

**Addendum Number:** 01

**Addendum Issue Date:** February 1, 2021

**Owner:** Crawford Memorial Hospital

**Project Name:** CMH Ortho Clinic Addition and Renovation

**Project Number:** 0200707.00

**Containing:** 21 Pages; 15 Drawings; 1 Specification includes Geo-Technical Report

*This addendum amends the drawings and specifications of the above reference project and is hereby incorporated into the contract documents as part thereof. Bidders must acknowledge receipt of this Addendum in the space provided on the Bid Form. **FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.***

**General:**

1. Pre-Bid Meeting Minutes:
  - a. F.E. Moran security systems, fire alarm, and nurse call systems are already removed by the Owner.
  - b. Clarified that the Prevailing Wages are required and that there are currently no labor agreements in place.
  - c. Restated that NO IDPH is required but need to comply with local AHJ, City. We need plumbing inspections with an emphasis on underground plumbing inspections.
2. It is our understanding that F.E. Moran will be doing all fire alarm work including rough-in.

**Drawings:**

1. Sheet C0.1 – GENERAL NOTES
  - a. REVISE pavement and walk sections. See the attached reissued sheet.
2. Sheet C2.0 – SITE PLAN
  - a. REVISE pavement and walk sections. See the attached reissued sheet.
3. Sheet S1.1 – FOUNDATION PLAN
  - a. UPDATE Footing F1 thickness. See the attached reissued sheet.
4. Sheet S3.1 FOUNDATION DETAILS
  - a. UPDATE pedestal size and reinforcement in Detail 11. See the attached reissued sheet.
5. Sheet AD1.1 – FIRST FLOOR DEMOLITION PLAN
  - a. ADD demolition keynote D10-09 to include removal of existing room signs in the corridor, as shown on the attached reissued sheet.

6. Sheet A1.1 – FIRST FLOOR PLAN

- a. REVISE patching note D and update plan general notes. See the attached reissued sheet.
- b. Patching general note D & E is required throughout the project.

7. Sheet A2.4 – ENLARGED VESTIBULE PARAPET SECTIONS AND CANOPY DETAILS

- a. REVISE composite metal panel joint to the edge of the canopy brick column, as shown on the attached reissued sheet.

8. Sheet A5.2 – EXTERIOR DETAILS/BRICK-MTL STUD

- a. REVISE canopy column foundation detail. See the attached reissued S1.1 & S3.1 sheets for more information.

9. Sheet A7.1 – PARTITION TYPES

- a. ADD general note N to include all gypsum board to be mold resistant type. See the attached reissued sheet.

10. Sheet A9.1 – FIRST FLOOR REFLECTED CEILING PLAN

- a. REVISE location of luminaires in the canopy. See the attached reissued sheet.
- b. REVISE the metal soffit and metal composite panel ceiling extent in the canopy. See the attached reissued sheet.

11. Sheet P1.1 – FIRST FLOOR PLUMBING PLAN

- a. ADD a water line to the Lounge refrigerator. See the attached reissued sheet.

12. Sheet E1.1 – FIRST FLOOR LIGHTING PLAN

- a. REVISE lighting circuitry and lighting controls for Exam Rooms 122, 123, 124, 125, 126, 127, and 128. See the attached reissued sheet.
- b. DELETE two type 'A' luminaires in front of the Reception Desk. See the attached reissued sheet.
- c. REVISE location of luminaires in the Canopy. See the attached reissued sheet.

13. Sheet E2.1 – FIRST FLOOR POWER PLAN

- a. ADD Keynote 9 to the clerical area and to this list of Keynotes. See the attached reissued sheet.

14. Sheet E3.1 – FIRST FLOOR SYSTEMS PLAN

- a. ADD keynote 7 to the clerical area and to the list of Keynotes. See the attached reissued sheet.
- b. ADD Push button control to enter C101. See the attached reissued sheet.

15. Sheet E5.1 – ELECTRICAL SCHEDULES

- a. ADD RAB manufacturer and catalog number to luminaire types 'A' and 'B.' See the attached reissued sheet.

**Specifications:**

1. SECTION 00 2100 – INSTRUCTIONS TO BIDDERS

- a. REVISE paragraph 1.1.B.2. to read, Bid Location: Submit Bid Proposals in PDF form via email to the Architect, attention Annapoorna Halepatali, [ahalepatali@f-w.com](mailto:ahalepatali@f-w.com) and mark a copy to David Burnison @ [dburnison@f-w.com](mailto:dburnison@f-w.com).
- b. REVISE paragraph 1.1.H.C.7. to read, “Due to current issues with respect to COVID-19, Bidders may submit Bid Proposals in PDF form via email to the Architect, attention Annapoorna Halepatali, [ahalepatali@f-w.com](mailto:ahalepatali@f-w.com) and mark a copy to David Burnison @ [dburnison@f-w.com](mailto:dburnison@f-w.com).

2. SECTION 00 3100 – AVAILABLE PROJECT INFORMATION.

- a. ADD this new section including Geotechnical Report, the copy included with this addendum.

3. SECTION 00 5000 – CONTRACTING FORMS AND SUPPLEMENTS

- a. DELETE paragraph 1.1.B.

4. SECTION 00 7200 – GENERAL CONDITIONS

- a. REVISE to clarify that the general conditions are AIA A201-2017 and are not attached but available upon request

5. SECTION 00 7300 – SUPPLEMENTARY CONDITIONS

- a. REVISE paragraph 1.2.A.1 to replace the word County with the word Owner in two locations.

6. SECTION 09 2116 – GYPSUM BOARD ASSEMBLIES

- a. CLARIFY all gypsum board in the project to be mold resistant type.

7. Section 00 4000 – PROCUREMENT FORMS AND SUPPLEMENTS

- a. DELETE 1.2.F.1. to clarify that we do not require AIA A305 to be submitted with the bids.

**Bids are Due:** March 9, 2021 / 2:00 PM local time at *Email PDF to Annapoorna Halepatali @[ahalepatali@f-w.com](mailto:ahalepatali@f-w.com) and copy Dave Burnison @[dburnison@f-w.com](mailto:dburnison@f-w.com).*

**END OF ADDENDUM**

**Issued By:**

FARNSWORTH GROUP, INC.

Annapoorna Halepatali  
Architectural Designer 111

**Attachments:**

*Pre-Bid Meeting Sign-in Sheet*

Farnsworth Group, Inc.

Addendum

Page 4 of 4

*Drawings:* C0.1, C2.0, S1.1, S3.1, AD1.1, A1.1, A2.4, A5.2, A7.1, A9.1, P1.1, E1.1, E2.1, E3.1, E5.1.

*Specifications:* 00 3100 includes Geotechnical Report





## Meeting Sign-In

Project: CMH Ortho Addition and Renovation Date: 1/27/2021  
 Project #: 0200707.00 Location: 1000 N Allen Street, Robinson, IL  
 Subject: Pre-Bid Meeting Time: 1:00 pm

Name/Title	Organization	Phone #	Email Address
Mark Rich	CMH	618.546.2589	Mark.rich@crawfordmh.org
Craig Parrish	CMH	618.546.2512	Craig.parrish@crawfordmh.org
Annapoorna Halepatali	Farnsworth Group, Inc.	309.663.8436	ahalepatali@f-w.com
Dave Burnison	Farnsworth Group, Inc.	309.663.8436	dburnison@f-w.com
SCOTT RINKENBERGER	P.J. Hoerr	309.688.9567	scott@pjhoerr.com
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Shannon White	First Choice Electric	618-553-3902	Swhite@1stchoiceltr.com
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Brian Swingle	Swingle Const.	217-857-3119	brianswingle@swingleconstruction.com
Ron Johnson	S&L PLC	217-663-3452	SANDPLUMBING
Evan Sudkamp	Grumbach Const.	217-342-4457	C.Armstrong@Grumbach.com
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Alex Brown	Senco Construction	618-553-0358	abrown@sencoconstruction.com
Joe Erb	CSC	217-826-652	JoeErb@catalystco.com
Maurice Mathoney	CSC	217-826-6332	Jearles@catrasteeco.com
Jack D Steiner	S&B Excavating	812-234-4848 812-208-3019	Jack.Steiner@S&BExcavating.com

2211 West Bradley Avenue, Champaign, IL 61821 217/352-7408 www.f-w.com

Jason Jones

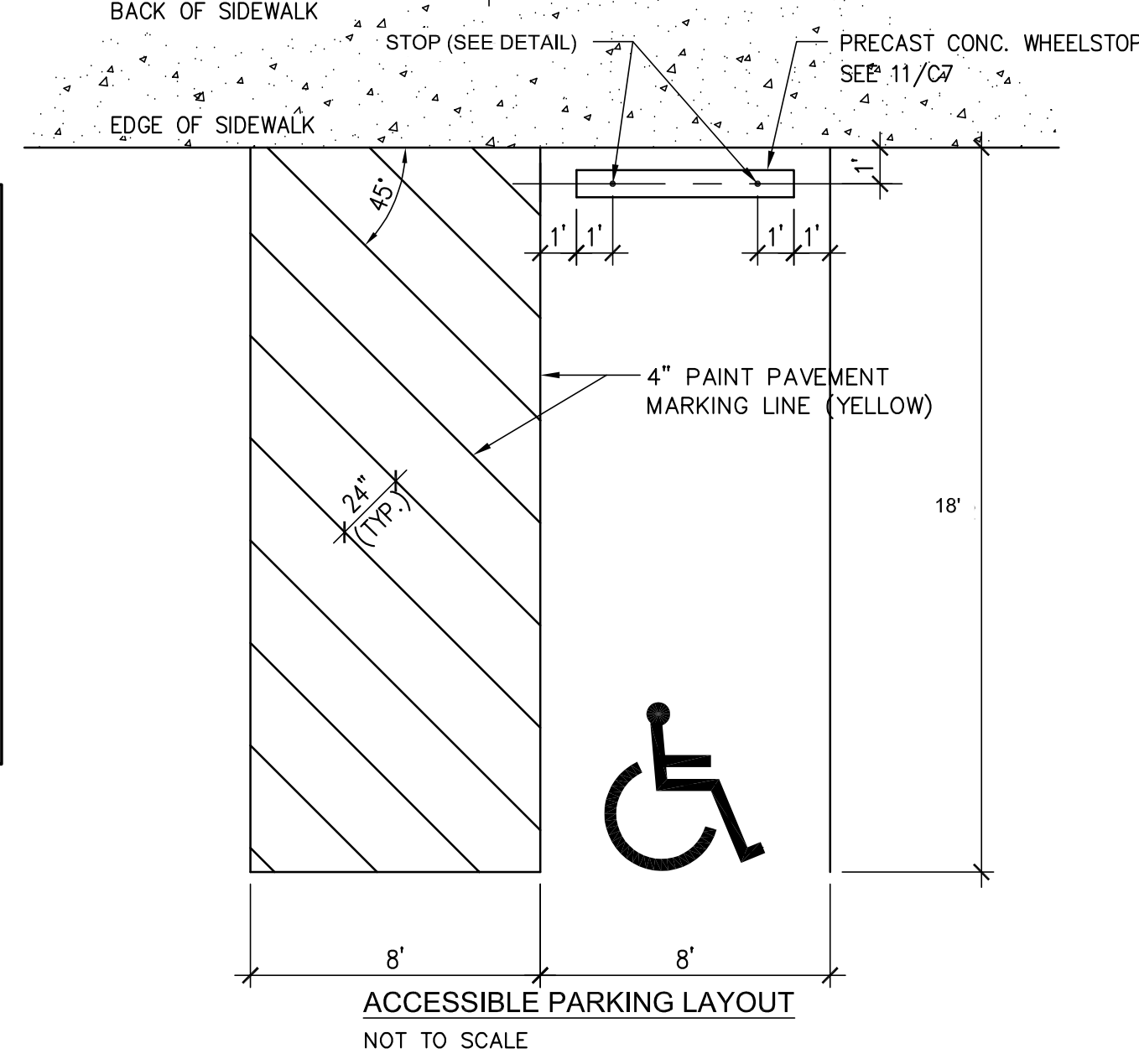
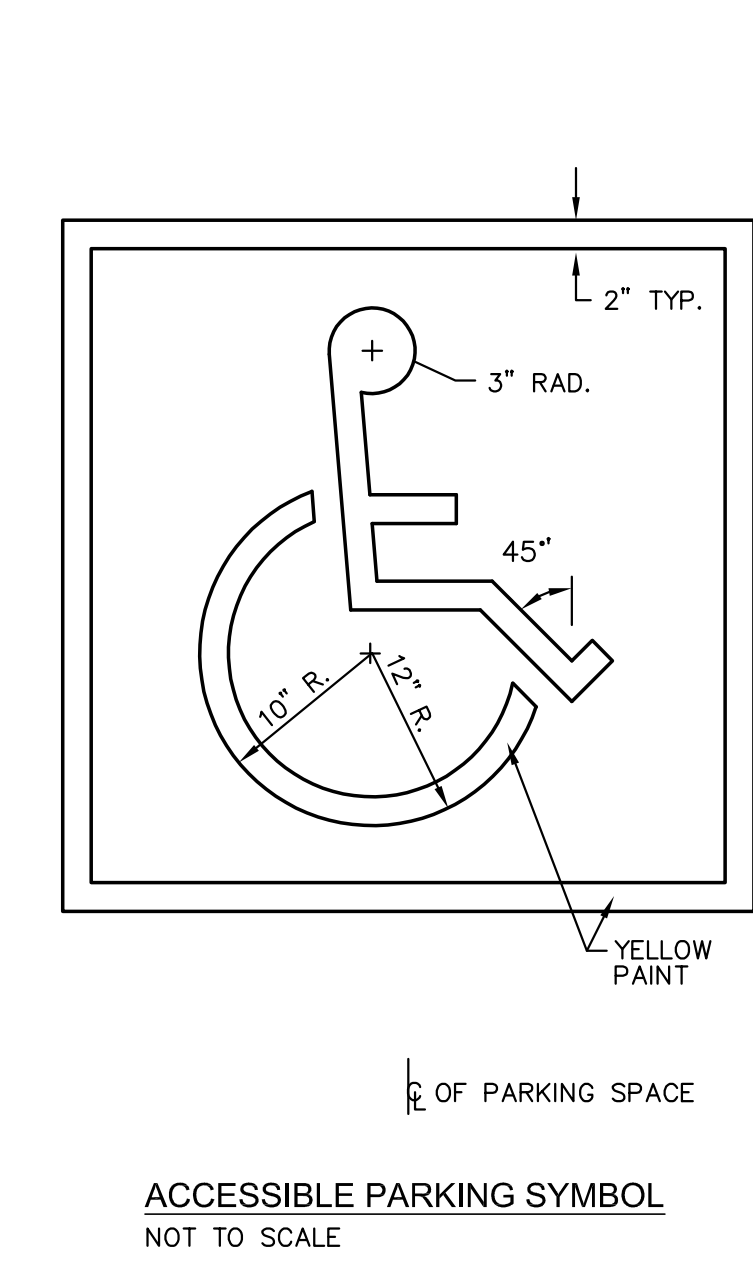
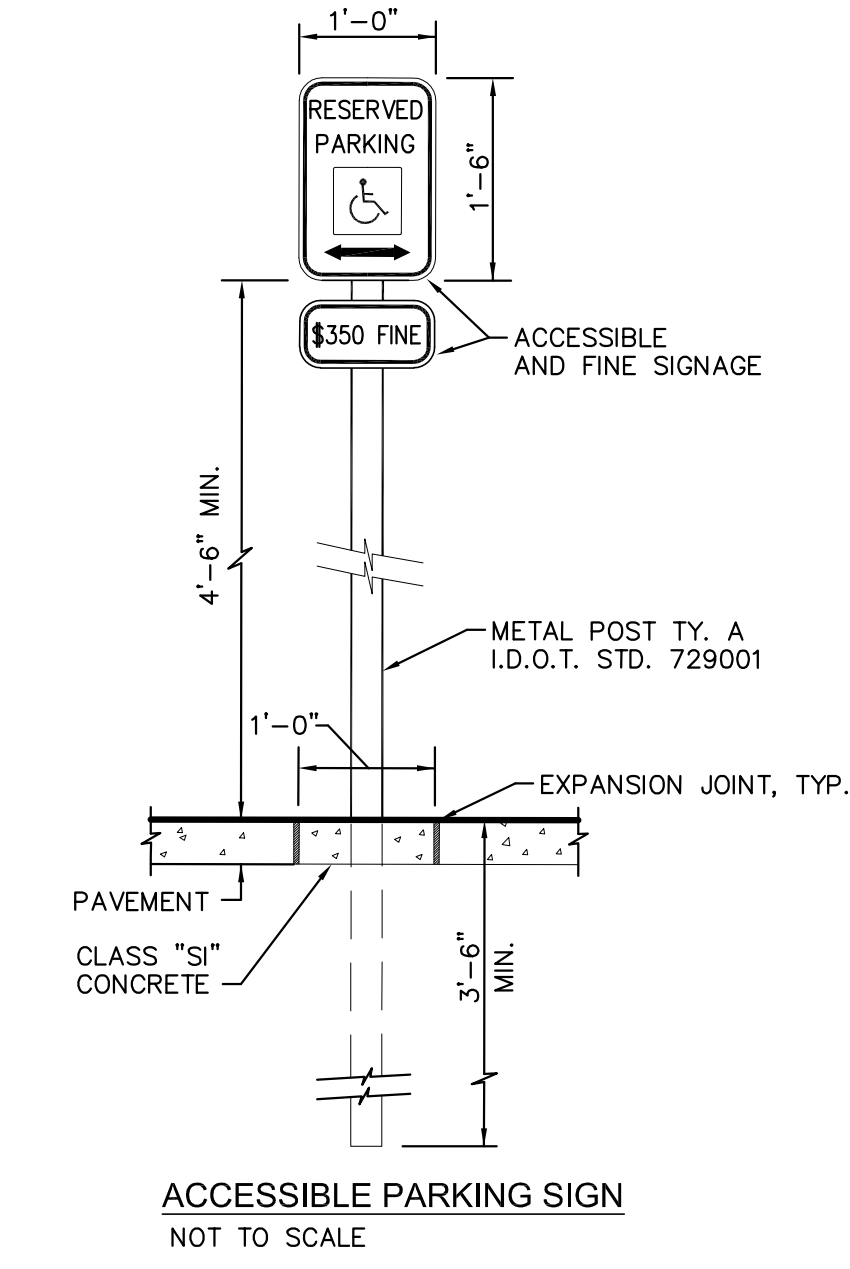
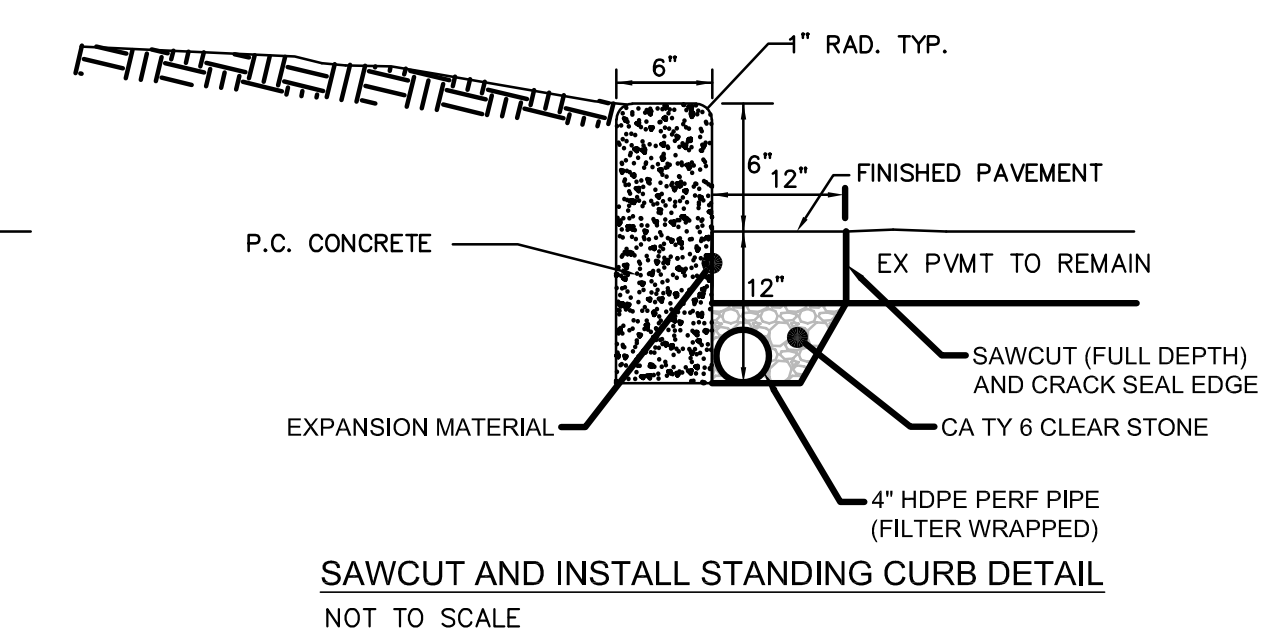
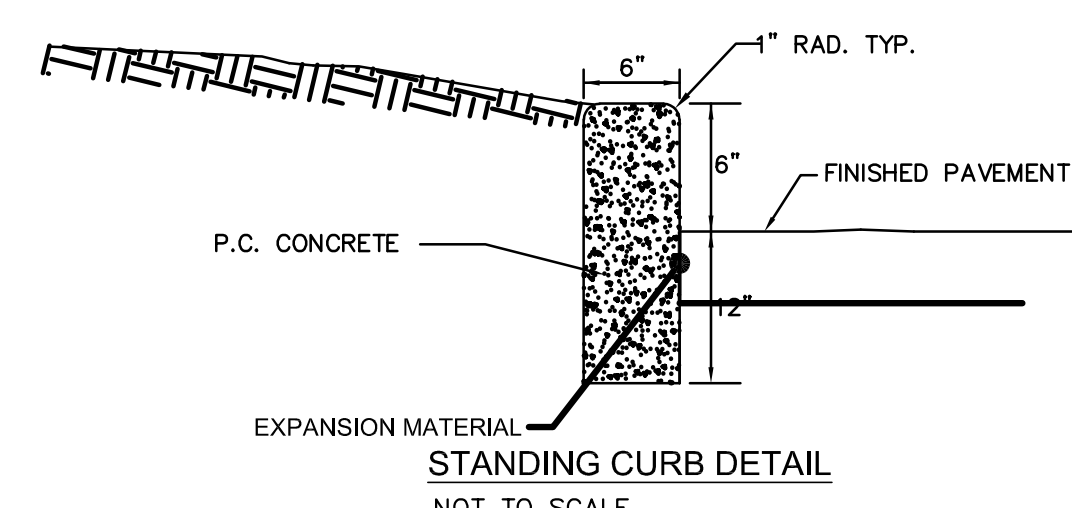
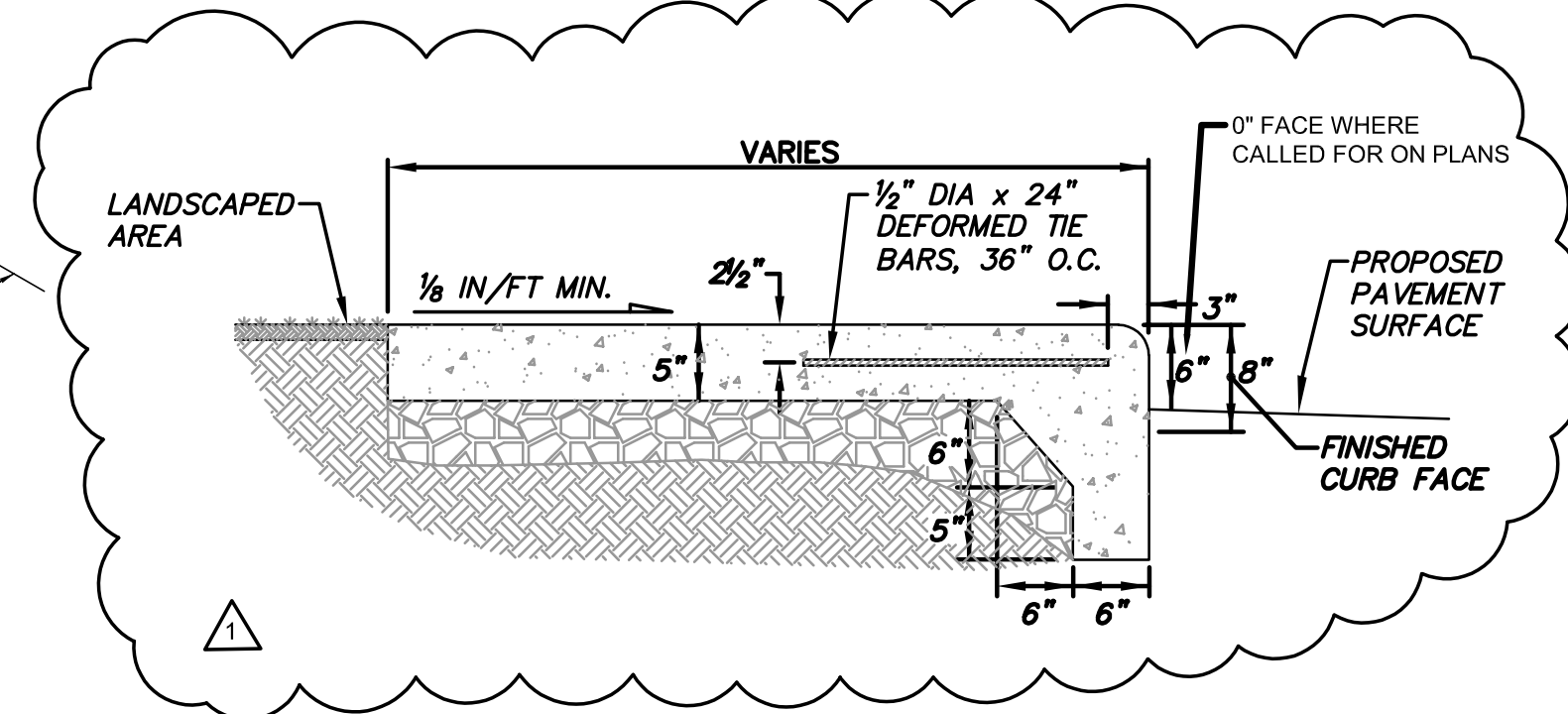
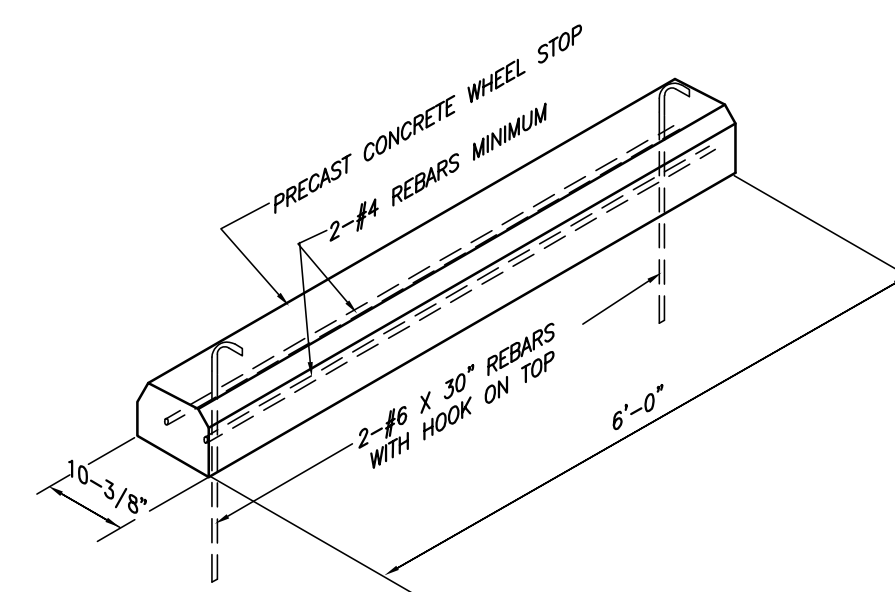
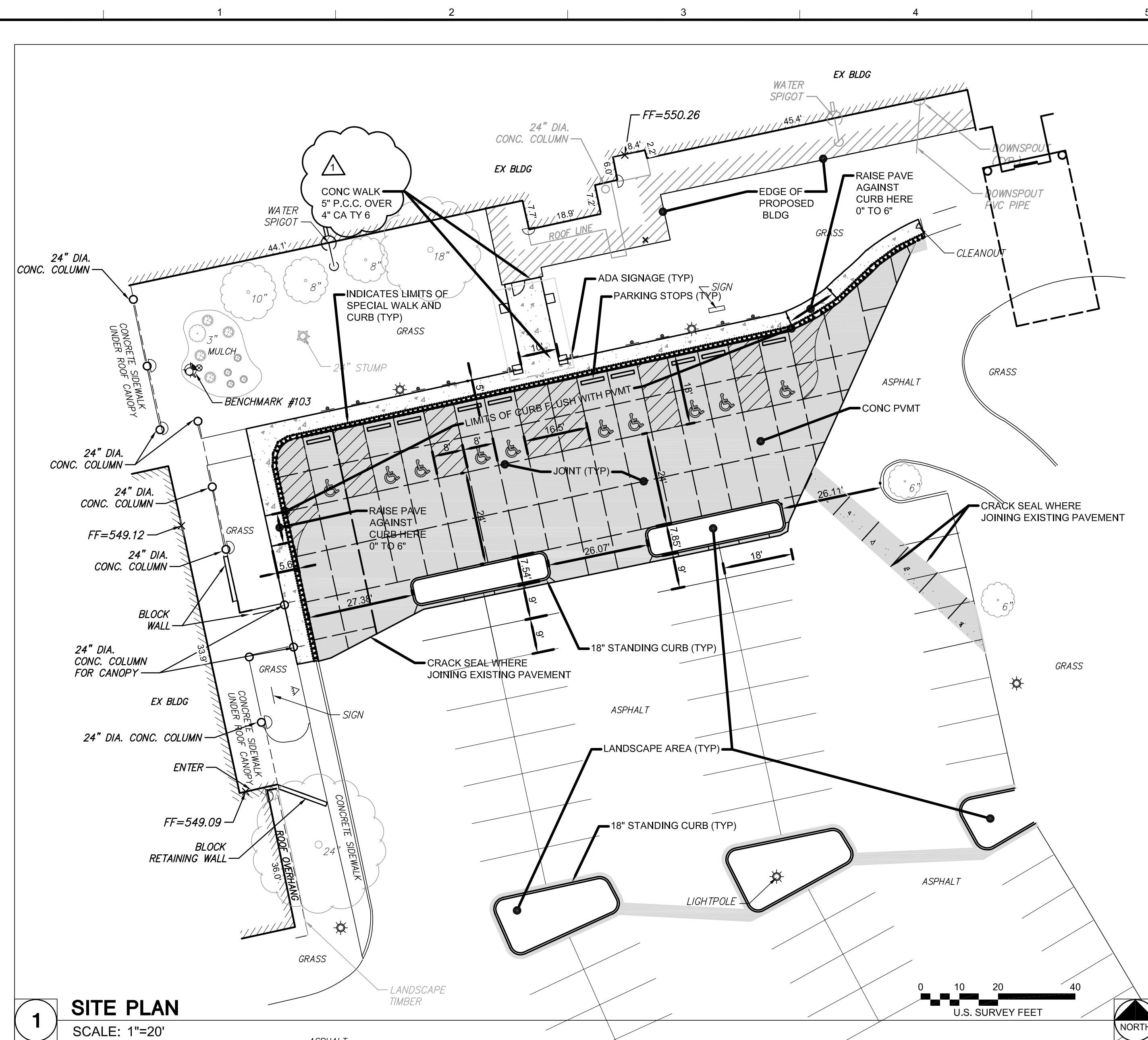
Hannig  
Const.

