMAIN FROM CONSTRUCTION ACTIVITY. PROVIDE TEMPORARY COVERS, CLOTH AND/OR POLY TARPS AS REQUIRED. COORDINATE PROTECTION TYPE(S) AND DURATION(S) WITH COR.

BUILDING 7 KEYED NOTES

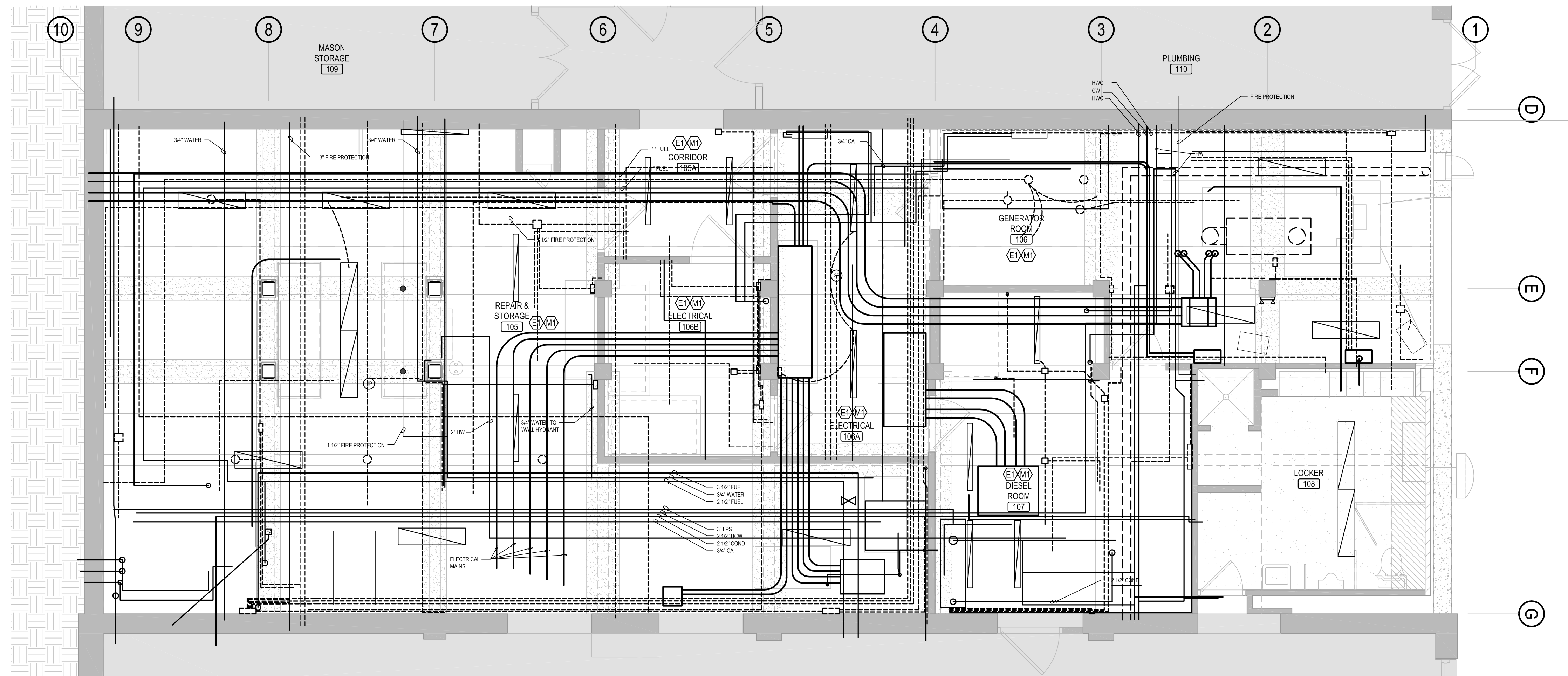
- D1. CAREFULLY REMOVE AND SALVAGE EXISTING PARTITIONS FOR REINSTALLATION.
- D2. CAREFULLY REMOVE AND SALVAGE EXISTING EXHAUST FAN AND HOOD FOR REINSTALLATION.
- D3. REMOVE PORTION OF EXISTING PLASTER CEILING TO EXPOSE ROOF STRUCTURE FOR SHORING - REFER TO STRUCTURAL.
- D4. REMOVE EXISTING 4" CMU WALL.
- D5. CAREFULLY REMOVE AND SALVAGE EXISTING LOUVER FOR REINSTALLATION. REMOVE DUCTWORK BACK TO EXISTING EMERGENCY GENERATOR, SALVAGE DAMPERS AND OTHER ACCESSORIES FOR REUSE.
- D6. PROTECT EXISTING NATURAL GAS PIPING FROM DAMAGE THROUGHOUT DEMOLITION AND RECONSTRUCTION PROCESS.
- D7. REMOVE EXISTING CONCRETE WALL - REFER TO STRUCTURAL.
- D8. CAREFULLY REMOVE AND SALVAGE EXISTING WALL CABINET TO REMOVE AND REPLACE 4" CMU WALL. REFER TO FLOOR PLAN FOR REINSTALLATION.
- D9. PRIOR TO COMMENCING STRUCTURAL REPAIRS TO ROOF DECK AND BEAMS, INSTALL NEW SUPPORTS ON EITHER SIDE OF BEAMS FOR ALL UTILITIES AFFECTED BY THE WORK. REMOVE ALL EXISTING SUPPORTS ATTACHED DIRECTLY TO BEAMS OR ARE IN CONFLICT WITH STRUCTURAL REPAIRS AND NEW GYP. BO. BEAM PROTECTION.
- D10. REMOVE ELECTRICAL DEVICES, WIRING, AND CONDUIT MOUNTED TO COLUMN AS REQUIRED TO PERFORM STRUCTURAL REPAIR WORK. AT COMPLETION OF STRUCTURAL REPAIR WORK, INSTALL NEW ELECTRICAL DEVICES AND CONDUIT TO EXISTING CIRCUITS.
- D11. CAREFULLY REMOVE AND SALVAGE EXISTING LOCKERS AS REQUIRED TO REMOVE AND REPLACE 4" CMU WALL. REFER TO FLOOR PLAN FOR REINSTALLATION.
- D12. REMOVE AND SALVAGE EXISTING STORAGE CABINETS TO PERFORM STRUCTURAL REPAIR WORK. COORDINATE TEMPORARY STORAGE CABINET LOCATIONS WITH COR. DEMO EXISTING 4" HIGH CONCRETE HOUSEKEEPING PADS AND REPAIR CONCRETE FLOOR TO MATCH EXISTING ADJACENT FLOOR. REFER TO FLOOR PLAN FOR REINSTALLATION.
- D13. TEMPORARILY REMOVE AND SALVAGE PEGBOARD TO PERFORM STRUCTURAL REPAIR WORK. REFER TO FLOOR PLAN FOR REINSTALLATION.
- D14. REMOVE AND REPAIR TOP OF GYPSUM BOARD PARTITION ASSEMBLY AS REQUIRED TO PERFORM STRUCTURAL REPAIRS. REPAIR AND PAINT PARTITION FOLLOWING STRUCTURAL REPAIRS.
- D15. REMOVE TOP COURSES OF MASONRY WALL TO PERFORM STRUCTURAL REPAIRS. TEMPORARILY SHORE EXISTING MASONRY WALL AS REQUIRED. REINSTALL TOP OF MASONRY WALL TO UNDERSIDE OF NEW STEEL BEAM.
- D16. PROVIDE CHAIN LINK FENCING AND INSECT SCREEN OR CONSTRUCTION PARTITIONS, WALL-TO-WALL AND FLOOR-TO-STRUCTURE ABOVE ENTIRE TIME EXTERIOR WALL IS DEMOLISHED.
- D17. PROVIDE TEMPORARY WALL AND DOOR(S) TO SEPARATE CONSTRUCTION AREA FROM BOILER ROOM. COORDINATE DOOR LOCATION(S) W/ COR.

- E1. TO ACCOMMODATE NEW BEAM AND COLUMN INSTALLATION:
 - ALL EXISTING ELECTRICAL EQUIPMENT, CONDUIT AND CONDUCTORS AND CABLING, HANGERS, CONTROLS AND ACCESSORIES THAT ARE HUNG FROM EXISTING BEAMS AND/OR COLUMNS THAT ARE TO BE REPAIRED / REPLACED SHALL BE TEMPORARILY SUPPORTED OR RELOCATED.
 - RESUPPORT AND/OR REINSTALL ALL EQUIPMENT, CONDUIT, CABLING, AND ACCESSORIES AFTER STRUCTURAL WORK IS COMPLETE.
 - PROVIDE A UNIT COST TO REPLACE CONDUIT, CONDUCTORS, AND CABLING WITH LIKE SIZE AND AMPACITY AND CONNECT TO ENSURE EXISTING BRANCH CIRCUITS AND FEEDERS ARE RETURNED TO OPERATING CONDITION AFTER STRUCTURAL REPAIRS ARE COMPLETE FOR LOCATIONS WHERE REPLACEMENT MAY BE REQUIRED TO COMPLETE THE WORK.
 - THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH STRUCTURAL WORK, FIELD VERIFY AND TRACE EXISTING CIRCUITS TO DETERMINE EXTENT OF DEMOLITION AND NEW WORK IS REQUIRED PRIOR TO STARTING DEMOLITION.

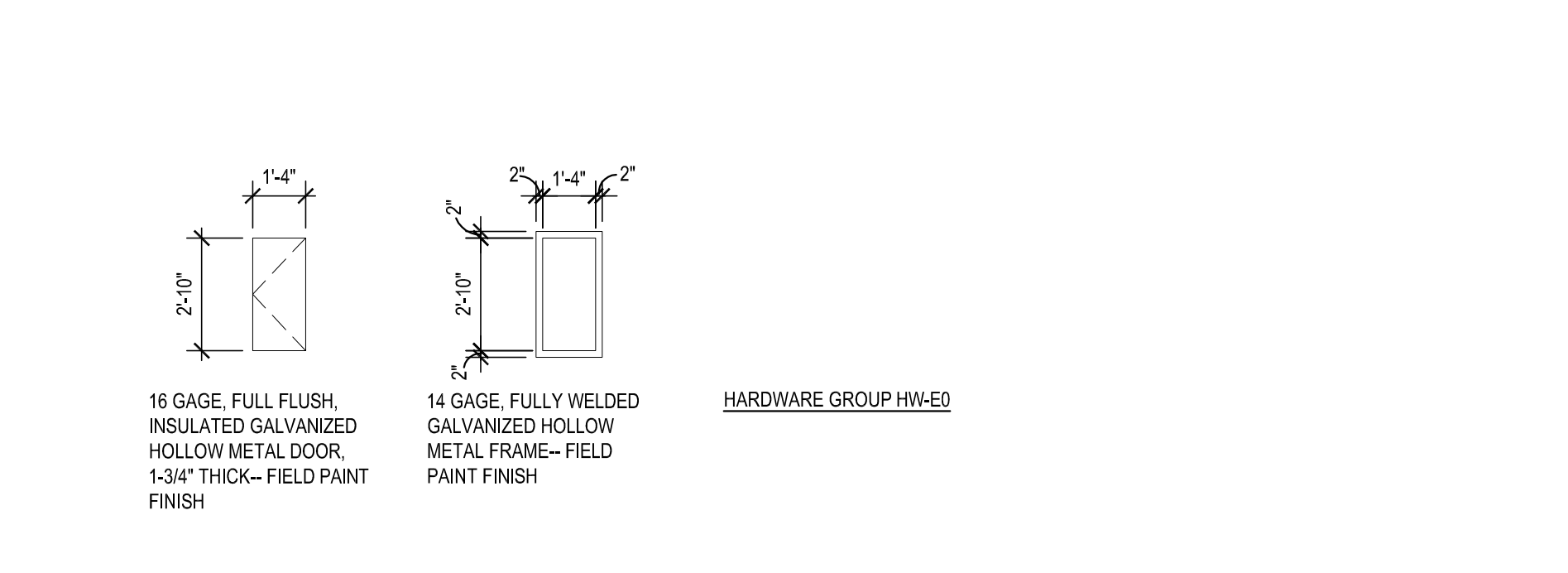
- M1. TO ACCOMMODATE NEW BEAM AND COLUMN INSTALLATION:
 - ALL PIPING, EQUIPMENT, HANGERS, STANDS, CONTROLS AND ACCESSORIES THAT ARE HUNG FROM EXISTING BEAMS AND/OR COLUMNS TO BE REPAIRED / REPLACED SHALL BE TEMPORARILY SUPPORTED, EXCEPT WHERE NOTED BELOW.
 - PROVIDE NEW INSULATION ON PIPING AND EQUIPMENT, WHERE EXISTING INSULATION IS REQUIRED TO BE REMOVED TO COMPLETE THE WORK.

- R1. CAREFULLY PULL BACK GRAVEL BALLAST TO EXPOSE EXISTING ROOF MEMBRANE & INSULATION. CUT MEMBRANE AT BASE OF PARAPET WALL, ROLL BACK AND PROTECT FOR RE-INSTALLATION.
- R2. NEW MASONRY PARAPET WALL AND METAL COPING.
- R3. THROUGH-WALL ROOF SCUPPERS- LOCATE IN APPROXIMATE LOCATION OF EXISTING SCUPPERS.
- R4. CAREFULLY PULL BACK GRAVEL BALLAST TO EXPOSE EXISTING ROOF MEMBRANE & INSULATION. CUT AND REMOVE MEMBRANE AND INSULATION AT LOCATION STRUCTURAL VOID REPAIR. REPLACE INSULATION AND PATCH MEMBRANE WITH NEW MATERIAL, FOLLOWING STRUCTURAL REPAIRS. VERIFY EXTENTS WITH STRUCTURAL.

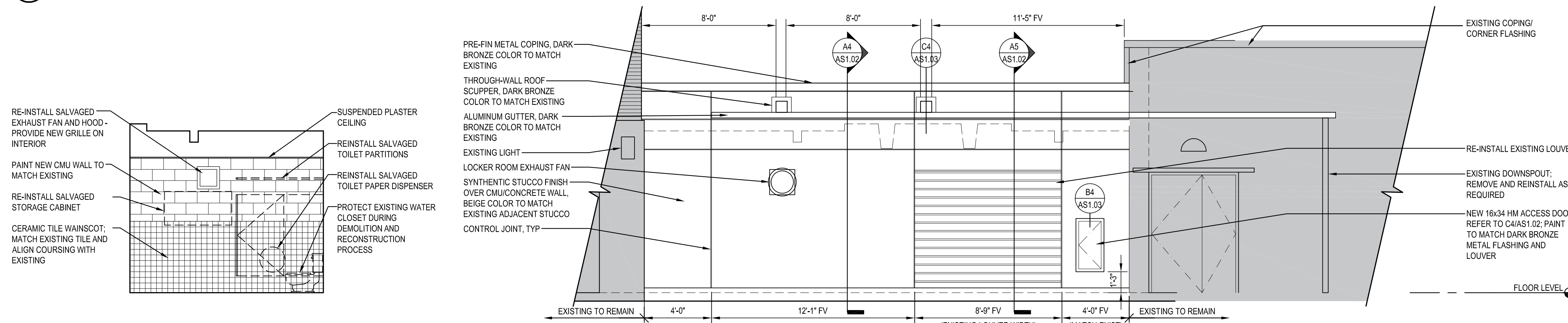
- S1. EXISTING CONCRETE COLUMN TO BE REMOVED. REFER TO STRUCTURAL.
- S2. EXISTING CONCRETE ENCASED STEEL BEAM ABOVE TO BE REMOVED. REFER TO STRUCTURAL.
- S3. EXISTING CONCRETE ENCASED STEEL BEAM ABOVE TO BE REINFORCED. REFER TO STRUCTURAL.



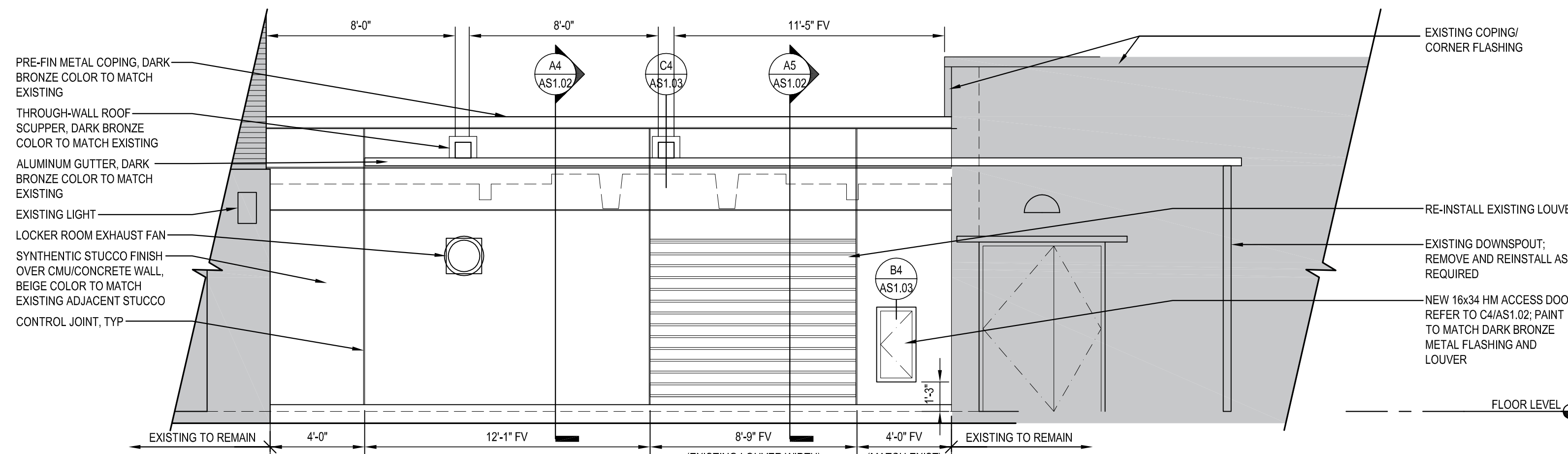
B1 BUILDING 7 UTILITY PLAN
AS1.02 1/4" = 1'-0"



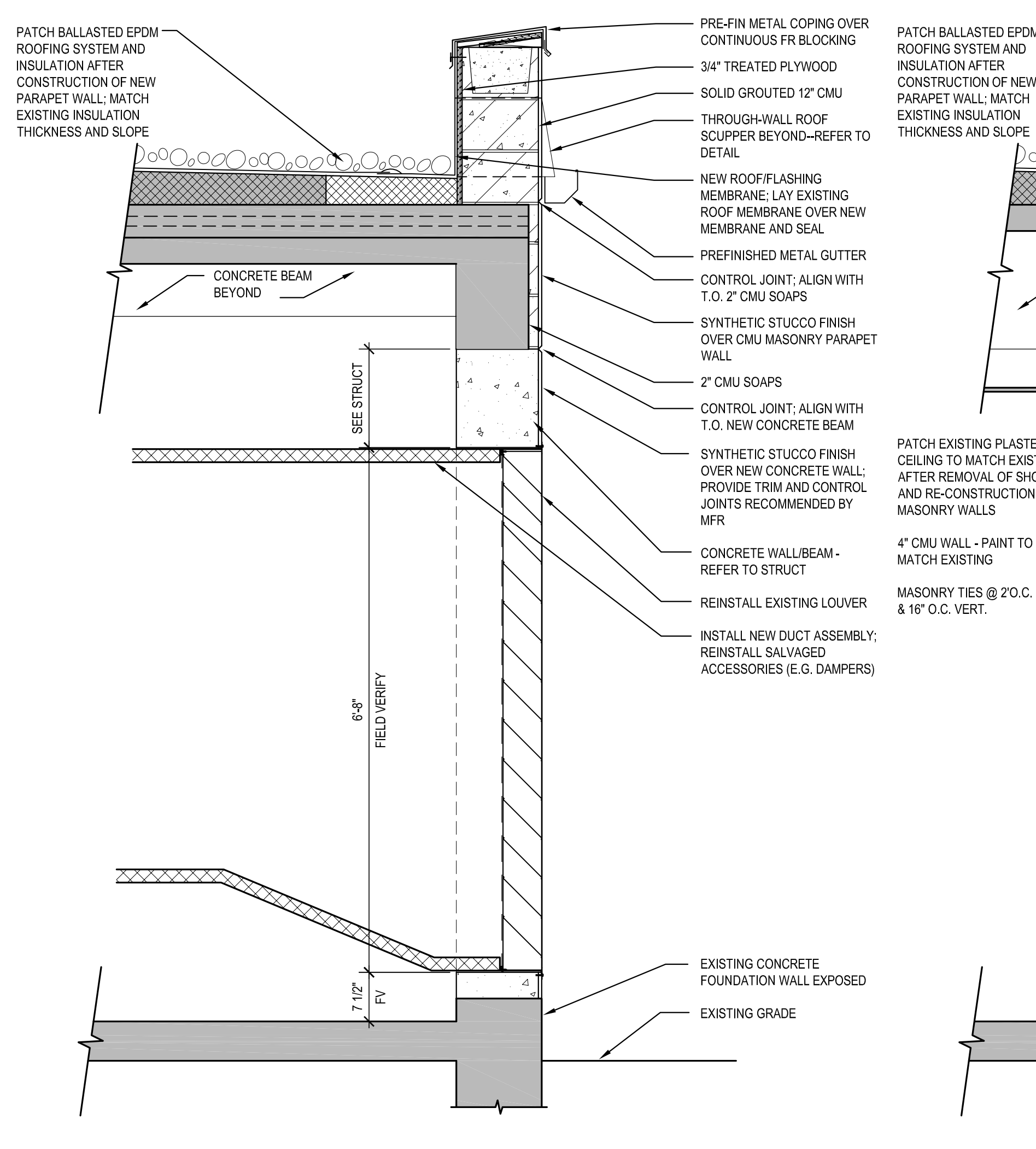
C4 BUILDING 7 DOOR AND FRAME TYPES
AS1.02 1/4" = 1'-0"



