

SPECIAL INSPECTIONS/TESTING/SUBMITTALS

STATEMENT OF SPECIAL INSPECTIONS

THE CONTRACTOR SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE "SPECIAL INSPECTIONS" DURING CONSTRUCTION. THE "SPECIAL INSPECTIONS" - REQUIRED IN ACCORDANCE W/ THE IBC, SECTIONS 1704 AND 1705 - 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 1704.2.4.

THE SPECIAL INSPECTOR SHALL USE THE LATEST ISSUE OF THE STRUCTURAL RECORD DRAWINGS FOR THE INSPECTION OF THE STRUCTURE. DO NOT USE THE SHOP DRAWINGS FOR INSPECTION PURPOSES.

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.

IBC SECTION 1704.2.5 INSPECTION OF FABRICATORS

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

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 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.

IBC TABLE 1705.2.2 REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	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 contract documents.	-	X	Applicable ASTM material standards		X		
b. Manufacturer's certified test reports.	-	X			X		
2. Inspection of welding:							
a. Cold-formed steel deck:							
1) Floor and roof deck welds.	-	X	AWS D1.3		X		
b. Reinforcing steel:							
1) Verification of weldability of reinforcing steel other than ASTM A 706.	-	X					X
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	-					X
4) Other reinforcing steel.	-	X					X

AISC 360-10 QUALITY CONTROL AND QUALITY ASSURANCE FOR STEEL CONSTRUCTION

INSPECTION TASKS	QC (Quality Control)	QA (Quality Assurance)	YES	NO	N.A.
TABLE N5.4-1 INSPECTION TASKS PRIOR TO WELDING					
Welding procedure specifications (WPSs) available	P	P	X		
Manufacturer certifications for welding consumables available	P	P	X		
Material identifications (type/grade)	O	O	X		
Welder identification system	O	O	X		
Fit-up of groove welds (including joint geometry)	O	O	X		
Configuration and finish of access holes	O	O	X		X
Fit-up of fillet welds	O	O	X		
Check welding equipment	O	-	X		
TABLE N5.4-2 INSPECTION TASKS DURING WELDING					
Use of qualified welders	O	O	X		
Control and handling of welding consumables	O	O	X		
No welding over cracked task welds	O	O	X		
Environmental conditions	O	O	X		
WPS followed	O	O	X		
Welding techniques	O	O	X		
TABLE N5.4-3 INSPECTION TASKS AFTER WELDING					
Welds cleaned	O	O	X		
Size, length and location of welds	P	P	X		
Welds meet visual acceptance criteria	P	P	X		
Arc strikes	P	P	X		
k-area	P	P	X		
Backing removed and weld tabs removed (if required)	P	P	X		
Repair activities	P	P	X		
Document acceptance or rejection of welding joint or member	P	P	X		
TABLE N5.6-1 INSPECTION TASKS PRIOR TO BOLTING					
Manufacturer's certifications available for fastener materials	O	P	X		
Fasteners marked in accordance with ASTM requirements	O	O	X		
Proper fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane)	O	O	X		
Proper bolting procedure selected for joint detail	O	O	X		
Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements	O	O	X		
Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used	P	O	X		
Proper storage provided for bolts, nuts, washers and other fastener components	O	O	X		
TABLE N5.6-2 INSPECTION TASKS DURING BOLTING					
Fastener assemblies, of suitable condition, placed in all holes and washers (if required) are positioned as required	O	O	X		
Joint brought to the snug-tight condition prior to the prestensioning operation	O	O	X		X
Fastener component not turned by the wrench prevented from rotating	O	O	X		
Fasteners are prestensioned in accordance with the RCSC Specification, progressing systematically from the most rigid point toward the free edges	O	O	X		X
TABLE N5.6-3 INSPECTION TASKS AFTER BOLTING					
Document acceptance or rejection of bolted connections	P	P	X		

O - Observe these items on a random basis. Operations need not be delayed pending these inspections.
P - Perform these tasks for each welded joint or member.

THE QUALITY ASSURANCE INSPECTOR SHALL BE ON THE PREMISES FOR INSPECTION DURING THE PLACEMENT OF ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. AS A MINIMUM, THE DIAMETER, GRADE, TYPE AND LENGTH OF THE ANCHOR ROD OR EMBEDDED ITEM, AND THE EXTENT OR DEPTH OF EMBEDMENT INTO THE CONCRETE, SHALL BE VERIFIED PRIOR TO PLACEMENT OF CONCRETE.

THE QUALITY ASSURANCE INSPECTOR SHALL INSPECT THE FABRICATED STEEL OR ERECTED STEEL FRAME, AS APPROPRIATE, TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE

CONSTRUCTION DOCUMENTS, SUCH AS BRACES, STIFFENERS, MEMBER LOCATIONS AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION.

IBC TABLE 1705.3 REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD	IBC REFERENCE	YES	NO	N.A.
1. Inspection of reinforcing steel, including prestressing tendons, and placement.	-	X	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.	-	-	AWS D1.4 ACI 318: 3.5.2	-			X
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			X
4. Inspection of anchors post-installed in hardened concrete members.	-	X	ACI 318: 3.8.6, 8.1.3, 21.1.8	1909.1	X		
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 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.	-	X	ACI 318: 5.11-5.13	1910.9	X		
9. Inspection of prestressed concrete:							
a. Application of prestressing forces.	X	-	ACI 318: 18.20	-			X
b. Grouting of bonded prestressing tendons in the seismic-force-resisting system.	X	-	ACI 318: 18.18.4	-			X
10. Erection of precast concrete members.	-	X	ACI 318: Ch. 16	-			X
11. Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	-	X	ACI 318: 6.2	-			X
12. Inspect formwork for shape, location and dimensions of the concrete member being formed.	-	X	ACI 318: 6.1.1	-			X

TMS 402 TABLE 1.18.2 LEVEL B QUALITY ASSURANCE FOR MASONRY

MINIMUM TESTS
Verification of Slump flow and VSI as delivered to the site in accordance with Article 1.5 B.1.b.3 for self-consolidating grout.
Verification of f_m and f'_{mc} prior to construction, except where specifically exempted by this Code.

INSPECTION TASK	CONTINUOUS	PERIODIC	YES	NO	N.A.
1. Verify compliance with the approved submittals.	X	X			
2. As masonry construction begins, verify that the following are in compliance:					
a. Proportions of site-prepared mortar.	-	X	X		
b. Construction of mortar joints.	-	X	X		
c. Grade and size of prestressing tendons and anchorages.	-	X	X		X
d. Location of reinforcement, connectors, prestressing tendons and anchorages.	-	X	X		
e. Prestressing technique.	-	X	X		X
3. Prior to grouting, verify that the following are in compliance:					
a. Grout space.	-	X	X		
b. Grade, type, and size of reinforcement and anchor bolts, and prestressing tendons, and anchorages.	-	X	X		
c. Placement of reinforcement, connectors, and prestressing tendons and anchorages.	-	X	X		
d. Proportions of site-prepared grout and prestressing grout for bonded tendons.	-	X	X		
e. Construction of mortar joints.	-	X	X		
4. Verify during construction:					
a. Size and location of structural elements.	-	X	X		
b. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames, or other construction.	-	X	X		
c. Welding of reinforcement.	X	-			X
d. Preparation, construction, and protection of masonry during cold weather (temperature below 40°F (4.4°C)) or hot weather (temperature above 90°F (32.2°C)).	-	X	X		
e. Application and measurement of prestressing force.	X	-			X
f. Placement of grout and prestressing grout for bonded tendons is in compliance.	X	-			X
5. Observe preparation of grout specimens, mortar specimens, and/or prisms.	-	X	X		

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 materials.	-	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	-			X
5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.	-	X	X		

STATEMENT OF TESTING

THE CONTRACTOR 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 1704.2.4 OF THE IBC.

TABLE 1 - SUMMARY OF REQUIRED STRUCTURAL TESTS

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD	IBC REFERENCE	YES	NO	N.A.
1. CONCRETE							
a. Cylinder Compression Testing	-	X	ASTM C39	-	X		
b. Beam flexure testing for wall panels	-	X	ASTM C78	-			X
c. Preconstruction testing of shotcrete	-	X	-	Section 1910			X
2. MASONRY							
a. Hollow Unit Block Compression Tests (Unit Strength Method)	-	X	ASTM C90	Section 2105	X		
3. POST-INSTALLED CONCRETE ANCHORS **							
a. Expansion anchors	-	X	ICC-ES AC108	Section 1908	X		
b. Adhesive anchors	-	X	ICC-ES AC308	Section 1908	X		

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

1. A REPRESENTATIVE OF THE ANCHOR MANUFACTURER OR PROJECT SPECIAL INSPECTOR SHALL BE ON SITE TO OVERSEE THE INSTALLATION OF THE FIRST FOUR ANCHORS FOR EACH TYPE OF ANCHOR INSTALLED. THIS MEASURE SHALL BE TAKEN FOR EACH INSTALLER OF THE ANCHORS. THIS SERVICE IS TYPICALLY PROVIDED FOR FREE BY THE LOCAL HILTI REPRESENTATIVE.
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.