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**Farnsworth**  
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Engineers | Architects | Surveyors | Scientists

ISSUE:	
#	DATE: DESCRIPTION:
1	02/01/2021 ADD 01

**Bid Set**  
01/15/202

PROJECT:

## CHM - Ortho Clinic Renovation and Addition

**1000 N Allen St,  
Robinson, IL 62454**

DATE: 01/15/2021

DESIGNED:

DRAWN: \_\_\_\_\_

REVIEWED: \_\_\_\_\_

\_\_\_\_\_

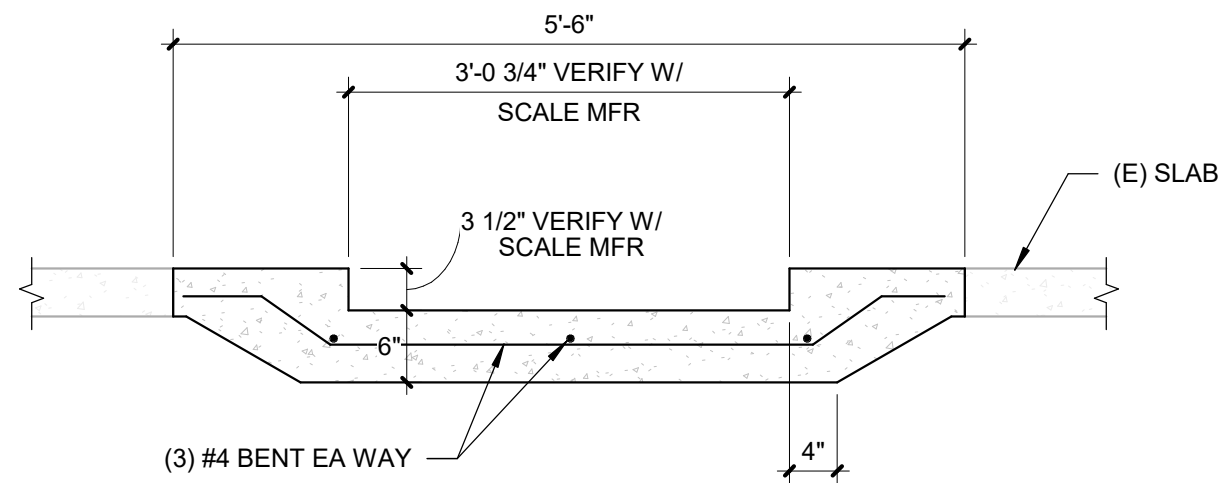
## SITE PLAN

SHEET NUMBER: \_\_\_\_\_

## C2.0

PROJECT NO.: 0200707.00





## 2 RECESSED SLAB DETAIL

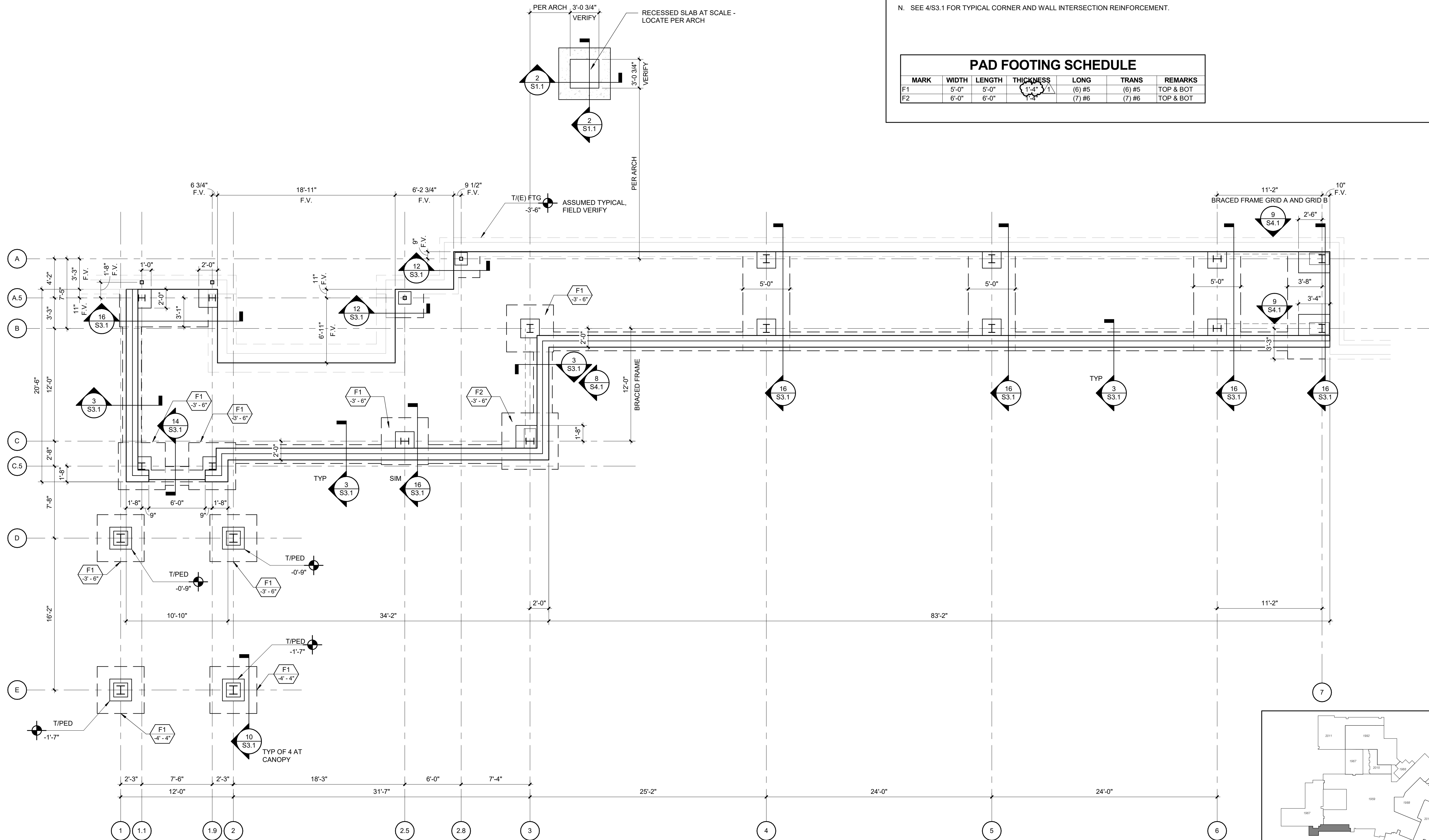
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## FOUNDATION PLAN NOTES

- A. SEE S0.1 AND S0.2 FOR GENERAL STRUCTURAL NOTES.  
B. SEE GENERAL STRUCTURAL NOTES FOR DESIGN SOIL BEARING PRESSURE.  
C. SEE ARCHITECTURAL FOR DIMENSIONS NOT SHOWN.  
D. SEE ARCHITECTURAL FOR FLOOR SLAB SLOPE REQUIREMENTS.  
E. SLAB SUBGRADE PREPARATION SHALL BE AS RECOMMENDED BY THE GEOTECHNICAL REPORT.  
F. COMPACTED FILL UNDER SLAB ON GRADE SHALL BE 6" FREE DRAINING GRANULAR FILL CONFORMING TO CA-7 OR CA-11.  
G. SEE THIS SHEET FOR PAD FOOTING SCHEDULE.  
H. T/FOOTING ELEVATION = -3'-6" UNLESS OTHERWISE NOTED.  
I. T/SLAB ELEVATION = 0'-0" UNLESS OTHERWISE NOTED.  
J. TYP T/ FOUNDATION WALL ELEVATION = 0'-0" UNLESS OTHERWISE NOTED.  
K. T/ CONCRETE PEDESTAL ELEVATION = -0'-8" UNLESS OTHERWISE NOTED.  
L. TYP T/BRICK LEDGE ELEVATION = -0'-8" UNLESS OTHERWISE NOTED ON THIS PLAN.  
M. SEE 5/S3.1 FOR FOUNDATION WALL CONSTRUCTION JOINT.  
N. SEE 4/S3.1 FOR TYPICAL CORNER AND WALL INTERSECTION REINFORCEMENT.  
O. SLAB ON GRADE SHALL BE 4" CAST IN PLACE CONCRETE REINFORCED WITH 6x6 W2.1xW2.1 WWF CENTERED IN THICKNESS POURED OVER MIN 15MIL VAPOR BARRIER.  
P. USE CIRCULAR OR DIAMOND ISOLATION JOINTS AT ALL COLUMNS. SEE DETAIL 9/S3.1 FOR SLAB CRACK CONTROL AT ISOLATION JOINT.  
Q. INSTALL CONTROL/CONSTRUCTION JOINTS AT ALL COLUMNS, INTERIOR CORNERS, AND WITH A MAX. JOINT SPACING OF 10'-0" OC. SEE DETAIL 1/S3.1.  
R. SEE DETAIL 2/S3.1 FOR SLAB CRACK CONTROL DETAILS.  
T. SEE S5.1 FOR BASE PLATE DETAILS.  
U. ANCHOR EMBED. DEPTH SHALL BE MEASURED FROM TOP OF PEDESTAL OR FOOTING, NOT TOP OF SLAB.  
V. SEE ARCHITECTURE AND PLUMBING FOR WATERPROOFING REQUIREMENTS.

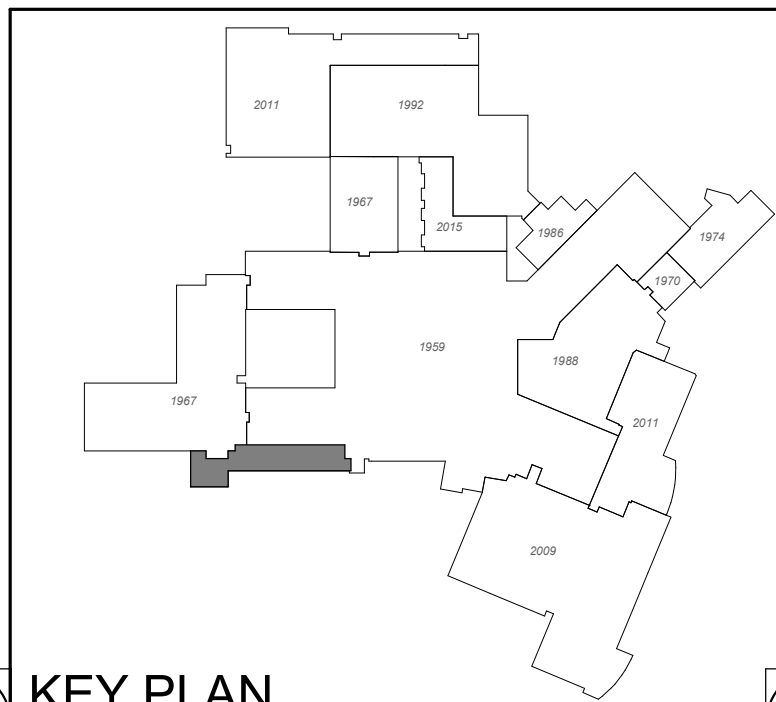
## PAD FOOTING SCHEDULE

MARK	WIDTH	LENGTH	THICKNESS	LONG	TRANS	REMARKS
F1	5'-0"	5'-0"	1'-4" S4.1	(6) #5	(6) #5	TOP & BOT
F2	6'-0"	6'-0"	1'-4" S4.1	(7) #6	(7) #6	TOP & BOT



## 1 FOUNDATION PLAN

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



KEY PLAN  
SCALE: NOT TO SCALE



PLAN  
NORTH

## BID SET

01/15/2021

PROJECT:  
Crawford Memorial Hospital

## CMH - Ortho Clinic Addition and Renovation

1000 N Allen Street  
Robinson, IL 62454

DATE: 01/15/2021

DESIGNED: AKC

DRAWN: AKC

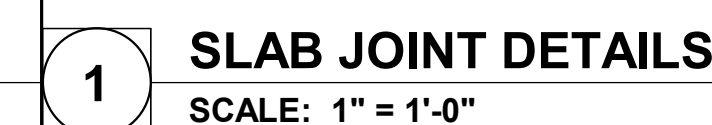
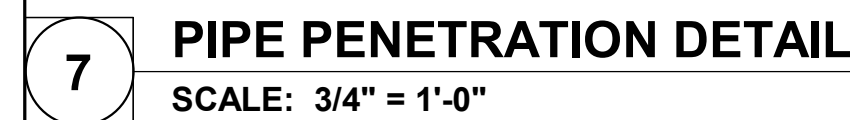
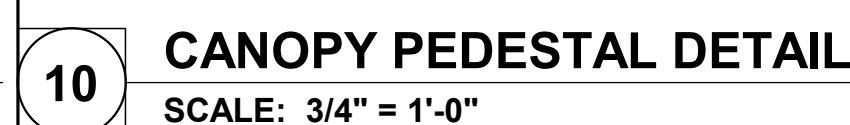
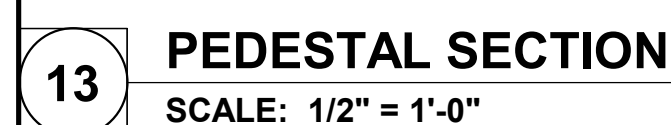
REVIEWED: PMH

## FOUNDATION PLAN

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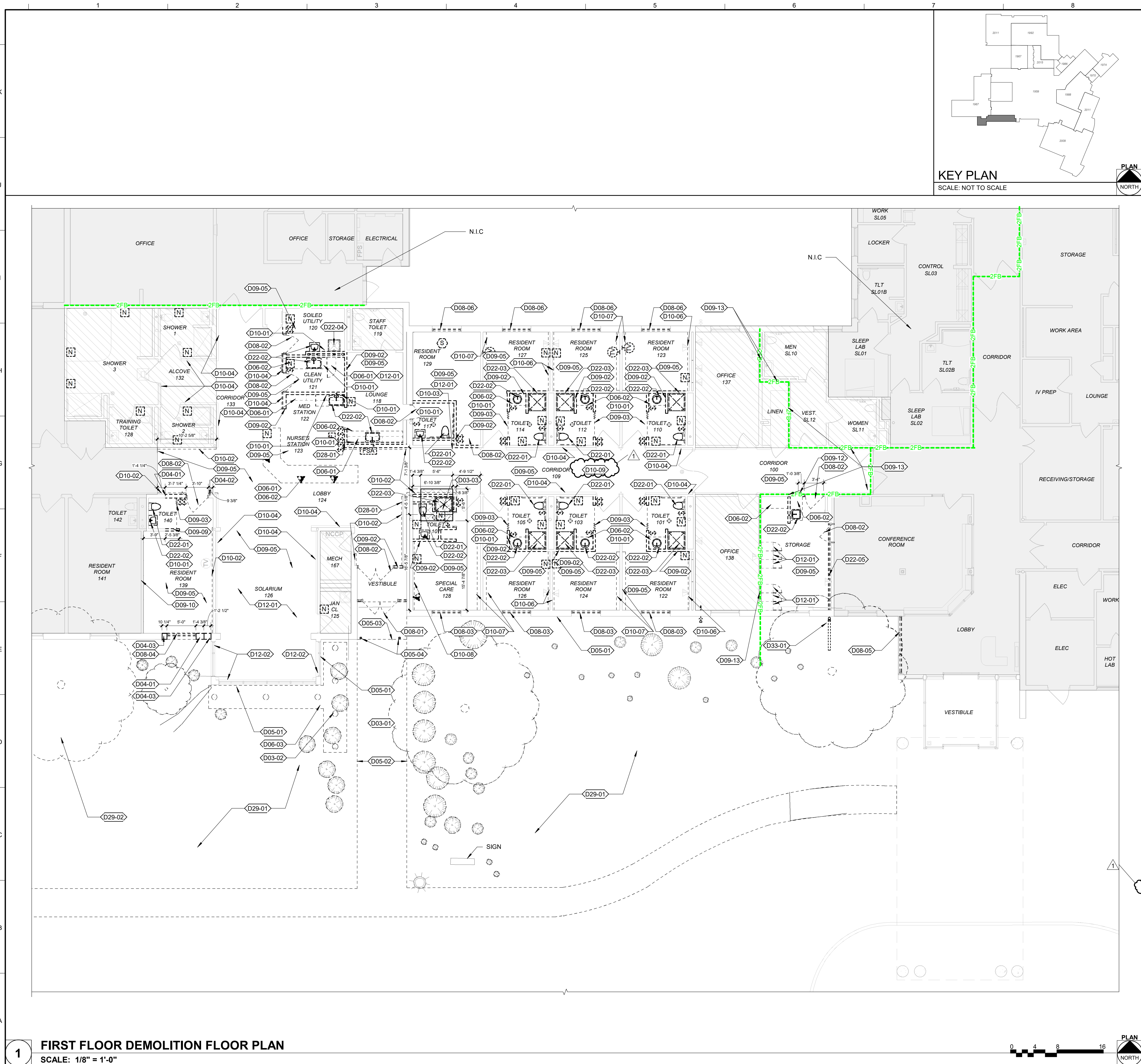
# S1.1

PROJECT NO.: 0200707.00

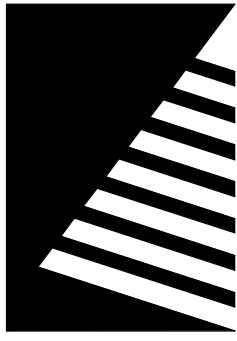




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DEMOLITION GENERAL NOTES	
A.	EXISTING CONSTRUCTION SHOWN DASHED IS TO BE DEMOLISHED - COORDINATE WITH NEW CONSTRUCTION. ALL ITEMS INDICATED TO BE DEMOLISHED SHALL BE REMOVED AS TO FULLY ALLOW FOR THE PROPER FURNISHING AND INSTALLATION OF ALL SCHEDULED NEW WORK. THIS SHALL INCLUDE DEMOLITION OF ADJACENT ITEMS, ACCESSORIES, AND APPURTENANCES AS NECESSARY. DEMOLITION DRAWINGS ILLUSTRATE MAJOR ITEMS TO BE REMOVED. CONTRACTOR SHALL COORDINATE THESE DRAWINGS WITH NEW WORK DRAWINGS AND SHALL BE RESPONSIBLE FOR OTHER ITEMS REQUIRED TO BE DEMOLISHED TO ACCOMMODATE NEW WORK.
B.	THE CONTRACTOR IS RESPONSIBLE FOR RETAINING AND RELOCATING ALL SALVAGE AS DESIGNATED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR IS RESPONSIBLE FOR STORAGE AND PROTECTION OF ALL SALVAGE ITEMS. ALL EXISTING HARDWARE AND WALL MOUNTED ACCESSORIES TO BE SALVAGED AND TO BE HANDED TO THE OWNER.
C.	EXISTING ITEMS, EQUIPMENT, PLUMBING FIXTURES, ETC. TO REMAIN IN PLACE SHALL BE PROTECTED FROM DIRT AND DAMAGE DURING DEMOLITION AND CONSTRUCTION. PROTECT ALL FINISHES TO REMAIN FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION. PRIOR TO DEMOLITION, ENSURE THE STABILITY OF ANY WALLS TO REMAIN. REMOVE ACOUSTICAL CEILINGS INCLUDING, BUT NOT LIMITED TO, RELATED SUPPORT SYSTEMS, CEILING TILES, LIGHT FIXTURES, GRILLES, DIFFUSERS, EXIST SIGNS, AND OTHER ELECTRICAL OR COMMUNICATION DEVICES. DEMOLITION OF FLOOR FINISHES INCLUDES REMOVAL OF ADHESIVES, GROUTING BEDS, RESILIENT BASE, ETC.
D.	REMOVAL OF EXISTING PLUMBING FIXTURES TO INCLUDE PIPING, WASTE LINES, ETC. LINES ARE TO BE CAPPED AS REQUIRED. SEE PLUMBING DRAWINGS. REMOVAL OF EXISTING HVAC TO INCLUDE DUCTWORK, HANGERS, GRILLES, DIFFUSERS, ETC. SEE MECHANICAL DRAWINGS. REMOVAL OF EXISTING ELECTRICAL SYSTEMS TO INCLUDE CONDUIT, BOXES, WIRE, CABLE, SUPPORTS, WIRING DEVICES, SAFETY SWITCHES, FIRE ALARM EQUIPMENT, SPEAKERS, TELEPHONE OUTLETS AND LIGHT FIXTURES. SEE ELECTRICAL DRAWINGS.
E.	HAZARDOUS MATERIALS INCLUDING, BUT NOT LIMITED TO: ASBESTOS AND/OR LEAD PAINT, IS ENCOUNTERED ON THE PROJECT SITE, THE OWNER SHALL ENGAGE A TESTING COMPANY TO IDENTIFY AREAS AND PROVIDE APPROPRIATE ABATEMENT. DEMOLITION CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH ABATEMENT CONTRACTOR.
DEMOLITION KEYNOTES (BY DIVISION)	
DIVISION 03	
D03-01	REMOVE EXISTING EXTERIOR CONCRETE STOOP IN ITS ENTIRETY.
D03-02	REMOVE EXISTING CONCRETE PERGOLA COLUMNS
D03-03	REMOVE 5'-6"x5'-6"x 3.5" (DEPTH) OF THE CONCRETE FLOOR CONSTRUCTION TO ACCOMMODATE RECESSED FLOOR SCALE. SEE STRUCTURAL AND PLUMBING FOR MORE INFORMATION. COORDINATE WITH SHOWER INFILL LOCATION.
DIVISION 04	
D04-01	REMOVE EXISTING CMU WALL UPTO ONE COURSE BELOW THE BOTTOM OF PRECAST PLANK ROOF. SEE STRUCTURAL FOR LINTEL DETAILS. SEE NEW REFLECTED CEILING PLAN FOR BULKHEAD HEIGHT.
D04-02	RETAIN EXISTING CMU WALL TO EXTENTS SHOWN
D04-03	FIELD VERIFY EXISTING EXTERIOR WALL PRIOR TO STEEL FABRICATION AND DEMOLITION OF CMU WALL - SEE STRUCTURAL FOR MORE INFORMATION
DIVISION 05	
D05-01	REMOVE EXISTING PARAPET COPING - DO NOT REMOVE OR DAMAGE ADJACENT ROOF. TYPICAL FOR EXTENT OF NEW CONSTRUCTION ADDITION.
D05-02	REMOVE METAL RAILINGS IN ITS ENTIRETY. SALVAGE TO OWNER.
D05-03	REMOVE EXISTING CANOPY IN ITS ENTIRETY.
D05-04	REMOVE EXISTING COLUMN.
DIVISION 06	
D06-01	REMOVE EXISTING CASEWORK IN ITS ENTIRETY.
D06-02	REMOVE EXISTING COUNTERTOP IN ITS ENTIRETY.
D06-03	REMOVE EXTERIOR TRELLIS FRAMING
DIVISION 08	
D08-01	REMOVE EXISTING EXTERIOR DOOR(S) AND FRAME ASSEMBLY. SALVAGE TO OWNER.
D08-02	REMOVE EXISTING INTERIOR DOOR(S) AND FRAME ASSEMBLY. SALVAGE TO OWNER.
D08-03	REMOVE EXISTING EXTERIOR WINDOW ASSEMBLY, INCLUDING SILL TO BULKHEAD. SALVAGE TO OWNER.
D08-04	REMOVE EXISTING WINDOW ASSEMBLY, INCLUDING SILL, AND PREPARE FOR NEW OPENING. SALVAGE TO OWNER. SEE STRUCTURAL FOR MORE DETAILS.
D08-05	REMOVE EXISTING STOREFRONT ASSEMBLY IN ITS ENTIRETY. SALVAGE TO OWNER.
D08-06	BASE BID - REMOVE EXISTING WINDOW ASSEMBLY, INCLUDING SILL. ALTERNATE-1 RETAIN EXISTING EXTERIOR WINDOW ASSEMBLY, INCLUDING SILL
DIVISION 09	
D09-01	REMOVE EXISTING ACOUSTICAL TILE CEILING SYSTEM AND ACCESSORIES TO FULL EXTENTS OF ROOM
D09-02	REMOVE EXISTING METAL STUD WALL IN ITS ENTIRETY
D09-03	REMOVE EXISTING PRIVACY CURTAIN AND TRACK.
D09-04	REMOVE EXISTING BULKHEAD.
D09-05	REMOVE EXISTING FLOORING INCLUDING ADHESIVE, TRANSITIONS, WALL BASE AND OTHER ACCESSORIES TO EXTENTS SHOWN.
D09-06	EXISTING BULKHEAD TO REMAIN
D09-07	EXISTING ACT TO REMAIN. REMOVE AND REINSTALL AS REQUIRED FOR ABOVE CEILING MECHANICAL WORK.
D09-09	REMOVE EXISTING METAL STUD WALL TO THE BOTTOM OF THE EXISTING SOFFIT.
D09-10	RETAIN EXISTING METAL STUD WALL
D09-11	DO NOT REMOVE EXISTING MAIN SUPPORT. FIELD VERIFY LOCATION.
D09-12	REMOVE EXISTING METAL STUD WALL UP TO 7'-0" HEIGHT. PREPARE FOR NEW OPENING.
D09-13	GRAPHIC INDICATES NEW LOCATION OF 2-HOUR OCCUPANCY SEPARATION. CONTRACTOR SHALL REMOVE AND REPLACE EXISTING CEILING AS NEEDED TO UPGRADE EXISTING WALLS TO 2-HOUR FIRE RATING.
DIVISION 10	
D10-01	REMOVE EXISTING PAPER TOWEL, TOILET ROLL AND SOAP DISPENSER. SALVAGE TO OWNER.
D10-02	REMOVE EXISTING WALL PROTECTION AND WALL BUMPER HAND RAIL TO EXTENTS SHOWN. SALVAGE TO OWNER.
D10-03	SALVAGE EXISTING WALL PROTECTION AND WALL BUMPER HAND RAIL CUT TO NEW LENGTH.
D10-04	EXISTING WALL PROTECTION AND WALL BUMPER HAND RAIL TO REMAIN.
D10-06	EXISTING WALL PROTECTION TO REMAIN.
D10-07	REMOVE EXISTING WALL BUMPER HAND RAIL TO EXTENTS SHOWN. SALVAGE TO OWNER. PREP FOR NEW FINISH.
D10-08	REMOVE EXISTING WALL PROTECTION TO EXTENTS SHOWN. PREP FOR NEW FINISH.
D10-09	REMOVE EXISTING ROOM SIGNS AND PREP FOR NEW FINISH.
DIVISION 12	
D12-01	REMOVE EXISTING FURNITURE AND SALVAGE TO OWNER.
D12-02	RETAIN EXISTING WINDOW TREATMENTS. PROTECT THEM DURING CONSTRUCTION.
DIVISION 22	
D22-01	REMOVE EXISTING TOILET INCLUDING ASSOCIATED WATER PIPING, ETC. CAP WATER AND WASTE PIPING AT LAST ACTIVE SERVICE.
D22-02	REMOVE EXISTING SINK INCLUDING ASSOCIATED WATER PIPING, ETC. CAP WATER AND WASTE PIPING AT LAST ACTIVE SERVICE.
D22-03	REMOVE EXISTING SHOWER AND SHOWER SEAT INCLUDING ASSOCIATED WATER PIPING, ETC. CAP WATER AND WASTE PIPING AT LAST ACTIVE SERVICE.
D22-04	REMOVE EXISTING TUB INCLUDING ASSOCIATED WATER PIPING, ETC. CAP WATER AND WASTE PIPING AT LAST ACTIVE SERVICE.
D22-05	TEMPORARILY REMOVE EXISTING STORM PIPE - SEE PLUMBING.
DIVISION 28	
D28-01	REMOVE EXISTING FIRE ALARM - SEE ELECTRICAL.
DIVISION 29	
D29-01	RETAIN EXISTING TREE - SEE CIVIL.
D29-02	EXISTING SHRUBS AND TREES TO BE REMOVED - SEE CIVIL.
DIVISION 33	
D33-01	EXISTING STORM DRAIN - SEE PLUMBING.



