State of Utah

GARY R. HERBERT
Governor

GREGORY S. BELL
Lt. Governor

Department of Administrative Services
KIMBERLY K. HOOD
Executive Director

Division of Facilities Construction and Management
DAVID G. BUXTON
Director

ADDENDUM NO. 4

Date: October 4, 2012

To: Contractors

From: Matthias Mueller

Reference: Ice Sheet Addition
Weber County/WSU – Ogden, Utah
DFCM Project No. 12265810

Subject: **Addendum No. 4**

Pages		
	Addendum Cover Sheet	2 pages
	Architects Addendum	47 pages
	Total	49 pages

Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to Disqualification.

While we contend that SB220 should only be potentially applicable to a contract issued after the effective date of said bill, this is to clarify that for purposes of this contract, regardless of the execution or effective dates of this contract, the status of Utah Law and remedies available to the State of Utah and DFCM, as it relates to any matter referred to or affected by said SB220, shall be the Utah law in effect at the time of the issuance of this Addendum.

4.1 **SCHEDULE CHANGES:** There are no Project Schedule changes.

4.2 **GENERAL ITEMS**: FFKR Architecture – Please read attached pages.

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QUESTION: All subcontractor bid bonds are to be provided in accordance with the RFP issued August 24, 2012. Are fax copies acceptable?

ANSWER: Fax copies are not acceptable. However, you may email a pdf copy to Marla Workman at marlaworkman@utah.gov.

QUESTION: What is the penalty for general contractors submitting sub bids without bid bonds on scopes over $100k?

ANSWER: DFCM is reviewing this matter with the State Attorney General's office to determine the appropriate penalty based upon the circumstances. All general contractors are advised to do everything possible to meet the subcontractor bid bond requirements.

ADDENDUM NO. 4

TO THE DRAWINGS AND PROJECT MANUAL FOR

The Ice Sheet Addition
4390 Harrison Blvd.
Ogden, Utah

Construction Documents dated 9/04/2012

DFCM Project No. 12265810
FFKR Project No. 11124

PREPARED BY:

FFKR ARCHITECTURE
730 Pacific Avenue
Salt Lake City, Utah 84104

October 4, 2012

This Addendum No. Four, issued October 4, 2012 is for all persons preparing Bids for the above named project; and, as such, shall be made a part of the Contract Documents. Changes, corrections, and deletions enumerated herein shall be included in the Contractor's Bid. Bidders should acknowledge receipt of this Addendum in the space provided on the Contractor's Bid Form. Failure to do so may subject the Bidder to disqualification. In case of any conflict between the drawings, specifications, and this addendum, this addendum shall govern.

This Addendum consists of this cover sheet, 8 pages related to Architectural Project Manual changes; Architectural, Mechanical, Electrical, and Audio/Visual Drawing changes; and Responses to specific questions, Mechanical Addendum #4, Electrical Addendum #4, 2 re-issued Project Manual Covers, 1 new specification section, 1 new drawing sheet, 17 re-issued drawing sheets, and 1 modified drawing detail.

REVISIONS TO THE PROJECT MANUAL

COVER PAGE (Volumes 1 and 2)

1. Reissue cover pages for both volumes. (photo replaced with signed stamps. (see attached cover sheets)

SECTION 07 4213 - FORMED METAL WALL PANELS

1. Page 5, Paragraph 2.2.B.1; Add the following as an approved Manufacturer and product: “i. Firestone Metal Products, LLC.; VR-Classic Omega."

SECTION 07 4214 - METAL COMPOSITE MATERIAL WALL PANELS

1. Page 4, Paragraph 2.2.A.1.f; Modify listed product to read as follows: “f. Firestone Metal Products, LLC; UNA-Clip Series 1000."

SECTION 07 5419 - POLYVINYL-CHLORIDE (PVC) ROOFING

1. Page 1, Paragraph 1.2.A.2; Modify R-value as follows: “2. Roof insulation of thicknesses required to achieve R-25 rating."
2. Page 8, Paragraph 2.5.B.3; Modify R-value as follows: “3. R-Value: Minimum 25."
3. Page 8, Paragraph 2.5.C; Modify minimum slope as follows: “C. Tapered Insulation: Provide factory-tapered insulation boards fabricated to a minimum slope of 1/4 inch per 12 inches at valleys. Do not use EPS."

SECTION 07 9500 - EXPANSION CONTROL

1. Page 2, Paragraph 2.3.A; Add the following: “7. Balco, Inc."

SECTION 08 7100 - DOOR HARDWARE

1. Page 22, Hardware Set 10; Replace hardware set #10 with the following:

HW SET NO: 10
DOOR NUMBER: (Includes but is not limited to the following doors)
214A

2	EA	CONT. HINGE	224HD	628	IVE
1	SET	AUTO FLUSH BOLT	FB32	630	IVE
1	EA	FIRE EXIT HARDWARE	9849-L-F-996-06-LBL	626	VON
1	EA	RIM CYLINDER	1E72 (BY OWNER) (BY OWNER)	626	BES
2	EA	SURFACE CLOSER	4040XP EDA TBWMS	689	LCN
2	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7850	689	LCN
1	SET	SEALS	160S	AL	NGP
1	SET	ASTRAGAL	9605A 84"	CL	NGP

DOORS ARE NORMALLY HELD OPEN WITH WALL MAGNETS. INTERFACE REQUIRED WITH FIRE ALARM SYSTEM TO RELEASE MAGNETS SO DOORS CAN CLOSE AND LATCH.

EXIT DEVICES TO BE INSTALLED ON DOOR EXITING FROM WEIGHT ROOM. AUTO FLUSHBOLTS ARE INSTALLED ON DOOR FROM CORRIDOR TO WEIGHT ROOM.

2. Page 26, Hardware Set 25; Add hardware set #25 as follows:

HW SET NO: 25
DOOR NUMBER: (Includes but is not limited to the following doors)
112

6	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	KEYED REMOVABLE MULLION	KR4954	689	VON
1	EA	PANIC HARDWARE	98-EO	626	VON
1	EA	PANIC HARDWARE	98-L-996-06	626	VON
1	EA	RIM CYLINDER	1E72 (BY OWNER)	626	BES
1	EA	MORTISE CYLINDER	1E74 (BY OWNER)	626	BES
2	EA	SURFACE CLOSER	4040XP SCUSH TBWMS	689	LCN
2	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
2	EA	SILENCER	SR64-1	GRY	IVE

SECTION 09 6566 - RESILIENT ATHLETIC FLOORING

1. Page 3, Paragraph 2.2.A; Add the following as an approved Manufacturer: “2. Robbins Sports Surfaces; Galaxy Classic.”

SECTION 13 3416 – BLEACHERS AND BENCHES

1. Page 1, Paragraph 1.4.B.1; Add the following sentence to paragraph 1: "Indicate product compliance with ICC 300-2007 "Standard for Bleachers, Folding and Telescopic Seating, and Grandstands".
2. Page 2, Paragraph 1.7.; Add the following subparagraph F: "Provide bleachers that comply with ICC 300-2007 "Standard for Bleachers, Folding and Telescopic Seating, and Grandstands".
3. Page 3, Paragraph 2.1; Add paragraph A as follows: "Provide bleachers that comply with ICC 300-2007 "Standard for Bleachers, Folding and Telescopic Seating, and Grandstands" and the following performance requirements:
4. Page 3, Paragraph 2.1.A.1.a; Modify subparagraph "a" to read as follows: "Uniform Live Load: 100 psf."
5. Page 3, Paragraph 2.1.A.1.e; Modify subparagraph "e" to read as follows: "Guardrails and Handrails:"
6. Page 3, Paragraph 2.1.A.1; Add subparagraphs "f" through "j" as follows:

    f. Vertical Load of Seats: 120 plf.
    g. Concentrated Load on Treads: Minimum 300 pounds on 4-inch square area.
    h. Tread Construction: Do not allow gap wider than 0.25 inch between adjacent tread surfaces where treads are constructed of more than 2 elements. If grating tread is provided, construct tread such that 0.25 inch sphere cannot pass through.
    i. Live Load Deflection: Not exceeding limit of 1/200.
    j. Open Space at Footboards and Seatboards: Where opening between seatboard and footboard is located more than 30 inches above level of

floor surface, close opening such that 4-inch-dia. sphere cannot pass through.

6. Page 3, Paragraph 2.2.B.3; Add subparagraph "a" and sub-subparagraph "1)" as follows:

    a. Tread Marking Stripes: Where tread or riser nonuniformity exceeds 0.188 inch, provide distinctive marking stripe on each tread adjacent to nonuniform tread or riser. Provide marking on each tread at nosing or leading edge such that location of each tread is readily apparent when viewed in descent.

        1) Stripe Width: Minimum 1-inch wide to maximum 3 inches wide.

REVISIONS TO THE DRAWINGS.

COVER SHEET – Re-issued.

1. Drawing Index; Add the following: “SHEET G-008 – DESIGN & CODE CRITERIA”.
2. Add the DFCM Project Number.
3. Project Team Stamps; Add dates to the stamps.

SHEET G-001 – CODE ANALYSIS & MEZZ. LEVEL SAFETY PLAN – Re-issued.

1. The entire sheet was modified and re-issued.

SHEET G-007 – DESIGN & CODE CRITERIA – Re-issued

1. UL Design No. X701; Add: “UL Design Assembly No X701”.

SHEET G-008 – DESIGN & CODE CRITERIA – New sheet

1. Add this new sheet.

SHEET AD-101 – BUILDING DEMO PLANS – Re-issued.

1. Elevation D3 - SOUTHWEST EXTERIOR ELEVATION DEMO; Modify the stair demolition note.
2. Plan A1 – LEVEL ONE DEMO PLAN; Add: Note to demo and remove Refrigeration Room door.

SHEET AS-100 – SITE AND GRADING PLAN – Re-issued.

1. Refer to clouded modifications on re-issued sheet.

SHEET AS-101- SITE ENLARGED PLANS AND DETAILS – Re-issued.

1. Refer to clouded modifications on re-issued sheet.
2. Detail F1- ADA PARKING SIGNAGE; Add: “Detail F1 - ADA PARKING SIGNAGE”

SHEET A-101 – LEVEL 1 FLOOR PLAN – Re-issued.

1. Refer to clouded modifications on re-issued sheet.

SHEET A-102 – LEVEL 2 FLOOR PLAN – Re-issued.

1. Refer to clouded modifications on re-issued sheet.

SHEET A-111 – LEVEL 1 REFLECTED CEILING PLAN – Re-issued.

1. Detail D3 – SEISMIC BRACING DETAIL; Modify detail as shown.

SHEET A-400 – ENLARGED RESTROOM PLANS – Re-issued.

1. Refer to clouded modifications on re-issued sheet.

SHEET A-401 – ENLARGED RESTROOM PLANS – Re-issued.

1. Refer to clouded modifications on re-issued sheet.

SHEET A-404 – ENLARGED PLANS – STAIR #4 – Re-issued.

1. Refer to clouded modifications on re-issued sheet.

SHEET A-405 – ENLARGED STAIR #3 & #5 PLANS – Re-issued.

1. Refer to clouded modifications on re-issued sheet.

SHEET A-600 – DOOR SCHEDULE & PARTITION TYPES – Re-issued.

1. A1 – PARTITION TYPES; Refer to the clouded modifications on re-issued sheet.
2. DOOR AND FRAME SCHEDULE; Add: “Door Opening 112 Refrig. Room”.

SHEET R401 – REFRIGERATION PLAN – Re-issued

1. Refer to the Mechanical Addendum #4.

SHEET R702 - REFRIGERATION SCHEMATIC PLAN – Re-issued

1. Refer to the Mechanical Addendum #4.

SHEET ES101 – ELECTRICAL SITE PLAN – Re-issued.

1. Refer to the Electrical Addendum #4

SHEET TA601 – EQUIPMENT LIST AND DETAILS

1. Add an assisted listening system; Listen LS-04-072-01. Feed the assisted listening system from the DSP.

RESPONSES TO SPECIFIC QUESTIONS

1. Who is supplying the steel in the Dasher Board Wall; Gates, and Benches on Sht. A-502? If I need to, what is happening?

RESPONSE: These items are specified in SECTION 13 1800 ICE SHEET ACCESSORIES. The general contractors shall determine how this scope of work is included in their bid.

2. What size wire/openings or Expanded Metal for the Steel Guardrail on A4/A-402; A1/A-700; Etc.?

RESPONSE: The expanded metal is to match the expanded metal installed in the existing building.

3. What thickness are the Horizontal Tubes at the Tube Walls @ Stairs # 3 & 4? – Sht. A-404 & A-405; A3, A5/S-201?

RESPONSE: See Addendum #4

4. Who is supplying the Perforated Gate & Fence at Stair # 4? It we are, what size/opening is the Perforated Metal? – D5/A-404.

RESPONSE: See Addendum #4.

5. How Many Studs do I need to figure on my Beams? No, Spacing or count is shown?

RESPONSE: There are no studs required on beams only on joists.

6. Do the Non-Brg. Wall Details occur? None are cut on the Structural Drawings. Please supply which walls get them and which detail applies – A2,A3,A4/S-703.

RESPONSE: See Addendum #4.

7. We were questioning if subs are to bid through contractors or if the DFCM would like subs to bid directly to them.

RESPONSE: All bids shall be provided through the short-listed general contractors.

8. Who is responsible for the steel plate cover over the ice rink header trench?

RESPONSE: The steel plate covers are part of the contract scope of work.

9. Is there a specific or minimum requirement for the 18" sand layer covering the sub soil heating system? This seems excessive.

RESPONSE: Provide as shown on the Contract documents.

10. Is the rink contractor responsible for the steel supports shown in the header trench? If so, would a structural pipe roller type support be approved?

RESPONSE: Yes. Yes, this would be considered.

11. Is the Refrigeration contractor responsible to ensure that the entire engine room is up to current code (both new and existing piping and equipment)?

RESPONSE: Refer to Addendum #4.

12. Our rink concrete expert says that concrete mix for the ink slab in the specs will not work. Will the design engineers be open to looking at other proven mixes?

RESPONSE: Yes.

13. Is the mechanical contractor responsible to pay for the modifications to the water treatment equipment?

RESPONSE: Yes, as stated in the Contract Documents.

14. Spec 23 0650-4 line 38 requires a refrigeration contractor to perform maintenance on the system and write a report to the engineer every month for the first month. Is this cost to be included in the original bid or be charged to the customer on a monthly basis?

RESPONSE: This is to be included in the scope of work as stated in the Contract Documents.

15. Which motors in the refrigeration system are going to be driven by VFD's? Brine Pumps? Condenser Fans? Under floor warming and ice melt pumps? Compressor Motor?

RESPONSE: Refer to Addendum #4.

16. How will utilities for this project be handled? Will the campus provide a utility budget or are we to assume all costs for heating, power, winter conditions, etc?

RESPONSE: The campus will not provide a utility budget. Please refer to the Contract Documents for all requirements pertaining to temporary utilities.

17. IIHF Regulations call for minimum height boards at 1.17m high (46") but drawings show 3'-6" (42"). Do we follow IIHF or drawings?

RESPONSE: Comply with the Contract Documents.

18. IHF Regulations call for minimum height glass on ends of rink 160cm (63") high but specs call for 60" high. Do we follow IIHF or Specifications?

RESPONSE: Comply with the Contract Documents.

19. Is Sport Systems Unlimited Corp an approved manufacturer? Crystaplex is a brand line in our dasher portfolio.

RESPONSE: Yes

20. Is an aluminum framed system an approved equal? 6A System-NHL preferred dasher system.

RESPONSE: Yes

21. Is a mechanically fastened system an approved equal? Pro Series System-excellent community dasher system.

RESPONSE: A mechanically fastened system is not an approved equal. A mechanically fastened system may be submitted as a proposed cost reduction.

22. Are bolt on hinges acceptable? Welded hinges allow no room for adjustment if concrete isn't perfect.

RESPONSE: Bolt-on hinges are acceptable.

23. If you route ¼" of material out of ½" poly facing it leaves only a ¼" of support behind red and blue lines. This is known to crack and fail. Are ½" cut in lines acceptable?

RESPONSE: Yes.

24. Smooth caprail shows scratches which collect dirt especially after installation is complete and facility is in use. Is an orange peel texture finish acceptable?

RESPONSE: Yes

25. Is nylon netting acceptable in lieu of cotton?

RESPONSE: Yes

26. There is 1/8" over hang on the caprail of the boards for ad panels. Are ad panels required?

RESPONSE: Ad panels are not included in this scope of work.

27. 1" caprail with a notch seems excess. Tempered glass does not need a notch. Can caprail be reduced to ½" material to save cost?

RESPONSE: Provide the specified 1” cap rail. A ½ “ cap rail may be submitted as a proposed cost reduction.

28. There is a specification for access doors but none are shown on the drawings. Please advise.

RESPONSE: Coordinate number and general location of access doors with trades requiring access doors.

29. The drawings don’t call out any new shelving at the skate storage room, but the drawings seem to show a new configuration with new shelving. Please advise whether this shelving is new.

RESPONSE: There is no new shelving. Refer to Addendum #4 for clarification.

30. Detail A1/A600 - Reference to Finish Schedule. Is this available?

RESPONSE: No, there is no Finish Schedule in the Contract Documents. Refer to the Finish Plans.

31. Went down to the walk through today. Still questions about the fire alarm system. They said they didn't have a FACP to run the notifier speaker system. There has got to be something that runs all of that. All they showed us was the fire riser pipes - the water side of it. Any other info would be splendid.

RESPONSE: As per the fire alarm riser that was sent out in Addendum #3, we are providing a separate, new panel that will incorporate the amplifier for the voice evacuation system. The old system will not incorporate the voice evacuation function.

32. Also there are two machines that we can't find on the plans. BP-4 & BP5. They are on the equipment schedule and the one line. Any help there?

RESPONSE: Refer to Addendum #4.

33. We prequalified an alternative refrigeration subcontractor for this project at the time our statement of qualifications was submitted and spent a great deal of time reviewing our approach to the project with this sub. We are now learning that other generals who did not submit this same refrigeration subcontractor with their statement of qualifications are planning to use the sub with their bid. It was our understanding per addenda #2 that the contractors had to submit the refrigeration subcontractor with their own statement of qualifications in order to use them on this project. Are generals going to be allowed to use subs which were not prequalified with their own statement of qualifications or held to the original requirement that they needed to include them within their original proposal and SOQ

RESPONSE: The requirement to provide information on refrigeration subcontractors was for “alternative refrigeration contractors” (refrigeration contractors other than the 3 that were pre-approved and listed in the specification). The requirement was not to require the general contractors to identify their single refrigeration sub contractors as part of their Management Plan / SOQ. The documents do not require the general contractors to identify the refrigeration sub-contractor they are using until the sub list is submitted. The refrigeration sub-contractors pre-approval is being handled very similar to a pre-approved product substitution.

The refrigeration sub-contractors that have been added to the approved list are included in this addendum. (Addendum #4).

VAN BOERUM
& FRANK ASSOCIATES, INC.
CONSULTING ENGINEERS

MECHANICAL ITEMS FOR ADDENDUM 04

DATE: October 4, 2012

PROJECT NO: 11612

PROJECT: Weber Ice Sheet - The Ice Sheet Addition

DIVISION – 23

GENERAL

1. For all mechanical, plumbing and brine piping that crosses the building expansion joint along grid 'A', provide a Metraflex Metraloop seismic expansion joint. Each expansion joint shall be sized and configured according to the manufacturer's recommendations to accommodate no less than 5" of movement in any horizontal direction. The Metraloop seismic expansion joints for brine piping shall be 316 stainless steel and shall be provided with a liner, coordinate with manufacturer's recommendations for brine.
2. For all mechanical ducts that cross the building expansion joint along grid 'A', provide a flexible duct connection to accommodate no less than 5" of movement in any horizontal direction.

SHEET M-101

1. The new duct from existing Refrigeration Room 112 to the new 48" x 48" louver in the Resurface Room 111 shall be 48" x 24". Transition to the 48" x 48" louver as needed.
2. Provide a new ATC damper on the new duct from the existing Refrigeration Room 112 to the new 48" x 48" louver. The new ATC damper shall be interlocked with the existing ATC controls in a manner similar to how the existing damper was interlocked.

SHEET M-601

1. Heat Exchanger schedule for BC-2: Adjust the brine temperature difference to 3.6 -3.7 to match the design chiller capacity of 2200 mbh.
2. In the Pump Schedule, change the following columns for BP-5:
   Manufacturer and Model Number: B&G Series 80 3X3X7B
   Flow Rate: 160 GPM

SHEET P-101

1. The roof drain leaving the building at the northwest corner of Team Room 123 is a 4" pipe. Also, the invert elevation referencing this pipe is the elevation at the point the pipe exits the building.
2. Add a floor cleanout at the east floor drain in the piping tunnel at the north end of the ice rink.

SHEET P-401

1. Plan 11: Add a wall cleanout in Men's R-Room 217 where the waste line from the lavatories turns north.
2. Plan 7: Add a wall cleanout in Restroom 132 where the waste line from the lavatories turns north.
3. Plan 3: Add a vent for the shower drain in Restroom 125 and Restroom 126. The vent for each drain shall rise up in the nearest wall and connect to the vent piping in the ceiling space.
4. Plan 7: Add a vent for the shower drain in Restroom 131 and Restroom 132. The vent for each drain shall rise up in the nearest wall and connect to the vent piping in the ceiling space.

SHEET P-601

1. Add Water Hammer Arrestor (HY-1) to the fixture specification as follows:
   Water Hammer Arrestor: Smith "Hydrotrol" Figure 5010 (rated at 12-32 F.U.), Figure 5020 (rated at 33-60 F.U.), Figure 5030 (rated at 61-113 F.U.) or Figure 5040 (rated at 114-154 F.U.). Determine the fixture units for the plumbing equipment and install the arrestor rated for the fixture units. Locate where shown on the plans or at the end of domestic cold water lines serving a set of water closets or urinals.

SHEET RD-401

1. Where HG and AL drop thru patio into room below, remove both pipes to the point where they will be reconnected to new pipes that extend the lines to the new evaporative condenser.
2. Key note 9 shall also point to AL pipe next to the evaporative condenser.
3. Key note 15 pointing to the warm water tank shall be changed to key note 7.

SHEET R-401

1. Replace sheet R-401 in the bid set of drawings with the new sheet R-401 in this addendum.

SHEET R-702

1. Replace sheet R-702 in the bid set of drawings with the new sheet R-702 in this addendum.

SPECIFICATION SECTION 230100 page 5;

1. Replace the paragraph beginning on line 4 with the following:
   The Contractor shall remove all piping, equipment, accessories, hangers, attachments, controls, etc., required by new construction and cap or plug openings unless noted otherwise. No capping, etc., shall be exposed in occupied areas. All openings of items removed shall be sealed to match adjacent surfaces.

SPECIFICATION SECTION 230150

1. In addition to balancing the new work, the TAB contractor shall also re-balance the existing exhaust fan that serves the existing refrigeration room as the emergency ventilation system. The existing fan, EF-4 shall be balanced to the original 4200 cfm.

SPECIFICATION SECTION 230400

1. On page 2, delete the section on Charcoal Vent Filters.
2. The last paragraph of the “Water Heater (Gas)” section shall read as follows:
   Provide concentric vent kit and PVC vent piping, PVC air intake piping. Install in accordance with manufacturers recommendations.

SPECIFICATION SECTION 230650

1. Add the following to this section:
   <u>Glycol:</u>
   The snow melt heating piping system shall be filled with a mixture of water and glycol. The glycol provided shall be propylene glycol as manufactured by Dow Chemical. Trade name shall be DownFrost. The water quality in this system shall meet the recommendations of the glycol manufacturer so as to reduce sludging. 24 Glycol percentages shall be 40% by volume.
2. The ammonia diffusion tank shall be a steel tank, epoxy lined, with ladder, piping connections, electric freeze protection heater, and manholes. Electric immersion heater shall be 23 kw, 480 volt, Chromolox or approved equal. Tank shall be mounted and adequately secured to a concrete pad.

SPECIFICATION SECTION 230700

1. Add the following paragraphs to the “Packaged Rooftop Air Conditioning Unit (RTU’S)” section:
   Each RTU shall be provided with exhaust fans. Exhaust dampers shall be sized for 100% relief.
2. Add the following paragraphs to the “Packaged Rooftop Air Conditioning Unit (RTU’S)” section:
   Rooftop unit supply and exhaust fans shall be belt drive or direct drive. If fans are direct drive, the unit supplier shall be provide the variable frequency drives including factory wiring and mounted in the unit.

   RTU-1 supplier shall provide variable frequency drives on the supply fans and exhaust fans. Variable frequency drives shall be factory wired and mounted in the unit. Fan motors shall be premium efficiency.

   Provide a factory provided unit controller selected to meet the new building ATC control architecture, i.e. BACNet, etc.

3. Add the following section to the end of the specification:
   <u>Ductless Split-Type Air Conditioner</u>
   Provide a ductless split-type air conditioner with indoor evaporator section and outdoor condensing unit. Indoor unit shall have adjustable outlet, quiet operation, microprocessor remote control panel. Outdoor unit shall have corrosion-resistant cabinet containing compressor, copper-tube aluminum-fin coils, direct-

drive centrifugal fans with motors with internal overload protection; capacity control to minus 20 deg F. Provide refrigerant line kit and roof supports. Field verify line kit routings and distances before ordering. Unit shall be Mitsubishi, Fujitsu, Daikin or Sanyo.

SPECIFICATION SECTION 230800

1. Add the following to this section:
   Louvers:
   Louvers are to be furnished by this Contractor. Exact sizes shall be coordinated with the Architect. Connections to louvers shall be made by this Contractor. Louvers shall be fixed drainable type 6 inches thick of 12-gauge galvanized metal. Louver shall be AMCA certified rated for no water carry-over at free area velocities less than 1000 fpm. In no case shall free area be less than 50% of the face area. Frames shall be flange type as selected by architect for mounting in a wall. A 1/4-inch galvanized mesh insect screen shall be provided behind the louver. Louvers shall be prime painted and then shall have a final Kynar finish coat in color selected by Architect. Louvers to be Airolite (K6776), Venco, Ruskin, or Louvers and Dampers.

2. Add the following paragraph to the “Equipment” section:
   Complete medium-pressure single-duct variable volume reheat terminal boxes of the size and capacity scheduled on the drawings shall be furnished and installed. Boxes shall be pressure independent volume regulation with continuous compensation for pressure fluctuations, from maximum to minimum volumes. Flow sensor shall be multiport type. Unit construction shall be 20-gauge galvanized steel with round inlet collars and rectangular outlet collars. Internal surfaces shall be treated with materials which have U.L. approval meeting NBFU and NFPA. Each box shall be fully lined with 1" thick 1.5 lb. density insulation. Sound levels shall not exceed 35 NC at 3.0" S.P. drop based on a 10db room absorption factor for both radiated and discharge sound data. Reheat coils shall have aluminum fins with copper tubes and shall be ARI rated to provide the heating capacity scheduled on the drawings. Boxes to be Titus, Trane, Nailor, Tempmaster, United Air Flow, or Anemostat.

SPECIFICATION SECTION 230900

1. On page 1 line 49 under VFD for ATC control add in the following sentence
   The VFDS required by the RTU’s shall be provided with the RTUs and shall be provided by the RTU supplier. The VFD for EC-2 shall be provided by the RAS contractor. The VFD for EC-2 shall be located in the same room as BP-3A and near BP-3A. Coordinate location with existing conditions and the electrical engineer.
2. On page 3 line 26 delete requirement for a telephone modem. Provide a web service router to be tied to an owner furnished internet connection and IP address.

SPECIFICATION SECTION 230900

1. On page 1 line 42, delete this paragraph refereeing to a low limit thermostat. If DAT sensor senses a temperature less than 40 degrees, the unit shall be shut down and an alarm sent.

SPECIFICATION SECTION 230910

1. The contractor shall investigate the existing refrigeration systems and equipment. All new work shall be installed in accordance with current codes. Any existing conditions which the contractor discovers that do not meet code shall be brought immediately to the architects/engineers attention prior to proceeding with any work or ordering of equipment.
2. On page 4, paragraph Control Requirement, change to the following:
   The work of this section is to integrate the control of the new refrigeration equipment and systems with the existing refrigeration equipment and systems. The existing system has controls for the existing compressors, evaporative condenser, chiller, heat exchangers, brine pumps, refrigeration leak monitoring, emergency ventilation and emergency equipment shut down.

   It is the intention of the refrigeration controls to completely control the operation of the refrigeration plant and all new controls will be supplied by the Refrigeration Automation System Contractor as required for a complete RAS control systems. The RAS will monitor the operation of the compressors from the main control panel. The ice floor temperatures which are the main control points will also be monitored and adjustable but only after a password access so that only the plant ice operator has access. All alarms will be monitored.

The existing system is a Lyndis & Gyr system. Any issues which are identified as making it difficult to integrate with this system shall be immediately brought to the architects/engineers attention. The final control of the refrigeration plant shall meet the requirements as specified.

The new refrigeration equipment shall be integrated into the emergency shutdown system.

3. On page 4 line 44 delete the last two sentences regarding VFD control of brine pumps from this paragraph.
4. On page 5 delete the lines 12 to 33.
5. On page 6 line 12 Condensing System Controls, change the paragraph to the following:
   The new evaporative condenser shall be controlled by a refrigerant discharge pressure sensing device in the compressors discharge line. When the pressure reaches a pre-set pressure (about 165 PSIG) a pressure switch will start the evaporative condenser spray pump operating. As the pressure keeps rising the condenser fan motor VFD will start the fan at minimum speed. If the pressure continues to rise, the fan speed shall be increased by the fan VFD. The reverse will be true for decreasing discharge pressure. The sequences shall also be adjustable to allow the fan to start and speed up prior to starting the water. The RAS contractor shall provide the VFD for EC-2 and shall install and control it.
6. Provide an emergency pressure control system in accordance with the International Fire Code section 606. Provide a new crossover valve between the high pressure side and the low pressure side together with a companion overpressure sensing devise. If the pressure reaches 90 percent of the relief valve set points, the overpressure sensing device shall stop all compressors.
7. The ammonia sensor in the relief line downstream of the diffusion tank shall send an alarm if it senses ammonia.

PRIOR APPROVALS

The following manufacturers, trade names and products are allowed to bid on a name brand only basis with the provision that they completely satisfy all and every requirement of the drawings, specifications and all addenda shall conform to the design, quality and standards specified, established and required for the complete and satisfactory installation and performance of the building and all its respective parts.

Item	**Manufacturer**
Air Separator	Patterson Pump Company
Air Vents	Bell & Gossett
ATC Contractor	Precision Controls installing Johnson Controls, D&L installing Alerton
ATC Contractor	Johnson Controls, Wasatch Controls, Siemens Controls
Calibrated Balance Valve	Nexus Valve
Check Valves	Metraflex
Control Dampers	Greenheck
Domestic Water Valves	Boston Valve
Expansion Joints and Loops	Metraflex
Expansion Tanks	Patterson Pump Company
Faucets and Flush Valves	Moen
Flexible Connectors	Patterson Pump Company
Floor Drains	Mifab
Gas Valves	Boston Valve
Heat Exchangers	ITT Standard/Bell & Gossett
Heavy Duty No-Hub Couplings	Clamp-All
HVAC Pumps	Patterson Pump Company, Taco
Ice Rink Contractor	Rink Tek
Motors	Ram
Pipe Insulation	LSP Products
Plumbing fixtures	American Standard
Plumbing Specialties	Mifab, McGuire
Pump Suction Diffusers	Patterson Pump Company
Refrigeration Contractor	LA Roser
Roof Drains	Mifab
Rooftop Units	Lennox, McQuay
Seismic and Vibration Control	Vibro Acoustics

Showers	Bradley
Stainless Steel Sinks	Moen, Elkay
Strainers	Metraflex
Test Tees “Petes Plugs”	Trerice
Thermometers	Trerice
Thermostatic Mixing Valves	Moen, Bradley
Variable Frequency Drives	Eaton Cutler-Hammer, Yaskawa
VAV Diffusers	Acutherm
VFD Testing	American Mechanical Systems and Services
Water Outlet Boxes	LSP Products

VAN BOERUM
& FRANK ASSOCIATES, INC.
CONSULTING ENGINEERS

ELECTRICAL - ADDENDUM #4

DATE: October 4, 2012

PROJECT NO: 11612

PROJECT: Weber Ice Sheet No. 2

DIVISION – 26, 27 & 28

GENERAL

1. As a clarification, the tele/data outlets serving the upstairs Weber State College spaces are rough-in only. All other outlets in spaces being used by the ice rink and Weber County will have cabling installed back to the main telecommunications room, jacks, faceplates, testing and termination provided as part of this scope of work. There is an existing MDF rack that will be used in the existing telecommunications room to land all new cabling on. Provide new patch panels in the existing MDF rack for new cabling.

DRAWINGS

SHEET - EG001 – ELECTRICAL GENERAL
1. The symbol, a circle with a half shaded triangle within it, is for a ceiling mounted data outlet to serve the wire access points installed by the owner.
2. As a clarification between the specifications and Note #31, MC cabling will be allowed as per Note #31. All home runs must be in conduit.
3. Change the callout for fire alarm duct detector in the symbols schedule to be provided by electrical contractor.

SHEET - EG500 – ONE-LINE DIAGRAM
1. The equipment being fed from MCC2 is shown with a symbol to represent a combination starter at the equipment. This should be changed to a non-fused disconnect for all equipment.
2. Change the 84 circuit designation for panel L1W to 42 circuits.
3. Provide a 40A3P circuit breaker in MCC2 to feed a new 25kw, 480V, 3ph tank heater. Branch circuit shall be 1”C-3#8(CU,THHN)+1#10(CU,THHN)GND. The new tank heater will be located outside next to EC-1.

SHEET - EG501 – ELECTRICAL DETAILS
1. Change the conduit size for tele/data from (2)3/4” to 1” on detail 3/EG501.

SHEET - EG502 – ELECTRICAL DETAILS
1. Replace the telecommunications riser diagram detail 2/EG502 with the new attached riser diagram.

SHEET - EL101 – LEVEL 1 LIGHTING PLAN
1. Fixture type in Pro Shop should be labeled as Type ‘F8’ with catalog number M232 A12 MVOLT, manufacturer Lithonia.

SHEET - EL103 – MEZZANINE LIGHTING PLAN
1. Recessed light fixture adjacent to exit should be labeled Type ‘D2’.

SHEET - EP101 – LEVEL 1 POWER PLAN
1. Circuit the new pre-action fire protection system air compressor located in JANITOR 122 to L1D-41.
2. Circuit the new pre-action fire protection panel located in JANITOR 122 to L1D-42.

3. Circuit the new fire alarm control panel on the same circuit as the existing fire alarm control panel, which is located in the existing telecommunications room near the REFRIGERATION ROOM 112.

SHEET - EP401 – LARGE SCALE POWER PLAN

1. The pump designated as BP-3 in REFRIGERATION ROOM 112 shall be changed to BP-4.
2. Pump BP-5 is located outside of the REFRIGERATION ROOM 112, next to the ice melt pit. Provide a non-fused equipment disconnect on the wall near the pump and feed from MCC2 as per the one line diagram and equipment schedule.
3. Provide a branch circuit from MCC2 to feed a new tank heater (see notes above for drawing EG500). Install a fused disconnect on the wall next to equipment and fuse as per the manufacture's recommendations.