REQUIRED STRUCTURAL SUBMITTALS

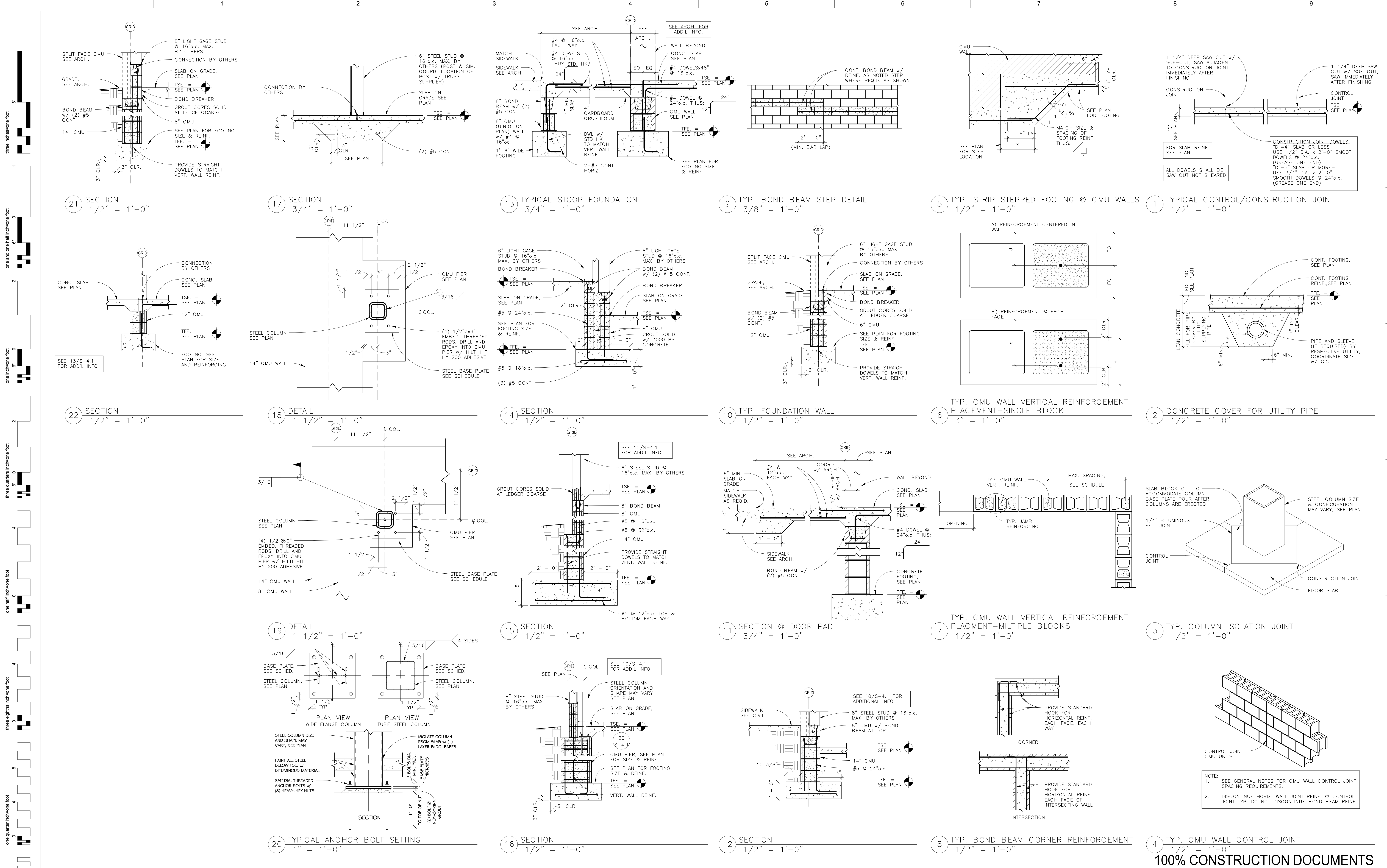
1. THE REVIEW OF THE FOLLOWING SUBMITTALS IS INCLUDED IN THE STRUCTURAL ENGINEER OF RECORD'S (SEOR) SCOPE OF SERVICES. THE GENERAL CONTRACTOR SHALL PROVIDE THE ITEMS BELOW TO THE SEOR FOR REVIEW PRIOR TO CONSTRUCTION.
2. SHOP DRAWINGS SHALL BE ORIGINALS AND SHALL NOT BE CREATED FROM THE ELECTRONIC STRUCTURAL CAD FILES OR REPRODUCTIONS OF THE STRUCTURAL DRAWINGS. REPRODUCING THE STRUCTURAL DRAWINGS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER IS A VIOLATION OF COPYRIGHT LAWS.
3. SHOP DRAWING PACKAGES MUST BE COMPLETE WHEN SUBMITTED AND MUST INCLUDE CERTIFIED CALCULATIONS IF REQUIRED. INCOMPLETE SHOP DRAWING PACKAGES WILL BE REJECTED WITHOUT REVIEW.
4. PRIOR TO SUBMITTING SHOP DRAWINGS TO SEOR, THE SHOP DRAWINGS MUST BE REVIEWED AND COORDINATED BY THE GENERAL CONTRACTOR.
5. ELECTRONIC VERSION IN PDF FORMAT OF ALL REQUIRED SHOP DRAWINGS AND CALCULATIONS MUST BE SUBMITTED BY THE SUPPLIER AND A MINIMUM OF 10 BUSINESS DAYS MUST BE PROVIDED FOR REVIEW BY THE STRUCTURAL ENGINEER OF RECORD.

TABLE 1. LIST OF REQUIRED STRUCTURAL SUBMITTALS

CATEGORY	ITEM	COMMENTS
SITE WORK	GRADING PLAN	
CONCRETE	FOUNDATION REINFORCING	
	MIX DESIGNS FOR ALL CLASSES OF CONCRETE	
	MILL CERTS. FOR REINFORCING	
MASONRY	STEEL REINFORCING	
	MILL CERTS. FOR REINFORCING	
STEEL	CURRENT AISC OR ICC SHOP CERTIFICATION	SEE STRUCTURAL DRAWINGS GENERAL NOTES FOR ADDITIONAL INFORMATION ON EACH SUBMITTAL.
	ANCHOR BOLTS	
	METAL ROOF/FLOOR DECK	
	OPEN WEB STEEL JOISTS/JOIST GIRDERS	
	SPECIAL JOIST AND JOIST GIRDER CALCULATIONS	
	STRUCTURAL STEEL	
	STRUCTURAL STEEL EMBEDS	
MILL CERTS. FOR STRUCTURAL STEEL		
STAIR AND MISC. METALS SHOP DRAWINGS	STAIR AND MISC. METALS SHOP DRAWINGS	
	STAIR CALCULATIONS	
LIGHT GAGE METAL	LIGHT-GAGE SHOP DRAWINGS	
	LIGHT-GAGE CALCULATIONS	
	ROOF TRUSS SHOP DRAWINGS	
	ROOF TRUSS DESIGN CALCULATIONS	
	ROOF TRUSS PLACEMENT DIAGRAM	
OTHER	ROOF TRUSS PERMANENT BRACING DIAGRAM	
	SPRINKLER SHOP DRAWINGS	

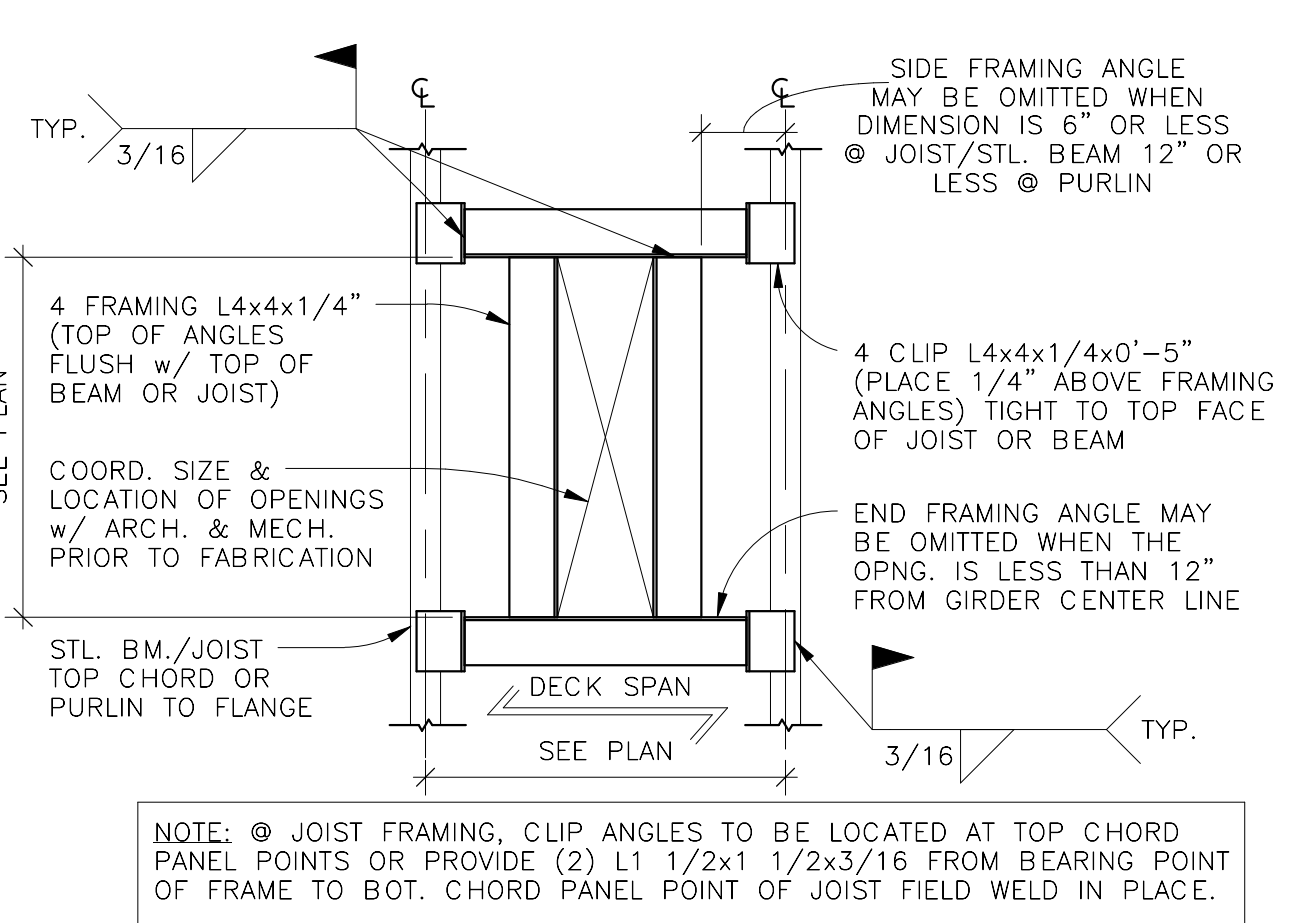
100% CONSTRUCTION DOCUMENTS

<p>CONSULTANTS:</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> AMERICAN ENGINEERS, INC. 65 ABERDEEN DR. CLACKAMING, NY 11911 (772) 651-7220 TEL. (772) 651-3246 FAX WWW.AEI.CC </div> <div style="text-align: center;"> ADVANCED STRUCTURAL TECHNOLOGIES 7212 METRO BLVD EDINA, MN 55439 (952) 854-9832 TEL. (952) 854-9890 FAX WWW.ASTMN.COM </div> <div style="text-align: center;"> ENGINEERING CONSULTANTS Experience you can build on™ STRUCTURAL, MECHANICAL, ELECTRICAL, TECHNOLOGY, MEDICAL EQUIPMENT SOLUTIONS (309) 788-0632 TEL. (309) 788-5917 FAX 3040 CITIES, IL WWW.KJWW.COM </div> </div>	<p>ARCHITECT/ENGINEERS:</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> ANDERSON ENGINEERING ENGINEERING • ARCHITECTURE • LAND SURVEYING ENVIRONMENTAL SERVICES • LANDSCAPE ARCHITECTURE </div> <div style="font-size: 8px;"> I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. PRINT NAME: John M. Levar SIGNATURE: DATE: 5-20-15 LICENSE # 43095 </div> <div style="font-size: 8px;"> Anderson Engineering of Minnesota, LLC 13605 1st Avenue North Suite 100 Plymouth, MN 55441 763-412-4000 (t) 763-412-4090 (f) www.ae-mn.com </div> </div>	<p>Drawing Title</p> <p style="text-align: center;">SPECIAL INSPECTIONS/TESTING/SUBMITTALS</p> <p>Approved: Project Director</p>	<p>Project Title</p> <p style="text-align: center;">WASH BAY / STORAGE BUILDING</p> <p>Location: CAMP NELSON NATIONAL CEMETERY NICHOLASVILLE, KENTUCKY</p> <p>Date: May 20, 2015</p> <p>Checked: AO</p> <p>Drawn: RL</p>	<p>Project Number</p> <p>833-CM3-026</p> <p>Building Number</p> <p>3003</p> <p>Drawing Number</p> <p style="text-align: center; font-size: 1.2em;">S-1.1</p> <p>Dwg. 33 of 53</p>	<p>National Cemetery Administration</p>
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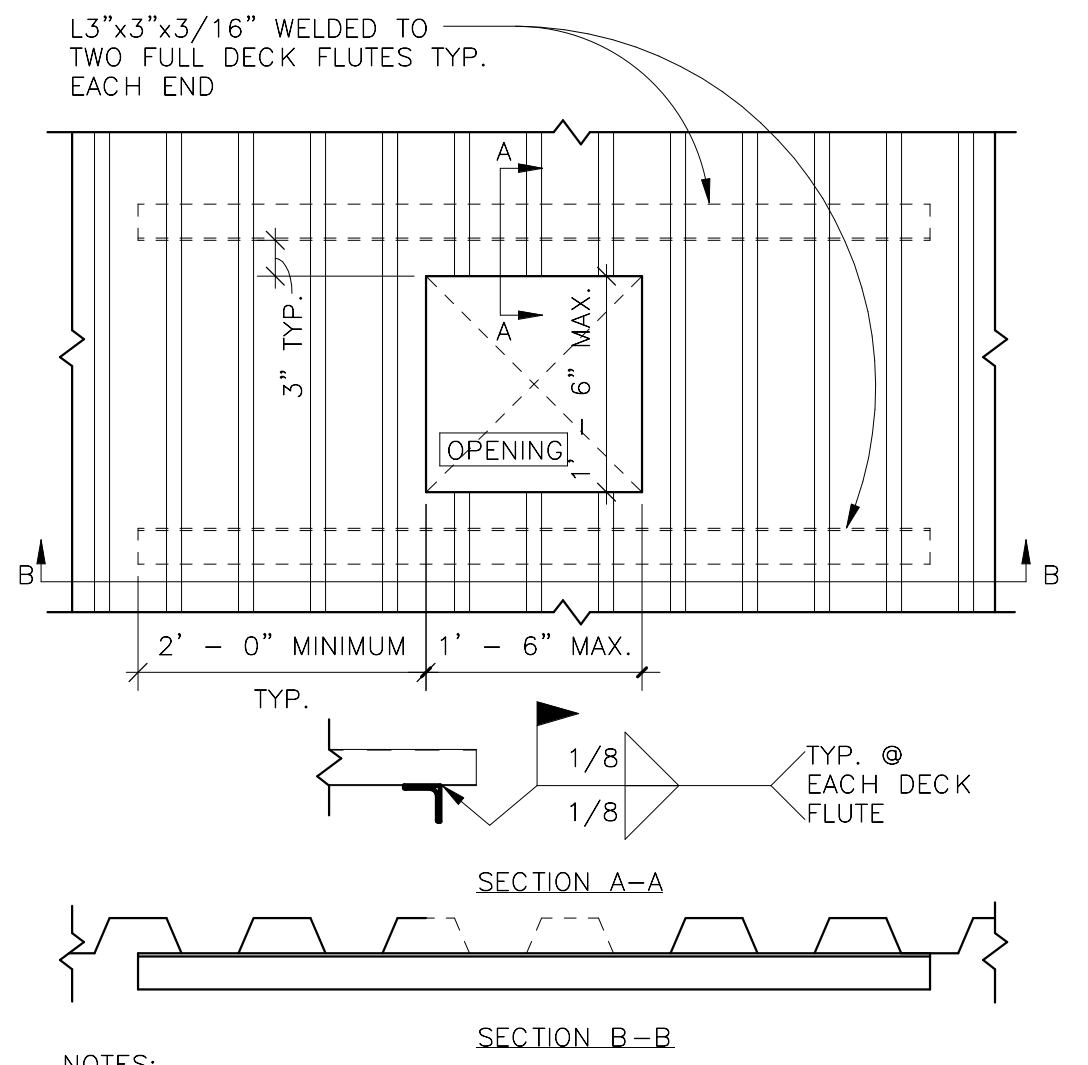


