

GENERAL NOTES:

1. All scheduled numbers and amounts of material and equipment are for contractor's convenience only. Contractor shall count and measure independently for bidding and ordering purposes. All scheduled numbers, lengths and other amounts may be incorrect and owner is not liable for mismatch.
2. Notes applied to single items may apply to all like items on view.
3. UTILITY CONNECTIONS: where work indicated includes installation of utilities (Gas, Power, Water, Sewer, Phone etc.) Provide all the required work that normally is not done by the Utility. Contractor shall inquire with Utilities to learn about the Scope of the Utility's work.

SPECIAL SITE CONDITIONS:

1. Hours of operation are limited to 7 a.m. to 7 p.m. Monday through Saturday and Sunday 10 a.m. through 7 p.m. unless approved otherwise.
2. Contractor trailer shall be parked on the Street. Contractor shall arrange for permit and shall coordinate location with owner.
3. The yard site needs to be secured at any time. Contractor may use the existing fence, or provide new fence until the actual fence and gate (part of this contract) are erected and functional.
4. Storage of equipment and material shall be coordinated with the owner. Space is limited and the building-footprint shall be used to the maxim possible degree. When storage is required outside building footprint, effort needs to be made to limit the times and to coordinate with owner. The site is an operational Public Works yard used by Engineering, Streets and Fleet to provide a variety of services. The site also provides a citizen yard waste drop off site. All existing yard operations are shall remain operational through construction.
5. Yard grading, piping, and earthwork shall be scheduled to have the least impact on yard operations. The yard shall not be left unusable for longer periods than necessary. Contractor shall coordinate with owner and shall ensure all labor and material are ready once yard work begins.
6. The existing garage and shop will be operational during construction. Contractor shall schedule any outages with owner and to minimize impact on operations. Closure of shop shall be kept to a minimum.
7. Contractor shall provide own Bathroom and Lunch Room Facilities. Contractor shall keep the facilities and building as clean as possible and limit dirt entry.

WORK PROVIDED BY OWNER (DONT INCLUDE IN BID PRICE):

1. Balancing of HVAC (air and water flow)
2. Fire Alarm System
3. Communication Wiring for Intranet.
4. Landscaping

EQUIPMENT PROVIDED BY OWNER (DONT INCLUDE IN BID PRICE):

1. Generator and transfer switches shall be provided by owner. Don't include the cost in bid price! Contractor is responsible for generator pad installation inc. coordination and installation of gas, electrical and control piping, wiring and conduit.

SPECIAL WARRANTIES:

1. Provide 5 year contractor warranty for membrane roof work

PROVISIONS FOR FUTURE WORK

1. A Photovoltaic (PV) System will be installed by owner at a later time. The on-roof metal structure (part of this contract) will be the support for that system. Contractor shall accommodate that future installation in layout, design and execution of that structure. Coordinate with owner. Don't include any PV installation in bid price.
2. Owner will install Communication Wiring and Fire Alarm Conduits. Install Sleeves as required for this work. Owner will provide Sleeves and Locations before Pouring of Concrete or CMU and other installation.

PERMIT REQUIREMENTS:

1. Conditional Plan Approval has been obtained by Owner.

UTILITIES:

1. TEMPORARY CONSTRUCTION SERVICES:
 - a) WATER: Owner will provide water from owner service in existing garage. Contractor is responsible from piping downstream of that service.
 - b) ELECTRICITY: Contractor will make arrangements with utility and install electrical service of necessary size. Owner will pay the utility fees for installation and consumption to utility directly (Contractor shall not include such utility fees in bid price). Contractor shall be responsible for installation downstream of utility.
 - c) HEATING/FUEL: Contractor responsibility
2. PERMANENT SERVICES:
 - a) Contractor shall make arrangements with utilities for installation of services. Owner will pay utility fees for installation and connection to utility directly (Contractor shall not include such utility fees in bid price)

CONTINUITY OF SERVICE:

1. Schedule work to ensure the existing garage and shop can be used as long as possible. Coordinate with owner when services or equipment serving the existing garage and shop are disrupted or demolished.

General Abbreviations	
AFF	Above Finished Floor
EQ	Equal Distance
Est.	Estimated
JHA	Jurisdiction Having Authority
XTG	Existing

City of Madison

Facilities Maintenance
1600 Emil St.
Madison, WI 53713



Design prepared for:
Engineering Division

Engineering Operations
Building Addition

Location:
1600 Emil St
Madison, WI 53713

Contract: 6484
Project: 10308
Common Council Approval:
8/2/2015

Lighting Design:
Kay Schindel, P.E., City of
Madison; 608-266-4668;
kschindel@cityofmadison.com

Civil Design:
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Landscaping Design:
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Fire Protection Design:
Robert Novak, Kueny Architects

Architectural Design:
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Revisions by Addendum

No.	Description	Addendum
1	Re-issued and added notes for clarification	1

General
Project Data

01

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12/22/2015 11:43:34 AM



Design prepared for:
Engineering Division

Engineering Operations
Building Addition

Location:
1600 Emil St.
Madison, WI 53713

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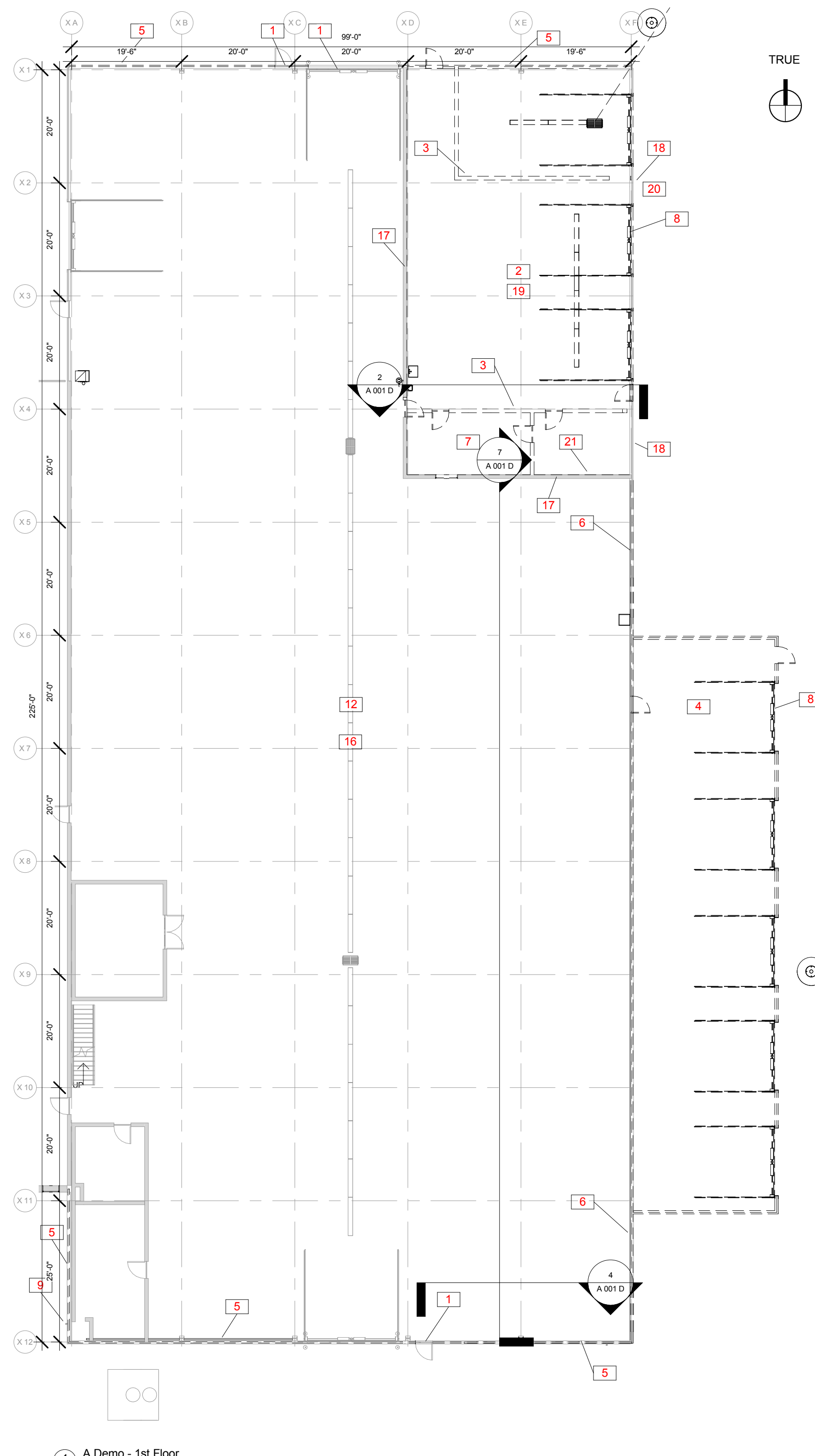
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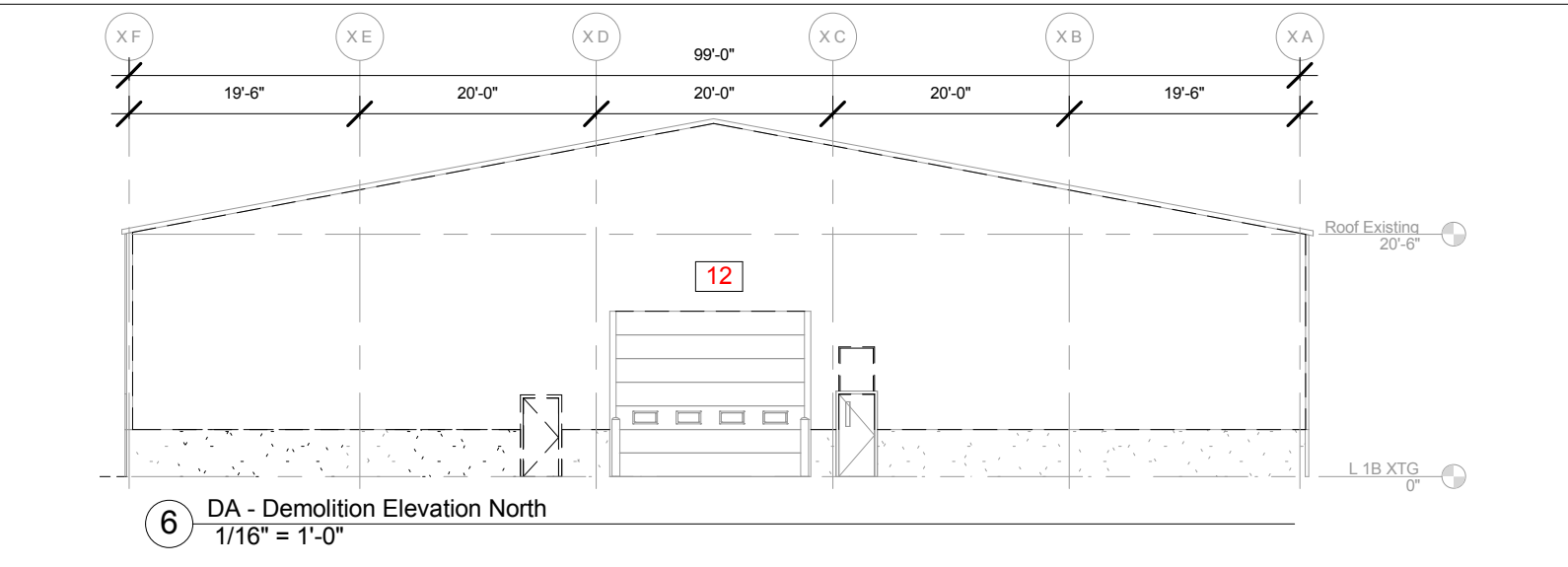
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and M**

A 001 D

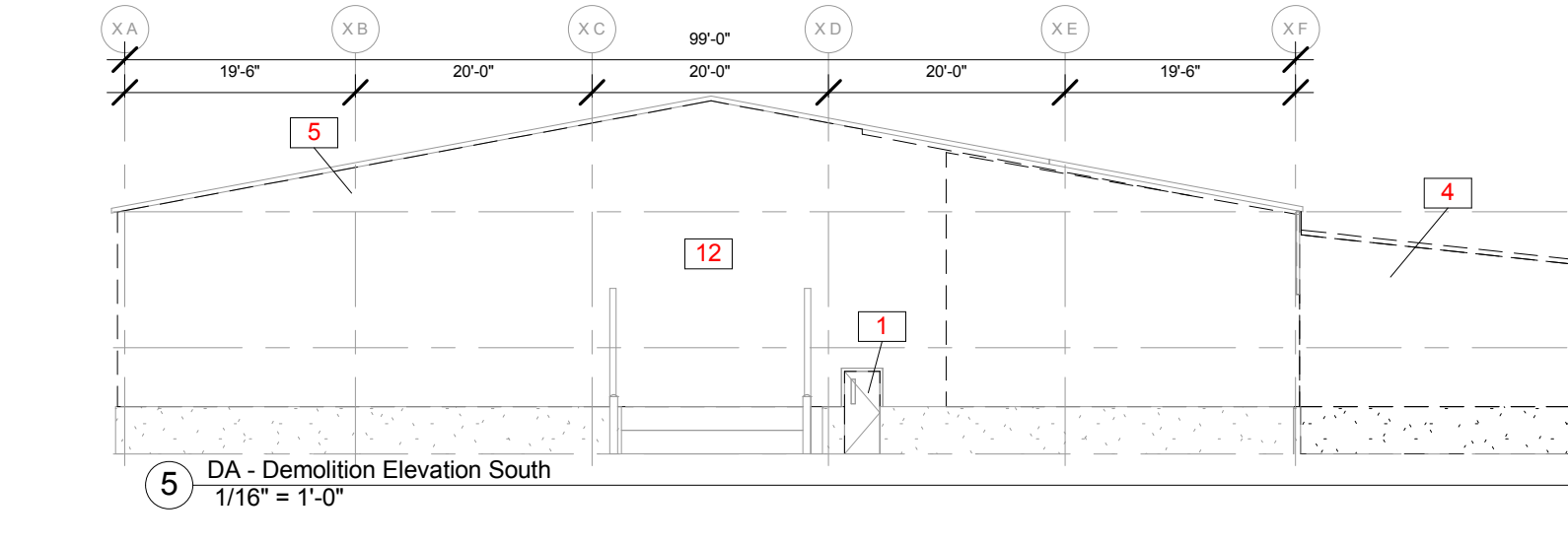
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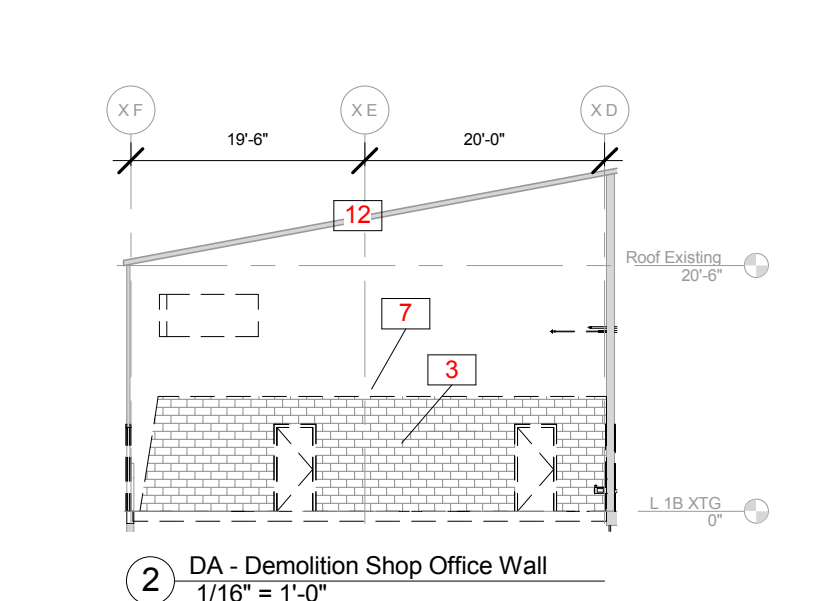
1 A Demo - 1st Floor
1/16" = 1'-0"



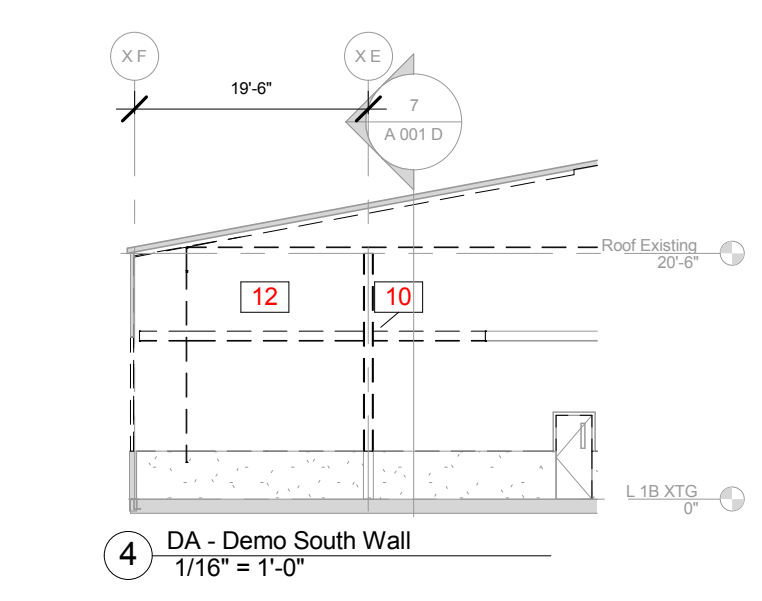
6 DA - Demolition Elevation North
1/16" = 1'-0"



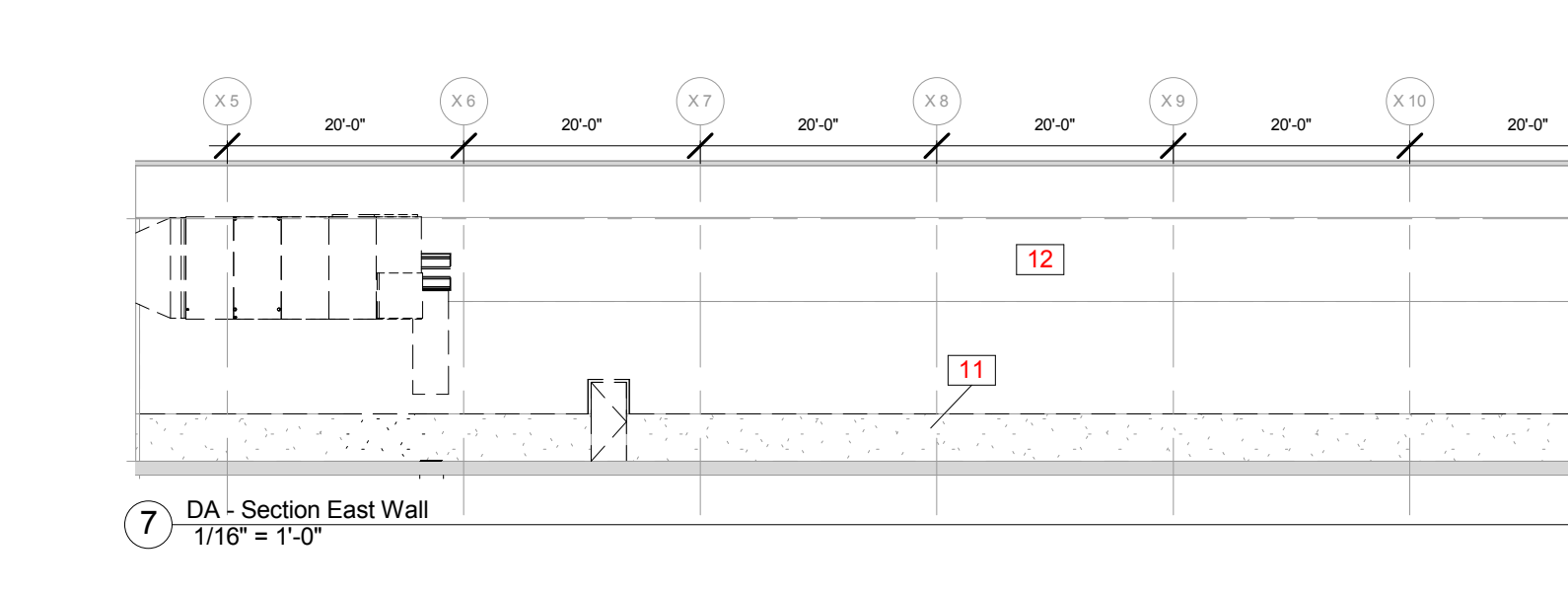
5 DA - Demolition Elevation South
1/16" = 1'-0"



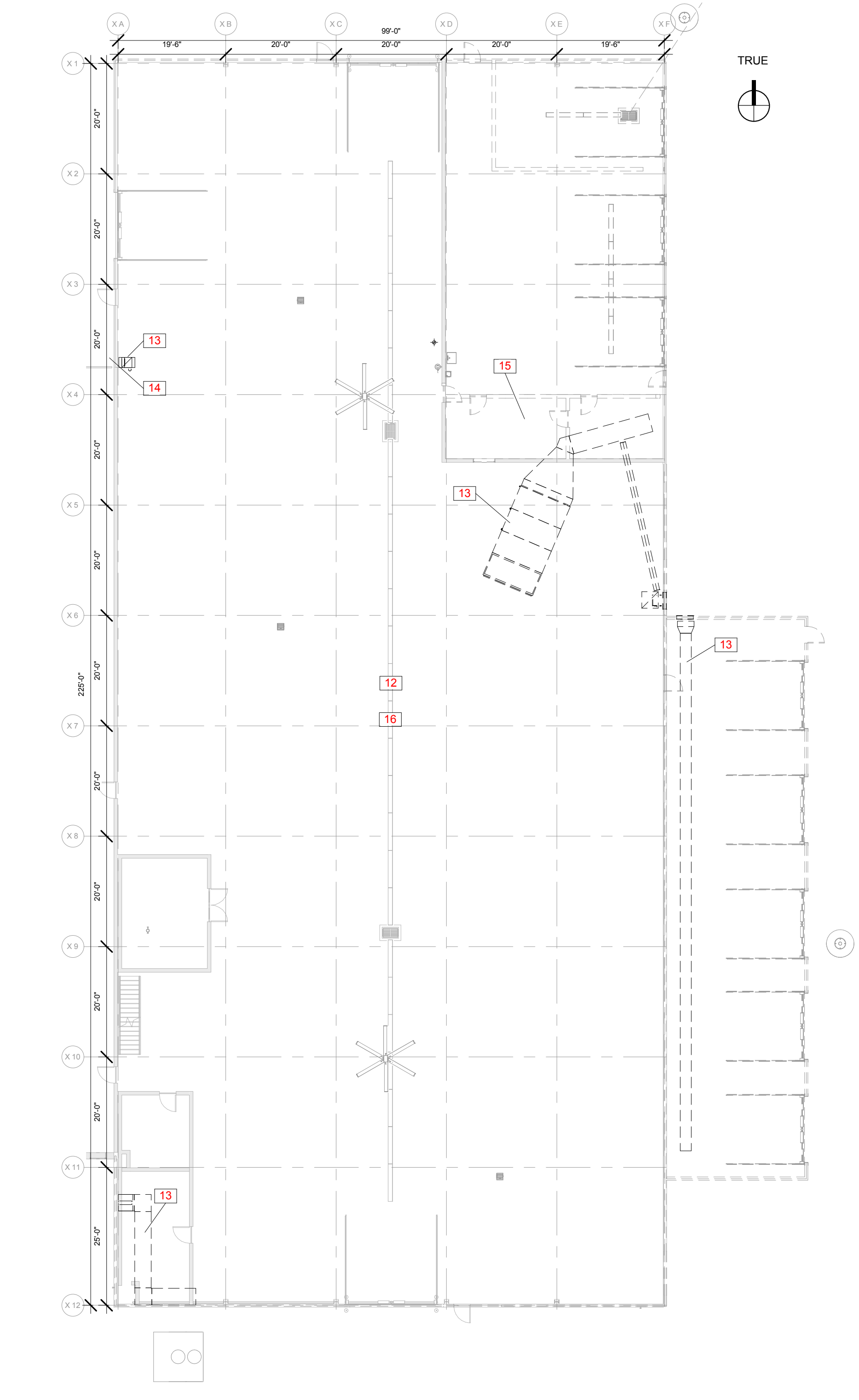
2 DA - Demolition Shop Office Wall
1/16" = 1'-0"



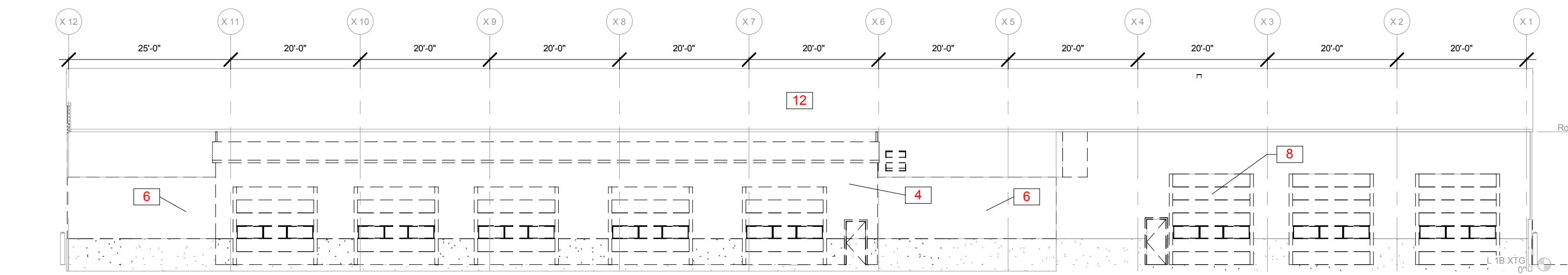
4 DA - Demo South Wall
1/16" = 1'-0"



7 DA - Section East Wall
1/16" = 1'-0"



8 M Demo
1/16" = 1'-0"



3 DA - Elevation East
1/16" = 1'-0"

Keynote Legend

Key Value	Keynote Text
1	DEM-INSTALL AND RE-INSTALL AS REQUIRED
2	DEM-FLOOR AND EXCAVATE FOR NEW SLAB, UTILITIES, AND OTHER ELEMENTS; REMOVE EXISTING UTILITIES; DEMOLISH FLOOR UP TO REMAINING CMU WALL; STABILIZE CMU REMAINING CMU WALL AS REQUIRED
3	DEM-WALLS INC. FOOTING AS REQUIRED FOR NEW CONSTRUCTION
4	DEM-ENTIRE LEAN TO AND ALL ITS PARTS; FOOTING, DOORS, ETC.
5	DEM-STEEL SIDING AND INSULATION FOR INSTALLATION OF NEW SIDING
6	DEM-METAL SIDING AND INSULATION UP TO NEW MEZZANINE HEIGHT
7	DEM-ENTIRE MEZZANINE INC. DECKING, SPRANGETS, AND RAILING ETC.
8	DEM-DOORS AND OVERHEAD DOORS
9	REMOVE UTILITY METER AND REINSTALL AS REQUIRED BY UTILITY
10	REMOVE SECTION OF EXISTING PURLIN TO INSTALL DOOR; DESIGN AND INSTALL NEW PURLIN STRUCTURE AROUND DOOR TO PROVIDE ADEQUATE SUPPORT
11	KEEP CONCRETE WALL IN PLACE AND VERIFY PER ARCHITECTURAL PLANS
12	GENERAL NOTE: CONTRACTOR SHALL VERIFY XTG DIMENSIONS. VALUES GIVEN ARE APPROXIMATE.
13	REMOVE COMPLETE DUCTWORK, LOUVER, FAN ETC.
14	KEEP LOUVER IN PLACE AND BLOCK OFF FROM INSIDE; INSULATE MAINTAINING FIRE RATING; SEAL AIRTIGHT.
15	DEMOLISH ALL MECHANICAL EQUIPMENT ON MEZZANINE INC. WATER HEATER
16	GENERAL NOTE: DEMOLISH ALL DASHED ITEMS
17	XTG CMU WALL DIVIDING XTG SHOP AND XTG GARAGE TO REMAIN
18	XTG SIDING AND KNEEWALL TO REMAIN UNLESS REMOVAL IS REQUIRED FOR NEW CONSTRUCTION
19	OWNER WILL REMOVE ALL SHOP EQUIPMENT INCLUDING LUBE SYSTEM, COMPRESSED AIR SYSTEMS, TOOLS AND BENCHES
20	REMOVE EXISTING BOLLARDS
21	REMOVE XTG HOLLOWCORE PLANK AND FILL IN WITH SOLID MASONRY; ASSUME CAVITY TO BE FILLED AT LEAST 1" PAST CENTER OF WALL.



Design prepared for:
Engineering Division

**Engineering Operations
 Building Addition**

Location:
 1600 Emil St.
 Madison, WI 53713

Contract: 6484
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 Common Council Approval:
 8/2/2015

Lighting Design:
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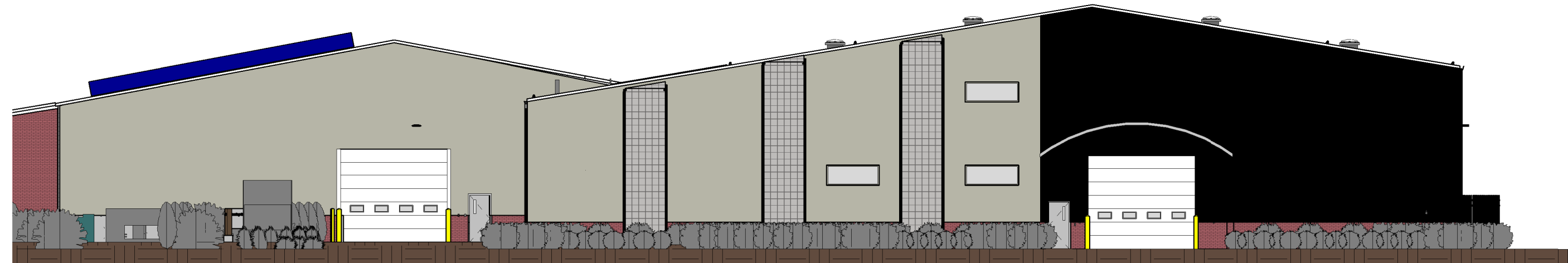
Structural Design:
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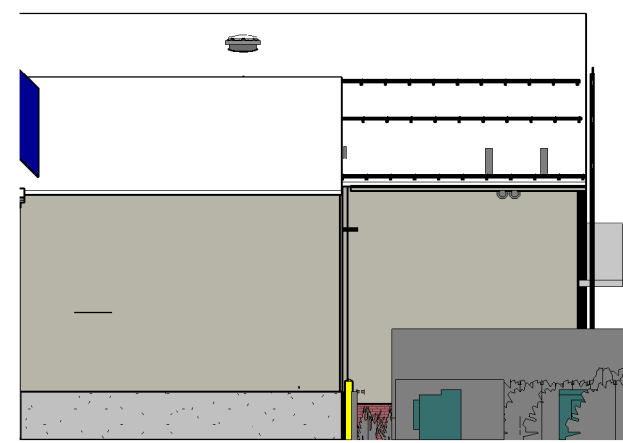
Architectural Design:
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Revisions by Addendum

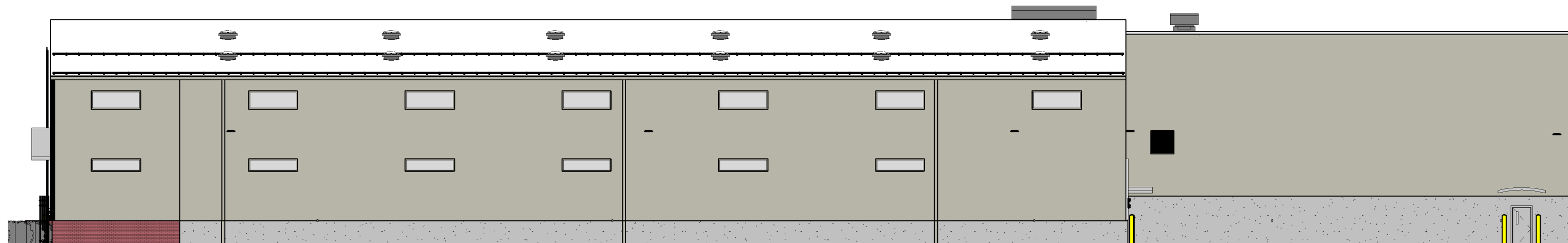
No.	Description	Addendum
1	Re-issued and added notes for clarification	1



3 Presentation - Elevation South
 1/16" = 1'-0"



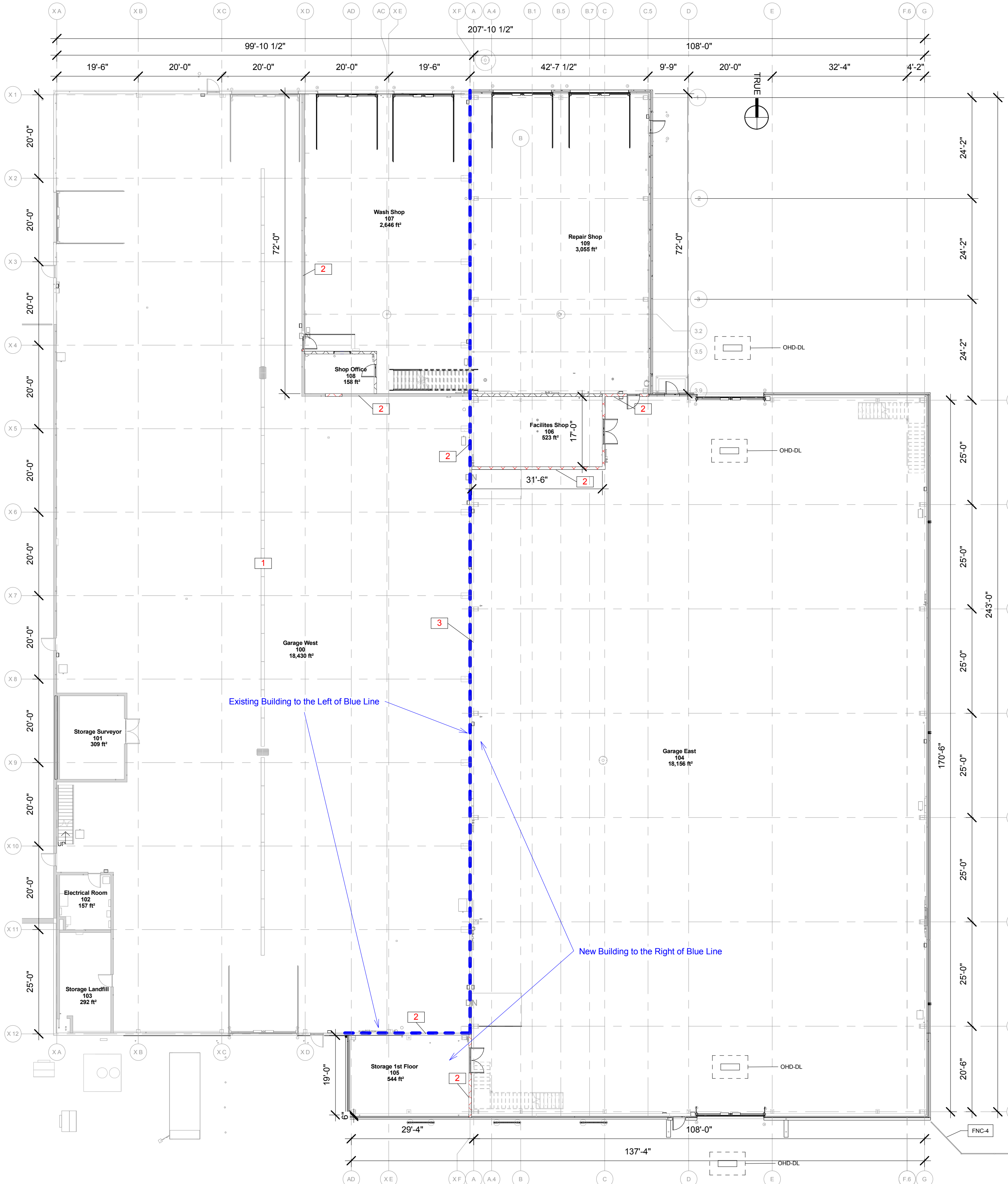
4 Presentation Elevation West S
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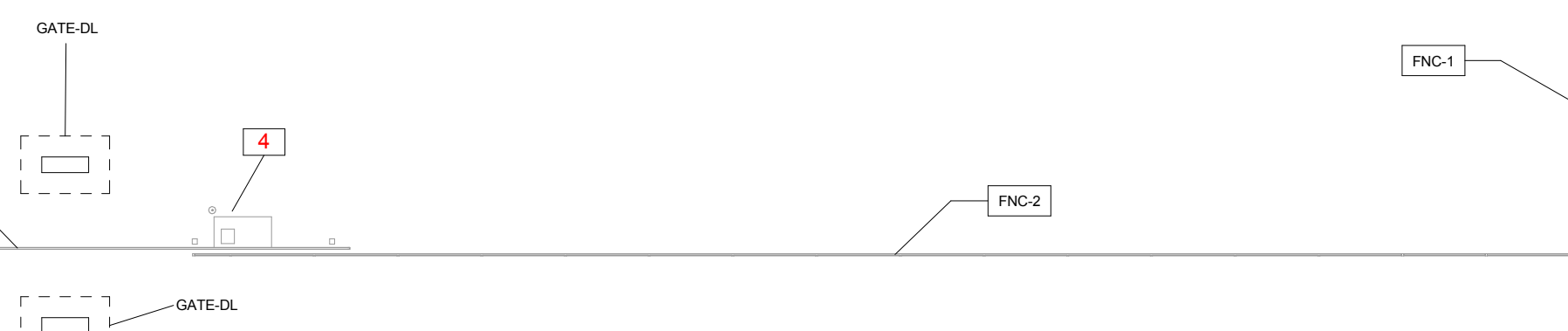
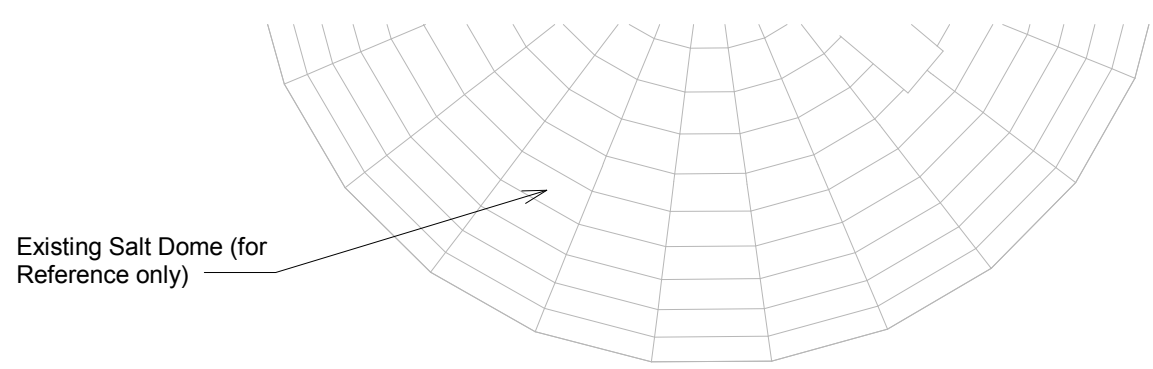
5 Presentation - Elevation East
 1/16" = 1'-0"



6 Presentation - Elevation North
 1/16" = 1'-0"



1 A - 1st Floor Complete
 1/16" = 1'-0"



2 A - Elevation Fence and Gate
 1/8" = 1'-0"

Key Value	Keynote Text
1	GENERAL NOTE: CONTRACTOR SHALL VERIFY XTG DIMENSIONS. VALUES GIVEN ARE APPROXIMATE.
2	1-HOUR FIRE SEPARATION PER IBC 2012 TABLE 508.4 PROVIDE DETAILED FIRE SEPARATION MEETING CODE. SEAL ALL OPENINGS, JOINTS AND PROTECT ALL PENETRATIONS AND FIREPROOF ALL MATERIAL AS REQUIRED BY CODE.
3	NO FIRE SEPARATION BETWEEN GARAGES.
4	INSTALL 1" SPARE CONDUIT BEYOND OF WHAT IS REQUIRED FOR GATE INSTALLATION UNDER THIS CONTRACT. CONDUIT FROM GATE CONTROLLER TO THE ELECTRICAL PANEL FEEDING GATE OPERATOR AND CONTROLLER.

