AND FACADE REPAIR

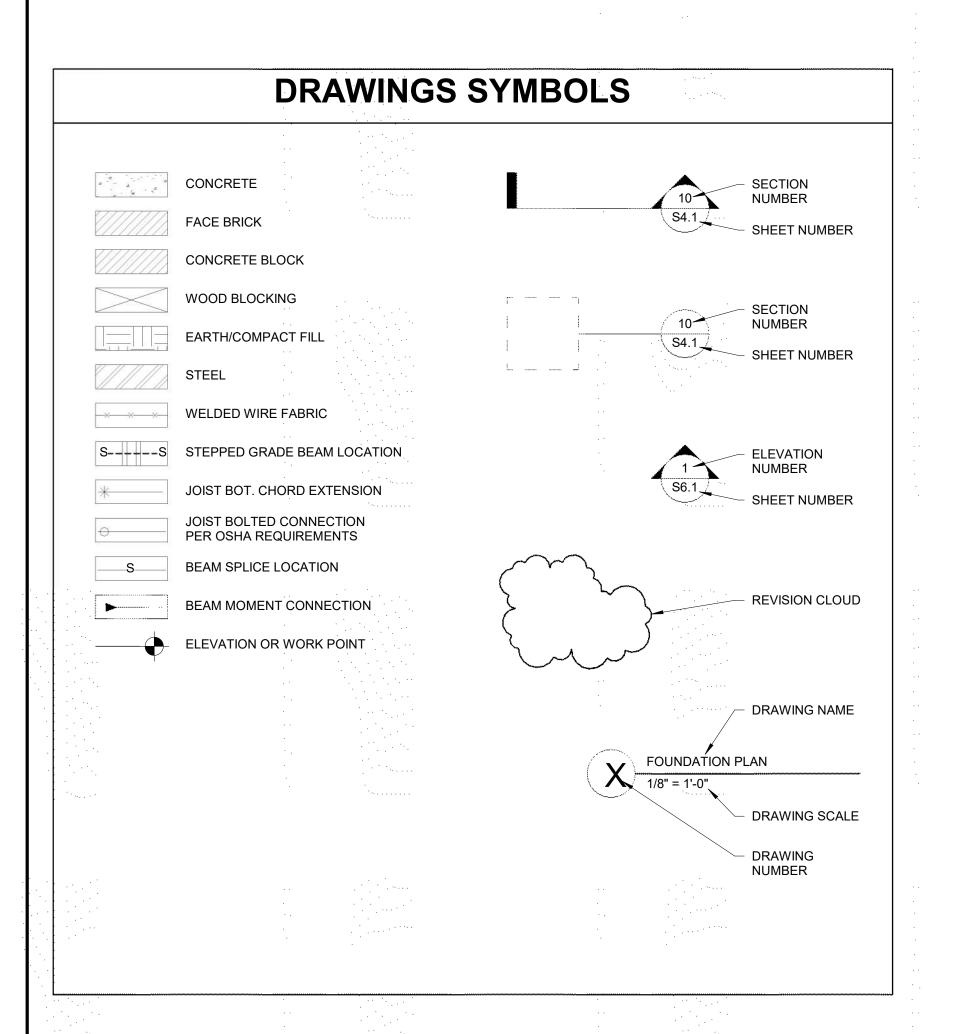
BROWNSTONES OF SUMMIT
596-604 SUMMIT AVE.

2022 EGRESS STAIR REPLACEMENT

Sheet		
Number	Sheet N	Name
\1.0	ROOF PLAN	
\1.1	ELEVATIONS	
A2.1	FACADE DETAILS	
A2.2	FACADE DETAILS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

ST. PAUL, MN

STRUCTURAL DRAWING INDEX							
Sheet Number	Sheet Name						
S0.1	GENERAL NOTES						
S0.2	SPECIAL INSPECTIONS						
S0.3	SCHEDULES						
S1.1	FOUNDATION PLAN						
S2.1	FRAMING PLAN - LEVEL 2						
S2.2	FRAMING PLAN - LEVEL 3						
S4.1	FOUNDATION DETAILS						
S5.2	FRAMING DETAILS						







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CERTIFICATION

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Name Anne Crisp

Date 10/17/2022

Registration Number 47

Project Number: 21-7861-000

10/14/2022

Date: JPS

Drawn: AMC

Checked:

12" = 1'-0"

RFVISIONS

.

PROJECT

BROWNSTONES ON SUMMITEGRESS REPLACEMENT

596-604 SUMMIT AVE. ST PAUL, MN

SHEET TITLE:

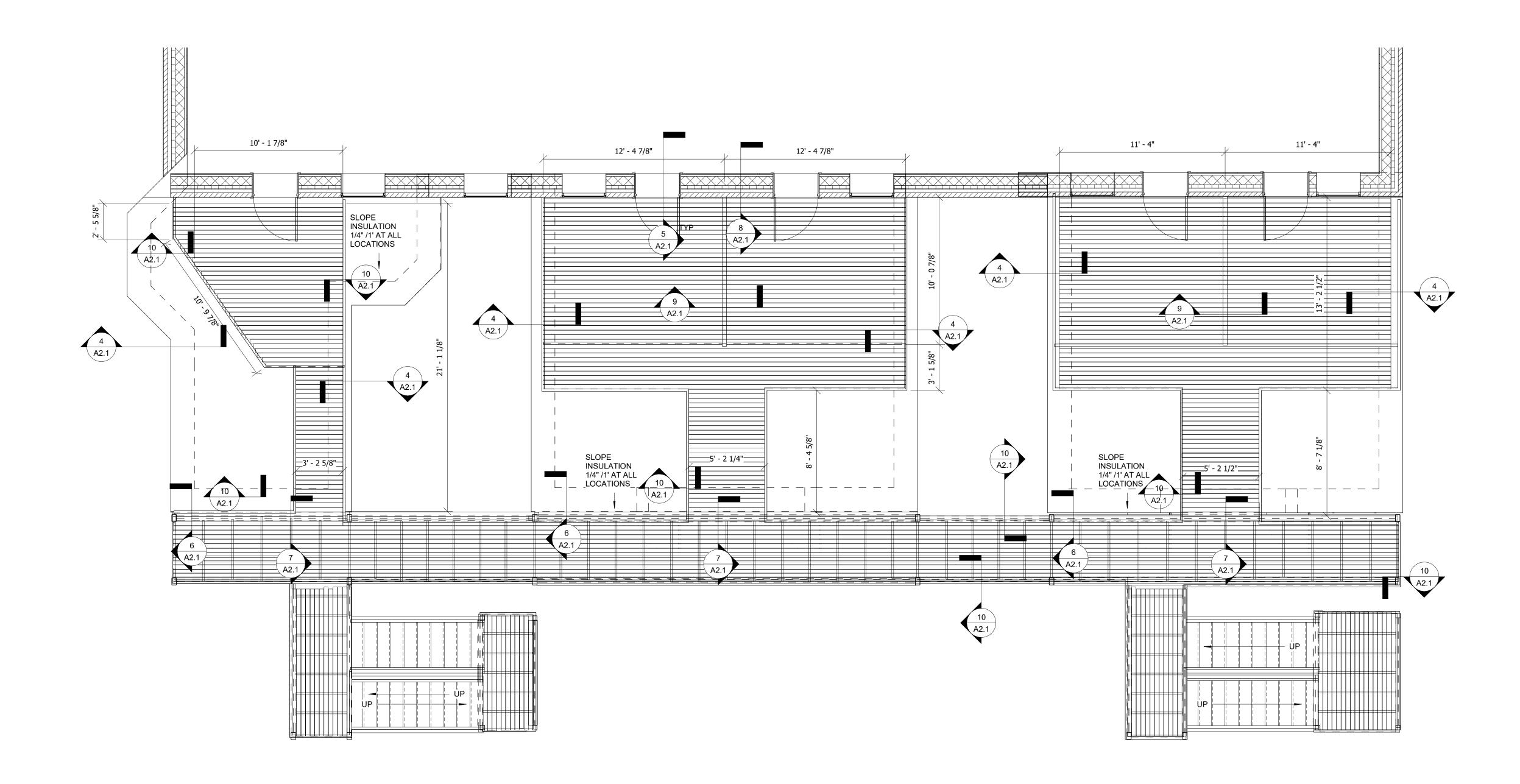
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BID SET 10/17/2022

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SHEET 1 OF



1) ROOF REPLACEMENT PLAN 1/4" = 1'-0"

ROOF PLAN NOTES:

- SLEEPERS WILL VARY IN DEPTH. TAPERING MAY BE REQUIRED. DEPTHS TO BE FIELD VERIFIED & COORDINAED w/ EXISTING DOOR THRESHOLD ELEVATIONS AND INSULATION THICKNESSES. MAX SPACING OF SLEEPERS TO BE 16" O.C.
- CONTACT ENGINEER IF INSULATION HEIGHT WILL INTERFERE w/ DOOR THRESHOLD OR OTHER EXISTING ARCHITECTURAL ELEMENTS.
 SEE A2.1 FOR TYPICAL DECK DETAILS.

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BROWNSTONES ON SUMMIT **EGRESS REPLACEMENT**

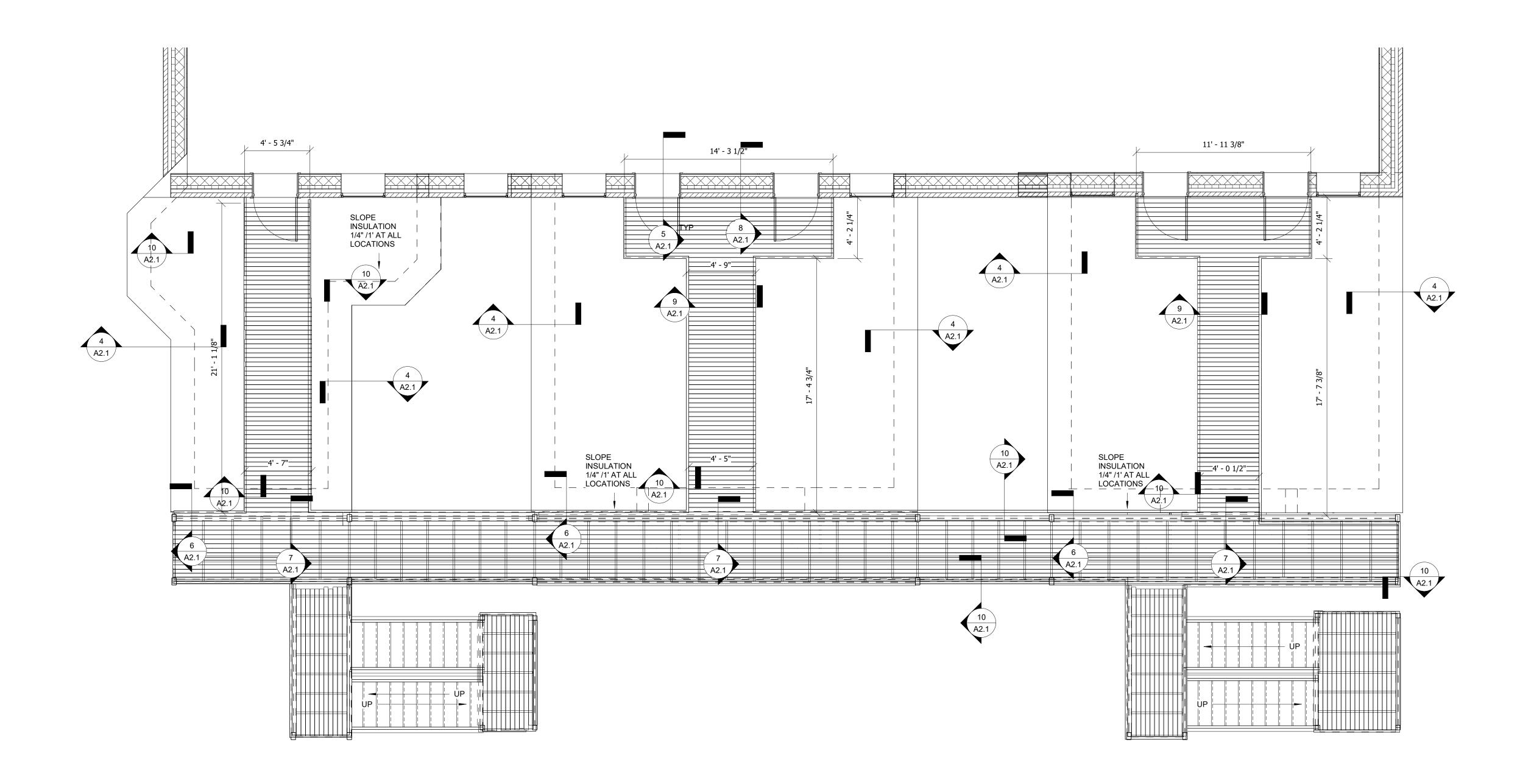
596-604 SUMMIT AVE.