# Farnsworth

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NORMAL, ILLINOIS 61761  
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www.f-w.com  
Engineers | Architects | Surveyors | Scientists

ISSUE:

#	DATE:	DESCRIPTION:
1	02/01/2021	ADD 01

Bid Set

01/15/2021

PROJECT:  
Crawford Memorial Hospital

**CMH - Ortho Clinic  
Addition and  
Renovation**

1000 N Allen Street  
Robinson, IL 62454

DATE:	01/15/2021
DESIGNED:	APH/DGB
DRAWN:	APH/KEC
REVIEWED:	MCR/DGB

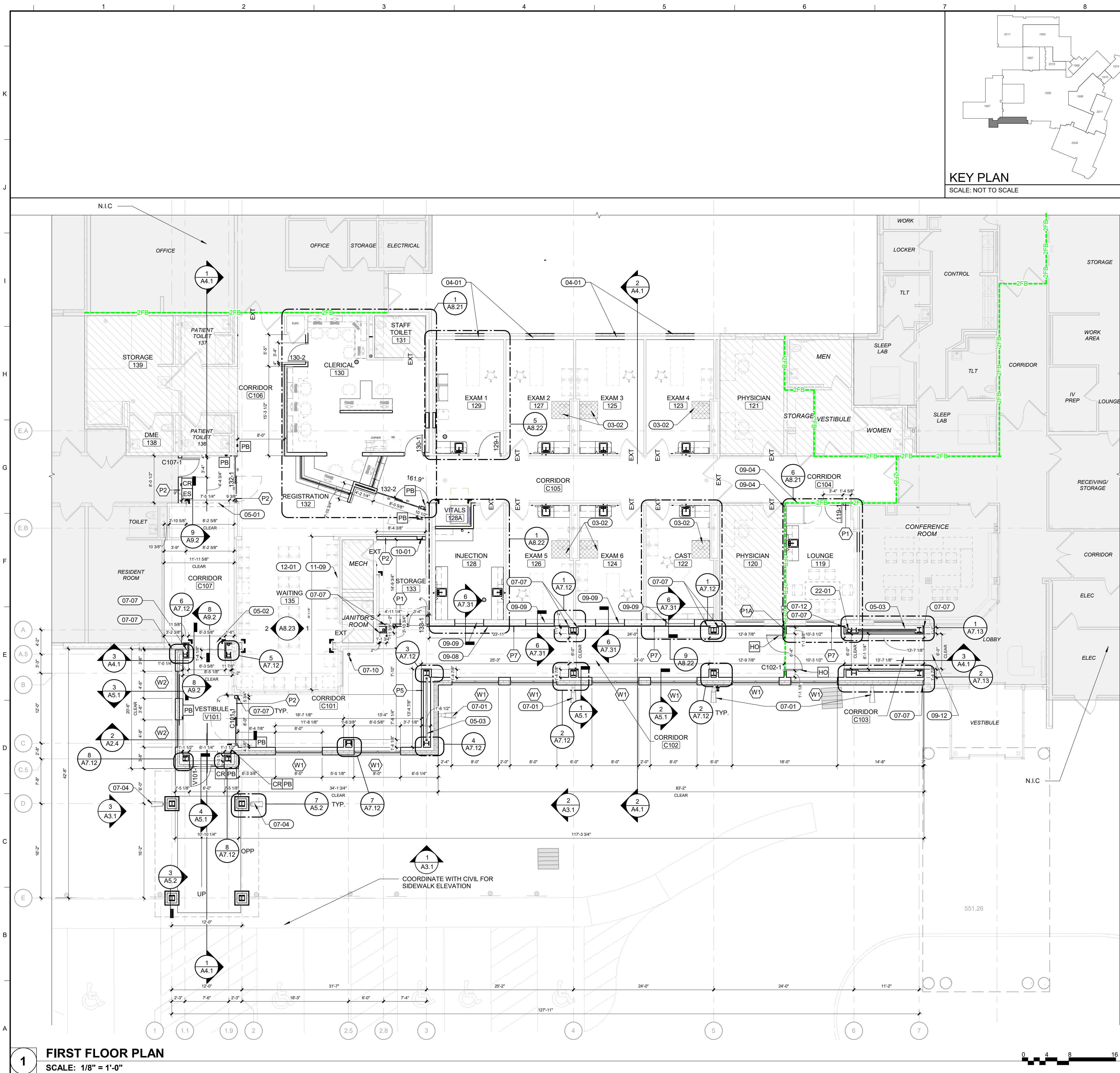
SHEET TITLE:  
**FIRST FLOOR  
DEMOLITION PLAN**

SHEET NUMBER:

AD1.1

PROJECT NO.: 0200707.00





## PLAN GENERAL NOTES

- REFER TO LIFE SAFETY PLANS FOR LOCATION AND DESCRIPTION OF FIRE RATED PARTITIONS AND FIRE SEPARATIONS.
- ALL DIMENSIONS ARE TO FACE OF STUD, CMU AND/OR CONCRETE UNLESS NOTED OTHERWISE. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. ALL NEW WORK SHALL BE PLUMB TRUE, AND LEVEL UNLESS OTHERWISE NOTED.
- EXTEND FIRE RESISTANT CONSTRUCTION TO STRUCTURE ABOVE. EXTEND PARTITIONS AROUND EQUIPMENT, CABINETS, AND OTHER ITEMS THAT PENETRATE THESE PARTITIONS AND FILL VOIDS IN PARTITIONS ABOVE CEILING TO MAINTAIN DESIGNATED FIRE RESISTANCE. SEE LIFE SAFETY SHEET(S) FOR FURTHER FIRE AND SMOKE RESISTANCE INFORMATION.
- PATCH EXISTING ROOFS AS REQUIRED FOR NEW WORK.
- PATCH EXISTING FLOORS AND WALLS, WHERE AFFECTED BY DEMO WORK INCLUDING BUT NOT LIMITED TO REMOVAL OF WALL MOUNTED SIGNS, OR OTHER CONSTRUCTION ELEMENTS ETC.
- DISSIMILAR FLOOR FINISH MATERIALS SHALL MEET UNDER CENTER OF DOOR LEAF.
- CLEAN EXISTING STONE OR BRICK WALL EXPOSED TO VIEW.
- REFER TO STRUCTURAL DRAWINGS FOR FRAMING INFORMATION AND FRAMING DIMENSIONS. HINGE SIDE OF DOOR JAMBS TO BE LOCATED 4" FROM NEAREST WALL INTERSECTION UNLESS OTHERWISE NOTED. FURNITURE IS SHOWN FOR REFERENCE ONLY AND IS NOT IN CONTRACT.
- INSTALL HAND SANITIZER AS REQUIRED. COORDINATE WITH OWNER FOR LOCATIONS.
- NOT UNDER CURRENT SCOPE OF WORK.

## KEYNOTES (BY DIVISION)

DIVISION 03	
03-01	CONCRETE SLAB INFILL AT EXISTING SHOWER LOCATION. COORDINATE THE INFILL WITH THE NEW RECESSED CONCRETE SLAB FOR IN-FLOOR MEDICAL SCALE - SEE STRUCTURAL FOR MORE INFORMATION.
03-02	CONCRETE SLAB INFILL AT EXISTING SHOWER LOCATIONS. TYPICAL AT ALL LOCATIONS
DIVISION 04	
04-01	BASE BID - INFILL PREVIOUS WINDOW LOCATION. MATCH EXISTING WALL WIDTH, TYPE, BRICK INFILL TO BE TOOTHED IN TO MATCH THE SURROUNDING BRICK, PROVIDE A SMOOTH UNINTERRUPTED FINISH. * ALTERNATE - 1 RETAIN ALL WINDOWS INCLUDING SILL.
DIVISION 05	
05-01	PROVIDE STRUCTURAL LINTEL. TOP OF BEAM SHALL BE ONE COURSE BELOW BOTTOM OF PRE CAST PLANK ROOF - SEE STRUCTURAL FOR MORE INFORMATION
05-02	PROVIDE STRUCTURAL LINTEL. FIELD VERIFY EXISTING EXTERIOR WALL PRIOR TO STEEL FABRICATION AND DEMOLITION OF CMU WALL - SEE STRUCTURAL FOR MORE INFORMATION
05-03	STRUCTURAL CROSS BRACING - SEE STRUCTURAL
DIVISION 06	
06-01	PROVIDE BLOCKING FOR GRAB BARS - COORDINATE WITH OWNER FOR LOCATION (CFCI)
06-02	SLOPED PLAM CLOSURE PANEL (CFCI) - SEE DETAIL FOR NOTES
06-03	GROMMET FOR EACH WORKSTATION
DIVISION 07	
07-01	6" DOWNSPOUT WITH CEMENT SPLASH BLOCK - DRAIN TO GRADE
07-02	PARAPET SCUPPER AND CONDUCTOR HEAD - 16"x12"
07-03	FULLY ADHERED MEMBRANE ROOF SYSTEM OVER R-30 LTTR RIGID ROOF INSULATION, SLOPED TO DRAIN 1/4":1'-0" MIN
07-04	4" DOWNSPOUT WITH CEMENT SPLASH BLOCK - DRAIN TO GRADE
07-05	2" ROOF EXPANSION JOINT, AT ALL LOCATIONS WHERE ORTHO ADDITION CONNECTS TO EXISTING BUILDING. TYPICAL
07-06	GUTTER
07-07	2" WALL EXPANSION JOINT, AT ALL LOCATIONS WHERE ORTHO ADDITION CONNECTS TO EXISTING BUILDING. TYPICAL
07-08	ADD TAPERED RIGID INSULATION AND ROOF MEMBRANE TO THE EXISTING SOLARIUM ROOF TO DRAIN INTO NEW ROOF - FIELD VERIFY.
07-09	SEPARATE ROOF INFILL WITH LIGHT GAUGE STUD JOISTS - SEE STRUCTURAL
07-10	INTUMESCENT FIRE PROOFING AROUND THE COLUMN
07-11	2" CEILING EXPANSION JOINT, AT ALL LOCATIONS WHERE ORTHO ADDITION CONNECTS TO EXISTING BUILDING. TYPICAL
07-12	2" FIRE RATED WALL EXPANSION JOINT AND JOINT COVER ON EACH SIDE OF PARTITION.
07-13	ROOF CURB AT MECHANICAL PENETRATION
07-14	DUCT SUPPORT ROOF CURBS, PATCH EXISTING ROOFING - MAX 8'-0" ON CENTER
07-15	ADD TAPERED RIGID INSULATION AND ROOF MEMBRANE TO THE ADJACENT EXISTING COPING HEIGHT TO DRAIN INTO EXISTING ROOF - FIELD VERIFY.
DIVISION 08	
08-01	APPLY GLAZING SURFACE FILM ON THE TOP SPANDREL OF THE EXISTING STOREFRONT AS SHOWN (CFCI) - SEE INTERIORS
DIVISION 09	
09-01	EXISTING BULKHEAD TO REMAIN
09-02	12" AXION TRIM TO SPAN VERTICALLY BETWEEN CEILING AND THE TOP OF GLAZING, FULL DISTANCE - SEE DETAIL ON SHEET A9.31
09-03	EXISTING ACT TO REMAIN. REMOVE AND REINSTALL AS REQUIRED FOR ABOVE CEILING MECHANICAL WORK.
09-04	REMOVE AND REPLACE EXISTING CEILING AS NEEDED TO UPGRADE EXISTING WALLS TO 2-HOUR FIRE RATING.
09-05	INFILL EXISTING OPENING WITH METAL STUD WALL OF SIMILAR WIDTH AND TYPE. FINISHES TO MATCH EXISTING. PROVIDE A SMOOTH UNINTERRUPTED FINISH.
09-06	GYP BULKHEAD TO CONCEAL ROOF DRAIN
09-07	EXISTING WALL PROTECTION TO REMAIN IN ALL EXAM ROOMS AND CAST ROOM.
09-08	5/8" GYP BOARD ON 7/8" FURRING CHANNEL ALONG THE LENGTH OF THE WALL. EXTEND 6" ABOVE CEILING.
09-09	INFILL PREVIOUS WINDOW LOCATION WITH GYP BOARD ON ONE SIDE OF METAL STUDS AT EACH SIDE OF EXISTING WALL. MATCH EXISTING WALL WIDTH. PROVIDE A SMOOTH UNINTERRUPTED FINISH
09-10	INFILL EXISTING DOOR OPENING WITH GYP BOARD ON ONE SIDE OF METAL STUD FOR EACH SIDE OF THE FORMER DOOR OPENING. MATCH EXISTING WALL WIDTH. PROVIDE A SMOOTH UNINTERRUPTED FINISH
09-11	2" AXION TRIM TO SPAN THE CEILING GAP BETWEEN THE EXISTING SOLARIUM AND THE NEW CORRIDOR ADDITION.
09-12	PATCH EXISTING FINISHES WHERE STOREFRONT WAS REMOVED.
DIVISION 10	
10-01	FIRE EXTINGUISHER CABINET - FULLY RECESSED
10-02	SHARPS CONTAINER (OFOI)
DIVISION 11	
11-01	REFRIGERATOR (OFOI)
11-02	WALL MOUNTED MONITOR - PROVIDE BLOCKING IN WALL (OFCI)
11-03	SOLACE IN-FLOOR 3'-0"x3'-0" MEDICAL SCALE (OFCI) - REFER STRUCTURAL FOR FOUNDATION AND ELECTRICAL FOR POWER REQUIREMENTS
11-04	EXAM TABLE (OFCI)
11-05	MOBILE COMPUTER STAND (OFCI)
11-06	SHREDDER BIN (OFOI)
11-07	COPIER (OFOI)
11-08	COMPUTER - SHOWN FOR REFERENCE (OFOI)
11-09	WALL MOUNTED TV (OFOI) - PROVIDE NECESSARY BLOCKING.
DIVISION 12	
12-01	WAITING ROOM CHAIRS (OFOI)
12-02	DINING TABLE AND CHAIRS (OFOI)
12-03	SYSTEMS FURNITURE - WORK DESK AND CABINETS (OFOI) - PROVIDE NECESSARY BLOCKING. COORDINATE WITH OWNER FOR LOCATION
DIVISION 22	
22-01	RE-ROUTED STORM PIPE - SEE PLUMBING

## FIRST FLOOR PLAN

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

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1 02/01/2021 ADD 01

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01/15/2021

PROJECT:  
Crawford Memorial Hospital

**CMH - Ortho Clinic**  
**Addition and**  
**Renovation**

1000 N Allen Street  
Robinson, IL 62454

DATE: 01/15/2021  
DESIGNED: APH/DGB  
DRAWN: APH/KEC  
REVIEWED: MCR/DGB

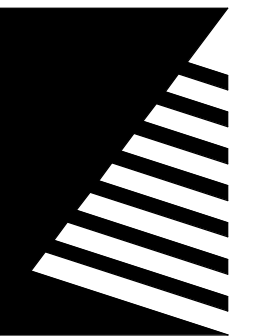
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**FIRST FLOOR PLAN**

SHEET NUMBER:

**A1.1**

PROJECT NO.: 0200707.00





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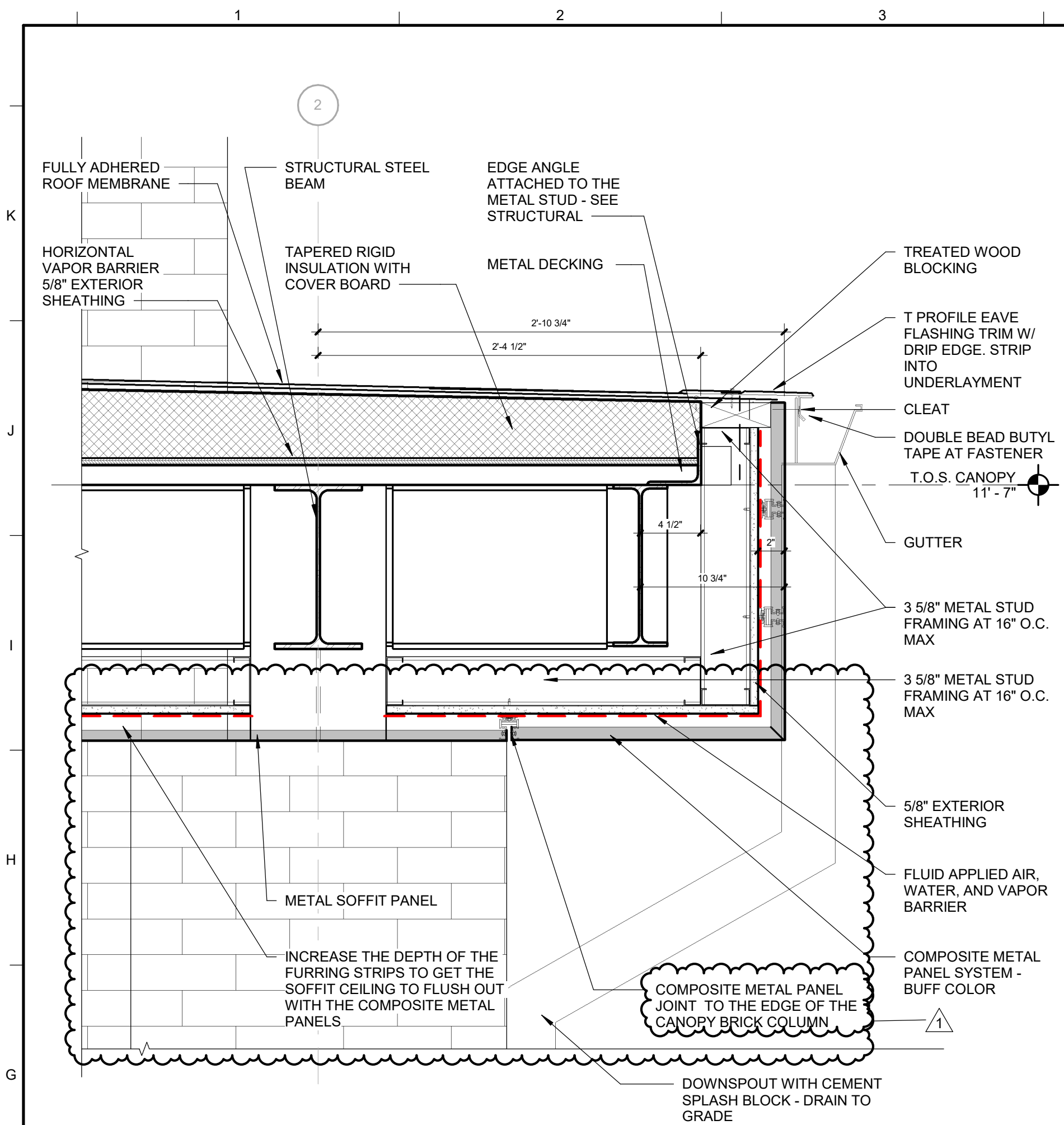
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DATE: 01/15/2021  
DESIGNED: APH/DGB  
DRAWN: APH  
REVIEWED: DGB/MCB

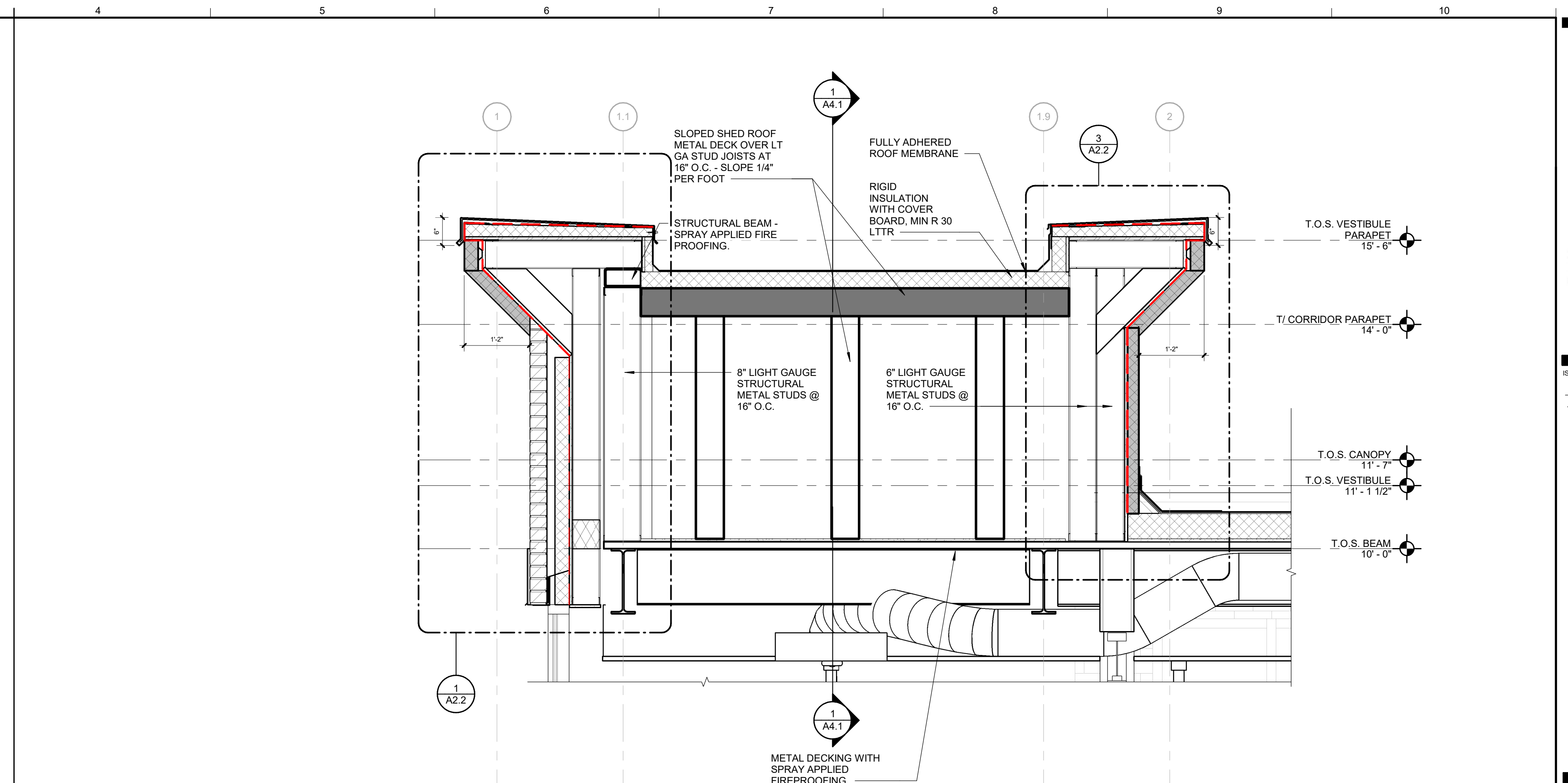
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**ENLARGED  
VESTIBULE PARAPET  
SECTIONS & CANOPY  
DETAILS**

SHEET NUMBER:

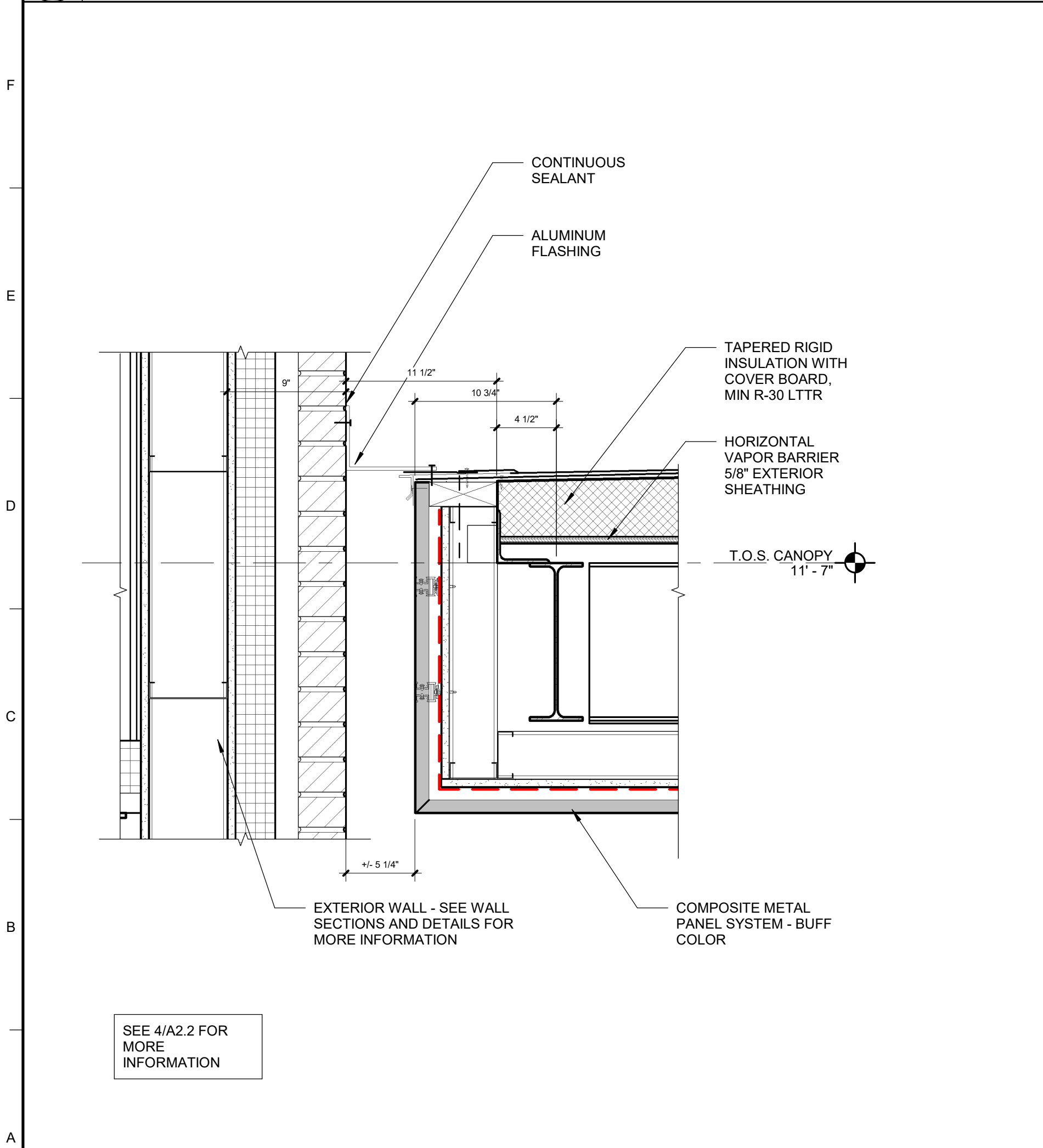
PROJECT NO.: 0200707.00



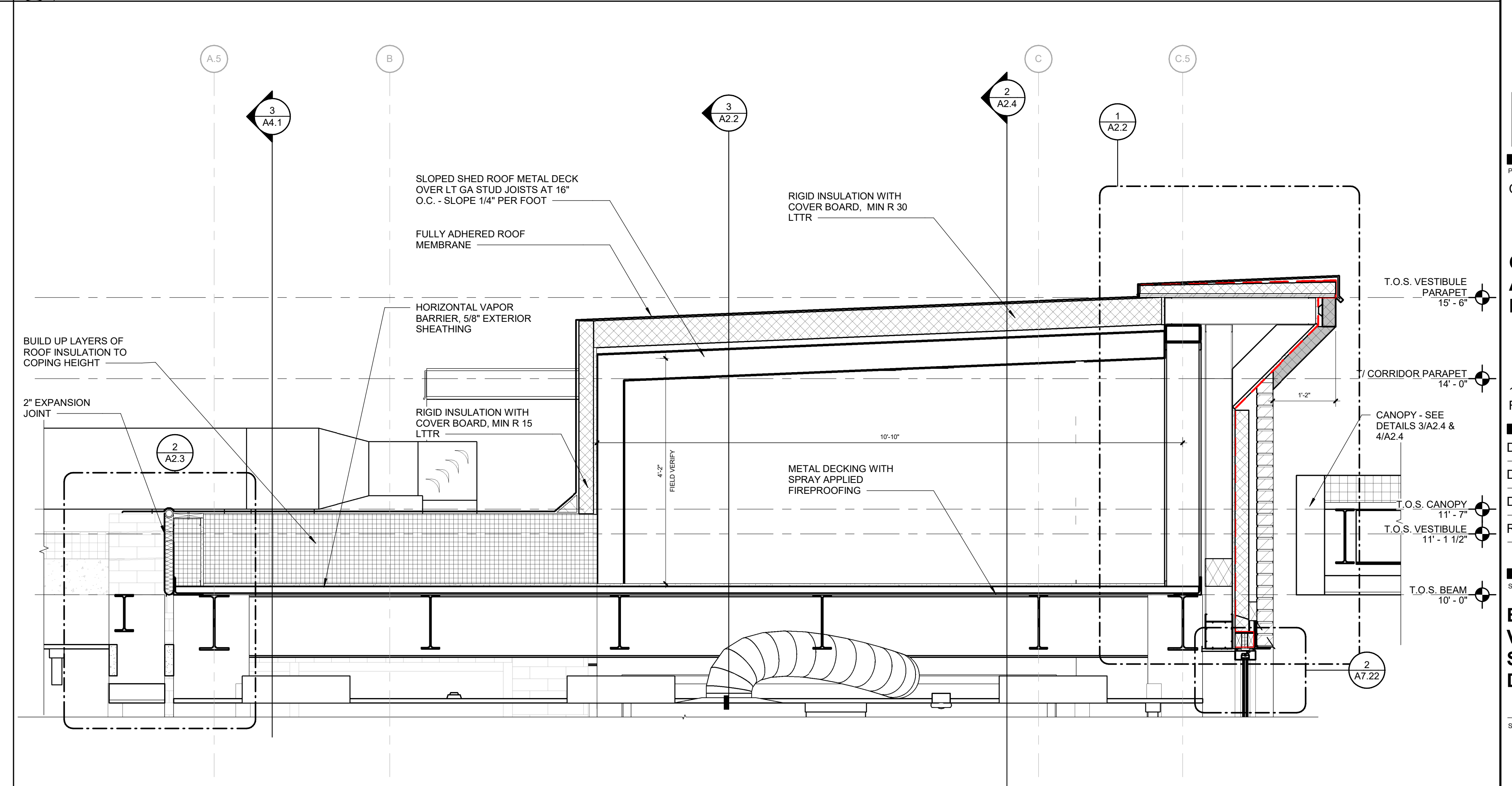
**4 CANOPY EAVE DETAIL**  
SCALE: 1 1/2" = 1'-0"



**2 SECTION THROUGH VESTIBULE ROOF**  
SCALE: 3/4" = 1'-0"



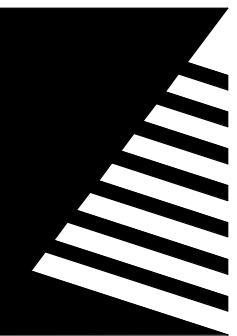
**3 CANOPY EAVE ENCLOSURE DETAIL AT THE VESTIBULE WALL**  
SCALE: 1 1/2" = 1'-0"



**1 SECTION THROUGH VESTIBULE ROOF - EAST WEST**  
SCALE: 3/4" = 1'-0"

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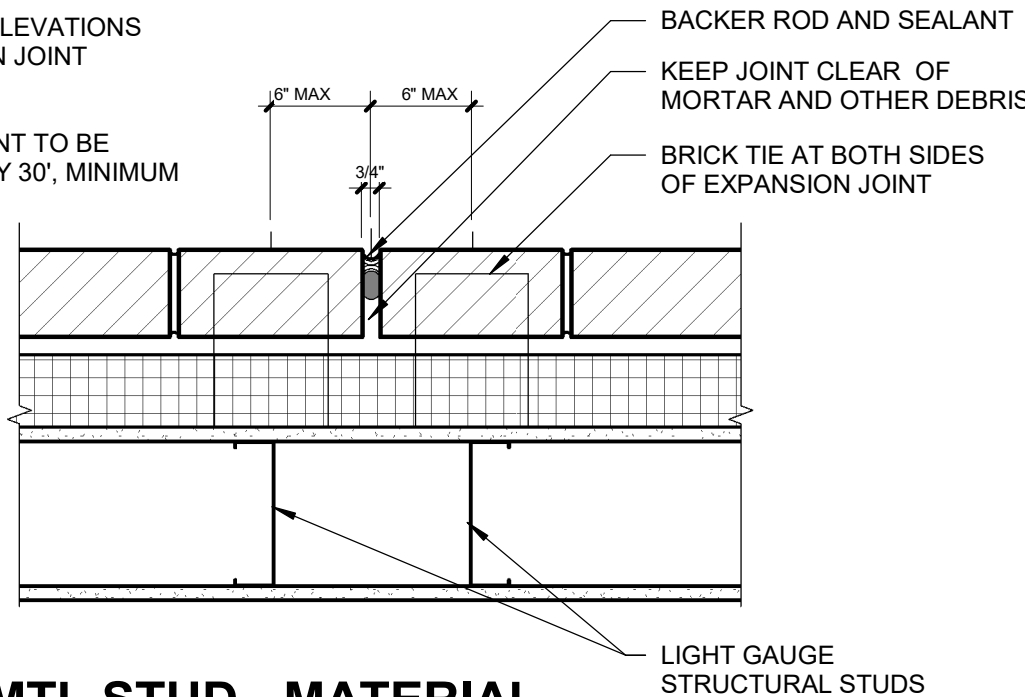
SHEET TITLE:  
EXTERIOR DETAILS -  
BRICK/MTL STUD

SHEET NUMBER:

A5.2

PROJECT NO.: 0200707.00

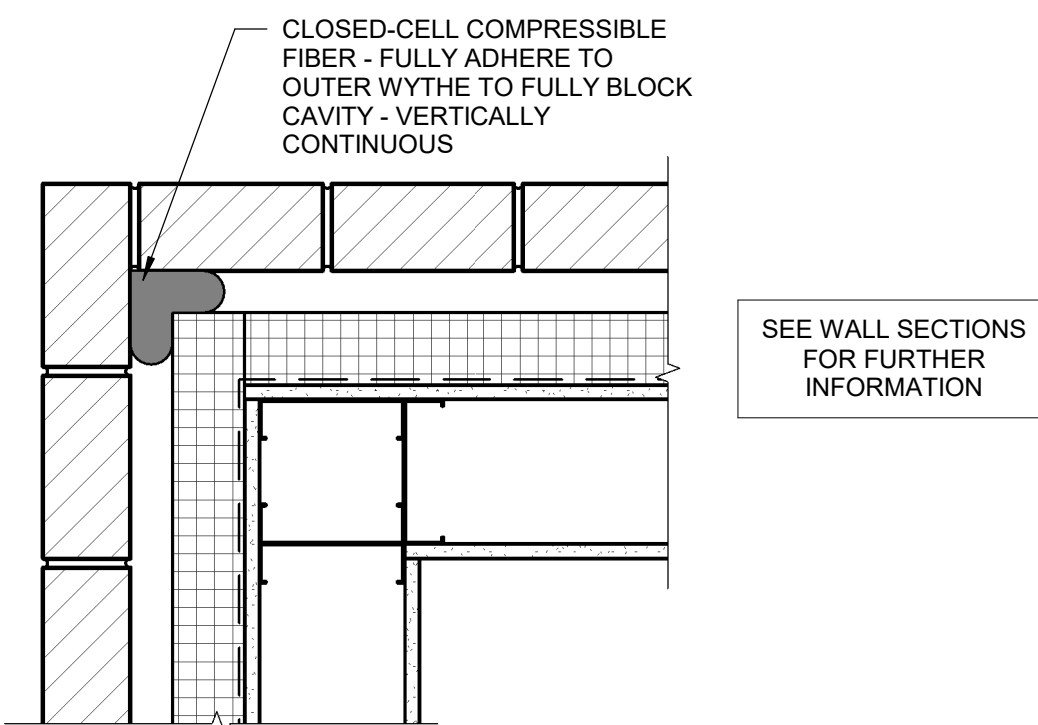
- NOTE:  
1. SEE BUILDING ELEVATIONS  
FOR EXPANSION JOINT  
LOCATIONS.  
2. EXPANSION JOINT TO BE  
LOCATED EVERY 30', MINIMUM



HD - BRICK/ MTL STUD - MATERIAL  
EXPANSION JOINT

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

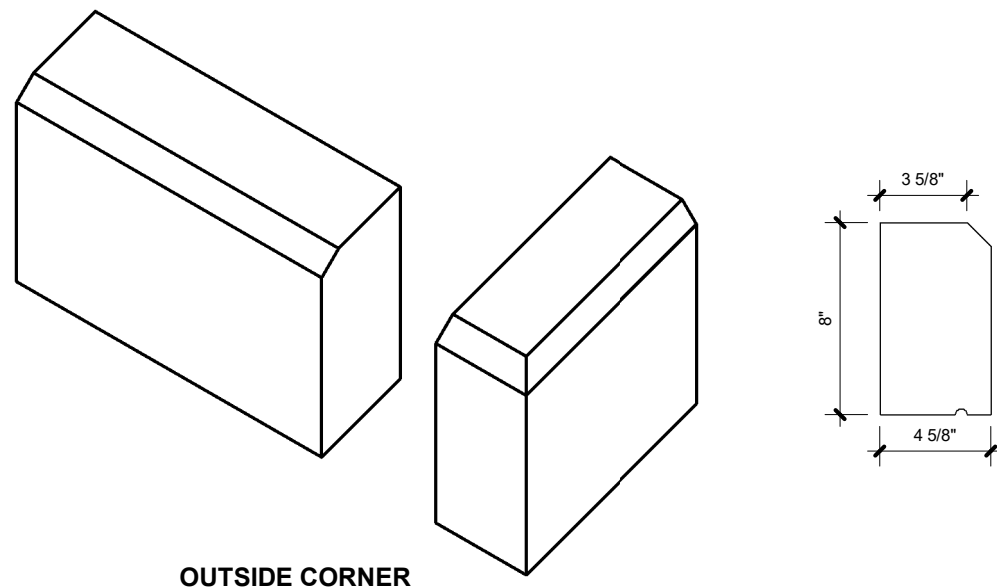
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HD - BRICK/ STUD - EXT CORNER

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

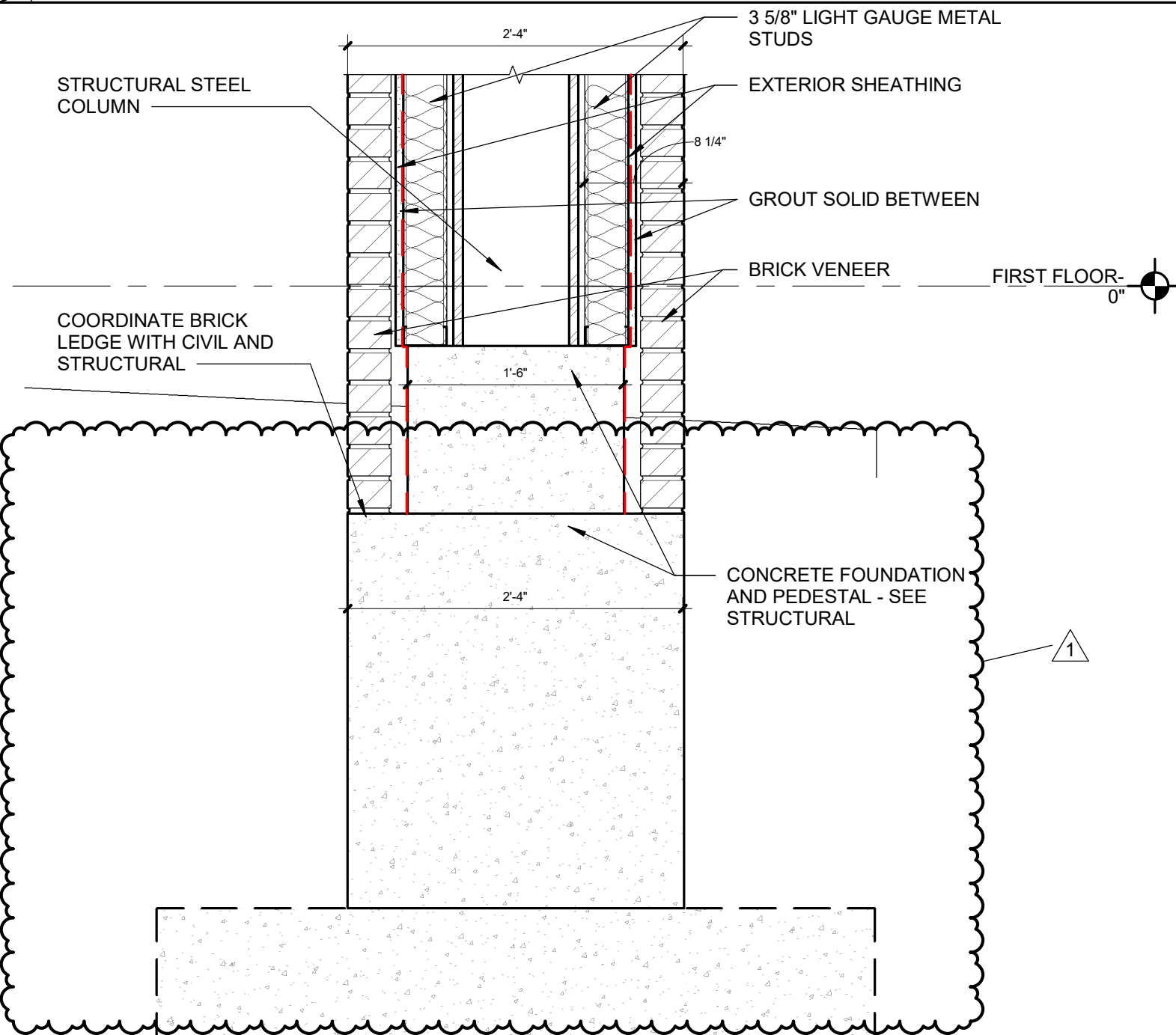
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CAST STONE TRIM BAND

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

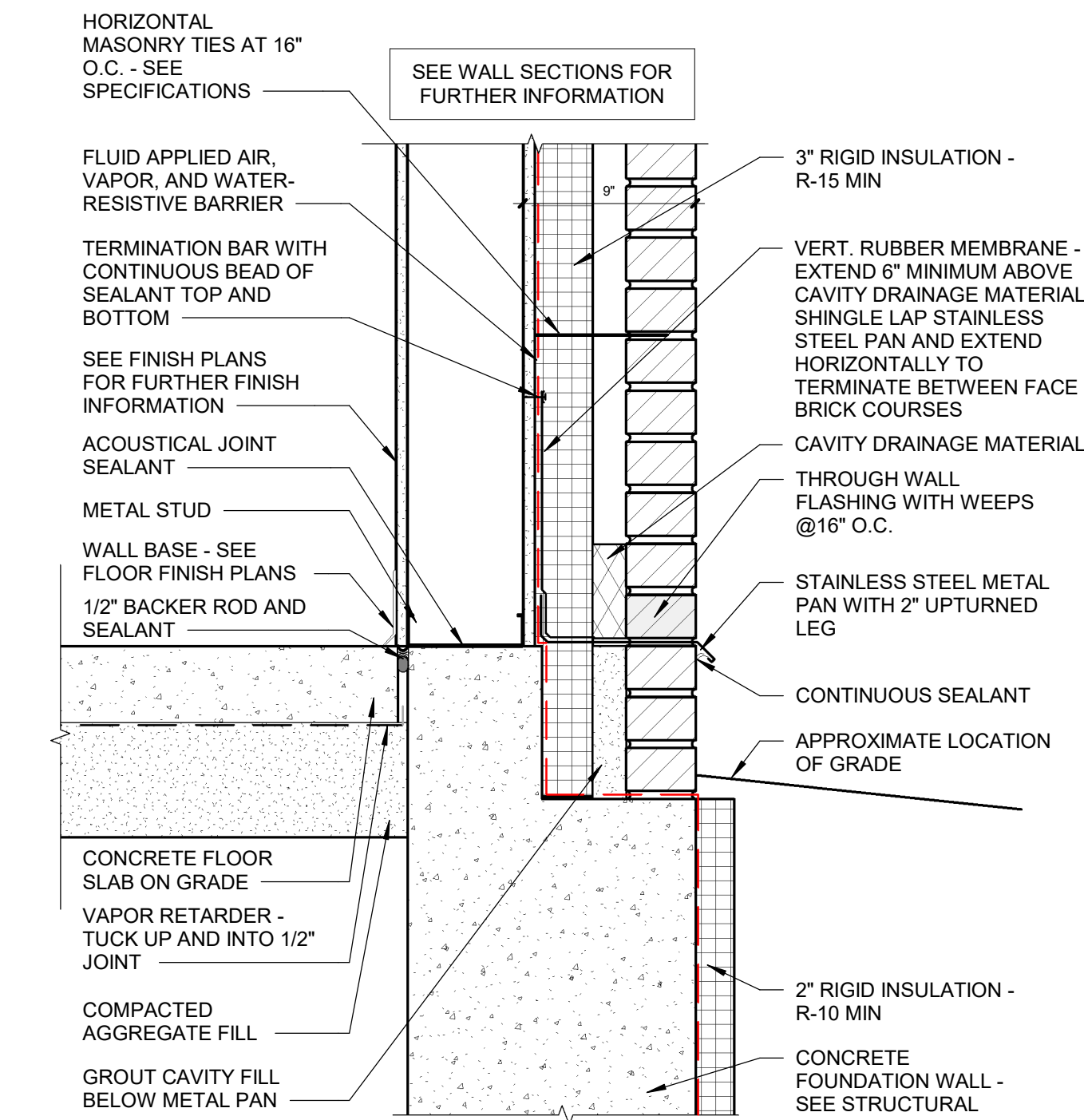
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WB - CANOPY COLUMN

SCALE: 1" = 1'-0"

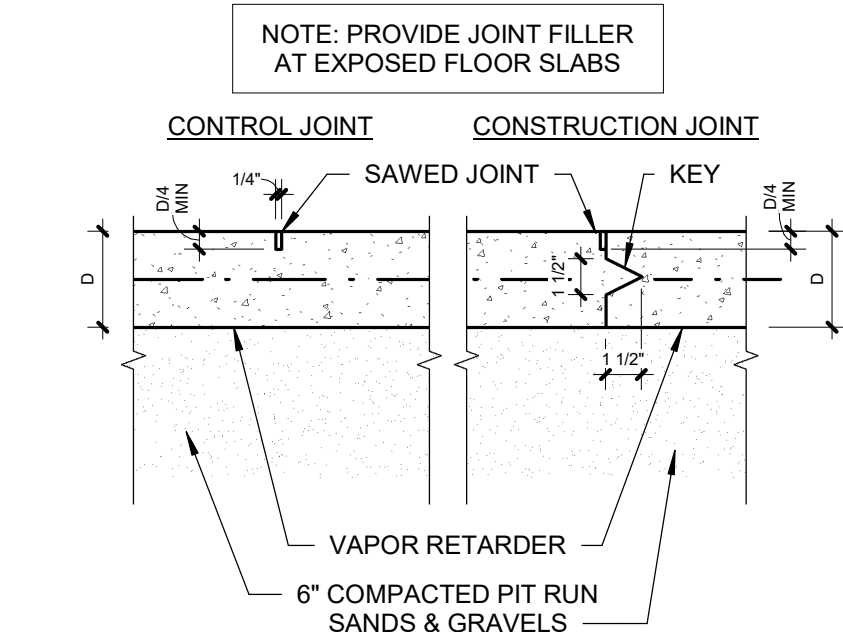
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WB - BRICK/ MTL STUD - GRADE

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

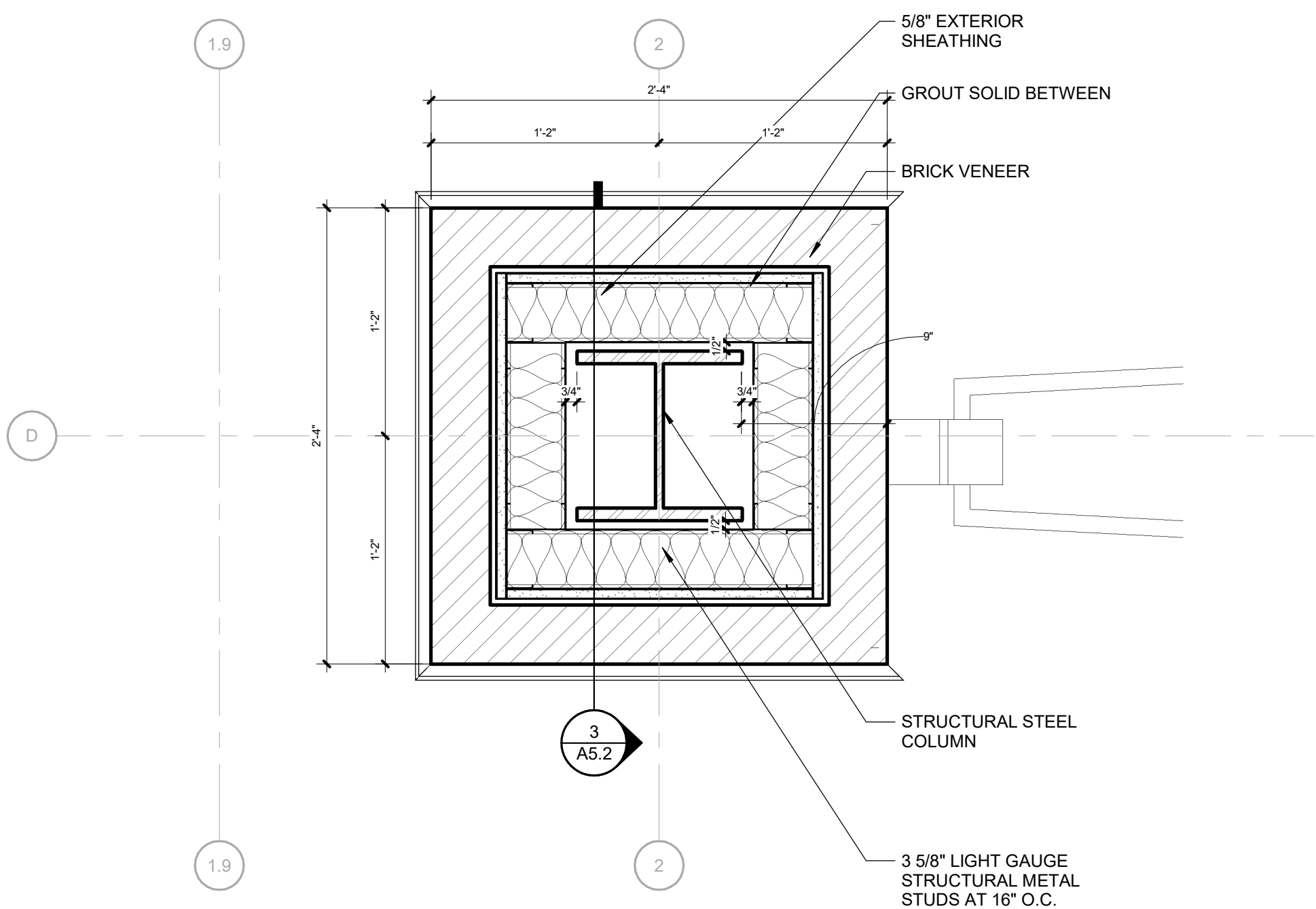
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TYPICAL  
CONCRETE  
FLOOR JOINTS