First Floor - All

A 105

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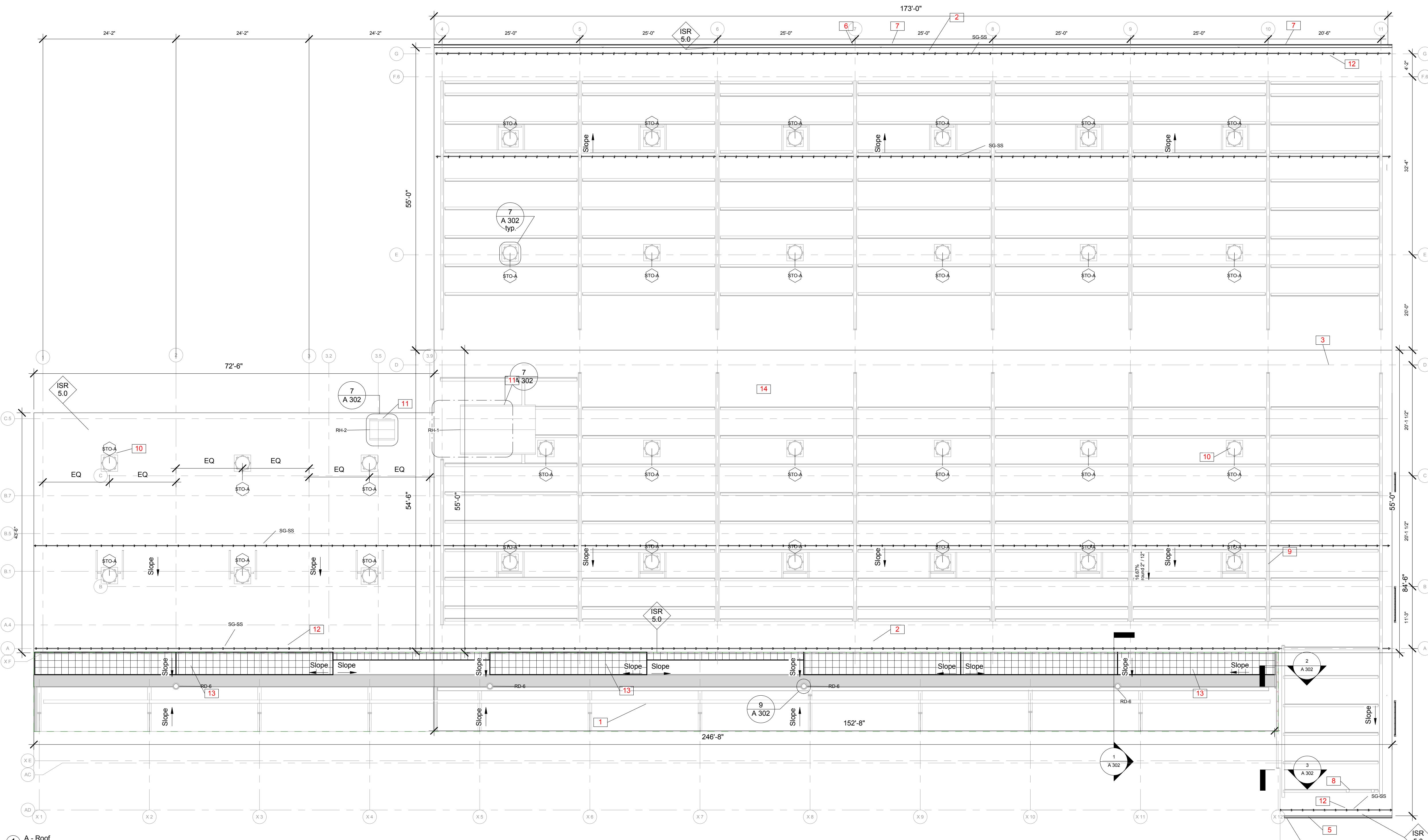
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No.	Description	Addendum
1	Re-issued and added notes for clarification	1



Keynote Legend	
Key Value	Keynote Text
1	EXISTING WHITE TPO ROOF. REPAIR TO ACCOMMODATE ANY WORK UNDER THIS CONTRACT.
2	MIN. 6" FIREFIGHTER ACCESS
3	MIN. 4" PATHWAY PER 2012 IFC 605.11.3.2
4	2X4 DOWN SPOUT IN WALL COLOR. COORDINATE WITH CIVIL ENGINEERING DESIGN TO TERMINATE IN STORMWATER PIPE.
5	GUTTER GS 5X5 MATCH WALL COLOR.
6	GUTTER GS 7X7 MATCH WALL COLOR.
7	4X4 DOWN SPOUT IN WALL COLOR. COORDINATE WITH CIVIL ENGINEERING DESIGN TO TERMINATE IN STORMWATER PIPE.
8	COORDINATE WITH ROOF EQUIPMENT AND RE-ROUTE AS REQUIRED.
9	SUPERSTRUCTURE FOR FUTURE SOLAR INSTALLATION. COORDINATE LOCATION WITH ROOF EQUIPMENT. COORDINATE EQUIPMENT WITH SUPERSTRUCTURE.
10	COORDINATE SOLATORS WITH PURLINS. SOLAR SUPERSTRUCTURE AND OTHER OBSTACLES.
11	COORDINATE ROOF EQUIPMENT WITH STRUCTURE AND OTHER ELEMENTS. RE-DESIGN AND RE-ARRANGE UNDERLAYING SYSTEMS AS REQUIRED.
12	INSTALL SNOWGUARD PER MANUFACTURERS INSTRUCTIONS. COORDINATE WITH ROOF EQUIPMENT AND ADJUST FINAL LAYOUT AS REQUIRED UPON APPROVAL BY OWNER.
13	INSTALL BLACK TPO ROOF OVER TAPERED INSULATION TO CREATE CRICKETS.
14	GENERAL NOTE: GALVANIZE ENTIRE SOLAR STRUCTURE.

Roofplan

A 150

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12/22/2015 11:44:36 AM



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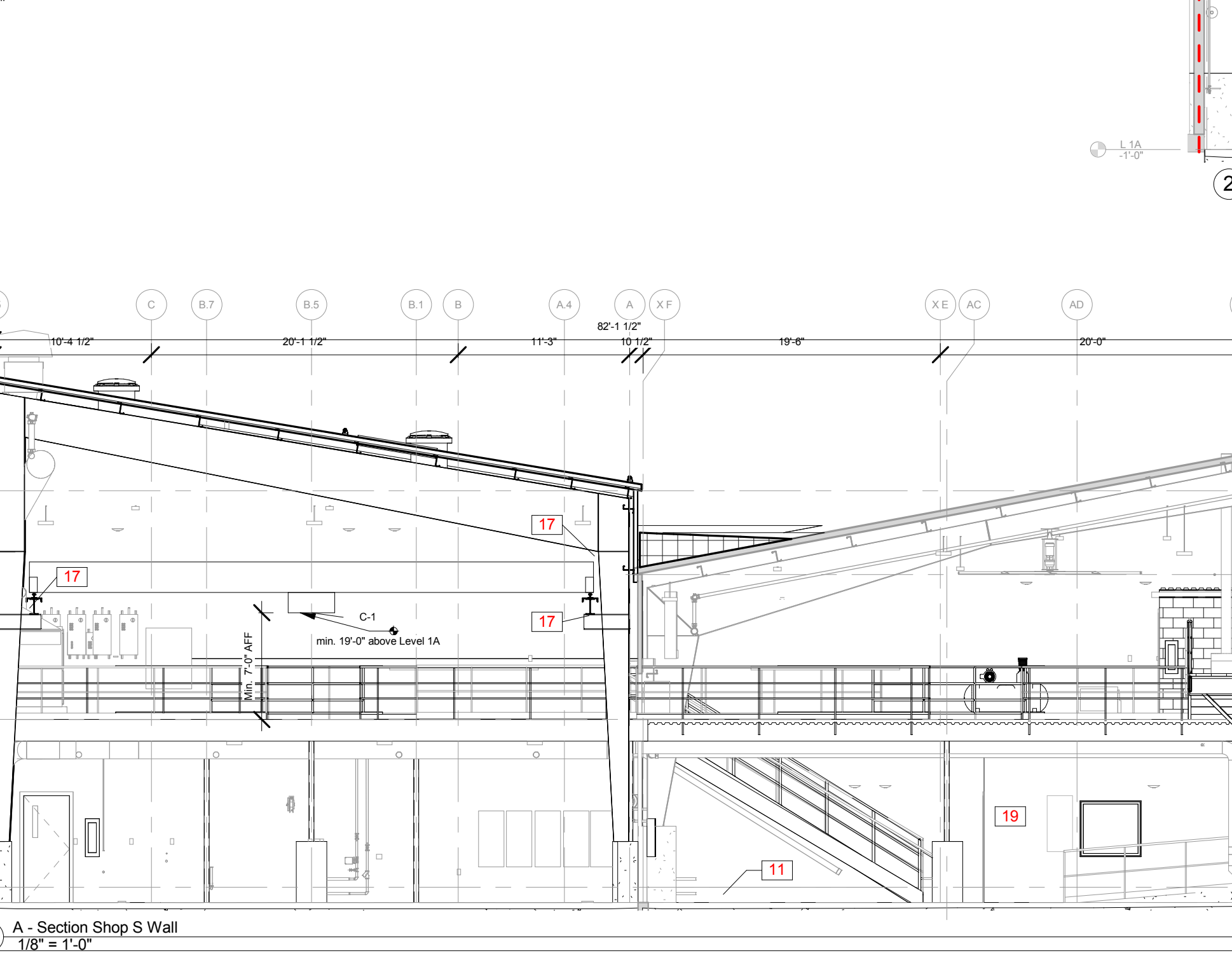
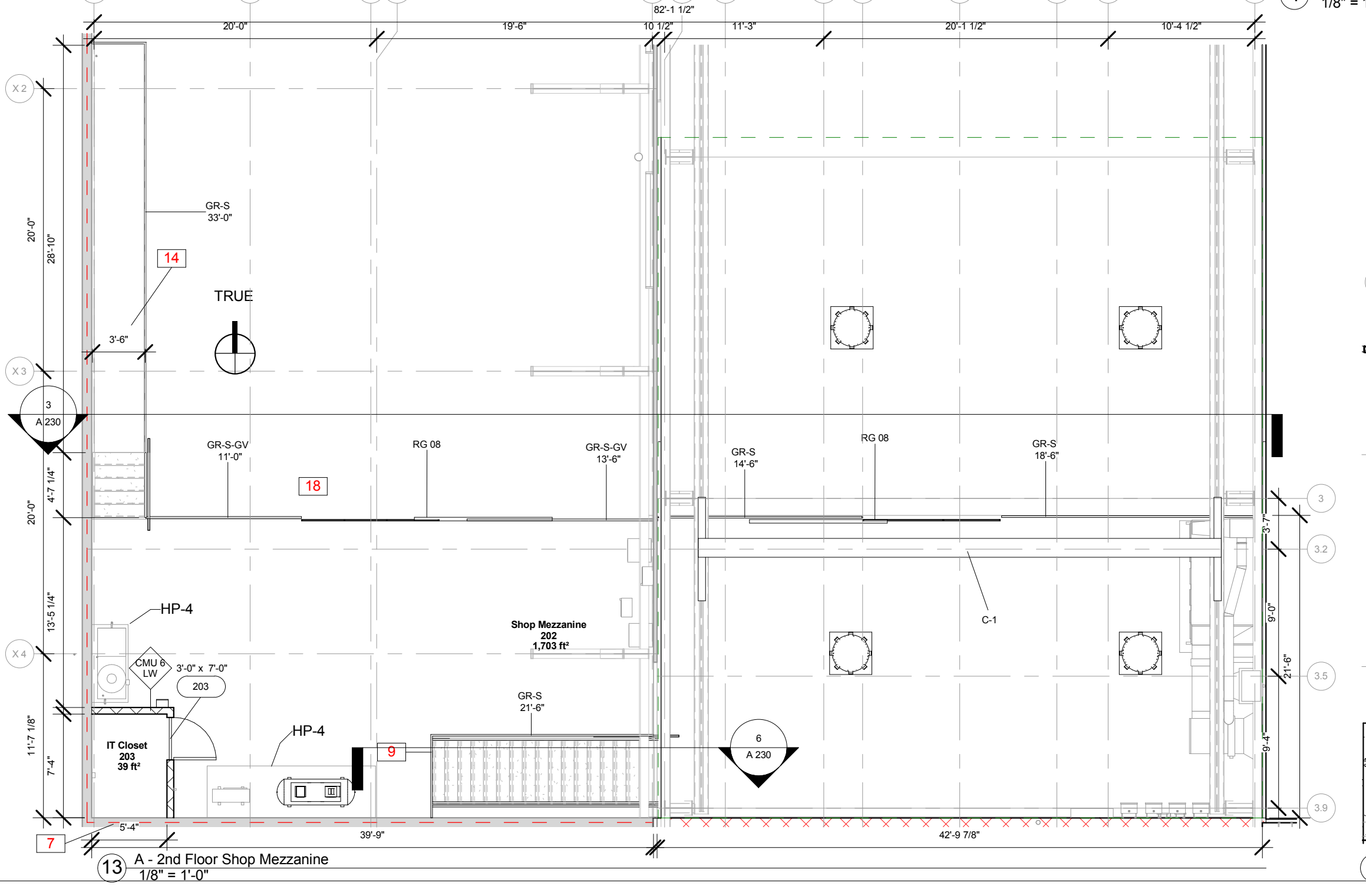
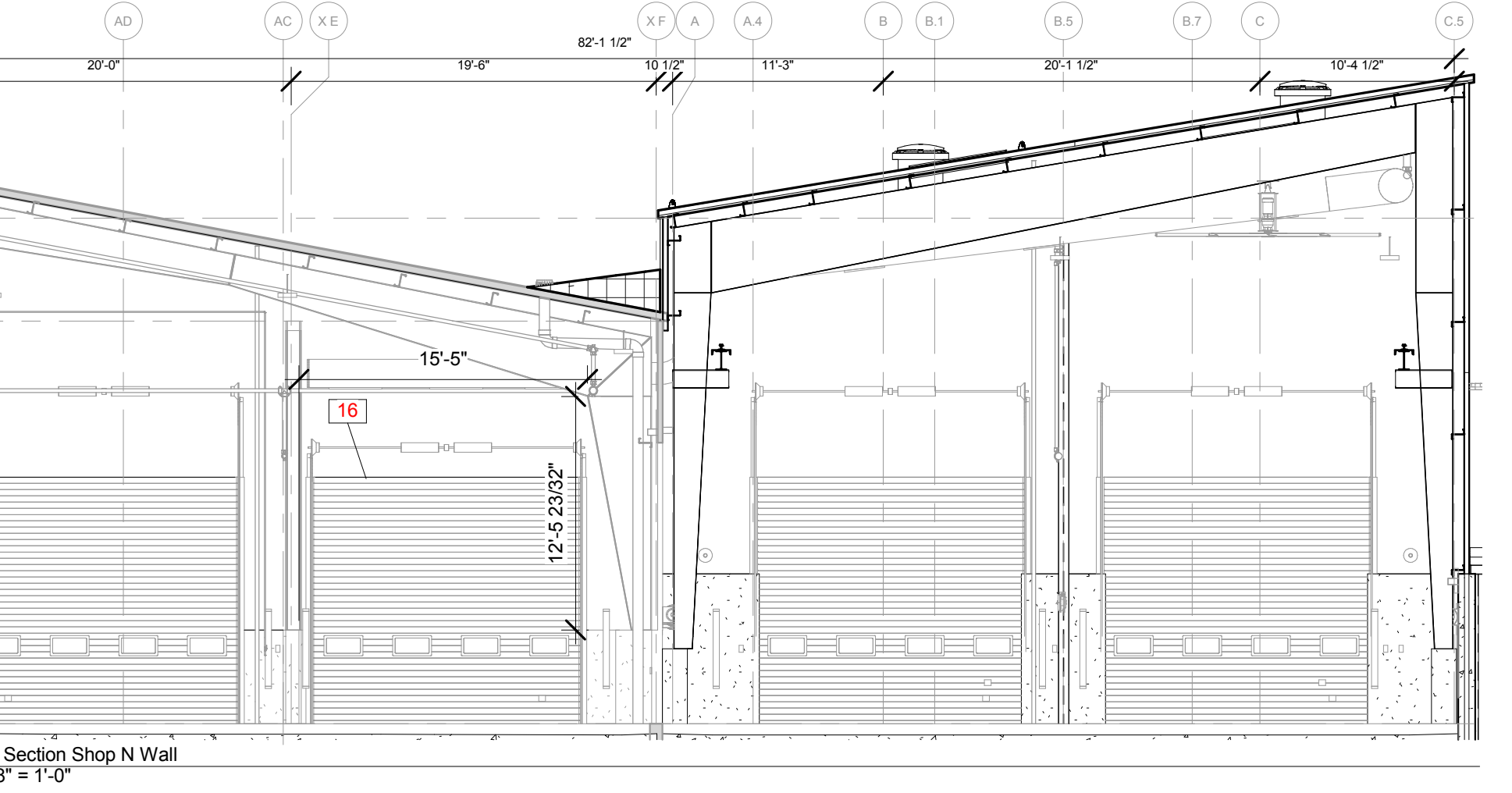
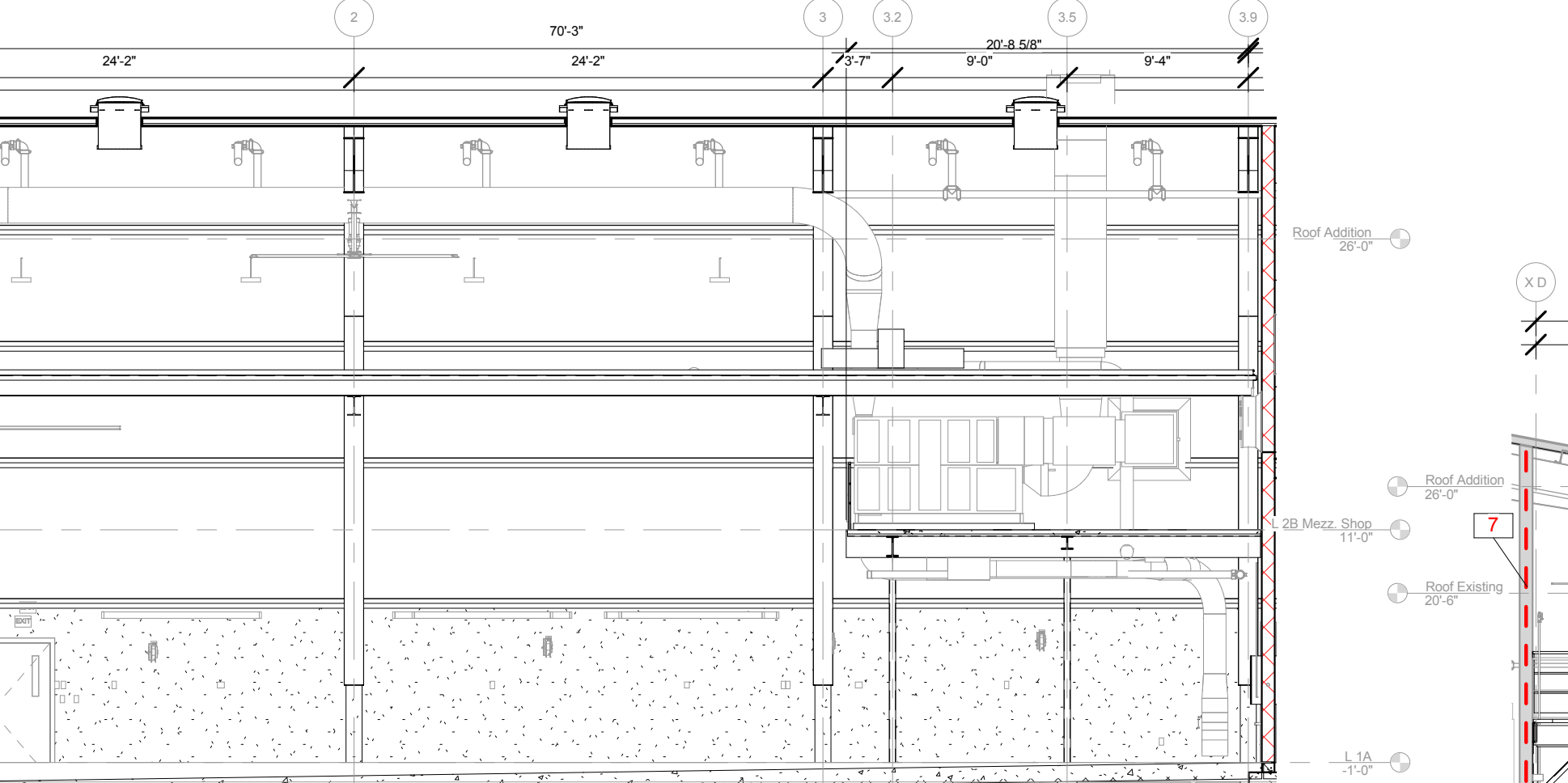
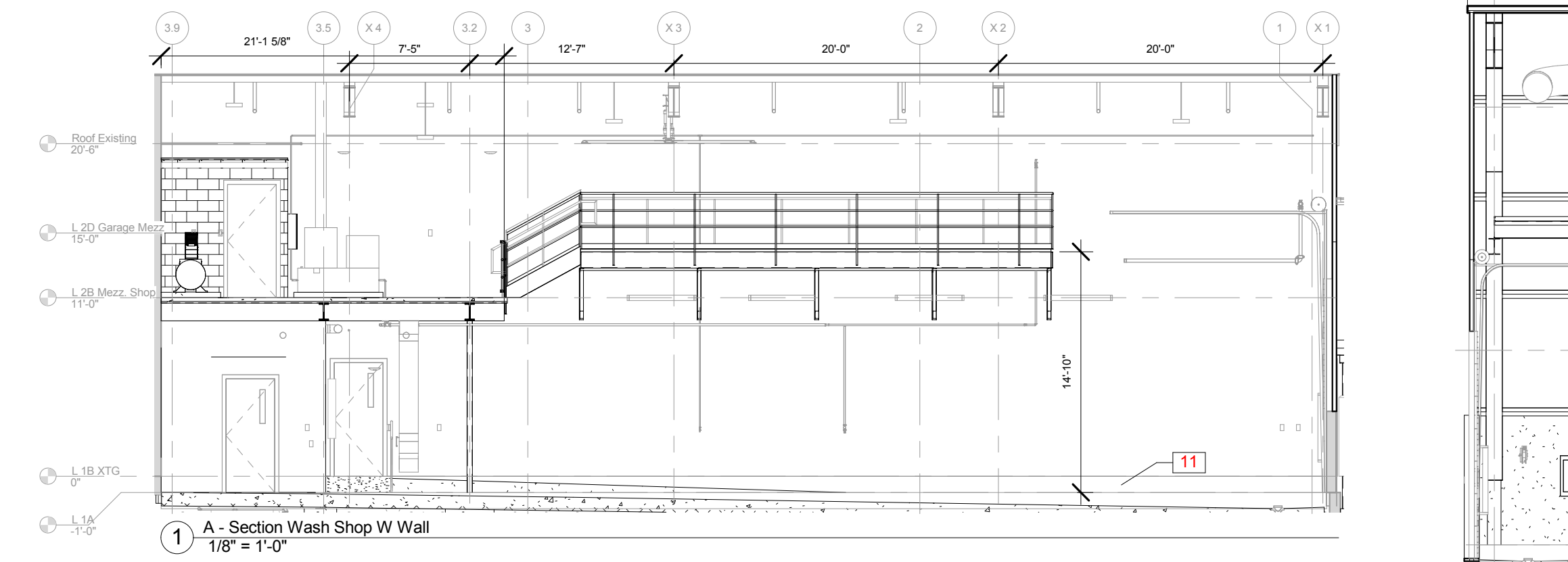
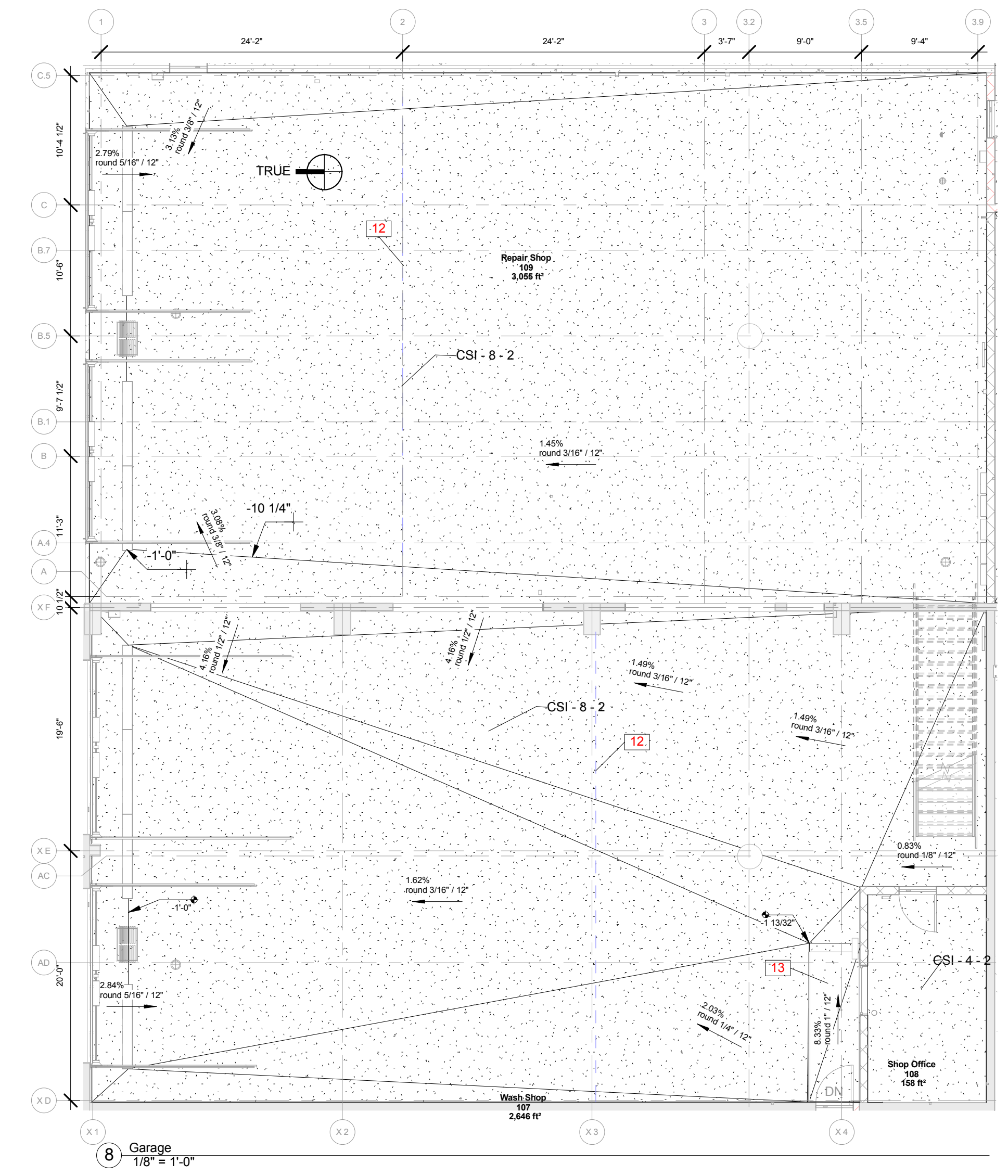
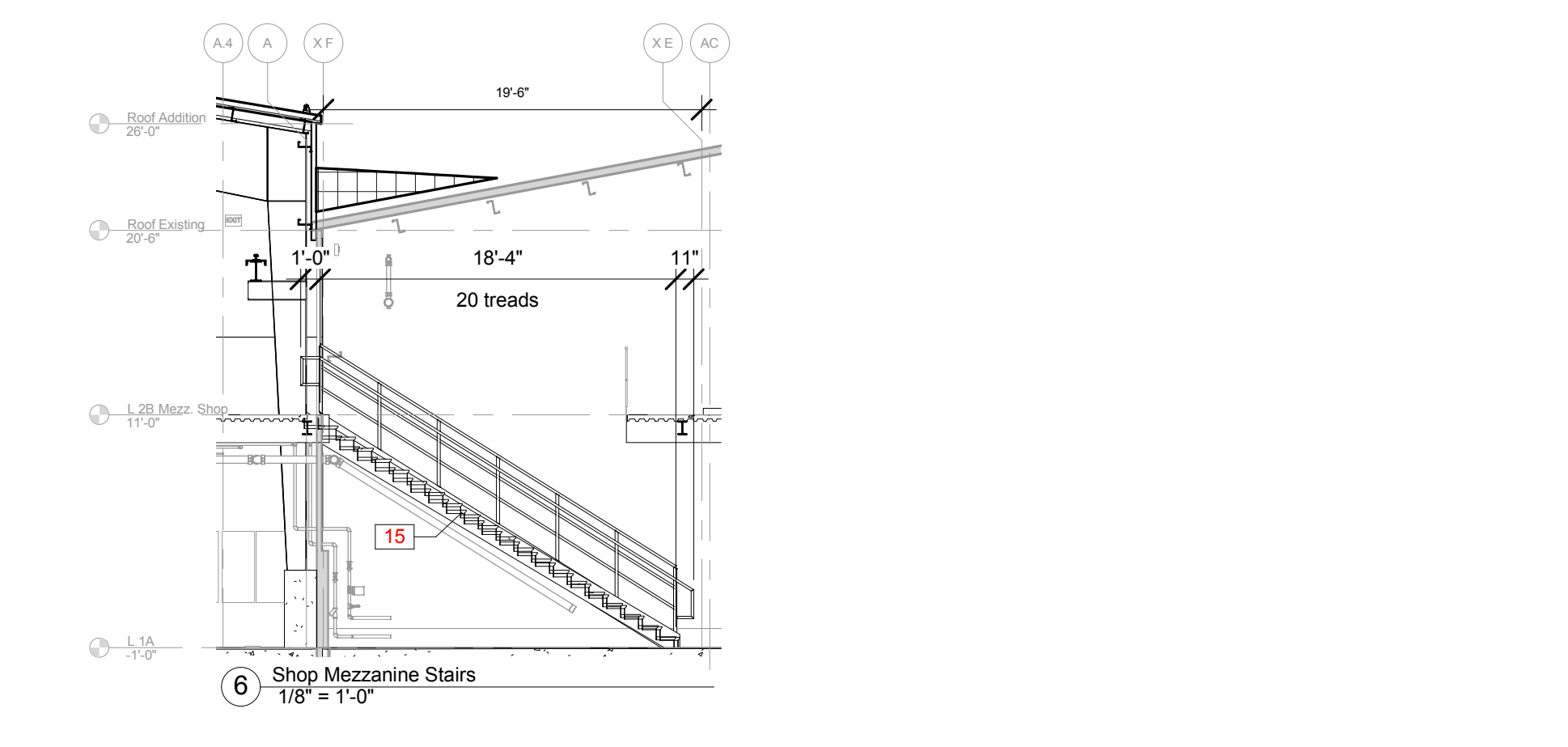
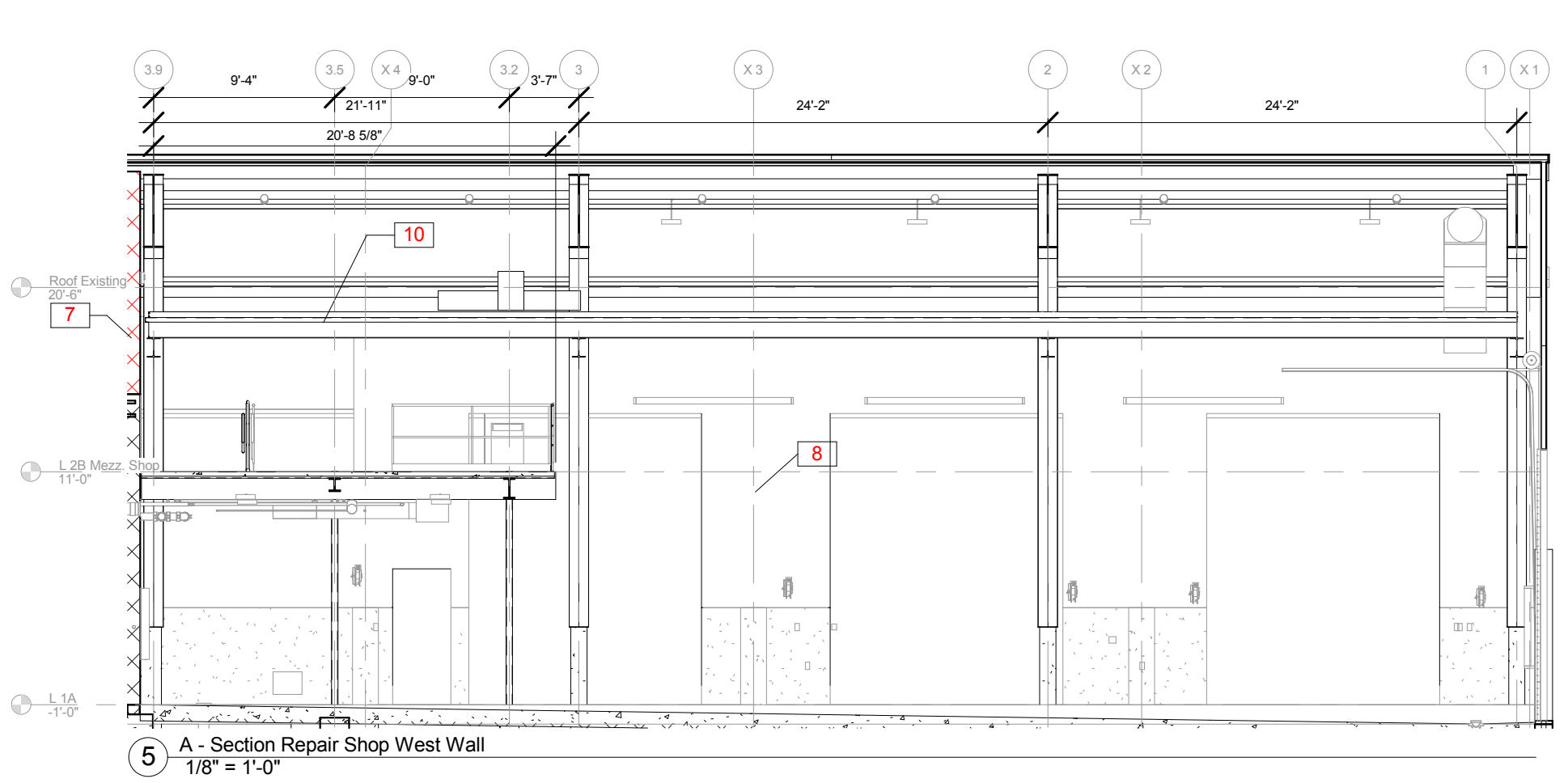
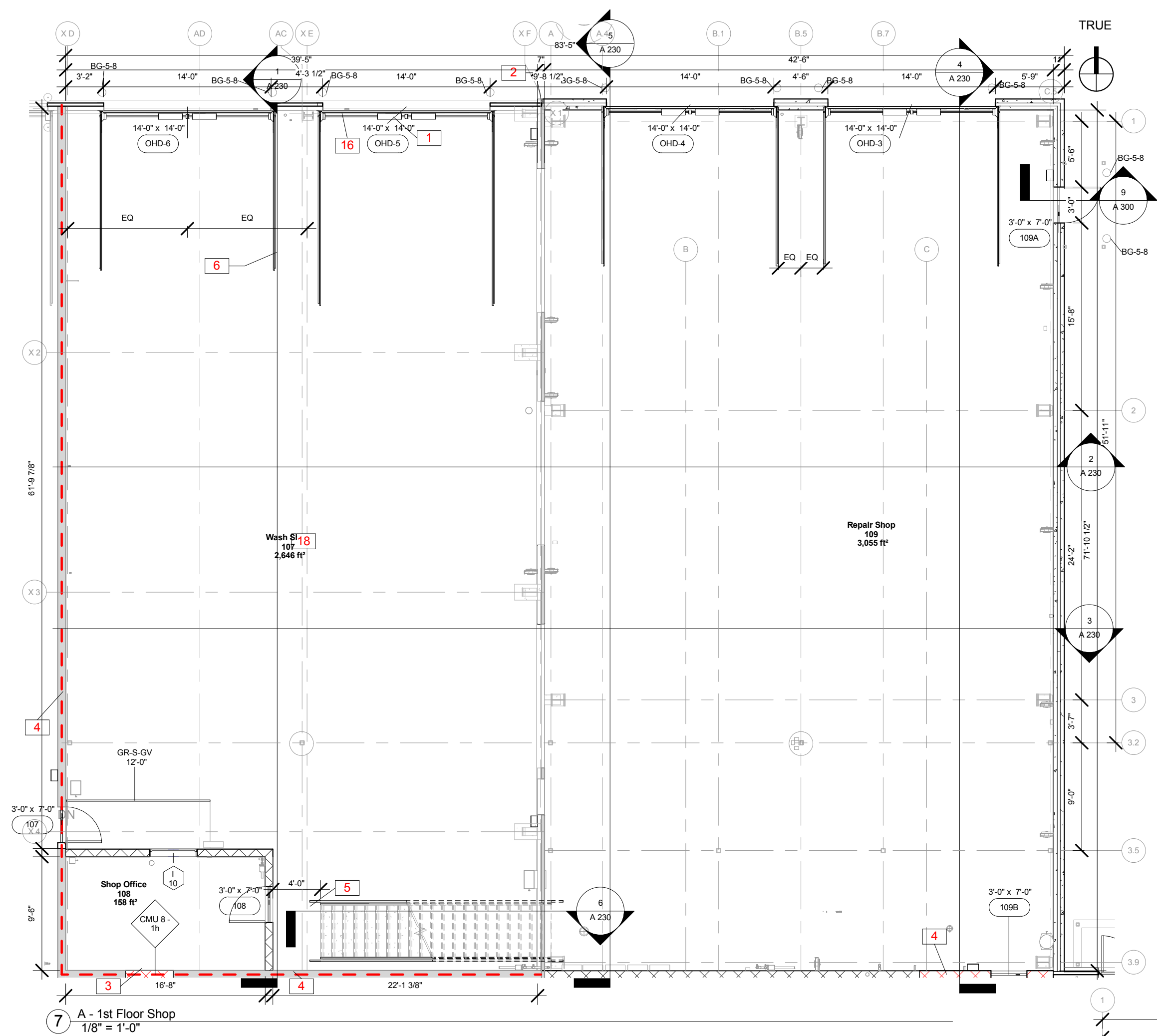
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Shop