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SHEET TITLE: ROOF PLAN

SHEET NUMBER:

SHEET 1 OF



1 ROOF REPLACEMENT PLAN 1/4" = 1'-0"

ROOF PLAN NOTES:

- SLEEPERS WILL VARY IN DEPTH. TAPERING MAY BE REQUIRED. DEPTHS TO BE FIELD VERIFIED & COORDINAED w/ EXISTING DOOR THRESHOLD ELEVATIONS AND INSULATION THICKNESSES. MAX SPACING OF SLEEPERS TO BE 16" O.C.
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596-604 SUMMIT AVE.

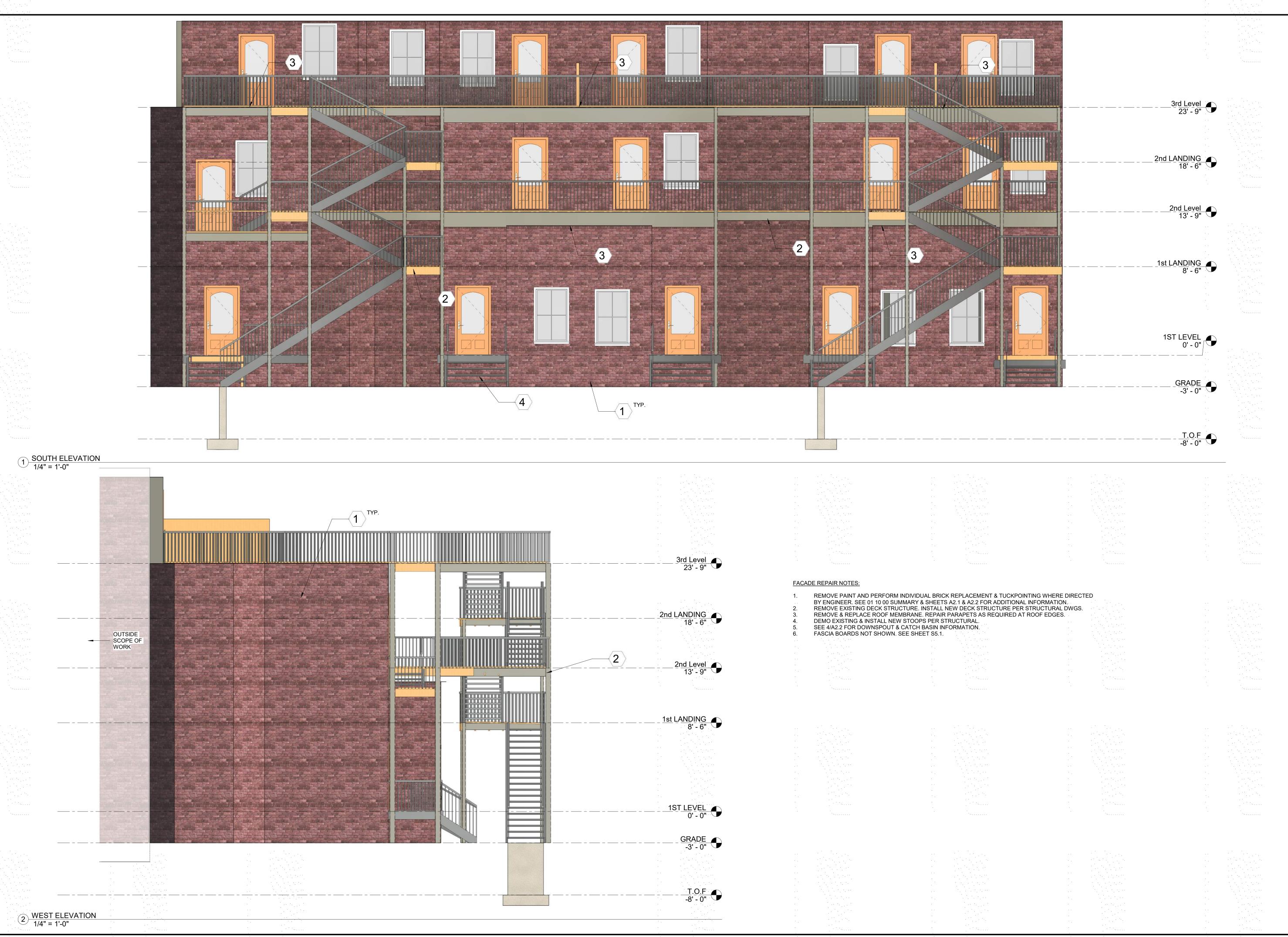
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SHEET TITLE:

ROOF PLAN ALTERNATE

SHEET NUMBER:

SHEET 1 OF 4





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Signature

Name

Date

Registration Number

Project Number: 21-7861-000
10/14/2022
Date: JPS
Drawn: AMC
Checked: As indicated

REVISIONS:

PROJECT:

BROWNSTONES ON SUMMIT EGRESS REPLACEMENT

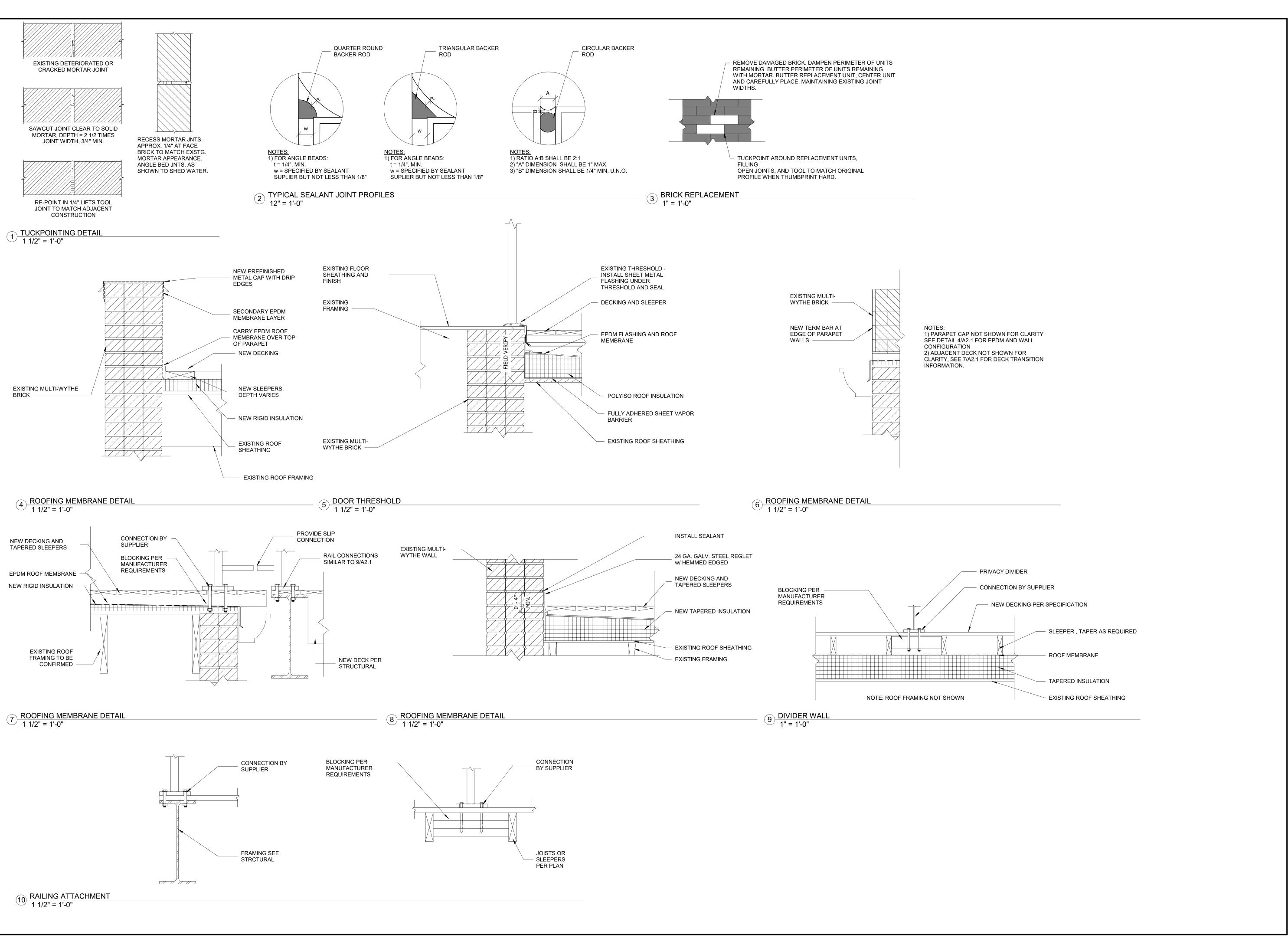
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SHEET TITLE: ELEVATIONS

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A1.

SHEET 2 OF



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Name _____

Registration Number

Project Number: 21-7861-000

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Date: _____

Checked: AMC

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BROWNSTONES ON SUMMIT EGRESS REPLACEMENT

596-604 SUMMIT AVE. ST PAUL, MN

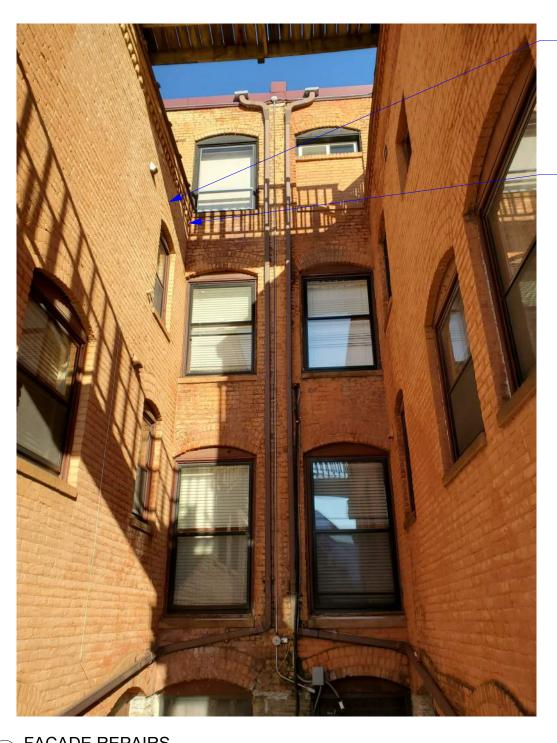
SHEET TITLE:

FACADE DETAILS

SHEET NUMBER:

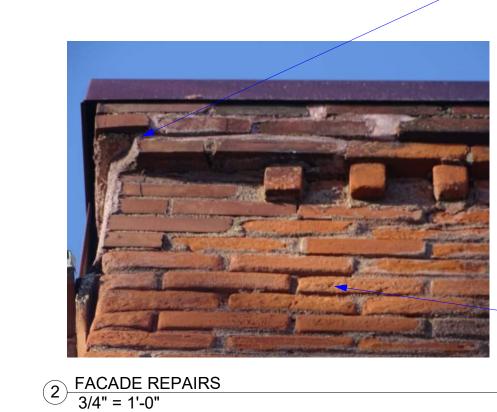
A2.1

SHEET 3 OF



BRICK REPLACEMENT
PER SPECIFICATIONS
LIMITED TO PARAPET AREAS AND WHERE DECK IS TO BE REPLACED

TUCKPOINTING PER SPECIFICATIONS
LIMITED TO PARAPET
AND WEHERE DECK IS TO BE REPLACED



TUCKPOINTING PER SPECIFICATIONS LIMITED TO PARAPET AREAS AND WHERE DECK IS TO BE REPLACED

BRICK REPLACEMENT

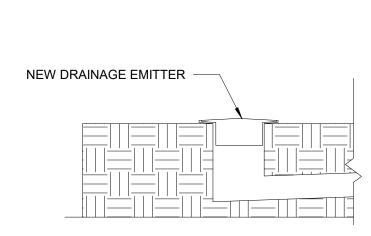
PER SPECIFICATIONS LIMITED TO PARAPET AREAS AND WHERE

DECK IS TO BE REPLACED

TUCKPOINTING PER SPECIFICATIONS LIMITED TO PARAPET AREAS AND WHERE DECK IS TO BE REPLACED 3 FACADE REPAIRS
3/4" = 1'-0"

PARAPET CAP TO BE REPLACED

1 FACADE REPAIRS 3/4" = 1'-0"



EXISTING DOWNSPOUT REMOVE & REPLACE SIDEWALK OVER DRAIN TILE AS NEEDED **EXISTING** BUILDING NEW 8"x 8" CATCH BASIN FOR DOWNSPOUT —

NEW 4" GUTTER DRAIN TILE, NON-CORRUGATED, NON PERFORATED

4 DRAINAGE DETAIL 1" = 1'-0"

CERTIFICATION:

CONSULTANTS:

BRICK REPLACEMENT
PER SPECIFICATIONS
LIMITED TO PARAPET

AREAS AND WHERE DECK IS TO BE

REPLACED

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SHEET TITLE:

FACADE DETAILS

SHEET NUMBER:

SHEET 4 OF 4

THESE GENERAL STRUCTURAL NOTES ARE GIVEN AS MINIMUM REQUIREMENTS. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND INFORMATION. **BUILDING CODE:** MINNESOTA STATE BUILDING CODE 2020 BASED ON INTERNATIONAL BUILDING CODE 2018 EDITION WITH MINNESOTA AMENDMENTS. ASCE 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES. **DESIGN LOADS:** BUILDING CATEGORY II DEAD LOAD 12.0 PSF LIVE LOAD 100 PSF PUBLIC AREAS, 60 PSF PRIVATE AREAS ROOF UNIFORM LIVE LOAD 20 PSF HANDRAIL ASSEMBLIES AND GUARDRAIL SYSTEMS: 50 PLF LOAD AT TOP RAIL (ANY DIRECTION) SINGLE CONCENTRATED AT TOP RAIL HORIZONTAL LOAD ON INTERMEDIATE RAILS, BALUSTERS AND PANEL FILLERS UNIFORM SNOW LOAD 42 PSF (INCREASED AT AREAS OF ACCUMULATION) Ce 1.0 1.0 WIND SPEED 109 MPH (DESIGNED AS HAVING A HEIGHT OF 60' OR LESS) ENCLOSURE CLASSIFICATION = OPEN BUILDING EXPOSURE C I_w=1.0 SEISMIC DESIGN (MINNESOTA) EXEMPT LATERAL SOIL PRESSURE AT FOUNDATION WALLS 50 PCF (EQUIVALENT FLUID PRESSURE, AT REST PRESSURED) **DEFLECTION CRITERIA**

ROOF SLOPES LESS THAN 1/4 UNIT VERTICAL IN 12 UNITS HORIZONTAL SHALL BE STRUCTURALLY INVESTIGATED FOR PONDING INSTABILITY DUE TO PROGRESSIVE DEFLECTION.

