

X: 39.55 ft Y: -5.08 ft Z: 26.48 ft

PROJECT NUMBER:

23106

Date  
11/7/2023 2:09:32 PM

REVISION

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208-732-2354

EMAIL:  
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SHEET NUMBER:

P-1

PROJECT NUMBER:

23106

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LOCATION:

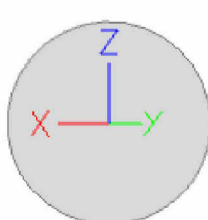
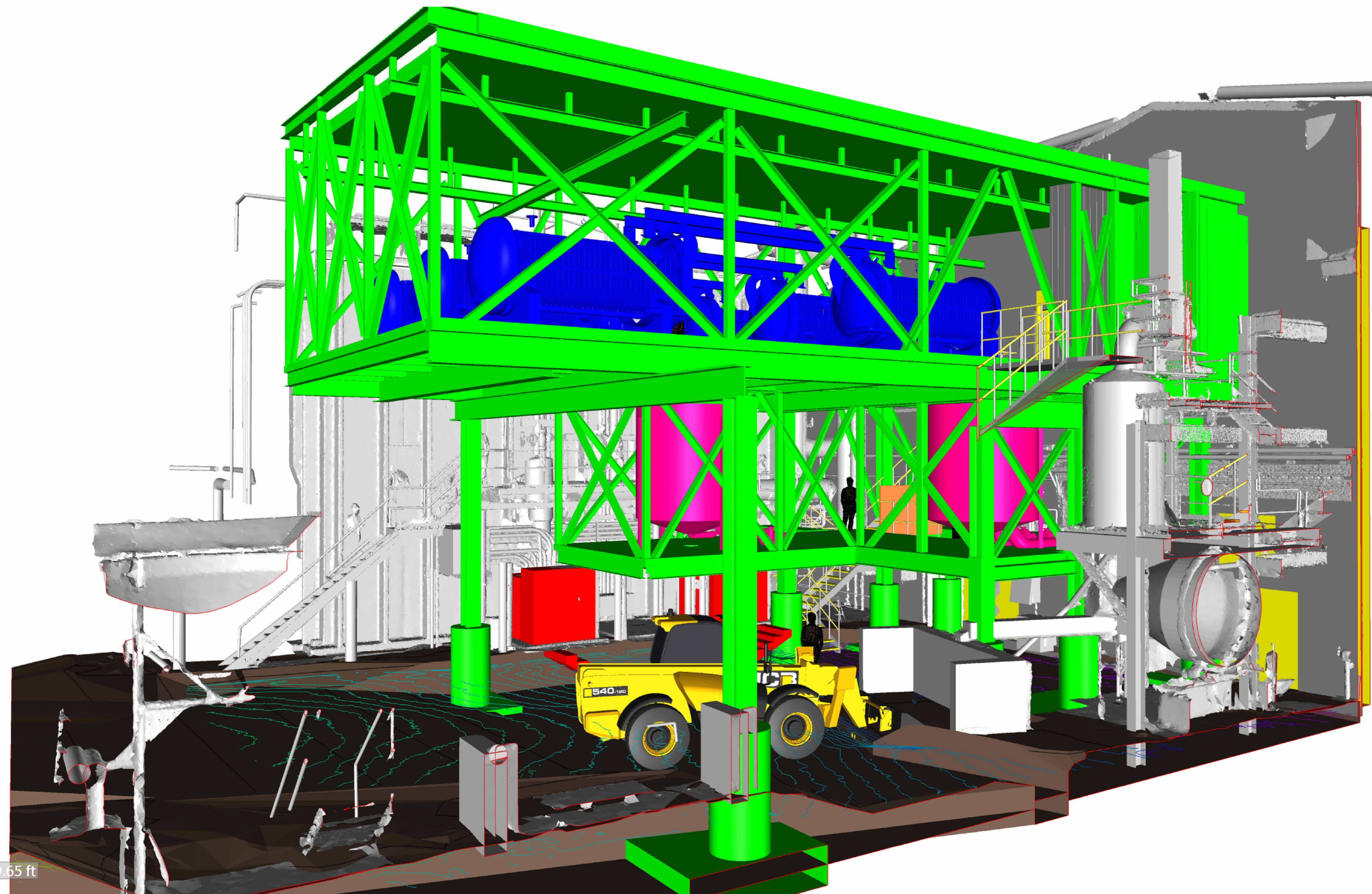
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P-2



X: 7.06 ft Y: 24.12 ft Z: 19.65 ft

PROJECT NUMBER:

23106

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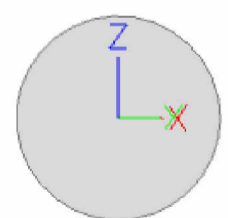
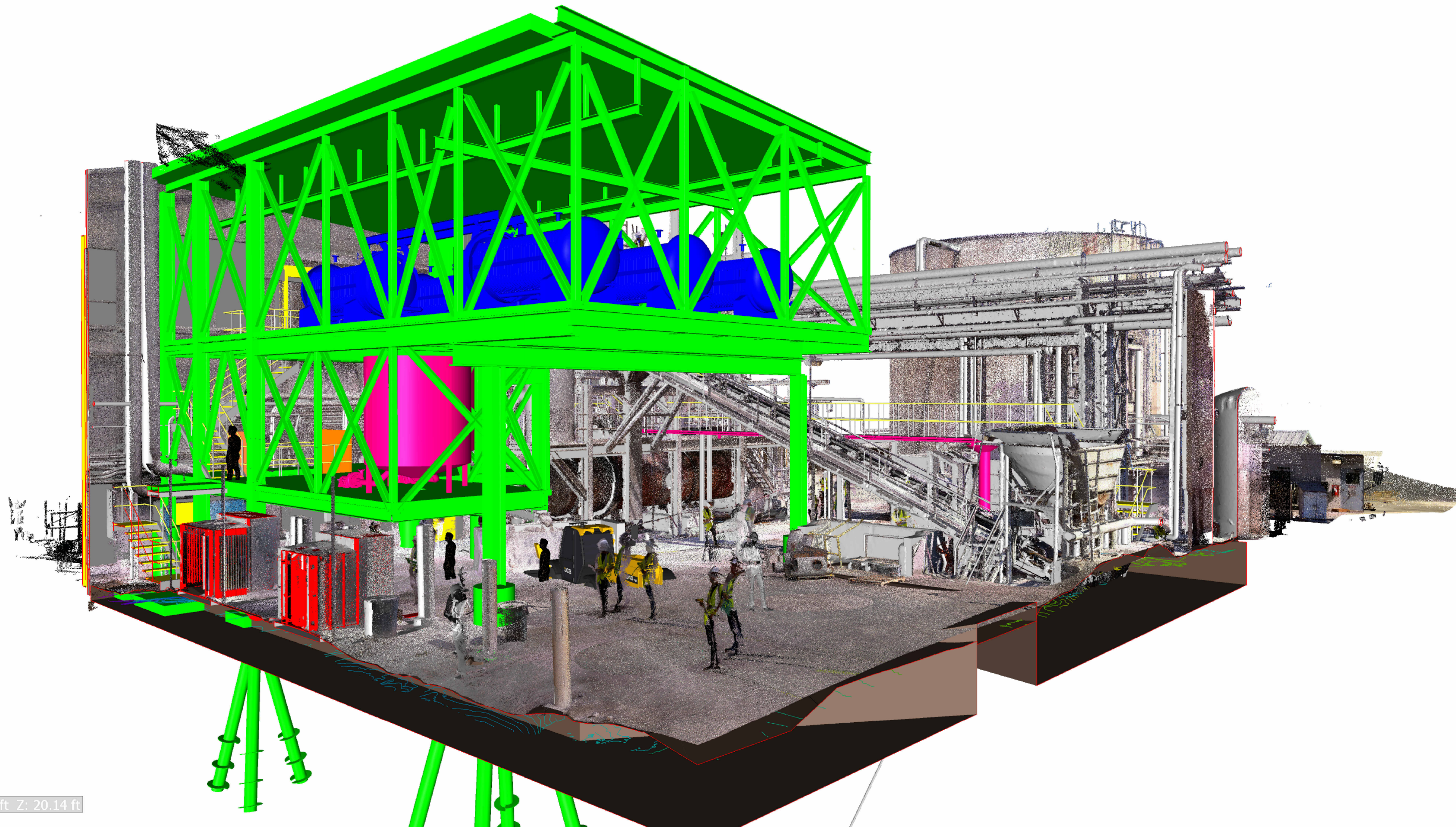
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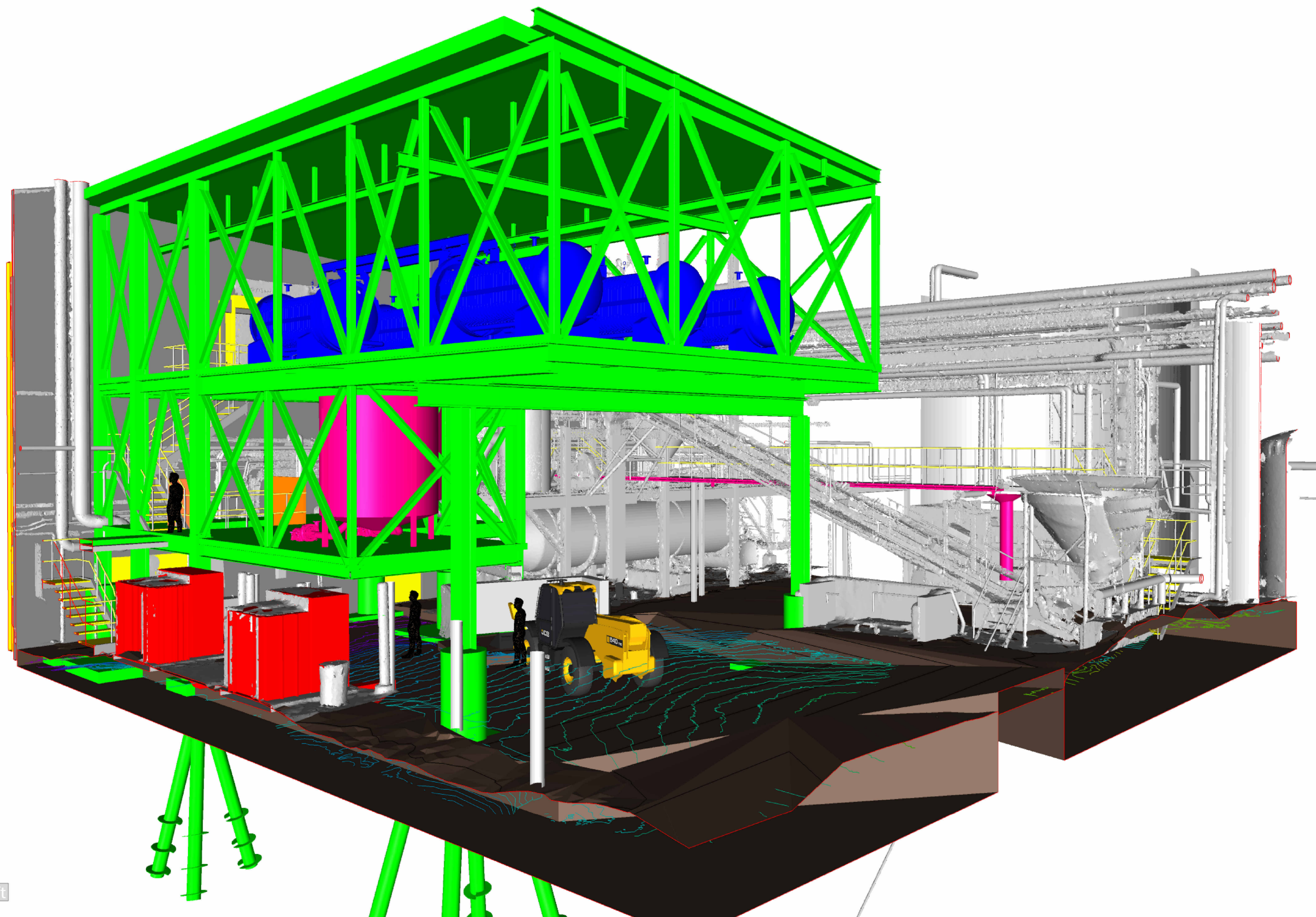
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P-3



X: 38.82 ft Y: -99.58 ft Z: 20.14 ft



X: 38.82 ft Y: -99.58 ft Z: 20.14 ft

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P-4

**APPLICABLE CODES, STANDARDS AND SPECIFICATIONS:**

THE FOLLOWING CODES SHALL BE DEEMED MANDATORY FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT. DESIGN AND CONSTRUCTION SHALL BE BASED ON, BUT NOT LIMITED TO THE FOLLOWING STANDARDS AND SPECIFICATIONS (LATEST EDITIONS):

INTERNATIONAL BUILDING CODE (IBC) 2018 EDITION

AMERICAN CONCRETE INSTITUTE (ACI)

PRESTRESSED CONCRETE INSTITUTE (PCI)

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AMERICAN IRON AND STEEL INSTITUTE (AISI)

STRUCTURAL MEMBERS AMERICAN WELDING SOCIETY (AWS)

AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM)

RECOMMENDED DESIGN PRACTICES (MANUAL)

OCCUPATIONAL SAFETY AND HEALTH STANDARDS (OSHA)

ALL SPECIFICATIONS FOR ARCHITECTURAL, CIVIL, STRUCTURAL, ELECTRICAL AND MECHANICAL WORK.

**DESIGN CRITERIA:**

CONTRACTOR SHALL VERIFY THE CORRECTNESS OF ALL DIMENSIONS PRIOR TO FABRICATION AND CONSTRUCTION.

ROOF: DEAD LOAD (AS CALCULATED)  
20 PSF MIN. LIVE LOAD  
30 PSF SNOW LOAD  
15 PSF MECHANICAL & ELECTRICAL LIVE LOAD

WIND LOAD: 115 MPH (IBC, 3 SECOND GUST) RISK CATEGORY II, AT 33 FT, EXPOSURE "C"

ADDITIONAL WIND LOAD CRITERIA AS PER FM GLOBAL: WALL PANELS FOR THE KELLY FILTER BUILDING DESIGNED WITH WIND PRESSURE RATINGS ADEQUATE FOR THE MAXIMUM INWARD AND OUTWARD WIND LOAD DESIGN PRESSURES OF 35 PSF INWARD AND 35 PSF OUTWARD. INCREASED DESIGN PRESSURES IN THE 5 FT. WIDE ZONE 5 TO A WIND LOAD DESIGN PRESSURE OF 45 PSF OUTWARD. THE ZONE 5 INWARD DESIGN PRESSURE IS 35 PSF.

SEISMIC LOAD: AS PER IBC SITE SPECIFIC DATA FOR 0.20 SECOND SPECTRAL RESPONSE ACCELERATION.

ALLOWABLE SANNEKX FILTER BEARING PRESSURE = 3500 PSF (STATIC LOADING)

**CAST-IN-PLACE CONCRETE:**

1. MINIMUM ULTIMATE COMPRESSIVE STRENGTH FOR CAST-IN-PLACE CONCRETE SHALL BE 4000 PSI AT 28 DAYS (UNLESS OTHERWISE NOTED). ALL CONCRETE SHALL BE AIR ENTRAINED TO AN AIR CONTENT OF 6% (±1%) AS MEASURED BY THE VOLUMETRIC METHOD.

2. ALL REINFORCING STEEL SHALL BE DEFORMED BILLET STEEL CONFORMING TO ASTM A615, GRADE 60 (FY = 60,000 PSI).

3. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND PROVIDED IN SHEETS RATHER THAN ROLLS.

4. UNLESS OTHERWISE NOTED, THE MINIMUM LAP LENGTH OF REINFORCING SHALL BE AS REQUIRED BY ACI. IF THE TYPE OF SPLICE IS UNKNOWN, ASSUME CLASS B SPLICES. HORIZONTAL SPLICES IN WALLS SHALL DETAILED USING AN ALPHA FACTOR OF 1.3 AS SPECIFIED IN 12.2.4.

5. NO WELDED OR MECHANICAL SPLICES WILL BE ALLOWED, UNLESS SPECIFICALLY INDICATED.

6. SPLICING OF MAIN BEAM REINFORCING BARS PERMITTED ONLY OVER SUPPORTS FOR BOTTOM BARS OR AT MID-SPAN FOR TOP BARS, UNLESS OTHERWISE NOTED.

7. TOP SLAB REINFORCING SHALL BE SPLICED AT MID-SPAN BETWEEN SUPPORTS. BOTTOM REINFORCING SHALL BE SPLICED WITHIN 1/5 OF SPAN EITHER SIDE OF SUPPORT.