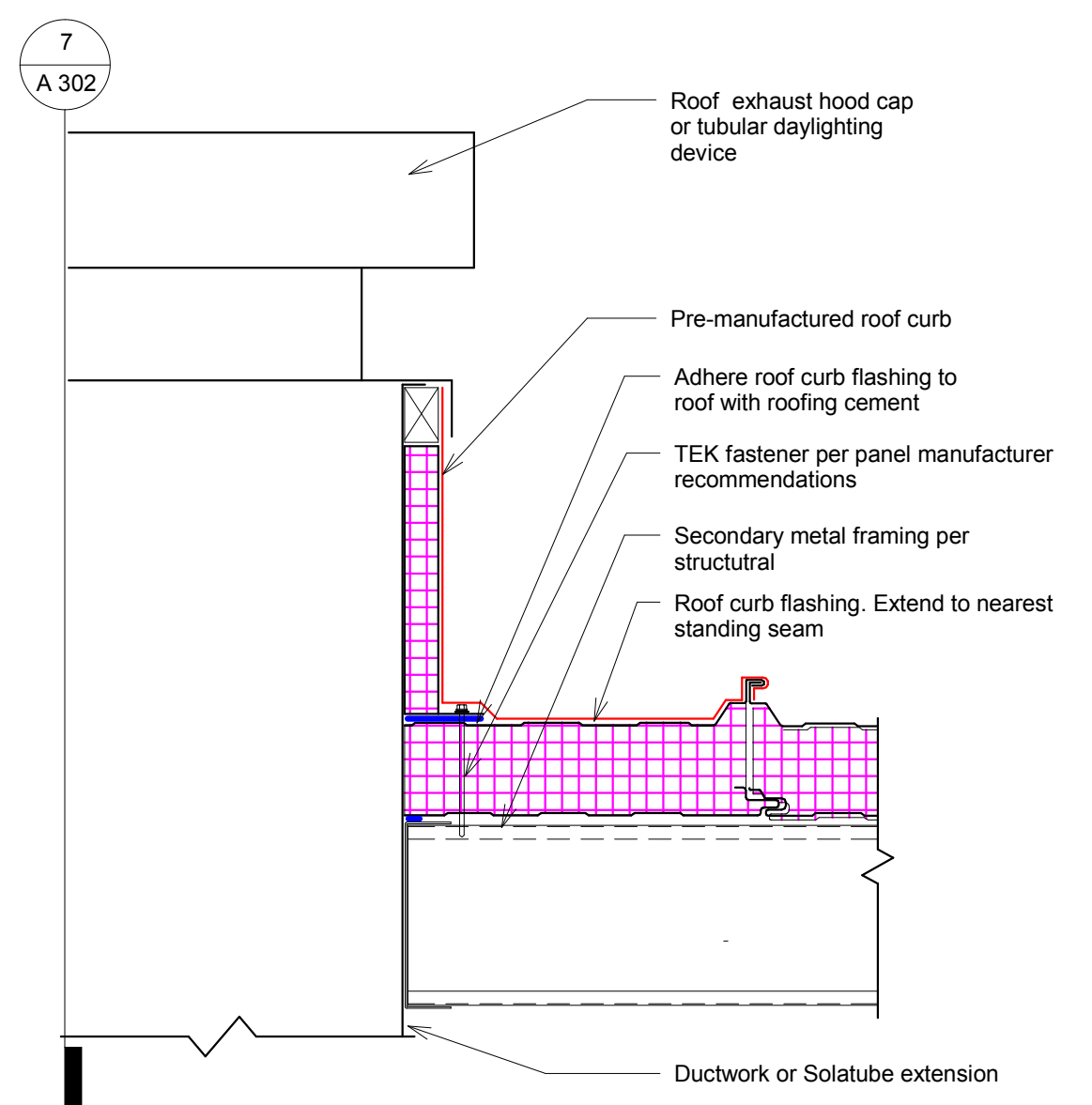
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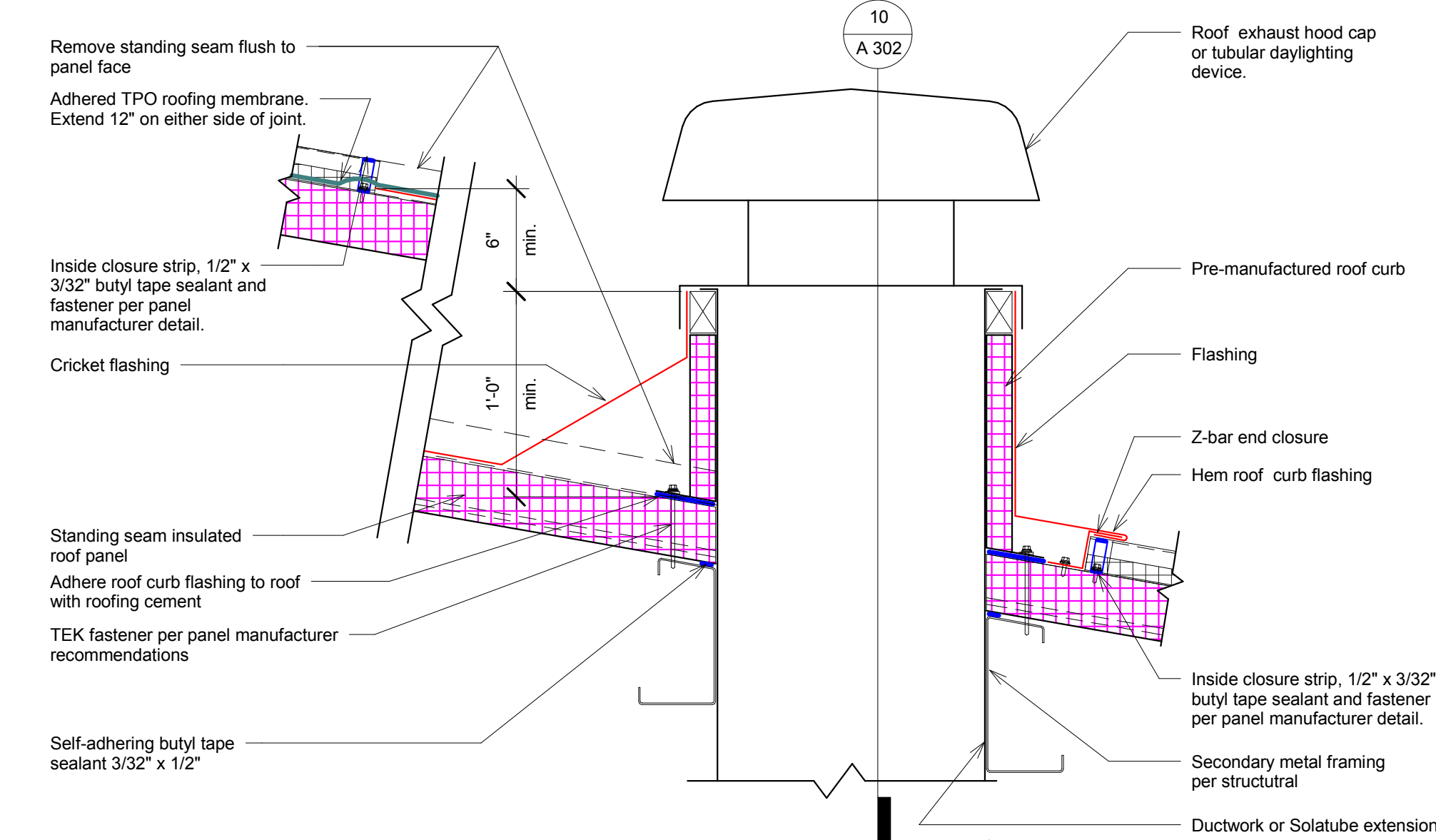


Key Value	Keynote Text
1	WASHBAY RATED DOORS WITH GALVANIZED STEEL TRACKS AND STAINLESS STEEL ROLLERS
2	ALONG NEW WALL HAVE INSULATED METAL PANEL OF NEW AND EXISTING WALL IN ONE PLANE
3	CLOSE EXISTING OPENINGS WITH CMU
4	1-HOUR FIRE SEPARATION PER IBC 2012 TABLE 508.4 PROVIDE DETAILED FIRE SEPARATION MEETING CODE. SEAL ALL OPENINGS, JOINTS AND PROTECT ALL PENETRATIONS AND FIREPROOF ALL MATERIAL AS REQUIRED BY CODE
5	ADJUST HANDRAIL EXTENSION AND LOCATION OF START TO MEET 2012 IBC CHAPTER 10 REQUIREMENTS. PROVIDE AT LEAST 4' LONG LANDING AND 3' PATH TO PASS HANDRAIL
6	LOCATE DOORS TO ALLOW PROPER DRIVEWAY USAGE
7	PROVIDE DETAILED FIRE SEPARATION MEETING CODE. SEAL ALL OPENINGS, JOINTS AND PROTECT ALL PENETRATIONS AND FIREPROOF ALL MATERIAL AS REQUIRED BY CODE
8	KEEP EXISTING SIDING IN PLACE. REMOVE AS REQUIRED FOR OTHER CONSTRUCTION
9	ADJUST FLOOR TO PROVIDE CLEAR HEIGHT OF 8' BETWEEN BOTTOM OF MEZZANINE AND STAIRS. CONTRACTOR RESPONSIBLE FOR MEETING CODE REQUIREMENTS
10	PROVIDE OPENING IN DIMENSIONS SHOWN. PROTECT ALL EDGES AND COVER OR REMOVE SHARP EDGES. REWORK STRUCTURAL ELEMENTS AS REQUIRED TO PROVIDE REQUIRED CLEARANCE AND OPENING
11	CUT AND SMOOTHEN FOUNDATION AND SLAB TO PROVIDE SURFACE IN SIMILAR QUALITY AS NEW WALL
12	EXPANSION JOINTS. KEEP ANY TUBING AND OTHER OBSTACLES 6" AWAY
13	BUILD RAMP NOT EXCEEDING SLOPE INDICATED
14	CATWALK AND STAIRS MADE OF HOT-DIP GALVANIZED STEEL
15	SEE STRUCTURAL FOR START CONSTRUCTION DETAILS
16	LOCATE DOOR AND ADJUST BREAKAWAY TO ALLOW OPERATION WITHIN WITHOUT CONFLICT WITH STRUCTURAL OR OTHER ELEMENTS. IF SCHEDULED DOOR CANNOT BE MADE FIT, INSTALL NON-STANDARD SIZE DOOR SMALLER UPON APPROVAL BY OWNER
17	INSTALL CRANE AS HIGH AS POSSIBLE MAINTAINING OPERABILITY. DESIGN AND INSTALL STRUCTURE TO ALLOW CRAN INSTALLATION AS HIGH AS POSSIBLE, BUT NOT BELOW SHOWN WORKED PLANS
18	GENERAL NOTE: CONTRACTOR SHALL VERIFY XTG DIMENSIONS. VALUES GIVEN ARE APPROXIMATE
19	GENERAL NOTE: GALVANIZE MEZZANINE, RAILING AND STAIRS IN WASH BAY ROOM

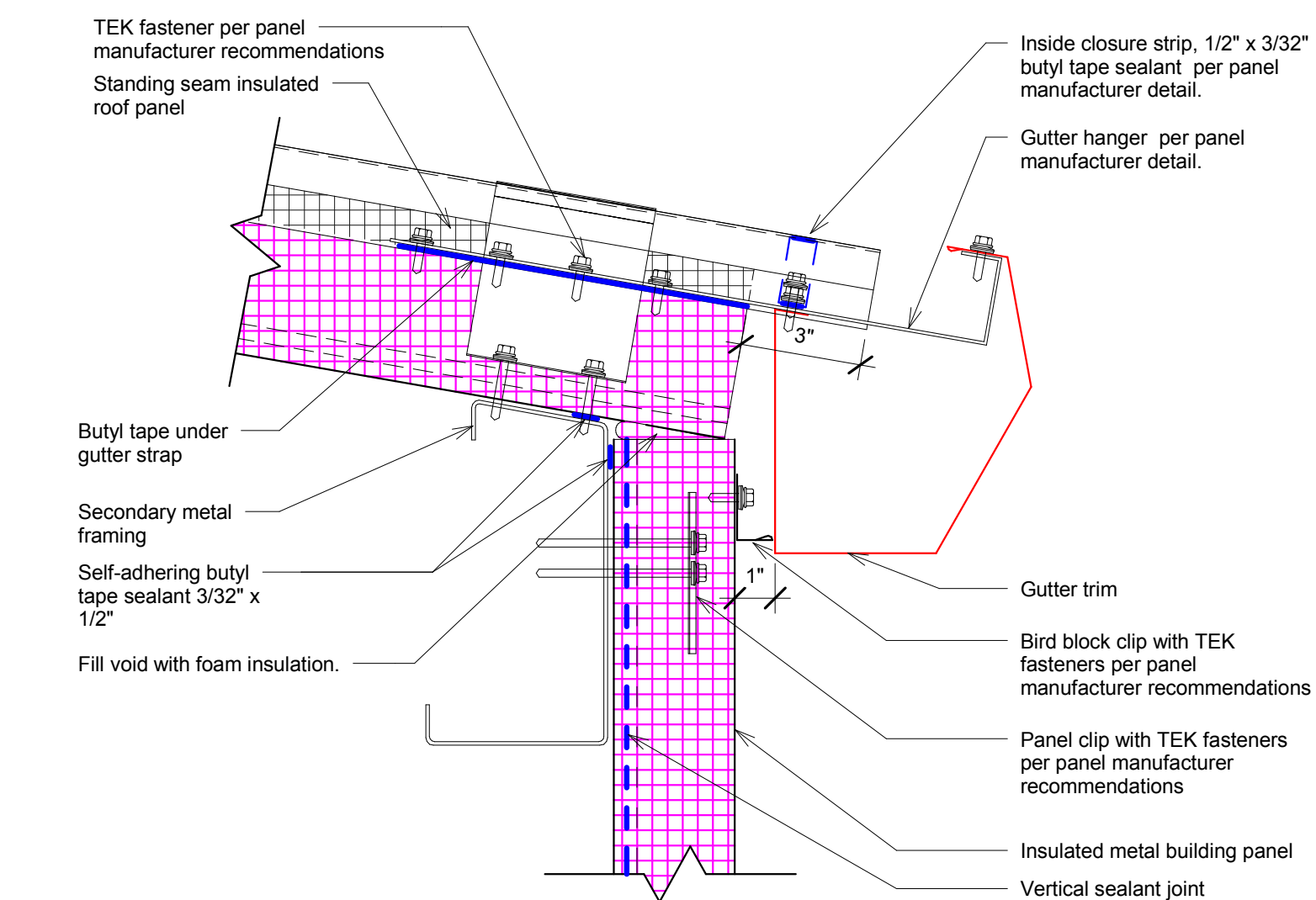
No.	Description	Addendum
1	Detail clarification to include columns and ducts	1



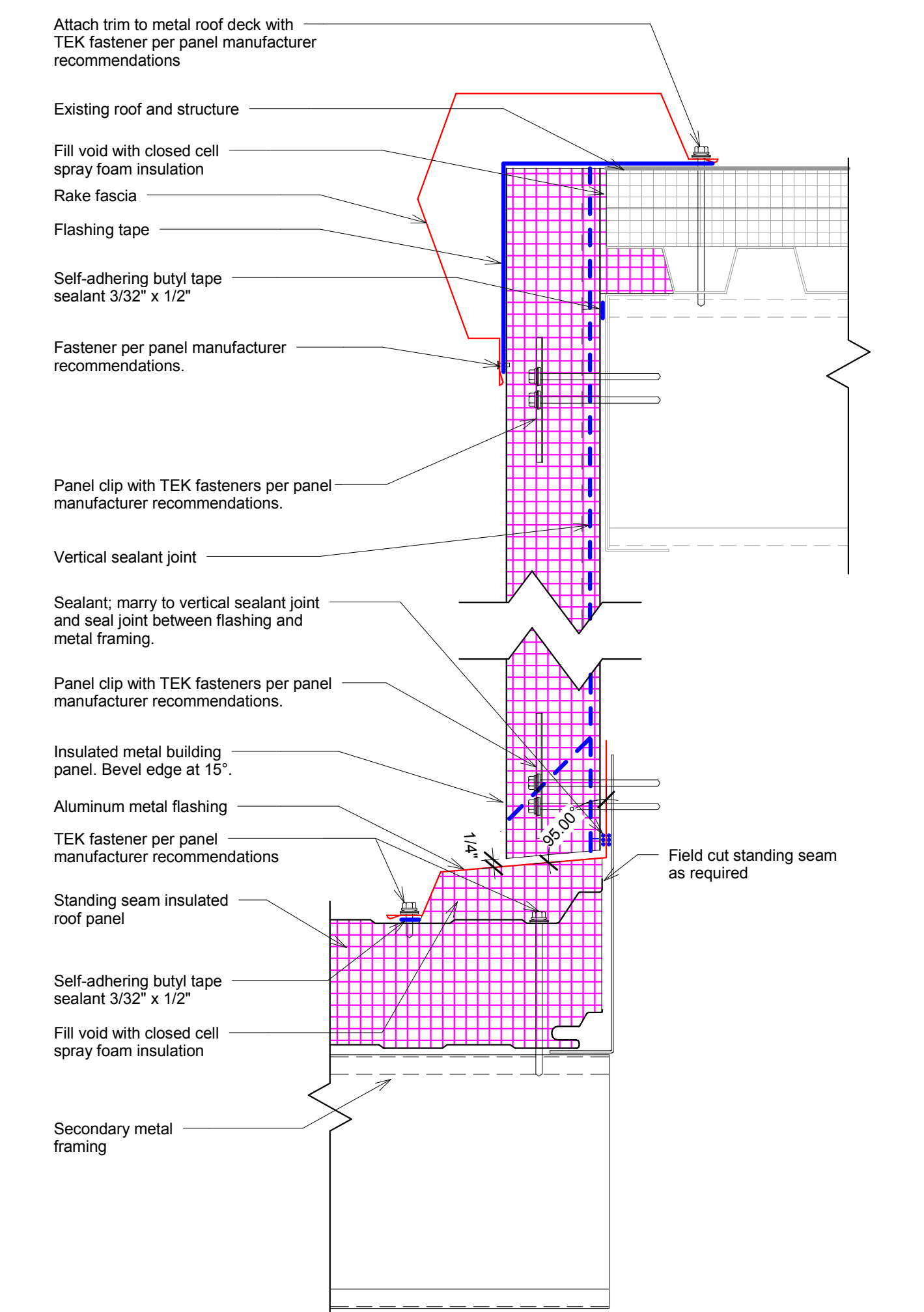
10 Roof Curb at Insulated Roof Panel - Section
 1 1/2" = 1'-0"



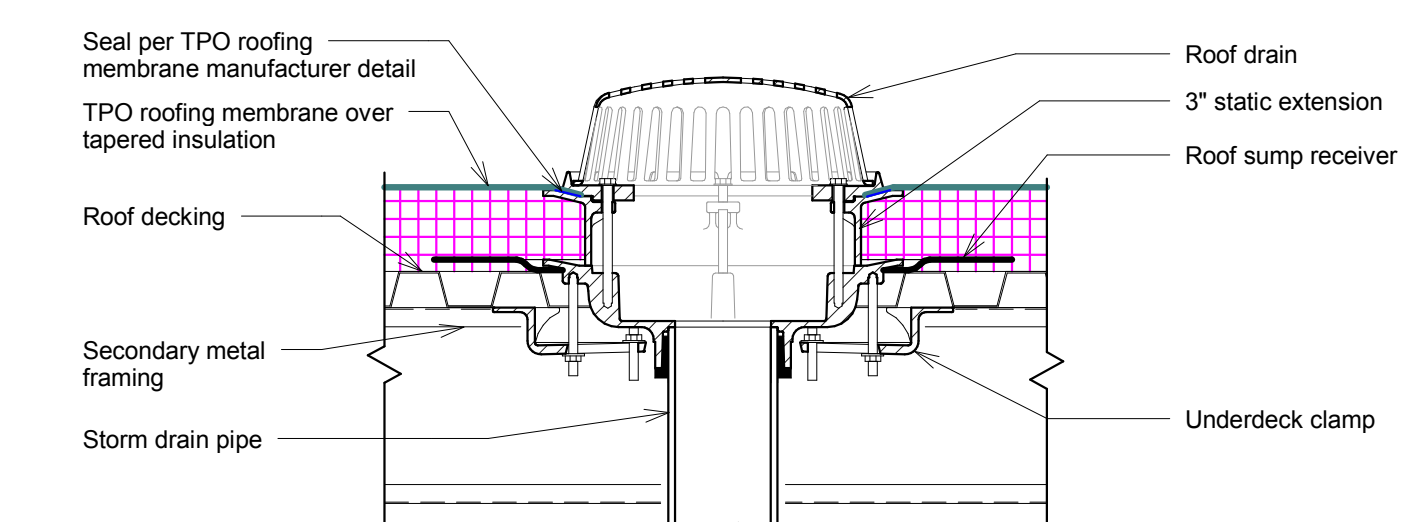
7 Roof Curb at Insulated Roof Panel
 1 1/2" = 1'-0"



12 Typical Eave with Gutter
 3" = 1'-0"

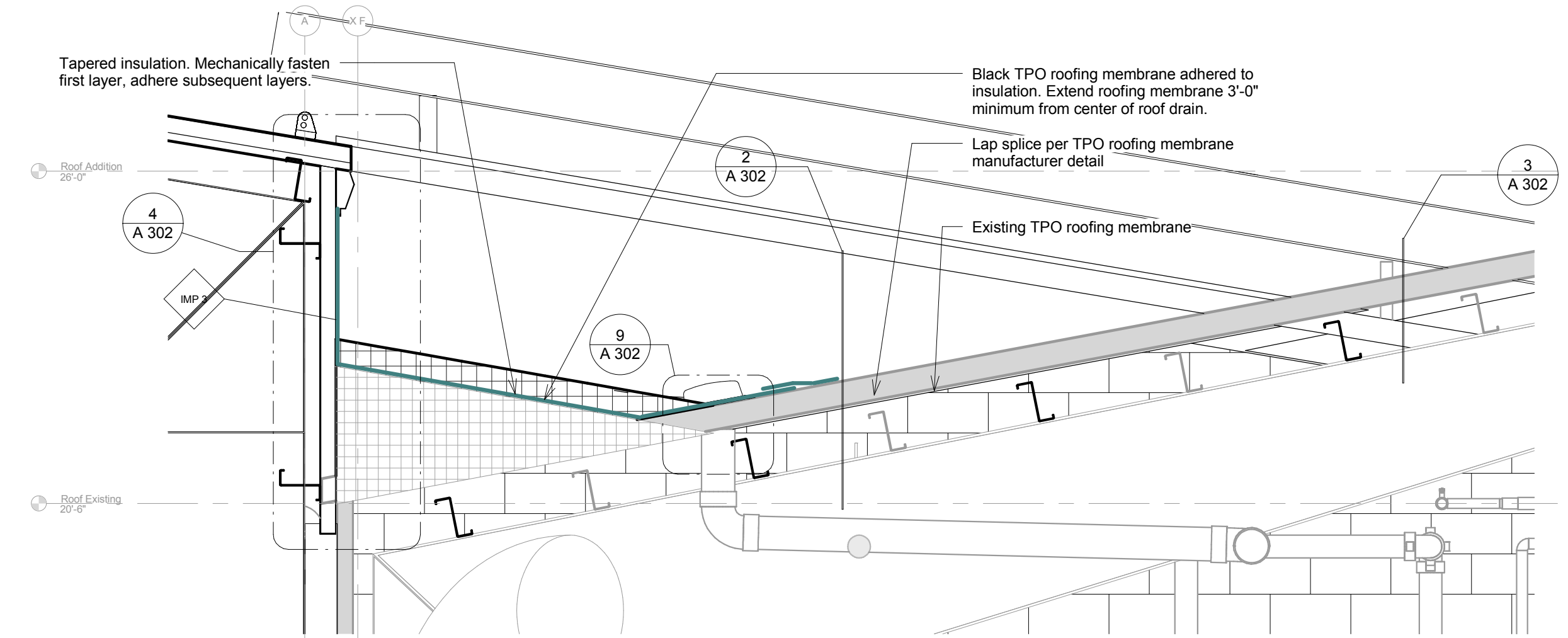


8 Metal Insulated Panel Wall to Roof - Rake Side
 3" = 1'-0"

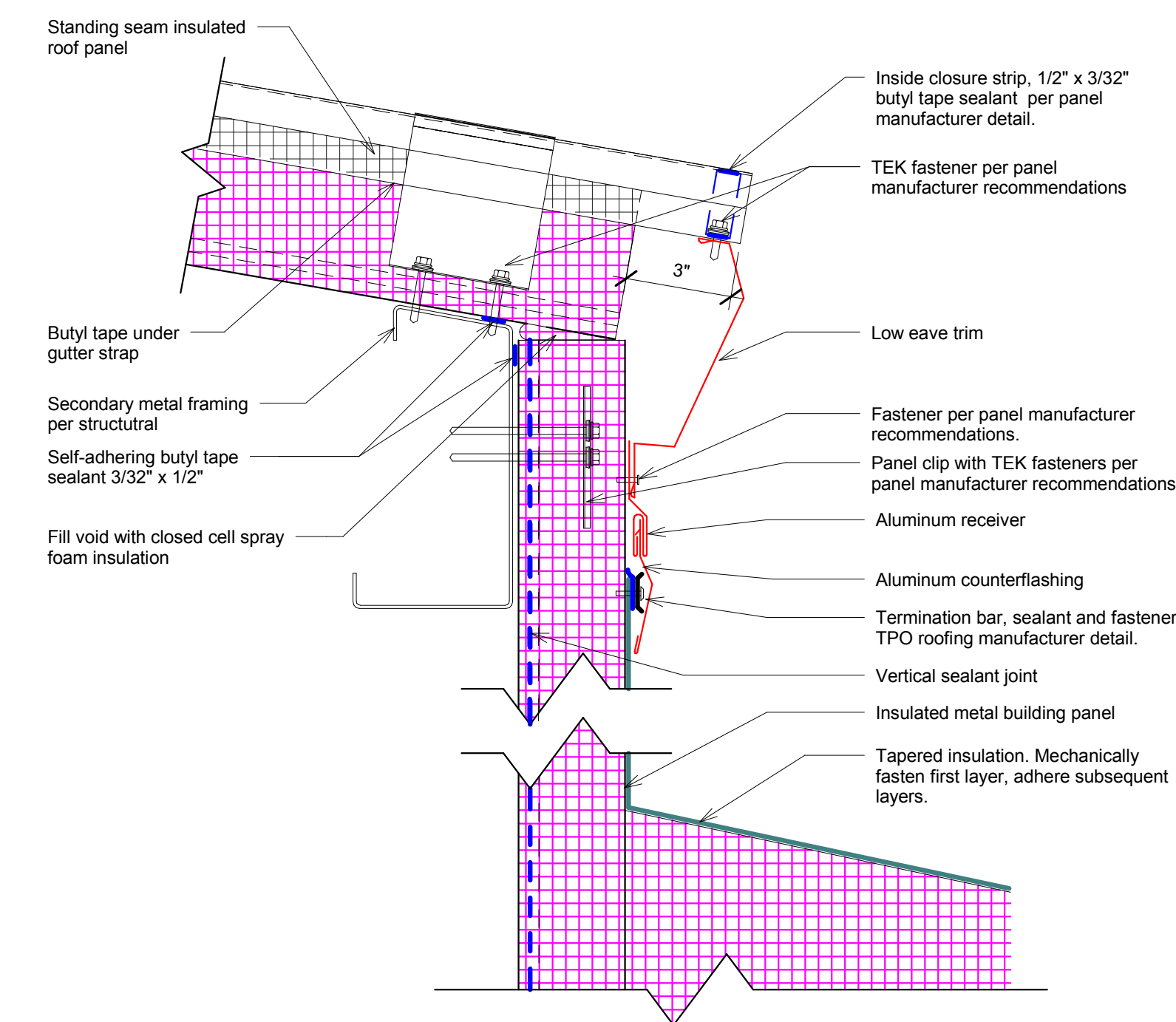


9 Roof Drain
 1 1/2" = 1'-0"

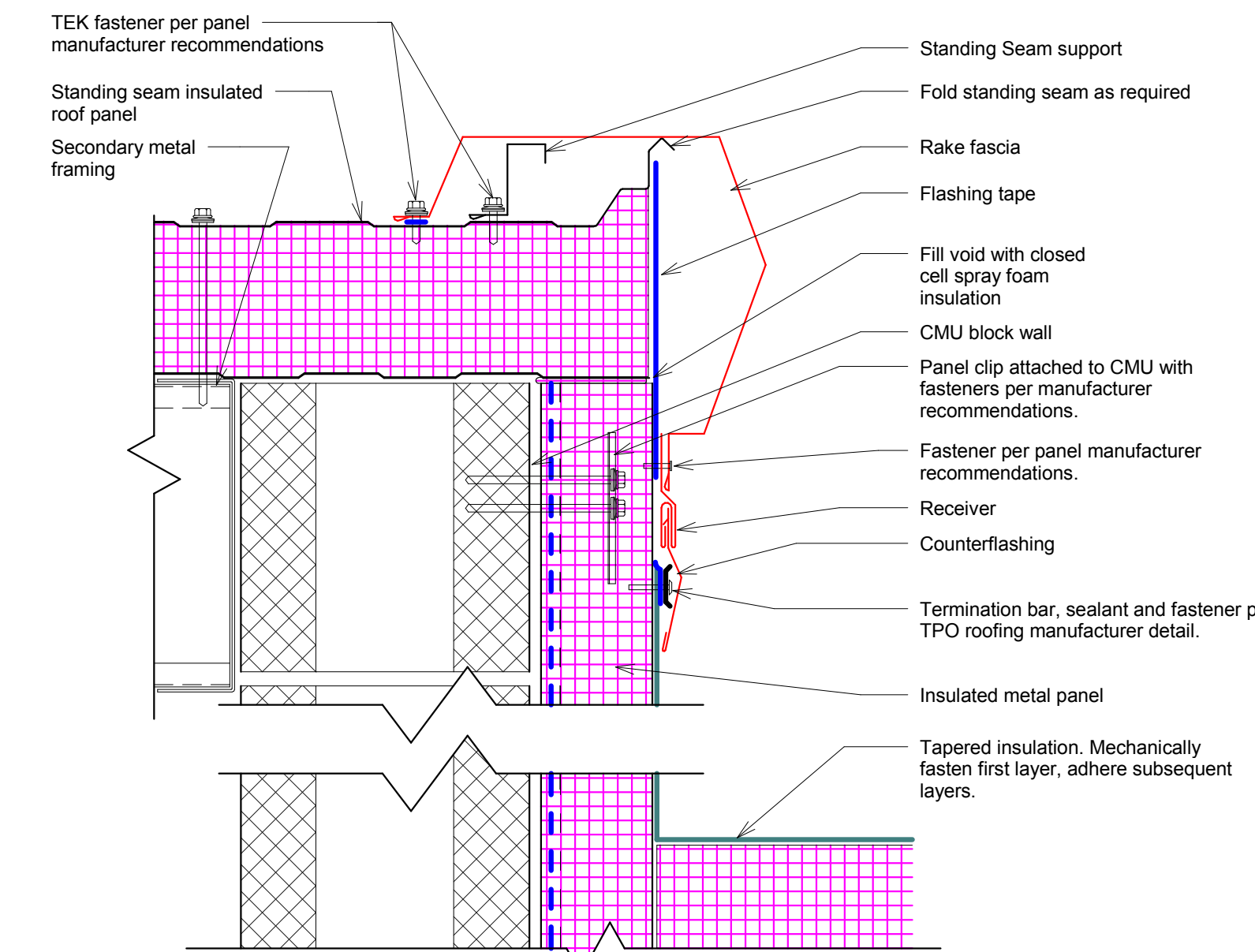
Notes:
 1. See structural drawings for framing requirements.



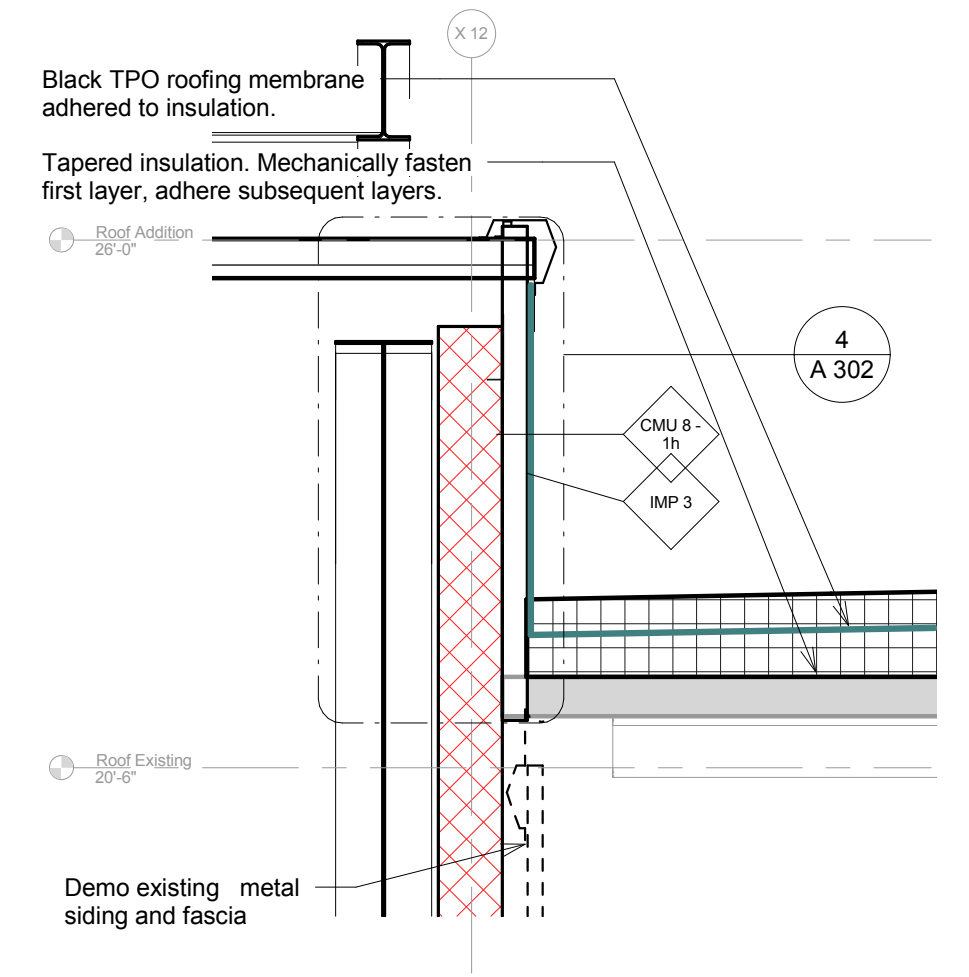
1 New to Existing Roof Section
 1/2" = 1'-0"



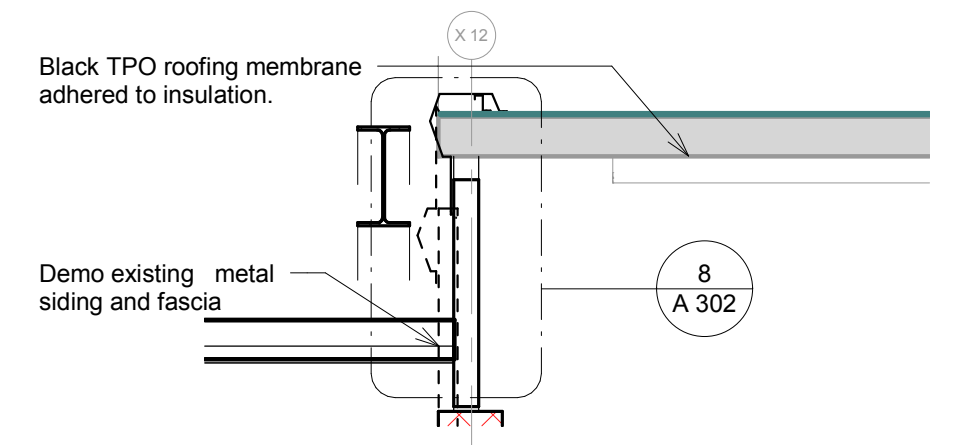
5 New to Existing Roof at Metal Insulated Panel
 3" = 1'-0"



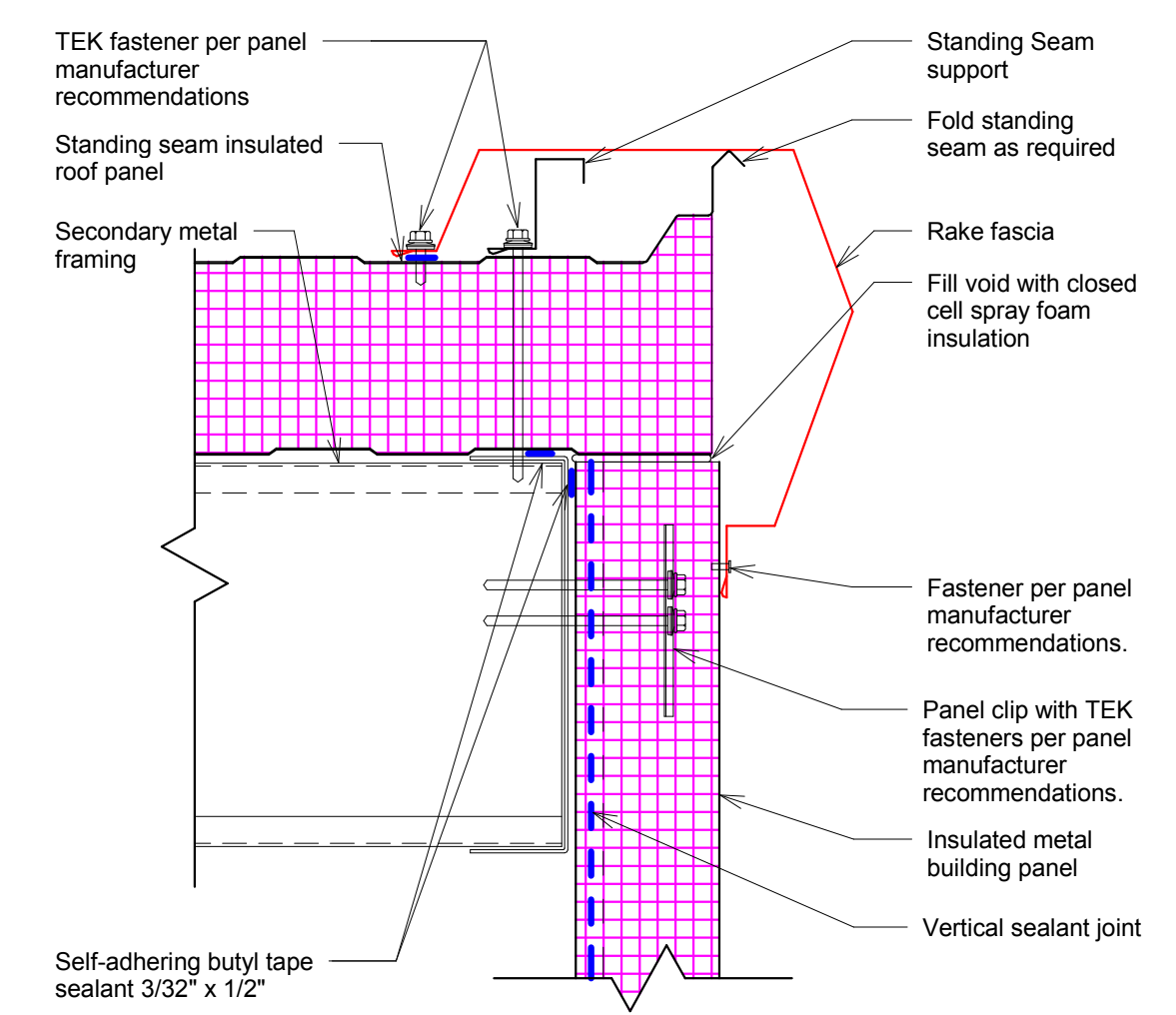
6 Rake Fascia at CMU Wall
 3" = 1'-0"



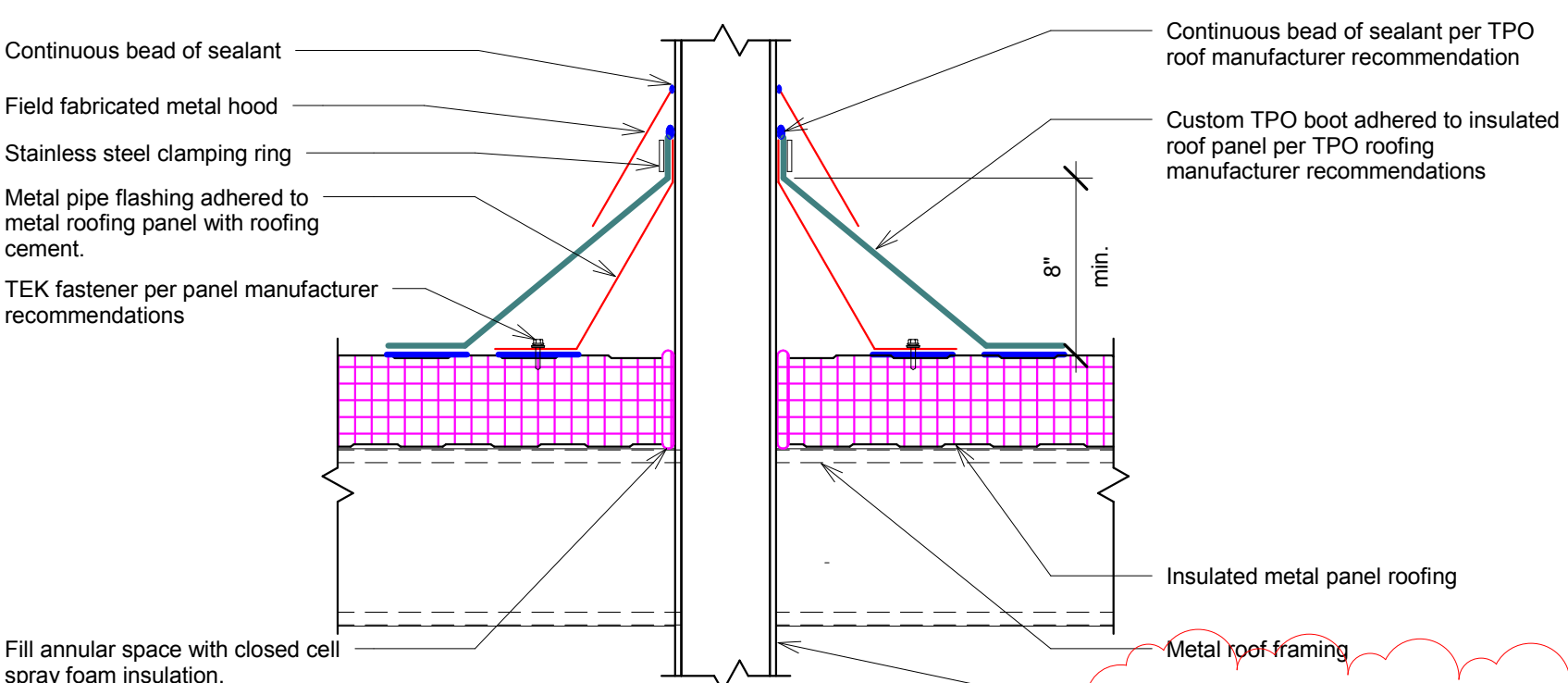
2 CMU Wall to Roof Section
 1/2" = 1'-0"