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

8



ENLARGED CANOPY COLUMN - TYPICAL

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

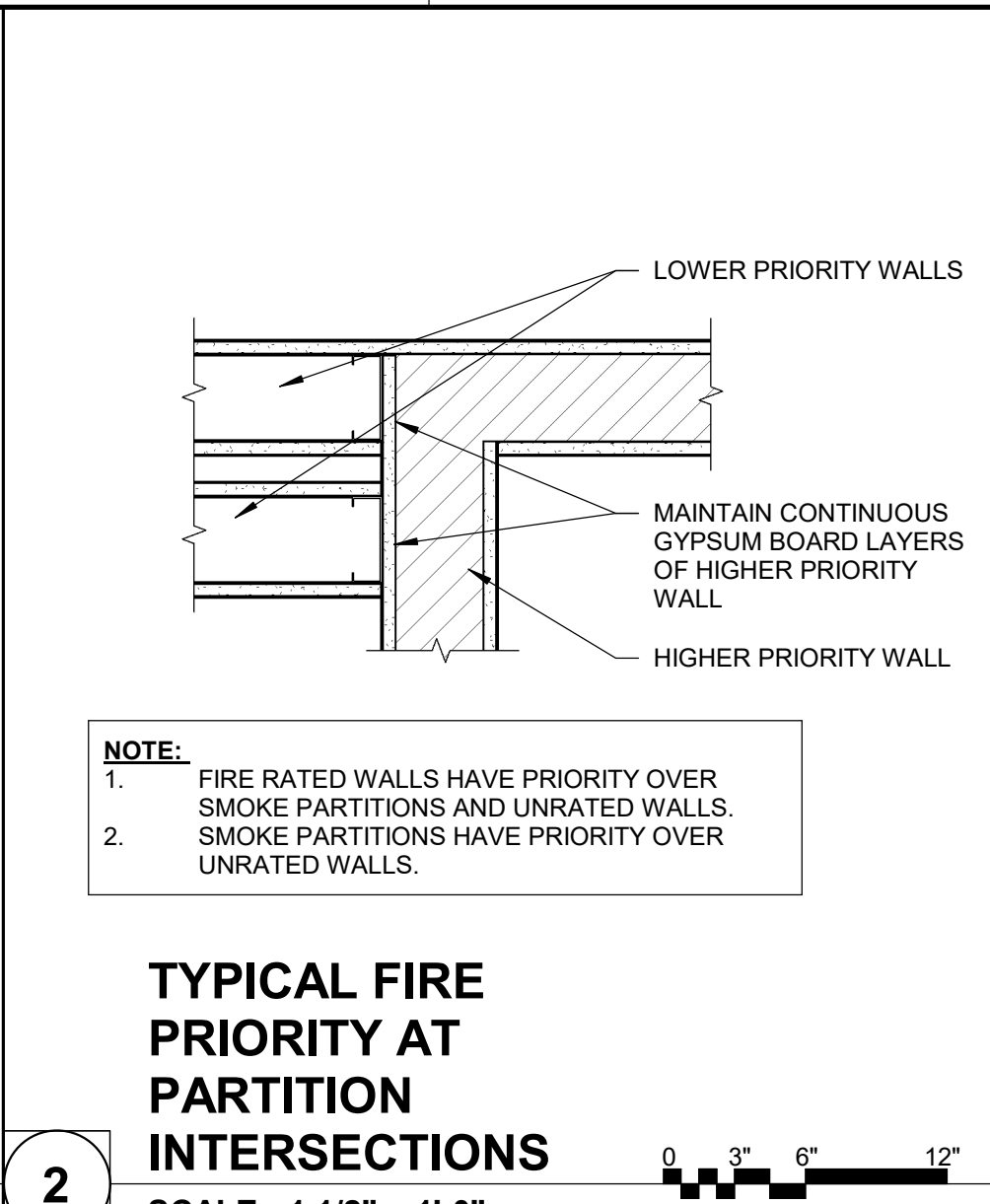
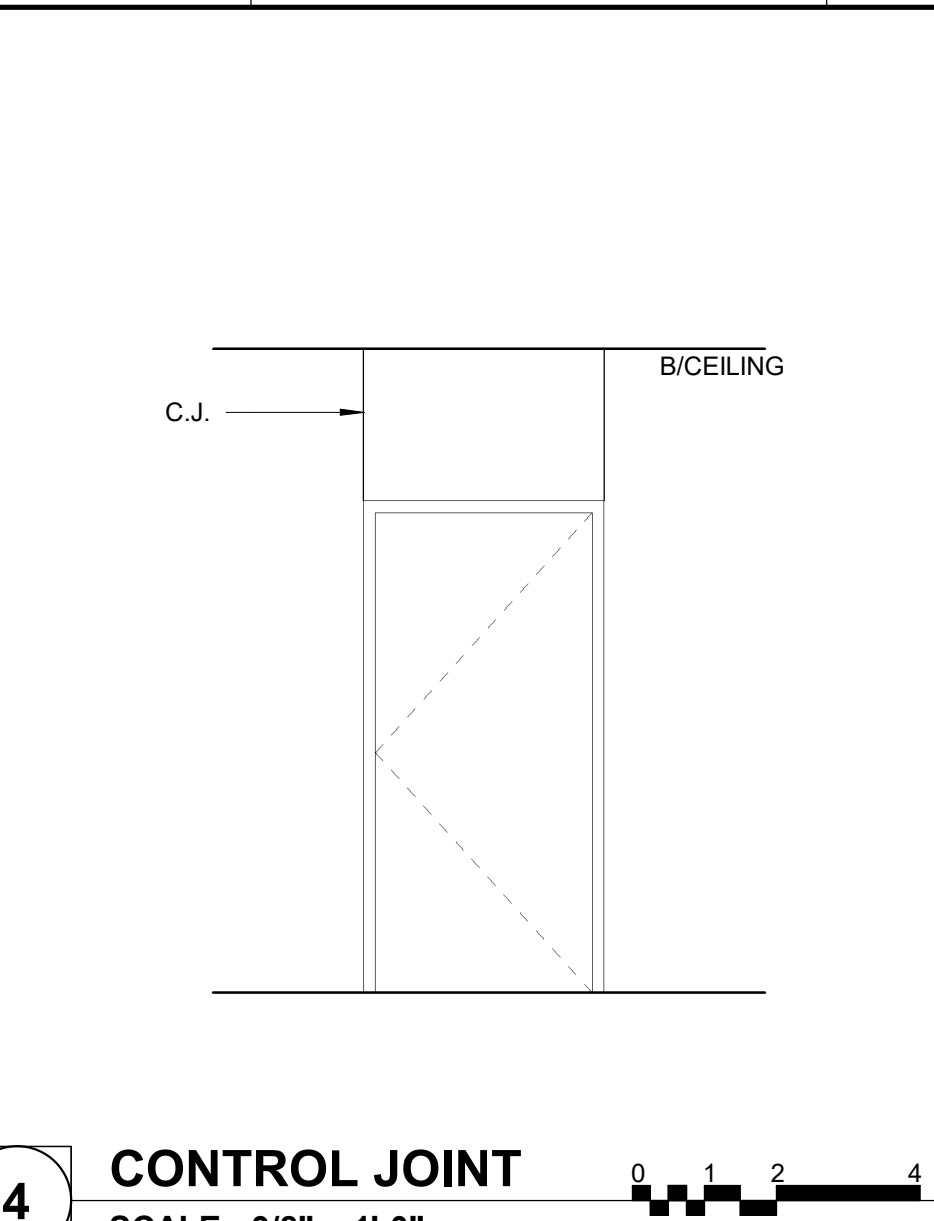
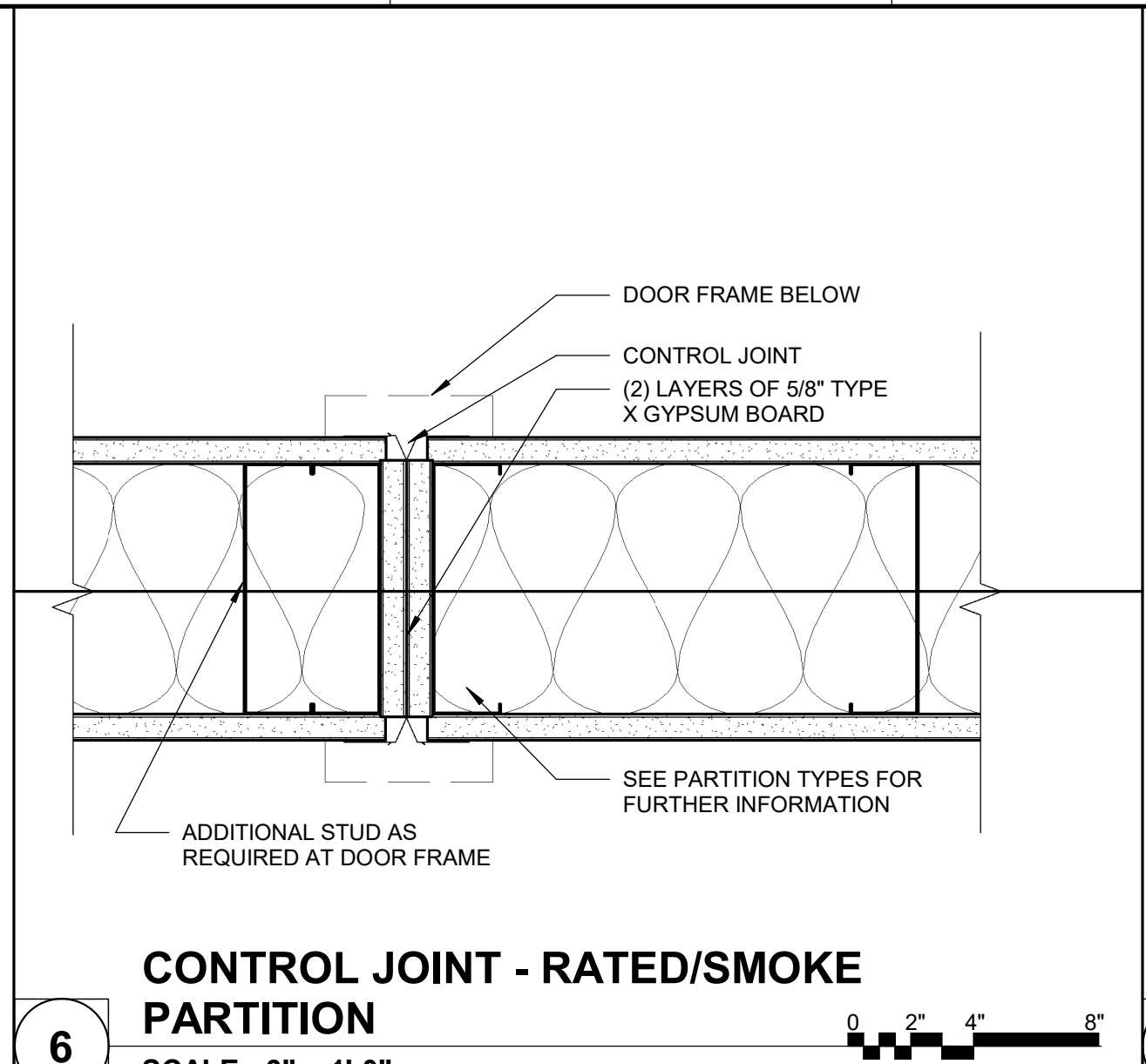
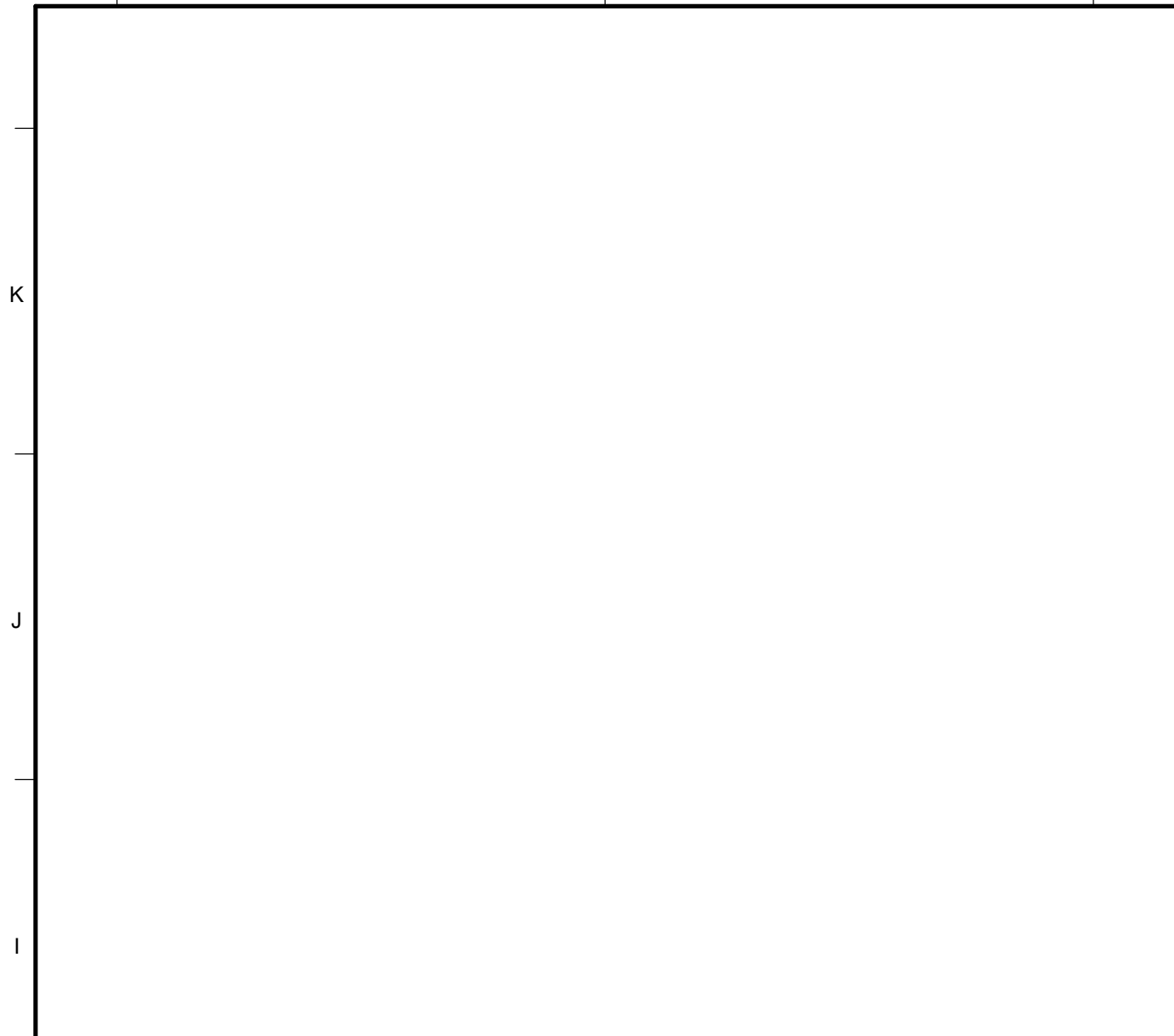
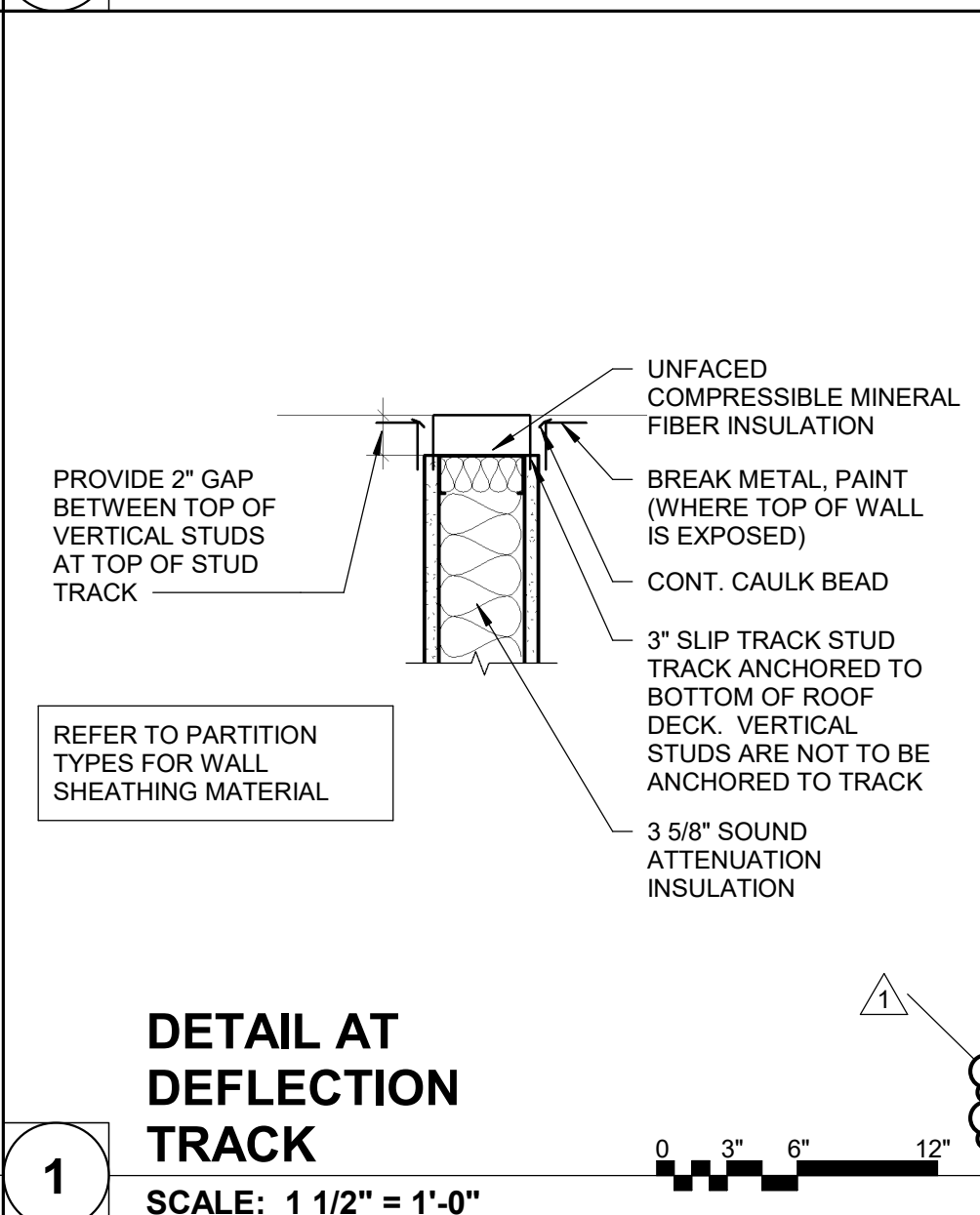
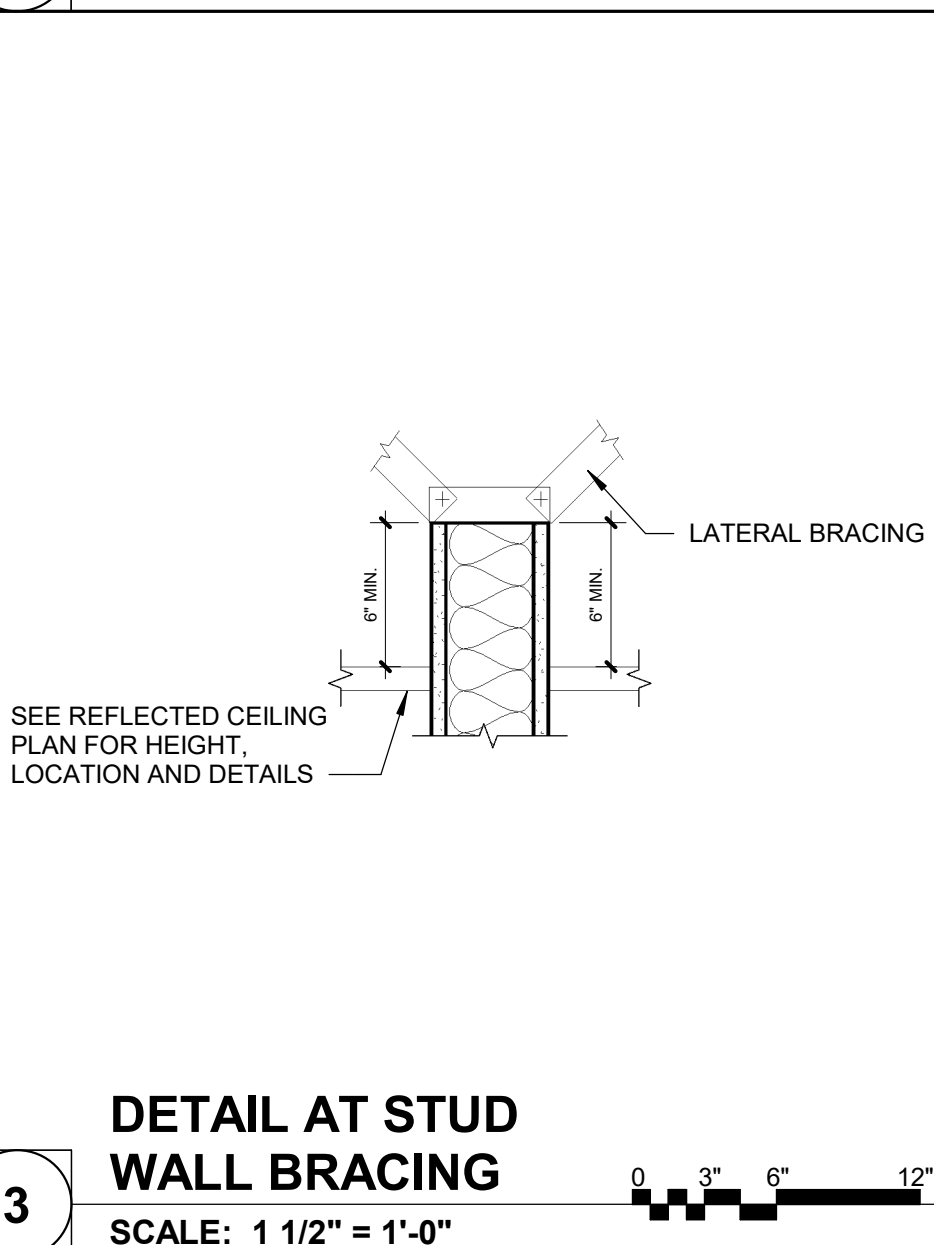
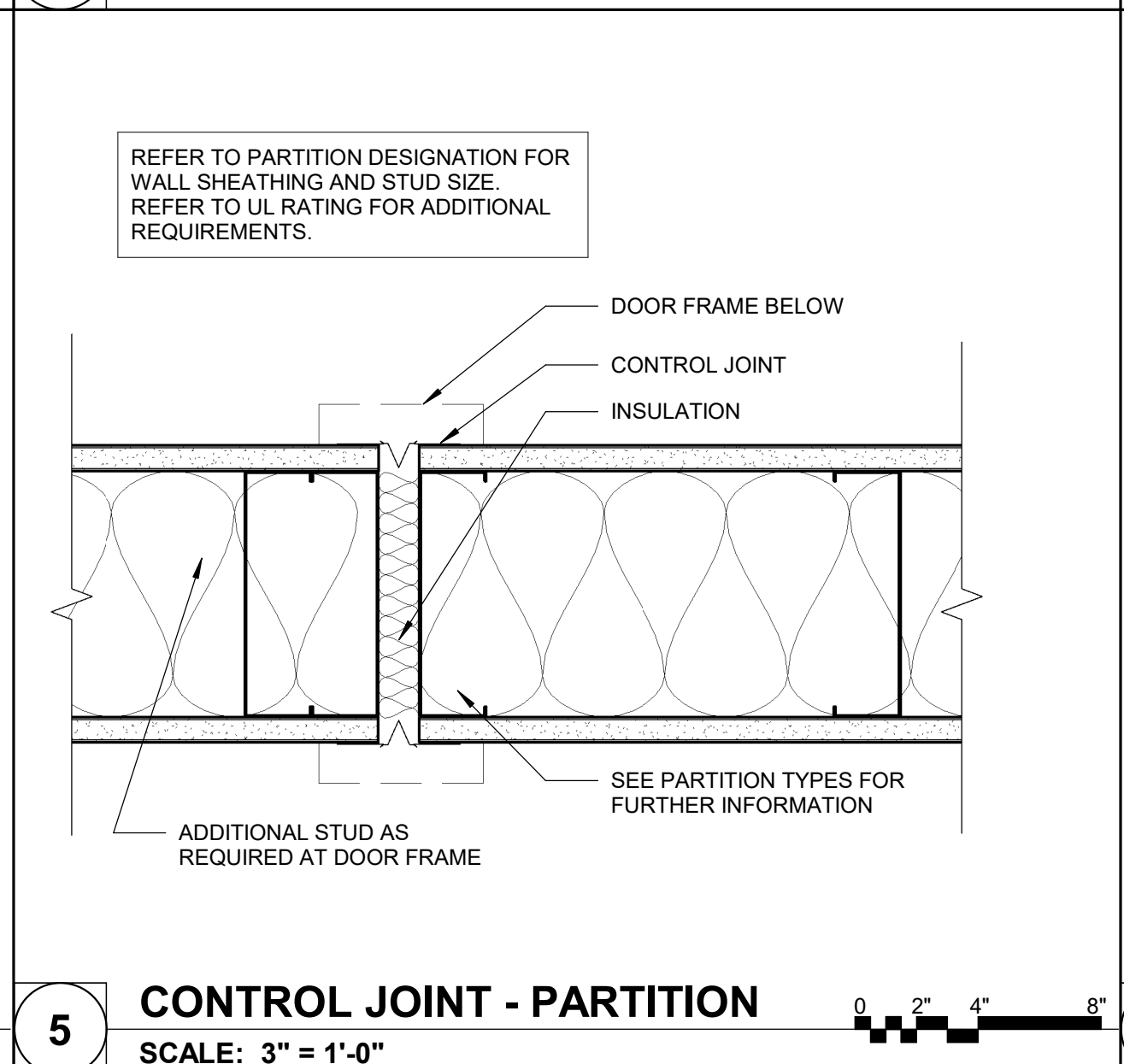
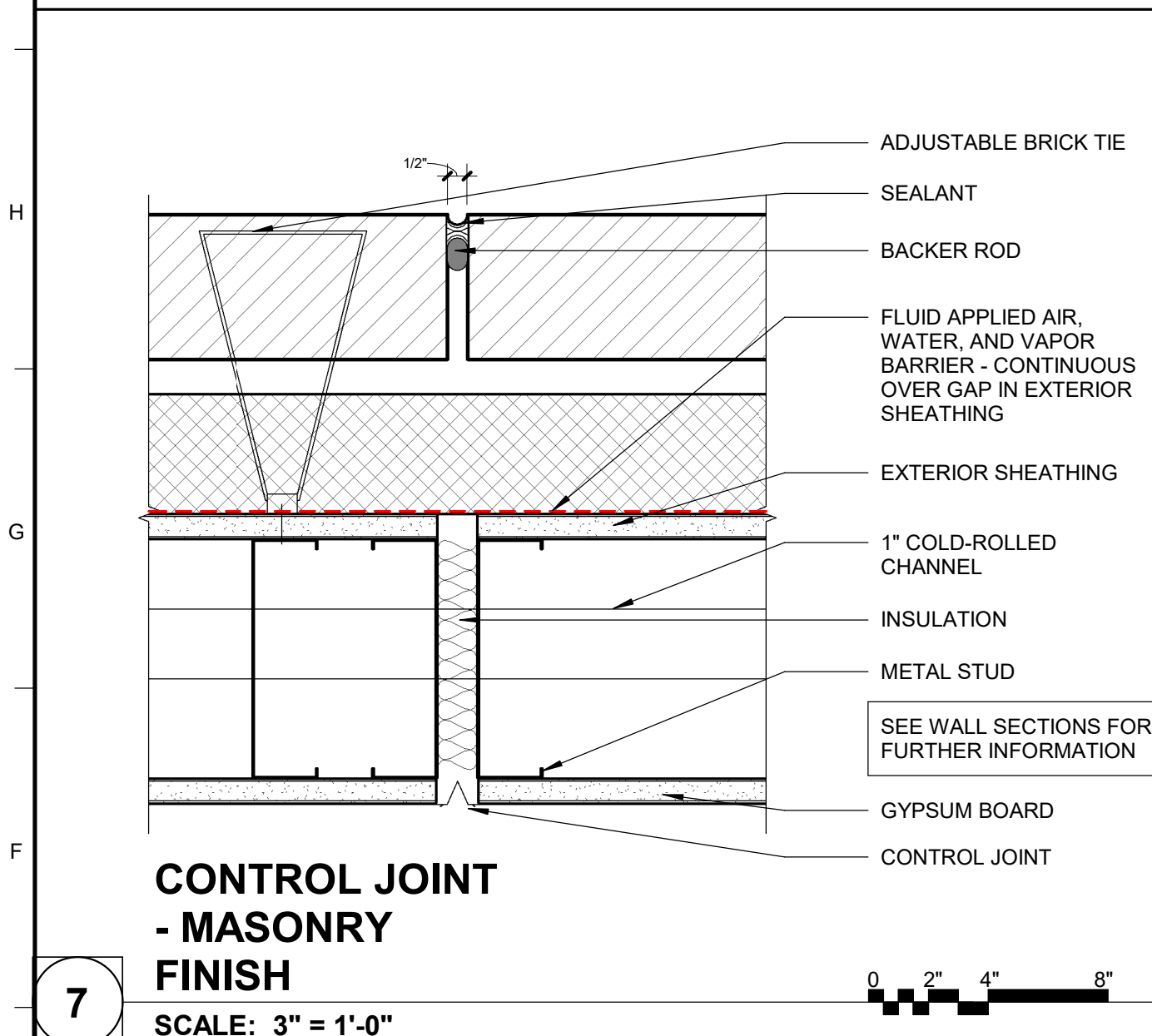
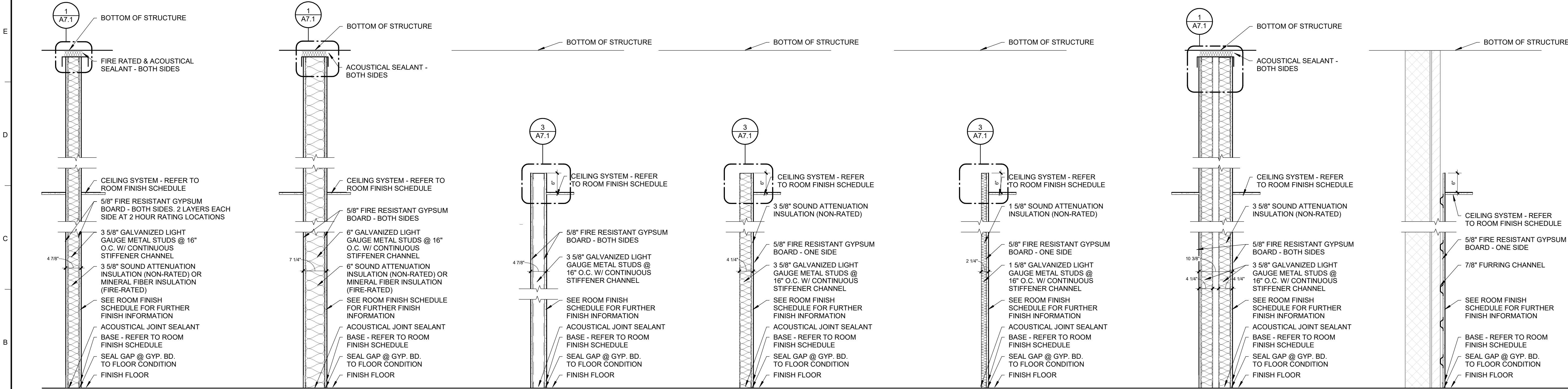
7