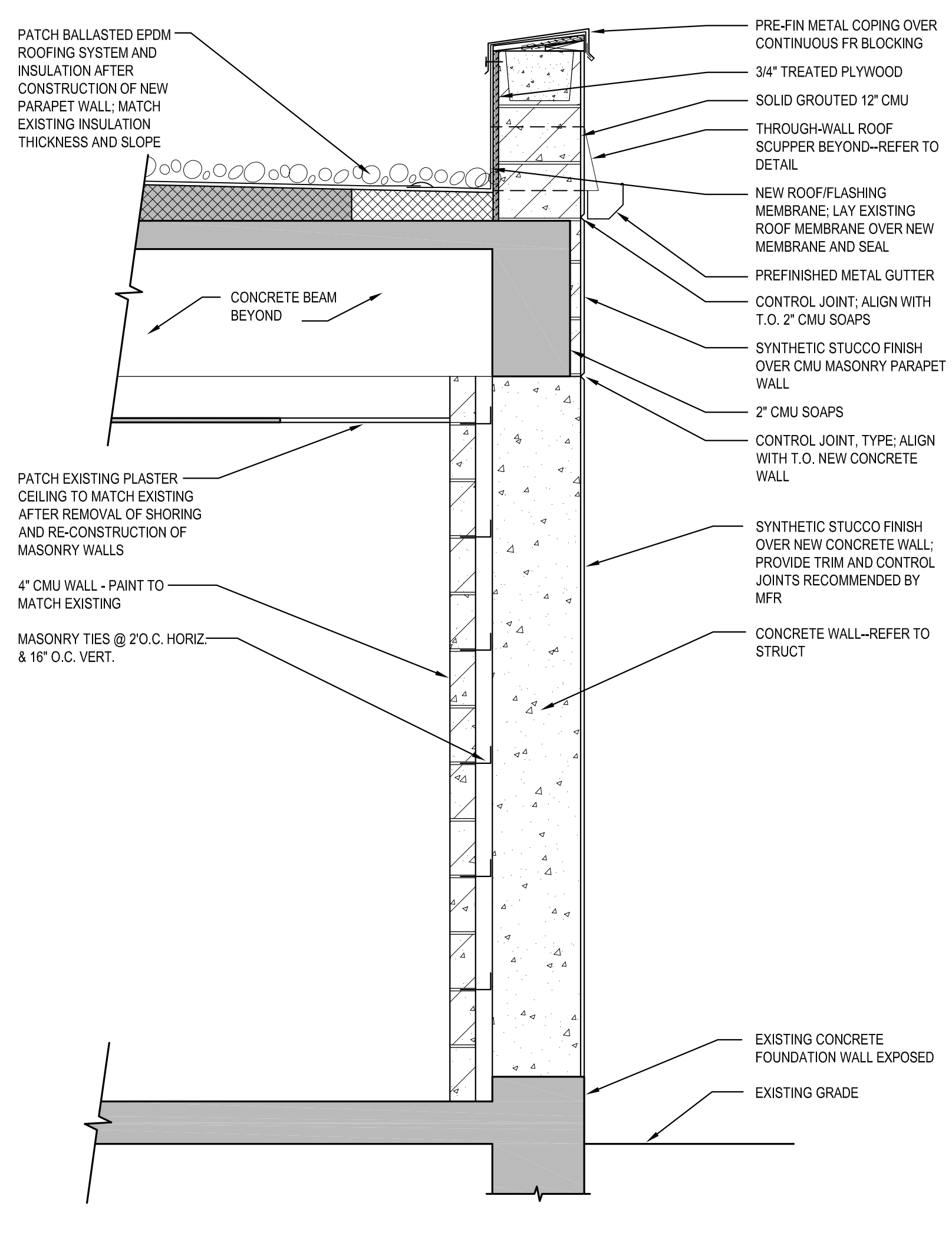
A1 BUILDING 7 LOCKER ROOM ELEVATION
AS1.02 1/4" = 1'-0"



A2 BUILDING 7 EXTERIOR ELEVATION
AS1.02 1/4" = 1'-0"



A4 BUILDING 7 WALL SECTION
AS1.02 3/4" = 1'-0"



A5 BUILDING 7 WALL SECTION
AS1.02 3/4" = 1'-0"

NO.	REVISION	DATE

GRÄEF 3433 BROADWAY STREET NE, SUITE 220, MINNEAPOLIS, MN 55413

LHB 701 Washington Ave North, Suite 200 | Minneapolis, MN 55401 | 612.338.2029

I HEREBY CERTIFY that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

SIGNATURE: *[Signature]*
TYPED OR PRINTED NAME: **Daniel Maldonado**
DATE: **10/24/2023** REG. NO.: **47352**

APPROVED: SERVICE UNIT DIRECTOR	DATE:	APPROVED: INJECTION CONTROL NURSE	DATE:
APPROVED: GENI COORDINATOR	DATE:	APPROVED: PATIENT SAFETY	DATE:
APPROVED: PROJECTS SECTION MANAGER	DATE:	APPROVED: CHIEF OF POLICE	DATE:
APPROVED: DIRECTOR PAB	DATE:	APPROVED: SAFETY MANAGER	DATE:

BUILDING 7 DEMOLITION & UTILITY PLANS, SECTIONS, AND ELEVATIONS

PROJECT TITLE: 656-14-247 REPAIR FOUNDATIONS BUILDINGS 4, 7, 9
St. Cloud VA Health Care System Main Campus, St. Cloud, Minnesota

DATE: 10/24/2023
PROJECT NO: 230297
DRAWN: NRP
CHECKED: Arch
DATE: 10/24/2023
SCALE: As Indicated
SHEET NO: 4 OF 18

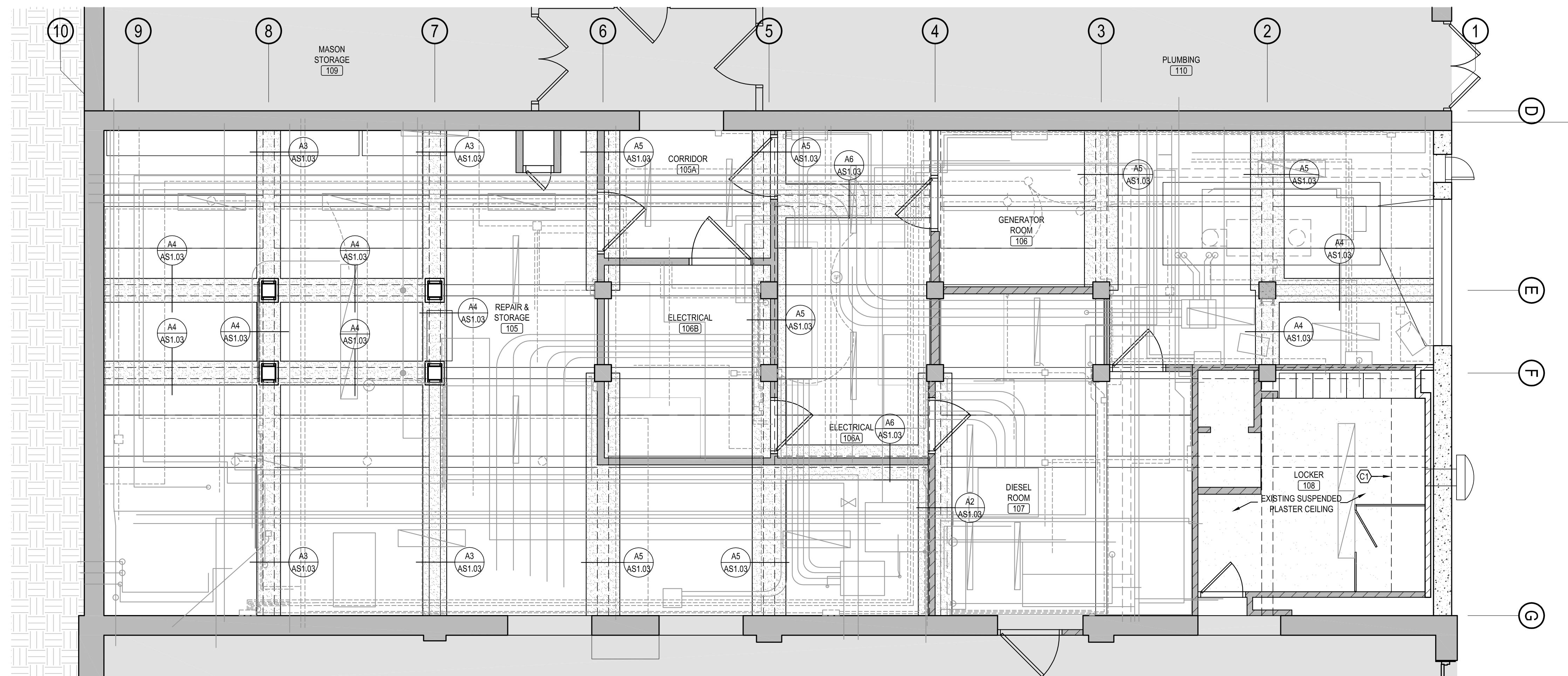
VAMC SAINT CLOUD MN

BUILDING 7 GENERAL NOTES

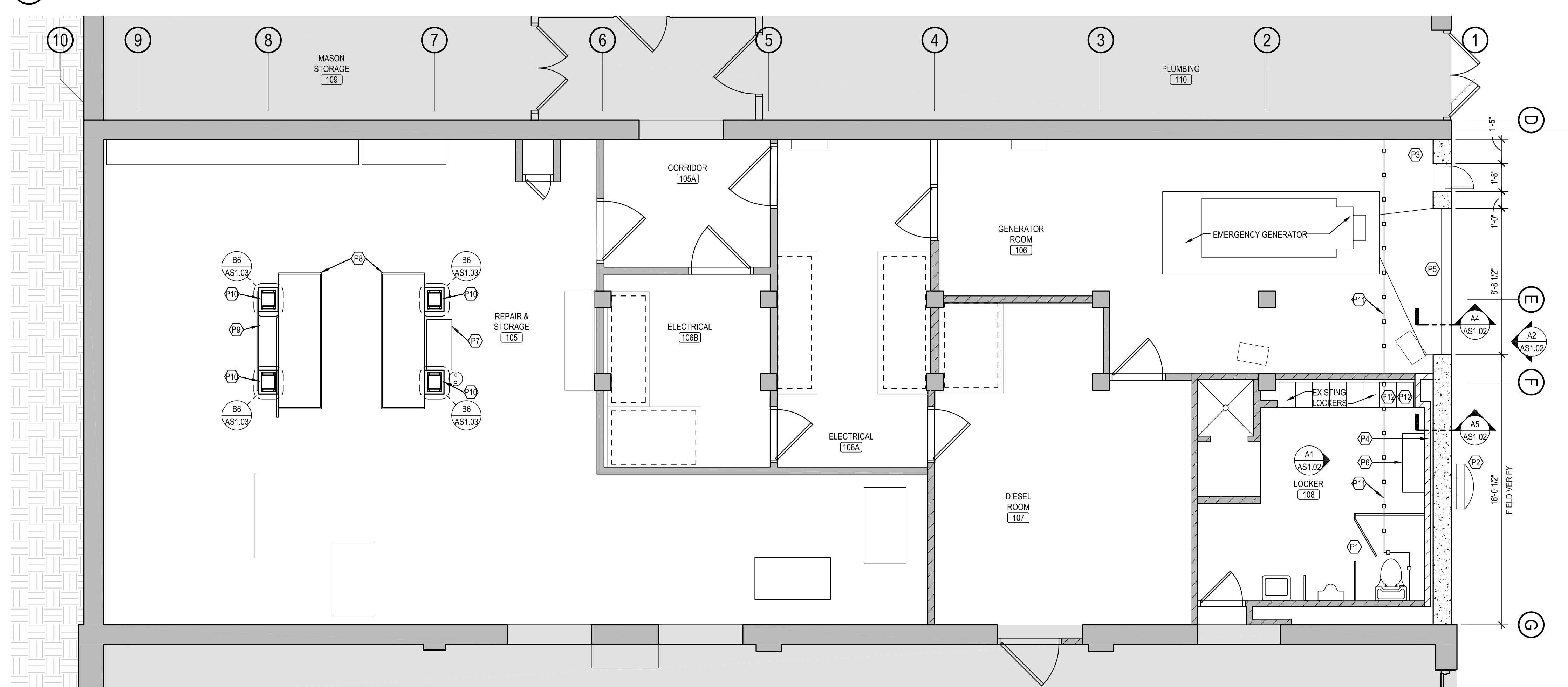
A. UTILITIES SHOWN ARE APPROXIMATE LOCATIONS ONLY, AND MAY NOT REFLECT ALL UTILITIES IN THE AREA. CONTRACTOR SHALL PROTECT UTILITIES IN-PLACE.

④ BUILDING 7 KEYED NOTES

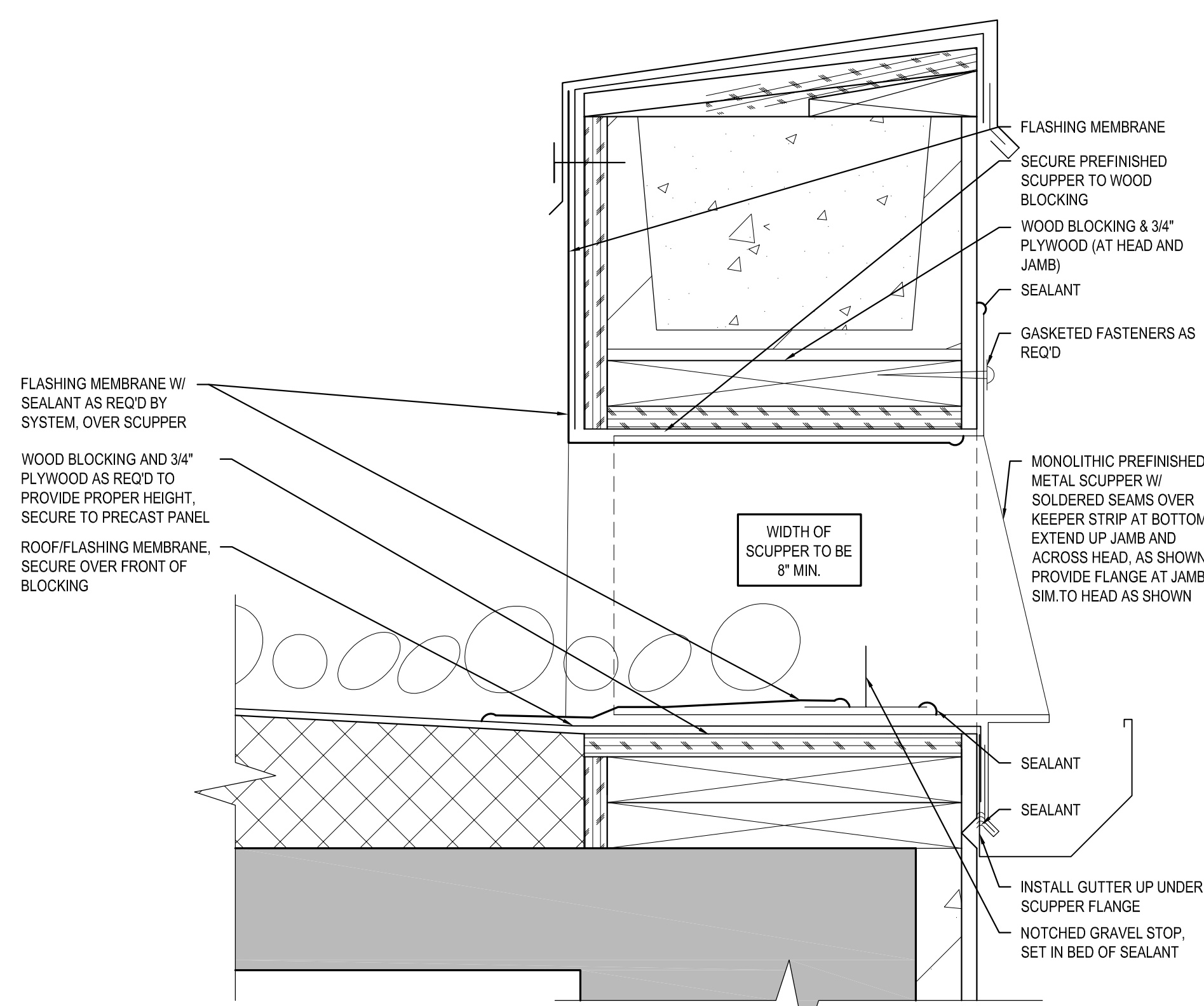
- C1. PATCH CEILING TO MATCH ADJACENT PLASTER CEILING- PAINT TO MATCH.
- P1. REINSTALL SALVAGED TOILET PARTITIONS.
- P2. REINSTALL SALVAGED EXHAUST FAN AND HOOD.
- P3. PAINT NEW CONCRETE WALL TO MATCH ADJACENT EXISTING WALLS.
- P4. CONSTRUCT NEW 4" CMU WALL IN LINE WITH ORIGINAL WALL LOCATION.
- P5. REINSTALL SALVAGED LOUVER. INSTALL NEW DUCTWORK FROM LOUVER TO EXISTING EMERGENCY GENERATOR.
- P6. INSTALL SALVAGED DAMPER AND OTHER ACCESSORIES IN NEW DUCTWORK.
- P7. REINSTALL SALVAGED WALL CABINET IN ORIGINAL LOCATION AT COMPLETION OF STRUCTURAL REPAIR WORK.
- P8. REINSTALL SALVAGED STORAGE CABINET IN ORIGINAL LOCATION AT COMPLETION OF STRUCTURAL REPAIR WORK.
- P9. REINSTALL SALVAGED REFRIGERATOR IN ORIGINAL LOCATION AT COMPLETION OF STRUCTURAL REPAIR WORK.
- P10. PAINT NEW GYPSUM BOARD COLUMN ENCLOSURE TO MATCH EXISTING COLUMNS.
- P11. PROVIDE CHAIN LINK FENCING AND INSECT SCREEN OR CONSTRUCTION PARTITIONS, WALL-TO-WALL AND FLOOR-TO-STRUCTURE ABOVE ENTIRE TIME EXTERIOR WALL IS DEMOLISHED.
- P12. REINSTALL SALVAGED LOCKERS AT COMPLETION OF STRUCTURAL REPAIR WORK.



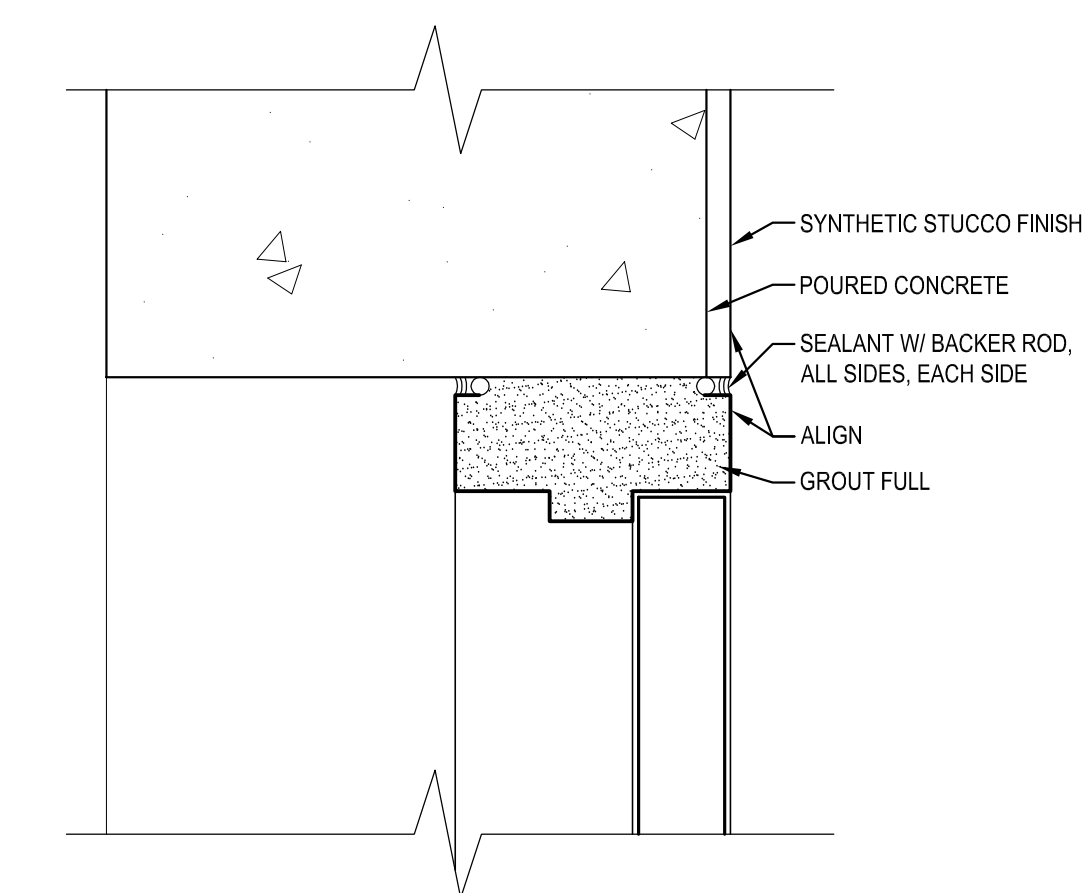
B1 BUILDING 7 REFLECTED CEILING PLAN
1/4" = 1'-0"



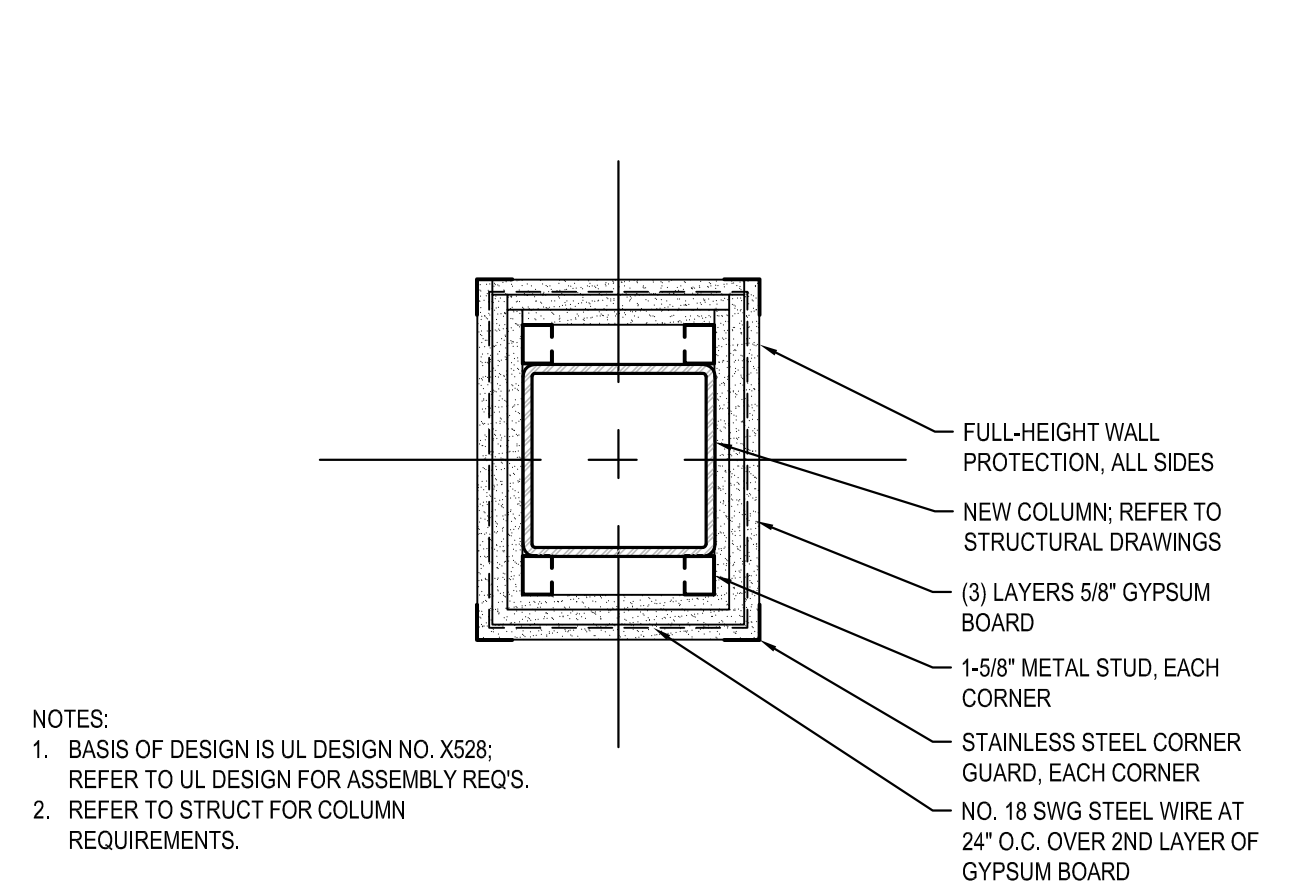
B1 BUILDING 7 FLOOR PLAN
1/4" = 1'-0"