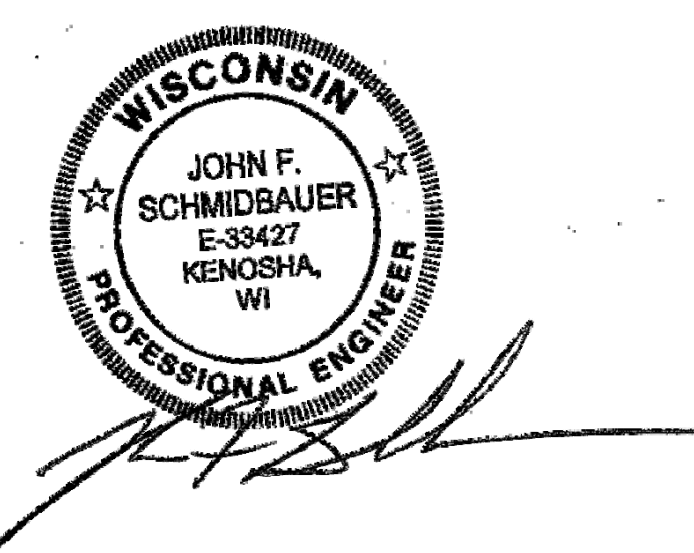
3 New to Existing Roof Transition
 1/2" = 1'-0"



4 Typical Rake Fascia
 3" = 1'-0"



13 Pipe, Duct and Column Penetration Flashing
 1 1/2" = 1'-0"



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Engineering Operations
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Revisions by Addendum

No.	Description	Addendum
1	Foundation plan changes	1

SHEET LIST

S 100	Foundation Plan
S 200	Mezzanine Framing Plan
S 201	Roof Framing Plan
S 202	Solar Panel and Crane Rail Structure
S 301	Building Sections
S 302	Building Sections
S 401	Wall Sections and Details
S 402	Wall Sections and Details
S 403	Wall Sections and Details
S 404	Wall Sections
S 501	Structural Details

CONCRETE SLAB SCHEDULE

CONCRETE TYPE "A"
6" CONCRETE SLAB - #3 EPOXY COATED REINF. @ 18" O.C. EACH WAY w/ 15 MIL POLYETHYLENE VAPOR BARRIER OVER 6" COMPACTED CRUSHED STONE

CONCRETE TYPE "B"
8" CONCRETE SLAB - #3 EPOXY COATED REINF. @ 16" O.C. EACH WAY w/ 15 MIL POLYETHYLENE VAPOR BARRIER OVER 8" COMPACTED LIMESTONE #5 EPOXY COATED BARS REQ @ EXPANSION JOINTS OR END OF CONSTRUCTION JOINTS 16" O.C. 2'-0" LONG

COLUMN SCHEDULE

MARK	TYPE	BASE PLATE
C-1	HSS3X3X1/4	9" x 1/2" x 0'-0"
C-2	HSS4X4X1/4	10" x 3/4" x 0'-0"
C-3	Pipe3STD	6" x 1/2" x 0'-0"
C-4	HSS6X6X1/4	12" x 1/2" x 1'-0"

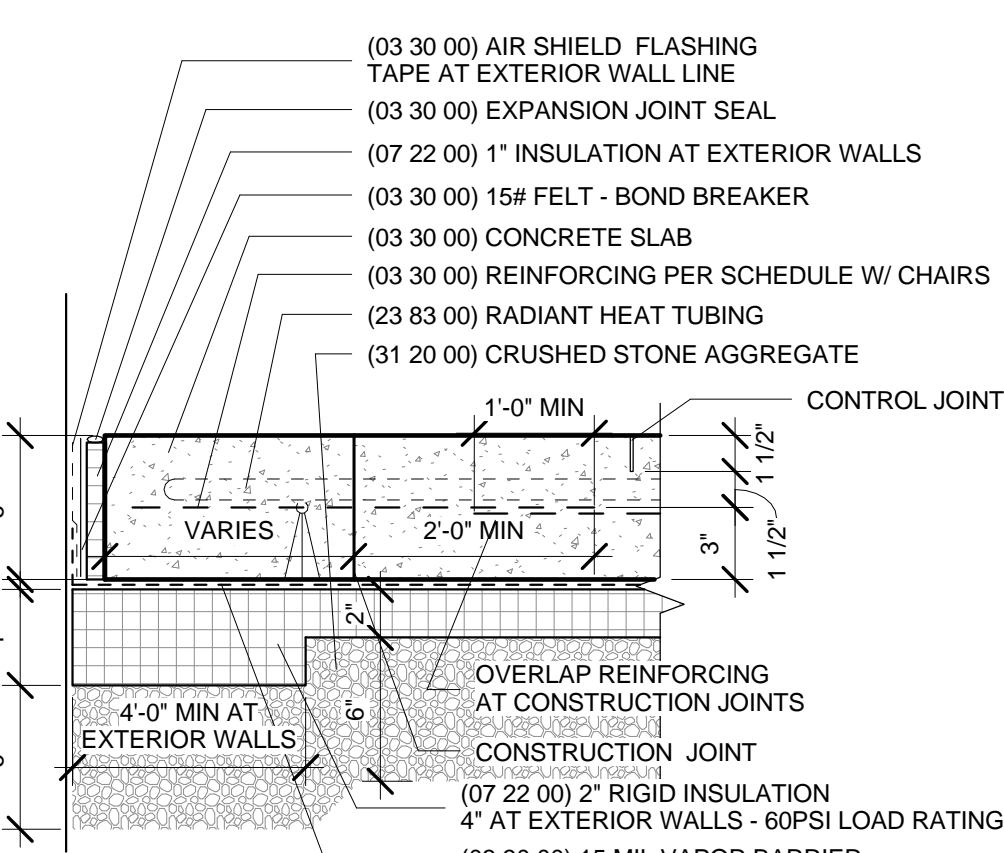
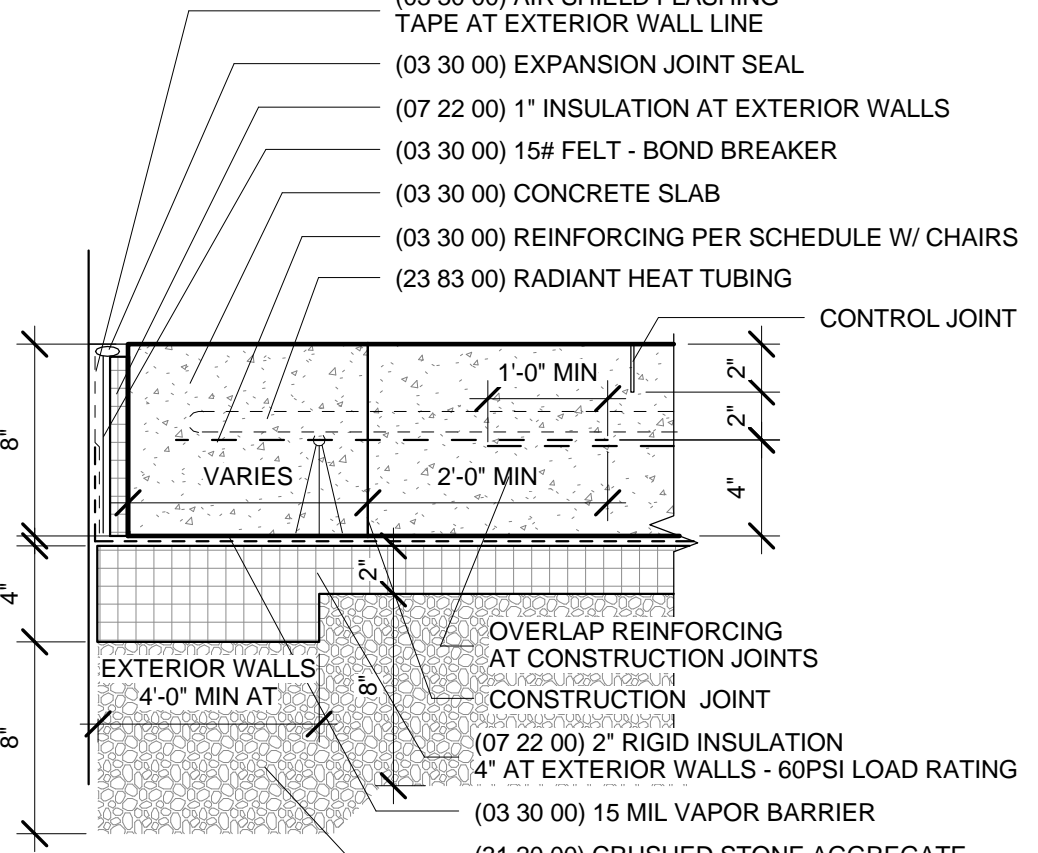
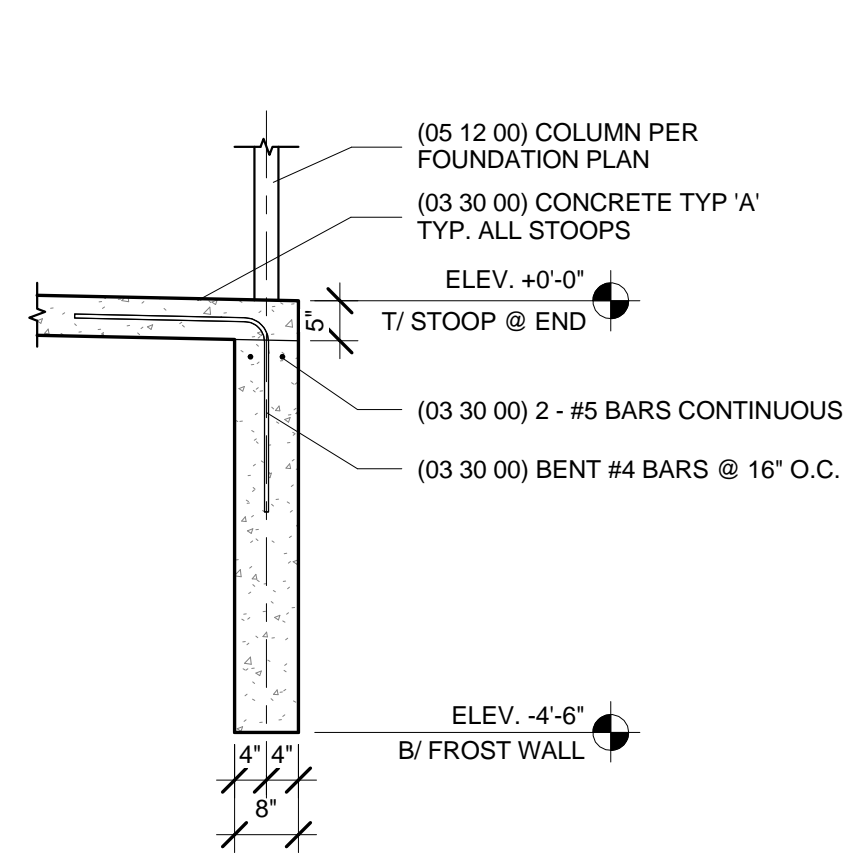
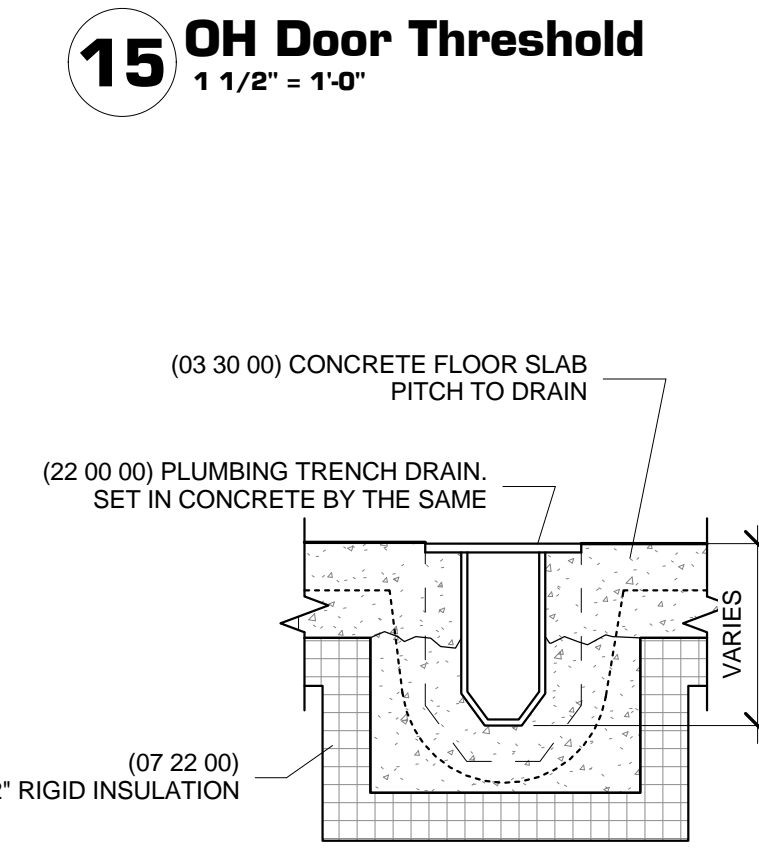
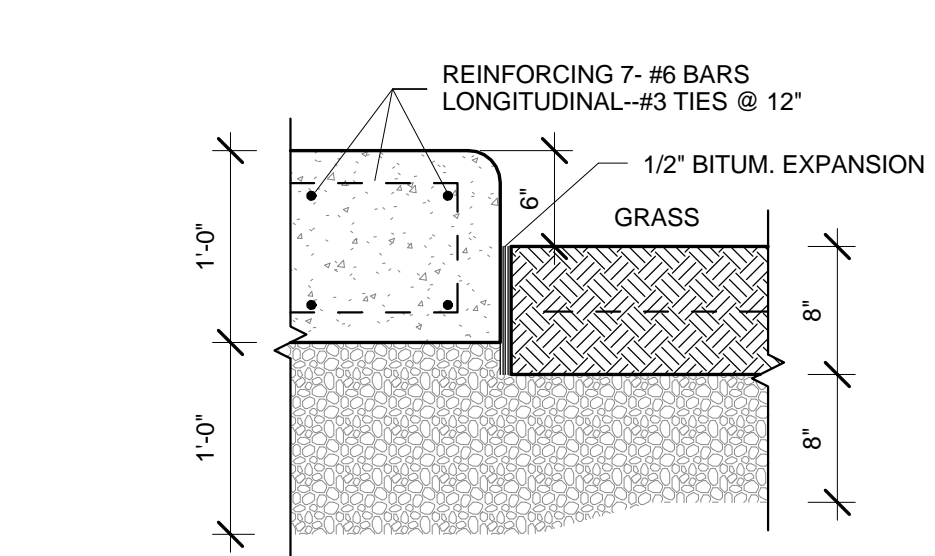
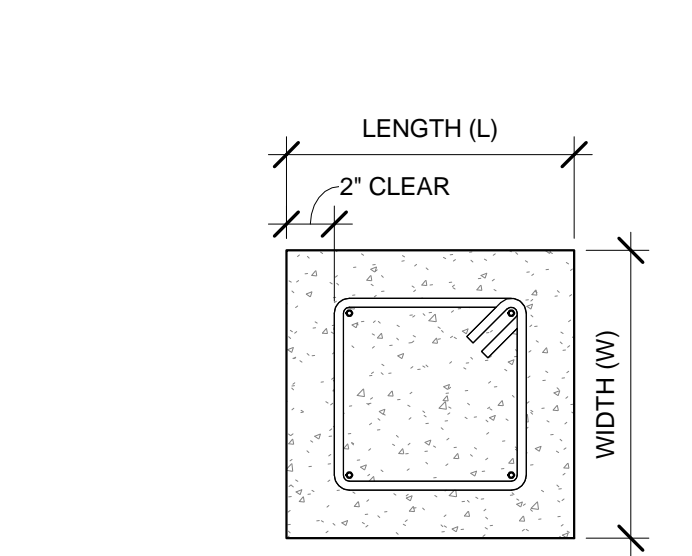
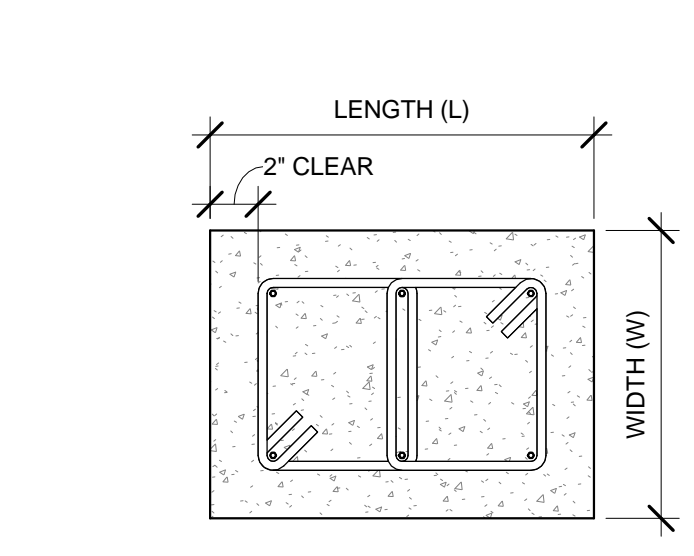
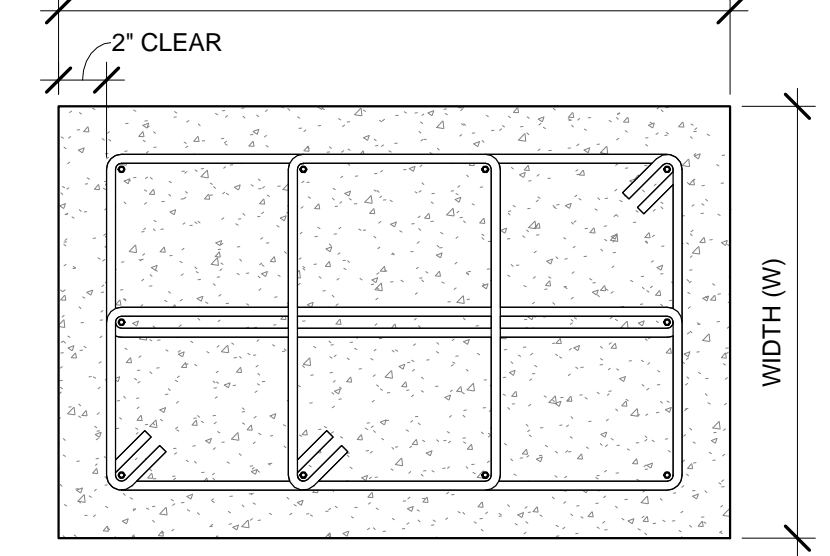
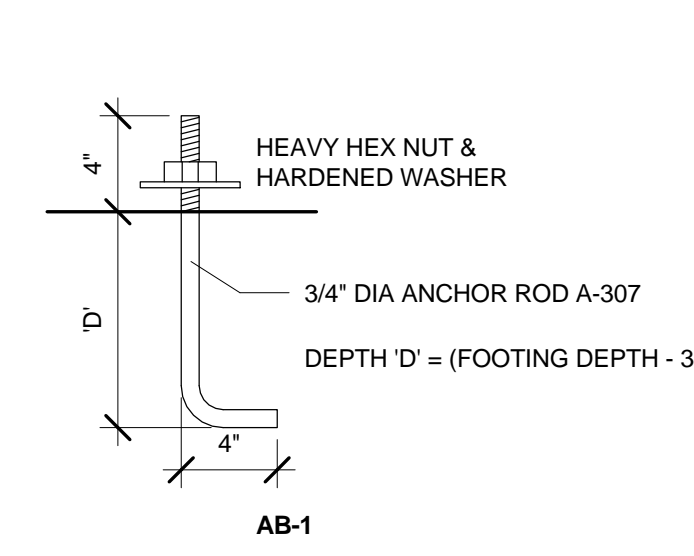
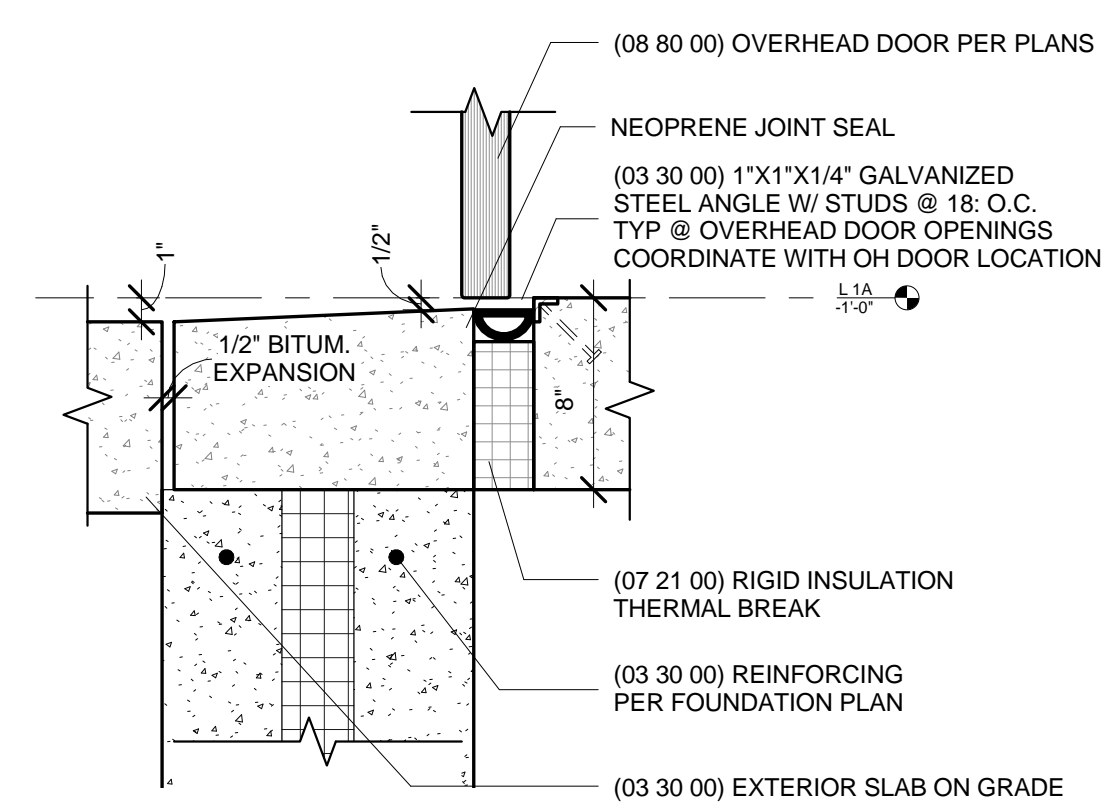
FOOTING SCHEDULE

NOTE: ALL STRIP FOOTINGS ARE "ST-1" UNLESS NOTED OTHERWISE

MARK	SIZE	REINFORCING
F-1	36" x 36" x 12"	(4) #5 BARS E. W.
F-2	51" x 51" x 12"	(5) #5 BARS E. W.
F-2A	51" x 51" x 12" (Uplift)	(5) #5 BARS E. W. / T & B
F-3	66" x 66" x 12"	(6) #5 BARS E. W. / T & B
F-4	87" x 87" x 12"	(8) #5 BARS E. W. / T & B
F-5	96" x 96" x 13"	(10) #6 BARS TOP AND BOTTOM
F-6	108" x 60" x 12"	(6) #5 BARS LONG. - (10) #5 BARS TRANS. - T & B
F-7	162" x 48" x 24"	(6) #7 BARS LONG. - (18) #7 BARS TRANS. - T & B
F-8	144" x 120" x 21"	(13) #7 BARS LONG. - (14) #7 BARS TRANS. - T & B
F-9	54" x 42" x 14"	(5) #5 BARS LONG. - (6) #5 BARS TRANS.
F-10	72" x 36" x 18"	(4) #6 BARS LONG. - (8) #6 BARS TRANS. - T & B
F-11	108" x 108" x 16"	(8) #7 BARS E. W. / T & B
ST-1	24" x 12"	(3) #5 BARS CONT.

PIER SCHEDULE

MARK	SIZE	REINFORCING	TIES
P-1	12 x 12	4 - #6 BARS	#3 TIES @ 12" O.C.
P-2	10 x 16	6 - #5 BARS	#3 TIES @ 10" O.C.
P-3	12 x 20	6 - #8 BARS	#3 TIES @ 16" O.C.
P-4	38" x 20"	10 - #8 BARS	#3 TIES @ 16" O.C.
P-5	18" DIA	6 - #6 BARS	#3 TIES @ 12" O.C.

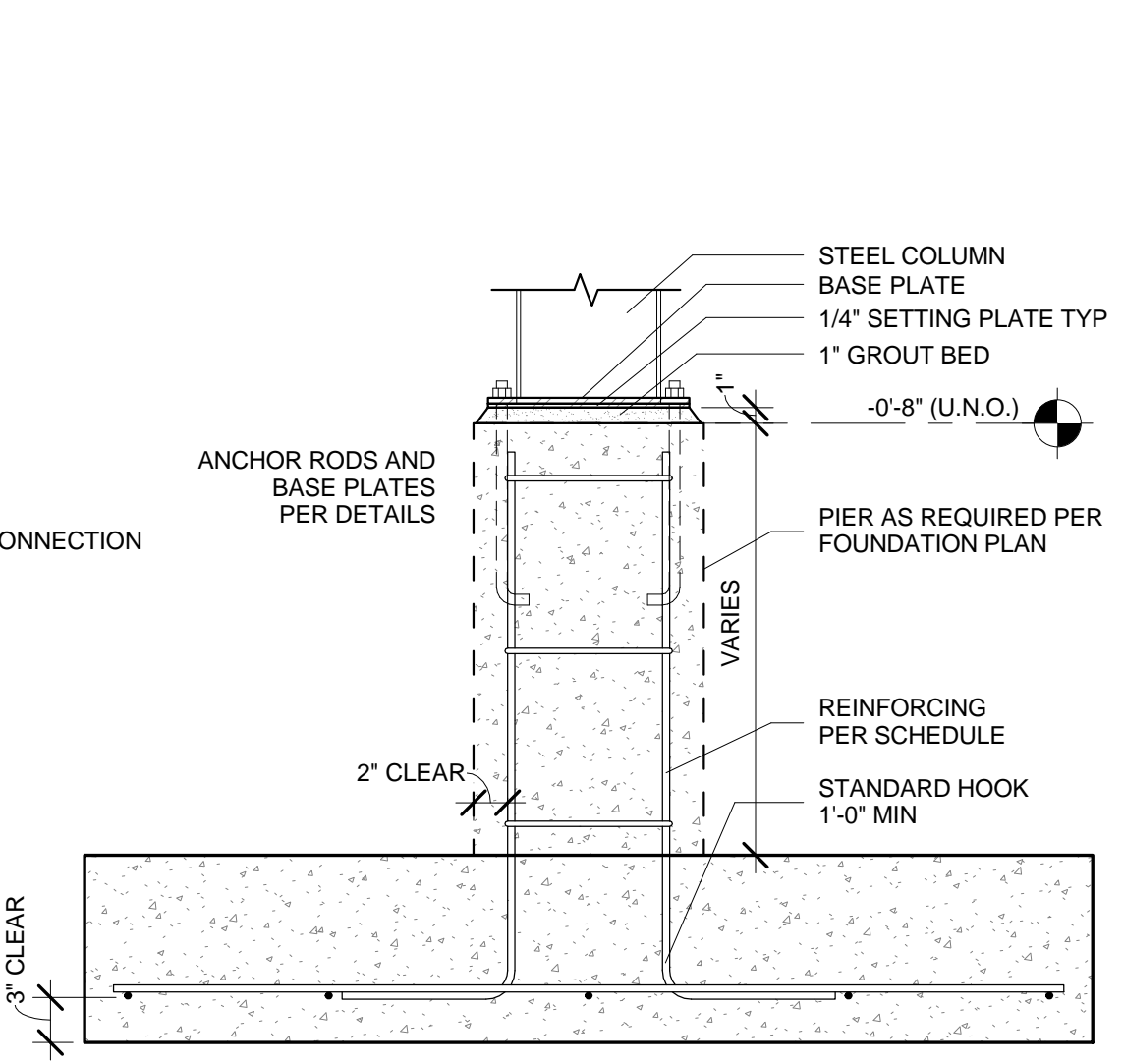
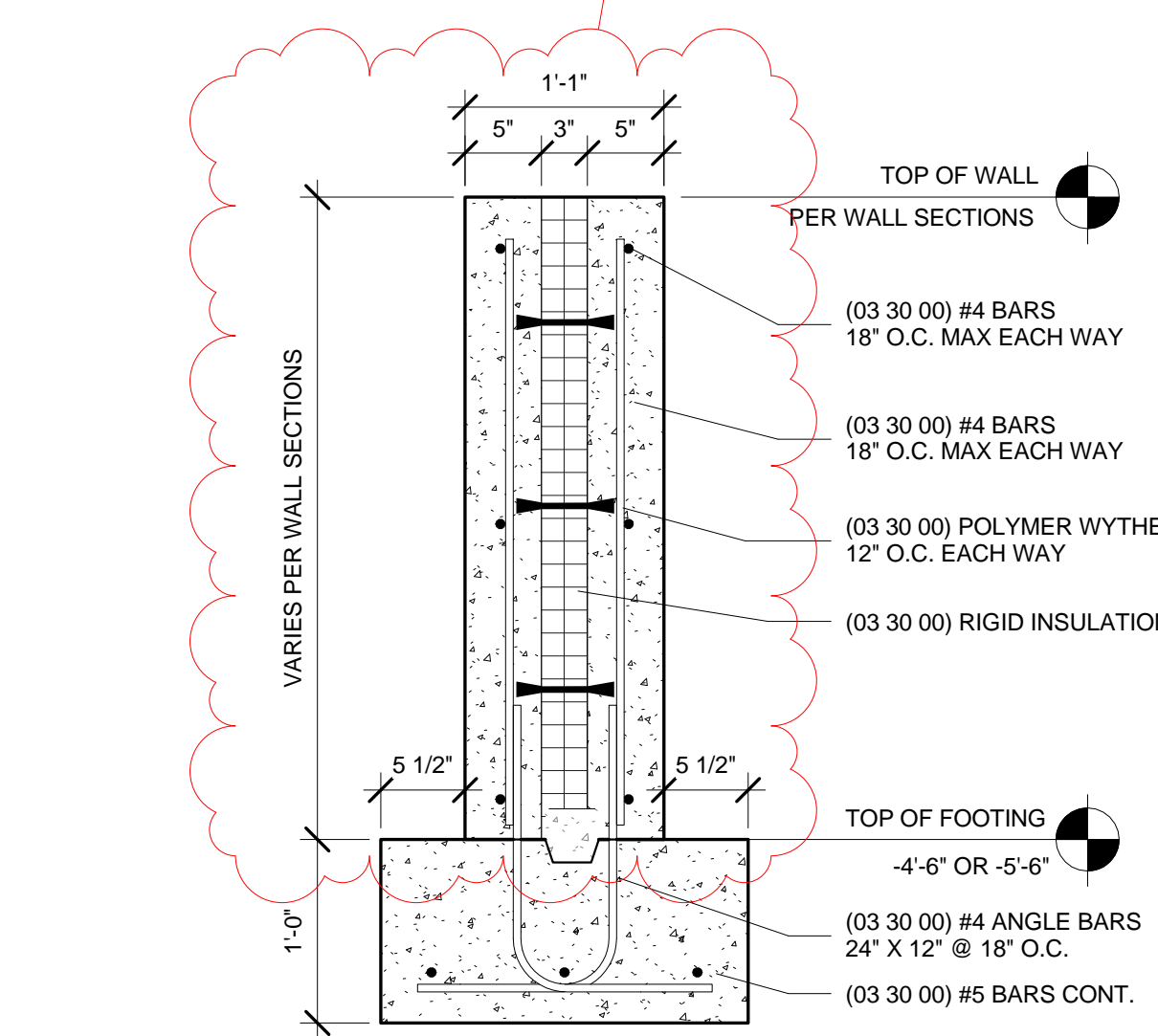


9 Trench Drain
1 1/2" = 1'-0"

8 Stoop Frost Wall
1 1/2" = 1'-0"

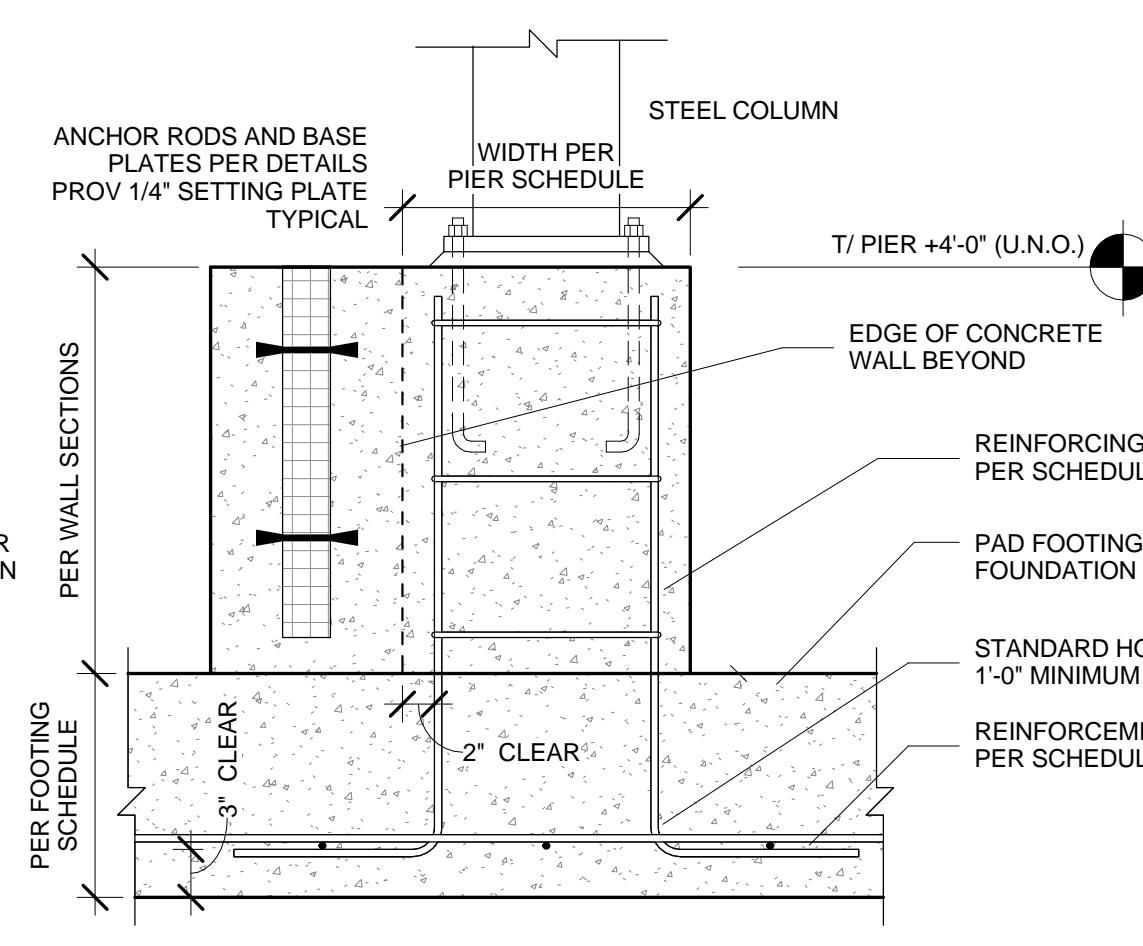
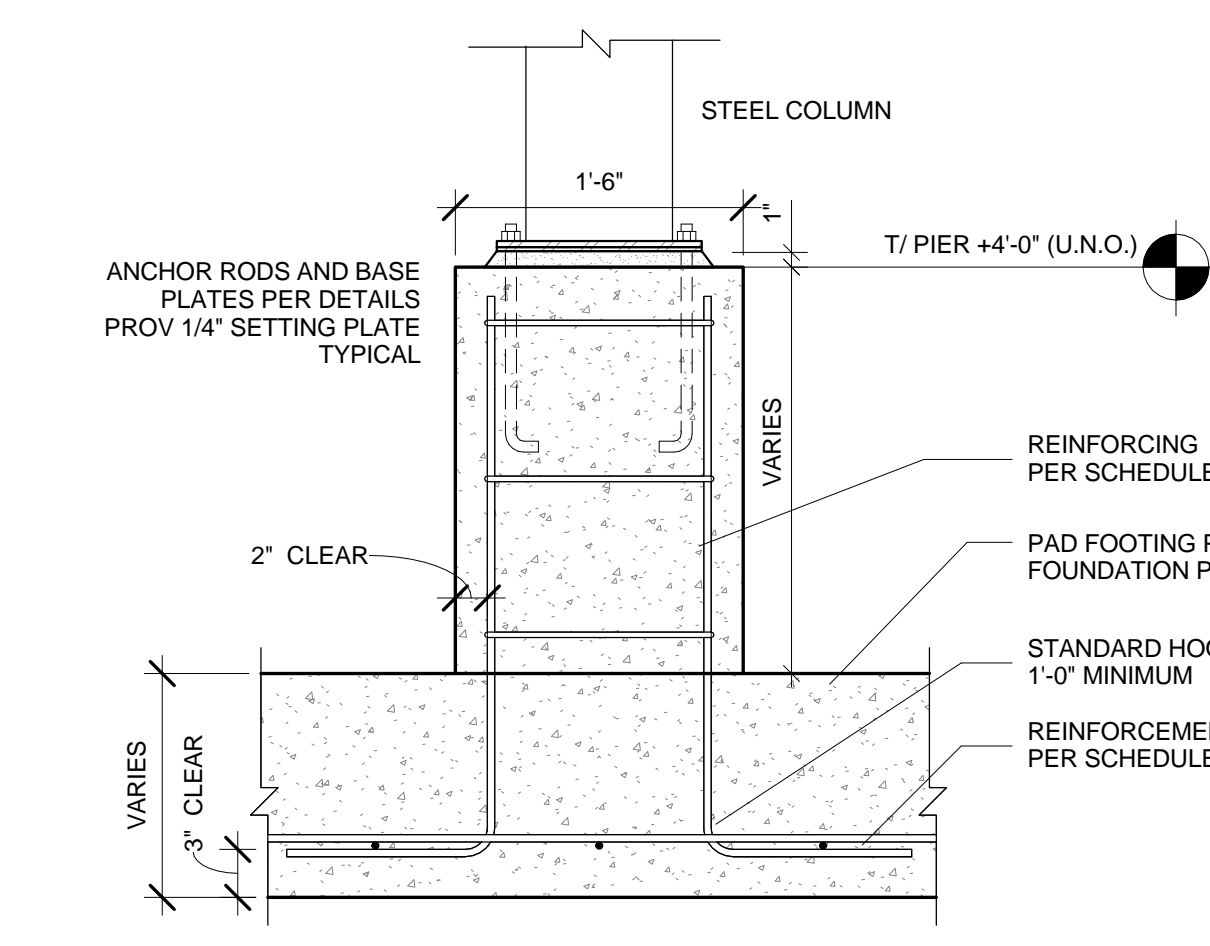
7 Concrete Slab - Type B
1 1/2" = 1'-0"

6 Concrete Slab - Type A
1 1/2" = 1'-0"



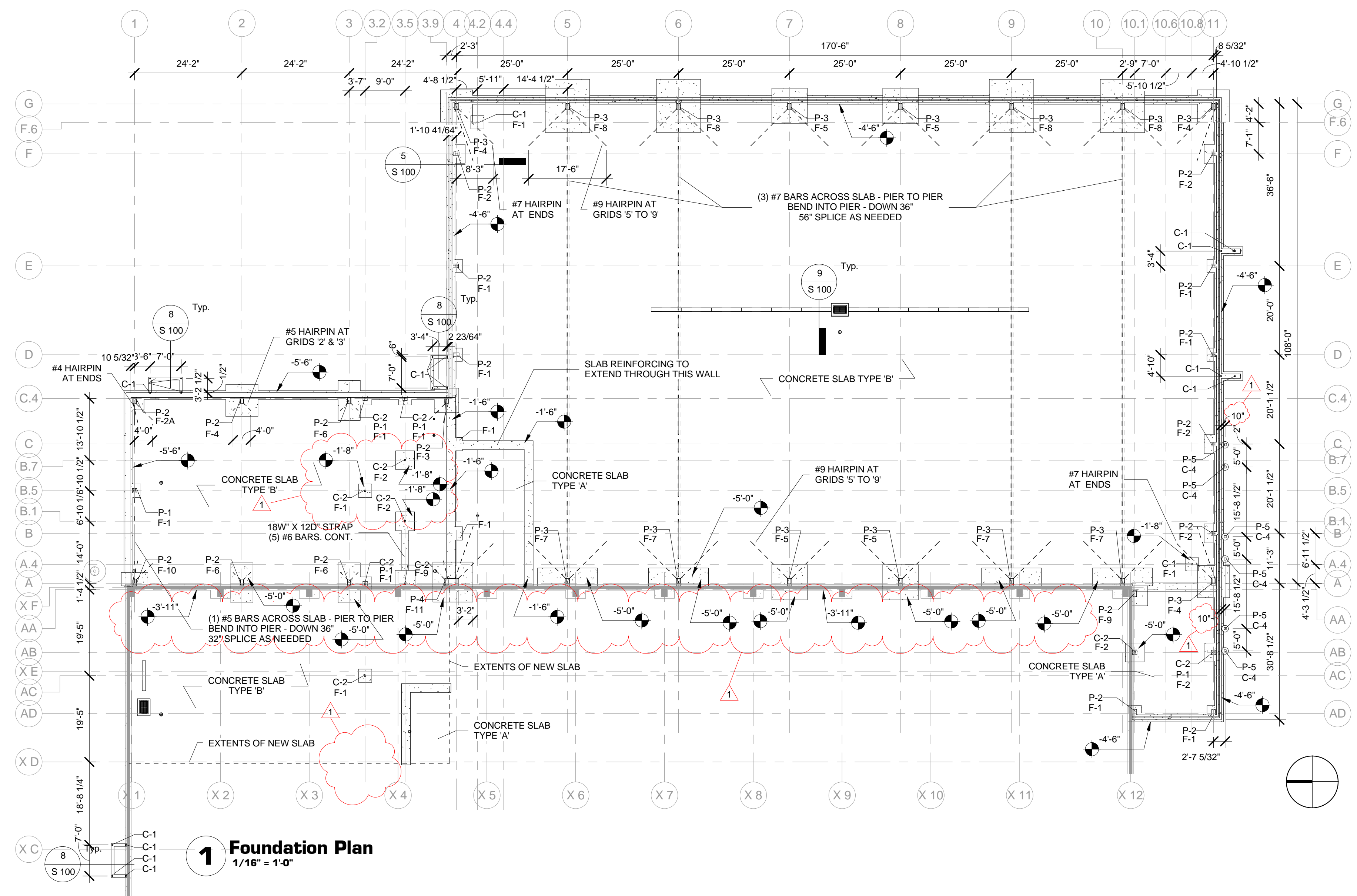
5 Typical Foundation Wall
1" = 1'-0"