QUALITY OF WORK AND MATERIALS

- CONTRACTOR AND/OR OWNER SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, CODE COMPLIANCE AND GENERAL CONSTRUCTION INTEGRITY. ALL WORK AND MATERIALS SHALL COMPLY WITH APPLICABLE CODES, ORDINANCES, AND LABOR
- LAWS, AND SHALL BE IN ACCORDANCE WITH GENERALLY ACCEPTED STANDARDS OF GOOD PRACTICE. ALL INSPECTIONS AND TESTING SHALL MEET THE MINIMUM REQUIREMENTS STATED EITHER HERE,
- IN THE BUILDING CODE, OR AS REQUIRED BY THE BUILDING OFFICIAL WHICHEVER IS MORE RESTRICTIVE. THE CONTRACTOR SHALL VERIFY THE INSPECTION REQUIREMENTS WITH THE BUILDING OFFICIAL DURING THE BUILDING PERMIT DOCUMENT REVIEW. THE STRUCTURE SHALL BE ADEQUATELY BRACED AND SHORED AGAINST WIND, LATERAL SOIL
- PRESSURE AND CONSTRUCTION LOADS DURING CONSTRUCTION. STRUCTURAL MEMBERS ARE DESIGNED FOR "IN PLACE" LOADS. PRODUCTS SHALL BE HANDLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S
- RECOMMENDATIONS FOR BEST RESULTS.
- SUBSTITUTION OF SPECIFIED STRUCTURAL ITEMS SHALL BE DONE ONLY AFTER APPROVAL ACCORDING TO THE FOLLOWING:
- VERIFICATION OF SPECIFIED STRUCTURAL ITEMS AS "APPROVED EQUAL" SHALL COME FROM ONLY ENCOMPASS, INC.
- ALTERNATES THAT ARE NOT SHOWN ON THE DRAWINGS MAY BE SUBMITTED FOR REVIEW PROVIDED THEY ARE SUBMITTED WITH SPECIFICATIONS, DRAWINGS (AND CALCULATIONS FOR STRUCTURAL ITEMS). THE SUBMITTAL MUST SHOW THE EQUIVALENCY OF THE ALTERNATE TO THE GIVEN ITEM. ALL ALTERNATES USED MUST HAVE BEEN ACCEPTED IN WRITING BY ENCOMPASS, INC. PRIOR TO USE
- ITEMS INDICATED AS EITHER OPTIONAL (OPT.) OR ALTERNATE (ALT.) SHALL BE BID SEPARATELY AND SO NOTED REFER TO CONTRACTOR AND/OR OWNER FOR VERIFICATION OF ALL MATERIALS NOT SPECIFICALLY NOTED.

DOCUMENT COORDINATION & VERIFICATION OF EXISTING CONDITIONS:

- EXAMINE THE EXISTING BUILDING DOCUMENTS AND ALL OTHER DOCUMENTS TO DETERMINE THE LOCATION AND DIMENSIONS OF ANY OTHER OPENINGS, SLEEVES, DEPRESSIONS AND/OR OTHER PROJECT REQUIREMENTS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- BEFORE FABRICATION AND ERECTION OF ANY MATERIALS. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELEVATIONS, DIMENSIONS, AND CONDITIONS SHOWN ON THE DRAWINGS AND REPORT ANY DISCREPANCIES TO ENCOMPASS, INC. FOR RESOLUTION.
- THE CONTRACTOR SHALL EXAMINE THE SITE TO DETERMINE LOCATION AND DIMENSIONS OF ANY PROJECT CONDITIONS OR REQUIREMENTS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- "VERIFY" OR "FIELD VERIFY" ON THESE DOCUMENTS REFERS TO THE CONTRACTOR, UNLESS NOTED OTHERWISE.

LIMITS OF DESIGN RESPONSIBILITY:

- LIMITS OF DESIGN RESPONSIBILITY ARE FOR THE STRUCTURES SHOWN WITHIN THESE DOCUMENTS ONLY. THESE DRAWINGS DO NOT INCLUDE COMPONENTS FOR CONSTRUCTION SAFETY. CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION SAFETY MEASURES.
- THE STRUCTURAL DESIGN IS BASED ON THE STRUCTURE IN ITS COMPLETED STATE. CONTRACTORS/SUBCONTRACTORS SHALL TAKE REQUIRED PRECAUTIONS TO WITHSTAND HORIZONTAL
- AND VERTICAL LOADS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION PRIOR TO COMPLETION OF THE BUILDING.

CONSTRUCTION SEQUENCE:

THE CONSTRUCTION SEQUENCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE STRUCTURE SHALL BE ERECTED IN SUCH A MANNER THAT IT WILL NOT IMPOSE LOADS OR STRESSES GREATER THAN THE STRUCTURAL ELEMENTS WOULD SUPPORT IN THE COMPLETED STRUCTURE.

FUTURE EXPANSION:

A. THIS PROJECT IS NOT DESIGNED FOR FUTURE EXPANSION.

INSPECTIONS AND TESTING:

- ALL INSPECTIONS AND TESTING SHALL MEET THE MINIMUM REQUIREMENTS STATED EITHER HERE, IN THE BUILDING CODE, OR AS REQUIRED BY THE BUILDING OFFICIAL, WHICHEVER IS MORE RESTRICTIVE. THE CONTRACTOR SHALL VERIFY THE INSPECTION REQUIREMENTS WITH THE BUILDING OFFICIAL DURING
- THE BUILDING PERMIT DOCUMENT REVIEW. SPECIAL INSPECTIONS SHALL BE PROVIDED BY AN INDEPENDENT TESTING AGENCYBY PERSONNEL QUALIFIED FOR THE TYPE OF INSPECTION AS NOTED.
- REFER TO CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE AND THE AMENDMENTS OF THE STATE OF THE PROJECT FOR SPECIFIC DEFINITIONS OF TERMS, SECTIONS AND ABBREVIATIONS AS STATED HEREIN.
 - STRUCTURAL STEEL CONSTRUCTION SEE AISC 360-16 SPECIFICATIONS FOR STRUCTURAL STEEL

HIGH-STRENGTH BOLTING, BEARING	PERIODIC
FILLET WELDS 5/16" OR LESS	PERIODIC
FRAMING AND CONNECTION GENERAL COMPLIANCE	PERIODIC

II. CONCRETE CONSTRUCTION, IBC TABLE 1705.3

BUILDINGS, SECTION N.

REINFORCING STEEL SIZE, SPACING AND PLACEMENT VERIFY USE OF DESIGN MIX	PERIODIC PERIODIC
SLUMP, AIR, TEMPERATURE	CONTINUOUS
CONCRETE CURING	PERIODIC
STRENGTH TESTING (CYLINDER BREAKS)	PERIODIC
POST INSTALLED ANCHORS	CONTINUOUS

- WOOD CONSTRUCTION SEE IBC SECTION 1704.2.5.
- IV. SOILS/EARTHWORK, IBC TABLE 1705.6

VERIFY EXCAVATIONS	PERIODIC
VERIFY SOILS BELOW FILL	PERIODIC
VERIFY FILL MATERIALS AND PLACEMENT	CONTINUO
TEST FILL COMPACTION	PERIODIC
VERIFY SOILS BELOW FOOTINGS	PERIODIC

FOUNDATIONS AND SITE WORK:

A. GEOTECHNICAL REPORT

- FOUNDATIONS, RETAINING & BASEMENT WALLS, FOUNDATION DRAINAGE, SLABS ON GRADE & OTHER ITEMS RELATED TO THE SOILS ARE DESIGNED BASED ON THE INFORMATION LISTED BELOW. PRIOR TO CONSTRUCTION A QUALIFIED SOILS ENGINEER FAMILIAR WITH THE SITE AND PROJECT MUST VERIFY THE SOILS ARE CAPABLE OF WITHSTANDING THE INDICATED BEARING PRESSURES.
- DESIGN NET SOIL BEARING CAPACITY IS AS FOLLOWS:
 - SPREAD FOOTINGS 2500 PSF* STRIP FOOTINGS 2500 PSF
- MINIMUM DEPTH FROM EXTERIOR GRADE TO BOTTOM OF BUILDING PERIMETER FOOTINGS SHALL BE 5'-0". ALL OPEN AIR FOUNDATIONS HAVE A MINIMUM OF 5'-0" FROST PROTECTION.

CONCRETE (DIVISION 3)

A. CONCRETE DESIGN STRENGTH, MAXIMUM W/CM RATIOS, EXPOSURE CATEGORIES:

		MINIMUM DESIGN STRENGTH PSI	MAX w/cm RATIO	FREEZE THAW	SULFATE	WATER CONTACT	REINFORCING CORROSION PROTECTION
I	FOOTINGS	3500	0.55	F0	S0	W0	C1
II	CONCRETE UNO	4000	0.45				
III	EXTERIOR PLAIN SLABS	4500	0.45				

- MATERIALS AND PROPORTIONS USED IN THE CONCRETE MIX DESIGN SHALL MEET THE REQUIREMENTS OF ACI 318 CODE FOR REINFORCED CONCRETE DESIGN AND CONSTRUCTION USING ACI 318 LATEST PUBLISHED EDITION.
- ALL REINFORCING SHALL BE DETAILED, FABRICATED & PLACED IN ACCORDANCE WITH CRSI "MANUAL OF STANDARD PRACTICE", LATEST EDITION.
- CALCIUM CHLORIDE IS NOT PERMITTED AS A CONCRETE ADDITIVE. ALL ADMIXTURES SHALL BE ACCEPTED IN WRITING BY ENCOMPASS, INC. PRIOR OT USE IN
- ANY CONCRETE. VIBRATE CONCRETE DURING PLACEMENT AS NECESSARY TO ENCAPSULATE REINFORCING STEEL AND PREVENT AGGREGATE SEGREGATION.
- CONCRETE EXPOSED TO FREEZING AND THAWING SHALL BE AIR ENTRAINED 6% +/- 1%. CONCRETE SHALL BE PROTECTED FROM HIGH TEMPERATURES, SUN AND WIND BY THE USE OF CURING COMPOUNDS, POLY COVERS, WATER SPRAY OR SOME OTHER ACCEPTABLE
- MEANS OF PROTECTION. CONCRETE COVER TO REINFORCING BARS SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:
- SURFACES CAST AGAINST THE EARTH: FORMED SURFACES IN CONTACT WITH EARTH OR EXPOSED TO WEATHER: #6 OR LARGER #5 OR SMALLER
- THE FOLLOWING THREE CRITERIA ESTABLISH THE REQUIRED MINIMUM SAMPLING FREQUENCY FOR EACH CLASS OF CONCRETE:
 - ONCE EACH DAY A GIVEN CLASS IS PLACED. NOR LESS THAN ONCE FOR EACH 150 CU YD OF EACH CLASS PLACED EACH DAY, NOR LESS THAN
 - ONCE FOR EACH 5000 SQ FT OF SLAB OR WALL SURFACE AREA PLACED EACH DAY.
- ON A GIVEN PROJECT.
- IF TOTAL VOLUME OF CONCRETE IS SUCH THAT FREQUENCY OF TESTING REQUIRED WOULD PROVIDE LESS THAN FIVE STRENGTH TESTS FOR A GIVEN CLASS OF CONCRETE, TESTS SHALL BE MADE FROM AT LEAST FIVE RANDOMLY SELECTED BATCHES OR FROM EACH BATCH IF FEWER THAN FIVE BATCHES ARE USED.