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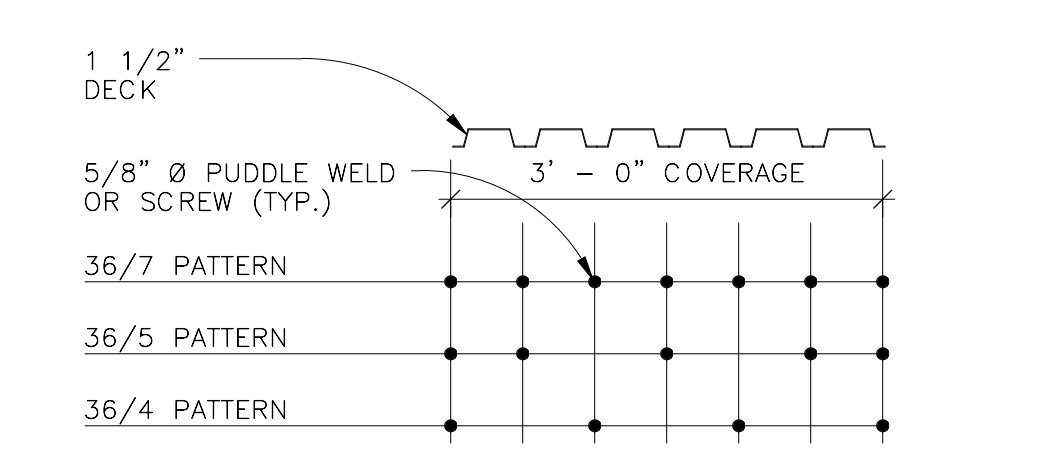
CONSULTANTS: 		ARCHITECT/ENGINEERS: 		Drawing Title FOUNDATION DETAILS		Project Title WASH BAY / STORAGE BUILDING		Project Number 833-CM3-026		National Cemetery Administration 	
AMERICAN ENGINEERS, INC. 65 ABBOTT DR. GLASGOW, NY 14241 (716) 651-7220 TEL. (716) 651-3246 FAX WWW.AEI.CC		ADVANCED STRUCTURAL TECHNOLOGIES 7212 METRO BLVD EDINA, MN 55439 (952) 854-3302 TEL. (952) 854-9890 FAX WWW.ASTMN.COM		Anderson Engineering of Minnesota, LLC 13605 1st Avenue North Suite 100 Plymouth, MN 55441 763-412-4000 (t) 763-412-4090 (f) www.ae-mn.com		Location CAMP NELSON NATIONAL CEMETERY NICHOLASVILLE, KENTUCKY		Building Number 3003			
Revisions:		I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. PRINT NAME: John M. Levar SIGNATURE: DATE: 5-20-15 LICENSE # 43095		Approved: Project Director		Date May 20, 2015		Drawing Number S-4.1		Dwg. 36 of 53	



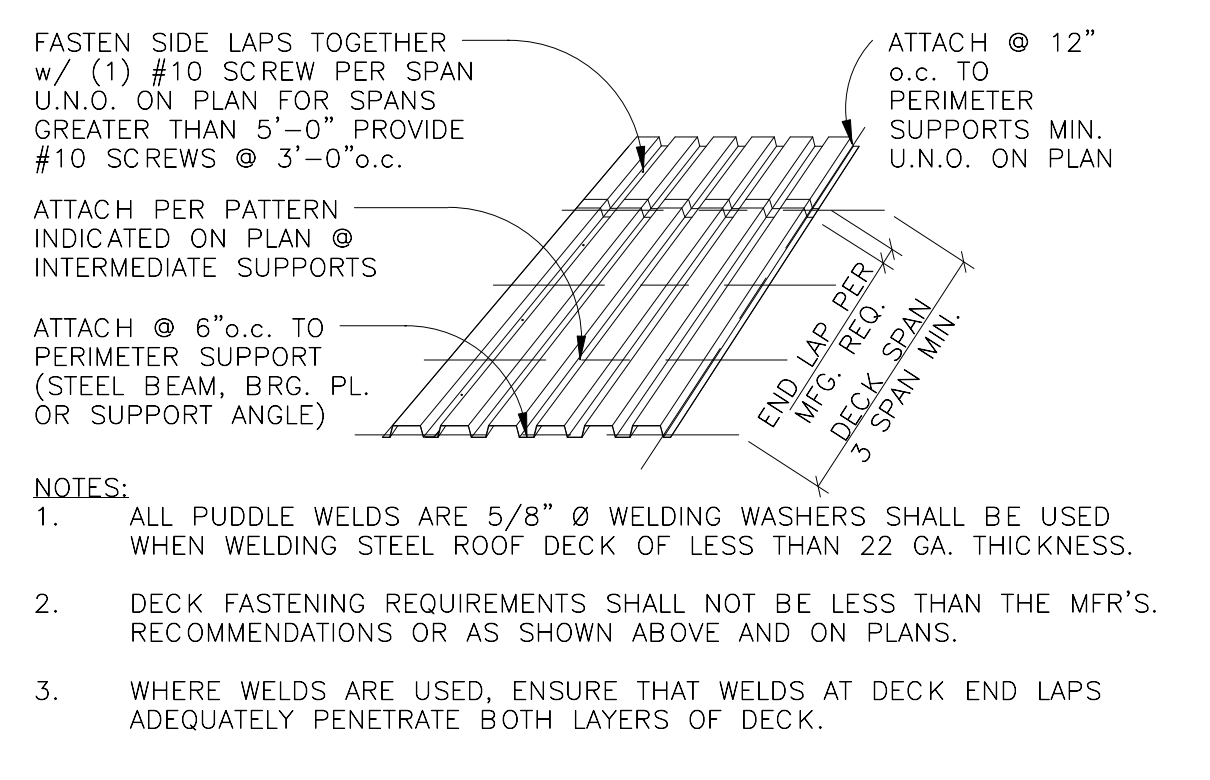
17 ROOF AND MEZZANINE OPENING SUPPORT FRAME - 18" 3/4" = 1'-0"



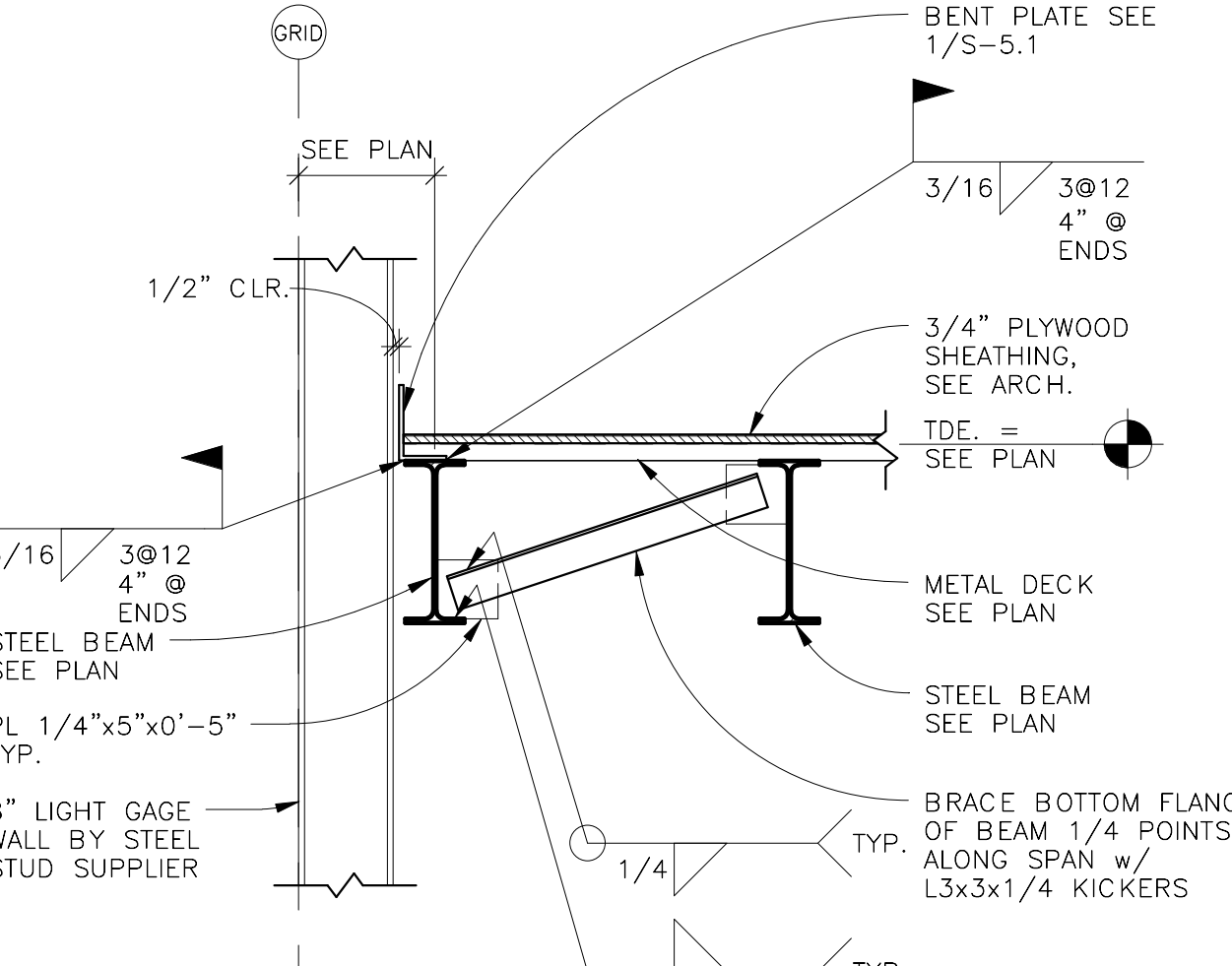
18 ROOF AND MEZZANINE DECK OPENINGS - SMALLER THAN 18" 3/4" = 1'-0"