4 Pad Footing Detail
1" = 1'-0"



3 Typical Pier @ Interior Location
1" = 1'-0"

2 Typical Pier @ Exterior Walls
1" = 1'-0"



1 Foundation Plan
1/16" = 1'-0"



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Revisions by Addendum

No.	Description	Addendum
1	Structural framing	1
2	Galvanized metal	1

Mezzanine Framing Plan

S 200

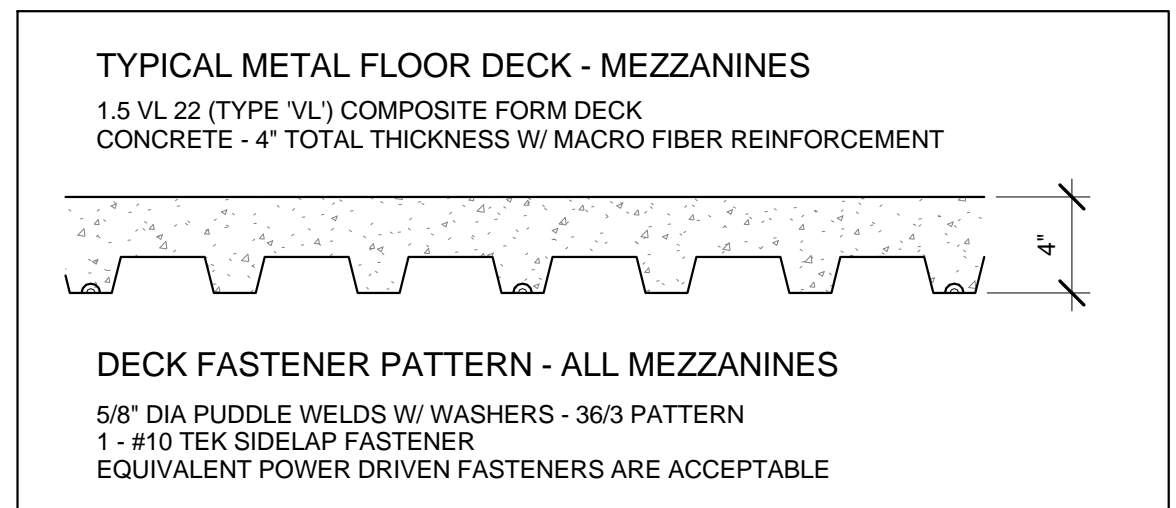
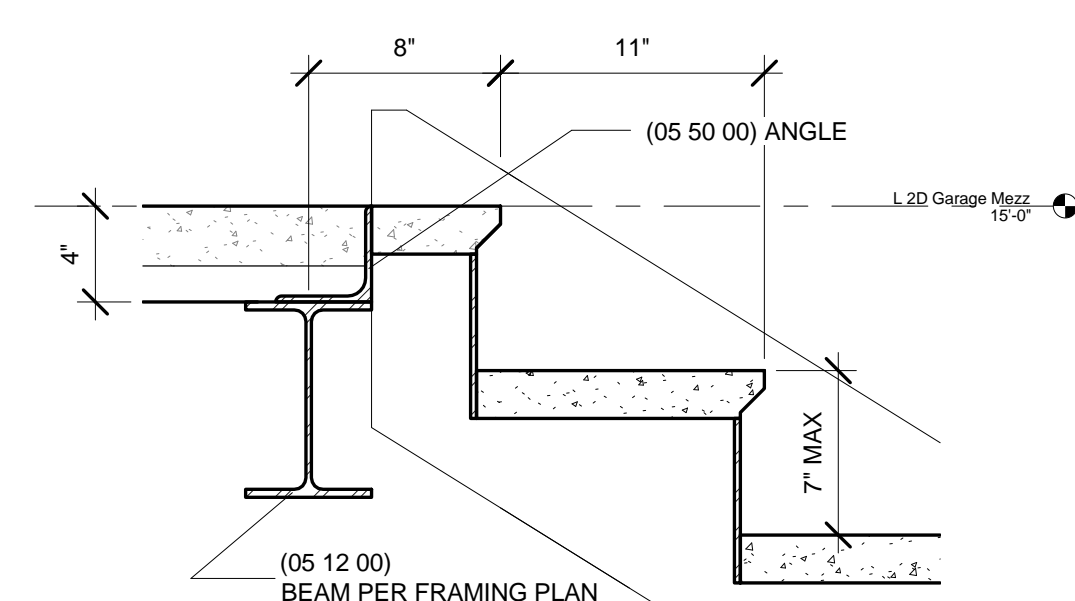
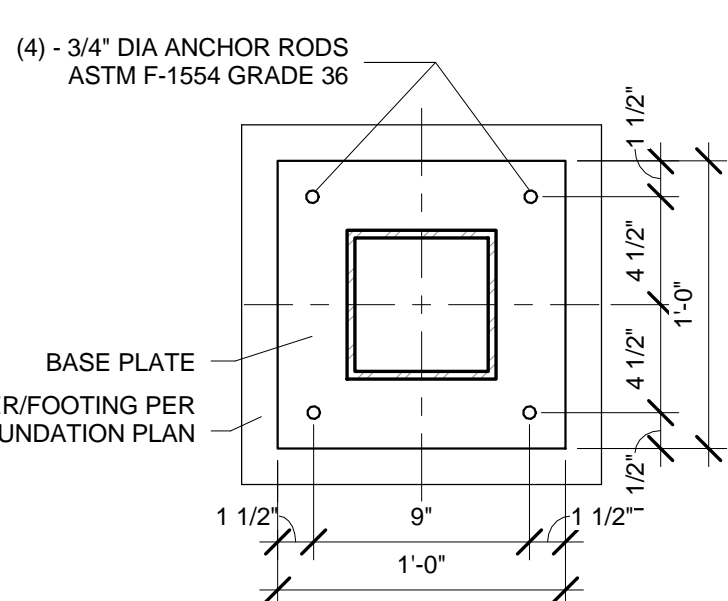
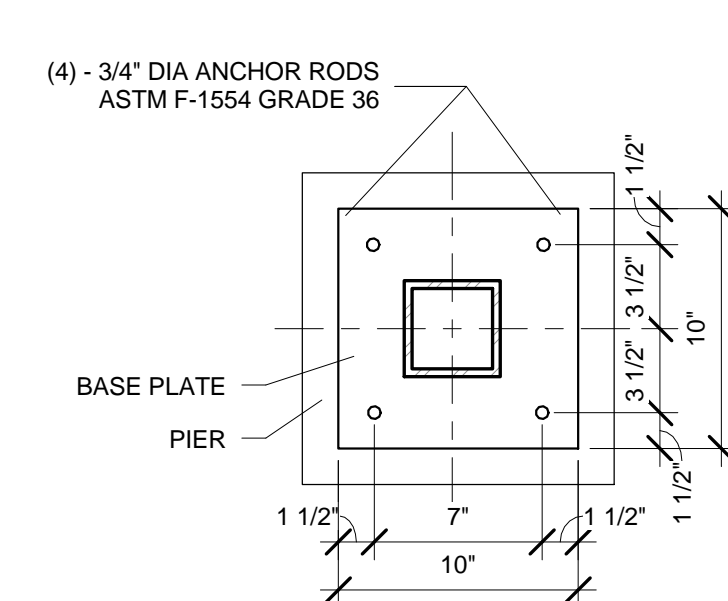
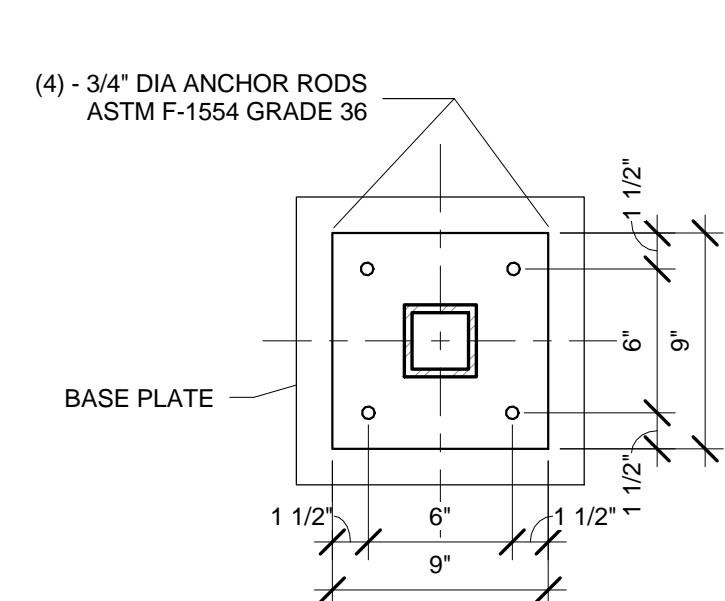
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COLUMN SCHEDULE

MARK	TYPE	BASE PLATE
C-1	HSS3X3X1/4	9" x 1/2" x 0-9"
C-2	HSS4X4X1/4	10" x 3/4" x 0-10"
C-3	Pipe3STD	6" x 1/2" x 0-6"
C-4	HSS6X6X1/4	12" x 1/2" x 1-0"

LINTEL SCHEDULE

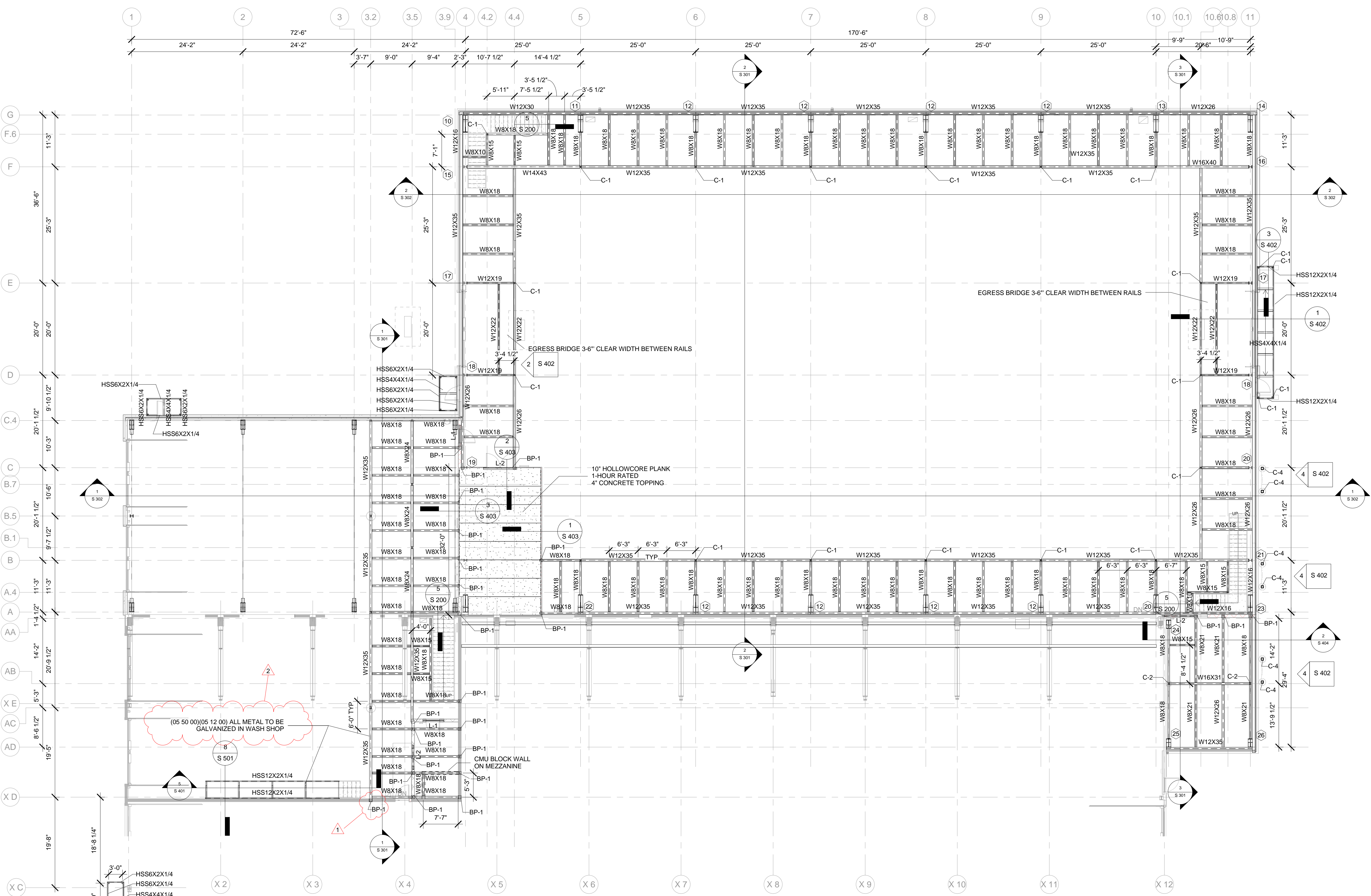
MARK	SIZE	END BEARING/REINFORCING
BP-1	8"X7-1/2"X1/4"	GROUTED CORE W/ #5 BAR INTO FOOTING
L-1	2L3-1/2X3-1/2X1/4	8" END BEARING, GROUT SOLID (3) CORES
L-2	W8X10 W/ 1/4" X 7" PLATE	8" END BEARING, GROUT SOLID (3) CORES W/ #5 BAR INTO FOOTING



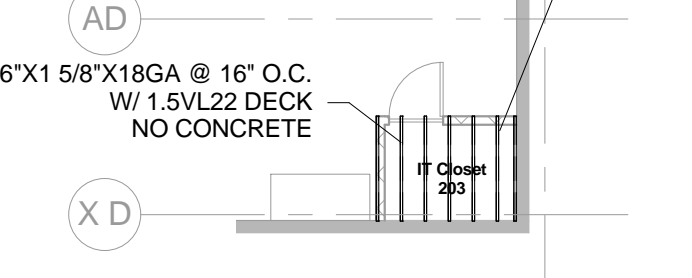
6 Metal Deck Fastening
1 1/2" = 1-0"

LOAD CHART

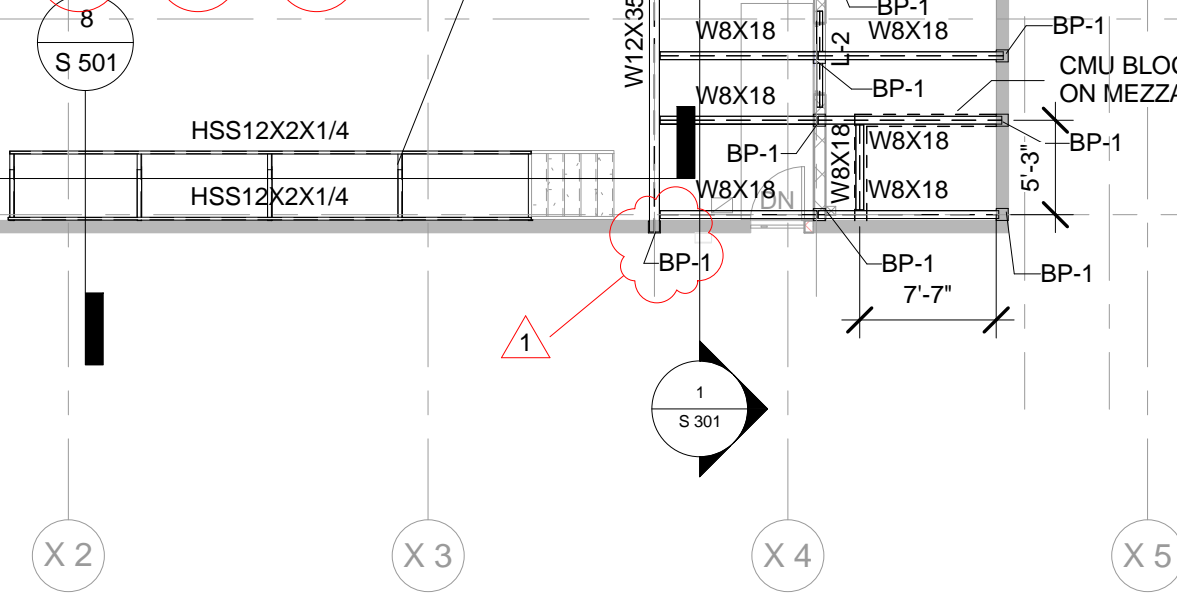
Tag	Live Load (k)	Dead Load (k)	Total Load (k)
1	21.2	9.2	30.4
2	18.1	7.7	25.8
3	26.1	10.8	36.9
4	6.6	3.4	10.0
5	6.0	3.1	9.1
6	18.6	8.0	26.6
7	12.0	5.0	17.0
8	5.3	3.1	8.4
9	7.3	4.0	11.3
10	1.9	1.2	3.1
11	16.7	7.2	23.9
12	18.1	7.7	25.8
13	16.2	6.5	22.7
14	7.2	2.7	9.9
15	16.9	7.9	24.8
16	25.2	10.4	35.6
17	10.0	4.4	14.4
18	8.0	3.5	11.5
19	4.8	2.1	6.9
20	14.4	6.0	20.4
21	13.4	5.8	19.2
22	12.0	5.0	17.0
23	8.0	2.6	10.6
24	3.1	1.4	4.5
25	8.5	4.6	13.1
26	10.4	4.6	15.0



7 IT Closet Framing Plan
3/32" = 1-0"



1 2nd Floor Garage - Mezzanine Framing Plan
3/32" = 1-0"



(05 50 00)(05 12 00) ALL METAL TO BE GALVANIZED IN WASH SHOP

(05 50 00)(05 12 00) ALL METAL TO BE GALVANIZED IN WASH SHOP

CMU BLOCK WALL ON MEZZANINE

10" HOLLOWCORE PLANK
1-HOUR RATED
4" CONCRETE TOPPING

EGRESS BRIDGE 3-6" CLEAR WIDTH BETWEEN RAILS

EGRESS BRIDGE 3-6" CLEAR WIDTH BETWEEN RAILS



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Revisions by Addendum

No.	Description	Addendum
1	Structural framing	1

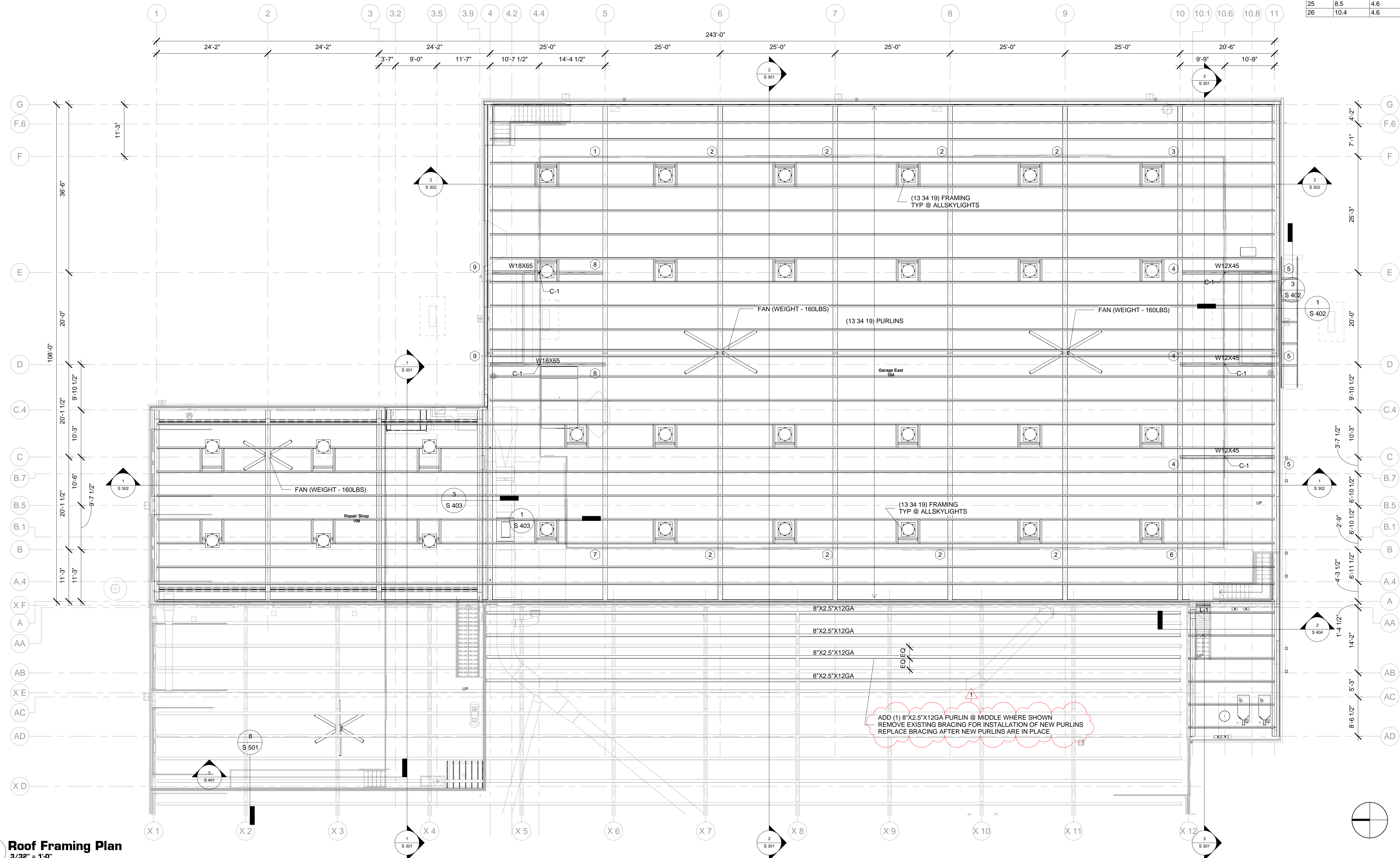
ROOF LOAD SYSTEM @ METAL BUILDING

LIVE LOAD	21 P.S.F.
DEAD LOAD	15 P.S.F.
INSULATED ROOF PANEL	3.0
SOLAR PANEL SYSTEM (1)	5.0
MECHANICAL	2.0
MISCELLANEOUS	3.0
	14.8
(1) DESIGN FOR ACTUAL SOLAR PANEL LOADS AND IMPOSED SNOW DRIFT	
DESIGN LOAD	36 P.S.F.

METAL BUILDING SYSTEMS CONTRACTOR IS RESPONSIBLE FOR THE ENTIRE BUILDING SYSTEM INCLUDING SECTIONS 05 12 00, 05 30 00, 05 50 00, AND 13 34 19. FRAMING SHOWN ON THE CONTRACT DRAWINGS FOR THE SOLAR PANEL ARRAY, SUSPENDED MAIN BUILDING MEZZANINE, AND SHOP MEZZANINES CAN BE CONSTRUCTED AS SHOWN INCORPORATING ALL CONNECTIONS TO THE METAL BUILDING SYSTEM. ALTERNATIVELY, THE METAL BUILDING DESIGNER CAN DESIGN THOSE COMPONENTS FOR THE LOADS SHOWN ON THE DRAWINGS.

LOAD CHART

Tag	Live Load (k)	Dead Load (k)	Total Load (k)
1	21.2	9.2	30.4
2	18.1	7.7	25.8
3	26.1	10.8	36.9
4	6.6	3.4	10.0
5	6.0	3.1	9.1
6	18.6	8.0	26.6
7	12.0	5.0	17.0
8	5.3	3.1	8.4
9	7.3	4.0	11.3
10	1.9	1.2	3.1
11	16.7	7.2	23.9
12	18.1	7.7	25.8
13	16.2	6.5	22.7
14	7.2	2.7	9.9
15	16.9	7.9	24.8
16	25.2	10.4	35.6
17	10.0	4.4	14.4
18	8.0	3.5	11.5
19	4.8	2.1	6.9
20	14.4	6.0	20.4
21	13.4	5.8	19.2
22	12.0	5.0	17.0
23	8.0	2.6	10.6
24	3.1	1.4	4.5
25	8.5	4.6	13.1
26	10.4	4.6	15.0



1 Roof Framing Plan
3/32" = 1'-0"

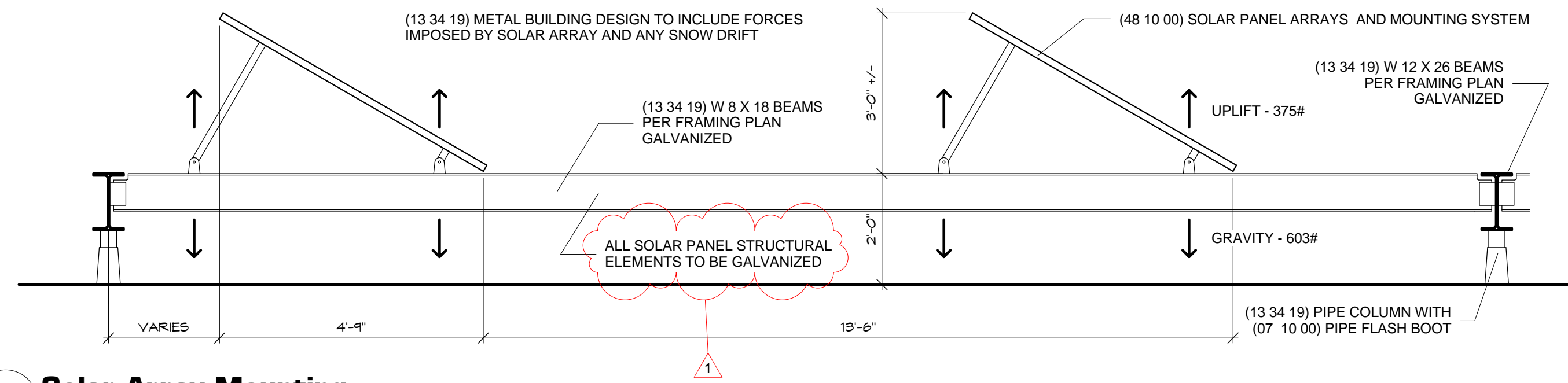
Roof Framing Plan

S 201
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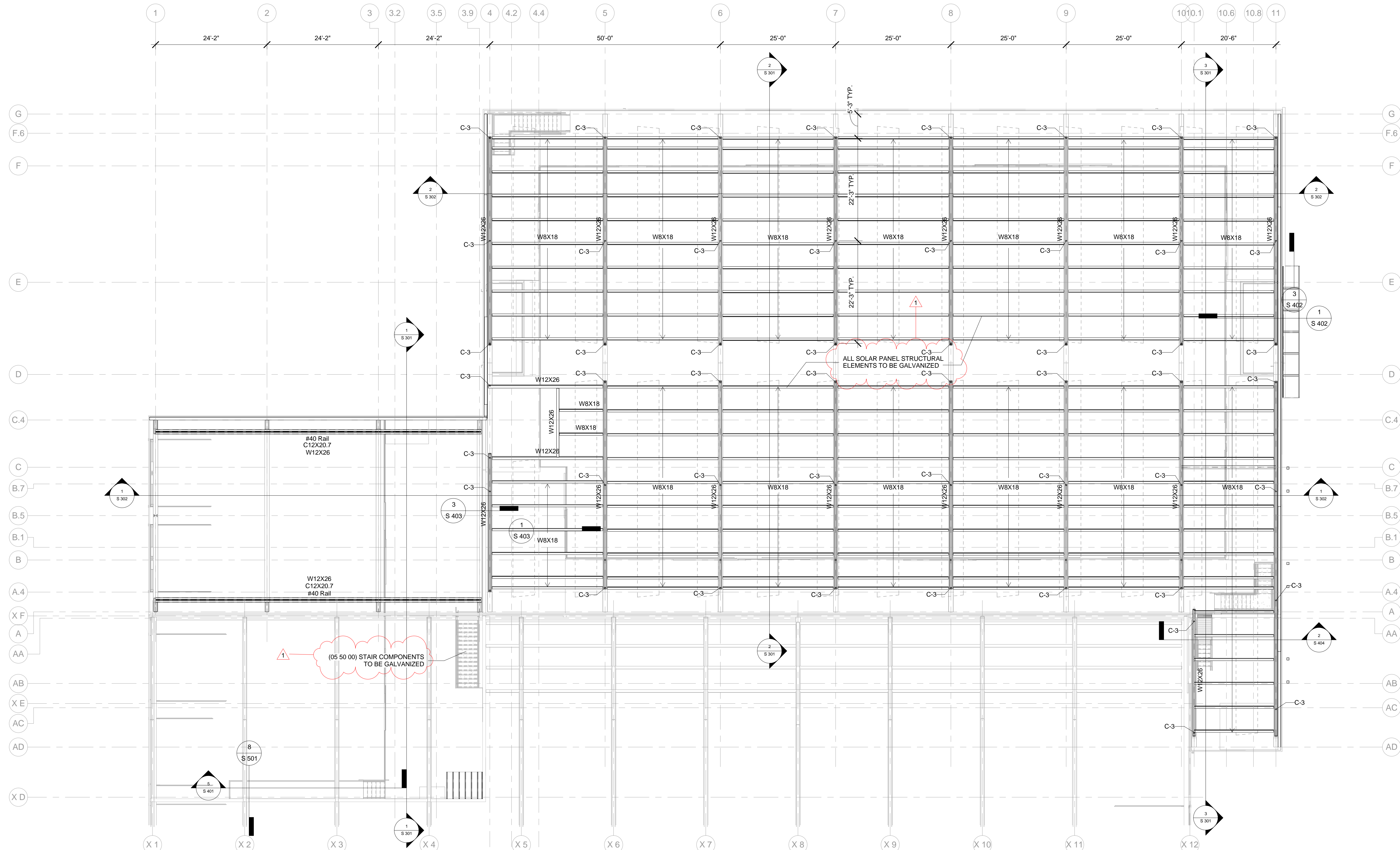


No.	Description	Addendum
1	Galvanized metal	1

DESIGN DATA - OVERHEAD BRIDGE CRANE	
CRANE DATA:	
2 TON BRIDGE CRANE	
WHEEL LOAD = 3.4k	
HOIST / TROLLEY WEIGHT = 470#	
CRANE BEAM REACTIONS:	
VERTICAL = 5.8k	
LATERAL = 1.2k	
LONGITUDINAL = 0.7k	
COORDINATE ACTUAL CRANE PROPERTIES WITH BUILDING GEOMETRY INCLUDING LOADS AND CLEARANCES.	



2 Solar Array Mounting
1/2" = 1'-0"



1 Solar Panel Structure and Crane Rail
3/32" = 1'-0"



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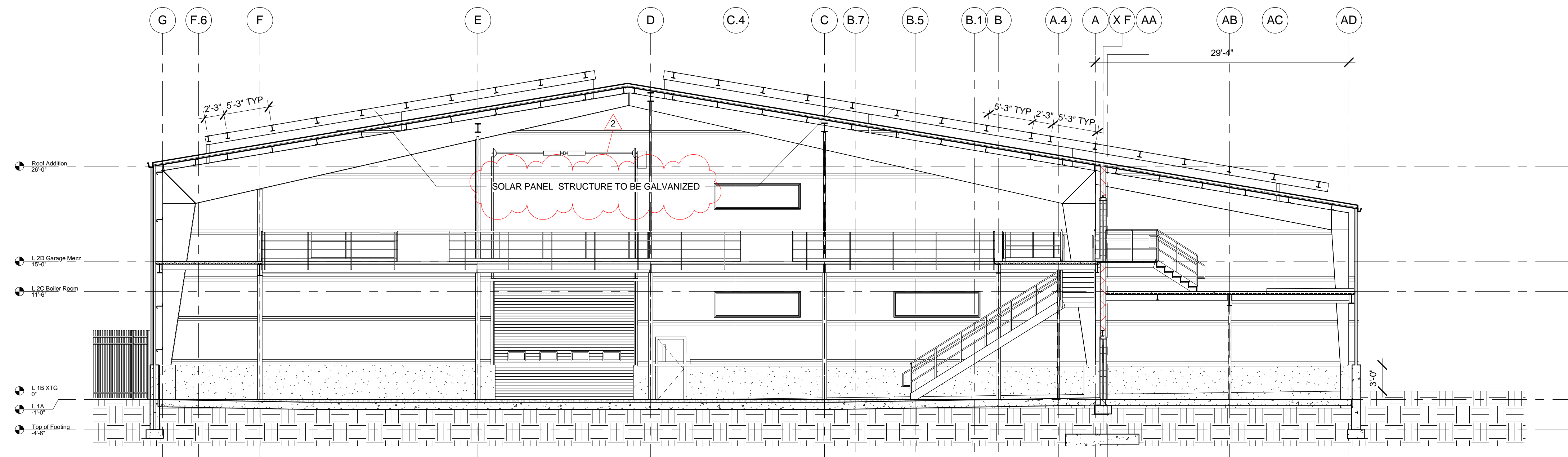
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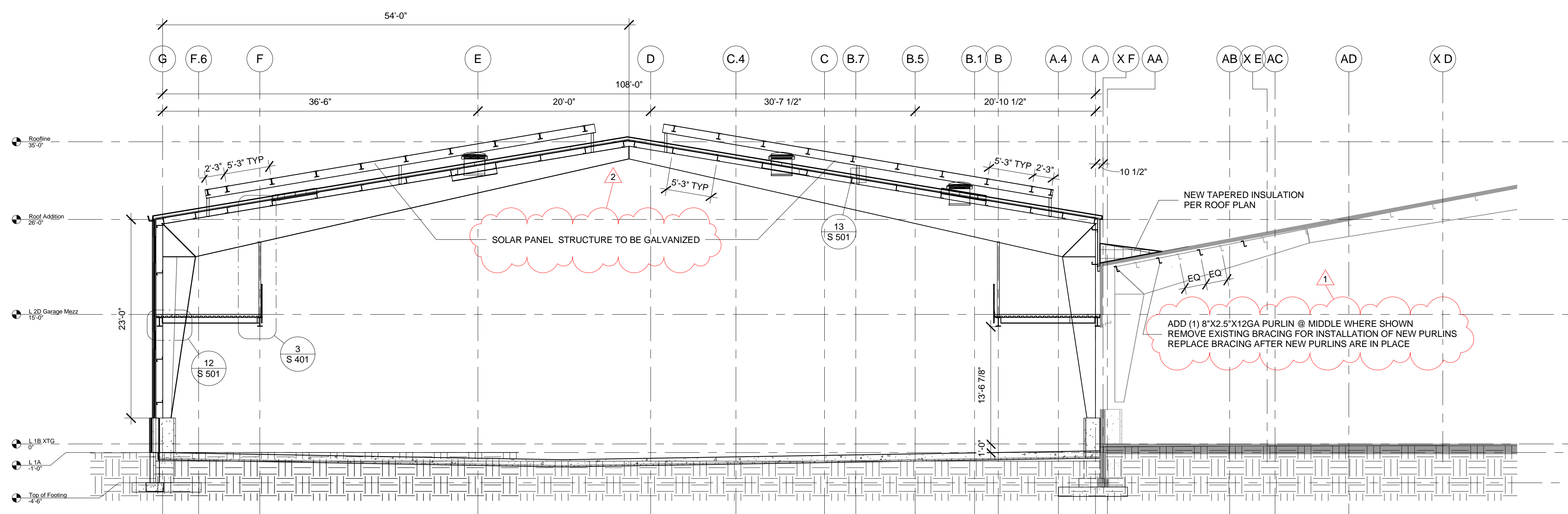
Architectural Design:
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kschindel@cityofmadison.com

Revisions by Addendum

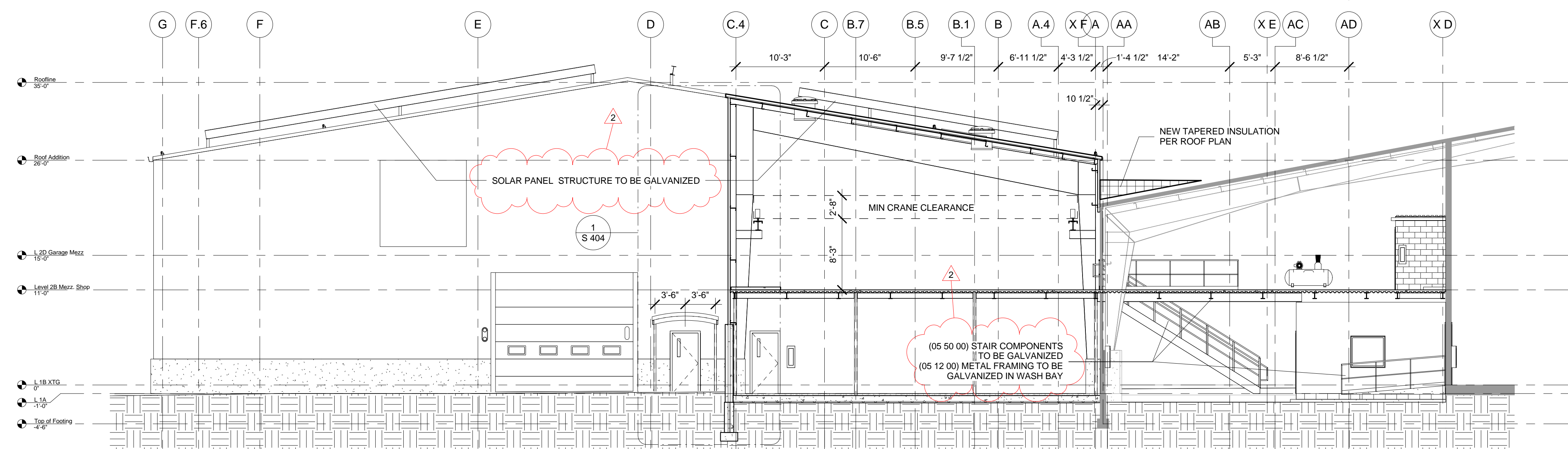
No.	Description	Addendum
1	Structural framing	1
2	Galvanized metal	1



3 Building Section
1/8" = 1'-0"



2 Building Section
1/8" = 1'-0"



1 Building Section
1/8" = 1'-0"

Building
Sections

S 301

Print Date:
12/22/2015 11:00:43 AM



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Plumbing Design:
Kay Schindel, P.E., City of
Madison; 608-266-4668;
kschindel@cityofmadison.com

HVAC Design:
Kay Schindel, P.E., City of
Madison; 608-266-4668;
kschindel@cityofmadison.com