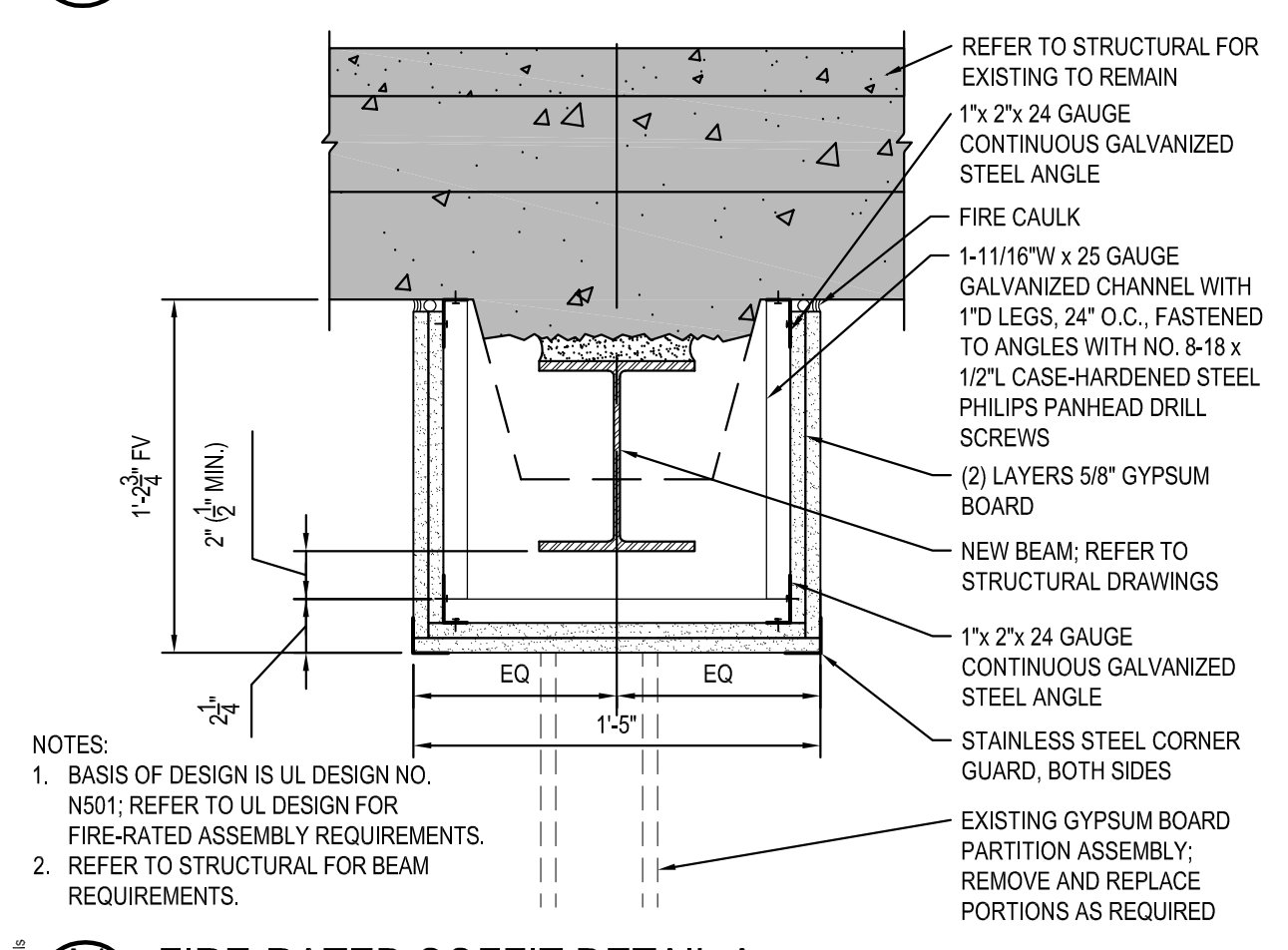
C1 SCUPPER DETAIL
3" = 1'-0"



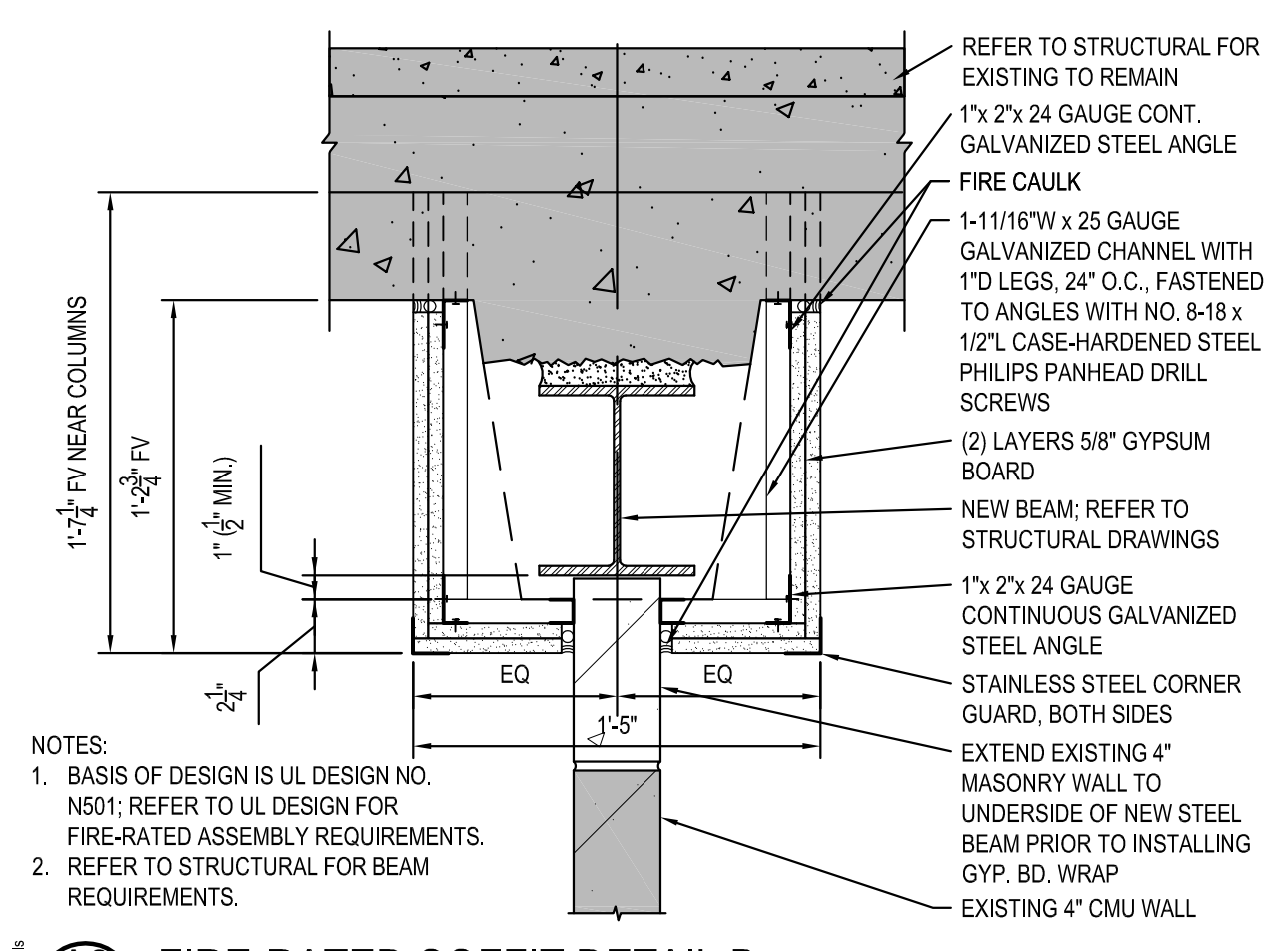
B4 HOLLOW METAL HEAD DETAIL
3" = 1'-0"



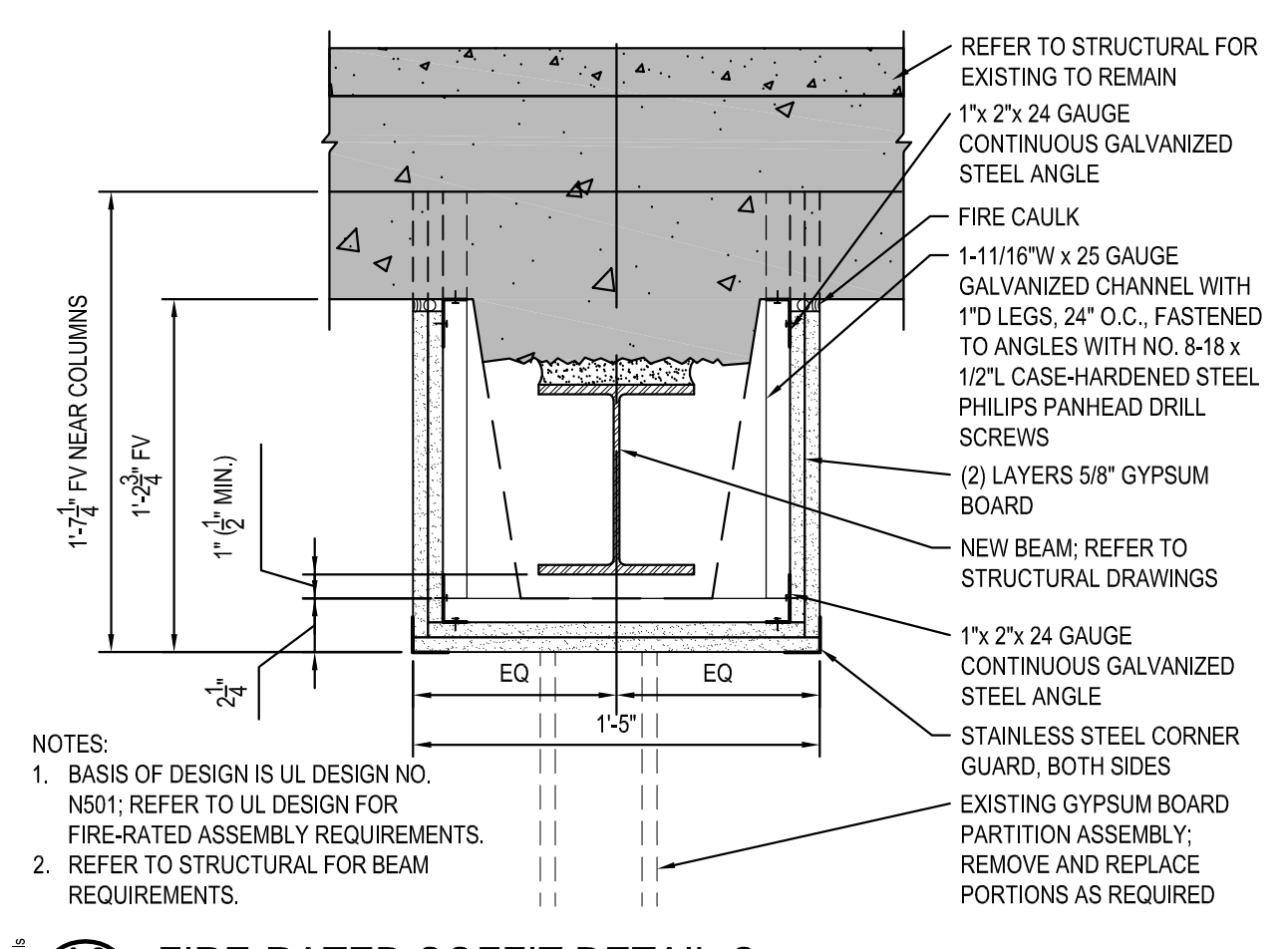
B6 FIRE-RATED COLUMN ENCLOSURE DETAIL
1 1/2" = 1'-0"



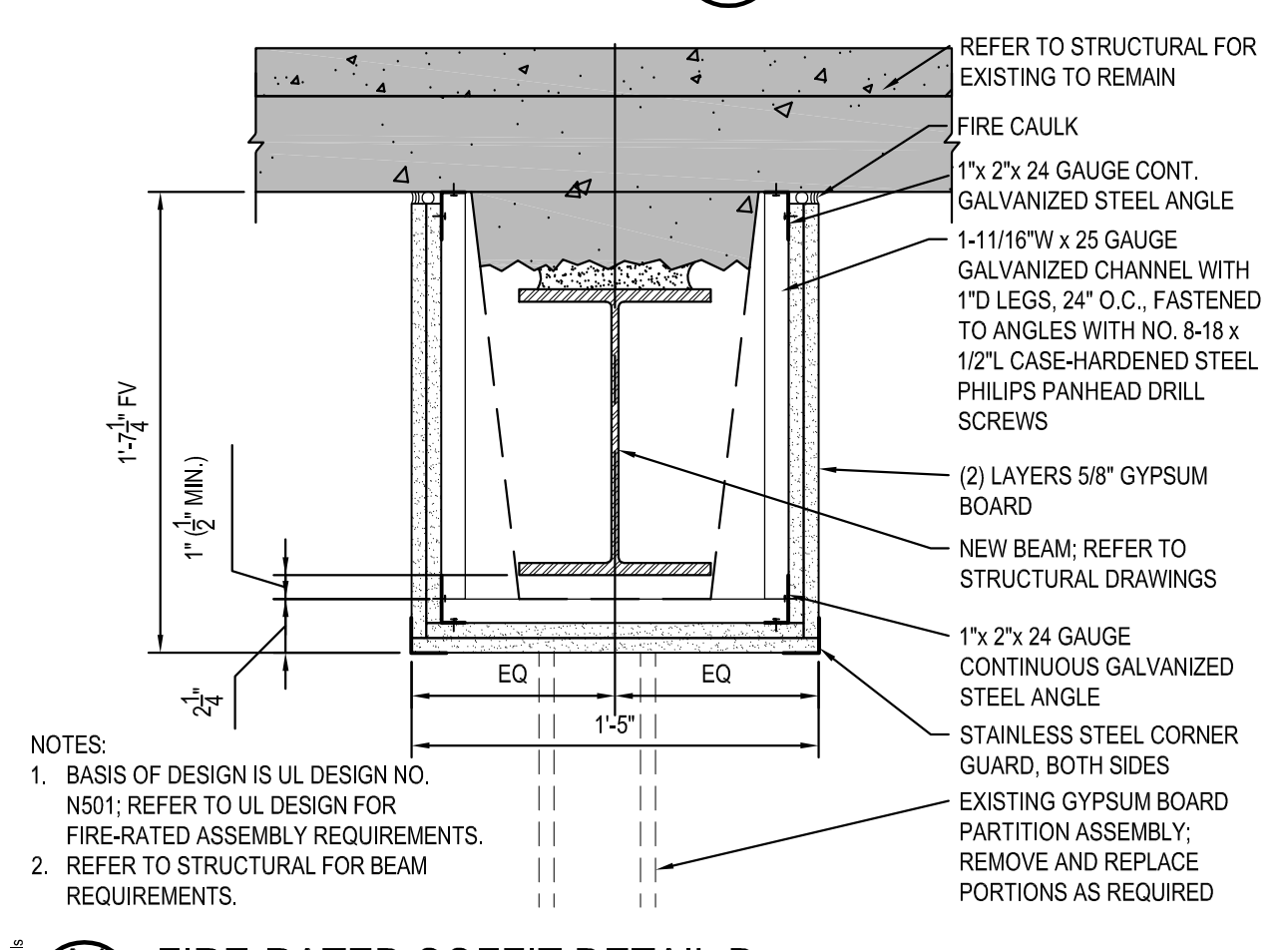
A1 FIRE-RATED SOFFIT DETAIL A
1 1/2" = 1'-0"



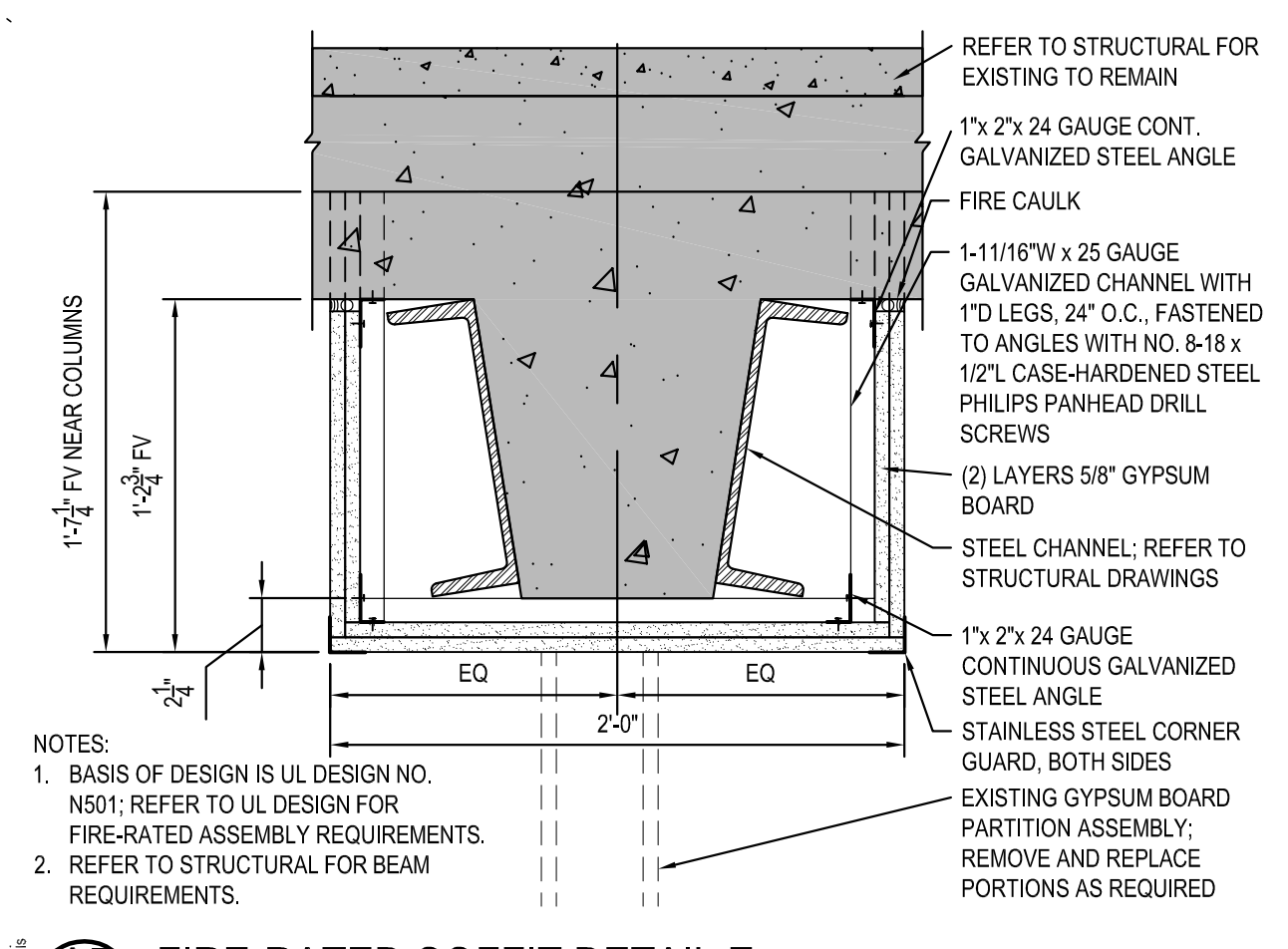
A2 FIRE-RATED SOFFIT DETAIL B
1 1/2" = 1'-0"



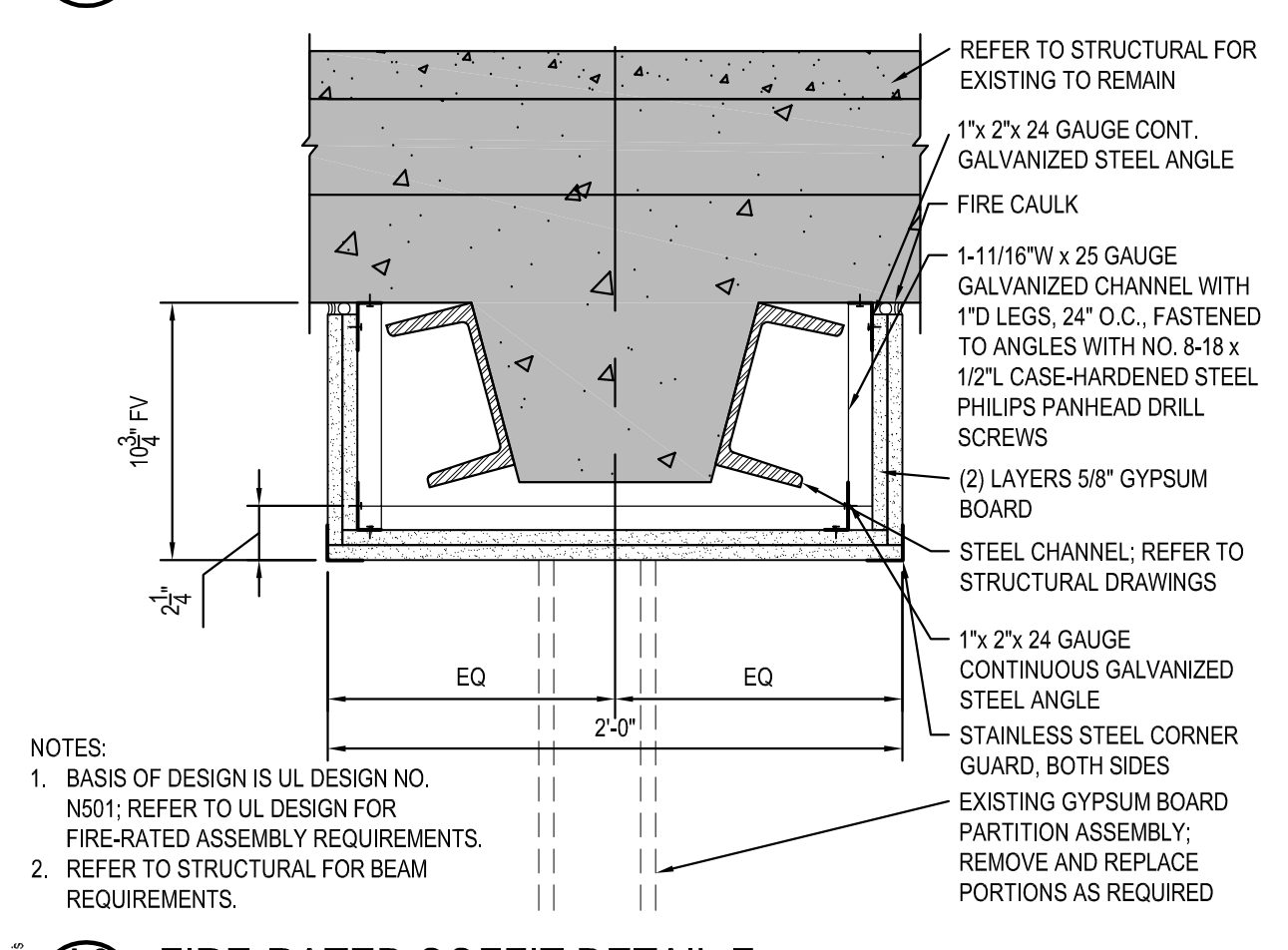
A3 FIRE-RATED SOFFIT DETAIL C
1 1/2" = 1'-0"