8. HEATING OF REINFORCING OR ANCHOR BOLTS WILL NOT BE ALLOWED.

9. REINFORCING BARS ADJACENT TO THE FACE OF CONCRETE SHALL HAVE THE FOLLOWING CONCRETE COVER (REINFORCING BAR COVER SHALL FOLLOW THE SLOPING SURFACES OF THE CONCRETE) UNLESS OTHERWISE INDICATED ON THE CONTRACT DRAWINGS.

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: \_\_\_\_\_ 3"

CONCRETE SURFACES EXPOSED TO EARTH OR WEATHER: \_\_\_\_\_ 2"

TOP BARS OF CONCRETE MATS \_\_\_\_\_ 3"

CONCRETE ELEVATED SLABS NOT PERMANENTLY EXPOSED TO WEATHER, TOP AND BOTTOM BARS FOR FORMED SLABS (#11 BAR AND SMALLER) \_\_\_\_\_ 3/4"

ALL OTHER CONDITIONS \_\_\_\_\_ 1 1/2"

10. GROUT UNDER COLUMN BASE PLATES SHALL BE GENERAL CONSTRUCTION GROUT AS MANUFACTURED BY MASTER BUILDERS OR APPROVED EQUAL.

11. CHAMFER ALL EXPOSED EDGES OF CONCRETE 1/2", TYPICAL.

**STRUCTURAL STEEL:**

1. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 AND A36.

2. ALL TUBE STEEL SHALL CONFORM TO ASTM A500, GRADE B.

3. ALL PIPE STEEL SHALL CONFORM TO ASTM A53, GRADE B.

4. ALL CONNECTION BOLTS SHALL CONFORM TO ASTM A325 UNLESS OTHERWISE NOTED. ALL BOLTS SHALL BE FURNISHED WITH WASHERS AND NUTS.

5. ALL WELDS AND WELDING PROCEDURES SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE PROVISIONS OF AISC AND AWS WELDING PROCEDURES AND CODES AS OUTLINED IN THE SPECIFICATION. SPECIAL ATTENTION SHALL BE GIVEN TO PROPER HEAT TREATMENT REQUIREMENTS. ALL WELDS SHALL BE MADE WITH E-70XX ELECTRODES UNLESS OTHERWISE SPECIFIED.

6. WELDING ELECTRODES SHALL BE OF E-70 SERIES

7. ALL ANCHOR BOLTS SHALL CONFORM TO ASTM A307 OR A36 UNLESS OTHERWISE NOTED.

8. CONNECTIONS: UNLESS OTHERWISE NOTED OR CALLED FOR ON DRAWINGS:

ALL CONNECTIONS TO NEW STEEL SHALL BE SHOP WELDED AND FIELD BOLTED.

BEAM TO BEAM AND BEAM TO COLUMN CONNECTIONS SHALL BE FRAMED, BEARING TYPE WITH A MINIMUM OF TWO 3/4" DIAMETER BOLTS AND THREADS IN SHEAR PLANE.

BOLTED BEAM CONNECTIONS SHALL BE SELECTED FROM THE AISC MANUAL OF STEEL CONSTRUCTION TO SUPPORT A MINIMUM OF ONE-HALF THE TOTAL UNIFORM LOAD CAPACITY OR ONE-FOURTH THE MAXIMUM WEB SHEAR (WHICHEVER IS GREATER).

SHOP WELDED FRAMED CONNECTIONS SHALL BE AS PER TABLE VI OF AISC MANUAL DETAILED TO OBTAIN EQUIVALENT STRENGTH OF BOLTED CONNECTIONS.

BRACING CONNECTIONS SHALL BE BEARING TYPE WITH 3/4" DIA. BOLTS AND THREADS IN SHEAR PLANE. MINIMUM NUMBER OF BOLTS SHALL BE TWO.

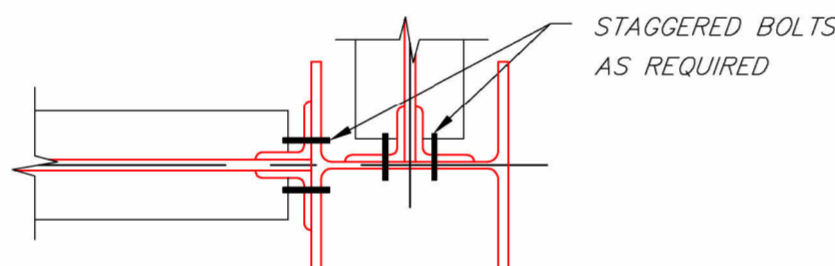
UNLESS BEAM REACTIONS ARE INDICATED ON PLANS, EACH BEAM SHALL BE CONNECTED WITH THE FOLLOWING MINIMUM NUMBER OF BOLTS:

NOMINAL BEAM SIZE	TOTAL NO. OF BOLTS	NUMBER OF ROWS
W4, W5, W6	2	1
W8, W10, W12	4	2
W14, W16	6	3
W18, W21	8	4
W24, W27	10	5
W30	12	6
W33	14	7
W36	16	8

HOLES FOR FIELD CONNECTIONS SHALL BE 1/16" LARGER IN DIAMETER THAN THE BOLT. HOLES IN STRUCTURAL STEEL TO MATCH EQUIPMENT HOLE LOCATIONS SHALL BE 3/16" LARGER IN DIAMETER THAN CONNECTING BOLTS. HOLES FOR ANCHOR BOLTS IN COLUMN BASE PLATES SHALL BE 5/16" LARGER IN DIAMETER THAN THE BOLT FOR 3/4" AND 7/8" BOLTS AND 1/2" LARGER IN DIAMETER THAN THE BOLT FOR BOLTS 1" AND LARGER.

WHEN SHOP BOLTING OF BEAM CONNECTION IS BEING DONE, THE SHOP BOLTS AND THE FIELD BOLTS SHALL BE STAGGERED TO FACILITATE ERECTION.

BOLT SPACING OF CONCURRENT CONNECTIONS AT COLUMN FLANGE AND WEB AS SHOWN BELOW SHALL BE STAGGERED AS REQUIRED. \*\* \*\*

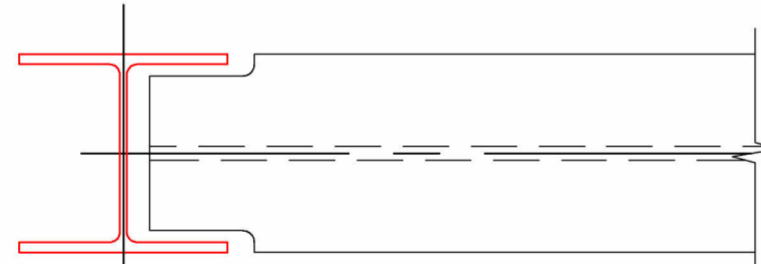


9. ALL WORKMANSHIP FOR STRUCTURAL STEEL SHALL CONFORM TO LATEST AISC SPECIFICATIONS FOR DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.

10. STEEL SURFACE PREPARATION, PAINTING AND FIELD TOUCH-UP SHALL BE IN ACCORDANCE WITH PAINT SPECIFICATIONS. BEAM FRAMING SHOWN ON PLANE SHALL HAVE THE WEB VERTICAL UNLESS OTHERWISE SHOWN.

11. ALL WIDE FLANGE SHAPES USED WITH WEB ORIENTED HORIZONTAL SHALL HAVE A 1/2" DIAMETER DRAINAGE HOLE DRILLED IN CENTER OF WEB AT CENTER OF SPAN.

12. FOR BEAMS FRAMING INTO THE WEB OF COLUMNS WITH BEAM FLANGES WIDER THAN THE DEPTH CLEARANCE OF THE COLUMN, BEAM FLANGES SHALL BE COPED TO FIT AS SHOWN BELOW: \*\* \*\*



13. MINIMUM GUSSET PLATE SIZE SHALL BE 3/8" UNLESS OTHERWISE NOTED.

14. FOR TYPICAL DETAILS WHICH APPLY TO MORE THAN ONE LOCATION, WELD SIZES SHOWN ON DRAWINGS ARE MINIMUM DESIGN SIZES AND SHALL BE INCREASED ACCORDING TO ADJOINING STEEL THICKNESS TO MEET THE MINIMUM WELD SIZES PER AISC SPECIFICATIONS.