SHEET - ED401 – LARGE SCALE DEMOLITION PLAN

1. The existing natural gas fueling station is located on the outside of the building, to the west of the overhead door near REFRIGERATION ROOM 112. This equipment is to be relocated as per drawing EP101.
2. Add a general note #1 stating "Refer to drawing RD-401 for removal of mechanical equipment. Contractor shall disconnect and remove branch circuits feeding equipment removed during demolition."

SHEET - ES101 – ELECTRICAL SITE PLAN

1. Replace the existing electrical site plan with the new attached site plan.
2. The existing underground primary will need to be routed around the new building footprint as shown on the revised site plan. Coordinate with Rocky Mountain Power for location of new pull boxes and new primary conduit requirements.
3. The existing telephone service conduit will need to be re-routed around the new building footprint. Install two new pullboxes (as per Qwest requirements) and (2)4"C-pullcord as shown on the revised site plan.
4. The new electrical distribution equipment in the electrical courtyard has been better identified on the revised site plan for the contractors coordination.

SHEET - FA101 – LEVEL 1 FIRE ALARM PLAN

1. Provide monitor modules for fire alarm output and trouble alarm output of the pre-action fire protection system in JANITOR 122.
2. Install a smoke detector in JANITOR 122 for protection of the pre-action fire alarm system.
3. The symbol, a rectangle with "AR" within it, is an addressable relay to be controlled by the fire alarm system (i.e. to control smoke dampers, fire rated motorized doors, etc...).
4. The existing fire alarm control panel is located in the existing telecommunication room near the REFRIGERATION ROOM 112. The new fire alarm control panel is to be located in this room.

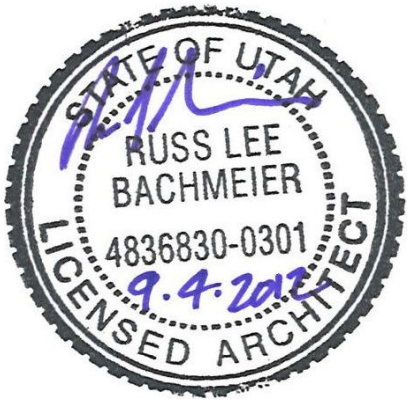
SPECIFICATIONS

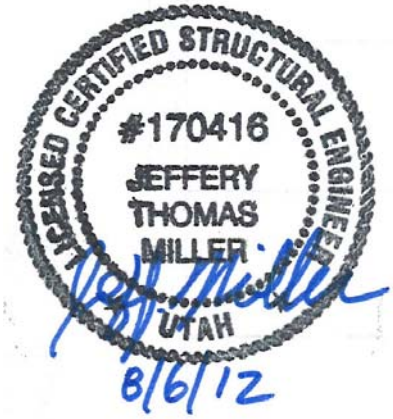
SECTION - 271500 – COMMUNICATIONS HORIZONTAL CABLING

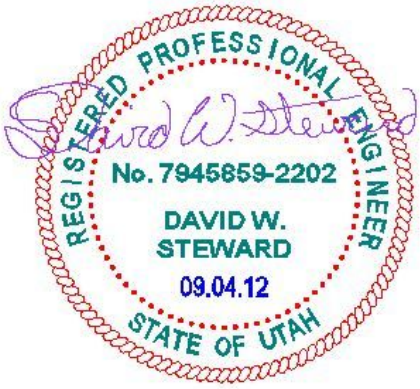
1. See attached telecommunications wiring system specification for specific requirements of the telecommunications system for the Weber County portion of the building.

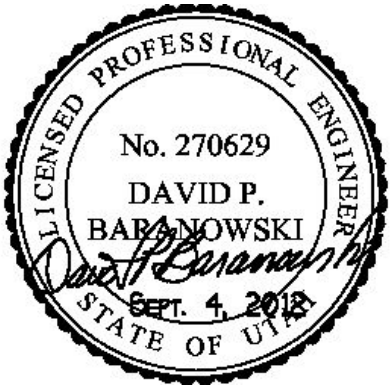
Ice Sheet Addition

4390 Harrison Blvd.
Ogden, Utah 84403









Volume 1
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Specifications

September 4, 2012

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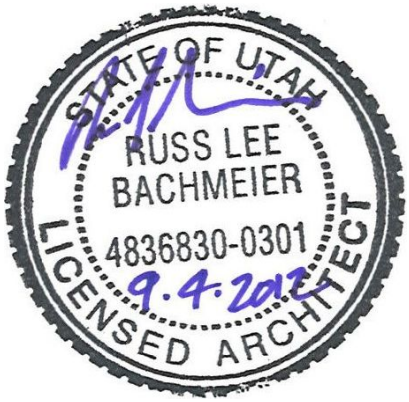

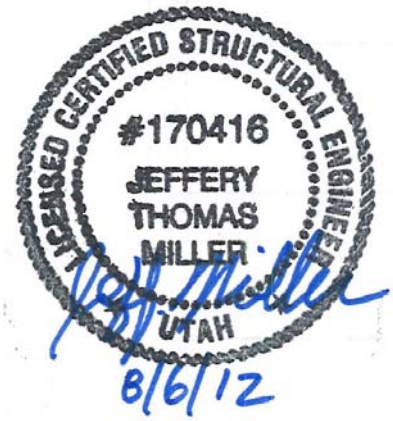

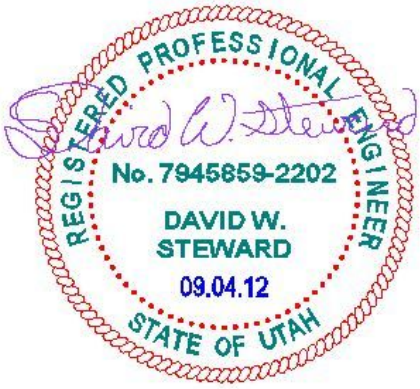

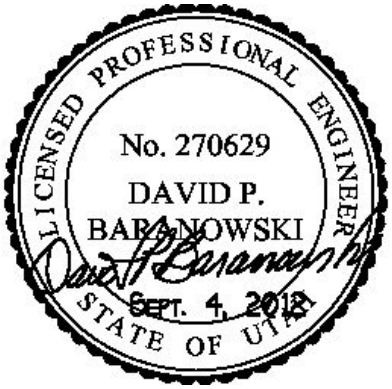

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SECTION 271500 - COMMUNICATIONS HORIZONTAL CABLING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. UTP cabling.
2. Multiuser telecommunications outlet assemblies.
3. Cable connecting hardware, patch panels, and cross-connects.
4. Telecommunications outlet/connectors.
5. Cabling system identification products.
6. Cable management system.

1.3 DEFINITIONS

A. BICSI: Building Industry Consulting Service International.

B. Consolidation Point: A location for interconnection between horizontal cables extending from building pathways and horizontal cables extending into furniture pathways.

C. Cross-Connect: A facility enabling the termination of cable elements and their interconnection or cross-connection.

D. EMI: Electromagnetic interference.

E. IDC: Insulation displacement connector.

F. LAN: Local area network.

G. MUTOA: Multiuser telecommunications outlet assembly, a grouping in one location of several telecommunications outlet/connectors.

H. Outlet/Connectors: A connecting device in the work area on which horizontal cable or outlet cable terminates.

I. RCDD: Registered Communications Distribution Designer.

J. UTP: Unshielded twisted pair.

1.4 ADMINISTRATIVE REQUIREMENTS

A. Coordinate layout and installation of telecommunications cabling with Owner's telecommunications and LAN equipment and service suppliers.

B. Coordinate telecommunications outlet/connector locations with location of power receptacles at each work area.

1.5 ACTION SUBMITTALS

A. Product Data: For each type of product.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For splices and connectors to include in maintenance manuals.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: Cabling Installer must have personnel certified by BICSI on staff.

1. Installation Supervision: Installation shall be under the direct supervision of Registered Technician, who shall be present at all times when Work of this Section is performed at Project site.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Test cables upon receipt at Project site.

1. Test each pair of UTP cable for open and short circuits.

PART 2 - PRODUCTS

2.1 HORIZONTAL CABLING DESCRIPTION

A. Horizontal cable and its connecting hardware provide the means of transporting signals between the telecommunications outlet/connector and the horizontal cross-connect located in the communications equipment room. This cabling and its connecting hardware are called a "permanent link," a term that is used in the testing protocols.

1. TIA/EIA-568-B.1 requires that a minimum of two telecommunications outlet/connectors be installed for each work area.
2. Horizontal cabling shall contain no more than one transition point or consolidation point between the horizontal cross-connect and the telecommunications outlet/connector.
3. Bridged taps and splices shall not be installed in the horizontal cabling.
4. Splitters shall not be installed as part of the optical fiber cabling.

B. A work area is approximately 100 sq. ft. (9.3 sq. m), and includes the components that extend from the telecommunications outlet/connectors to the station equipment.

C. The maximum allowable horizontal cable length is 295 feet (90 m). This maximum allowable length does not include an allowance for the length of 16 feet (4.9 m) to the workstation equipment or in the horizontal cross-connect.

2.2 PERFORMANCE REQUIREMENTS

A. General Performance: Horizontal cabling system shall comply with transmission standards in TIA/EIA-568-B.1 when tested according to test procedures of this standard.

B. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

1. Flame-Spread Index: 25 or less.
2. Smoke-Developed Index: 50 or less.

C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

D. Grounding: Comply with J-STD-607-A.

2.3 UTP CABLE

A. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings or comparable product by one of the following:

1. ADC.
2. Belden Inc.
3. Berk-Tek; a Nexans company.
4. CommScope, Inc.
5. Draka Cableteq USA.
6. Genesis Cable Products; Honeywell International, Inc.
7. Mohawk; a division of Belden Networking, Inc.
8. Superior Essex Inc.
9. SYSTIMAX Solutions; a CommScope, Inc. brand.
10. 3M Communication Markets Division.
11. Tyco Electronics Corporation; AMP Products.
12. Engineer approved equal.

B. Description: 100-ohm, four-pair UTP, formed into 25-pair, binder groups covered with a blue thermoplastic jacket.

1. Comply with ICEA S-90-661 for mechanical properties.
2. Comply with TIA/EIA-568-B.1 for performance specifications.
3. Comply with TIA/EIA-568-B.2, Category 6.
4. Listed and labeled by an NRTL acceptable to authorities having jurisdiction as complying with UL 444 and NFPA 70 for the following types:

a. Communications, General Purpose: Type CM or CMG.
b. Communications, Plenum Rated: Type CMP, complying with NFPA 262.
c. Communications, Riser Rated: Type CMR, complying with UL 1666.
d. Communications, Limited Purpose: Type CMX.
e. Multipurpose: Type MP or MPG.
f. Multipurpose, Plenum Rated: Type MPP, complying with NFPA 262.
g. Multipurpose, Riser Rated: Type MPR, complying with UL 1666.

2.4 UTP CABLE HARDWARE

A. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings or comparable product by one of the following:

1. ADC.
2. American Technology Systems Industries, Inc.
3. Belden Inc.
4. Dynacom Inc.
5. Hubbell Premise Wiring.
6. Leviton Commercial Networks Division.
7. Molex Premise Networks; a division of Molex, Inc.
8. Panduit Corp.
9. Siemon Co. (The).
10. Tyco Electronics Corporation; AMP Products.
11. Engineer approved equal.

B. General Requirements for Cable Connecting Hardware: Comply with TIA/EIA-568-B.2, IDC type, with modules designed for punch-down caps or tools. Cables shall be terminated with connecting hardware of same category or higher.

C. Patch Panel: Modular panels housing multiple-numbered jack units with IDC-type connectors at each jack for permanent termination of pair groups of installed cables.

1. Number of Jacks per Field: One for each four-pair conductor group of indicated cables, plus spares and blank positions adequate to suit specified expansion criteria.

D. Jacks and Jack Assemblies: Modular, color-coded, eight-position modular receptacle units with integral IDC-type terminals.

2.5 TELECOMMUNICATIONS OUTLET/CONNECTORS

A. Jacks: 100-ohm, balanced, twisted-pair connector; four-pair, eight-position modular. Comply with TIA/EIA-568-B.1.

B. Workstation Outlets: Four-port-connector assemblies mounted in single or multigang faceplate.

1. Plastic Faceplate: High-impact plastic. Coordinate color with Section 262726 "Wiring Devices."
2. For use with snap-in jacks accommodating any combination of UTP, optical fiber, and coaxial work area cords.

a. Flush mounting jacks, positioning the cord at a 45-degree angle.

3. Legend: Snap-in, clear-label covers and machine-printed paper inserts.

2.6 GROUNDING

A. Comply with requirements in Section 260526 "Grounding and Bonding for Electrical Systems" for grounding conductors and connectors.

B. Comply with J-STD-607-A.

2.7 IDENTIFICATION PRODUCTS

A. Comply with TIA/EIA-606-A and UL 969 for labeling materials, including label stocks, laminating adhesives, and inks used by label printers.

B. Comply with requirements in Section 260553 "Identification for Electrical Systems."

2.8 SOURCE QUALITY CONTROL

A. Factory test UTP and optical fiber cables on reels according to TIA/EIA-568-B.1.

B. Factory test UTP cables according to TIA/EIA-568-B.2.

C. Cable will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

PART 3 - EXECUTION

3.1 WIRING METHODS

A. Install cables in pathways and cable trays except within consoles, cabinets, desks, and counters and except in accessible ceiling spaces and in gypsum board partitions where unenclosed wiring method may be used. Conceal pathways and cables except in unfinished spaces.

1. Install plenum cable in environmental air spaces, including plenum ceilings.

B. Conceal conductors and cables in accessible ceilings, walls, and floors where possible.

C. Wiring within Enclosures:

1. Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii.
2. Install lacing bars and distribution spools.
3. Install conductors parallel with or at right angles to sides and back of enclosure.

3.2 INSTALLATION OF CABLES

A. Comply with NECA 1.

B. General Requirements for Cabling:

1. Comply with TIA/EIA-568-B.1.
2. Comply with BICSI ITSIM, Ch. 6, "Cable Termination Practices."
3. Install 110-style IDC termination hardware unless otherwise indicated.
4. Consolidation points may be used only for making a direct connection to telecommunications outlet/connectors:

    a. Do not use consolidation point as a cross-connect point, as a patch connection, or for direct connection to workstation equipment.
    b. Locate consolidation points for UTP at least 49 feet (15 m) from communications equipment room.

5. Terminate conductors; no cable shall contain unterminated elements. Make terminations only at indicated outlets, terminals, cross-connects, and patch panels.
6. Cables may not be spliced. Secure and support cables at intervals not exceeding 30 inches (760 mm) and not more than 6 inches (150 mm) from cabinets, boxes, fittings, outlets, racks, frames, and terminals.
7. Install lacing bars to restrain cables, to prevent straining connections, and to prevent bending cables to smaller radii than minimums recommended by manufacturer.
8. Bundle, lace, and train conductors to terminal points without exceeding manufacturer's limitations on bending radii, but not less than radii specified in BICSI ITSIM, "Cabling Termination Practices" Chapter. Install lacing bars and distribution spools.
9. Do not install bruised, kinked, scored, deformed, or abraded cable. Do not splice cable between termination, tap, or junction points. Remove and discard cable if damaged during installation and replace it with new cable.
10. Cold-Weather Installation: Bring cable to room temperature before dereeling. Heat lamps shall not be used for heating.
11. In the communications equipment room, install a 10-foot- (3-m-) long service loop on each end of cable.
12. Pulling Cable: Comply with BICSI ITSIM, Ch. 4, "Pulling Cable." Monitor cable pull tensions.

C. UTP Cable Installation:

1. Comply with TIA/EIA-568-B.2.
2. Do not untwist UTP cables more than 1/2 inch (12 mm) from the point of termination to maintain cable geometry.

D. Open-Cable Installation:

1. Install cabling with horizontal and vertical cable guides in telecommunications spaces with terminating hardware and interconnection equipment.
2. Suspend UTP cable not in a wireway or pathway a minimum of 8 inches (200 mm) above ceilings by cable supports not more than 60 inches (1524 mm) apart.
3. Cable shall not be run through structural members or in contact with pipes, ducts, or other potentially damaging items.

E. Group connecting hardware for cables into separate logical fields.

F. Separation from EMI Sources:

1. Comply with BICSI TDMM and TIA-569-B for separating unshielded copper voice and data communication cable from potential EMI sources, including electrical power lines and equipment.
2. Separation between open communications cables or cables in nonmetallic raceways and unshielded power conductors and electrical equipment shall be as follows:

    a. Electrical Equipment Rating Less Than 2 kVA: A minimum of 5 inches (127 mm).
    b. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 12 inches (300 mm).
    c. Electrical Equipment Rating More Than 5 kVA: A minimum of 24 inches (610 mm).

3. Separation between communications cables in grounded metallic raceways and unshielded power lines or electrical equipment shall be as follows:

    a. Electrical Equipment Rating Less Than 2 kVA: A minimum of 2-1/2 inches (64 mm).
    b. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 6 inches (150 mm).
    c. Electrical Equipment Rating More Than 5 kVA: A minimum of 12 inches (300 mm).

4. Separation between communications cables in grounded metallic raceways and power lines and electrical equipment located in grounded metallic conduits or enclosures shall be as follows:

    a. Electrical Equipment Rating Less Than 2 kVA: No requirement.
    b. Electrical Equipment Rating between 2 and 5 kVA: A minimum of 3 inches (76 mm).
    c. Electrical Equipment Rating More Than 5 kVA: A minimum of 6 inches (150 mm).

5. Separation between Communications Cables and Electrical Motors and Transformers, 5 kVA or HP and Larger: A minimum of 48 inches (1200 mm).
6. Separation between Communications Cables and Fluorescent Fixtures: A minimum of 5 inches (127 mm).

3.3 FIRESTOPPING

A. Comply with requirements in Section 078413 "Penetration Firestopping."

B. Comply with TIA-569-B, Annex A, "Firestopping."

C. Comply with BICSI TDMM, "Firestopping Systems" Article.

3.4 GROUNDING

A. Install grounding according to BICSI TDMM, "Grounding, Bonding, and Electrical Protection" Chapter.

B. Comply with J-STD-607-A.

C. Locate grounding bus bar to minimize the length of bonding conductors. Fasten to wall allowing at least 2-inch (50-mm) clearance behind the grounding bus bar. Connect grounding bus bar with a minimum No. 4 AWG grounding electrode conductor from grounding bus bar to suitable electrical building ground.

D. Bond metallic equipment to the grounding bus bar, using not smaller than No. 6 AWG equipment grounding conductor.

3.5 IDENTIFICATION

A. Identify system components, wiring, and cabling complying with TIA/EIA-606-A. Comply with requirements for identification specified in Section 260553 "Identification for Electrical Systems."

1. Color-code cross-connect fields. Apply colors to voice and data service backboards, connections, covers, and labels.

B. Using cable management system software specified in Part 2, develop Cabling Administration Drawings for system identification, testing, and management. Use unique, alphanumeric designation for each cable and label cable, jacks, connectors, and terminals to which it connects with same designation. At completion, cable and asset management software shall reflect as-built conditions.

C. Comply with requirements in Section 099123 "Interior Painting" for painting backboards. For fire-resistant plywood, do not paint over manufacturer's label.

D. Paint and label colors for equipment identification shall comply with TIA/EIA-606-A.

E. Cable Schedule: Post in prominent location in each equipment room and wiring closet. List incoming and outgoing cables and their designations, origins, and destinations. Protect with rigid frame and clear plastic cover. Furnish an electronic copy of final comprehensive schedules for Project.

F. Cable and Wire Identification:

1. Label each cable within 4 inches (100 mm) of each termination and tap, where it is accessible in a cabinet or junction or outlet box, and elsewhere as indicated.
2. Each wire connected to building-mounted devices is not required to be numbered at device if color of wire is consistent with associated wire connected and numbered within panel or cabinet.
3. Exposed Cables and Cables in Cable Trays and Wire Troughs: Label each cable at intervals not exceeding 15 feet (4.5 m).
4. Label each terminal strip and screw terminal in each cabinet, rack, or panel.

a. Individually number wiring conductors connected to terminal strips, and identify each cable or wiring group being extended from a panel or cabinet to a building-mounted device shall be identified with name and number of particular device as shown.
b. Label each unit and field within distribution racks and frames.

5. Identification within Connector Fields in Equipment Rooms and Wiring Closets: Label each connector and each discrete unit of cable-terminating and connecting hardware. Where similar jacks and plugs are used for both voice and data communication cabling, use a different color for jacks and plugs of each service.
6. Uniquely identify and label work area cables extending from the MUTOA to the work area. These cables may not exceed the length stated on the MUTOA label.

G. Labels shall be preprinted or computer-printed type with printing area and font color that contrasts with cable jacket color but still complies with requirements in TIA/EIA-606-A.

1. Cables use flexible vinyl or polyester that flex as cables are bent.

3.6 FIELD QUALITY CONTROL

A. Perform the following tests and inspections:

1. Visually inspect UTP and optical fiber cable jacket materials for NRTL certification markings. Inspect cabling terminations in communications equipment rooms for compliance with color-coding for pin assignments, and inspect cabling connections for compliance with TIA/EIA-568-B.1.
2. Visually confirm Category 6, marking of outlets, cover plates, outlet/connectors, and patch panels.
3. Visually inspect cable placement, cable termination, grounding and bonding, equipment and patch cords, and labeling of all components.
4. Test UTP backbone copper cabling for DC loop resistance, shorts, opens, intermittent faults, and polarity between conductors. Test operation of shorting bars in connection blocks. Test cables after termination but not cross-connection.

a. Test instruments shall meet or exceed applicable requirements in TIA/EIA-568-B.2. Perform tests with a tester that complies with performance requirements in "Test Instruments (Normative)" Annex, complying with measurement accuracy specified in "Measurement Accuracy (Informative)" Annex. Use only test cords and adapters that are qualified by test equipment manufacturer for channel or link test configuration.

5. UTP Performance Tests:

a. Test for each outlet and MUTOA. Perform the following tests according to TIA/EIA-568-B.1 and TIA/EIA-568-B.2:

1) Wire map.
2) Length (physical vs. electrical, and length requirements).
3) Insertion loss.
4) Near-end crosstalk (NEXT) loss.

5) Power sum near-end crosstalk (PSNEXT) loss.
6) Equal-level far-end crosstalk (ELFEXT).
7) Power sum equal-level far-end crosstalk (PSELFEXT).
8) Return loss.
9) Propagation delay.
10) Delay skew.

6. Final Verification Tests: Perform verification tests for UTP systems after the complete communications cabling and workstation outlet/connectors are installed.

a. Voice Tests: These tests assume that dial tone service has been installed. Connect to the network interface device at the demarcation point. Go off-hook and listen and receive a dial tone. If a test number is available, make and receive a local, long distance, and digital subscription line telephone call.
b. Data Tests: These tests assume the Information Technology Staff has a network installed and is available to assist with testing. Connect to the network interface device at the demarcation point. Log onto the network to ensure proper connection to the network.

B. Document data for each measurement. Data for submittals shall be printed in a summary report that is formatted similar to Table 10.1 in BICSI TDMM, or transferred from the instrument to the computer, saved as text files, and printed and submitted.

C. End-to-end cabling will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

END OF SECTION 271500

THE ICE SHEET ADDITION

CONSTRUCTION DOCUMENTS - 9/04/2012

△4 DFCM project No 12265810

FFKR
ARCHITECTS

SYMBOLS LEGEND

- ROOM IDENTIFICATION NUMBER — ROOM NAME / NUM — ROOM NAME, ROOM NUMBER
- DOOR NUMBER — XXX
- REFERENCE NOTE — X
- GLAZING TYPE — X
- PARTITION WALL TYPE — X
- INTERIOR ELEVATION — SHADE INDICATES ELEVATED WALL; ELEVATION NUMBER; SHEET NUMBER; WALL NUMBER
- BUILDING SECTION — SECTION NUMBER; SHEET NUMBER
- WALL SECTION — SECTION NUMBER; SHEET NUMBER
- EXTERIOR ELEVATION — ELEVATION NUMBER; SHEET NUMBER
- DETAIL — DETAIL NUMBER; SHEET NUMBER
- DETAIL TITLE — A1 DETAIL 1" = 1'-0"
- REVISION DELTA — 2 REVISION NUMBER

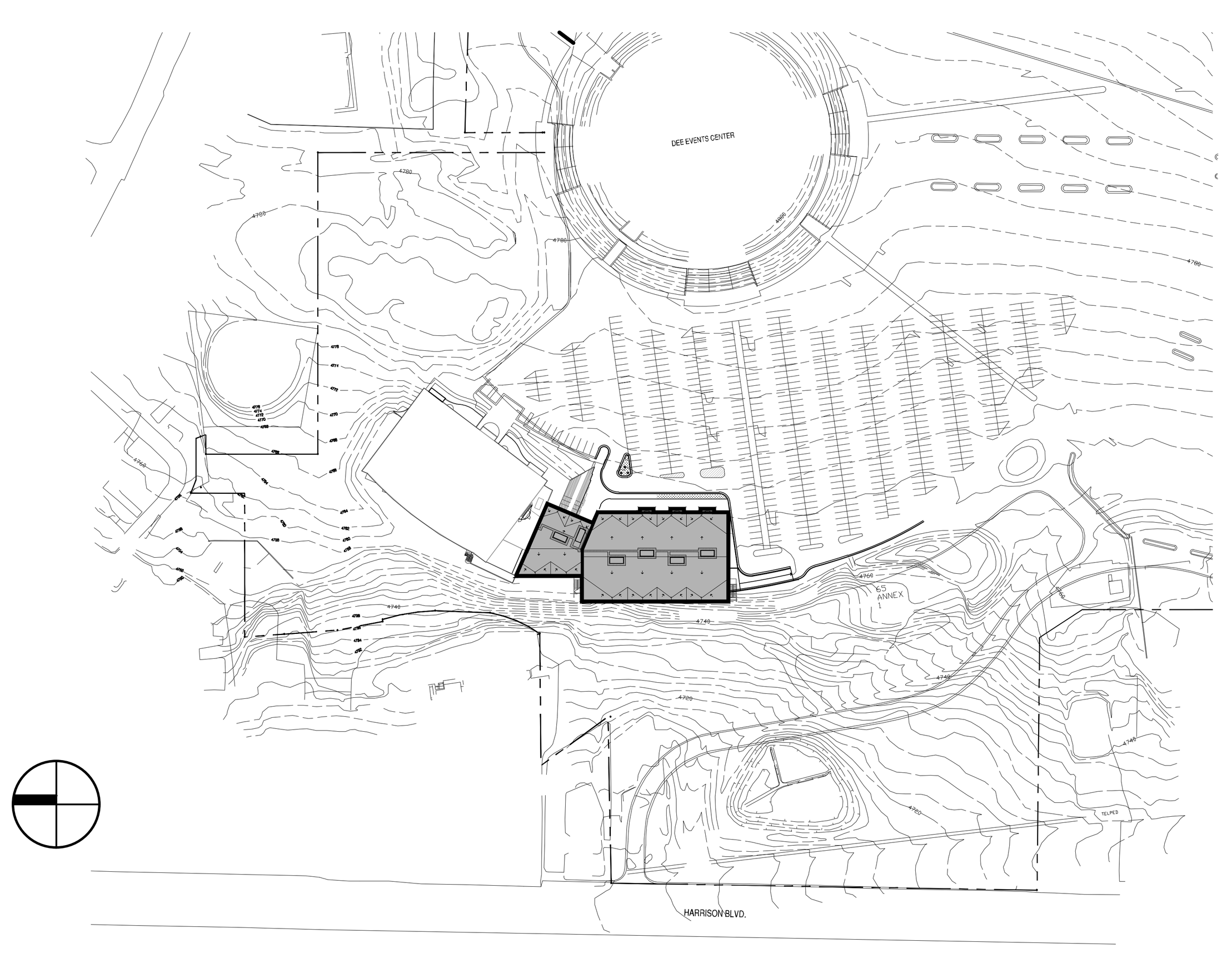
ABBREVIATIONS

AFF	- ABOVE FINISHED FLOOR
CMU	- CONCRETE MASONRY UNIT
EIFS	- EXTERIOR INSULATED FINISH SYSTEM
EWC	- ELECTRIC WATER COOLER
EQ	- EQUAL
MAX	- MAXIMUM
MIN	- MINIMUM
NIC	- NOT IN CONTRACT
O.C.	- ON CENTER
SPEC	- SPECIFICATION
SIM	- SIMILIAR
TYP	- TYPICAL
T. O.	- TOP OF
B. O.	- BOTTOM OF

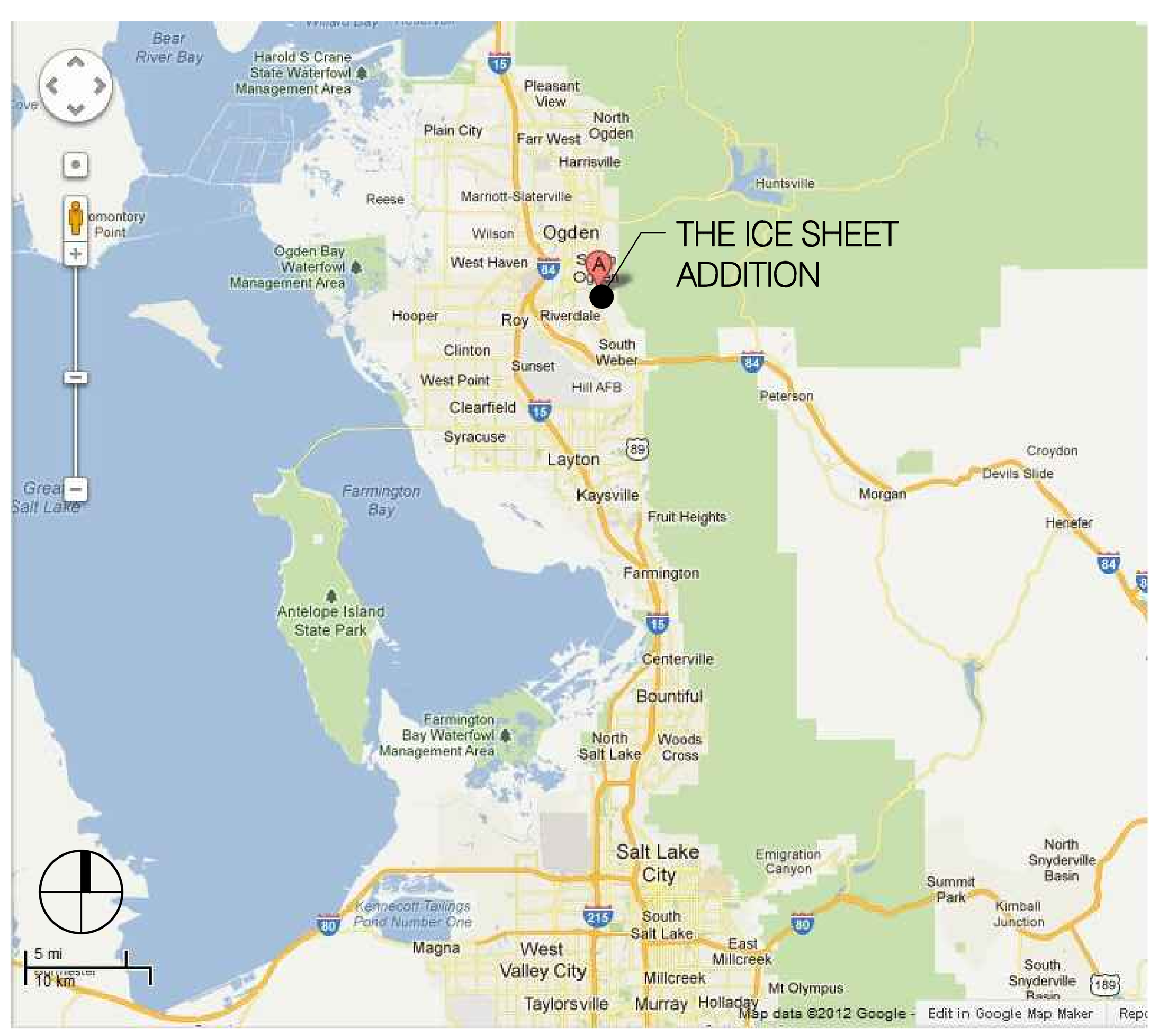
MATERIAL LEGEND

- GYPSUM BOARD OR CONCRETE SURFACE
- CONCRETE
- STUD WALL
- GRAVEL
- COMPACTED FILL AND/OR EARTH
- CMU (CONCRETE MASONRY UNIT)
- BATT INSULATION
- RIGID INSULATION

SITE MAP



VICINITY MAP



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TA105	2ND FLOOR PLAN AREA 'C' A/V LAYOUT
TA106	1ST FLOOR AREA 'B' RCP A/V LAYOUT
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DFCM STAMP OF APPROVAL

THE ICE SHEET ADDITION
4390 HARRISON BLVD, OGDEN, UT 84403
100 % REVIEW SET

PROJECT NUMBER:
11124

CODE ANALYSIS AND CALCULATIONS

FOR ADDITION TO THE EXISTING ICE SHEET FACILITY

1.0 ALLOWABLE BUILDING AREA (SECTION 506)

1.1 GENERAL CONCEPT:

AREA "A" - CONNECTOR BUILDING (NEW CONSTRUCTION NORTH OF GRID LINES B AND C) WILL MATCH THE EXISTING BUILDING TYPE OF CONSTRUCTION (TYPE II A) AND ITS AREA WILL BE COUNTED TOWARD UNUSED EXISTING BUILDING ALLOWABLE AREA.

AREA "B" - THE ICE SHEET / ACTIVITY AREA BUILDING (SOUTH OF GRID LINES B AND C) WILL HAVE ITS OWN TYPE OF CONSTRUCTION (TYPE II B) AND SEPARATE ALLOWABLE AREA WILL BE DEMONSTRATED FOR THIS PORTION OF THE NEW CONSTRUCTION.

THE SEPARATION FIRE WALL WILL BE ESTABLISHED BETWEEN CONNECTOR BUILDING ON ONE SIDE AND ICE SHEET / ACTIVITY AREA ON OTHER SIDE.