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PARTITION TYPES

- P1 2 HOUR RATED WHERE NOTED  
# SOUND ATTENUATION BATT INSULATION  
P1A FIRE RATED WALL SHALL ADHERE TO UL U419



- PARTITION TYPE NOTES**
- AT ALL FIRE RATED SEPARATIONS, EXTEND GYPSUM BOARD THROUGH ALL CHASES AND WALL INTERSECTIONS TO PROVIDE A CONTINUOUS UNINTERRUPTED LAYER OF 5/8" GYPSUM BOARD ON EACH SIDE OF THE PARTITION AND SEPARATION. SEAL ALL PENETRATIONS WITH APPROVED U.L. LISTED SEALANT AND/OR SEALANT ASSEMBLIES.
  - AT ALL SMOKE SEPARATIONS, EXTEND GYPSUM BOARD THROUGH ALL CHASES AND WALL INTERSECTIONS TO PROVIDE A CONTINUOUS UNINTERRUPTED LAYER OF 5/8" GYPSUM BOARD ON EACH SIDE OF THE PARTITION AND SEPARATION. SEAL ALL PENETRATIONS WITH APPROVED U.L. LISTED SEALANT AND/OR SEALANT ASSEMBLIES TO LIMIT THE PASSAGE OF SMOKE.
  - CONTROL JOINTS SHALL BE INSTALLED AT ALL CONSTRUCTION CHANGES WITHIN A PLANE OF PARTITION OR CEILING. AT PARTITION RUNS THAT EXCEED 30'-0" IN LENGTH, CEILING DIMENSIONS THAT EXCEED 50' IN EITHER DIRECTION WITH PERIMETER RELIEF AND 30' WITHOUT, AT WINGS OF "L", "U" AND "T" SHAPED CEILING AREAS, AT BUILDING EXPANSION OR CONTROL JOINTS. CONTROL JOINTS SHALL BE INSTALLED AT EACH DOOR FROM OUTSIDE CORNER OF THE TOP OF DOOR JAMB TO ABOVE CEILING. REFER TO PUBLISHED CONTROL JOINT DETAILS IN GA 600-900 FIRE RESISTANCE DESIGN MANUAL.
  - CONTRACTOR SHALL PROVIDE ADDITIONAL MATERIALS TO MAINTAIN THE APPROPRIATE FIRE RATING WHERE CONTROL JOINTS ARE LOCATED IN FIRE-RATED PARTITIONS. INSTALLATION SHALL BE PER THE DETAILS SHOWN IN THE LATEST PUBLICATION OF THE USG CONSTRUCTION HANDBOOK, GYPSUM ASSOCIATION PUBLICATION OR UNDERWRITERS LABORATORY FIRE RESISTANCE DIRECTORY AND AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.
  - AT UL LISTED RATED ASSEMBLIES, THE CONTRACTOR IS TO VERIFY THE GYPSUM BOARD TYPE AND MANUFACTURER BASED ON THE WRITTEN DESCRIPTIONS FOR THE APPROPRIATE UL LISTED ASSEMBLY RATING SPECIFICATIONS FOUND IN THE LATEST EDITION OF THE UNDERWRITERS LABORATORY FIRE RESISTANCE DIRECTORY.
  - AT THE BASE AND HEAD OF ALL WALLS REQUIRING SOUND ATTENUATION INSULATION, ENSURE THAT THE GYPSUM WALL PANELS ARE NOT OFFSET FROM THE SUBFLOOR OR THE STRUCTURE ABOVE MORE THAN 1/2". IF CONSTRUCTION CONDITIONS REQUIRE THE GYPSUM WALL PANELS TO BE OFFSET MORE THAN 1/2", PROVIDE A CONTINUOUS BEAD OF BACKER ROD AND SEALANT TO PREVENT THE WALL BASE FROM DEFLECTING INTO THE CAVITY.
  - AT THE BASE OF ALL WALLS NOT REQUIRING SOUND ATTENUATION INSULATION, ENSURE THAT THE GYPSUM BOARD WALL PANELS ARE NOT OFFSET FROM THE SUBFLOOR GREATER THAN 1/2". IF CONSTRUCTION CONDITIONS REQUIRE THE GYPSUM BOARD WALL PANELS TO BE INSTALLED WITH AN OFFSET GREATER THAN 1/2", PROVIDE A CONTINUOUS BEAD OF BACKER ROD AND SEALANT TO PREVENT THE WALL BASE FROM DEFLECTING INTO THE CAVITY.
  - PROVIDE RED ROSIN PAPER OR SIMILAR MATERIAL BETWEEN DISSIMILAR MATERIALS.
  - PROVIDE 5/8" FIRE RATED MOISTURE RESISTANT/MOLD RESISTANT GYPSUM BOARD AT ALL LOCATIONS WHERE WATER PRODUCING DEVICES MAY BE PRESENT OR SPLASHED ONTO THE WALL SURFACE (I.E. WATER COOLERS, SINKS, LAVATORIES, HOSE BIBS, ETC.). EXTEND GYPSUM BOARD A MINIMUM OF 4'-0" IN ALL DIRECTIONS FROM CENTER OF DEVICE.
  - EXTEND FIRE RATED PARTITIONS, BARRIERS AND OTHER SEPARATIONS TO BOTTOM OF ROOF DECK ABOVE AND TO EXTERIOR WALL. EXTEND GYPSUM BOARD TO FURTHEST EXTENT POSSIBLE AND AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.
  - PROVIDE CONTINUOUS STIFFENER CHANNELS AT 4'-0" MAXIMUM VERTICAL SPACING, TYPICAL. ALSO PROVIDE AT MIDPOINT BETWEEN BOTTOM OF STRUCTURE AND HEAD OF INTERIOR WINDOWS AND DOORS AS WELL AS HINGE MIDPOINT AT DOORS. IF DOOR OPENING IS OVER 4'-0" LONG, PROVIDE STIFFENER CHANNELS AT ALL HINGE POINTS FOR MINIMUM OF 2 STUD SPACES.
  - AT ALL INTERSECTIONS WITH CEILINGS, PROVIDE METAL STUD FIRE BLOCKING AT NO GREATER THAN 8'-0" APART AND AS REQUIRED BY THE FIRE RATED ASSEMBLY.
  - ON FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS, AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS, PROVIDE EFFECTIVE AND PERMANENT IDENTIFICATION WITH SIGNS OR STENCILING AS REQUIRED BY CODE.
  - ALL GYPSUM BOARD TO BE MOLD RESISTANT TYPE.

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1 02/01/2021 ADD 01

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DESIGNED: APH/DGB  
DRAWN: APH/KEC  
REVIEWED: MCR/DGB

SHEET TITLE:  
**PARTITION TYPES**

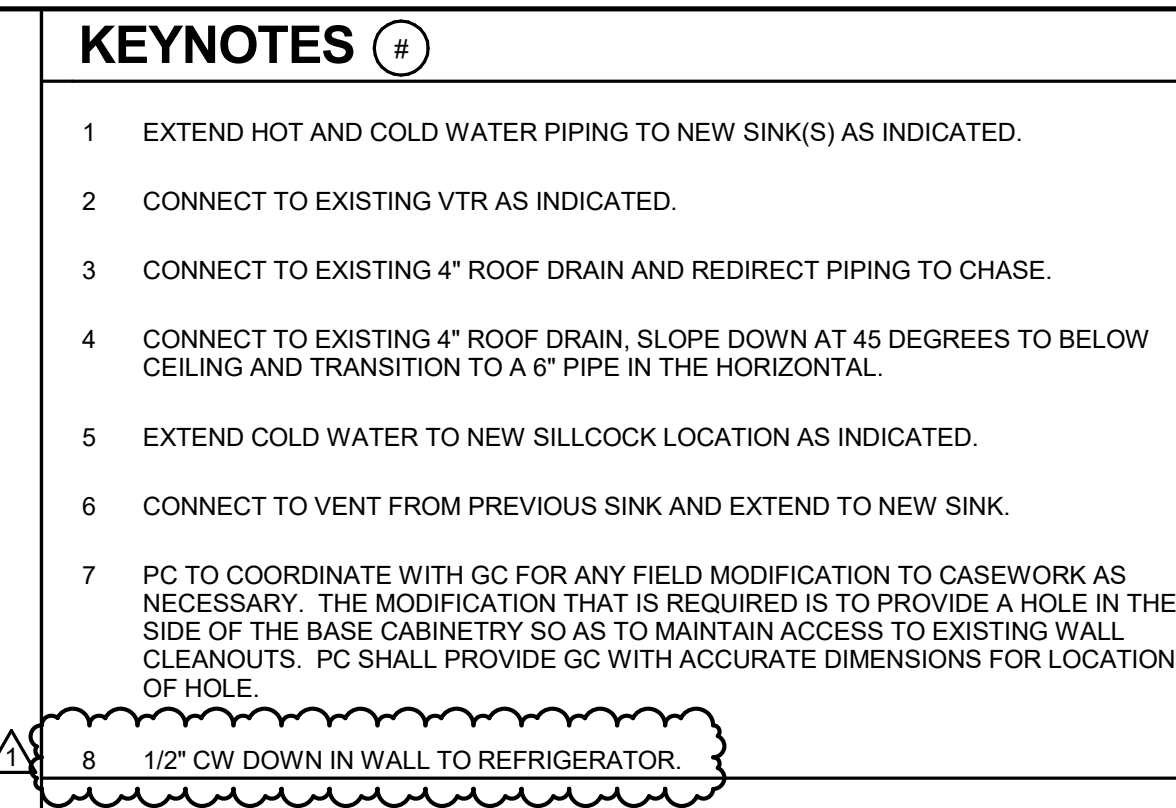
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PROJECT NO.: 0200707.00

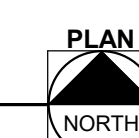




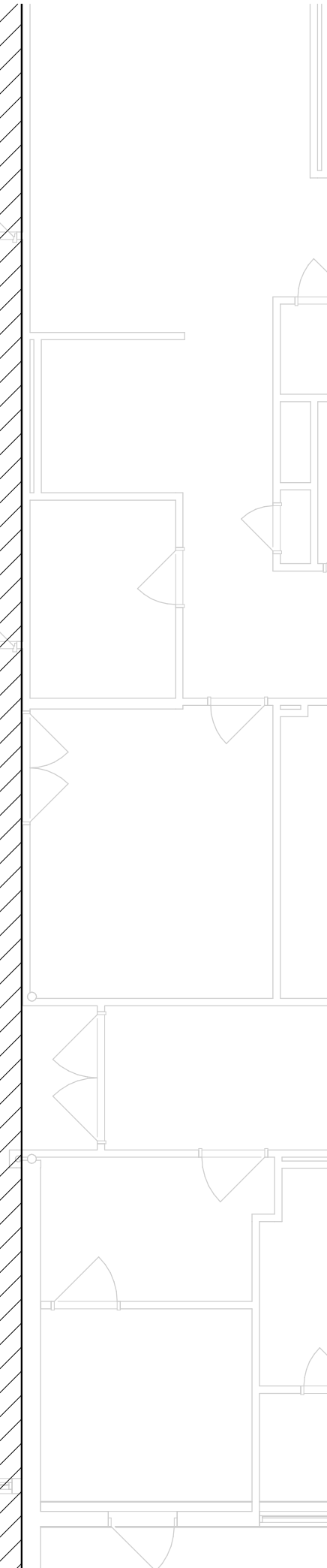


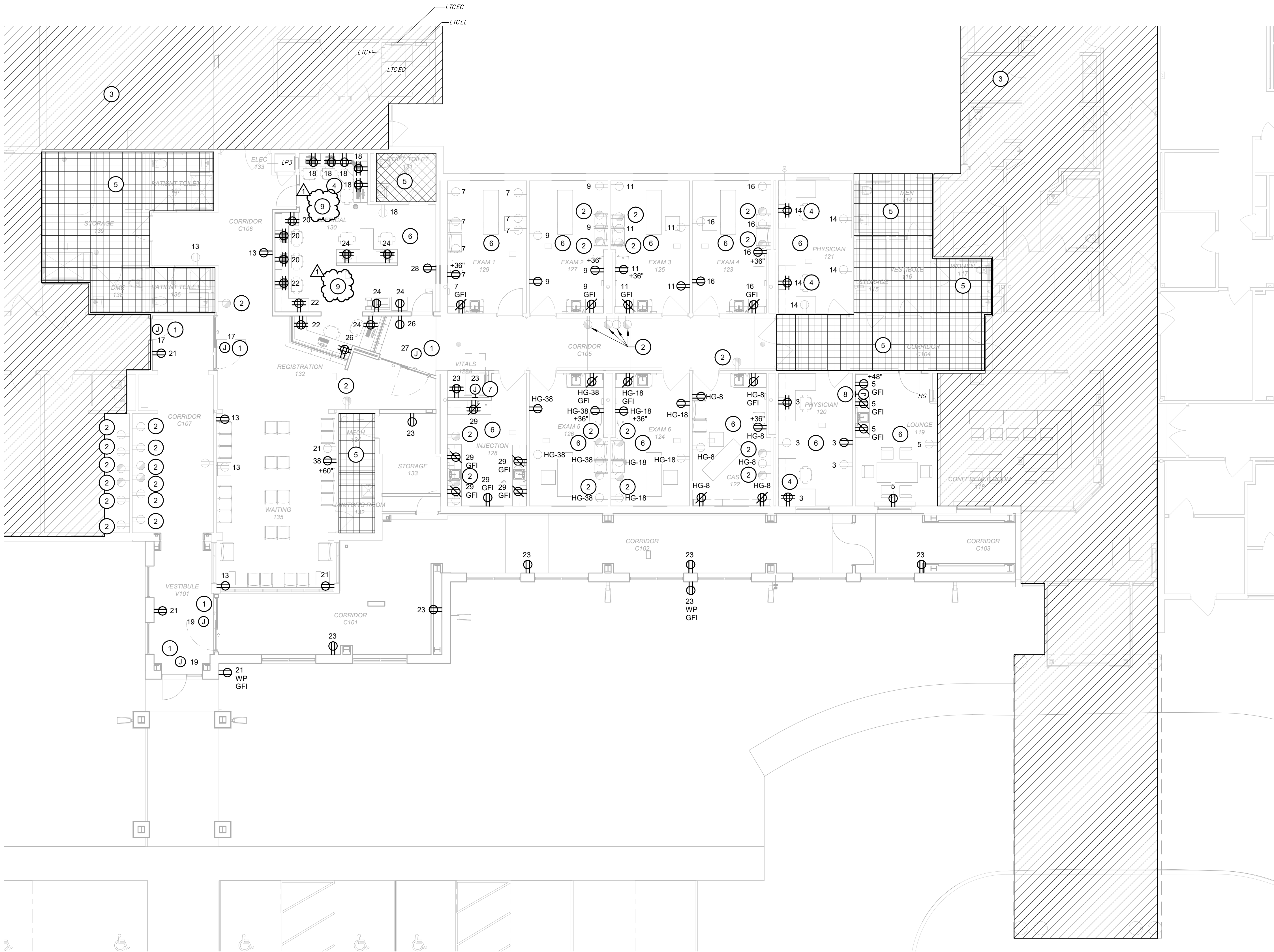


SCALE: NOT TO SCALE



A compass rose with a circle and a vertical line. The top half is labeled "TRUE" and the bottom half is labeled "NORTH".



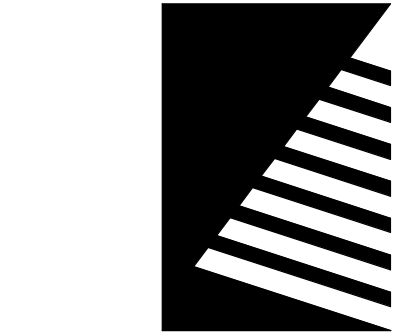


GENERAL NOTES

- A. ALL CIRCUIT NUMBERS REFER TO PANEL LP3 UNLESS OTHERWISE NOTED.  
B. CIRCUITING IS BASED ON EXISTING DRAWINGS AND EXISTING PANELBOARD PANEL DIRECTORIES IN FIELD, CONTRACTOR TO VERIFY WITH OWNER.

KEYNOTES #

- 1 PROVIDE 120V 20A CIRCUIT FOR POWERED DOOR. REFER TO DRAWING E3.1 FOR ANY ACCESS CONTROL OR ADA PUSHBUTTON REQUIREMENTS.  
2 EXISTING DEVICE NO WORK.  
3 NO NEW POWER WORK THIS AREA.  
4 INSTALL NEW QUADPLEX WIRING DEVICE IN LOCATION OF OLD WIRING DEVICE SEE ED1.1.  
5 AREA IN ORTHO SUITE, NO POWER WORK TO BE DONE.  
6 ROOMS TO BE RECIRCUITED.  
7 COORDINATE LOCATION OF SCALE CONTROL PANEL WITH VENDOR.  
8 REMOTE DEAD FACE TEST/RESET GFI DEVICE FOR REFRIDGERATOR RECEPTACLE MOUNT ABOVE COUNTER.  
9 COORDINATE RECEPTACLE LOCATIONS IN THIS AREA WITH OWNER FURNISHED EQUIPMENT.



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DATE:	01/15/2021
DESIGNED:	JDE
DRAWN:	BPH/TMT/AJ
REVIEWED:	BMS

SHEET TITLE:  
FIRST FLOOR POWER  
PLAN

SHEET NUMBER:

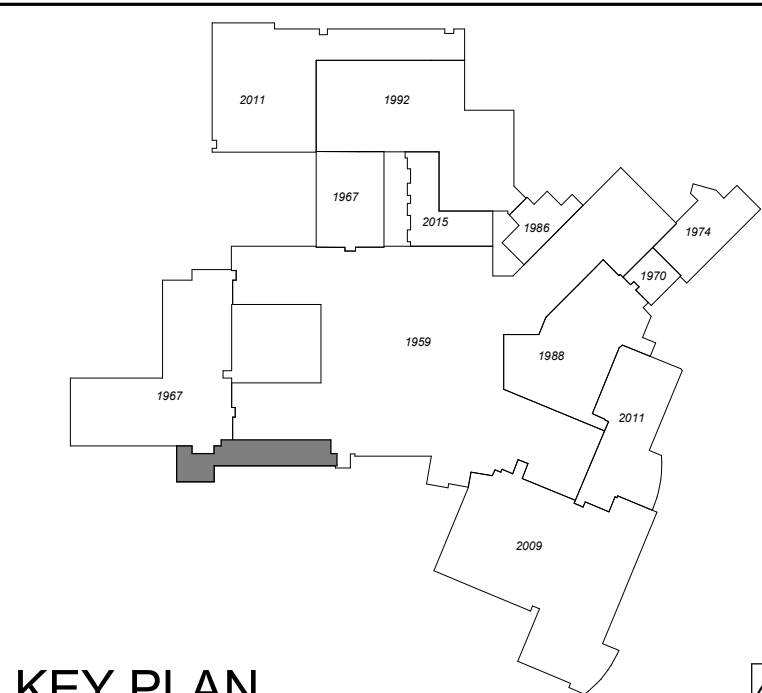
E2.1

PROJECT NO.: 0200707.00

1 FIRST FLOOR POWER PLAN  
SCALE: 1/8" = 1'-0"

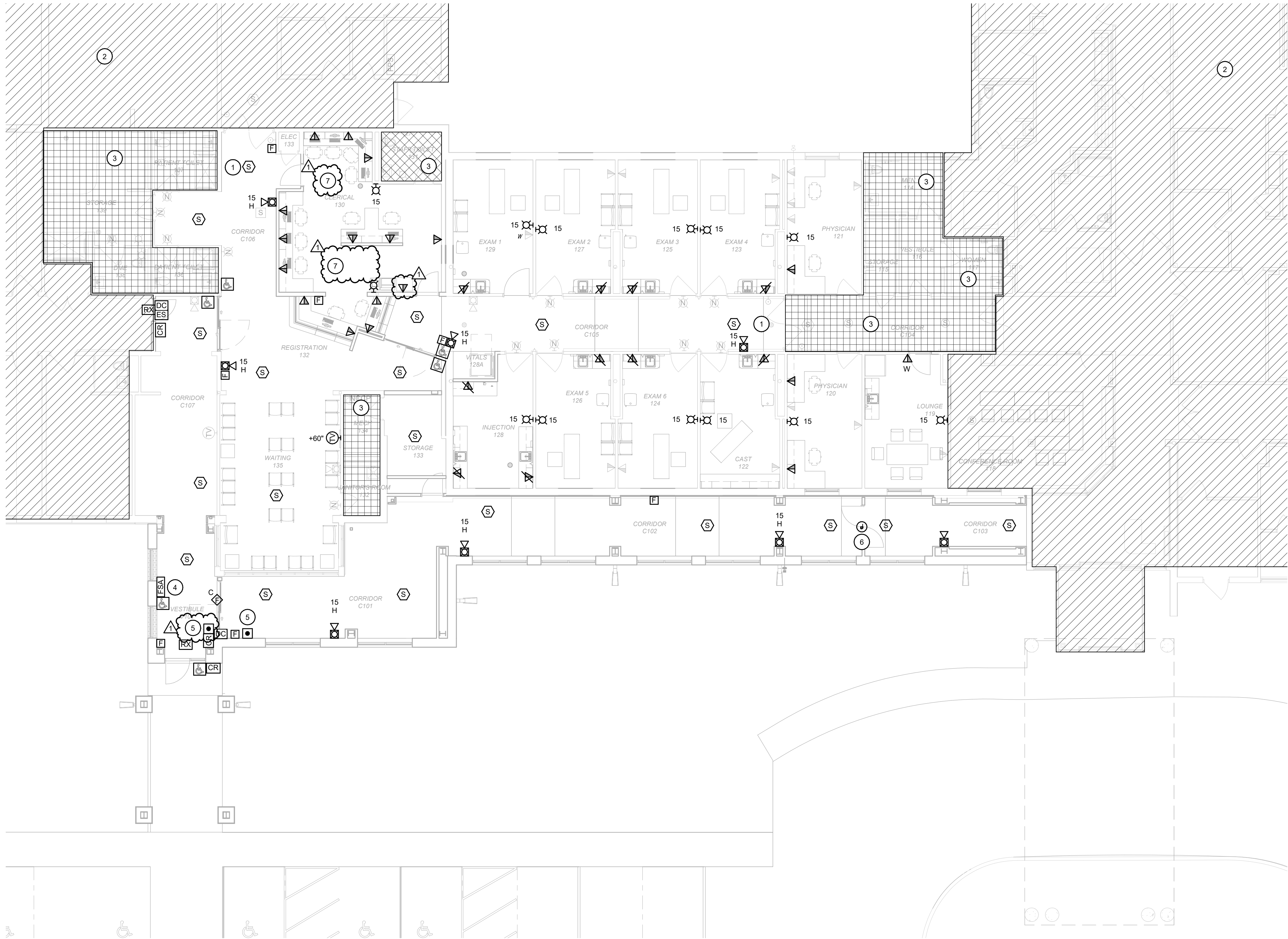


KEY PLAN  
SCALE: NOT TO SCALE



1/26/2021 3:26:54 PM

1 FIRST FLOOR SYSTEMS PLAN  
SCALE: 1/8" = 1'-0"

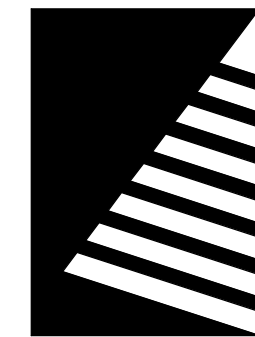


GENERAL NOTES

A. ALL FIRE ALARM WORK SHALL BE NOTIFIER; AS PROVIDED BY F.E. MORAN.

KEYNOTES #

- 1 WIRE INTO EXISTING DOOR CLOSER.
- 2 NO NEW SYSTEMS WORK THIS AREA.
- 3 AREA IN ORTHO SUITE, NO SYSTEMS WORK TO BE DONE.
- 4 RELOCATED UNIT.
- 5 PUSH BUTTON FOR DOOR RELEASE.
- 6 FIRE DOOR HOLD OPEN DEVICES BUILT INTO THE CLOSER, TIE TO FIRE ALARM SYSTEM.
- 7 COORDINATE RECEPTACLE LOCATIONS IN THIS AREA WITH OWNER FURNISHED EQUIPMENT.