12. **CONCRETE REINFORCING (DIVISION 3):**

REINFORCEMENT

- REINFORCEMENT Fy = 60,000 PSI ASTM A615 WELDABLE REINFORCEMENT Fy = 60,000 PSI ASTM A706 WELDED WIRE FABRIC Fy = 65,000 PSI ASTM A185
- ARRANGEMENT AND BENDING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE ACI DETAILING MANUAL, LATEST EDITION.
- REINFORCING STEEL SHALL BE NEW DEFORMED BARS OR WELDED WIRE FABRIC. WHERE REINFORCING BARS ARE SHOWN CONTINUOUS, PROVIDE CLASS B TENSION LAP SPLICES (12" MINIMUM) EXCEPT WHERE NOTED OR DETAILED OTHERWISE. STAGGER LAPS IN
- SLABS AND WALLS. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT INTERSECTIONS
- OF FOOTINGS, WALLS, BOND BEAMS. VERIFY ALL EMBEDDED REINFORCING PRIOR TO PLACING CONCRETE. REINFORCING SHALL BE PROPERLY CHAIRED AND TIED IN PLACE TO PREVENT MOVEMENT DURING CONCRETE
- PLACEMENT. ALL CHAIRS, SLAB BOLSTERS AND SUPPORT BARS SHALL BE PLASTIC OR EPOXY COATED OR
- MADE FROM NON-CORRODING MATERIALS.
- ALL EMBEDDED ELECTRICAL CONDUITS AND BOXES SHALL BE PLASTIC OR APPROVED NON-
- ALL EMBEDDED ITEMS SUCH AS PLATES, ANGLES, HEADED STUDS, ANCHOR BOLTS STUD RAILS, ETC. SHALL BE EPOXY COATED OR GALVANIZED.
- EPOXY COATING SHALL CONFORM TO ASTM A775 FOR REINFORCING BARS AND ASTM A884 FOR

POST-INSTALLED ANCHORS INTO CONCRETE

GALVANIZING SHALL CONFORM TO ASTM A123.

- POST-INSTALLED MECHANICAL ANCHORS INTO CONCRETE SHALL BE ICC-ES APPROVED FOR USE IN CRACKED CONCRETE. ANCHORS SHALL BE TESTED IN ACCORDANCE WITH ICC-ES AC193. PRE-APPROVED ANCHORS INCLUDE:
- HILTI KWIK BOLT TZ ICC-ES REPORT ESR-1917 HILTI HDA UNDERCUT ANCHOR ICC-ES REPORT ESR-1546 ICC-ES REPORT ESR-1771 SIMPSON STRONG-BOLT ITW RED HEAD TRUBOLT+ ICC-ES REPORT ESR-2427
- POST-INSTALLED ADHESIVE ANCHORS INTO CONCRETE SHALL BE ICC-ES APPROVED FOR USE IN CRACKED CONCRETE. ANCHORS SHALL BE TESTED IN ACCORDANCE WITH ICC-ES AC308. PRE-APPROVED ANCHORS INCLUDE:
- HILTI HIT-RE 500-SD ICC-ES REPORT ESR-2322 ICC-ES REPORT PENDING SIMPSON SET-XP
- SEE THE STRUCTURAL DRAWINGS FOR SPECIFIC POST-INSTALLED ANCHOR REQUIREMENTS. SUBSTITUTIONS IN THE ABOVE LISTS SHALL BE SUBMITTED FOR REVIEW. SUBSTITUTIONS MUST HAVE PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD BEFORE THEIR USE.
- REFER TO THE MANUFACTURERS INFORMATION AND ICC-ES REPORTS FOR SPECIFIC INSTALLATION REQUIREMENTS & PROCEDURES.
- SEE STATEMENT OF STRUCTURAL INSPECTIONS ON DRAWINGS FOR ANCHOR INSPECTION REQUIREMENTS.

STRUCTURAL STEEL (DIVISION 5):

- MATERIAL STRENGTH UNLESS NOTED ON PLAN: Fy = 36 KSI ASTM A36 STRUCTURAL SHAPES WIDE FLANGE SECTIONS Fv = 50 KSI ASTM A992 BOLTS Fy = 74 KSI A325N WELDING ELECTRODES Fy = 70 KSI A233
- PLATES, ANGLES, ETC. Fy = 36 KSI ASTM A36 LATEST AISC MANUAL AND SPECIFICATIONS APPLY. ALL WELDING AND TESTING OF WELDS SHALL BE IN ACCORDANCE WITH THE AMERICAN
- WELDING SOCIETY CODES AND RECOMMENDATIONS. ALL WELDING SHALL BE BY WELDERS HOLDING CURRENT VALID CERTIFICATES IN THE
- TYPE OF WELDING CALLED FOR. FIELD CUTTING OR OTHER FIELD MODIFICATIONS TO STRUCTURAL STEEL SHALL NOT BE
- MADE WITHOUT SPECIFIC PRIOR WRITTEN APPROVAL OF ENCOMPASS, INC.

WOOD FRAMING (DIVISION 6):

A. SEE SPECS

ROOFING (DIVISION 7):

A. SEE SPECS

17. SHEET METAL FLASHING AND TRIM (DIVISION 7):

A. SEE SPECS

18. <u>JOINT PROTECTION (DIVISION 7):</u>

A. SEE SPECS

19. MISCELLANEOUS:

NOTIFY ENCOMPASS, INC. IN WRITING OF ANY DISCREPANCIES



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www.encompassinc.com

CONSULTANTS:

CERTIFICATION:

I hereby certify that this drawing 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.

Anne Crisp 10/17/2022

Registration Number <u>47126</u>

Project Number: 21-7861-000 10/14/2022

As indicated

REVISIONS:

PROJECT:

BROWNSTONES ON SUMMI | EGRESS REPLACEMENT

596-604 SUMMIT AVE.

GENERAL NOTES

ST PAUL, MN

SHEET TITLE:

SHEET NUMBER:

SHEET 1

STATEMENT OF SPECIAL INSPECTIONS

THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE "SPECIAL INSPECTIONS" DURING CONSTRUCTION. THE "SPECIAL INSPECTIONS" - REQUIRED IN ACCORDANCE W/ THE IBC, SECTION 1704 - ARE SUMMARIZED BELOW.

THE SPECIAL INSPECTION AGENCY SHALL SUBMIT A SCOPE OF SERVICES FOR APPROVAL PRIOR TO COMMENCING CONSTRUCTION. IN ADDITION, THE SPECIAL INSPECTION AGENCY SHALL SUBMIT QUALIFICATIONS OF EACH SPECIAL INSPECTOR THAT WILL BE PERFORMING THE WORK.

THE SPECIAL INSPECTOR SHALL FOLLOW THE REPORT REQUIREMENTS OF IBC SECTION 1704.1.2.

THE SPECIAL INSPECTOR SHALL USE THE LATEST ISSUE OF THE STRUCTURAL RECORD DRAWINGS FOR THE INSPECTION OF THE STRUCTURE.

THE FOLLOWING LIST IDENTIFIES THE SECTIONS OF THE IBC WHICH APPLY TO THIS PROJECT. THE SPECIAL INSPECTOR SHALL ILLUSTRATE THEIR UNDERSTANDING OF THE SPECIAL INSPECTION REQUIREMENTS BY IDENTIFYING APPLICABLE ITEMS WITHIN EACH SECTION OF THEIR SUBMITTAL.

DO NOT USE THE SHOP DRAWINGS FOR INSPECTION PURPOSES.

SPECIAL INSPECTIONS OF FABRICATED ITEMS ARE REQUIRED WHEN STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES ARE BEING FABRICATED ON TEH PREMISES OF A FABRICATOR'S SHOP.

IBC SECTION 1704.2.5 - INSPECTION OF FABRICATORS

THE SPECIAL INSPECTOR SHALL VERIFY THAT THE FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO THE APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS. THE SPECIAL INSPECTOR SHALL REVIEW THE PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK.

SPECIAL INSPECTIONS SHALL NOT BE REQUIRED IF THE FABRICATOR IS APPROVED IN ACCORDANCE WITH IBC SECTION 1704.2.5.2.

STEEL CONSTRUCTION QUALITY CONTROL / QUALITY ASSURANCE

INSPECTION TASKS	QC	QA	INSPECTION TASKS	QC	Q/
PRIOR TO WELDING:			Welds meet visual acceptance criteria		
Welding procedure specifications (WPSs) available	Р	Р	1. Crack prohibition	Р	Р
Manufacturer certifications for welding consumables available	Р	Р	2. Weld/base-metal fusion	Р	Р
Material identification (type/grade)	0	0	3. Crater cross section	Р	Р
Welder identification system	0	0	4. Weld profiles	Р	Р
Fit-up of groove welds (including joint geometry)	'		5. Weld size	Р	Р
1. Joint preparation	0	0	6. Undercut	Р	Р
2. Dimensions (alignment, root opening, root face, bevel)	0	0	7. Porosity	Р	Р
3. Cleanliness (condition of steel surfaces)	0	0	Arc strikes	Р	Р
4. Tacking (tack weld quality and location)	0	0	k-area1	Р	Р
5. Backing type and fit (if applicable)	0	0	Backing removed and weld tabs removed (if required)	Р	Р
Configuration and finish of access holes	0	0	Repair activities	Р	Р
Fit-up of fillet welds	'		Document acceptance or rejection of welded joint or member	Р	Р
1. Dimensions (alignment, gaps at root)	0	0	PRIOR TO BOLTING:		
2. Cleanliness (condition of steel surfaces)	0	0	Manufacturer's certifications available for fastener materials	0	Р
3. Tacking (tack weld quality and location)	0	0	Fasteners marked in accordance with ASTM requirements	0	0
Check welding equipment	0	_	Proper fasteners selected for the joint detail (grade, type, bolt		
Use of qualified welders	0	0	length if threads are to be excluded from shear plane)	0	0
Control and handling of welding consumables			Proper bolting procedure selected for joint detail	0	0
1. Packaging	0	0	Connecting elements, including appropriate faying surface condition		
2. Exposure Control	0	0	& hole preparation, if specified, meet applicable requirements	0	0
No welding over cracked tack welds	0	0	Pre-installation verification testing by installation personnel		
Environmental conditions			observed and documented for fastener assemblies and methods	P	0
1. Wind speed within limits	0	0	Proper storage provided for bolts, nuts, washers and other fastener		
2. Precipitation and temperature	0	0	components	0	0
WPS followed			Fastener assemblies, of suitable condition, placed in all holes and		
1. Settings on welding equipment	0	0	washers (if required) are positioned as required	0	0
2. Travel speed	0	0	Joint brought to the snug-tight condition prior to the pretensioning		
3. Selected welding materials	0	0	operation	0	0
4. Shielding gas type/flow rate	0	0	Fastener component not turned by the wrench prevented from		
5. Preheat applied	0	0	rotating	0	0
6. Interpass temperature maintained (min./max.)	0	0	Fasteners are pretensioned in accordance with the RCSC		
Proper position (F, V, H, OH)	0	0	Specification, progressing systematically from the most rigid point	0	0
Welding techniques			toward the free edges		
1. Interpass and final cleaning	0	0	Document acceptance or rejection of bolted connections	P	Р
2. Each pass within profile limitations	0	0	INSPECTION OF STEEL ELEMENTS OF COMPOSITE CONSTRU	CTION	PRIO
Each pass meets quality requirements	0	0	TO CONCRETE PLACEMENT:		
Welds cleaned	0	0	Manufacturer's certifications available for fastener materials	0	Р
Size, length and location of welds	Р	Р	Fasteners marked in accordance with ASTM requirements	0	0
P – Perform these tasks for each welded joint or member. O - Observe these items on a random basis. Operations need not	he delaved	nendina	Proper fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane)	0	0
these inspections	•		SPECTIONS AND TESTS OF STEEL CONSTRUCTI	ON	1

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	REFERENCED STANDARD	IBC REFERENCE	YES	NO	N.A.
1. Material verification of cold-formed steel deck:							
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	_	х	Applicable ASTM material specifications	-			х
b. Manufacturer's certified test reports.	_	X	materiai specifications	-			Х
2. Inspection of welding:					•		,
a. Cold-formed steel deck:							
1) Floor and roof deck welds.	_	X	AWS D1.3	-	х		
b. Reinforcing steel:					•		
1)Verification of weldability of reinforcing steel other than ASTM A 706.	_	X		-			Х
2) Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement.	X	_	AWS D1.4 ACI 318: Section 3.5.2	-			x
3) Shear reinforcement.	X	_	Section 5.5.2	-			Х
4) Other reinforcing steel.	_	X		-			Х

IBC TABLE 1705.6 - REQUIRED VERIFICATION AND INSPECTION OF SOILS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	YES	NO	N.A.
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	_	X	X		
2. Verify excavations are extended to proper depth and have reached proper material.	_	X	X		
3. Perform classification and testing of compacted fill materials.	_	X	X		
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X	_	х		
5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.	_	х	Х		