1.2 GENERAL BUILDING CODE DATA

OCCUPANCY GROUP (CHAPTER 3):	A-3 / GYMNASIUM W/O SPECTATORS (LEVEL TWO) ; A-4 / ICE RINK (LEVEL ONE)
NEW BUILDING FOOTPRINT:	28,558 SF / ICE SHEET AND ACTIVITY AREA + 7,828 SF CONNECTOR BUILDING

ACTUAL BUILDING AREA PER LEVELS AND ZONES ("A" AND "B" ZONES / SEE LIFE SAFETY PLANS):

AREA "A" - EXISTING BUILDING - LEVEL 1 = 41,271 SF
AREA "A" - EXISTING BUILDING - LEVEL 2 = 16,513 SF
AREA "A" - MEZZANINE LEVEL . . . . = 3,939 SF
AREA "A" - CONNECTOR BUILDING - LEVEL 1 = 7,828 SF
AREA "A" - CONNECTOR BUILDING - LEVEL 2 = 5,202 SF

AREA "B" - ICE SHEET - LEVEL 1 . . . .= 28,558 SF
AREA "B" -ACTIVITY AREA W/O SPECTATOR SEATING - LEVEL 2 = 28,558 SF
AREA "B" - MEZZANINE . . . .= 2,845 SF

CONSTRUCTION TYPE AS PER TABLE 503 (TABLE 601): II B - AREA "B" II A - AREA "A"

1.3 EXISTING BUILDING FACTS AND AREA CALCULATIONS:

YEAR EXISTING BUILDING WAS CONSTRUCTED: 1994 / APPLICABLE CODE: UBC 1991
EXISTING OCCUPANCY: A-2.1
EXISTING TYPE OF CONSTRUCTION: II / ONE HR
EXISTING NUMBER OF STORIES: 1
EXISTING HEIGHT IN FEET: 47'-4" (65 FT ALLOWED AS PER TABLE 503)
EXISTING BUILDING - ACTUAL AREA / 57,784 SF (L-1= 41,271 SF + L-2 = 16,513 SF)
EXISTING BUILDING ALLOWABLE AREA: 81,000 SF

3.0 OCCUPANCY CALCULATIONS:

AS PER TABLE 1004.1.1 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT / SEE SAFETY PLANS ON SHEET G-001 AND G-002

LEVEL / USE GROUP	FUNCTION OF SPACE	AREA	OCCUPANCY FACTOR	OCCUPANTS
MEZZANINE / A-3	OBSERVING DECK	2,845 G.S.F.	15 G.S.F. / OCCUPANT	190
			TOTAL OCCUPANTS MEZZ.	190

LEVEL - 2 / A-3	GYMNASIUM w/o SPECTATOR SEATING	23,667 G.S.F.	50 G.S.F / OCCUPANT	474
-	TEAM ROOMS	553 G.S.F.	50 G.S.F / OCCUPANT	11
-	TRAINING ROOM	311 G.S.F.	100 G.S.F. / OCCUPANT	4
-	STORAGE	486 G.S.F.	300 G.S.F. / OCCUPANT	2
-	WEIGHT ROOM	3,024 G.S.F.	50 G.S.F. / OCCUPANT	61
B	OFFICES	1,028 G.S.F.	100 G.S.F. / OCCUPANT	11
			TOTAL OCCUPANTS @ L- 2	563

LEVEL - 1 / A-4	ICE RINK	16,500 G.S.F.	50 G.S.F / OCCUPANT	330
-	TEAM ROOMS	1,590 G.S.F.	50 G.S.F / OCCUPANT	32
-	STORAGE	680 G.S.F.	300 G.S.F. / OCCUPANT	3
-	BLEACHERS	323 G.S.F.	ACTUAL SEATS	60
-	SEATING ALONG CIRCULATION	986 G.S.F.	ACTUAL SEATS	32
-	PARTY ROOM	753 G.S.F.	15 G.S.F. / OCCUPANT	51
-	RESURFACER ROOM	1,766 G.S.F.	300 G.S.F. / OCCUPANT	6
M	MERCHANTILE	440 G.S.F.	30 G.S.F. / OCCUPANT	15
B	KITCHEN	102 G.S.F.	100 G.S.F. / OCCUPANT	2
			TOTAL OCCUPANTS @ L- 1	531

4.0 MEANS OF EGRESS:

AS PER CHAPTER 10 - SEE SAFETY PLANS ON SHEET G-001 AND G-002

EGRESS WIDTH (SECTION 1005)	STAIRWAYS: OCCUPANT LOAD X 0.3" OTHER COMPONENTS: OCCUPANT LOAD X 0.2"
MINIMUM NUMBER OF EXITS FOR OCCUPANT LOAD	COMPLY WITH TABLE 1021.1: OCCUPANT LOAD: 501-1,000 = MINIMUM NUMBER OF 3 EXITS PER STORY. 3 EXITS PROVIDED.
EXIT ACCESS TRAVEL DISTANCE (TABLE 1016.1) WITH SPRINKLER SYSTEM	250' MAX IN GROUP A (SEE PLAN SHEET G-002)
DEAD END (1018.4)	NO DEAD ENDS IN CORRIDORS MORE THAN 20 FT. IN LENGTH
COMMON PATH OF EGRESS TRAVEL (1014.3)	COMMON PATH OF EGRESS (FOR NON SEATING AREAS) IS 75 FEET.
CORRIDOR FIRE RESISTANCE RATING (TABLE 1018.1)	0 HR. IN GROUP A & B WITH FIRE SPRINKLER SYSTEM.
CORRIDOR WIDTH (IBC 2009 SECTION 1018.2)	44" MIN. PROVIDED.
ACCESSIBLE MEANS OF EGRESS AS PER SECTION 1007	ACCESSIBLE MEANS OF EGRESS ARE NOT REQUIRED AT MEZZANINE (1004.4 EXCEPTION 1) AT LEAST TWO ACCESSIBLE MEANS OF EGRESS PROVIDED FROM EACH LEVEL.
ELEVATOR SHALL BE AN ACCESSIBLE MEANS OF EGRESS (1007.2.1)	NOT REQUIRED IN LESS THAN FOUR STORY BUILDING.

5.0 FIRE SEPARATIONS AND FIRE PROTECTION

AS PER SECTION 503, CHAPTER 7 AND 9

FIRE WALL AS PER SEC. 706	2HR FIRE WALL ESTABLISHED ALONG GRID LINES B AND C AS PER 706.4 (SEE GENERAL CONCEPT 1.1)
OPENING PROTECTIVES SEC. 715	DOOR AND SHUTTER ASSEMBLIES AS PER 715.4
MIXED USE OF OCCUPANCIES SEC. 508	SEPARATION NOT REQUIRED AS PER TABLE 508.4
SHAFT ENCLOSURES SECTION 708	WHERE TYPE II A CONSTRUCTION OCCUR ONE HR. SHAFT FIRE RATINGS WILL BE PROVIDED AS PER 708.4. WHERE TYPE II B CONSTRUCTION OCCUR NON RATED SHAFT CAN BE CONSTRUCTED AS PER 708.2 EXCEPTION 4 AND PROVISION 716.6.3.2.
FIRE & SMOKE DAMPERS SEC. 716	OPENING ALONG FIRE WALL (ALONG GRID LINES B AND C) SHALL BE PROTECTED WITH 1.5 HR RATED ASSEMBLIES AS PER TABLE 716.3.2.1
FIRE PROTECTION SEC. 903.3.1.1	AUTOMATIC FIRE SPRINKLER SYSTEM SHALL BE INSTALLED THROUGHOUT ENTIRE BUILDING IN ACCORDANCE WITH NFPA 13.
SUPERVISION AND ALARMS (903.4)	ALL SPRINKLER SYSTEM A SHALL BE ELETRICALLY SUPERVISED BY A LISTED FIRE ALARM CONTROL UNIT.
STANDPIPE SYSTEM SECTION 905.3.1	CLASS I STANDPIPE SYSTEM IS REQUIRED.
PORTABLE FIRE EXTINGUISHERS: (IFC 906.1)	NOT REQUIRED IN GROUP A OCCUPANCIES IF EQUIPPED WITH FIRE SPRINKLER SYSTEM.

6.0 INTERIOR FINISHES

ALL INTERIOR FINISHES WILL BE DESIGNED AND COMPLY WITH TABLE 803.9

7.0 ACCESSIBILITY

AS PER CHAPTER 11 IBC 2009 AND 2010 ADA ACCESSIBILITY GUIDELINES

THE ACCESSIBLE ACCESS ROUTE FOR THE MAIN LEVEL TWO ACTIVITY AREA WILL BE BY THE EXISTING ELEVATOR LOCATED IN THE EXISTING POTION OF THE BUILDING AND ACROSS THE RAMP NEXT TO THE WEIGHT ROOM.

8.0 PLUMBING REQUIREMENTS:

AS PER CHAPTER 29

L 2 - TYPE OF OCCUPANCY	USE GROUP			TOTAL OCCUPANTS @ LEVEL 2 = 563			
ASSEMBLY PLACES FOR PUBLIC USE	A-3 RECREATION / GYMNASIUM			PER 2902.1.1 (50% MALE + 50% FEMALE) = 282 M + 282 F			
REQUIREMENT FROM TABLE 2902.1	WATER CLOSETS		URINAL	LAVATORIES		DRINKING FOUNTAINS	SERVICE SINK
	282 MALE @ (1/125)	282 @ FEMALE (1/65)	AS PER 419.2	282 MALE @ (1/200)	282 FEMALE @ (1/200)	563 @ (1/500)	
TOTAL REQUIRED :	3	5	-	2	2	2	1
TOTAL PROVIDED :	2	5	3	4	4	2	1

L 1- TYPE OF OCCUPANCY	USE GROUP			TOTAL OCCUPANTS @ LEVEL 1 = 531			
ASSEMBLY PLACES FOR PUBLIC USE	A-4 SKATING RINK			PER 2902.1.1 (50% MALE + 50% FEMALE) = 266 M + 266 F			
REQUIREMENT FROM TABLE 2902.1	WATER CLOSETS		URINAL	LAVATORIES		DRINKING FOUNTAINS	SERVICE SINK
	266 MALE @ (1/75)	266 @ FEMALE (1/40)	AS PER 419.2	266 MALE @ (1/200)	266 FEMALE @ (1/150)	531 @ (1/1000)	
TOTAL REQUIRED :	4	6	-	2	2	1	1
TOTAL PROVIDED :	2	4	2	2	2	2	1

IN ADDITION TO THE PLUMBING FIXTURES COUNT SHOWN IN TABLE ABOVE ALL TEAM ROOMS AT LEVEL ONE HAVE TWO WATER CLOSETS AND TWO LAVATORIES (TOTAL OF 8 WATER CLOSETS + 8 LAVATORIES). EACH OF THE TEAM ROOMS ALSO HAS TWO SHOWERS. OFFICIAL'S ROOM HAVE DEDICATED WATER CLOSET, URINAL, LAVATORY AND SHOWER.

AREA 'A'

CODE ANALYSIS

APPLICABLE CODES

	Year		Year
International Building Code	2009	National Electrical Code	2011
International Mechanical Code	2009	Uniform Code for Building Conservation	N/A
International Fuel Gas Code	2009	ADA Accessibility Guildelines	2010
International Plumbing Code	2009		
International Fire Code	2009		
International Energy Conservation Code	2009		

A. Occupancy and Group: A - 4

Change in Use: Yes ______ No X Mixed Occupancy: Yes ______ No X
Special Use and Occupancy (e.g. High Rise, Covered Mall): n/a

B. Seismic Design Category: D Design Wind Speed: 90 mph

C. Type of Construction (circle one): I/A I/B (II/A circled) II/B III/A III/B IV/HT V/A V/B

D. Fire Resistance Rating Requirements for the Exterior Walls based on the fire separation distance (in hours):
North: 0 South: 1 East: 0 West: 0

E. Mixed Occupancies: NO Nonseparated Uses: ______

F: Sprinklers:
Required: YES Provided: YES
Type of Sprinkler System (IBC 903.3.1) CLASS I STANDPIPE

G: Number of Stories: 2 Building Height: 47'-4"

H: Actual Area per Floor (square feet): 49,099

I: Tabular Area: (table 503): 15,500

J: Area Modifications:

a) $A_a = \left\{ A_t + \left[A_t \times I_f \right] + \left[A_t \times I_s \right] \right\}$ $I_f = \left[F/P - 0.25 \right] W/30$

F= 316 lf
P= 935 lf
W= 30

$I_f = \left[316/935 - 0.25 \right] 30/30 = 0.09$

$I_f = 0.09$
$I_s = 2$
$A_t = 15{,}500$

$A_a = \left\{ 15{,}500 + \left[15{,}500 \times 0.09 \right] + \left[15{,}500 \times 2 \right] \right\} = 63{,}315$

b) Sum of the Ratio Calculations for Mixed Occupancies:

$\frac{\text{Actual Area}}{\text{Allowable Area}} \leq 1$

c) Total Allowable Area for:
1) One Story: 63,315
2) Two Story: $A_a(2)$ 126,630
3) Three Story: $A_a(3)$ N/A

d) Unlimited Area Building: Yes ______ No X Code Section: ______

K. Fire Resistance Rating Requirements for Building Elements (hours).

Element	Hours	Assembly Listing	Element	Hours	Assembly Listing
Exterior Bearing Walls	1	U906	Floors - Ceiling Floors	1	D759
Interior Bearing Walls	1	U906	Roofs - Ceiling Roofs	1	P717
Exterior Non-Bearing Walls	0 / 1	U906	Exterior Doors and Windows	0	-
Structural Frame	1	X701	Shaft Enclosures	1	U415
Partitions - Permanent	0	-	Fire Walls	2	U906
Fire Barriers	n/a	-	Fire Partitions	n/a	-
			Smoke Partitions	n/a	-

L. Design Occupant Load: 2,756
Exit Width Required: 623,8" Exit Width Provided: 805"

M. Minimum Number of Required Plumbing Facilities:
a) Water Closets - Required (m) 16 (f) 29 Provided (m) 13 (f) 23
b) Urinals - Required (m) - (f) - Provided (m) 10 (f) -
c) Lavatories - Required (m) 7 (f) 10 Provided (m) 10 (f) 10
d) Bath Tubs or Showers: N/A
e) Drinking Fountains: 2/5 Service Sinks: 1/2

FOOTNOTES:

1) In case of conflict with the U.S. Department of Justice Federal Registers Parts I through V - ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern.

2) Additional Code Information shall be provided at the discretion of the Building Official for Complex Buildings. Including, but not limited to:
a) High Rise Requirements.
b) Atriums.
c) Performance Based Criteria.
d) Means or Egress Analysis.
e) Fire Assembly Locator Sheet.
f) Exterior and Interior Accessibility Route.
g) Fire Stopping, Including Tested Design Number.

AREA 'B'

CODE ANALYSIS

APPLICABLE CODES

	Year		Year
International Building Code	2009	National Electrical Code	2011
International Mechanical Code	2009	Uniform Code for Building Conservation	N/A
International Fuel Gas Code	2009	ADA Accessibility Guildelines	2010
International Plumbing Code	2009		
International Fire Code	2009		
International Energy Conservation Code	2009		

A. Occupancy and Group: A - 3 A - 4

Change in Use: Yes ______ No X Mixed Occupancy: Yes X No ______
Special Use and Occupancy (e.g. High Rise, Covered Mall): n/a

B. Seismic Design Category: ______ Design Wind Speed: ______ mph

C. Type of Construction (circle one): I/A I/B II/A (II/B circled) III/A III/B IV/HT V/A V/B

D. Fire Resistance Rating Requirements for the Exterior Walls based on the fire separation distance (in hours):
North: 1 South: 0 East: 0 West: 0

E. Mixed Occupancies: YES Nonseparated Uses: YES

F: Sprinklers:
Required: YES Provided: YES
Type of Sprinkler System (IBC 903.3.1) CLASS I STANDPIPE

G: Number of Stories: 2 Building Height: 58'-0"

H: Actual Area per Floor (square feet): 28,558

I: Tabular Area: (table 503): 9,500

J: Area Modifications:

a) $A_a = \left\{ A_t + \left[A_t \times I_f \right] + \left[A_t \times I_s \right] \right\}$ $I_f = \left[F/P - 0.25 \right] W/30$

F= 344 lf
P= 935 lf
W= 30

$I_f = \left[344/935 - 0.25 \right] 30/30 = 0.23$

$I_f = 0.23$
$I_s = 2$
$A_t = 9{,}500$

$A_a = \left\{ 9{,}500 + \left[9{,}500 \times 0.23 \right] + \left[9{,}500 \times 2 \right] \right\} = 50{,}065$

b) Sum of the Ratio Calculations for Mixed Occupancies:

$\frac{\text{Actual Area}}{\text{Allowable Area}} \leq 1$

c) Total Allowable Area for:
1) One Story: 50,065
2) Two Story: $A_a(2)$ 100,130
3) Three Story: $A_a(3)$ N/A

d) Unlimited Area Building: Yes ______ No X Code Section: ______

K. Fire Resistance Rating Requirements for Building Elements (hours).

Element	Hours	Assembly Listing	Element	Hours	Assembly Listing
Exterior Bearing Walls	0	-	Floors - Ceiling Floors	0	-
Interior Bearing Walls	0	-	Roofs - Ceiling Roofs	0	-
Exterior Non-Bearing Walls	0	-	Exterior Doors and Windows	0	-
Structural Frame	0	-	Shaft Enclosures	n/a	-
Partitions - Permanent	0	-	Fire Walls	2	U906
Fire Barriers	n/a	-	Fire Partitions	n/a	-
			Smoke Partitions	n/a	-

L. Design Occupant Load: 1,004
Exit Width Required: 255,8" Exit Width Provided: 330"

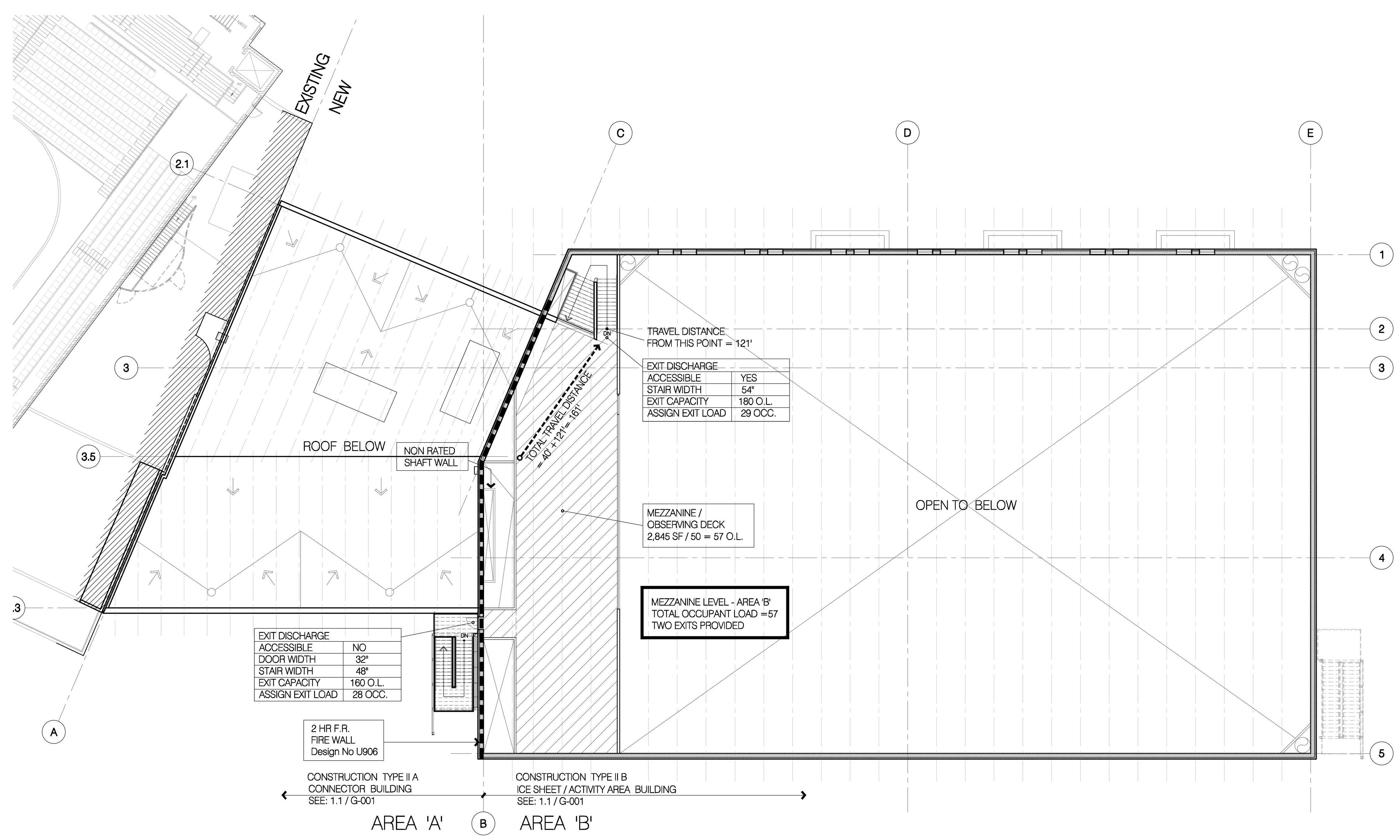
M. Minimum Number of Required Plumbing Facilities:
a) Water Closets - Required (m) 7 (f) 11 Provided (m) 6 (f) 11
b) Urinals - Required (m) - (f) - Provided (m) 3 (f) -
c) Lavatories - Required (m) 4 (f) 4 Provided (m) 7 (f) 9
d) Bath Tubs or Showers: N/A
e) Drinking Fountains: 3/10 Service Sinks: 2/2

FOOTNOTES:

1) In case of conflict with the U.S. Department of Justice Federal Registers Parts I through V - ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern.

2) Additional Code Information shall be provided at the discretion of the Building Official for Complex Buildings. Including, but not limited to:
a) High Rise Requirements.
b) Atriums.
c) Performance Based Criteria.
d) Means or Egress Analysis.
e) Fire Assembly Locator Sheet.
f) Exterior and Interior Accessibility Route.
g) Fire Stopping, Including Tested Design Number.

MEZZANINE LEVEL - EXISTING BUILDING
TOTAL OCCUPANT LOAD = 728
TOTAL OF 3 STAIR EXITS PROVIDED
REQUIRE EXIT WIDTH = 218.4"
EXIT WIDTH PROVIDED 228" (3 X 76")



A4 MEZZANINE LEVEL SAFETY PLAN
SCALE: NTS

DFCM STAMP OF APPROVAL

FFKR ARCHITECTS
bogue building
730 pacific avenue
salt lake city
Utah 84104
o 801-521-6186
f 801-539-1916
ffkr com

THE ICE SHEET ADDITION
4390 HARRISON BLVD. OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

SEAL
STATE OF UTAH
RUSS LEE BACHMEIER
4836830-0301
9.4.2012
LICENSED ARCHITECT

DATE	STATUS
9/4/2012	CD
10/04/2012	ADDENDUM 4

PROJECT NUMBER 11124
CAD DWG FILE
DRAWN BY XXX
CHECKED BY
SCALE NTS

CODE ANALYSIS & MEZZ. LEVEL SAFETY PLAN

G-001

UL Design No P-717

(1 HOUR RATED ROOF STRUCTURE)

ONLINE CERTIFICATIONS DIRECTORY

Design No. P717
BXUV.P717
Fire Resistance Ratings - ANSI/UL 263

Page Bottom

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Listed or Classified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered as Classified, Listed, or Recognized.

Fire Resistance Ratings - ANSI/UL 263

See General Information for Fire Resistance Ratings - ANSI/UL 263

Design No. P717

June 18, 2012

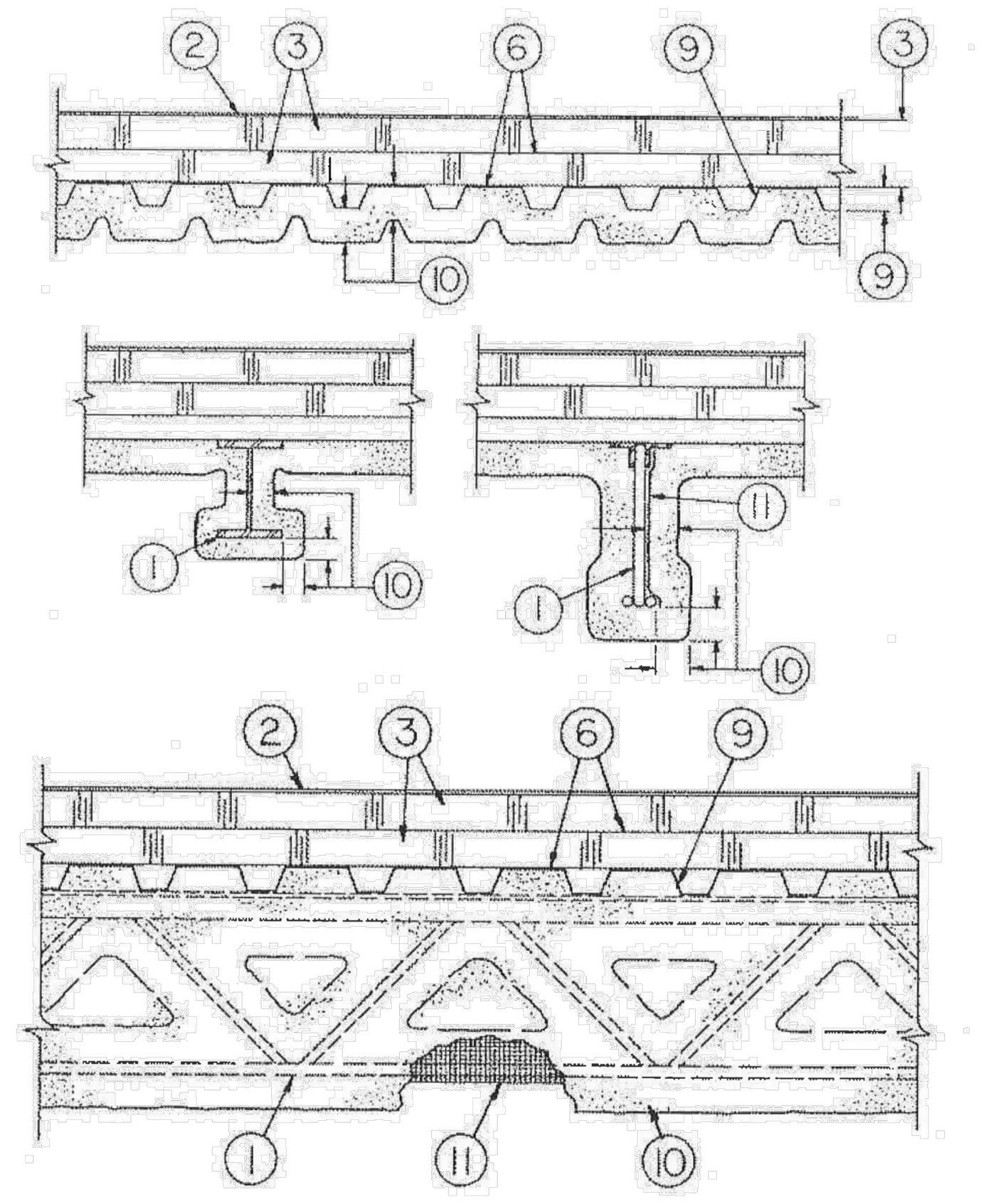
Restrained Assembly Rating — 1, 1-1/2 or 2 H (See Items 3, 4 and 10)

Unrestrained Assembly Rating — 1, 1-1/2 or 2 H (See Items 3, 4 and 10)

Unrestrained Beam Rating — 1, 1-1/2 or 2 H (See Item 10)

Restricted Load Condition — See Item 1

Load Restricted for Canadian Applications — See Guide BXUV7



+2 Hr. assembly and beam ratings apply only to assembly with gypsum wallboard.

ARABIAN VERMICULITE INDUSTRIES — Type MK-5.

© 2012 UL LLC

UL Desing No. X701

(SPRAY APPLIED FIRE RESISTIVE MATERIALS)

4

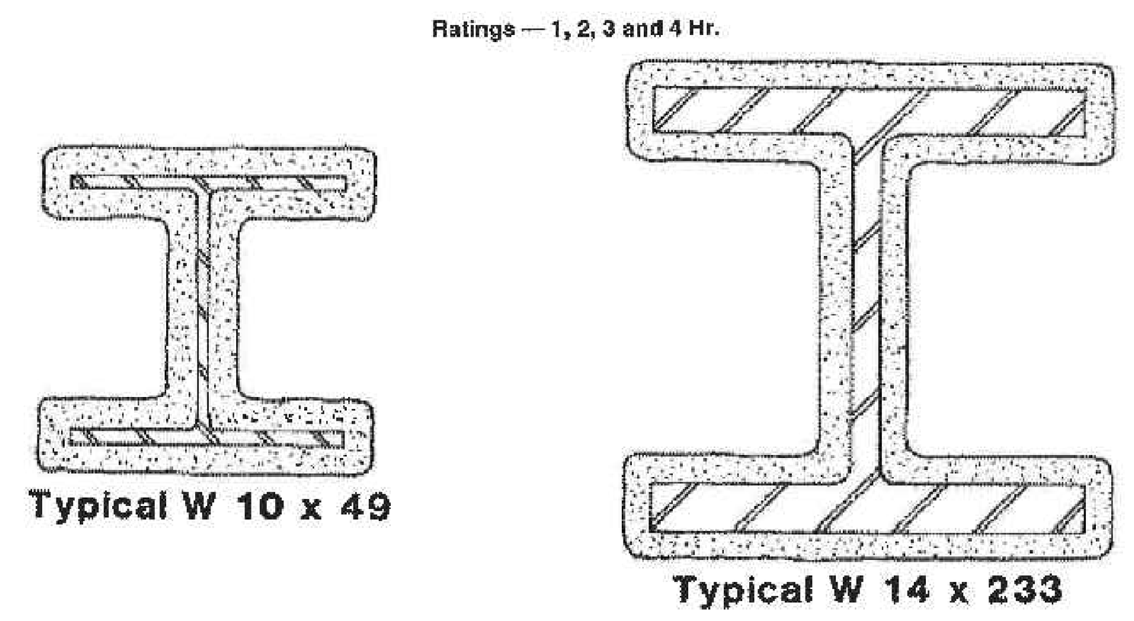
Fire Resistance Ratings - ANSI/UL 263

See General Information for Fire Resistance Ratings - ANSI/UL 263

Design No. X701

April 17, 2012

Ratings — 1, 2, 3 and 4 Hr.



1. **Spray-Applied Fire Resistive Materials*** — See table below for appropriate thickness. Min avg and min ind density of 15/14 pcf respectively. Min avg and min ind density of 19/18 pcf respectively for Types 7GP and 7HD. Min avg and min ind density of 40/36 pcf for Type AV650. Min avg and min ind density of 50/45 pcf for Type AV800. For method of density determination, refer to Design Information Section, preceding these designs.

Rating Hr	Min Thkns In.
4	2-1/2
3	1-11/16
2	1-1/8
1-1/2	7/8
1	11/16

The thicknesses contained in the table below are applicable when the Spray-Applied Fire Resistive Materials applied to columns flange tips are reduced to one-half that shown in the table below:

Rating Hr	Min Thkns In.
4	2-7/8
3	2-1/16
2	1-3/8
1-1/2	1-1/16
1	13/16

ARABIAN VERMICULITE INDUSTRIES — Type MK-5. Type AV650 and AV800 evaluated for Exterior Exposure.

GRACE KOREA INC — Types MK-6/CBF, MK-6/ED, MK-6/HY, MK-6s, Monokote Acoustic 1 .

PYROK INC — Type LD.

SOUTHWEST FIREPROOFING PRODUCTS CO — Types 4, 5, 5EF, 5GP, 5MD, 7GP, 7HD, 8EF, 8GP, 8MD, 9EF, 9GP, 9MD.

W R GRACE & CO - CONN — Types MK-4, MK-5, MK-6/HY, MK-6s, Monokote Acoustic 1 , RG.

2. **Steel Column** — Minimum size of column, W10x49, with outside dimensions of 10x10 in., a flange thickness of 9/16 in., a web thickness of 5/16 in., and a cross-sectional area of 14.4 sq in.

*Bearing the UL Classification Mark

Last Updated on 2012-04-17

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FFKR
ARCHITECTS

bogue building
730 pacific avenue
salt lake city
Utah 84104

p 801-521-6186
f 801-539-1916
ffkr.com

THE ICE SHEET ADDITION
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CONSTRUCTION DOCUMENTS

SEAL

STATE OF UTAH
RUSS LEE BACHMEIER
4836830-0301
LICENSED ARCHITECT

DATE	STATUS
9/4/2012	CD
10/04/2012	ADDENDUM 4

PROJECT NUMBER	11124
CAD DWG FILE	
DRAWN BY	XXX
CHECKED BY	
SCALE	NTS

DESIGN & CODE CRITERIA

G-007

JOINT SYSTEMS:

UL Design # HW - D - 0060

ONLINE CERTIFICATIONS DIRECTORY

XHBN.HW-D-0060
Joint Systems
Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Listed or Classified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered as Classified, Listed, or Recognized.

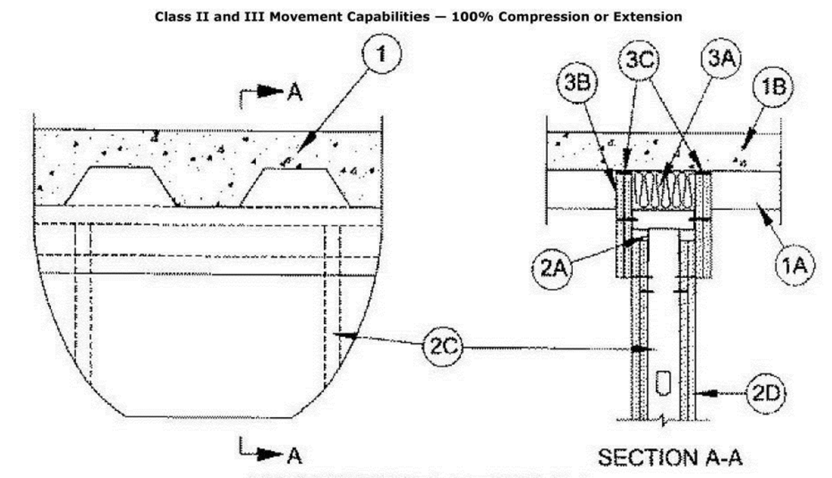
Joint Systems
System No. HW-D-0060

March 30, 2010

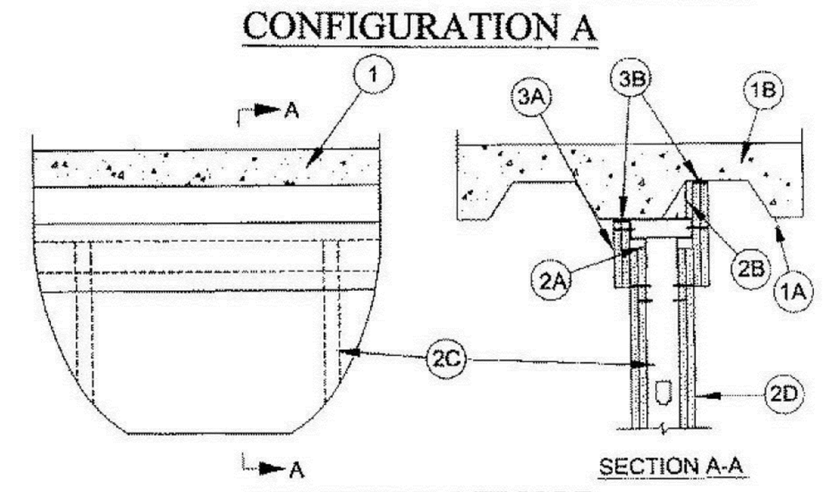
Assembly Ratings — 1, 2 and 3 Hr (See Item 2)

Nominal Joint Width — 1 In.