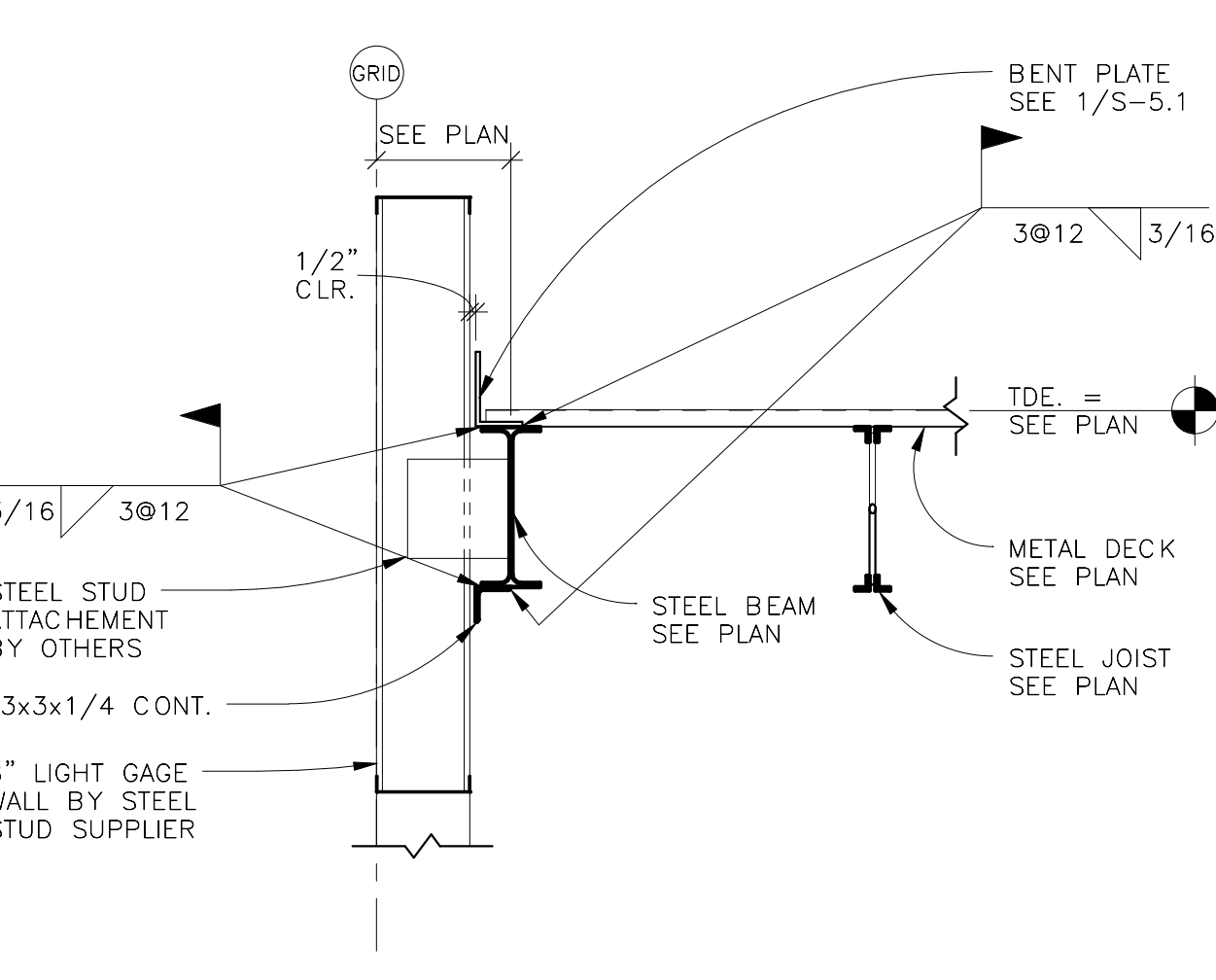
19 FASTENING PATTERNS FOR NON-COMPOSITE METAL DECK 3/4" = 1'-0"



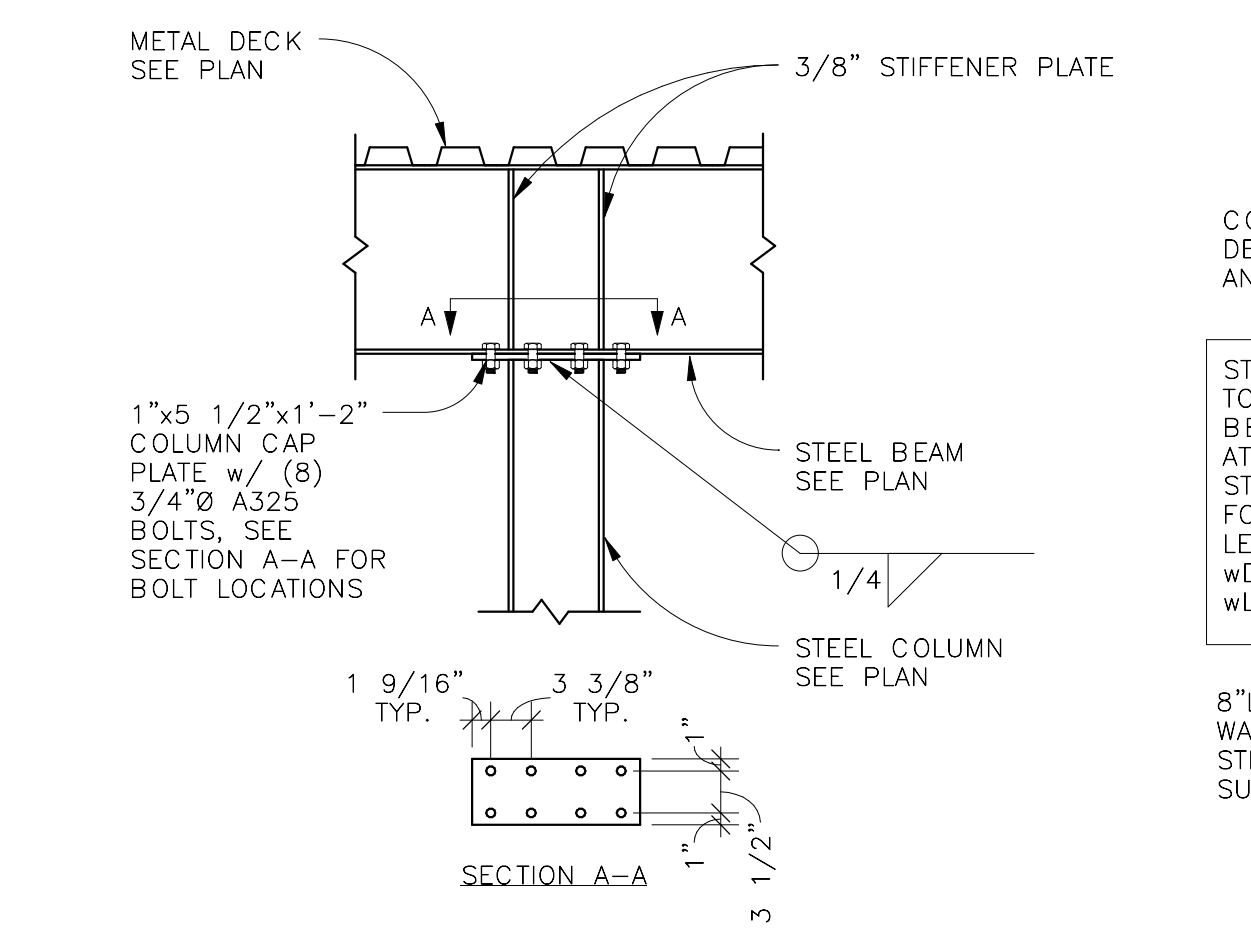
20 TYP. 1 1/12" ROOF DECK FASTENING INFORMATION 1/2" = 1'-0"



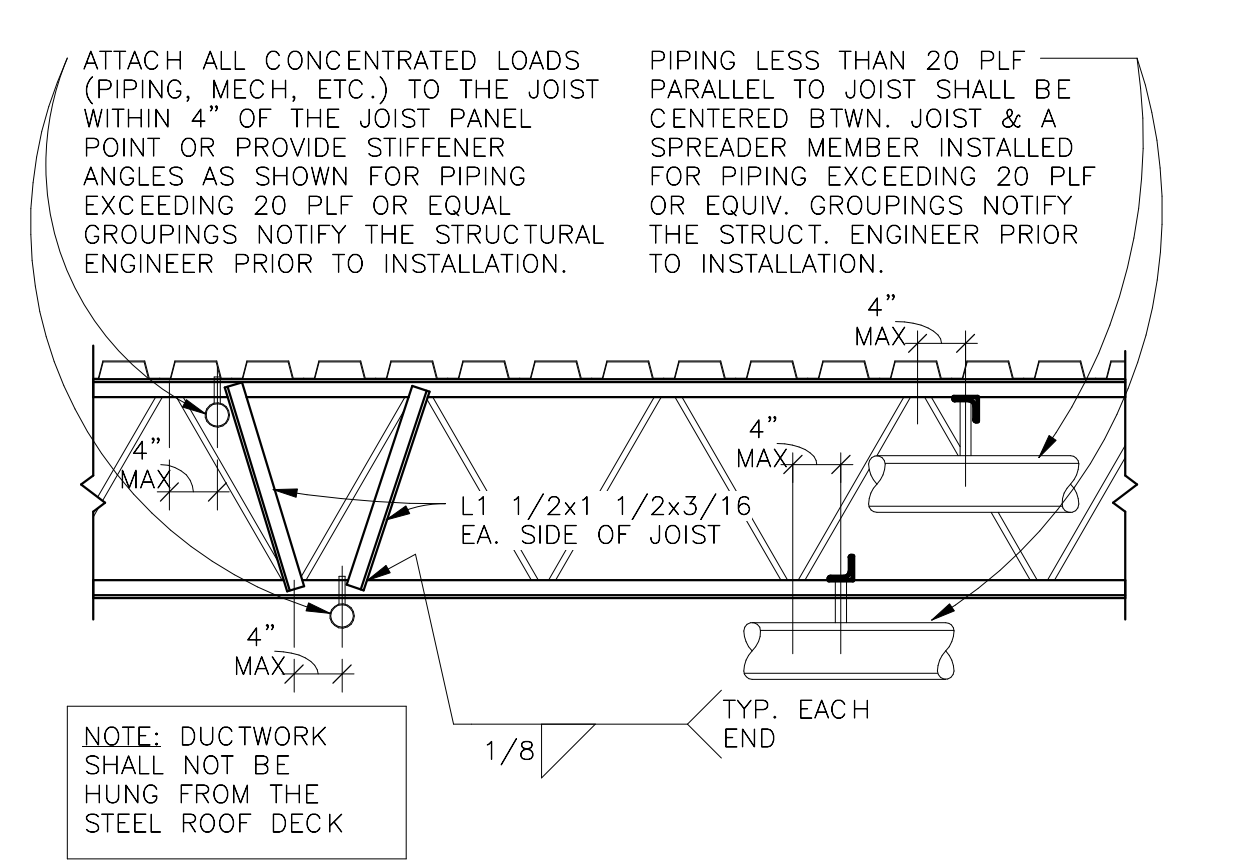
13 SECTION 3/4" = 1'-0"



