

SPECIAL INSPECTION AND TESTING (IBC 1704)

Indicate required Special Inspections for project by checking the appropriate boxes:

FABRICATORS (IBC 1704.2)

Approved Fabricator Fabricator's Name: Metallic Building Systems a division of NCI Building Systems
 Unapproved Fabricator Fabricator's Name: _____
 In-plant inspections
 Steel Construction Welding Details

STEEL (IBC 1704.3)

Item	Reference/Comments
High Strength Bolting (1704.3.3)	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Periodic Per RCSC Specification for Structural Joints Using ASTM A325 or A 490 Bolts. See specifications.
WELDING (1704.3.1)	
Details (1704.3.2)	
Complete & partial penetration groove welds	<input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Periodic Per AWS D1.1/D1.1M using ASTM E165, ASTM E 709, ASTM E164 or ASTM E 94. See specifications.
Multipass fillet welds	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Single-pass fillet welds > 5/16"	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Single-pass fillet welds ≤ 5/16"	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Periodic Per AWS D1.1/D1.1M using ASTM E165, ASTM E 709, ASTM E164 or ASTM E 94. See specifications.
Floor & roof deck welds	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
REINFORCEMENT STEEL	
Verification of weldability	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Shear wall and shear reinforcement	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Other reinforcement	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Steel frame joint details	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

CONCRETE CONSTRUCTION (IBC 1704.4)

Item	Reference/Comments
Materials (1704.4.1)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Steel placement	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Steel welding	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Bolts prior & during placement	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Periodic Inspection of all epoxy bolts in concrete. See specifications.
Use of required design mix	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Concrete sampling for strength test, slump, air content, and temperature of concrete	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Periodic Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mixture placed each day. See specifications.
Concrete & shotcrete placement	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Curing temperature and techniques	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Pre-stressed concrete	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Pre-cast concrete	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Posttensioned concrete	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Form work	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

MASONRY CONSTRUCTION (IBC 1704.5)

Item	Reference/Comments
Site preparation	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Structural fill material	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Structural fill lift thickness	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Structural fill soil densities	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Periodic At slabs, one test per 1000 sq. ft. or part, but not less than three. See specifications.
Backfill soils materials	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Backfill soil densities	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Periodic One for every 15 feet of backfill. See specifications.
Fill material under side walks and parking	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Fill soil densities under side walks and parking	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Periodic At slabs, one test per 1000 sq. ft. or part, but not less than three. See specifications.

PILE FOUNDATIONS (IBC 1704.8)

Item	Reference/Comments
Observe driving operation and reporting	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Verify placement & installation data	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

PIER FOUNDATIONS (IBC 1704.9)

Item	Reference/Comments
Observe drilling operation and reporting	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Verify placement & installation data	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

SPRAYED FIRE-RESISTANT MATERIALS (IBC 1704.10)

Item	Reference/Comments
Structural member surface conditions	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Material application	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Material thickness	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Material density	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Bonding strength	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS (IBC 1704.11)

Item	Reference/Comments
Material and installation	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) (IBC 1704.12)

Item	Reference/Comments
Material and installation	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

ALTERNATIVE CONSTRUCTION METHODS OR MATERIALS (IBC 1704.13)

Item	Reference/Comments
Material and installation	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

EPOXY (IBC 1704.13)

Item	Reference/Comments
Material and installation	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

SMOKE CONTROL (IBC 1704.14)

Item	Reference/Comments

Item	Reference/Comments
As masonry construction begins:	
Site prepared mortar	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Construction of mortar joints	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Location of reinforcement, connectors, pre-stressing tendons and anchorages	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Pre-stressing technique	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Grade and size of pre-stressing tendons and anchorages	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Inspection program verify:	
Size and location of structural elements	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Type, size and location of anchors	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Size, grade and type of reinforcement	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Welding of reinforcement	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Cold and hot weather protection	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Application and measurement of pre-stressing force	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Prior to grouting verify:	
Clean grout space	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Placement of reinforcement	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Grout mix	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Mortar joints	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Grout placement	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Grout and mortar specimens and prisms	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Periodic Prism Test: For each type of construction provided, according to ASTM C 1314 at 7 days and at 28 days. See specifications.
Construction and submittal compliance verification	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Empirical masonry - Cat. I-II (1708.1.1)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Empirical masonry - Cat. IV (1708.1.1)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Engineered masonry - Cat. I-III (1708.1.1)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Engineered masonry - Cat. IV (1708.1.1)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Engineering & pre-stressing steel (1708.3)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Structural steel (1708.4)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Qualification of mechanical & electrical equipment (1708.5)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Seismically isolated structures (1708.6)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Testing for seismic resistance is	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

WOOD CONSTRUCTION (IBC 1704.6)

Item	Reference/Comments
Prefabricated elements & assembly	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

SOILS CONSTRUCTION (IBC 1704.7)

Item	Reference/Comments
Material	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Installation	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

Special inspection for seismic resistance (IBC 1707)

Item	Reference/Comments
Structural Steel (1707.2)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Structural Wood (1707.3)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Cold-formed steel framing (1707.4)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Pier foundations (1707.5)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Storage racks & access floors (1707.6)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Architectural components (1707.7)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Mechanical & electrical items (1707.8)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Designated systems verification (1707.9)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic
Seismic isolation systems (1707.10)	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

Inspection of seismic resistance are not required per IBC 1705.3

OTHER

Item	Reference/Comments
Asphalt Paving	<input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Periodic Field density of in-place pavement every 1000 sq. yd. or less with minimum of 3 samples. See Specifications.
	<input type="checkbox"/> Continuous <input type="checkbox"/> Periodic

Special Inspectors Shall:

- Be approved by the Building Official prior to performing any duties;
- Provide proof of licensure as a special inspector by the State of Utah for each type of inspection;
- Inspection reports are to be submitted to the code consultant, architect, DFCM project manager, and the State of Utah Building Official within 48 hrs. of inspections;
- A final inspection report shall be submitted following completion of the project documenting the types of special inspections performed and a statement indicating that the structure is in compliance with the drawings, specifications and applicable codes. IBC 1704.1.2

OGDEN BAY GREAT SALT LAKE ECOSYSTEM STORAGE BUILDING PHASE II
 DIVISION OF WILDLIFE RESOURCES
 DFCM PROJECT # 08221520
 HOOPER, UTAH



ARCHITECTS
 577 South 200 East
 Salt Lake City, Utah 84111
 (801) 533-2100 fax: 533-2101 jrcaesign.com

DATE/REVISION	PROJECT #
01 - 07 - 09	08013

SPECIAL INSPECTION AND TESTING

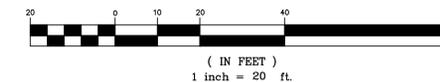
GI 102

LEGEND

- FH FIRE HYDRANT
- PP POWER POLE
- P/T POWER/TELEPHONE LINE
- SP SERVICE POLE
- TP TELEPHONE PEDESTAL
- WM WATER METER
- WV WATER VALVE
- FENCE/GATE



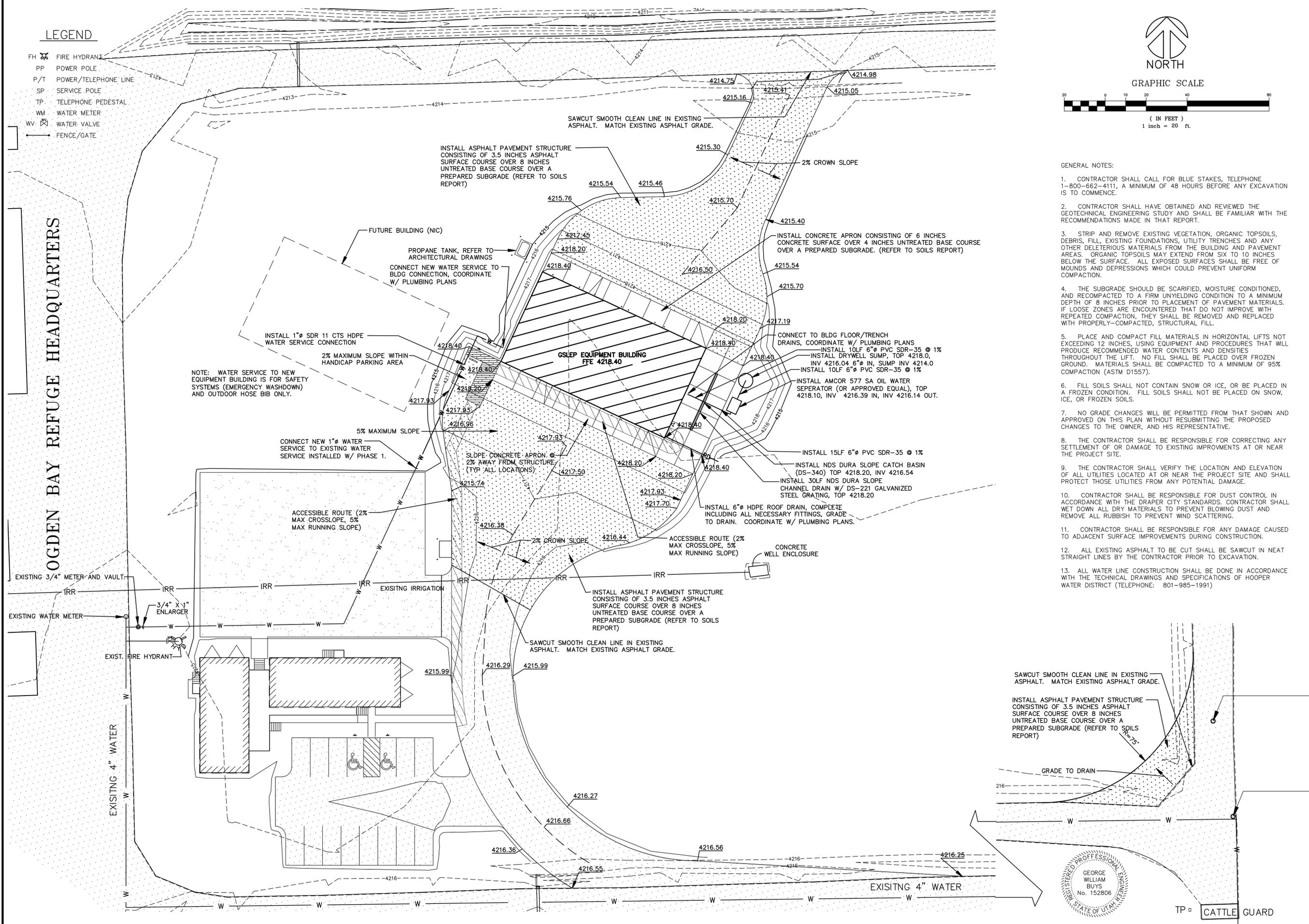
GRAPHIC SCALE



GENERAL NOTES:

1. CONTRACTOR SHALL CALL FOR BLUE STAKES, TELEPHONE 1-800-662-4111, A MINIMUM OF 48 HOURS BEFORE ANY EXCAVATION IS TO COMMENCE.
2. CONTRACTOR SHALL HAVE OBTAINED AND REVIEWED THE GEOTECHNICAL ENGINEERING STUDY AND SHALL BE FAMILIAR WITH THE RECOMMENDATIONS MADE IN THAT REPORT.
3. STRIP AND REMOVE EXISTING VEGETATION, ORGANIC TOPSOILS, DEBRIS, FILL, EXISTING FOUNDATIONS, UTILITY TRENCHES AND ANY OTHER DELETERIOUS MATERIALS FROM THE BUILDING AND PAVEMENT AREAS. ORGANIC TOPSOILS MAY EXTEND FROM SIX TO TEN INCHES BELOW THE SURFACE. ALL EXPOSED SURFACES SHALL BE FREE OF MOUNDS AND DEPRESSIONS WHICH COULD PREVENT UNIFORM COMPACTION.
4. THE SUBGRADE SHOULD BE SCARIFIED, MOISTURE CONDITIONED, AND RECOMPACTED TO A FIRM UNYIELDING CONDITION TO A MINIMUM DEPTH OF 8 INCHES PRIOR TO PLACEMENT OF PAVEMENT MATERIALS. IF LOOSE ZONES ARE ENCOUNTERED THAT DO NOT IMPROVE WITH REPEATED COMPACTION, THEY SHALL BE REMOVED AND REPLACED WITH PROPERLY-COMPACTED, STRUCTURAL FILL.
5. PLACE AND COMPACT FILL MATERIALS IN HORIZONTAL LIFTS NOT EXCEEDING 12 INCHES, USING EQUIPMENT AND PROCEDURES THAT WILL PRODUCE RECOMMENDED WATER CONTENTS AND DENSITIES THROUGHOUT THE LIFT. NO FILL SHALL BE PLACED OVER FROZEN GROUND. MATERIALS SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION (ASTM D1557).
6. FILL SOILS SHALL NOT CONTAIN SNOW OR ICE, OR BE PLACED IN A FROZEN CONDITION. FILL SOILS SHALL NOT BE PLACED ON SNOW, ICE, OR FROZEN SOILS.
7. NO GRADE CHANGES WILL BE PERMITTED FROM THAT SHOWN AND APPROVED ON THIS PLAN WITHOUT RESUBMITTING THE PROPOSED CHANGES TO THE OWNER, AND HIS REPRESENTATIVE.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY SETTLEMENT OF OR DAMAGE TO EXISTING IMPROVEMENTS AT OR NEAR THE PROJECT SITE.
9. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES LOCATED AT OR NEAR THE PROJECT SITE AND SHALL PROTECT THOSE UTILITIES FROM ANY POTENTIAL DAMAGE.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL IN ACCORDANCE WITH THE DRAPER CITY STANDARDS. CONTRACTOR SHALL WET DOWN ALL DRY MATERIALS TO PREVENT BLOWING DUST AND REMOVE ALL RUBBISH TO PREVENT WIND SCATTERING.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO ADJACENT SURFACE IMPROVEMENTS DURING CONSTRUCTION.
12. ALL EXISTING ASPHALT TO BE CUT SHALL BE SAWCUT IN NEAT STRAIGHT LINES BY THE CONTRACTOR PRIOR TO EXCAVATION.
13. ALL WATER LINE CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE TECHNICAL DRAWINGS AND SPECIFICATIONS OF HOOPER WATER DISTRICT (TELEPHONE: 801-985-1991)

OGDEN BAY REFUGE HEADQUARTERS



NOTE: WATER SERVICE TO NEW EQUIPMENT BUILDING IS FOR SAFETY SYSTEMS (EMERGENCY WASHDOWN) AND OUTDOOR HOSE BIB ONLY.

SAWCUT SMOOTH CLEAN LINE IN EXISTING ASPHALT. MATCH EXISTING ASPHALT GRADE.

INSTALL ASPHALT PAVEMENT STRUCTURE CONSISTING OF 3.5 INCHES ASPHALT SURFACE COURSE OVER 8 INCHES UNTREATED BASE COURSE OVER A PREPARED SUBGRADE (REFER TO SOILS REPORT)

GRADE TO DRAIN



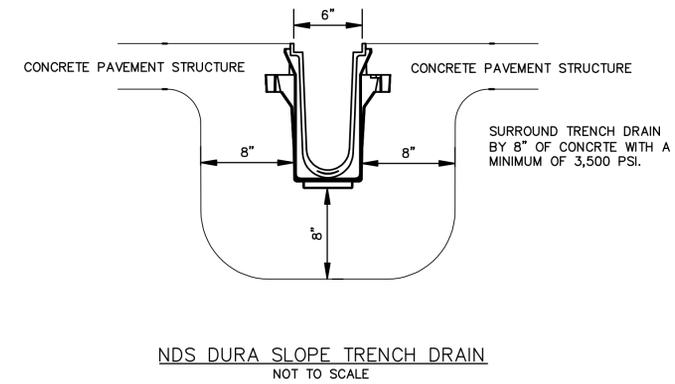
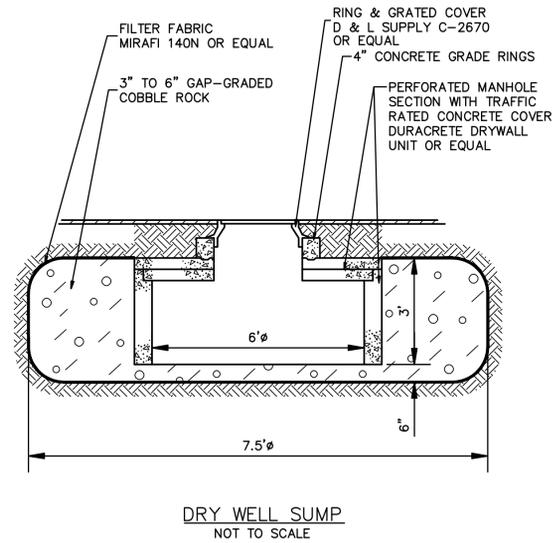
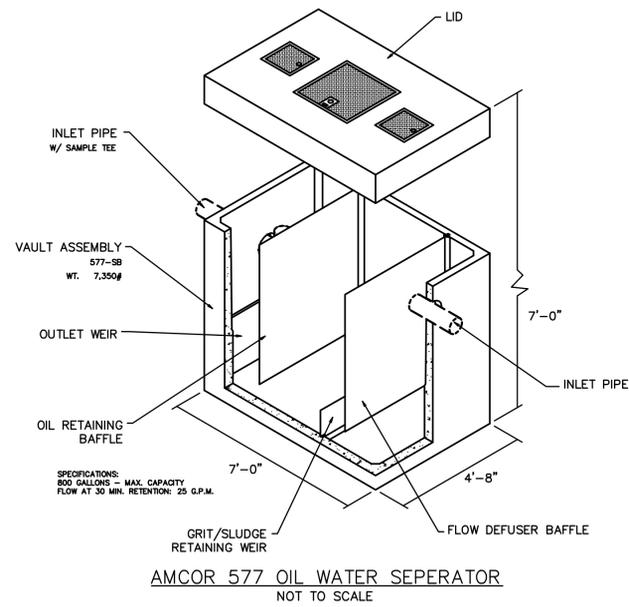
BUSH & GUDGELL, INC.
 Engineers - Planners - Surveyors
 925 South 300 East, Room 84111
 Salt Lake City, UT 84111
 Phone (801) 964-1212 / Fax (801) 964-1225
 www.bushandgudgell.com



Drawn: GWR Date: 18 OCT 06
 Designer: GWR
 Checked: GWR
 Approved: [Signature]
 Scale: 1 INCH = 20 FEET
 Job No.: 47811

GSLEP EQUIPMENT BUILDING PHASE 2
UTILITY & GRADING PLAN
 4788 SOUTH 7500 WEST, HOOPER, UTAH
 LOCATION: SEC 10, T34N, R34W, S14&15E
 PREPARED FOR: JRCA ARCHITECTS

