State of Utah

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Department of Administrative Services
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Division of Facilities Construction and Management
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Addendum No. 5

Date: June 13, 2013

To: Contractors

From: Rick James - Project Manager

Reference: George S. Eccles Student Life Center
University of Utah – Salt Lake City, Utah
DFCM Project No. 08015750

Subject: **Addendum No. 5**

Pages	Addendum Cover Sheet	1	page
	Architect's Addendum No. Three	101	pages
	Architect's Addendum No. Four	61	pages
	Architect's Question/Answer Addenda	25	pages
	Total	188	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.

5.1 SCHEDULE CHANGES: There are no Project Schedule changes.

5.2 GENERAL ITEMS:

5.2.1 This project is tax exempt. The tax exemption certificate will be furnished to the awarded contractor.

5.2.2 See attached Architect's Addendum No. Three dated June 11, 2013.

5.2.3 See attached Architect's Addendum No. Four dated June 13, 2013.

5.2.4 See attached Architect's Question/Answer Addenda dated June 11 and 13, 2013.

MHTN
ARCHITECTS

Addendum No. 3 Issued: 06/11/13

Addendum No. Three
for the
Student Life Center
Bid Package
MHTN Project No. 2010562

All Contractors submitting proposals on the above captioned project shall be governed by the following addendum, changes and explanations to the bidding documents dated May 15, 2013 and shall submit their bids in accordance therewith:

Changes to the Project Manual:

A3.01 Section 012300 – ALTERNATES. Add the following to Paragraph 3.1:

ADD ALTERNATE #5: PVC laminated stainless steel pool system. Alternate shall provide pricing for the following:

1. Base bid activity pool and raised spa.
2. Alternate 1 activity pool, 50M pool and raised spa.
3. Outdoor leisure pool.

A3.02 Section 018112 – OWNER PROJECT REQUIREMENTS. Delete this section from the Project Manual.

A3.03 Section 053100 – STEEL DECKING. Clarification: All manufacturers listed in Paragraph 2.1 may offer products for steel roof deck, acoustical roof deck and acoustical floor deck. Manufacturers listed in Paragraph 2.5.A may offer products for composite vented form deck.

A3.04 Section 068000 – COMPOSITE FABRICATIONS. In addition to the specified fabrications, this section shall also include:

1. Epoxy resin front panel/component for the Control Desk. The fabrication shall be back-lit; provide uniform LED light with color control.

2. Epoxy resin front panel/ component for the Outdoor Rec Control Desk. The fabrication shall be back-lit; provide uniform LED light with color control.

3. Epoxy resin front panel/ component for the Fitness Center Desk. The fabrication shall be back-lit; provide uniform LED light with color control.

4. Epoxy resin front panel/ component for the Issue Desk. The fabrication shall be back-lit; provide uniform LED light with color control.

5. Note: The epoxy resin fabrication for the Outdoor Recreation Program entry arch shall be back lit; provide uniform LED light with color control.

6. The design standard for the epoxy resin components is 3Form, Salt Lake City.

A3.05 Section 072726 – FLUID-APPLIED MEMBRANE AIR BARRIERS. Add the following to paragraph 2.1.A.1.a, as an available product:

1. Dow Corning DefendAir 200.

A3.06 Section 074113 – METAL ROOF PANELS. Clarifications:

1. Ice and water shield under all metal roofing is to be high-temperature.
2. Metal roof gutter shall be a continuous gutter of minimum 24 gage steel sheet.

A3.07 Section 088000 – GLASS AND GLAZING. Make the following clarifications:

1. The Design Standard for all glazing panes with Low E coating is Viracon 1/4-inch clear with VE1-2M #2 (low E coating on the #2 surface).
2. The fritted glass silkscreen patterns will be an organic pattern designed by the Architect.
3. All skylights shall have a decorative film overlay with sandblast pattern applied to the interior glass surface. Intent of the film is to reduce solar heat gain and glare. Light transmittance of the film pattern will be in the range of 20%-40% (to be determined). Film must be suitable for exterior applications.

A3.08 Section 088100 – FIRE-RATED GLASS AND FRAMING. Clarification: All fire-rated glass and frames are to be 1-hour rated.

A3.09 Section 099120 – PAINTING. Delete references to “Phase 1 work”. Revise paragraph 2.1.B to read: Manufacturers Names: The following manufacturers provide products that may be incorporated into the Work:

1. Interior Paints:
   i. Dupont 76: Medium gloss enamel.
   ii. Kwal Paints: Accu-Pro Satin 1910.
   iii. Pratt & Lambert; ProHide or Cellu-tone satin or semigloss enamel.
   iv. Pratt & Lambert; Vitralite enamel or equal.
   v. Sherwin-Williams; Satin Latex ProMar 200 Series.

2. Exterior Paints:
   i. Ameritone.
   ii. Glidden.
   iii. Kwal Paints.
   iv. Pratt & Lambert.
   v. Sherwin-Williams.

A3.10 Section 099600 – SPECIAL COATINGS. Revise paragraph 2.2.E to read: "EPOXY where scheduled "EXPD" in Natatorium/Swimming Pool Areas"**.**

A3.11 Section 102800 – TOILET AND BATH ACCESSORIES. Clarification: All toilet tissue dispensers, paper towel dispensers, and soap dispensers (including those in the shower) are to be Owner provided and installed**.**

A3.12 Section 116623 – SPORTS EQUIPMENT. Add these items to the section:

1. All-Aluminum Benches: Lightweight, corrosion resistant clear anodized aluminum bench with three pedestals. Bench plank 9.5" wide x 2" high, with rounded edges and center braces. With optional rubber feet. Bench height: 18" (with rubber feet). Bench length: 12' or as indicated on drawings.

2. Swimsuit Dryer: Where indicated, provide wall-mounted swim dryer which extracts water from suits without involving a heating element. Unit to be fabricated with durable plastic exterior shell and stainless steel lid, extracting unit and drain. Operation by manual self-start/self-stop pressure on lid. Dryer to be prewired with built-in moisture-proof junction box and ground fault circuit interrupter. Provide heavy duty mounting bracket and full size template for mounting on wall.

    a. Acceptable Product: Suitmate by Extractor Corporation (800) 553-3353 or approved equal.

3. High-Velocity Hand Dryer: High Speed, energy efficient, electric hand dryer; surface mounted; entire dryer internally grounded.

    a. Design Standard: Excel Dryer XLERATOR Hand Dryer Model XL-SB.

        i. Sound Level: Operational sound level less than 80 dB.
        ii. Motor and Blower: 5/8 HP, 20,000 RPM. Air flow rate: 19,000 linear feet per minute.
        iii. Heater: 900 watts mounted inside blower housing to be vandal proof with Air Temperature of 135 degrees F measured at average hand position of 4 inches below air outlet.
        iv. Controls: Completely sealed control board and optics, automatic operation, activated by infrared optical sensor.
        v. Size: 11-3/4" wide by 12-11/16" high by 6-11/16" deep.
        vi. Cover: Stainless Steel.
        vii. Finish: Brushed.
        viii. Warranty Period: 5 years; limited warranty.

A3.13 Section 131150 – PREFABRICATED SWIMMING POOL (Add Alternate No. 5). Issue this section as an attachment to the addendum.

A3.14 Section 323113 – CHAIN LINK FENCES AND GATES. Issue this section as an attachment to the addendum.

A3.15 SECTION 131100 – SPECIAL CONSTRUCTION – SWIMMING POOLS

1. *Add to 1.07 SUBMITTALS list:*

   51. PVC Coated Stainless Steel Pool System (Alternate Bid 5):

      a) Shop Drawings to convert from concrete pool to stainless steel pool.

      b) Engineered Concrete Footing and Slab drawings (sealed by Utah Engineer)

      c) Structural Calculations of Pool System (sealed by Utah Engineer)

      d) Documentation that the surface material has been tested and passed by an ANSI accredited testing facility conforming to the ICPA standard ANSI / ICPA SS-1-2001

A3.16 SECTION 230900 Instrumentation and Control For HVAC

A. In PART 4- SEQUENCE OF OPERATIONS, the following sequences are modified
4.2. AIR HANDLERS AH-1, AH-5, AH-6, AH-8, AH-9
HEATING: If the discharge air temperature setpoint is 3 Deg F below setpoint for 10 minutes (adj) and the cooling system is off, the heating system shall be enabled.

Upon a call for heating from the discharge air sensor, the coil circulation pump shall start and the preheat valve shall modulate to maintain discharge air setpoint as reset by space temperature. Once the valve is 100% open and the space temperature still cannot be maintained, the supply fans shall modulate above minimum to maintain discharge air temperature setpoint as reset by space temperature.

The coil circulation pump shall alarm upon failure.

FREEZE PROTECTION: A hardwired, low limit temperature switch shall be electrically interlocked with the variable speed drive. If the low limit temperature switch is tripped 38.0 deg. F (adj.), the outside air damper shall close, all valves shall open to 100% (adjust per climate), **the coil circulation pump shall start (or remain on)**, and an alarm shall be annunciated at the BAS. A manual reset of the low limit temperature switch shall be required to restart the fan.

4.3 AIR HANDLERS AH-2 AND AH-7
HEATING: If the discharge air temperature setpoint is 3 Deg F below setpoint for 10 minutes (adj) and the cooling system is off, the heating system shall be enabled.
Upon a call for heating from the discharge air sensor, the coil circulation pump shall start and the preheat valve shall modulate to maintain discharge air setpoint of 55 Deg F (adj).

The coil circulation pump shall alarm upon failure.

FREEZE PROTECTION: A hardwired, low limit temperature switch shall be electrically interlocked with the variable speed drive. If the low limit temperature switch is tripped 38.0 deg. F (adj.), the outside air damper shall close, all valves shall open to 100% (adjust per climate), **the coil circulation pump shall start (or remain on),** and an alarm shall be annunciated at the BAS. A manual reset of the low limit temperature switch shall be required to restart the fan.

4.4 AIR HANDLER AH-4 WITH HEAT RECOVERY
HEATING: If the discharge air temperature setpoint is 3 Deg F below setpoint for 10 minutes (adj) and the cooling system is off, the heating system shall be enabled.

Upon a call for heating from the discharge air sensor, the coil circulation pump shall start and the preheat valve (on the heat exchanger) shall modulate to maintain discharge air setpoint of 55 Deg F (adj).

The coil circulation pump shall alarm upon failure.

4.5 NATATORIUM AIR HANDLER AH-3 (AND ALTERNATE BID AIR HANDLER AH-10 SERVING 50 METER POOL)

HEATING: **Upon a call for heating from the space temperature, the coil circulation pump shall start. The preheat valve (on the heat exchanger) shall modulate to maintain discharge air setpoint as reset by space temperature. Once the valve is 100% open and the space temperature still cannot be maintained, the supply fans shall modulate above minimum to maintain discharge air temperature setpoint as reset by space temperature.**

4.8 CENTRAL PLANT HIGH TEMP HOT WATER SYSTEM

HIGH TEMPERATURE HOT WATER BTU MEASURING SYSTEM:
The control panel for the BTU meter serving the high temperature heat exchangers shall be located outside of the HTW vault.

BTU meter shall be Fluxus ADM 7407 as basis of design, or GE DigitalFlow XMT868i Panametrics liquid flow ultrasonic transmitter. Provide with wetted transducers. Flow accuracy +/-0.5%.

GLYCOL PREHEAT SYSTEM HEAT EXCHANGERS PHX-01 AND PHX-02: **SECTION DELETED.**

4.9 CENTRAL PLANT CHILLED WATER SYSTEM
CHILLED WATER BTU MEASURING SYSTEM:
BTU meter shall be Fluxus ADM 7407 as basis of design, or GE DigitalFlow XMT868i Panametrics liquid flow ultrasonic transmitter. Provide with wetted transducers. Flow accuracy +/-0.5%.

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. Additionally, the manufacturer and product must meet the approval of the University, especially when not listed specifically in the University Design

Standards.

Item	Manufacturer	Comments
Custom Air Handling Units	Haakon	
	Pace	
Custom Indoor Pool AHU	Innovent	
	Unitech	
VFD	Danfoss	
Thermometers	Miljoco	
Destratification Fan	Kelley HVLS	
Control Dampers	Greenheck	
OSA Air Flow Measurement	Ebtron	
Remote Operated Zone Dampers	Greenheck	
	Young Regulator	
Flat Plate Heat Exchangers	Mueller	
Finned Tube Radiation	Sigma	
	Modine	
Exterior Louvers	Ruskin	
Cabinet Heaters	Modine	
Fan coil units	Carrier	
Vitreous Chine Plumbing fixtures	Sloan	
Water Softeners	Watts Water Tech	
Expansion Tank	Watts Water Tech	
Wye Strainers	Nexus Valve	
Expansion Tank	Patterson	
Flexible Connectors	Patterson	Must be steel braided
	Twin City Hose	Must be steel braided
Pump Suction diffuser	Patterson	Must match pump manufacturer
Circulator Pump	Patterson	
Registers, grilles, and diffusers	Tuttle & Bailey	

A3.17 SECTION 16500 – LIGHTING

Type	Manufacturer
A	INSIGHT
A1	INSIGHT
A2	INSIGHT
A3	INSIGHT
B6	LITHONIA, NULITE
C	TIVOLI
D2	LITHONIA, METALUX
D5	LITHONIA, METALUX
D6	GOTHAM, PORTFOLIO
E	CONTECH, ERUEKA
E1	CONTECH, ERUEKA
E2	CONTECH, INTENSE
F2	DELTA, METALUX

F4	LITHONIA, METALUX
G	NULITE, ESCO
H	LITHONIA, METALUX
I	SPI, POULSEN
J	LITHONIA
K	KENALL, LUMINAIRE
K1	PRUDENTIAL, LOTECONTROL
K2	SPI, PEERLESS
L	SPI, TEGAN
M2	PORTFOLIO, LITHONIA
M3	PORTFOLIO, GOTHAM
M4	INTENSE
N3	LUMENPULSE, ARCHITECTURAL LIGHTING WORKS
N4	LUMENPULSE, ARCHITECTURAL LIGHTING WORKS
N5	LUMENPULSE, ARCHITECTURAL LIGHTING WORKS
N6	PRUDENTIAL, ARCHITECTURAL LIGHTING WORKS
O	CORELITE, LEDALITE
P1	LUMENPULSE, I2SYSTEM
P2	MODA LIGHT, ACCLAIM
P3	LUMENPULSE, ACCLAIM
Q	KENALL, LUMINAIRE
S	MCGREW EDISON, LITHONIA
S4	LIGMAN LTG, BEGA
S5	WAGNER
T	ETC
U	LITHONIA, METALUX
UE	LITHONIA, METALUX
U1	CONTECH, INTENSE
V	LITHONIA, METALUX
W	DAC
W1	EUREKA
W2	OCL
X1	LITHONIA, EVENLITE
X1	LITHONIA, EVENLITE
X2	LITHONIA, EVENLITE

A3.18 SECTION 26 05 19 – WIRES & CABLES (600V)

1. Change: 2.5(C)(1), Neutral A to be Grey with Black stripe.

A3.19 SECTION 26 27 26 – SWITCHES & RECEPTACLES

1. Change: 2.2(C) to read "Provide 302 stainless steel plates. Receptacles fed by normal po wer shall have white devices. Receptacles fed by emergency circuits shall have red device s. Receptacles fed by UPS circuits shall have blue devices. Receptacles with Isolated Grou

nd shall have orange devices. Anyreceptacle greater than 20 Amps shall have black devic es."

A3.20 SECTION 27 53 13 – WIRELESS CLOCK SYSTEM

1. Clarification: the new wireless clock system is to be able to communicate with the existing Primex GPS system on campus.

Changes to the Drawings:

GENERAL

A3.21 Sheet AE010:

1. Open stair west of elevator add the following note:
   "NON-EGRESS STAIR EXTENDING 3 STORIES MEETING IBC 708.2 EXCEPTION 2.1, FLOOR OPENING 556 SF/ STAIR HORIZONTAL PROJECTED AREA – 364 SF."
2. At south locker room add 1 hour fire barrier around mechanical ductwork as shown in AD03-A006.

A3.22 Sheet AE011:

1. Open stair west of elevator add the following note:
   "NON-EGRESS STAIR EXTENDING 3 STORIES MEETING IBC 708.2 EXCEPTION 2.1, FLOOR OPENING 556 SF/ STAIR HORIZONTAL PROJECTED AREA – 364 SF."
2. At outdoor recreation – storage add 1 hour fire barrier around mechanical ductwork as shown in AD03-A007.
3. Note path of 1 hour fire barrier path change at accordion fire doors as shown in AD-A009.

A3.23 Sheet AE012:

1. Open stair west of elevator add the following note:
   "NON-EGRESS STAIR EXTENDING 3 STORIES MEETING IBC 708.2 EXCEPTION 2.1, FLOOR OPENING 561 SF/ STAIR HORIZONTAL PROJECTED AREA – 274.5 SF."

A3.24 Sheet AE013:

1. Open stair west of elevator add the following note:
   "NON-EGRESS STAIR EXTENDING 3 STORIES MEETING IBC 708.2 EXCEPTION 2.1, FLOOR OPENING 561 SF/ STAIR HORIZONTAL PROJECTED AREA –274.5 SF."
2. Add 1 hour fire barrier rating to walls north of elevator shaft. Add 1 hour fire barrier rating to walls around machine room as shown in AD03-A008.

CIVIL

A3.25 Sheet CS100

1. Removed reference to bid alternate #5 pervious pavers in the parking lot. **AD03-C1.0**

A3.26 Sheet CS100a

1. Removed reference to bid alternate #5 pervious pavers in the parking lot. **AD03-C2.0**

A3.27 Sheet CS102, CS104

1. Paving note corrected to be asphalt paving in parking lot. **AD03-C3.0**
   Added ADA drop-off ramp. **AD03-C3.0**

A3.28 Sheet CS102a, CS104a

1. Paving note corrected to be asphalt paving in parking lot. **AD03-C4.0**
2. Added ADA drop-off ramp. **AD03-C4.0**

A3.29 Sheet CS401

1. Added detail for Non-Freeze yard hydrant per owner request. **AD03-C5.0**
2. Removed reference to bid alternate #5 pervious pavers on detail A3. **AD03-C5.0**

A3.30 Sheet CU302 & CU302a

1. Added a non-freeze yard hydrant to North side of Storage Building. **AD03-C6.0**
2. Added 1" dia. Water line to hydrant. **AD03-C6.0**

A3.31 Sheet CG202 & CG202a

1. Added grade spots to the new ADA drop-off ramp. **AD03-C7.0**

LANDSCAPE

A3.32 Sheet LI101

1. Revise the irrigation as per the attached AD03-L01

A3.33 Sheet LI102

1. Revise the irrigation at the south end of the building to reflect the changes due to the addition of the accessible drop off as per the attached AD03-L02

A3.34 Sheet LP102

2. Revise the planting at the south end of the building to reflect the changes due to the addition of the accessible drop off as per the attached AD03-L03

A3.35 Sheet LP403

1. Revise the planting at the south end of the building to reflect the changes due to the addition of the accessible drop off as per the attached AD03-L04

A3.36 Sheets LI101, LI102, LP101, LP101A, LP102, LP401, LP401A, LP402, LP402A, LP403, LP404

1. Revise Keynote #37 to read: Building Outline - Bid Alternate #3
2. Revise Keynote #38 to read: Pedestrian Bridge – Bid Alternate #3

STRUCTURE

A3.37 Sheet SF101C:

1. Revise plan note at approximate grids F.5-8.5 to read "2-1/2" STD PIPE BLW".

A3.38 Sheet SF103A:

1. Callout pipe size.

A3.39 Sheet SF106C:

1. Add W8x10 beams.

A3.40 Sheet SF203:

1. Revise end of note in elevation A2/SF203 to read "…IF ALTERNATE #3 BRIDGE IS ACCEPTED.".

A3.41 Sheet SF401:

1. Add note to detail A1/SF401: "ALL GLASS CANOPY FRAMING TO BE STAINLESS STEEL. CONTRACTOR SHALL SUBMIT A WELDING PROCEDURE SPECIFICATION FOR ALL STAINLESS STEEL WELDS FOR REVIEW BY ARCHITECT.

A3.42 Sheet SF515:

1. Add detail C4/SF515.

ARCHITECTURAL

A3.43 Sheet AS100

2. Add grading along accessible routes as shown on re-issued AS100
3. Revise fire lane route as per the re-issued AS100

A3.44 Sheet AS101

4. Add hand rails at concrete steps as per the re-issued AS101
5. Add trash receptacles at the locations shown on the re-issued AS101
6. Add Skate board racks at the locations shown on the re-issued AS101
7. Add keynote #67 Trash receptacle – see specifications
8. Add keynote #68 Emergency gas shut off – bid alternate #4
9. Add keynote #69 Concrete bike path/ firelane – see civil

A3.45 Sheet AS101A

1. Add hand rails at concrete steps as per the re-issued AS101
2. Added edges of walks, walls and handrails in bid alternate #1 area
3. Add trash receptacles at the locations shown on the re-issued AS101A
4. Add Skate board racks at the locations shown on the re-issued AS101A
5. Add keynote #67 Trash receptacle – see specifications
6. Add keynote #68 Emergency gas shut off – bid alternate #4
7. Add keynote #69 Concrete bike path/ firelane – see civil

A3.46 Sheet AS102

1. Revised area at south end of the building to accommodate accessible drop off
2. Add trash receptacles at the locations shown on the re-issued AS102
3. Add Skate board racks at the locations shown on the re-issued AS102
4. Add keynote #67 Trash receptacle – see specifications
5. Add keynote #68 Emergency gas shut off – bid alternate #4
6. Add keynote #69 Concrete bike path/ firelane – see civil

A3.47 Sheet AS401

1. Add hand rails at concrete steps as per the re-issued AS401
2. Add hand rails as per the attached AS401
3. Add trash receptacles at the locations shown on the re-issued AS401
4. Add Skate board racks at the locations shown on the re-issued AS401
5. Revise keynote #14 to read: Trash receptacle – see specifications
6. Revise keynote #24 to read: Concrete step – see detail D1/AS504
7. Revise keynote #43 to read: Pool – alternate #2
8. Add keynote #68 Emergency gas shut off – bid alternate #4

A3.48 Sheet AS401A

1. Add hand rails at concrete steps as per the re-issued AS401A
2. Add hand rails as per the attached AS401A
3. Add trash receptacles at the locations shown on the re-issued AS401A
4. Add Skate board racks at the locations shown on the re-issued AS401A
5. Revise keynote #14 to read: Trash receptacle – see specifications
6. Revise keynote #24 to read: Concrete step – see detail D1/AS504
7. Revise keynote #43 to read: Pool – alternate #2
8. Add keynote #68 Emergency gas shut off – bid alternate #4
9. Detail C3 – revised the keynote call to 47 to read #43

A3.49 Sheet AS402

1. Revise detail D4 to reflect the added Accessible Drop off
2. Add trash receptacles at the locations shown on the re-issued AS402
3. Add Skate board racks at the locations shown on the re-issued AS402
4. Revise keynote #14 to read: Trash receptacle – see specifications
5. Revise keynote #24 to read: Concrete step – see detail D1/AS504
6. Revise keynote #43 to read: Pool – alternate #2
7. Add keynote #68 Emergency gas shut off – bid alternate #4

A3.50 Sheet AS502

1. Revise detail D1 by adding handrails as per the attached AD03-AS01, AD03-AS02, AD03-AS03

A3.51 Added notes on all applicable AExxxx & ACxxxx floor plan sheets:

1. SEE AE601 FOR LEGENDS. (Sheets not re-issued)

A3.52 Sheet AE100C

1. Add note: "PROVIDE "WALLYBALL" EQUIPMENT FOR BOTH COURTS." AD03-AE004

A3.53 Sheet AE447 – A6

1. Add note: "INSTALL TRP-101 USING READY TO GO 200-10-01. REFER TO SPEC. (TYP.)" AD03-AE005

A3.54 Sheet AE455 – A1

1. Revise Freshens storage room layout and size. AD03-AE001

A3.55 Sheet AE456 – B2

1. Add notes for PLAM and SPS. Glass door to have aluminum frame and handle. AD03-AE003

A3.56 Sheet AE610

1. Door #240 – add 60 min rating

<u>MECHANICAL</u>

A3.57 MS100

1. The cooling tower CT-1, is deleted, along with the associated piping.

2. The chilled water piping located below grade between the HPER building and the tunnel is to be deleted, and keynote #8 is pointed to the piping where it exits HPER and enters the tunnel, and is changed to read: "SEE CIVIL SITE UTILITY PLAN FOR CONTINUATION."

A3.58 MH102A

1. See supplemental drawing AD03-MH001 for duct routing modification.

A3.59 MH401

1. On Detail #2, In Mech Room 85A, the air separator HWAS-1 is to be located on the floor to the right of column X-14 on a housekeeping pad, with the HW piping re-routed to drop and connect to it.
2. On Detail #1, in Mech Room 10M, HWAS-1 is deleted.

A3.60 MH402

1. Entire Sheet re-issued.

A3.61 MH404

1. Entire sheet re-issued.

A3.62 MH507

1. Detail #3, AH-3 is deleted.

A3.63 MH509

1. Detail #2, AH-10 is changed to be AH-3.

A3.64 MH510

1. New sheet issued.

A3.65 MH603

1. On the plumbing fixture schedule, the following fixtures are to have deep seal p-traps in lieu of p-traps with trap primer connections: FD-1, FD-2, DD-1, TD-1, and FS-1.
2. On the plumbing fixture schedule, the fixture TP-1 is deleted.

A3.66 MP100A

1. Keynote #2 is modified to include the pipe size 8" for all four pipes.

A3.67 MP100C

1. The finned tube in Stair #2 is to have equipment callout FT/1.

A3.68 MP101A

1. In Storage 145A, the pipe size on all four pipes is to be 8"
2. At column W-13, the CHWS and CHWR going up to the next level is to be 6".

A3.69 MP102A

1. At column W-13, the CHWS and CHWR going up and down is to be 6".

A3.70 MP103A

1. At column W-13, the CHWS and CHWR is to be 6".

A3.71 MP103B

1. The CHWS and CHWR piping after the branch to AH-6 is to be 4"

A3.72 MP103C

1. The CHWS and CHWR piping to AH-5 is to be 4".

2. The HWS/R branch piping to Stair #3 is to be 1" with shutoff valves at the branch takeoff, and an 8' length of finned tube FT/1 is located in the stairwell with keynote #2 pointing at it and the HWS/R piping connected to it.

A3.73 MP105

1. The finned tube in Stair #2 is to have equipment callout FT/1.

2. Keynote #1 is to read: "CHILLED WATER AND HEATING WATER PIPING UP TO NEXT LEVEL."

3. Keynote #2 is to read: "SLHX-1 IS FUTURE EQUIPMENT."

4. Keynote #3 is to read: "FINNED TUBE IS TO CONNECT TO THERMOSTAT ON LEVEL 2."

5. The CHWS/R piping to the mechanical room in MH404 is to be called out as 2 1/2" CHWS and 2 1/2" CHWR.

A3.74 PP101A

1. Keynote #8 is to read: "GAS PIPING TO LEVEL ABOVE."

2. Keynote #9 is to read: "SEE SHEET PP101C FOR CONTINUATION."

A3.75 PP401

1. A 2" vent is added to the 3" line that comes out of the natatorium on detail #2 between grid E and F and connects to the vent off WC-1.

ELECTRICAL

A3.76 Sheet EG100 – Symbol List

1. Change: Vanity sconce light fixture symbol added.

A3.77 Sheet ES100 – Site Lighting Plan Base Bid

1. Add: Provided J-box for power to lighting for the outdoor landscape feature.

A3.78 Sheet ES100A – Site Lighting Plan Alternate

1. Add: Provided J-box for power to lighting for outdoor landscape feature.

A3.79 Sheet EP100.C – Lower Level Power Plan – Area C

1. Change: Moved location of J-box in natatorium for spa control
2. Add: J-box for power to Spa underwater lights.

A3.80 Sheet EP101.A – Level 1 Power Plan – Area A

1. Change: Delete Fire Smoke Damper shown at entry to room 145.

A3.81 Sheet EP101.C – Level 1 Power Plan – Area C

1. Change: Keyed note #6 now reads –
   "Power for fireplace blower/exhaust. Control by installer. Fireplace installer shall provide control at control desk 101"

2. Add: Provided power and data for Turnstiles. See attachments.

A3.82 Sheet EP102.A – Level 2 Power Plan – Area A

1. Change: Moved location of clocks in Exercise rooms.

A3.83 Sheet EP102.B – Level 2 Power Plan – Area B

1. Change: Moved location of some receptacles layouts in fitness area.
2. Add: Added receptacles in fitness area to plan.
3. Change: Turned off fitness equipment background for clarity.

A3.84 Sheet EP103.C – Level 3 Power Plan Area C

1. Clarification: Receptacles shown on column at grid line 10G are to be used for power to tr ack pace and information clocks. Clocks provided by others.

A3.85 Sheet EP104.B – Roof Power Plan Area B2.

1. Add: Provide a 30A Disconnect and 30A, 2 pole fuse for power to condensing units CU-1. Units provided by mechanical. Circuit equipment to panel EL3P1 using 3/4" C 3#10, 1#10 GRD. Coordinate with mechanical plans for exact locations of equipment before rough in.

A3.86 Sheet EP200.C1 – Lower Level Power Plan Alternate 1A

1. Add: J-boxes for power to Spa and outdoor pool underwater lights.

A3.87 Sheet EP200.C2 – Lower Level Power Plan Alternate 1B

1. Change: Various circuit changes and layout changes in Pool Equipment room

A3.88 Sheet EP501 – Enlarged Electrical and Data Rooms

1. Add: Add 4 Type 'J' lighting fixtures in transformer vault. Space fixtures evenly placing 1 fi xture on each wall. Provide and install a switch on south side of entry door from building. Circuit fixtures to panel ELLP1.
2. Add: Add (1) 20A receptacle and 120V circuit to rooms Main Data 7, Data 100E, Data 201E and Data 301D for power to Mechanical provided FC-1 equipment. 120V circuit shall be to panel EHLM1.
3. Change: Panel EH2M1 was renamed L2P5 and became a 120/208V panel.