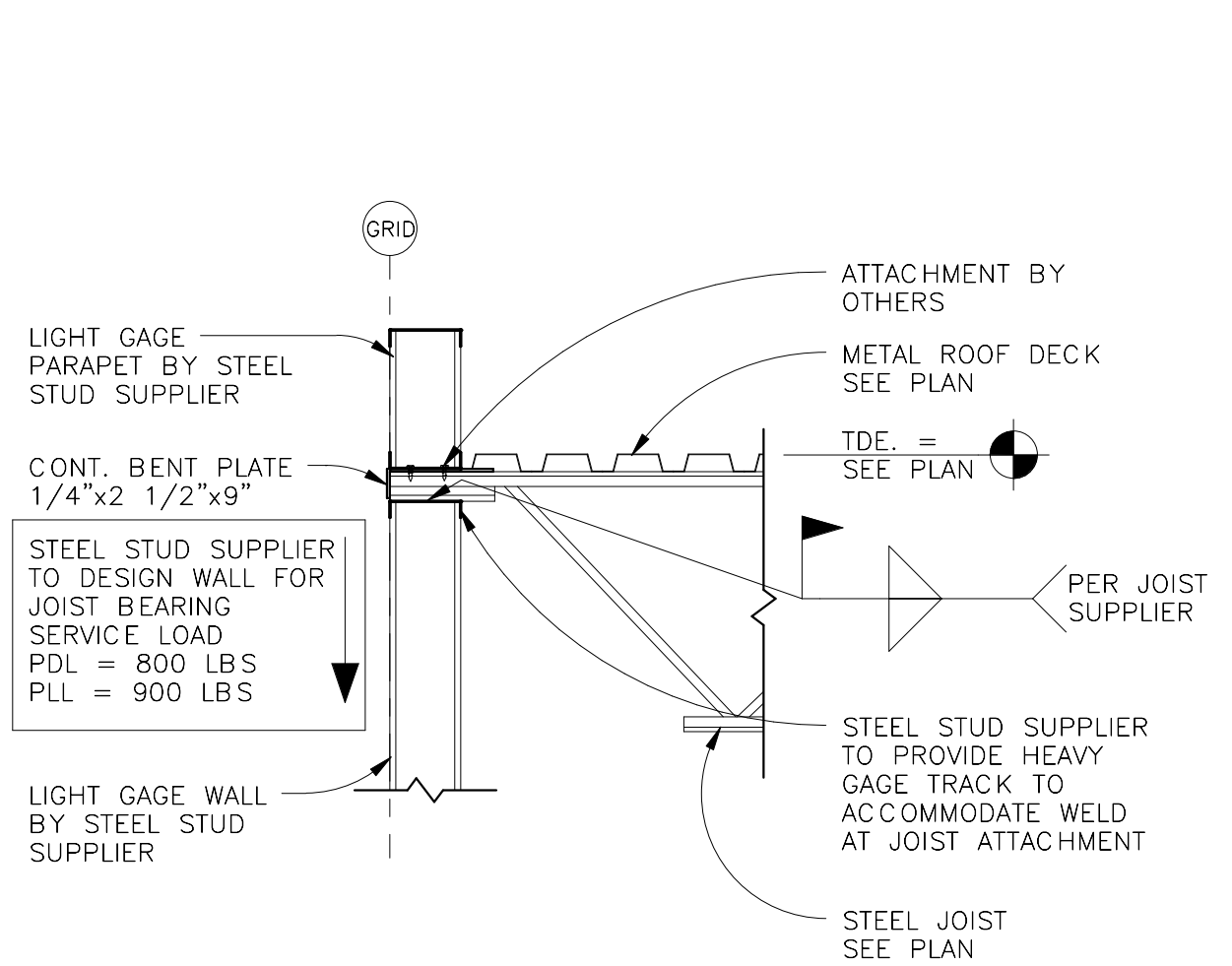
14 SECTION 3/4" = 1'-0"



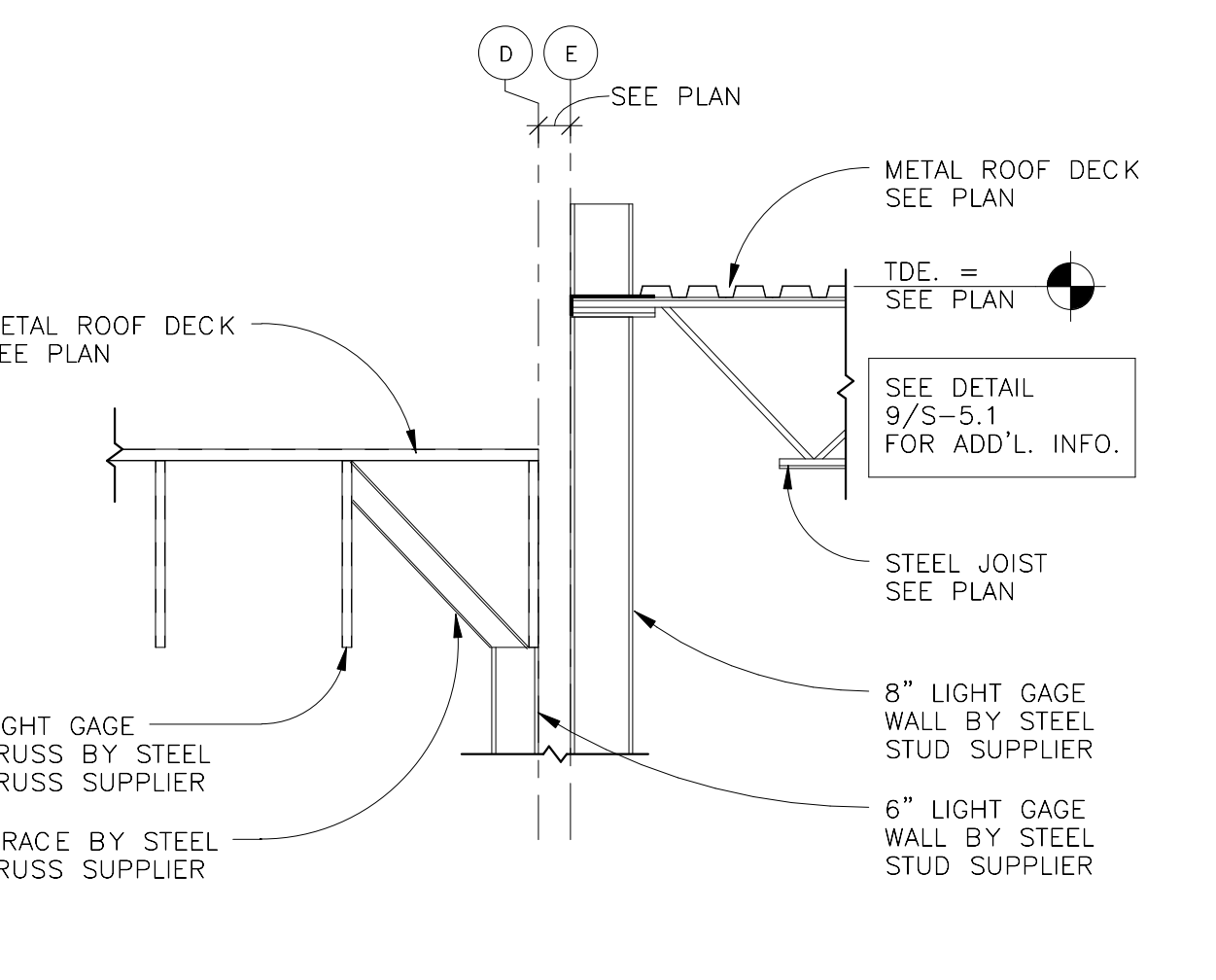
15 SECTION 3/4" = 1'-0"



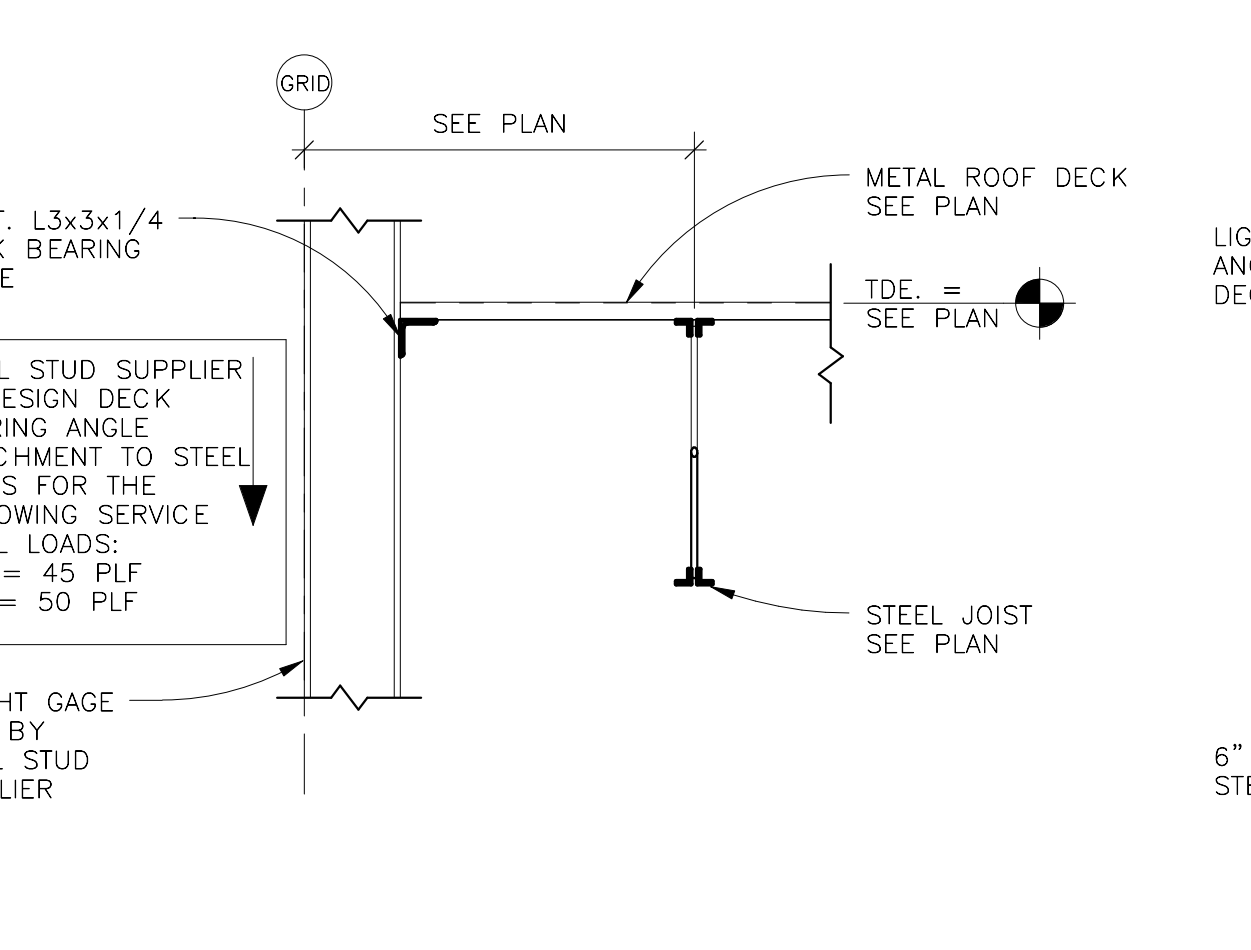
16 TYP. HANGER REQUIREMENTS FOR STEEL JOISTS 3/4" = 1'-0"