A4 FIRE-RATED SOFFIT DETAIL D
1 1/2" = 1'-0"



A5 FIRE-RATED SOFFIT DETAIL E
1 1/2" = 1'-0"



A6 FIRE-RATED SOFFIT DETAIL F
1 1/2" = 1'-0"

NO.	REVISION	DATE

GR̄aEF
3433 BROADWAY
STREET NE, SUITE 220,
MINNEAPOLIS, MN 55413

LHB
701 Washington Ave North, Suite 200 | Minneapolis, MN 55401 | 612.338.2029

I HEREBY CERTIFY that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.
SIGNATURE: *[Signature]*
TYPED OR PRINTED NAME: **Daniel Maldonado**
DATE: **10/24/2023**, REG. NO.: **47352**

APPROVED SERVICE LINE DIRECTOR	DATE	APPROVED INFECTION CONTROL NURSE	DATE
APPROVED GENI COORDINATOR	DATE	APPROVED PATIENT SAFETY	DATE
APPROVED PROJECTS SECTION MANAGER	DATE	APPROVED CHIEF OF POLICE	DATE
APPROVED DIRECTOR P&B	DATE	APPROVED SAFETY MANAGER	DATE

BUILDING 7 FLOOR & REFLECTED CEILING PLANS AND DETAILS		PROJECT TITLE 656-14-247 REPAIR FOUNDATIONS BUILDINGS 4, 7, 9 St. Cloud VA Health Care System Main Campus, St. Cloud, Minnesota	DATE 10/24/2023 PROJECT SCALE As Indicated DESIGN NO. 230297
DRAWING NO. 7	SHEET NO. DAM	SHEET TYPE NRP	DATE 10/24/2023 DRAWN BY 230297 Arch
APPROVED CHIEF OF STAFF		APPROVED MEDICAL CENTER DIRECTOR	
APPROVED ARCHITECT		APPROVED ARCHITECT	

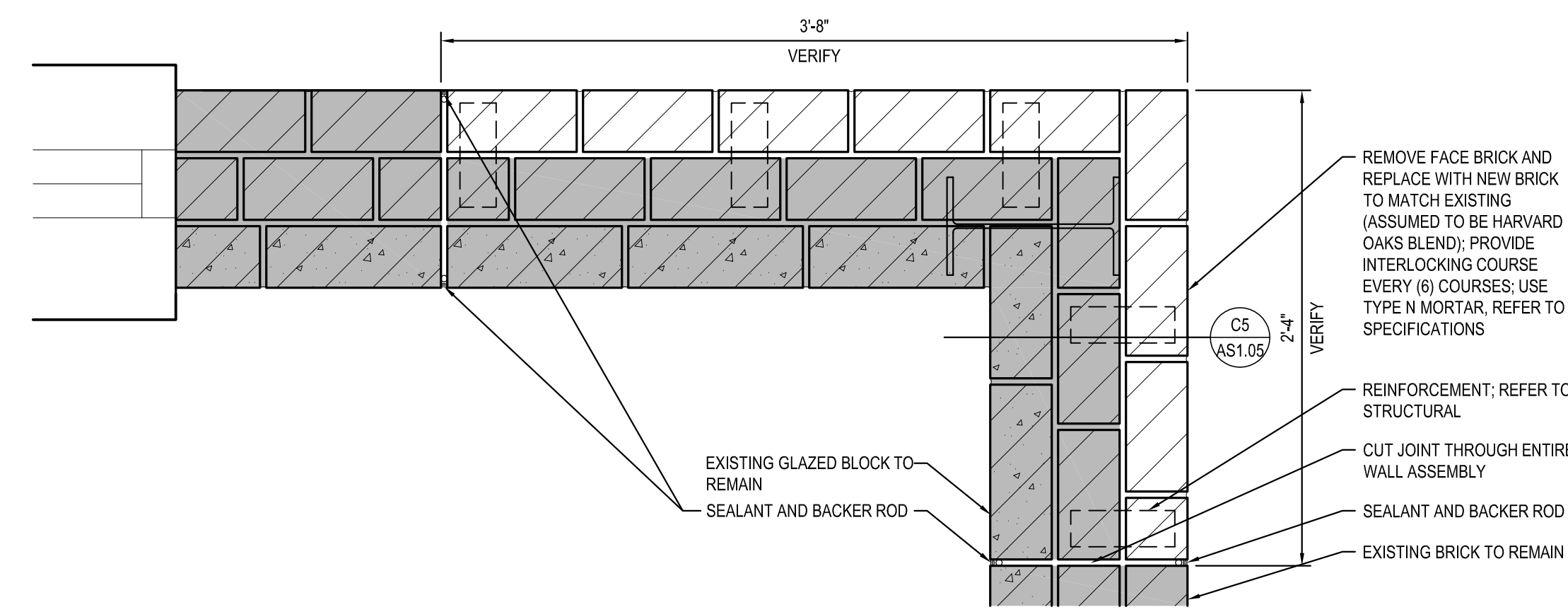
LOCATION: VA MEDICAL CENTER ST. CLOUD, MN 56303
 SCALE: AS SHOWN
 SHEET NO.: 5 OF 18
VAMC SAINT CLOUD MN

BUILDING 59 GENERAL NOTES

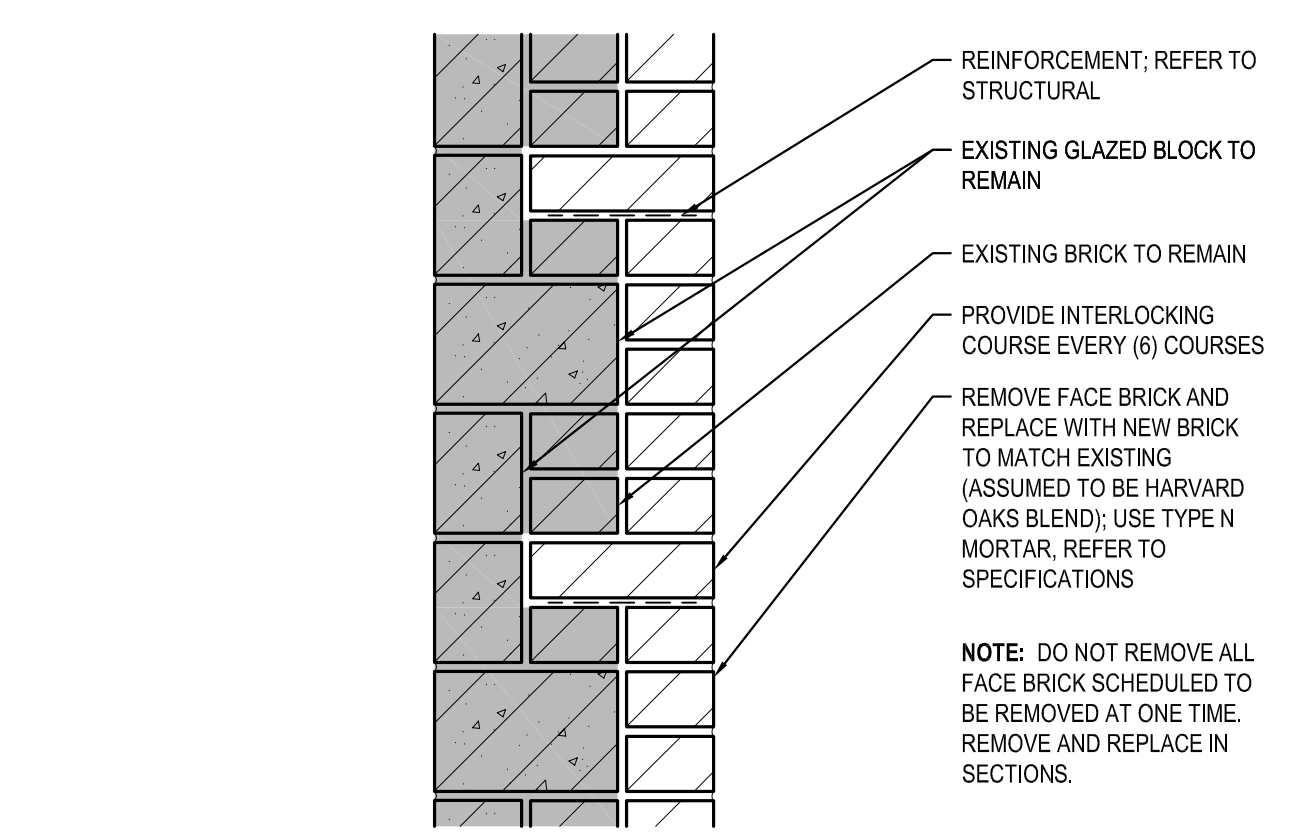
A. EXISTING EXTERIOR WALL ASSEMBLIES ARE BASED ON BEST AVAILABLE INFORMATION AND MAY VARY FROM WHAT IS INDICATED; NOTIFY ARCHITECT OF DISCREPANCIES PRIOR TO CONTINUING WORK.

BUILDING 59 KEYED NOTES

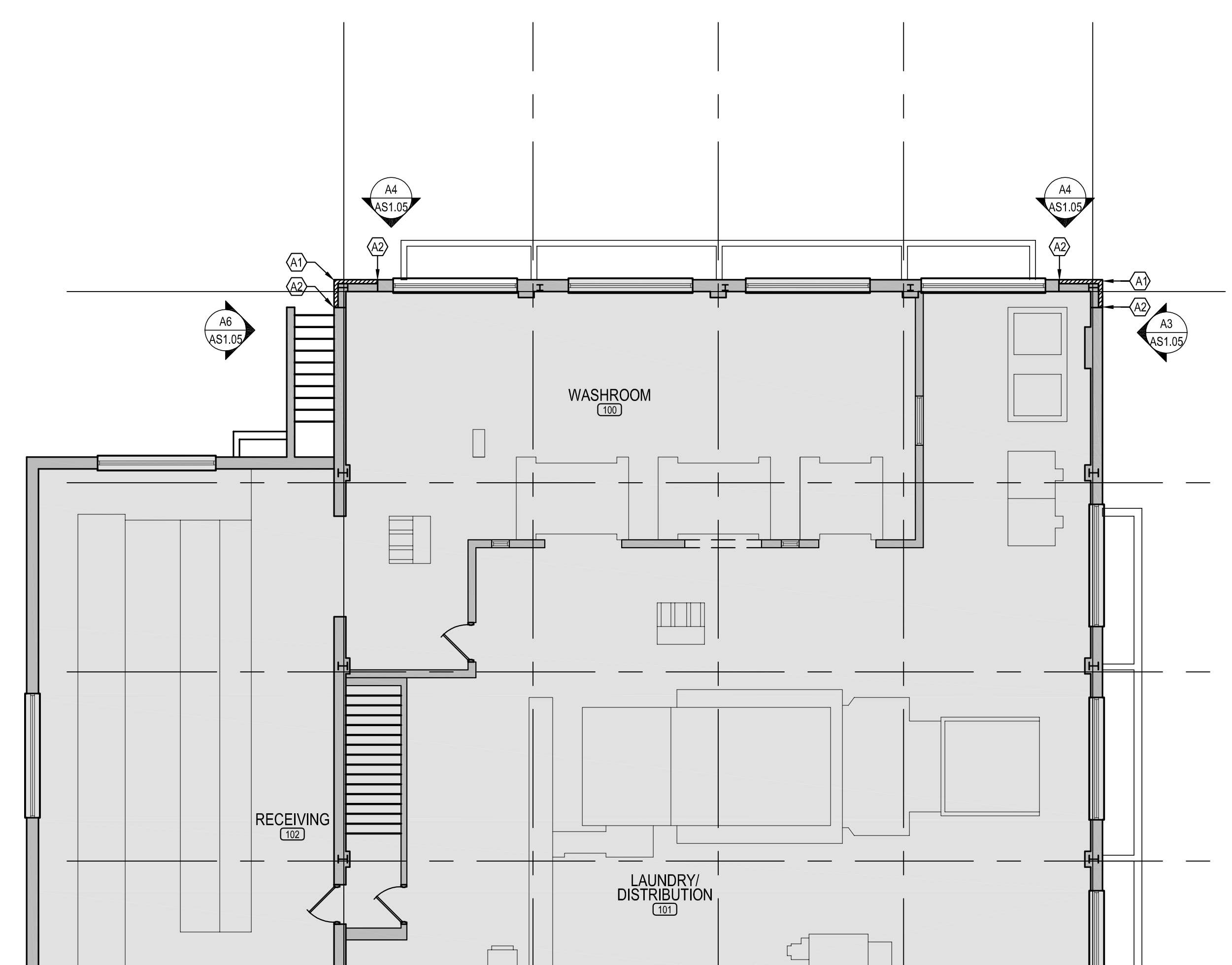
- A1. REMOVE EXISTING FACE BRICK AT CORNER; REPLACE WITH NEW FACE BRICK; REFER TO SECTION AND DETAILS FOR ADDITIONAL INFORMATION.
- A2. SAW CUT NEW CONTROL JOINT THROUGH WALL ASSEMBLY; REFER TO DETAILS FOR ADDITIONAL INFORMATION.



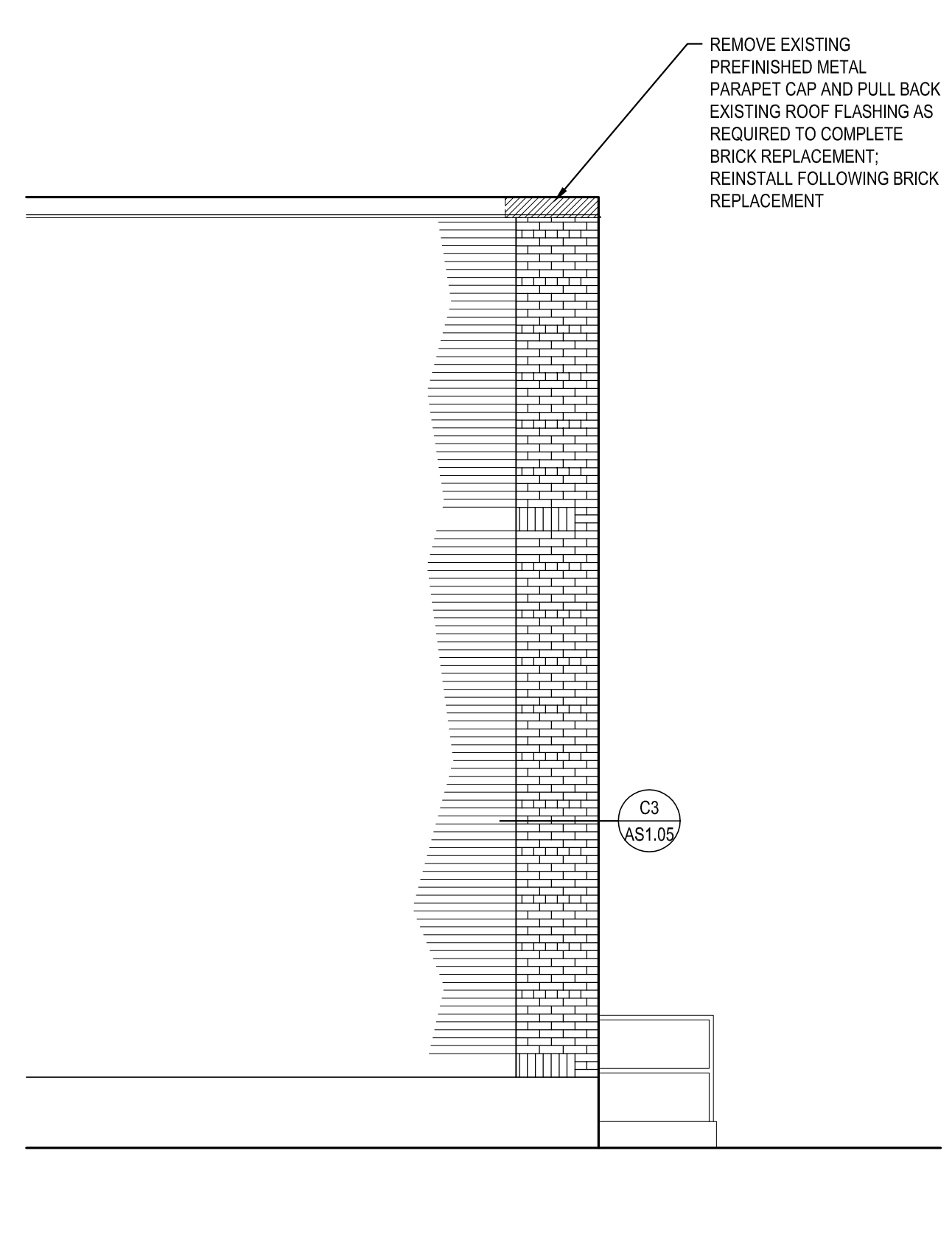
C3 BRICK CORNER DETAIL
1 1/2" = 1'-0"



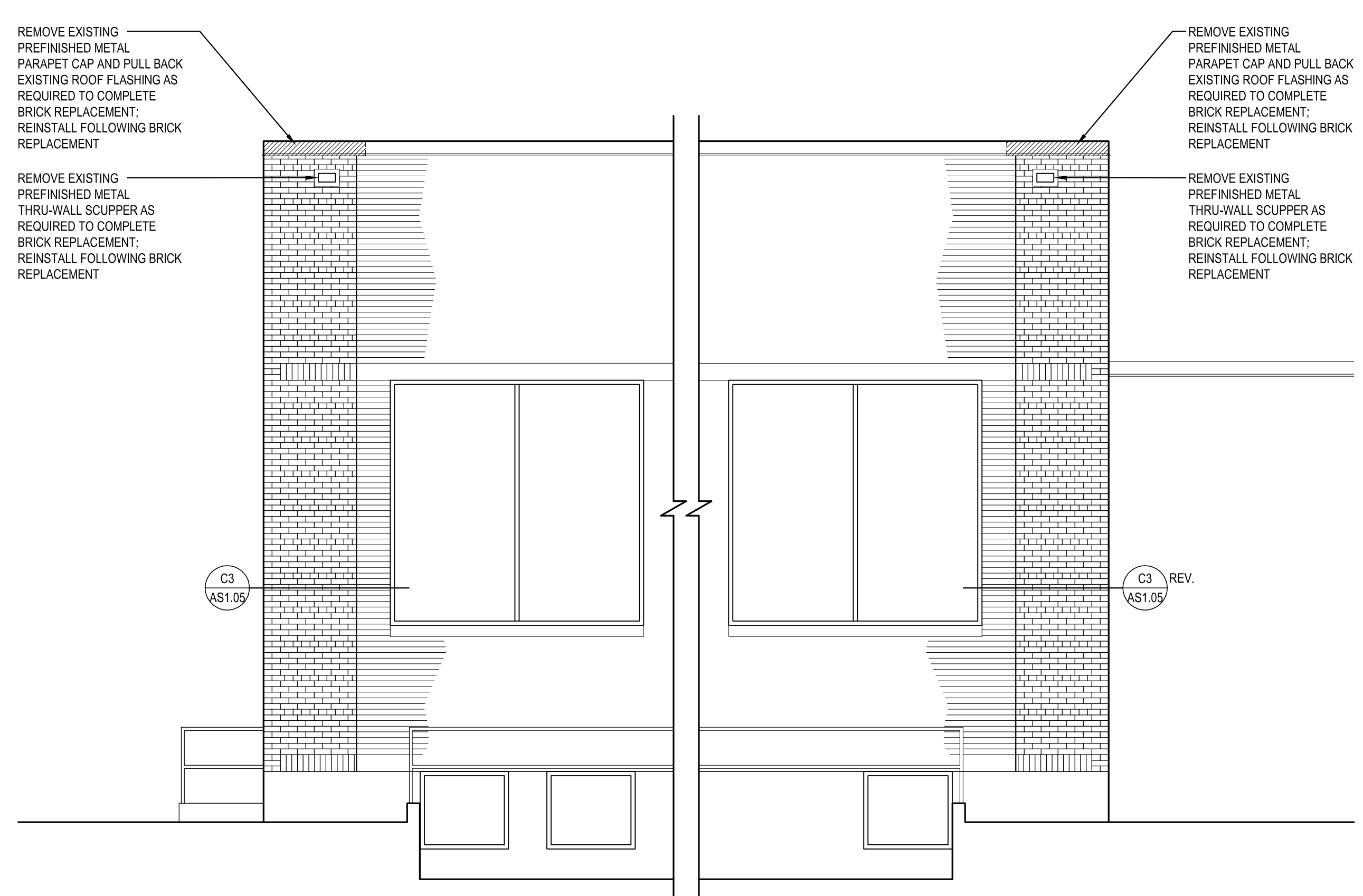
C5 BRICK COURSING SECTION DETAIL
1 1/2" = 1'-0"



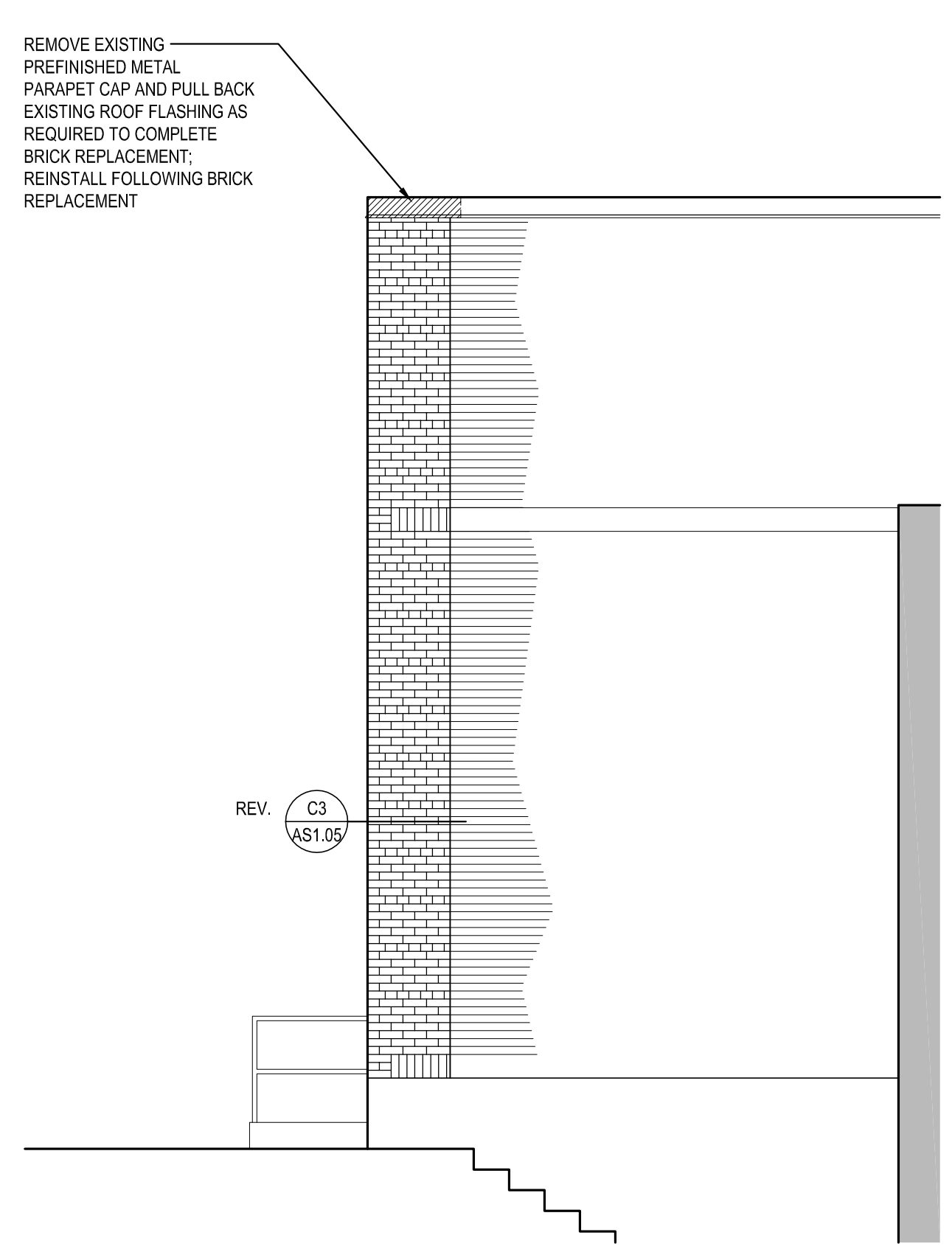
A1 BUILDING 59 FIRST FLOOR DEMOLITION / FLOOR PLAN
1/8" = 1'-0"