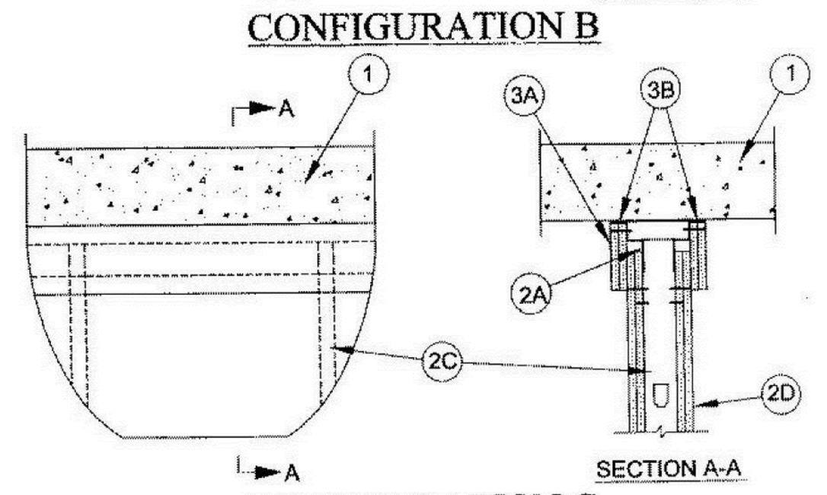
Class II and III Movement Capabilities — 100% Compression or Extension



CONFIGURATION A



CONFIGURATION B



CONFIGURATION C

1. **Floor Assembly —** The fire-rated fluted steel deck/concrete floor assembly shall be constructed of the materials and in the manner described in the individual Floor-Ceiling Design in the UL Fire Resistance Directory. The hourly fire rating of the floor assembly shall be equal to or greater than the hourly fire rating of the wall assembly. The floor assembly shall include the following construction features:

A. **Steel Floor and Form Units* —** Max 3 in. deep galv fluted floor units.

B. **Concrete —** Min 2-1/2 in. thick reinforced (100-150 pcf) concrete, as measured from the top plane of the floor units.

1A. **Roof Assembly —** As an alternate to Item 1, the fire-rated roof assembly shall be constructed of the materials and in the manner described in the individual P700, P800 or P900 series Roof-Ceiling Designs in the UL Fire Resistance Directory and shall contain max 3 in. deep galv steel fluted roof units. The hourly fire rating of the roof assembly shall be equal to or greater than the hourly fire rating of the wall assembly. In the case of spray-applied protection materials on the steel roof units, the joint system shall be installed prior to the spray-applied protection material.

1B. **Floor Assembly —** As an alternate to Item 1, min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) structural concrete.

2. **Wall Assembly —** The 1, 2 or 3 hr fire-rated gypsum board /steel stud wall assembly shall be constructed of the materials and in the manner described in the individual U400 and V400-Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. **Light Gauge Framing* - Deflection Trak —** Deflection trak of wall assembly shall consist of min No. 25 gauge galv steel channels sized to accommodate steel studs (Item 2C) and with offset legs to accommodate wall cladding (Item 3A). Deflection trak installed parallel or perpendicular to the floor units. When installed perpendicular (Configuration A), min No. 25 gauge deflection trak secured on both sides to valley of floor units with 1-1/2 in. long welds spaced max 12 in. OC. Min No. 20 gauge deflection trak may be secured with steel fasteners spaced 12 in. OC. When installed parallel (Configuration B), min No. 25 gauge deflection trak secured on one side to valley of floor units with 1-1/2 in. long welds spaced 12 in. OC. Min No. 20 gauge deflection trak may be secured with steel fasteners spaced max 12 in. OC. The other side of the deflection trak is secured to Z-Furring clips (Item 2B) with two No. 8 by 1/2 in. long tec screws. On concrete floor (Configuration C), min No. 20 gauge deflection trak attached to concrete at ceiling with steel fasteners spaced max 12 in. OC.

FIRE TRAK CORP — Shadowline

B. **Z-Furring - (Parallel Units) —** When trak is installed parallel to floor units, Z-Furring clips are attached to the bottom of the floor units within the crests with two steel fasteners . Clip spacing not to exceed 24 in. OC.

C. **Studs —** Steel studs to be min 2-1/2 in. wide and as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Studs cut 1-1/2 in. less in length than the assembly height with bottom nesting in and resting on floor runner and with top nesting in ceiling runner without attachment. Stud spacing not to exceed 24 in. OC.

D. **Gypsum Board* —** Gypsum board sheets installed and attached to studs and runners as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory, except that a nominal 1 in. gap shall be maintained between top of the gypsum board and the bottom flange of the deflection trak. Top row of screws shall be installed into the studs 3 in. below the top edge of the gypsum board sheets.

The hourly assembly rating of the joint system is equal to the fire rating of the wall.

Firestop Configuration A

3. **Joint System — Max separation between bottom flange of the deflection trak and top of wallboard (at the time of installation of the joint system) is 1 in. The joint system is designed to accommodate a max 100 percent compression or extension from its installed width.** The joint system consists of packing material (Item 3A), wall cladding (Item 3B) and a fill material (Item 3C) as follows:

A. **Packing Material —** Min 4 pcf density mineral wool batt insulation cut to the shape of the fluted deck, 25 percent larger than the area of the flutes and compressed into the flutes of the steel floor units above the ceiling runner as a permanent form.

B. **Wall Cladding —** Strips of the gypsum board material cut to the contour of the steel floor units and attached to the deflection trak. The number of layers, board type and thickness and fastener type shall be as specified for the gypsum board in the individual Wall and Partition Design in the UL Fire Resistance Directory. Fasteners shall be max spaced 3 in. OC. The top of the wall cladding shall be recessed min 1/8 in. to max 1/2 in. from the steel floor units and overlap the gypsum board 4 in.

C. **Fill, Void or Cavity Material* —** Full depth of fill material installed on each side of the wall between the top of the wall cladding and the surface of the steel floor units, flush with each surface of the cladding.

A/D FIRE PROTECTION SYSTEMS INC — A/D FireBarrier Seal N/S, A/D FireBarrier Silicone

DAP PRODUCTS INC — DAP Firestop Sealant

EGS NELSON FIRESTOP — ES 1399 Sealant

FPT FLAMMADUR, DIV OF FIRE PROTECTION

TECHNOLOGIES INC — Acrylic Firestop Sealant Flammadur A108

HILTI CONSTRUCTION CHEMICALS, DIV OF

HILTI INC — FS611A or FS-ONE Sealant

JOHNS MANVILLE INTERNATIONAL INC — Firetemp CI

3M COMPANY — FB 1000NS, FB 2000, FB 2000+, FD-150+, CP 25 WB+

NATIONAL GYPSUM CO — FS-90

NUCO INC — Self Seal GG-200

PASSIVE FIRE PROTECTION PARTNERS — 4100NS, 4800DW

RECTORSEAL — Metacaulk 835+, Metacaulk 1000, Biostop 500+Caulk, Biotherm 100

SPECIFIED TECHNOLOGIES INC — SpecSeal ES Sealant

Firestop Configuration B

3. **Joint System — Max separation between bottom flange of the deflection trak and top of wallboard (at the time of installation of the joint system) is 1 in. The joint system is designed to accommodate a max 100 percent compression or extension from its installed width.** The joint system consists of packing material (Item 3A), wall cladding (Item 3B) and a fill material (Item 3C) as follows:

A. **Wall Cladding —** Strips of the gypsum board material attached to the deflection trak. The number of layers, board type and thickness and fastener type shall be as specified for the gypsum board in the individual Wall and Partition Design in the UL Fire Resistance Directory. Fasteners shall be max spaced 3 in. OC. The top of the wall cladding shall be recessed min 1/8 in. to max 1/2 in. from the steel floor units and overlap the gypsum board 4 in.

B. **Fill, Void or Cavity Material* —** Full depth of fill material installed on each side of the wall between the top of the wall cladding and the surface of the steel floor units, flush with each surface of the cladding.

A/D FIRE PROTECTION SYSTEMS INC — A/D FireBarrier Seal N/S, A/D FireBarrier Silicone

DAP PRODUCTS INC — DAP Firestop Sealant

EGS NELSON FIRESTOP — ES 1399 Sealant

FPT FLAMMADUR, DIV OF FIRE PROTECTION

TECHNOLOGIES INC — Acrylic Firestop Sealant Flammadur A108

HILTI CONSTRUCTION CHEMICALS, DIV OF

HILTI INC — FS611A or FS-ONE Sealant

JOHNS MANVILLE INTERNATIONAL INC — Firetemp CI

3M COMPANY — FB 1000NS, FB 2000, FB 2000+, FD-150+, CP 25 WB+

NATIONAL GYPSUM CO — FS-90

NUCO INC — Self Seal GG-200

PASSIVE FIRE PROTECTION PARTNERS — 4100NS, 4800DW

RECTORSEAL — Metacaulk 835+, Metacaulk 1000, Biostop 500+Caulk, Biotherm 100, FS3000, FS3001, FS3005

SPECIFIED TECHNOLOGIES INC — SpecSeal ES Sealant

TREMCO INC — TREMstop Acrylic

UNITED STATES GYPSUM CO — FC, RFC

Firestop Configuration C

3. **Joint System — Max separation between bottom flange of the deflection trak and top of wallboard (at the time of installation of the joint system) is 1 in. The joint system is designed to accommodate a max 100 percent compression or extension from its installed width.** The joint system consists of packing material (Item 3A), wall cladding (Item 3B) and a fill material (Item 3C) as follows:

A. **Wall Cladding —** Strips of the gypsum board material attached to the deflection trak. The number of layers, board type and thickness and fastener type shall be as specified for the gypsum board in the individual Wall and Partition Design in the UL Fire Resistance Directory. Fasteners shall be max spaced 3 in. OC. The top of the wall cladding shall be recessed min 1/8 in. to max 1/2 in. from the bottom of the concrete floor and overlap the gypsum board 4 in.

B. **Fill, Void or Cavity Material* —** Full depth of fill material installed on each side of the wall between the top of the wall cladding and the bottom of the concrete floor , flush with each surface of the cladding.

A/D FIRE PROTECTION SYSTEMS INC — A/D FireBarrier Seal N/S, A/D FireBarrier Silicone

DAP PRODUCTS INC — DAP Firestop Sealant

EGS NELSON FIRESTOP — ES 1399 Sealant

FPT FLAMMADUR, DIV OF FIRE PROTECTION

TECHNOLOGIES INC — Acrylic Firestop Sealant Flammadur A108

HILTI CONSTRUCTION CHEMICALS, DIV OF

HILTI INC — FS611A or FS-ONE

JOHNS MANVILLE INTERNATIONAL INC — Firetemp CI

3M COMPANY — FB 1000NS, FB 2000, FB 2000+, FD-150+, CP 25 WB+

NATIONAL GYPSUM CO — FS-90

NUCO INC — Self Seal GG-200

PASSIVE FIRE PROTECTION PARTNERS — 4100NS, 4800DW

RECTORSEAL — Metacaulk 835+, Metacaulk 1000, Biostop 500+Caulk, Biotherm 100, FS3000, FS3001, FS3005

SPECIFIED TECHNOLOGIES INC — SpecSeal ES Sealant

TREMCO INC — TREMstop Acrylic

UNITED STATES GYPSUM CO — FC, RFC

*Bearing the UL Classification Mark

Last Updated on 2010-03-30

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10/04/2012	ADDENDUM 4

PROJECT NUMBER 11124

CAD DWG FILE

DRAWN BY XXX

CHECKED BY

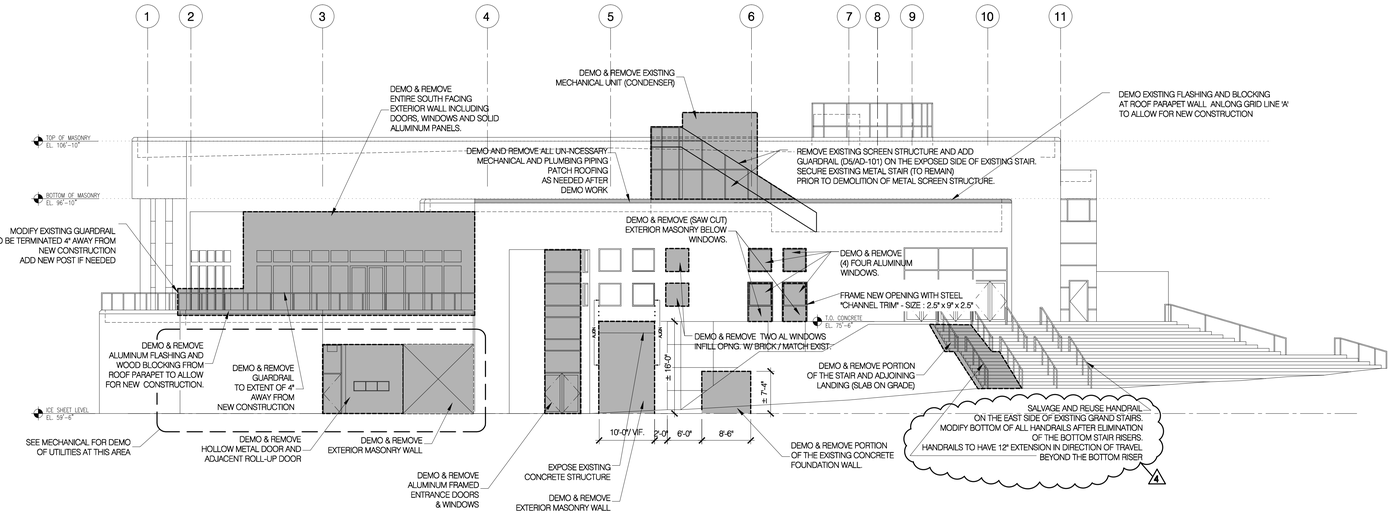
SCALE NTS

DPCM STAMP OF APPROVAL

4

DESIGN & CODE CRITERIA

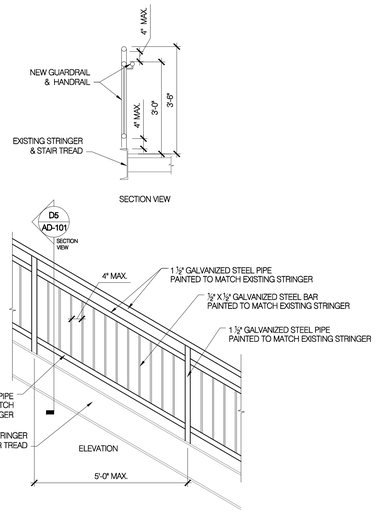
G-008



D3 SOUTHWEST EXTERIOR ELEVATION DEMO

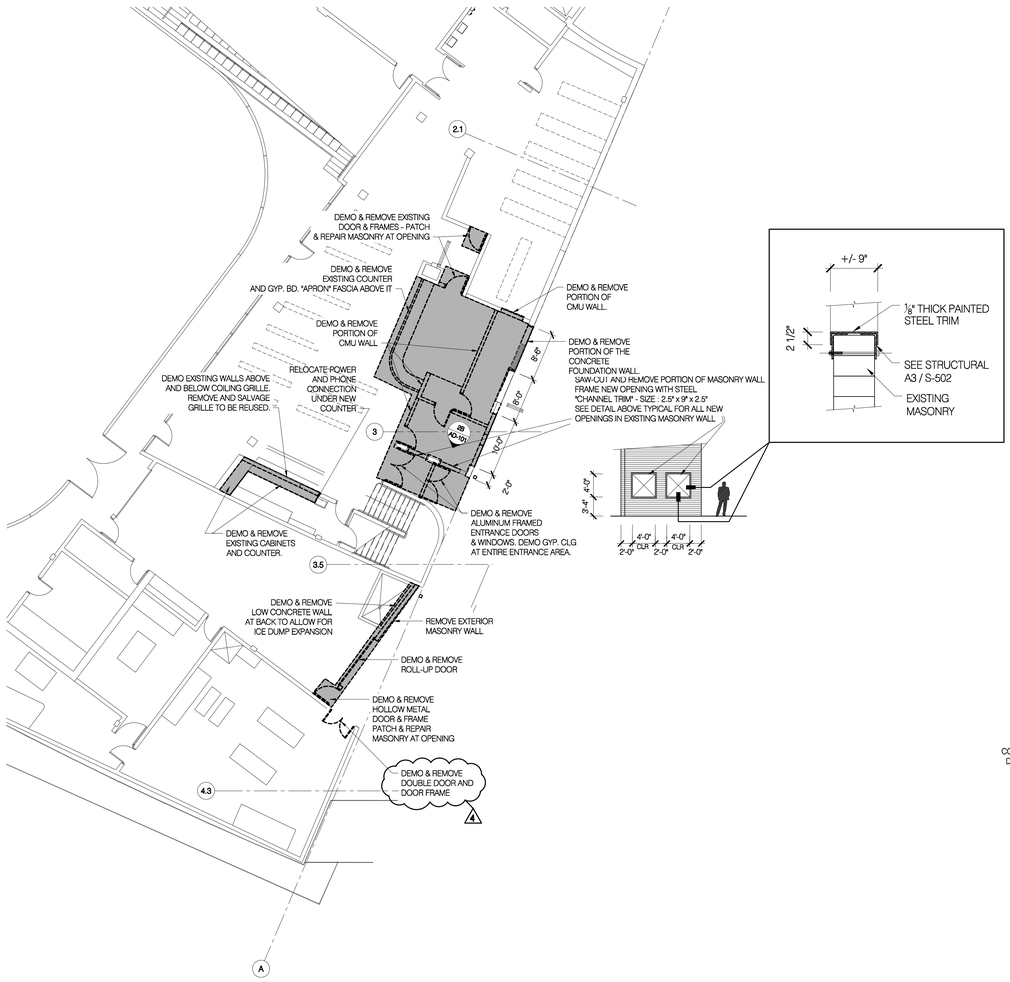
SCALE: 3/32"=1'-0"

0 8' 16'



D5 RAILING DETAILS

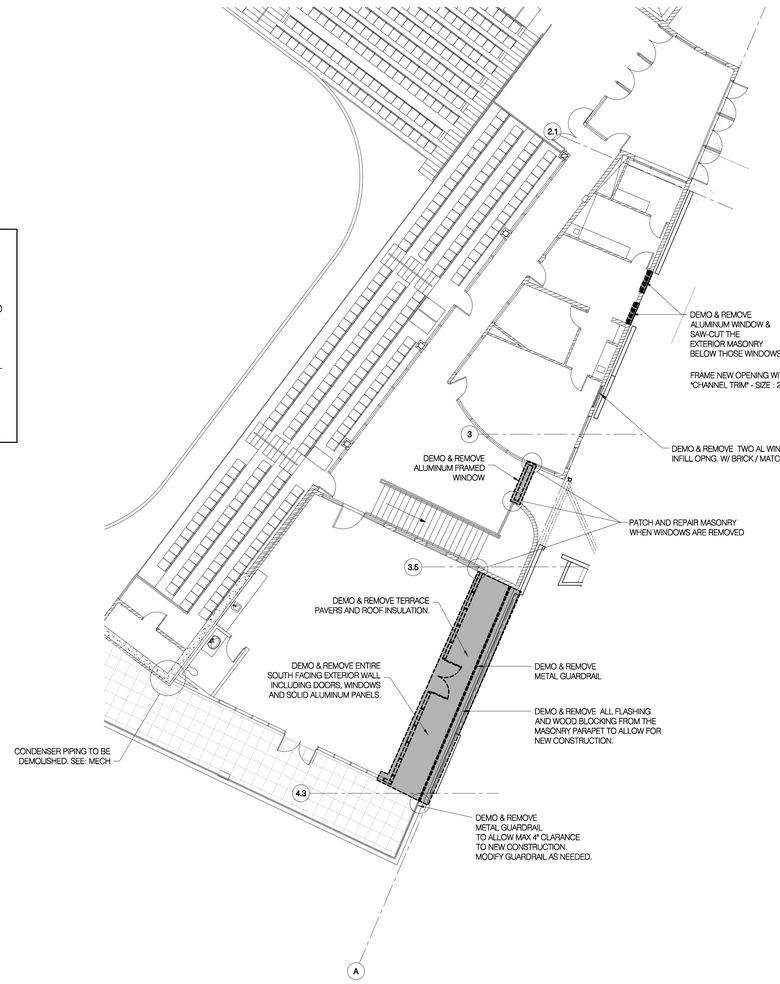
SCALE: 1/2"=1'-0"



A1 LEVEL ONE DEMO PLAN

SCALE: 3/32"=1'-0"

0 8' 16'



A4 LEVEL TWO DEMO PLAN

SCALE: 3/32"=1'-0"

0 8' 16'

GENERAL NOTES:

A. BEFORE ANY DEMOLITION SECURE STRUCTURAL STABILITY OF ANY ELEMENTS OF EXISTING BUILDING RE: STRUCTURAL PLANS.
B. WHERE SAW CUT WAS DONE USE PAINTED STEEL CHANNELS TO FRAME NEW BRICK OPENINGS.
C. ANY DIMENSIONS ON DEMO PLANS REPRESENT CLEAR FINISH OPENING EXCLUDING NEEDED DEMO FOR POTENTIAL ADDITIONAL STRUCTURAL ELEMENT SUCH AS STEEL FRAMES, BEAMS,COLUMNS ETC.
D. SEE STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND REFRIGERATION DRAWINGS FOR THE ADDITIONAL DEMO NOTES.

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salt lake city
Utah 84104
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f 801-539-1916
ffkr com

THE ICE SHEET ADDITION
4390 HARRISON BLVD. OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

GENERAL NOTES

DFCM STAMP OF APPROVAL

SEAL
STATE OF UTAH
RUSS LEE BACHMEIER
6836830-0301
9-4-2012
LICENSED ARCHITECT

DATE	STATUS
9/4/2012	CD
10/04/2012	ADDENDUM 4

PROJECT NUMBER	11124
CAD DWG FILE	
DRAWN BY	XXX
CHECKED BY	
SCALE	AS INDICATED

BUILDING DEMO PLANS

AD-101

REFERENCE NOTES

1. EXISTING ELECTRICAL EQUIPMENT
2. EXISTING CURB AND GUTTER
3. NEW CONCRETE CURB AND GUTTER. AS/CU-503
4. NEW CONCRETE SIDEWALK. SIM TO C3/CU-503 ALLOW FOR 2% CROSS SLOPE AND CONSTRUCTION JOINTS AT +/- 6'-0" O.C.
5. RELOCATED FLAGPOLES.
6. LANDSCAPING AREA SEE LANDSCAPING DWG.
7. EDGE OF THE NEW ASPHALT PAVEMENT
8. NEW ENTRY PLAZA / CONCRETE ON GRADE
9. NEW CONCRETE PAD ON GRADE / SIM TO C3/CU503 W/ CONSTRUCTION JOINTS TO ALLOW FOR MAX. 144 SF IN SIZE AND APPROXIMATELY SQUARE SHAPES OF PADS). PROVIDE MAX 2% SLOPE AWAY FROM BUILDING.
10. CONCRETE PAD FOR MECHANICAL EQUIPMENT SEE: S-101 AND R-401
11. CONCRETE RETAINING WALL SEE STRUCTURAL
12. EXISTING PAINT STRIPING TO BE ERASED
13. NEW ASPHALT PAINT STRIPING
14. TRUNCATED DOME STRIP
15. CONTRACT LIMIT LINE
16. EXISTING LIGHT POLE TO REMAIN OR RELOCATE, COORDINATE WITH ELECTRICAL.
17. CATCH BASIN, SEE CIVIL.
18. GRAVEL AROUND MECHANICAL PAD
19. ALLOW FOR EXISTING SUMP ACCESS THRU NEW CONCRETE PAD
20. EXISTING FENCE AROUND STAIRS
21. PRECAST CONCRETE WHEEL STOP
22. ADA SIGNAGE

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THE ICE SHEET ADDITION
4390 HARRISON BLVD. OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

SEAL

STATE OF UTAH
RUSS LEE BACHMEIER
4838830-0301
9.4.2012
LICENSED ARCHITECT

GENERAL NOTES

A. ALL TREES SHOWN ON THIS PLAN ARE EXISTING TREES AND SHALL BE PROTECTED AND MAINTAINED DURING CONSTRUCTION.

ELEVATION = FINISHED ELEVATION

DFCM STAMP OF APPROVAL

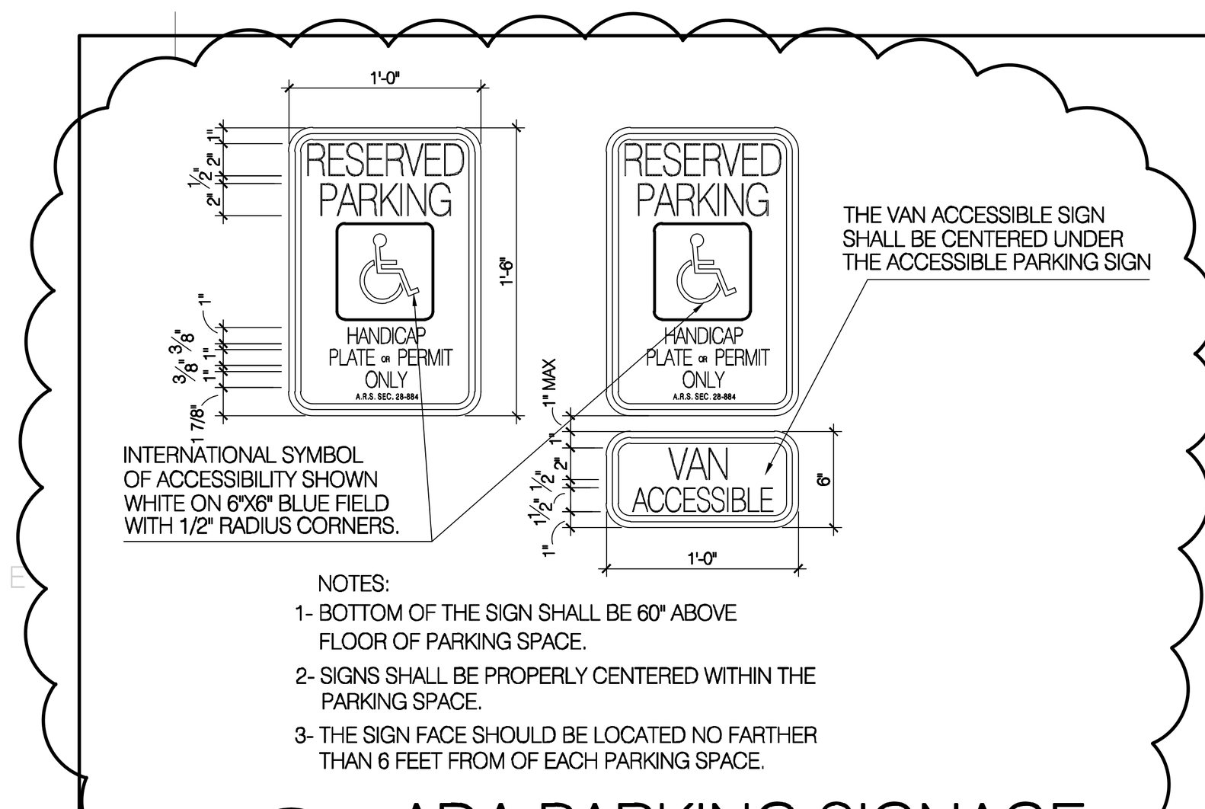
DATE	STATUS
9/4/2012	CD
10/04/2012	ADDENDUM 1

PROJECT NUMBER 11124
CAD DWG FILE
DRAWN BY XXX
CHECKED BY
SCALE AS INDICATED

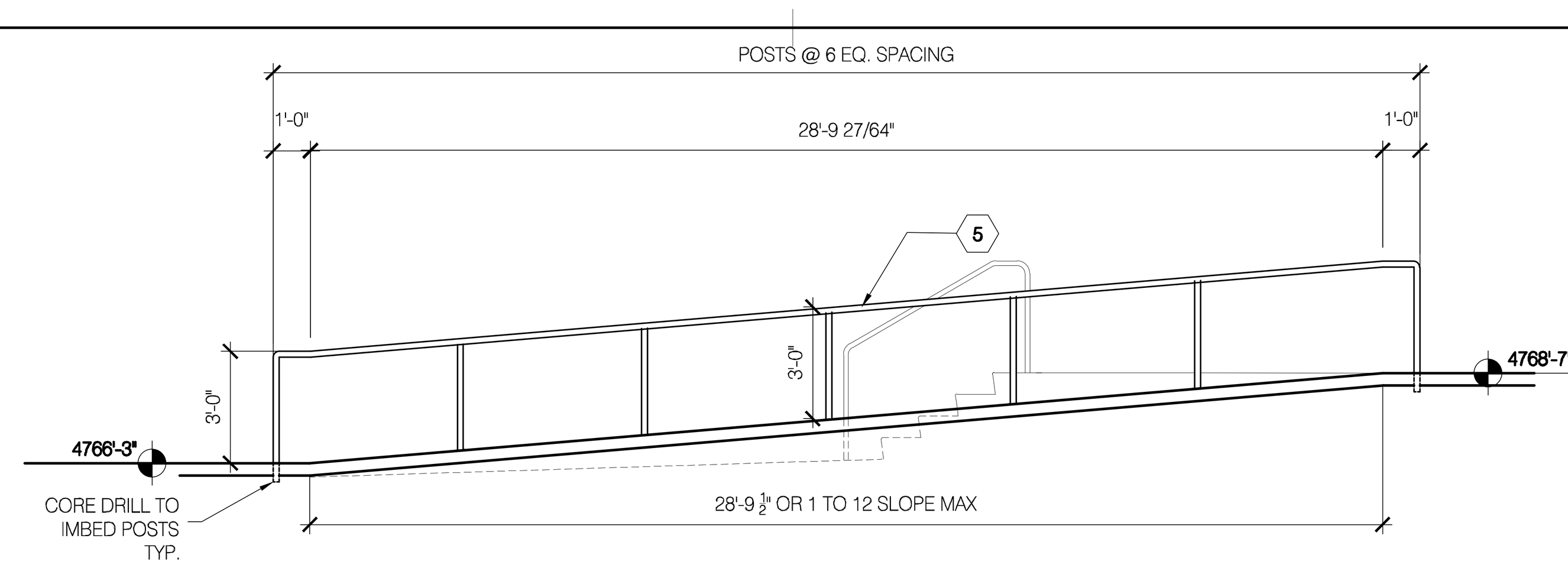
SITE AND GRADING PLAN

AS-100

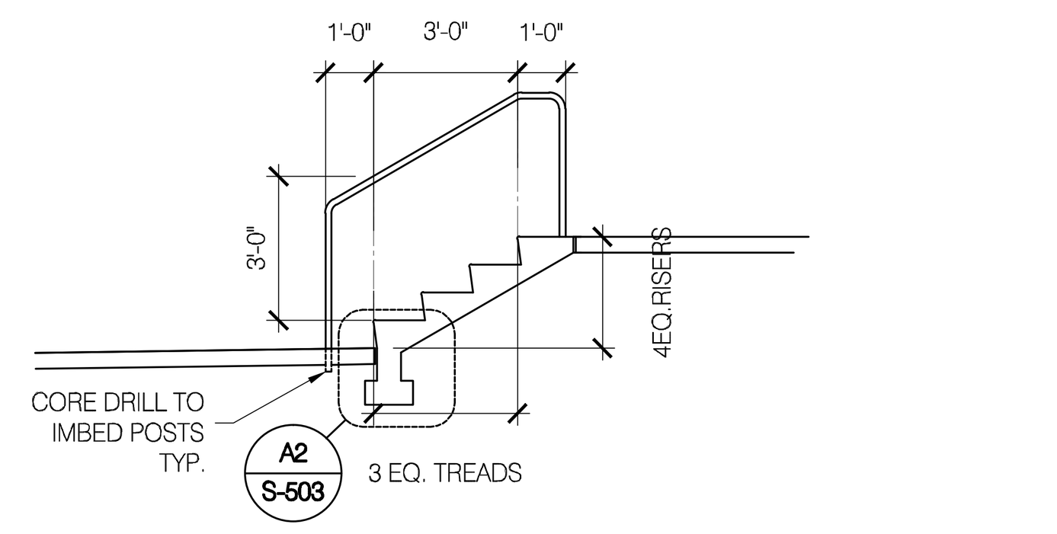
A3 SITE AND GRADING PLAN
1" = 20'
0 10' 20' 40'



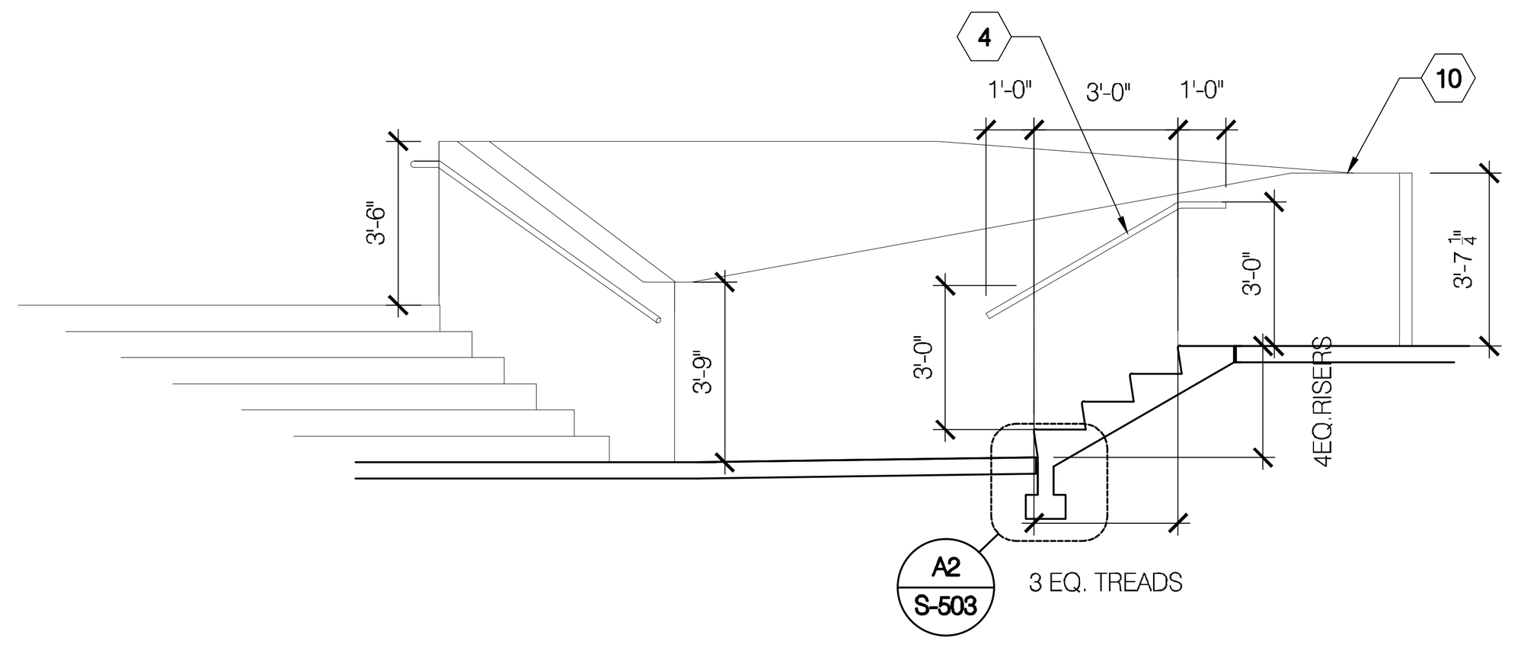
F1 ADA PARKING SIGNAGE
SCALE: 1" = 1'-0"