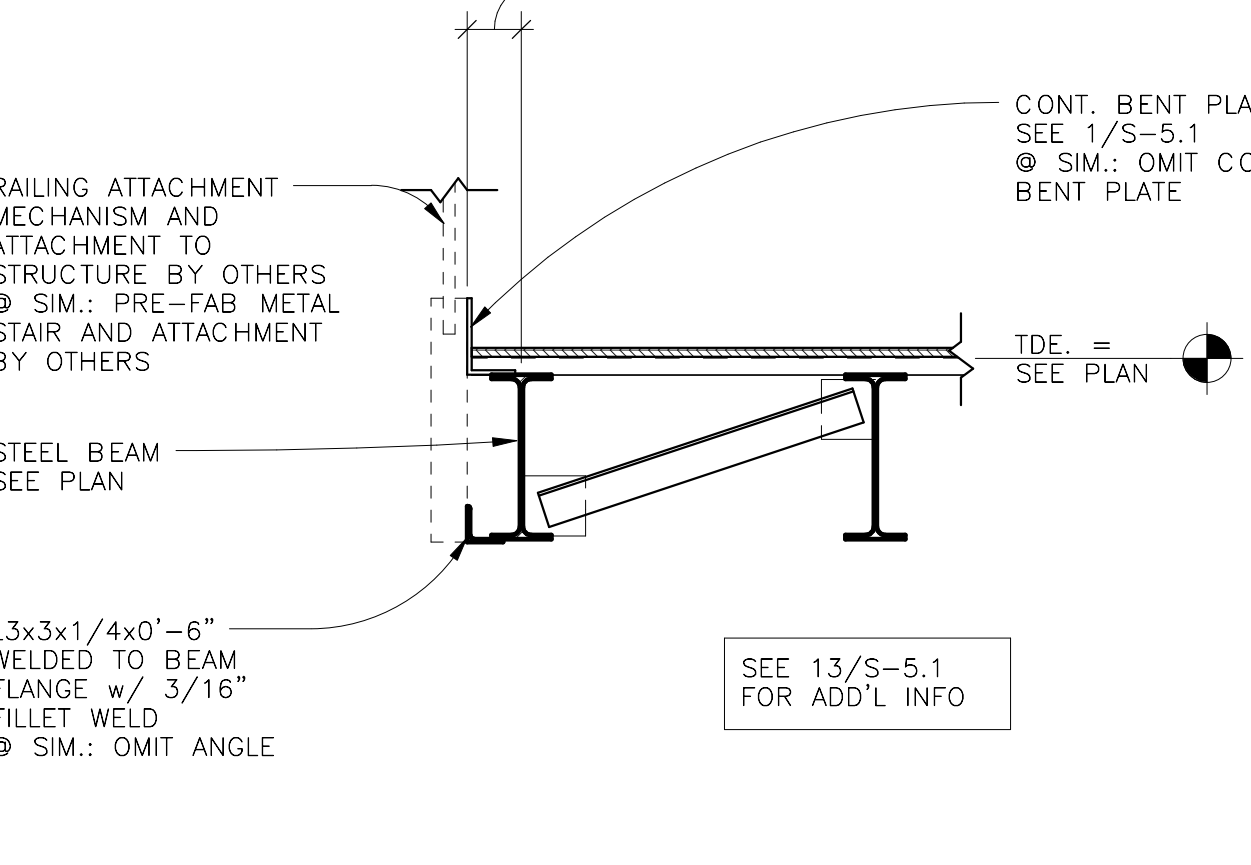
9 SECTION 3/4" = 1'-0"



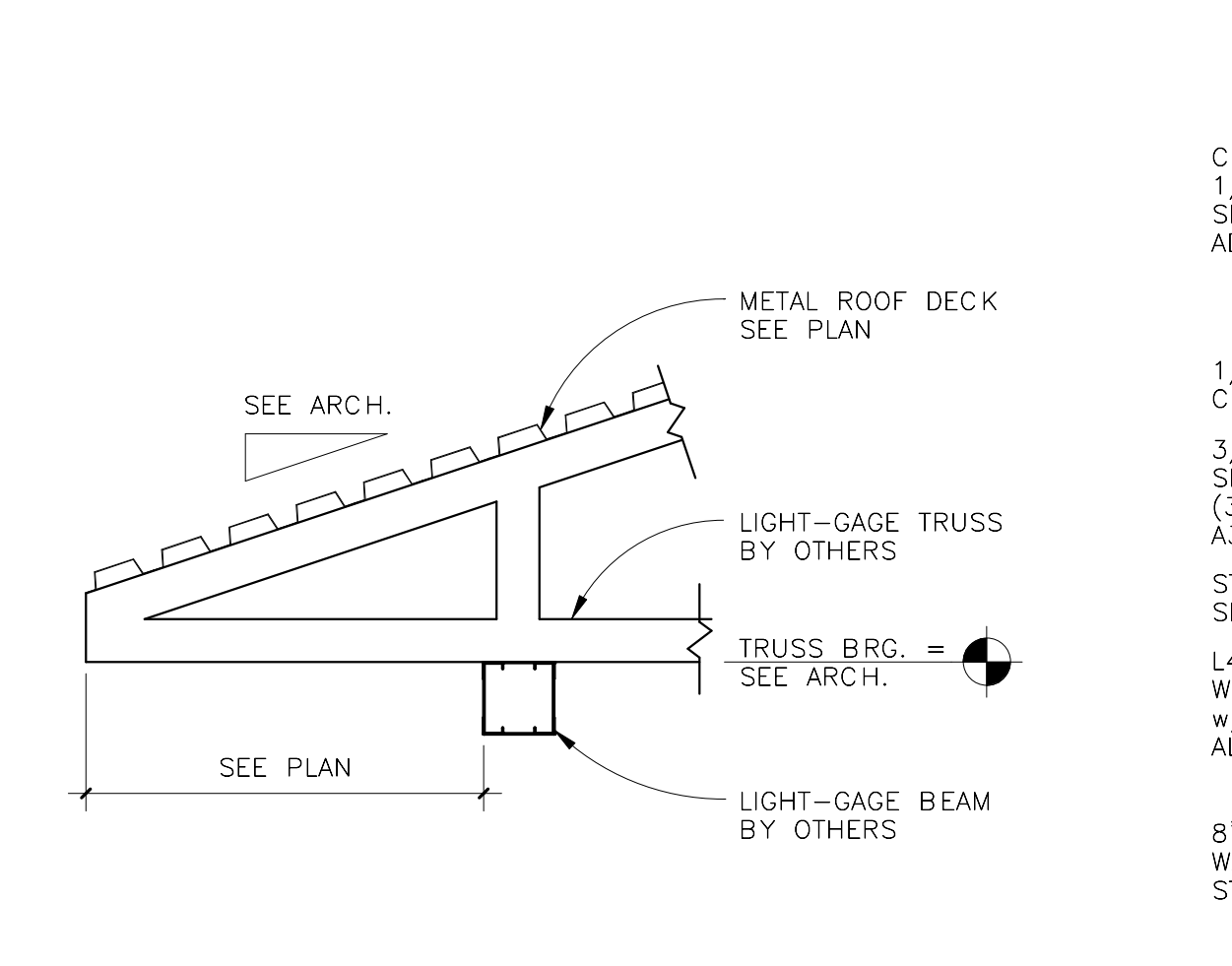
10 SECTION 1/2" = 1'-0"



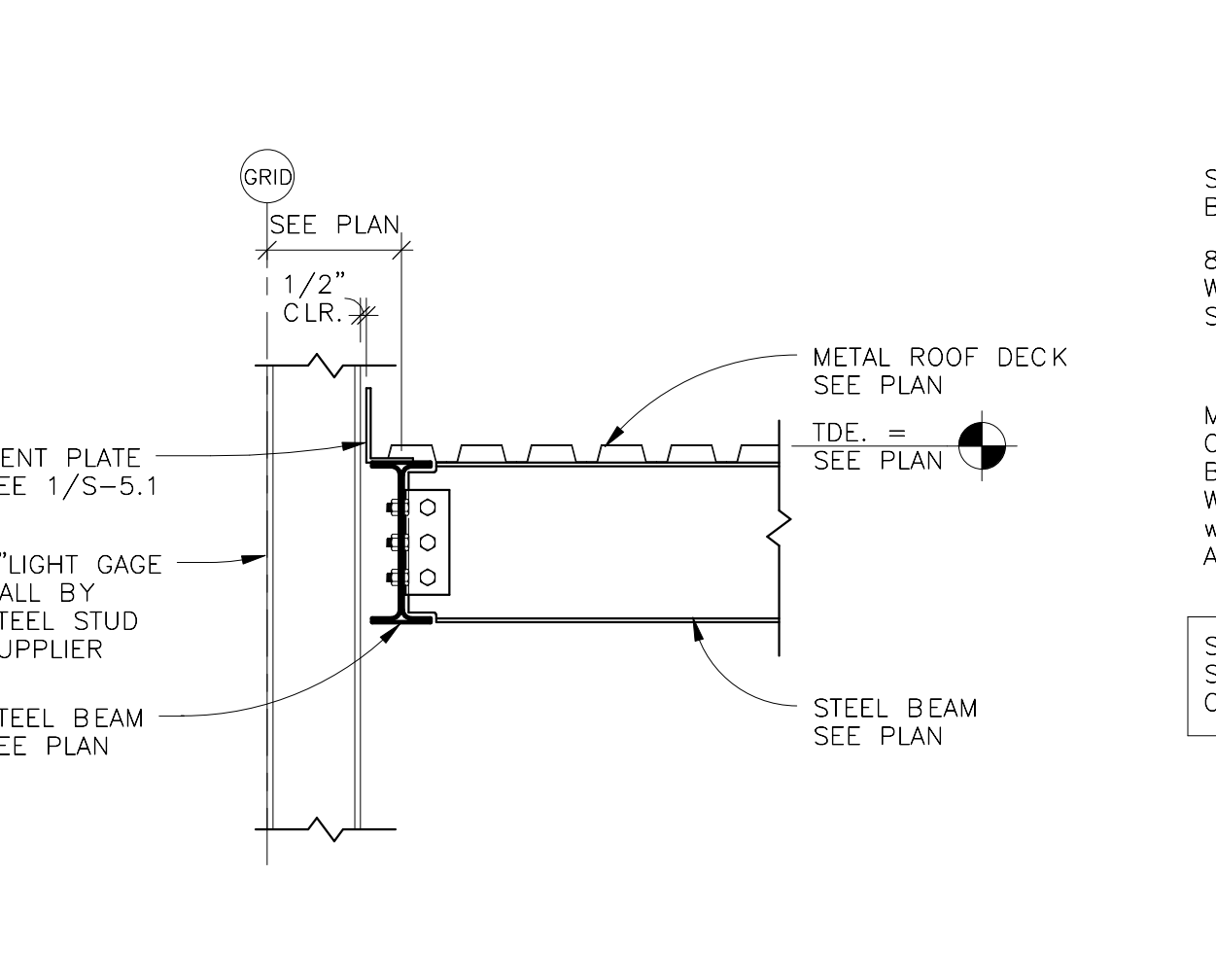
11 SECTION 3/4" = 1'-0"