A3.89 Sheet EP502 – Enlarged Lower Level Rooms

1. Change: Updated circuits and layout in Pool equipment room.

A3.90 Sheet EP600 – One line diagram 480V

1. Change: Breaker feeding HLM1 became a 400A instead of 225A.

A3.91 Sheet EP601 – One line diagram 208V

1. Change: Added Panel L2P5

A3.92 Sheet EP602 – Emergency One Line Diagram

1. Change: Deleted Panel EH2M1 from oneline and project.

A3.93 Sheet EP603 – Panel Schedules

1. Change: Updated Panel Schedules

A3.94 Sheet EP604 – Panel Schedules

1. Change: Updated Panel Schedules

A3.95 Sheet EP607 – Panel Schedules

1. Change: Added Panel Schedule L2P5 and moved location of some schedules on sheet.

A3.96 Sheet EP609 – Electrical Schedules

1. Change: Updated items on Mechanical and Pool Equipment schedules.
2. Add: Provide a 120V circuit to equipment DOF-1 in high temp room. Provide a 20A breake r and 3/4" C with 3#12, 1#12 GRD.

A3.97 Sheet EP610 – Electrical Relay Panel

1. Change: Added relay panel schedules.

A3.98 Sheet EY100.B – Lower Level Systems Plan – Area B

1. Change: Moved location of speaker strobe in lounge
2. Change: Moved location of speaker in gym

A3.99 Sheet EY100.C – Lower Level Systems Plan – Area C

1. Add: Added Speaker Strobe in each racquetball court.

A3.100 Sheet EY102.C – Level 2 Systems Plan – Area C

1. Change: Moved speaker strobe and Camera to new location
2. Change: Moved location of wireless transmitters to opposite side of gym.

A3.101 Sheet 302 – Level 2 Cable Tray Plan

1. Add: Cable tray layout routing.

A3.102 Sheet EL100.A – Lower level Lighting Plan – Area A

1. Change: Added Fixture type S above Mechanical 10M door.
2. Change: Deleted 2 exits sign by the climbing doors.
3. Change: Deleted circuit from stair 99E to vestibule 10D; Added homerun EHLL1-3.
4. Change: Added Homerun EHLL1-3 in stair 99D.

A3.103 Sheet EL100.B – Lower level Lighting Plan – Area B

1. Change: Added corrected homerun EHLL1-3 for stair 99F.

A3.104 Sheet EL100.C – Lower level Lighting Plan – Area C

1. Change: Added fixture type S above south outdoor storage 40S door.
2. Change: Added Fixture type Q above natatorium 40 West door.
3. Change: Added corrected homerun EHLL1-2 for custodial 40J.
4. Change: Added lighting layout for changing room 25E; see plan.
5. Change: Added lighting layout for women's shower 41S; see plan.
6. Change: Added lighting layout for men's shower 47S; see plan.
7. Change: Added lighting layout for men's shower 47; see plan.
8. Change: Added lighting fixtures type L for women's toilet 41T; see plan.
9. Change: Added lighting fixtures type L for men's toilet 47T; see plan.
10. Change: Added lighting fixtures type L by women's locker 41; see plan.
11. Change: Added lighting fixtures type L by men's locker 47; see plan.
12. Change: Moved lighting switch by stair 99B door.
13. Change: Added corrected emergency homerun EHLL1-7 for shower area.
14. Change: Added corrected homerun HL11-5 for shower area.
15. Change: Deleted 2 exits sign by the racquetball doors.

A3.105 Sheet EL101.A – Level 1 Lighting Plan – Area A

1. Change: Added note #17 to the keyed notes.
2. Change: Added fixture type S above West stair 199D door.
3. Change: Added 2 fixtures type S above North East stair 199F door.
4. Change: Added connection circuit in between 2 fixture type K in North East stair 199F.
5. Change: Changed fixture type R to D6 in control desk 155A area.
6. Change: Added junction box, switch and homerun H1L1-17 in control desk 155A.
7. Change: Added 2 junction box and homerun H1L1-17 in boulders between lobby 150 and lo

bby 100.

A3.106 Sheet EL101.B – Level 1 Lighting Plan – Area B

1. Change: Added fixture type S above South East vestibule 100J door.

A3.107 Sheet EL101.C – Level 1 Lighting Plan – Area C

1. Change: Added fixture type Q above North West vestibule 100A door.
2. Change: Added fixture type Q above West vestibule 100N door.
3. Change: Added fixture type S above West stair 199C door.
4. Change: Added fixture type S above South chemical storage 197 door.
5. Change: Added fixture type S above South East stair 199B door.
6. Change: Added fixture type S above East mechanical 120 door.
7. Change: changed fixture type D2 to H in data 100E.
8. Change: changed fixture type D2 to H in electrical room 104.
9. Change: Added 2 junction box, switch and homerun H1L1-21 in mill work at control desk 101
10. Change: Added 2 fixture type D6, 4 fixture type R and 1 fixture type M3 to cafe 117.
11. Change: Added corrected homerun H1L1-9 for natatorium 40 lighting.
12. Change: Added corrected homerun H1L1-5 for natatorium 40 lighting.
13. Change: Added corrected homerun H1L1-7 for natatorium 40 lighting.
14. Change: Added note #13 to the keyed notes.

A3.108 Sheet EL102.A – Level 2 Lighting Plan – Area A

1. Change: Moved location of low voltage switch in exercise room255.
2. Change: Moved location of 2 low voltage switches in exercise room265.
3. Change: Moved location of low voltage switch in exercise room285.
4. Change: changed fixture type N5 to M2 in corridor 220.
5. Change: Added fixture call out M2 in toilet 200M.

A3.109 Sheet EL102.B – Level 2 Lighting Plan – Area B

1. Change: Added note #11 to the keyed notes.
2. Change: Added lighting layout for men's toilet 234; see plan.
3. Change: Added lighting layout for women's toilet 236; see plan.
4. Change: Added corrected homerun EH2L1-5 for corridor 220 lighting.
5. Change: Added junction box, switch and homerun H2L1-2 in mill work at control desk in fit ness center/MAC GYM.
6. Change: Added circuit connection from the lighting in South East corridor 220 to lighting i n the quiet fitness 235A room.

A3.110 Sheet EL102.C – Level 2 Lighting Plan – Area C

1. Change: Added fixture type K1 in quiet fitness 235A room; see plan.
2. Change: Added fixture type K in stair 299B room; see plan.
3. Change: Moved location of 2 low voltage switches in 3 court gymnasium 215.
4. Change: Added fixture call out X1 and note call for exit sign on North East of 3 court gymn asium 215.
5. Change: Added corrected homerun EH2L1-1 for lighting in electrical 201F.
6. Change: Revised running length for fixture type N4 in lobby 100 area; see plan.

A3.111 Sheet EL103.C – Level 3 Lighting Plan – Area C

1. Change: Added connection circuit in between 2 fixture type N4 in the jogging track 315 an d stretching 305.
2. Change: Added fixture type K in stair 399B room.
3. Change: Added general notes.
4. Change: Added homerun EH3L1-11 for lighting in data room 301D.

A3.112 Sheet EL200.C1 – Lower Level Lighting Plan – Alternate 1A

1. Change: Added lighting layout for men's shower 121; see plan.

2. Change: Added lighting layout for men's toilet 118; see plan.
3. Change: Relocated lighting over the 50 meter pool 132 to sheet EL201.C1; see plan.
4. Change: Added corrected homerun EHLL1-7 for lighting in men's shower room 121 area.
5. Change: Added corrected homerun HL11-5 for lighting in men's shower room 121.
6. Change: changed note call out #1 to #2 by the lighting switch in men's shower room 121 ar ea.
7. Change: Deleted note C from general note.

A3.113 Sheet EL200.C2 – Lower Level Lighting Plan – Alternate 1B

1. Change: Added lighting layout for men's locker room 119 entrance; see plan.
2. Change: Relocated lighting over the 50 meter pool 132 to sheet EL201.B; see plan.
3. Change: Added homerun HL11-7 for lighting in men's shower room 121 area; see plan.
4. Change: Added homerun EHLL1-9 for lighting in men's locker room 119 area; see plan.
5. Change: Added exit sing type X1 near hallway 11; see plan.
6. Change: Added lighting layout for women's locker room 126; see plan.
7. Change: Added lighting layout for women's shower room 127; see plan.
8. Change: Added lighting layout for women's toilet room 125; see plan.
9. Change: Added fixture type S above East storage 40S door.
10. Change: Added 2 fixtures type K in stair 99B room; see plan.
11. Change: Added corrected homerun EHLL1-3 for lighting in stair 99B.
12. Change: Added note call out #2 by exit sign on East 50 meter pool 132 door.
13. Change: Deleted note C from general note.
14. Change: Added fixture call out M2 in storage 10J.
15. Change: Added fixture call out D2 in custodial 10K.

A3.114 Sheet EL201.C1 – Level 1 Lighting Plan – Alternate 1A

1. Change: Revised lighting layout for natatorium/50 meter pool 132; see plan.
2. Change: Added glowing donor wall lighting; see plan.
3. Change: Added note 2 and 3 in the keyed notes.

A3.115 Sheet EL201.C2 – Level 1 Lighting Plan – Alternate 1B

1. Change: Revised lighting layout for natatorium/50 meter pool 132; see plan.
2. Change: Added fixture type Q above West vestibule 100N door.
3. Change: Added fixture type S above West stair 199C door.

A3.116 Sheet EL201.B – Level 1 Lighting Plan – Alternate 3

1. Change: Added corrected homerun EHLL1-3 for stairwell lighting.
2. Change: Added fixture type Q above East vestibule 100K door.

A3.117 Sheet EL703 – Lighting Control System Riser

1. Change: Revised relay control riser diagram.

A3.118 Sheet EL702 – Lighting Details

1. Change: Revised exterior lighting race way & detail.
2. Changed: Added more details.
3. Clarification: All power pack and contact closures used in restrooms shall be rated for exh aust fan control.

<u>POOL</u>

A3.119 Sheet WF010.0 General Notes:

1. Alternate Bid Item boxed note (for PVC Laminated Stainless Steel Pool Systems) shall be referred to as Alternate Bid 5.

A3.120 Sheet WF010.1 General Notes:

1. Alternate Bid Item boxed note (for PVC Laminated Stainless Steel Pool Systems) shall be referred to as Alternate Bid 5.

A3.121 Sheet WF400.0 Activity Pool Plan:

1. Enlarged Activity Pool Plan: Item 18 bubble with two arrows removed (was not required – not pointing to or identifying an item). See attached AD03-WF01.
2. Enlarged Activity Pool Play: Additional section cut added to the plan – Section F (at the gutter thru the faux rock planter). See attached AD03-WF01.
3. Activity Pool Deck Equipment Schedule –Item 4: Descriptions and remarks revised. Waterline tile identified. See attached AD03-WF02.
4. Activity Pool Deck Equipment Schedule –Item 20: Remarks shall be revised to include the sentence – Provide shop drawing submittal for review. There shall be no rough edges.

A3.122 Sheet WF410.0 Activity Pool Sections:

1. Additional section thru the faux rock planter at the pool fingerwall added to Section F. See attached AD03-WF03.

A3.123 Sheet WF410.1 Activity Pool Sections:

1. Note added to Detail F that reads: Provide additional #4 bars at 12" c.c. each way for every additional 10" of wall thickness.

A3.124 Sheet WF503 Details:

1. "No Running Detail" Detail 3: Notes regarding distance of tiles from water's edge revised to read: "No Running" tiles installed 5'-0" from water's edge at the gutter pools, and 4'-0" from water's edge at skimmer pools.

A3.125 Sheet WF505 Details:

1. New pool wall section added to Angled Deck Spray Detail 6 to illustrate the installation of the angled deck sprays in the alternate bid Activity Pool finger wall. See attached AD03-WF02.

A3.126 Sheet WF601.0 Equipment Room Schedules:

1. Boxed note added to sheet: Electrical Interlock Notes – See Sheet WF406.0.

Attachments:

Civil

1. AD03-C1.0
2. AD03-C2.0
3. AD03-C3.0
4. AD03-C4.0
5. AD03-C5.0
6. AD03-C6.0
7. AD03-C7.0

Landscape

1. AD03-L01
2. AD03-L02
3. AD03-L03
4. AD03-L04

Structural

1. ADD-03-S01

2. ADD-03-S02
3. ADD-03-S03

Architectural

1. AD03-AS01
2. AD03-AS02
3. AD03-AS03
4. Reissued – Sheet AS100
5. Reissued – Sheet AS101
6. Reissued – Sheet AS101A
7. Reissued – Sheet AS102
8. Reissued – Sheet AS401
9. Reissued – Sheet AS401A
10. Reissued – Sheet AS402
11. AD03-AE001
12. AD03-AE002
13. AD03-AE003
14. AD03-AE004
15. AD03-AE005
16. AD03-AE006
17. AD03-AE007
18. AD03-AE008
19. AD03-AE009

Mechanical

1. AD03-MH001
2. MH402
3. MH404
4. MH510

Electrical

1. EG100
2. ES100
3. ES100A
4. EL100.A
5. EL100.B
6. EL100.C
7. EL101.A
8. EL101.B
9. EL101.C
10. EL102.A
11. EL102.B
12. EL102.C
13. EL103.C
14. EL200.C1
15. EL200.C2
16. EL201.B
17. EL201C1
18. EL201.C2
19. EL702
20. EL703
21. EP100.C
22. EP101.A
23. EP101.C

24. EP102.A
25. EP102.B
26. EP103.C
27. EP104.B
28. EP200.C1
29. EP200.C2
30. EP501
31. EP502
32. EP600
33. EP601
34. EP602
35. EP603
36. EP604
37. EP607
38. EP609
39. EY100-B
40. EY100.C
41. EY102.C
42. EY302

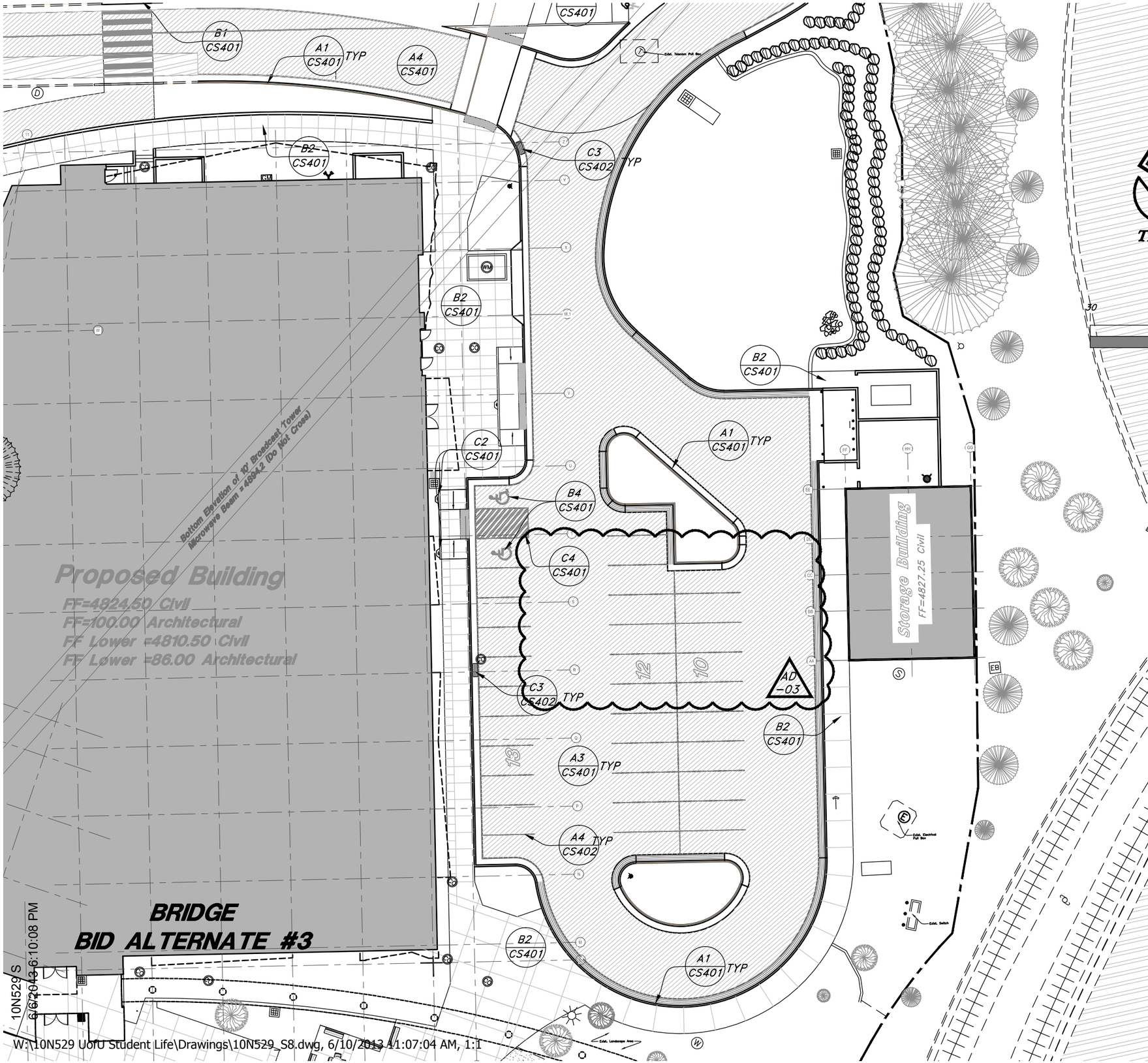
Pool

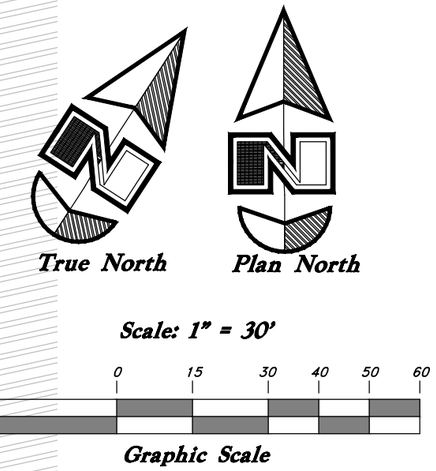
1. AD03-WF01
2. AD03-WF02
3. AD03-WF03
4. AD03-WF04

End of Addendum No. 3

The Project Team Leader has reviewed this document and found it in compliance with internal standards

Angelica M. Pavoni	6/11/2013
Team Leader	Date





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SHEET NUMBER

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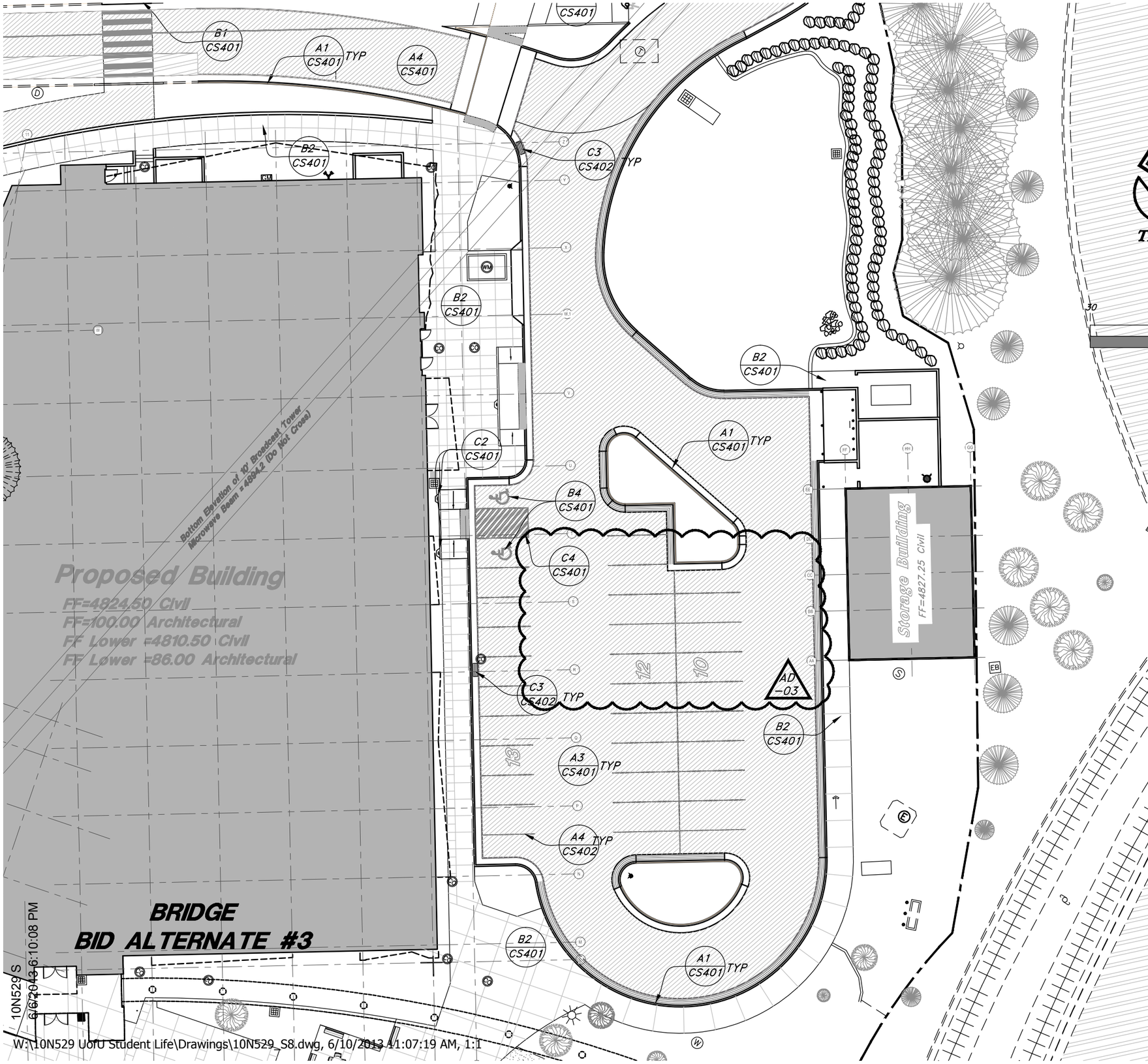

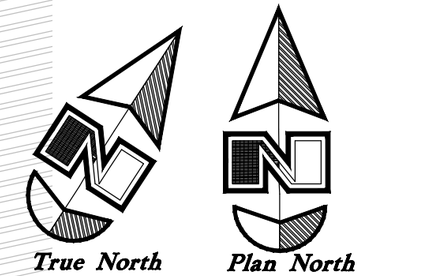

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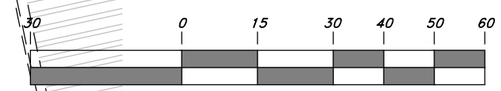

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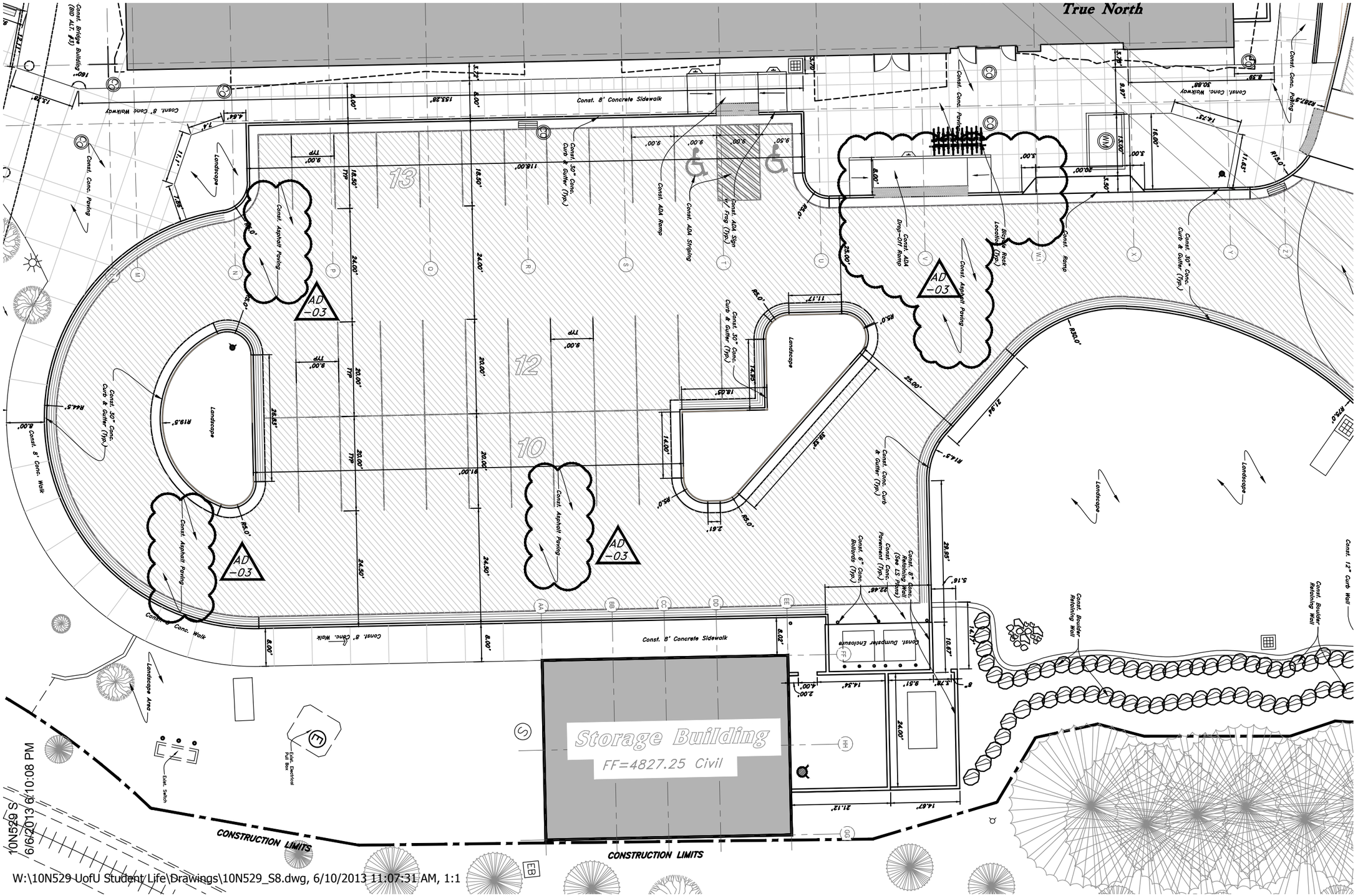

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CS102 & CS104

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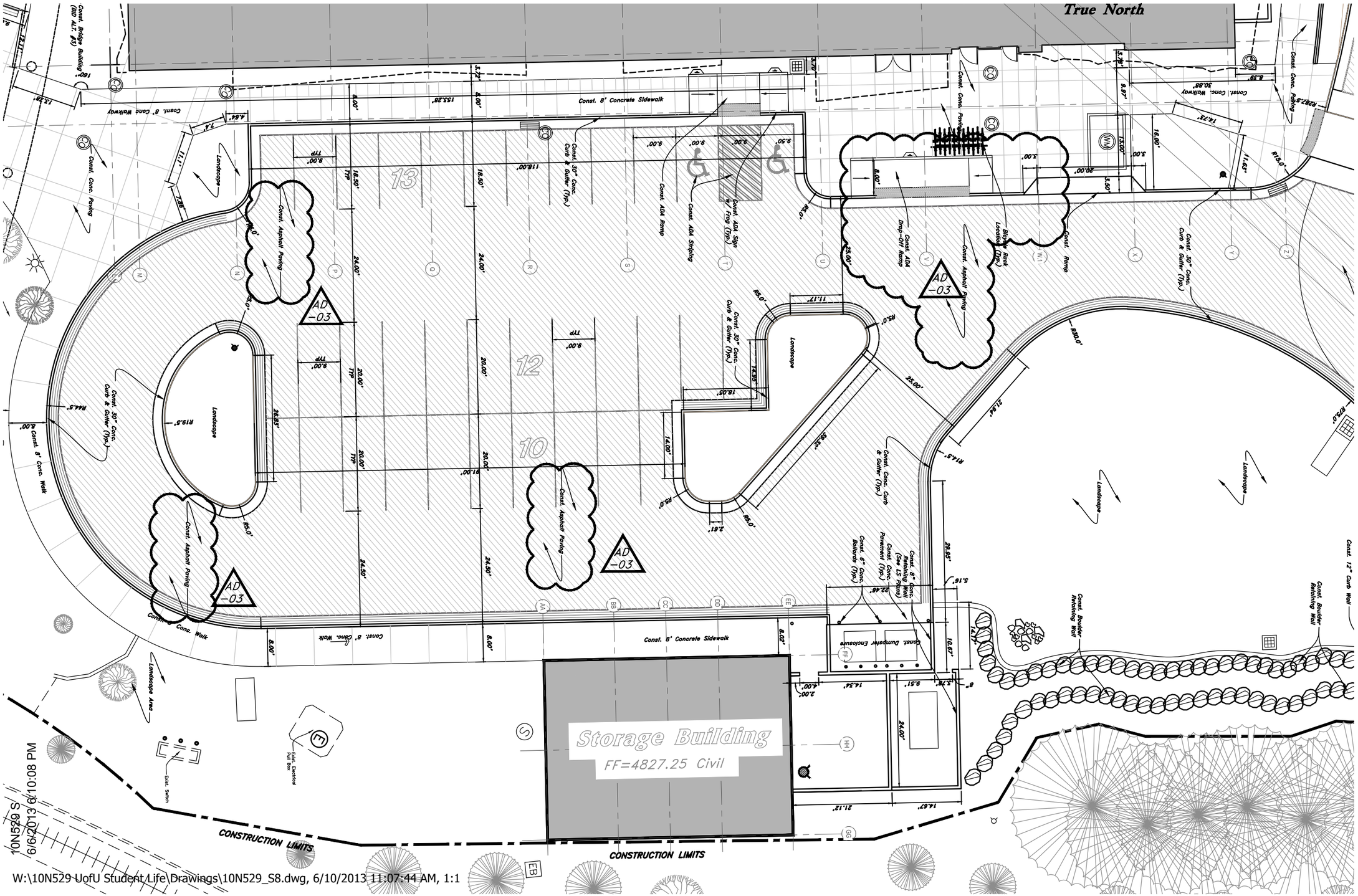