A3 BUILDING 59 EAST ELEVATION
1/4" = 1'-0"



A4 BUILDING 59 NORTH ELEVATION
1/4" = 1'-0"

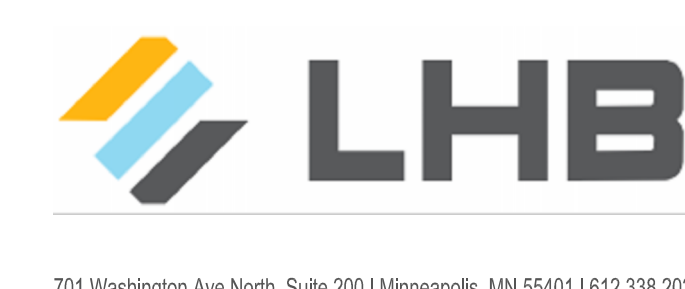


A6 BUILDING 59 WEST ELEVATION
1/4" = 1'-0"

No	REVISION	DATE



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STREET NE, SUITE 220,
MINNEAPOLIS, MN 55413

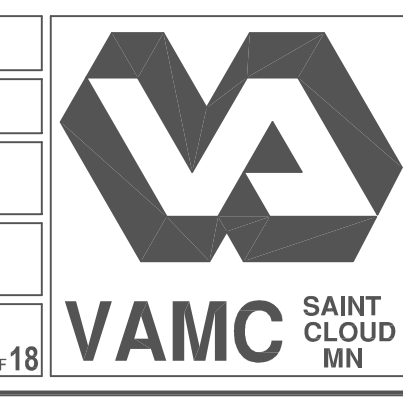


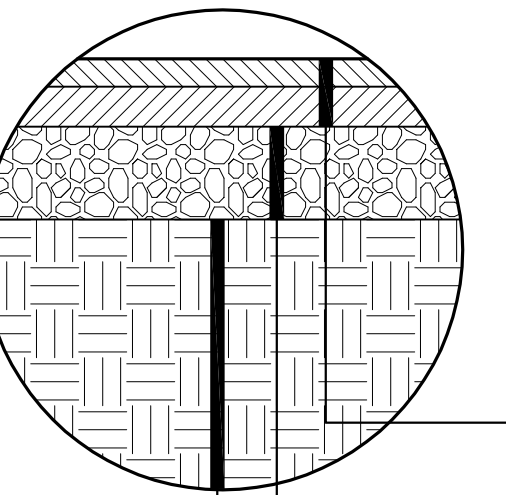
701 Washington Ave North, Suite 200 | Minneapolis, MN 55401 | 612.338.2029

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TYPED OR PRINTED NAME: **Daniel Maldonado**
DATE: **10/24/2023** REG. NO.: **47352**

APPROVED SERVICE LINE DIRECTOR	DATE	APPROVED INFECTION CONTROL NURSE	DATE
APPROVED GENI COORDINATOR	DATE	APPROVED PATIENT SAFETY	DATE
APPROVED PROJECTS SECTION MANAGER	DATE	APPROVED CHIEF OF POLICE	DATE
APPROVED DIRECTOR PAB	DATE	APPROVED SAFETY MANAGER	DATE

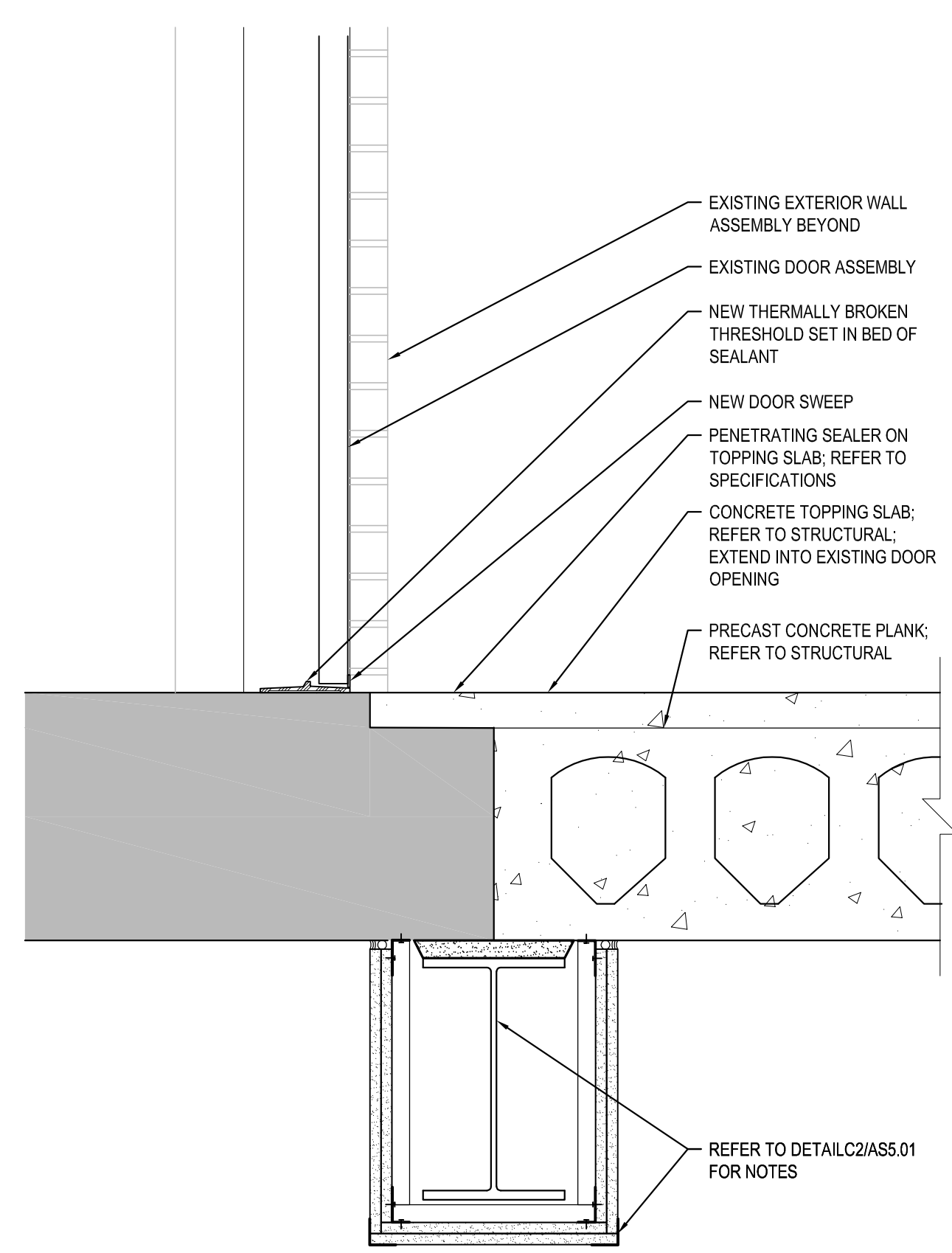
DRAWING TITLE BUILDING 59 PLAN, ELEVATIONS, AND DETAILS		PROJECT TITLE 656-14-247 REPAIR FOUNDATIONS BUILDINGS 4, 7, 59 St. Cloud VA Health Care System Main Campus, St. Cloud, Minnesota		DATE 10/24/2023
APPROVED CHIEF OF STAFF		REVISIONS 59 DAM NRP		PROJECT NO. 230297
APPROVED MEDICAL CENTER DIRECTOR		DRAWN 230297 Arch		SCALE As Indicated
DATE		DATE		DATE AS1.05 7 of 18



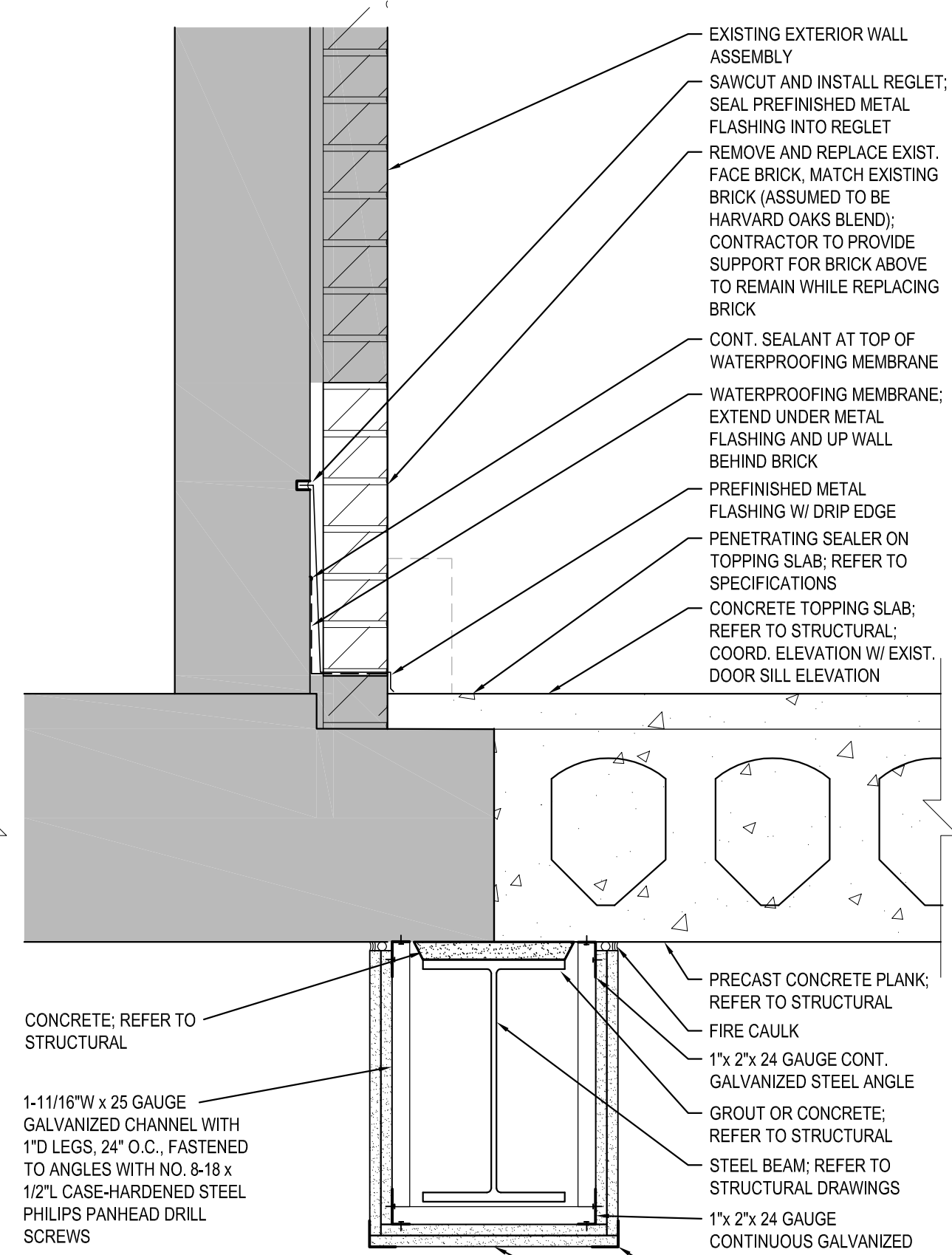


1.5" WEARING COURSE MIXTURE (SPWES340C)
 PLACE TACK COAT BETWEEN BIT. COURSES - SPEC. 2357
 2" WEARING COURSE MIXTURE (SPWES340C)
 6" AGGREGATE BASE
 GENERAL FILL OR SUBGRADE SOILS COMPACTED

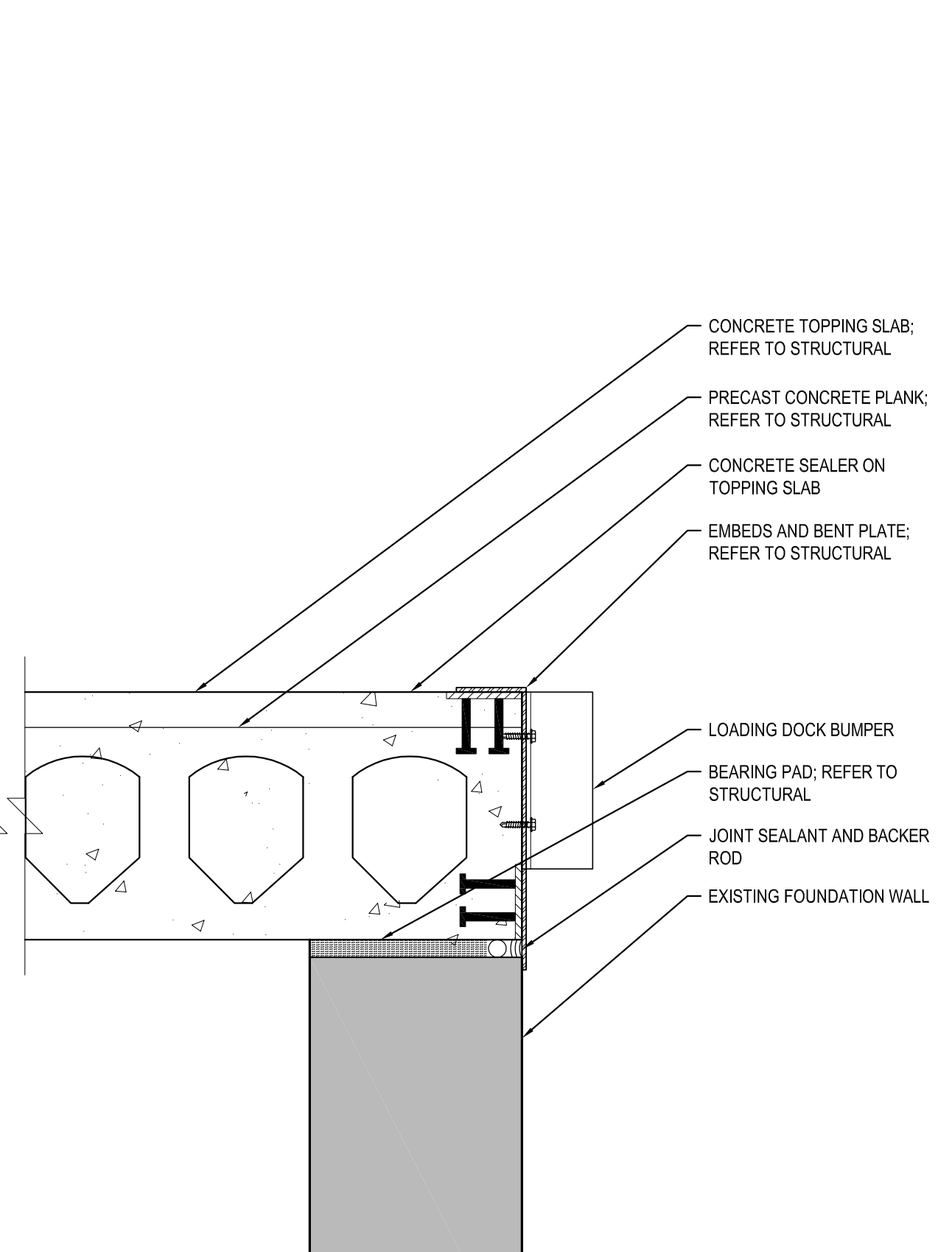
E6 STANDARD DUTY BITUMINOUS DETAIL
 ASS.01 NTS



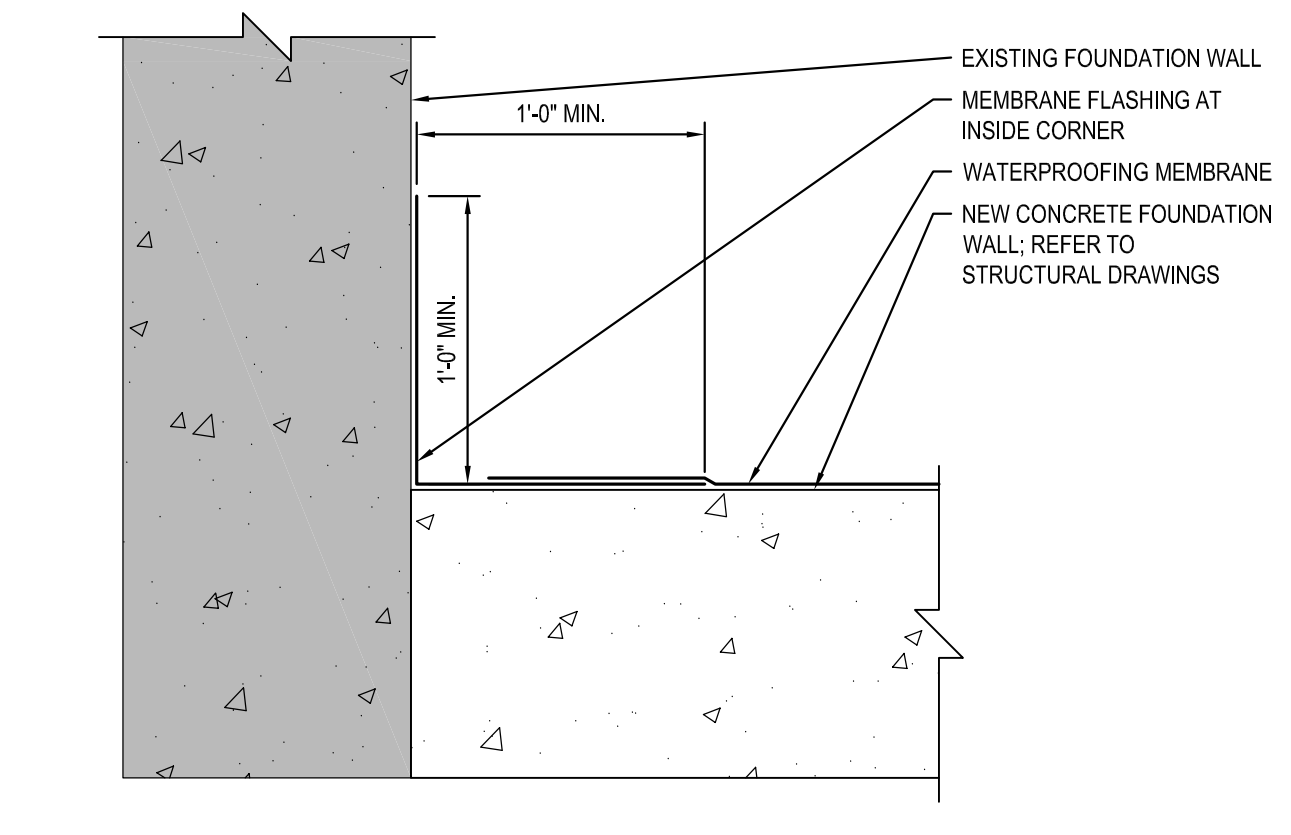
C1 LOADING DOCK DETAIL AT DOOR OPENING
 ASS.01 1 1/2" = 1'-0"



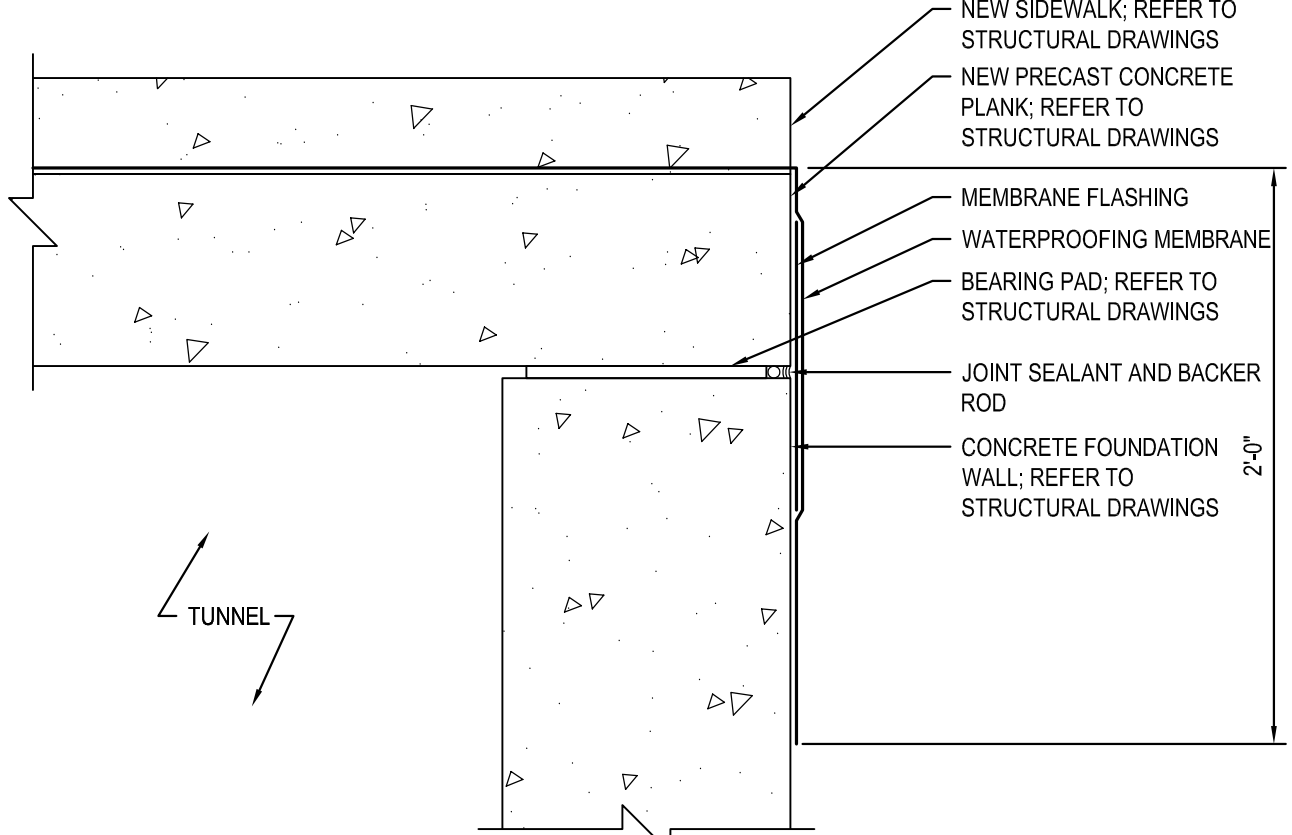
C2 LOADING DOCK DETAIL AT BUILDING
 ASS.01 1 1/2" = 1'-0"