SHEET
G-1
 SHEETS
 FILE: 47929



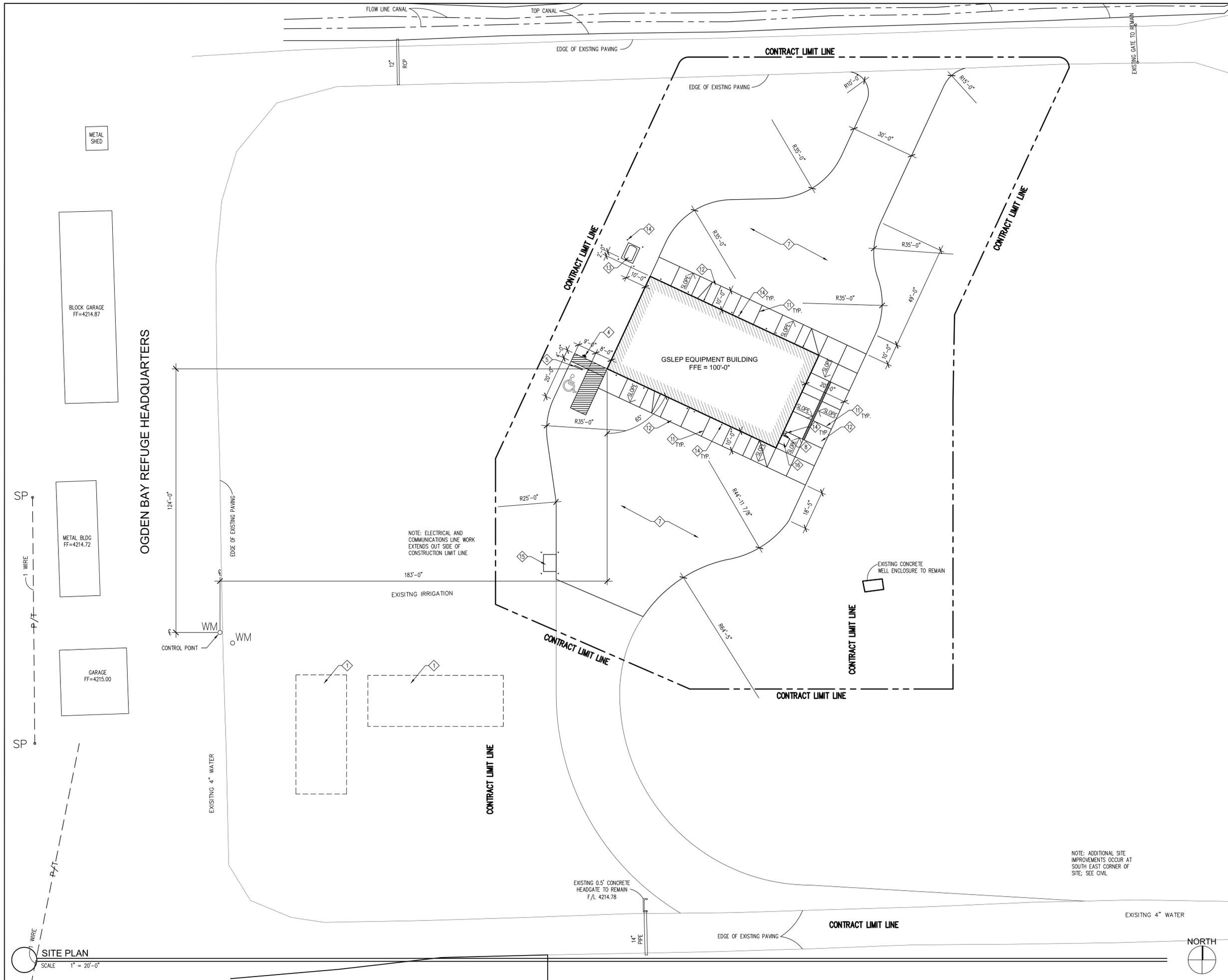
**GSLEP EQUIPMENT BUILDING PHASE 2
DETAIL SHEET**
4786 SOUTH 7500 WEST, HOOPER, UTAH
LOCATION: SEC 10, T3N, R3W, S1E, B1M.
PREPARED FOR: JRCA ARCHITECTS

Drawn : GWR Date : 15 OCT 06
 Designer : GWR
 Checked : GWR
 Approved : AS SHOWN
 Scale : 47829
 Job No :



BUSH & GUDGELL, INC.
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 Salt Lake City, Utah 84111
 Phone (801) 364-1212 / Fax (801) 364-1225
 www.bushandgudgell.com

No.	Date	By	Revision



GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING LANDSCAPING & SITE IMPROVEMENTS WHICH ARE TO REMAIN FREE FROM DAMAGE DURING CONSTRUCTION BOTH INSIDE & OUTSIDE THE CONTRACT LIMIT LINE. CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED ITEM OR SITE IMPROVEMENTS AS SPECIFIED OR IF NOT SPECIFIED, MATCH EXISTING ADJACENT CONSTRUCTION.
2. CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL UTILITIES & SITE IMPROVEMENTS WHICH ARE AFFECTED BY, OR WHICH TIE-IN W/ NEW CONSTRUCTION.
3. EXISTING ROAD, PARKING, SERVICE DRIVES & SIDEWALKS SHALL REMAIN ACCESSIBLE & BE KEPT CLEAR OF CONSTRUCTION EQUIPMENT, MATERIALS, MUD, DIRT OTHER DEBRIS.
4. SEE CIVIL DRAWINGS FOR EXTENT OF SITE WORK.

KEY NOTES:

- 1 MODULAR BUILDING (SEE PHASE I)
- 2 WATER LINE (SEE PHASE I)
- 3 WATER LINE
- 4 H.C. PARKING SIGN SEE A5/AE201
- 5 CONC. WHEEL STOP
- 6 NOT USED
- 7 ASPHALT PAVING; SEE CIVIL DRAWINGS
- 8 YARD HYDRANT
- 9 NOT USED
- 10 NOT USED
- 11 CONTROL JOINTS @ 10'-0" MAX
- 12 6" THICK CONCRETE APRON ON 4" GRAVEL BASE W/ #3 @ 18" O.C. EACH WAY
- 13 PROPANE TANK ON 6" DEEP CONCRETE PAD, 8'-0" LONG x 6'-0" WIDE
- 14 BOLLARD (TYP.); SEE DETAIL B4/AE101
- 15 EXISTING TRANSFORMER
- 16 4'-0"x4'-0" LEVEL LANDING

OGDEN BAY GREAT SALT LAKE ECOSYSTEM STORAGE BUILDING PHASE II
 DIVISION OF WILDLIFE RESOURCES
 DFCM PROJECT # 08221520
 HOOPER, UTAH

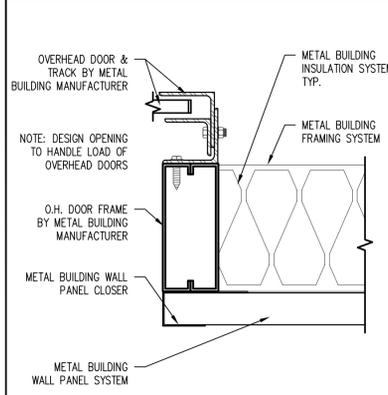
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 577 South 200 East
 Salt Lake City, Utah 84111
 (801) 533-2100 fax: 533-2101 jrcadesign.com

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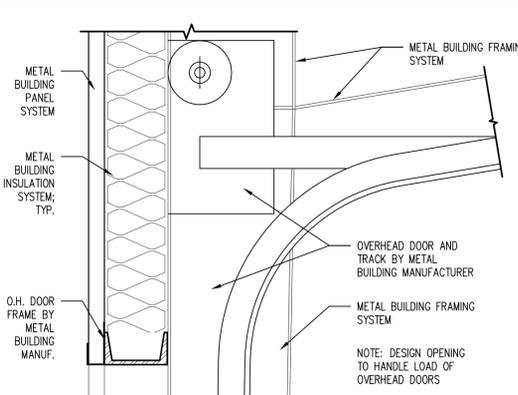
SITE PLAN

AS
101

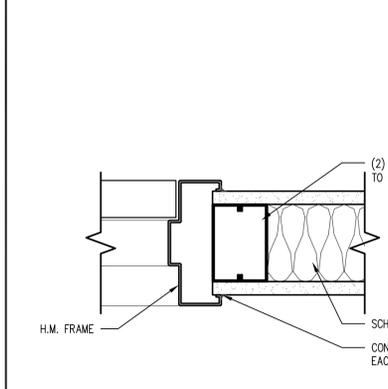
NOTE: ADDITIONAL SITE IMPROVEMENTS OCCUR AT SOUTH EAST CORNER OF SITE; SEE CIVIL



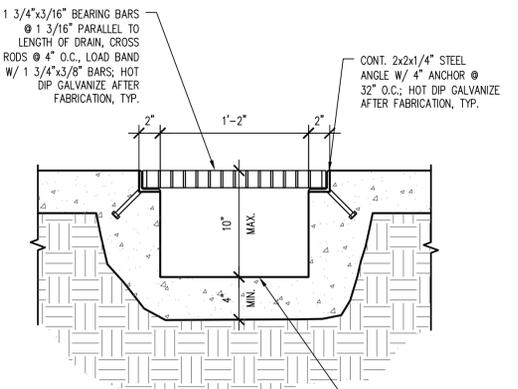
D5 OVERHEAD DOOR JAMB
 9-14.DWG
 AE101 SCALE 3" = 1'-0"



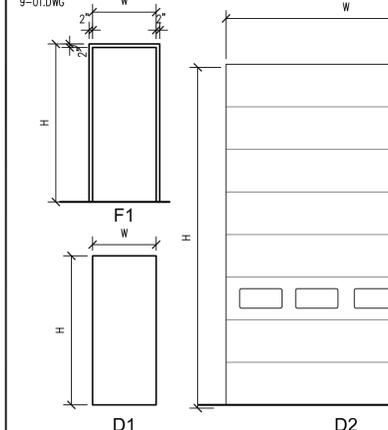
D4 OVERHEAD DOOR DETAIL
 9-14.DWG
 AE101 SCALE 1 1/2" = 1'-0"



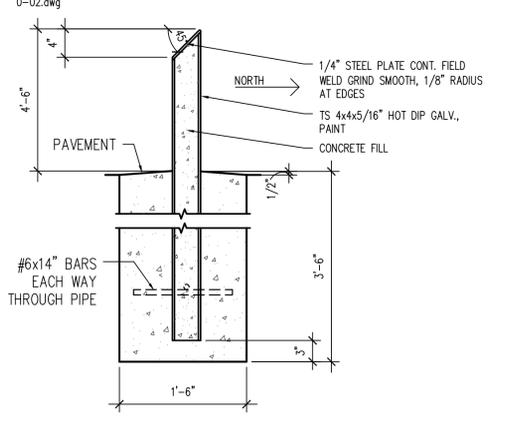
C5 INTERIOR H.M. DOOR JAMB (HEAD SIM.)
 9-01.DWG
 AE101 SCALE 3" = 1'-0"



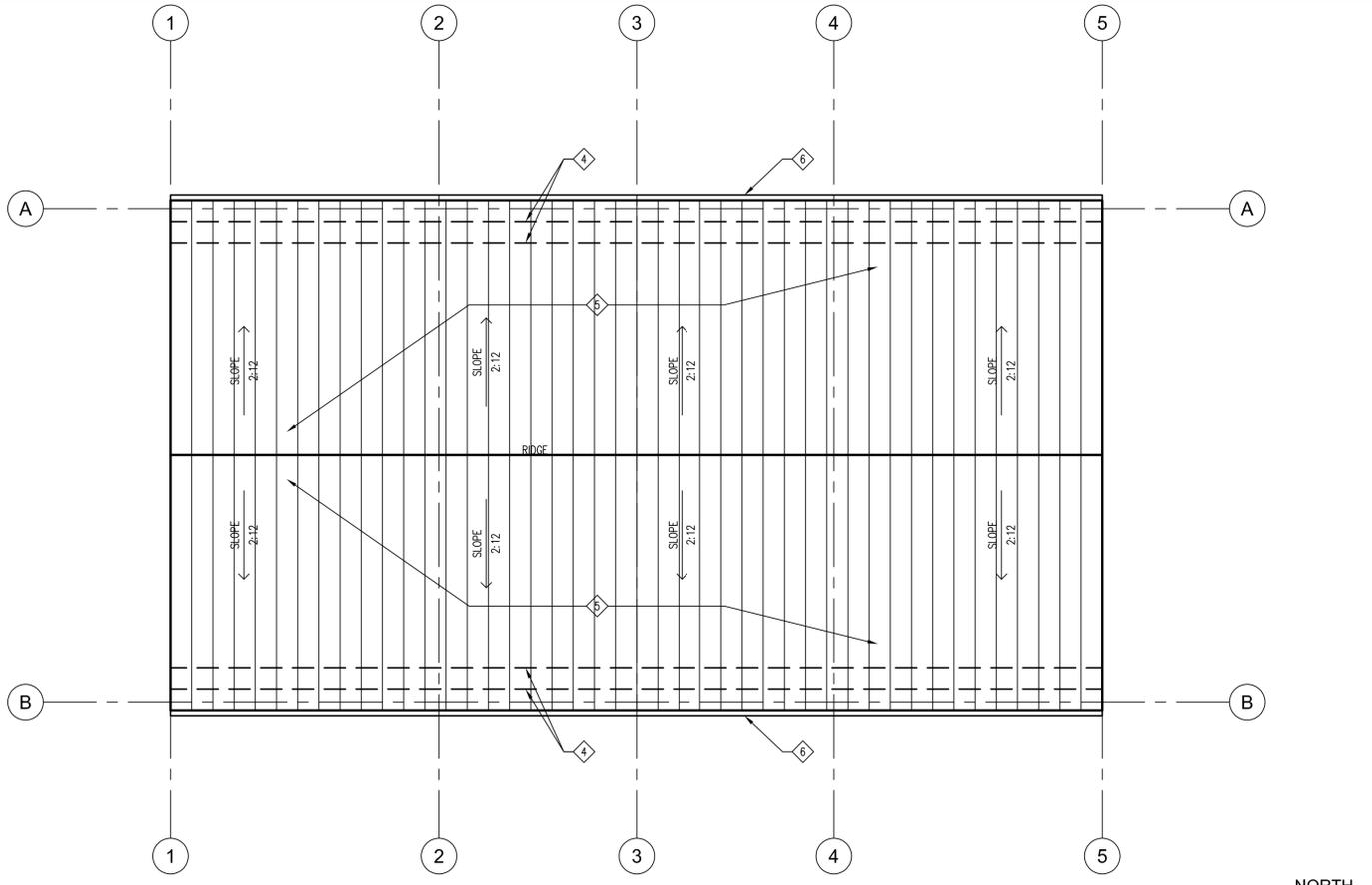
C4 TRENCH DRAIN DETAIL
 0-02.DWG
 AE101 SCALE 1 1/2" = 1'-0"



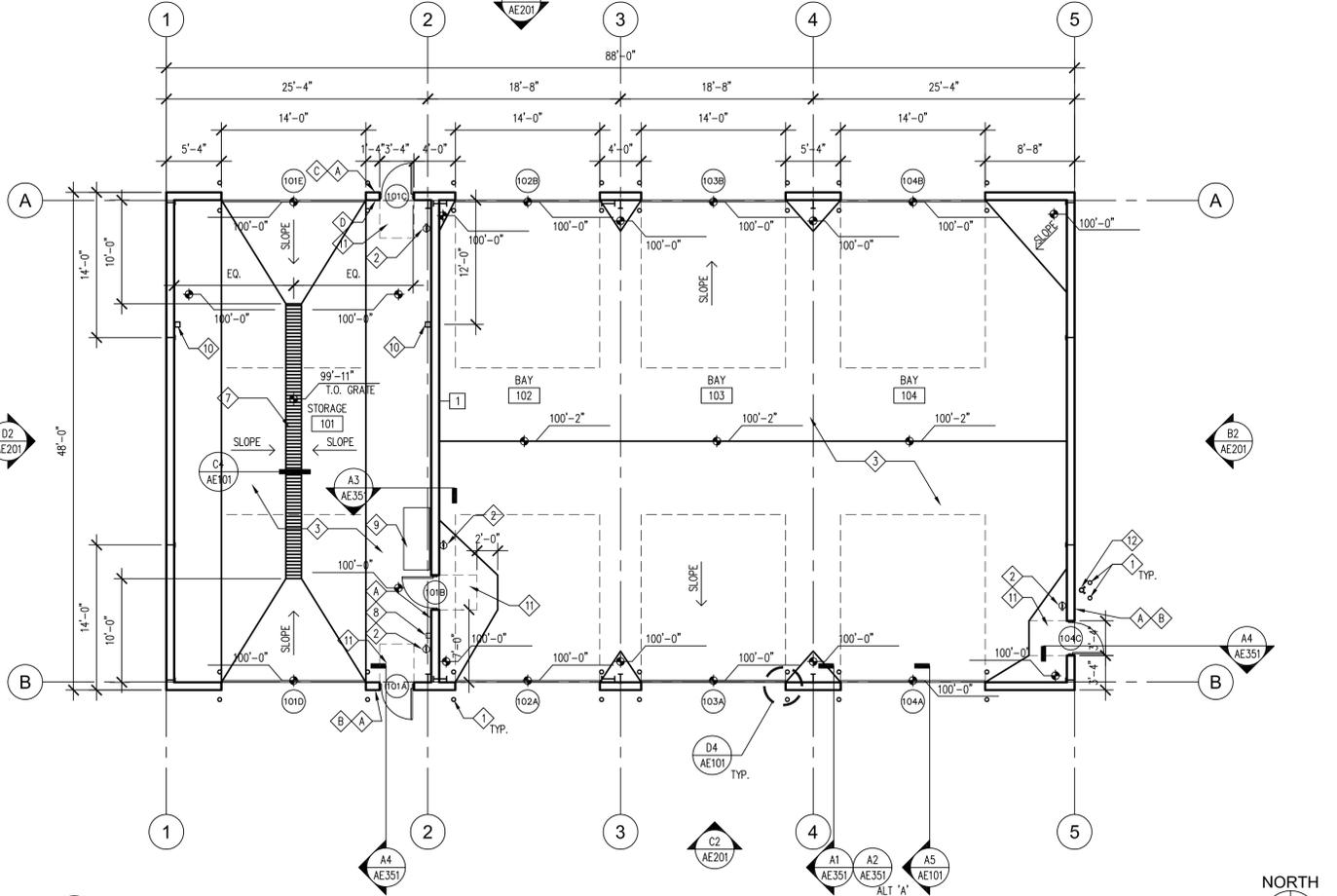
B5 DOOR & FRAME TYPES
 1-01.DWG
 AE101 SCALE 1/4" = 1'-0"



B4 BOLLARD DETAIL
 0-01.DWG
 AE101 SCALE 1" = 1'-0"



ROOF PLAN
 SCALE 1/8" = 1'-0"



FLOOR PLAN
 SCALE 1/8" = 1'-0"

GENERAL NOTES:

- 1. --
- 2. --

SIGNAGE KEY NOTES:

- ◇ A PROVIDE A SIGN STATING "ALL RESTROOMS ARE LOCATED IN EAST MODULAR UNIT" SIGN TO COMPLY WITH (ANSI 117.1); SEE SHEET AE201/A4-A
- ◇ B PROVIDE A SIGN STATING "ACCESSIBLE ENTRANCE" SIGN TO COMPLY WITH (ANSI 117.1); SEE SHEET AE201/A4-B
- ◇ C PROVIDE A SIGN STATING "NON ACCESSIBLE BUILDING ENTRANCE - ACCESSIBLE ENTRANCES ON S.E. AND S.W. CORNERS OF BUILDING" SIGN TO COMPLY WITH (ANSI 117.1); SEE SHEET AE201/A4-C
- ◇ D PROVIDE A SIGN STATING "NON ACCESSIBLE BUILDING EXIT - ACCESSIBLE EXITS ON S.E. AND S.W. CORNERS OF BUILDING" SIGN TO COMPLY WITH (ANSI 117.1); SEE SHEET AE201/A4-D

KEY NOTES:

- ◇ 1 BOLLARD, SEE B4/AE101
- ◇ 2 FIRE EXTINGUISHER
- ◇ 3 6" CONC. W/ SEALER ON 4" GRAVEL BASE ON STRUCTURAL FILL
- ◇ 4 CONTINUOUS SNOW FENCE
- ◇ 5 METAL ROOF
- ◇ 6 CONT. GUTTER & DOWNSPOUT SYSTEM
- ◇ 7 TRENCH DRAIN SEE DETAIL C4/AE101
- ◇ 8 EMERGENCY EYE WASH
- ◇ 9 WORK BENCH BY OWNER, N.I.C.
- ◇ 10 STEEL COLUMN FOR HOIST (ALTERNATE 'B'); SEE STRUCTURAL DRAWINGS
- ◇ 11 36" X 44" LEVEL LANDING AREA
- ◇ 12 GROUND MOUNTED FIRE HYDRANT

WALL TYPE SCHEDULE:

- 1 8" 20 GA. METAL STUDS @ 16" O.C. W/ 5/8" TYPE "X" GYP. BD. EACH SIDE W/ CONT. R-19 BATT; EXTEND ASSEMBLY TO B.O. OF ROOF DECK; PROVIDE DEFLECTION TOP TRACK. SCREW PATTERN TO FOLLOW GA W P1350 ASSEMBLY FINISH LEVEL 4 AND PAINT COLOR PT-2; PROVIDE 4" RUBBER WALL BASE EACH SIDE