Farnsworth  
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ISSUE:		
#	DATE:	DESCRIPTION:
1	02/01/2021	ADD 01

Bid Set  
01/15/2021

PROJECT:  
Crawford Memorial Hospital

CMH - Ortho Clinic  
Addition and  
Renovation

1000 N Allen Street  
Robinson, IL 62454

DATE: 01/15/2021

DESIGNED: JDE

DRAWN: BPH/TMT/AJ

REVIEWED: BMS

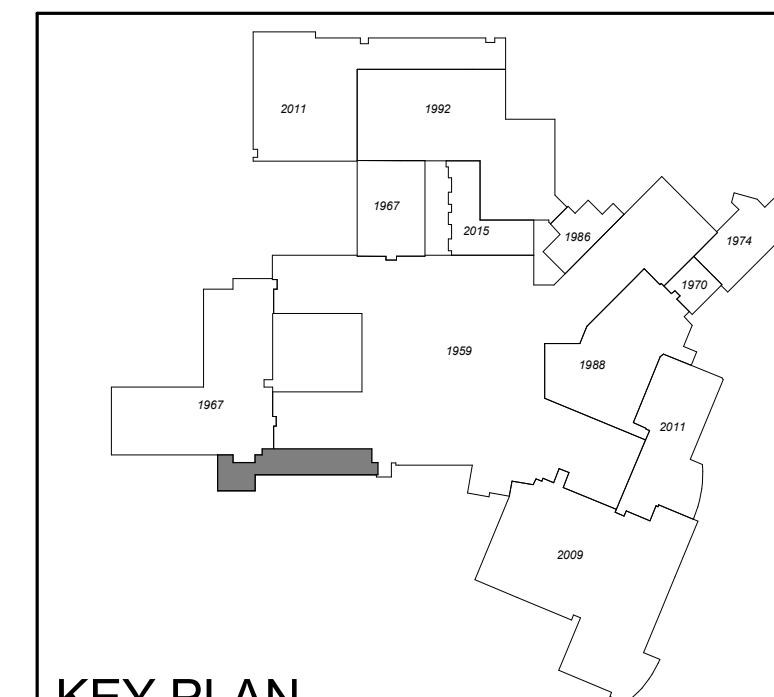
SHEET TITLE:

FIRST FLOOR  
SYSTEMS PLAN

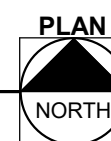
SHEET NUMBER:

E3.1

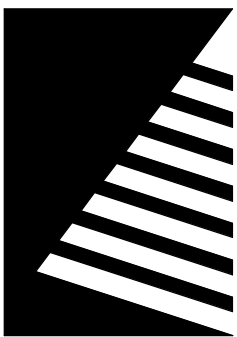
PROJECT NO.: 0200707.00



KEY PLAN  
SCALE: NOT TO SCALE







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ISSUE:

# DATE: DESCRIPTION:

1 02/01/2021 ADD 01

Bid Set

01/15/2021

PROJECT:

Crawford Memorial Hospital

CMH - Ortho Clinic  
Addition and  
Renovation

1000 N Allen Street  
Robinson, IL 62454

DATE: 01/15/2021

DESIGNED: JDE

DRAWN: BPH/TMT/AJ

REVIEWED: BMS

SHEET TITLE:

SCHEDULES

SHEET NUMBER:

E5.1

PROJECT NO.: 0200707.00

## LUMINAIRE SCHEDULE

TYPE	MANUFACTURER	CATALOG NUMBER	LAMP DESCRIPTION	VOLTAGE	LOAD (VA)	FINISH	MOUNTING	DESCRIPTION
A	ELITE LED LIGHTING JUNO HALL RAB	RL670-1000LDIMTRMVOLT40K90+VWH J5F 7IN 10LM 40K 90CRI MVOLT ZT WH HLS60X40FLATPLNLSBP SM7R15940UNVW	LED, 4K, 1000 LUMENS	120 V	14		SURFACE	6" JUNCTION BOX MOUNTED DOWNLIGHT
B	COLUMBIA LIGHTING LITHONIA RAB	CPX22-3-40HE CPX 2X2 3200LM 40K E2PAND22-17N1010 CPX 2X2 3200LM 40K	LED, 4K, 3500 LUMENS	120 V	26		RECESSED	2X2 RECESSED FLAT PANEL LUMINAIRE
C	VISA LIGHTING	CPX 2X2 3200LM 40K E2PAND22-17N1010	CFL, 4K	120 V	27	EXISTING	WALL	EXISTING SCONCE, CLEAN AND RELAMP WITH 4K LAMP
D	EATON	Z2FP3240C	LED, 4K, 3100 LUMENS	120 V	30	EXISTING	RECESSED	EXISTING 2X2 FLAT PANEL TO BE REUSED.
X	DUALITE LITHONIA SURE-LITE	EVEURWAI LOM S W 3 R 120/277 EL N LPX7SD	LED	120 V	-	WHITE	SURFACE	EXIT LIGHT, RED LETTERS
NOTES: A. REMOVE ALL FINGER PRINTS FROM LENSES, REFLECTORS, AND LOUVERS FOLLOWING LIGHT FIXTURE INSTALLATION. B. FOR APPROVAL OF FIXTURES FROM MANUFACTURERS OTHER THAN THOSE LISTED, PROPOSED FIXTURES SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER TEN BUSINESS DAYS PRIOR TO BID FOR REVIEW. FINAL DETERMINATION OF 'EQUAL' STATUS FOR BIDDING SHALL BE THE SOLE DETERMINATION OF THE ARCHITECT/ENGINEER.								

## EXISTING PANELBOARD HG

VOLTAGE: 208/120V				CONNECTED LOAD PER						ISOLATED GROUND BUS (Y/N):				N	
PHASE / WIRE: 30 / 4W				PHASE						BUSSING:				SEE SPEC	
RATED AMPERAGE: 225 A				A		B		C		MOUNTING:				RECESSED	
MAIN: 225 A MLO				2160 VA		0 VA		1080 VA		MCB GROUND FAULT PROTECTION (Y/N):				N	
SCC RATING (SYM): SEE ONE-LINE				19 A		0 A		10 A		MCB SHUNT TRIP (Y/N):				N	
						0 A				MCB 100% RATED (Y/N):				N	
CKT	IDENTIFICATION	TYPE (*)	BKR SIZE	POLES	A		B		C		POLES	BKR SIZE	TYPE (*)	IDENTIFICATION	CKT
1	LOBBY		20 A	1	0	0					1	20 A		HALL AUTO DOORS	2
3	CONF. RM BLUG MOLD		20 A	1			0	0			1	20 A		CONEDNSATE PUMP SL01	4
5	CONF. RM BLUG MOLD		20 A	1					0	0	1	20 A		CONDENSATE PUMP SL02	6
7	CONF. RM BLUG MOLD		20 A	1	0	1080					1	20 A		RCPT - CAST 122	8
9	SOUTHWEST RCPT CONF. RM.		20 A	1			0	0			2	20 A		RTU-1 CONFERENCE ROOM	10
11	REC. OFFICE COUNTER		20 A	1					0	0					12
13	COUNTER CONF. RM N. WALL		20 A	1	0	0					2	20 A		ROOFTOP UNIT SL01, SL02	14
15	SL01, SL01B, SL10, SL11, SL12		20 A	1			0	0							16
17	SL02, SL02B, SL03		20 A	1					0	1080	1	20 A		RCPT - EXAM 6 124	18
19	SL06, SL09		20 A	1	0	0					1	20 A		CORRIDOR LTG LINEN CLOSET	20
21	LTG - SL03 SL05-SL09		20 A	1			0	0			1	20 A		EXHAUST FAN SL11	22
23	EXHAUST FAN SL02B		20 A	1					0	0	1	20 A		ERC-06	24
25	EXHAUST FAN SL02		20 A	1	0	0					1	20 A		H-1	26
27	SL05		20 A	1			0	0			1	20 A		H-1	28
29	SL05		20 A	1					0	0	1	20 A		H-1	30
31	SL04, SL05		20 A	1	0	0									32
33	SL06		20 A	1			0	0			3	20 A		RTU-2 SLEEP LAB	34
35	SL06		20 A	1					0	0					36
37	SL03, SL06		20 A	1	0	1080					1	20 A		RCPT - EXAM 5 126	38
39	BASEMBOARD HEAT		20 A	2			0	0			2	20 A		BASEBOARD HEAT OFFICE	40
41	CONFERENCE ROOM		20 A	2					0	0	2	20 A			42
Load Classification				Connected Load		Demand Factor		Demand Load		PANEL TOTALS					
Receptacle				3240 VA		100.00%		3240 VA							
										TOTAL CONNECTED LOAD: 3240 VA					
										TOTAL DEMAND: 3240 VA					
										TOTAL CONNECTED CURRENT: 9 A					
										TOTAL DEMAND CURRENT: 9 A					
NOTES:															
1. ALL BREAKERS ARE STANDARD UNLESS OTHERWISE NOTED															
2. (*) NUMBER INDICATES BREAKER TYPE: 1 = AFCI, 2 = CLASS A 5mA GFCI, 3 = 30mA GFPE, 4 = SHUNT TRIP ACTIVATED, 5 = PANELBOARD FEEDER SERVING UNIT SHALL BE LOCKABLE USING A PADLOCK, IN ACCORDANCE WITH OSHA LOCK-OUT-TAG RULES, 6 = LSI, 7 = LSIG.															

## EXISTING PANELBOARD LP3

VOLTAGE: 208/120V					CONNECTED LOAD PER					ISOLATED GROUND BUS (Y/N):					N		
PHASE / WIRE: 30 / 4W					PHASE					BUSSING:					SEE SPEC		
RATED AMPERAGE: 200 A					A		B		C		MOUNTING:					RECESSED	
MAIN: 200 A MLO					7390 VA		6304 VA		9964 VA		MCB GROUND FAULT PROTECTION (Y/N):					N	
SCC RATING (SYM): SEE ONE-LINE					63 A		53 A		84 A		MCB SHUNT TRIP (Y/N):					N	
											MCB 100% RATED (Y/N):					N	
CKT	IDENTIFICATION	TYPE (*)	BKR SIZE	POLES	A		B		C		POLES	BKR SIZE	TYPE (*)	IDENTIFICATION	CKT		
1	LTG - N. STATION, LNGE., S. TLT.		20 A	1	0	0					1	20 A		LTG - RESTRMS 122, 124, 126, 128	2		
3	RCPT - PHYSICIAN 120		20 A	1			1080	0			1	20 A		LTG - RM 120 & 121	4		
5	RCPT - LOUNGE 119		20 A	1					900	0	1	20 A		LTG - RSTRMS 123, 125, 127	6		
7	RCPT - EXAM 1 129		20 A	1	1440	0					1	20 A		LTG - RM 129, S. STAFF TLT.	8		
9	RCPT - EXAM 2 127		20 A	1			1080	0			1	20 A		LTG - CORRIDOR 100 & 109	10		
11	RCPT - EXAM 3 125		20 A	1					1080	0	1	20 A		LTG - CORRIDORS 135 & 136	12		
13	RCPT - GENERAL PURPOSE		20 A	1	900	1260					1	20 A		RCPT - PHYSICIAN 121	14		
15	RCPT - SHOWER #2 & #3		20 A	1			0	1080			1	20 A		RCPT - EXAM 4 123	16		
17	MOTORIZED DOOR		20 A	1					400	1980	1	20 A		RCPT - CLERICAL 130	18		
19	MOTORIZED DOOR		20 A	1	400	1080					1	20 A		RCPT - CLERICAL 130	20		
21	RCPT - GENERAL PURPOSE		20 A	1			900	1080			1	20 A		RCPT - CLERICAL 130	22		
23	RCPT - GENERAL PURPOSE		20 A	1					2000	1440	1	20 A		RCPT - CLERICAL 130	24		
25	CLEAN LINEN - WEST HALL		20 A	1	0	540					1	20 A		RCPT - CLER. 130, CORR. C105	26		
27	MOTORIZED DOOR		20 A	1			200	180			1	20 A		RCPT - CLERICAL 130	28		
29	RCPT - INJECTION 128		20 A	1					1260	0	1	20 A		SPARE	30		
31	LIGHTING		20 A	1	770	0									32		
33	LIGHTING		20 A	1			704	0			3	20 A		PANEL LP-2 FEEDER	34		
35	LIGHTING		20 A	1					904	0					36		
37	SPARE		20 A	1	0	1000					1	20 A		TV	38		
39	SPARE		20 A	1			0	0			1	20 A		SPARE	40		
41	SPARE		20 A	1					0	0	1	20 A		SPARE	42		
Load Classification					Connected Load		Demand Factor		Demand Load		PANEL TOTALS						
Lighting - Continuous					2378 VA		125.00%		2973 VA								
Receptacle					20080 VA		74.90%		15040 VA		TOTAL CONNECTED LOAD: 23658 VA						
Other Non-Continuous Load					1200 VA		100.00%		1200 VA		TOTAL DEMAND: 19213 VA						
											TOTAL CONNECTED CURRENT: 66 A						
											TOTAL DEMAND CURRENT: 53 A						
NOTES:																	
1. ALL BREAKERS ARE STANDARD UNLESS OTHERWISE NOTED																	
2. (*) NUMBER INDICATES BREAKER TYPE: 1 = AFCI, 2 = CLASS A 5mA GFCI, 3 = 30mA GFPE, 4 = SHUNT TRIP ACTIVATED, 5 = PANELBOARD FEEDER SERVING UNIT SHALL BE LOCKABLE USING A PADLOCK, IN ACCORDANCE WITH OSHA LOCK-OUT-TAG RULES, 6 = LSI, 7 = LSIG.																	



**SECTION 00 3100 - AVAILABLE PROJECT INFORMATION**

**PART 1 GENERAL**

**1.1. EXISTING CONDITIONS**

- A. Certain information relating to existing conditions and structures is available to bidders and is included for reference. In transmitting information regarding the materials and conditions expected to be encountered, the Architect does not guarantee the accuracy or completeness of the data given and assumes no responsibility for the data or its subsequent use(s). The Contractor shall draw their own conclusions from whatever information is available through the report, through the Architect, or through other means.
- B. Site Topographic Survey:
  - 1. Prepared by: Farnsworth Group, Inc, copy utilized in the Drawings.
- C. Geotechnical Report: Entitled Subsurface Explorations and Foundation Proposed Recommendations Crawford Memorial Hospital Additions, dated January 8, 2021.
  - 1. Prepared by: Midwest Engineering and Testing
  - 2. This report identifies properties of below-grade conditions and offers recommendations for the design of foundations, prepared primarily for the use of the Architect.
  - 3. This report, by its nature, cannot reveal all conditions that exist on the site. Should subsurface conditions be found to vary substantially from this report, changes in the design and construction of foundations will be made, with resulting credits or expenditures to the Contract Sum accruing to the Owner.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**



**Midwest Engineering and Testing, Inc.**

geotechnical - environmental - materials engineers

501 Mercury Drive

Champaign, IL 61822-9649

217-359-2128

FAX 217-359-8446

[www.metgeotech.com](http://www.metgeotech.com)

January 8, 2021

Mr. Mark Rich  
Special Project Coordinator  
Crawford Memorial Hospital  
1000 North Allen Street  
Robinson, IL 62454

Re: Subsurface Exploration and Foundation Recommendations  
Proposed Crawford Memorial Hospital Additions  
1000 North Allen Street  
Robinson, Illinois  
MET Project No. 203129

Dear Mr. Rich:

In accordance with your request, Midwest Engineering and Testing, Inc. (MET) has completed subsurface exploration and an evaluation of the foundation conditions at the above-referenced project site. Our geotechnical report in .pdf format is being submitted via e-mail. Hard copies can be provided, if so desired.

MET appreciates the opportunity to be of service during this phase of the project. If there are any questions or comments you may have regarding the content of this report, or if we may be of any further service, please contact us at your convenience.

Sincerely,

**Midwest Engineering and Testing, Inc.**

Nicholas D. Wendling, P.E.  
Geotechnical Department Manager

Daniel E. Tappendorf, P.E.  
President

**SUBSURFACE EXPLORATION  
AND  
FOUNDATION RECOMMENDATIONS**

**Proposed Crawford Memorial Hospital Additions  
1000 North Allen Street  
Robinson, Illinois**

**Prepared For:**

**Crawford Memorial Hospital  
1000 North Allen Street  
Robinson, Illinois**

**January 8, 2021**

**MET File No. 203129**

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## **INTRODUCTION**

### **General**

This report presents the results of a subsurface exploration and evaluation of the foundation conditions for the proposed additions to the Crawford Memorial Hospital in Robinson, Illinois. The purpose of this study was to determine and evaluate the subsurface conditions existing at the subject site, and to establish related parameters for use by the design engineers and architects. Included herein are the results of the subsurface exploration, field and laboratory soil test data, and recommendations regarding design and construction of the foundation and pavement systems.

### **Scope**

The scope of services included a reconnaissance of the site, subsurface exploration, field and laboratory testing of the soil samples collected, and engineering analysis and evaluation of the data. In addition, geologic maps and literature relative to the general area of the site were reviewed.

### **Authorization**

Authorization to perform this subsurface exploration and analysis was in the form of a fully executed proposal agreement between Crawford Memorial Hospital and Midwest Engineering and Testing, Inc. (MET). The proposal (MET Proposal No. 20227, dated December 3, 2020) outlined the scope of services and conditions for performance of the work, and was signed by Mr. Mark Rich, Special Projects Coordinator, on December 14, 2020.

## **PROJECT AND SITE DESCRIPTION**

The proposed project involves construction of an addition to the existing Rural Health Clinic located to the northeast of the Main Hospital and an addition to the Ortho Clinic located on the southern edge of the southwest wing of the Main Hospital Building as shown on the Vicinity Map, Figure 1, in the Appendix.

The proposed Rural Health Clinic (RHC) addition will be constructed to the north and a portion of the east sides of the existing structure. At the time the borings were performed, the majority of the project site was covered with asphalt paved parking and drive areas, with some grassy and landscaped areas along the edge of the existing structure. Site drainage is directed to an existing catch basin in the parking lot, and to a concrete flow channel to the east of the RHC building. We anticipate the proposed addition will consist of a single-story of wood or steel framing with masonry veneer and a concrete slab-on-grade.

The proposed Ortho Clinic addition will be located on the south side of the existing Ortho Clinic. At the time the borings were performed, the site was covered with grassy vegetation and landscaping, as well as a concrete sidewalk used to access the clinic. Site drainage at the Ortho site is generally directed to the south, away from the building, to a catch basin in the south adjacent parking lot. The proposed addition is to consist of construction of a new corridor and entryway, which we anticipate will be a single-story of wood or steel framing with masonry veneer and a concrete slab-on-grade

## **GEOLOGY OF THE AREA**

### **General**

The geology of the Robinson, Illinois area has been greatly influenced by several major landforming factors. Bedrock and tectonic movements prior to the Pleistocene Period, continental glaciation during the Pleistocene Period, wind action, alluvial deposition and man have all contributed to the geologic history of the area.

Bedrock in the project area is generally found at a depth of 25 to 50 feet below the ground surface and consists of Pennsylvanian Age deposits associated with the Mattoon Formation. Shale, coal, sandstone and limestone are the predominant rock types comprising the formation in this area.

The surficial geology in the surrounding area generally consists of 5 to 10 feet of wind deposited and water worked loessial material overlying shallow deposits of glacial drift. The drift is comprised primarily of glacial till, a heterogeneous mixture of sand and pebbles bound in a compact matrix of clay or silt, but can also contain inclusions of granular outwash material.

### **Seismic Considerations**

Considering the relatively shallow mapped depth to bedrock, the soil strength information obtained through the boring depths, and our past experience in the project area, it is our opinion that seismic **Site Class C**, as defined in Table 1613.5.2 of the International Building Code (IBC) – 2015, can be utilized for design. The project site in Robinson, Illinois is located at approximate latitude 39.0145°N and longitude 87.7501°W. The 0.2 second period ( $S_s$ ) and 1.0 second period ( $S_1$ ) spectral acceleration values for the aforementioned coordinates, as determined from the USGS U.S. Seismic Design Maps Web Application, are 0.395 g and 0.147 g, respectively.

## **FIELD EXPLORATION**

### **Scope**

In order to evaluate the significant engineering characteristics of the foundation soils, a field exploratory program was undertaken. A total of six (6) soil borings were advanced for the project through depths of about 21.5 feet below surface grade. Four (4) of the borings were advanced for the proposed RHC addition, while the remaining two (2) borings were advanced for the Ortho Clinic addition. The boring locations were determined in the field by MET personnel as shown on the Boring Location Diagrams, Figures 2a and 2b, included in the Appendix. The following sections provide a description of field drilling and testing procedures utilized.

### **Drilling and Sampling Procedures**

The soil borings were performed with a truck-mounted drilling rig equipped with a rotary head. Conventional, continuous-flight, hollow-stem augers were used to advance the holes with representative samples obtained employing split-barrel sampling techniques in general accordance with ASTM Procedure D-1586.

### **Field Tests and Measurements**

**Standard Penetration Tests:** During the sampling procedure, Standard Penetration Tests (SPTs) were performed at regular intervals through the depth of the borings. The SPT value ("N", or blow counts) is defined as the number of blows required to advance a 2-inch O.D., split-barrel sampler a distance of one foot by a 140-pound hammer falling 30-inches. These values provide a useful preliminary indication of the consistency or relative density of most soil deposits and are included on the Soil Boring Logs.

**Water Level Measurements:** Groundwater level observations were made during and upon completion of the drilling process. Water level information is noted on the Soil Boring Logs in the Remarks column.

**Ground Surface Elevations:** Ground surface elevations at the boring locations were interpolated from site topographic data provided by Farnsworth Group, and are included on the individual soil borings logs.

## LABORATORY TESTING

### General

Additional significant characteristics of the foundation materials were determined in the laboratory to provide data on which to classify and quantitatively assess the engineering properties of the soil samples obtained. The types of soils encountered were identified and logged on the Soil Boring Logs in the Appendix. The results of the field and laboratory tests are also presented in the Appendix. Representative samples of the soils encountered in the field were placed in clean, glass sample jars and are now stored in the laboratory for further analysis, if desired.

### Laboratory Tests and Measurements

**Visual Classification:** A soils engineer visually classified all samples in accordance with the Unified Soil Classification System (ASTM D-2488) terminology. An explanation of the symbols used in this system is included in the Appendix.

**Moisture Content Tests:** The natural moisture content of all samples was determined by ASTM method D-2216 and is recorded on the Soil Boring Logs as a percentage of the dry weight of the soil.

**Hand Penetrometer Tests:** Cohesive specimens extracted from the split-barrel sampler were tested in the laboratory with a calibrated soil penetrometer. This device provides an approximation of the unconfined compressive strength of the soils, and is useful, along with other soil parameters, in evaluating the soil strength characteristics. The results are listed on the Soil Boring Logs beneath the column labeled "Q<sub>P</sub>".

**Unconfined Compression Tests:** The undrained shear strength of the cohesive soils was determined from unconfined compression tests performed on specimens obtained from the split-barrel samplers. The strength values of soil samples obtained by the SPT method must also be considered, recognizing that this sampling technique provides a representative, but somewhat disturbed sample. The results are listed on the Soil Boring Logs beneath the column labeled "Q<sub>u</sub>".

**Dry Density Determination:** The dry density was determined on the cohesive soils where intact samples were available. The results are listed on the Soil Boring Logs beneath the column labeled "D<sub>d</sub>".



## **DESCRIPTION OF SUBSURFACE CONDITIONS**

### **General**

The types of foundation materials encountered at the test boring locations are described on the Soil Boring Logs. The lines delineating the changes in strata on the logs represent an approximate boundary between the various soil classifications. These soil descriptions and delineations are representative for the specific test hole location. Variations in the soil profile and the engineering properties of the soil deposits may occur between boring locations. A summary of the major soil profile components is described in the following paragraphs. A more detailed description and supporting data for each boring location can be found on the individual Soil Boring Logs.

### **Soil Conditions**

Borings B-1 through B-4 were advanced for the proposed RHC addition, and all encountered 4 inches of asphalt at surface, which was underlain by about 8 inches of crushed stone, placed on geotextile fabric. Borings B-5 and B-6 were advanced for the proposed Ortho Clinic addition and each encountered a thin layer of vegetation and topsoil.

Below the surficial materials, each of the borings encountered brown and gray mottled silty clay with some sand, of loessial origin. The loess typically extended through depths of about 10 to 12 feet below grade and possessed stiff to very stiff consistency.

The loess was underlain by glacial drift deposits which extended through the boring termination depths. The drift was primarily comprised of hard silty clay glacial till, however, deposits of silty and sandy outwash were encountered near the termination depth of the Ortho Clinic borings.

### **Groundwater Observations**

Groundwater was encountered within saturated deposits of glacial outwash at depths of about 20 feet below surface grade in the Ortho Clinic boring locations (B-5 and B-6), while all other borings remained dry during and upon completion of the drilling activities. It must be recognized that groundwater levels fluctuate with time due to variations in seasonal precipitation, lateral drainage conditions, and soil permeability characteristics. Monitoring standpipes should be installed and periodically checked where it is necessary to more accurately assess prevailing water levels preceding or during construction.

## **FOUNDATION DISCUSSION AND RECOMMENDATIONS**

### **General**

On the basis of the available soil boring information, it is our opinion that a shallow foundation system could be utilized for support of the proposed building additions. A discussion of the foundation design parameters, as well as site preparation and construction considerations, is included in the following sections.

### **Shallow Foundation Systems**

#### Rural Health Clinic Foundations

The proposed RHC addition may be supported on conventional shallow foundations founded on suitable natural soils or engineered structural fill. The native brown and gray silty clays encountered below the existing surficial pavement and crushed stone are considered suitable for direct foundation support or as subgrade on which to construct new engineered fill.

Midwest Engineering Services, a predecessor company to MET, performed a subsurface exploration and geotechnical evaluation for the existing RHC building in 2003 (MES Project No. 1-33011), and provided allowable bearing capacities of 3,000 PSF and 2,400 PSF for spread and continuous footings respectively. Based upon the soil boring data recently obtained, and the previous report, it is recommended that spread and continuous wall footings founded on the natural loessial soils be designed using similar allowable bearing capacities of 3000 PSF and 2500 PSF, respectively. Such allowable capacities are subject to the minimum dimensions discussed in the General Shallow Foundation Recommendations section of this report.

#### Ortho Clinic Foundations

The proposed Ortho Clinic addition may be supported on conventional shallow foundations founded on suitable natural soils or engineered structural fill. The native brown and gray silty clays encountered below the existing surficial vegetation and topsoil are considered suitable for direct foundation support or as subgrade on which to construct new engineered fill.