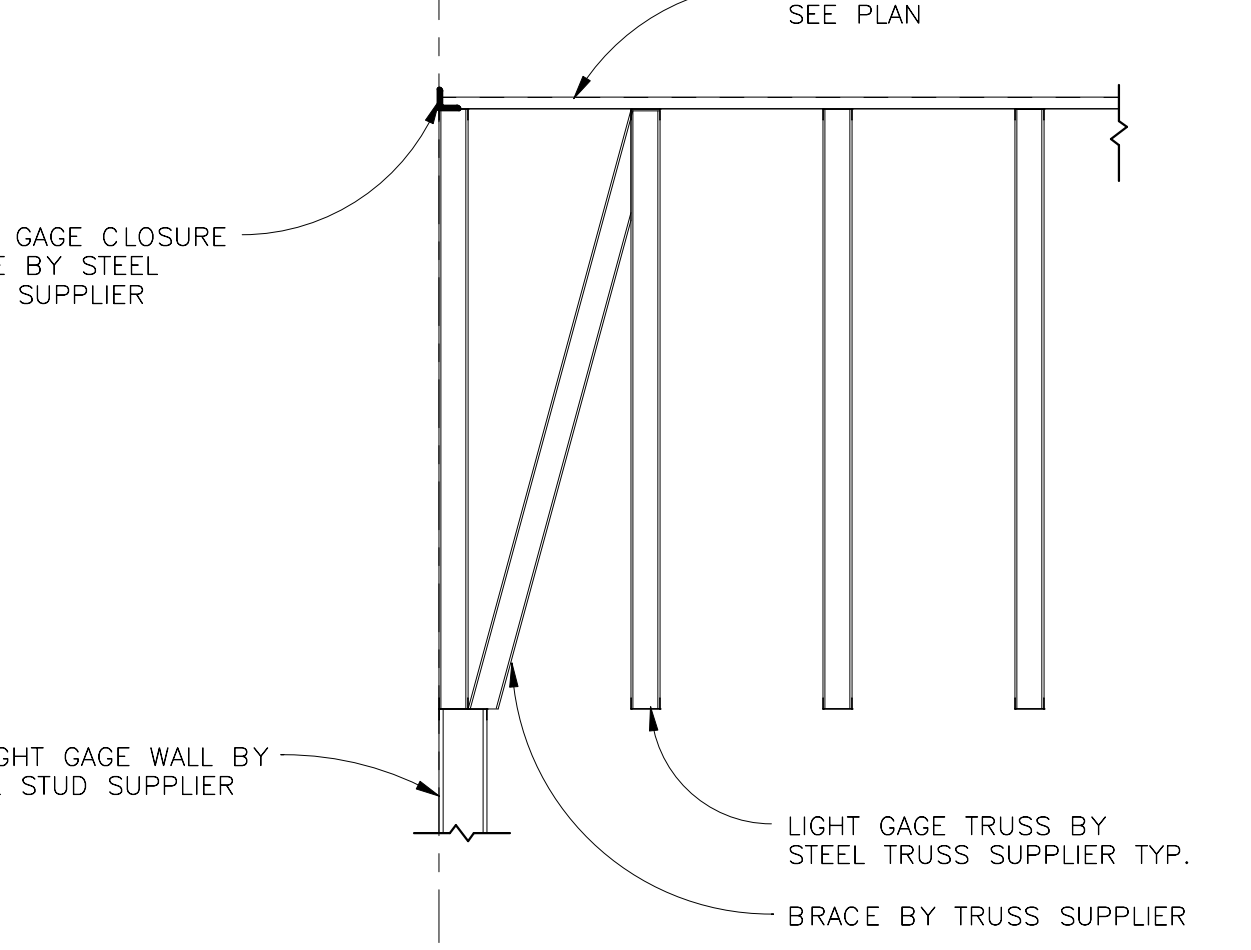
12 SECTION 3/4" = 1'-0"



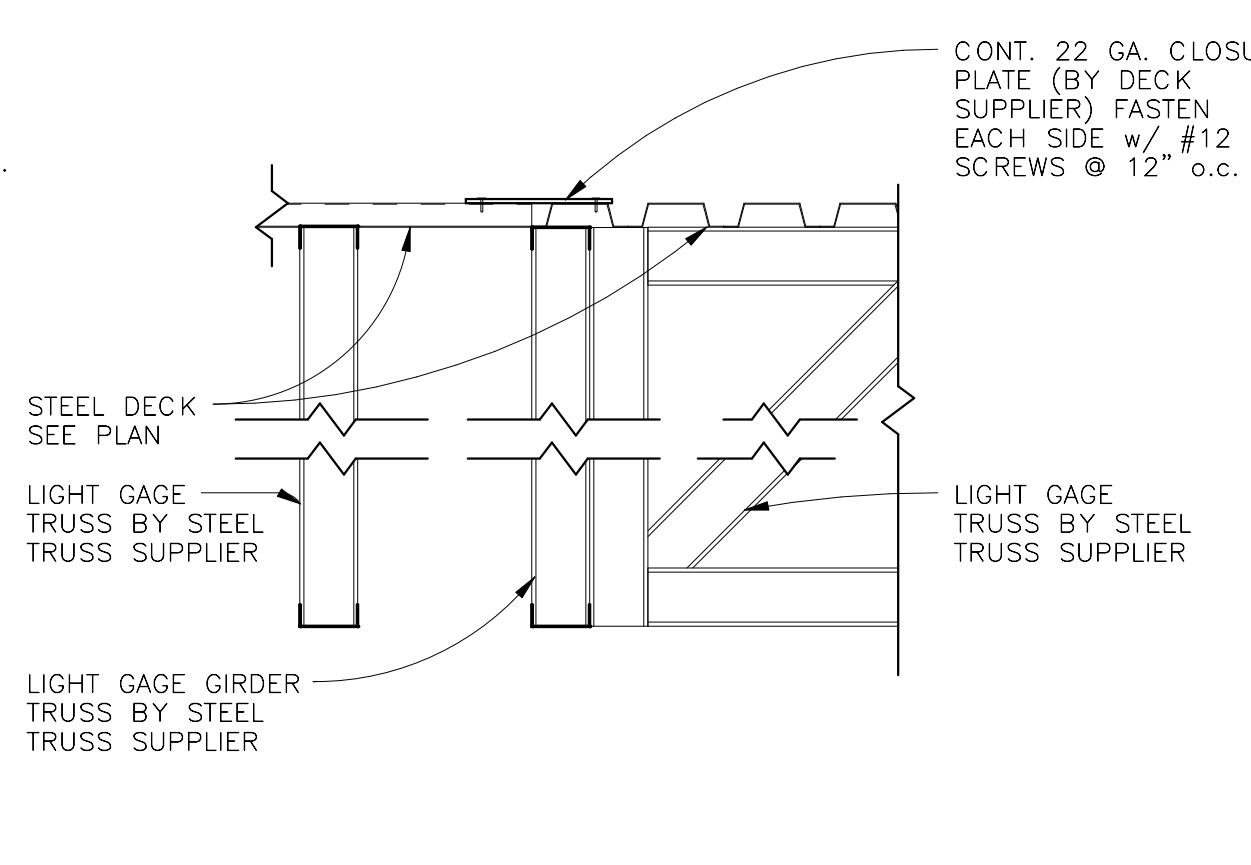
5 SECTION 3/4" = 1'-0"



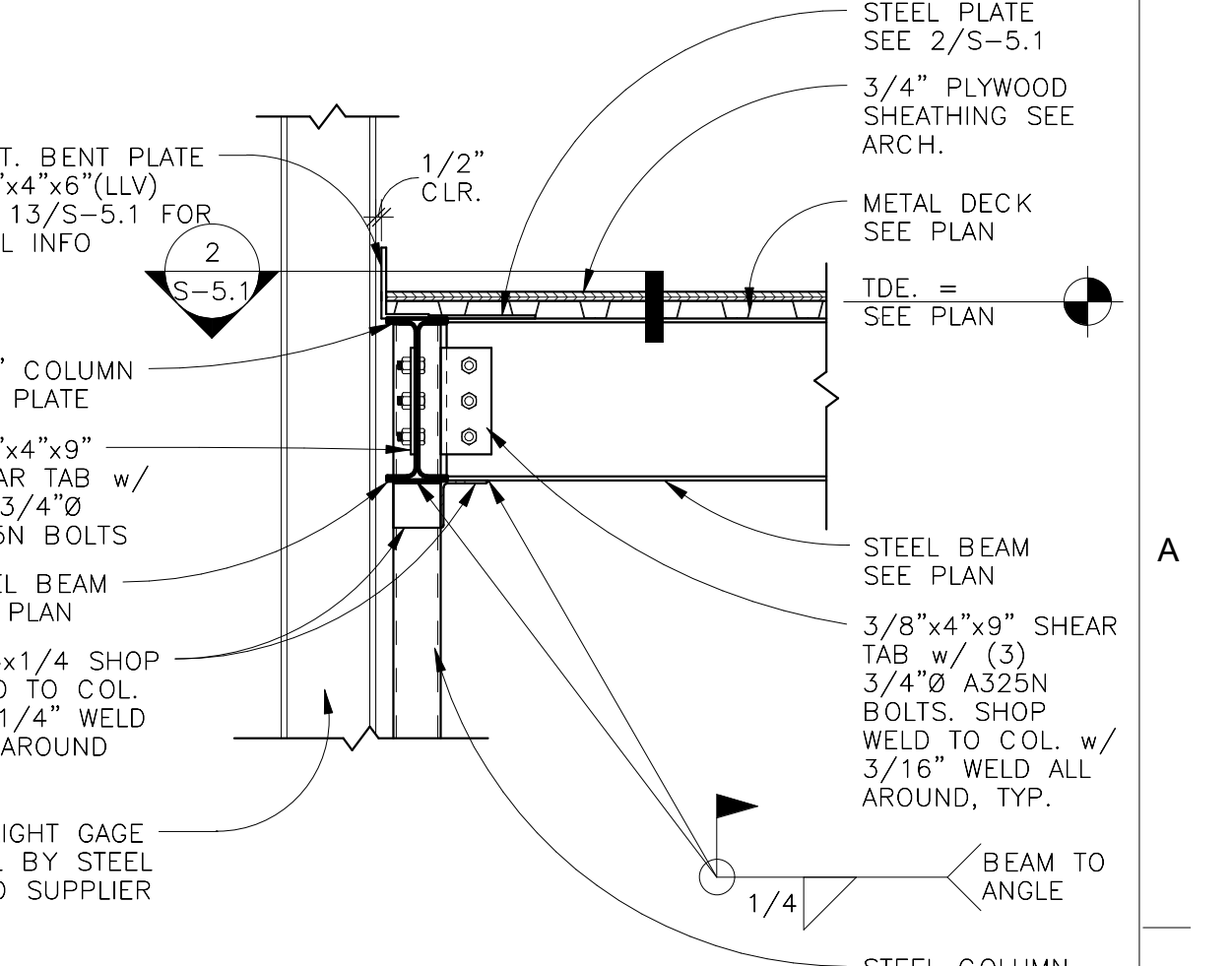
6 SECTION 3/4" = 1'-0"