OGDEN BAY GREAT SALT LAKE ECOSYSTEM STORAGE BUILDING
 PHASE II
 DIVISION OF WILDLIFE RESOURCES
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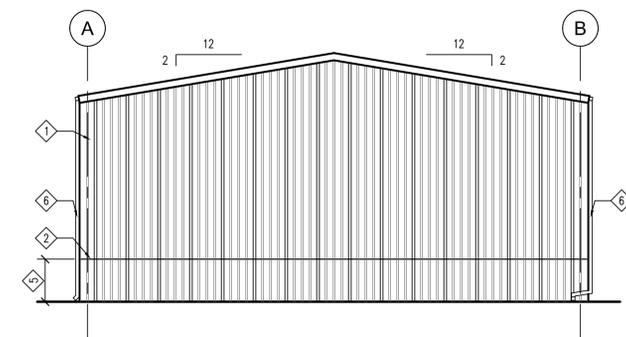
DATE/REVISION	PROJECT #
01 - 07 - 09	08013

FLOOR PLAN, ROOF PLAN & DETAILS

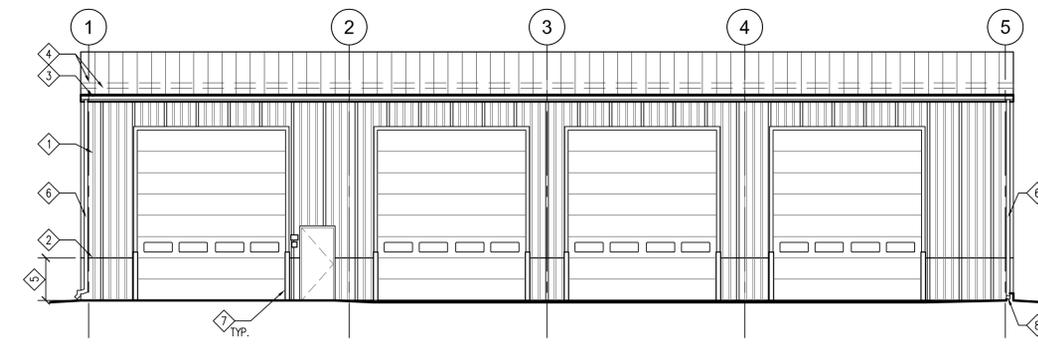
AE 101

DOOR AND FRAME SCHEDULE														
DOOR	DOOR				FRAME: SEE AE101 & AE351							NOTES		
	SIZE	TYPE	MATL	FINISH	GLAZING	TYPE	MATL	FINISH	HEAD	JAMB	THRSH		FIRE RATING	
101A	3'-0" x 7'-0"	D1	HM	PT-1	--	F1	HM	PT-1	--	--	D5	--	1	
101B	3'-0" x 7'-0"	D1	HM	PT-1	--	F1	HM	PT-1	C5	C5	--	--	--	
101C	3'-0" x 7'-0"	D1	HM	PT-1	--	F1	HM	PT-1	--	--	D5	--	1	
101D	14'-0" x 16'-0"	D2	STL	--	--	--	--	--	--	--	D4	D5	--	2
101E	14'-0" x 16'-0"	D2	STL	--	--	--	--	--	--	--	D4	D5	--	2
102A	14'-0" x 16'-0"	D2	STL	--	--	--	--	--	--	--	D4	D5	--	2
102B	14'-0" x 16'-0"	D2	STL	--	--	--	--	--	--	--	D4	D5	--	2
103A	14'-0" x 16'-0"	D2	STL	--	--	--	--	--	--	--	D4	D5	--	2
103B	14'-0" x 16'-0"	D2	STL	--	--	--	--	--	--	--	D4	D5	--	2
104A	14'-0" x 16'-0"	D2	STL	--	--	--	--	--	--	--	D4	D5	--	2
104B	14'-0" x 16'-0"	D2	STL	--	--	--	--	--	--	--	D4	D5	--	2
104C	3'-0" x 7'-0"	D1	HM	--	PT-1	F1	HM	PT-1	--	--	D5	--	1	

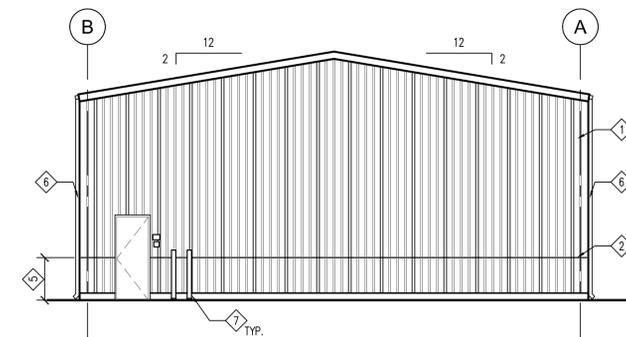
1. DOOR, FRAME & HARDWARE BY PRE-ENGINEERED BUILDING MANUFACTURER
 2. OVERHEAD SECTIONAL DOOR ASSEMBLY



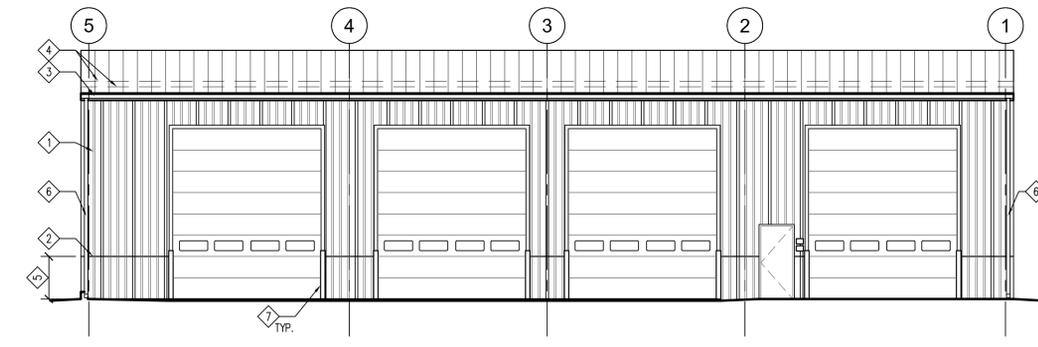
WEST ELEVATION
 D2
 AE201
 SCALE 1/8" = 1'-0"



SOUTH ELEVATION
 C2
 AE201
 SCALE 1/8" = 1'-0"



EAST ELEVATION
 B2
 AE201
 SCALE 1/8" = 1'-0"



NORTH ELEVATION
 A2
 AE201
 SCALE 1/8" = 1'-0"

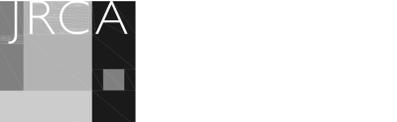
GENERAL NOTES:

1. --
2. --

KEY NOTES:

- 1 METAL WALL PANEL
- 2 LAP SEAM IN EXTERIOR METAL PANEL
- 3 CONT. GUTTER SYSTEM
- 4 CONTINUOUS SNOW FENCE (2 ROWS TOTAL)
- 5 REFER TO DETAIL A2/AE351 FOR ALTERNATE 'A' MASONRY OPTION
- 6 DOWN SPOUT
- 7 BOLLARD; SEE DETAIL B4/AE101
- 8 CONNECT DOWNSPOUT TO 6" DIA. HDPE. SEE CIVIL FOR CONTINUATION

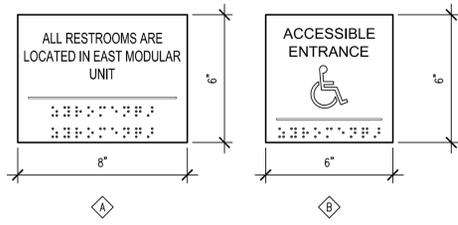
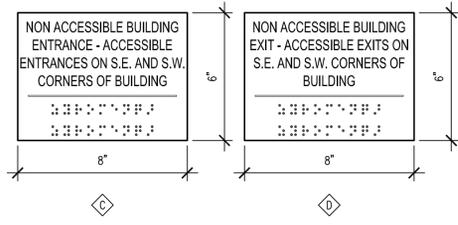
OGDEN BAY GREAT SALT LAKE ECOSYSTEM STORAGE BUILDING PHASE II
 DIVISION OF WILDLIFE RESOURCES
 DFCM PROJECT # 08221520
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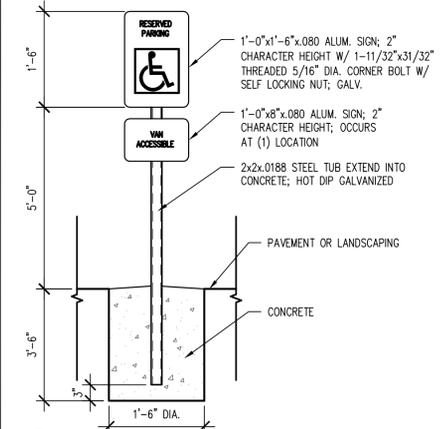
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EXTERIOR ELEVATIONS
AE 201

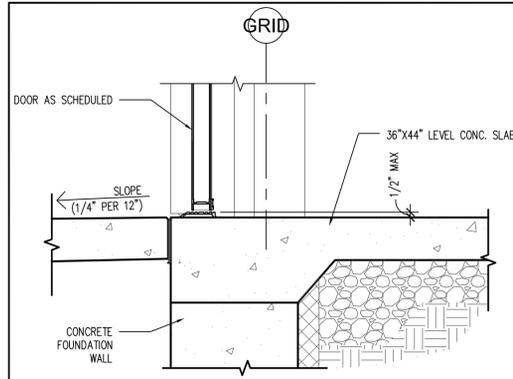


NOTE: ALL TEXT TO BE 3/4" HEIGHT

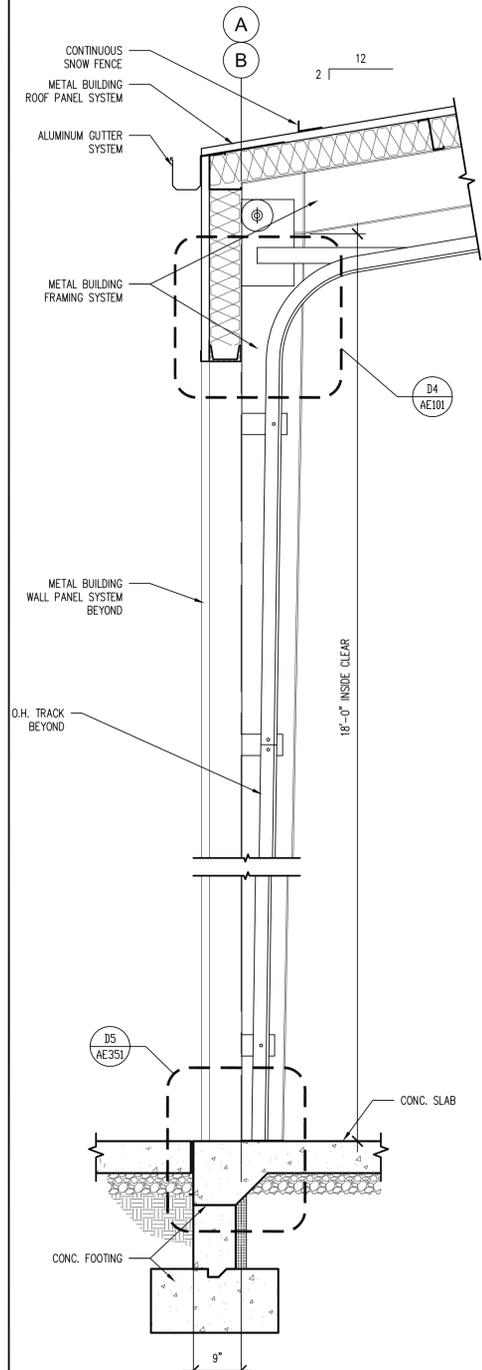


A5 ADA PARKING STALL SIGN
 AE201
 SCALE 3/4" = 1'-0"

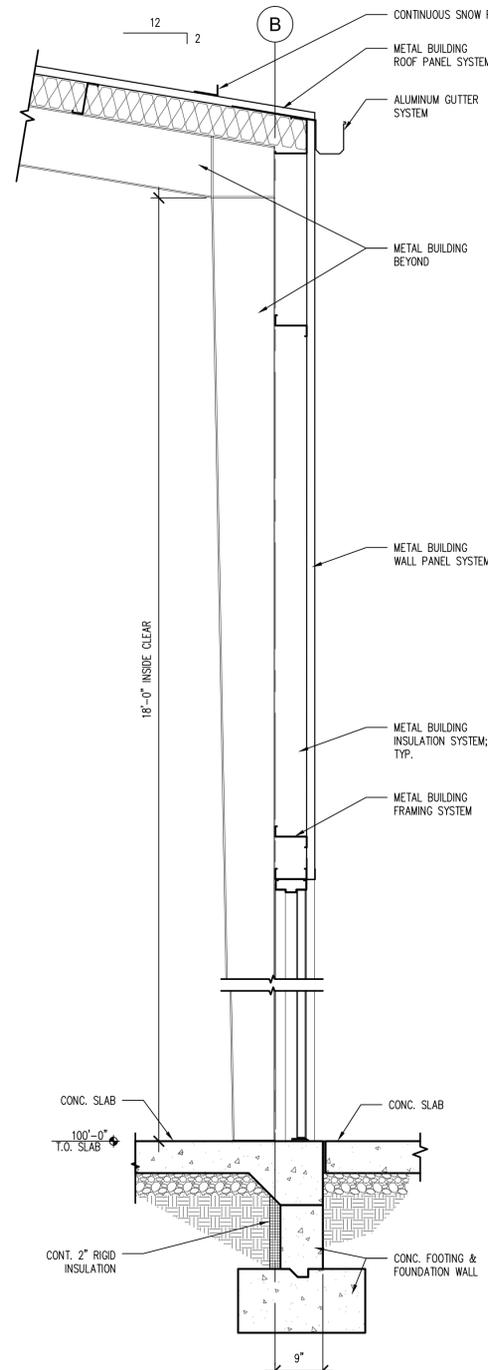
A4 SIGN SCHEDULE
 AE201
 SCALE 3" = 1'-0"



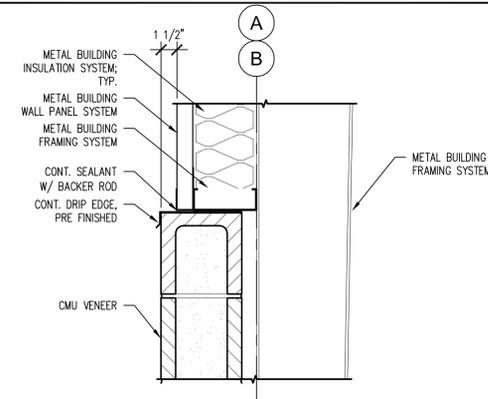
D5 DOOR SILL DETAIL
SCALE 1 1/2" = 1'-0"



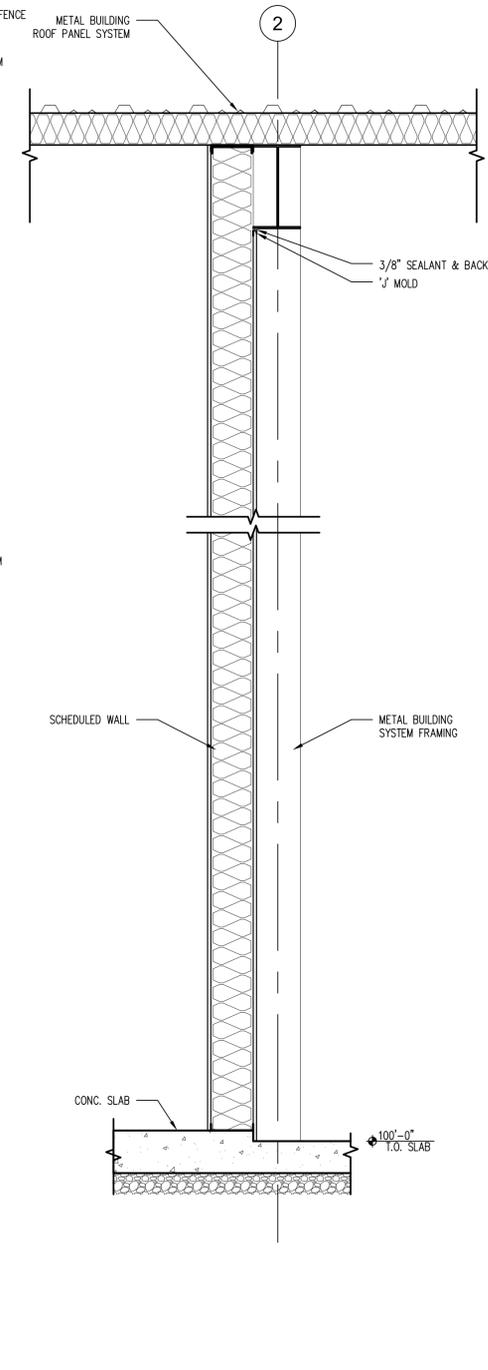
A5 WALL SECTION
SCALE 3/4" = 1'-0"



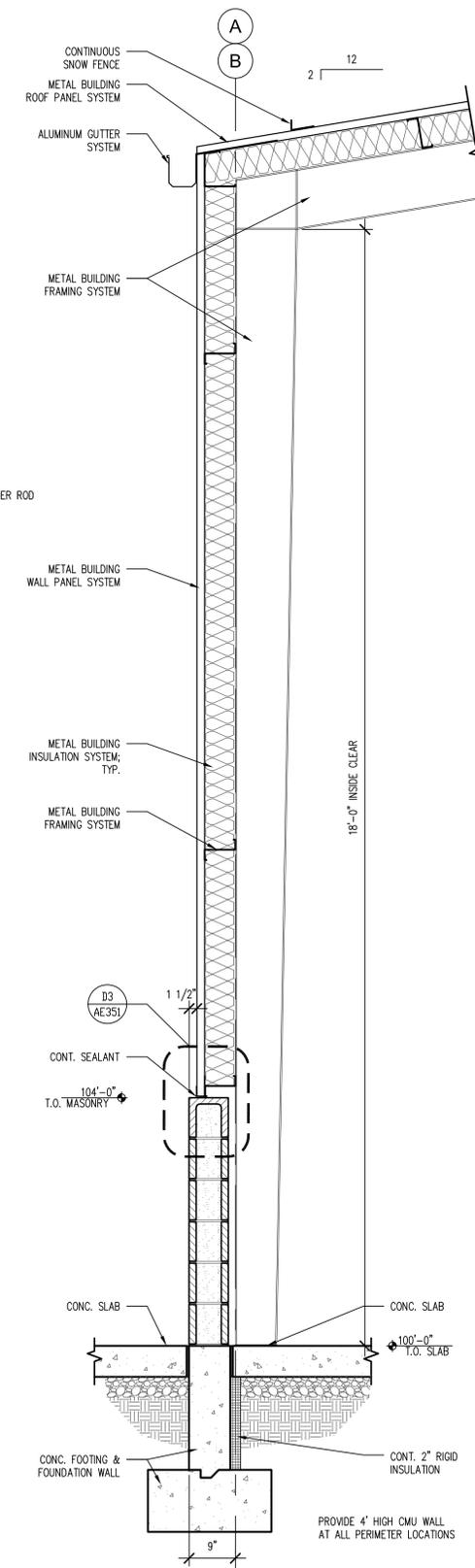
A4 WALL SECTION
SCALE 3/4" = 1'-0"