<u>IBC TABLE 1705.8 - REQUIRED VERIFICATION AND SPECIAL INSPECTIONS FOR STEEL CONSTRUCTION AND</u> FOR OTHER THAN STRUCTURAL STEEL CONSTRUCTION

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED		REFERENCED STANDARD	IBC REFERENCE	YES	NO	N.A
Material verification of cold-formed steel deck:		L					
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	_	Х	Applicable ASTM material	-			Х
b. Manufacturer's certified test reports.	<u> </u>	Х	specifications	_			X
2. Inspection of welding:			•				
a. Cold-formed steel deck:							
1) Floor and roof deck welds.	_	Х	AWS D1.3	_			Х
b. Reinforcing steel:			71110 5210				
1)Verification of weldability of reinforcing steel other than ASTM A 706.		Х					Х
-		^					\ \ \
 Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement. 	X	_	AWS D1.4 ACI 318: Section 3.5.2	-			X
3) Shear reinforcement.	Χ		30000011 31312	-			X
4) Other reinforcing steel.		X		-			Х
Material verification of high-strength bolts, nuts and washers:							
a. Identification markings to conform to ASTM standards specified in the appoved construction documents.	-	Х	Applicable ASTM specifications; AISC	-	х		
b. Manufacturer's certificate of compliance required	-	Х	360, Section A3.3	-	Х		
Inspection of high-strength bolting:							
a. Bearing-type connections.	-	X	AISC 360, Section		Χ		
b. Slip-critical connections.	Х	Х	M2.5	1704.3.3		Х	1
3. Material verification of structural steel:		I				-	
a. Identification markings to conform to ASTM standards specified in the			ASTM A 6 or				
approved construction documents.	-	-	ASTM A 568		X		
b. Manufacturer's certified mill test reports.	-	-	ASTM A 6 or ASTM A 568	1708.4	Х		
4. Materials verification of weld filler materials.							
a. Identification markings to conform to AWS specification in the approved	_	_	AISC 360,	_	Х		
construction documents.			Section A3.5				
b. Manufacturer's certificate of compliance required.	-	-	-	-	X		
5. Inspection of welding:							
a. Structural steel:							
Complete and partial penetration groove welds.	X	-				X	
2) Multipass fillet welds.	X	-	AWS D1.1	1704.3.1		X	
3) Single-pass fillet welds ≥ 5/16"	X	-		_,		X	
4) Single-pass fillet welds < 5/16"	-	X			X		
5) Floor and roof deck welds.	-	X	AWS D1.3	-		X	
b. Reinforcing steel:		Γ	T T			I	
1) Verification of weldability of reinforcing steel other than ASTM A 706.	-	X				Х	
2) Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls and shear reinforcement.	X	-	AWS D1.4 ACI 318: 3.5.2	-		X	
3) Shear reinforcement.	Х	-				Х	
4) Other reinforcing steel.	-	Х				X	
Inspection of steel frame joint details for compliance with approved constru	ction documents:		1		T .	1	
Details such as bracing and stiffening.	-	Х				Х	Т
<u> </u>	-	X	_	1704.3.2		X	-
b. Member locations.	-						

SPECIAL INSPECTIONS SHALL BE REQUIRED FOR THE FOLLOWING CONCRETE STRUCTURE COMPONENTS:

- SOIL SUPPORTED FOUNDATIONS OF BUILDINGS THAT ARE THREE (3) STORIES OR LESS ABOVE THE GRADE PLANE AND:
- a. ARE ISOLATED CONCRETE SPREAD FOOTINGS, OR
- b. STRIP OR TRENCH FOOTINGS SUPPORTING LIGHT FRAME CONSTRUCTION, OR c. USE A FOOTING DESIGN BASED ON CONCRETE COMPRESSIVE STRENGTH (fc) 2,500 PSI (REGARDLESS OF THAT SPECIFIED ON DESIGN
- DOCUMENTS). NON-STRUCTURAL SLABS ON GRADE.

IBC TABLE 1705.3 - REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

	VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	REFERENCED STANDARD	IBC REFERENCE	YES	NO	N.A.
\neg	Inspection of reinforcing steel, including prestressing tendons, and placement.	_	Х	ACI 318: 3.5, 7.1-7.7	1910.4	x		
	2. Inspection of reinforcing steel welding in accordance with Table 1705.2.2, Item 2b.	_	X	AWS D1.4 ACI 318: 3.5.2	_		х	
	3. Inspection of anchors cast in concrete where allowable loads have been increased or where strength design is used.	_	X	ACI 318: 8.1.3, 21.1.8	1908.5, 1909.1	Х		
	4. Inspection of anchors post-installed in hardened concrete membersb.	_	X	ACI 318: 3.8.6, 8.1.3, 21.1.8	1909.1	Х		
	5. Verifying use of required design mix.	_	X	ACI 318: Ch. 4, 5.2-5.4	1904.2, 1910.2, 1910.3	x		
	6. At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	X	_	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	1910.10	X		
	7. Inspection of concrete and shotcrete placement for proper application techniques.	x	_	ACI 318: 5.9, 5.10	1910.6, 1910.7, 1910.8	x		
	8. Inspection for maintenance of specified curing temperature and techniques.	_	Х	ACI 318: 5.11-5.13	1910.9		х	
	9. Inspection of prestressed concrete:							
	a. Application of prestressing forces.	X	_	ACI 318: 18.20	_			Х
	b. Grouting of bonded prestressing ten- dons in the seismic force-resisting system.	X	_	ACI 318: 18.18.4	_			x
	10. Erection of precast concrete members.	_	X	ACI 318: Ch. 16	_			х
	11. Verification of in-situ concrete strength, prior to stressing of tendons in post-ten- sioned concrete and prior to removal of shores and forms from beams and struc- tural slabs.	_	X	ACI 318: 6.2	_			х
	12. Inspect formwork for shape, location and dimensions of the concrete member being formed.	_	Х	ACI 318: 6.1.1	_			х

STATEMENT OF TESTING

THE OWNER SHALL EMPLOY ONE OR MORE TESTING AGENCIES TO PROVIDE STRUCTURAL TESTING DURING CONSTRUCTION. THE MINIMUM STRUCTURAL TESTING - REQUIRED IN ACCORDANCE W/ THE IBC, SECTION 1704 - IS SUMMARIZED BELOW.

THE TESTING AGENCY SHALL SUBMIT A SCOPE OF SERVICES FOR APPROVAL PRIOR TO COMMENCING CONSTRUCTION. IN ADDITION, THE TESTING AGENCY SHALL SUBMIT QUALIFICATIONS ASSOCIATED WITH EACH TYPE OF TESTS THAT WILL BE PERFORMED. THE TESTING AGENCY SHALL SUBMIT TEST RESULTS TO THE STRUCTURAL ENGINEER OF RECORD DURING CONSTRUCTION FOR VERIFICATION, INCLUDING A FINAL REPORT IN ACCORDANCE WITH SECTION 1704.1.2 OF THE IBC.

SUMMARY OF REQUIRED STRUCTURAL TESTS

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED	IBC REFERENCE	YES	NO	NA
1. CONCRETE							
a. Cylinder Compression Testing	-	X	ASTM C39	Section 1905	Χ		
2. MASONRY							
a. Hollow Unit Block Compression Tests (Unit Strength Method)	-	Χ	ASTM C90	Section 2105	Χ		
3. POST-INSTALLED CONCRETE ANCHORS **							
a. Adhesive anchors	-	X	ICC-ES AC308	Section 1912	Χ		

** WHEN DIRECTED BY THE STRUCTURAL ENGINEER OF RECORD TO PROVIDE POST-INSTALLED ANCHORAGES THE FOLLOWING GUIDELINES SHALL BE

- 1. A REPRESENTATIVE OF THE ANCHOR MANUFACTURER OR PROJECT SPECIAL INSPECTOR SHALL BE ON SITE TO OVERSEE THE INSTALLATION OF
- THIS SERVICE IS TYPICALLY PROVIDED FOR FREE BY THE LOCAL HILTI REPRESENTATIVE.

ANCHORS FOR EACH TYPE OF ANCHOR INSTALLED. THIS MEASURE SHALL BE TAKEN FOR EACH INSTALLER OF THE ANCHORS.

2. THE FIRST FOUR ANCHORS SHALL BE TENSION TESTED ONCE INSTALLATION IS COMPLETE FOR 100% OF THE SERVICE LEVEL LOAD CAPACITY AS SPECIFIED BY THE STRUCTURAL ENGINEER OF RECORD

Project Name:			
Location:			
Owner:			
requirements of	the 2012 International Building Code		th the Special Inspection and Structural Testing chedule of Special Inspection services applicable to this atement of Special Inspections encompasses the following the compasses the co
Structural		X	
Architectural		-	
Other		-	
A Final report of		mpletion of all required Special Inspections, testir	ng and correction of any discrepancies noted in the
A Final report of		mpletion of all required Special Inspections, testing Certificate of Use and Occupancy.	ng and correction of any discrepancies noted in the
A Final report of inspection shall	Special Inspections documenting cobe submitted prior to issuance of the	mpletion of all required Special Inspections, testir	ng and correction of any discrepancies noted in the Date:
A Final report of	Special Inspections documenting cobe submitted prior to issuance of the	mpletion of all required Special Inspections, testing Certificate of Use and Occupancy. ACKNOWLEDGEMENTS	
A Final report of inspection shall	Special Inspections documenting cobe submitted prior to issuance of the ctor:	mpletion of all required Special Inspections, testing Certificate of Use and Occupancy. ACKNOWLEDGEMENTS Firm:	Date:
A Final report of inspection shall Owner:	Special Inspections documenting cobe submitted prior to issuance of the ctor:	mpletion of all required Special Inspections, testing Certificate of Use and Occupancy. ACKNOWLEDGEMENTS Firm: Firm:	Date:
A Final report of inspection shall Owner: Contract Archite	Special Inspections documenting cobe submitted prior to issuance of the ctor:	mpletion of all required Special Inspections, testing Certificate of Use and Occupancy. ACKNOWLEDGEMENTS Firm: Firm: Firm:	Date: Date: Date:
Owner: Contract Archite SER: SI-S SI-T	Special Inspections documenting cobe submitted prior to issuance of the ctor:	mpletion of all required Special Inspections, testing Certificate of Use and Occupancy. ACKNOWLEDGEMENTS Firm: Firm: Firm: Firm: Firm:	Date: Date: Date: Date: Date:
Owner: Contract Archite SER: SI-S SI-T TA	Special Inspections documenting cobe submitted prior to issuance of the ctor:	mpletion of all required Special Inspections, testing Certificate of Use and Occupancy. ACKNOWLEDGEMENTS Firm: Firm: Firm: Firm: Firm: Firm: Firm: Firm:	Date: Date: Date: Date: Date: Date: Date:
Owner: Contract Archite SER: SI-S SI-T TA F	Special Inspections documenting cobe submitted prior to issuance of the ctor:	mpletion of all required Special Inspections, testing Certificate of Use and Occupancy. ACKNOWLEDGEMENTS Firm:	Date: Date: Date: Date: Date: Date: Date: Date: Date:
Owner: Contract Archite SER: SI-S SI-T TA F Legend	Special Inspections documenting cobe submitted prior to issuance of the ctor:	repletion of all required Special Inspections, testing and Occupancy. ACKNOWLEDGEMENTS Firm: Firm:	Date:
A Final report of inspection shall Owner: Contract Archite SER: SI-S SI-T TA F Legend SER=S	Special Inspections documenting cobe submitted prior to issuance of the ctor:	mpletion of all required Special Inspections, testing Certificate of Use and Occupancy. ACKNOWLEDGEMENTS Firm:	Date:

REQUIRED STRUCTURAL SUBMITTALS

- THE REVIEW OF THE FOLLOWING SUBMITTALS IS INCLUDED IN THE STRUCTURAL ENGINEER OF RECORD'S (SEOR) SCOPE OF SERVICES. THE
- GENERAL CONTRACTOR SHALL PROVIDE THE ITEMS BELOW TO THE SEOR FOR REVIEW PRIOR TO CONSTRUCTION. SHOP DRAWINGS SHALL BE ORIGINALS AND SHALL NOT BE CREATED, IN WHOLE OR IN PART, FROM THE ELECTRONIC STRUCTURAL CAD FILES
- THE ENGINEER IS A VIOLATION OF COPYRIGHT LAWS AND CODE OF STANDARD PRACTICE. SUBMITTALS NOT ADHERING TO THESE PROVISIONS SHOP DRAWING PACKAGES MUST BE COMPLETE WHEN SUBMITTED AND MUST INCLUDE CERTIFIED CALCULATIONS IF REQUIRED. INCOMPLETE