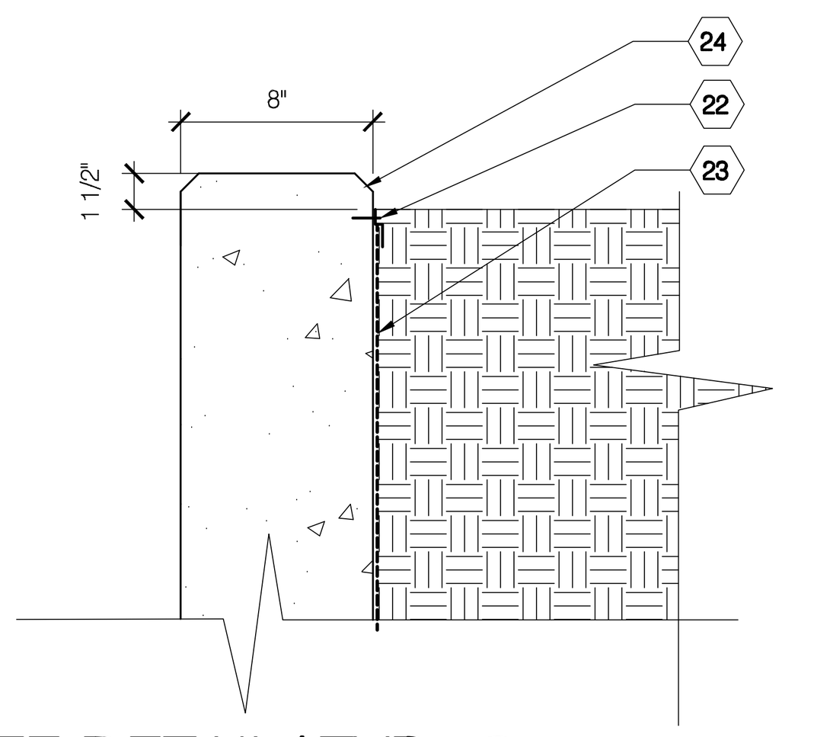
F2 RAMP SECTION / ELEVATION
SCALE: 1/4" = 1'-0"



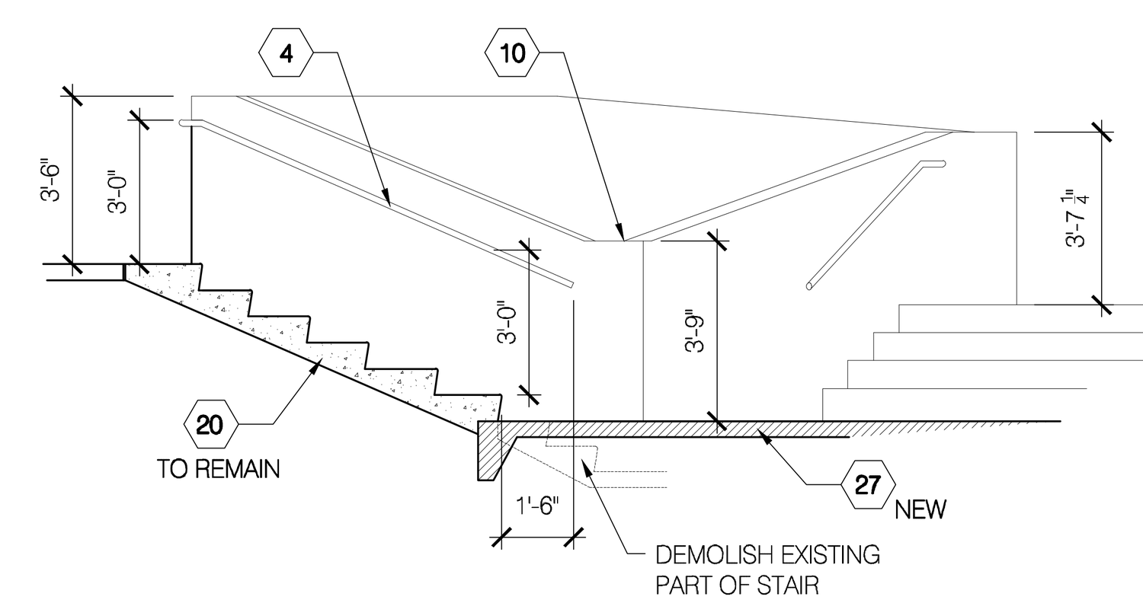
E1 STAIR SECTION / ELEVATION
SCALE: 1/4" = 1'-0"



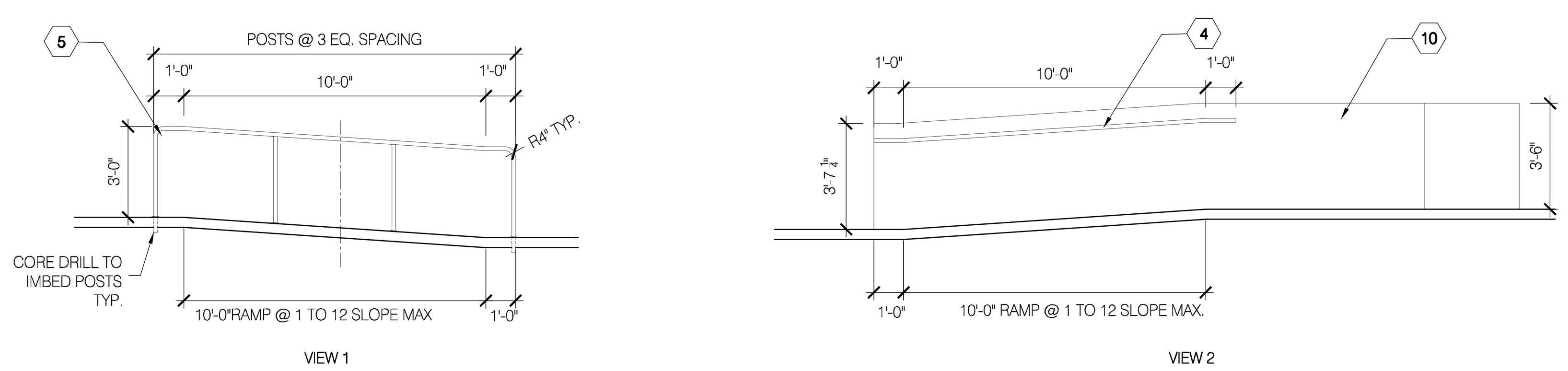
E2 STAIR SECTION / ELEVATION
SCALE: 1/4" = 1'-0"



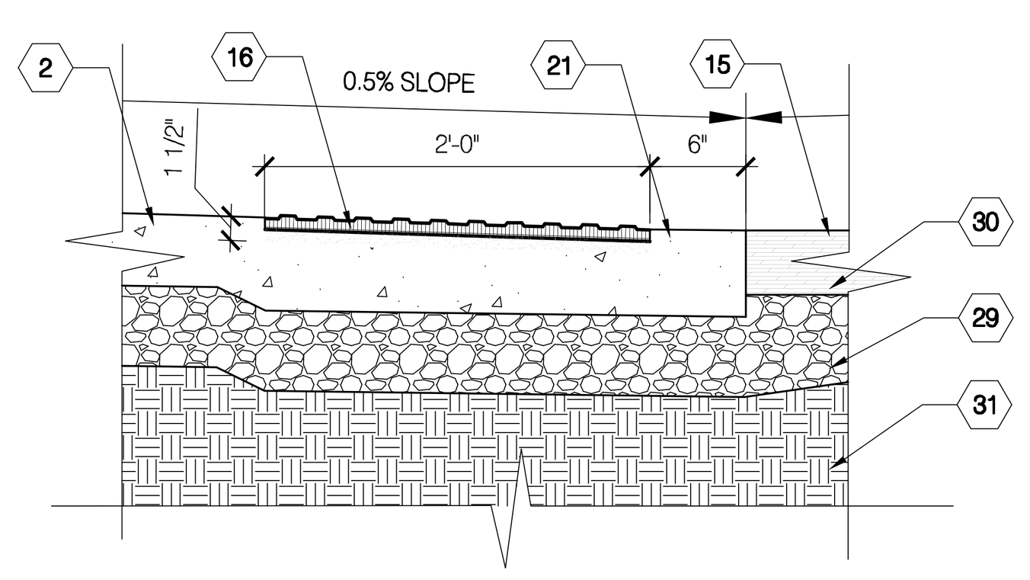
D1 SITE DETAIL/ TYP. @ ALL ARCHITECTUAL CONCRETE
SCALE: 1 1/2"=1'-0"



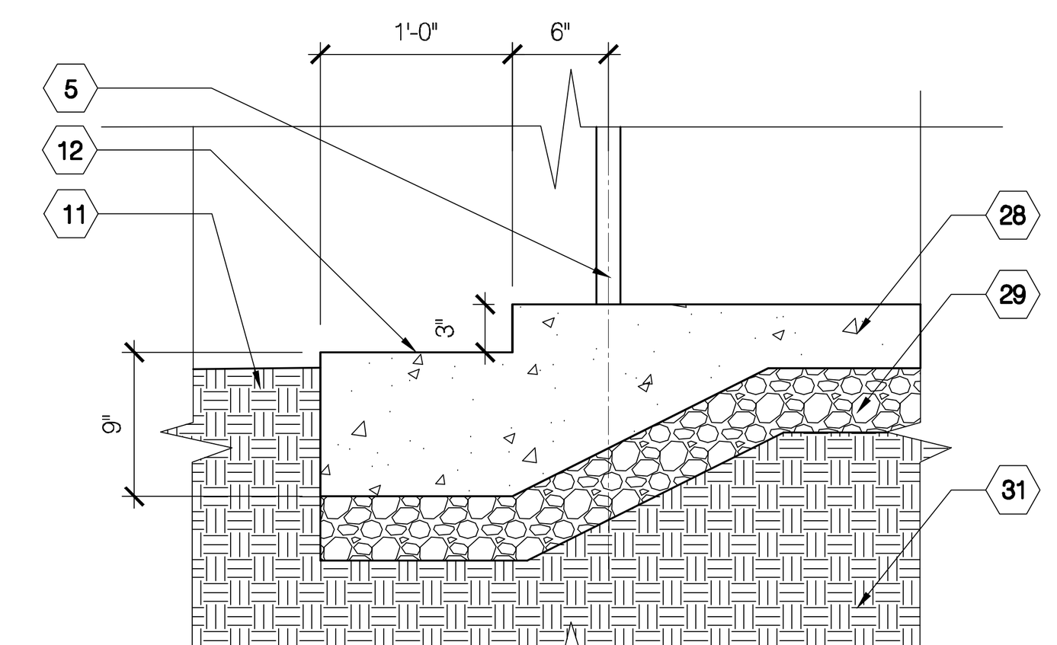
D2 STAIR SECTION / ELEVATION
SCALE: 1/4" = 1'-0"



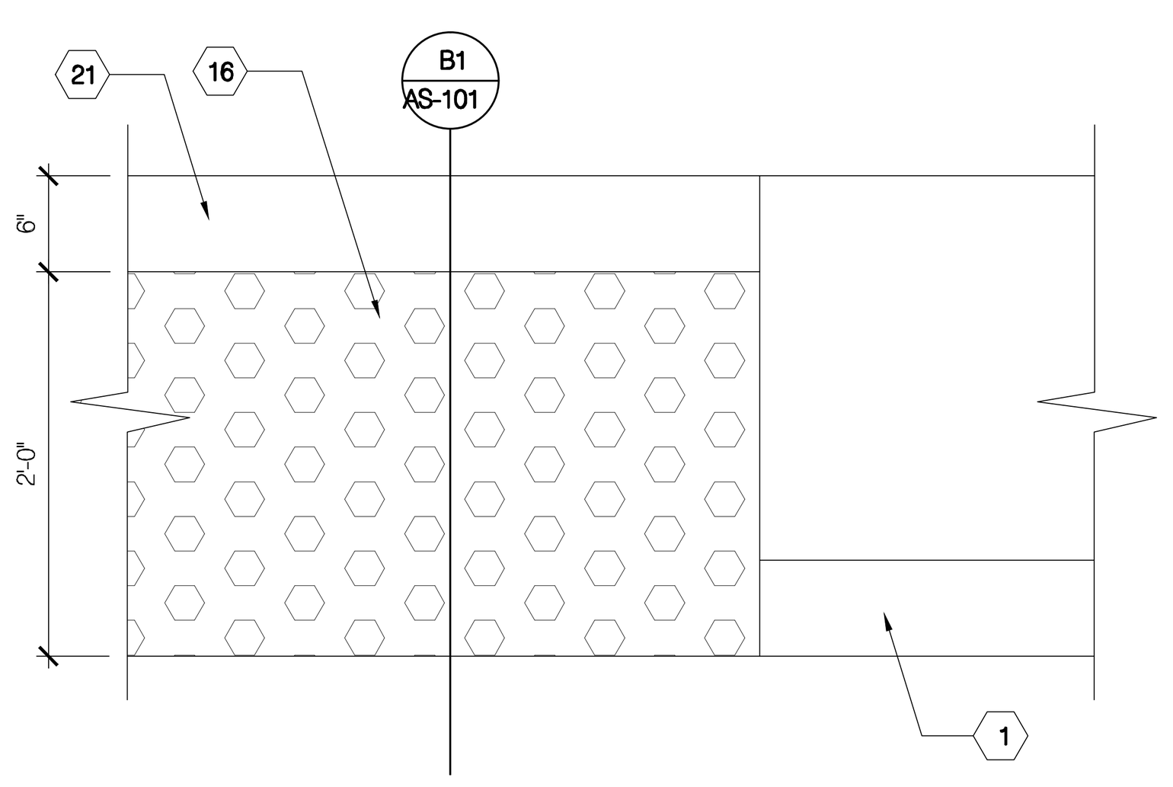
C1 RAMP SECTION / ELEVATION
SCALE: 1/4" = 1'-0"



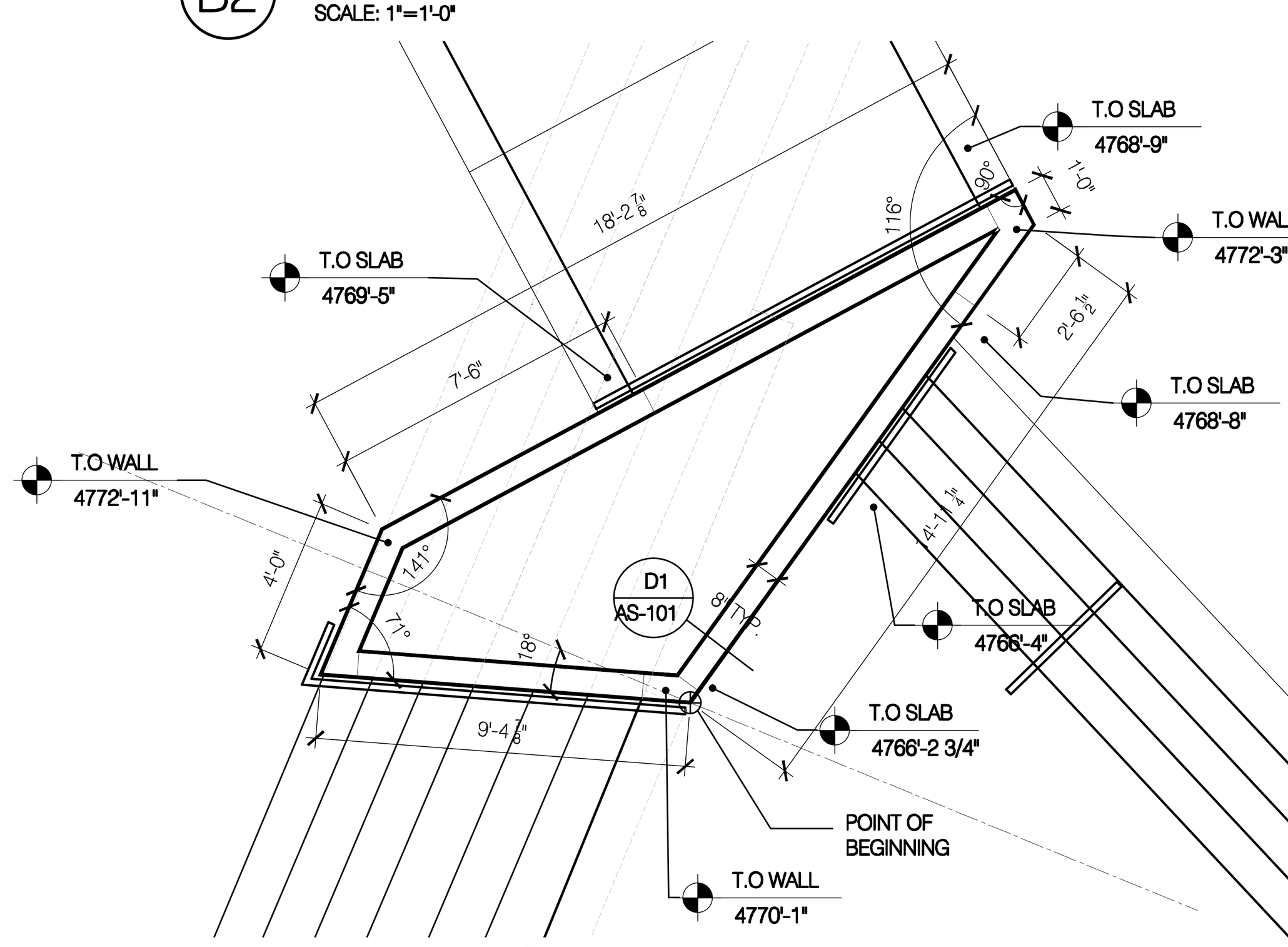
B1 SITE DETAIL
SCALE: 1"=1'-0"



B2 SITE DETAIL
SCALE: 1"=1'-0"

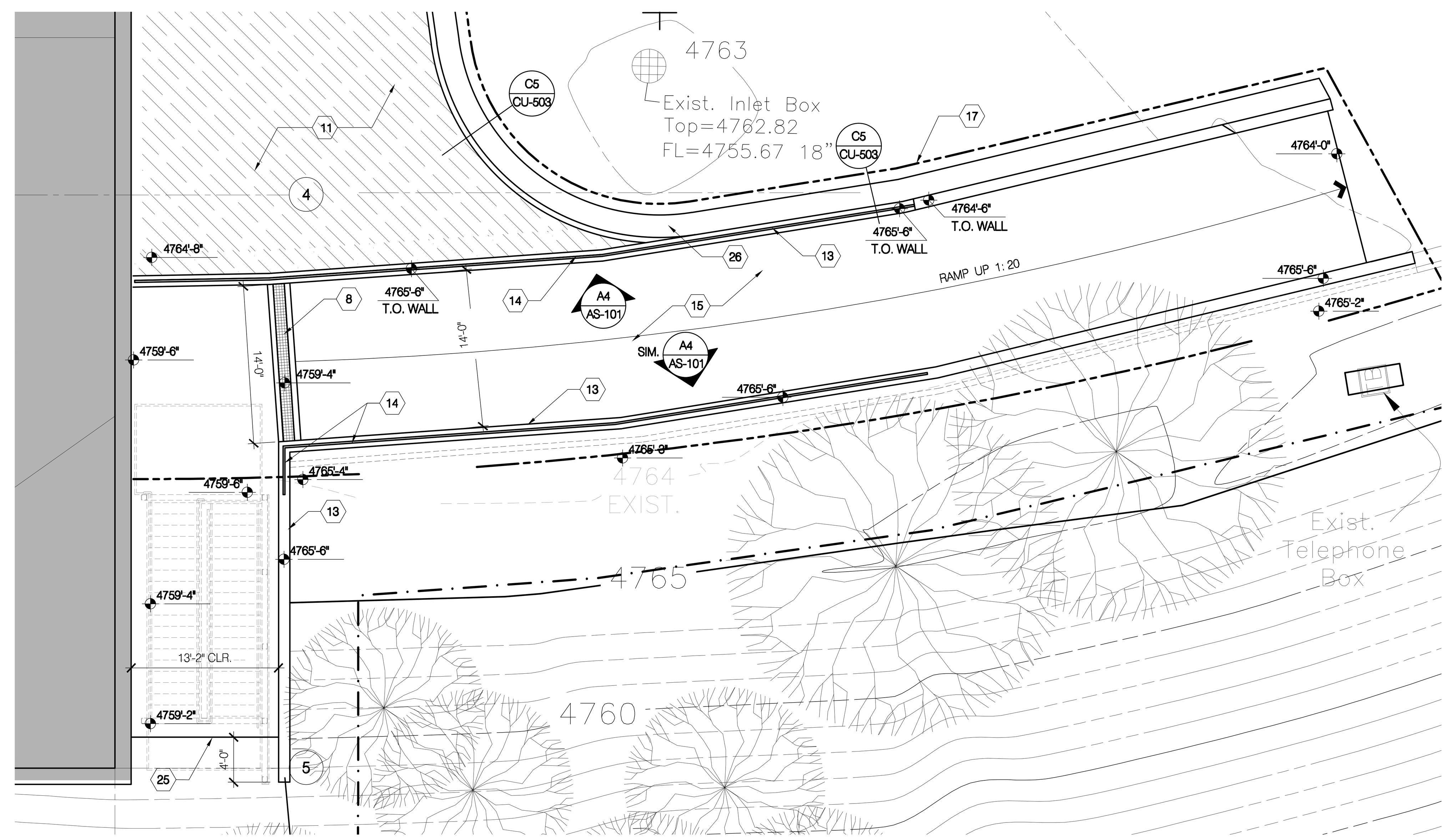


A1 SITE DETAIL
SCALE: 1"=1'-0"

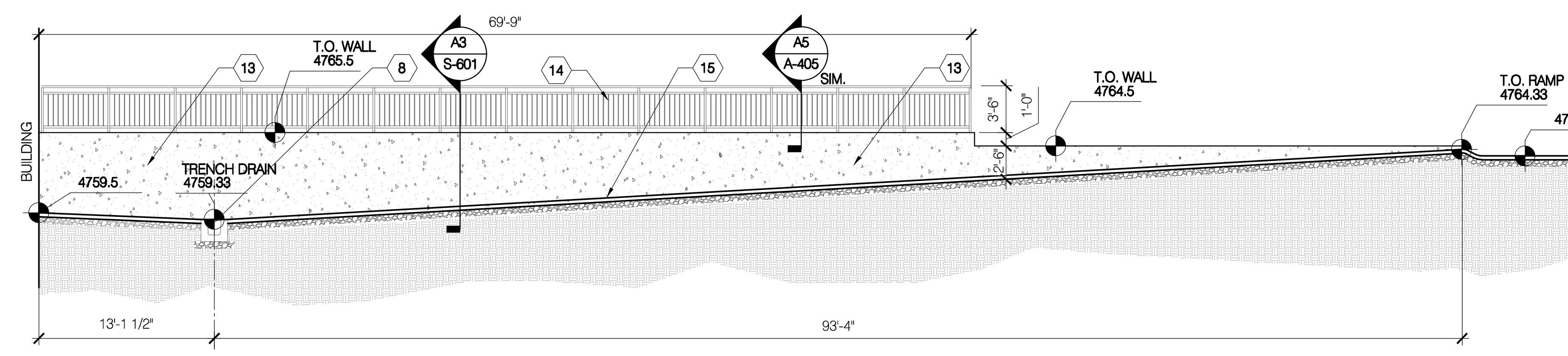


A2 ENLARGE PLAN
SCALE: 1/4" = 1'-0"

D4 ENLARGED ENTRY PLAZA PLAN
SCALE: 1/8" = 1'-0"



B4 ENLARGED RAMP PLAN
SCALE: 1/8" = 1'-0"



A4 RAMP SECTION / RETAINING WALL ELEVATION
SCALE: 1/8" = 1'-0"

REFERENCE NOTES

1. NEW CURB AND GUTTER, SEE A5/CU-503.
2. NEW 4" CONCRETE SIDE WALK, SEE C3/CU-503.
3. LIGHT BOLLARD SEE ELEC. (TOTAL OF 7)
4. NEW WALL MOUNTED 1.5" DIA SS HANDRAIL
5. NEW POST MOUNTED 1.5" DIA SS HANDRAIL
6. RELOCATED AND RECONDITION FLAG POLES (3)
7. RELOCATED EXISTING HANDRAIL
8. NEW TRENCH DRAIN SEE: CIVIL DWG.
9. SAW-CUT CONTROLLED JOINT AT CONCRETE WALKWAY.
10. CONCRETE RAISED PLANTER
11. LANDSCAPED AREA
12. NEW 12" WIDE CONCRETE STRIP
13. NEW 12" WIDE CONCRETE RETAINING WALL, SEE STRUCTURAL DWG.
14. 42" HIGH GALVANIZED PIPE GUARDRAIL. SIM. TO A5/A-405
15. NEW ASPHALT PAVEMENT, SEE CIVIL DRAWINGS.
16. 24" WIDE TRUNCATED DOME STRIP
17. SAW CUT ASPHALT PAVING
18. EXTERIOR LIGHT FIXTURE. SEE ELEC.
19. EXISTING HANDRAIL
20. EXISTING STAIR
21. NEW CONC. CURB
22. ALUMINUM REGLET
23. WATER PROOFING TO TOP OF FOOTING
24. 3/4" CHAMFER TYP AT ALL TOP EDGES AND CORNERS.
25. EDGE OF SLAB ON GRADE
26. CATCH BASIN, SEE CIVIL.
27. SLAB ON GRADE
28. CONCRETE
29. ROAD BASE
30. ASPHALT PAVEMENT
31. COMPACTED EARTH
32. PRECAST CONCRETE WHEEL STOP
33. ADA SIGNAGE SEE F1/AS-101

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THE ICE SHEET ADDITION
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CONSTRUCTION DOCUMENTS

SEAL
RUSS LEE BACHMEIER 4836830-0301 LICENSED ARCHITECT STATE OF UTAH

DATE	STATUS
9/4/2012	CD
10/04/2012	ADDENDUM 4

PROJECT NUMBER	11124
CAD DWG FILE	
DRAWN BY	XXX
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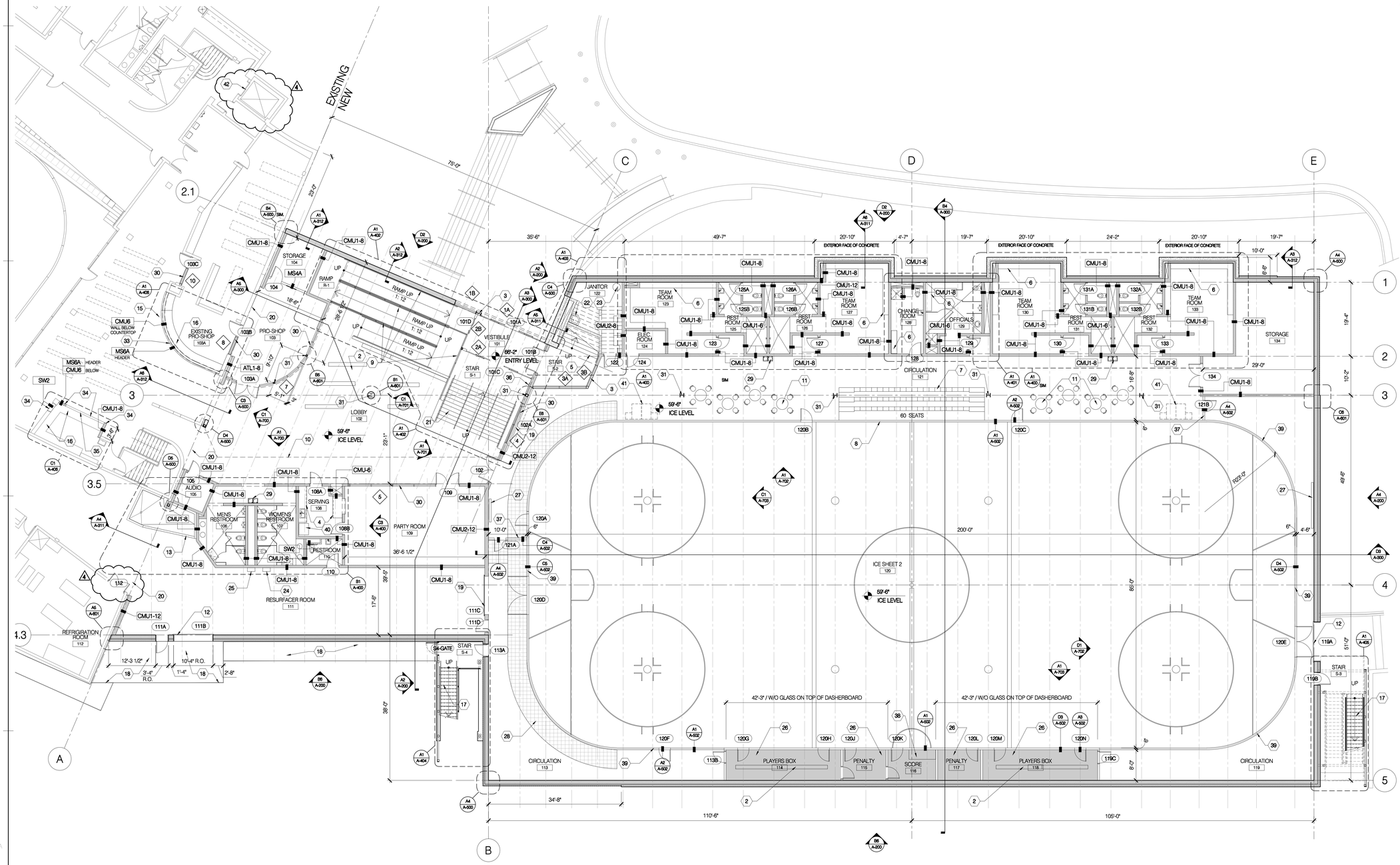
SCALE	AS INDICATED

DFCM STAMP OF APPROVAL

SITE ENLARGED PLANS AND DETAILS

AS-101



A4 LEVEL 1 FLOOR PLAN
SCALE: 3/32" = 1'-0"
0 8' 16'

REFERENCE NOTES

1. NOT USED.
2. RECYCLABLE PLASTIC BENCH SEE: A5/A-502
3. ALUMINUM FRAMED WINDOW / EXTERIOR
4. MILLWORK.
5. STAIR, METAL PAN W/ CONCRETE INFILL.
6. RECYCLABLE PLASTIC BENCH
7. PORTABLE ALUMINUM BLEACHERS WITH PLASTIC SEATS (TO COMPLY W/ ICC STANDARDS 303-2007)
8. DASHER BOARD (ALL AROUND ICE RINK) SOLID POLYETHYLENE ON BOTH SIDES ONLY WHERE ADJACENT TO PUBLIC CIRCULATION AREA.
9. GUARDRAIL WITH HANDRAIL, METAL FRAME WITH EXPANDED METAL PANEL.
10. EDGE OF RAMP ABOVE.
11. FURNISHING N.I.C.
12. INSULATED OVERHEAD COILING DOOR
13. ICE DUMP PIT.
14. NOT USED
15. DEMOLISH PART OF EXISTING COUNTER.
16. NEW COUNTER SEE: MILLWORK.
17. GALVANIZED METAL STAIR.
18. 6" CONCRETE SLAB ON GRADE
19. 1.5 HR. FIRE RATED OVERHEAD COILING DOOR (SUBMITTAL TO INCLUDE UL TEST AND INSTALLATION INSTRUCTIONS)
20. 6" WIDE EXPANSION JOINT (ABOVE).
21. CONCRETE STAIR ON GRADE.
22. MOP SINK SEE: PLUMBING DWG.
23. WATER HEATER SEE PLUMBING DWG.
24. WATER FILL STATION SEE PLUMBING DWG.
25. GAS FILL STATION SEE PLUMBING DWG.
26. 7" RAISED PLATFORM.
27. SCORE BOARD N.I.C.
28. COVER AT THE REFRIGERATION PIPING TRENCH. SEE B3-B4/S-503
29. DRINKING FOUNTAIN SEE PLUMBING DWG.
30. ALUMINUM FRAME WINDOW / INTERIOR
31. STEEL, COLUMN, SEE STRUCTURAL DWG.
32. DRINKING FOUNTAIN W/ ELECTRIC WATER COOLER SEE PLUMBING DWG.
33. NEW "APRON" FASCIA ABOVE (BOTTOM AT 7'-4"AFF)
34. NEW WALLS TO ACCOMMODATE CONCESSION EXPANSION
35. REUSE EXISTING COILING GRILLE
36. SECURITY SYSTEM KEY-PAD LOCATION
37. DASHER BOARD WALL (3'-6" HIGH)
38. OFFICIALS TABLE AT SCORE BOX BY DASHER BOARD SUB-CONTRACTOR
39. NO WHITE POLYETHYLENE SHEET ON BACK SIDE OF DASHER BOARDS IN NON-PUBLIC AREAS.
40. REFRIGERATOR BY OWNER.
41. DESIGNATED AREA FOR ACCESSIBLE AND COMPANION SEATING.
42. EXISTING ELEVATOR TO COMPLY WITH CURRENT ACCESSIBILITY REQUIREMENTS

GENERAL NOTES

A. ALL PARTITION WALLS TO BE CMU (U.N.O.), SEE STRUCTURAL FOR DIMENSIONS.
B. SHOWER AND RESTROOM AREAS IN TEAM ROOMS TO HAVE CERAMIC TILE UP TO 7'-4"
C. ALL FLOORING TO BE RUBBER (MONDO) FLOOR EXCEPT WHERE NOTED OTHERWISE.
D. 2HR. FIRE RATED WALL ALONG GRID LINES "B" & "C".
E. ALL DOORS TO BE HOLLOW METAL, U.N.O.
F. JANITOR ROOM 122 TO BE FIRE RATED WITHIN 1 HR FIRE RATED ENCLOSURE. (RATED CMU WALLS AND RATED METAL FRAMING WITH GYPSUM BOARD ASSEMBLY AT CEILING - U415)
G. ICE SHEET LINES AND LOGOS BY OWNER.
H. SEE SHEET A-600 FOR PARTITION TYPES AND DOOR SCHEDULE.
I. ALL EXPOSED INTERIOR CMU WALLS (EXCLUDING 8" CMU SCORED) TO BE PAINTED. SEE INTERIOR ELEVATIONS FOR THE PAINT TYPE.