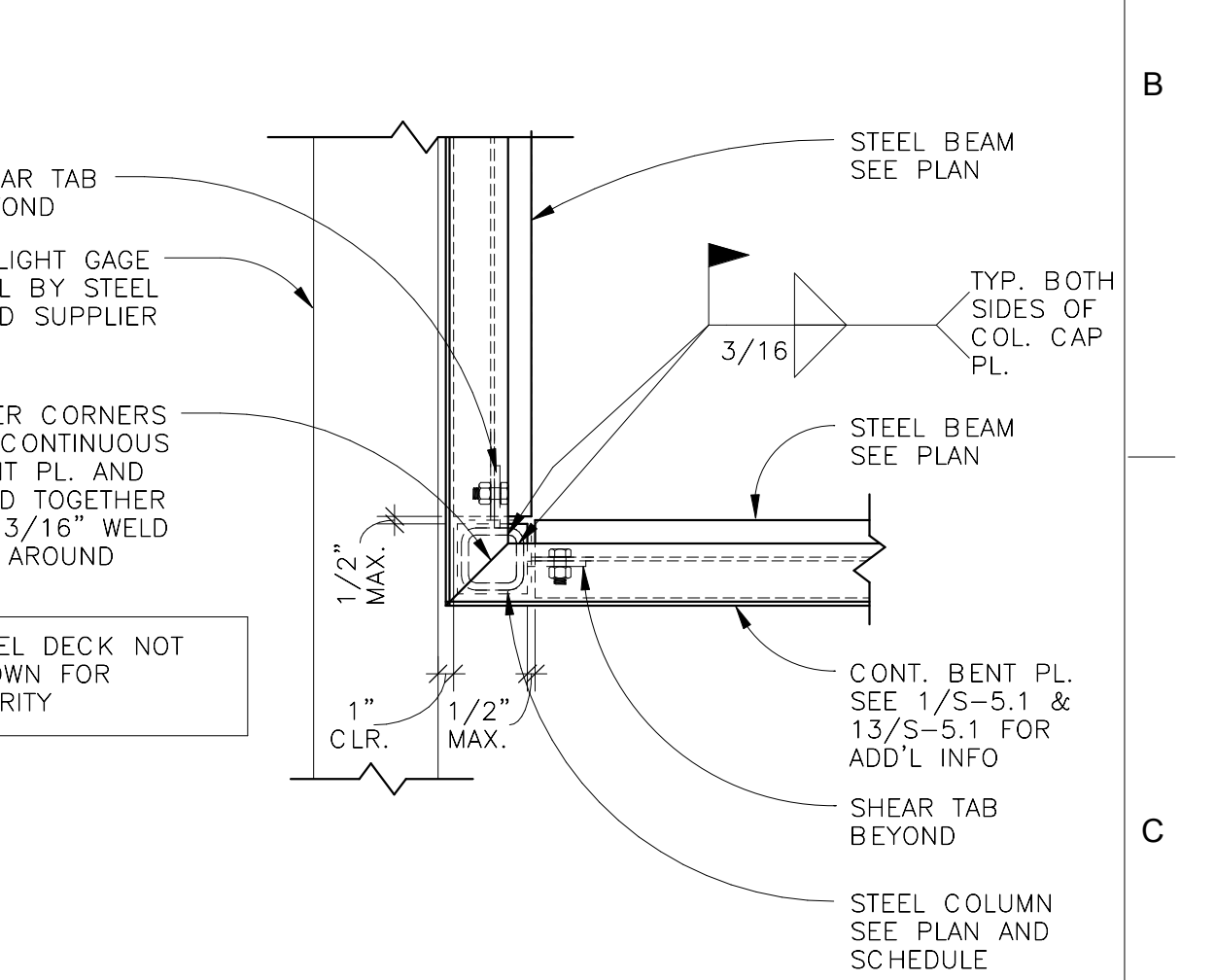
7 SECTION 1/2" = 1'-0"



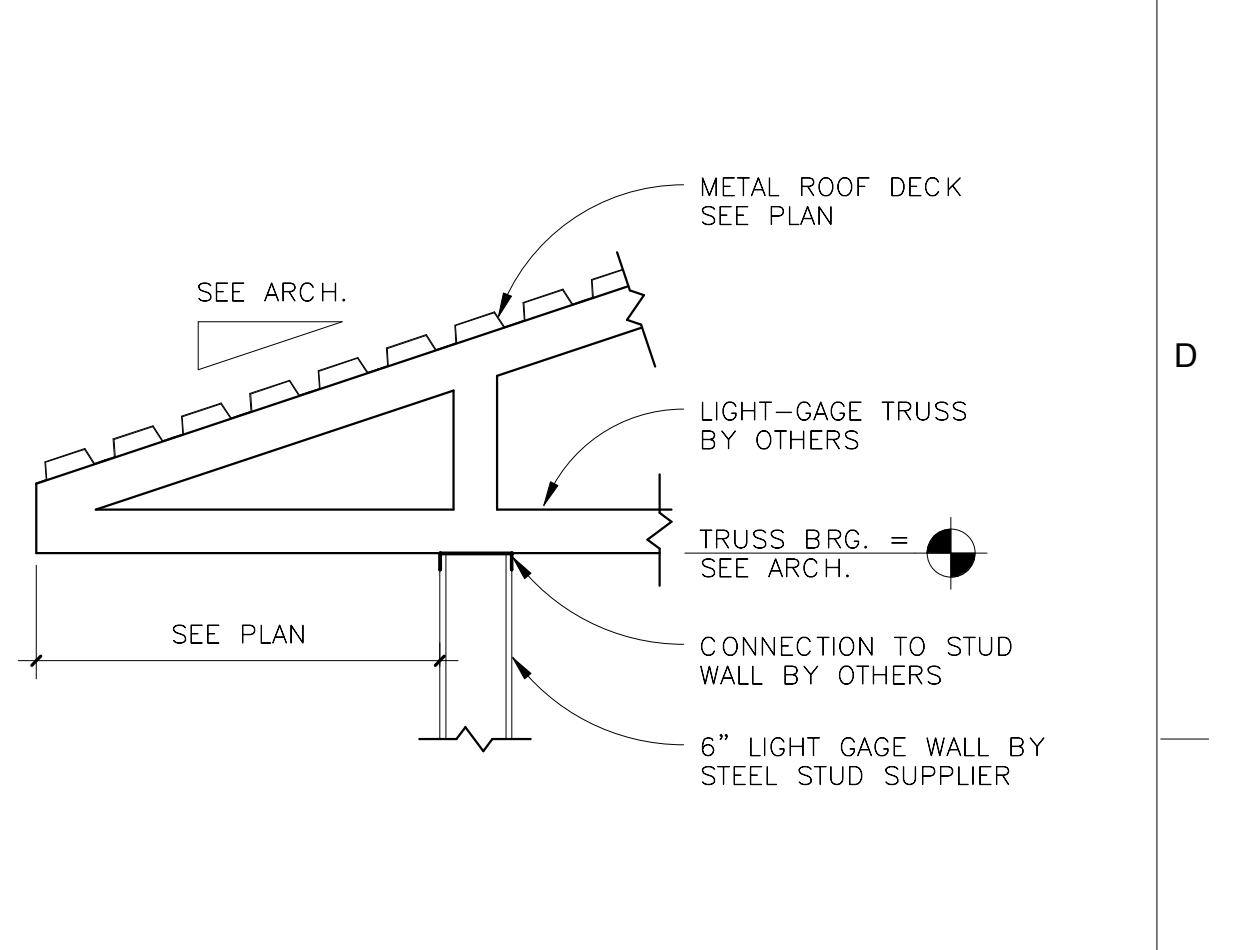
8 SECTION 1" = 1'-0"



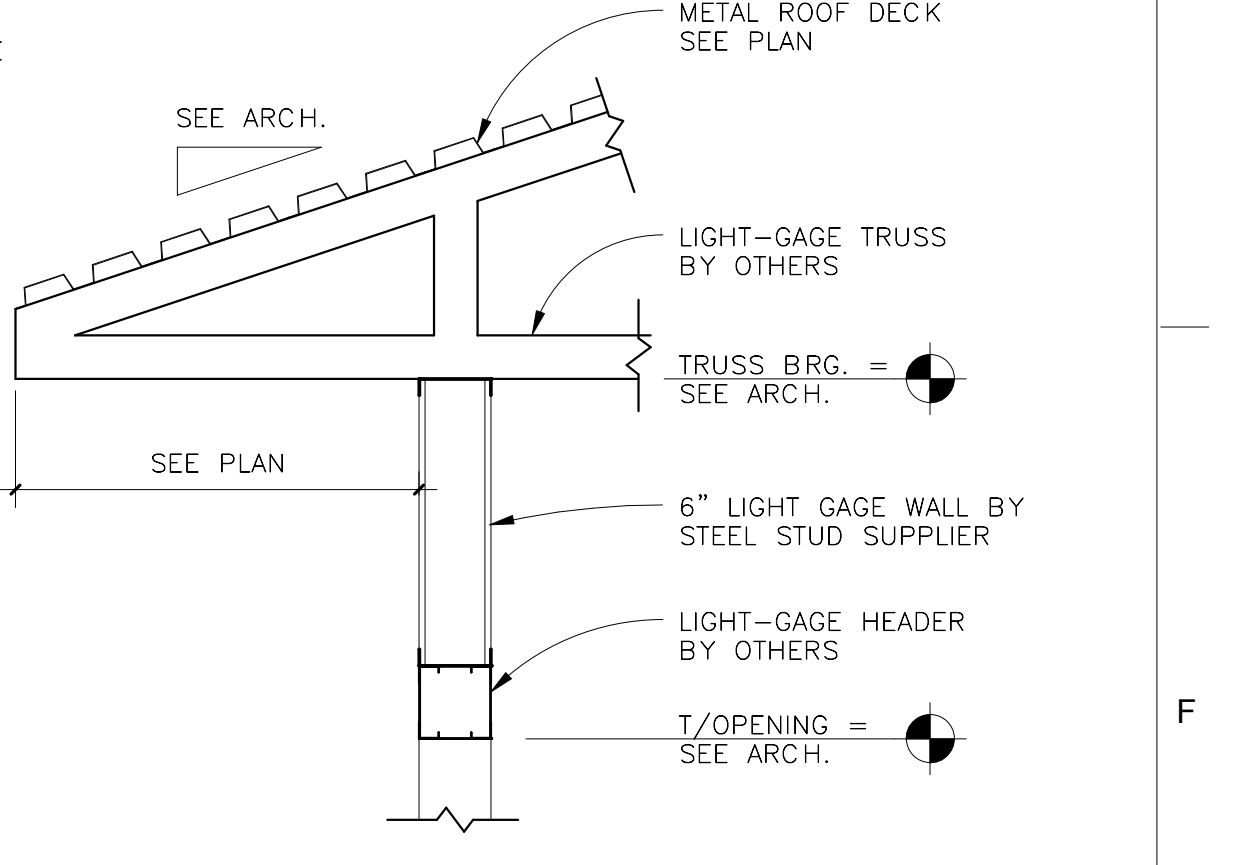
1 SECTION 3/4" = 1'-0"



2 PLAN DETAIL 1" = 1'-0"



3 SECTION 3/4" = 1'-0"



4 SECTION 3/4" = 1'-0"

100% CONSTRUCTION DOCUMENTS

CONSULTANTS: 		ARCHITECT/ENGINEERS: 		Drawing Title ROOF FRAMING DETAILS		Project Title WASH BAY / STORAGE BUILDING		Project Number 833-CM3-026		National Cemetery Administration 	
AMERICAN ENGINEERS, INC. 65 ABBOTSDEN DR. GLASSBORO, NJ 07031 (202) 651-7220 TEL. (202) 651-3246 FAX WWW.AEI.CC		ADVANCED STRUCTURAL TECHNOLOGIES 7212 METRO BLVD EDINA, MN 55438 (952) 854-9302 TEL. (952) 854-9690 FAX WWW.ASTMN.COM		I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. PRINT NAME: John M. Levar SIGNATURE: DATE: 5-20-15 LICENSE # 43095		Anderson Engineering of Minnesota, LLC 13605 1st Avenue North Suite 100 Plymouth, MN 55441 763-412-4000 (o) 763-412-4090 (f) www.ae-mn.com		Approved: Project Director			Location CAMP NELSON NATIONAL CEMETERY NICHOLASVILLE, KENTUCKY
Revisions:		Date		Date May 20, 2015		Checked AO		Drawn RL		Drawing Number S-5.1	Dwg. 37 of 53