OR REPRODUCTIONS OF THE STRUCTURAL DRAWINGS. REPRODUCING THE STRUCTURAL DRAWINGS WITHOUT PRIOR WRITTEN CONSENT OF

- SHOP DRAWING PACKAGES WILL BE REJECTED WITHOUT REVIEW. PRIOR TO SUBMITTING SHOP DRAWINGS TO SEOR, THE SHOP DRAWINGS MUST BE REVIEWED AND COORDINATED BY THE GENERAL
- ELECTRONIC VERSION IN PDF FORMAT OF ALL REQUIRED SHOP DRAWINGS AND CALCULATIONS MUST BE SUBMITTED BY THE SUPPLIER AND A

LIST OF STRUCTURAL SUBMITTALS

	LIST OF STRUCTURAL SUBMITTALS	
CATEGORY	ITEM	COMMENTS
SITE WORK		
	GRADING PLAN	
CONCRETE		
	CONCRETE MIX DESIGNS FOR ALL CLASSES OF CONCRETE	
	FOUNDATION REINFORCING	
	CIP WALL & PIER REINFORCING	
	MILL CERTS. FOR REINFORCING	
		SEE STRUCTURAL
STEEL		DRAWINGS GENERAL
	STRUCTURAL STEEL	NOTES ON SHEET SO.1
	STRUCTURAL STEEL CONNECTION SHOP DRAWINGS AND DESIGN CALCULATIONS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT.	FOR ADDITIONAL SUBMITTAL INFORMATION.
	MILL CERTS. FOR STRUCTURAL STEEL	
	MISCELLANEOUS METALS SHOP DRAWINGS AND DESIGN CALCULATIONS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT	
WOOD		
	ENGINEERED WOOD MATERIALS	



5435 Feltl RD. Minnetonka, MN 55343 Tel: (952) 854-4511

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CONSULTANTS:

CERTIFICATION: I hereby certify that this drawing 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. Anne Crisp 10/17/2022 Registration Number 47126

Project Number: 21-7861-000 10/14/2022 12" = 1'-0"

REVISIONS:

PROJECT: BROWNSTONES ON SUMMIT

EGRESS REPLACEMENT

596-604 SUMMIT AVE. ST PAUL, MN

SHEET TITLE: SPECIAL INSPECTIONS

SHEET NUMBER:

CAST IN PLACE CONCRETE WALL SCHEDULE							
MARK	NOMINAL THICKNESS	VERT. REINF.	VERT. BAR LOCATION	HORIZ. REINF. SPACING	VERT. BAR SPLICE / LAP	COMMENTS	
CW1	8"	#5 @ 18 OC	CENTER	#5 @ 18 OC	(ΙΔ <u>ςς</u> Β	PROVIDE (2) - \$5 CONT. HORIZ. AT TOP OF WALL	
66UEDIU = 1	NATES.						

- **SCHEDULE NOTES:**
- 1. VERTICAL REINFORCING IS PRIMARY. WHEN INDICATED AS INSIDE FACE ABOVE, PLACE VERTICAL REINFORCING CLOSEST TO INSIDE (INTERIOR) FACE OF WALL AND HORIZONTAL REINFORCING BEHIND THAT. WHERE CENTERED IS INDICATED ABOVE, CENTER THE VERTICAL REINFORCING AND PLACE HORIZONTAL REINFORCING ON EITHER SIDE OF
- 2. SEE SCHEDULES ON THIS SHEET FOR REBAR LAP SPLICES FOR COATED AND UNCOATED REBAR.

			C	LASS 'A' TENS	ON LAP SPLIC	E		
BAR					f'c (psi)			
SIZE	3,000	3,500	4,000	5,000	6,000	7,000	8,000	10,000
#3	1'-5"	1'-4"	1'-3"	1'-1"	1'-0"	0'-11"	0'-11"	0'-9"
#4	1'-10"	1'-9"	1'-7"	1'-5"	1'-4"	1'-3"	1'-2"	1'-0"
#5	2'-4"	2'-2"	2'-0"	1'-10"	1'-8"	1'-7"	1'-5"	1'-3"
#6	2'-9"	2'-7"	2'-5"	2'-2"	2'-0"	1'-10"	1'-9"	1'-6"
#7	4'-1"	3'-9"	3'-6"	3'-2"	2'-11"	2'-8"	2'-6"	2'-3"
#8	4'-7"	4'-3"	4'-0"	3'-7"	3'-3"	3'-0"	2'-10"	2'-6"
#9	5'-2"	4'-10"	4'-6"	4'-1"	3'-8"	3'-5"	3'-3"	2'-10"
#10	5'-9"	5'-4"	5'-0"	4'-6"	4'-1"	3'-9"	3'-7"	3'-2"
#11	6'-4"	5'-11"	5'-6"	5'-0"	4'-6"	4'-2"	3'-11"	3'-6"

CLASS 'B' TENSION LAP SPLICE									
BAR	f'c (psi)								
SIZE	3,000	3,500	4,000	5,000	6,000	7,000	8,000	10,000	
#3	1'-10"	1'-8"	1'-7"	1'-5"	1'-4"	1'-3"	1'-2"	1'-0"	
#4	2'-5"	2'-3"	2'-1"	1'-11"	1'-9"	1'-7"	1'-6"	1'-4"	
#5	3'-0"	2'-10"	2'-7"	2'-4"	2'-2"	2'-0"	1'-10"	1'-8"	
#6	3'-7"	3'-4"	3'-1"	2'-10"	2'-7"	2'-5"	2'-3"	2'-0"	
#7	5'-3"	4'-10"	4'-7"	4'-1"	3'-9"	3'-5"	3'-3"	2'-11"	
#8	6'-0"	5'-7"	5'-3"	4'-8"	4'-3"	3'-11"	3'-9"	3'-3"	
#9	6'-9"	6'-3"	5'-11"	5'-3"	3'-10"	4'-5"	4'-2"	3'-8"	
#10	7'-6"	6'-11"	6'-6"	5'-10"	5'-4"	4'-11"	4'-8"	4-1"	
#11	8'-3"	7'-8"	7'-2"	6'-5"	5'-10"	5'-5"	5'-1"	4'-6"	

- 1. THESE TABLES ARE BASED ON THE FOLLOWING ASSUMPTIONS:
- a. CLEAR SPACING OF BARS ≥db
- b. CLEAR COVER ≥db
- c. STIRRUPS OR TIES PROVIDED THROUGHOUT DEVELOPMENT LENGTH CODE MIN \geq OR
- CLEAR SPACE OF BARS ≥ 2db
- CLEAR COVER ≥db
- 2. FOR OTHER CASES MULTIPLY LENGTHS SHOWN BY 1.5. 3. FOR TOP BAR SPLICES, MULTIPLY LENGTHS SHOWN BY 1.3. TOP BARS ARE SUCH THAT 12" OR MORE OF FRESH CONCRETE IS CAST BELOW THE SPLICE OR DEVELOPMENT LENGTH.
- 4. FOR LIGHTWEIGHT CONCRETE MULTIPLY LENGTHS SHOWN BY 1.3.
- 5. FOR HIGHER GRADE STEEL MULTIPLY LENGTHS SHOWN BY A RATIO OF HIGHER fy(KSI) OVER 1160(KSI). ALL OTHR FACTORS LISTED STILL APPLY.
- 6. FOR COMPRESSION LAP SPLICE USE (.0009fy-24)*db OR .0005(fy)(db)

CONTINUOUS FOUNDATION SCHEDULE							
MARK	FOOTING SIZE	CONTINUOUS REINFORCING	TRANSVERSE REINFORCING	COMMENTS			
CF3.0	3'-0" x 12"	(3) - #5	#5 @ 12" o.c.				

WOOD COLUMN SCHEDULE					
MARK	SHAPE	POST BASE	ANCHOR BOLTS	COMMENTS	
WC3	4x4			PSL TO BE FULLY ENCASED AND FLASHED AGAINST MOISTURE w/ METAL AND SELF ADHERED FLASHING. ALT STEEL: HSS7X5X1/4	

BEAM SCHEDULE					
MARK	TYPE	COMMENTS			
B1	W18X35				
B2	W10X12				
B3	W8X15				

WOOD MATERIAL SCHEDULE							
COMPONENT WOOD SPECIES GRADE MINIMUM DESIGN PROPERTIES (PSI) REMARKS						DEMARKS	
WOOD SPECIES	GRADE	E	Fb	FV	FC	FC (PERP)	REMARKS
		DIM	NSIONAL LUM	BER			
SOUTHERN PINE	NO. 1	1,700,000	1,850	175	1,850	565	JOISTS
SOUTHERN PINE	NO. 1	1,700,000	1,850	175	1,850	565	LOWER LEVEL STEPS AS NEEDED
		SOUTHERN PINE NO. 1	WOOD SPECIES GRADE E DIMI SOUTHERN PINE NO. 1 1,700,000	WOOD SPECIES GRADE MINIMUM I E Fb DIMENSIONAL LUM SOUTHERN PINE NO. 1 1,700,000 1,850	WOOD SPECIES GRADE MINIMUM DESIGN PROPER E Fb FV DIMENSIONAL LUMBER SOUTHERN PINE NO. 1 1,700,000 1,850 175	WOOD SPECIES MINIMUM DESIGN PROPERTIES (PSI) E Fb FV FC DIMENSIONAL LUMBER SOUTHERN PINE NO. 1 1,700,000 1,850 175 1,850	WOOD SPECIES MINIMUM DESIGN PROPERTIES (PSI) E Fb FV FC FC (PERP) DIMENSIONAL LUMBER SOUTHERN PINE NO. 1 1,700,000 1,850 175 1,850 565

STEEL COLUMN SCHEDULE				
MARK	SHAPE			
C1	HSS6X4X1/4			
C2	HSS4X4X1/4			



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CONSULTANTS:

CERTIFICATION:

I hereby certify that this drawing 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.

Name Anne Crisp Date __03/30/2022

Registration Number 47126

Project Number: 21-7861-000 3/30/2022

Scale: _

REVISIONS:

PROJECT:

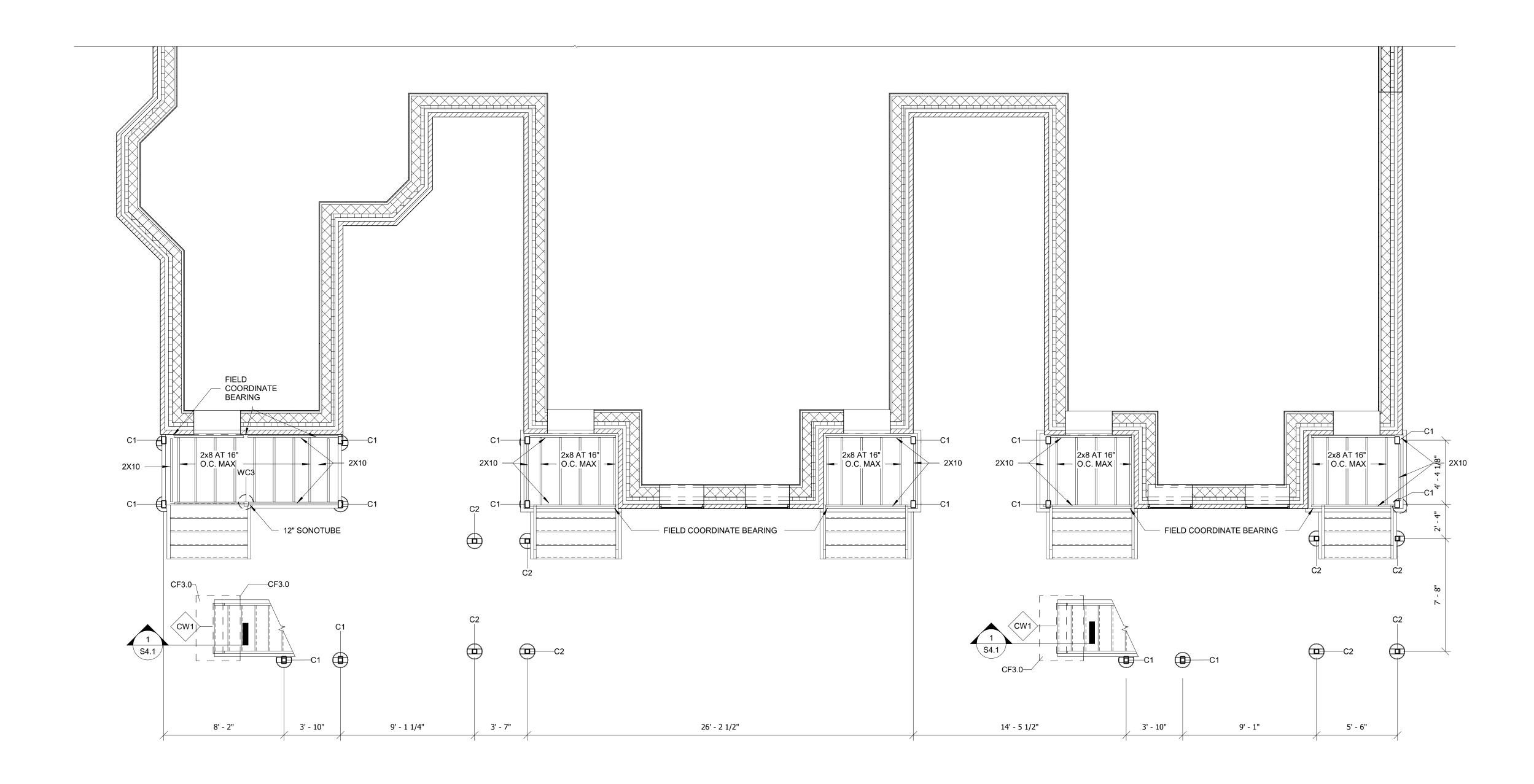
BROWNSTONES ON SUMMIT EGRESS REPLACEMENT