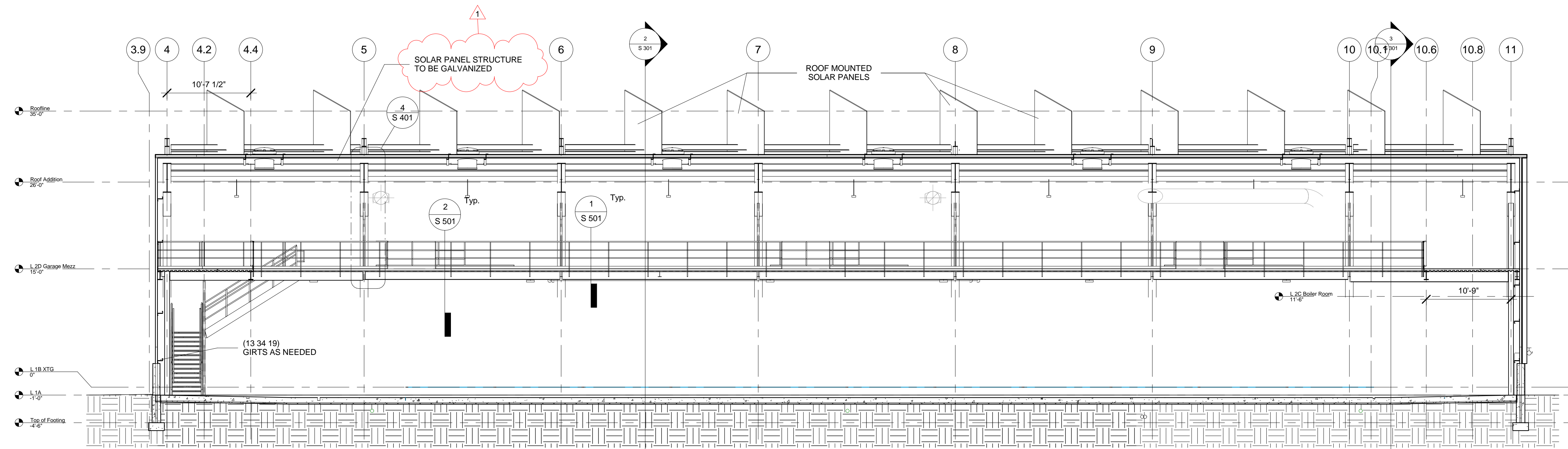
Structural Design:
John Schmidbauer, P.E.,
Kueny Architects

Fire Protection Design:
Robert Novak, Kueny Architects

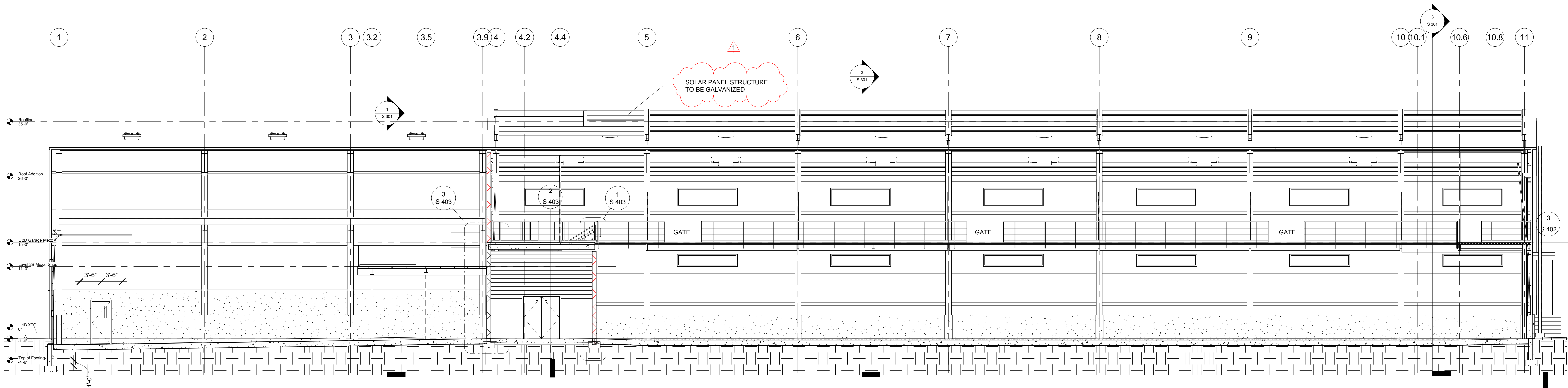
Architectural Design:
Kay Schindel, P.E., City of
Madison; 608-266-4668;
kschindel@cityofmadison.com

Revisions by Addendum

No.	Description	Addendum
1	Galvanized metal	1



2 Building Section 4
1/8" = 1'-0"



1 Building Section 5
1/8" = 1'-0"

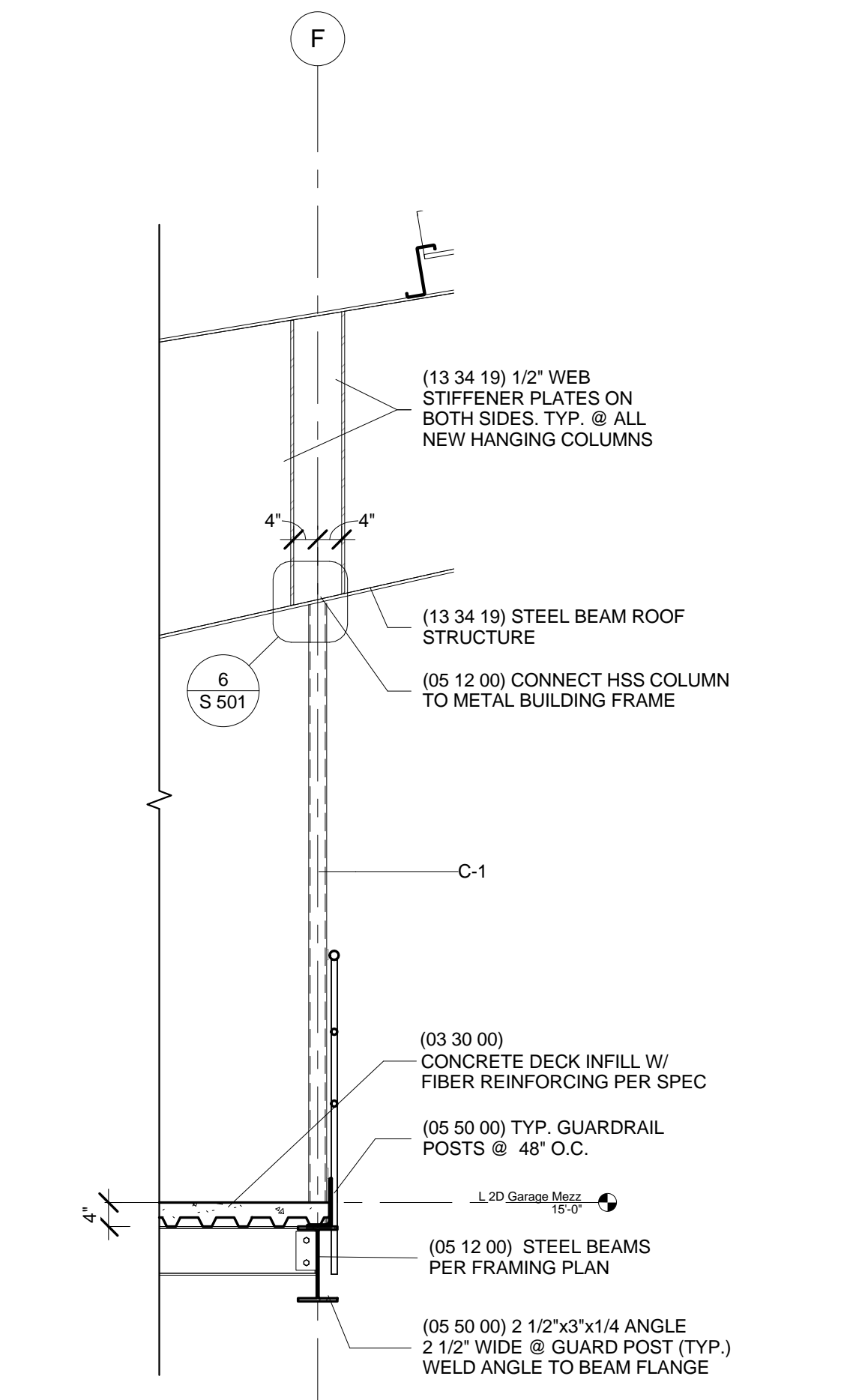
Building
Sections

S 302

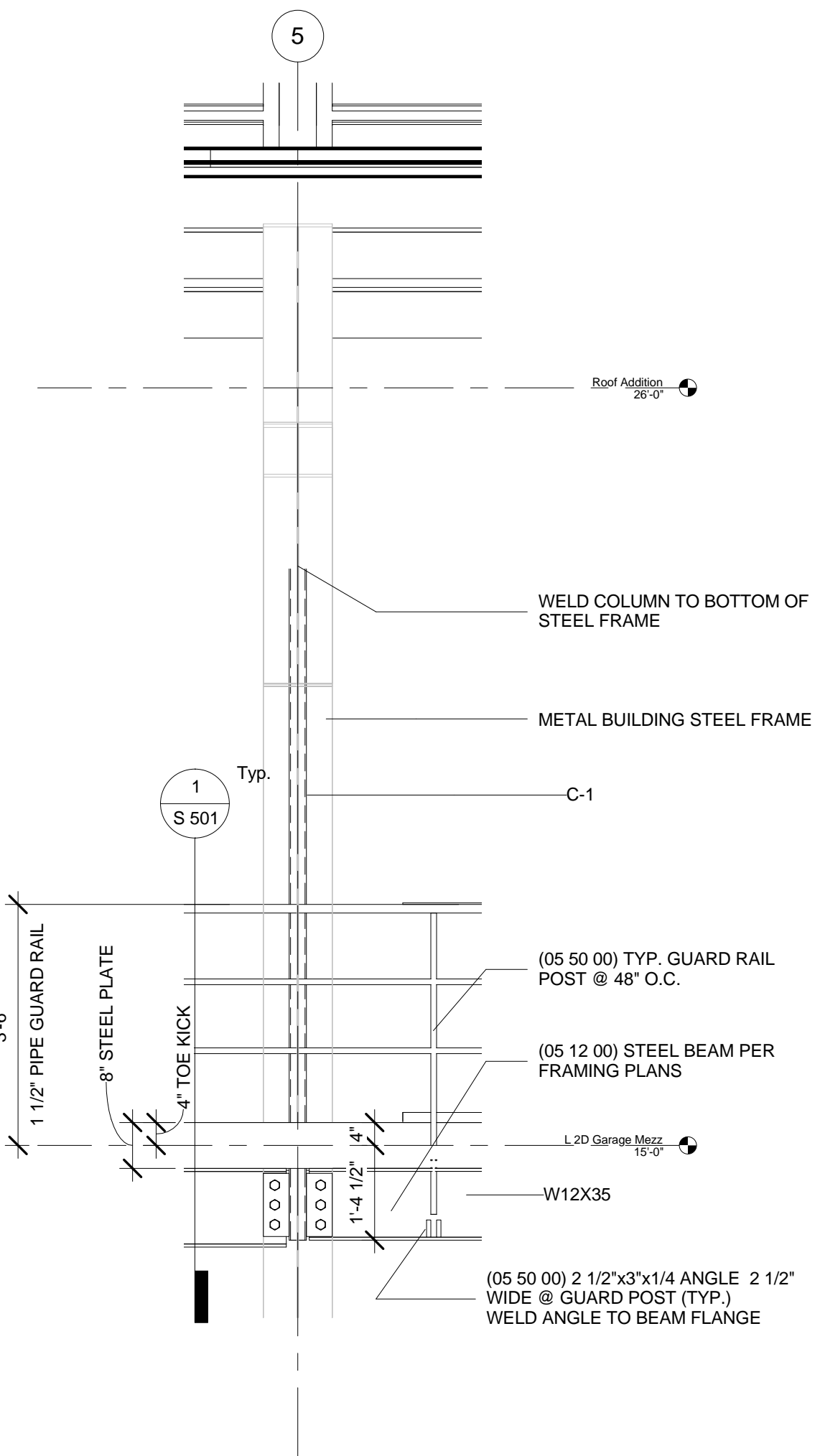
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Revisions by Addendum

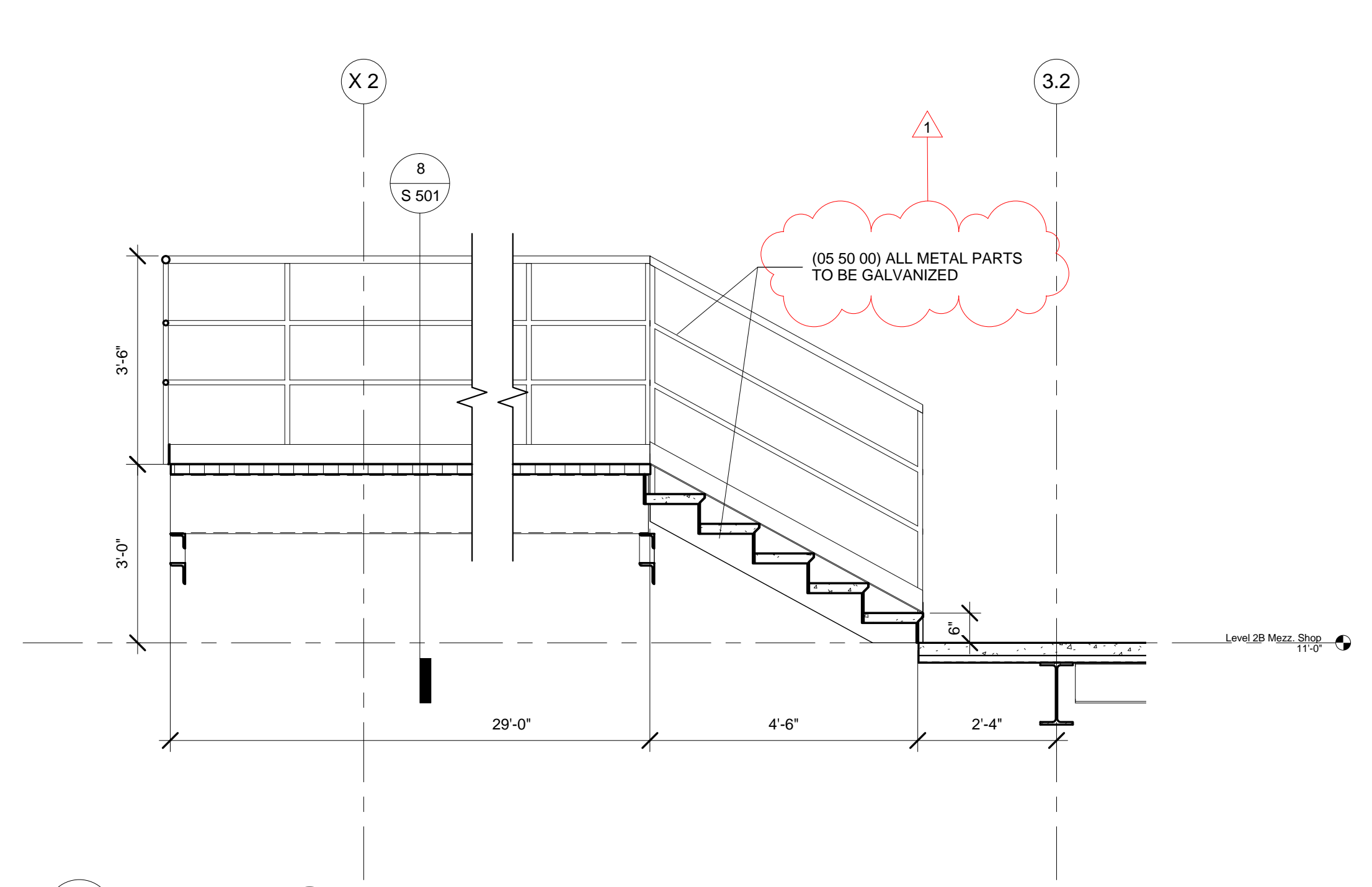
No.	Description	Addendum
1	Galvanized metal	1



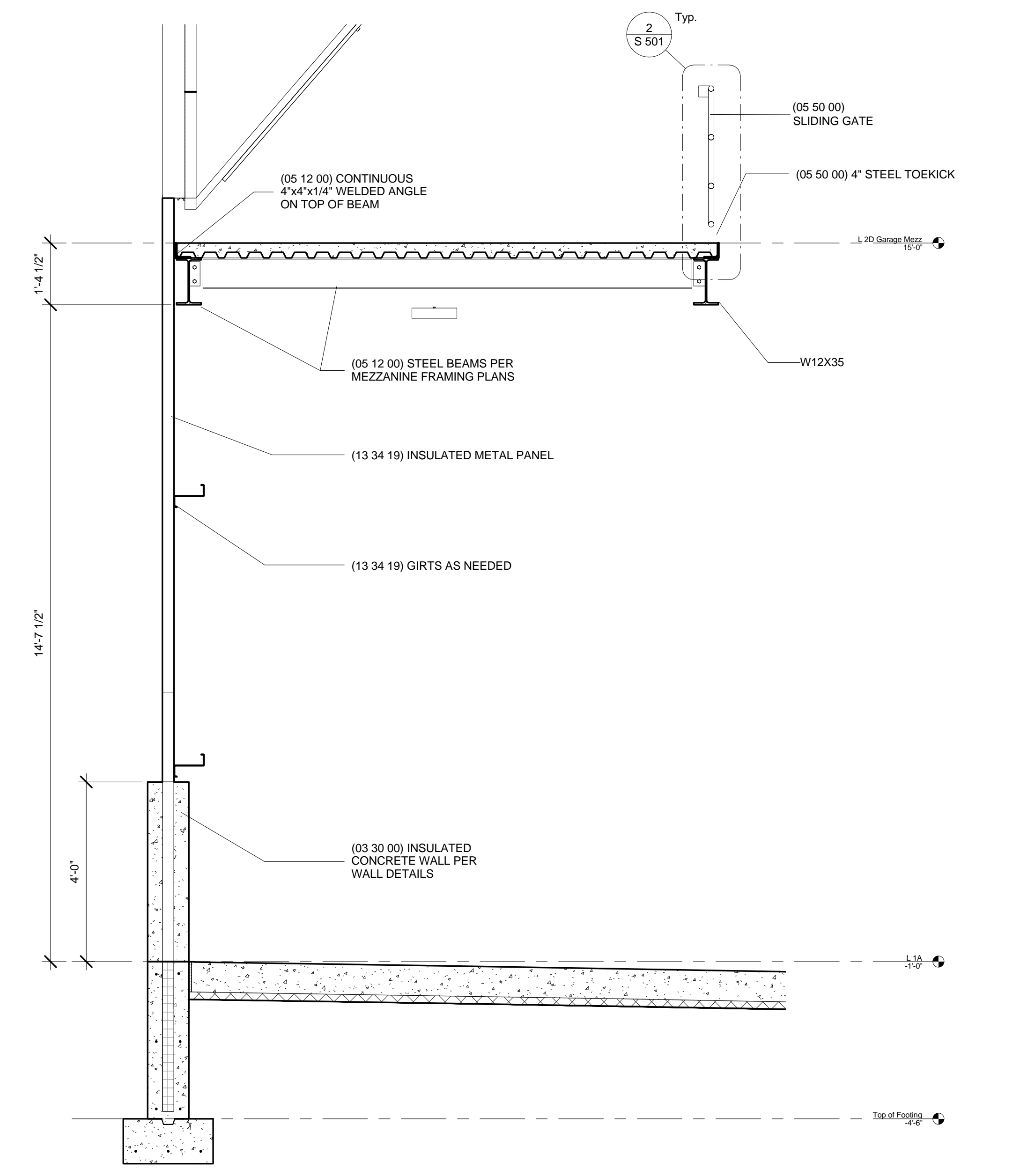
3 Mezzanine Hanging Column Detail (Typ.)
 1/2" = 1'-0"



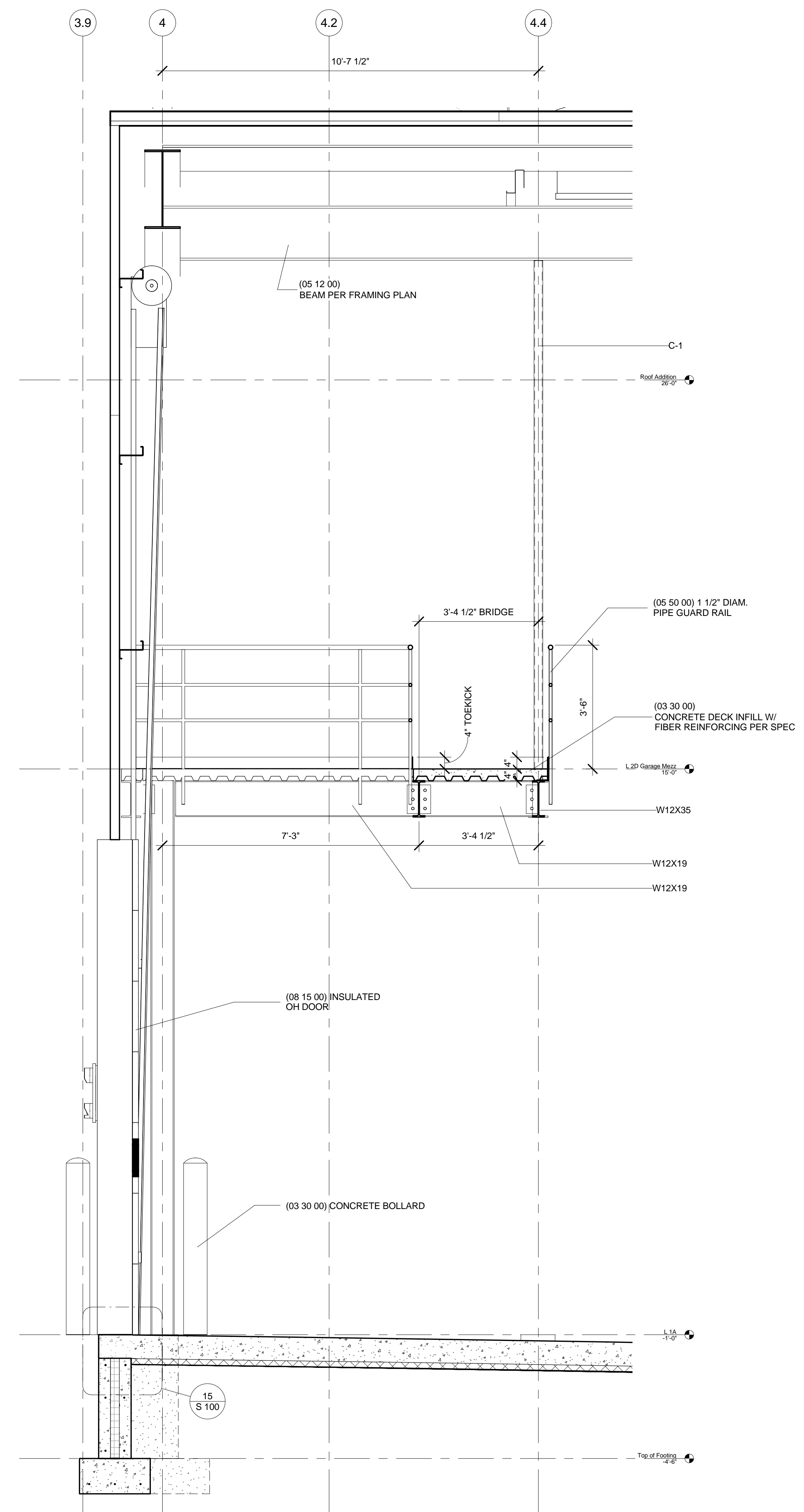
4 Mezzanine Hanging Column Elev.
 1/2" = 1'-0"



5 Wash Bay - Cat Walk
 1/2" = 1'-0"



2 Mezzanine Section 2
 1/2" = 1'-0"



1 Mezzanine Section 1
 1/2" = 1'-0"



Design prepared for:
Engineering Division

Engineering Operations
Building Addition - 2015

Location:
1600 Emil St.
Madison, WI 53713

Contract: TBD
Project: 10349
Common Council Approval:

Lighting Design:
Kay Schindel, P.E., City of
Madison; 608-266-4668;
kschindel@cityofmadison.com

Civil Design:
Eric Dundee, P.E., City of
Madison

Landscaping Design:
Sarah Lerner, LPA, City of
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slerner@cityofmadison.com

Electrical Design:
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Architects

Plumbing Design:
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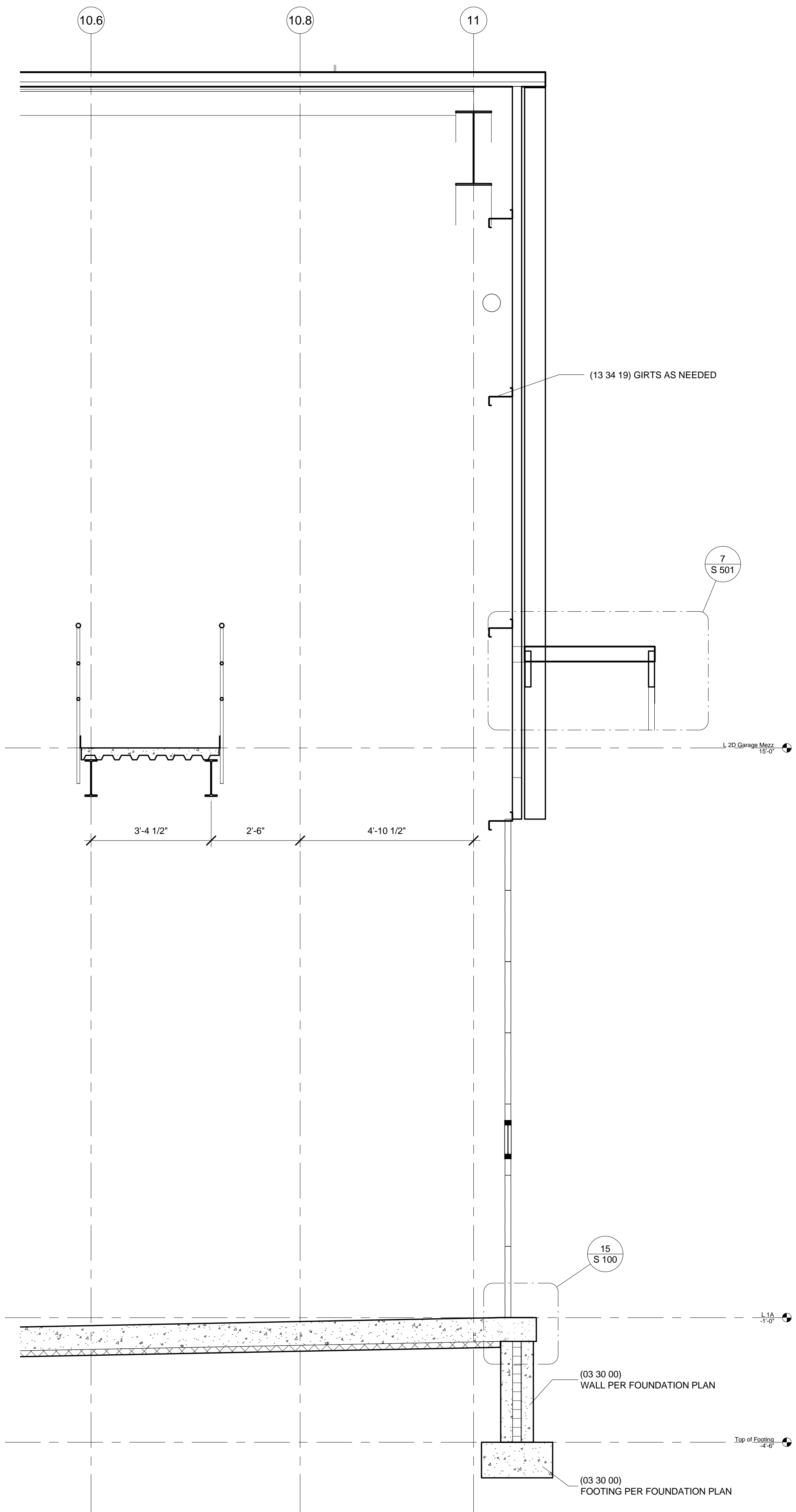
Revisions by Addendum

No.	Description	Addendum
1	Structural framing	1

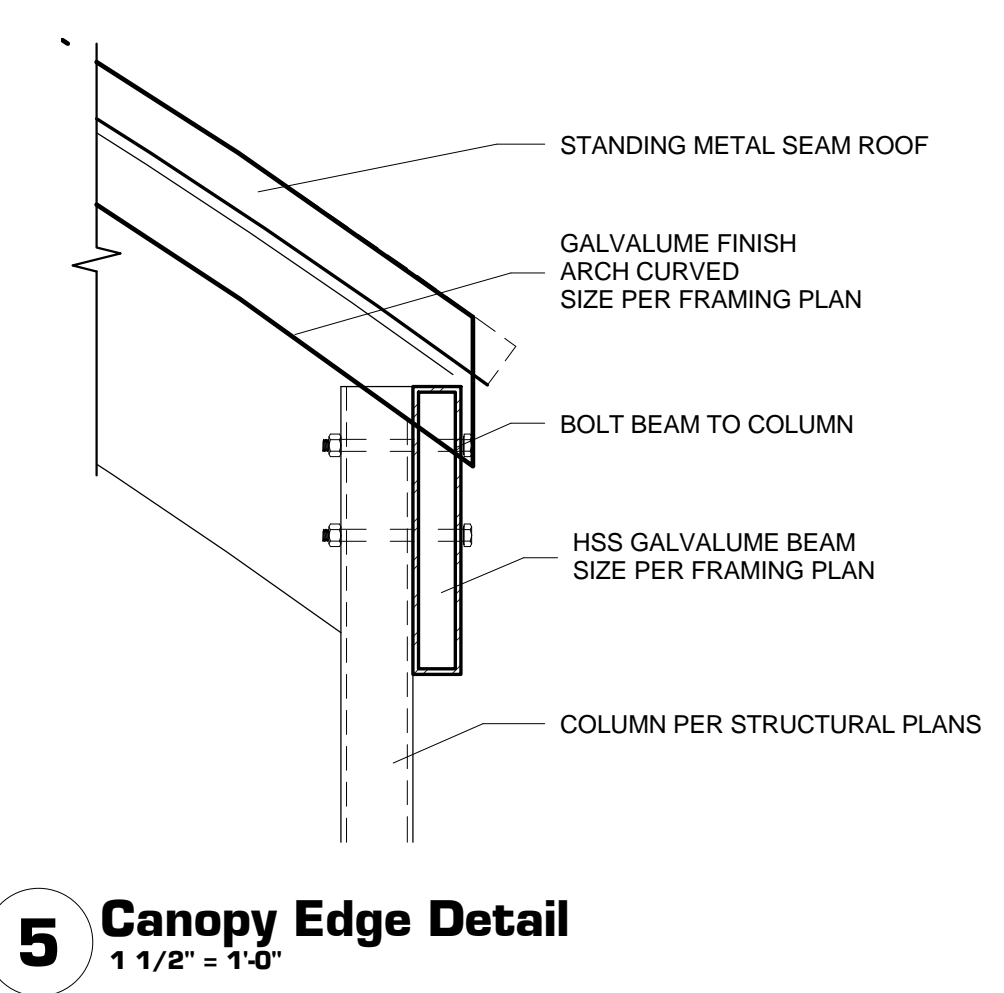
Wall Sections
and Details

S 402

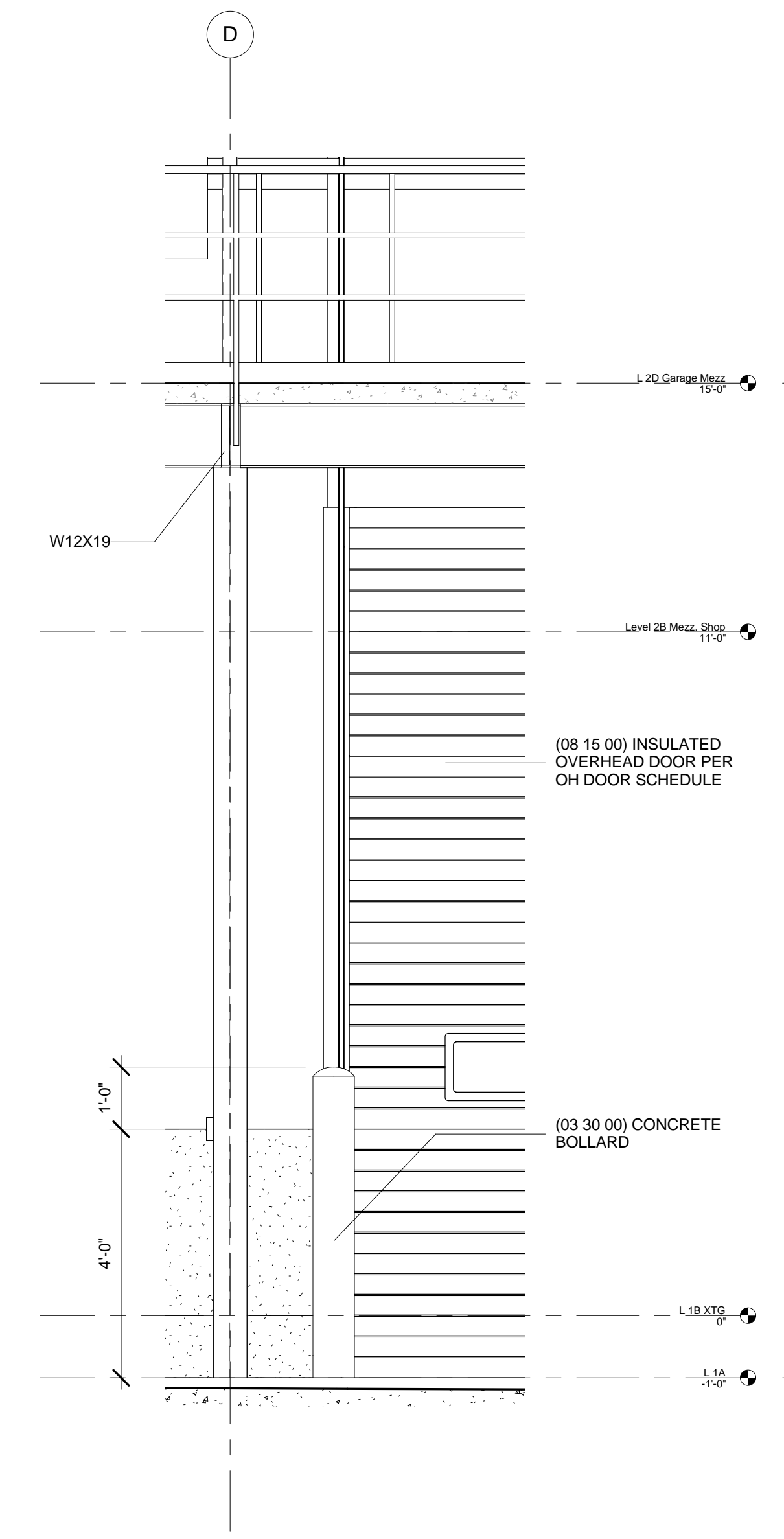
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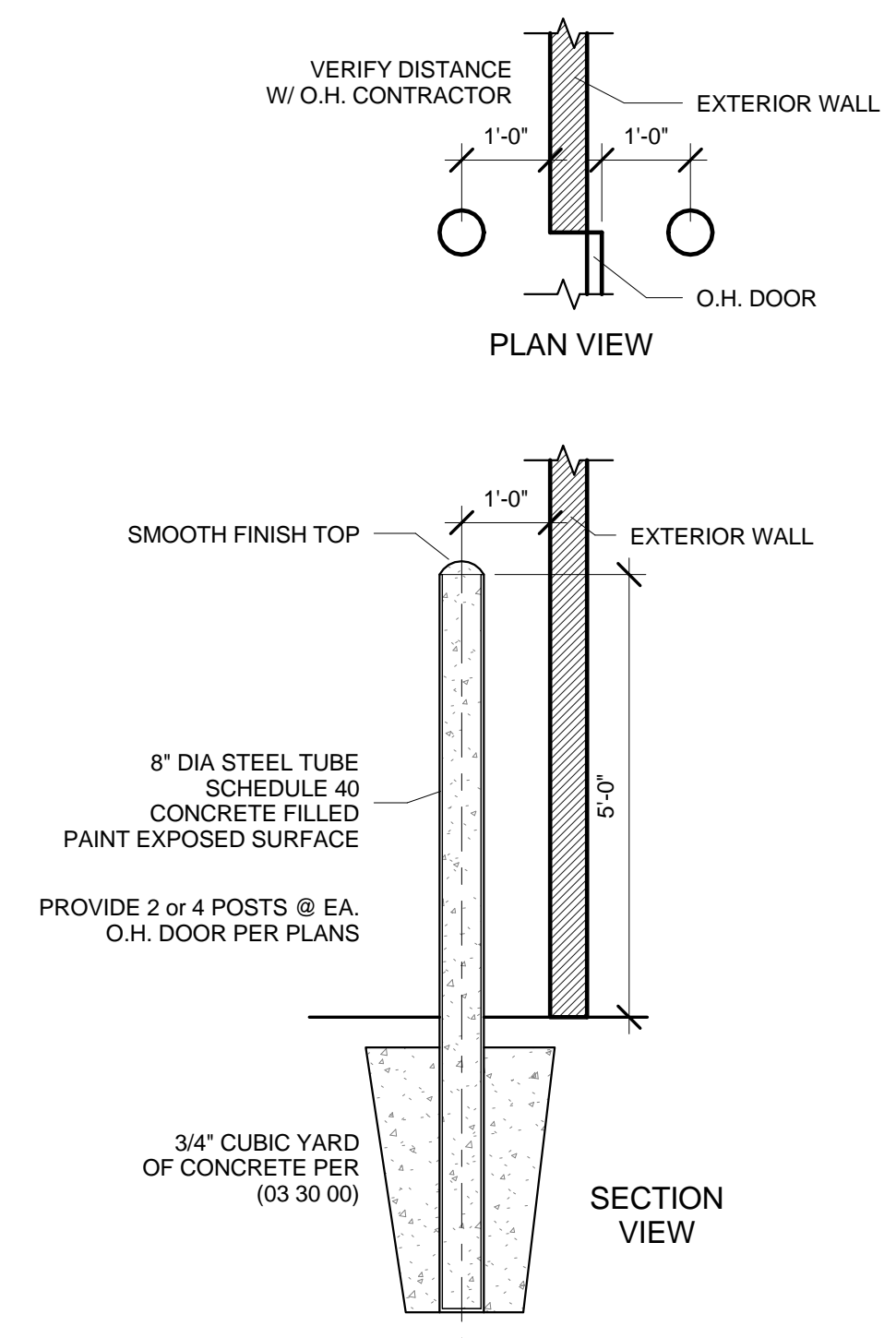
1 Garage Entry Canopy
1/2" = 1'-0"



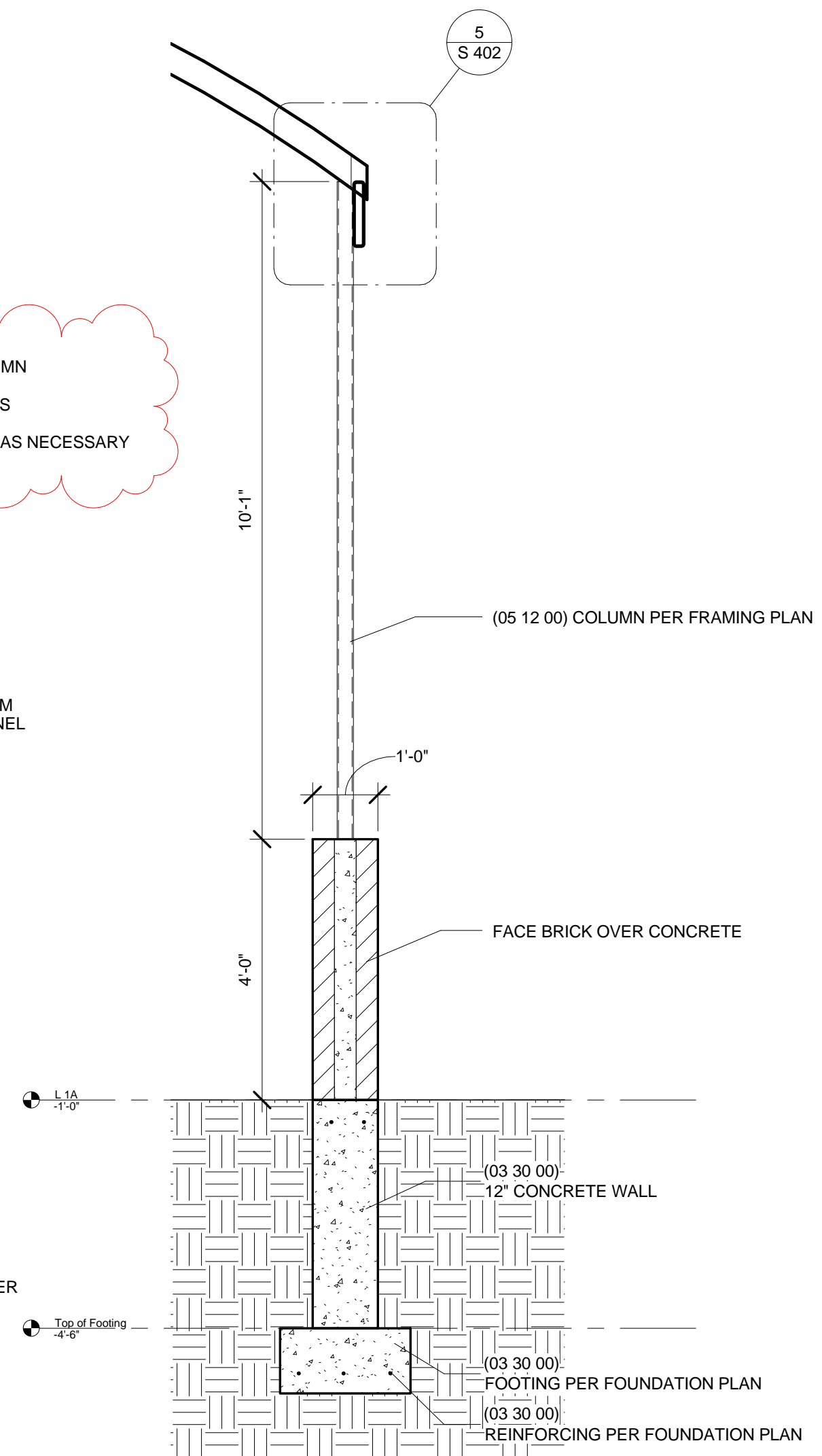
5 Canopy Edge Detail
1 1/2" = 1'-0"