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THE ICE SHEET ADDITION
4390 HARRISON BLVD. OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

SEAL
STATE OF UTAH
RUSS LEE BACHMEIER
4838830-0301
9-4-2012
LICENSED ARCHITECT

DATE	STATUS
9/4/2012	CD
10/04/2012	ADDENDUM 4

PROJECT NUMBER	11124
CAD DWG FILE	
DRAWN BY	XXX
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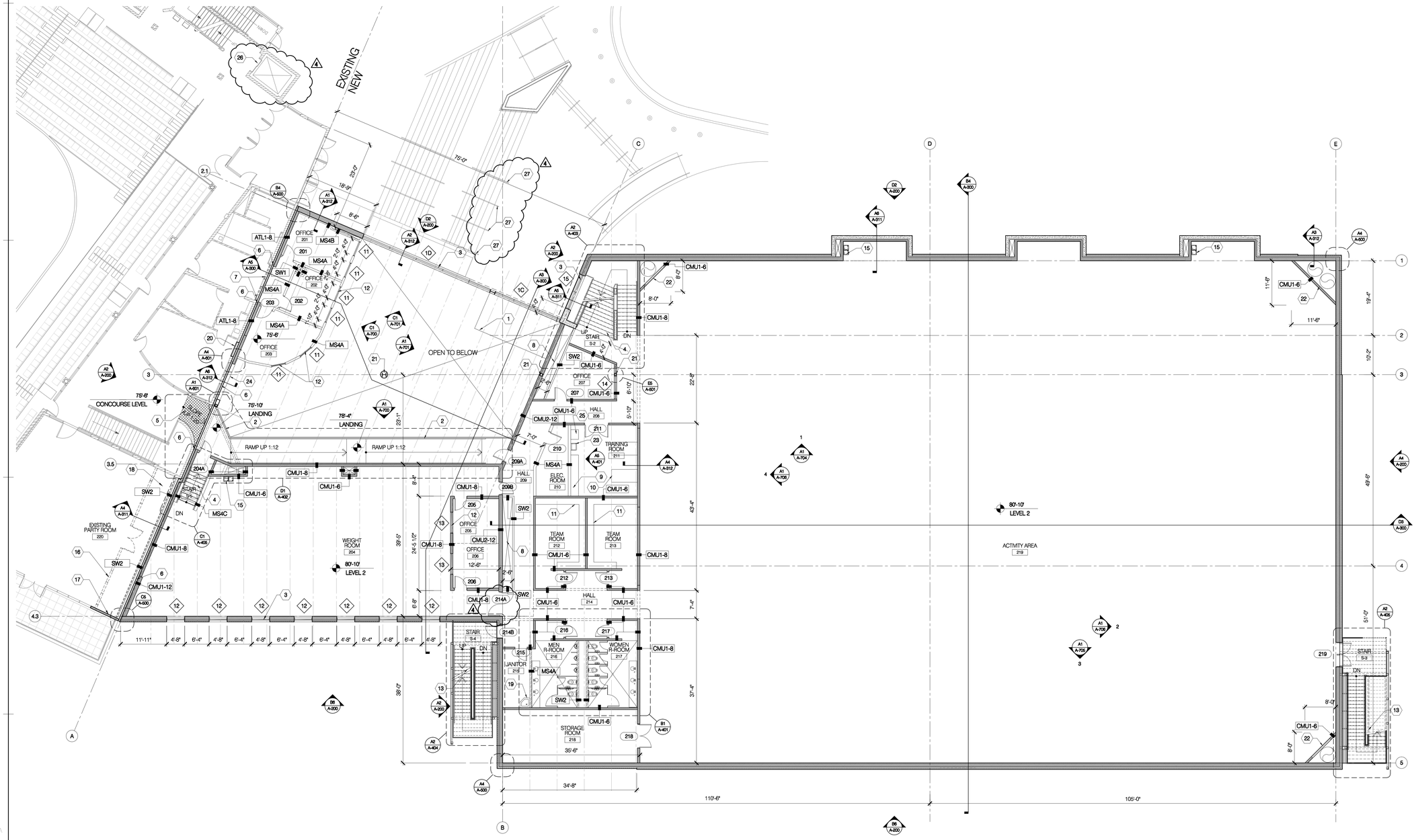
SCALE	AS INDICATED

LEVEL 1 FLOOR PLAN

A-101



LEVEL 2 FLOOR PLAN

A4 — SCALE: 3/32"= 1'-0"

0 8' 16'

REFERENCE NOTES

1. VESTIBULE ENCLOSURE BELOW.
2. GUARDRAIL, METAL FRAME WITH EXPANDED METAL PANEL.
3. ALUMINUM FRAMED EXTERIOR WINDOW SEE: SCHED.
4. STAIR, METAL PAN W/ CONCRETE INFILL.
5. NEW DECK, SEE STRUCTURAL.
6. EXPANSION JOINT COVER
7. DEMOLISH EXISTING WINDOWS AND PARAPET (SHOWN DASHED).
8. NON-RATED MECHANICAL SHAFT
9. MILLWORK.
10. FURNISHING - N.I.C.
11. RECYCLED PLASTIC BENCH W/ WALL HOOKS ABOVE IDENTICAL TO THE TEAM ROOMS AT LEVEL ONE SEE MILLWORK DRAWINGS.
12. ALUMINUM FRAMED INTERIOR WINDOW SEE SCHED.
13. GALVANIZED METAL STAIR
14. NOT USED
15. DRINKING FOUNTAIN / EWC
16. DEMO EXISTING EXTERIOR WALL & TERRACE PAVING.
17. CLOSE EXISTING PARTY ROOM W/ METAL PANEL (MATCH EXISTING).
18. RAISE FLOOR TO MATCH EXISTING.
19. MOP SINK, SEE PLUMBING.
20. REMOVE EXISTING WINDOWS AND INFILL OPENING WITH BRICK TO MATCH EXISTING.
21. STRUCTURAL COLUMN, SEE STRUCTURAL.
22. 6" CMU ENCLOSURE AROUND MECHANICAL DUCT 15'-4" TALL (ABOVE LEVEL 2)
23. UTILITY SINK, SEE PLUMBING.
24. ENCLOSED STRUCTURAL BEAM BELOW
25. ICE MAKER N/C (STUB-OUTS ONLY)
26. EXISTING ELEVATOR TO COMPLY W/ CURRENT ACCESSIBILITY REQUIREMENTS
27. EXITING STAIR (6"/12" - RISE/RUN) HANDRAIL TO BE MODIFIED TO HAVE A MINIMUM 12" EXTENSION BEYOND TOP AND BOTTOM RISER (IN DIRECTION OF TRAVEL).

GENERAL NOTES

A. ALL PARTITION WALLS TO BE CMU (U.N.O.), SEE STRUCTURAL FOR DIMENSIONS.
B. SHOWER AND RESTROOM AREAS IN TEAM ROOMS TO HAVE CERAMIC TILE UP TO 7'-4"
C. ALL FLOORING TO BE STAINED AND SEALED CONCRETE FLOOR. U.N.O.
D. 2HR. FIRE RATED WALL ALONG GRID LINES "B" & "C".
E. ALL DOORS TO BE HOLLOW METAL. U.N.O.
F. SEE SHEET A-600 FOR PARTITION TYPES & DOOR SCHEDULE.
G. ALL EXPOSED INTERIOR CMU WALLS (EXCLUDING 8" CMU SCORED) TO BE PAINTED. SEE INTERIOR ELEVATIONS FOR THE PAINT TYPE.

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4836830-0301
LICENSED ARCHITECT
9-4-2012

DATE	STATUS
9/4/2012	CD
10/04/2012	ADDENDUM 1

PROJECT NUMBER	11124
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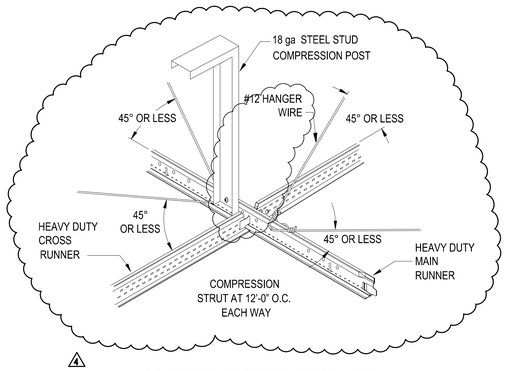
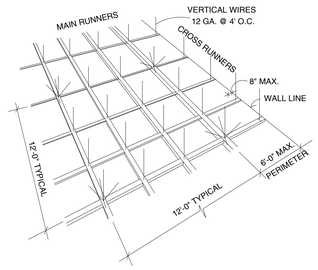
SCALE	AS INDICATED

LEVEL 2
FLOOR PLAN

A-102



D3 SEISMIC BRACING DETAIL
NOT TO SCALE



D5 SEISMIC BRACING DETAIL
NOT TO SCALE

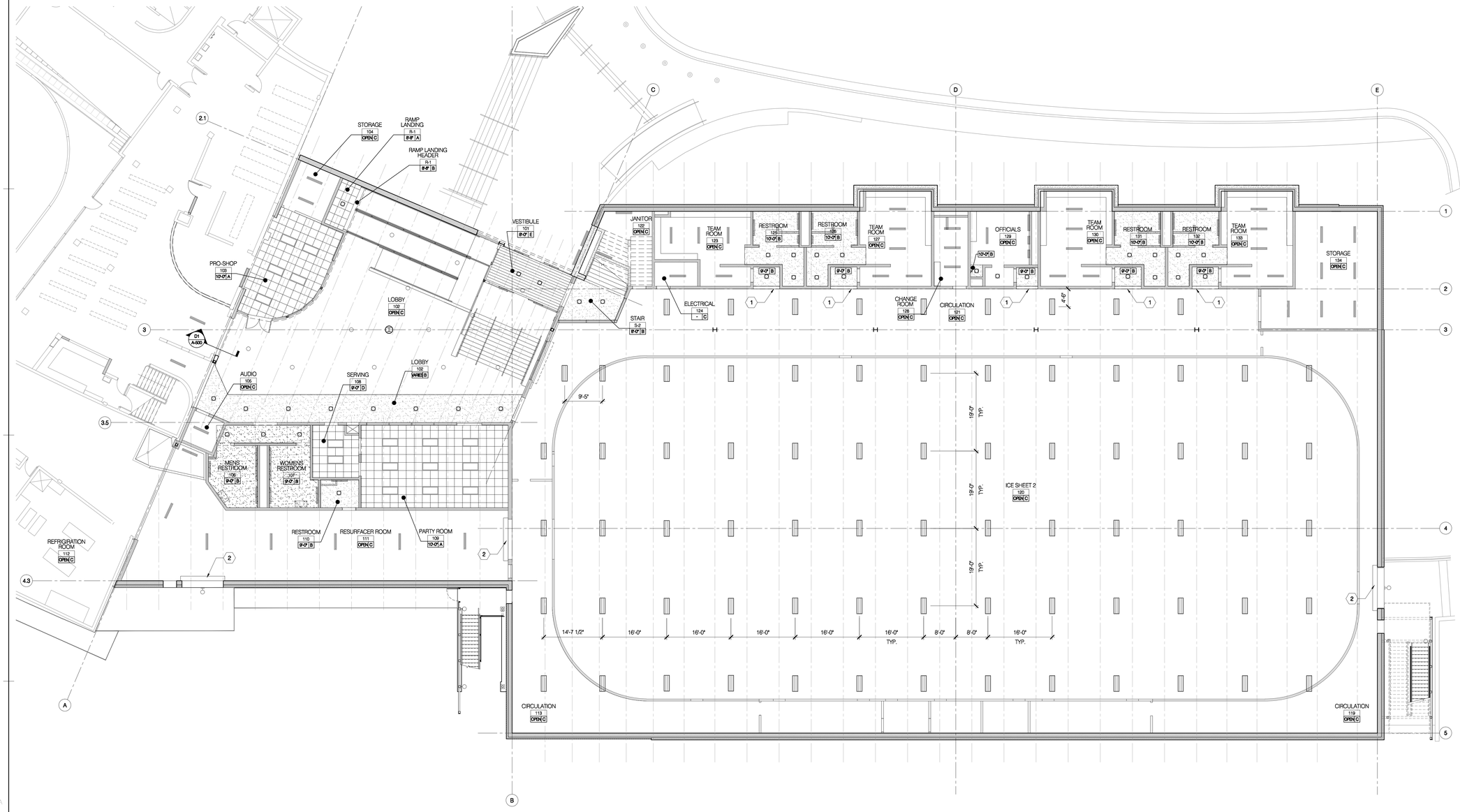
Notes:
1. A ceiling area of 144sf or less surrounded by walls that connect directly to structure above shall be exempt from the following lateral design requirements.

2. In each orthogonal direction, one end of the ceiling grid shall be attached to the closure angle. The other end in each direction shall be attached with an ICC evaluated & approved seismic clip system and .75" of clearance to allow free horizontal movement.

3. Lateral ceiling bracing is required @ 12'-0" o.c. in both directions for all ceilings greater than 1000sf.

4. Ceiling areas over 2500sf must have siesmic separation joints.

5. Light fixtures, mechanical equipment, etc. must be supported independent of the ceiling support system.



A4 LEVEL 1 REFLECTED CEILING PLAN
SCALE: 3/32"= 1'-0"
0 8' 16'

REFERENCE NOTES

1. CMU HEADER / 8'-0" AFF
2. COILING DOOR ENCLOSURE / 10'-0" AFF

CEILING FINISH LEGEND

- A 2'x2' SUSPENDED ACOUSTICAL PANEL
- B 5/8" PAINTED GYPSUM BOARD ON STEEL STUD JOIST FRAMING.
- C OPEN TO STRUCTURE.
- D 2'x2' SUSPENDED ACOUSTICAL PANEL VINYL COATED
- E 8" WIDE METAL PLANK LINEAR CLG. BY "AMSTRONG"

SYMBOLS

ROOM NAME
HEIGHT ABOVE FINISHED FLOOR — RM NO. / HT. TYPE

- PENDANT LIGHT FIXTURE
- CEILING MOUNTED LIGHT FIXTURE
- FLORESCENT LIGHT FIXTURE
- LAY-IN LIGHT FIXTURE.
- LAY-IN LIGHT FIXTURE.
- RECESSED LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE (SEE INTERIOR ELEV. FOR EXACT LOCATION)
- WALL MOUNTED EXIT SIGN
- CEILING MOUNTED EXIT SIGN
- EMERGENCY LIGHT
- PROJECTOR
- INFRARED EMITTER
- SPEAKER
- ROUND AIR DIFFUSER
- RETURN AIR GRILLE/ EXHAUST GRILLE
- AIR DIFFUSER
- ACCESS DOOR
- SPRINKLER HEAD @ ACOUSTICAL CLG.
- PAINTED GYPSUM BOARD / GYPSUM FIN. CEILING.
- ACOUSTICAL TILE

GENERAL NOTES

A. ALL PARTITION WALLS TO BE CMU (U.N.O.), SEE STRUCTURAL FOR DIMENSIONS.
B. 2HR. FIRE RATED WALL ALONG GRID LINES "B" & "C".

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10/04/2012	ADDENDUM 1

PROJECT NUMBER 11124
CAD DWG FILE
DRAWN BY XXX
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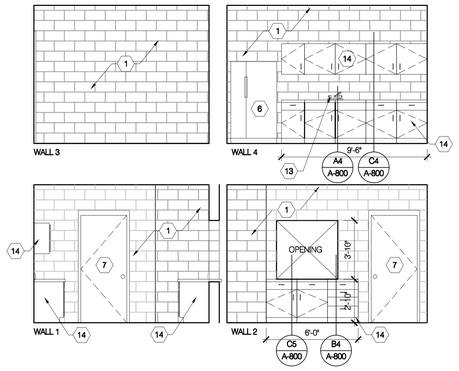
SCALE AS INDICATED

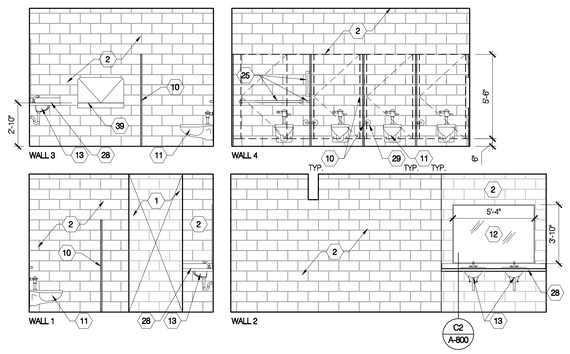
LEVEL 1 REFLECTED CEILING PLAN

A-111



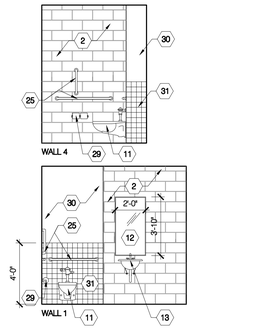
D1 INTERIOR ELEVATIONS - KITCHEN #108

SCALE: 1/4"=1'-0"



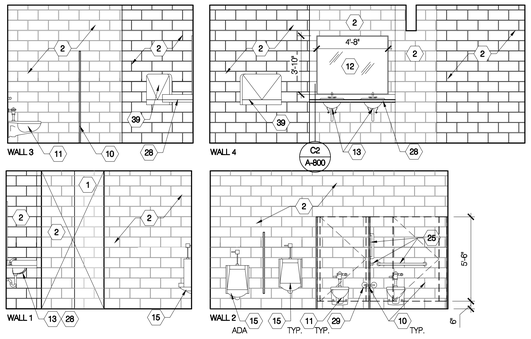
D2 INTERIOR ELEVATIONS - RESTROOM #107

SCALE: 1/4"=1'-0"



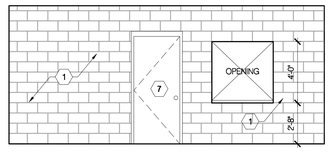
D4 INTERIOR ELEVATIONS - RESTROOM #110

SCALE: 1/4"=1'-0"



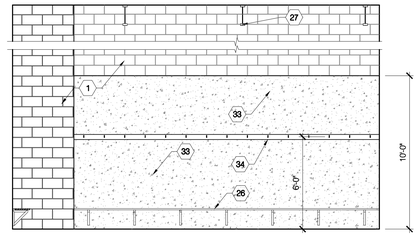
D5 INTERIOR ELEVATIONS - RESTROOM #106

SCALE: 1/4"=1'-0"



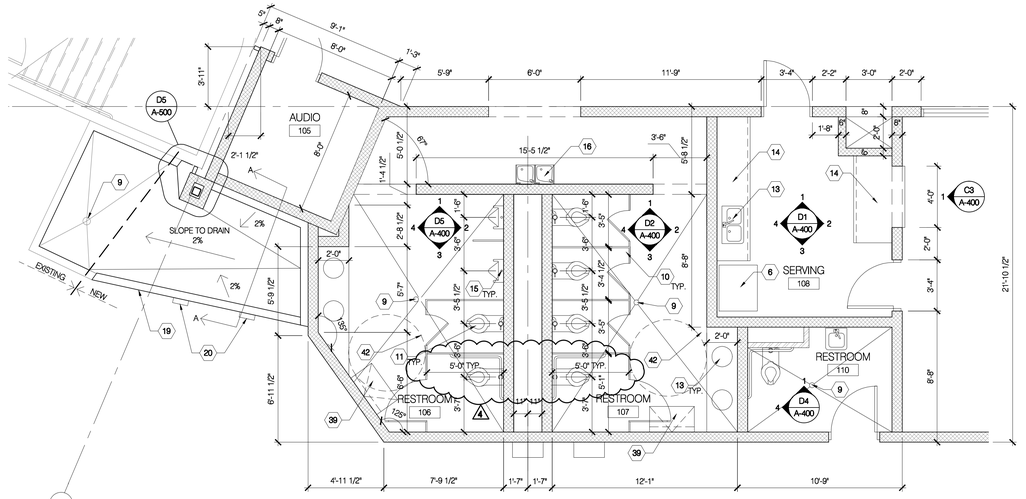
C3 INTERIOR ELEVATIONS PARTY ROOM #109

SCALE: 1/4"=1'-0"



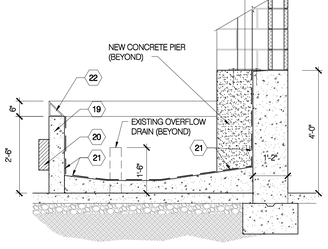
C5 INTERIOR ELEVATIONS - TEAMROOM #123

SCALE: 1/4"=1'-0"



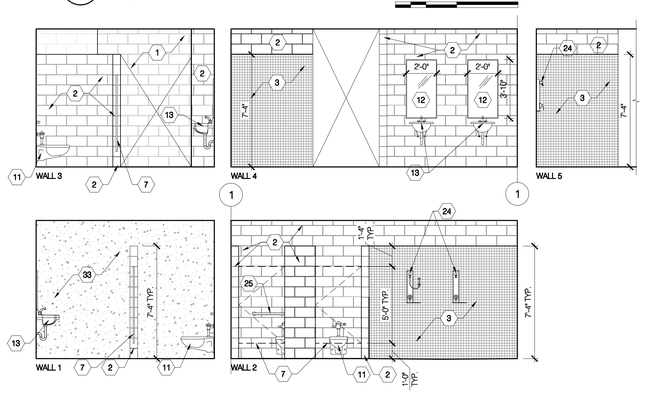
B1 ENLARGED RESTROOM #106, #107, #108 & #110

SCALE: 1/4"=1'-0"



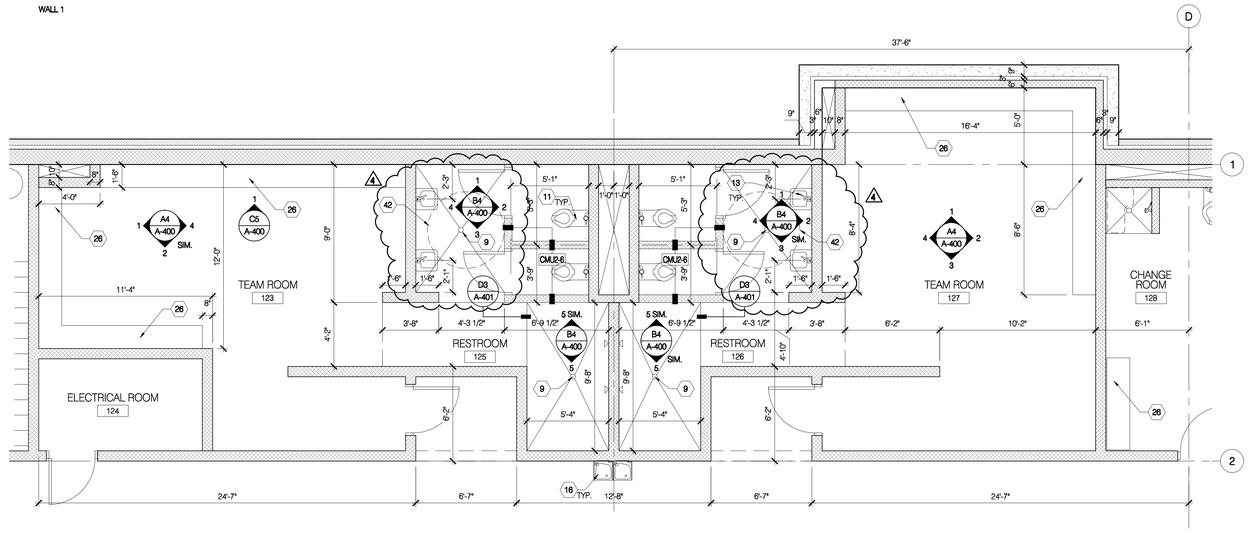
B3 WALL SECTION A-A

SCALE: 1/4"=1'-0"



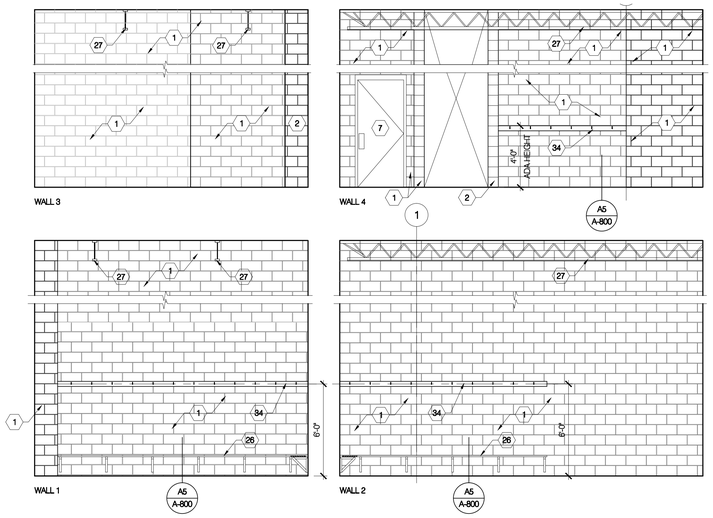
B4 INTERIOR ELEVATIONS - RESTROOM #125

SCALE: 1/4"=1'-0"



A1 ENLARGED RESTROOM #125 & #126 (#131 & #132)

SCALE: 1/4"=1'-0"



A4 INTERIOR ELEVATIONS - TEAM ROOM #127

SCALE: 1/4"=1'-0"

REFERENCE NOTES

1. CMU WALL, SEE FLOOR PLANS
2. CMU WALL, EPOXY PAINTED.
3. CMU WALL, TILED (2x2 CER. TILE)
4. BASE CABINET
5. WALL CABINET
6. REFRIGERATOR (N.I.C.)
7. SCHEDULED DOOR
8. WALL BASE
9. FLOOR DRAIN, SEE PLUMBING.
10. PAINTED STEEL TOILET PARTITION
11. WALL MOUNTED TOILET, SEE PLUMBING.
12. MIRROR
13. SINK, SEE: PLUMBING.
14. MILLWORK SEE SHEET A-800.
15. URINAL, SEE PLUMBING.
16. DRINKING FOUNTAIN, SEE PLUMBING.
17. ROLL-UP METAL PARTITION
18. N.I.C. (NOT IN CONTRACT)
19. WATERPROOFED CONCRETE WALL
20. BUMPER, 12" x 12" x 4" THICK SECURED TO WALL OF SNOW MELT PUMP.
21. WATERPROOFING MEMBRANE
22. SLOPED STEEL CAP, CONTINUOUS.
23. CONCRETE LOW WALL.
24. SHOWER HEAD AND CONTROLS, SEE PLUMBING.
25. ADA S.S. GRAB BAR
26. TEAM ROOM BENCH, SEE: A5/ A-800
27. STRUCTURAL BEAM/TRUSS/COLUMN, SEE: STRUCTURAL DWGS.
28. LAMINATE COUNTER, SEE: MILLWORK DWGS
29. TOILET PAPER DISPENSER BY OWNER.
30. FRAMED GYPSUM WALL (PAINTED)
31. FRAMED GYPSUM WALL TILED (4 x4 CER. TILE)
32. LOCKERS
33. CONCRETE / EPOXY PAINTED
34. 3/8" THICK x 4" HIGH PAINTED STEEL PLATE (CONT.) W/ 1/2" DIA x 3" LONG HOOKS WELDED AT 16" O.C.
35. UTILITY SINK SEE: PLUMBING DRAWINGS
36. ADA FOLDING BENCH
37. ADA COMBINATION SHOWER HEAD
38. MOP SINK, SEE PLUMBING.
39. WALL MOUNTED BABY CHANGING STATION
40. ICE MAKER - BY OWNER
41. ~~FRAMED GYPSUM BOARD SOFFIT~~
42. 60" DIA ADA CLEARANCE

GENERAL NOTES

A. REFERENCE D1/A-401 FOR RESTROOM FIXTURE MOUNTING LOCATIONS.

DFCM STAMP OF APPROVAL

FFKR ARCHITECTS
bogue building
730 pacific avenue
salt lake city
Utah 84104
p 801-521-6186
f 801-539-1916
ffkr com

THE ICE SHEET ADDITION
4390 HARRISON BLVD. OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

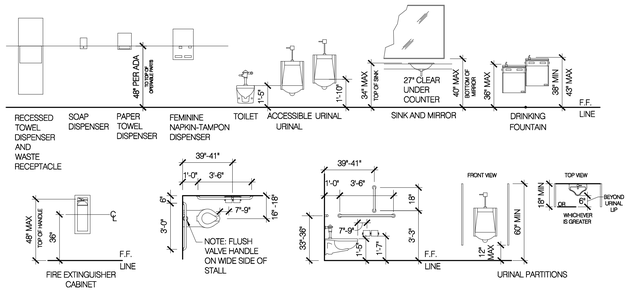
SEAL
RUSS LEE BACHMEIER
4836530-0301
LICENSED ARCHITECT

DATE	STATUS
9/4/2012	CD
10/04/2012	ADDENDUM 4

PROJECT NUMBER 11124
CAD DWG FILE
DRAWN BY PAC
CHECKED BY
SCALE AS INDICATED

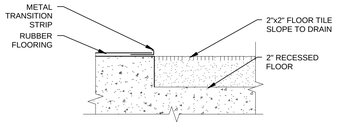
ENLARGED RESTROOM PLANS

A-400



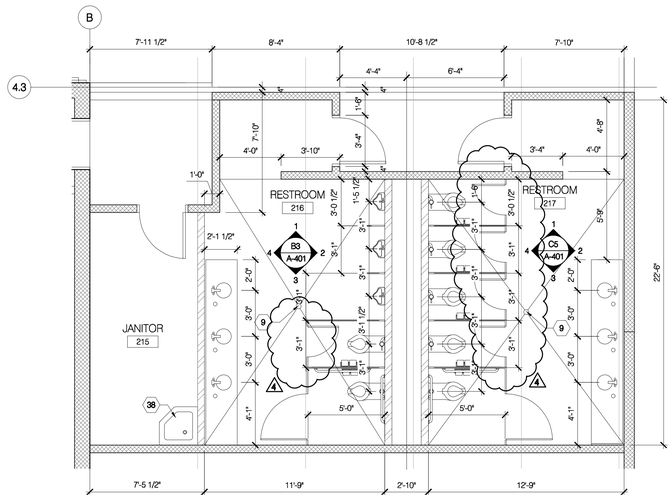
D1 FIXTURE ELEVATIONS (TYPICAL)

SCALE: 1/4" = 1'-0"



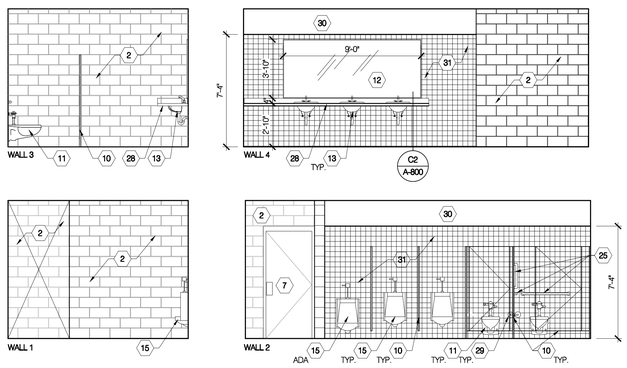
D3 FLOOR DETAIL

SCALE: 3"=1'-0"



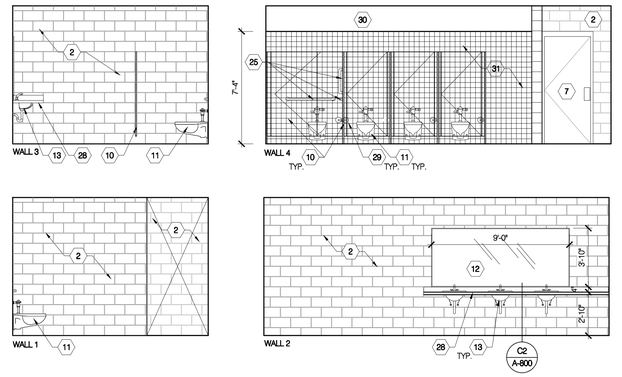
B1 ENLARGED RESTROOM #216 & #217

SCALE: 1/4"=1'-0"



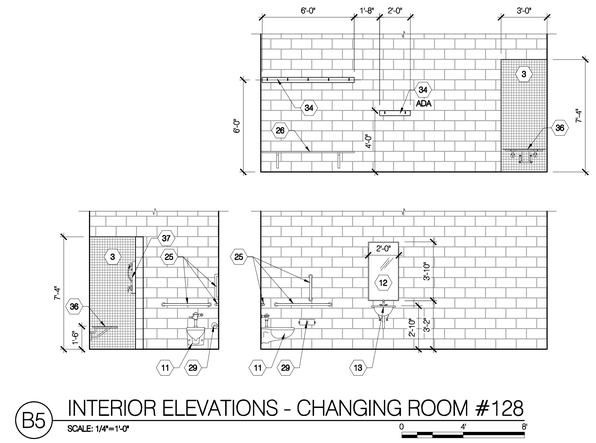
B3 INTERIOR ELEVATIONS - RESTROOM #216

SCALE: 1/4"=1'-0"



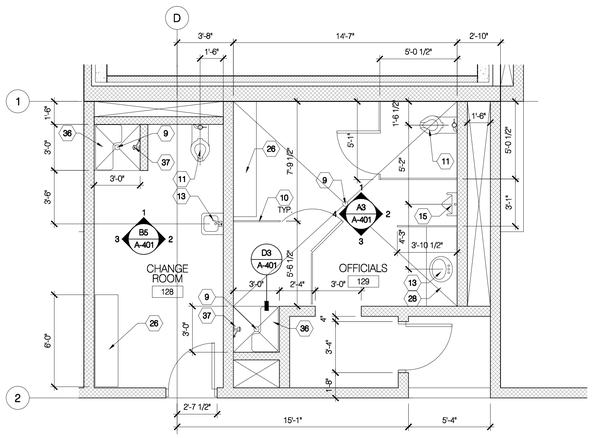
C5 INTERIOR ELEVATIONS - RESTROOM #216

SCALE: 1/4"=1'-0"



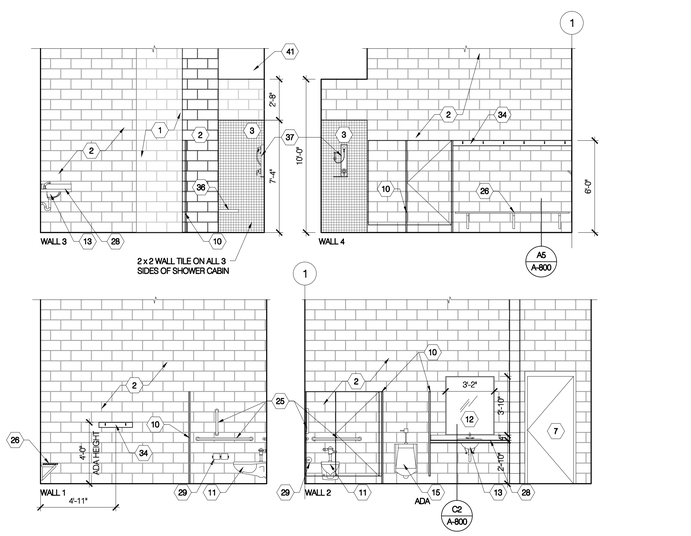
B5 INTERIOR ELEVATIONS - CHANGING ROOM #128

SCALE: 1/4"=1'-0"



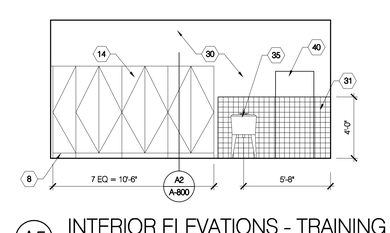
A1 ENLARGED OFFICIALS ROOM #129

SCALE: 1/4"=1'-0"



A3 INTERIOR ELEVATIONS - OFFICIALS ROOM #129

SCALE: 1/4"=1'-0"



A5 INTERIOR ELEVATIONS - TRAINING ROOM #211

SCALE: 1/4"=1'-0"