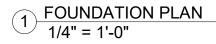
596-604 SUMMIT AVE. ST PAUL, MN

SHEET TITLE: SCHEDULES

SHEET NUMBER:

SHEET 3 OF 9





FOUNDATION PLAN NOTES:

- 1. SEE PLAN FOR FOOTING ELEVATIONS. 100'-0" IS SET AT FIRST FLOOR ELEVATION
- 2. ALL FOOTINGS TO BE DRILLED PIERS UNLESS NOTED OTHERWISE
- 3. ALL CONTINUOUS FOOTINGS TO BE 'CF3.0' UNLESS NOTED OTHERWISE. SEE SHEET S0.3 FOR MORE INFORMATION.
- 4. ALL CAST IN PLACE WALLS TO BE 'CW1' UNLESS NOTED OTHERWISE. SEE SHEET S0.3 FOR MORE INFORMATION.
- THE GEOTECHNICAL ENGINEER SHALL VERIFY THAT THE FOOTING ELEVATIONS SHOWN LOCATE THE BOTTOM OF THE FOOTINGS AT AN ELEVATION WHICH PROVIDES BEARING IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF LOCATIONS THAT DO NOT SATISFY THOSE REQUIREMENTS. IN THOSE CASES, THE GRADE MAY BE ELEVATED WITH COMPACTED MATERIAL APPROVED BY GEOTECHNICAL ENGINEER OR THE FOOTING DEPTH MAY BE INCREASED WITH PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.



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Name Anne Crisp

Date 10/17/2022

Registration Number 47126

Project Number: 21-7861-000

10/14/2022

Date: JPS

Drawn: AMC

Checked: As indicated

REVISIONS:

PROJECT:

BROWNSTONES ON SUMMIT EGRESS REPLACEMENT

596-604 SUMMIT AVE.

ST PAUL, MN

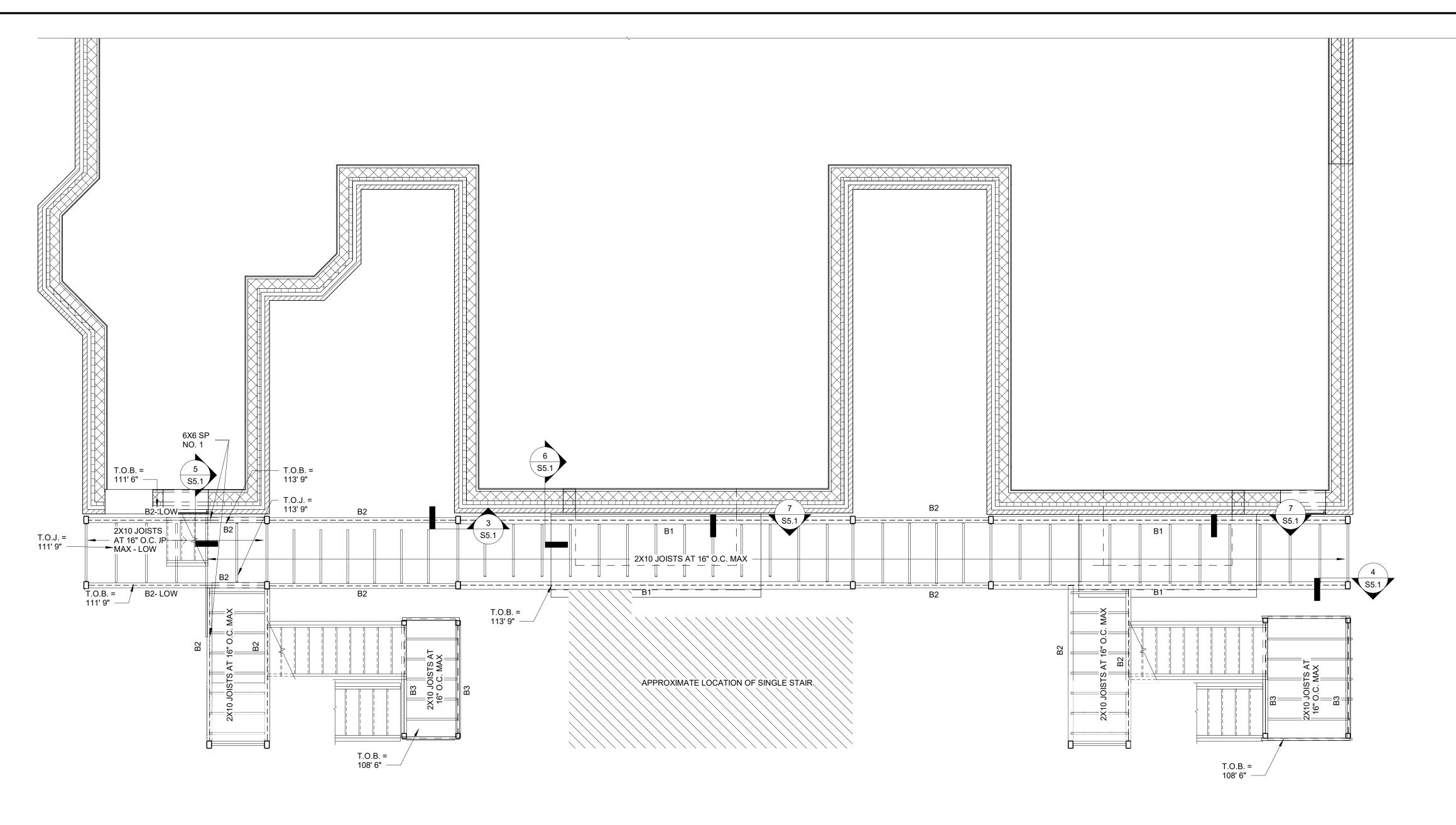
SHEET TITLE:

FOUNDATION PLAN

SHEET NUMBER:

S1.

SHEET 4 OF 9



1) SECOND LEVEL FRAMING PLAN 1/4" = 1'-0"

FLOOR PLAN NOTES:

- 1. SEE ARCHITECTURAL DRAWINGS FOR FINISHED FLOOR ELEVATION. SEE ARCHITECTURAL DRAWINGS FOR ROOF DECK INFORMATION.
- ALL STEEL IS TO BE SHOP GALVANIZED.
- 4. ALL STAIR STRINGERS WERE DESIGNED TO BE C10x20 MEMBERS.

ALTERNATE: ALL JOISTS TO BE C8X13.75 INSTEAD OF WOOD JOISTS. CONNECTIONS DETAILED AS ALTERNATES ON SHEET S5.1



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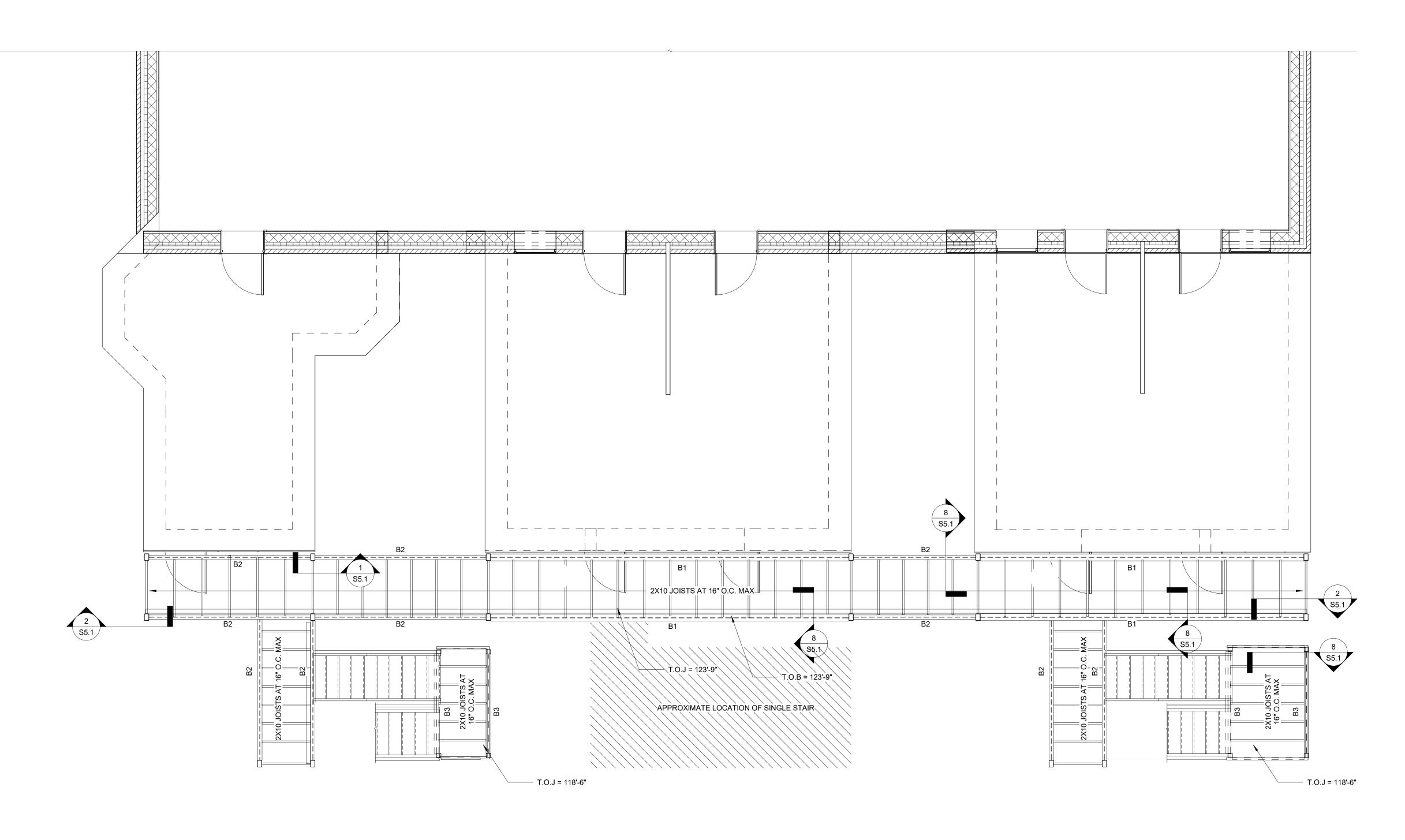
SHEET TITLE:

FRAMING PLAN - LEVEL 2

SHEET NUMBER:

S2.

SHEET 5 OF 9



1) THIRD LEVEL FRAMING PLAN 1/4" = 1'-0"

FLOOR PLAN NOTES:

- SEE ARCHITECTURAL DRAWINGS FOR FINISHED FLOOR ELEVATION.
- SEE ARCHITECTURAL DRAWINGS FOR ROOF DECK INFORMATION.
 ALL STEEL IS TO BE SHOP GALVANIZED.
- ALL STEEL IS TO BE SHOP GALVANIZED.

 ALL STAIR STRINGERS WERE DESIGNED TO BE C10x20 MEMBERS.