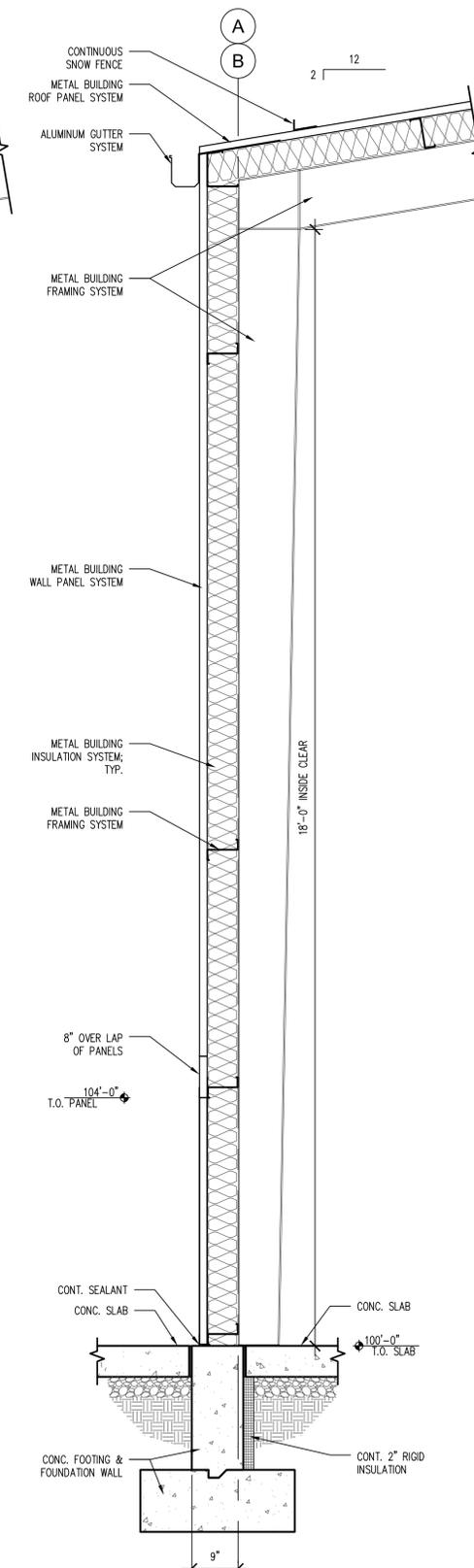
D3 DETAIL - ALTERNATE 'A'
SCALE 1 1/2" = 1'-0"



A3 WALL SECTION
SCALE 3/4" = 1'-0"



A2 WALL SECTION - ALTERNATE 'A'
SCALE 3/4" = 1'-0"



A1 WALL SECTION
SCALE 3/4" = 1'-0"

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PHASE II
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DFCM PROJECT # 08221520
HOOPER, UTAH



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WALL SECTIONS

AE 351

GENERAL STRUCTURAL NOTES:

- I. GENERAL:**
- THE STRUCTURAL DRAWINGS SHOW THE COMPLETED PROJECT. DETAILS, SECTIONS, AND NOTES SHOWN ON THE DRAWINGS SHALL BE TYPICAL AND APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS NOTED OR SHOWN OTHERWISE.
 - CONTRACTOR SHALL COMPARE ALL DIMENSIONS AND CONDITIONS ON CONTRACT DOCUMENTS AND AT THE SITE. ANY OMISSION OR CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. IN CASE OF ANY CONFLICT FOLLOW THE MOST STRINGENT REQUIREMENT AS DIRECTED BY ARCHITECT/ENGINEER.
 - SEE THE ARCHITECTURAL DRAWINGS FOR DOORS, WINDOWS, NON-BEARING INTERIOR AND EXTERIOR WALLS, RECESSES, DEPRESSIONS, ETC.
 - CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING FOR ALL PORTIONS OF THE BUILDING UNTIL THE ENTIRE STRUCTURE OF THE BUILDING IS COMPLETE.
 - OBSERVATION VISITS TO THE SITE BY STRUCTURAL ENGINEER'S FIELD REPRESENTATIVES SHALL NOT BE CONSIDERED AS INSPECTION OR APPROVAL OF CONSTRUCTION.
 - ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN UTAH.

- II. DESIGN CRITERIA:**
- BUILDING CODE: 2006 INTERNATIONAL BUILDING CODE (IBC) W/ AMENDMENTS
 - LOADINGS:
 - ROOF SNOW LOAD = 30 PSF + SNOW DRIFT PER IBC
 - WIND LOAD - 90 MPH ZONE - EXPOSURE C
 - SEISMIC DESIGN CATEGORY: E

- C. FOUNDATION:**
- THE SOIL REPORT IS PROVIDED BY "AMEC" JOB NO. 2-81-0045 ON 2002 AND NO. 0763-001-08 ON 2008.
 - ALL EXTERIOR FOOTINGS ARE TO BE FOUNDATION AT NOT LESS THAN 30" BELOW LOWEST ADJACENT FINISH FLOOR OR FINISH GRADE ONTO UNDISTURBED EXISTING SUBSOILS HAVING A MINIMUM NET BEARING CAPACITY OF 2000 PSF. ALL INTERIOR FOOTINGS ARE TO BE FOUNDATION AT NOT LESS THAN 1'-3" BELOW LOWEST ADJACENT FINISH FLOOR ONTO SUBSOILS.

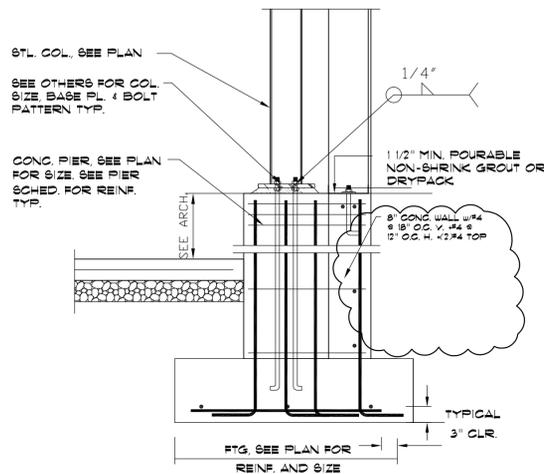
- III. CONCRETE:**
- ALL MATERIALS SHALL COMPLY WITH ACI 318 AND ACI 347 PUBLICATIONS AND APPLICABLE ASTM PUBLICATIONS.
 - CONCRETE MATERIAL PROPERTIES: 28-DAY COMPRESSIVE STRENGTHS ARE TO BE 3000 PSI TYPICAL UNLESS NOTED OTHERWISE. DESIGN BASED ON 2500 PSI.
 - CAST-IN-PLACE CONCRETE:
 - SPACING OF CONSTRUCTION JOINTS OR CONTROL JOINTS IN WALLS EXPOSED TO VIEW SHALL NOT EXCEED 40 FEET UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS.
 - PROVIDE EXTRA REINFORCING AROUND ALL OPENINGS EXCEEDING 24 INCHES SQUARE OR ROUND IN ALL SLABS AND WALLS EQUAL TO TWO #5 BARS ON FOUR SIDES AND EXTEND TWO FEET BEYOND THE OPENING.
 - PROVIDE A 3/4" CHAMFER ON ALL EXPOSED CORNERS OF CONCRETE UNLESS NOTED OTHERWISE.
 - PROVIDE CLASS B LAP SPLICES FOR ALL REINFORCING UNLESS NOTED OTHERWISE.
 - PROVIDE ISOLATION JOINTS AROUND ALL COLUMNS AT ALL EXPOSED SLAB ON GRADE AREAS.

- IV. REINFORCING STEEL:**
- ALL BARS #4 AND LARGER TO BE ASTM A 615, GRADE 60. ALL #2 AND #3 BARS TO BE ASTM A 615, GRADE 40. DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH ACI-318, LATEST ADOPTION.
 - ALL REINFORCING STEEL SHALL BE BENT, DETAILED AND CHAIRED AS PER "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCING CONCRETE STRUCTURES".
 - WELDED WIRE FABRIC TO BE IN ACCORDANCE WITH ASTM A 185.
 - ALL BARS INDICATED ON THE PLANS TO BE WELDED SHALL CONFORM TO ASTM A106 (GRADE 60).
 - CONCRETE COVER REQUIREMENTS FOR DEFORMED BAR REINFORCING STEEL SHALL COMPLY WITH ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCING CONCRETE:
 - CAST-IN-PLACE CONCRETE:
 - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
 - FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:
 - #6 BARS AND LARGER: 2"
 - #5 BARS AND SMALLER: 1-1/2"
 - CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
 - SLABS, WALLS JOISTS, #11 BARS OR SMALLER: 3/4"
 - BEAMS, COLUMNS, PRIMARY REINFORCING, TIES, STIRRUPS, SPIRALS: 1-1/2"

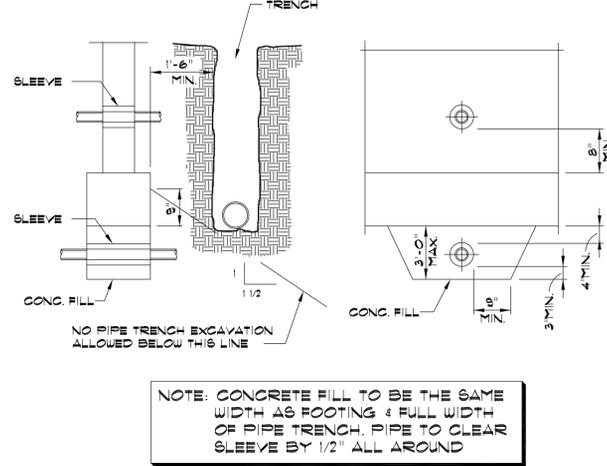
- F. DETAILING: SUBMIT PLACING DRAWINGS PER ACI DETAILING MANUAL ACI 90-66. FABRICATE ONLY AFTER REVIEW AND APPROVAL. REINFORCING BARS SHALL NOT BE WELDED UNLESS SPECIFICALLY SHOWN ON DRAWINGS.**
- LAP SPlice LENGTHS SHALL BE AS FOLLOWS:
 - 30 BAR DIAMETER FOR #3 AND #4 BARS
 - 40 BAR DIAMETER FOR #5 THROUGH #8 BARS
 DO NOT SPlice STIRRUPS AND TIES
DO NOT SPlice VERTICAL BARS IN RETAINING WALLS UNLESS SPECIFICALLY SHOWN.
 - ALL EMBEDMENTS AND DOWELS SHALL BE SECURELY TIED TO FORMWORK OR TO ADJACENT REINFORCING PRIOR TO THE PLACEMENT OF CONCRETE.

- V. STRUCTURAL AND MISCELLANEOUS STEEL:**
- MATERIAL PROPERTIES:
 - ALL SHAPES, PLATES, ANGLES, AND CHANNELS TO BE ASTM A-36 UNLESS NOTED OTHERWISE.
 - ALL LF SHAPES WEIGHING 84 POUNDS PER LINEAR FOOT OR LESS TO BE ASTM A 572, GRADE 50. ALL LF SHAPES WEIGHING MORE THAN 84 POUNDS PER LINEAR FOOT TO BE ASTM A 572, GRADE 58.
 - SQUARE OR RECTANGULAR TUBES TO BE ASTM A 500, GRADE B, F_y = 46 KSI.
 - ALL STEEL TO BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS, LATEST ADOPTION.
 - WELDING:
 - FOR STRUCTURAL STEEL TO BE IN ACCORDANCE WITH A.I.S.C. REQUIREMENTS FOR EPOXY ELECTRODES.
 - BOLTS:
 - ALL BOLTS TO BE 3/4" DIAMETER ASTM A 325-N UNLESS NOTED OTHERWISE.
 - BOLTS, NUTS AND WASHERS SHALL NOT BE REUSED.
 - ANCHOR BOLTS SHALL BE ASTM A 307 OR A 36.

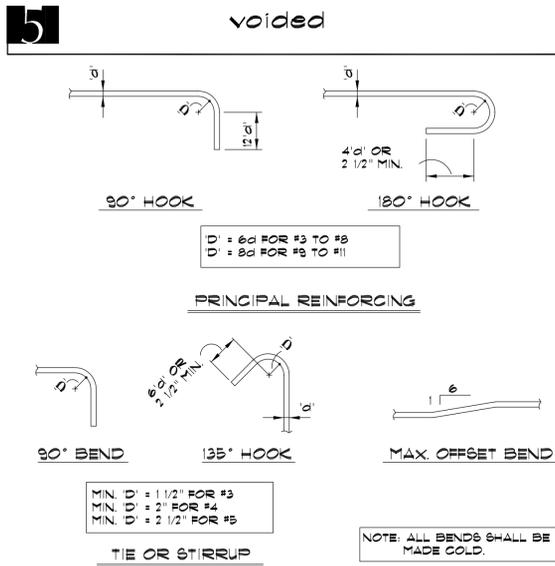
- V. SPECIAL INSPECTION: SPECIAL INSPECTION IS REQUIRED IN ACCORDANCE WITH IBC SECTION 1701.**
- ALL WELDINGS
 - EPOXY BOLTS IF APPLY



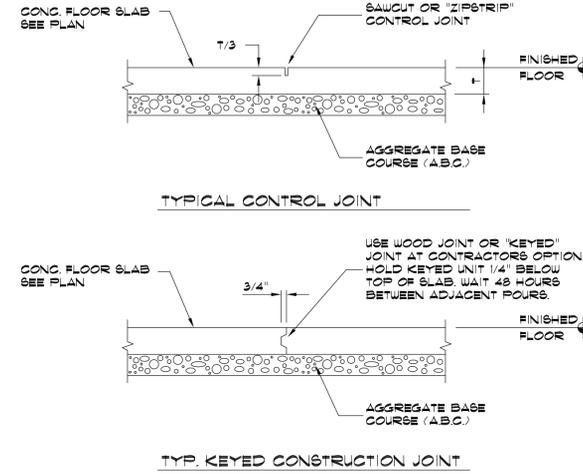
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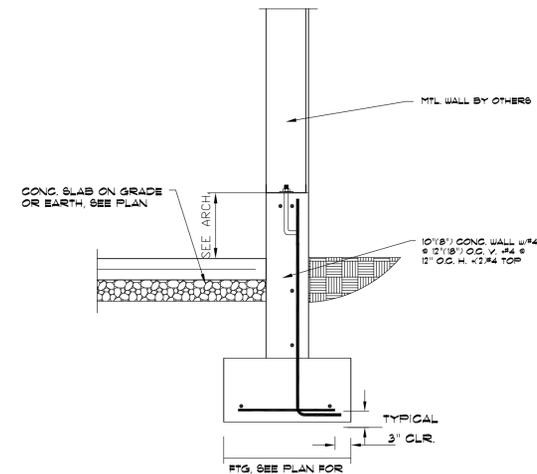
4 PIPES AT CONCRETE FOOTING



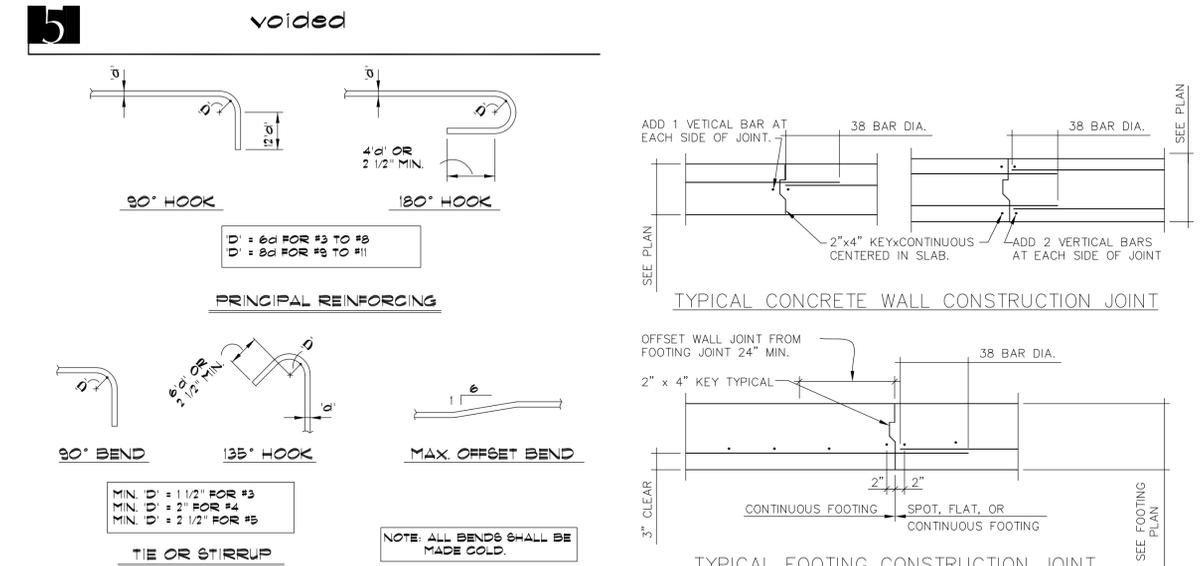
6 TYPICAL REINFORCING BAR BENDS



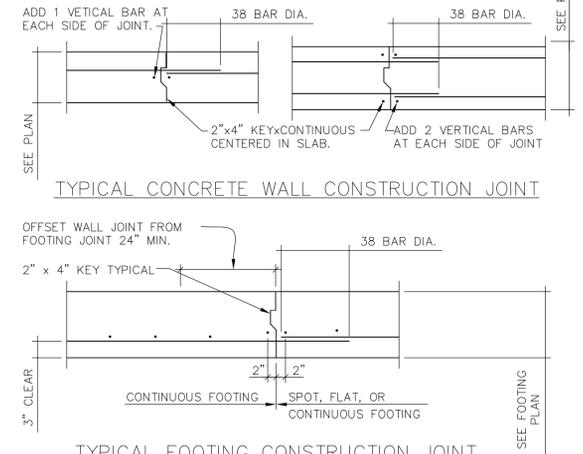
1 TYPICAL CONCRETE FLOOR JOINTS



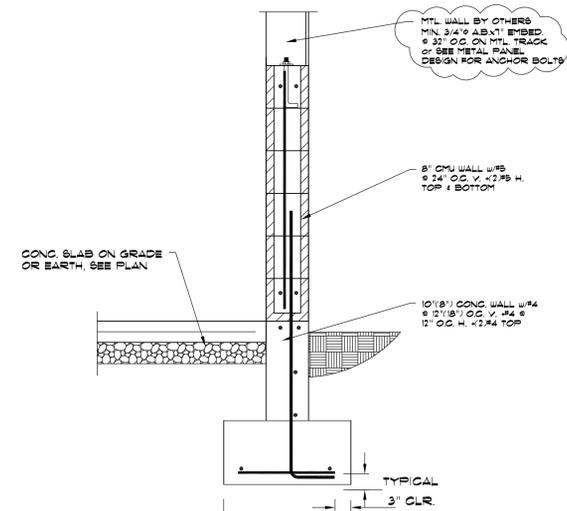
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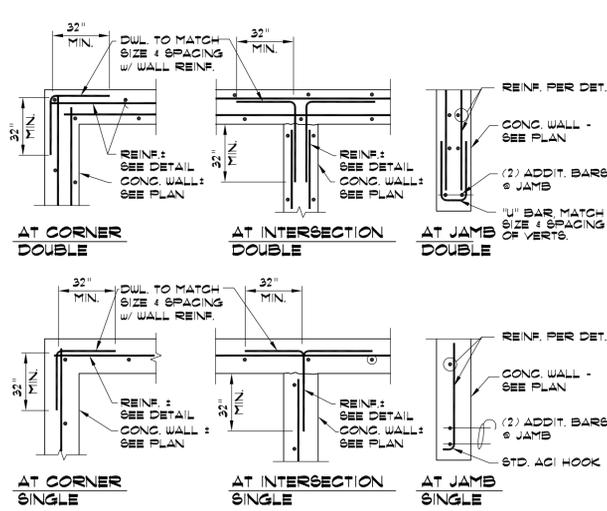
6 TYPICAL REINFORCING BAR BENDS



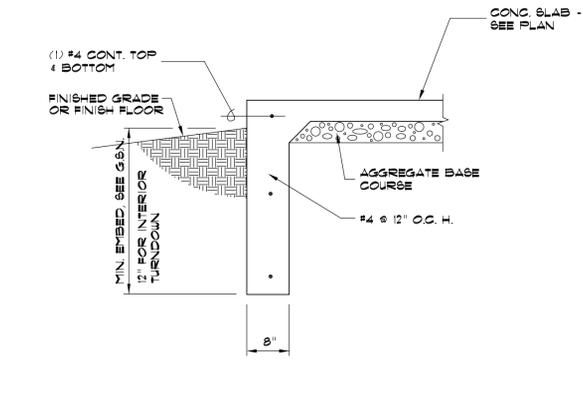
2 TYP. FTG. & WALL CONSTRUCTION JOINT



10



7 TYPICAL CONC. WALL REINF.



3 TYPICAL TURNDOWN FOOTING

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Structural/Seismic Consultants
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REGISTERED PROFESSIONAL ENGINEER
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HUA SHEN
STATE OF UTAH