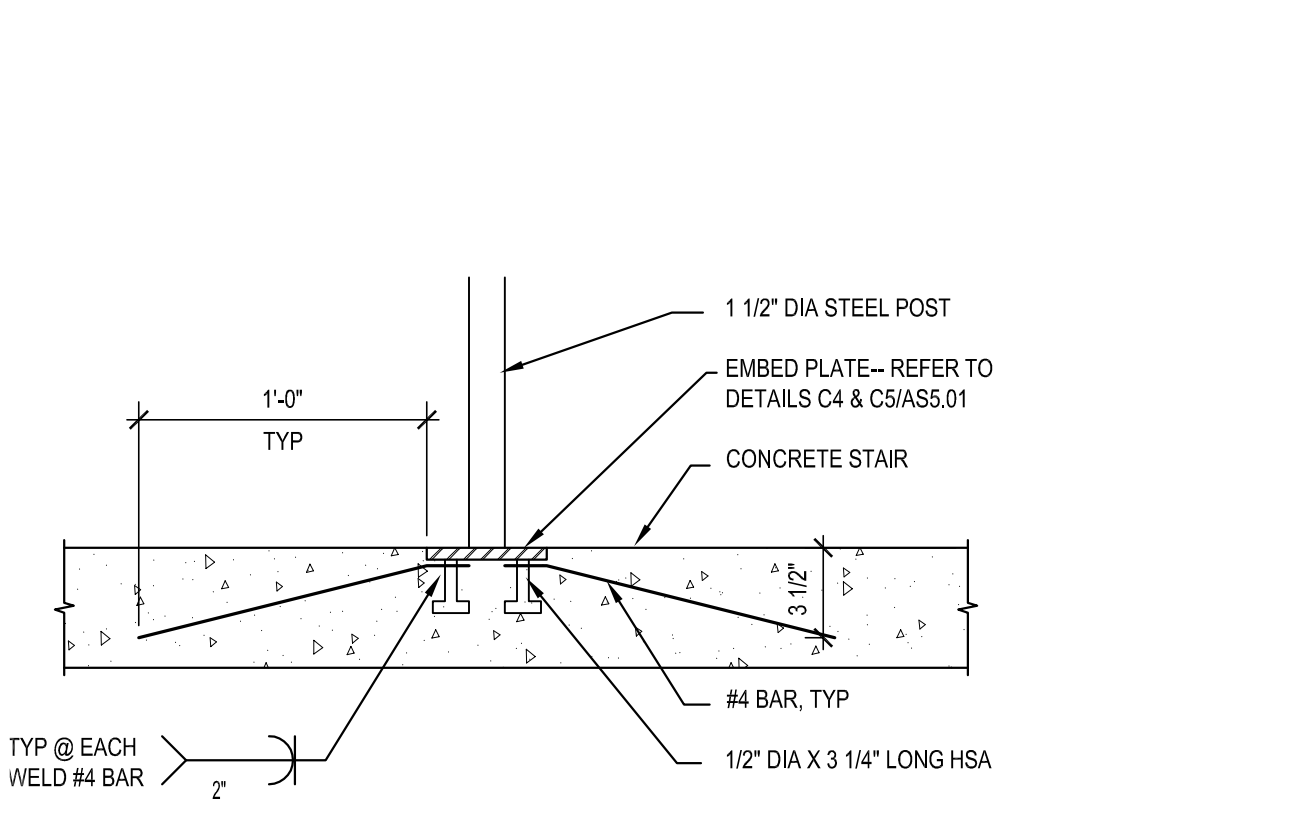
C3 LOADING DOCK EDGE DETAIL
 ASS.01 1 1/2" = 1'-0"



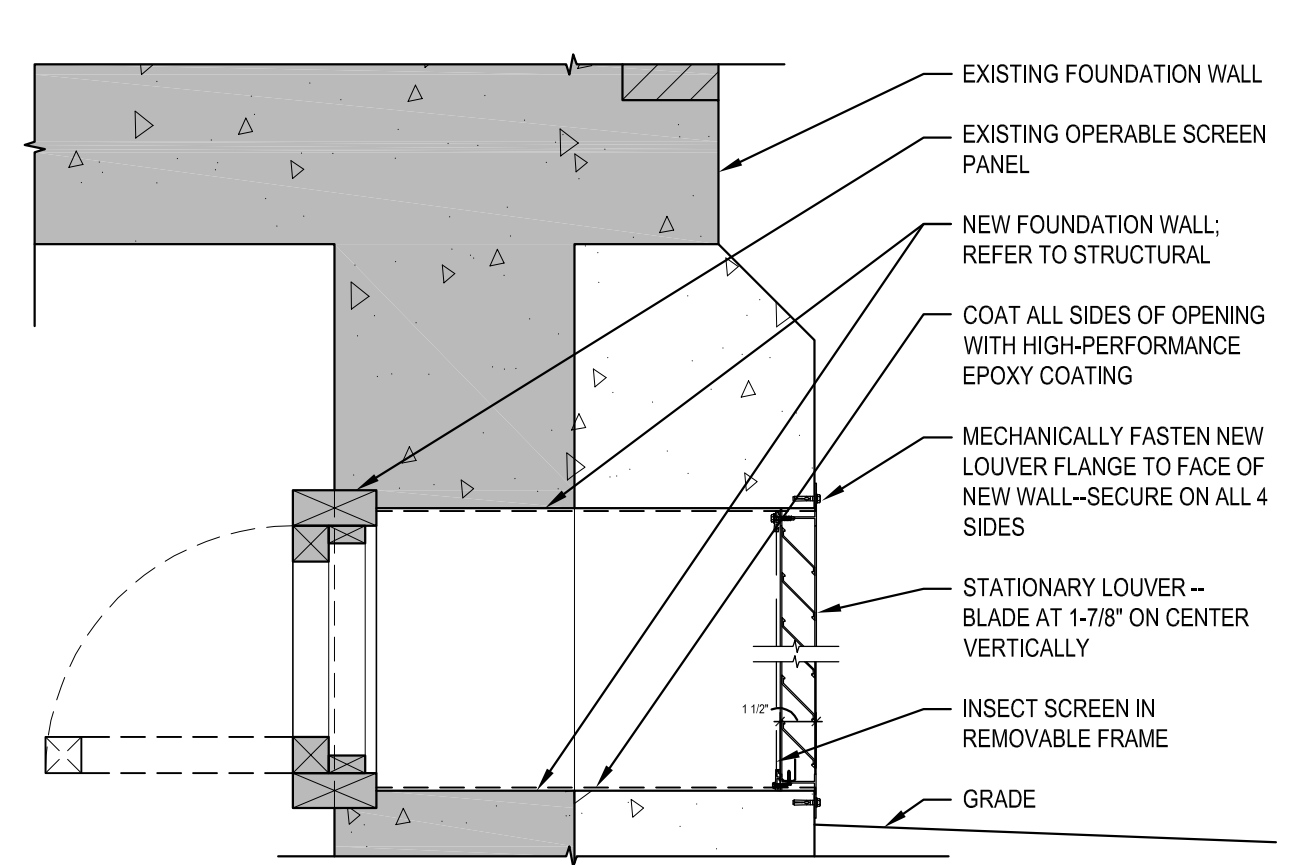
D4 FOUNDATION WALL WATERPROOFING DETAIL
 ASS.01 1 1/2" = 1'-0"



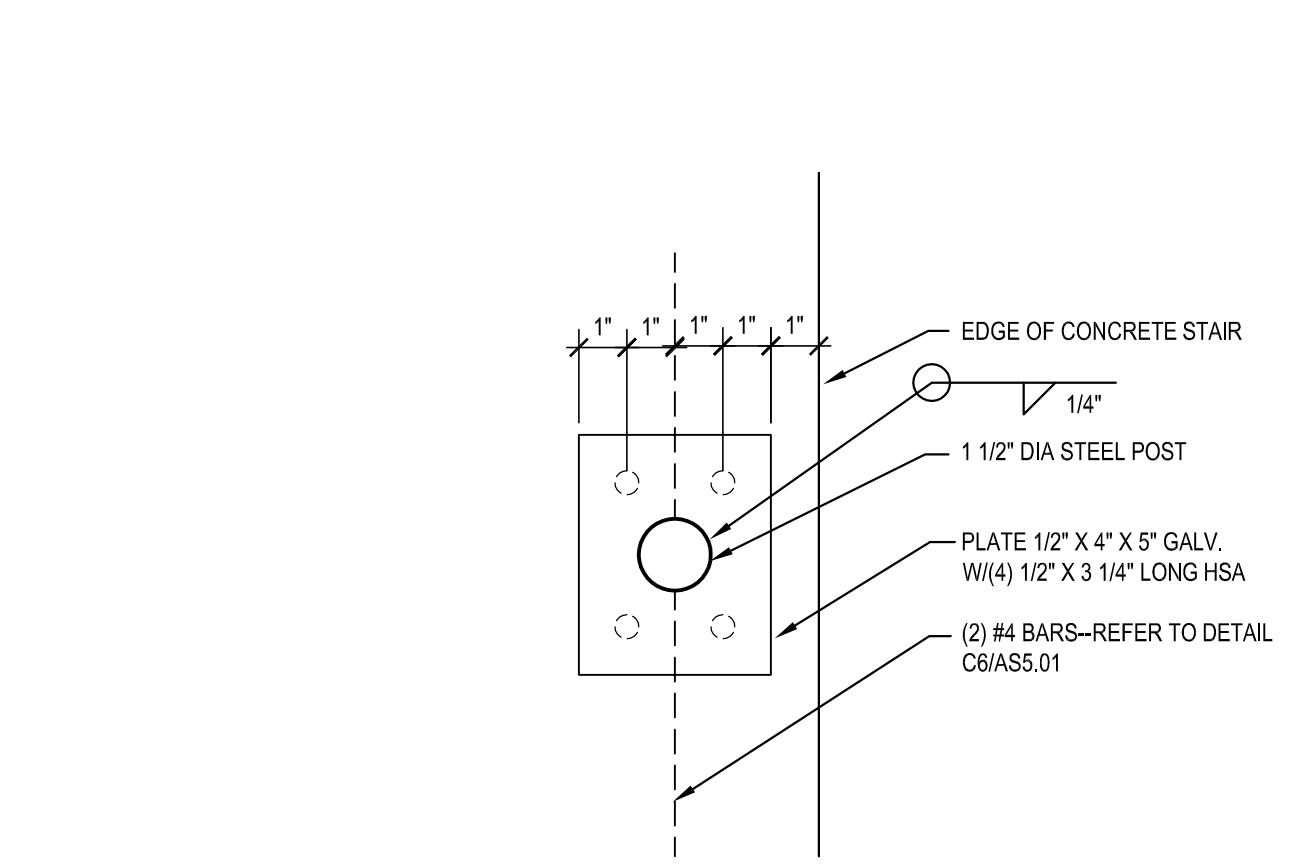
D5 FOUNDATION WALL WATERPROOFING DETAIL
 ASS.01 1 1/2" = 1'-0"



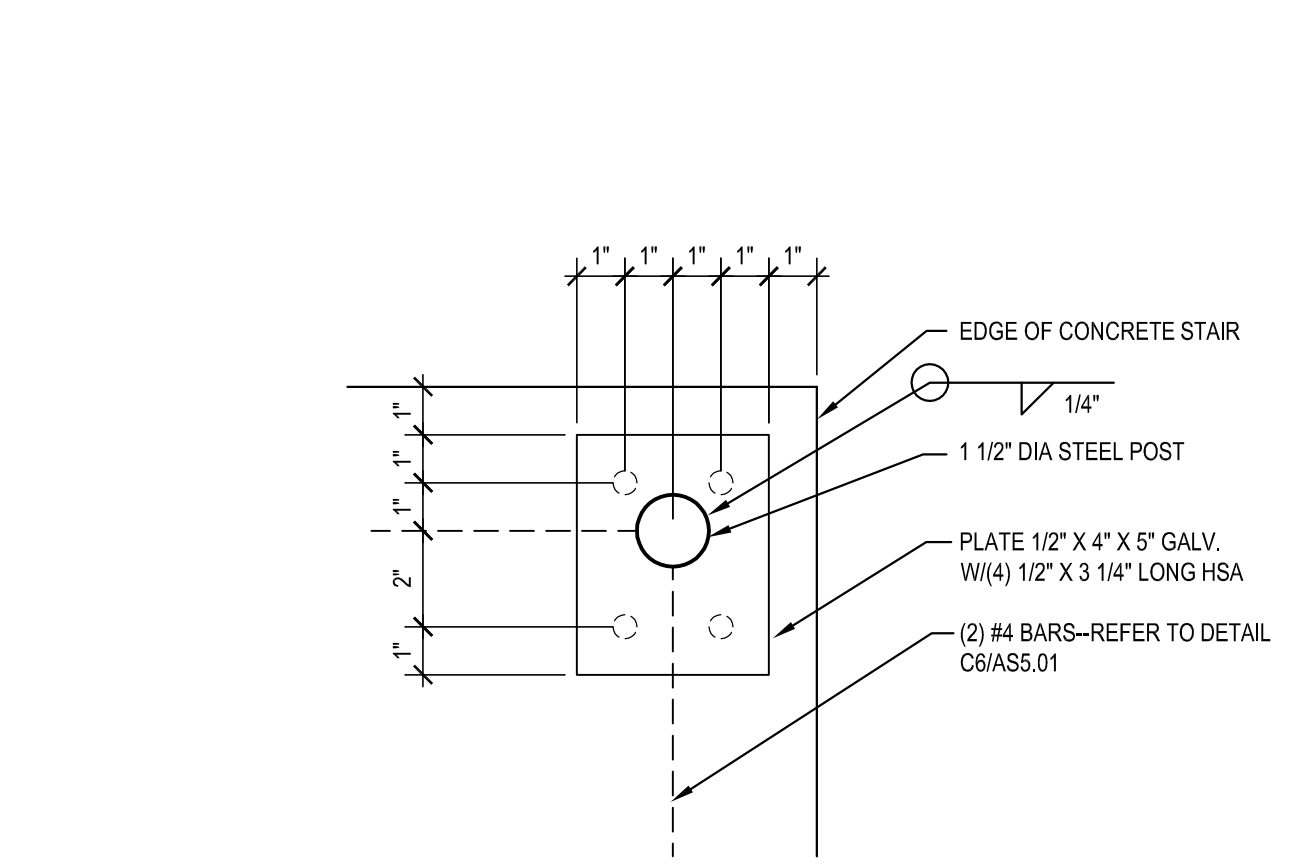
D6 RAIL ANCHOR DETAIL
 ASS.01 3" = 1'-0"



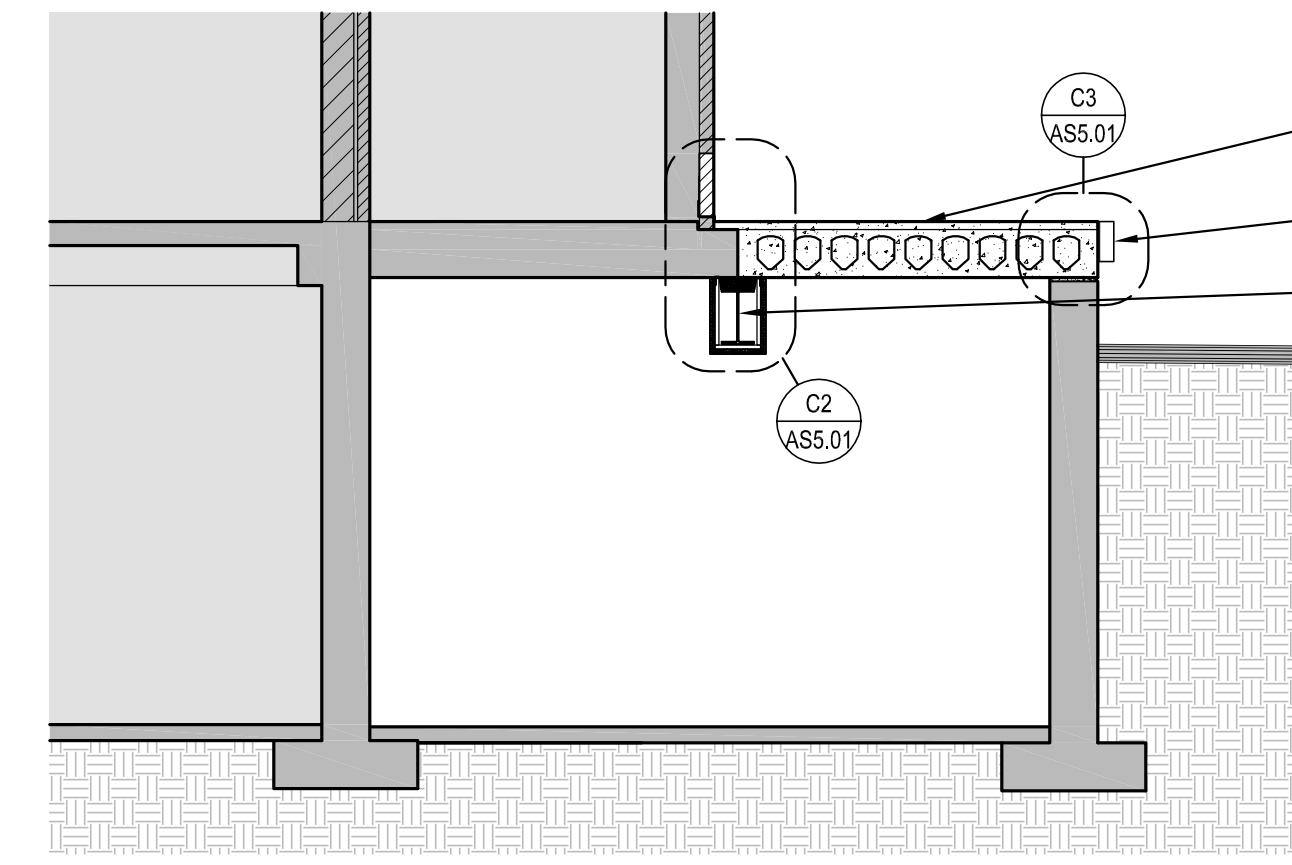
C4 LOUVER DETAIL
 ASS.01 1 1/2" = 1'-0"



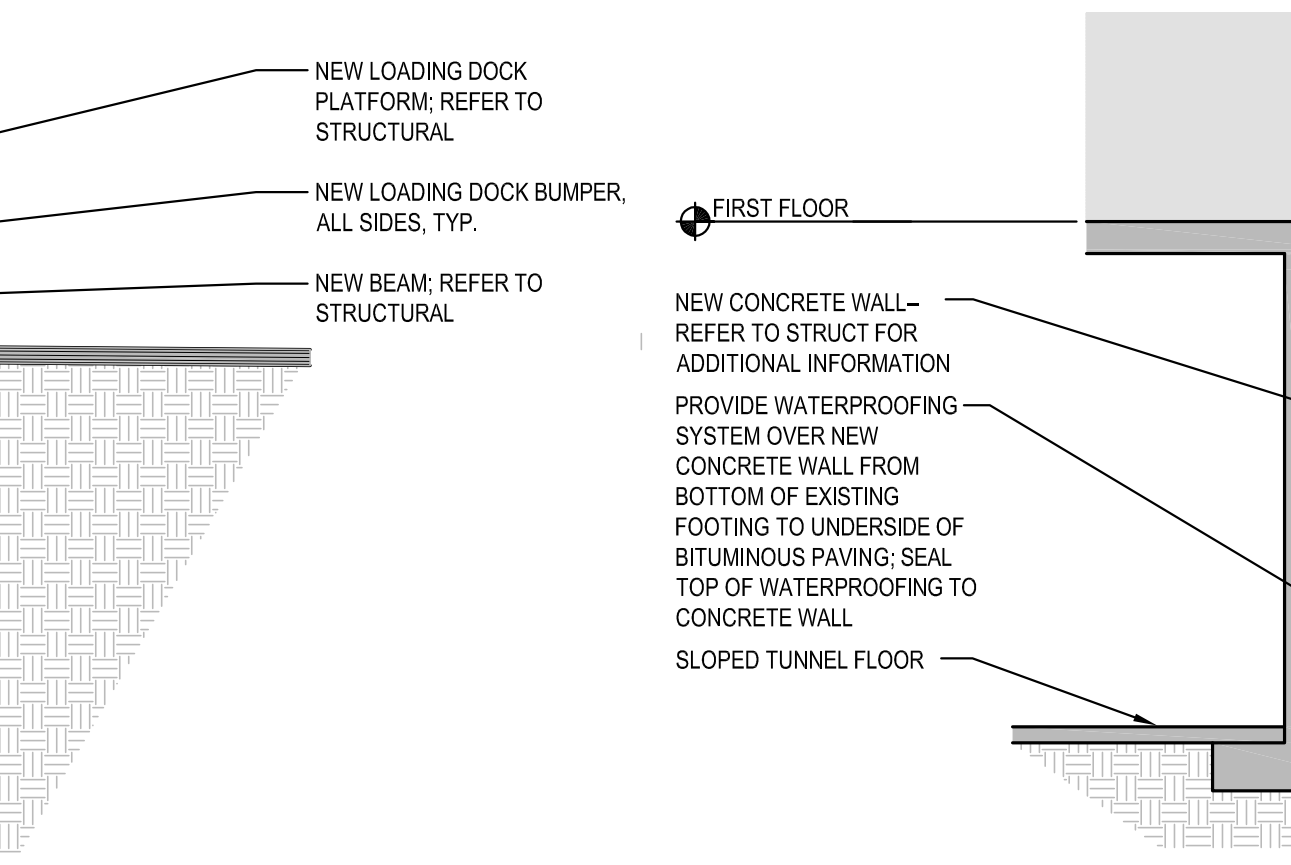
C5 RAIL ANCHOR DETAIL
 ASS.01 3" = 1'-0"