REFERENCE NOTES

1. CMU WALL, SEE FLOOR PLANS
2. CMU WALL, EPOXY PAINTED.
3. CMU WALL, TILED (2x2 CER. TILE)
4. BASE CABINET
5. WALL CABINET
6. REFRIGERATOR (N.I.C.)
7. SCHEDULED DOOR
8. WALL BASE
9. FLOOR DRAIN, SEE PLUMBING.
10. PAINTED STEEL TOILET PARTITION
11. WALL MOUNTED TOILET, SEE PLUMBING.
12. MIRROR
13. SINK, SEE: PLUMBING.
14. MILLWORK SEE SHEET A-800.
15. URINAL, SEE PLUMBING.
16. DRINKING FOUNTAIN, SEE PLUMBING.
17. ROLL-UP METAL PARTITION
18. N.I.C. (NOT IN CONTRACT)
19. WATERPROOFED CONCRETE WALL
20. BUMPER, 12" x 12" x 4" THICK SECURED TO WALL OF SNOW MELT PUMP.
21. WATERPROOFING MEMBRANE
22. SLOPED STEEL CAP, CONTINUOUS.
23. CONCRETE LOW WALL.
24. SHOWER HEAD AND CONTROLS, SEE PLUMBING.
25. ADA S.S. GRAB BAR
26. TEAM ROOM BENCH, SEE: A5/ A-800
27. STRUCTURAL BEAM/TRUSS/COLUMN, SEE: STRUCTURAL DWGS.
28. LAMINATE COUNTER, SEE: MILLWORK DWGS
29. TOILET PAPER DISPENSER BY OWNER.
30. FRAMED GYPSUM WALL (PAINTED)
31. FRAMED GYPSUM WALL TILED (4 x4 CER. TILE)
32. LOCKERS
33. CONCRETE / EPOXY PAINTED
34. ¾" THICK x 4" HIGH PAINTED STEEL PLATE (CONT.) W/ ½" DIA x 3" LONG HOOKS WELDED AT 16" O.C.
35. UTILITY SINK SEE: PLUMBING DRAWINGS
36. ADA FOLDING BENCH
37. ADA COMBINATION SHOWER HEAD
38. MOP SINK, SEE PLUMBING.
39. WALL MOUNTED BABY CHANGING STATION
40. ICE MAKER - BY OWNER
41. FRAMED GYPSUM BOARD SOFFIT
42. 60" DIA ADA CLEARANCE

GENERAL NOTES

A. REFERENCE D1/A-401 FOR RESTROOM FIXTURE MOUNTING LOCATIONS.

DRCM STAMP OF APPROVAL

FFKR ARCHITECTS
bogue building
730 pacific avenue
salt lake city
Utah 84104
p 801-521-6186
f 801-539-1916
ffkr com

THE ICE SHEET ADDITION
4390 HARRISON BLVD. OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

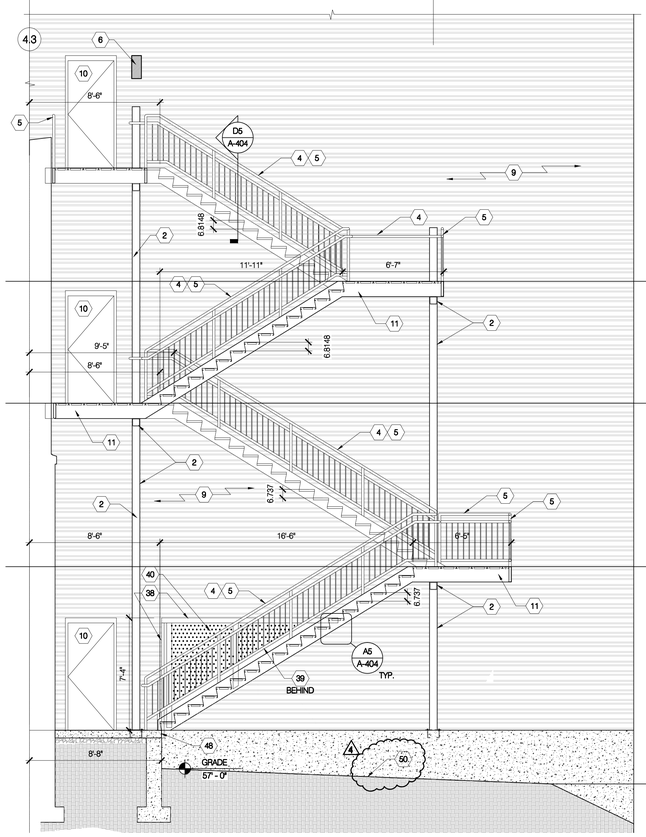
SEAL
STATE OF UTAH
RUSS LEE BACHMEIER
4836830-0301
9-4-2012
LICENSED ARCHITECT

DATE	STATUS
9/4/2012	CD
10/04/2012	ADDENDUM 1

PROJECT NUMBER 11124
CAD DWG FILE
DRAWN BY PAC
CHECKED BY
SCALE AS INDICATED

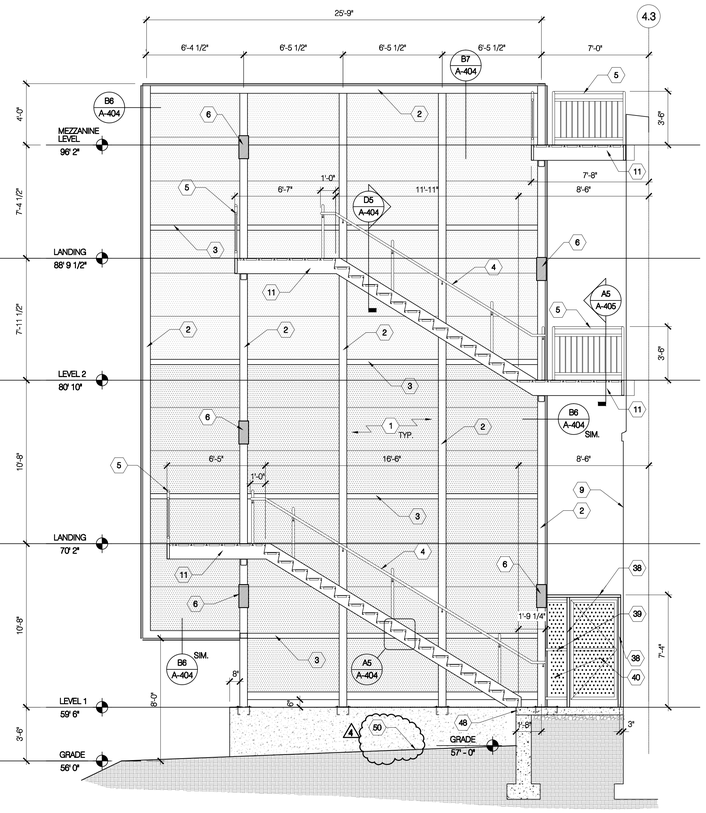
ENLARGED RESTROOM PLANS

A-401



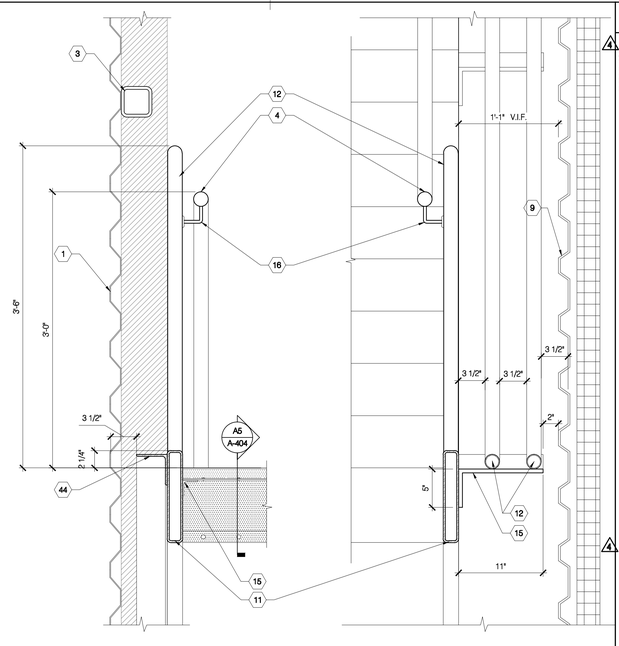
C1 STAIR #4 SECTION

SCALE 1/4"=1'-0"



C3 STAIR #4 SECTION - STAIR SCREEN

SCALE 1/4"=1'-0"



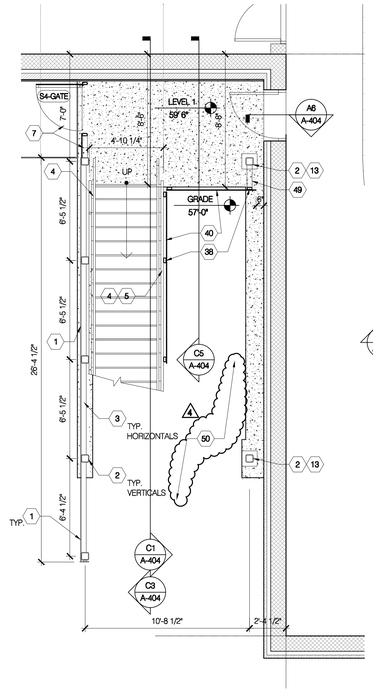
D5 STAIR #4 SECTION - STAIR

SCALE 1 1/2"=1'-0"

REFERENCE NOTES

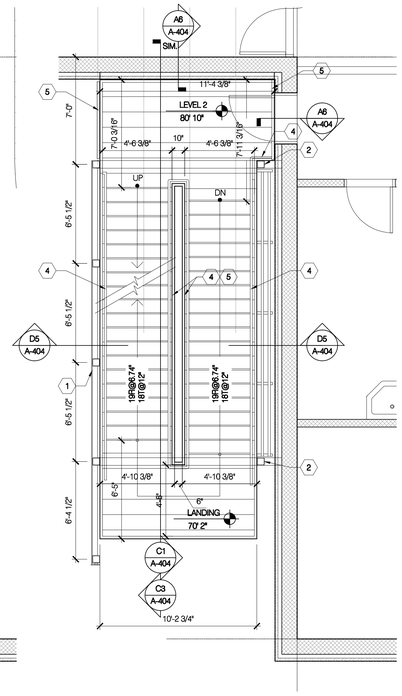
4 1. CORRUGATED & PERFORATED GALVANIZED METAL PANEL WITH 5/16" DIA. DIAGONAL HOLES 7/16" CENTER, 47% OPEN / 20 ga.
2. GALVANIZED 6 x 6 x 1/4" HSS, SEE STRUCTURAL.
3. GALVANIZED 4 x 4 x 1/4" HSS, SEE STRUCTURAL.
4. GALVANIZED 1 1/2" STEEL PIPE HANDRAIL
5. GALVANIZED STEEL GUARDRAIL
6. LIGHTING FIXTURE, SEE ELECTRICAL
7. GALVANIZED STEEL SECURITY GATE
8. CONCRETE STAIRS, SEE B5/A-404
9. FACE OF BUILDING
10. EXTERIOR DOOR, SEE DOOR SCHEDULE
11. 12 x 2 GALVANIZED TUBE STEEL STRINGER
12. GALVANIZED 1 1/2" STEEL PIPE
13. GALVANIZED BASE PLATE, SEE STRUCTURAL.
14. PERFORATED GALVANIZED METAL PLANKS
15. GALVANIZED STEEL SUPPORT ANGLE, SEE: STRUCTURAL.
16. GALVANIZED STEEL HANDRAIL BRACKET
17. PERFORATED GALVANIZED METAL RISER
18. SCHEDULED DOOR
19. THRESHOLD
20. GALVANIZED STEEL PLATE, SEE: STRUCTURAL
21. 1" x 3" GALVANIZED STEEL TUBE
22. GALVANIZED CORRUGATED PANEL, 7.2 MBCI
23. 1 1/2" GALVANIZED PAINTED STEEL STANDARD PIPE HANDRAIL
24. STRUCTURAL COLUMN/BEAM, SEE STRUCTURAL
25. 12"x2" GALVANIZED TUBE STEEL STRINGER
26. 6" CMU
27. 8" CMU
28. 12" CMU
29. BROKEN BACK BEAM, SEE: STRUCTURAL
30. EXPANSION JOINT
31. CONCRETE FLOOR SLAB, SEE: STRUCTURAL
32. DRINKING FOUNTAINS, SEE: PLUMBING
33. FIREPROOFING
34. FORMED GALVANIZED STEEL PAN TREAD AND RISER
35. 5/8" GYPSUM BOARD
36. 3 5/8" METAL STUD
37. 1 HR. RATED CEILING - UL# U415
38. 4" x 2" GALVANIZED TUBE STEEL
39. 2" x 2" GALVANIZED TUBE STEEL
4 40. PERFORATED FLAT GALVANIZED METAL PANEL WITH 1/2" DIA. / 1/16" STAGG. CENTER HOLES / 16 ga.
41. SCHEDULE
42. REMOVABLE GALVANIZED STEEL GUARDRAIL
43. EDGE OF SLAB ON GRADE
44. GALVANIZED STEEL CLOSURE ANGLE 4" X 4" X 1/8"
45. CONCRETE STAIR TREAD SAFETY GROOVES
46. "CH" STEEL STUD
47. 1" GYPSUM LINER PANEL
48. 4" X 4" X 1/4" CONT. GALAVNIZED ANGLE / INBEDED AT THE CONCRETE EDGE
49. 2" X 4" GALVANIZED BRACE AT TOP MID AND BOTTOM
4 50. LANDSCAPING

MACH GATE S-4 HORIZONTAL LOCATIONS



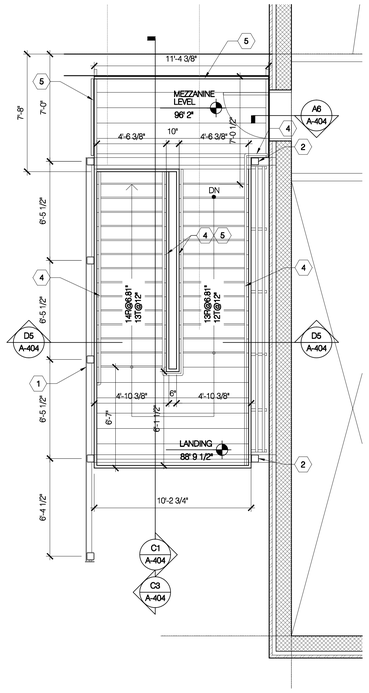
A1 STAIR #4 PLAN - LEVEL 1

SCALE 1/4"=1'-0"



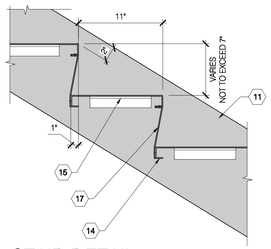
A2 STAIR #4 PLAN - LEVEL 2

SCALE 1/4"=1'-0"



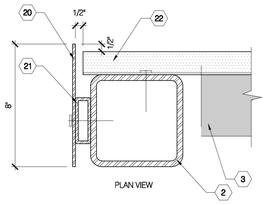
A3 STAIR #4 PLAN - MEZZANINE LEVEL

SCALE 1/4"=1'-0"



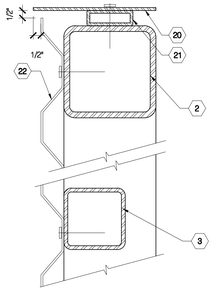
A5 STAIR DETAIL

1 1/2" = 1'-0"



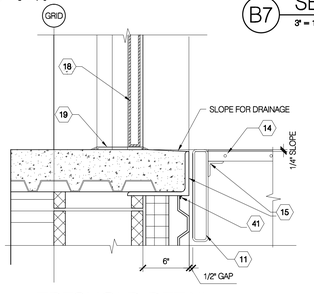
B6 SCREEN ATTACHMENT PLAN DETAIL

3" = 1'-0"



B7 SCREEN ATTACHMENT SECTION DETAIL

3" = 1'-0"



A6 TRESHOLD DETAIL

1 1/2" = 1'-0"

DFCM STAMP OF APPROVAL

FFKR ARCHITECTS

bogue building
730 pacific avenue
salt lake city
Utah 84104

p 801-521-6186
f 801-539-1916
ffkr com

THE ICE SHEET ADDITION
4390 HARRISON BLVD. OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

SEAL

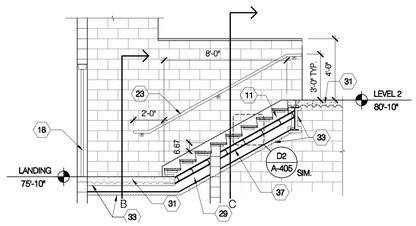
STATE OF UTAH
RUSS LEE BACHMEIER
163930-0301
LICENSED ARCHITECT
9.4.2012

DATE	STATUS
9/4/2012	CD
10/04/2012	ADDENDUM 4

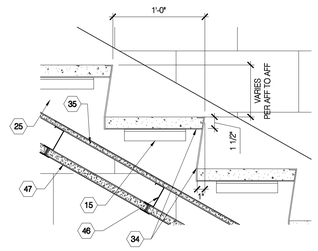
PROJECT NUMBER	11124
CAD DWG FILE	
DRAWN BY	XXX
CHECKED BY	
SCALE	AS INDICATED

ENLARGED PLANS - STAIR #4

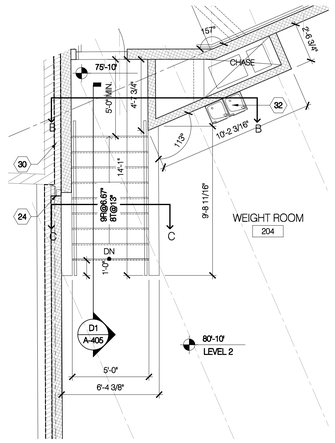
A-404



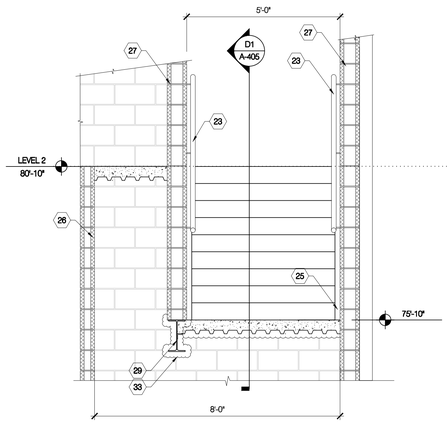
D1 STAIR #5 SECTION
SCALE 1/4"=1'-0" 0 8' 16'



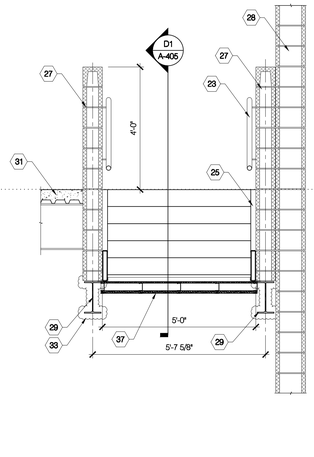
D2 STAIR DETAIL
SCALE 1 1/2"=1'-0" 0 6" 1'



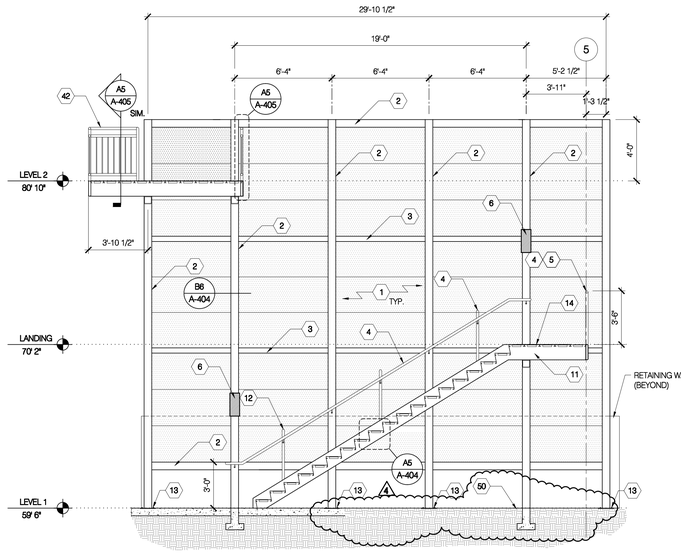
C1 STAIR #5 PLAN - LEVEL 2
SCALE 1/4"=1'-0" 0 8' 16'



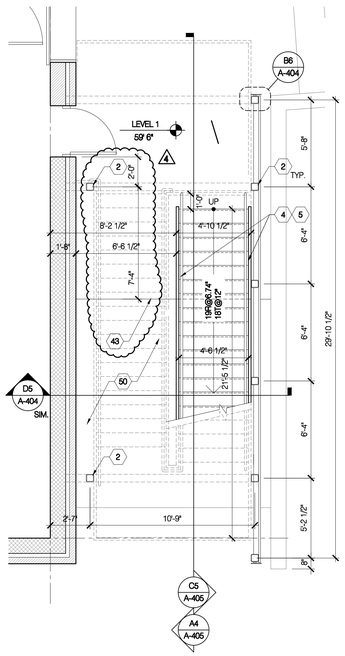
C2 STAIR #5 PLAN - SECTION - B-B
SCALE 1/2"=1'-0"



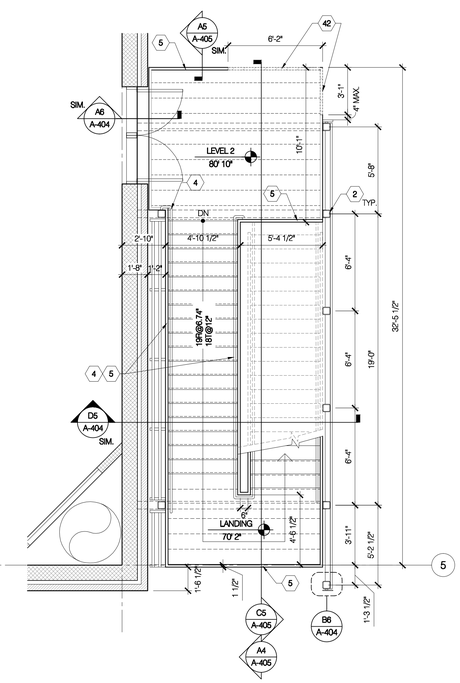
C3 STAIR #5 PLAN - SECTION C-C
SCALE 1/2"=1'-0"



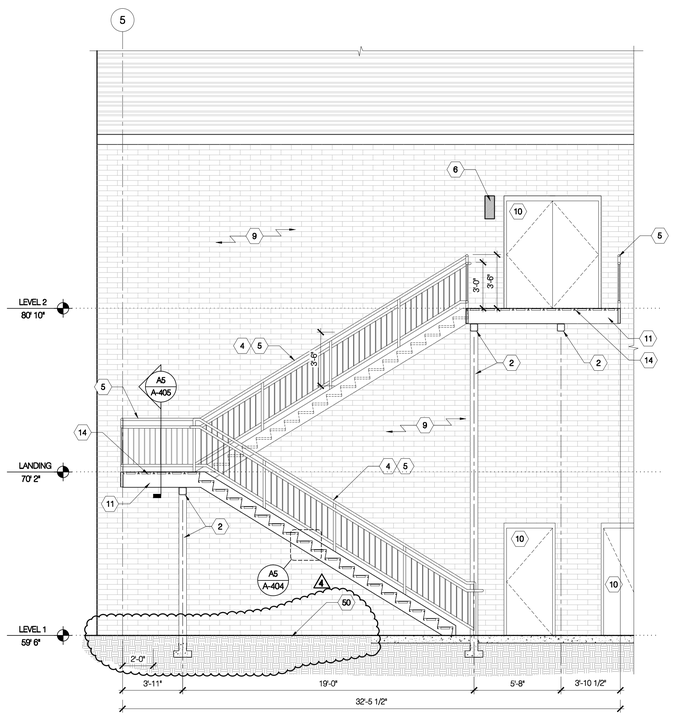
C5 STAIR #3 - SECTION
SCALE 1/4"=1'-0" 0 8' 16'



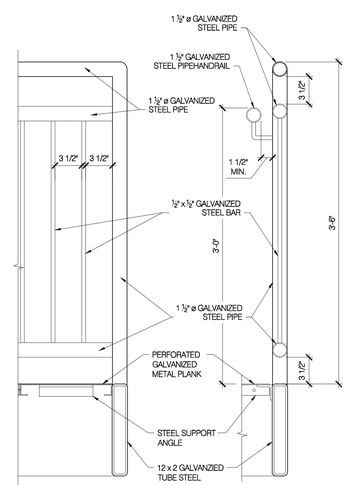
A1 STAIR #3 - LEVEL 1
SCALE 1/4"=1'-0" 0 8' 16'



A2 STAIR #3 - LEVEL 2
SCALE 1/4"=1'-0" 0 8' 16'



A4 STAIR #3 - SECTION
SCALE 1/4"=1'-0" 0 8' 16'



A5 GUARDRAIL DETAIL
1 1/2" = 1'-0" 0 6" 1'

REFERENCE NOTES

1. CORRUGATED & PERFORATED GALVANIZED METAL PANEL WITH 5/16" DIA . DIAGONAL HOLES 7/16" CENTER, 47% OPEN / 20 ga.
2. GALVANIZED 6 x 6 x 1/4" HSS, SEE STRUCTURAL.
3. GALVANIZED 4 x 4 x 1/4" HSS, SEE STRUCTURAL.
4. GALVANIZED 1 1/2" STEEL PIPE HANDRAIL
5. GALVANIZED STEEL GUARDRAIL
6. LIGHTING FIXTURE, SEE ELECTRICAL
7. GALVANIZED STEEL SECURITY GATE
8. CONCRETE STAIRS, SEE B5/A-404
9. FACE OF BUILDING
10. EXTERIOR DOOR, SEE DOOR SCHEDULE
11. 12 x 2 GALVANIZED TUBE STEEL STRINGER
12. GALVANIZED 1 1/2" STEEL PIPE
13. GALVANIZED BASE PLATE, SEE STRUCTURAL.
14. PERFORATED GALVANIZED METAL PLANKS
15. GALVANIZED STEEL SUPPORT ANGLE, SEE: STRUCTURAL.
16. GALVANIZED STEEL HANDRAIL BRACKET
17. PERFORATED GALVANIZED METAL RISER
18. SCHEDULED DOOR
19. THRESHOLD
20. GALVANIZED STEEL PLATE, SEE: STRUCTURAL
21. 1" x 3" GALVANIZED STEEL TUBE
22. GALVANIZED CORRUGATED PANEL: 7.2 MBCI
23. 1 1/2" GALVANIZED PAINTED STEEL STANDARD PIPE HANDRAIL
24. STRUCTURAL COLUMN/BEAM, SEE STRUCTURAL
25. 12"x2" GALVANIZED TUBE STEEL STRINGER
26. 6" CMU
27. 8" CMU
28. 12" CMU
29. BROKEN BACK BEAM, SEE: STRUCTURAL
30. EXPANSION JOINT
31. CONCRETE FLOOR SLAB, SEE: STRUCTURAL
32. DRINKING FOUNTAINS, SEE: PLUMBING
33. FIREPROOFING
34. FORMED GALVANIZED STEEL PAN TREAD AND RISER
35. 5/8" GYPSUM BOARD
36. 3 5/8" METAL STUD
37. 1 HR. RATED CEILING - UL# U415
38. 4" x 2" GALVANIZED TUBE STEEL
39. 2" x 2" GALVANIZED TUBE STEEL
40. PERFORATED FLAT GALVANIZED METAL PANEL WITH 1/2" DIA . 1 1/16" STAGG. CENTER HOLES / 16 ga.
41. SCHOOL
42. REMOVABLE GALVANIZED STEEL GUARDRAIL
43. EDGE OF SLAB ON GRADE
44. GALVANIZED STEEL CLOSURE ANGLE 4" X 4" X 1/8"
45. CONCRETE STAIR TREAD SAFETY GROOVES
46. "CH" STEEL STUD
47. 1" GYPSUM LINER PANEL
48. 4" X 4" X 1/4" CONT. GALAVNIZED ANGLE / INBEDED AT THE CONCRETE EDGE
49. 2" X 4" GALVANIZED BRACE AT TOP MID AND BOTTOM MAGULGATES 4 HORIZONTAL LOCATIONS
50. LANDSCAPING

GENERAL NOTES

A. GALVANIZE ALL OUTSIDE STEEL.

DRCM STAMP OF APPROVAL

FFKR ARCHITECTS

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730 pacific avenue
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Utah 84104

801-521-6186
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ffkr com

THE ICE SHEET ADDITION
4390 HARRISON BLVD. OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

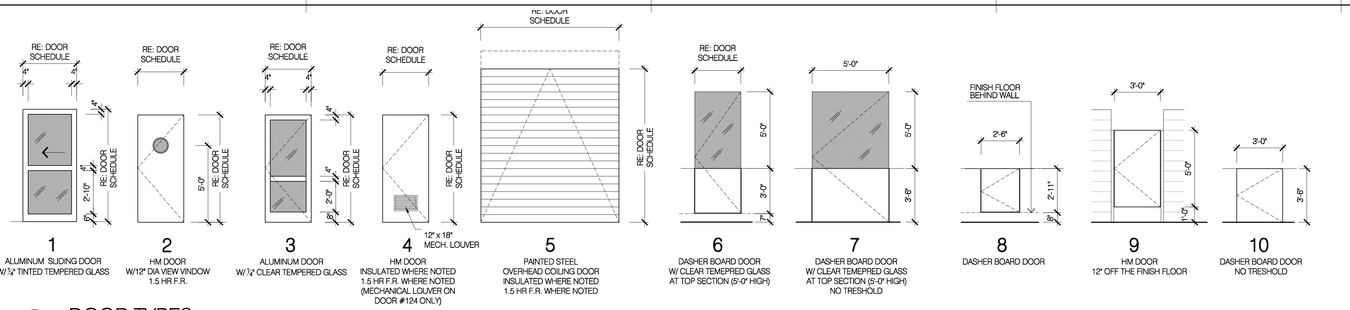
SEAL
RUSS LEE BACHMEIER
163853O-0301
LICENSED ARCHITECT
9.4.2012

DATE	STATUS
9/4/2012	CD
10/04/2012	ADDENDUM 1

PROJECT NUMBER 11124
CAD DWG FILE
DRAWN BY XXX
CHECKED BY
SCALE AS INDICATED

ENLARGED STAIR #3 & #5 PLANS

A-405



1 ALUMINUM SLIDING DOOR W/ ¾" TINTED TEMPERED GLASS

2 HM DOOR W/12" DIA VIEW WINDOW 1.5 HR F.R.

3 ALUMINUM DOOR W/ ¼" CLEAR TEMPERED GLASS

4 HM DOOR INSULATED WHERE NOTED 1.5 HR F.R. WHERE NOTED (MECHANICAL LOUVER ON DOOR #124 ONLY)

5 PAINTED STEEL OVERHEAD COILING DOOR INSULATED WHERE NOTED 1.5 HR F.R. WHERE NOTED

6 DASHER BOARD DOOR W/ CLEAR TEMEPRED GLASS AT TOP SECTION (5'-0" HIGH)

7 DASHER BOARD DOOR W/ CLEAR TEMEPRED GLASS AT TOP SECTION (5'-0" HIGH) NO TRESHOLD

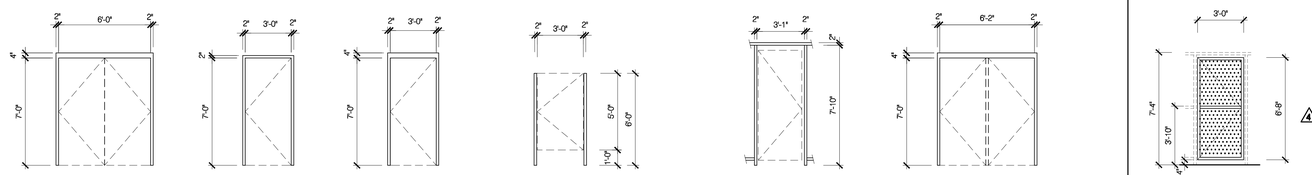
8 DASHER BOARD DOOR

9 HM DOOR 12" OFF THE FINISH FLOOR

10 DASHER BOARD DOOR NO TRESHOLD

E1 DOOR TYPES

SCALE: 1/4" = 1'-0"



A HOLLOW METAL FRAME

B HOLLOW METAL FRAME

C HOLLOW METAL FRAME

D HOLLOW METAL FRAME

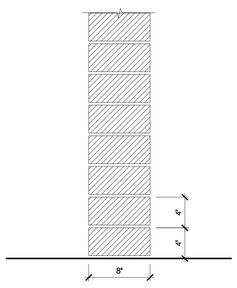
E GALVANIZED HSS STEEL (4" X 2") FRAME

F HOLLOW METAL FRAME W/ REMOVABLE MULLION

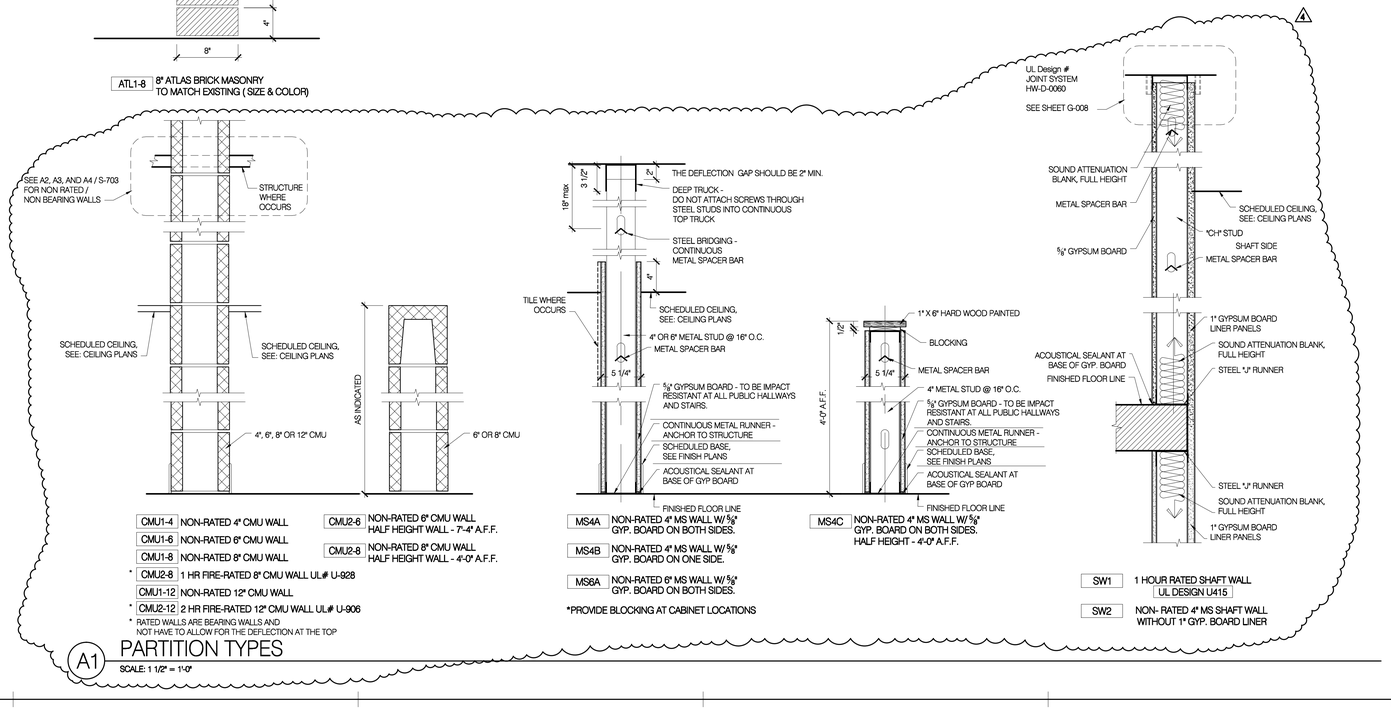
11 2x2 GALVANIZED METAL TUBE FRAME WITH PAINTED FLAT PERFORATED METAL PLATE OVER EXTERIOR SIDE OF IT

D1 DOOR FRAME TYPES

SCALE: 1/4" = 1'-0"



ATL1-8 8" ATLAS BRICK MASONRY TO MATCH EXISTING (SIZE & COLOR)



CMU1-4 NON-RATED 4" CMU WALL

CMU1-6 NON-RATED 6" CMU WALL

CMU1-8 NON-RATED 8" CMU WALL

* CMU2-8 1 HR FIRE-RATED 8" CMU WALL UL# U-928

CMU1-12 NON-RATED 12" CMU WALL

* CMU2-12 2 HR FIRE-RATED 12" CMU WALL UL# U-906

* RATED WALLS ARE BEARING WALLS AND NOT HAVE TO ALLOW FOR THE DEFLECTION AT THE TOP

CMU2-6 NON-RATED 6" CMU WALL HALF HEIGHT WALL - 7'-4" A.F.F.