BID SET

OGDEN BAY GREAT SALT LAKE ECOSYSTEM STORAGE BUILDING

DIVISION OF WILDLIFE RESOURCES
DFCM PROJECT #08221520
SOUTH OGDEN, UTAH

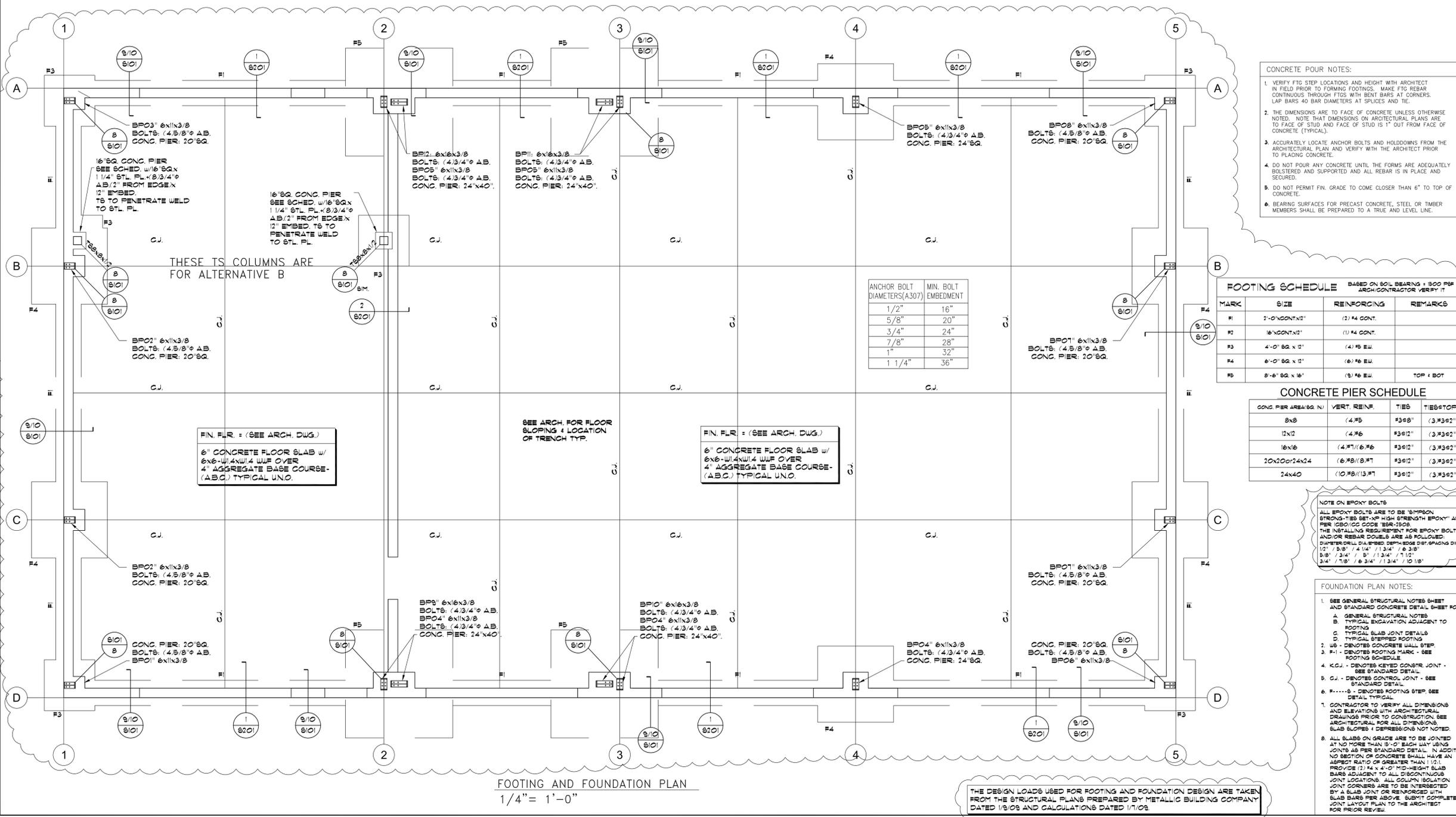
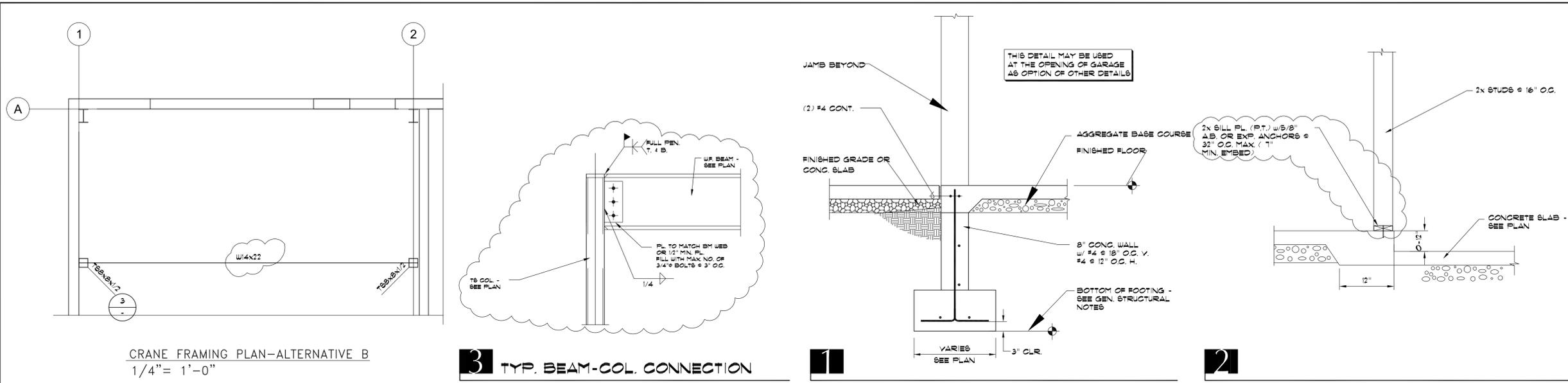
JRCA

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DATE/REVISION 12.12.08 1/28/09 REV. 1	PROJECT # SE08031
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SHEET DESCRIPTION: GENERAL STRUCTURAL NOTES	SHEET NO. S 101
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AutoCAD Version: 13.24
Date: 12/12/08
Drawing: S-101-STRUC-01-UTZLWZMG (R&G)



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ABBREVIATIONS

∅	ROUND, DIAMETER, PHASE	EWT	ENTERING WATER TEMPERATURE	OZ	OUNCE
ABS	ACRYLONITRILE-BUTADIENE-STYRENE, ABSOLUTE	EXH	EXHAUST	P	PUMP
ACCU	AIR COOLED CONDENSING UNIT	EXP	EXPANSION	PD	PRESSURE DROP/DIFFERENCE
A/C	AIR CONDITIONING	EXT	EXTERIOR	PE	POLYETHYLENE
AD	ACCESS DOOR, AREA DRAIN	F	FAHRENHEIT	PEX	CROSS-LINKED POLYETHYLENE
ADA	AMERICAN DISABILITIES ACT	FC	FLEXIBLE CONNECTION, FORWARD CURVED	PF	PRE-FILTER
AF	AIR FOIL, AIR FILTER	FCO	FLOOR CLEAN OUT	PH	PHASE
AFF	ABOVE FINISH FLOOR	FCU	FAN COIL UNIT	PIV	POST INDICATOR VALVE
AHU	AIR HANDLING UNIT	FD	FLOOR DRAIN, FIRE DAMPER	PLMB	PLUMBING
ALT	ALTITUDE, ALTERNATE	FDC	FIRE DEPARTMENT CONNECTION	POC	POINT OF CONNECTION
AMB	AMBIENT	FF	FINISH FLOOR, FINAL FILTER	PPM	PARTS PER MILLION
AMP	AMPERE (AMP, AMPS)	FL	FLOW LINE	PRS	PRESSURE REDUCING STATION
AP	ACCESS PANEL	FLEX	FLEXIBLE	PRV	PRESSURE REDUCING VALVE
APD	AIR PRESSURE DROP	FO	FLAT OVAL	PSF	POUNDS PER SQUARE FOOT
ARCH	ARCHITECT	FP	FIRE PROTECTION	PSI	POUNDS PER SQUARE INCH
AS	AIR SEPARATOR	FFM	FEET PER MINUTE	PTAC	PACKAGED TERMINAL AIR CONDITIONER
AV	ACID VENT, AIR VENT	FS	FLOOR SINK	PVC	POLYVINYL CHLORIDE
B	BOILER	FSD	FIRE SMOKE DAMPER	R	THERMAL RESISTANCE, RANKINE, RETURN
BAL	BALANCE	FSTAT	FREEZE/STAT	RA	RETURN AIR
BAS	BUILDING AUTOMATION SYSTEM	FT	FEET	RAD	RADIUS
BBR	BASEBOARD RADIATOR	FTR	FIN TUBE RADIATION	RCP	RADIANT CEILING PANEL
BDD	BACKDRAFT DAMPER	FURN	FURNACE, FURNISH, FURNITURE	RD	ROOF DRAIN
BFP	BACKFLOW PREVENTER	FV	FACE VELOCITY	RECIR C	RECIRCULAT(E),(OR),(ING)
BFV	BUTTERFLY VALVE	G	GAUGE, NATURAL GAS	REF	REFRIGERAT(OR),(ION)
BHP	BRAKE HORSEPOWER	GA	GAGE	REQ'D	REQUIRED
BI	BACKWARD INCLINED	GAL	GALLON	RF	RETURN FAN
BOD	BOTTOM OF DUCT	GALV	GALVANIZED	RH	RELATIVE HUMIDITY
BOP	BOTTOM OF PIPE	GC	GENERAL CONTRACTOR	RM	ROOM
BT	BATH TUB	GD	GARAGE DRAIN	RPBP	REDUCED PRESS. BACKFLOW PREVENTER
BTU	BRITISH THERMAL UNIT	GH	GRAVITY HOOD	RPM	REVOLUTIONS PER MINUTE
BTUH	BRITISH THERMAL UNITS/HR	GPM	GALLONS PER MINUTE	REV	REVOLUTION, REVISION, REVERSE
BV	BALL VALVE	GT	GREASE TRAP	S	SECONDS, SUPPLY, SINK
C	CHILLER	HB	HOSE BIBB	SA	SUPPLY AIR, SOUND ATTENUATOR
CA	COMPRESSED AIR, COMBUSTION AIR	H/C, HC	HEATING COIL	SAN	SANITARY
CAP	CAPACITY	HEPA	HIGH EFFICIENCY PARTICULATE AIR	SAT	SATURATED
CAV	CONSTANT AIR VOLUME	HOA	HAND, OFF, AUTO	SCFM	STANDARD CUBIC FEET PER MINUTE
C/C, CC	COOLING COIL	HP	HORSEPOWER, HEAT PUMP	SD	STORM DRAIN, SMOKE DAMPER
CD	CONDENSATE DRAIN, CEILING DIFFUSER	HR	HOUR	SECT	SECTION
CFM	CUBIC FEET PER MINUTE	HSTAT	HUMIDISTAT	SEN	SENSIBLE
CFOI	CONTRACTOR FURN., OWNER INSTALLED	HT	HEIGHT	SHT	SHEET
CHW	CHILLER WATER	HVAC	HEATING, VENTILATING, AIR-CONDITIONING	SIM	SIMILAR
CO	CLEAN OUT, CARBON MONOXIDE	HX	HEAT EXCHANGER	SL	SEA LEVEL
CO2	CARBON DIOXIDE	HZ	FREQUENCY	SP	STATIC PRESSURE
CONC	CONCRETE	IAQ	INDOOR AIR QUALITY	SPEC	SPECIFICATION
COND	CONDENS(ER),(ING),(ATE),(ATION)	ID	INSIDE DIAMETER	SQ	SQUARE
CONT	CONTINUOUS	IE	INVERT ELEVATION	SS	SERVICE SINK, STAINLESS STEEL
COP	COEFFICIENT OF PERFORMANCE, COPPER	IN	INCH	STD	STANDARD
COTG	CLEANOUT TO GRADE	IN WC	INCHES, WATER COLUMN	STRUC T	STRUCTUR(E),(AL)
CPVC	CHLORINATED POLY VINYL CHLORIDE	INV	INVERT	SUCT	SUCTION
CV	CONTROL VALVE, CONSTANT VOLUME	I/O	INPUT/OUTPUT	T	TEMPERATURE, TIME
CUH	CABINET UNIT HEATER	JS	JANITORS SINK	T&P	TEMPERATURE AND PRESSURE
CW	CONDENSER WATER, CLOCKWISE	KEC	KITCHEN EQUIPMENT CONTRACTOR	TAB	TEST, ADJUST AND BALANCE
DA	DISCHARGE AIR	KW	KILOWATT	TDH	TOTAL DYNAMIC HEAD
dB	DECIBELS	KWH	KILOWATT HOUR	TEMP	TEMPERATURE, TEMPORARY
DB	DRY BULB TEMPERATURE	LAT	LEAVING AIR TEMPERATURE	TONS	TONS OF REFRIGERATION
DDC	DIRECT DIGITAL CONTROL	LAV	LAVATORY	TOD	TOP OF DUCT
DF	DRINKING FOUNTAIN	LBS	POUNDS	TOP	TOP OF PIPE
DIA	DIAMETER	LF	LINEAR FEET	TSP	TOTAL STATIC PRESSURE
DMPR	DAMPER	LVR	LOUVER	TSTAT	THERMOSTAT
DP	DEWPOINT, DIFFERENTIAL PRESSURE	LWT	LEAVING WATER TEMPERATURE	TYP	TYPICAL
DR	DRAIN	MA	MEDICAL AIR, MIXED AIR	U	URINAL
DSN	DOWNSPOUT NOZZLE	MAT	MATERIAL, MIXED AIR TEMPERATURE	UH	UNIT HEATER
DW	DISHWASHER	MAU	MAKE UP AIR HANDLING UNIT	UNO	UNLESS NOTED OTHERWISE
DWG	DRAWING	MAV	MANUAL AIR VENT	V	VENT, VALVE
DWV	DRAIN, WASTE, VENT	MAX	MAXIMUM	VA	VOLT AMPERE
(E) EXIST	EXISTING	MBH	BTU/HR X 1,000	VAC	VACUUM
EAT	ENTERING AIR TEMPERATURE	MC	MECHANICAL CONTRACTOR	VAV	VARIABLE AIR VOLUME
EC	ELECTRICAL CONTRACTOR	MECH	MECHANICAL	VD	VOLUME DAMPER
ECON	ECONOMIZER	MH	MAN HOLE	VFD	VARIABLE FREQUENCY DRIVE
EDH	ELECTRIC DUCT HEATER	MIN	MINIMUM, MINUTE	VI	VIBRATION ISOLATOR
EER	ENERGY EFFICIENCY RATIO	MVD	MANUAL VOLUME DAMPER	VOL	VOLUME
EF	EXHAUST FAN	NA	NOT APPLICABLE	VP	VELOCITY PRESSURE
EFF	EFFICIENCY	NC	NOISE CRITERIA, NORMALLY CLOSED	VSC	VARIABLE SPEED CONTROLLER
EL, ELEV	ELEVATION	NIC	NOT IN CONTRACT	VTR	VENT THROUGH ROOF
EMER	EMERGENCY	NO	NORMALLY OPEN, NITROUS OXIDE	W	WASTE
ENCL	ENCLOSURE	NO.	NUMBER	W/	WITH
ESP	EXTERNAL STATIC PRESSURE	NOM	NOMINAL	W/O	WITHOUT
ET	EXPANSION TANK	NTS	NOT TO SCALE	WB	WET BULB
EUH	ELECTRIC UNIT HEATER	OA	OUTSIDE AIR	WC	WATER CLOSET
EVAP	EVAPORAT(E),(ING),(ED),(OR)	OBD	OPPOSED BLADE DAMPER	WCO	WALL CLEAN OUT
EWB	ENTERING WET BULB	OD	OVERFLOW DRAIN, OUTSIDE DIAMETER	WT	WEIGHT
EWV	ELECTRIC WATER COOLER	OF/CI	OWNER FURN./CONTRACTOR INSTALLED	YCO	YARD CLEANOUT
EWH	ELECTRIC WATER HEATER	OF/OI	OWNER FURNISHED/OWNER INSTALLED		
EWS	EYE WASH STATION	OS&Y	OPEN SCREW & YOLK		

MECHANICAL LEGEND

BALL VALVE		THERMOSTAT/HUMIDISTAT	
BUTTERFLY VALVE		POINT OF CONNECTION/REMOVAL	
GATE VALVE		KEYED NOTE/REVISION	
ANGLE GATE VALVE, PLAN VIEW		WALL SWITCH	
GLOBE VALVE		EQUIPMENT CALLOUT	
PLUG VALVE		3-WAY VALVE	
NON-RISING STEM/OS&Y VALVE ACTUATOR		PLUMBING FIXTURE CALLOUT	
LEVER VALVE ACTUATOR		DETAIL TAG	
CHECK VALVE			
SPRING CHECK VALVE			
BALL VALVE W/HOSE END & CAP			
NEEDLE VALVE			
PRESSURE REDUCING VALVE			
REDUCED PRESSURE BACKFLOW PREVENTER			
INLINE PUMP			
PRESSURE & TEMPERATURE RELIEF VALVE			
SQUARE HEAD COCK			
STRAINER, W/BV HOSE END & CAP			
AUTOMATIC/MANUAL AIR VENT			
THERMOMETER/PRESSURE GAGE W/COCK			
CONCENTRIC/ECCENTRIC REDUCER			
UNION			
BUSHING/CAP			
ELBOW UP/DOWN			
TOP/BOTTOM CONNECTION, 45° OR 90°			
TEE UP/SIDE/DOWN			
FLOW/PITCH DOWN DIRECTION			
FLOOR OR GRADE CLEANOUT, W/CONC PAD			
WALL CLEANOUT, HOSE BIBB OR WALL HYDRANT			
FLOOR DRAIN/FLOOR SINK			
VENT			
COLD WATER			
HOT WATER			
HOT WATER RETURN			
CONDENSATE DRAIN			
LIQUID PETROLEUM GAS			
GREASE-WASTE			

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH, 2006 INTERNATIONAL BUILDING CODE, 2006 INTERNATIONAL MECHANICAL CODE, 2006 INTERNATIONAL PLUMBING CODE, 2006 INTERNATIONAL FUEL GAS CODE, AND 2006 INTERNATIONAL ENERGY CODE, INCLUDING STATE AND LOCAL AMENDMENTS, SUBJECT TO AUTHORITY HAVING JURISDICTION INTERPRETATION.
- CLOSELY COORDINATE NEW MECHANICAL AND PLUMBING CONSTRUCTION WITH ALL MECHANICAL, ELECTRICAL, ARCHITECTURAL AND STRUCTURAL MEMBERS. DUCTWORK AND PIPE ROUTING IS APPROXIMATE, DIAGRAMMATIC AND IS NOT TO BE SCALED. PROVIDE ALTERNATE ROUTING, OFFSETS AND TRANSITIONS AS REQUIRED FOR COORDINATION OF ALL WORK WITHOUT ADDITIONAL COST.
- DO NOT SHUT-OFF/PUT OUT SERVICE ANY SYSTEMS/SERVICES WITHOUT FIRST COORDINATING ALL DOWNTIME WITH THE OWNER'S PERSONNEL.
- PROVIDE SEISMIC RESTRAINT FOR ALL MECHANICAL AND PLUMBING EQUIPMENT AND PIPING IN ACCORDANCE WITH 2006 IBC, IMC, AND IPC.
- CONTRACTOR SHALL PROVIDE 1 YEAR STANDARD WARRANTY. SUBMIT ALL VALVES, FITTINGS, PIPE MATERIALS, INSULATION, AND ACCESSORIES TO BE USED IN PROJECT. SUBMIT ALL EQUIPMENT AND ACCESSORIES LISTED ON MECHANICAL SCHEDULE SHEET. SUBMIT SEVEN COPIES IN 3 RING BINDER TO ARCHITECT FOR REVIEW AND APPROVAL BY ENGINEER. DO NOT PLACE ORDER UNTIL ENGINEER HAS REVIEWED AND APPROVED SUBMITTAL.
- RECORD ALL FIELD CHANGES ON RECORD DRAWINGS AND SUBMIT TO ENGINEER DURING PROJECT CLOSE OUT.
- INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS INSTALLATION INSTRUCTIONS.
- PROJECT ELEVATION IS 5000 FT FOR EQUIPMENT SELECTION.
- PROVIDE TEST AND BALANCE REPORT TO ENGINEER FOR REVIEW AND APPROVAL.
- PROVIDE ISOLATION VALVES SERVING EACH PIECE OF EQUIPMENT.
- DISINFECT NEW DOMESTIC WATER PIPING. SUBMIT DISINFECT REPORT TO ENGINEER FOR REVIEW.
- T-DRILL FITTINGS SHALL NOT BE USED IN THIS PROJECT.
- INSULATE ALL COLD WATER PIPE WITH 1/2" INSULATION WITH ASJ.
- PROVIDE "DIRT LEG" AHEAD OF EACH PIECE OF FUEL FIRED EQUIPMENT.
- PROVIDE TRAP PRIMERS AND CONNECT TO ALL FLOOR DRAINS, ALL FLOOR SINKS, AND ALL STANDPIPES THAT DO NOT HAVE A RELIABLE SOURCE TO MAINTAIN TRAP SEAL.