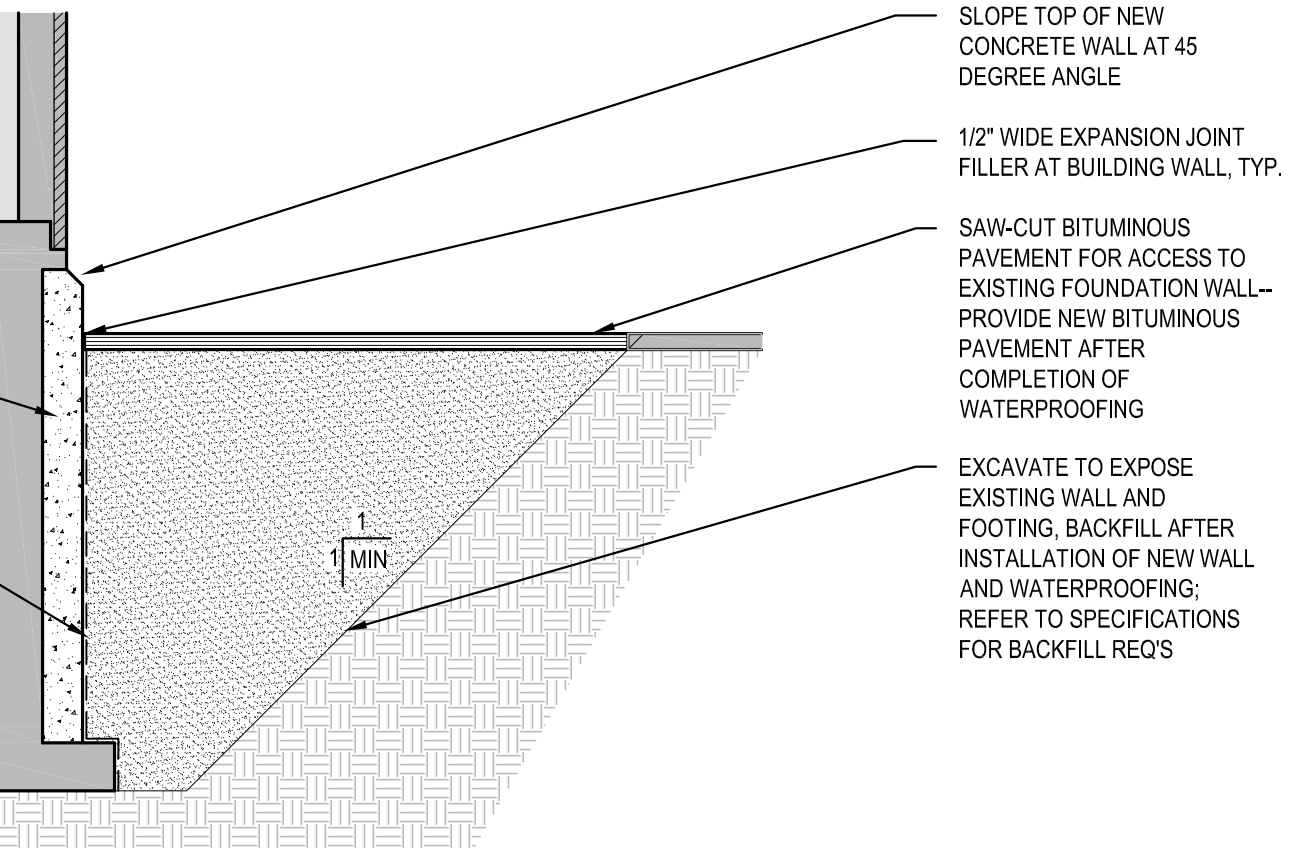
C6 RAIL ANCHOR DETAIL
 ASS.01 3" = 1'-0"



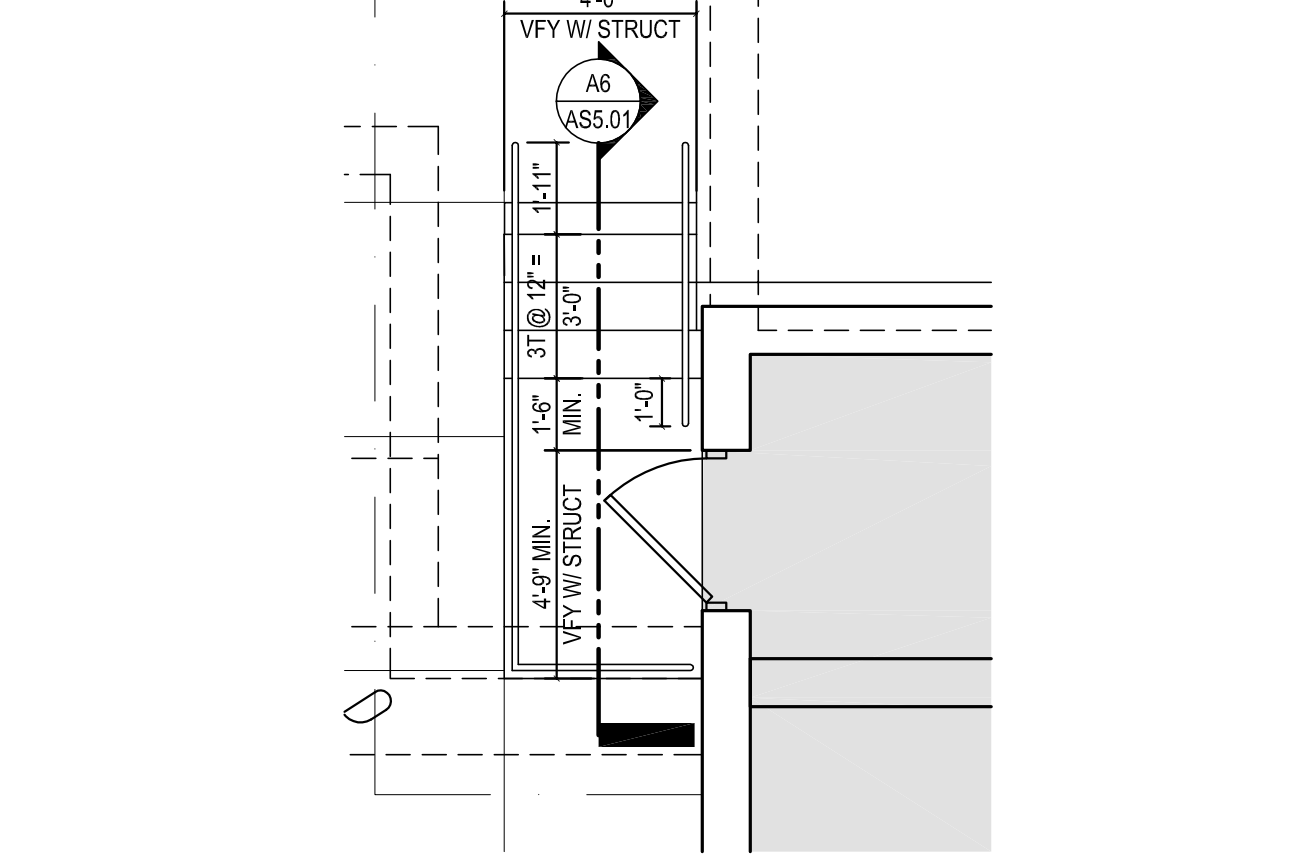
B3 BUILDING 4 MECH/ELEC ROOM SECTION
 ASS.01 1/4" = 1'-0"



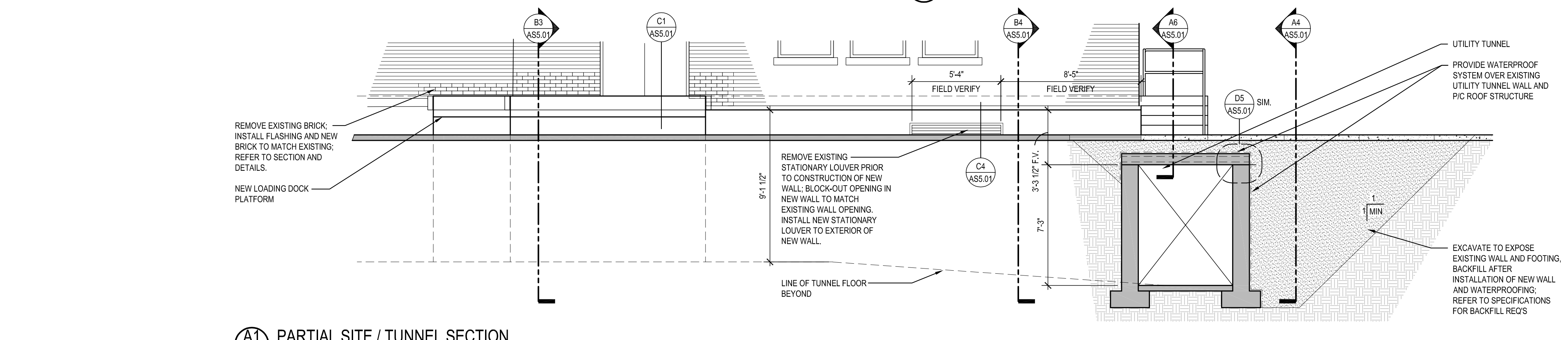
B4 BUILDING 4 FOUNDATION WALL SECTION
 ASS.01 1/4" = 1'-0"



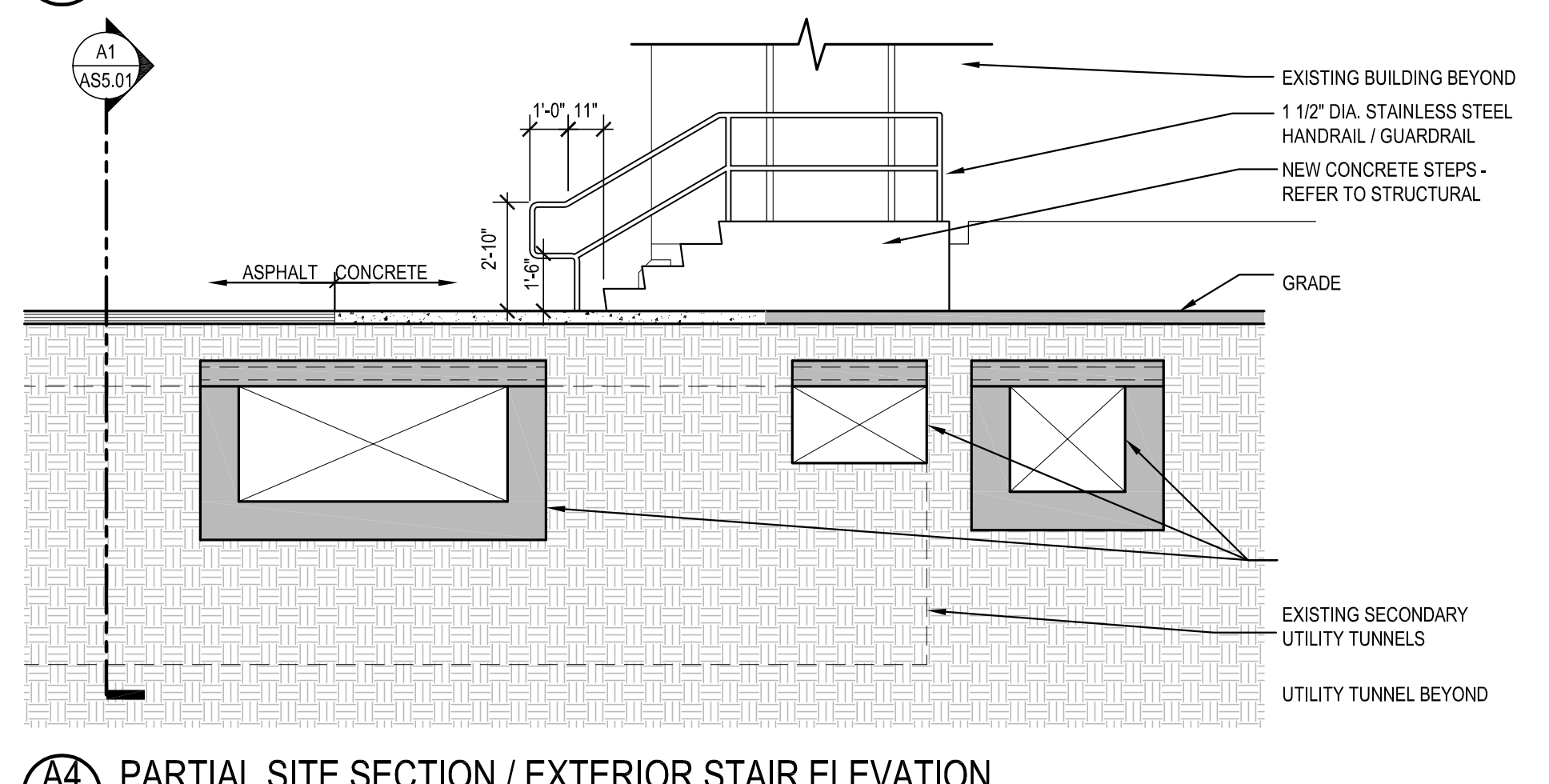
B6 EXTERIOR STAIR PLAN
 ASS.01 1/4" = 1'-0"



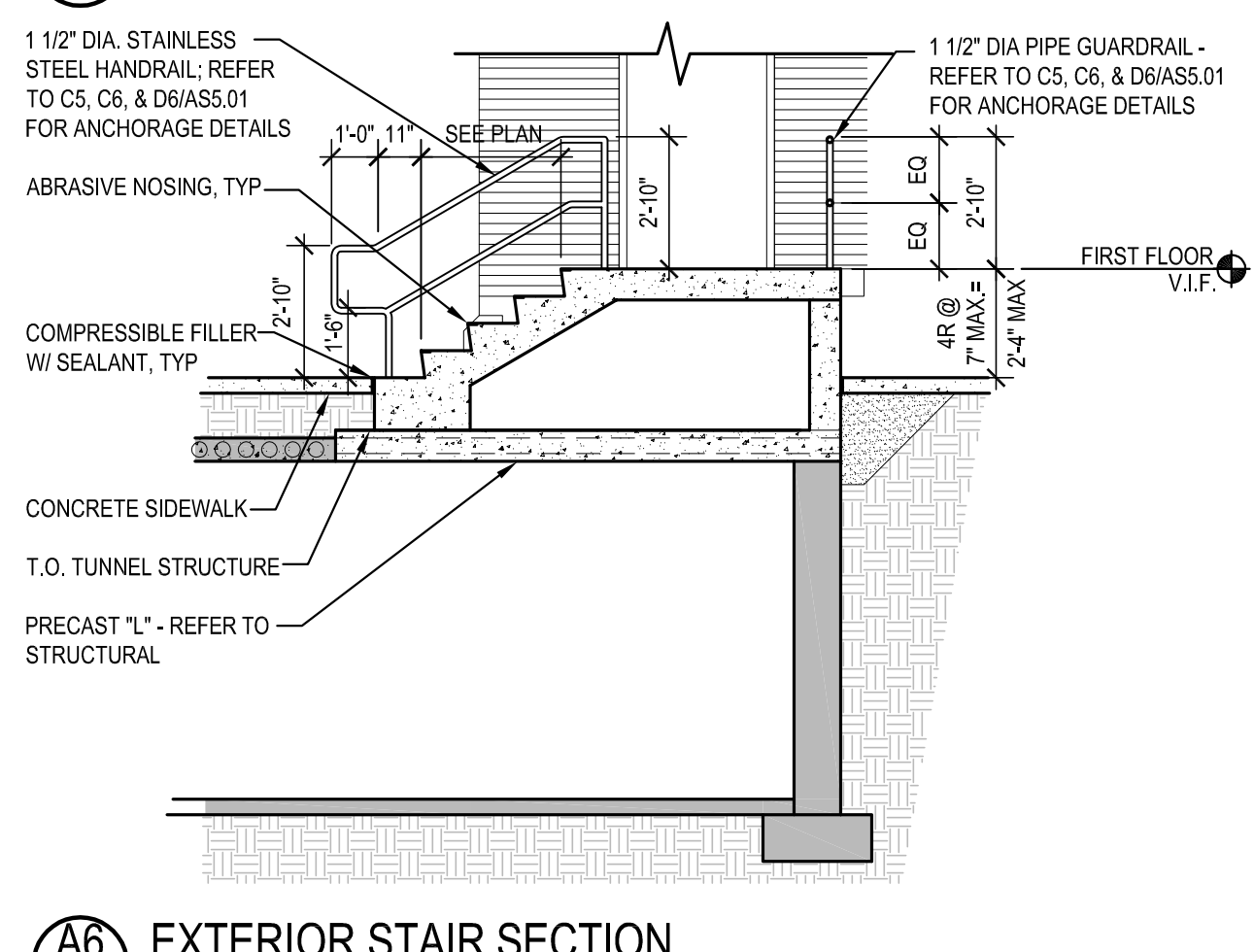
B6 EXTERIOR STAIR SECTION
 ASS.01 1/4" = 1'-0"



A1 PARTIAL SITE / TUNNEL SECTION
 ASS.01 1/4" = 1'-0"



A4 PARTIAL SITE SECTION / EXTERIOR STAIR ELEVATION
 ASS.01 1/4" = 1'-0"



A6 EXTERIOR STAIR SECTION
 ASS.01 1/4" = 1'-0"

NO.	REVISION	DATE

I HEREBY CERTIFY that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the State of Minnesota.

GRÄEF 3433 BROADWAY STREET NE, SUITE 220, MINNEAPOLIS, MN 55413

LHB 701 Washington Ave North, Suite 200 | Minneapolis, MN 55401 | 612.338.2029

SIGNATURE: *[Signature]*
 TYPED OR PRINTED NAME: **Daniel Maldonado**
 DATE: **10/24/2023** REG. NO.: **47352**

APPROVED SERVICE USER DIRECTOR	DATE	APPROVED INFECTION CONTROL NURSE	DATE
APPROVED GENM COORDINATOR	DATE	APPROVED PATIENT SAFETY	DATE
APPROVED PROJECTS SECTION MANAGER	DATE	APPROVED CHIEF OF POLICE	DATE
APPROVED DIRECTOR PMS	DATE	APPROVED SAFETY MANAGER	DATE

DRAWING TITLE: **BUILDING 4 / TUNNEL SECTIONS AND DETAILS**

PROJECT TITLE: **656-14-247 REPAIR FOUNDATIONS BUILDINGS 4, 7, 9 St. Cloud VA Health Care System Main Campus, St. Cloud, Minnesota**

DATE: **10/24/2023**

SCALE: **As Indicated**

PROJECT NO: **230297**

REVISION: **4**

DESIGNER: **DAM**

DRAWN: **NRP**

CHECKED: **AS5.01**

DATE: **10/24/2023**

SCALE: **8 1/2" = 1'-0"**

VAMC SAINT CLOUD MN

DESIGN SPECIFICATIONS

- DESIGN IS IN ACCORDANCE WITH THE STATE OF MINNESOTA 2020 AND THE 2018 INTERNATIONAL BUILDING CODE.
- MINIMUM 28 DAY CONCRETE CYLINDER STRENGTH SHALL BE:

FOOTINGS	4000 PSI
FOUNDATION WALLS	4000 PSI
INTERIOR SLABS ON GRADE	4000 PSI
EXTERIOR SIDEWALKS	4500 PSI
- REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60.
- WELDABLE REINFORCING STEEL SHALL CONFORM TO ASTM A706 GRADE 60.
- EPOXY COATED REINFORCING STEEL SHALL CONFORM TO ASTM A775 GRADE 60.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064.
- SYNTHETIC FIBER REINFORCING SHALL CONFORM TO ASTM C1116.
- CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 NORMAL WEIGHT UNITS. MINIMUM COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS SHALL BE $f_{cm} = 2000$ PSI.
- MORTAR SHALL CONFORM TO ASTM C270 TYPE S AND TYPE M.
- MASONRY GROUT SHALL CONFORM TO ASTM C476. MINIMUM COMPRESSIVE STRENGTH SHALL BE $f_g = 3000$ PSI.
- MINIMUM COMPRESSIVE STRENGTH OF CONCRETE MASONRY CONSTRUCTION SHALL BE $f_{m1} = 2000$ PSI.
- STRUCTURAL STEEL PLATES SHALL CONFORM TO THE FOLLOWING:

THICKNESS $\leq 1/8"$	ASTM A1011 CS TYPE B (OR APPROVED EQUAL)
3/16" \leq THICKNESS $\leq 4"$	ASTM A572 GRADE 50
THICKNESS $> 4"$	ASTM A58
- STRUCTURAL STEEL W-SHAPES AND WT-SHAPES SHALL CONFORM TO ASTM A992.
- STRUCTURAL STEEL ANGLES AND OTHER ROLLED MEMBERS SHALL CONFORM TO ASTM A572 GRADE 50.
- STRUCTURAL STEEL CHANNELS 8" DEEP OR GREATER SHALL CONFORM TO ASTM A992. STRUCTURAL STEEL CHANNELS LESS THAN 8" DEEP SHALL CONFORM TO ASTM A99.
- RECTANGULAR OR SQUARE HSS MEMBERS SHALL CONFORM TO ASTM A500 GRADE C.
- THREADED RODS SHALL CONFORM TO ASTM A36 UNLESS NOTED OTHERWISE.
- ANCHOR RODS SHALL CONFORM TO ASTM F1554 GRADE 36 UNLESS NOTED OTHERWISE.
- DATED BEARING CAPACITY FOR SPREAD FOOTINGS IS 4,000 PSF. BASED UPON SOILS REPORT REPORTED JUNE 10, 2014, AS PREPARED BY BRAUN INTERTEC CORPORATION.
- DESIGN LOADS:

FLOOR LIVE LOAD	
PATIENT ROOMS	40 PSF
OFFICES	50 PSF
OPERATING ROOMS, LABORATORIES	60 PSF
CORRIDORS (ABOVE FIRST FLOOR)	60 PSF
CORRIDORS (FIRST FLOOR)	100 PSF
STAIRS AND EXIT WAYS	100 PSF
LOBBIES	100 PSF
PUBLIC ROOMS AND CORRIDORS SERVING THEM	100 PSF
FOR FLOOR LIVE LOAD ≤ 80 PSF, A 15 PSF PROVISION FOR PARTITIONS HAS BEEN INCLUDED.	
ROOF LIVE LOAD	
MINIMUM ROOF LIVE LOAD	20 PSF
LIVE LOAD REDUCTION	
LIVE LOAD REDUCTION PER IBC 2015 SECTION 1607.10 IS INCLUDED.	
ROOF SNOW LOAD	
RISK CATEGORY	IV
IMPORTANCE FACTOR	$I_s = 1.2$
GROUND SNOW LOAD	$P_g = 50$ PSF
FLAT ROOF SNOW LOAD	$P_f = 42.6$ PSF
EXPOSURE FACTOR	$C_e = 1.1$
THERMAL FACTOR	$C_t = 1.0$

REFER TO TABLE [THIS SHEET] [ON SHEET _____] FOR SNOW DRIFT SURCHARGE LOADS (P_d) AND WIDTHS OF SNOW DRIFTS (w)
- ROOF RAIN LOAD
BUILDING HAS BEEN DESIGNED FOR RAIN LOADS PER IBC 2015 SECTION 1611.
- WIND LOAD
RISK CATEGORY IV
ULTIMATE WIND SPEED $V_{ult} = 122$ MPH
NOMINAL WIND SPEED $V_{ref} = 95$ MPH
EXPOSURE C
INTERNAL PRESSURE COEFFICIENT $GCF = +/- 0.18$
COMPONENTS AND CLADDING REFER TO TABLE THIS SHEET
- RESISTANCE TO LATERAL LOADS ON STRUCTURE IS PROVIDED BY FLOOR DIAPHRAGMS, AND ROOF DIAPHRAGMS. CONTRACTOR SHALL PROVIDE SUFFICIENT TEMPORARY BRACING UNTIL ALL LATERAL SUPPORT SYSTEMS ARE IN PLACE AND FUNCTIONAL.
- ALL STRUCTURAL FRAMING AND CONNECTIONS HAVE BEEN DESIGNED FOR THE FINAL COMPLETED CONDITION AND HAVE NOT BEEN INVESTIGATED FOR POTENTIAL LOADINGS ENCOUNTERED DURING ERECTION AND CONSTRUCTION. ANY INVESTIGATION OF THE STRUCTURAL FRAMING AND CONNECTIONS FOR ADEQUACY DURING THE ERECTION AND CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION AND JOB SITE SAFETY.
- PROVISIONS ARE INCLUDED FOR THE FOLLOWING FUTURE ADDITIONS: NONE.