Midwest Engineering Services also performed a subsurface exploration and geotechnical evaluation for an addition immediately to the east of the proposed addition in 2009 (MES Project No. 1-93019), and provided allowable bearing capacities of 3,000 PSF and 2,500 PSF for spread and continuous footings respectively. Based upon the soil boring data recently obtained, and the previous report, it is recommended that spread and continuous wall footings founded on the natural loessial soils also be

designed using similar allowable bearing capacities of 3000 PSF and 2500 PSF, respectively. Such allowable capacities are subject to the minimum dimensions discussed in the General Shallow Foundation Recommendations section of this report.

It should be noted that a deposit of medium stiff sandy clay was encountered at a depth of about 5 feet below surface grade in boring B-6, which if encountered in footing excavations, may require remediation. However based upon the anticipated building finished floor and existing grades, we do not anticipate that foundations will extend below depths of about 3 feet below existing grade.

#### General Shallow Foundation Recommendations

Due to typical variations in natural soils, marginal bearing strengths could be encountered during excavation for footings. Such conditions should be evaluated by the soils engineer to determine the appropriate remedial options, which could include resizing of footings or undercutting and replacement of the suspect material with granular backfill or lean concrete.

Excavations to remove unsuitable bearing materials below footings should be widened at least 1 foot in all directions from the edges of the footing for each foot of excavation depth below the design footing base elevation. The replacement backfill should be a well-graded granular material placed in lifts of eight (8) inches or less in loose thickness and compacted to a minimum of 95 percent of the material's maximum Standard Proctor dry density (ASTM D-698). Lean concrete backfill is essentially an extension of the footing and bank formed excavations do not need to be widened. For formed footings, the foundation excavation should be widened at least 6 inches from the footing edges to allow centering of the foundation on the lean concrete base and reduce the potential for eccentric loading.

All exterior footings must be placed at a depth of at least 3.0 feet below finished grade for frost protection. Interior footings not subject to frost action may be founded immediately below the floor slab, if so desired, provided they are supported on suitable natural soils or engineered structural fill. All footings must be protected from the effects of frost if construction is carried out during winter months.

It is recommended that the footings supporting individual columns have a minimum dimension of 30 inches, and continuous footings have a minimum width of 18 inches. In order to minimize the effects of any slight differential movement that may occur due to variations in the character of the supporting soils and variations in seasonal moisture contents, it is recommended that all footings be suitably reinforced.

The above outlined bearing pressures were evaluated using a factor-of-safety of 3 against bearing capacity failure. Using such a safety factor theoretically results in contact pressures of sufficiently low magnitude to keep load-induced deformations

within the elastic range of the bearing soils. Potentially, total load responsive elastic settlements should be one (1) inch or less provided the suggested design and construction criteria are followed. It is recommended that the preparation and installation of the foundations be monitored and tested by a representative of the soils engineer.

### **Slabs-on-grade**

Prior to the placement of slabs-on-grade, or before any slab-supporting fill is placed, it is recommended that all vegetation, organic topsoil and existing pavement materials be removed. The resulting subgrade should then be thoroughly inspected and proof-rolled to detect areas of unstable, yielding soils that may need to be further undercut.

It is recommended that slabs-on-grade be placed on a base layer of well-graded granular material, such as IDOT CA-6, at least 6-inches in thickness. Proper subgrade preparation and adherence to the recommendations regarding fill materials and compaction will allow the use of a subgrade modulus of 125 psi/in.

The use of a plastic vapor barrier is left to the discretion of the architect. When a vapor barrier is used, proper curing conditions must be maintained to reduce the potential for edge curling.

Floor slabs-on-grade should be suitably reinforced and proper joints should be provided at the junctions of the slab and foundation system so that a small amount of independent movement can occur without causing damage. Large floor areas should be provided with joints at frequent intervals to compensate for concrete volume changes. It is recommended that ACI guidelines regarding joint construction and spacing be used.

## **CONSTRUCTION CONSIDERATIONS**

### **Site Preparation**

The presence of unsuitable materials in the subgrade can adversely affect the serviceability of various structural elements placed upon it. To reduce the potential for detrimental movements, the site surface preparation in the building and pavement areas should include the removal of all vegetation, organic topsoil and existing pavement materials.

After the initial site stripping operations have been completed, the resulting subgrade should be carefully proof-rolled and evaluated for areas of instability that may require remediation. Depending upon the weather conditions and extent of any unstable areas discovered, remedial measures for unstable subgrades could include removal and replacement for smaller areas; scarification, drying, and recompaction of wet soils

should weather conditions allow; or modification of the subgrade utilizing lime, flyash or cement. If chemical modification of the subgrade is considered, we recommend that the proposed stabilization techniques and materials be reviewed by the geotechnical engineer prior to implementation. After a stable subgrade has been achieved, low areas may then be raised to the planned grades with suitable, properly compacted fill.

It is recommended that fill or backfill materials used for structural support consist of granular or low plasticity cohesive soils, which can be categorized as GW, GP, SW, SP, CL or ML under the Unified Classification System. Structural fill should be placed in layers of not more than 8-inches in loose thickness, at moisture contents at or slightly above optimum, and compacted to at least 95 percent of the maximum dry density as determined by ASTM D-698 (Standard Proctor) method of test.

Proper moisture control is essential to reduce the amount of compactive effort necessary to achieve the desired densities. This is especially true of cohesive soils, where scarification and aeration may be required to achieve near-optimum moisture levels prior to compaction. A sheepsfoot roller is generally required for compaction of clayey soils, whereas, a vibratory smooth drum roller is preferred for granular and silty material. Granular backfill compacted with small hand-operated equipment should be used in confined areas.

The evaluation of the subgrade and selection of fill materials for various applications should be done in consultation with the soils engineer. Similarly, the placement and compaction of fill for structural applications should be monitored and tested by a qualified representative of the soils engineer.

### **Groundwater Control**

Based on the boring information, it is not anticipated that significant groundwater seepage will be encountered in shallow excavations for the foundations or utilities. Should any seepage be experienced, filtered sump pumps or other dewatering devices should be made available to control the water and maintain reasonably dry conditions.

Because the foundation materials are subject to deterioration when exposed to free moisture, every effort should be made to keep the soils dry, during and after construction. Site runoff and discharge water from roof drains should be diverted away from the foundation and directed towards on-site retention areas, natural drainage ways or municipal sewer systems. Such measures reduce the potential for the softening and possible erosion of the foundation subgrade soils.

## Excavations

All excavations should be performed in accordance with the requirements detailed in the OSHA Excavation Regulations and Procedures, Section 1926 Subpart P. Based upon the soil boring data, Type A, Type B and Type C soils were all encountered through the depths explored. The maximum allowable slopes for these soils types are shown in the following table.

Soil Type	Maximum Allowable Slopes for Excavations Less than 20 ft. deep Horizontal : Vertical (H:V)
A	$\frac{3}{4} : 1$
B	1 : 1
C	$1 \frac{1}{2} : 1$

All excavations should be monitored by a Competent Person, as defined by the OSHA standard, and appropriate shoring or sloping techniques used to prevent cave-ins.

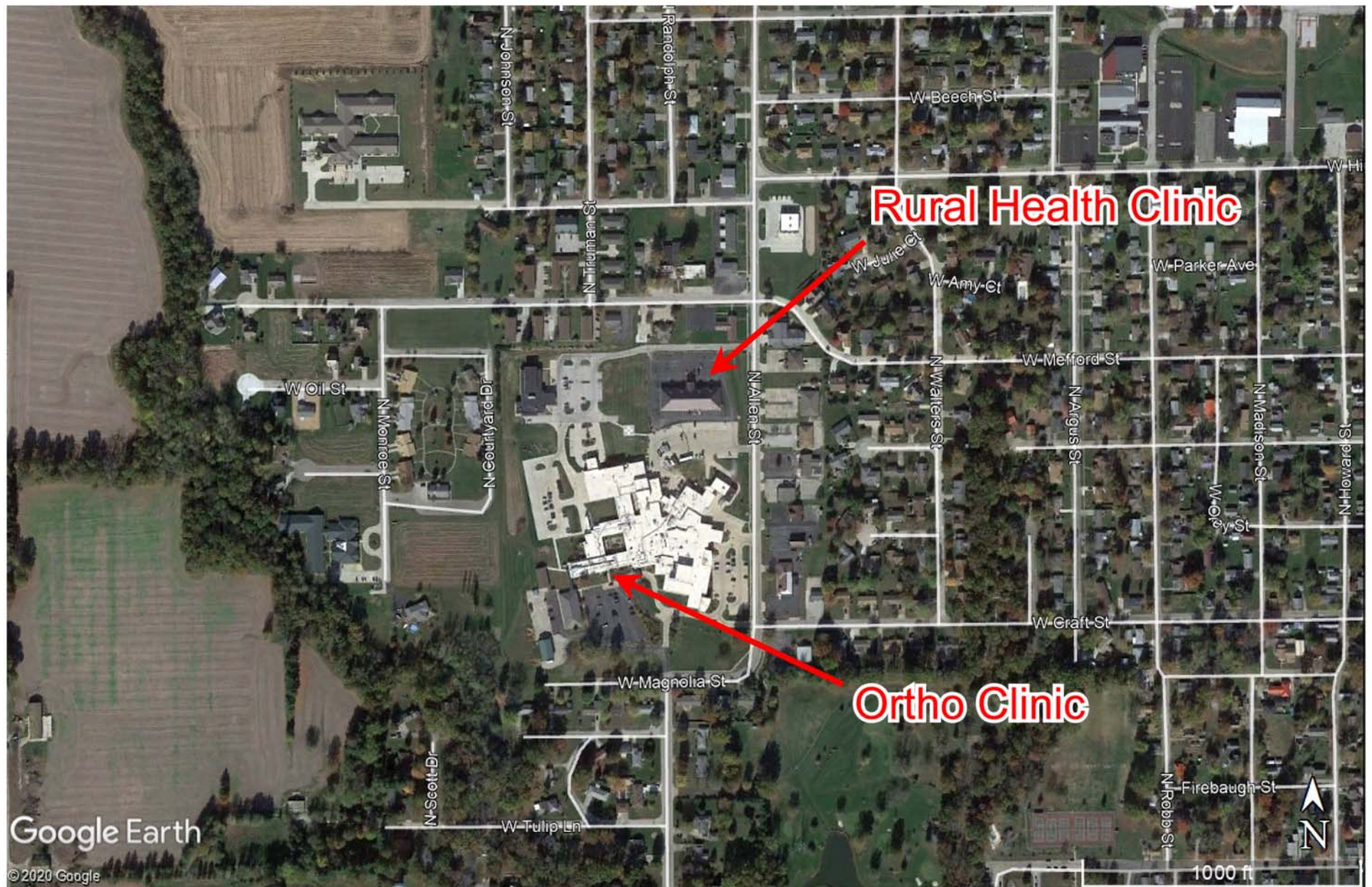
## GENERAL COMMENTS

This geotechnical exploration and foundation analysis has been conducted to aid in the evaluation of the foundation conditions for the proposed RHC and Ortho Clinic Additions at the Crawford Memorial hospital Campus in Robinson, Illinois. The recommendations presented herein are based on the available soil information obtained and the design information provided. Any changes in the soil conditions encountered during construction, or in the design or location of the buildings, should be brought to the attention of the soils engineer to determine if modifications in the recommendations are required.

The final design plans and specifications should also be reviewed by the soils engineer to determine that the recommendations presented herein have been interpreted and implemented as intended. It is recommended that the earthwork and foundation operations be monitored by the soils engineer in order that he/she may test and evaluate the bearing capacities and the selection, placement, and compaction of controlled fills. This geotechnical study has been conducted in a manner consistent with that level of care ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The findings, recommendations, and opinions contained herein have been promulgated in accordance with generally accepted practice in the fields of foundation engineering, soils mechanics, and engineering geology.

# APPENDIX





**Midwest Engineering and Testing, Inc.**

geotechnical\*environmental\*materials engineers

Figure 1 - Vicinity Map

Proposed Crawford Memorial Hospital Additions  
1000 North Allen Street  
Robinson, Illinois

**SCALE:** Shown Above

**PROJECT NO.:** 203129

**DATE:** January 7, 2021

**DRAWN BY:** NDW





**Midwest Engineering and Testing, Inc.**

geotechnical\*environmental\*materials engineers

Figure 2a - Boring Location Diagram

Proposed Crawford Memorial Hospital Additions  
Rural Health Clinic  
1000 North Allen Street  
Robinson, Illinois

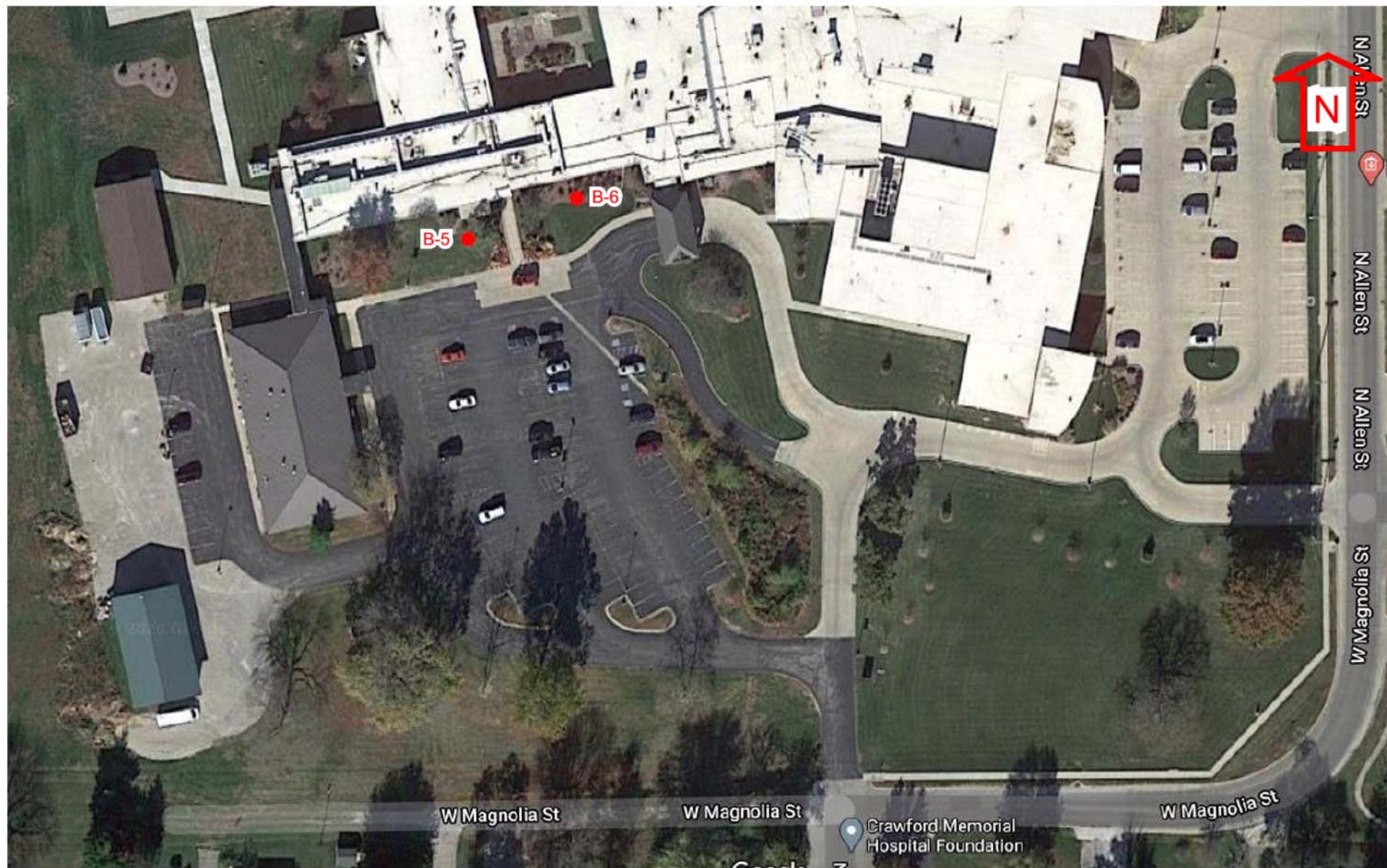
**SCALE:** Shown Above

**PROJECT NO.:** 203129

**DATE:** January 7, 2021

**DRAWN BY:** NDW





**MET**

**Midwest Engineering and Testing, Inc.**

geotechnical\*environmental\*materials engineers

Figure 2b - Boring Location Diagram

Proposed Crawford Memorial Hospital Additions  
Ortho Clinic  
1000 North Allen Street  
Robinson, Illinois

**SCALE:** Shown Above

**PROJECT NO.:** 203129

**DATE:** January 7, 2021

**DRAWN BY:** NDW

## SOIL BORING LOG

**MET** Midwest Engineering and Testing, Inc.

Project Name: Proposed Crawford Memorial Hospital Additions  
 Location: 1000 North Allen Street  
 Robinson, Illinois

Boring: B-1  
 Project No. : 203129  
 Date of Boring: December 22, 2020  
 Field Representative: Nick Wendling

VISUAL SOIL CLASSIFICATION Ground Surface Elevation: ± 551.5 ft.	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
4" Asphalt over 8" Crushed Stone and Fabric		1-SS	-	-	-	22	-	Dry during and upon completion of drilling
Brown and gray silty CLAY (CL)								
		2-SS	6	2.5	1.2	19	100	
Brown and gray silty CLAY (CL) with sand	5	3-SS	6	2.8	1.6	19	99	
		4-SS	5	2.0	1.0	22	97	
Brown and gray sandy CLAY (CL)	10	5-SS	7	1.0	0.4	20	122	
		6-SS	28	4.5+	5.5	10	117	
Brown silty CLAY (CL) with sand and small gravel - Till	15							
		7-SS	91	4.3	-	7	-	
	20							
		8-SS	50/5.5"	4.5+	-	6	-	
END OF BORING AT 21.5 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

# SOIL BORING LOG

**MET** Midwest Engineering and Testing, Inc.

Project Name: Proposed Crawford Memorial Hospital Additions  
Location: 1000 North Allen Street  
Robinson, Illinois

Boring: B-2  
Project No. : 203129  
Date of Boring: December 22, 2020  
Field Representative: Nick Wendling

VISUAL SOIL CLASSIFICATION Ground Surface Elevation: ± 552 ft.	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
4" Asphalt over 8" Crushed Stone and Fabric		1-SS	-	2.0	-	25	-	Dry during and upon completion of drilling
Brown and gray silty CLAY (CL)								
		2-SS	6	2.3	1.4	22	93	
Brown and gray silty CLAY (CL) with sand	5	3-SS	5	2.0	1.0	19	105	
		4-SS	7	3.8	2.3	24	99	
Brown and gray sandy CLAY (CL)	10	5-SS	5	1.8	1.0	18	114	
		6-SS	17	3.0	-	18	-	
Brown silty CLAY (CL) with sand and small gravel - Till	15							
		7-SS	86	4.5+	-	7	-	
Gray silty CLAY (CL) with sand and small gravel - Till	20							
		8-SS	81	4.5+	-	8	-	
END OF BORING AT 21.5 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

# SOIL BORING LOG

**MET** Midwest Engineering and Testing, Inc.

Project Name: Proposed Crawford Memorial Hospital Additions  
Location: 1000 North Allen Street  
Robinson, Illinois

Boring: B-3  
Project No. : 203129  
Date of Boring: December 22, 2020  
Field Representative: Nick Wendling

VISUAL SOIL CLASSIFICATION Ground Surface Elevation: ± 552 ft.	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
4" Asphalt over 8" Crushed Stone and Fabric		1-SS	-	3.3	-	25	-	Dry during and upon completion of drilling
Brown and gray silty CLAY (CL)								
		2-SS	6	3.5	1.8	24	93	
Brown and gray silty CLAY (CL) with sand	5	3-SS	5	2.0	1.3	19	104	
		4-SS	5	3.3	1.8	23	98	
Brown silty CLAY (CL) with sand and small gravel - Till	10	5-SS	8	4.5+	3.0	18	106	
		6-SS	29	4.5+	-	8	-	
	15	7-SS	50 / 1"	4.5+	-	6	-	
	20							
		8-SS	50 / 3"	4.5+	-	6	-	
END OF BORING AT 21.5 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

# SOIL BORING LOG

**MET** Midwest Engineering and Testing, Inc.

Project Name: Proposed Crawford Memorial Hospital Additions  
Location: 1000 North Allen Street  
Robinson, Illinois

Boring: B-4  
Project No. : 203129  
Date of Boring: December 22, 2020  
Field Representative: Nick Wendling

VISUAL SOIL CLASSIFICATION Ground Surface Elevation: ± 551 ft.	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
4" Asphalt over 8" Crushed Stone and Fabric		1-SS	-	-	-	23	-	Dry during and upon completion of drilling
Brown and gray silty CLAY (CL)								
		2-SS	6	3.3	2.0	23	90	
Brown and gray silty CLAY (CL) with sand	5	3-SS	6	2.8	1.8	17	96	
		4-SS	5	2.5	2.0	19	99	
Brown and gray sandy CLAY (CL)	10	5-SS	4	1.0	0.6	26	96	
		6-SS	19	4.5+	-	10	-	
Brown silty CLAY (CL) with sand and small gravel - Till	15							
		7-SS	79	4.5+	-	5	-	
	20							
		8-SS	50/5.5"	4.5+	-	5	-	
END OF BORING AT 21.5 FEET								

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.



# SOIL BORING LOG

**MET** Midwest Engineering and Testing, Inc.

Project Name: Proposed Crawford Memorial Hospital Additions  
Location: 1000 North Allen Street  
Robinson, Illinois

Boring: B-5  
Project No. : 203129  
Date of Boring: December 22, 2020  
Field Representative: Nick Wendling

VISUAL SOIL CLASSIFICATION Ground Surface Elevation: ± 549 ft.	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
7" Dark brown silty CLAY (OH) Topsoil		1-SS	5	2.5	-	25	-	
Brown and gray silty CLAY (CL)	5	2-SS	7	3.3	1.8	21	91	
		3-SS	5	3.0	1.2	19	97	
		4-SS	6	4.0	2.0	16	102	
Brown and gray silty CLAY (CL) with sand	10	5-SS	10	3.8	1.8	16	108	
		6-SS	20	4.5+	4.2	8	122	
		7-SS	50 / 1"	4.5+	-	8	-	
Brown silty CLAY (CL) with sand and small gravel - Till	20	8-SS	40	1.3	-	11	-	
END OF BORING AT 21.5 FEET								

▼  
Drilling: 21 ft.  
Completion: 20 ft.

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.

# SOIL BORING LOG

**MET** Midwest Engineering and Testing, Inc.

Project Name: Proposed Crawford Memorial Hospital Additions  
Location: 1000 North Allen Street  
Robinson, Illinois

Boring: B-6  
Project No. : 203129  
Date of Boring: December 22, 2020  
Field Representative: Nick Wendling

VISUAL SOIL CLASSIFICATION Ground Surface Elevation: ± 549 ft.	FT.	SAMPLE NO.	N	Q <sub>p</sub> (tsf)	Q <sub>u</sub> (tsf)	MC (%)	Dd (pcf)	REMARKS
4" Topsoil		1-SS	4	2.5	-	24	-	
Brown and gray silty CLAY (CL)		2-SS	6	2.5	1.4	25	86	
Brown and gray sandy CLAY (CL)	5	3-SS	4	0.8	0.6	19	109	
Brown and gray silty CLAY (CL) with sand		4-SS	7	3.5	2.1	24	96	
Brown and gray sandy CLAY (CL)	10	5-SS	7	1.3	0.4	21	112	
Brown silty CLAY (CL) with sand and small gravel - Till	15	6-SS	21	4.5+	5.4	12	120	
		7-SS	81	4.5+	-	10	-	
	20	8-SS	50/5.5"	2.8	0.8	12	112	
END OF BORING AT 21.5 FEET								

▼  
Drilling: 20 ft.  
Completion: 19 ft.

Lines of Demarcation represent an approximate boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions.



## GENERAL NOTES

### SAMPLE IDENTIFICATION

Visual soil classifications are made in general accordance with the Unified Soil Classification System on the basis of textural and particle size categorization, and various soil behavior characteristics. Visual classifications should be substantiated by appropriate laboratory testing when a more exact soil identification is required to satisfy specific project applications criteria.

#### PARTICLE SIZE $\pm$

Boulders: 8 inches	Coarse Sand: 2 mm to 4 mm	Silt: 0.005 mm to 0.074 mm
Cobbles: 3 to 8 inches	Medium Sand: 0.42 mm to 2 mm	Clay: - 0.005 mm
Gravel: 5 mm to 3 inches	Fine Sand: 0.074 to 0.42 mm	

### DRILLING & SAMPLING SYMBOLS

SS: Split-spoon, 2" O.D. by 1 3/8" I.D.

ST: Shelby Tube, 2" O.D. or 3" O.D., as noted in test

AU: Auger Sample

DB: Diamond Bit

CB: Carbide Bit

RB: Roller Bit

WS: Wash Sample

BS: Bag Sample

HA: Hand Auger

### SOIL PROPERTY SYMBOLS

N: Standard penetration count, indicating number of blows of a 140 lb. Hammer with a 30-inch drop, required to advance a split-spoon sampler one (1) foot.

Qu: Unconfined compressive strength, tons per square foot (tsf).

Qp: Calibrated hand penetrometer resistance, tsf.

MC: Moisture Content, %

LL: Liquid Limit      PL: Plastic Limit      PI: Plasticity Index

Dd: Dry density, pounds per cubic foot (pcf).

PID: Photoionization Detector (Hnu meter) volatile vapor level, ppm

### SOIL RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

NON-COHESIVE SOILS		COHESIVE SOILS		
Classifier	N-Value Range	Classifier	Qu Range (tsf)	N-Value Range
very loose	0 – 3	very soft	0 – 0.25	0 – 2
loose	3 – 7	soft	0.25 – 0.5	2 – 5
medium dense	7 – 15	medium stiff	0.5 – 1.0	5 – 10
dense	15 – 38	stiff	1.0 – 2.0	10 – 14
very dense	38 +	very stiff	2.0 – 4.0	14 – 32
		hard	4.0 +	32 +

### GROUNDWATER



Approximate Groundwater level at time noted on soil boring log, measured in open bore hole unless otherwise noted. Groundwater levels often vary with time, and are affected by soil permeability characteristics, weather conditions, and lateral drainage conditions.

# UNIFIED SOIL CLASSIFICATION

MAJOR DIVISIONS			SYMBOL	TYPICAL DESCRIPTION
COARSE GRAINED SOILS	Gravel and Gravelly Soils	Clean Gravels	GW	Well-graded gravels and gravel-sand mixtures
			GP	Poorly-graded gravels and gravel-sand mixtures
		Gravels with Fines	GM	Silty gravels and gravel-sand-silt mixtures
			GC	Clayey gravels and gravel-sand-clay mixtures
	Sand and Sandy Soils	Clean Sands	SW	Well-graded sands and gravelly sands
			SP	Poorly-graded sands and gravelly sands
		Sands with Fines	SM	Silty sands and sand-silt mixtures
			SC	Clayey sands and sand-clay mixtures
FINE GRAINED SOILS	Silts and Clays of Low Plasticity		ML	Inorganic silts or clayey silts of slight plasticity
			CL	Inorganic clays of low to medium plasticity
			OL	Organic silts and organic silty clays of low plasticity
	Silts and Clays of High Plasticity		MH	Inorganic silts of high plasticity
			CH	Inorganic clays of medium to high plasticity
			OH	Organic clays of medium to high plasticity
Highly Organic Soils			PT	Peat, humus and swamp soils with high organic contents

*Note: Dual symbols are used to indicate borderline classifications.*