15. DIMENSIONS: TO CENTERLINES OF COLUMNS AND BEAMS, TOP SURFACES OF BEAMS AND TUBES AND BACKS OF CHANNELS AND ANGLES UNLESS SHOWN OTHERWISE.

16. ELEVATIONS: REFER TO TOP SURFACE OR FLANGE OF MEMBER UNLESS SHOWN OTHERWISE.

17. ALL ASSEMBLIES WEIGHING OVER TEN TONS SHALL HAVE THEIR LIFTING WEIGHTS SHOWN ON THE DRAWINGS AND SHOP PAINTED ON THE ASSEMBLY.

18. ALL COPES SHALL HAVE A 1/2" MINIMUM RADIUS.

**ANNEX FILTER STORAGE BUILDING REFERENCES AND DESIGN CRITERIA:**

1. FIRE SUPPRESSION SYSTEM SHALL BE DESIGNED AND INSTALLED BY A LICENSED CONTRACTOR IN THE STATE OF IDAHO AND SHALL COMPLY WITH ALL OF FM GLOBAL AND NFPA DESIGN REQUIREMENTS AND STANDARDS.

2. NFPA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS.

3. NFPA 30 FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE

4. ANALYSIS RESULTS FOR ANNEX FILTER STORAGE BUILDING: THE ANALYSIS OF THE ANNEX FILTER BUILDING AND CONTAINERS TO BE STORED IN THE BUILDING ARE NO FLAMMABLE LIQUIDS.

5. OUTPUT AND DURATION DETERMINATION: FIRE SPRINKLERS OUTPUT 15 TO 40 GPM BASED UPON THE PRESSURE REQUIREMENTS. AN OUTPUT OF 0.2GPM/SQ FT WAS SELECTED FOR A SPRINKLER SPACING OF HEADS SPACED 10'-0" ON CENTERS. A DURATION OF 10 MINUTES MINIMUM IS SPECIFIED BY NFPA 13.

**SPECIAL INSPECTIONS:**

SPECIAL INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT INSPECTION AGENCY QUALIFIED TO PERFORM SUCH WORK IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE LATEST EDITION. SPECIFIC SPECIAL INSPECTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO ALL STEEL ERECTION AND WELDED CONNECTIONS. SPECIFIC INSPECTION REQUIREMENTS ARE AS FOLLOWS.

REQUIRED VERIFICATION AND INSPECTION	REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION (REF. IBC-2009 TABLE 1704.3)			IBC REFERENCE
	CONTINUOUS	PERIODIC	REFERENCED STANDARD	
CONFIRMATION OF HIGH STRENGTH BOLTS, NUTS, AND WASHERS:				
IDENTIFICATION MARKINGS CONFORM TO ASTM MANUFACTURERS CERTIFICATE OF COMPLIANCE	—	X	AISC 360 SECTION A3.3	
INSPECTION OF HIGH STRENGTH BOLTING:				
SNUG TIGHT JOINTS	—	X		
PRETENSIONED AND SLIP-CRITICAL JOINTS USING TURN OF THE NUT WITH MATCHMARKING, TWIST-OFF BOLT, OR DIRECT TENSION INDICATOR METHODS.	—	X	AISC 360 SECTION M2.5	1704.3.3
PRETENSIONED AND SLIP-CRITICAL JOINTS USING TURN OF THE NUT WITHOUT MATCHMARKING OR CALIBRATED WRENCH INSTALLATION METHODS.	X	—		
CONFIRMATION OF ASTM MATERIAL STANDARDS	—	—	ASTM A6 OR ASTM A568	1708.4
INSPECTION OF WELDING STRUCTURAL STEEL				
AWS VERIFICATION OF FILLER WELD MATERIAL	—	—	AISC, ASD, SECTION A3.6	—
SINGLE-PASS FILLET WELDS > 5/16"	X	—	AWS D1.1	1704.3.1
SINGLE-PASS FILLET WELDS <= 5/16"	—	X	AWS D1.1	1704.3.1
FLOOR AND DECK WELDS	—	X	AWS D1.1	1704.3.1
INSPECTION STRUCTURAL STEEL FRAME JOINTS				
BRACING AND STIFFENING	—	—	—	1704.3.2
MEMBER LOCATIONS	—	X	—	1704.3.2
APPLICATION OF JOINT DETAILS @ CONN.	—	X	—	1704.3.2

**ESTIMATED MATERIAL TAKEOFF:**

STRUCTURAL STEEL:	MATERIAL	EST. QUANTITY
W24x104	ASTM A992	16,900 LBS
W18x158	ASTM A992	23,300 LBS
W14x99	ASTM A992	23,500 LBS
W14x74	ASTM A992	7500 LBS
W12x65	ASTM A992	6900 LBS
W12x53	ASTM A992	5600 LBS
W12x45	ASTM A992	26,100 LBS
W12x35	ASTM A992	4500 LBS
W12x26	ASTM A992	6100 LBS
W10x30	ASTM A992	1000 LBS
W8x40	ASTM A992	5100 LBS
W8x18	ASTM A992	3000 LBS
HSS6x6x1/4	A500, GR B	3700 LBS
HSS4x4x1/4	A500, GR B	6000 LBS
C8x11.5	ASTM A36	3900 LBS
C3x3.5	ASTM A36	300 LBS
L6x4x3/8	ASTM A36	20,700 LBS
TOTAL HOT-ROLLED STEEL		164,100 LBS
REINFORCED CONCRETE:		
FOOTINGS AND FOUNDATIONS	F'c = 4000 PSI	40 CUBIC YARDS
REINFORCING STEEL	ASTM A615, GR 60	#5,#6 4000 LBS
HELICAL PIERS (100 TON ULTIMATE)	100 KIP LOAD EACH	(7) SEVEN
ELEVATED FLOOR SLAB 6"	F'c = 4000 PSI	46 CUBIC YARDS
REINFORCING STEEL	ASTM A615, GR 60	#3 2500 LBS
2" 20GA 2C COMFORM STEEL DECK	ASTM A611, GALV	2470 SQ FT

**ANNEX FILTER BUILDING FM GLOBAL REQUIREMENTS AND RECOMMENDATIONS:**

1. PROVIDE AN AUTOMATIC FIRE SPRINKLER SYSTEM IN THE ANNEX FILTER STORAGE WAREHOUSE DESIGNED IN ACCORDANCE WITH DATA FM GLOBAL SHEET 7-29, IGNITABLE LIQUID STORAGE IN PORTABLE CONTAINERS. THE LIQUID MEETS THE CRITERIA TO BE CLASSIFIED AS A VERY HIGH FLASHPOINT LIQUID, USE A MINIMUM CEILING SPRINKLER DESIGN OF NOT LESS THAN 7 PSF USING 25 K8.0 STANDARD COVERAGE SPRINKLERS.

2. SUBMIT ONE SET OF WORKING DRAWINGS, SPRINKLER SYSTEM HYDRAULIC CALCULATIONS, EARTHQUAKE BRACING CALCULATIONS, MATERIAL DATA SHEETS AND SPECIFICATIONS TO FM GLOBAL FOR REVIEW AND ACCEPTANCE PRIOR TO THE START OF ANY SPRINKLER SYSTEM INSTALLATION. AT LEAST TWO WEEKS SHOULD BE ALLOWED FOR REVIEW IN THE CONSTRUCTION PLANNING.

3. INSTALL THE FIRE ALARM SYSTEM IN THE ANNEX FILTER STORAGE WAREHOUSE, IN ACCORDANCE WITH FM GLOBAL PROPERTY LOSS PREVENTION DATA SHEET 5-48, FIRE ALARM SYSTEMS AND 5-48, AUTOMATIC FIRE DETECTION. THE FIRE ALARM SYSTEM AND RELATED EQUIPMENT, INCLUDING, BUT NOT LIMITED TO, ALL DETECTORS, WATERFLOW ALARMS, AND TAMPER SWITCHES SHOULD BE FM APPROVED.

**RECOMMENDATIONS TO REDUCE HAZARDS DURING INSTALLATION:**

1. STRICTLY MANAGE AND TAKE PROPER PRECAUTIONS FOR HOT WORK: O AVOID HOT WORK OF ANY KIND WHEN POSSIBLE.

5. IF THERE IS A PRACTICAL AND SAFER WAY TO DO THE JOB WITHOUT HOT WORK, USE THE ALTERNATIVE METHOD.

6. IF HOT WORK IS UNAVOIDABLE, USE THE FM GLOBAL HOT WORK PERMIT SYSTEM, USING THE HOT WORK PERMIT SYSTEM AND TAKING THE PRECAUTIONS IT REQUIRES PREVENTS HOT WORK FIRES.