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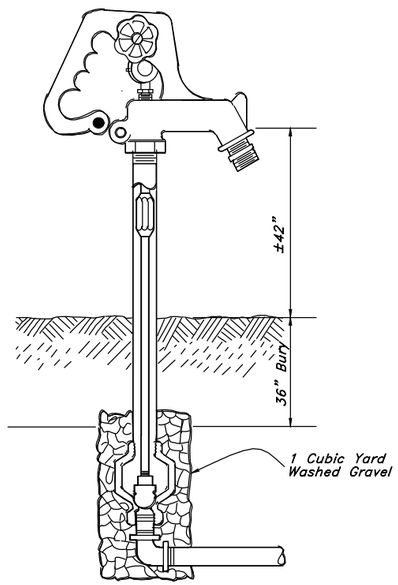

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A2 Non-Freeze Yard Hydrant Detail

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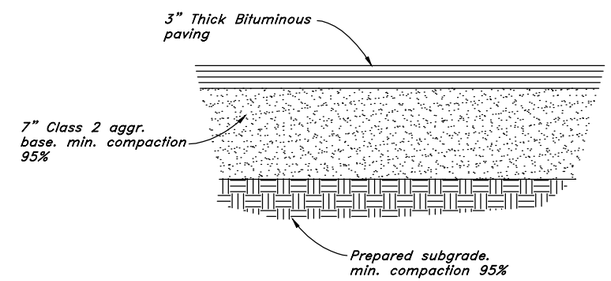
-03



AD
-03

A3 Typical Pavement Section Parking Areas

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True North

CONST. 12"ø CP SD LINE ±155.25 L.F. @ S=0.50%

CONST. SD INLET BOX GRATE=4823.40 FL=4821.18

CONST. 4"ø HDPE GAS LINE

CONST. 12"ø CLASS 52 D.I. WATER LINE

Exist. Underground Communication Line - Depth 30"-36"

CONST. 12"ø CP SD LINE ±53.86 L.F. @ S=0.74%

CONST. 12"ø CTS POLY WATER LINE

CONST. 12"ø CLASS 52 D.I. WATER LINE

CONST. 10"ø CLASS 52 D.I. WATER LINE

CONST. 12"ø 90° ELBOW

CONNECT TO EXIST. 12"ø WATER LINE

CONNECT TO EXIST. 10"ø WATER LINE

CONST. 10"ø 90° ELBOW

CONST. 10"x6"x10" TEE W/ 6"ø GATE VALVE

CONST. RIP RAP

CONST. FIRE HYDRANT ASSEMBLY W/ 6"ø GATE VALVE

CONST. 12"X6"X12" TEE

CONST. BUBBLE UP BOX TG=4821.80 FL=FIELD VERIFY

BOTTOM GRATE=21.00 FL IN=20.00 FL OUT=19.50

CONST. 12"ø 45"ø ELBOW

CONST. 12"X6"X12" TEE

CONST. FIRE HYDRANT ASSEMBLY W/ 6"ø GATE VALVE

Exist. 12470 High Voltage - Depth 30" from Top of Asphalt

CONST. 1"ø 90° ELBOW

CONST. 1"x1"x1" TEE

CONST. 1"ø CTS POLY WATER LINE

Exist. Water Line From Owner Utility Map

Exist. Sewer Manhole

Storage Building

FF=4827.25 Civil

AD -03

CONSTRUCTION LIMITS

CONSTRUCTION LIMITS

Exist. 12470 Overhead Power Line

CONST. NON-FREEZE 1"ø YARD HYDRANT

24" SD LINE: SEE 'NOLTE' FOR LAYOUT AND DIRECTION

Exist. 12" Water Line From Owner Utility Map

Exist. 10" Water Line From Owner Utility Map

Exist. 24"ø Storm Drain Line

Exist. 12" Water Line

CONST. 1"ø SLEEVE VALVE & SLEEVE

TIE SD

10N529_S 6/6/2013 6:10:08 PM

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Student Life Center
DFCM# 08015750

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PROJECT NO. 2010562

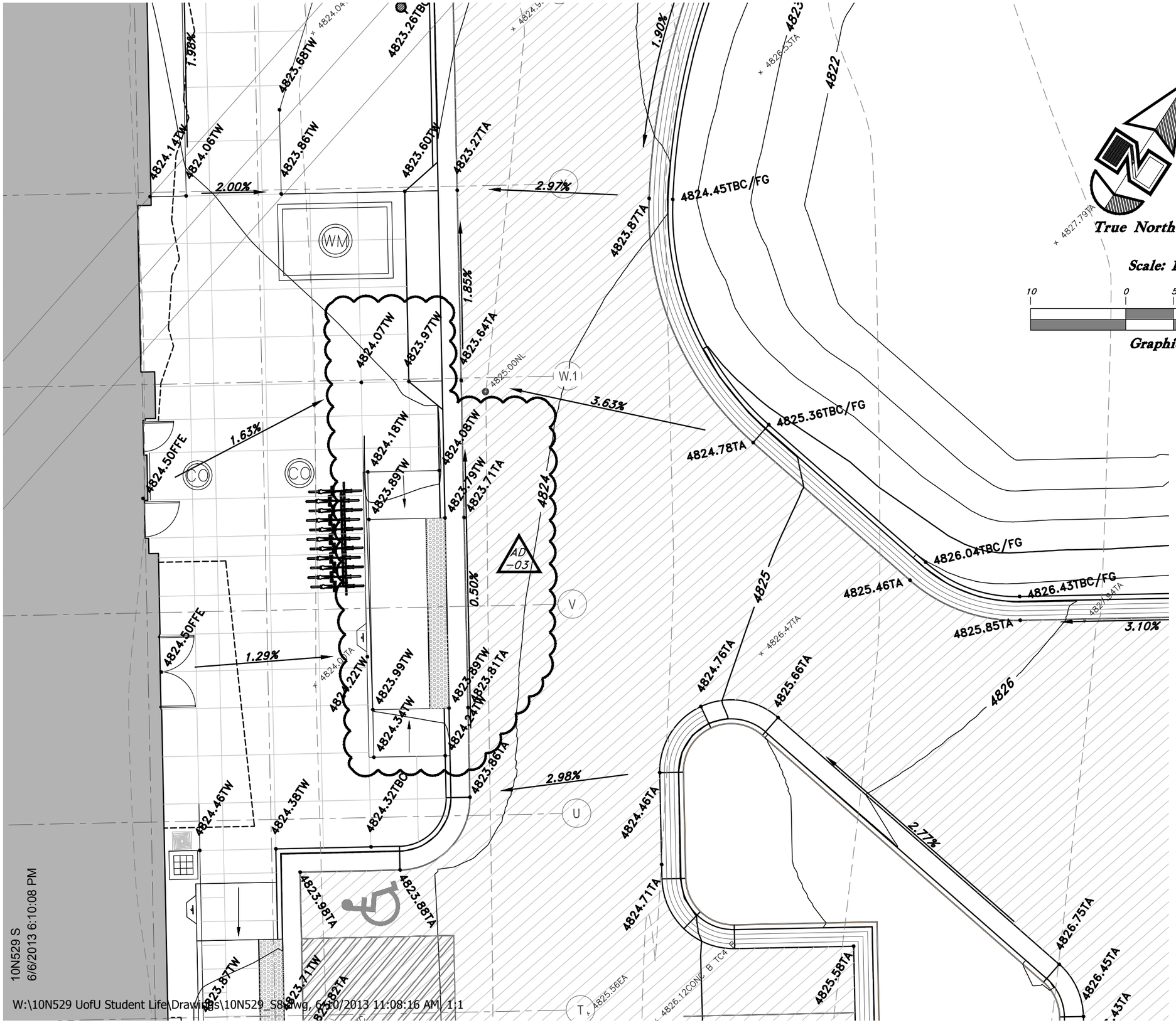
DATE: 06.11.2013

SHEET REFERENCE

CU302& CU302a

SHEET NUMBER

AD03-C6.0



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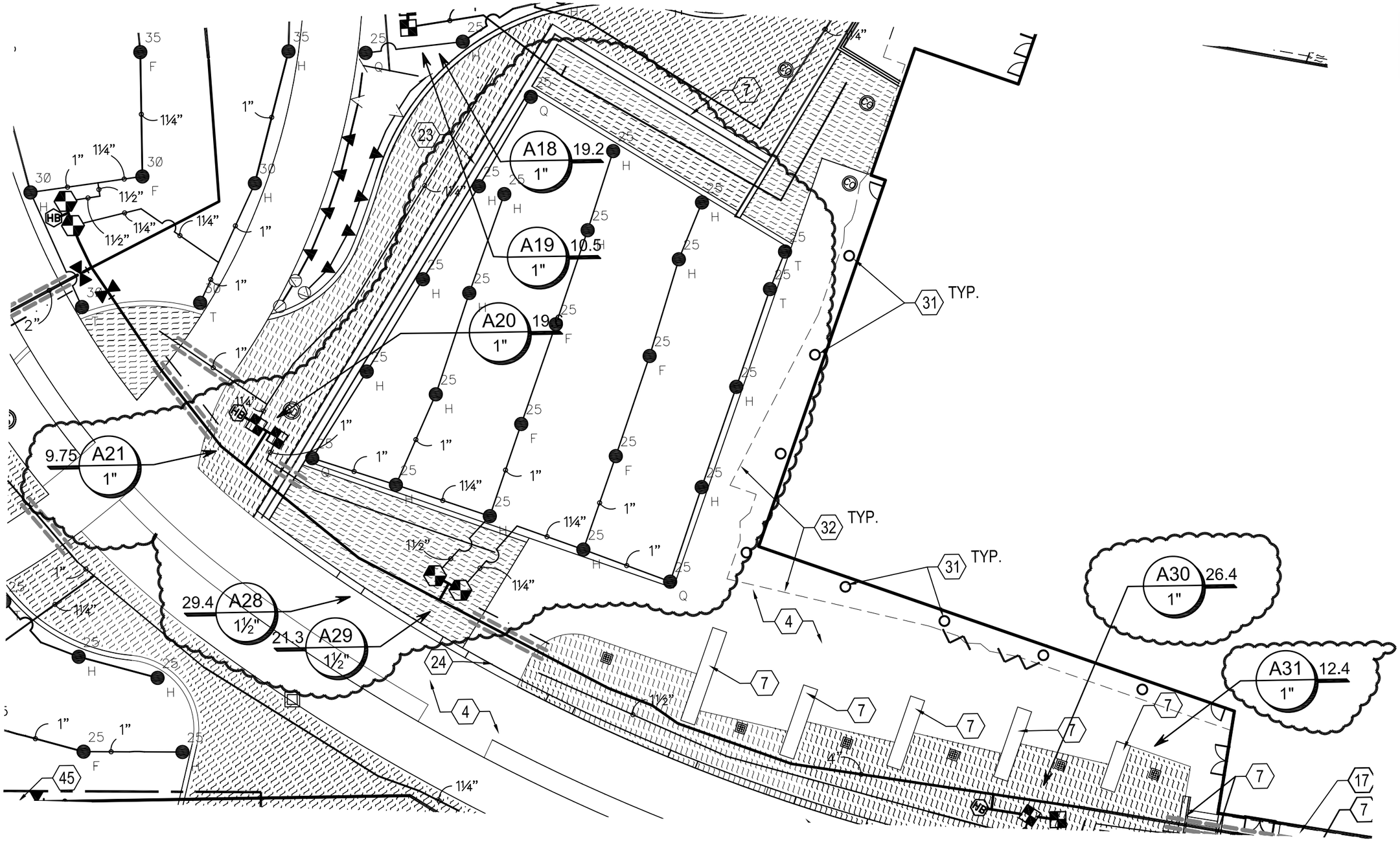
DATE: 06.11.2013

SHEET REFERENCE

CG202 & CG202a

SHEET NUMBER

AD03-C7.0



A1 IRRIGATION PLAN AREA "A"

0 10' 20' 40'

SCALE: 1' = 20'-0"

Project File Name and Path
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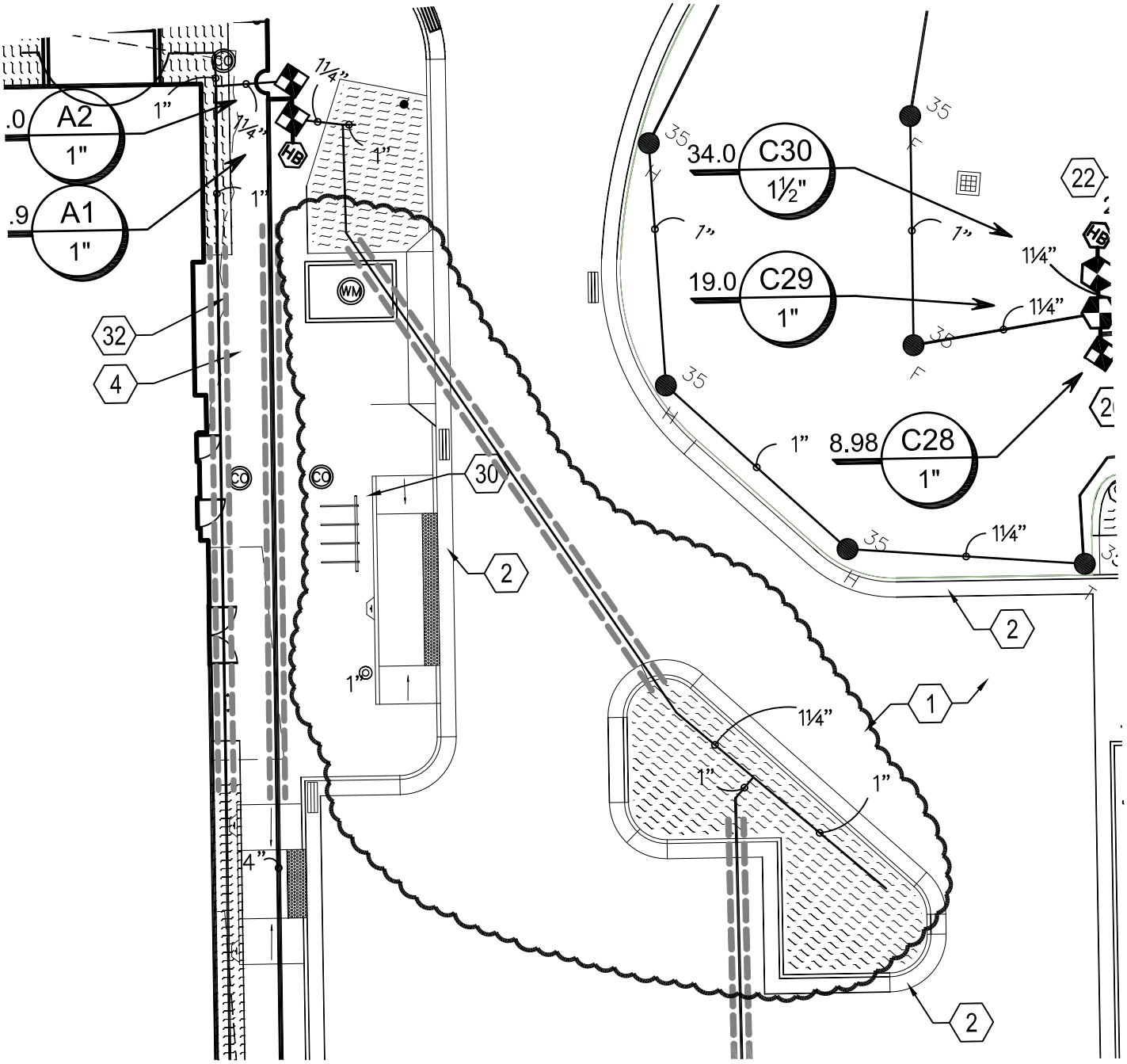
DATE: 11 JUNE 2013

SHEET REFERENCE

LI101

SHEET NUMBER

AD03-L01



A1 IRRIGATION PLAN AREA "B"

0 10' 20' 40'

SCALE: 1' = 20'-0"

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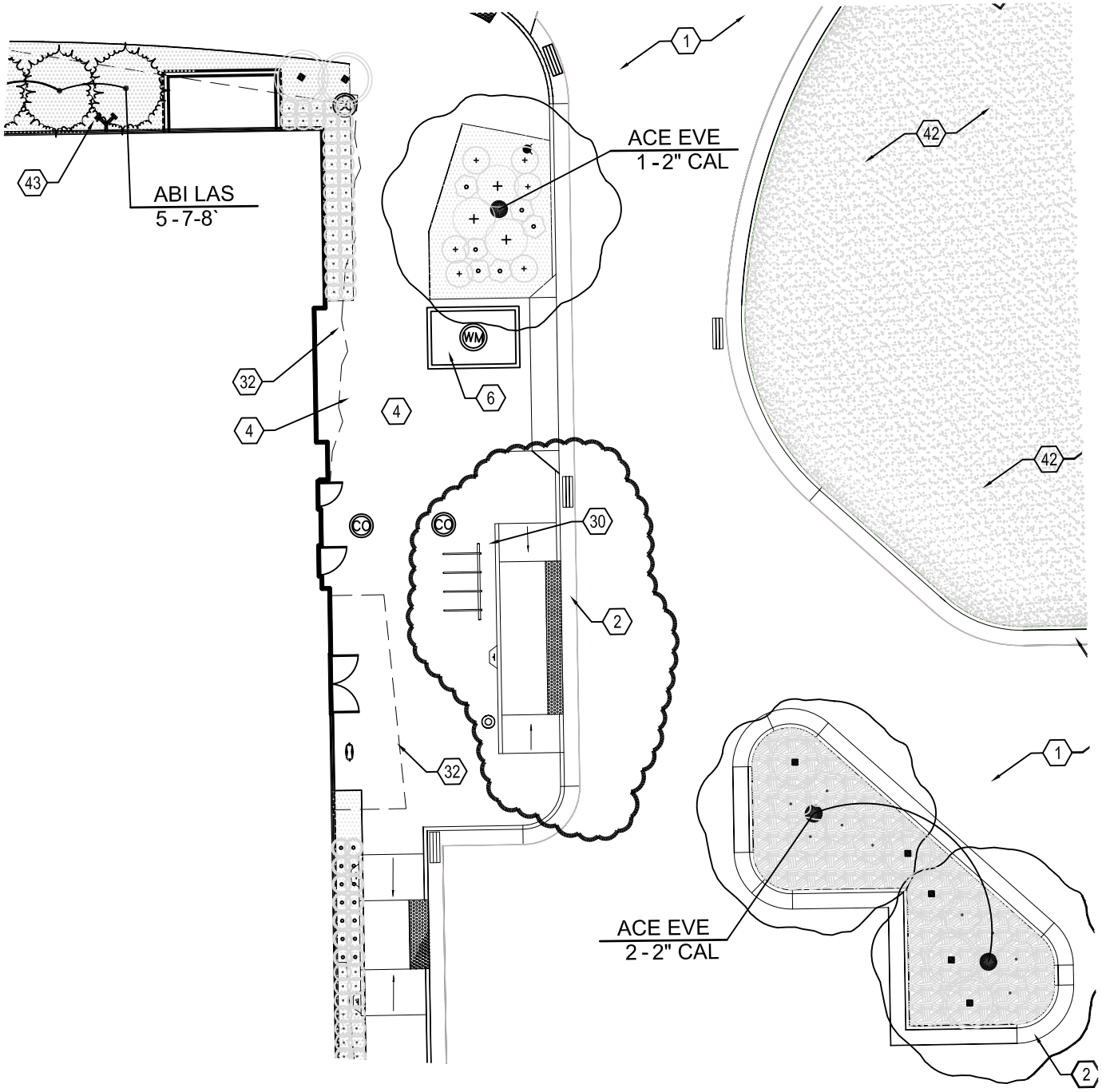
SHEET NUMBER
AD03-L02

SHEET REFERENCE
LI102



A1 TREE PLANTING PLAN AREA "B"

10'-20'-0'0' 20' 40'

SCALE: 1' = 20'-0"

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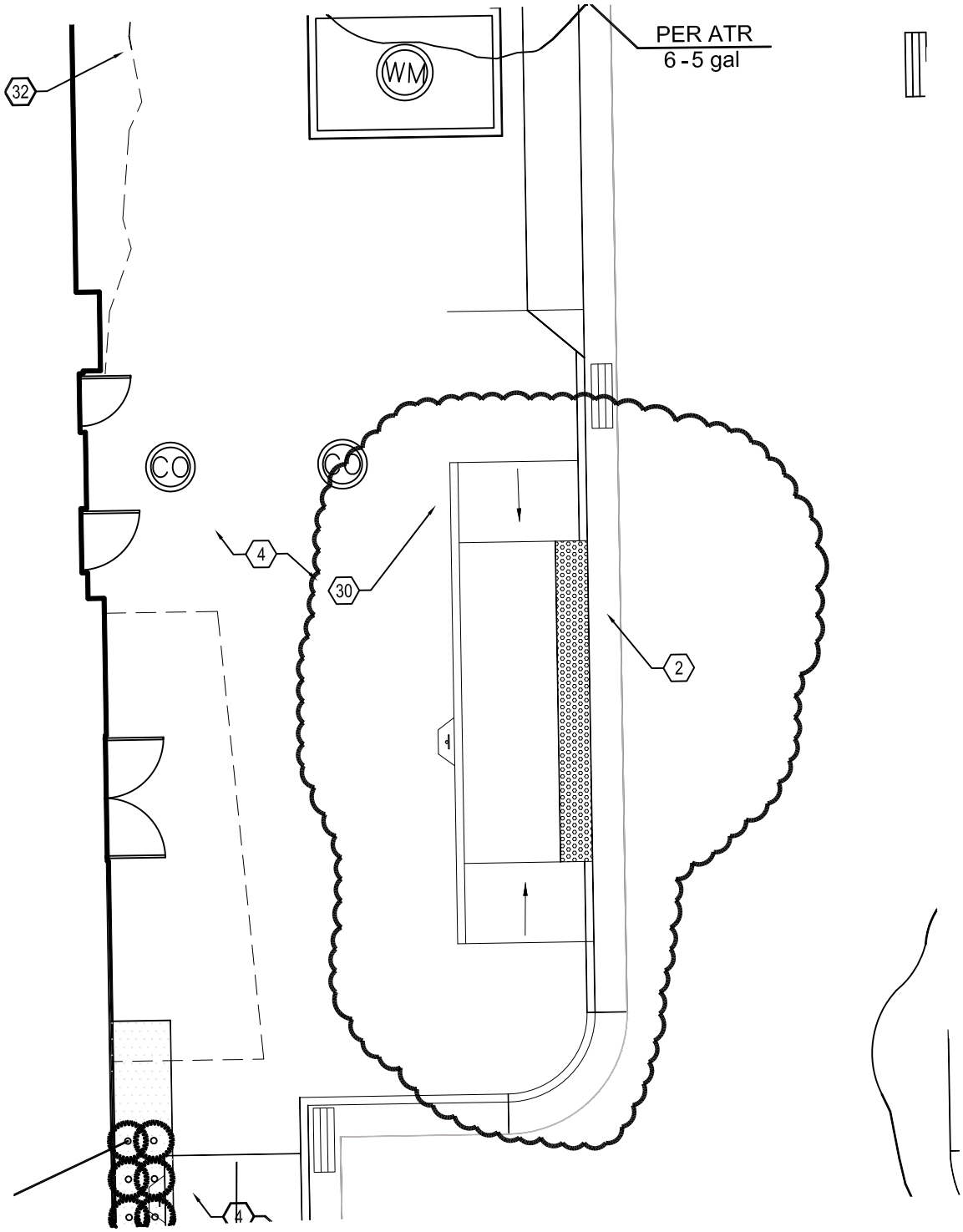
SHEET NUMBER
AD03-L03

SHEET REFERENCE
LP102



A1 LANDSCAPE PLAN AREA "A"

0 10' 20' 40'

SCALE: 1' = 20'-0"

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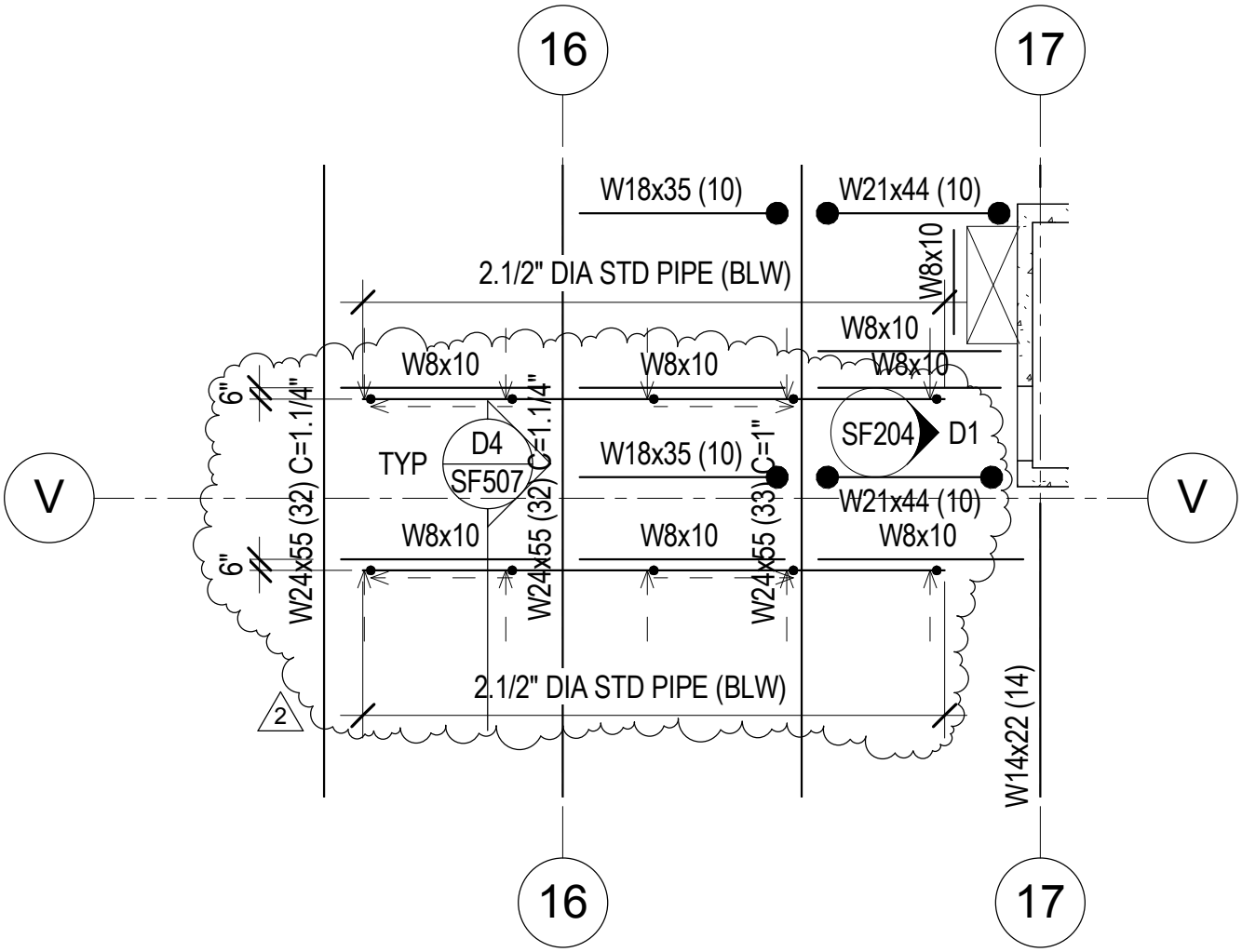
SHEET NUMBER
AD03-L04

SHEET REFERENCE
LP403



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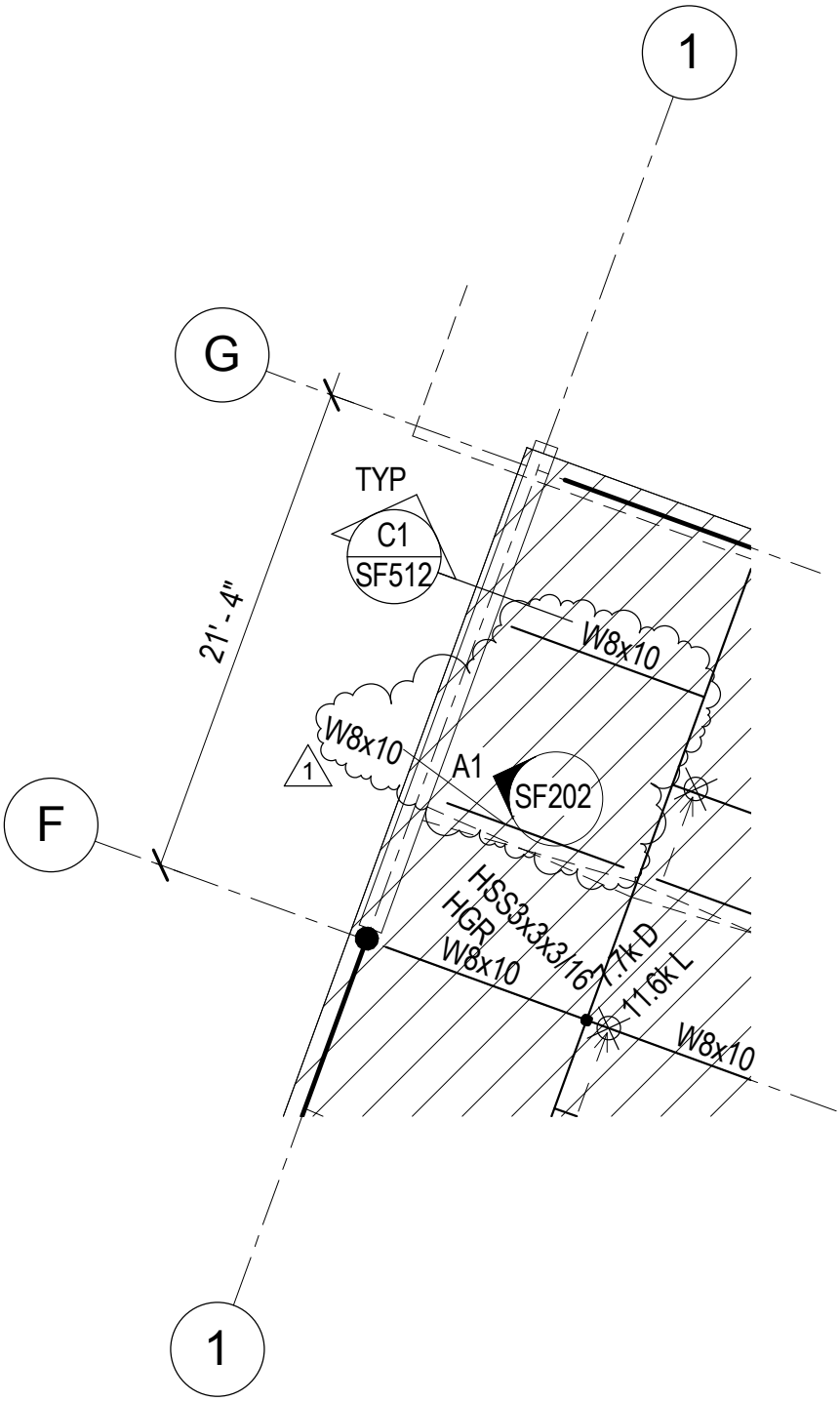
SHEET NUMBER
ADD-03-S01