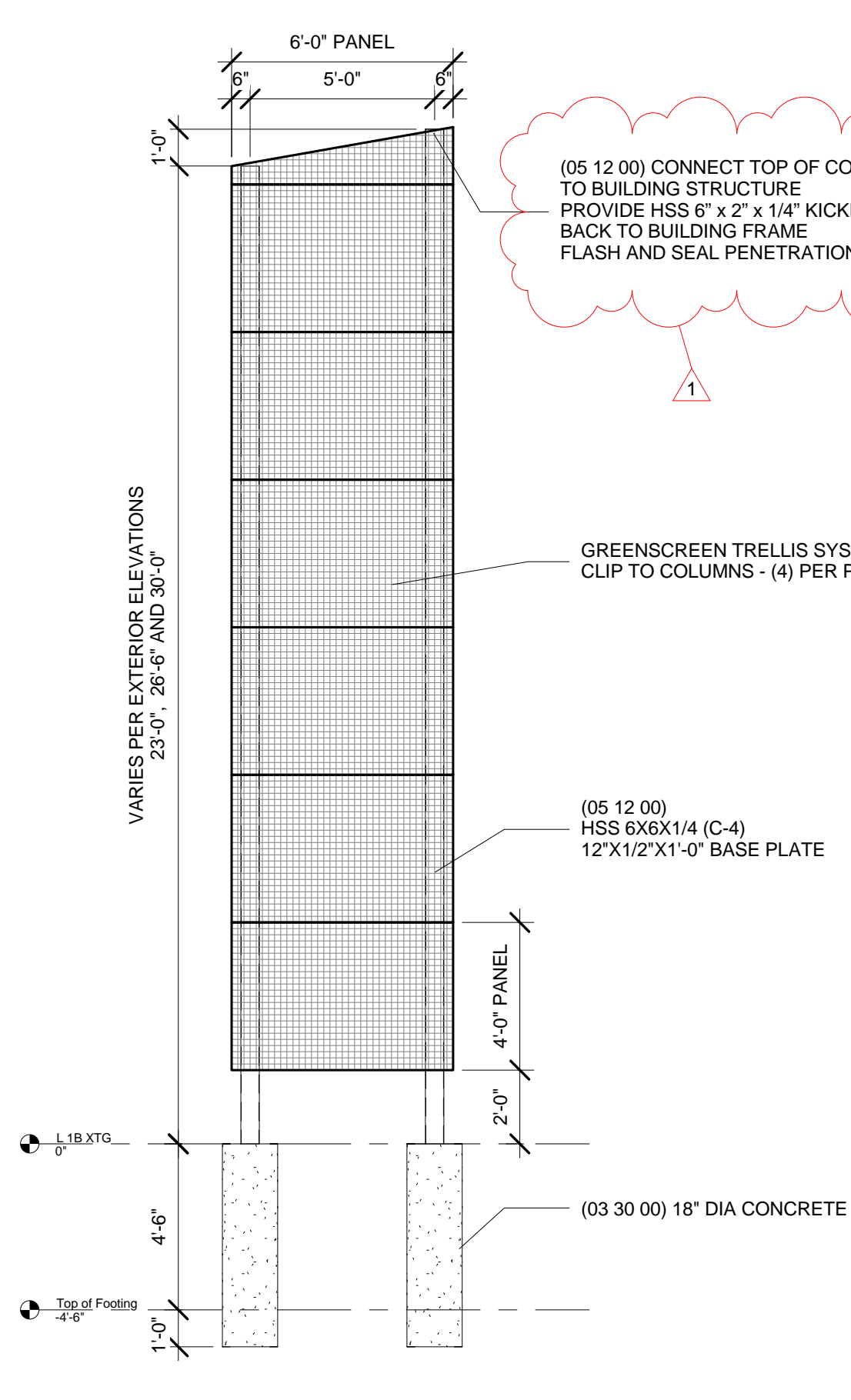
2 Mezzanine Walkway
1/2" = 1'-0"



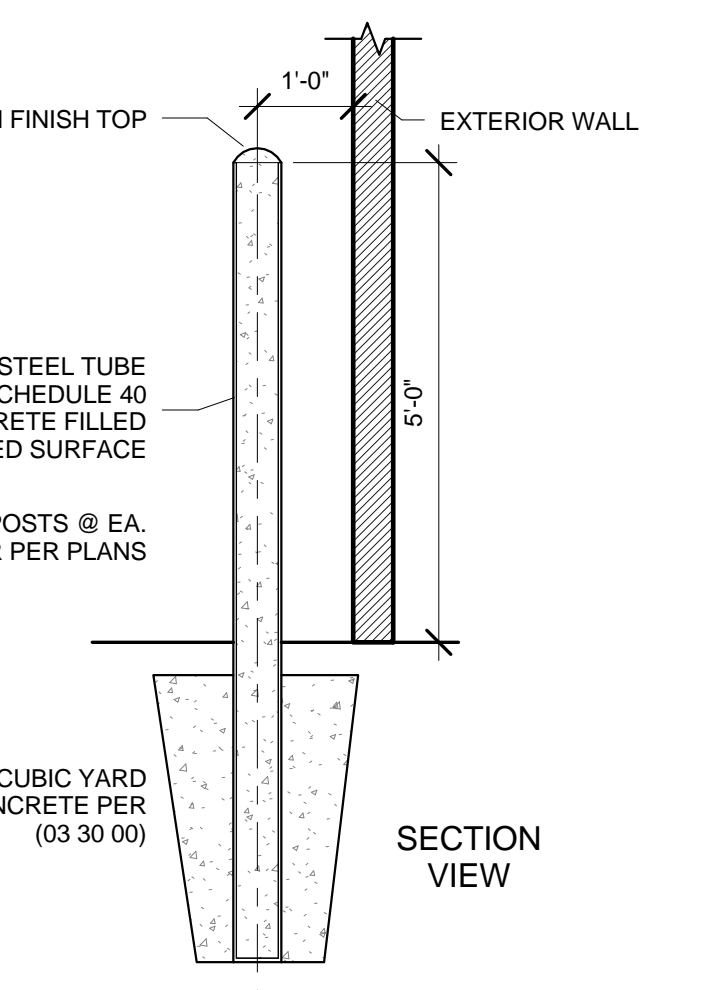
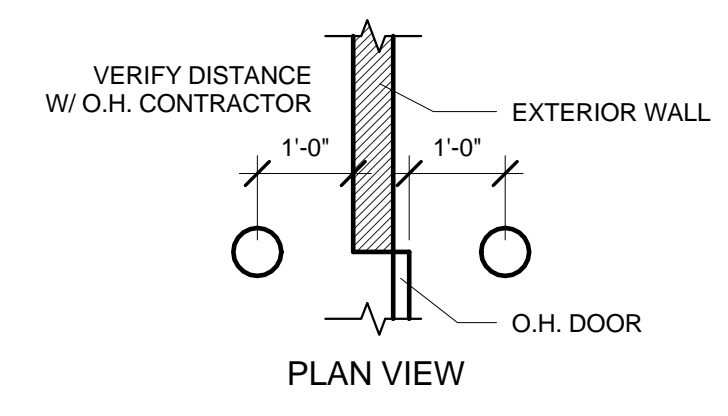
6 Bollard
1/2" = 1'-0"



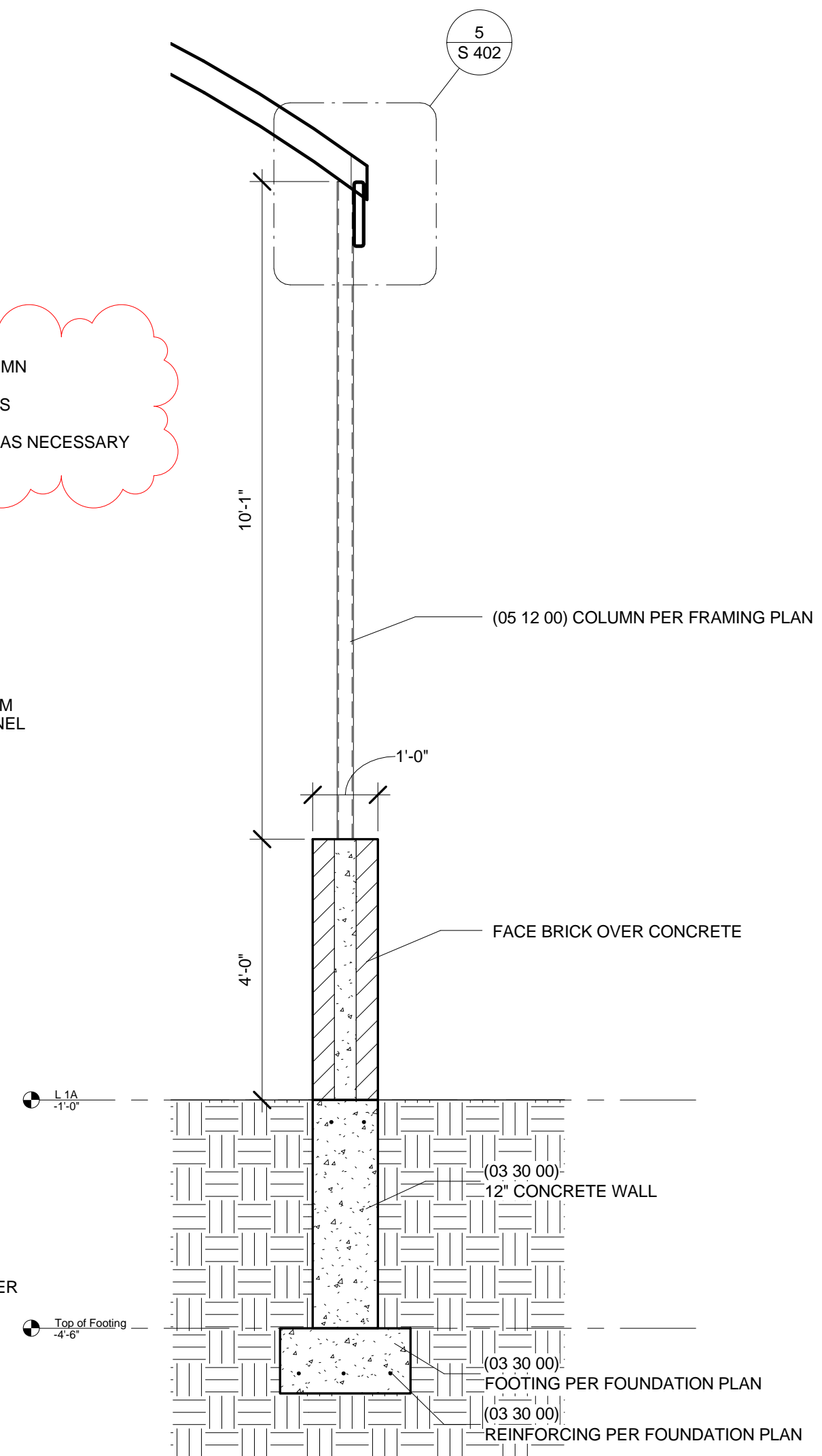
3 Canopy Support
1/2" = 1'-0"



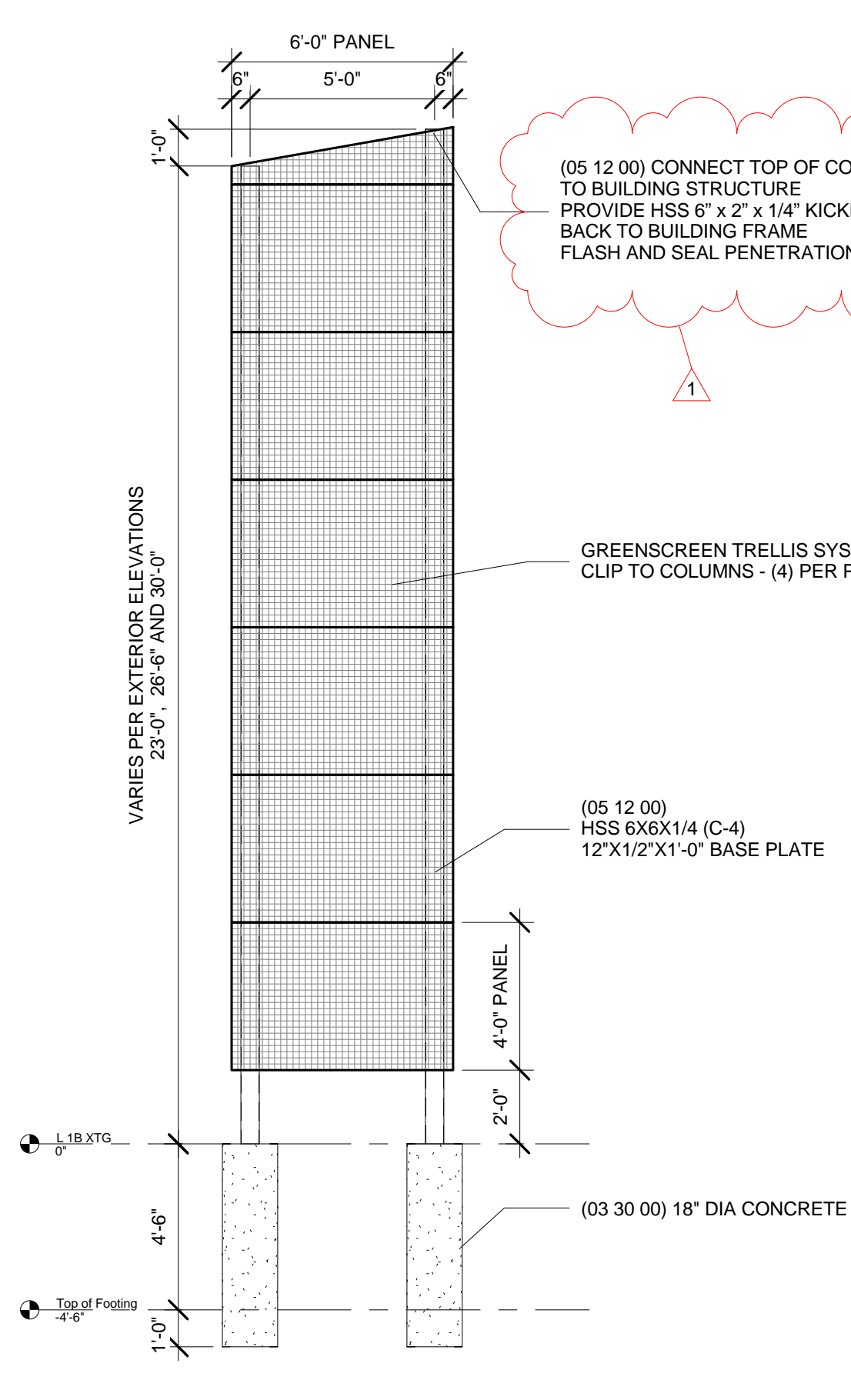
4 GreenScreen Structure
1/4" = 1'-0"



6 Bollard
1/2" = 1'-0"



3 Canopy Support
1/2" = 1'-0"



4 GreenScreen Structure
1/4" = 1'-0"



Design prepared for:
Engineering Division

Engineering Operations
Building Addition - 2015

Location:
1600 Emil St.
Madison, WI 53713

Contract: TBD
Project: 10349
Common Council Approval:

Lighting Design:
Kay Schindel, P.E., City of
Madison; 608-266-4668;
kschindel@cityofmadison.com

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Madison

Landscaping Design:
Sarah Lerner, LPA, City of
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kschindel@cityofmadison.com

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kschindel@cityofmadison.com

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Fire Protection Design:
Robert Novak, Kueny Architects

Architectural Design:
Kay Schindel, P.E., City of
Madison; 608-266-4668;
kschindel@cityofmadison.com

Revisions by Addendum

No.	Description	Addendum
1	Structural framing	1

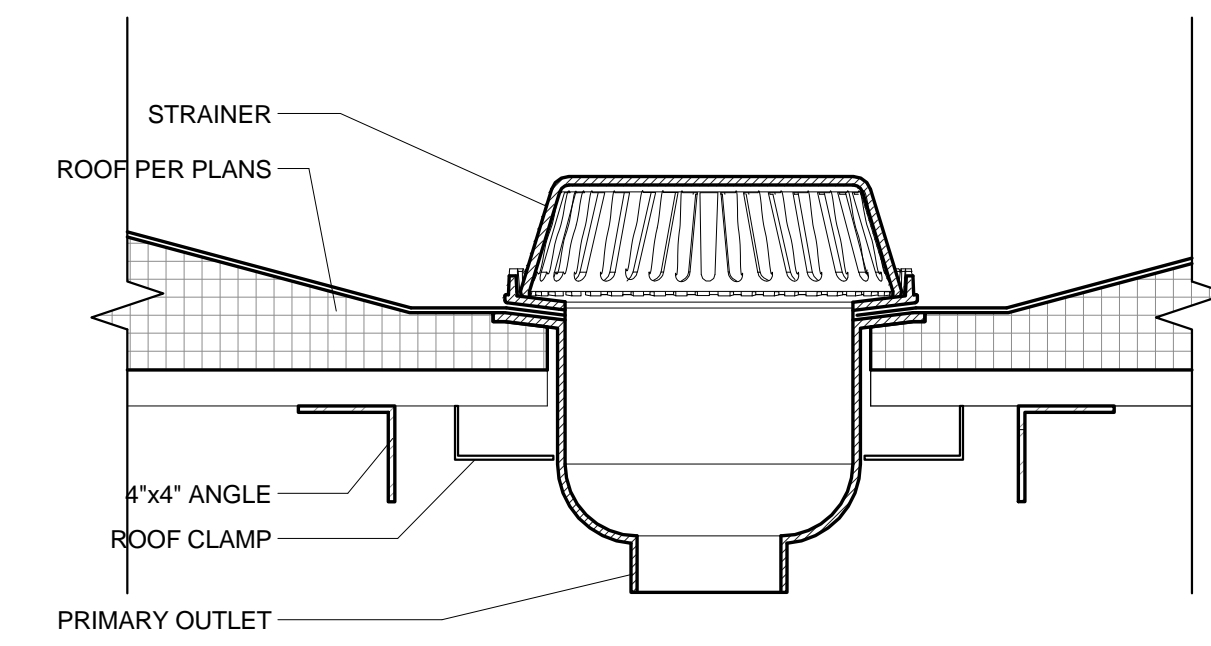
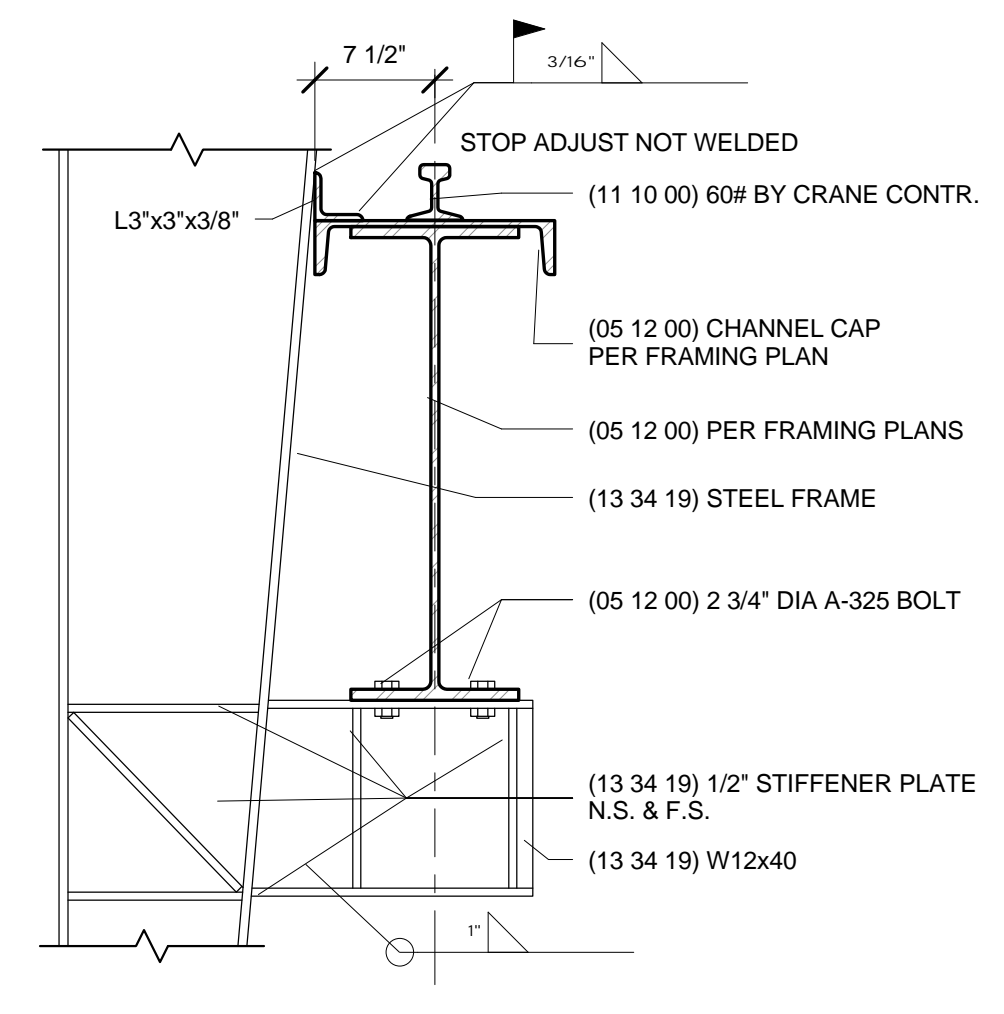
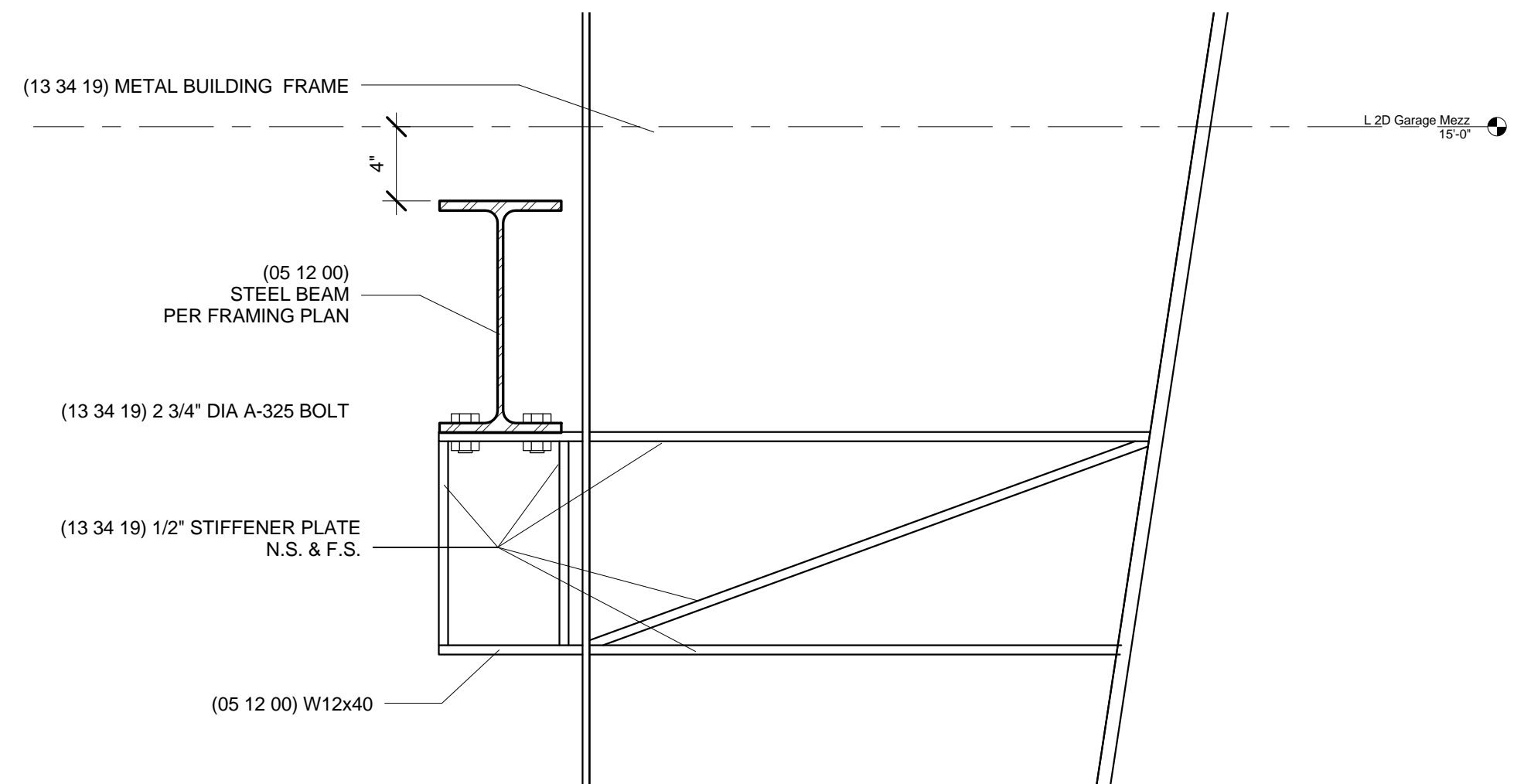
Structural
Details

S 501

Print Date:
12/21/2015 6:06:53 PM

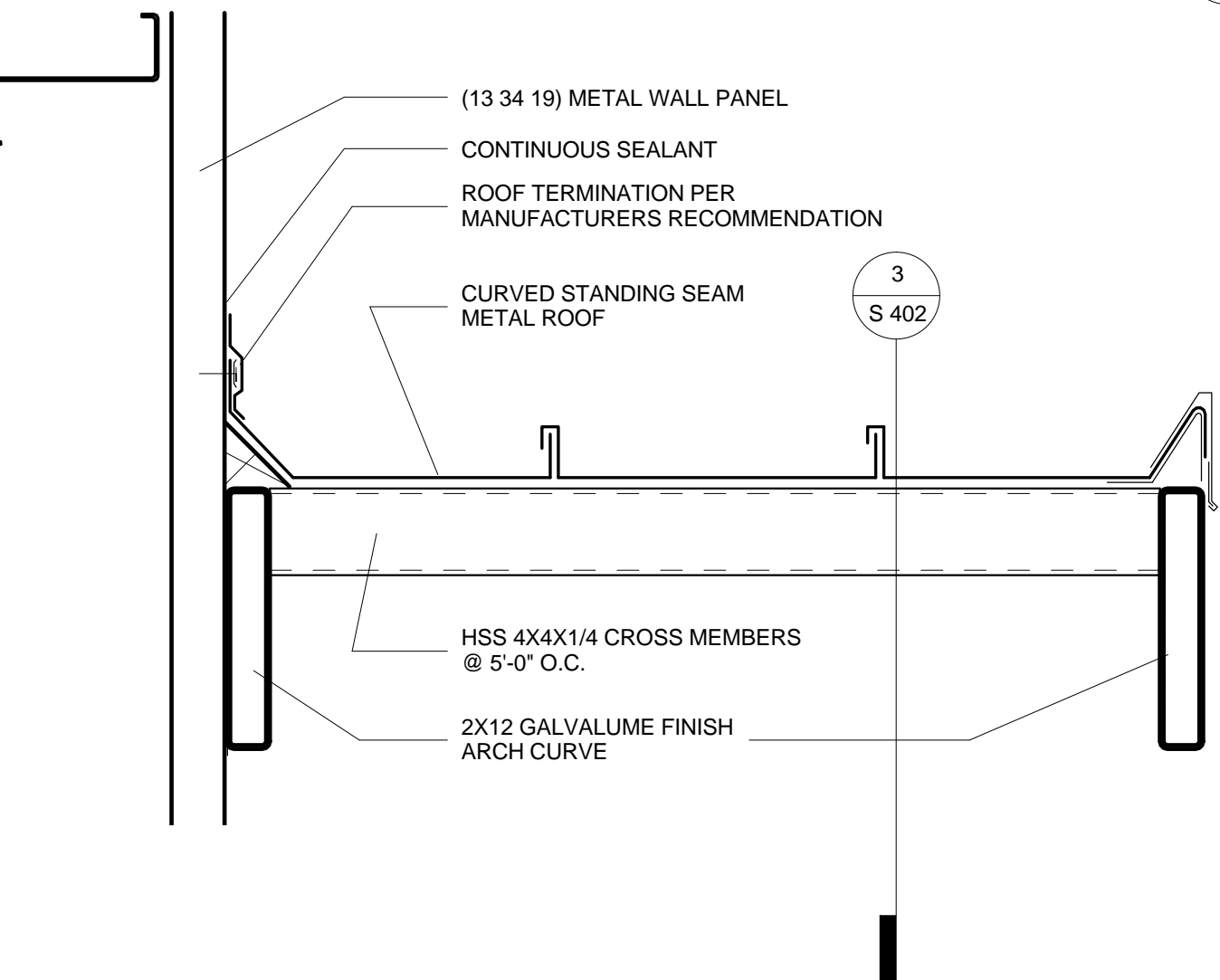
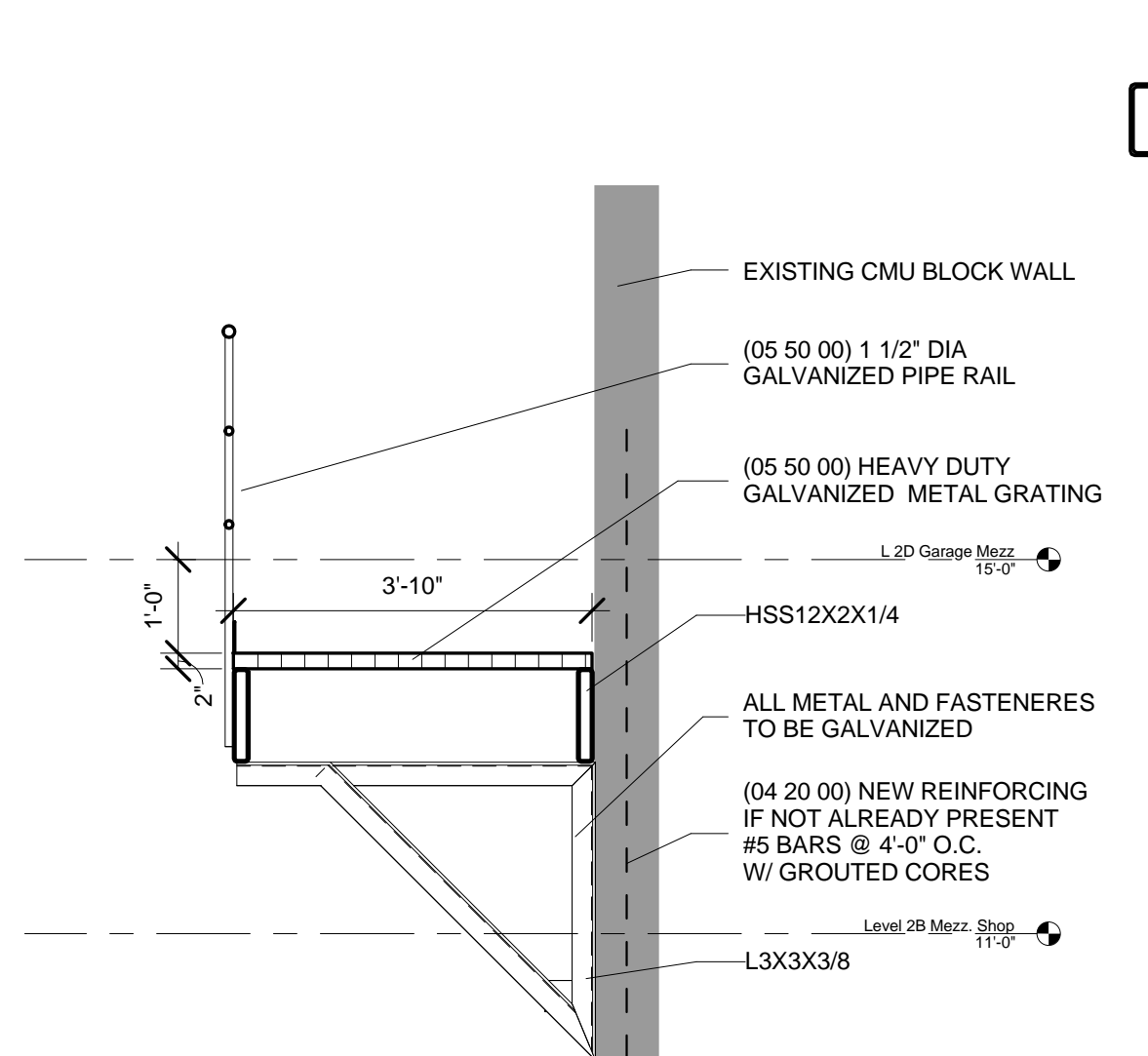
SEE PIPE PENETRATION DETAIL
ON SHEET A-302

13 Roof Column Penetration
3" = 1'-0"



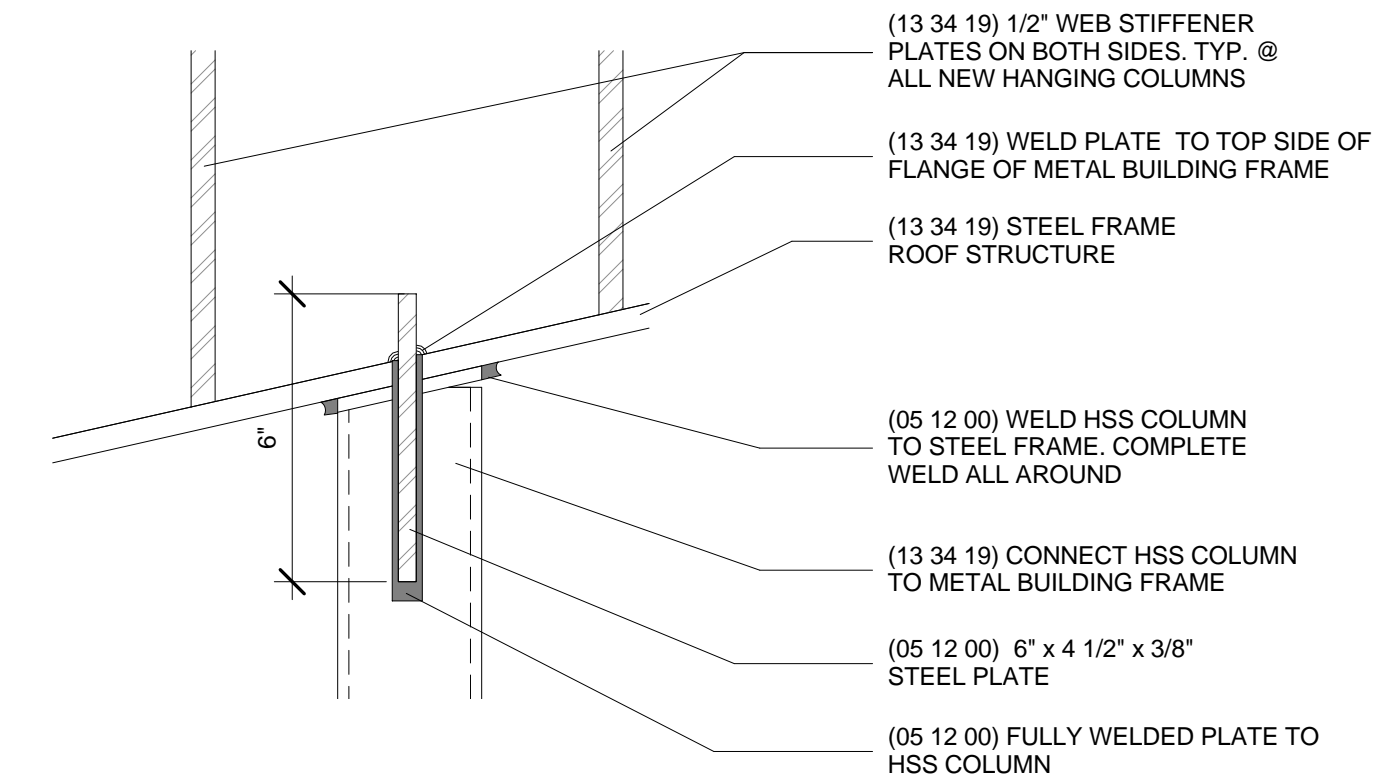
10 Roof Drain
1 1/2" = 1'-0"

12 Mezzanine Haunch
1 1/2" = 1'-0"

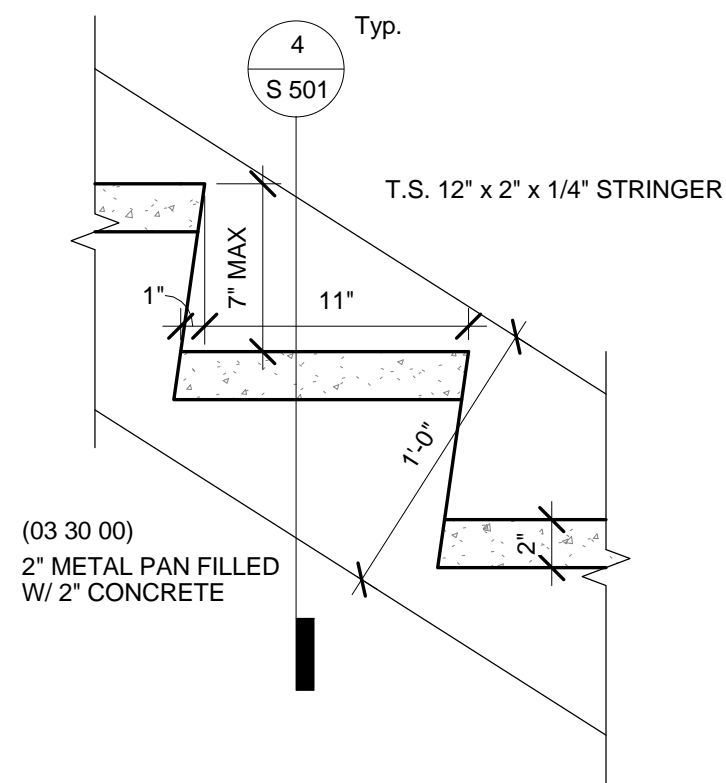


7 Garage Entry Canopy Detail
1 1/2" = 1'-0"

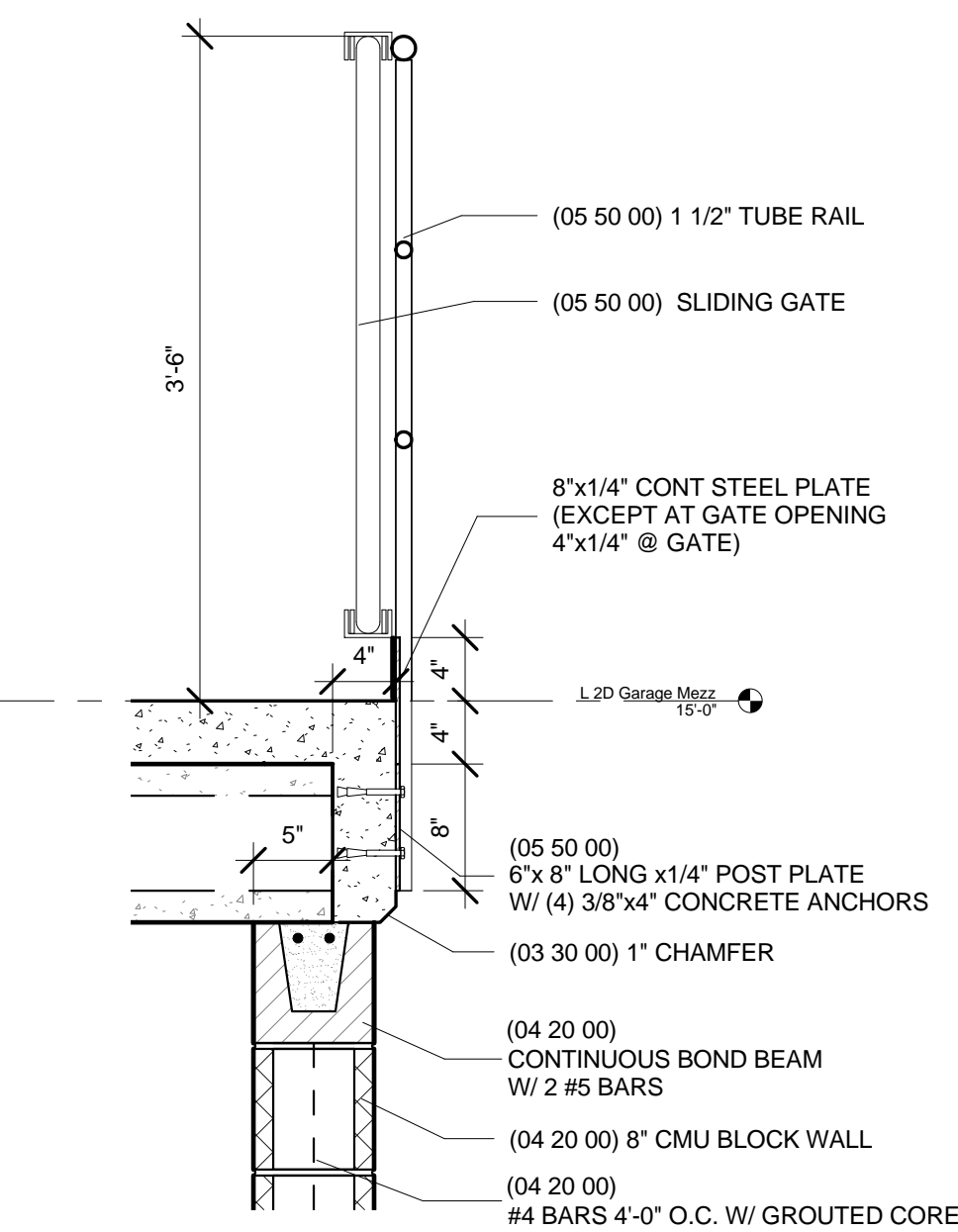
11 Crane Beam Haunch
1" = 1'-0"