SHEET LIST

- MH001 - MECHANICAL LEGENDS AND NOTES
- MH101 - MECHANICAL AND PLUMBING FLOOR PLAN
- MH501 - MECHANICAL DETAILS



OGDEN BAY GREAT SALT LAKE ECOSYSTEM STORAGE BUILDING
 DIVISION OF WILDLIFE RESOURCES
 DFCM PROJECT # 08221520
 SOUTH OGDEN, UTAH



ARCHITECTS
 577 South 200 East
 Salt Lake City, Utah 84111
 (801) 533-2100 fax: 533-2101 jrcadesign.com

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10 · 15 · 08	08013

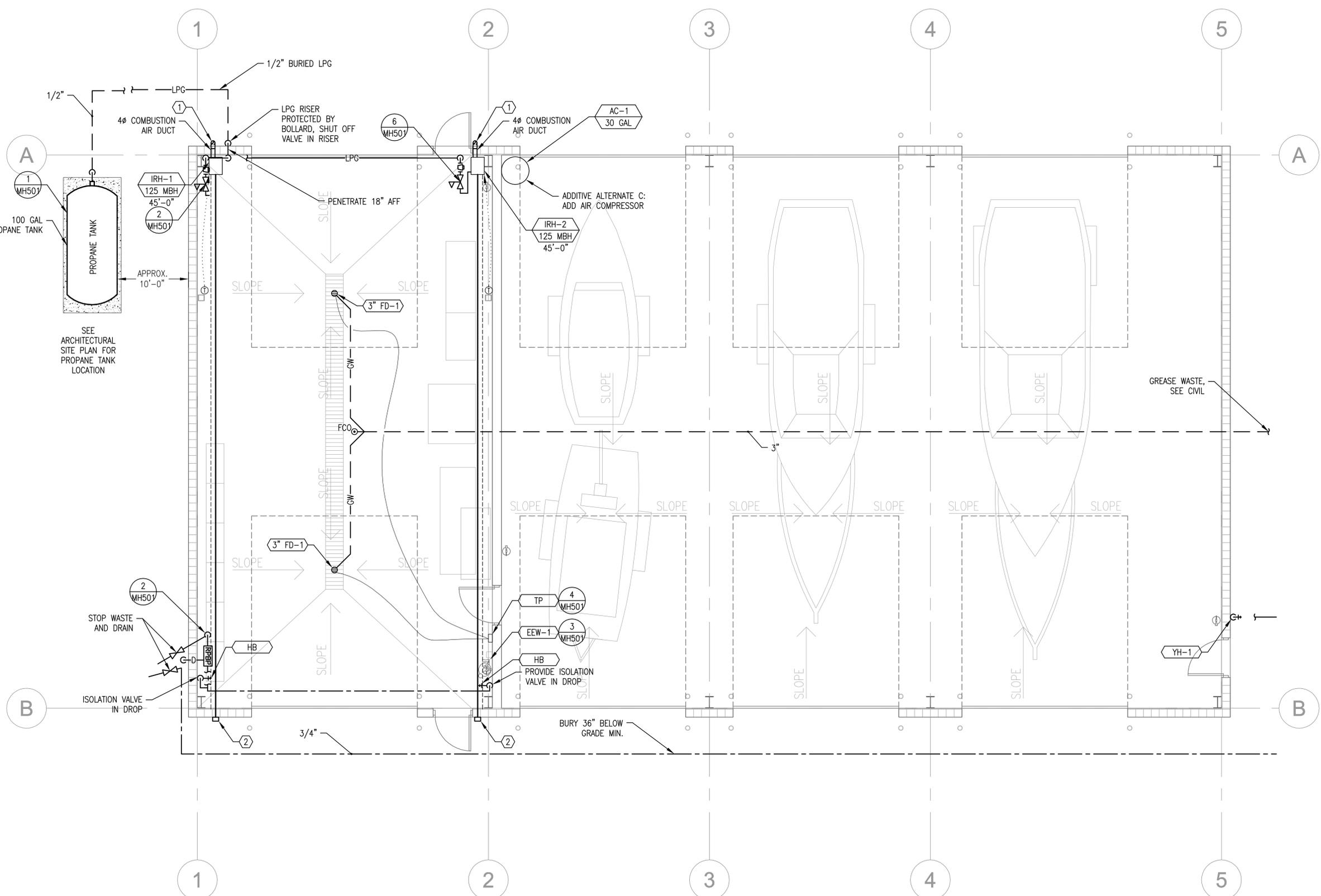
MECHANICAL LEGENDS AND NOTES

MH 001

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KEYED NOTES

- ① 4" COMBUSTION AIR INLET CAP WITH INSECT SCREEN
- ② TERMINATE FLUE WITH TYPE "B" LISTED VENT CAP



1 MECHANICAL AND PLUMBING FLOOR PLAN
 MH101
 SCALE: 1/4" = 1'-0"
 NORTH



OGDEN BAY GREAT SALT LAKE ECOSYSTEM STORAGE BUILDING
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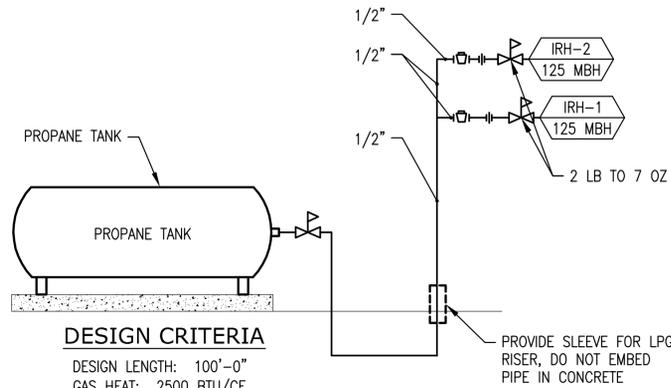
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MECHANICAL AND PLUMBING FLOOR PLAN

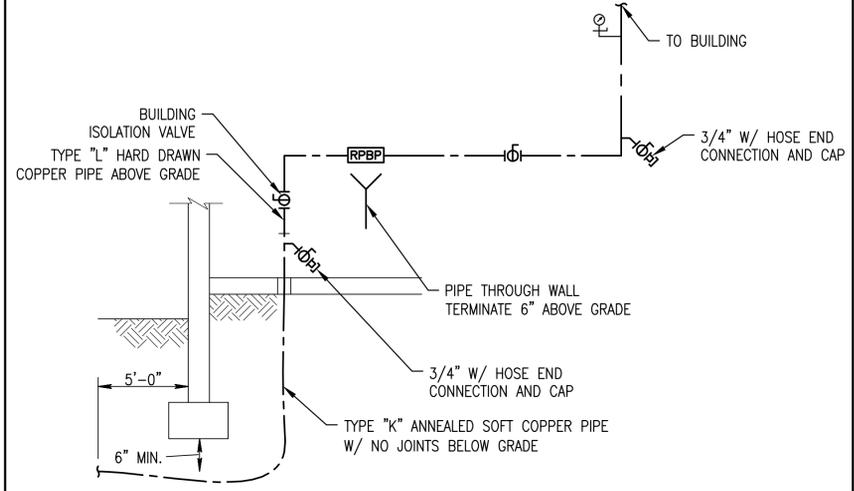
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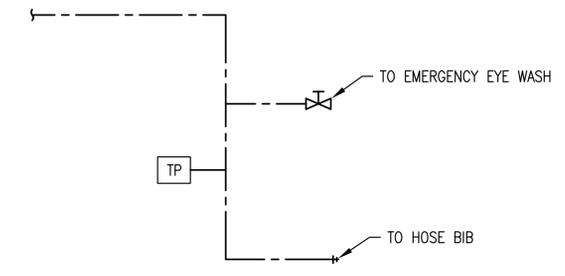


DESIGN CRITERIA
 DESIGN LENGTH: 100'-0"
 GAS HEAT: 2500 BTU/CF
 SYSTEM PRESSURE: 2 LB
 REGULATORS: 2 LB TO 12" WC

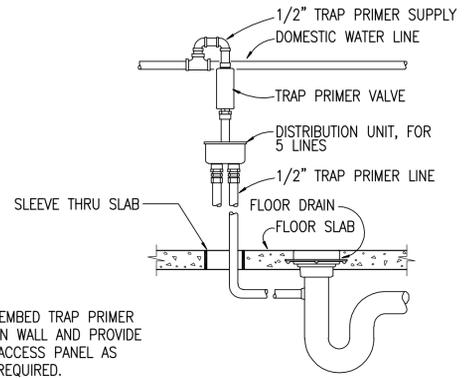
1 WH501 ALTERNATE INFARED HEATER PROPANE PIPING DIAGRAM



2 WH501 WATER SERVICE ENTRY/PRV STATION



3 WH501 EMERGENCY EYE WASH CONNECTION



NOTE: EMBED TRAP PRIMER IN WALL AND PROVIDE ACCESS PANEL AS REQUIRED.

5 WH501 TRAP PRIMER

6 WH501 NOT USED

7 WH501 NOT USED

AIR COMPRESSOR SCHEDULE (AC)

MARK	TANK GAL	MAX PRESSURE PSIG	MOTOR HP	ELECTRICAL		DIMENSIONS				MANUFACTURER MODEL	REMARKS
				VOLT	PHASE	L IN	W IN	H IN	WT LBS		
AC-1	30	155	1.5	120	1	22	20	45	118	HUSKY VLH1582609	W/ POST FILTER, DRYER, AUTOMATIC DRAIN, AND SELF-RETRACTING HOSE REEL W/ 50' 3/8" HOSE W/ QUICK DISCONNECT AT THE BIKE STORAGE TERMINATION

INFRA-RED RADIANT HEATER (IRH)

MARK	BURNER			DIMENSIONS			MANUFACTURER MODEL	REMARKS
	INPUT MBH	VOLT/PHASE	RLA	TUBE DIA IN	FLUE DIA IN	WT LBS		
IRH-1	125	120/1φ	1.0	4	4	220	ROBERTS-GORDON HE-125	NOTE 1, W/ SIDE SHIELD
IRH-2	125	120/1φ	1.0	4	4	220	ROBERTS-GORDON HE-125	NOTE 1, W/ SIDE SHIELD

NOTE 1: LPG-FIRED, PARABOLIC ALUMINUM REFLECTORS, ALUMINIZED TUBING, HANGERS, ACCESSORIES, HOT SURFACE IGNITION, "FACTORY" CONTROLS, VENT CAP PACKAGE, AND CAST IRON BURNER.

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	ROUGH IN SIZE					MANUFACTURER MODEL	REMARKS
		WASTE IN	TRAP IN	VENT IN	HW IN	CW IN		
EWS-1	EMERGENCY EYEWASH 11ø ABS	2	1 1/4	2	X	1/2	HAWS 7260	ABS PLASTIC RECEPTOR AND TWIN SOFT-FLO ABS PLASTIC ANTI-SURGE EYEWASH HEADS.
HB	HOSE BIBB	N/A	N/A	N/A	N/A	3/4	ZURN Q1343	ROUGH BRONZE LAWN FAUCET.
YH-1	YARD HYDRANT	N/A	N/A	N/A	N/A	3/4		
FD-1	FLOOR DRAIN	X	X	X/2 2" MIN	N/A	N/A	ZURN FD-2321-NH"X" "X" INDICATED ON DRAWINGS	CAST IRON BODY, ADJUSTABLE NICKEL BRONZE STRAINER ASSEMBLY, MEMBRANE CLAMP, WEEP HOLES, AND TRAP PRIMER CONNECTION.



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MECHANICAL DETAILS

MH
501

GENERAL NOTES

1. CONSULT ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF ALL LIGHTING FIXTURES.
2. VERIFY ALL EQUIPMENT DIMENSIONS AND LOCATIONS BEFORE BEGINNING ROUGH IN. CONSULT ALL APPLICABLE CONTRACT DRAWINGS AND SHOP DRAWINGS TO INSURE NEC CODE CLEARANCES REQUIRED AROUND ALL ELECTRICAL EQUIPMENT.
3. CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS (VOLTAGE, PHASE, CONNECTION REQUIREMENTS, ETC.) OF EQUIPMENT FURNISHED UNDER DIVISION 15 WITH APPROVED MECHANICAL SHOP DRAWINGS BEFORE BEGINNING ROUGH IN.
4. SEE SECTION 16510 OF THE SPECIFICATION REQUIRED COORDINATION MEETINGS WITH MECHANICAL AND CEILING CONTRACTORS.
5. SEE APPLICABLE SHOP DRAWINGS FOR ROUGH IN LOCATION OF ALL EQUIPMENT, WIRING DEVICES, ETC. WHERE APPLICABLE MOUNT ALL WIRING DEVICES ABOVE BACK SPLASH EXCEPT THOSE SERVING UNDER COUNTER EQUIPMENT.
6. SEE SPECIFICATION FOR ENERGY SAVING LAMP AND BALLAST REQUIREMENTS.
7. FINISHES OF ALL LIGHT FIXTURES SHALL BE AS SELECTED BY ARCHITECT.
8. THE ELECTRICAL CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE MECHANICAL CONTRACTOR SUCH THAT NO PIPING, DUCTS, OR EQUIPMENT FOREIGN TO THE OPERATION OF THE ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE INSTALLED IN, ENTER OR PASS THRU ELECTRICAL ROOMS OR SPACES, OR ABOVE OR BELOW ELECTRICAL EQUIPMENT IN OTHER AREAS.
9. ELECTRICAL BOXES SHALL NOT BE LOCATED IN MASONRY COLUMNS IN BRICK WALLS OR IN GROUTED CELLS ADJACENT TO OPENINGS. COORDINATE LOCATION OF BOXES WITH MASONRY CONTRACTOR.
10. ALL PENETRATIONS OF FIRE RATED FLOORS, WALLS, AND CEILINGS SHALL BE SEALED WITH APPROVED MATERIAL TO MAINTAIN FIRE RATING OF SURFACE PENETRATED.
11. CIRCUITS EXTENDING OVER 70' FOR 120 VOLT AND 165' FOR 277 VOLT 20 AMP CIRCUITS SHALL BE RUN WITH MINIMUM #10 CONDUCTORS.

FIXTURE SCHEDULE

TYPE	DESCRIPTION	CATALOG NUMBER	VOLTS	LAMPS
A2	2-LAMP INDUSTRIAL HIGH BAY FLUORESCENT FIXTURE WITH WHITE BAFFLE 60 MIN EMERGENCY BATTERY BACK-UP	METALLIC 405-225-019W-UV-GL-ERS	120	(2) F32T8
A4	4-LAMP INDUSTRIAL HIGH BAY FLUORESCENT FIXTURE WITH WHITE BAFFLE	METALLIC 405-432-019W-UV-GL-ERS	120	(4) F32T8
B	METAL HALIDE WALL PACK FORWARD THROW REFLECTOR BLACK FINISH	LUMARK M94N-70-120V-F1-L-WA2	120	70W MH
C	COMPACT FLUORESCENT WALL PACK BLACK FINISH 60 MIN EMERGENCY BATTERY BACK-UP	LUMARK FLP-T-42-120V-F1-SK-EM-40EP-120	120	42 TIT
EM	WALL MOUNTED EMERGENCY FIXTURE TWO ADJUSTABLE HEADS	SURELITE C02	120	PROVIDED

LIGHT FIXTURE ABBREVIATION SCHEDULE	LIGHT FIXTURE GENERAL NOTES
NOTE: NOT ALL ABBREVIATIONS WILL NECESSARILY BE USED.	1. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATIONS OF LIGHT FIXTURES. BRING ALL DISCREPANCIES OF LOCATIONS AND QUANTITIES TO THE ATTENTION OF THE ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO BIDDING.
A.F.F. ABOVE FINISH FLOOR	2. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHTS AND LOCATIONS OF LIGHT FIXTURES. BRING ALL DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING.
WALL@CLG WALL MOUNT AT CORNER OF WALL AND CEILING	3. REFER TO THE SPECIFICATIONS FOR OTHER LIGHT FIXTURE, FUSING, BALLAST, AND LAMP REQUIREMENTS AND ACCEPTABLE MANUFACTURERS.
CCBA CUSTOM PAINTED COLOR AS SELECTED BY THE ARCHITECT	4. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR LOUVER REQUIREMENTS AS REQUIRED.
SCBA STANDARD PAINTED COLOR AS SELECTED BY THE ARCHITECT	5. CONFIRM AVAILABLE MOUNTING DEPTHS OF ALL LIGHT FIXTURES AND COMPARE WITH DEPTHS SHOWN ON SHOP DRAWINGS. BRING ALL POTENTIAL CONFLICT AREAS TO THE ATTENTION OF THE ARCHITECT AND ELECTRICAL ENGINEER PRIOR TO RELEASE.
CFBA CUSTOM FINISH AS SELECTED BY THE ARCHITECT	
SFBA STANDARD FINISH AS SELECTED BY THE ARCHITECT	
MOD MODIFY STANDARD LIGHT FIXTURE AS INDICATED	

BIDDING REQUIREMENTS

1. BID ONLY PRODUCTS THAT ARE SPECIFIED OR APPROVED BY ADDENDUM.
2. PACKAGING OF LIGHT FIXTURES WITH OTHER SYSTEMS IS NOT ALLOWED.
3. WHEN ONLY ONE PRODUCT IS APPROVED FOR BIDDING, THE PRICE FOR THAT ITEM SHALL BE BROKEN OUT SEPARATELY WHEN SUBMITTING PRICING TO VARIOUS DISTRIBUTORS AND/OR CONTRACTORS.
4. WHEN A CONTRADICTION EXISTS BETWEEN A SPECIFIC MODEL NUMBER AND THE DESCRIPTION, THE DESCRIPTION SHALL GOVERN.

PRIOR APPROVAL REQUIREMENTS

1. PRIOR APPROVAL IS REQUIRED BEFORE BIDDING THIS PROJECT.
2. PRIOR APPROVALS SHALL BE SUBMITTED TO THE ELECTRICAL ENGINEER'S OFFICE AT LEAST (8) EIGHT WORKING DAYS BEFORE THE BID. PRIOR APPROVALS RECEIVED AFTER THIS TIME PERIOD SHALL BE REJECTED.
3. PRIOR APPROVALS SHALL BE SIGNED BY A PRINCIPAL OF THE SUBMITTING ORGANIZATION STATING THAT THEY HAVE PREPARED AND/OR REVIEWED THE SUBMITAL AND THAT THE PRODUCTS PROPOSED ARE EQUIVALENT TO THOSE SPECIFIED. ANY EXCEPTIONS SHALL BE SO NOTED.
4. ITEMS THAT ARE SUBMITTED AND HAVE BEEN APPROVED WILL BE LISTED IN THE ADDENDUM(S). VERBAL APPROVAL WILL NOT BE GIVEN ON ANY ITEM.
5. IT IS NOT THE RESPONSIBILITY OF THE ELECTRICAL ENGINEER TO NOTIFY THE SUBMITTING PARTY OF ERRORS IN THE SUBMITAL. NOTIFICATION OF ERRORS BY THE ELECTRICAL ENGINEER PRIOR TO ISSUANCE OF THE ADDENDUM(S) MAY NOT BE GIVEN.
6. PRIOR APPROVALS SHALL CONSIST OF TWO SETS OF CUT SHEETS DESCRIBING THE PRODUCTS BEING SUBMITTED AS EQUIVALENTS. FAXES ARE NOT ACCEPTABLE. ALL SPECIFICATION INFORMATION SHALL BE CLEARLY MARKED, WITH NON-APPLICABLE INFORMATION GROSSED OUT. COMPLETE PHOTOMETRIC DATA SHALL BE PROVIDED. PRODUCTS WITHOUT PHOTOMETRIC DATA WILL NOT BE APPROVED.
7. SUPPLY POINT-BY-POINTS AS REQUIRED BY THE ELECTRICAL ENGINEER AND/OR LIGHTING DESIGNER.
8. SAMPLE FIXTURES MUST BE SUPPLIED WITH A CORD, PLUG AND 120V BALLAST.