SHEET REFERENCE
SF103A



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SHEET NUMBER
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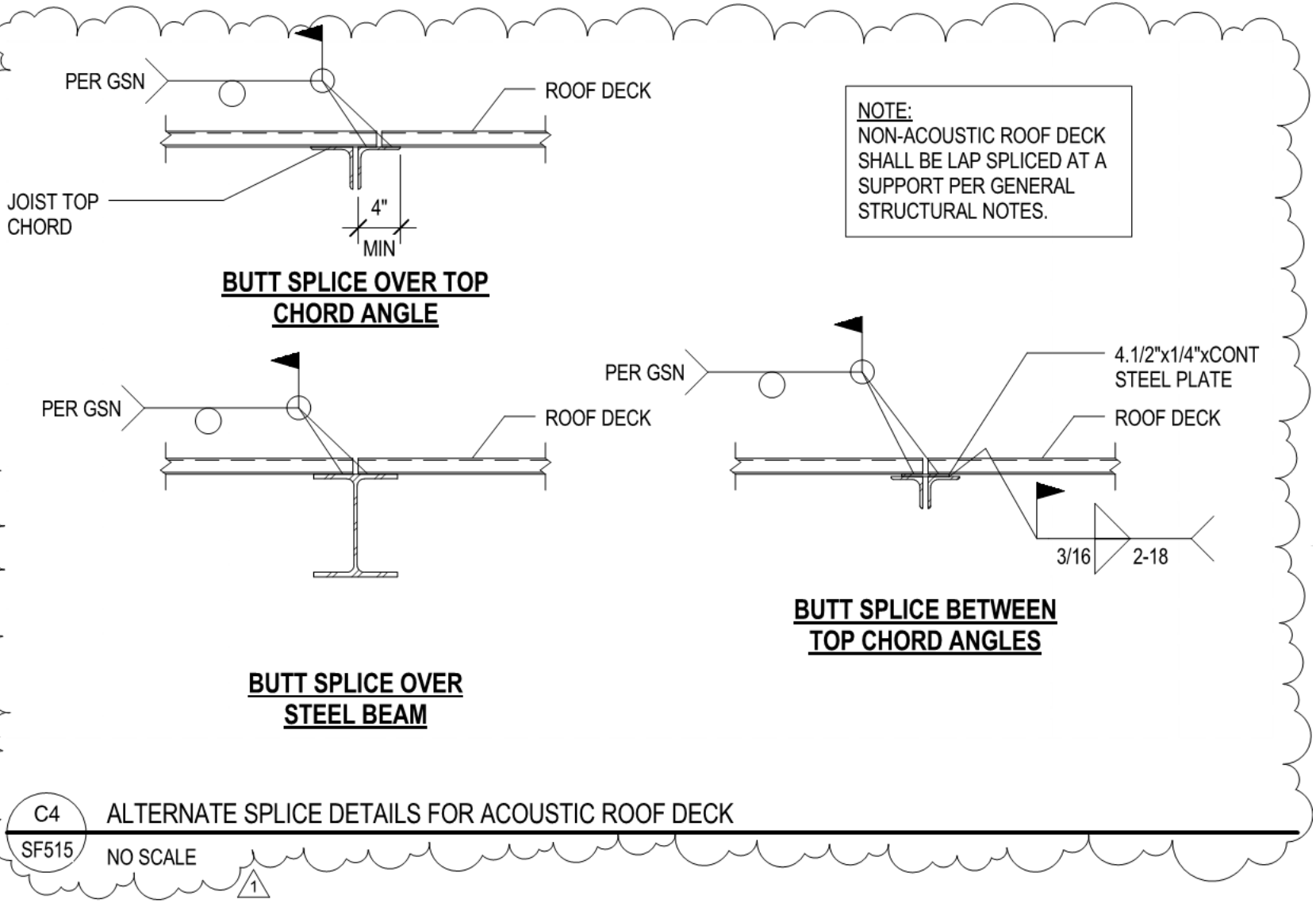
SHEET REFERENCE
SF106C



C4 / SF515 ALTERNATE SPLICE DETAILS FOR ACOUSTIC ROOF DECK

NO SCALE

1

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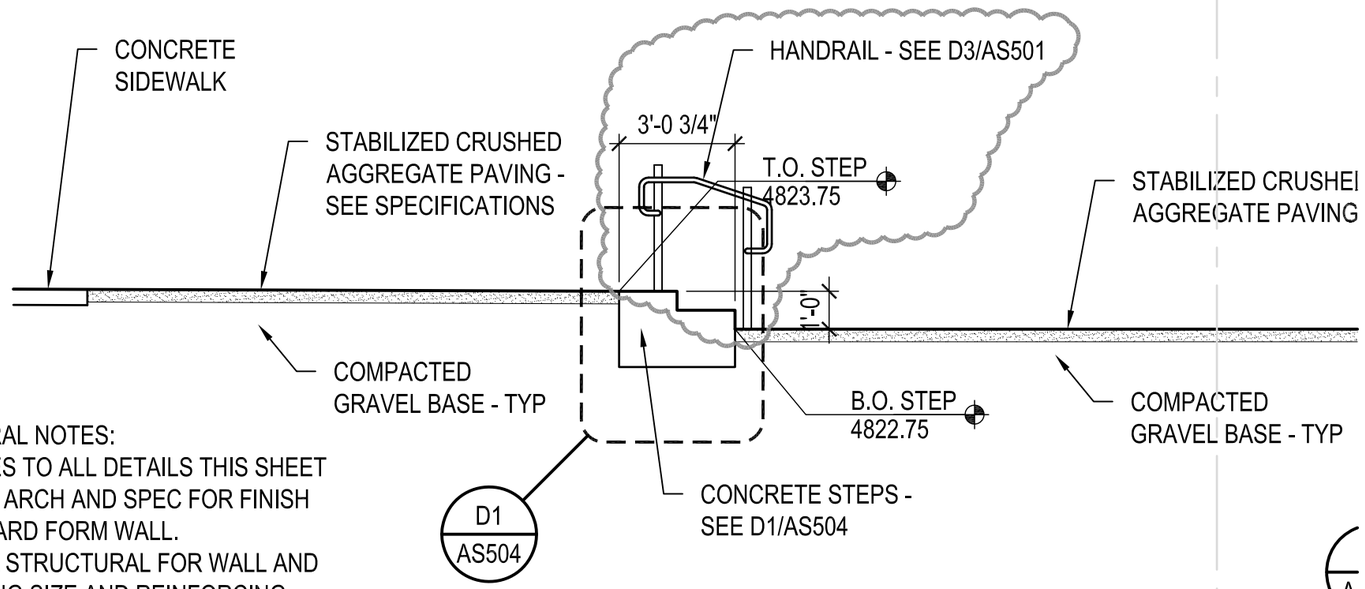
SF515



GENERAL NOTES:
APPLIES TO ALL DETAILS THIS SHEET
1. SEE ARCH AND SPEC FOR FINISH OF BOARD FORM WALL.
2. SEE STRUCTURAL FOR WALL AND FOOTING SIZE AND REINFORCING.
3. CONSTRUCT 'V' JOINTS AT 8' O.C. MAXIMUM. SEE B4/AS501 AND STR'L

D1 STABILIZED CRUSHED AGGREGATE PATHWAY W/ STEPS

1/4" = 1'-0"

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SHEET NUMBER
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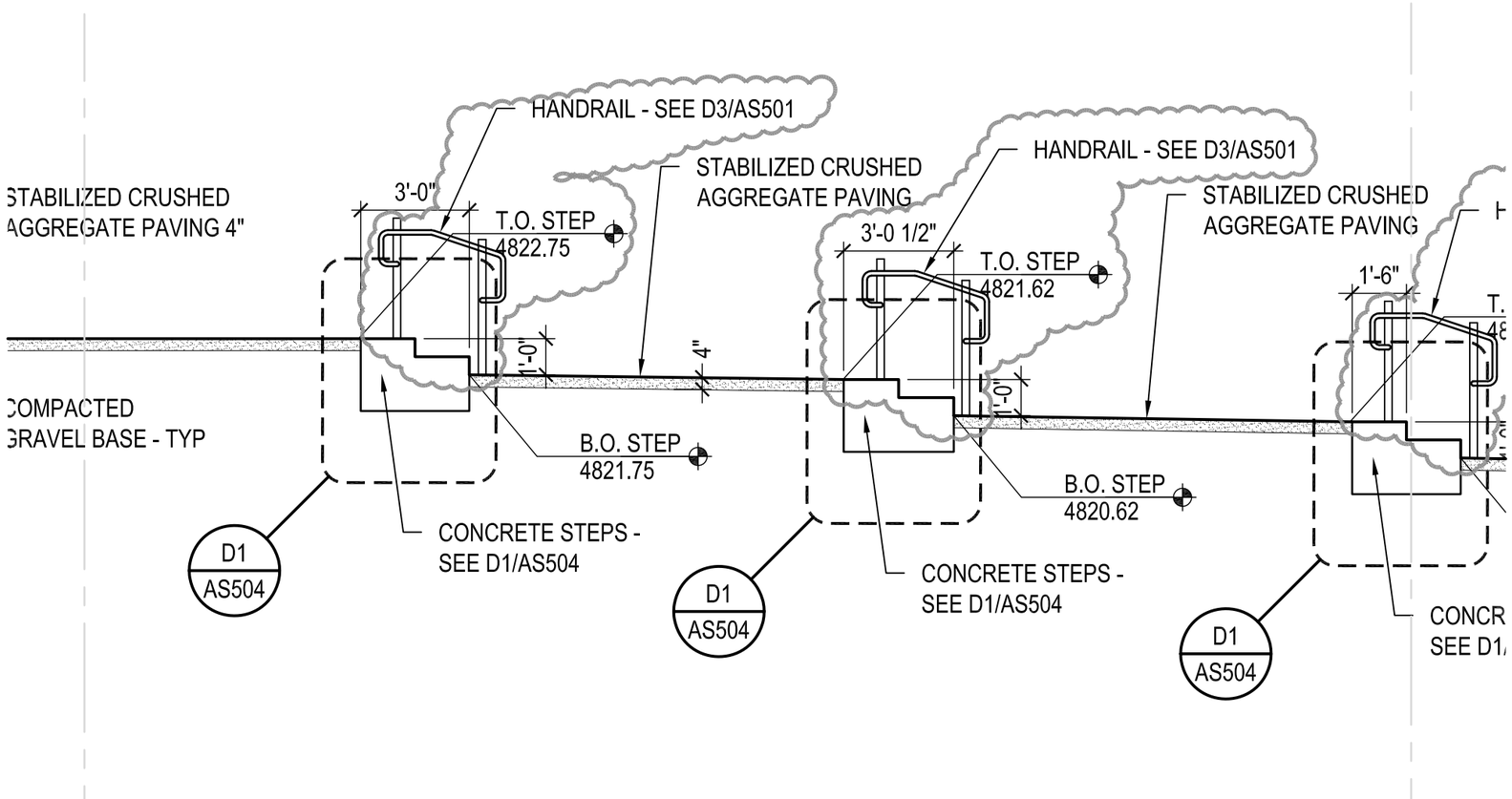

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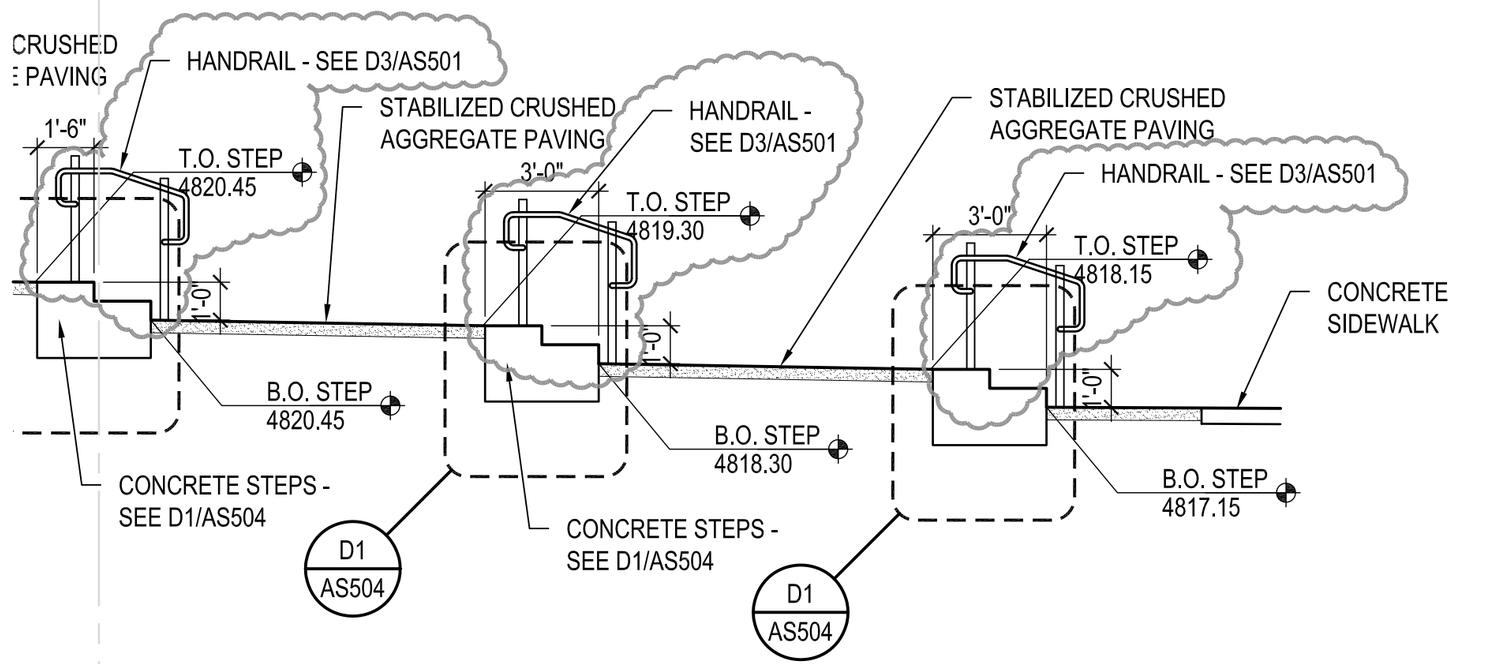

DETAIL—FILE

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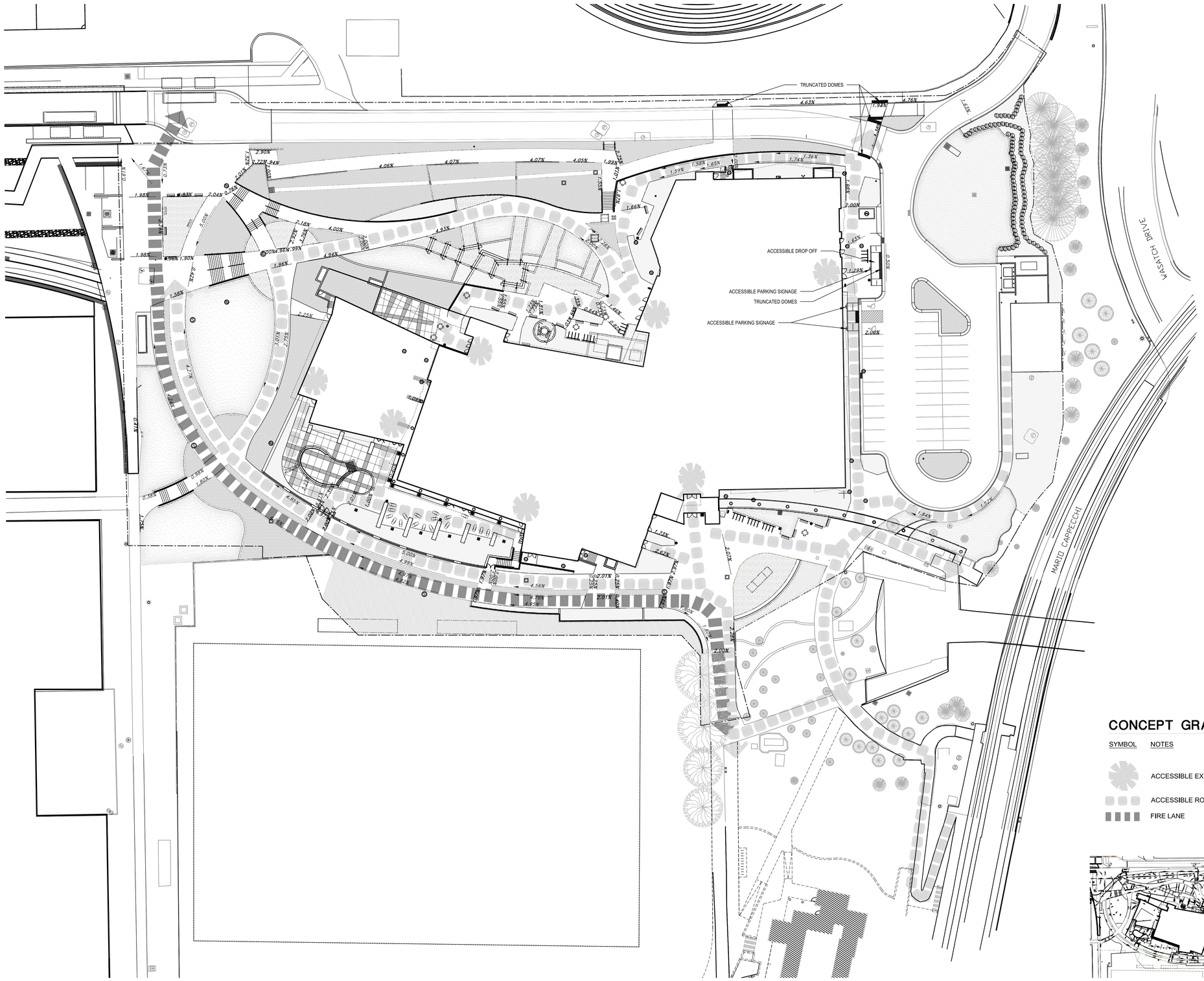


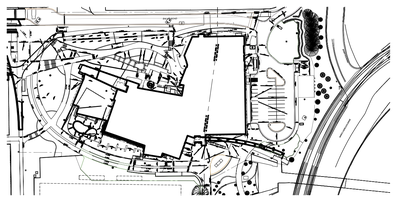
A1 OVERALL SITE PLAN

0 15' 30' 60'

SCALE: 1' = 30'-0"

CONCEPT GRAPHICS SCHEDULE

SYMBOL	NOTES
	ACCESSIBLE EXIT
	ACCESSIBLE ROUTE
	FIRE LANE



KEY PLAN

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1	11 JUNE 2013	ADDENDUM #3

SHEET NAME

OVERALL SITE PLAN

BID DOCUMENTS
MAY 15, 2013

SHEET NUMBER

AS100

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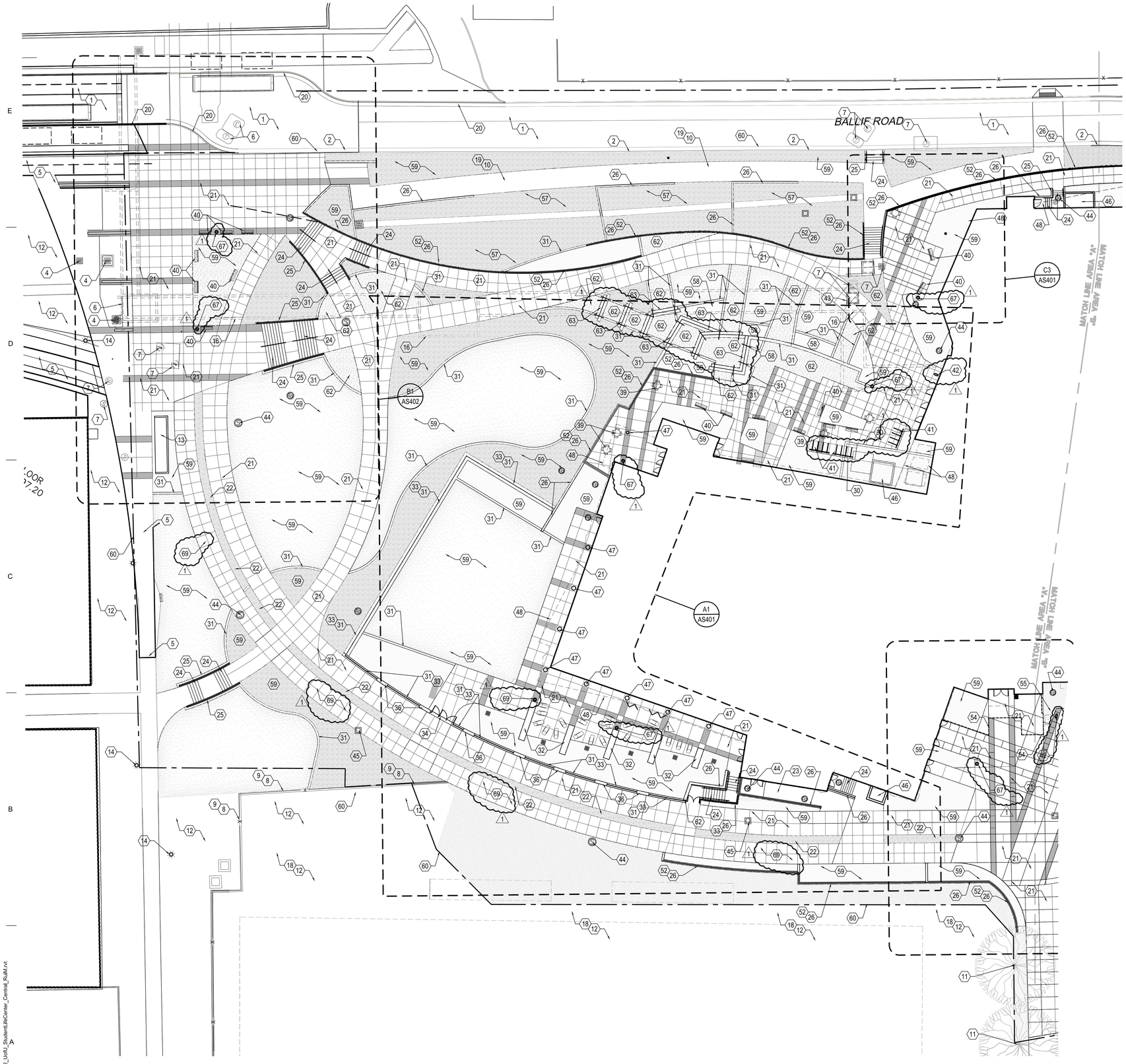


A1 SITE PLAN AREA "A"

0 10' 20' 40'

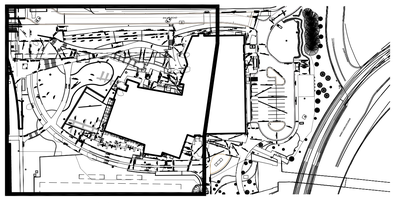
SCALE: 1' = 20'-0"

KEYNOTES

1. EXISTING ASPHALT PAVING - SEE CIVIL
2. EXISTING CURB AND GUTTER - SEE CIVIL
3. EXISTING CONCRETE SPEED TABLE - SEE CIVIL
4. EXISTING CATCH BASIN - SEE CIVIL
5. EXISTING CONCRETE PAVING - SEE CIVIL
6. EXISTING UTILITY VAULT - SEE CIVIL
7. EXISTING UTILITY MANHOLE - SEE CIVIL
8. EXISTING RETAINING WALL - SEE CIVIL
9. EXISTING FENCE - SEE CIVIL
10. EXISTING ASPHALT BIKE PATH - SEE CIVIL
11. EXISTING TREE TO BE PROTECTED - SEE CIVIL
12. EXISTING LANDSCAPE AREA TO BE PROTECTED - SEE CIVIL
13. EXISTING ELECTRICAL BOX - SEE ELECTRICAL
14. EXISTING LIGHT POLE - SEE ELECTRICAL
15. EXISTING BRIDGE RAMP AND STAIRS - SEE CIVIL
16. EXISTING UTILITY TUNNEL - SEE CIVIL AND MECHANICAL
17. EXISTING TUNNEL LID - SEE CIVIL
18. EXISTING SOCCER FIELD TO BE PROTECTED - SEE CIVIL
19. ASPHALT PAVING- SEE CIVIL
20. CURB AND GUTTER - SEE CIVIL
21. CONCRETE SIDE WALK - SEE CIVIL
22. FIRE LANE W/ COBBLE PAVING - SEE A3/AS501/ CIVIL
23. CONCRETE RAMP - SEE B1/AS503
24. CONCRETE STAIRS - SEE A4/AS501
25. CONCRETE STAIR CHEEK WALL - SEE A4/AS501
26. CONCRETE RETAINING WALL - SEE B1, C1/AS501
27. CONCRETE SEAT WALL - SEE E1/AS504
28. BOULDER WALL - SEE CIVIL
29. FIRE PIT - SEE C4/AS501
30. THICKENED EDGE CONC PAVING - SEE E3/AS504
31. CONCRETE MOWSTRIP - SEE E4/AS504
32. POOL PARTITION WALL - SEE E2/AS504
33. ORNAMENTAL FENCE - SEE B2,B3,B4/AS501
34. ORNAMENTAL GATE - SEE SPECIFICATIONS
35. ROCK SWALE - SEE CIVIL
36. CONCRETE PILLISTER - SEE D2/AS504
37. CURB WALL - SEE B5/AS501
38. FUTURE CLIMBING TOWER
39. TABLE - SEE SPECIFICATIONS
40. BENCH - SEE SPECIFICATIONS
41. BIKE RACK - SEE SPECIFICATIONS
42. SKATE BOARD/ LONG BOARD RACK - SEE SPECIFICATIONS
43. TUNNEL LID - SEE CIVIL
44. UTILITY MAN HOLE - SEE CIVIL
45. CATCH BASIN - SEE CIVIL
46. AIR SHAFT WALL - SEE ARCHITECTUAL
47. BUILDING COLUMN - SEE ARCHITECTUAL
48. BUILDING OVERHANG
49. LIGHT POLE - SEE ELECTRICAL
50. TRASH ENCLOSURE - SEE E5/AS402
51. GENERATOR ENCLOSURE - SEE E4/AS402
52. GUARDRAIL - SEE C3/AS501
53. FIRE HYDRANT - SEE CIVIL
54. BUILDING OUTLINE - BID ALT. #3
55. PEDESTRIAN BRIDGE - BID ALT. #3
56. HAND RAIL - SEE D1,D2,D3/AS501
57. BIO-SWALE - SEE LANDSCAPE PLAN
58. CRUSHED AGGREGATE MULCH - SEE A2/AS501
59. LANDSCAPE AREA - SEE LANDSCAPE SHEETS
60. CONTRACT LIMIT LINE
61. WALL OF STRUCTURE BELOW
62. STABILIZED AGGREGATE PAVING -SEE
63. CONCRETE STEP - SEE D1/AS504
64. COLORED CONCRETE PAVING - SEE SPECS
65. POOL - SEE ALTERNATE #2 (1)
66. STEEL PIPE BOLLARD - SEE D2/AS504
67. TRASH RECEPTACLE - SEE SPECS (1)
68. EMERGENCY GAS SHUT OFF - BID ALT.#4
69. CONCRETE BIKE PATH/ FIRE LANE - SEE CIVIL

MATERIALS LEGEND

- INTEGRALLY COLORED CONCRETE COLOR #1
- INTEGRALLY COLORED CONCRETE COLOR #2
- 1- 3" COBBLE - SEE LANDSCAPE DRAWINGS AND SPECIFICATIONS
- STONE MULCH - SEE LANDSCAPE DRAWINGS AND SPECIFICATIONS
- STABILIZED CRUSHED AGGREGATE PAVING - SEE SPECIFICATIONS
- LAWN - SEE LANDSCAPE DRAWINGS



KEY PLAN

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SHEET NAME

SITE PLAN AREA "A"

BID DOCUMENTS
MAY 15, 2013

SHEET NUMBER

AS101

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A1 ALTERNATE #1 SITE PLAN

0 10' 20' 40'

SCALE: 1' = 20'-0"