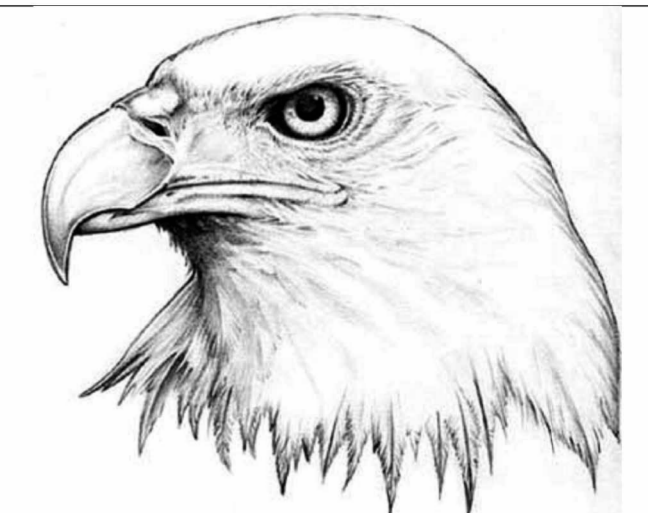
7. USE CAUTION WHERE HOT WORK IS CONDUCTED WITHIN OR NEAR WALL, FLOOR/CEILING, OR ROOF/CEILING SPACES WHERE COMBUSTIBLES ARE PRESENT. FOR ADDITIONAL INFORMATION, SEE DS 1-8, SAFEGUARDS DURING CONSTRUCTION, ALTERATION AND DEMOLITION.

8. NOTIFY THE FM GLOBAL CUSTOMER SERVICE DESK WHEN AUTOMATIC FIRE PROTECTION IS SHUT OFF, REGARDLESS OF THE DURATION. USE THE FM GLOBAL RED TAG PERMIT SYSTEM TO MANAGE ANY SHUTDOWNS OF AUTOMATIC FIRE PROTECTION. IT WILL PROVIDE A QUICK REVIEW OF PRECAUTIONS NEEDED DURING FIRE PROTECTION IMPAIRMENTS AND WILL ALSO PROVIDE A FOLLOW-UP TO ENSURE THAT FULL PROTECTION IS RESTORED AS SOON AS POSSIBLE.

9. HAVE A MINIMUM OF TWO 10 LB. ABC FIRE EXTINGUISHERS AVAILABLE ON THE ROOF DURING ROOF CONSTRUCTION AND REPAIRS.

10. IT IS ESSENTIAL THAT THOROUGH SUPERVISION BY THE BUILDING OWNER'S QUALIFIED REPRESENTATIVE IS PROVIDED DURING ALL ROOF CONSTRUCTION TO ENSURE QUALITY OF WORKMANSHIP AND ADHERENCE TO FM APPROVAL STANDARDS AND PROJECT SPECIFICATIONS.

11. AVOID CUTTING AND WELDING ON SPRINKLER PIPING. WHEN SYSTEM FABRICATION REQUIRES DRILLING, CUTTING, OR BURNING OF HOLES IN THE SPRINKLER PIPE AND/OR WELDING OF OUTLETS TO PIPE, REMOVE PIPING TO A SAFE LOCATION. TAKE EXTREME CARE TO ENSURE THAT COUPONS, SLAG AND OTHER DEBRIS ARE REMOVED FROM PIPING BEFORE INSTALLATION BEGINS. ALL WELDING SHOULD BE PERFORMED BY WELDERS CERTIFIED FOR THE PROCEDURES USED.



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**DOCUMENT STATUS:**

ISSUED FOR COST ESTIMATE  
9/18/2023

**REVISION INFORMATION:**

No.	Description	Issued by	Date
0	ISSUED FOR COST ESTIMATE	MPF	9-8-23

**CLIENT / PROJECT DESCRIPTION:**

AMAL. SUGAR CO  
AMALGAMATED SUGAR CO TWIN FALLS, ID FACILITY

**DRAWING DESCRIPTION:**

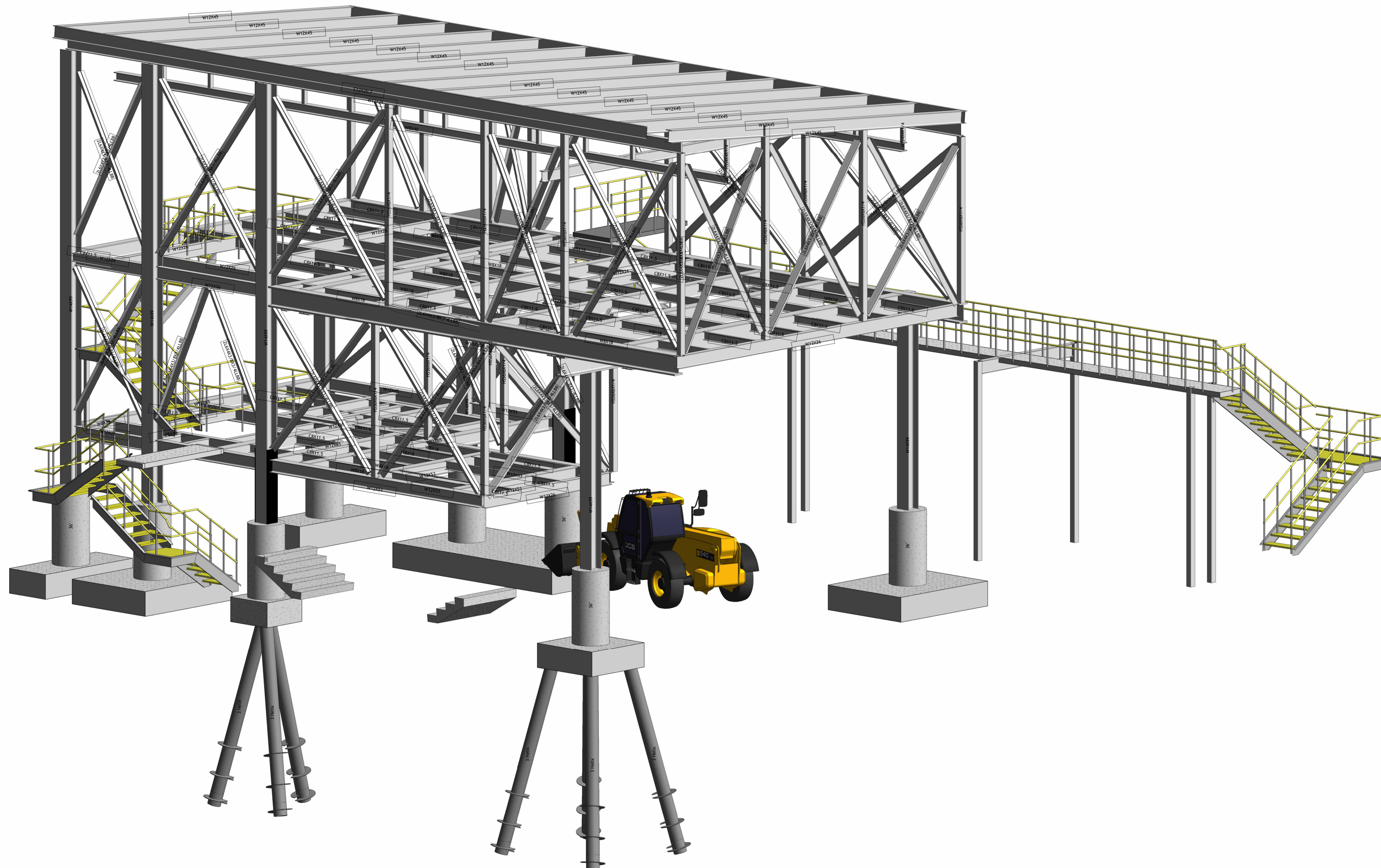
NEW ANNEX FILTER BUILDING AND FOUNDATION GENERAL NOTES & SPECIAL INSPECTIONS ESTIMATED QUANTITIES

**DRAWING INFORMATION:**

Project number	23-10ASTI
Date	11/3/2023
Drawn by	MPF
Checked by	MPF
Scale	AS NOTED