LIGHTING SHOP DRAWING REQUIREMENTS

1. REFER TO SPECIFICATIONS 16001, 16510 & 16551.
2. MUST INCLUDE BALLAST AND LAMP CUT SHEETS.
3. LINEAR LIGHTING MUST INCLUDE DETAILED DRAWINGS WITH SUPPORT DETAILS, STEM LOCATIONS AND HAVE ALL LENGTHS IDENTIFIED WITH STEM LOCATIONS.
4. COLOR SAMPLES MUST BE INCLUDED IN FIRST SUBMITAL.
5. CUT SHEETS MUST BE STAMPED WITH THE FACTORY REPRESENTATIVE'S COMPANY NAME.
6. VALUE ENGINEERING CONDUCTED WITHOUT THE DESIGN TEAM IE; ARCHITECT, OWNER, ENGINEER & LIGHTING CONSULTANT/DESIGNER WILL NOT BE ALLOWED, REVIEWED OR APPROVED.
7. PROVIDE A LIST OF SPARE PARTS, EQUIPMENT & LAMPS.

EQUIPMENT SCHEDULE

UNIT #	FUNCTION	LOAD	VOLT	PHASE	FULL LOAD AMPS	CONST	SIZE	MINES		OCFD		REF. NOTES	REMARKS	
								NO. BRKS	NO. DEE	TYPE	AMPS			
AC-1	AIR COMPRESSOR	1.5 HP	120	1	20.00	30"	3"	1	2	12	CB	40	15A	
PH-1	INDUWV HEATER	675A	208	1	6.00	30"	3"	1	2	12	CB	20	4A	
PH-2	INDUWV HEATER	675A	208	1	6.00	30"	3"	1	2	12	CB	20	4A	
W-1	WELDER	40 FLA	240	1	40.00	30"	3"	1	2	8	CB	10	10A	

- NOTES:**
1. NON-FUSED DISCONNECT SWITCH
 2. FUSED DISCONNECT SWITCH
 3. BREAKER IN ENCL. CHUTE
 4. MANUAL STARTER THERMAL OVERLOAD
 5. MAGNETIC STARTER
 6. MAGNETIC STARTER/FUSED DISCONNECT COMBINATION
 7. MAGNETIC STARTER/FUSED DISCONNECT COMBINATION
 8. MAGNETIC STARTER/BREAKER COMBINATION
 9. VARIABLE FREQUENCY DRIVE
 10. REDUCED VOLTAGE STARTER
 11. DIRECT ON LINE STARTER
 12. REDUCED VOLTAGE PURPOSE OUTLET/RECIPT.
 13. TWO-POLE STARTER, COORDINATE MINOR TYPE

- A. FURNISHED, INSTALLED, AND CONNECTED UNDER DIVISION 16
 - B. FURNISHED AND INSTALLED UNDER ANOTHER DIVISION REQUIRING CONNECTION UNDER DIVISION 16.
 - C. FURNISHED UNDER ANOTHER DIVISION BUT INSTALLED AND CONNECTED UNDER DIVISION 16.
 - D. FURNISHED, INSTALLED AND CONNECTED UNDER ANOTHER DIVISION.
- CB = CIRCUIT BREAKER - THERMAL MAGNETIC
COW = CHILLER RELAY/START

NOTE C. PER NEC CODE, EQUIPMENT GROUND IS NOT REQUIRED TO BE LARGER THAN PHASE CONDUCTOR.

INDEX OF ELECTRICAL DRAWINGS

- E001 SYMBOLS, SCHEDULES AND NOTES
- E101 ELECTRICAL SITE PLAN
- E201 LIGHTING PLAN
- E301 POWER PLAN
- E401 ONE-LINE DIAGRAM AND PANELBOARD SCHEDULES
- E501 ELECTRICAL DIAGRAMS

ELECTRICAL SYMBOL SCHEDULE

1. SEE FIXTURE SCHEDULE FOR TYPE MOUNTING AND WATTAGE.			
2. HEIGHT MEASURED TO CENTER LINE OF THE BOX FROM THE FINISH FLOOR.			
3. REFER TO DRAWINGS FOR DIRECTIONAL ARROWS.			
4. SUBSCRIPT KEYS SWITCH TO FIXTURES CONTROLLED.			
5. NEMA TYPE "N" NON-FUSED UNLESS NOTED "F" (FUSED). USE "HD" 480 V. HEIGHT TO BE THE LOWER OF EITHER 80" A.F.F. OR 6" BELOW CEILING.			
6. PROVIDE H.O.A. AND S.S. PUSHBUTTONS AS REQUIRED.			
7. DOUBLE ARROWS DENOTE A DOUBLE FACE UNIT.			
8. COORDINATE WITH MILLWORK SHOP DRAWINGS AND ELEVATIONS FOR HEIGHT.			
9. SUBSCRIPT DENOTES NEMA CONFIGURATION.			
10. HEIGHT MEASURED TO BOTTOM OF THE BOX FROM FINISH FLOOR.			
STANDARD MOUNTING HEIGHT UNLESS OTHERWISE NOTED ON PLANS			
SYMBOL	DESCRIPTION	MOUNTING HEIGHT	NOTES
→	ONE CIRCUIT, TWO WIRE HOME RUN TO PANEL		
→→	2 CIRCUIT, 3 WIRE, COMMON NEUTRAL HOME RUN		
→→→	3 CIRCUIT, 4 WIRE, COMMON NEUTRAL HOME RUN		
---	CONDUIT RUN CONCEALED IN WALL OR CEILING		
----	CONDUIT RUN CONCEALED IN FLOOR OR GROUND		
○	CONDUIT UP		
●	CONDUIT DOWN		
—]	CONDUIT STUB LOCATION	CAP CONDUIT	
○	CEILING LIGHT FIXTURE	CEILING	1.
○	WALL LIGHT FIXTURE	AS NOTED	1.
○	RECESSED DOWNLIGHT FIXTURE	CEILING	1.
○	FLUORESCENT LIGHT FIXTURE	AS NOTED	1
○	FLUORESCENT EGRESS LIGHT FIXTURE	AS NOTED	UNSWITCHED
●	AREA LIGHT POLE AND FIXTURE	CONCRETE BASE	SEE DIAGRAM
◁	FLOOD OR TRACK FIXTURE	AS NOTED	
\$	SINGLE POLE SWITCH	+4'-0"	2.
\$ ^a	SINGLE POLE SWITCH	+4'-0"	4. 2.
\$ ³	THREE-WAY SWITCH	+4'-0"	2.
\$ ⁴	FOUR-WAY SWITCH	+4'-0"	2.
○	OCCUPANCY SENSOR	CEILING	
○	OCCUPANCY SENSOR	+4'-0"	2.
⊕	POWER PACK	CEILING	SEE DIAGRAM, SPEC.
⊕	AUTOMATIC RELAY PACK	CEILING	SEE DIAGRAM, SPEC.
⊕	LOW VOLTAGE TRANSFORMER		
⊕	DUPLEX RECEPTACLE	+16" OR AS NOTED	9. 11.
⊕ _A	DUPLEX RECEPTACLE		9.
⊕ _W	ELECTRIC WATER COOLER RECEPTACLE		SEE DIAGRAM
⊕ _{WP}	WEATHERPROOF RECEPTACLE	+24" OR AS NOTED	2. 9.
⊕	GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE	+16" OR AS NOTED	9. 11.
⊕	FOURPLEX RECEPTACLE	+16" OR AS NOTED	9. 11.
○	FLOOR OUTLET WITH 20A DEVICE	FLOOR	
○	SPECIAL PURPOSE OUTLET	+16" OR AS NOTED	10. WITH CAP. 11.
○	CORD DROP		SEE DIAGRAM
○	PLUGMOLD	+46" OR AS NOTED	
▶	DATA OUTLET	+16" OR AS NOTED	9. 11.
▶	TELEPHONE OUTLET	+16" OR AS NOTED	9. 11.
▶	TELEPHONE/DATA OUTLET	+16" OR AS NOTED	9. 11.
⊕	JUNCTION BOX (1" IN FLOOR)	AS NOTED	
○	MOTOR OUTLET	TO SUIT EQUIP.	
⊕	PHOTO-ELECTRIC CONTROL	AS NOTED	TORK 2000A
⊕	TIME CLOCK	+5'-0"	2.
⊕	PUSHBUTTON	+4'-0"	2.
⊕	NON-FUSED DISCONNECT SWITCH	+5'-0"	5.
⊕	FUSED DISCONNECT SWITCH	+5'-0"	5.
\$ ^T	MANUAL STARTER THERMAL OVERLOAD SWITCH WITH PILOT LIGHT	+4'-0"	2.
⊕	MAGNETIC STARTER	+5'-0"	7.
⊕	MAGNETIC STARTER / DISCONNECT COMBINATION	+5'-0"	
■	PANEL BOARD	TOP AT +6'-0"	
▨	MAIN DISTRIBUTION PANEL		
⊕	TELEPHONE TERMINAL BOARD		
⊕	FIRE ALARM MANUAL STATION	+4'-0"	2.
⊕	FIRE ALARM SIGNAL HORN/STROBE	+6'-8"	6.
⊕	FIRE ALARM SIGNAL SPEAKER/STROBE	+6'-8"	6.
⊕	FIRE ALARM STROBE	+6'-8"	6.
⊕	FIRE ALARM SPEAKER ONLY	+6'-8"	6.
⊕ _S	SMOKE DETECTOR	CEILING	
⊕	FIRE/SMOKE DAMPER		
⊕ _S	FLOW SWITCH		
⊕ _S	TAMPER SWITCH		
⊕ _W	WATER FLOOD INDICATOR		
⊕	O.S. & Y. VALVE		SEE DIAGRAM
⊕	FIRE ALARM RELAY		
⊕ ₄₂	ARCHITECTURAL ROOM NUMBER		
⊕	LIGHT FIXTURE (LETTER DESIGNATES TYPE)		
⊕ ₅₂	EQUIPMENT NUMBER		

OGDEN BAY GREAT SALT LAKE ECOSYSTEM STORAGE BUILDING PHASE 2
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DFCM PROJECT # 08221520
SOUTH OGDEN, UTAH

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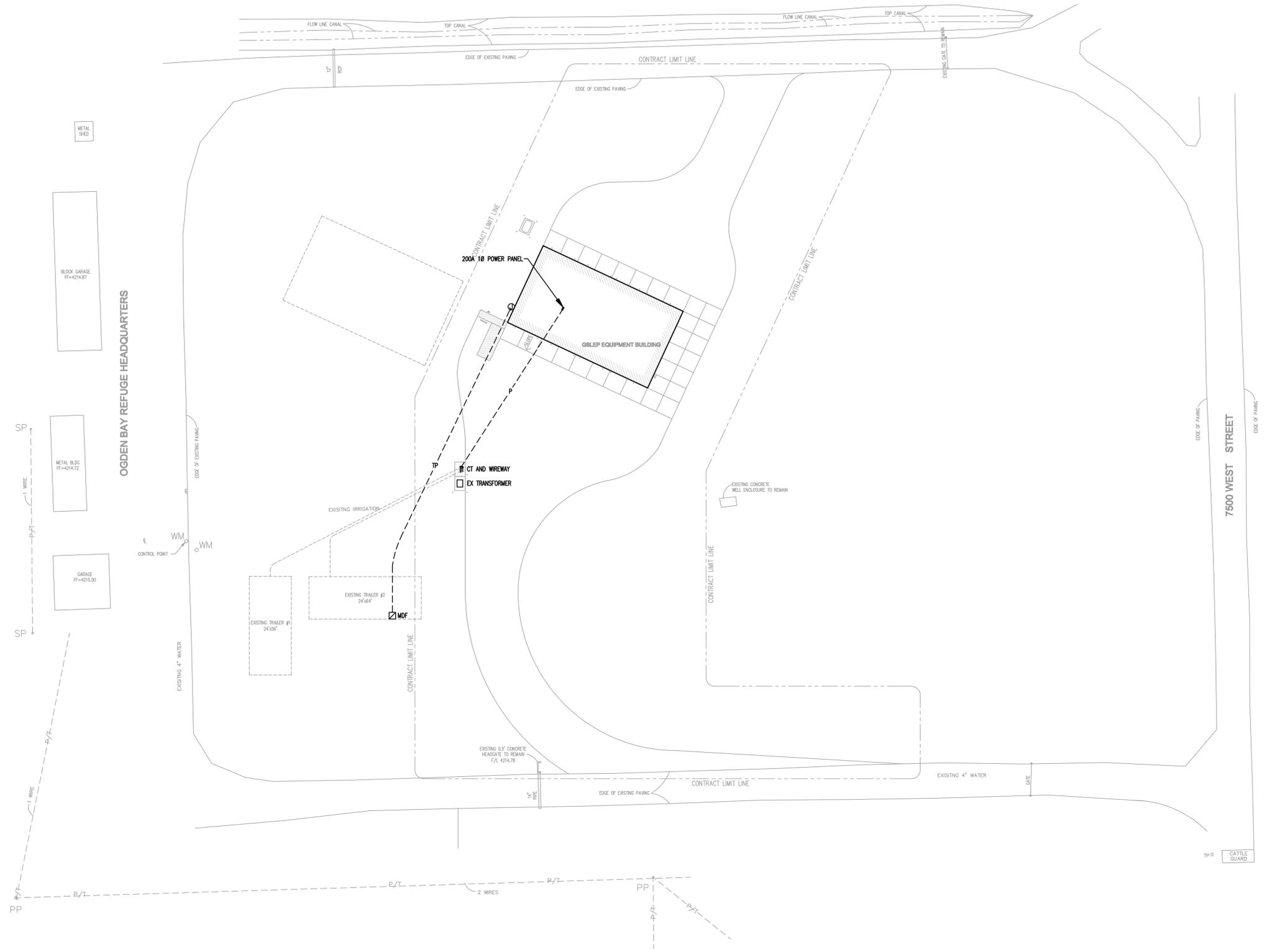
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12 • 08 • 08	08143A

SYMBOLS, SCHEDULES & NOTES

**E
001**



PLAN NORTH
ELECTRICAL SITE PLAN
 1" = 30'-0"
 0 15' 30' 60'

By: paul, Dec 31, 2008 - 10:48am
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OGDEN BAY GREAT SALT LAKE ECOSYSTEM STORAGE BUILDING PHASE 2
 DIVISION OF WILDLIFE RESOURCES
 DFCM PROJECT # 08221520
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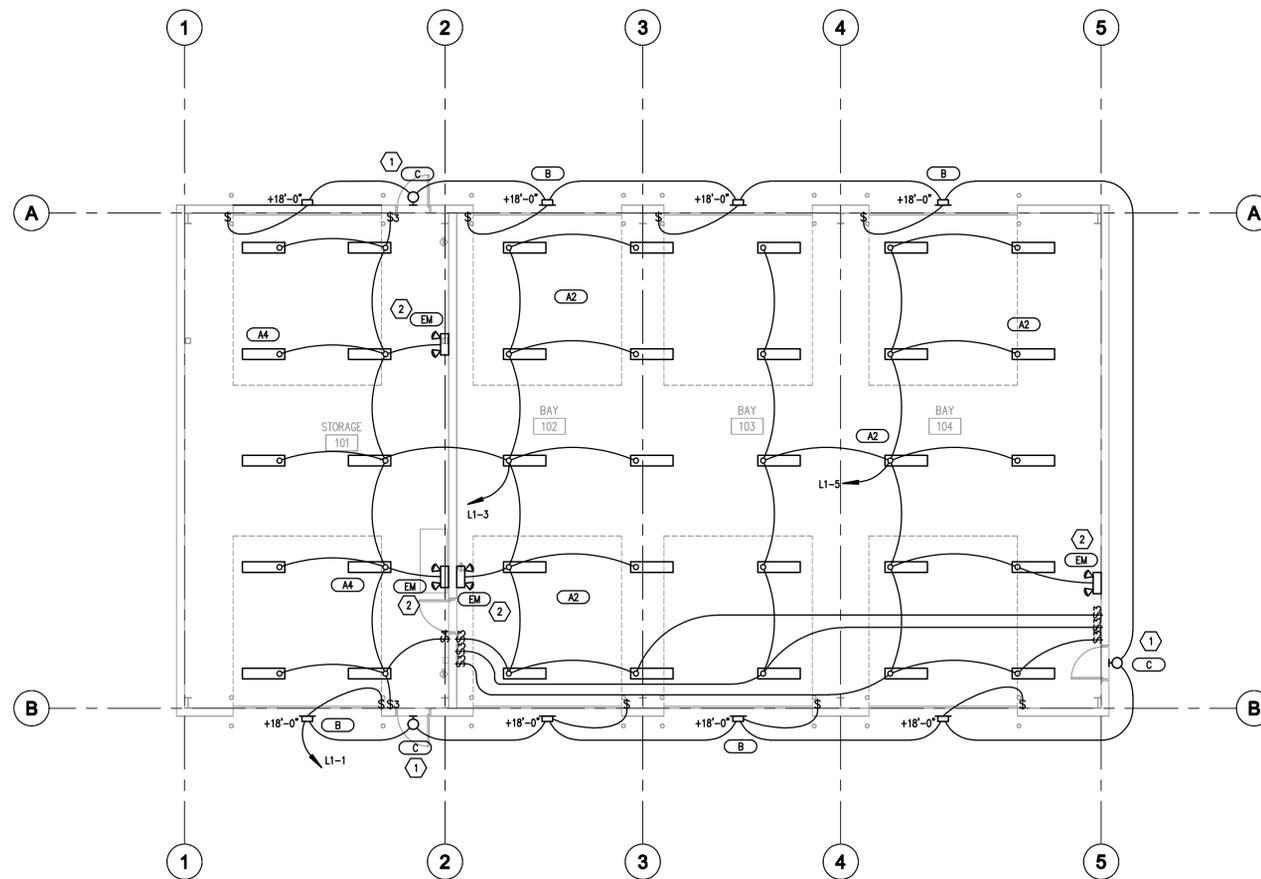
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ELECTRICAL SITE PLAN
E 101

SHEET KEYNOTES

- ① MOUNT WALL PACK FIXTURE ABOVE DOOR. FIXTURE IS CONTROLLED BY PHOTOCELL INTEGRAL LIGHT FIXTURE.
- ② CONNECT EMERGENCY WALL PACKS TO UNSWITCHED HOT LEG.