KEYNOTES

1. EXISTING ASPHALT PAVING - SEE CIVIL
2. EXISTING CURB AND GUTTER - SEE CIVIL
3. EXISTING CONCRETE SPEED TABLE - SEE CIVIL
4. EXISTING CATCH BASIN - SEE CIVIL
5. EXISTING CONCRETE PAVING - SEE CIVIL
6. EXISTING UTILITY VAULT - SEE CIVIL
7. EXISTING UTILITY MANHOLE - SEE CIVIL
8. EXISTING RETAINING WALL - SEE CIVIL
9. EXISTING FENCE - SEE CIVIL
10. EXISTING ASPHALT BIKE PATH - SEE CIVIL
11. EXISTING TREE TO BE PROTECTED - SEE CIVIL
12. EXISTING LANDSCAPE AREA TO BE PROTECTED - SEE CIVIL
13. EXISTING ELECTRICAL BOX - SEE ELECTRICAL
14. EXISTING LIGHT POLE - SEE ELECTRICAL
15. EXISTING BRIDGE RAMP AND STAIRS - SEE CIVIL
16. EXISTING UTILITY TUNNEL - SEE CIVIL AND MECHANICAL
17. EXISTING TUNNEL LID - SEE CIVIL
18. EXISTING SOCCER FIELD TO BE PROTECTED - SEE CIVIL
19. ASPHALT PAVING- SEE CIVIL
20. CURB AND GUTTER - SEE CIVIL
21. CONCRETE SIDE WALK - SEE CIVIL
22. FIRE LANE W/ COBBLE PAVING - SEE A3/AS501/ CIVIL
23. CONCRETE RAMP - SEE B1/AS503
24. CONCRETE STAIRS - SEE A4/AS501
25. CONCRETE STAIR CHEEK WALL - SEE A4/AS501
26. CONCRETE RETAINING WALL - SEE B1, C1/AS501
27. CONCRETE SEAT WALL - SEE E1/AS504
28. BOULDER WALL - SEE CIVIL
29. FIRE PIT - SEE C4/AS501
30. THICKENED EDGE CONC PAVING - SEE E3/AS504
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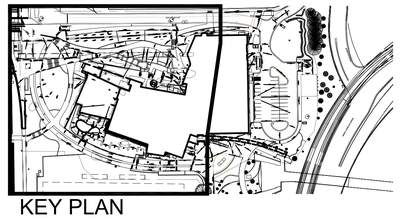
34. ORNAMENTAL GATE - SEE SPECIFICATIONS
35. ROCK SWALE - SEE CIVIL
36. CONCRETE PILLISTER - SEE D2/AS504
37. CURB WALL - SEE B5/AS501
38. FUTURE CLIMBING TOWER
39. TABLE - SEE SPECIFICATIONS
40. BENCH - SEE SPECIFICATIONS
41. BIKE RACK - SEE SPECIFICATIONS
42. SKATE BOARD/ LONG BOARD RACK - SEE SPECIFICATIONS
43. TUNNEL LID - SEE CIVIL
44. UTILITY MAN HOLE - SEE CIVIL
45. CATCH BASIN - SEE CIVIL
46. AIR SHAFT WALL - SEE ARCHITECTUAL
47. BUILDING COLUMN - SEE ARCHITECTUAL
48. BUILDING OVERHANG
49. LIGHT POLE - SEE ELECTRICAL
50. TRASH ENCLOSURE - SEE E5/AS402
51. GENERATOR ENCLOSURE - SEE E4/AS402
52. GUARDRAIL - SEE C3/AS501
53. FIRE HYDRANT - SEE CIVIL
54. BUILDING OUTLINE - BID ALT. #3
55. PEDESTRIAN BRIDGE - BID ALT. #3
56. HAND RAIL - SEE D1,D2,D3/AS501
57. BIO-SWALE - SEE LANDSCAPE PLAN
58. CRUSHED AGGREGATE MULCH - SEE A2/AS501
59. LANDSCAPE AREA - SEE LANDSCAPE SHEETS
60. CONTRACT LIMIT LINE
61. WALL OF STRUCTURE BELOW
62. STABILIZED AGGREGATE PAVING -SEE
63. CONCRETE STEP - SEE D1/AS504
64. COLORED CONCRETE PAVING - SEE SPECS
65. POOL - SEE ALTERNATE #2 (1)
66. STEEL PIPE BOLLARD - SEE D2/AS504
67. TRASH RECEPTACLE - SEE SPECS
68. EMERGENCY GAS SHUT OFF - BID ALT.#4 (1)
69. CONCRETE BIKE PATH/ FIRE LANE - SEE CIVIL

MATERIALS LEGEND

- INTEGRALLY COLORED CONCRETE COLOR #1
- INTEGRALLY COLORED CONCRETE COLOR #2
- 1- 3" COBBLE - SEE LANDSCAPE DRAWINGS AND SPECIFICATIONS
- STONE MULCH - SEE LANDSCAPE DRAWINGS AND SPECIFICATIONS
- STABILIZED CRUSHED AGGREGATE PAVING - SEE SPECIFICATIONS
- LAWN - SEE LANDSCAPE DRAWINGS



KEY PLAN

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NO.	DATE	DESCRIPTION
1	11 JUNE 2013.	ADDENDUM #3

SHEET NAME
ALTERNATE #1
SITE PLAN

BID DOCUMENTS
MAY 15, 2013

SHEET NUMBER
AS101A

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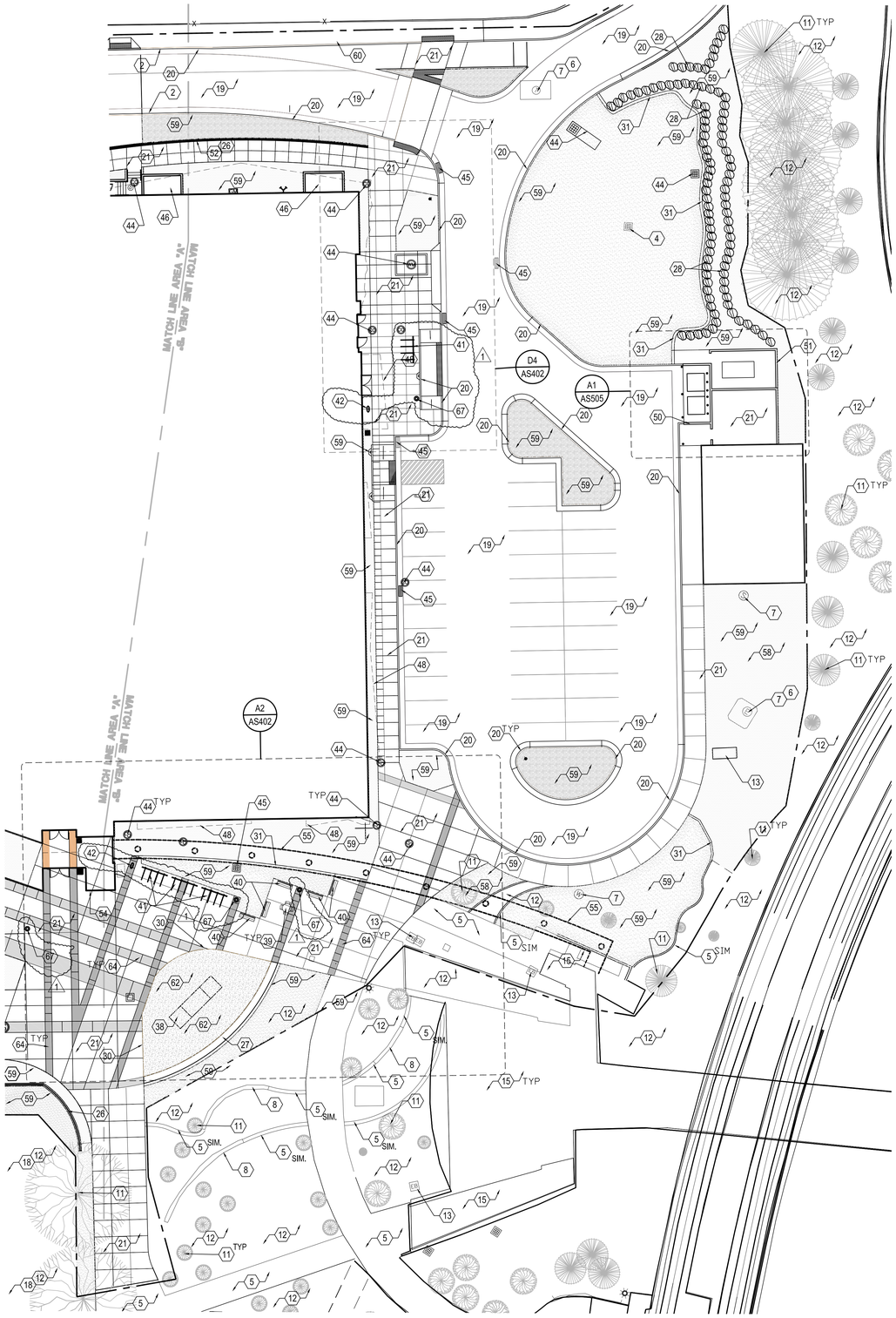


A1 SITE PLAN AREA "B"

10-20'-0'0' 20' 40'

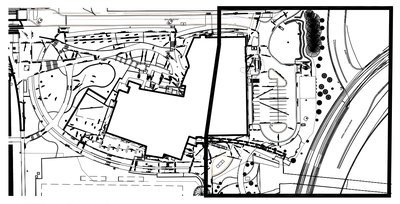
SCALE: 1' = 20'-0"

KEYNOTES

1. EXISTING ASPHALT PAVING - SEE CIVIL
2. EXISTING CURB AND GUTTER - SEE CIVIL
3. EXISTING CONCRETE SPEED TABLE - SEE CIVIL
4. EXISTING CATCH BASIN - SEE CIVIL
5. EXISTING CONCRETE PAVING - SEE CIVIL
6. EXISTING UTILITY VAULT - SEE CIVIL
7. EXISTING UTILITY MANHOLE - SEE CIVIL
8. EXISTING RETAINING WALL - SEE CIVIL
9. EXISTING FENCE - SEE CIVIL
10. EXISTING ASPHALT BIKE PATH - SEE CIVIL
11. EXISTING TREE TO BE PROTECTED - SEE CIVIL
12. EXISTING LANDSCAPE AREA TO BE PROTECTED - SEE CIVIL
13. EXISTING ELECTRICAL BOX - SEE ELECTRICAL
14. EXISTING LIGHT POLE - SEE ELECTRICAL
15. EXISTING BRIDGE RAMP AND STAIRS - SEE CIVIL
16. EXISTING UTILITY TUNNEL - SEE CIVIL AND MECHANICAL
17. EXISTING TUNNEL LID - SEE CIVIL
18. EXISTING SOCCER FIELD TO BE PROTECTED - SEE CIVIL
19. ASPHALT PAVING- SEE CIVIL
20. CURB AND GUTTER - SEE CIVIL
21. CONCRETE SIDE WALK - SEE CIVIL
22. FIRE LANE W/ COBBLE PAVING - SEE A3/AS501/ CIVIL
23. CONCRETE RAMP - SEE B1/AS503
24. CONCRETE STAIRS - SEE A4/AS501
25. CONCRETE STAIR CHEEK WALL - SEE A4/AS501
26. CONCRETE RETAINING WALL - SEE B1, C1/AS501
27. CONCRETE SEAT WALL - SEE E1/AS504
28. BOULDER WALL - SEE CIVIL
29. FIRE PIT - SEE C4/AS501
30. THICKENED EDGE CONC PAVING - SEE E3/AS504
31. CONCRETE MOWSTRIP - SEE E4/AS504
32. POOL PARTITION WALL - SEE E2/AS504
33. ORNAMENTAL FENCE - SEE B2,B3,B4/AS501
34. ORNAMENTAL GATE - SEE SPECIFICATIONS
35. ROCK SWALE - SEE CIVIL
36. CONCRETE PILLISTER - SEE D2/AS504
37. CURB WALL - SEE B5/AS501
38. FUTURE CLIMBING TOWER
39. TABLE - SEE SPECIFICATIONS
40. BENCH - SEE SPECIFICATIONS
41. BIKE RACK - SEE SPECIFICATIONS
42. SKATE BOARD/ LONG BOARD RACK - SEE SPECIFICATIONS
43. TUNNEL LID - SEE CIVIL
44. UTILITY MAN HOLE - SEE CIVIL
45. CATCH BASIN - SEE CIVIL
46. AIR SHAFT WALL - SEE ARCHITECTUAL
47. BUILDING COLUMN - SEE ARCHITECTUAL
48. BUILDING OVERHANG
49. LIGHT POLE - SEE ELECTRICAL
50. TRASH ENCLOSURE - SEE E5/AS402
51. GENERATOR ENCLOSURE - SEE E4/AS402
52. GUARDRAIL - SEE C3/AS501
53. FIRE HYDRANT - SEE CIVIL
54. BUILDING OUTLINE - BID ALT. #3
55. PEDESTRIAN BRIDGE - BID ALT. #3
56. HAND RAIL - SEE D1,D2,D3/AS501
57. BIO-SWALE - SEE LANDSCAPE PLAN
58. CRUSHED AGGREGATE MULCH - SEE A2/AS501
59. LANDSCAPE AREA - SEE LANDSCAPE SHEETS
60. CONTRACT LIMIT LINE
61. WALL OF STRUCTURE BELOW
62. STABILIZED AGGREGATE PAVING -SEE
63. CONCRETE STEP - SEE D1/AS504
64. COLORED CONCRETE PAVING - SEE SPECS
65. POOL - SEE ALTERNATE #2 (1)
66. STEEL PIPE BOLLARD - SEE D2/AS504
67. TRASH RECEPTACLE - SEE SPECS (1)
68. EMERGENCY GAS SHUT OFF - BID ALT.#4
69. CONCRETE BIKE PATH/ FIRE LANE - SEE CIVIL

MATERIALS LEGEND

- INTEGRALLY COLORED CONCRETE COLOR #1
- INTEGRALLY COLORED CONCRETE COLOR #2
- 1- 3" COBBLE - SEE LANDSCAPE DRAWINGS AND SPECIFICATIONS
- STONE MULCH - SEE LANDSCAPE DRAWINGS AND SPECIFICATIONS
- STABILIZED CRUSHED AGGREGATE PAVING - SEE SPECIFICATIONS
- LAWN - SEE LANDSCAPE DRAWINGS



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NO.	DATE	DESCRIPTION
1	11 JUNE 2013	ADDENDUM #3

SHEET NAME

SITE PLAN
AREA "B"

BID DOCUMENTS
MAY 15, 2013

SHEET NUMBER

AS102

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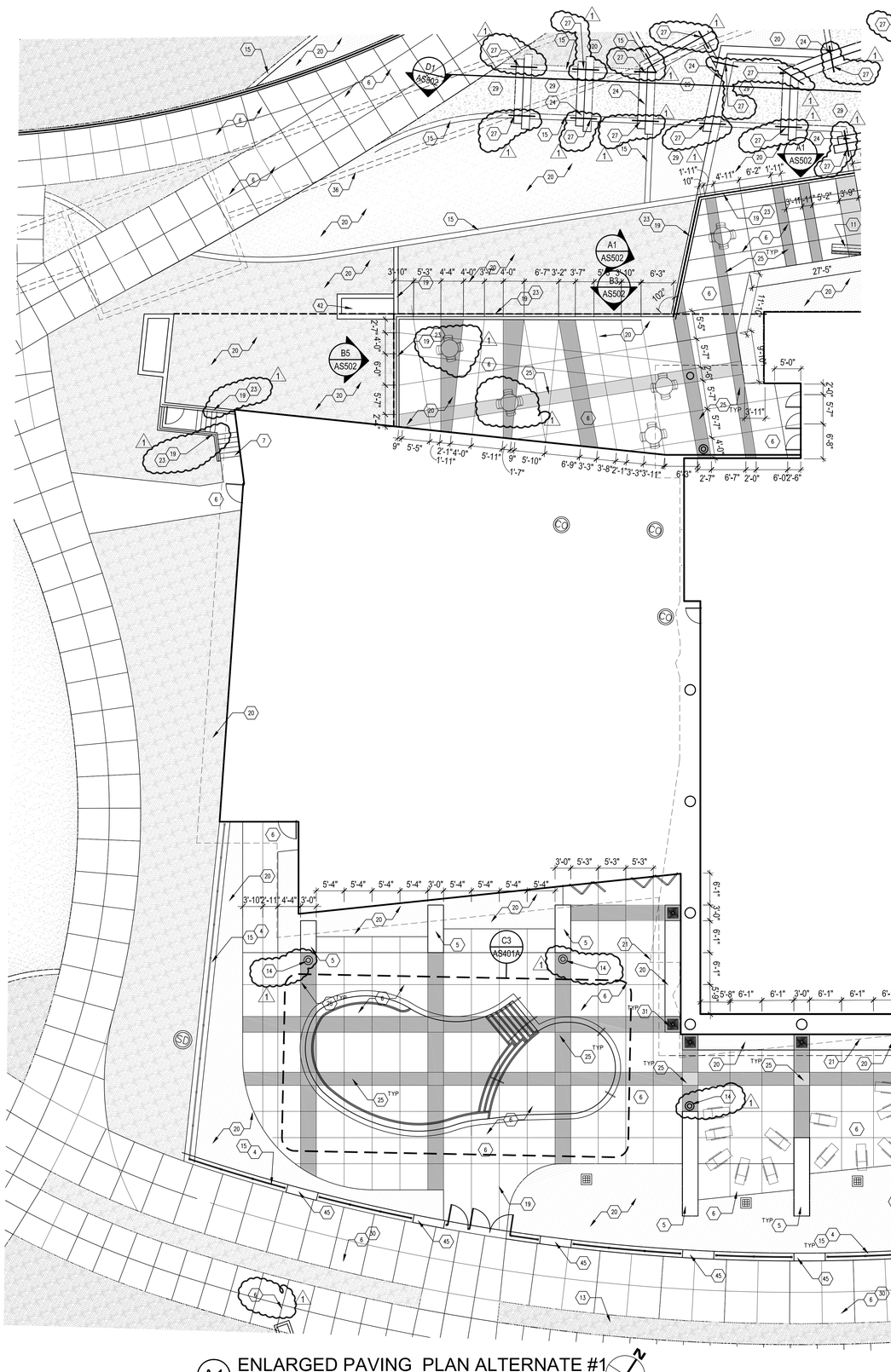
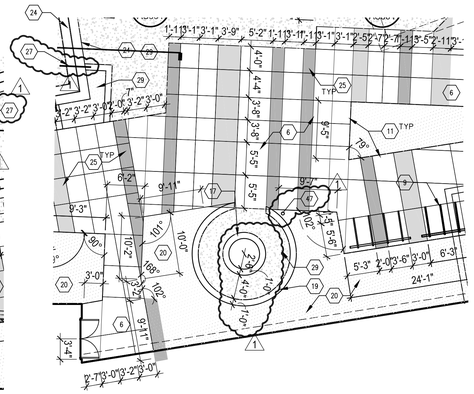


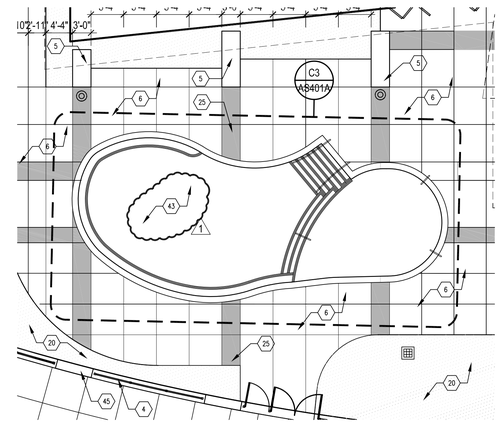
A1 ENLARGED PAVING PLAN ALTERNATE #1

SCALE: 1' = 10'-0"



D3 ENLARGED PAVING PLAN ALTERNATE # 4

SCALE: 1' = 10'-0"



C3 ENLARGED PAVING PLAN ALTERNATE # 2

SCALE: 1' = 10'-0"

KEYNOTES

1. BUILDING COLUMN
2. ASPHALT PAVING - SEE CIVIL
3. NOT USED
4. ORNAMENTAL FENCE - SEE B2,B3, B4/AS501
5. POOL PARTITION WALL - SEE C4/AS501 SIM.
6. CONCRETE PAVING - SEE CIVIL
7. CONCRETE STAIR - SEE A4/ AS501
8. BIKE PATH - SEE CIVIL
9. BIKE RACK - SEE SPECIFICATIONS
10. SKATE BOARD RACK - SEE SPECIFICATIONS
11. BENCH - SEE SPECIFICATIONS
12. TABLE - SEE SPECIFICATIONS
13. COBBLE PAVING - SEE A3/AS501
14. TRASH RECEPTACLE - SEE SPECS 1
15. CONCRETE MOWSTRIP - SEE E3/AS504
16. THICKENED EDGE CONCRETE WALK
17. FIRE PIT - SEE C4/AS501
18. MANHOLE - SEE CIVIL
19. CONCRETE RETAINING WALL - SEE C1/AS501
20. LANDSCAPE AREA
21. BUILDING OVERHANG
22. STEEL GRATE
23. STAINLESS STEEL GUARDRAIL - SEE C3/AS501
24. CONCRETE STEP - SEE D1/AS504 1
25. COLORED CONCRETE PAVING - SEE SPEC
26. CONCRETE CHEEK WALL - SEE A4&B1/AS501
27. STAINLESS STEEL HANDRAIL - SEE D3/AS501
28. TUNNEL LID - SEE STRUCTURAL
29. STABILIZED AGGREGATE PAVING - SEE A2/AS501
30. CONCRETE FIRELANE - SEE CIVIL
31. CATCH BASIN - SEE CIVIL
32. THICKENED EDGE SLAB - SEE E3/AS504
33. STEEL BOLLARD - SEE A1/AS501
34. BOULDER WALL - SEE CIVIL
35. CONCRETE CURB AND GUTTER - SEE CIVIL
36. EDGE OF TUNNEL
37. FUTURE CLIMBING WALL
38. BRIDGE/ENTRY - ALTERNATE # 3
39. EXISTING CONCRETE PAVING
40. EXISTING SEAT WALL - SEE CIVIL
41. EXISTING VAULT/ELECTRICAL EQUIPMENT
42. CONTRACT LIMIT LINE
43. POOL - ALTERNATE # 2 1
44. EXHAUST SHAFT
45. VERTICAL FENCE WALL PANEL - SEE C5/AS504
46. SEAT WALL- SEE E1/AS504
47. EMERGENCY GAS SHUT OFF - BID ALT.#4 1

MATERIALS LEGEND

- INTEGRALLY COLORED CONCRETE COLOR #1
- INTEGRALLY COLORED CONCRETE COLOR #2
- 1- 3" COBBLE - SEE LANDSCAPE DRAWINGS AND SPECIFICATIONS
- STONE MULCH - SEE LANDSCAPE DRAWINGS AND SPECIFICATIONS
- STABILIZED CRUSHED AGGREGATE PAVING - SEE SPECIFICATIONS
- LAWN - SEE LANDSCAPE DRAWINGS

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NO.	DATE	DESCRIPTION
1	11 JUNE 2013	ADDENDUM #3

SHEET NAME

ENLARGED PAVING PLAN ALTERNATE #1,4
BID DOCUMENTS
MAY 15, 2013

SHEET NUMBER

AS401A

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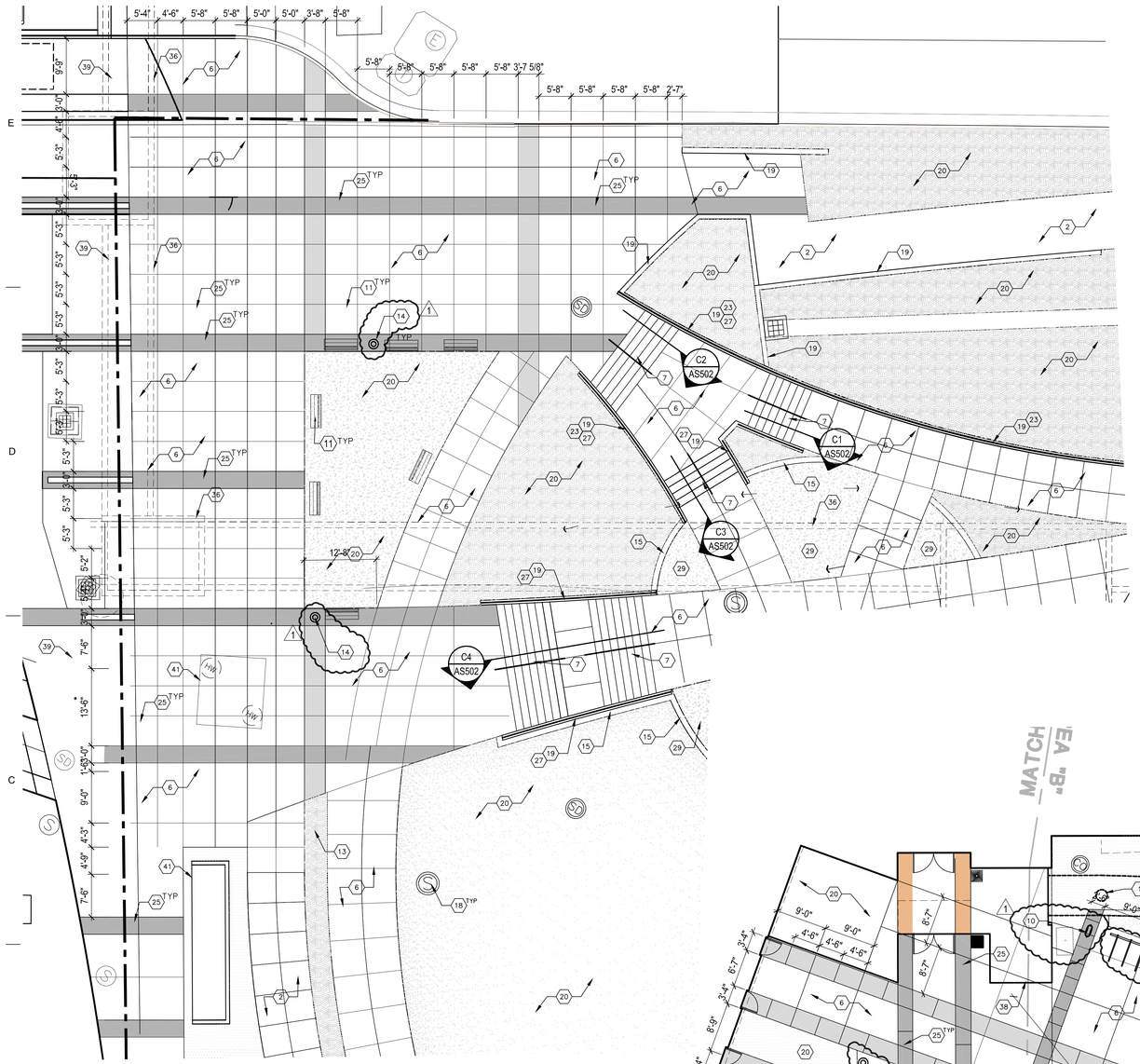
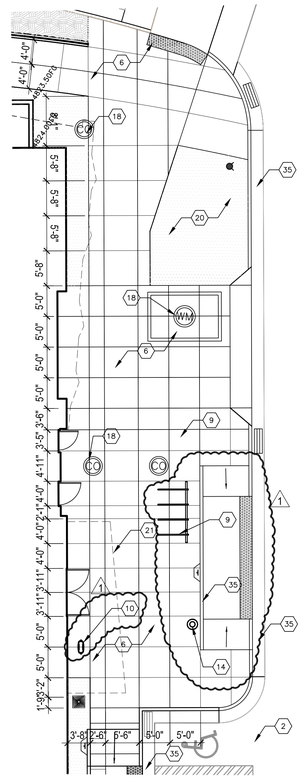
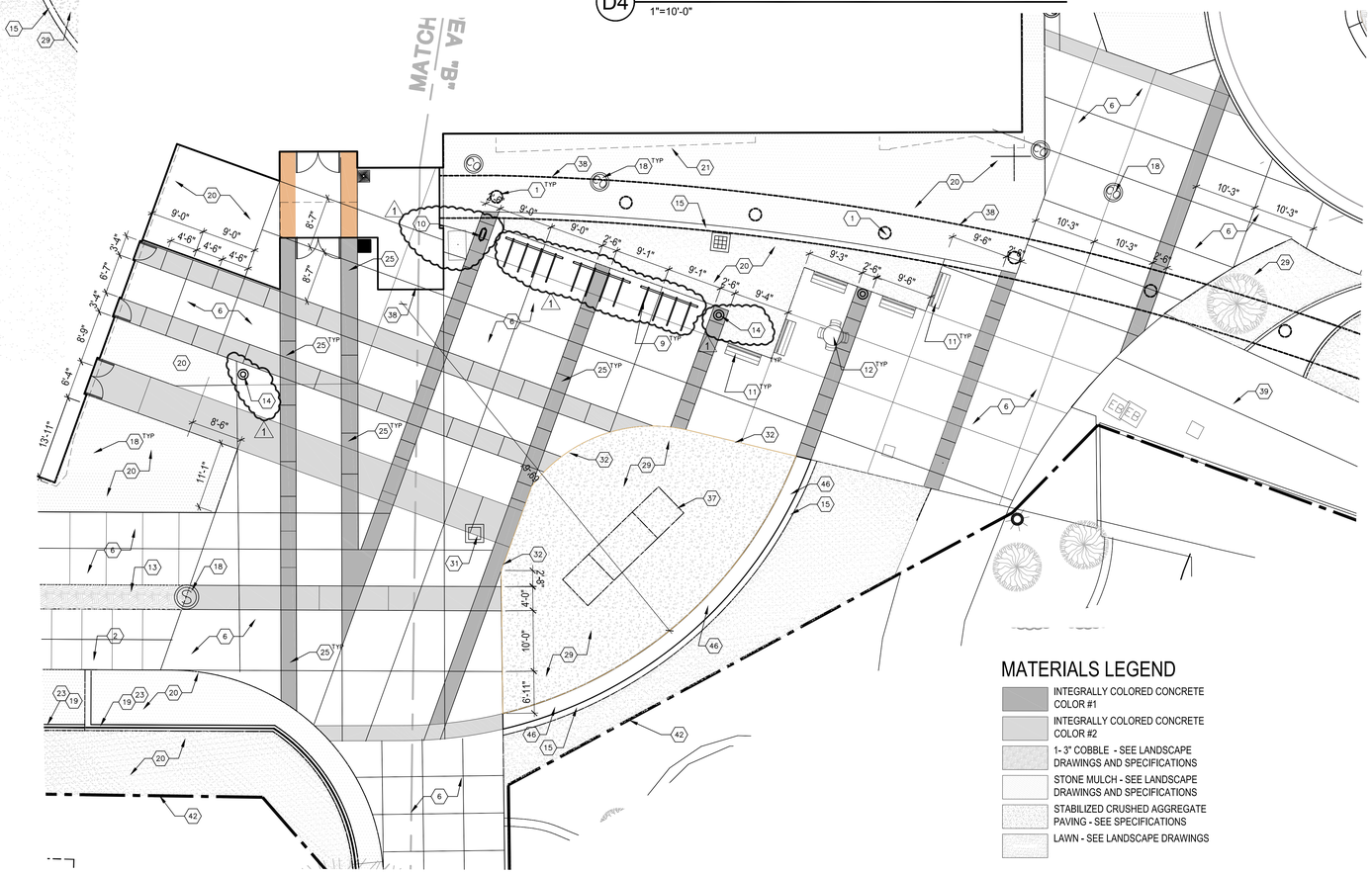