ALTERNATE: ALL JOISTS TO BE C8X13.75 INSTEAD OF WOOD JOISTS. CONNECTIONS DETAILED AS ALTERNATES ON SHEET S5.1



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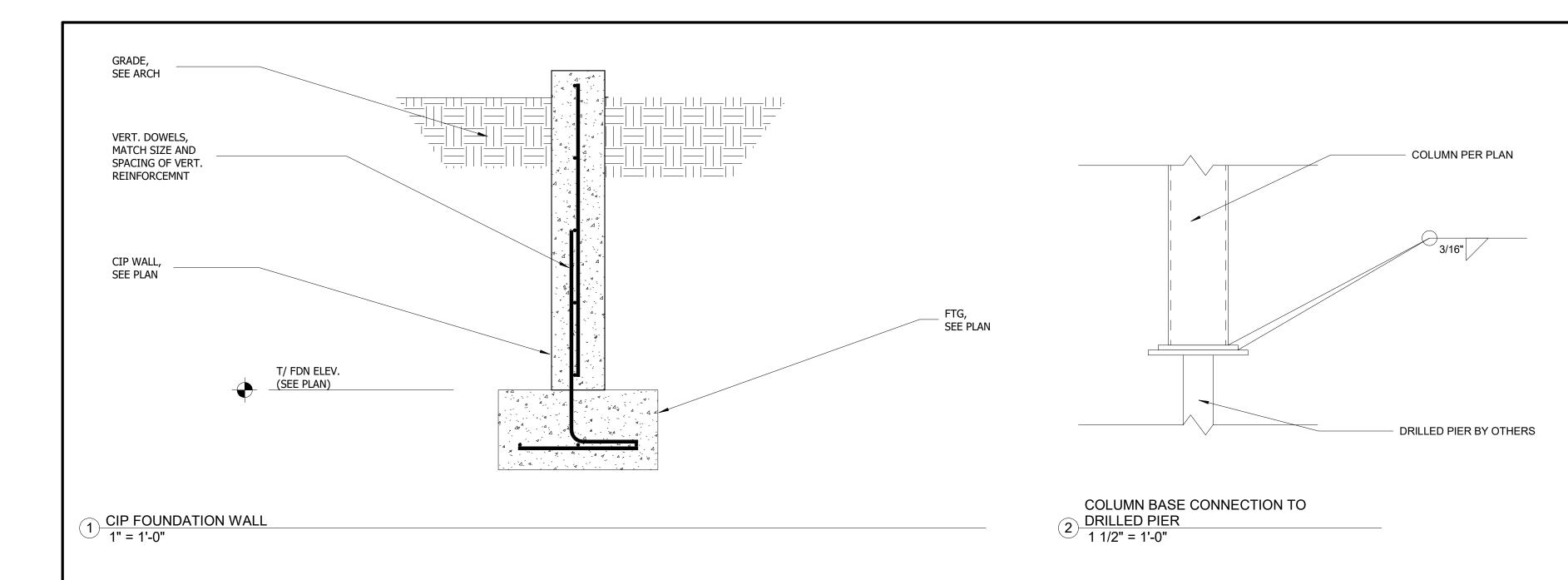
SHEET TITLE:

FRAMING PLAN - LEVEL 3

SHEET NUMBER:

S2.2

SHEET 6 OF 9



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Signature

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Date ___10/17/2022 Registration Number 47126

Project Number: 21-7861-000

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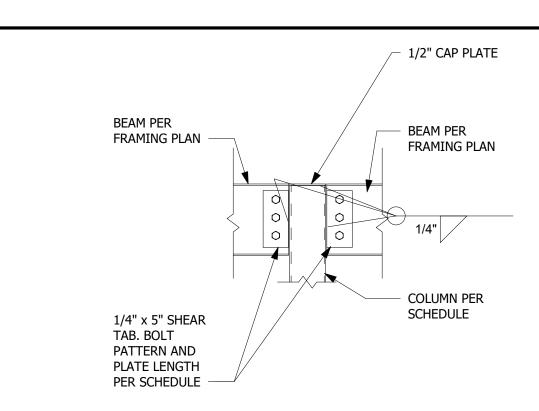
ST PAUL, MN

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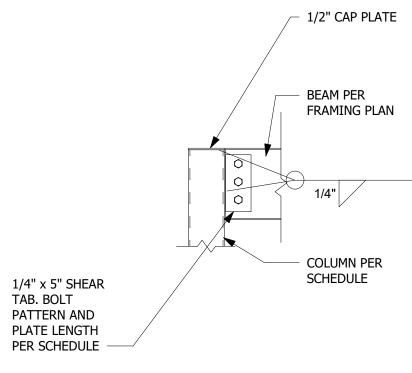
FOUNDATION DETAILS

SHEET NUMBER:

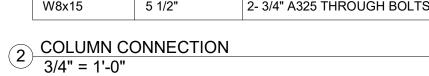
SHEET 7 OF 9

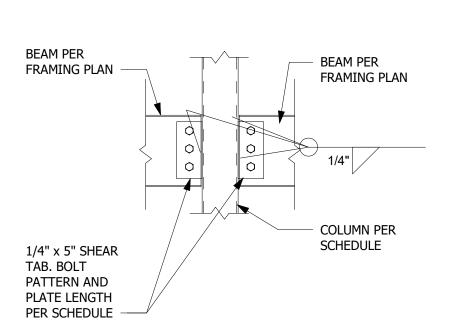


BEAM	PLATE LENGTH	BOLT PATTERN
W18x35	11 1/2"	4- 3/4" A325 THROUGH BOLTS
W10x19	8 1/2"	3- 3/4" A325 THROUGH BOLTS
W8x15	5 1/2"	2- 3/4" A325 THROUGH BOLTS

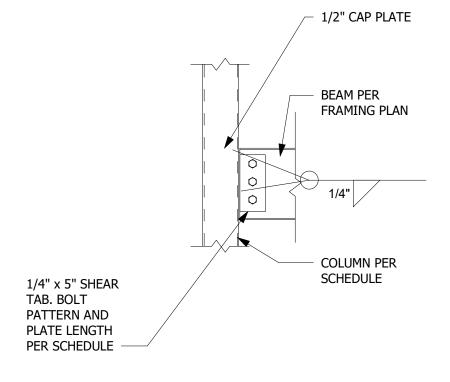


BEAM	PLATE LENGTH	BOLT PATTERN
W18x35	11 1/2"	4- 3/4" A325 THROUGH BOLTS
W10x19	8 1/2"	3- 3/4" A325 THROUGH BOLTS
W8x15	5 1/2"	2- 3/4" A325 THROUGH BOLTS



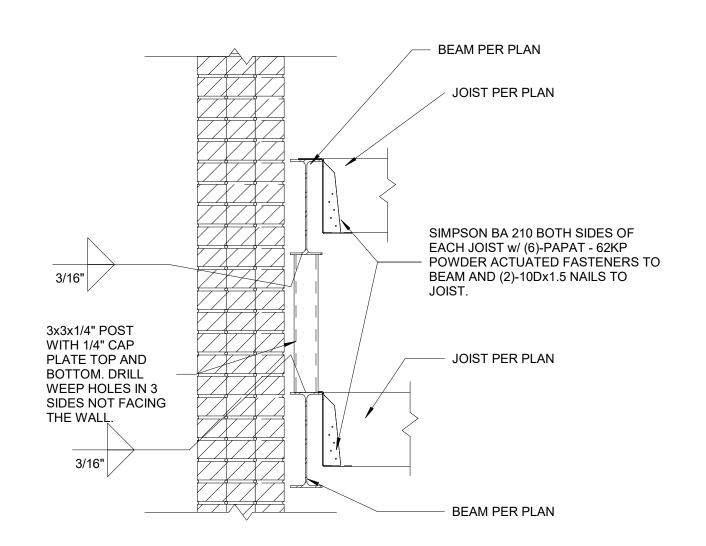


BEAM	PLATE LENGTH	BOLT PATTERN			
W18x35	11 1/2"	4- 3/4" A325 THROUGH BOLTS			
W10x19	8 1/2"	3- 3/4" A325 THROUGH BOLTS			
W8x15	5 1/2"	2- 3/4" A325 THROUGH BOLTS			
3 COLUMN CONNECTION 3/4" = 1'-0"					



BEAM	PLATE LENGTH	BOLT PATTERN
W18x35	11 1/2"	4- 3/4" A325 THROUGH BOLTS
W10x19	8 1/2"	3- 3/4" A325 THROUGH BOLTS
W8x15	5 1/2"	2- 3/4" A325 THROUGH BOLTS

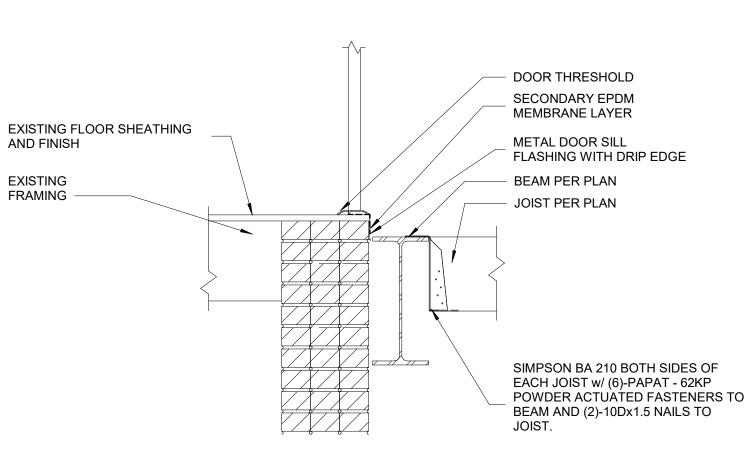
(4) COLUMN CONNECTION 3/4" = 1'-0"



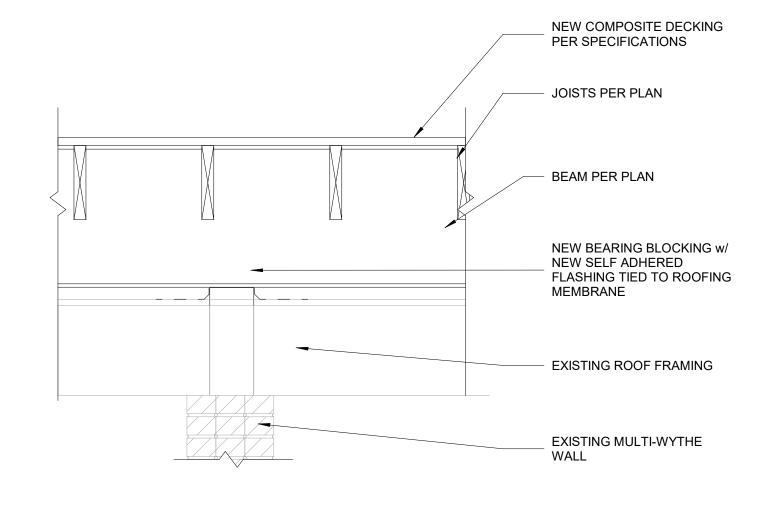


COLUMN CONNECTION

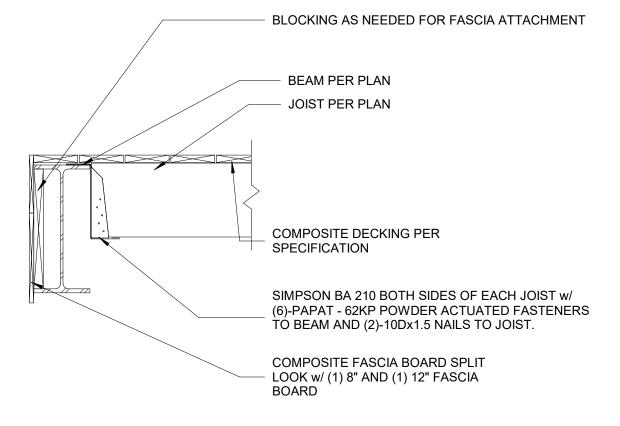
[/] 3/4" = 1'-0"



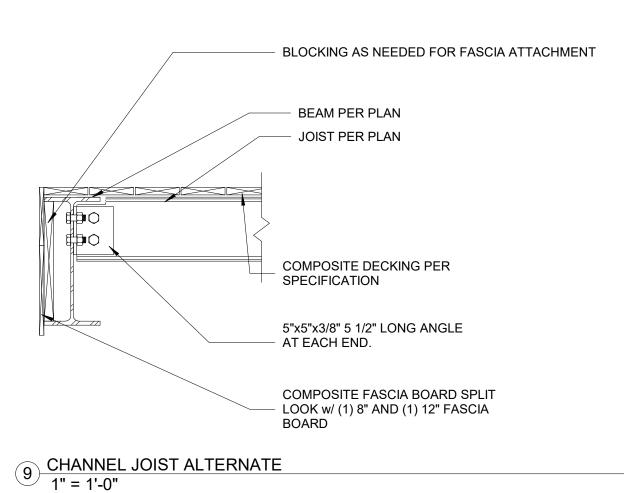
	POWDER ACTUATED I BEAM AND (2)-10Dx1.5 JOIST.
6 JOIST HANGER ON WOOD 1" = 1'-0"	

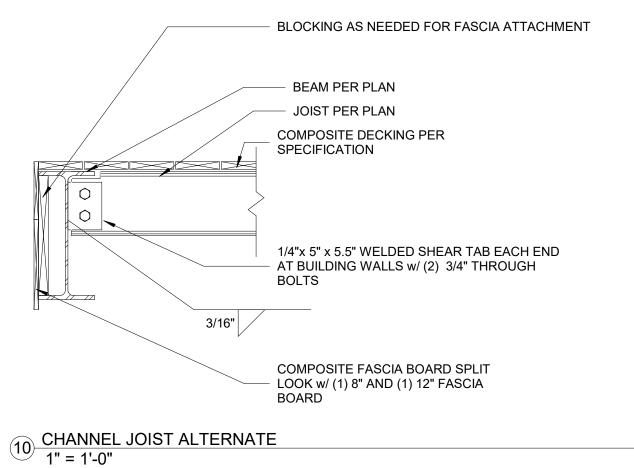












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Inne you Name Anne Crisp Date __10/17/2022

Registration Number 47126

Project Number: <u>21-7</u>861-000 10/11/2022

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SHEET TITLE:

FRAMING DETAILS

SHEET NUMBER:

SHEET 8 OF 9