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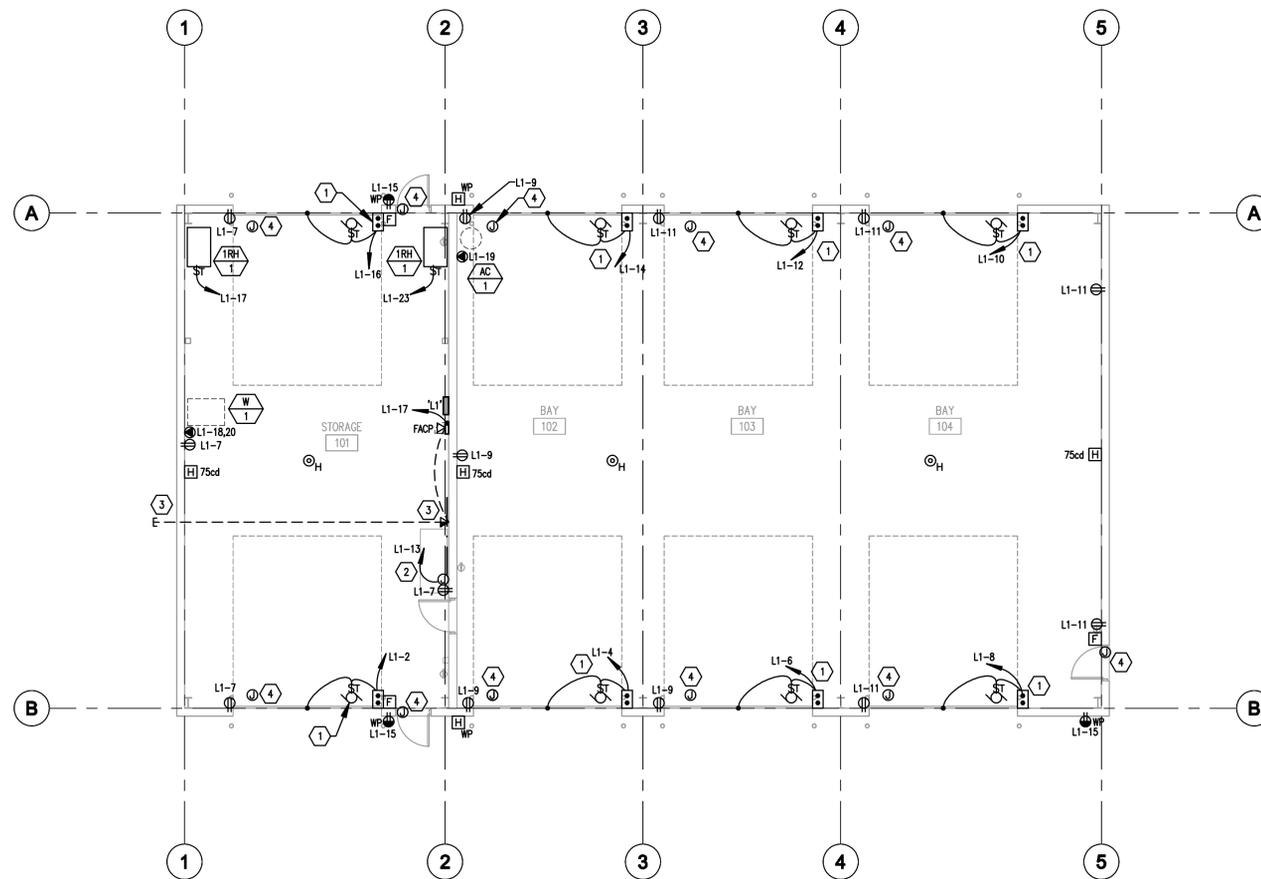
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LIGHTING PLAN

E
201

SHEET KEYNOTES

- ① CONNECT MOTORIZED ROLL-UP DOORS TO DOOR CONTROL. COORDINATE REQUIREMENT WITH DOOR MANUFACTURER PRIOR TO INSTALLATION.
- ② PLUGMOLD MOUNTED ABOVE DESK OF MODULAR OFFICE SPACE. COORDINATE EXACT LOCATION WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN.
- ③ RUN 1" CONDUIT TO DATA/OUTLET LOCATED BY DESK OF MODULAR OFFICE SPACE. COORDINATE EXACT LOCATION WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN. STUB AND CAP END OF CONDUIT FOR FUTURE CONNECTION.
- ④ RUN CONDUIT AND PULL STRING TO DOORS FOR FUTURE SECURITY CONNECTION. COORDINATE LOCATION OF FUTURE SECURITY PANEL WITH OWNER PRIOR TO ROUGH-IN.



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POWER PLAN

**E
301**

PANELBOARD SCHEDULE

PANEL	L1	TYPE	120/208V	VOLTS	1	PH	3	W
COUNTING	FLUSH	DIMENSIONS	20	W	LOCATION	STORAGE 101	HAWS	X BREAKER
	X SURFACE		0.5	D (H-)		AMP	200	NO GROUND
				H				200% NEUTRAL

ITEM	AMPS	POLE	WIRE SIZE	CIR. NO.	L. PHASE LOAD		R. PHASE LOAD		CIR. NO.	AMPS	POLE	WIRE SIZE	ITEM
					A	B	A	B					
EXTERIOR LIGHTING	20	1	12	1	1700		1600		2	20	1	10	OVERHEAD DOOR
STORAGE LIGHTING	20	1	12	3		1700		1600	4	20	1	10	OVERHEAD DOOR
DAY LIGHTING	20	1	12	9	1500		1600		6	20	1	10	OVERHEAD DOOR
RECEPTACLE	20	1	12	7		1000		1600	8	20	1	10	OVERHEAD DOOR
RECEPTACLE	20	1	12	9	800		1600		10	20	1	10	OVERHEAD DOOR
RECEPTACLE	20	1	12	11		1000		1600	12	20	1	10	OVERHEAD DOOR
WIRE MOLD	20	1	12	13	1000		1600		14	20	1	10	OVERHEAD DOOR
EXTERIOR RECEPTACLE	20	1	12	15		800		1600	16	20	1	10	OVERHEAD DOOR
INFRARED HEATER 1	20	1	12	17	720		4000		18	20	2	6	WELDER
COMPRESSOR	40	1	12	19		2400		4000	20	-	-	-	
SPACE	40	1	-	21					22	20	1		SPACE
INFRARED HEATER 2	20	1	12	23		720			24	20	1		SPACE
SPACE	20	1		25					26	20	1		SPACE
SPACE	20	1		27					28	20	1		SPACE
SPACE	20	1		29					30	20	1		SPACE
SPACE	20	1		31					32	20	1		SPACE
SPACE	20	1		33					34	20	1		SPACE
SPACE ONLY				35					36				SPACE ONLY
SPACE ONLY				37					38				SPACE ONLY
SPACE ONLY				39					40				SPACE ONLY
SPACE ONLY				41					42				SPACE ONLY

800	760	1480	1480
1884	1884	TOTAL	3768
142	142	AMPERPHASE	3000 W

CONNECTED LOAD TOTAL
EQUIP RATING
10,000 AMP'S RMS SYL

ORLEP Equipment Storage

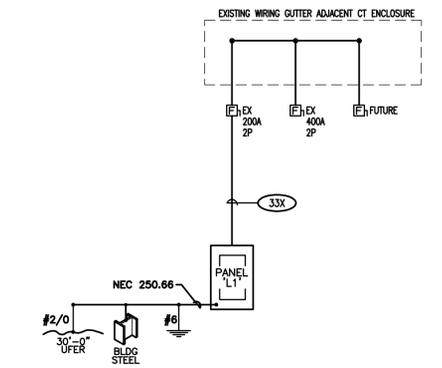
COPPER CONDUCTOR & CONDUIT SCHEDULE

TYPE	AMP.	COND. SIZE	CONDUCTOR QUAN.	CONDUIT SIZE	INSUL-ATION	EQ. GND. COND.
(20)	30	3/4"	2	10	THHN	10
(30)	30	3/4"	3	10	THHN	10
(40)	30	3/4"	4	10	THHN	10
(28)	40	3/4"	2	8	THHN	10
(38)	40	3/4"	3	8	THHN	10
(48)	40	3/4"	4	8	THHN	10
(26)	55	3/4"	2	6	THHN	8
(36)	55	3/4"	3	6	THHN	8
(46)	55	1"	4	6	THHN	8
(24)	70	3/4"	2	4	THHN	8
(34)	70	1"	3	4	THHN	8
(44)	70	1-1/4"	4	4	THHN	8
(23)	85	1"	2	3	THHN	8
(33)	85	1"	3	3	THHN	8
(43)	85	1-1/4"	4	3	THHN	8
(32)	95	1-1/4"	3	2	THHN	6
(42)	95	1-1/4"	4	2	THHN	6
(31)	110	1-1/4"	3	1	THHN	6
(41)	110	1-1/2"	4	1	THHN	6
(51)	110	2"	5	1	THHN	6
(31X)	150	1-1/2"	3	1/0	THHN	6
(41X)	150	1-1/2"	4	1/0	THHN	6
(51X)	150	2"	5	1/0	THHN	6
(32X)	175	1-1/2"	3	2/0	THHN	6
(42X)	175	2"	4	2/0	THHN	6
(52X)	175	2"	5	2/0	THHN	6
(33X)	200	2"	3	3/0	THHN	6
(43X)	200	2"	4	3/0	THHN	6
(53X)	200	2-1/2"	5	3/0	THHN	6
(34X)	230	2"	3	4/0	THHN	4
(44X)	230	2-1/2"	4	4/0	THHN	4
(54X)	230	2-1/2"	5	4/0	THHN	4
(32S)	255	2"	3	250	THHN	4
(42S)	255	2-1/2"	4	250	THHN	4
(52S)	255	2-1/2"	5	250	THHN	4
(33S)	310	2-1/2"	3	350	THHN	3
(43S)	310	3"	4	350	THHN	3
(53S)	310	3"	5	350	THHN	3
(34S)	335	3"	3	400	THHN	3
(44S)	335	3"	4	400	THHN	3
(54S)	335	3"	5	400	THHN	3
(35S)	380	3-1/2"	3	500	XHHW	3
(45S)	380	3-1/2"	4	500	XHHW	3
(55S)	380	3-1/2"	5	500	XHHW	3

COPPER CONDUCTOR & CONDUIT SCHEDULE FOR PARALLEL RUNS

TYPE	MAX. O.C. PROT.	COND. AMPS	SETS	CONDUCTOR QUAN.	CONDUIT SIZE	EQ. GND. COND.
(32S-2)	600	510	2	3	250	2-1/2"
(42S-2)	600	510	2	4	250	2-1/2"
(52S-2)	600	510	2	5	250	2-1/2"
(43S-2)	700	620	2	4	350	3"
(44S-2)	700	670	2	4	400	3"
(55S-2)	800	760	2	3	500	3"
(45S-2)	800	760	2	5	500	4"
(46S-2)	800	760	2	5	500	4"
(46S-2)	800	840	2	4	600	4"
(33S-3)	900	930	3	3	350	3"
(43S-3)	900	930	3	4	350	3"
(53S-3)	900	930	3	5	350	3"
(44S-3)	1000	1005	3	3	400	3"
(44S-3)	1000	1005	3	4	400	3"
(44S-3)	1000	1005	3	5	400	3"
(43S-4)	1200	1240	4	4	350	3"
(53S-4)	1200	1240	4	5	350	3"
(46S-3)	1200	1260	3	4	600	4"
(33S-5)	1500	1550	5	3	350	3"
(44S-5)	1600	1675	5	4	400	3"
(44S-5)	1600	1675	5	5	400	3"
(46S-4)	1600	1680	4	4	600	4"
(44S-6)	2000	2010	6	4	400	3"
(46S-6)	2500	2520	6	4	600	4"
(45S-8)	3000	3040	8	4	500	4"
(45S-1)	4000	4180	11	4	500	4"

NOTES
IN PARALLEL RUNS SIZE GND. COND. IN ACCORDANCE WITH NEC PARA. 250-122.
GND. CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS
* 200% NEUTRAL



1 ONE-LINE DIAGRAM
NO SCALE

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ONE-LINE DIAGRAM AND PANELBOARD SCHEDULES

E 401

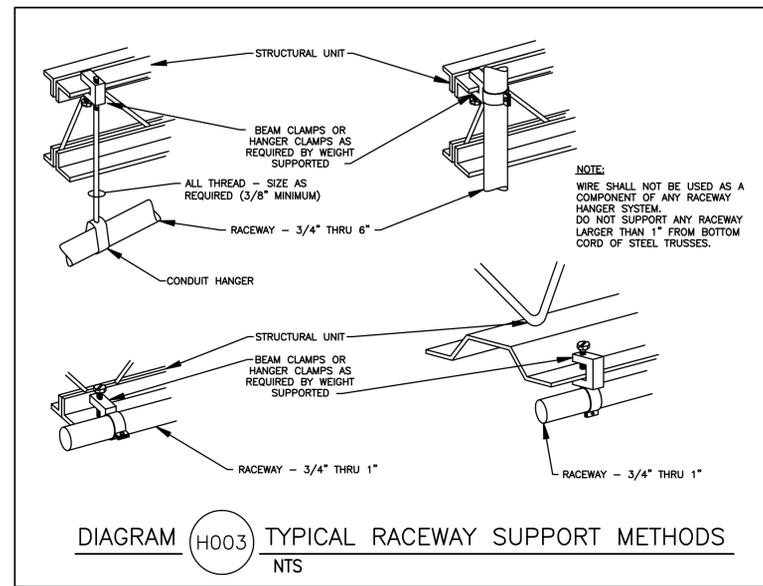


DIAGRAM H003 TYPICAL RACEWAY SUPPORT METHODS
NTS

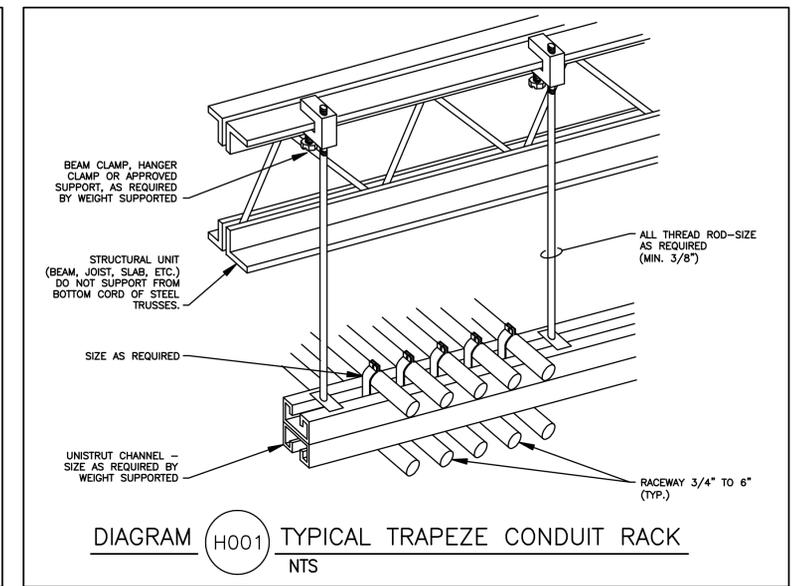


DIAGRAM H001 TYPICAL TRAPEZE CONDUIT RACK
NTS

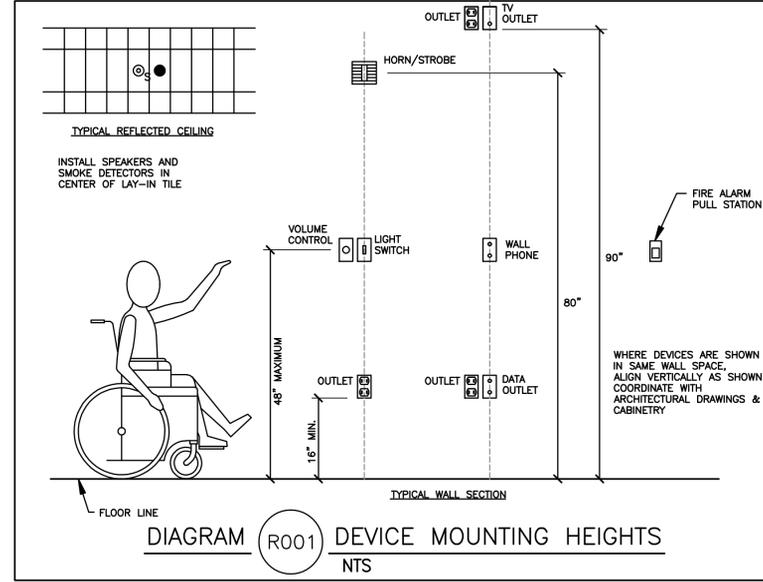


DIAGRAM R001 DEVICE MOUNTING HEIGHTS
NTS

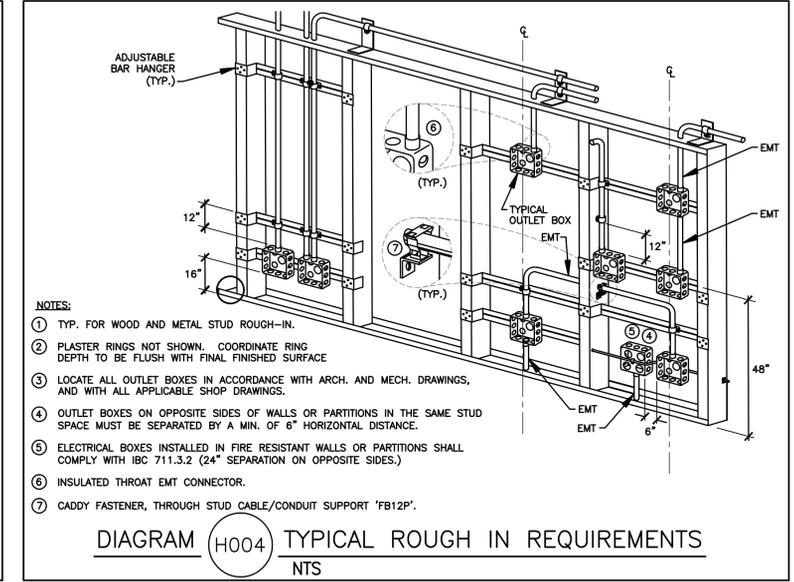


DIAGRAM H004 TYPICAL ROUGH IN REQUIREMENTS
NTS

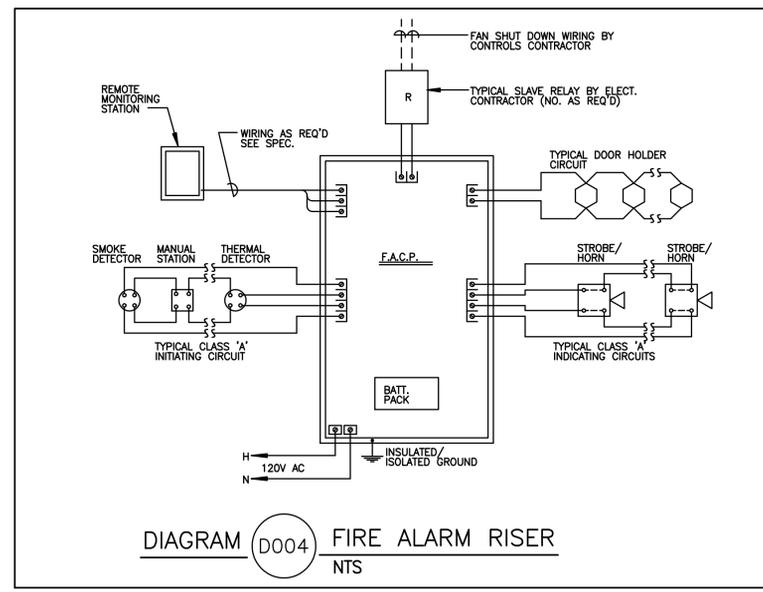


DIAGRAM D004 FIRE ALARM RISER
NTS

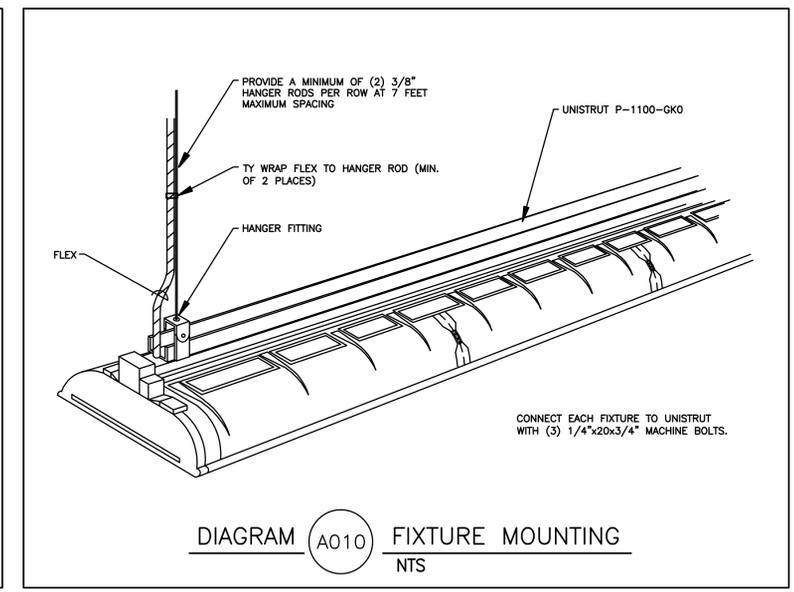


DIAGRAM A010 FIXTURE MOUNTING
NTS

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ELECTRICAL DIAGRAMS

E 501

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