GENERAL NOTES

EARTHWORK

- FOOTINGS SHALL BE CAST ON UNDISTURBED SUBSOIL. IF DESIGN CAPACITY IS NOT ENCOUNTERED AT THE ELEVATIONS SHOWN, FOOTINGS MUST BE LOWERED. CONSULT ENGINEER BEFORE PROCEEDING.
- 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.
- TOPSOIL AND FILL BELOW SLABS ON GROUND SHALL BE REMOVED. AGGREGATE BASE COURSE UNDER SLABS ON GROUND SHALL BE AS SPECIFIED.
- BACKFILL AGAINST EXTERIOR FOUNDATION WALLS SHALL BE BANKRUN GRAVEL COMPACTED TO MAXIMUM 6-INCH LAYERS.
- PROVIDE MINIMUM 24 INCHES OF FREE DRAINING AGGREGATE OVER ALL DRAIN TILES AND 4 INCHES BELOW.

CONCRETE

- FORMWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION.
- REINFORCING STEEL SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION, UNLESS OTHERWISE NOTED.
- LAP ALL WALL BARS 36 DIAMETERS WITH CLASS 3 SPLICES UNLESS OTHERWISE DETAILED. LAP WELDED WIRE MESH 6 INCHES.
- PROVIDE COLUMN AND WALL DOWELS OF THE SAME SIZE AND NUMBER AS THE RESPECTIVE COLUMN AND WALL REINFORCING UNLESS OTHERWISE DETAILED.
- CONCRETE PROTECTION FOR REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318-14.
- SLABS ON GRADE SHALL BE CAST ALLOWING A SUFFICIENT NUMBER OF JOINTS TO ADEQUATELY CONTROL SHRINKAGE CRACKING. SAWCUTTING SHALL BE DONE AS SOON AS SAWCUT WILL NOT RAVEL CONCRETE OR WITHIN 24 HOURS MAXIMUM OF INITIAL POURING OPERATION. MAXIMUM SIZE OF PANELS SHALL BE 12 FEET BY 12 FEET SLAB ON GRADE. GENERALLY, JOINTS SHALL OCCUR ON COLUMN CENTERLINES.
- 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 AS DETAILED ON THE DRAWINGS.
- CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO PLACING CONCRETE.
- CONSTRUCTION JOINTS IN BEAMS, JOISTS OR SLABS TO BE LOCATED BETWEEN THE 1/4 POINT AND CENTERLINE OF SPAN, OR AS DIRECTED BY THE ENGINEER.
- DO NOT PLACE OR CUT HOLES IN CONCRETE SLABS, BEAMS, WALLS OR COLUMNS WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- EXTERIOR EXPOSED CONCRETE SHALL BE AIR-ENTRAINED. AIR CONTENT SHALL BE 6 PERCENT (+/- 1/2 PERCENT).
- CAMBER CONCRETE MEMBERS FOR DEAD LOAD DEFLECTION BY ADJUSTING FORMS.
- PIPES AND CONDUITS EMBEDDED IN OR PASSING THROUGH STRUCTURAL MEMBERS MUST BE APPROVED BY THE STRUCTURAL ENGINEER. PIPE AND CONDUITS EMBEDDED IN CONCRETE SHALL NOT BE LARGER THAN 2 INCHES IN OUTSIDE DIAMETER AT THEIR WIDEST POINT OR FITTING OR 1/3 OF THE THICKNESS OF THE SLAB, BEAM OR WALL.
 - THEY ARE NOT CLOSER THAN THREE DIAMETERS ON CENTER.
 - THE CONCRETE COVER IS NOT LESS THAN 2 INCHES.
 - THEY RUN BETWEEN REINFORCING AND DO NOT DISPLACE IT IN ANY MANNER.
- ELECTRICAL CONDUIT OR PIPES EMBEDDED IN OR PASSING THROUGH SLABS, BEAMS OR WALLS SHALL BE LOCATED AND PLACED SO THAT:
 - THEY ARE NOT CLOSER THAN THREE DIAMETERS ON CENTER.
 - THE CONCRETE COVER IS NOT LESS THAN 2 INCHES.
 - THEY RUN BETWEEN REINFORCING AND DO NOT DISPLACE IT IN ANY MANNER.
- ALUMINUM CONDUITS SHALL NOT BE PLACED IN CONCRETE.
- CHAMFER ALL EXPOSED CONCRETE CORNERS. SEE ARCHITECTURAL/STRUCTURAL DRAWINGS FOR REQUIREMENTS.
- CONCRETE SHALL BE TESTED BY THE OWNER'S TESTING LAB. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
- PROPER CURING PROCEDURES SHALL BE USED FOR SLAB ON GRADE TO PREVENT CURLING.
- CALCIUM CHLORIDE SHALL NOT BE USED IN CONCRETE MIXES.
- PROVIDE WATERSTOPS AT ALL CONSTRUCTION JOINTS BELOW THE WATER TABLE AND AS SHOWN ON DRAWINGS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PRECAST CONCRETE

- PRECAST CONCRETE MEMBERS SHALL BE DESIGNED IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318-14.
- PRECAST CONCRETE SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION, AND THE FOREMENTIONED CONCRETE PROVISIONS.
- PRECAST CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DESIGN AND REINFORCING OF PRECAST CONCRETE FOR HANDLING AND ERECTION STRESSES.
- PRECAST MEMBERS SHALL BE ATTACHED AND SUPPORTED BY THE STRUCTURE AS INDICATED ON THE DRAWINGS. DEVIATION FROM THESE LOCATIONS WILL CONSTITUTE MEANS FOR REJECTION OF MEMBERS.
- PRECAST MEMBERS SHALL BE DESIGNED AND REINFORCED FOR SELF-WEIGHT AND ALL SUPERIMPOSED LOADS SHOWN ON THE DRAWINGS.
- PRECAST MEMBERS SHALL BE CAPABLE OF SAFELY SUPPORTING ANY CONCENTRATED LOADS INDICATED BY THE STRUCTURAL, MECHANICAL, AND ARCHITECTURAL DRAWINGS.
- PRECAST CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS HANGERS, CLIPS, PLATES, HEADERS, ANCHORAGES, ETC.] WHICH MUST BE PRECAST INTO THE CONCRETE UNLESS OTHERWISE NOTED OR REQUIRED FOR CONNECTION OF PRECAST TO STRUCTURE.
- CONTRACTOR SHALL COORDINATE LOCATIONS OF ALL HOLES OR OPENINGS WITH RESPECTIVE TRADES BEFORE FABRICATION. ANY DEVIATION FROM THESE LOCATIONS OR ADDITIONAL OPENINGS MUST BE APPROVED BY THE FABRICATOR.
- MAXIMUM ALLOWABLE CAMBER SHALL BE 1 INCH.
- FIRE RATING OF PRECAST FLOOR PLANK SHALL BE PER ARCHITECTURAL DRAWINGS.
- GROUT IN PRECAST MEMBER KEYWAYS SHALL BE SAND-CEMENT GROUT. MINIMUM COMPRESSIVE STRENGTH SHALL BE 2500 PSI.
- WALL PANEL JOINTS SHALL BE FILLED WITH APPROVED FIRE STOP MATERIAL AND POLYURETHANE JOINT SEALANT.

STRUCTURAL STEEL

- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AISC "STEEL CONSTRUCTION MANUAL", FIFTEENTH EDITION, AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", MAY 9, 2022 EDITION.
- WHERE INDICATED ON DRAWINGS, STRUCTURAL AND MISCELLANEOUS STEEL WHICH SHALL REMAIN EXPOSED TO VIEW SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE REQUIREMENTS FOR ARCHITECTURALLY EXPOSED STRUCTURAL STEEL, PER THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", MAY 9, 2022 EDITION.
- STEEL JOIST FABRICATION AND ERECTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE STEEL JOIST INSTITUTE. JOISTS SHALL BE MANUFACTURED WITH HOT-ROLLED TOP AND BOTTOM CHORD MEMBERS.
- STEEL DECK FABRICATION AND ERECTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE STEEL DECK INSTITUTE.
- ALL WELDING SHALL COMPLY WITH AWS D1.1 USING E70XX ELECTRODES. ALL WELDING TO BE DONE BY AWS PREQUALIFIED WELDERS, CERTIFIED FOR WELDS MADE. PROVIDE CONTINUOUS MINIMUM SIZED WELDS PER AISC REQUIREMENTS, UNLESS NOTED OTHERWISE.
- THE MINIMUM SIZE OF FILLET WELDS SHALL BE AS SPECIFIED IN TABLE J2.4 IN THE AISC "STEEL CONSTRUCTION MANUAL".
- MINIMUM STRENGTH OF WELDED CONNECTIONS, UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL SHOP AND FIELD WELDS SHALL DEVELOP THE FULL TENSILE STRENGTH OF THE MEMBER OF ELEMENT JOINED. ALL MEMBERS WITH MOMENT CONNECTIONS, NOTED ON THE DRAWINGS, SHALL BE WELDED TO DEVELOP THE FULL FLEXURAL CAPACITY OF THE MEMBER, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- BOLTED CONNECTIONS SHALL BE MADE WITH ASTM F3125 HIGH STRENGTH BOLTS (MINIMUM 3/4-INCH DIAMETER).
- NON-COMPOSITE BEAM CONNECTIONS SHALL SUPPORT AT A MINIMUM ONE-HALF THE TOTAL FACTORED UNIFORM LOAD CAPACITY SHOWN IN THE AISC TABLES OF UNIFORM LOAD CONSTANTS FOR THE GIVEN BEAM, SPAN, AND STEEL SPECIFIED, UNLESS OTHERWISE DETAILED OR END SHEAR REACTIONS ARE SHOWN ON THE DRAWINGS.
- MINIMUM NUMBER OF BOLTS FOR END SHEAR REACTIONS ARE AS FOLLOWS:
 - W8, W10 OR W12: 2
 - W12 OR W14: 3
 - W16 OR W18: 4
 - W20 OR W24: 5
 - W24 OR W30: 6
 - W36 OR W40: 6
- ALL STRUTS, HANGERS, AND BRACES SHALL HAVE CONNECTIONS DESIGNED TO DEVELOP THE FULL TENSILE STRENGTH OF THE MEMBER UNLESS THE DESIGN FORCE IS INDICATED ON THE DRAWINGS, IN WHICH CASE THE CONNECTIONS SHALL BE DESIGNED FOR THE FORCE INDICATED.
- COLUMN BASE PLATES SHALL HAVE OVERSIZED HOLES WITH PLATE WASHERS PER TABLE 14-2 OF THE AISC "STEEL CONSTRUCTION MANUAL", PROVIDED WITH ANCHOR RODS.
- GROUT UNDER BASE PLATES IN ACCORDANCE WITH THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", MAY 9, 2022 EDITION.
- WHILE THE DESIGN DOCUMENTS MAY REFERENCE OSHA, THEY ARE NOT INTENDED TO SPECIFICALLY IDENTIFY ALL APPLICABLE OSHA REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND COMPLY WITH ALL APPLICABLE OSHA REQUIREMENTS.
- ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER, INCLUDING MASONRY SHELF ANGLES, SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123, UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL MISCELLANEOUS STEEL.

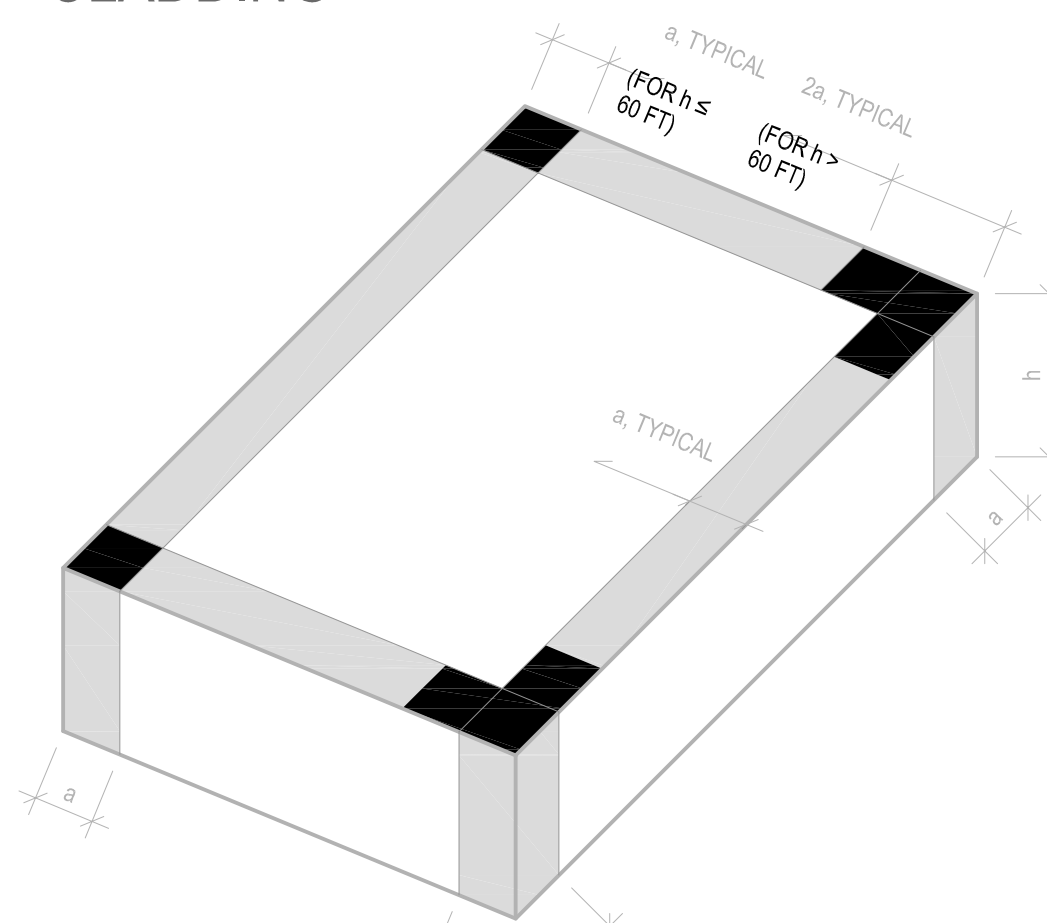
CONCRETE MASONRY

- PRODUCTION AND CONSTRUCTION OF CONCRETE MASONRY SHALL BE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES", ACI 530-13, AND THE NOMA "TEK MANUAL FOR CONCRETE MASONRY DESIGN AND CONSTRUCTION", LATEST EDITION.
- HOT AND COLD WEATHER CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE IMAC (INTERNATIONAL MASONRY INDUSTRY ALL-WEATHER COUNCIL) "RECOMMENDED PRACTICES AND GUIDE SPECIFICATIONS FOR HOT AND COLD WEATHER MASONRY AND CONSTRUCTION".
- CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.
- MASONRY WALLS SHALL BE ADEQUATELY BRACED TO RESIST WIND FORCES UNTIL PERMANENT DESIGN SUPPORTS ARE IN PLACE AND FUNCTIONAL. BRACING SHALL BE DESIGNED BY THE CONTRACTOR.
- PROVIDE DOWELS INTO FOUNDATION THE SAME SIZE AND NUMBER AS WALL REINFORCING.
- LAP REINFORCING BARS 48 DIAMETERS.
- CONCRETE MASONRY WALLS SHALL BE REINFORCED AT EVERY OTHER BED JOINT WITH 9 GAGE 3/16-INCH LADDER TYPE JOINT REINFORCEMENT.
- VERTICAL BARS SHOWN ON THE DESIGN DRAWINGS SHALL BE PLACED IN A CONTINUOUS UNOBSTRUCTED CELL OF NOT LESS THAN 3 INCHES BY 4 INCHES.
- ALL BOND BEAMS AND PILASTERS SHALL BE REINFORCED AS SHOWN ON THE DESIGN DRAWINGS AND FILLED WITH GROUT.
- ALL DOOR AND WINDOW JAMBS SHALL BE GROUTED SOLID 8 INCHES WIDE UNLESS SHOWN OTHERWISE.
- WHERE NOT SHOWN OTHERWISE, MINIMUM SOLID GROUTED MASONRY BELOW BEAM REACTIONS SHALL BE 16 INCHES DEEP BY 32 INCHES LONG.
- WHERE NOT SHOWN OTHERWISE, MINIMUM SOLID GROUTED MASONRY BELOW LINTEL REACTIONS SHALL BE 16 INCHES DEEP BY 16 INCHES LONG.

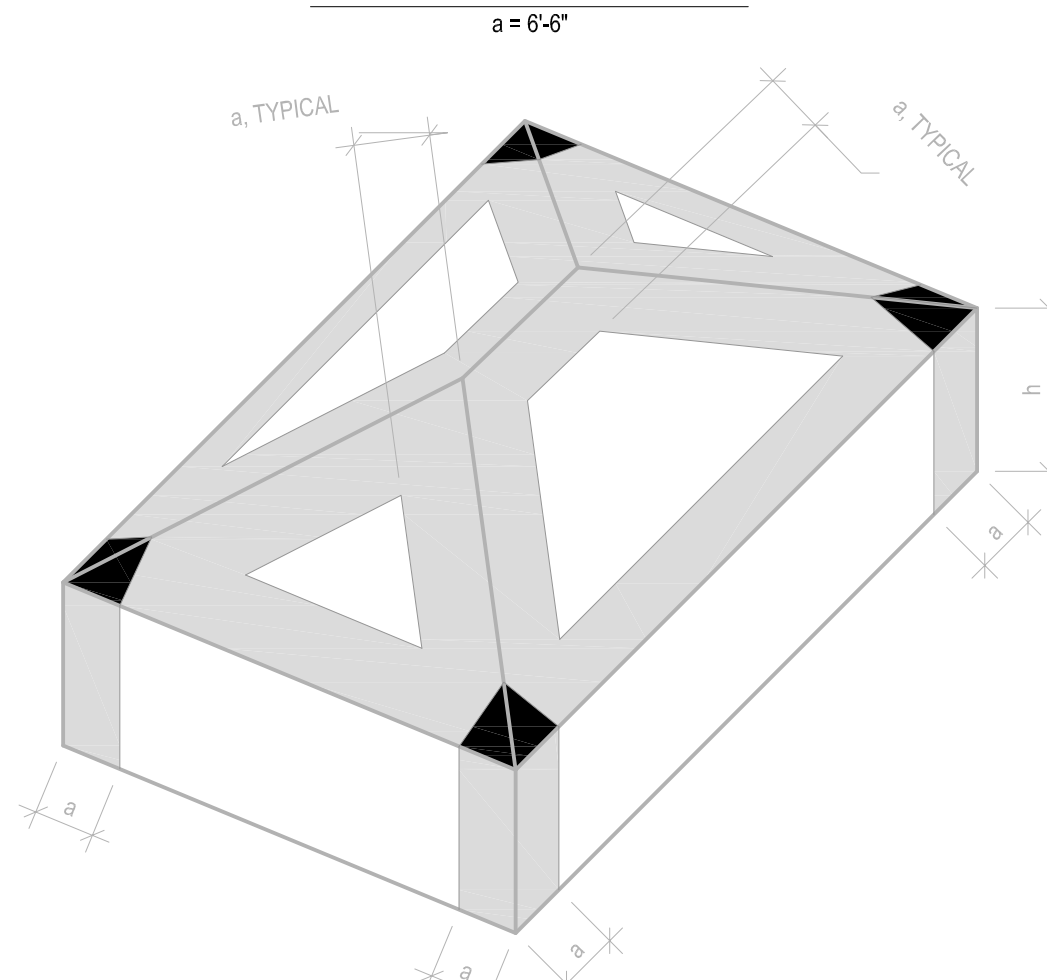
MISCELLANEOUS

- DIMENSIONS OF EXISTING CONSTRUCTION OR CONSTRUCTION IN PROGRESS SHALL BE VERIFIED AND COORDINATED PRIOR TO FABRICATION OF STRUCTURAL COMPONENTS.
- VERIFY AND COORDINATE, WITH ALL CONTRACTORS, THE LOCATION OF ALL ARCHITECTURAL AND MECHANICAL APURTANCES AND OPENINGS.
- EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT TZ.
- ADHESIVE ANCHORS SHALL BE HILTI HIT-HY 200.
- SCREW ANCHORS SHALL BE HILTI KWIK HUS.

WIND PROVISIONS FOR COMPONENTS AND CLADDING



FLAT ROOF BUILDING



HIP ROOF (7° θ ≤ 27°) BUILDING

ZONE	DESIGN WIND PRESSURE, PSF					DESCRIPTION		
	EFFECTIVE WIND AREA, SF							
	1	10	20	50	100	200	> 500	
1	-58	-58	-54	-49	-45	-42	-37	ROOF INTERIOR ZONE
2	-76	-76	-71	-65	-60	-55	-49	END ZONE REGION OF THE ROOF
3	-104	-104	-94	-81	-71	-62	-49	CORNER ZONE REGION OF THE ROOF
ROOF OVERHANG (ZONES 1 AND 2)	-71	-71	-64	-56	-49	-43	-34	
ROOF OVERHANG (ZONE 3)	-88	-88	-87	-72	-61	-49	-34	
4 (+)	34	34	32	30	29	27	25	WALL INTERIOR ZONE
4 (-)	-36	-36	-35	-33	-31	-30	-28	
5 (+)	34	34	32	30	29	27	25	END ZONE REGION OF THE WALL
5 (-)	-45	-45	-42	-38	-35	-32	-28	

- NOTES:
- NEGATIVE WIND PRESSURES ACT AWAY FROM COMPONENT SURFACE. POSITIVE WIND PRESSURES ACT TOWARD COMPONENT SURFACES.
 - WIND PRESSURES SHOWN IN THIS TABLE ARE ULTIMATE PRESSURES.

GRAEF

3433 BROADWAY
STREET NE, SUITE 220,
MINNEAPOLIS, MN 55413

LHB

701 Washington Ave North, Suite 200 | Minneapolis, MN 55401 | 612.338.2299

Professional Engineer

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the state of Minnesota.
Signature: _____
Typed or Printed Name: JOYDITH L. SMITH, PE, PSE
Date: 12-24-2023 License Number: 20275

APPROVED SERVICE LINE DIRECTOR	DATE	APPROVED INSPECTION CONTROL NURSE	DATE
APPROVED GEMS COORDINATOR	DATE	APPROVED PATIENT SAFETY	DATE
APPROVED PROJECTS SECTION MANAGER	DATE	APPROVED CHIEF OF POLICE	DATE
APPROVED DIRECTOR PHS	DATE	APPROVED SAFETY MANAGER	DATE

DRAWING TITLE	PROJECT TITLE	DATE
GENERAL NOTES	656-14247 REPAIR FOUNDATIONS BUILDINGS 4, 7, 9 St. Cloud VA Health Care System Main Campus, St. Cloud, Minnesota	10/24/2023
APPROVED CHIEF OF STAFF	CHECKED BY	DRAWN
APPROVED MEDICAL CENTER DIRECTOR	DATE	DATE

BUILDING NO.	GENERAL NOTES	CHECKED BY	DRAWN	CAD FILE
SLK	JMT			2023-9021
APPROVED MEDICAL CENTER DIRECTOR	DATE	DRAWING NO.	SCALE	DATE
		551.00	AS SHOWN	12/24/2023