CMU2-8 NON-RATED 8" CMU WALL HALF HEIGHT WALL - 4'-0" A.F.F.

MS4A NON-RATED 4" MS WALL W/ ⅝" GYP. BOARD ON BOTH SIDES.

MS4B NON-RATED 4" MS WALL W/ ⅝" GYP. BOARD ON ONE SIDE.

MS6A NON-RATED 6" MS WALL W/ ⅝" GYP. BOARD ON BOTH SIDES.

*PROVIDE BLOCKING AT CABINET LOCATIONS

MS4C NON-RATED 4" MS WALL W/ ⅝" GYP. BOARD ON BOTH SIDES. HALF HEIGHT - 4'-0" A.F.F.

SW1 1 HOUR RATED SHAFT WALL UL DESIGN U415

SW2 NON- RATED 4" MS SHAFT WALL WITHOUT 1" GYP. BOARD LINER

A1 PARTITION TYPES

SCALE: 1 1/2" = 1'-0"

DOOR AND FRAME SCHEDULE

DOOR LOCATION	DOOR NO.	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR SIZE THICKNESS	DOOR TYPE	FRAME TYPE	FRAME DETAIL - ALL DETAILS REFERENCE THIS DRAWING EXCEPT AS NOTED HEAD	FRAME DETAIL JAMB	FRAME DETAIL THRESHOLD	FIRE RATING LABEL	HARDWARE GROUP	NOTES
VESTIBULE	101A	2 x 3'-8"	7'-4"		1	-	A5/A-501	A4/A-501	A5/A-501		01	FOR FRAME SEE WIND. TYPE 1
VESTIBULE	101B	2 x 3'-0"	7'-0"		2	A	D2/A-501	D2/A-501	-	1.5 HR	06	
VESTIBULE	101C	2 x 3'-8"	7'-4"		1	-	C5/1-501	A4-A-501	C5/A-501		01	FOR FRAME SEE WIND TYPE 2
VESTIBULE	101D	3'-8"	7'-4"		1	-	C5/A-501	A4/A-501	-		01	FOR FRAME SEE WIND. TYPE 2
LOBBY	102	2 x 3'-0"	7'-0"		2	A	D2/A-501	D2/A-501	-	1.5 HR	07	
LOBBY	102A	10'-8	7'-8"		5	-	-	-	-	1.5 HR	01	
PRO-SHOP	103A	2 x 3'-0"	7'-2"		3	-	B6/A-601	B4-A-601	-		AL-01	FOR FRAME SEE WIND. TYPE 7
PRO-SHOP	103B	3'-0"	7'-0"		3	-	-	-	-		AL-03	FOR FRAME SEE WIND. TYPE 8
PRO-SHOP / EX	103C	3'-0"	7'-0"		3	-	B6/A-601	E1/A-501	-		AL-04	FOR FRAME SEE WIND. TYPE 10
STORAGE	104	3'-0"	7'-0"		4	B	A2/A-601	A2/A-601	-		11	
AUDIO	105	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		12	
SERVING	108A	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		15	
SERVING	108B	3'-0"	7'-0"		4	C	D2/A-501	D2/A501	-		16	
PARTY ROOM	109	2 x 3'-0"	7'-2"		3	-	E1/A-501	E1/A-501	-		AL-02	FOR FRAME SEE WIND. TYPE 5
RESTOOM	110	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-			
RESURFACER	111A	3'-0"	7'-0"		4	C	D1/A-501	D3/A-501	-		02	INSULATED
RESURFACER	111B	10'-0"	10'-0"		5	-	E4/A-501	D4/A-501	-		01	INSULATED
RESURFACER	111C	10'-0"	10'-0"		5	-	-	-	-	1.5 HR	01	
RESURFACER	111D	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-	1.5 HR	08	
REFRIG. ROOM	112	2 x 3'-0"	7'-0"		2	A	-	-	-		24	W/O WINDOWS
CIRCULATION	113A	3'-0"	7'-0"		4	C	C1/A-501	E3/A-501	-	1.5 HR	23	INSULATED
CIRCULATION	113B	2'-6"	3'-0"	6"	6	-	-	-	-		01	BY DASHER BOARD MFGR.
CIRCULATION	119A	10'-0"	10'-0"		5	-	E4/A-501	D4/A-501	-		01	INSULATED
CIRCULATION	119B	3'-0"	7'-0"		4	C	D1/A-501	D3/A-501	-		03	INSULATED
CIRCULATION	119C	2'-6"	3'-0"	6"	6	-	-	-	-		01	BY DASHER BOARD MFGR.
ICE SHEET	120A	3'-0"	8'-0"	6"	6	-	-	-	-		01	BY DASHER BOARD MFGR.
ICE SHEET	120B	3'-0"	8'-0"	6"	6	-	-	-	-		01	BY DASHER BOARD MFGR.
ICE SHEET	120C	3'-0"	8'-0"	6"	6	-	-	-	-		01	BY DASHER BOARD MFGR.
ICE SHEET	120D	2 x 5'-0"	8'-6"	6"	7	-	-	-	-		01	BY DASHER BOARD MFGR.
ICE SHEET	120E	2 x 5'-0"	8'-6"	6"	7	-	-	-	-		01	BY DASHER BOARD MFGR.
ICE SHEET	120F	3'-6"	8'-0"	6"	6	-	-	-	-		01	BY DASHER BOARD MFGR.
ICE SHEET	120G	2'-6"	2'-11"	6"	8	-	-	-	-		01	BY DASHER BOARD MFGR.
ICE SHEET	120J	2'-6"	2'-11"	6"	8	-	-	-	-		01	BY DASHER BOARD MFGR.
ICE SHEET	120K	2'-6"	2-11"	6"	8	-	-	-	-		01	BY DASHER BOARD MFGR.
ICE SHEET	120L	2'-6"	2'-11"	6"	8	-	-	-	-		01	BY DASHER BOARD MFGR.
ICE SHEET	120M	2'-6"	2'-11"	6"	8	-	-	-	-		01	BY DASHER BOARD MFGR.
ICE SHEET	120N	2'-6"	2'-11"	6"	8	-	-	-	-		01	BY DASHER BOARD MFGR.
CIRCULATION	121A	3'-0"	3'-6"	6"	10	-	-	-	-		01	BY DASHER BOARD MFGR.
CIRCULATION	121B	3'-0"	3'-6"	6"	10	-	-	-	-		01	BY DASHER BOARD MFGR.
JANITOR	122	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-	1 HR	14	
TEAM ROOM	123	3'-0"	7'-0"		4	C	D2/A-501	D2/A501	-		17	
ELECTRICAL	124	3'-0"	7'-0"		4	C	D2/A-501	D2/A501	-		15	W/ LOUVER, SEE: MECH.
RESTROOM	125A	3'-0"	5'-0"		9	D	N/A	D2/A-501	N/A		21	
RESTROOM	125B	3'-0"	5'-0"		9	D	N/A	D2/A-501	N/A		21	
RESTROOM	126A	3'-0"	5'-0"		9	D	N/A	D2/A-501	N/A		21	
RESTROOM	126B	3'-0"	5'-0"		9	D	N/A	D2/A-501	N/A		21	
TEAM ROOM	127	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		17	
CHANGE ROOM	128	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		18	
OFFICIALS	129	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		20	
TEAM ROOM	130	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		17	
RESTROOM	131A	3'-0"	5'-0"		9	D	N/A	D2/A-501	N/A		21	
RESTROOM	131B	3'-0"	5'-0"		9	D	N/A	D2/A-501	N/A		21	
RESTROOM	132A	3'-0"	5'-0"		9	D	N/A	D2/A-501	N/A		21	
RESTROOM	132B	3'-0"	5'-0"		9	D	N/A	D2/A-501	N/A		21	
TEAM ROOM	133	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		17	
STORAGE	134	2 x 3'-0"	7'-0"		4	A	D2/A-501	D2/A-501	-		13	
STAIR #4	S4-GATE	3'-0"	6'-8"		11	E	-	-	-		04	
OFFICE	201	3'-0"	7'-0"		4	B	A2/A-601	A2/A-601	-		16	
OFFICE	202	3'-0"	7'-0"		4	B	A2/A-601	A2/A501	-		16	
OFFICE	203	3'-0"	7'-0"		4	B	A2/A-601	A2/A-601	-		16	
WEIGHT ROOM	204A	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		22	
OFFICE	205	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		16	
OFFICE	206	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		16	
OFFICE	207	3'-0"	7'-0"		4	C	D2/A501	D2/A-501	-		16	
HALL	209A	3'-0"	7'-0"		2	C	D2/A-501	D2/A-510	-	1.5 HR	09	
HALL	209B	3'-0"	7'-0"		2	A	D2/A-501	D2/A-501	-	1.5 HR	24	
ELEC. ROOM	210	3'-0"	7'-0"		4	B	A2/A-601	A2/A-601	-		11	
TRAINING. RM	211	2 x 3'-0"	7'-0"		4	A	D2/A-501	D2/A-501	-		19	
TEAM ROOM	212	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		17	
TEAM ROOM	213	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		17	
HALL	214A	2 x 3'-0"	7'-0"		2	A	D2/A-501	D2/A-501	-	1.5 HR	10	
HALL	214B	3'-0"	7'-0"		4	C	C1/A-501	E3/A-501	A6/A-404	1.5 HR	23	INSULATED
JANITOR	215	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		11	
W. RESTROOMS	216	3'-0"	7'-0"		4	C	D2/A-501	D2/A-501	-		17	
M. RESTROOMS	217	3'-0"	7'-0"		4	C	D2-A501	D2/A501	-		17	
STORAGE	218	2 x 3'-0"	7'-0"		4	A	D2/A501	D2/A501	-		13	
ACWTY AREA	219	2 x 3'-0"	7'-0"		4	F	D1/A-501	D3/A-501	A6/A-404		05	INSULATED W/ REMOVABLE MULLION
MEZZANINE	300	3'-0"	7'-0"		4	C	C1/A-501	E3/A-501	A6/A404	1.5 HR	23	INSULATED

REFERENCE NOTES

1. -

DFCM STAMP OF APPROVAL

FFKR ARCHITECTS
bogue building
730 pacific avenue
salt lake city
Utah 84104
p 801-521-6186
f 801-539-1916
ffkr com

THE ICE SHEET ADDITION
4390 HARRISON BLVD. OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

SEAL
STATE OF UTAH
RUSS LEE BACHMEIER
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9.4.2012
LICENSED ARCHITECT

DATE	STATUS
9/4/2012	CD
10/04/2012	ADDENDUM 1

PROJECT NUMBER 11124
CAD DWG FILE
DRAWN BY XXX
CHECKED BY
SCALE AS INDICATED

DOOR SCHEDULE & PARTITION TYPES

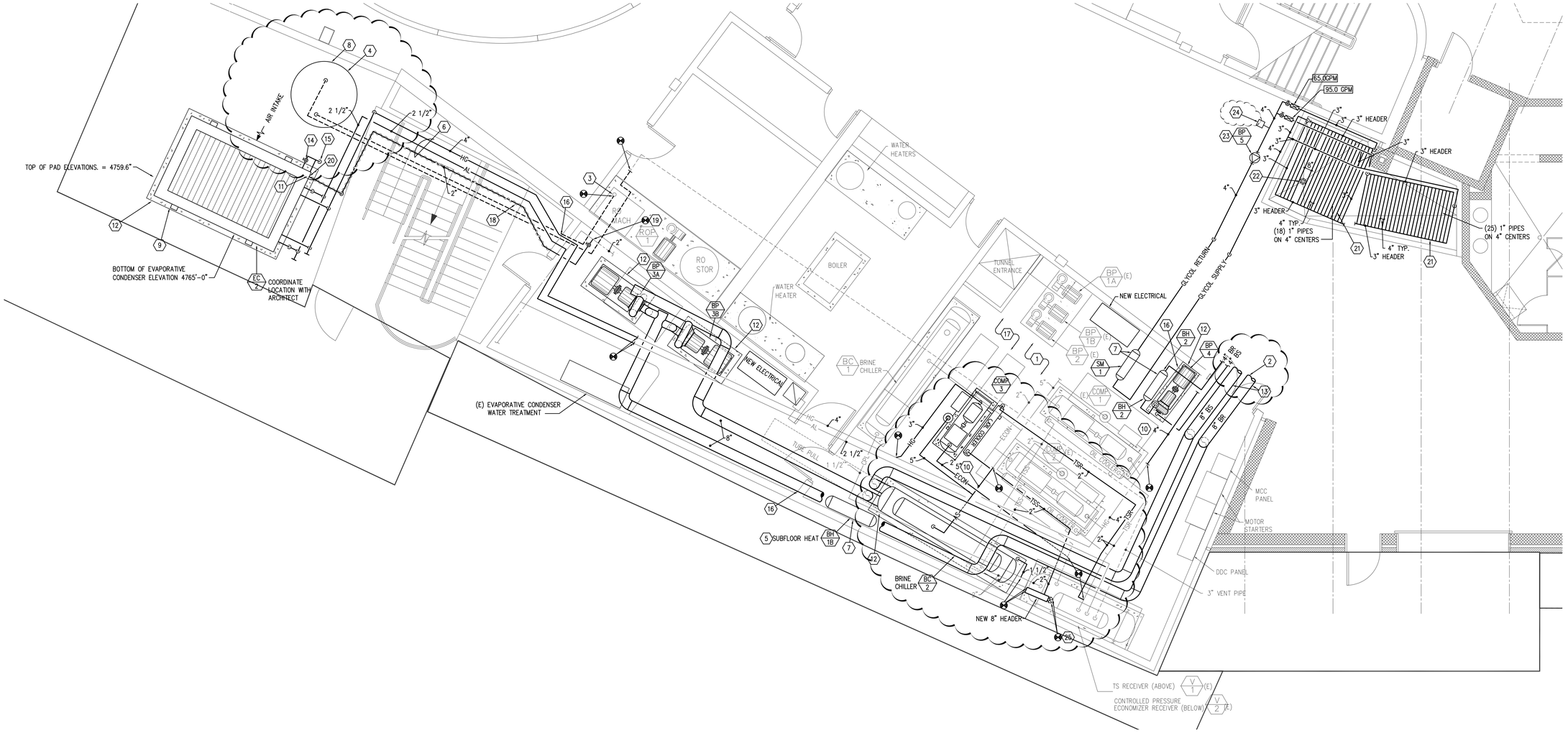
A-600

KEYED NOTES

18. PROVIDE HEAT TRACE ON MAKE-UP WATER LINE TO EVAPORATIVE CONDENSER. HEAT TRACE SHALL BE RAYCLEMXL-TRACE SXL HEAT TRAC, 5 W/ft . COORDINATE INSTALLATION WITH MANUFACTURERS RECOMMENDATIONS.
19. CONNECT TO EXISTING DCW PIPE. FIELD VERIFY EXACT SIZE AND LOCATION.
20. EVAPORATIVE CONDENSER MAKE-UP WATER CONNECTION WITH AIR GAP. COORDINATE WITH EQUIPMENT.
21. EPOXY COATED SNOWMELT GRID LOCATED IN PIT. GRID SHALL BE ASSEMBLED AS A REVERSE RETURN LOOP. MOUNT GRID 6" ABOVE BOTTOM OF PIT.
22. LEAVE ONE PIPE OUT OF SNOWMELT COIL TO ACCOMMODATE EXISTING 4" DRAIN AND OVERFLOW PIPE, FIELD VERIFY EXACT LOCATION.
23. INLINE PUMP. SEE DETAIL.
24. SNOW MELT EXPANSION TANK.
25. NEW 3" X 2" PIPE INCREASER.

KEYED NOTES

1. NOT ALL PIPING, VALVES, ACCESSORIES, ETC. ARE SHOWN ON THIS SHEET. REFER TO SHEET R-702 FOR OTHER REQUIRED PIPING, VALVES, ACCESSORIES ETC.
2. RUN PIPING THRU EXISTING WALL OPENING. REMOVE LOUVER. PATCH AND SEAL WALL OPENING TO CLOSE UP REFRIGERATION ROOM. FOR CONTINUATION OF PIPING SEE SHEET R-1
3. EXISTING PRESSURE RELIEF VENT RISES IN CHASE TO ROOF.
4. AMMONIA DIFFUSION TANK. RULE TANK 2000 GALLONS 76" DIA. X 108" TALL STEEL STORAGE TANK.
5. REPLACE EXISTING SUB FLOOR HEAT EXCHANGER WITH NEW HEAT EXCHANGER AND RE-PIPE.
6. COORDINATE ROUTING OF PIPING WITH STAIR.
7. SUPPORT HEAT EXCHANGERS. FROM EXISTING STRUCTURE
8. ANCHOR TANKS SECURELY.
9. MOUNT EVAPORATIVE CONDENSER ON PIERS. SEE STRUCTURAL PLANS.
10. EXTEND EXISTING HEADER.
11. OVERFLOW CONNECTION. MAKE OVERFLOW PIPE SAME SIZE AS CONNECTION.
12. NEW 6" CONCRETE HOUSE KEEPING PAD, TYPICAL.
13. KEEP PIPING AS HIGH AS POSSIBLE. SUPPORT FROM OVERHEAD.
14. DRAIN CONNECTION WITH DRAIN VALVE. MAKE DRAIN PIPE SAME SIZE AS CONNECTION.
15. EXTEND DRAIN/OVERFLOW PIPE TO GROUND.
16. CORE DRILL WALLS AS NECESSARY FOR NEW PENETRATIONS, TYP. SEAL OPENING AS NECESSARY.
17. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND COORDINATE WITH NEW WORK. IF ANY DISCREPANCIES ARE DISCOVERED, THEY SHALL IMMEDIATELY BE BROUGHT TO THE ENGINEERS ATTENTION BEFORE BEGINNING ANY DEMOLITION OR NEW WORK.



1 R401 REFRIGERATION ROOM PLAN
SCALE: 1/4" = 1'-0"
0' 4' 8'

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THE ICE SHEET ADDITION
4390 HARRISON BLVD. OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

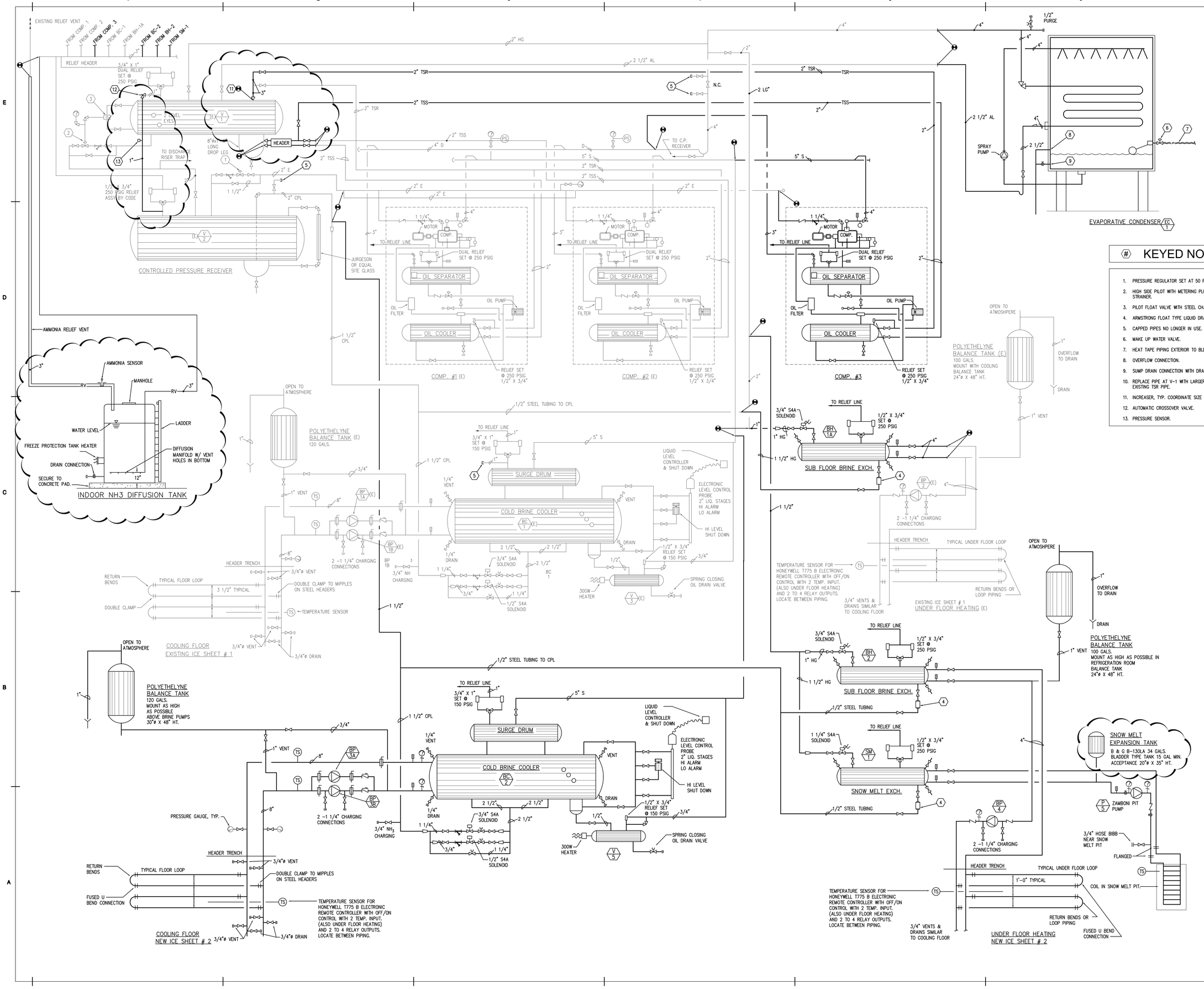
SEAL
REGISTERED PROFESSIONAL ENGINEER
No. 7715
RICHARD G. REEDER
STATE OF UTAH

DATE	STATUS
09/04/2012	CD
10/04/2012	ADDEN. 04

PROJECT NUMBER 11124
CAD DWG FILE
DRAWN BY
CHECKED BY
SCALE 1/4"=1'-0"

REFRIGERATION ROOM PLAN

R-401



KEYED NOTES

1. PRESSURE REGULATOR SET AT 50 PSIG.
2. HIGH SIDE PILOT WITH METERING PLUG AND SPRING WITH STRAINER.
3. PILOT FLOAT VALVE WITH STEEL CHAMBER.
4. ARMSTRONG FLOAT TYPE LIQUID DRAIN.
5. CAPPED PIPES NO LONGER IN USE.
6. MAKE UP WATER VALVE.
7. HEAT TAPE PIPING EXTERIOR TO BLDG.
8. OVERFLOW CONNECTION.
9. SUMP DRAIN CONNECTION WITH DRAIN VALVE.
10. REPLACE PIPE AT V-1 WITH LARGER. RE CONNECT EXISTING TSR PIPE.
11. INCREASER, TYP. COORDINATE SIZE AND CONDITIONS.
12. AUTOMATIC CROSSOVER VALVE.
13. PRESSURE SENSOR.

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VBFA Project Number:11413

THE ICE SHEET ADDITION
4390 HARRISON BLVD. OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

SEAL: REGISTERED PROFESSIONAL ENGINEER No. 7715 RICHARD G. REEDER STATE OF UTAH

DATE	STATUS
09/04/2012	CD
10/04/2012	ADDEN. 04

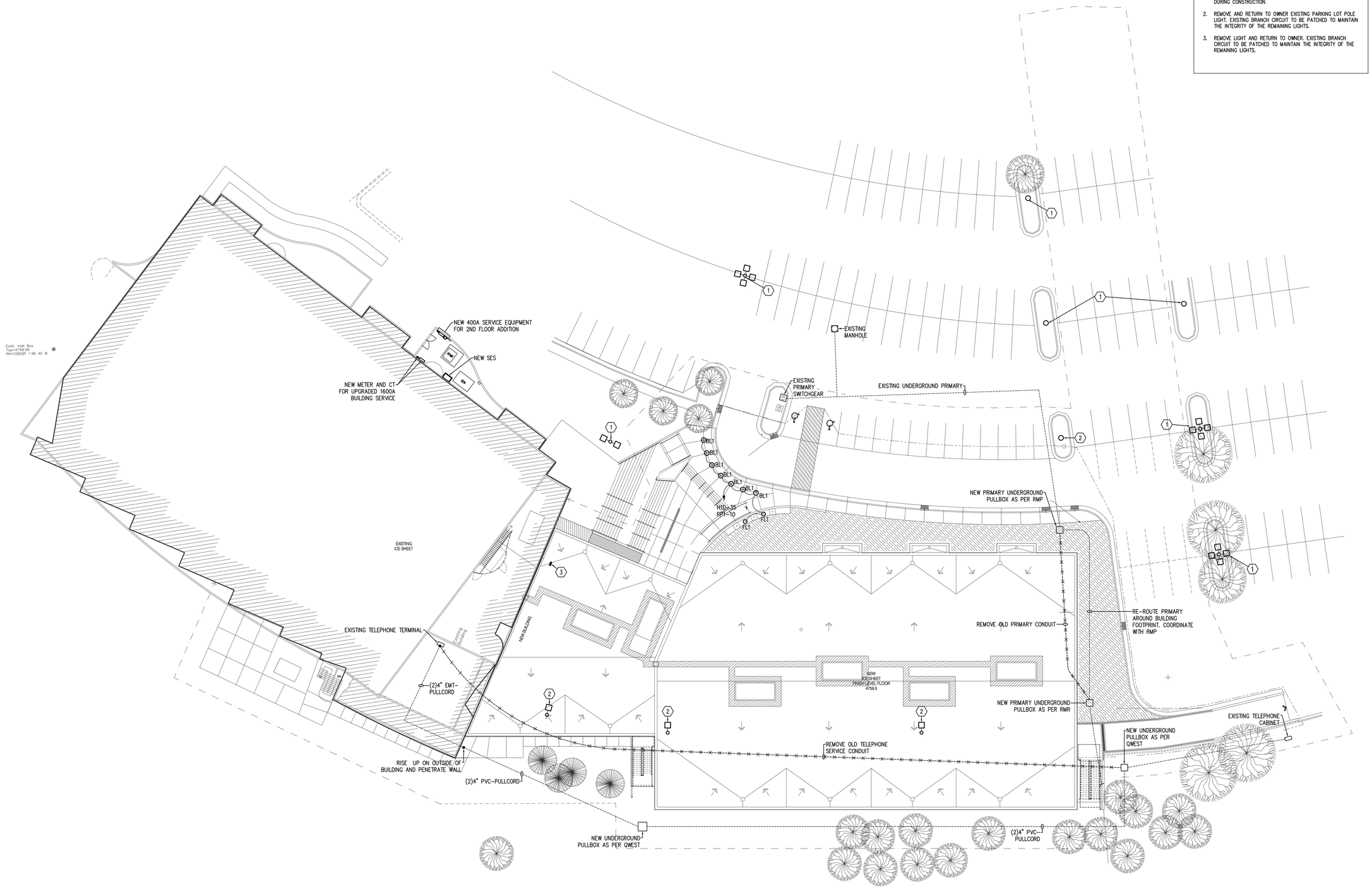
PROJECT NUMBER 11124
CAD DWG FILE
DRAWN BY
CHECKED BY
SCALE NONE

REFRIGERATION SCHEMATIC PLAN

R-702

KEYED NOTES

1. EXISTING SITE LIGHTING TO REMAIN. PROTECT FROM DAMAGE DURING CONSTRUCTION.
2. REMOVE AND RETURN TO OWNER EXISTING PARKING LOT POLE LIGHT. EXISTING BRANCH CIRCUIT TO BE PATCHED TO MAINTAIN THE INTEGRITY OF THE REMAINING LIGHTS.
3. REMOVE LIGHT AND RETURN TO OWNER. EXISTING BRANCH CIRCUIT TO BE PATCHED TO MAINTAIN THE INTEGRITY OF THE REMAINING LIGHTS.



N

1 ES101 **ELECTRICAL SITE PLAN**

SCALE: 1" = 20'-0"

0' 20' 40'

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VBFA Project Number:11913

THE ICE SHEET ADDITION
4390 HARRISON BLVD. OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

SEAL

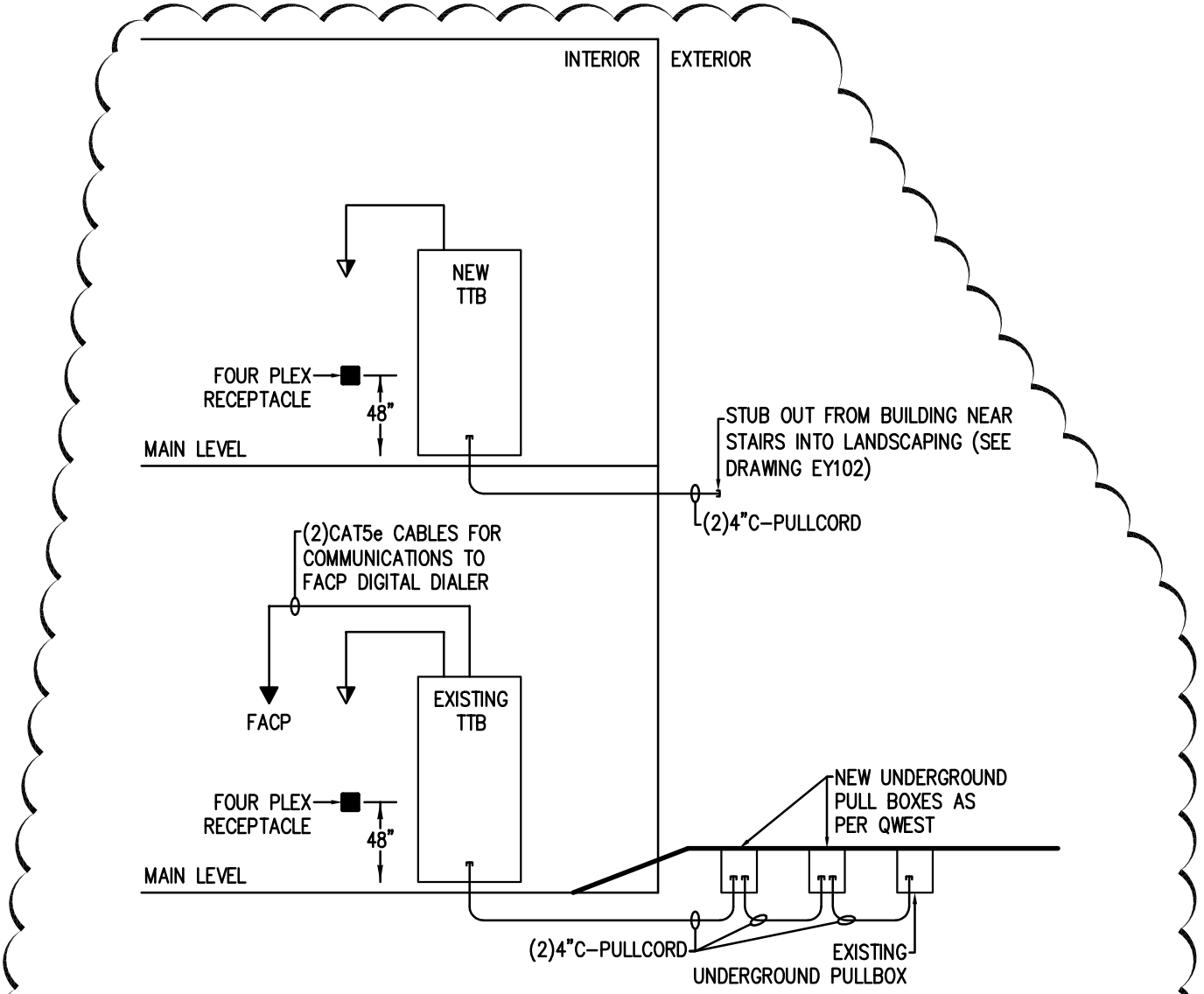
REGISTERED PROFESSIONAL ENGINEER
No. 7945859-2202
DAVID W. STEWARD
STATE OF UTAH

DATE	STATUS
09/04/2012	CD
1 10/03/2012	ADD. 04

PROJECT NUMBER	11124
CAD DWG FILE	
DRAWN BY	BRT/HA
CHECKED BY	DWS
SCALE	1"=20'-0"

ELECTRICAL SITE PLAN
1

ES101



NOTES:

1. WHERE ELBOW AND/OR SWEEPS PENETRATE FOUNDATION OR FLOOR SLABS THE CONDUIT SHALL BE GALVANIZED RIGID CONDUIT (GRC) WRAPPED WITH CORROSION RESISTANCE TAP.
2. CONDUITS SHALL BE STUBBED UP THROUGH THE FLOOR TO A HEIGHT OF 6" ABOVE FLOOR LEVEL AND CAPPED WITH PLASTIC BUSHINGS.
3. PROVIDE A 4'x8'x3/4" PLYWOOD BACKBOARD PAINTED WITH FIRE RESISTIVE COATING FOR BOTH THE TELEPHONE TERMINAL BOARD (TTB) FOR WEBER IT TTB.
4. PROVIDE A #6 GREEN GROUNDING CONDUCTOR FROM THE TTB PLYWOOD BACKBOARD TO THE BUILDING GROUNDING SYSTEM.
5. INSTALL TWO DEDICATED TELEPHONE LINE (CAT5e) CABLES FROM THE TELEPHONE TERMINAL BOARD TO THE FIRE ALARM DIALER.

1 / 2 EG502 **TELEPHONE RISER**

NO SCALE

1 10.3.12 ADD. 04

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THE ICE SHEET ADDITION
4390 HARRISON BLVD.
OGDEN, UT 84403
CONSTRUCTION DOCUMENTS

VBFA PROJECT #: 11612
CHECKED BY: DWS
DRAWN BY: LDT
CURRENT/BID DATE: 10.03.12
SHEET CONTENTS

ELECTRICAL DETAILS

EG502