6 Mezzanine Hanging Column Connection Detail
3" = 1'-0"

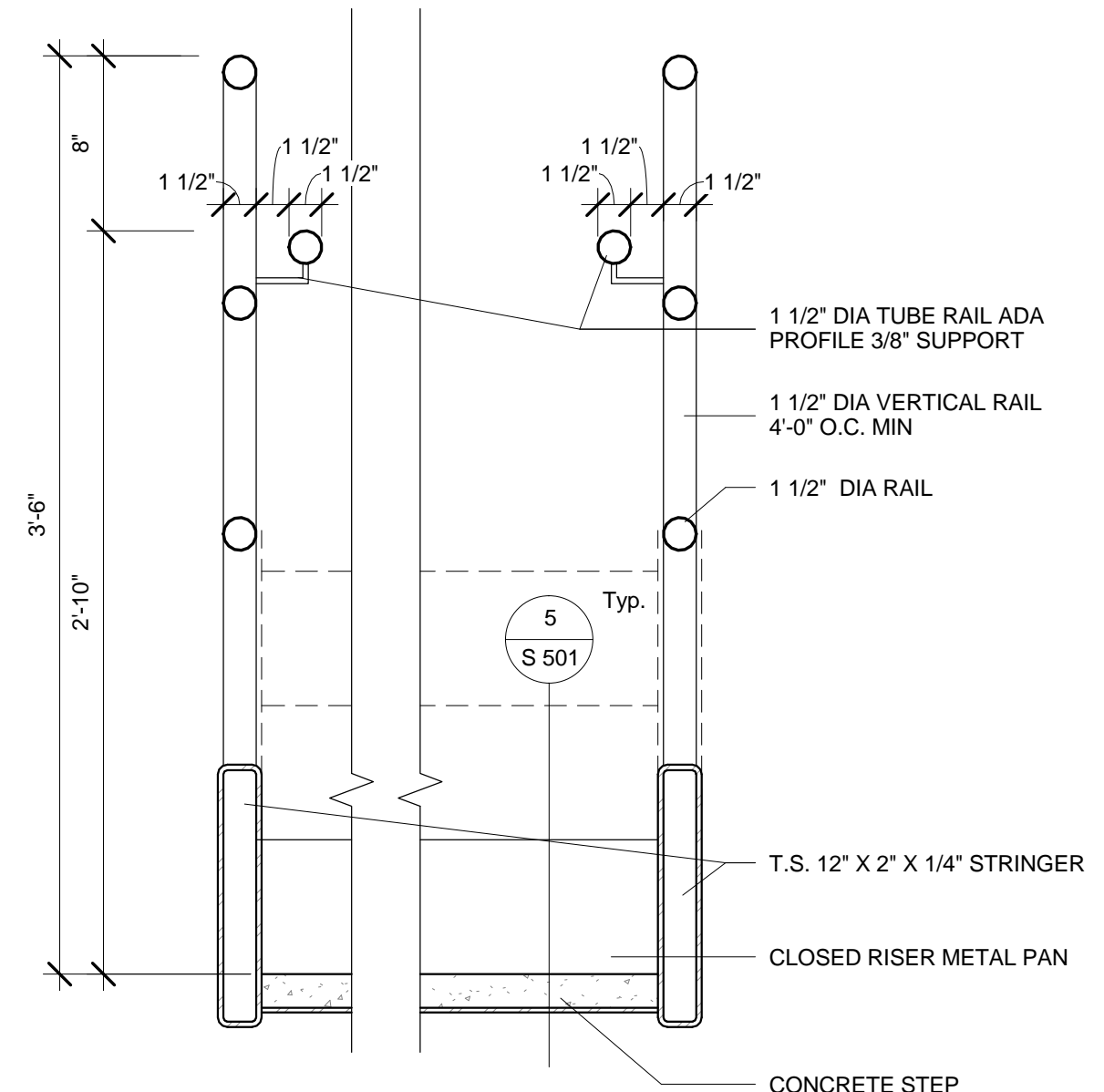


5 Stair Typ.
1 1/2" = 1'-0"



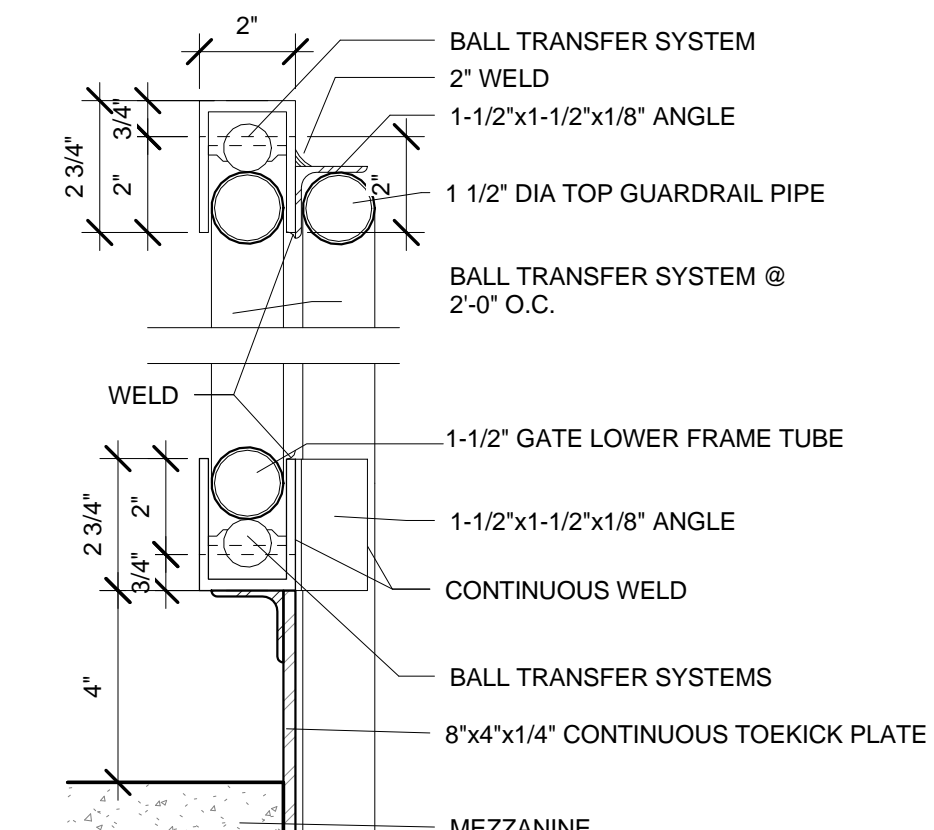
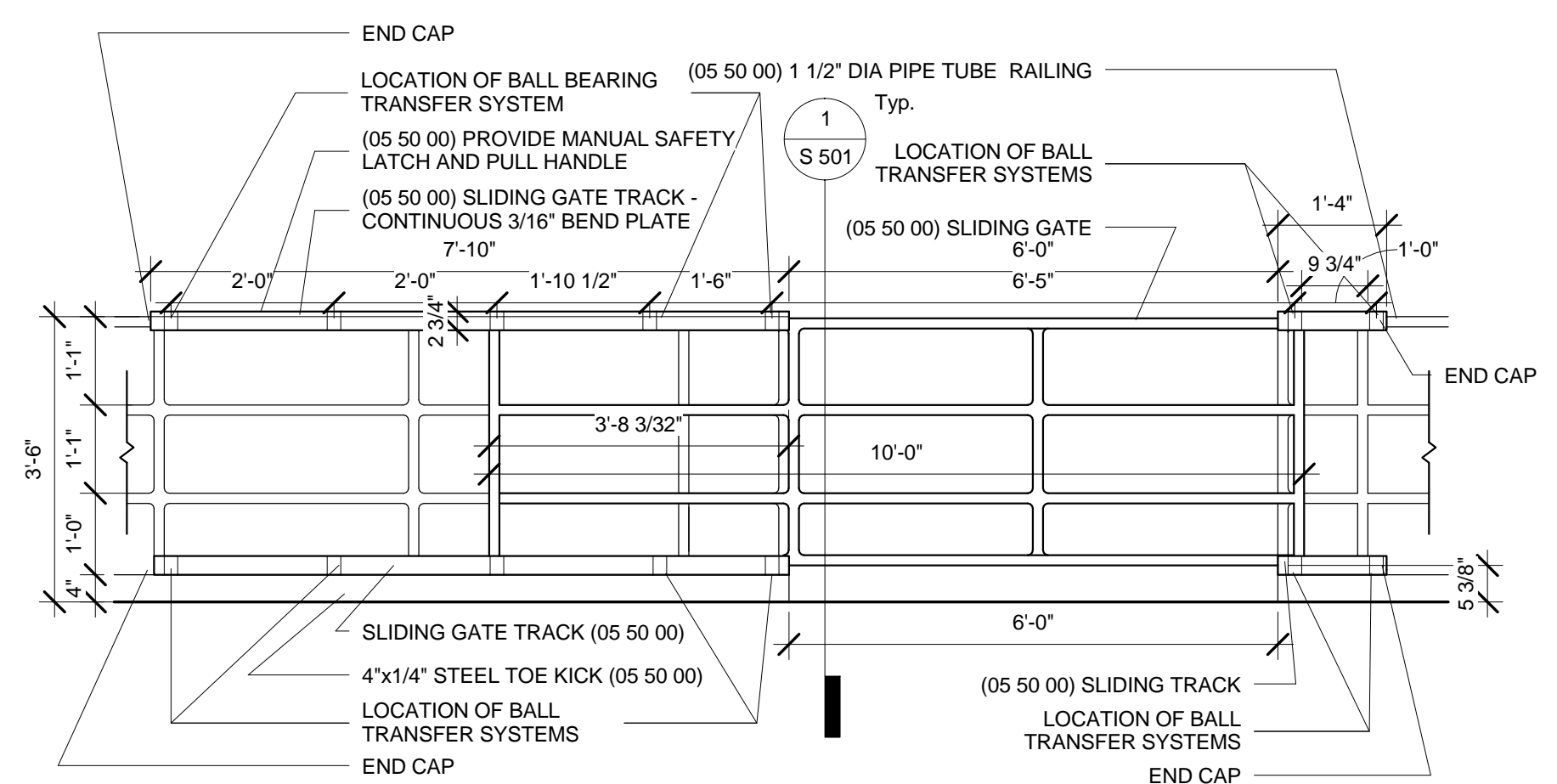
9 Precast Plank Nosing
1" = 1'-0"

8 Wash Bay Catwalk
1/2" = 1'-0"



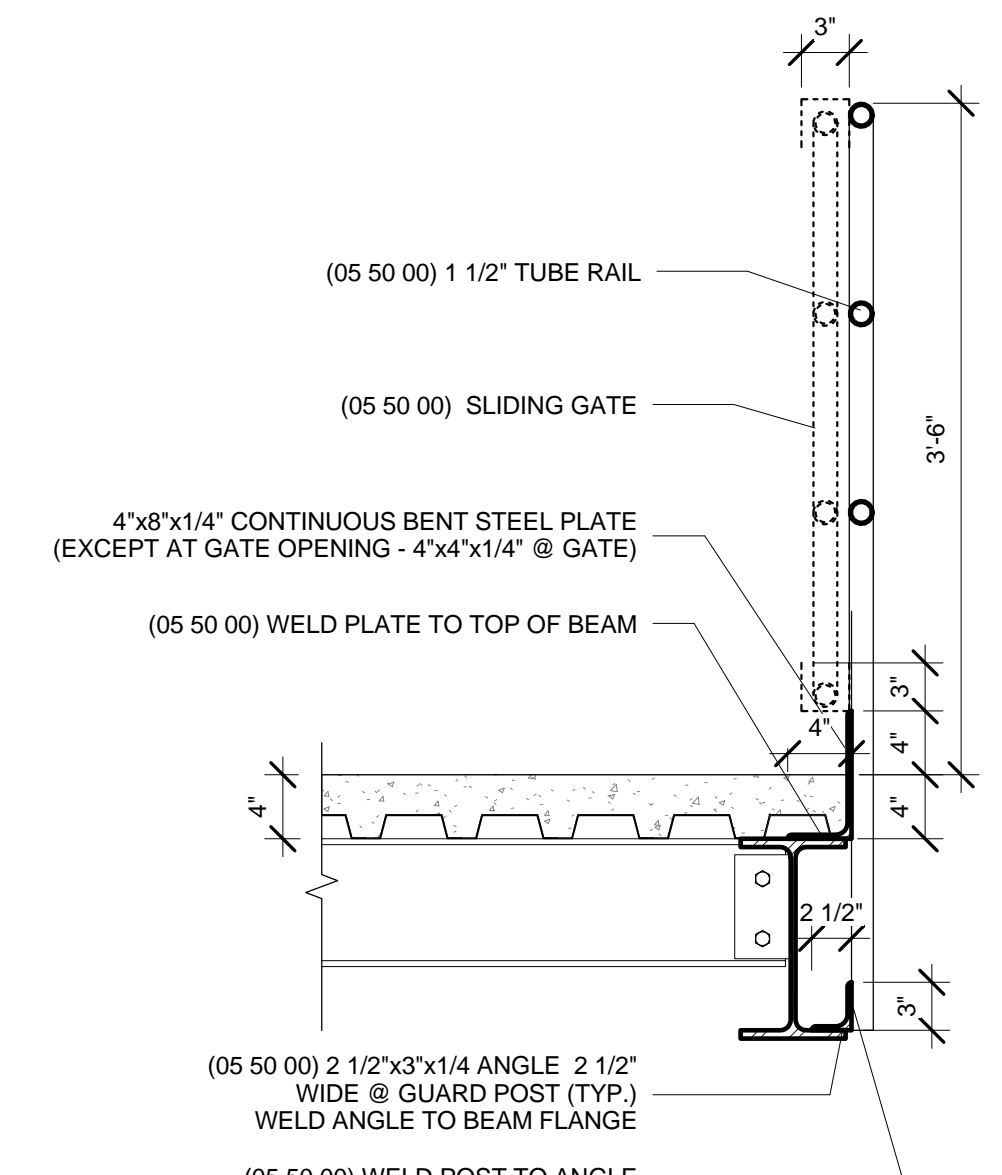
4 Pipe Rail Stair - Typ.
1 1/2" = 1'-0"

3 Mezzanine Sliding Gate - Typ. Elevation
1/2" = 1'-0"



2 Sliding Gate Detail
3" = 1'-0"

1 Mezzanine Gate Section
1" = 1'-0"



Gravity Ventilator Schedule table with columns: Mark, Description, Manufacturer, Model, URL, Airflow, Throat Length, Throat Width, OmniClass Number, OmniClass Title.

Diffusers, Registers and Grilles table with columns: Type Mark, Neck Size, Manufacturer, URL, Model, Description, Keypoint, Est. Count, Omni Class Number, Omni Class Title.

Control Damper Schedule table with columns: Mark, Description, Manufacturer, URL, Model, Size, OmniClass Number, OmniClass Title.

Louver Schedule table with columns: Mark, Manufacturer, Model, URL, Airflow, Depth, Height, Width, Color, OmniClass Number, OmniClass Title.

Air Flow Meter table with columns: Mark, Description, System, Manufacturer, URL, Model, Size, Omni Class Number, Omni Class Title.

Balancing Damper Schedule table with columns: Type Mark, Size, Description, Manufacturer, URL, Model, Count, OmniClass Number, OmniClass Title.

Thermostat Schedule table with columns: Type Mark, Description, Manufacturer, URL, Model, Est. Count.

Control Valve Schedule table with columns: Mark, Description, Comments, Manufacturer, URL, Model, Pressure Rating, Size, Cv Value, Flowrate, Pressuredrop, Keypoint, OmniClass Number, OmniClass Title.

Hydronic Valve Schedule table with columns: Type Mark, Description, Size, Manufacturer, URL, Model, Weight, Pressure Rating, Cv, Est. Count.

Chemical Feeder Schedule table with columns: Mark, Description, Manufacturer, URL, Pressure Rating, Water Volume, Weight, OmniClass Number, OmniClass Title.

Access Door Schedule table with columns: Type Mark, Description, Width, Height, Est. Count, Omni Class Number, Omni Class Title, Model, Manufacturer.

Radiant Manifold Schedule table with columns: Mark, Room Name, Room Number, Manufacturer, URL, Model, Pex Type / Size, Average Estimated Loop Length, Number of Loops, Tube Spacing and Layout, Water Volume, Total Flowrate, Flow per Loop, Pressure Drop, Pressure Rating, Comments.

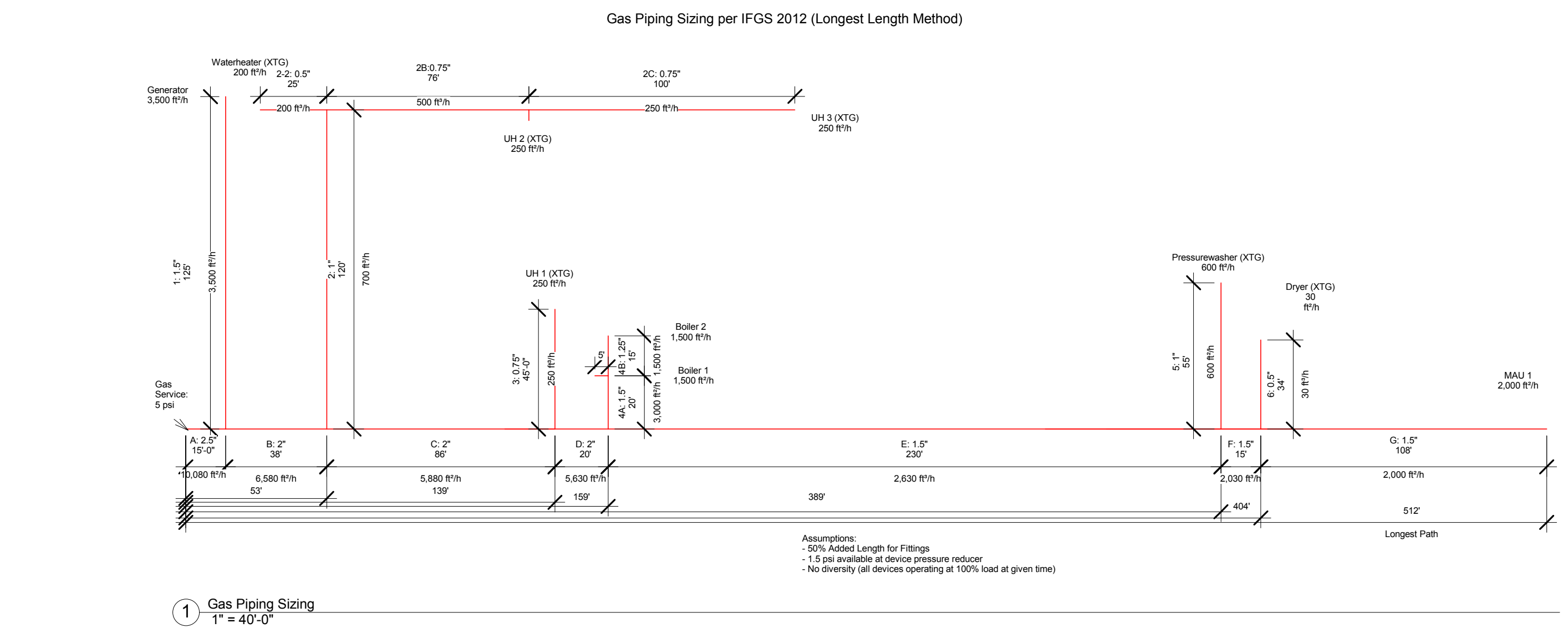
Fuel Valve Schedule table with columns: Type Mark, Description, Size, Manufacturer, URL, Model, Est. Count.

Miscellaneous Pipe Accessories table with columns: Type Mark, Description, Est. Count.

Pipe Accessories Schedule table with columns: Type Mark, Description, Size, Manufacturer, URL, Model, Weight, Pressure Rating, Est. Count.

Expansion Tank Schedule table with columns: Mark, Manufacturer, URL, Model, Volume, Weight, Pressure Rating.

Air and Dirt Separator Schedule table with columns: Mark, Description, Manufacturer, URL, Model, Size, Weight, Water Volume, Pressure Rating, OmniClass Number, OmniClass Title.



Design prepared for: Engineering Division

Engineering Operations Building Addition

Location: 1600 Emil St, Madison, WI 53713

Contract: 6484 Project: 10308 Common Council Approval: 8/2/2015

Lighting Design: Sarah Lerner, P.E., City of Madison; Key Schindel, P.E., City of Madison

Civil Design: Eric Dundee, P.E., City of Madison

Landscaping Design: Sarah Lerner, LPA, City of Madison; sierner@cityofmadison.com

Electrical Design: Dave Hanson, P.E., Kueny Architects

Plumbing Design: Key Schindel, P.E., City of Madison; kschindel@cityofmadison.com

HVAC Design: Key Schindel, P.E., City of Madison; kschindel@cityofmadison.com

Structural Design: John Schmidbauer, P.E., Kueny Architects

Fire Protection Design: Robert Novak, Kueny Architects

Architectural Design: Key Schindel, P.E., City of Madison; kschindel@cityofmadison.com

Revisions by Addendum

Table for Revisions by Addendum with columns: No., Description, Addendum.

HVAC Devices and Gas Piping

M 005 Print Date: 12/22/2015 11:44:46 AM



Design prepared for:
Engineering Division

Engineering Operations
Building Addition

Location:
1600 Emil St.
Madison, WI 53713

Contract: 6484
Project: 10308
Common Council Approval:
6/2/2015

Lighting Design:
Kay Schindel, P.E., City of
Madison; 608-266-4668;
kschindel@cityofmadison.com

Civil Design:
Eric Dundee, P.E., City of
Madison

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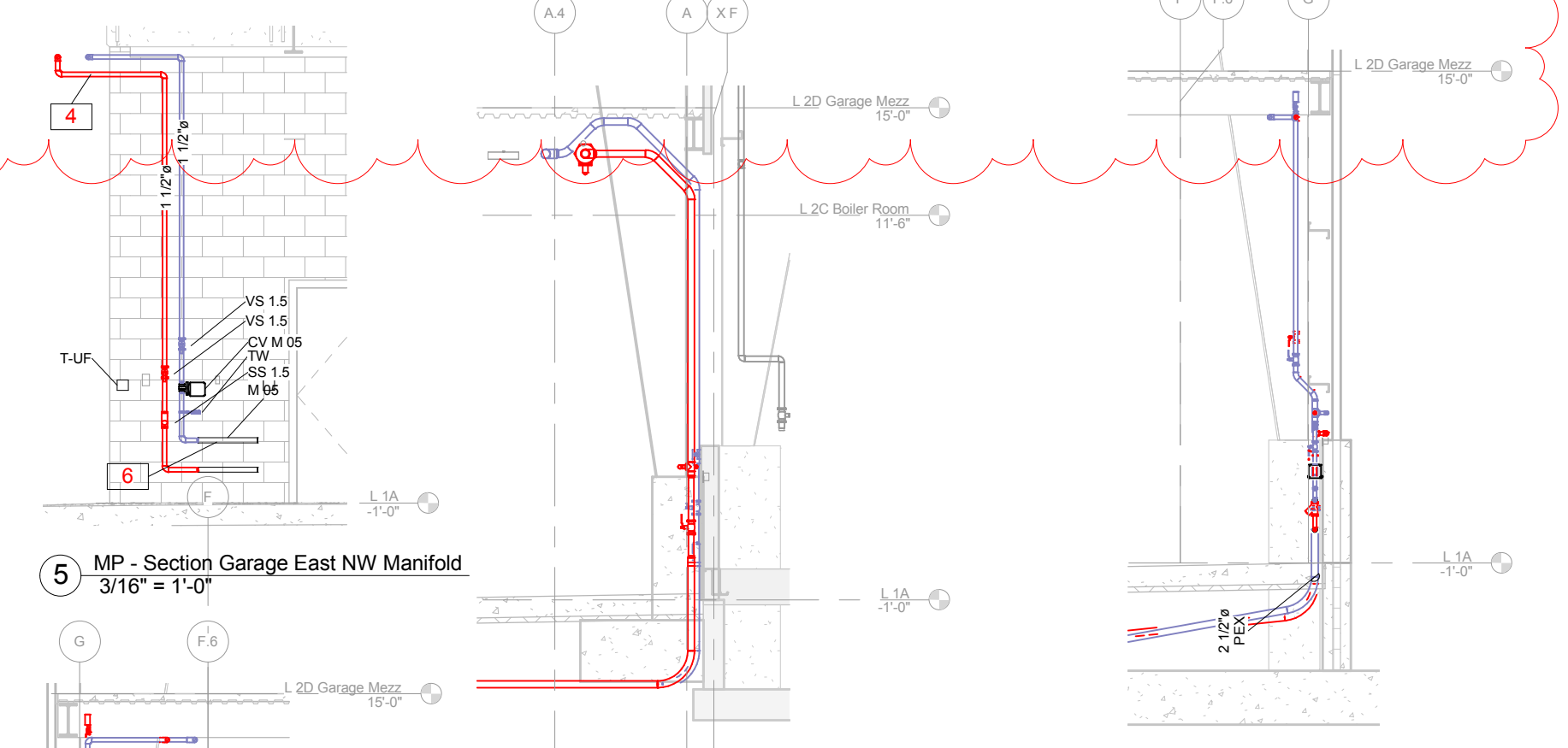
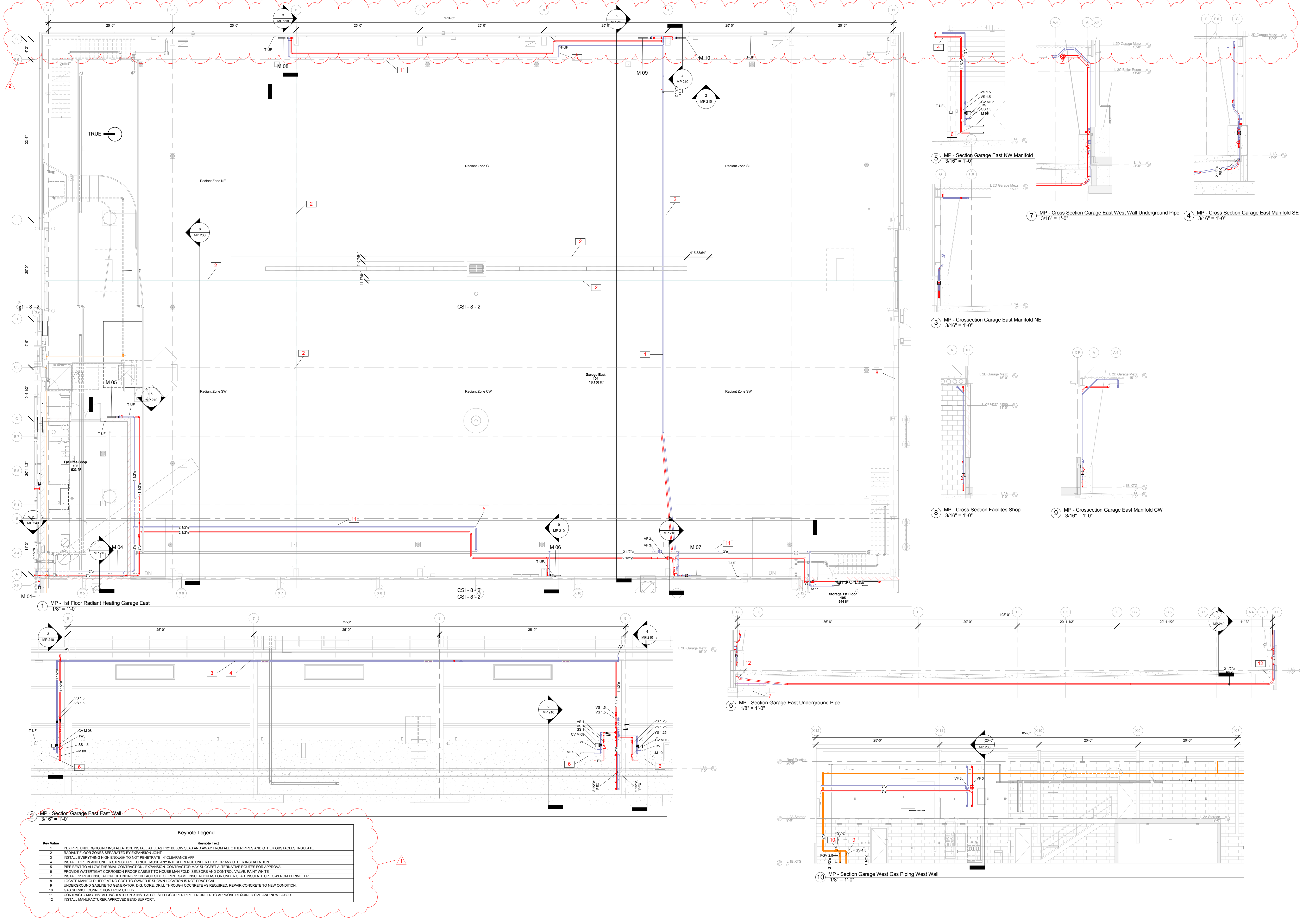
Revisions by Addendum

No.	Description	Addendum
1	Reformatted schedule	1
2	Relocated view	1

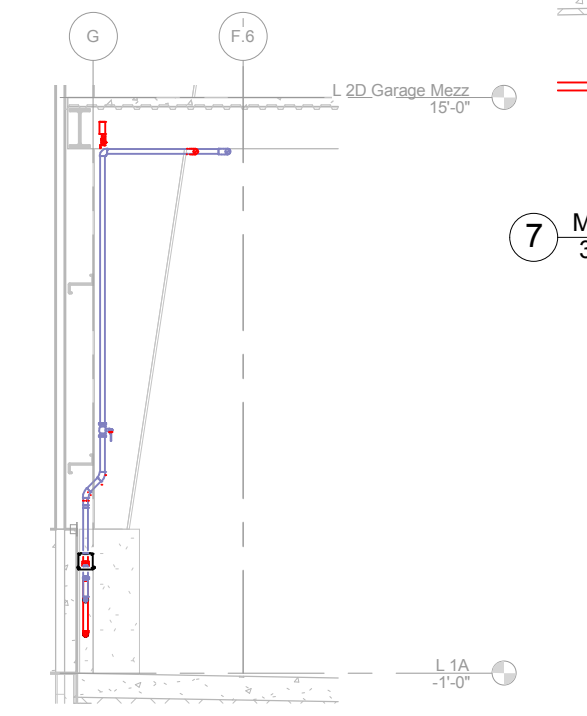
Garage Piping

MP 210

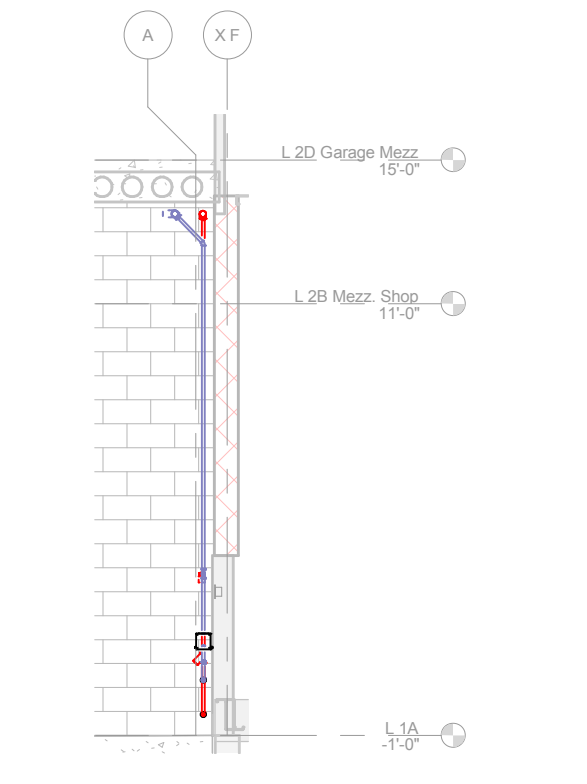
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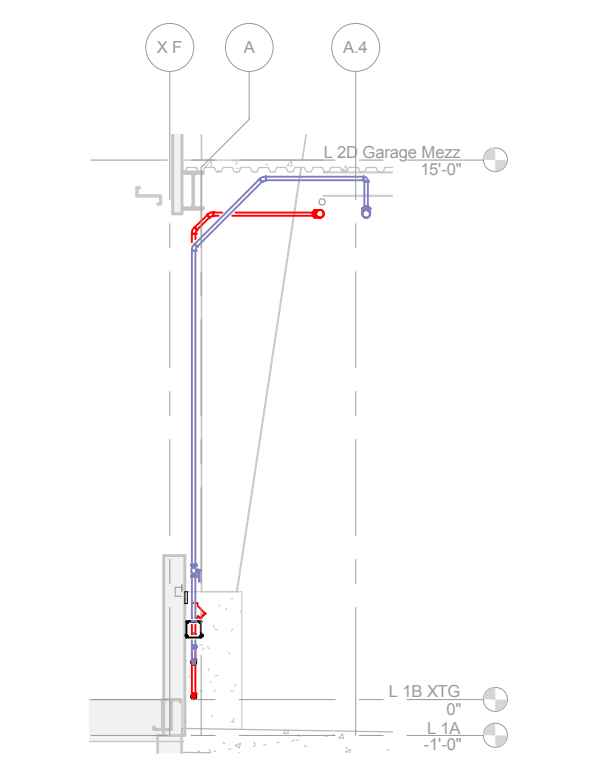
5 MP - Section Garage East NW Manifold
3/16" = 1'-0"



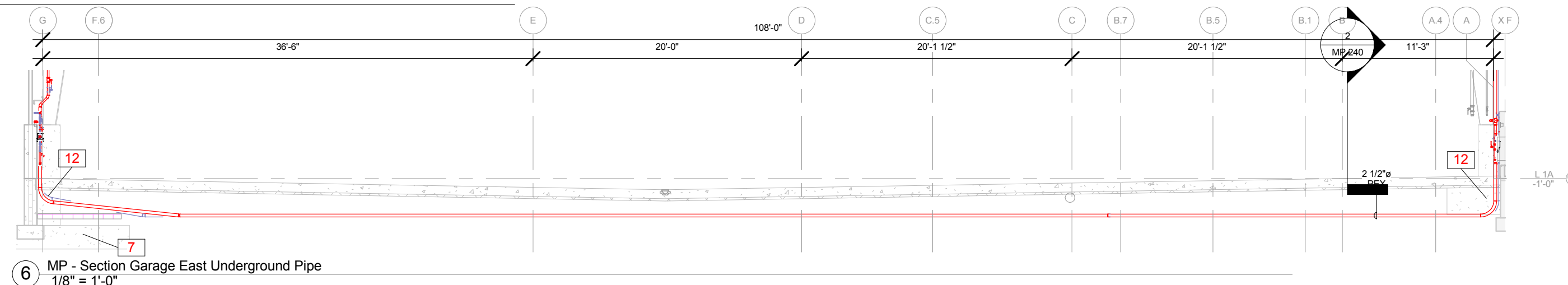
3 MP - Cross Section Garage East Manifold NE
3/16" = 1'-0"



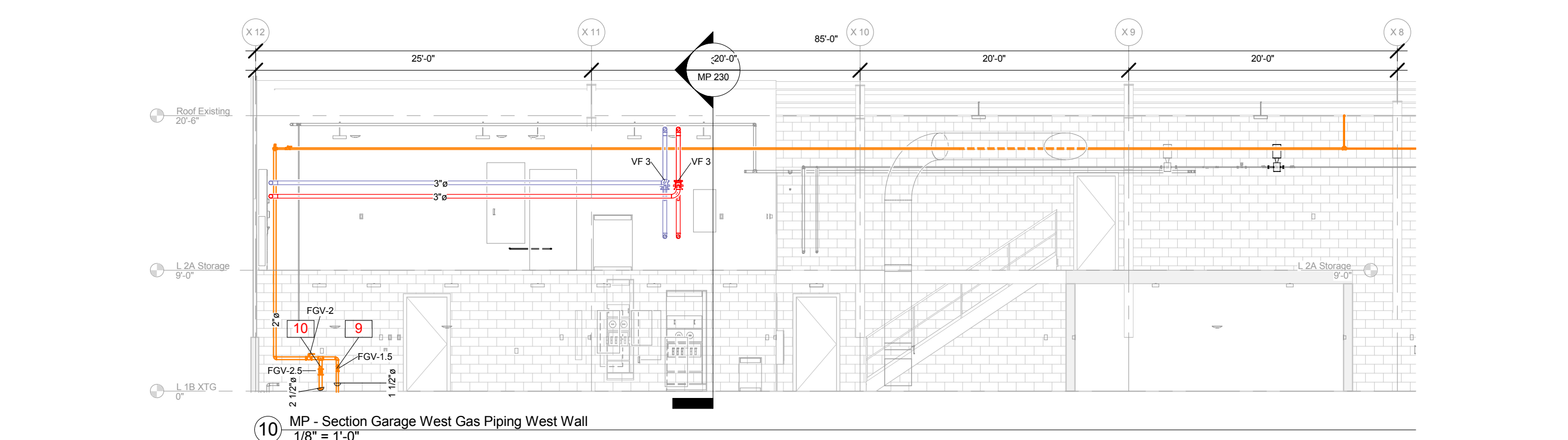
8 MP - Cross Section Facilities Shop
3/16" = 1'-0"



9 MP - Cross Section Garage East Manifold CW
3/16" = 1'-0"



6 MP - Section Garage East Underground Pipe
1/8" = 1'-0"



10 MP - Section Garage West Gas Piping West Wall
1/8" = 1'-0"

Keynote Legend

Key Value	Keynote Text
1	PEX PIPE UNDERGROUND INSTALLATION. INSTALL AT LEAST 12" BELOW SLAB AND AWAY FROM ALL OTHER PIPES AND OTHER OBSTACLES. INSULATE.
2	RADIANT FLOOR ZONES SEPARATED BY EXPANSION JOINT.
3	INSTALL EVERYTHING HIGH ENOUGH TO NOT PENETRATE 1/4" CLEARANCE AUF.
4	INSTALL PIPE IN AND UNDER STRUCTURE TO NOT CAUSE ANY INTERFERENCE UNDER DECK OR ANY OTHER INSTALLATION.
5	PIPE BENT TO ALLOW THERMAL CONTRACTION / EXPANSION. CONTRACTOR MAY SUGGEST ALTERNATIVE ROUTES FOR APPROVAL.
6	PROVIDE WATER TIGHT CORROSION PROOF CABINET TO HOUSE MANIFOLD SENSORS AND CONTROL VALVE. PAINT WHITE.
7	INSTALL 2" RIGID INSULATION EXTENDING 2" ON EACH SIDE OF PIPE. SAME INSULATION AS FOR UNDER SLAB. INSULATE UP TO 4" FROM PERIMETER.
8	LOCATE MANIFOLD HERE AT NO COST TO OWNER IF SHOWN LOCATION IS NOT PRACTICAL.
9	UNDERGROUND GASLINE TO GENERATOR. DIG, CORE, DRILL THROUGH CONCRETE AS REQUIRED. REPAIR CONCRETE TO NEW CONDITION.
10	GAS SERVICE CONNECTION FROM UTILITY
11	CONTRACTOR MAY INSTALL INSULATED PEX INSTEAD OF STEEL/COPPER PIPE. ENGINEER TO APPROVE REQUIRED SIZE AND NEW LAYOUT.
12	INSTALL MANUFACTURER APPROVED BEND SUPPORT.