B1 WEST PLAZA ENLARGED PLAN
1"=10'-0"



D4 RECREATION ENTRANCE PAVING PLAN
1"=10'-0"



A2 SOUTH ENTRANCE PLAZA ENLARGED PLAN
1"=10'-0"

KEYNOTES

1. BUILDING COLUMN
2. ASPHALT PAVING - SEE CIVIL
3. NOT USED
4. ORNAMENTAL FENCE - SEE B2,B3, B4/AS501
5. POOL PARTITION WALL - SEE C4/AS501 SIM.
6. CONCRETE PAVING - SEE CIVIL
7. CONCRETE STAIR - SEE A4/ AS501
8. BIKE PATH - SEE CIVIL
9. BIKE RACK - SEE SPECIFICATIONS
10. SKATE BOARD RACK - SEE SPECIFICATIONS
11. BENCH - SEE SPECIFICATIONS
12. TABLE - SEE SPECIFICATIONS
13. COBBLE PAVING - SEE A3/AS501
14. TRASH RECEPTACLE - SEE SPECS 1
15. CONCRETE MOWSTRIP - SEE E3/AS504
16. THICKENED EDGE CONCRETE WALK
17. FIRE PIT - SEE C4/AS501
18. MANHOLE - SEE CIVIL
19. CONCRETE RETAINING WALL - SEE C1/AS501
20. LANDSCAPE AREA
21. BUILDING OVERHANG
22. STEEL GRATE
23. STAINLESS STEEL GUARDRAIL - SEE C3/AS501
24. CONCRETE STEP - SEE D1/AS504 1
25. COLORED CONCRETE PAVING - SEE SPEC
26. CONCRETE CHEEK WALL - SEE A4&B1/AS501
27. STAINLESS STEEL HANDRAIL - SEE D3/AS501
28. TUNNEL LID - SEE STRUCTURAL
29. STABILIZED AGGREGATE PAVING - SEE A2/AS501
30. CONCRETE FIRELANE - SEE CIVIL
31. CATCH BASIN - SEE CIVIL
32. THICKENED EDGE SLAB - SEE E3/AS504
33. STEEL BOLLARD - SEE A1/AS501
34. BOULDER WALL - SEE CIVIL
35. CONCRETE CURB AND GUTTER - SEE CIVIL
36. EDGE OF TUNNEL
37. FUTURE CLIMBING WALL
38. BRIDGE/ENTRY - ALTERNATE # 3
39. EXISTING CONCRETE PAVING
40. EXISTING SEAT WALL - SEE CIVIL
41. EXISTING VAULT/ELECTRICAL EQUIPMENT
42. CONTRACT LIMIT LINE
43. POOL - ALTERNATE # 2 1
44. EXHAUST SHAFT
45. VERTICAL FENCE WALL PANEL - SEE C5/AS504
46. SEAT WALL- SEE E1/AS504 1
47. EMERGENCY GAS SHUT OFF - BID ALT.#4

MATERIALS LEGEND

- INTEGRALLY COLORED CONCRETE COLOR #1
- INTEGRALLY COLORED CONCRETE COLOR #2
- 1- 3" COBBLE - SEE LANDSCAPE DRAWINGS AND SPECIFICATIONS
- STONE MULCH - SEE LANDSCAPE DRAWINGS AND SPECIFICATIONS
- STABILIZED CRUSHED AGGREGATE PAVING - SEE SPECIFICATIONS
- LAWN - SEE LANDSCAPE DRAWINGS

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SHEET NAME
ENLARGED PAVING PLANS

BID DOCUMENTS
MAY 15, 2013

SHEET NUMBER
AS402

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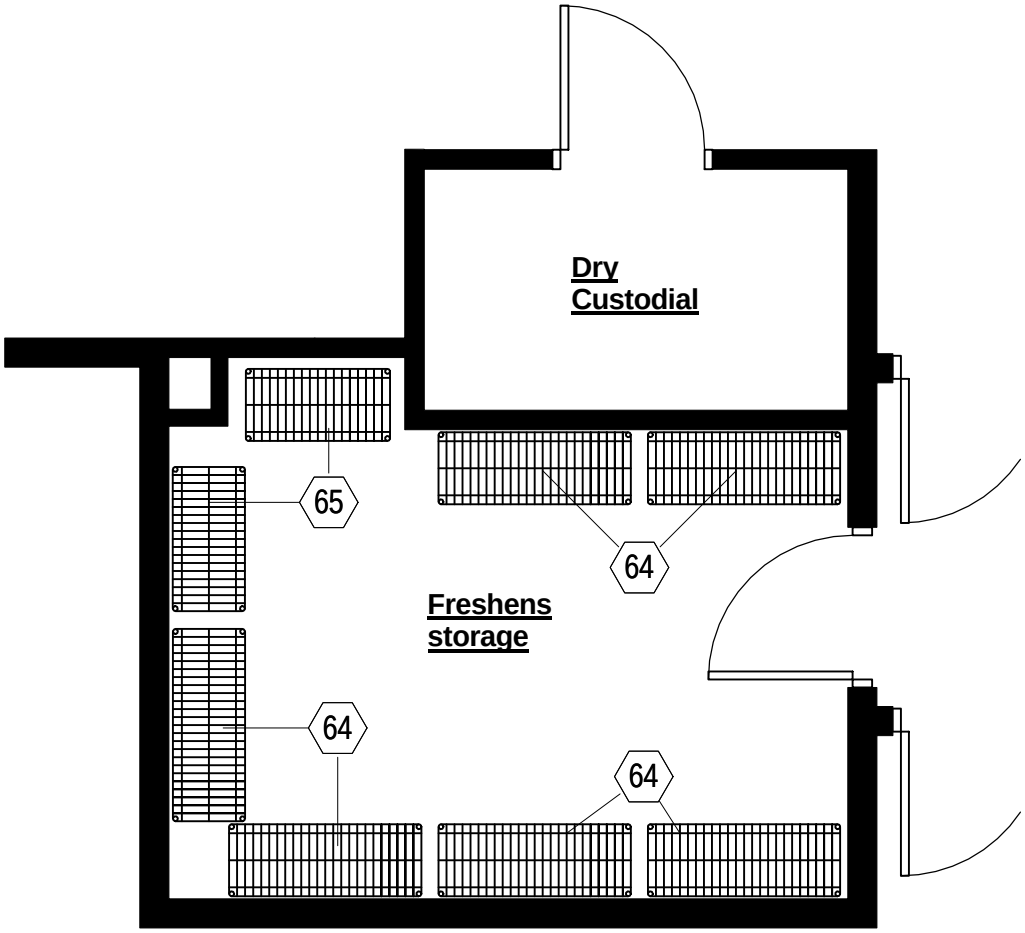

FRESHENS EQUIPMENT PLAN.

SCALE | **1/4" = 1'-0"**

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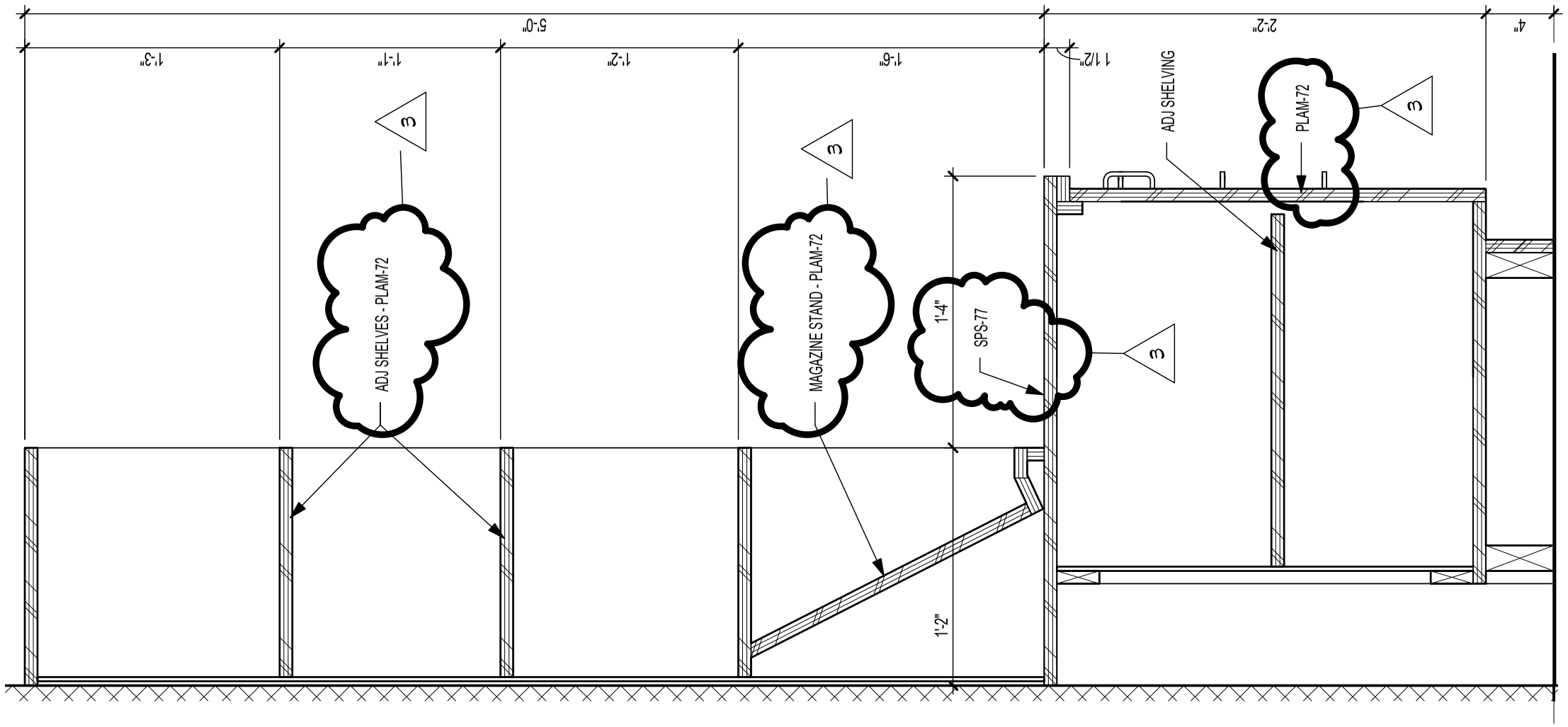
DATE: 06-11-2013

SHEET NUMBER
AD03-AE001

SHEET REFERENCE
A1/AE455



ORP LOBBY CASEWORK DETAIL 1.

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

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PROJECT NO. PROJ 2010562

DATE: June 11, 2013

SHEET REFERENCE
A4/AE454

SHEET NUMBER

AD03-AE002

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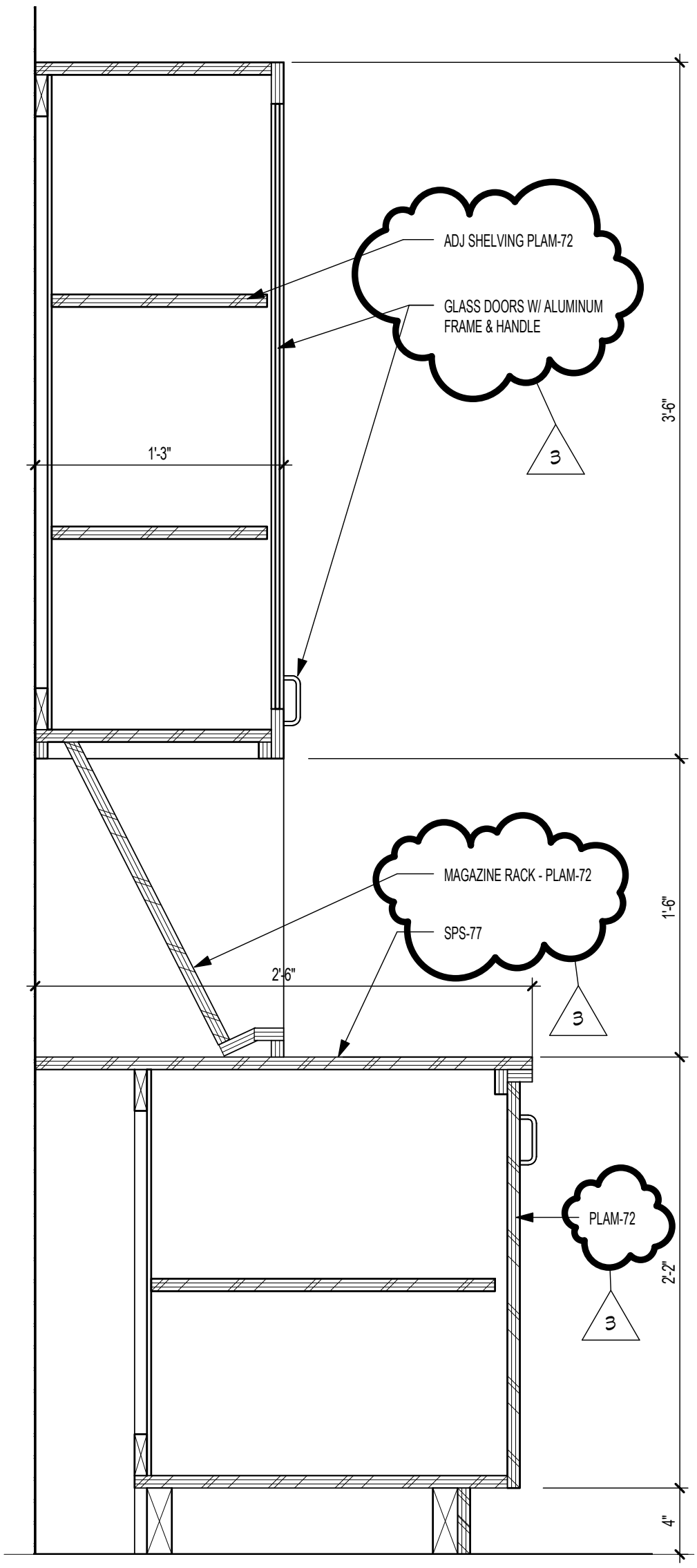

ORP LOBBY CASEWORK DETAIL 2.

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

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SHEET REFERENCE
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SHEET NUMBER
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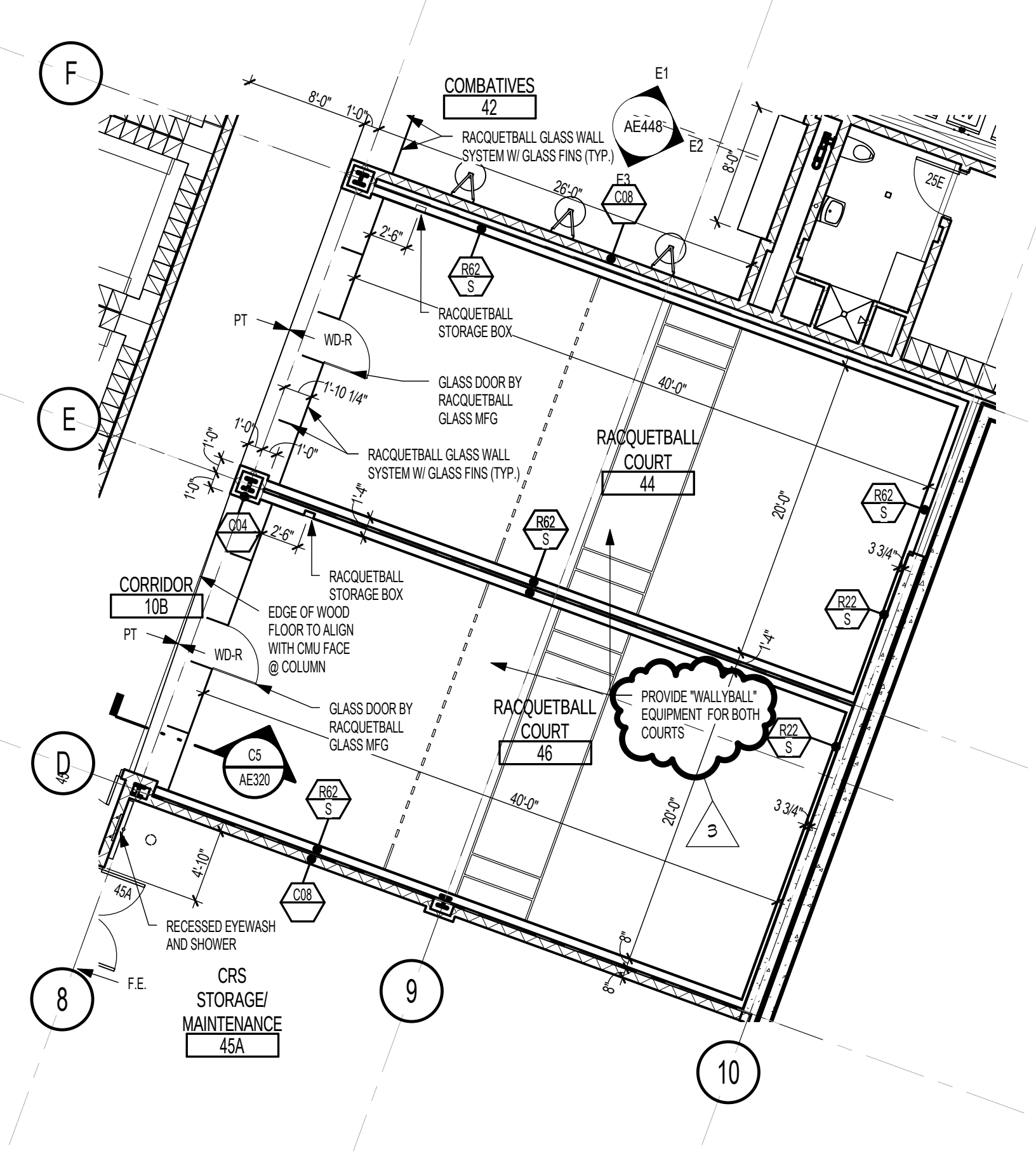

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DATE: (06-10-2013)13

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SHEET REFERENCE
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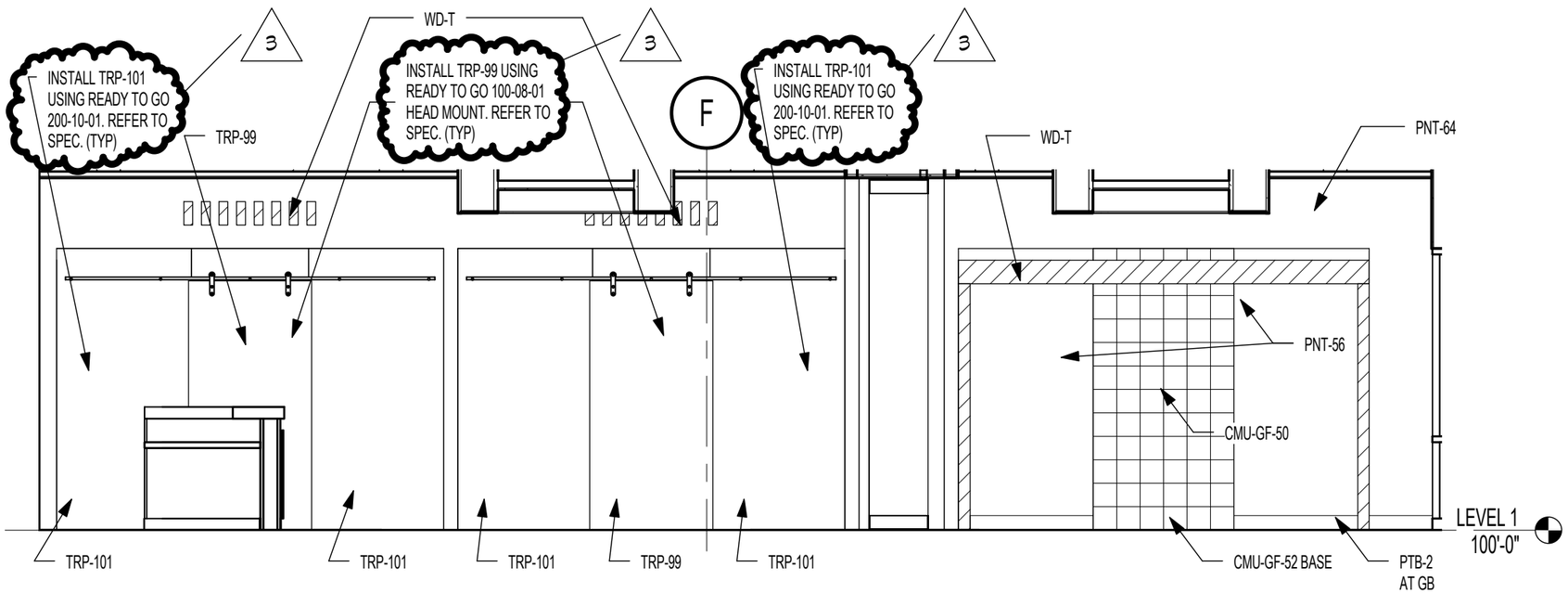

CREDIT UNION WEST INTERIOR ELEVATION-Sliding Doors

SCALE | **1/4" = 1'-0"**

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PROJECT NO. PROJ 2010562

DATE: June 11, 2013

SHEET REFERENCE

A6/AE447

SHEET NUMBER

AD03-AE005

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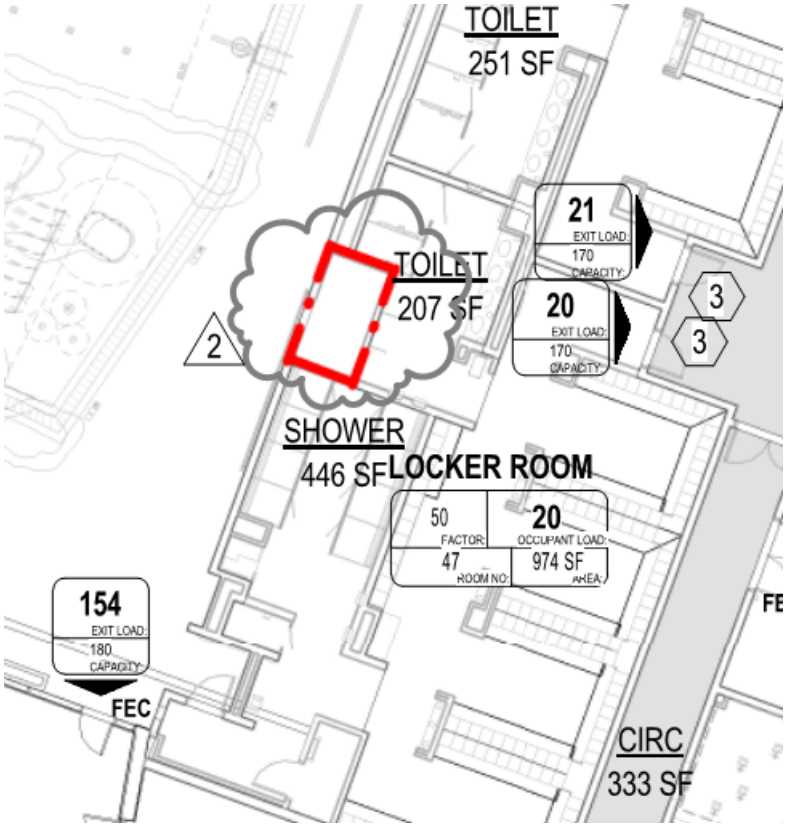

LOWER LEVEL (PARTIAL PLAN)

SCALE: 1/16" = 1'-0"

SHEET NUMBER
AD03-AE006
SHEET REFERENCE
AE010

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PROJECT NO. PROJ 2010562

DATE: JUNE 11, 2013

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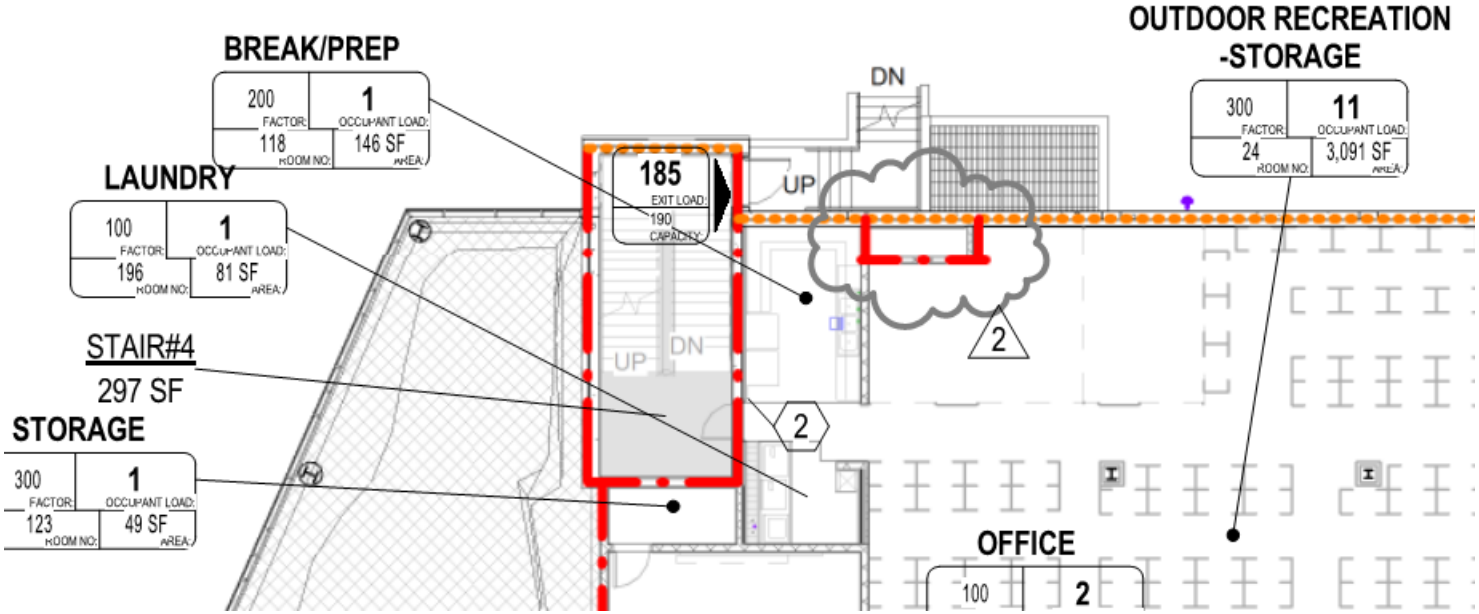

LEVEL 2 (PARTIAL PLAN)

SCALE: 1/16" = 1'-0"

SHEET NUMBER
AD03-AE007
SHEET REFERENCE
AE011

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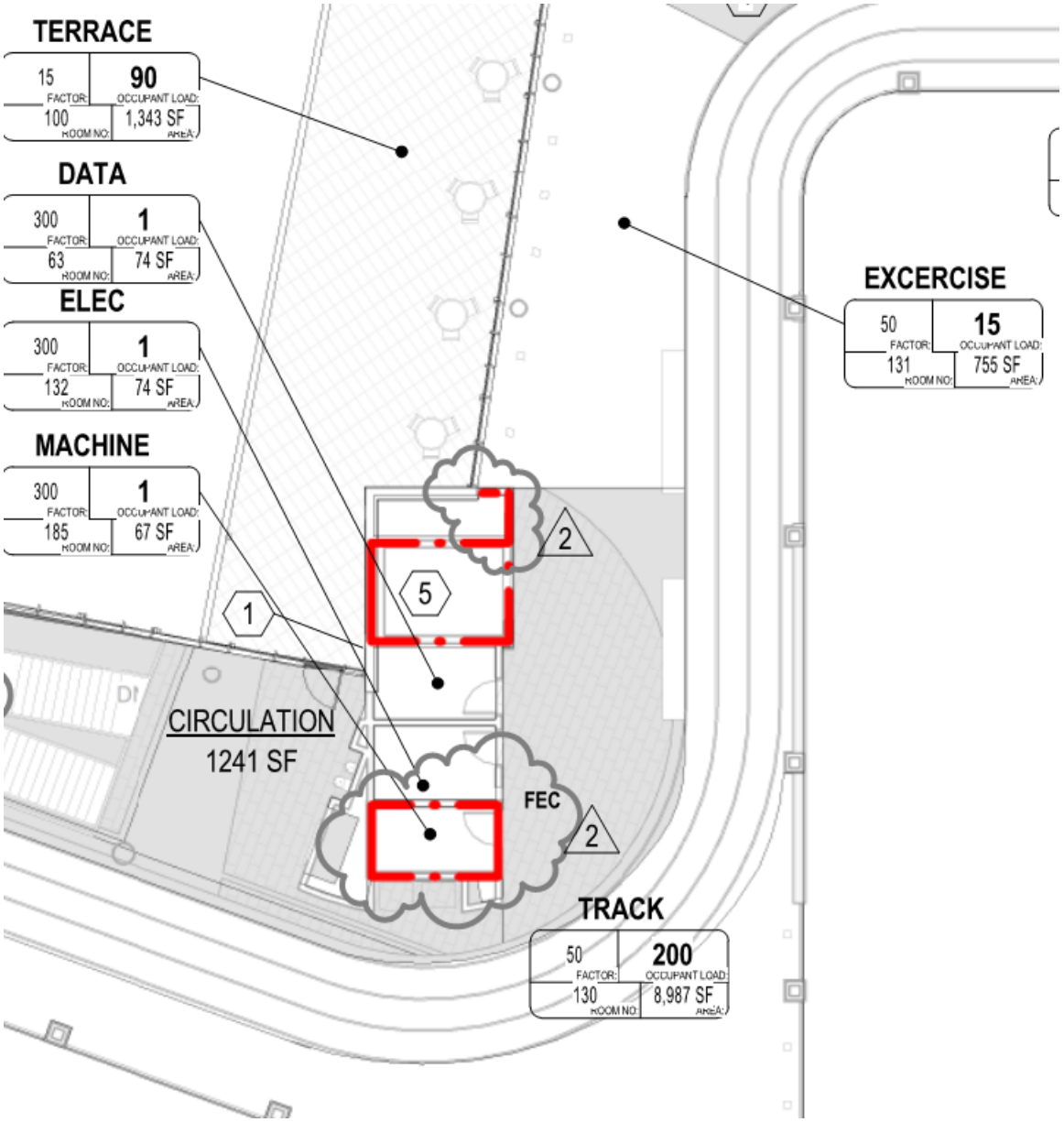