ISSUED FOR COST ESTIMATE  
11-3-2023

S-001



PROJECT NUMBER:

23106

Date  
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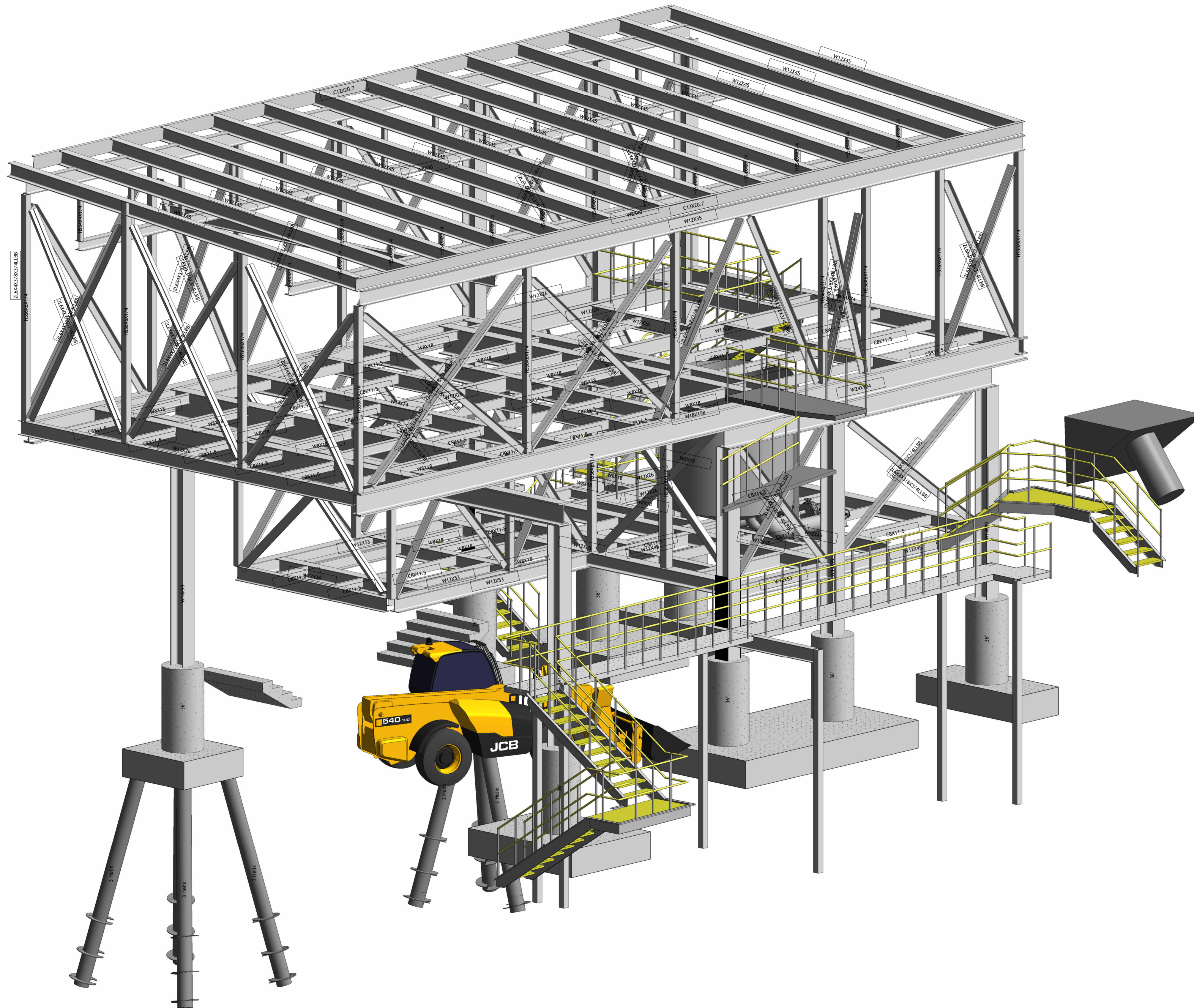
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3D1

SCALE:

SHEET NUMBER:

S-002



PROJECT NUMBER:

23106

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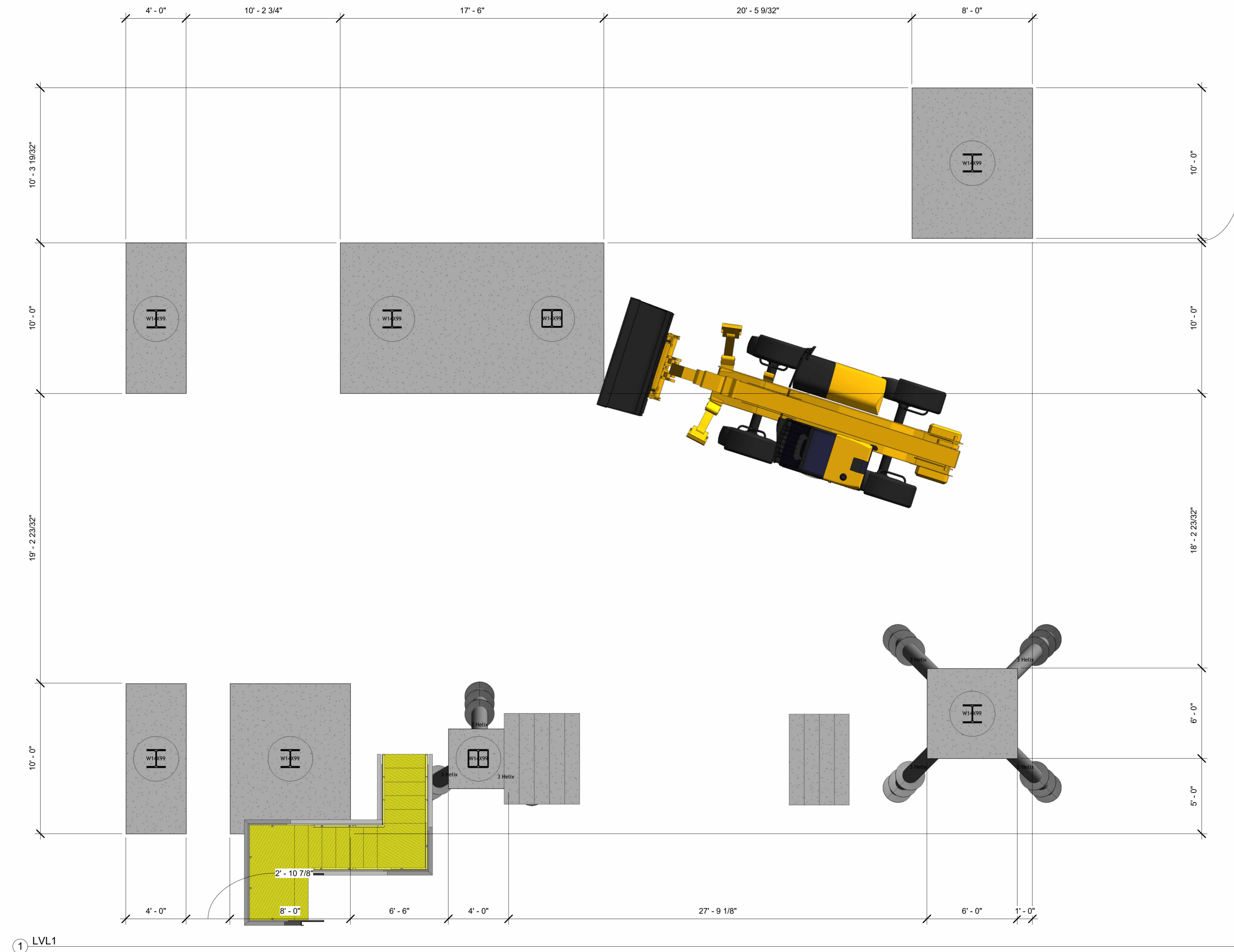
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SHEET NAME:  
3D2

SCALE:

SHEET NUMBER:

S-003



① LVL1

PROJECT NUMBER:

23106

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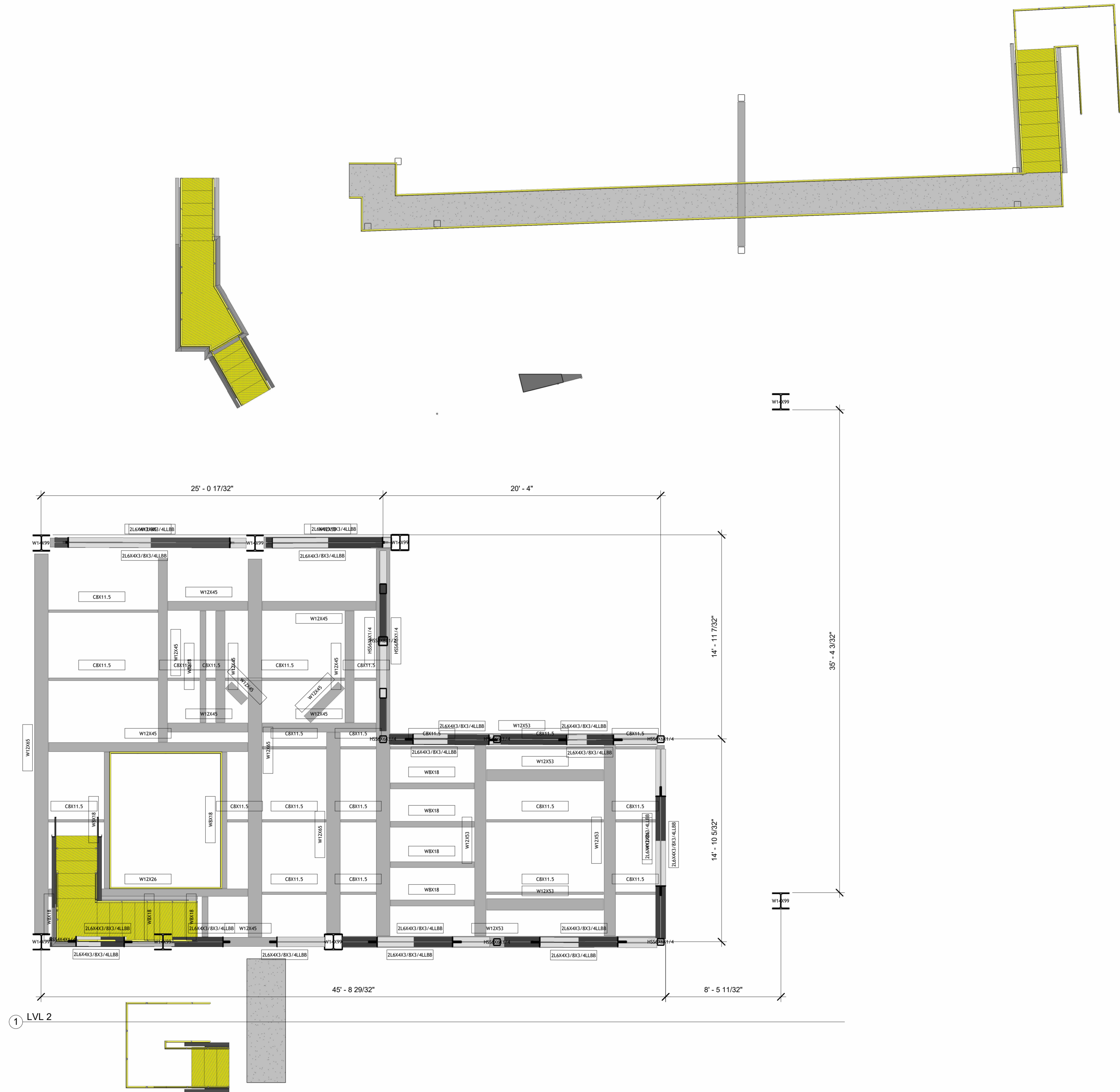
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LVL1

SCALE:

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S-004





PROJECT NUMBER:

23106

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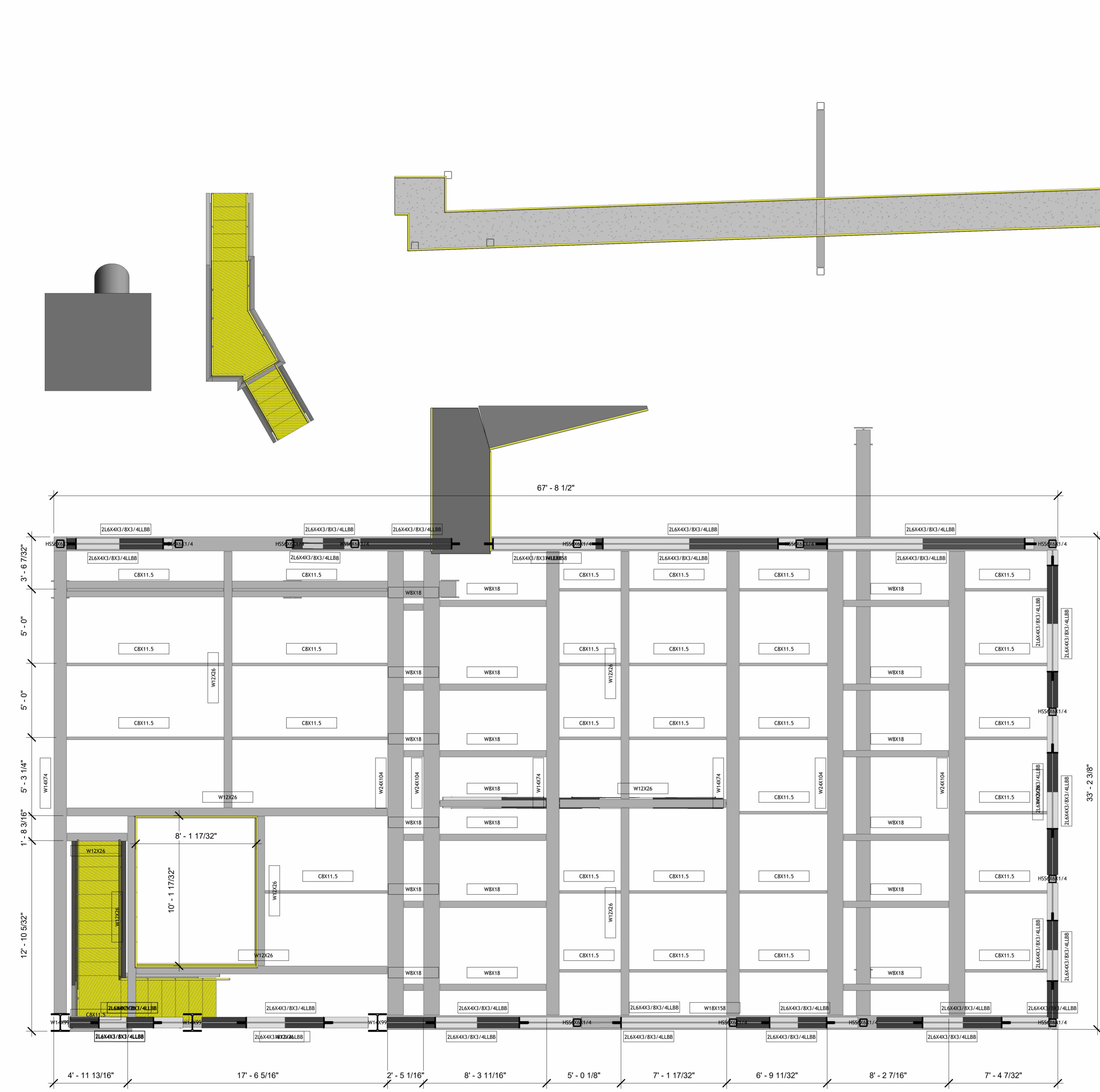
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LVL2

SCALE:

SHEET NUMBER:

S-005



1 LVL 3

PROJECT NUMBER:  
**23106**

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LVL3

SCALE:

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**S-006**

PROJECT NUMBER:

23106

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LOCATION:  
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SHEET NAME:

ELEVATION

SCALE:

1/4" = 1'-0"

SHEET NUMBER:

S-007

TOS ROOF HIGH  
SIDE  
42' - 6 3/4"

TOS ROOF LOW  
SIDE  
39' - 8 1/8"

TOS CRANE  
GIRDER  
36' - 2 15/32"

TOS LEVEL 2  
25' - 2 13/32"

TOS LEVEL 1  
11' - 2 13/32"

Level 2  
10' - 0"

Level 1  
0' - 0"

T.O. HELICAL PIER  
-1' - 0"

B.O. HELICAL PIER  
-17' - 0"

1 North  
1/4" = 1'-0"

PROJECT NUMBER:

23106

Date  
11/7/2023 2:11:30 PM

REVISION

PHONE:  
208-732-2354

EMAIL:  
inquiries@astra.ilc



LOCATION:

Enter address here

SHEET NAME:  
SCHEDULE

SCALE:

SHEET NUMBER:

S-008

Structural Framing Schedule		
Count	Type	Cut Length
4	W24X104	31' - 2 3/4"
1	W24X104	27' - 1 17/32"
1	W18X158	67' - 7 1/8"
1	W18X158	44' - 7 5/32"
1	W18X158	40' - 5"
1	W14X74	32' - 1 1/8"
2	W14X74	31' - 2 3/4"
1	W12X85	28' - 3 23/32"
1	W12X85	27' - 9 5/32"
1	W12X85	27' - 7 25/32"
1	W12X85	14' - 8 1/4"
1	W12X53	22' - 11 15/16"
1	W12X53	19' - 5 3/4"
2	W12X53	13' - 11 5/32"
1	W12X53	9' - 3 7/8"
2	W12X53	8' - 6 3/4"
14	W12X45	33' - 9 7/8"
1	W12X45	14' - 7 1/32"
1	W12X45	14' - 4 13/32"
1	W12X45	13' - 4 15/16"
1	W12X45	11' - 2 13/32"
2	W12X45	8' - 3 1/2"
2	W12X45	8' - 1 29/32"
2	W12X45	5' - 10 3/32"
1	W12X45	3' - 6 7/32"
1	W12X45	1' - 8 3/16"
1	W12X35	67' - 3"
1	W12X35	67' - 2 1/32"
1	W12X26	32' - 3 1/16"
1	W12X26	21' - 7"
1	W12X26	17' - 2 11/16"
1	W12X26	16' - 10 13/16"
1	W12X26	16' - 7 3/4"
1	W12X26	14' - 7 1/32"
1	W12X26	14' - 5 1/2"
1	W12X26	13' - 11 1/2"
1	W12X26	13' - 7"
1	W12X26	11' - 2 9/16"
1	W12X26	11' - 2 13/32"
1	W12X26	10' - 7"
1	W12X26	10' - 0 17/32"
2	W12X26	7' - 7 9/32"
1	W12X26	4' - 0 23/32"
1	W10X30	32' - 3 1/4"
2	W8X40	67' - 0 27/32"
2	W8X18	9' - 11 23/32"
1	W8X18	8' - 1 29/32"
7	W8X18	7' - 1 29/32"
6	W8X18	7' - 0 5/8"
4	W8X18	6' - 1 21/32"
1	W8X18	2' - 11 3/4"
1	W8X18	2' - 10 31/32"
1	W8X18	2' - 7 29/32"
6	W8X18	1' - 3 9/32"
1	HSS6X6X1/4	16' - 11 1/16"
1	HSS6X6X1/4	16' - 10 7/8"
1	C12X20.7	67' - 7 1/8"
1	C12X20.7	64' - 11 1/16"
3	C8X11.5	10' - 6 7/16"
3	C8X11.5	10' - 5 3/32"
1	C8X11.5	8' - 8 23/32"
3	C8X11.5	8' - 6 3/4"
1	C8X11.5	8' - 2 25/32"
2	C8X11.5	7' - 11 7/8"
5	C8X11.5	6' - 6 1/32"
1	C8X11.5	6' - 1 21/32"
6	C8X11.5	5' - 10 7/32"
6	C8X11.5	5' - 6 25/32"
3	C8X11.5	4' - 7 7/8"
1	C8X11.5	4' - 2 3/16"
5	C8X11.5	4' - 1 1/32"
1	C8X11.5	4' - 0 3/8"
3	C8X11.5	2' - 11 11/32"
3	C8X11.5	2' - 6 21/32"
1	C8X11.5	2' - 3 1/2"
1	C8X11.5	1' - 6 7/16"
1	C8X11.5	1' - 5 3/4"
1	C8X11.5	0' - 7 5/8"
1	2L6X4X3/8X3/4 LLBB	20' - 4 29/32"

Structural Framing Schedule		
Count	Type	Cut Length
1	2L6X4X3/8X3/4 LLBB	19' - 7 27/32"
1	2L6X4X3/8X3/4 LLBB	19' - 3 3/8"
2	2L6X4X3/8X3/4 LLBB	19' - 1 13/32"
1	2L6X4X3/8X3/4 LLBB	18' - 10 9/32"
1	2L6X4X3/8X3/4 LLBB	18' - 9 3/16"
1	2L6X4X3/8X3/4 LLBB	18' - 9 1/32"
1	2L6X4X3/8X3/4 LLBB	18' - 7 5/16"
1	2L6X4X3/8X3/4 LLBB	18' - 3 7/16"
2	2L6X4X3/8X3/4 LLBB	18' - 1"
1	2L6X4X3/8X3/4 LLBB	17' - 10 7/32"
2	2L6X4X3/8X3/4 LLBB	17' - 9 27/32"
1	2L6X4X3/8X3/4 LLBB	17' - 7 9/16"
1	2L6X4X3/8X3/4 LLBB	17' - 5 19/32"
1	2L6X4X3/8X3/4 LLBB	17' - 0 7/32"
1	2L6X4X3/8X3/4 LLBB	16' - 10 15/16"
1	2L6X4X3/8X3/4 LLBB	16' - 10 1/2"
1	2L6X4X3/8X3/4 LLBB	16' - 6 31/32"
1	2L6X4X3/8X3/4 LLBB	16' - 3 25/32"
1	2L6X4X3/8X3/4 LLBB	16' - 1 3/32"
1	2L6X4X3/8X3/4 LLBB	16' - 0 3/32"
1	2L6X4X3/8X3/4 LLBB	15' - 11 5/16"
1	2L6X4X3/8X3/4 LLBB	15' - 10 15/16"
1	2L6X4X3/8X3/4 LLBB	15' - 10 7/8"
1	2L6X4X3/8X3/4 LLBB	15' - 10 27/32"
1	2L6X4X3/8X3/4 LLBB	15' - 6 29/32"
1	2L6X4X3/8X3/4 LLBB	15' - 6"
1	2L6X4X3/8X3/4 LLBB	15' - 4 23/32"
2	2L6X4X3/8X3/4 LLBB	15' - 0 21/32"
1	2L6X4X3/8X3/4 LLBB	14' - 8 9/16"
1	2L6X4X3/8X3/4 LLBB	14' - 0 3/16"
1	2L6X4X3/8X3/4 LLBB	13' - 11 7/8"
1	2L6X4X3/8X3/4 LLBB	13' - 11 5/16"
1	2L6X4X3/8X3/4 LLBB	13' - 6 3/16"
1	2L6X4X3/8X3/4 LLBB	13' - 5 1/2"
1	2L6X4X3/8X3/4 LLBB	12' - 10 21/32"
1	2L6X4X3/8X3/4 LLBB	12' - 9 15/16"
1	2L6X4X3/8X3/4 LLBB	11' - 11 5/16"
1	2L6X4X3/8X3/4 LLBB	11' - 10 23/32"
1	2L6X4X3/8X3/4 LLBB	10' - 11 5/8"
1	2L6X4X3/8X3/4 LLBB	9' - 9 1/8"
1	2L6X4X3/8X3/4 LLBB	0' - 1"

Structural Column Schedule		
Count	Type	Length
3	W14X99	41' - 2 3/4"
1	W14X99	21' - 7 15/32"
1	W14X99	21' - 7 13/32"
3	W14X99	20' - 10 13/16"
1	HSS8X8X1/2	12' - 0"
1	HSS8X8X1/2	0' - 10"
2	HSS6X6X1/4	17' - 4 11/32"
4	HSS6X6X1/4	16' - 3 27/32"
6	HSS6X6X1/4	16' - 0 7/8"
7	HSS6X6X1/4	13' - 5 7/32"
1	HSS6X6X1/4	12' - 11 3/4"
1	HSS6X6X1/4	12' - 9 7/8"
2	HSS6X6X1/4	12' - 4 1/4"
1	HSS6X6X1/4	12' - 0"
1	HSS6X6X1/4	1' - 0 5/8"
1	HSS4X4X1/4	5' - 5 1/4"
13	HSS4X4X1/4	3' - 0"
13	HSS4X4X1/4	3' - 0"
8	36"	6' - 0"
4	3 Helix	28' - 9 5/32"
3	Helix	21' - 9 7/8"