LEVEL 3 (PARTIAL PLAN)
SCALE: 1/16" = 1'-0"

SHEET NUMBER
AD03-AE008
SHEET REFERENCE
AE013

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DATE: JUNE 11, 2013

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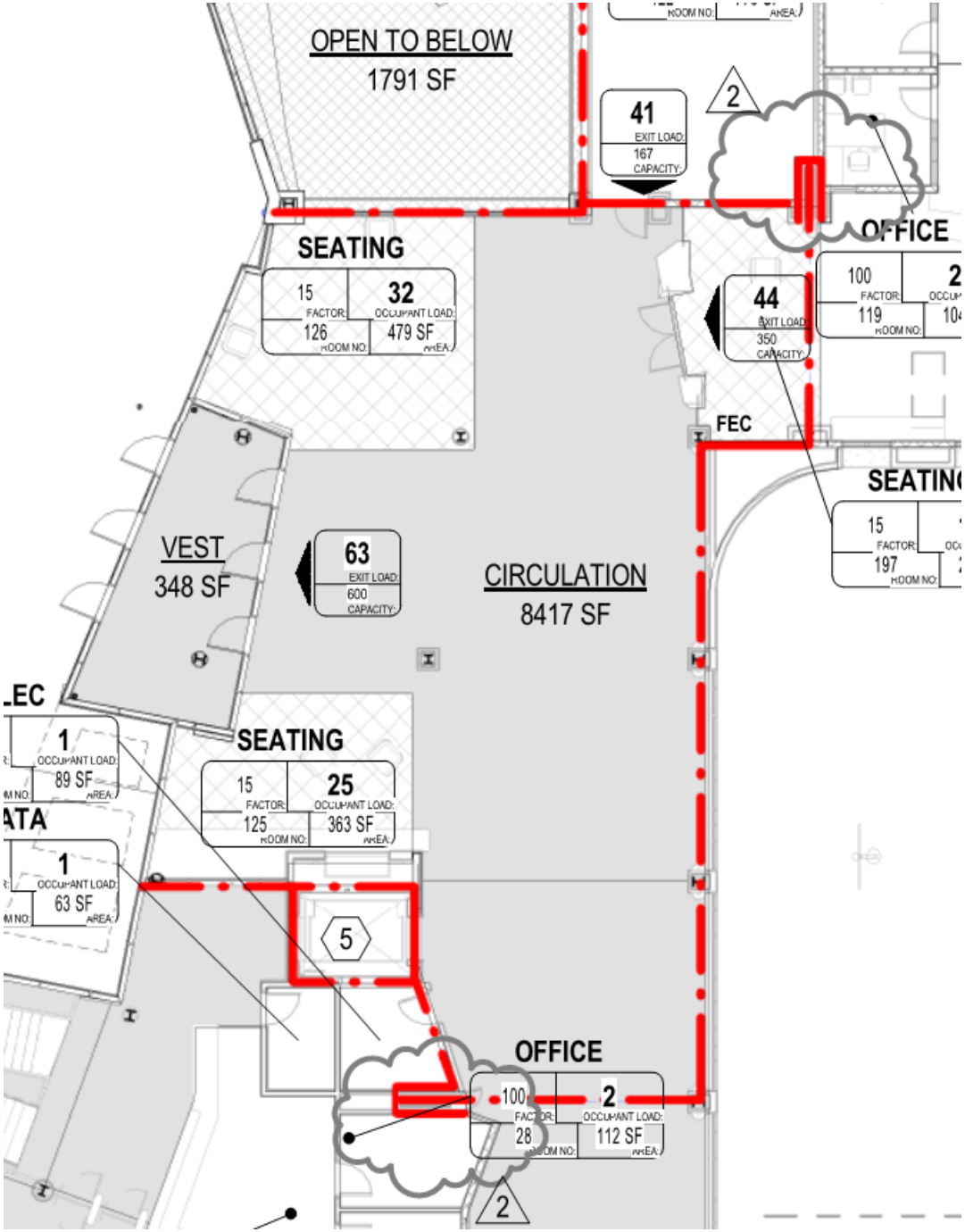

LEVEL 1 (PARTIAL PLAN)

SCALE: 1/16" = 1'-0"

SHEET NUMBER
AD03-AE009
SHEET REFERENCE
AE011

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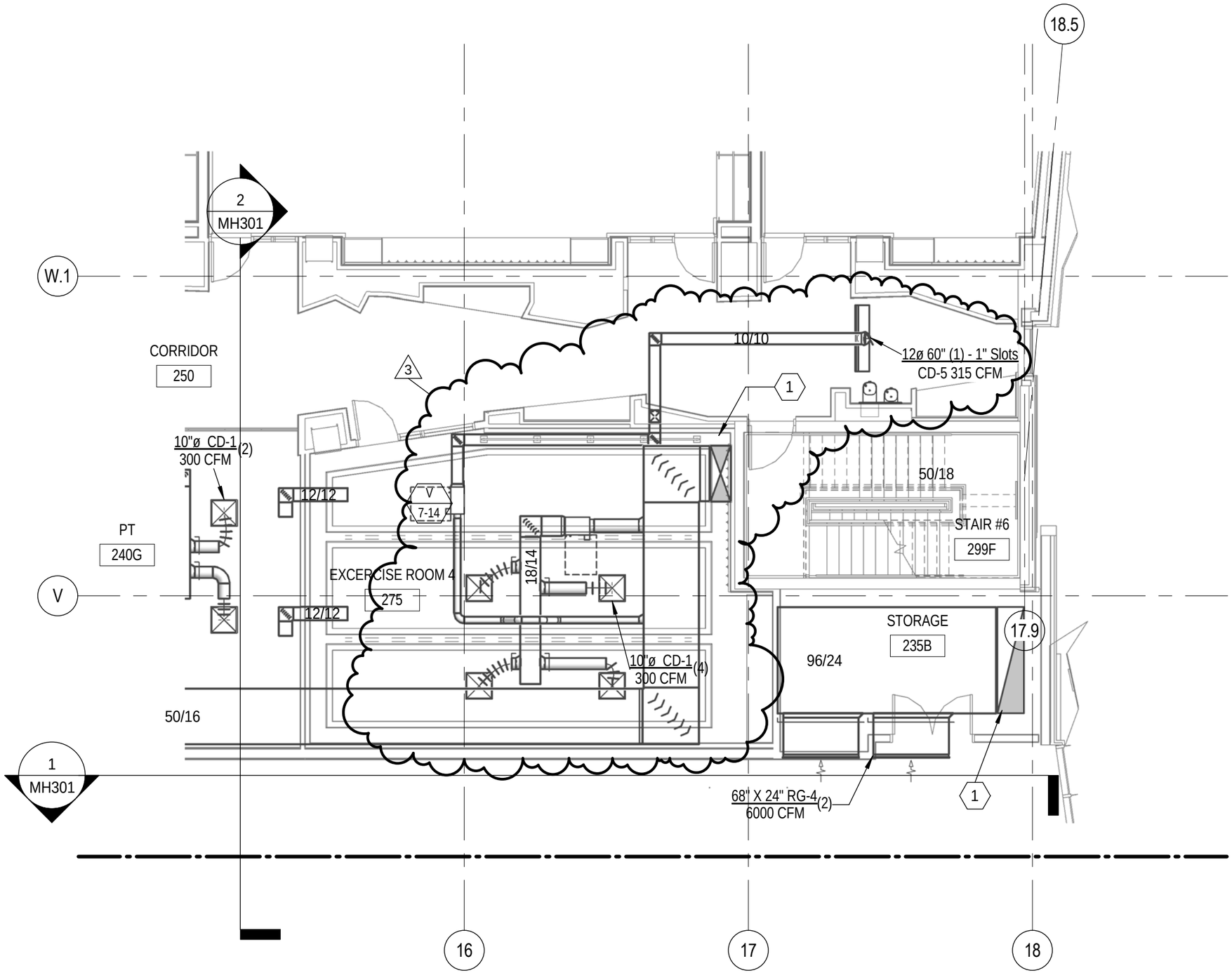

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SALT LAKE CITY, UTAH 84112

PROJECT NO. 10452

DATE: JUNE 05, 2013

SHEET REFERENCE

MH102A

SHEET NUMBER

AD03-MH001

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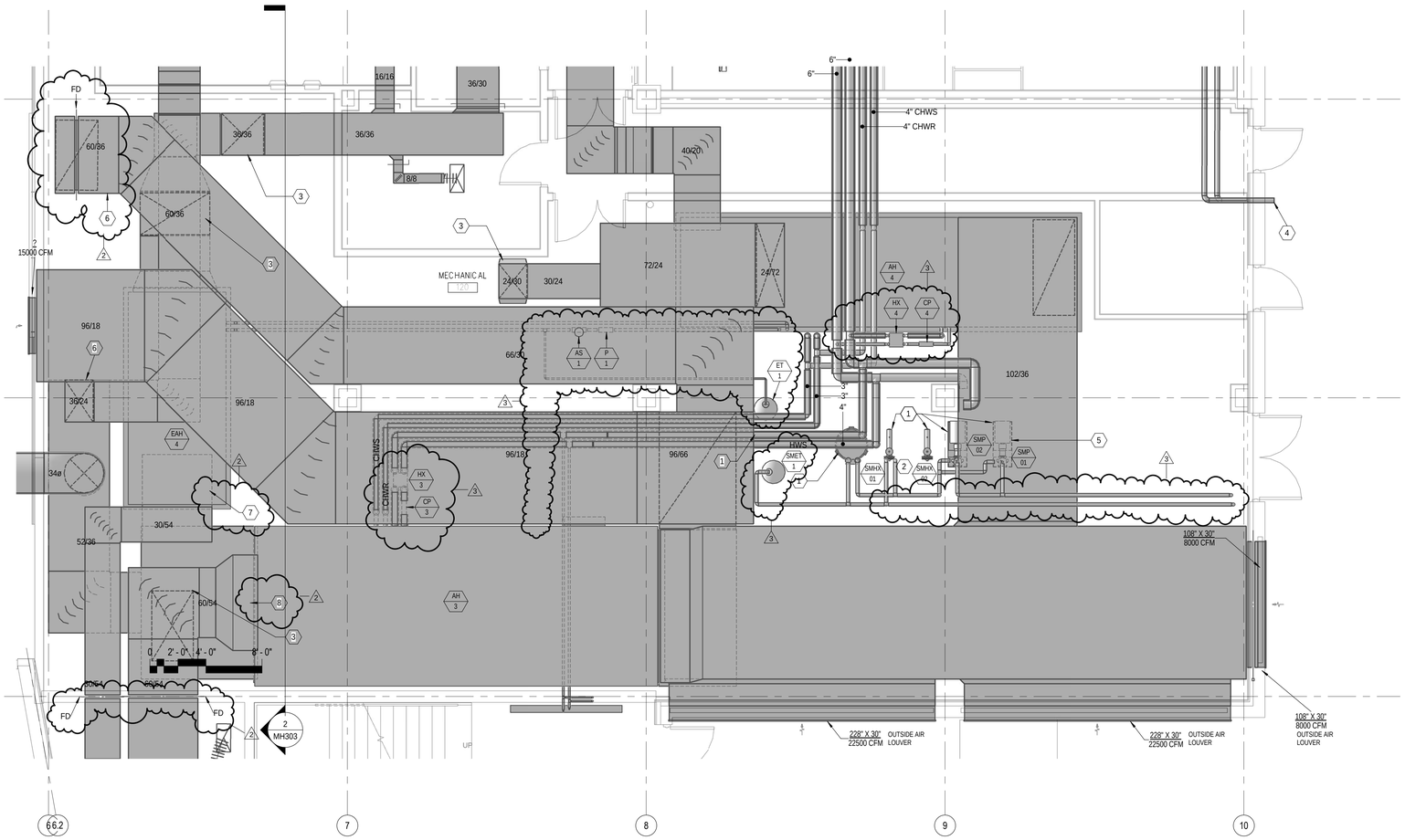
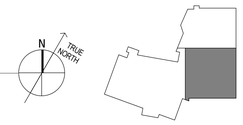
SHEET KEYNOTES

1. ALL EQUIPMENT AND PIPING FOR SNOWMELT SHALL BE BROKEN OUT FOR BID ALTERNATE PRICING.
2. GLYCOL FEED UNIT.
3. DUCT DROPS TO FLOOR BELOW. SEE MH100C.
4. DRYER VENT TERMINATION.
5. 4" HOUSEKEEPING PAD, TYPICAL.
6. DUCT DROPS TO FLOOR BELOW. SEE MH100C.
7. ALL DUCT CONNECTED TO EAH-4 IS TO BE ALUMINUM.
8. ALL METAL SUPPLY, RETURN AND EXHAUST DUCTS CONNECTED TO AIR HANDLER-3 IS TO BE ALUMINUM.



1 ENLARGED MECHANICAL ROOM 120

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



KEYPLAN

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NO.	DATE	DESCRIPTION

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NO.	DATE	DESCRIPTION
2	JUNE 05, 2013	ADDENDUM TWO
3	JUNE 11, 2013	ADDENDUM THREE

SHEET NAME

ENLARGED MECHANICAL PLANS
BID DOCUMENTS
JUNE 05, 2013

SHEET NUMBER

MH402

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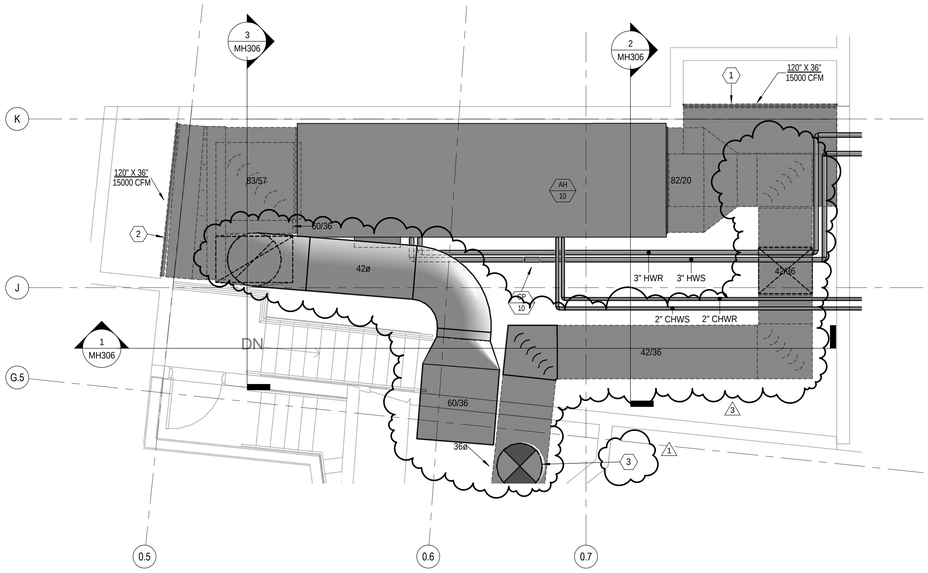
SHEET KEYNOTES

1 RELIEF AIR LOUVER.

2 OUSIDE AIR LOUVER.

3 DUCT RISES TO FLOOR ABOVE. SEE MH102C.

1

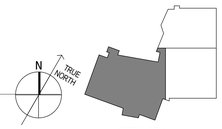


ENLARGED ALTERNATE 1
NATATORIUM MECHANICAL ROOM

1

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

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



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NO.	DATE	DESCRIPTION
1	MAY 28, 2013	ADDENDUM ONE

SHEET NAME

ENLARGED MECHANICAL PLANS
BID DOCUMENTS
JUNE 05, 2013

SHEET NUMBER

MH404

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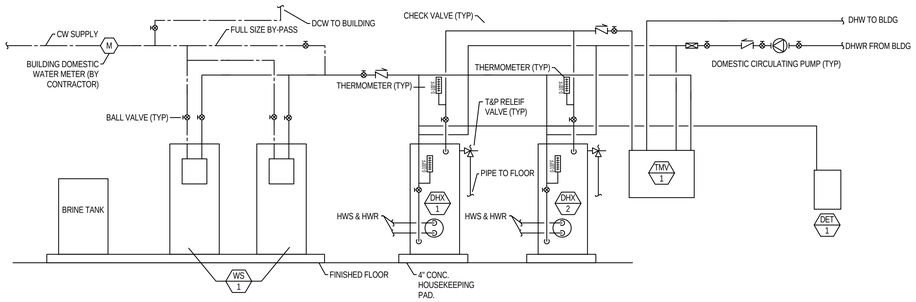
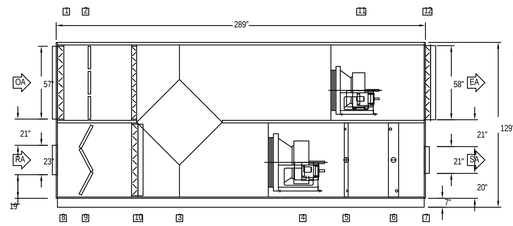


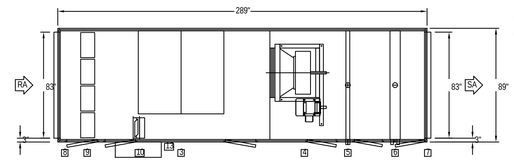
2 MH510 DOMESTIC HOT WATER PIPING DIAGRAM
NO SCALE



COMPONENTS
1 INLET (LxH)83 x 57
2 PANEL FILTER
3 HEAT EXCHANGER
4 FAN
5 HOT WATER COIL
6 CHILLED WATER COIL
7 OUTLET (LxH)83 x 21
8 INLET (LxH)83 x 23
9 Y-BANK FILTER
10 OUTLET (LxH)16 x 56
11 FAN
12 OUTLET (LxH)41 x 58
13 CONTROL PANEL

UNIT WEIGHT 10,800 LBS

CLEARANCES:
ACCCESS DOORS - 30 in



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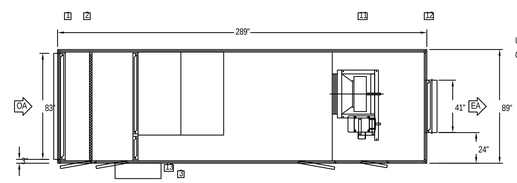
11 FAN
12 OUTLET (LxH)41 x 58
13 CONTROL PANEL

UNIT WEIGHT 10,800 LBS

CLEARANCES:
ACCCESS DOORS - 30 in



COMPONENTS
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10 OUTLET (LxH)16 x 56
11 FAN
12 OUTLET (LxH)41 x 58
13 CONTROL PANEL

UNIT WEIGHT 10,800 LBS

CLEARANCES:
ACCCESS DOORS - 30 in

1 MH510 AIR HANDLER DETAILS
NO SCALE

ENTIRE SHEET 3

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NO	DATE	DESCRIPTION
3	JUNE 11, 2013	ADDENDUM THREE

SHEET NAME
MECHANICAL DETAILS

BID DOCUMENTS
JUNE 05, 2013

SHEET NUMBER
3
MH510

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SYMBOL LIST

- CEILING SURFACE / PENDANT SUSPENDED FIXTURE
- LINEAR SUSPENDED PENDANT FIXTURE
- LINEAR SUSPENDED PENDANT FIXTURE (EMERGENCY POWER)
- VANITY SCONCE LIGHT FIXTURE
- RECESSED DOWNLIGHT
- RECESSED DOWNLIGHT (EMERGENCY POWER)
- WALL MOUNTED LIGHT FIXTURE
- RECESSED WALL MOUNTED LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE (EMERGENCY POWER)
- WALL MOUNTED FLOODLIGHT
- EXIT LIGHT CEILING
- WALL MOUNTED EXIT LIGHT
- GROUND MOUNTED LIGHT FIXTURE
- POLE MOUNTED LIGHT FIXTURE
- DUAL POLE MOUNTED LIGHT FIXTURE
- POLE TOP MOUNTED LIGHT FIXTURE
- RECESSED FLUORESCENT LIGHT FIXTURE
- RECESSED FLUORESCENT LIGHT FIXTURE (EMERGENCY POWER)
- FLUORESCENT STRIP LIGHT FIXTURE
- WALL MOUNTED FLUORESCENT LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE (EMERGENCY POWER)
- EMERGENCY BATTERY LIGHT FIXTURE
- SURFACE FLUORESCENT LIGHT FIXTURE
- SURFACE FLUORESCENT LIGHT FIXTURE (EMERGENCY POWER)
- LIGHT TRACK WITH LIGHT FIXTURES
- $ — SINGLE POLE SWITCH
- $K — KEY SWITCH
- $M — MOMENTARY CONTACT SWITCH
- $MK — MOMENTARY CONTACT KEY SWITCH
- $3K — 3 - WAY KEY SWITCH
- $3 — 3 - WAY SWITCH
- $PB — PUSHBUTTON SWITCH
- $RC — REMOTE CONTROL
- $LV — LOW VOLTAGE SWITCH
- $LM — LOW VOLTAGE MASTER
- $VR — SWITCH WITH VANDAL RESISTANT COVER PLATE
- $X — EXPLOSION PROOF
- $L — LINE VOLTAGE SENTRY SWITCH
- $P — PILOT LIGHT
- $T — THERMAL SWITCH
- TS — DIGITAL TIME SWITCH
- D — DIMMER
- OS — OCCUPANCY SENSOR, CEILING MOUNT
- OS — OCCUPANCY SENSOR, WALL MOUNT
- PP — POWER PACK
- SP — SLAVE POWER PACK
- ECU — EMERGENCY CONTROL RELAY UNIT
- DUPLEX RECEPTACLE
- USB — SINGLE RECEPTACLE WITH USB
- DUPLEX RECEPTACLE ISOLATED GROUND
- DUPLEX RECEPTACLE (EMERGENCY POWER)
- DUPLEX RECEPTACLE GFI
- SINGLE RECEPTACLE
- DUPLEX RECEPTACLE, FLUSH CEILING
- DUPLEX RECEPTACLE, FLUSH CEILING ISO GROUND
- QUADRAPLEX RECEPTACLE
- QUADRAPLEX RECEPTACLE ISOLATED GROUND
- QUADRAPLEX RECEPTACLE GFI
- DUPLEX RECEPTACLE, FLUSH IN FLOOR
- COMBO FLOORBOX WITH QUADRAPLEX RECEPT. AND DATA
- COMBO QUADRAPLEX FLUSH IN FLOOR WITH INTERCOM
- COMBO FLOORBOX WITH DUP. RECEPT. AND DATA
- DUPLEX RECEPTACLE, PEDESTAL MOUNTED
- QUADRAPLEX RECEPTACLE, PEDESTAL MOUNTED
- POKE-THRU DEVICE
- RANGE RECEPTACLE
- SPECIAL OUTLET TO MATCH EQUIPMENT PLUG
- SPECIAL OUTLET TO MATCH EQUIPMENT PLUG, FLUSH IN FLOOR
- J — JUNCTION BOX
- J — JUNCTION BOX, FLUSH FLOOR MOUNTED
- J — MULTI OUTLET ASSEMBLY
- SURFACE EQUIPMENT CABINET AS NOTED
- RECESSED EQUIPMENT CABINET AS NOTED
- SURFACE ELECTRICAL PANELBOARD
- RECESSED ELECTRICAL PANELBOARD
- R — RELAY
- LIGHTNING ARRESTER
- SB — SPLICEBOX
- PB — PULLBOX
- PC — PHOTO CONTROL
- PS — POWER SUPPLY
- T — TRANSFORMER (FLOOR PLAN)
- T — THERMOSTAT
- M — METER BASE
- NON-FUSED DISCONNECT SWITCH
- F — FUSED DISCONNECT SWITCH
- MANUAL STARTER
- MAGNETIC STARTER
- C — CONTACTOR
- COMBINATION STARTER/NON-FUSED DISCONNECT SWITCH
- F — COMBINATION STARTER/FUSED DISCONNECT SWITCH
- MOTOR CONNECTION
- PUSH BUTTON
- EMERGENCY POWER OFF BUTTON, 46" AFF
- START-STOP BUTTON
- UP-DOWN-STOP BUTTON
- 3 — DATA OUTLET: # INDICATES QTY.; NO DESIGNATION =(2) DATA OUTLET
- 3 — DATA OUTLET - ABOVE COUNTER: # INDICATES QTY.; NO DESIGNATION =(2) DATA OUTLET
- 3 — DATA OUTLET - FLUSH IN FLOOR: # INDICATES QTY.; NO DESIGNATION =(2) DATA OUTLET
- 3 — TELEPHONE OUTLET: # INDICATES QTY.; NO DESIGNATION =(1) TELEPHONE OUTLET
- 3 — TELEPHONE OUTLET - ABOVE COUNTER: # INDICATES QTY.; NO DESIGNATION =(1) TELEPHONE OUTLET
- 3 — TELEPHONE OUTLET - FLUSH IN FLOOR: # INDICATES QTY.; NO DESIGNATION =(1) TELEPHONE OUTLET
- 3D,1P — COMMUNICATIONS OUTLET: D=DATA, P=TELEPHONE, F=FIBER, # INDICATES QTY. NO DESIGNATION=(2) DATA OUTLET, (1) TELEPHONE OUTLET
- 3D,1P — COMMUNICATIONS OUTLET - ABOVE COUNTER D=DATA, P=TELEPHONE, F=FIBER, # INDICATES QTY. NO DESIGNATION=(2) DATA OUTLET, (1) TELEPHONE OUTLET
- 3D,1P — COMMUNICATIONS OUTLET - FLUSH IN FLOOR D=DATA, P=TELEPHONE, F=FIBER, # INDICATES QTY. NO DESIGNATION=(2) DATA OUTLET, (1) TELEPHONE OUTLET
- WIRELESS LAN TRANSMITTER
- 19" TELECOM EQUIPMENT RACK WITH VERTICAL WIRE MGMT.
- 19" TELECOM EQUIPMENT RACK
- S# — CEILING SPEAKER, RECESSED (# INDICATES TYPE)
- S# — WALL SPEAKER (# INDICATES TYPE)
- M# — MICROPHONE RECEPTACLE, WALL (# INDICATES TYPE)
- M — MICROPHONE RECEPTACLE, FLUSH FLOOR
- TV — T.V. OUTLET
- # — T.V. SECURITY CAMERA (# INDICATES TYPE)
- # — ROUND T.V. SECURITY CAMERA (# INDICATES TYPE)
- CLOCK
- WALL MOUNTED CLOCK
- PROGRAM HORN
- BUZZER
- BELL
- CHIME
- IC — INTERCOM STATION, SECURITY
- CR — CARD READER
- K — KEYPAD
- MS — MOTION SENSOR, CEILING MOUNTED
- MS — MOTION SENSOR, WALL MOUNTED
- FACP — FIRE ALARM CONTROL PANEL
- FAVE — FIRE ALARM VOICE EVACUATION PANEL
- ANN — FIRE ALARM ANNUNCIATOR
- FV — FIRE ALARM VISUAL SIGNAL
- F — FIRE ALARM HORN
- FV — FIRE ALARM VISUAL SIGNAL WITH HORN
- SS — FIRE ALARM VISUAL SIGNAL WITH SPEAKER
- F — FIRE ALARM MANUAL PULL STATION
- Z — FIRE ALARM FSD CONTROL RELAY
- F — FIRE ALARM CHIME
- FV — FIRE ALARM CHIME / VISUAL
- F — FIRE ALARM BELL
- S — DUCT DETECTOR
- S — PHOTO ELECTRIC SMOKE DETECTOR
- R — RATE OF RISE/THERMAL DETECTOR
- H — HEAT DETECTOR
- FS — FLOW SWITCH
- PS — FIRE ALARM PRESSURE SWITCH
- OS — O.S. & Y. VALVE TAMPER SWITCH
- CM — FIRE ALARM CONTROL MODULE
- MM — FIRE ALARM MONITOR MODULE
- FSD — FIRE SMOKE DAMPER
- DC — DOOR CONTACT
- ES — ELECTRIC STRIKE
- GA — GENERATOR ANNUNCIATOR
- NAC — NOTIFICATION APPLIANCE CIRCUIT EXTENDER
- RFCC — REMOTE FIRE COMMAND CENTER
- ML — MAGNETIC LOCK
- RA — RESCUE ANNUNCIATOR STATION
- RC — RESCUE CALL STATION
- RX — SECURITY REQUEST TO EXIT
- MAGNETIC DOOR HOLDER (WALL OR FLOOR MOUNTED)
- # — DRAWING NOTE DESIGNATION
- # — LIGHT FIXTURE DESIGNATION
- FLEXIBLE CONDUIT
- CONDUIT CONCEALED IN WALLS, CEILING OR FLOOR
- CONDUIT CONCEALED IN SLAB, UNDERGROUND OR UNDERFLOOR
- EXISTING CONDUIT
- GROUND WIRE
- STUB UP
- STUB DOWN
- STUB OUT
- ISOLATED GROUND CONDUCTOR / EQUIPMENT GROUND CONDUCTOR
- PHASE CONDUCTOR / NEUTRAL CONDUCTOR
- PHASE CONDUCTOR / NEUTRAL CONDUCTOR / PROVIDE GREEN GROUND WIRE SIZED PER NEC IN ALL RACEWAYS
- AHU-1 — MECHANICAL EQUIPMENT DESIGNATION
- CABLE TRAY FOR DATA TELEPHONE AND SOUND/PAGING ONLY (NO CONTROL WIRING)
- TRANSFORMER (ONE-LINES)
- BREAKER
- MANHOLE
- 600A DEADBREAK MOLDED PRODUCT TERMINATION (15KV)
- 600A DEADBREAK MOLDED PRODUCT SPLICE (15KV)
- G&W UNIVERSAL CE TERMINATION (15KV)
- G&W UNIVERSAL CE SPLICE (15KV)
- 200A LOADBREAK MOLDED PRODUCT TERMINATION (15KV)
- MEDIUM VOLTAGE SPLICE (15KV HEATSHRINK OR LOADSHRINK)

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AIC	AMP INTERRUPTING CURRENT (SYMMETRICAL)
AL	ALUMINUM
BG	BELOW GRADE
C	CONDUIT
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CLG	CEILING
CTR	ABOVE COUNTER DEVICE
CKT	CIRCUIT
CO	CONDUIT ONLY
CU	COPPER
EM	EMERGENCY
(E)	EXISTING
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
(F)	FUTURE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
GFI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTOR
GND	GROUND
GRC	GALVANIZED RIGID CONDUIT
IG	ISOLATED GROUND
LTG	LIGHTING
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MLO	MAIN LUGS ONLY
(N)	NEW
NAC	NOTIFICATION APPLIANCE CIRCUIT
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NTS	NOT TO SCALE
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
PNL	PANEL
(R)	RELOCATE
S	SWITCHED
SPD	SURGE PROTECTIVE DEVICE
ST	SHUNT TRIP
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VR	VANDAL RESISTANT
WG	WIRE GUARD
WP	WEATHER PROOF
(X)	DEMOLISH/DELETE
XFMR	TRANSFORMER

AUDIO VISUAL SYMBOLS

-4	EQUIPMENT CABINET (# INDICATES TYPE)
MV#	MASTER VOLUME (# INDICATES TYPE)
VC#	VOLUME CONTROL (# INDICATES TYPE)
	PROGRAM HORN
H	HDMI INPUT
V	VGA INPUT
VH	VGA/HDMI INPUT COMBO
A	AMPLIFIER (FLOOR PLAN)
S	SPLITTER (FLOOR PLAN)
C	CAMERA INPUT
DC	DIRECTIONAL COUPLER
AMP	AMPLIFIER(ONE-LINE)
SP	SPLITTER(ONE-LINE)
CP1	CUSTOM PLATE (# INDICATES TYPE)
-RG8-	ANTENNA CABLE
-CAT5-	CAT5 CABLE
-CAT6-	CAT6 CABLE
-S-	SPEAKER CABLE
-M-	MICROPHONE CABLE
-IC-	INTERCOM CABLE

NOTE: NOT ALL SYMBOLS USED ON DRAWINGS.

SHEET INDEX

SHEET #	SHEET NAME
EG100	SYMBOLS, ABBREVIATIONS AND SHEET INDEX
ED100.1	ELECTRICAL SITE DEMOLITION
ES100.2	ENLARGED ELECTRICAL SITE PLAN
ES100.3	ENLARGED ELECTRICAL SITE PLAN
ES100.4	LIGHTNING PROTECTION PLAN
ES100	SITE LIGHTING PLAN BASE BID
ES100.5	ENLARGED ELECTRICAL TUNNEL PLAN
ES100A	SITE LIGHTING PLAN ALTERNATE
ES500	MANHOLE DETAILS
ES501	ELECTRICAL SITE DETAILS
ES502	SITE LIGHTING DETAILS
EL100.A	LOWER LEVEL LIGHTING AREA A
EL100.B	LOWER LEVEL LIGHTING AREA B
EL100.C	LOWER LEVEL LIGHTING AREA C
EL200.C1	LOWER LEVEL LIGHTING - ALTERNATE 1A
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EL101.B	LEVEL 1 LIGHTING AREA B
EL101.C	LEVEL 1 LIGHTING AREA C
EL201.B	ALTERNATE 3 LIGHTING AREA B
EL201.C1	LEVEL 1 LIGHTING ATERNATE 1A
EL201.C2	LEVEL 1 LIGHTING ALTERNATE 1B
EL102.A	LEVEL 2 LIGHTING AREA A
EL102.B	LEVEL 2 LIGHTING AREA B
EL102.C	LEVEL 2 LIGHTING AREA C
EL103.A	LEVEL 3 LIGHTING AREA A
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EL501	ELEVATION STAIRWELL LIGHTING
EL601	LUMINARE SCHEDULE
EL602	LUMINARE SCHEDULE
EL701	LIGHTING DETAILS
EL702	LIGHTING DETAILS
EL703	LIGHTING CONTROL SYSTEM RISER DIAGRAM
EL704	LIGHTING CONTROL DETAILS
EL705	CLIMBING WALL LIGHTING
EP100.A	LOWER LEVEL POWER PLAN AREA A
EP100.B	LOWER LEVEL POWER PLAN AREA B
EP100.C	LOWER LEVEL POWER PLAN AREA C
EP200.C1	LOWER LEVEL POWER PLAN ALTERNATE 1A
EP200.C2	LOWER LEVEL POWER PLAN ALTERNATE 1B
EP101.A	LEVEL 1 POWER PLAN AREA A
EP101.B	LEVEL 1 POWER PLAN AREA B
EP101.C	LEVEL 1 POWER PLAN AREA C
EP201.B	POWER PLAN AREA B ALTERNATE 3
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EP103.C	LEVEL 3 POWER PLAN AREA C
EP104.A	ROOF POWER PLAN AREA A
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EP501	ENLARGED ELECTRICAL AND DATA ROOMS
EP502	ENLARGED LOWER LEVEL ROOMS
EP503	POWER PLANS ENLARGED VIEWS
EP504	ENLARGED U. OF U. CREDIT UNION
EP600	ONE-LINE DIAGRAM - 480V
EP601	ONE LINE DIAGRAM - 208V
EP602	EMERGENCY ONE-LINE DIAGRAM
EP603	PANEL SCHEDULES
EP604	PANEL SCHEDULES
EP605	PANEL SCHEDULES
EP606	PANEL SCHEDULES
EP607	PANEL SCHEDULES
EP608	PANEL SCHEDULES
EP609	ELECTRICAL SCHEDULES
EP610	RELAY PANELS
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EY100.A	LOWER LEVEL SYSTEMS PLAN AREA A
EY100.B	LOWER LEVEL SYSTEMS PLAN AREA B
EY100.C	LOWER LEVEL SYSTEMS PLAN AREA C
EY200.C1	LOWER LEVEL SYSTEMS PLAN ALTERNATE 1A
EY200.C2	LOWER LEVEL SYSTEMS PLAN ALTERNATE 1B
EY101.A	LEVEL 1 SYSTEMS PLAN AREA A
EY101.B	LEVEL 1 SYSTEMS PLAN AREA B
EY101.C	LEVEL 1 SYSTEMS PLAN AREA C
EY201.B	SYSTEMS PLAN AREA B ALTERNATE 3
EY102.A	LEVEL 2 SYSTEMS PLAN AREA A
EY102.B	LEVEL 2 SYSTEMS PLAN AREA B
EY102.C	LEVEL 2 SYSTEMS PLAN AREA C
EY103.A	LEVEL 3 SYSTEMS PLAN AREA A
EY103.B	LEVEL 3 SYSTEMS PLAN AREA B
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EY201.C	LEVEL 1 SYSTEMS ATERNATE 1
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EY500	ENLARGED SYSTEMS FLOOR PLANS
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EY604	SECURITY RISER DIAGRAM
EY605	ACCESS CONTROL DETAIL
EY705	A/V DETAILS
EY706	A/V DETAILS
EY707	A/V DETAILS
EY709	A/V EQUIPMENT SCHEDULES
EY710	A/V EQUIPMENT SCHEDULES
EY711	A/V EQUIPMENT SCHEDULES
EY712	A/V EQUIPMENT SCHEDULES
EY713	A/V EQUIPMENT SCHEDULES
EY714	A/V EQUIPMENT SCHEDULES
EY715	A/V EQUIPMENT SCHEDULES

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UNIVERSITY OF UTAH
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SEAL

MHTN PROJECT NO. 2010562.00
DRAWN BY: Author CHECKED BY: Checker

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
1	05-28-2013	ADDENDUM ONE
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
SYMBOLS, ABBREVIATIONS AND SHEET
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EG100

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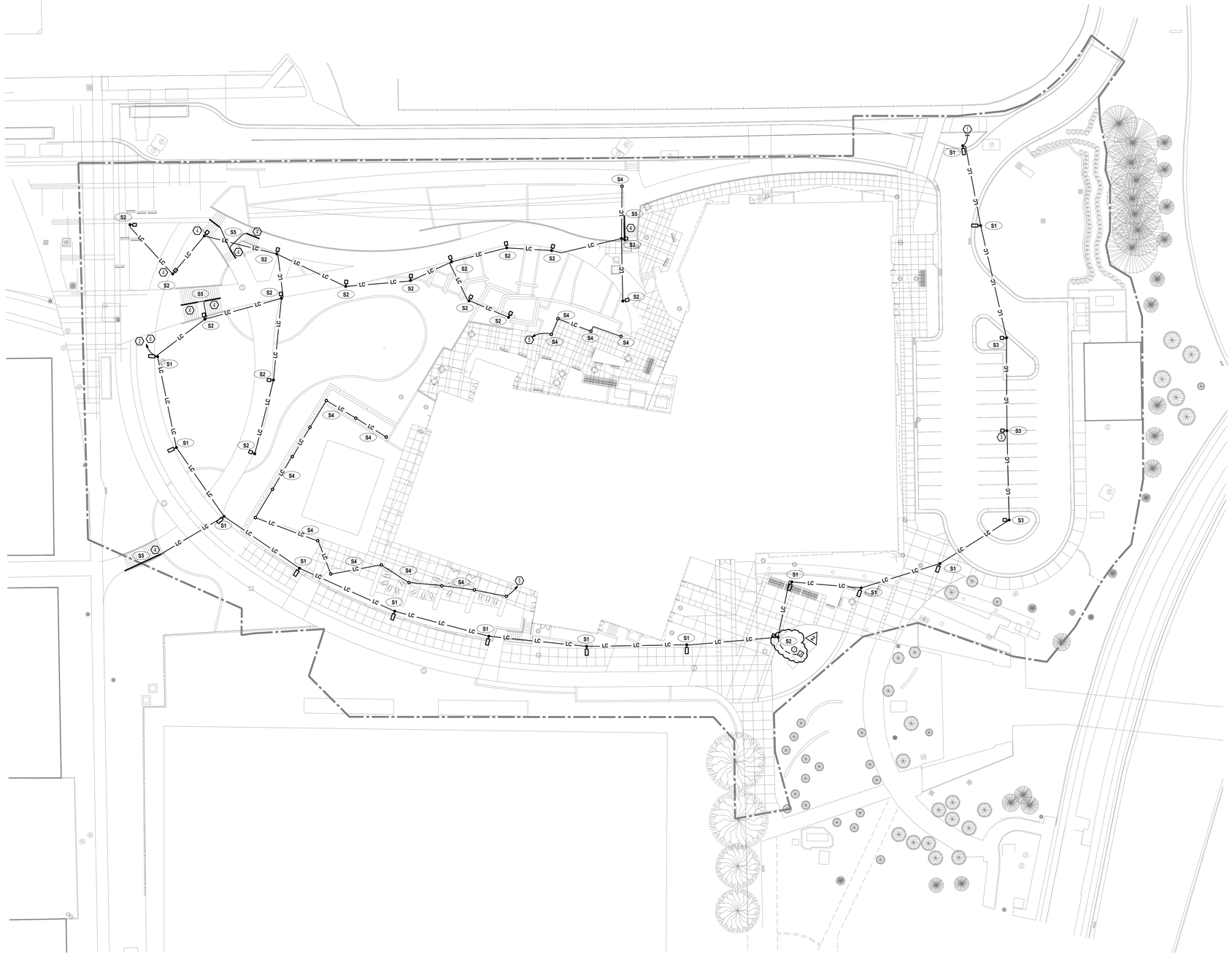


1 ELECTRICAL SITE PLAN BASE BID

0 15' 30' 60'

SCALE: 1" = 30'-0"

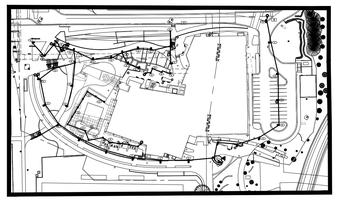
KEYED NOTES - SHEET ES101

1. PROVIDE 1-1/4" CONDUIT FROM POLE BASE STUBBED OUT A MINIMUM OF 5' IN DIRECTION SHOWN FOR CIRCUITING TO FUTURE LIGHT POLE. PROVIDE CAP ON END OF CONDUIT.
2. PROVIDE 1-1/4" CONDUIT FROM POLE BASE RUN BENEATH SIDEWALK AND CONNECT TO EXISTING HPER LIGHTING CIRCUITS AT EXISTING SITE FIXTURE POLE BASE. EXTEND EXISTING 1-1/4" CONDUIT AND #6 CONDUCTORS TO NEW SITE LIGHTING FIXTURES.
3. PROVIDE AND INSTALL POLE BASES FOR ALL SITE LIGHTING FIXTURES. SEE POLE BASE DETAILS FOR WALKWAY, PARKING AND BOLLARD LIGHTING FIXTURE BASES (TYPICAL)
4. LED LIGHTED HANDRAILS WITH REMOTE ELECTRONIC DRIVERS INSTALLED IN FLUSH WP ENCLOSURE. PROVIDE ALL NECESSARY CONDUIT, WIRE AND ACCESSORIES FOR A COMPLETE INSTALLATION. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS, LENGTHS AND REQUIREMENTS.
5. CONNECT TO BUILDING LIGHTING CONTROL PANEL.
6. EXISTING HPER MALL SITE FIXTURE WITH EXISTING SITE LIGHTING CIRCUITS.
7. 2 PROVIDE AND INSTALL INGRADE FIBOX FOR POWER TO LANDSCAPE FEATURE LIGHTING. LIGHTS SHALL BE CONTROLLED WITH ALL OTHER SITE LIGHTING BY PHOTOCELL.

GENERAL NOTES - SHEET ES101

A. INFORMATION SHOWN COMES FROM MULTIPLE SOURCES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS.
B. SITE LIGHTING SHALL BE CONNECTED TO EXISTING HPER MALL LIGHTING DISTRIBUTION PANEL PH1 THROUGH EXISTING LIGHTING CONTACTOR LC-2.
C. SITE LIGHTING FIXTURES ARE TO BE CONNECTED TO ALTERNATE PHASES AND THE LOAD IS TO BE BALANCED ACROSS ALL THREE PHASES. SEE SITE LIGHTING CIRCUIT DETAIL FOR ADDITIONAL REQUIREMENTS.

1.	PARKING AREA	24974.46 SF
2.	WALKWAY AREA	48076.17SF
3.	ILLUMINATED LENGTH OF FACADE WALL	862'-2 $\frac{3}{8}$"



KEY PLAN

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UNIVERSITY OF UTAH

STUDENT LIFE CENTER
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SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00

DRAWN BY: GE CHECKED BY: GE

ISSUED

NO.	DATE	DESCRIPTION

CONTRACTOR TO REFER TO DRAWINGS NOTED ELEC USE REFLECT LAST REVISION DATE

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME

SITE LIGHTING PLAN BASE BID

BID DOCUMENTS
MAY 15, 2013

SHEET NUMBER

ES100

By: hunzoga; Jun 10, 2013 – 12:42pm
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KEYED NOTES - SHEET ES101

1. PROVIDE 1-1/4" CONDUIT FROM POLE BASE STUBBED OUT A MINIMUM OF 5' IN DIRECTION SHOWN FOR CIRCUITING TO FUTURE LIGHT POLE. PROVIDE CAP ON END OF CONDUIT.
2. PROVIDE 1-1/4" CONDUIT FROM POLE BASE RUN BENEATH SIDEWALK AND CONNECT TO EXISTING HPER LIGHTING CIRCUITS AT EXISTING SITE FIXTURE POLE BASE. EXTEND EXISTING 1-1/4" CONDUIT AND #6 CONDUCTORS TO NEW SITE LIGHTING FIXTURES.
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5. CONNECT TO BUILDING LIGHTING CONTROL PANEL.
6. E□ST NG HPER MALL S TE F□TURE □ TH E□ST NG
7. PRO□DE AND NSTALL N GRADE J-BO□FOR PO□ER TO LANDSCAPE FEATURE L GHT NG. L GHTS SHALL BE CONTROLLED □TH ALL OTHER S□E L GHT NG B□ PHOTOCELL.

GENERAL NOTES - SHEET ES101

A. INFORMATION SHOWN COMES FROM MULTIPLE SOURCES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS.
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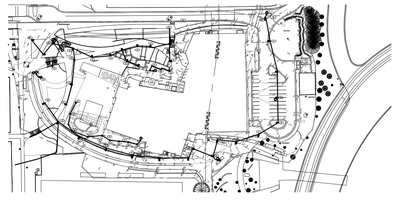
1 ELECTRICAL SITE PLAN ALTERNATE

0 15' 30' 60'

SCALE: 1' = 30'-0"



□E□ PLAN

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SEAL

MHTN PROJECT NO. 2010562.00

DRA□: N B□□GE CHEC□ED B□□GE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO □ERIFY DRA□INGS IN FIELD USE REFLECT LAST REVISION DATE

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME

SITE LIGHTING PLAN ALTERNATE
CON DOC
MA□ 13, 2013

SHEET NUMBER

ES100A

By: hunzaga; Jun 10, 2013 – 12:43pm
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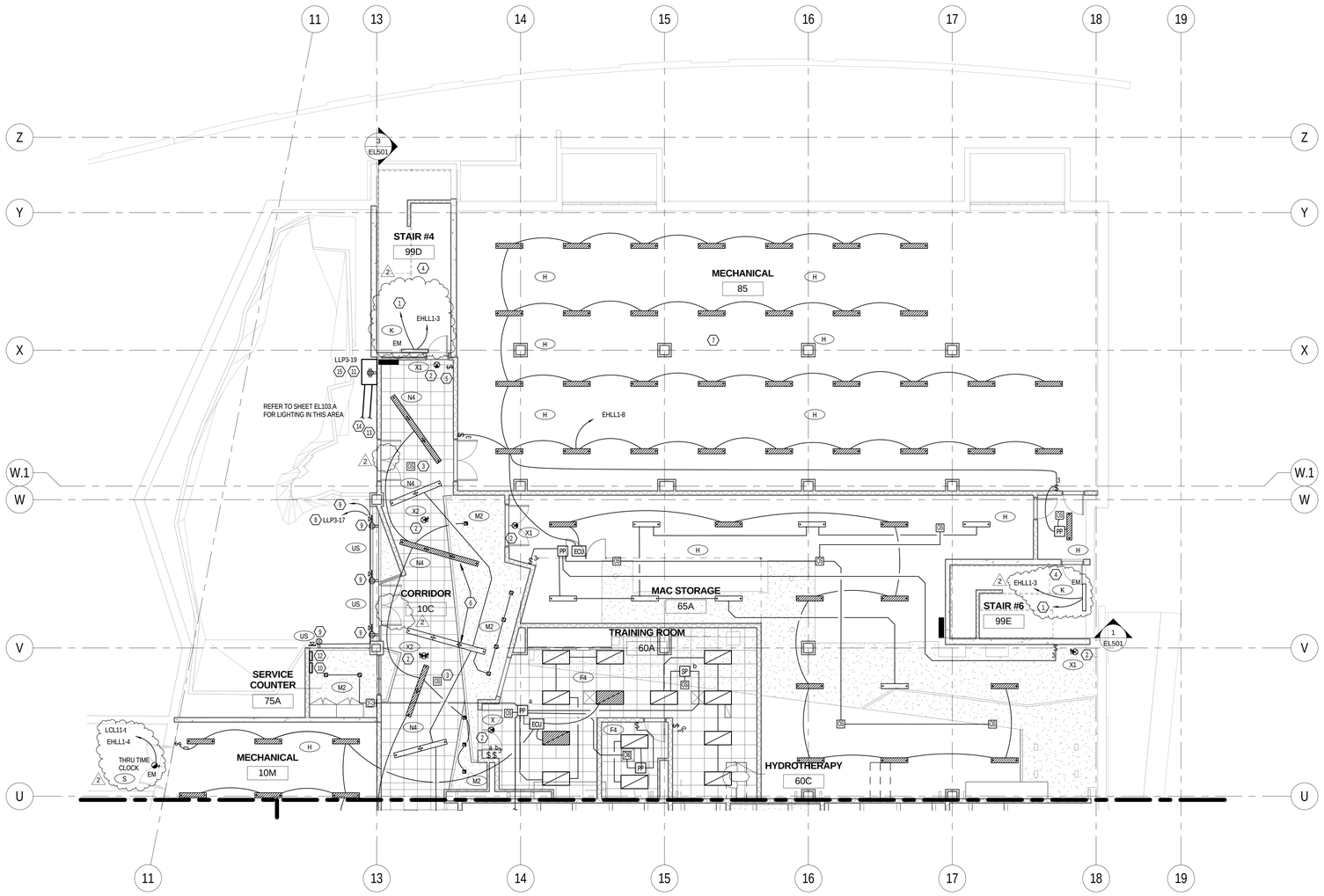

1 EL100.A A ENLARGED LOWER LEVEL RCP PLAN NORTH
SCALE |1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"

KEYED NOTES - SHEET EL100.A

1. CONTINUATION ON LEVEL ONE
2. CONNECT ALL EXIT SIGNS TO UNSWITCHED EM. CIRCUIT.
3. CORRIDOR OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL THE NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON DURING NIGHT TIME (UNOCCUPIED) MODE. NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
4. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR: ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
5. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.
6. ELECTRICAL CONTRACTOR TO COORDINATE WITH THE FRAMING CONTRACTOR FOR AREAS WHERE LINEAR FIXTURES TRANSITION FROM PENDANT MOUNT TO RECESS MOUNT. FIXTURE IS TO BE CONTINUOUS WITH NO SECTION BREAK. FRAMING AND GYP. BOARD IS TO BE INSTALLED TO ACCOMODATE THE LIGHTING FIXTURE. ELECTRICAL CONTRACTOR TO COORDINATE THE FRAMING OPENING WITH THE FIXTURE SUBMITTED, NOT THE DIMENSION SHOWN ON THE LUMINAIRE SCHEDULE. ACTUAL FIXTURE WIDTHS MAY VARY FROM MANUFACTURER TO MANUFACTURER.
7. ADJUST LIGHTING AS NEEDED TO ACCOMMODATE MECHANICAL UNITS.
8. 120V CIRCUIT FOR LIGHTING.
9. PROVIDE DUPLEX RECEPTACLE RECESSED IN COLUMN BUILDOUT FOR FIXTURE. PROVIDE DATA JACK WITH 4 JACKS IN ONE PLATE. PROVIDE CAT6 CABLING FROM THE ROCK WALL LIGHTING CONTROLLER TO JACK LOCATION. CAT6 CABLING IS FOR THE DMX SIGNAL AND DOES NOT CONNECT TO THE FACILITY NETWORK. ALL CABLING IN THIS INSTANCE IS PROVIDED AND TERMINATED BY THE CONTRACTOR.
10. ROCKWALL LIGHTING HOIST CONTROLLER. INSTALL IN A LOCATION SO USER HAS LINE OF SIGHT TO THE HOISTS.
11. LIGHTING CONTROL CABINET.
12. TOUCH SCREAN LIGHTING SCENE CONTROLLER.
13. DMX CABLING TO LIGHTING SCENE CONTROLEER.
14. DMX TO EACH LIGHTING HOIST AND EACH SET OF LIGHTING ON WALLS/COLUMNS.
15. SET THE STANDARD SCENE TO START METER 3200K STARTING AT SUNRISE, INCRESSING TO 5200K BY NOON, FADING TO 4200K BY MID AFTERNOON THEN BACK TO 3200K BY DUSK. MAINTAIN 3200K UNTIL THE FACILITY CLOSES. SET A SECOND SCENE TO WASH THE WALL RED TO BE USED WHEN DESIRED. USER MUST CHANGE WALL TO RED BY THE SCORE CONTROLLER. INCLUDE THE SERVICES OF THE FACTORY TRAINED CREATIVE PROGRAMMER TO WORK WITH THE OWNER FOR ADDITIONAL SCENE PROGRAMMING, MAXIMUM OF AREA DAY OF SERVICE. COORDINATE WITH THE OWNER TO HAVE IDEAS AND CONCEPTS PREPARED PRIOR TO THE WORK DAY WITH THE CREATIVE PROGRAMMER.

GENERAL NOTES - SHEET EL100.A

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.

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Project #: 2010-117.00

UNIVERSITY OF UTAH
STUDENT LIFE CENTER
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SEAL

MHTN PROJECT NO. 2010562.00

DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

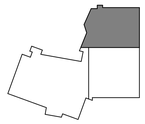
NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LOWER LEVEL
LIGHTING AREA
A
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL100.A


KEYPLAN

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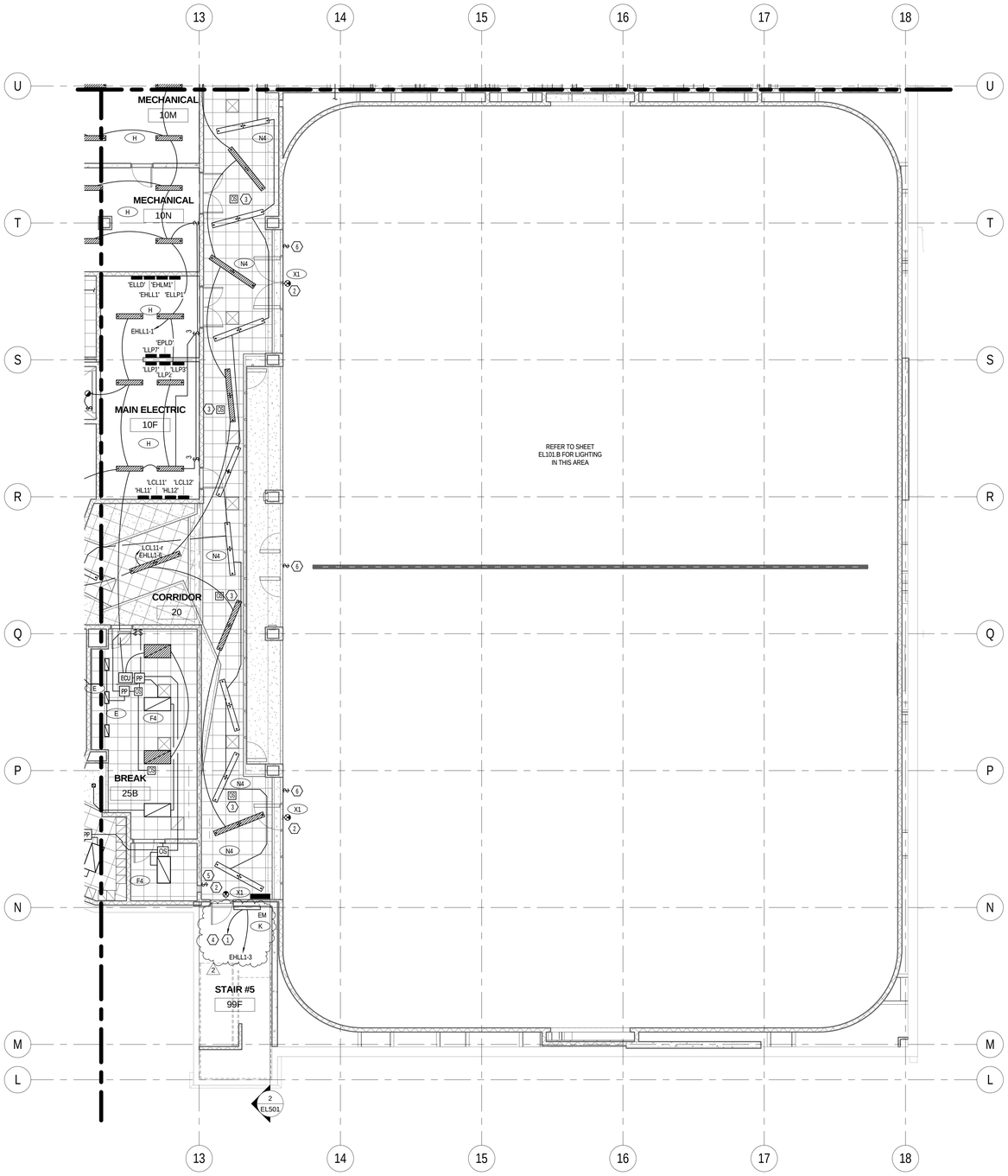
KEYED NOTES - SHEET EL100.B

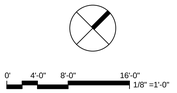
1. CONTINUATION ON LEVEL ONE.
2. CONNECT ALL EXIT SIGNS TO UNSWITCHED EM. CIRCUIT.
3. CORRIDOR OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON. DURING NIGHT TIME (UNOCCUPIED) MODE, NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY THE LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
4. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR: ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
5. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.
6. LOW VOLTAGE 8 BUTTON SWITCHING FOR CONTROL OF BASKETBALL COURT LIGHTING. CONTROL IS TO BE MANUAL ON/ MANUAL OFF WITH A PRESET TIME OFF AT THE END OF THE DAY.

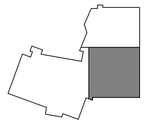
GENERAL NOTES - SHEET EL100.B

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.



1 EL100.B B ENLARGED LOWER LEVEL RCP PLAN SOUTH
SCALE |1/8" = 1'-0"





KEYPLAN

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Contact: Paris LeLaCheur
Project #: 2010-117.00

UNIVERSITY OF UTAH
STUDENT LIFE CENTER
1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00

DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE:

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LOWER LEVEL LIGHTING AREA B
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL100.B

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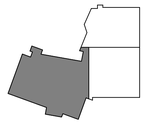
1 EL100.C C ENLARGED LOWER LEVEL RCP PLAN WEST
SCALE |1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"



KEYPLAN

KEYED NOTES - SHEET EL100.C

1. CONTINUATION ON LEVEL ONE.
2. CONNECT ALL EXIT SIGNS TO UNSWITCHED EM CIRCUIT.
3. CORRIDOR OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON. DURING NIGHT TIME (UNOCCUPIED) MODE, NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY THE LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
4. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSORS: ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
5. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS. LOCKER OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL LOCKER/ TOILET LIGHTING.
6. SHOWER AREA OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL SHOWER AREA LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON. DURING NIGHT TIME (UNOCCUPIED) MODE, NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY THE LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
7. SHOWER AREA LIGHTING SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEM'S TIME CLOCK.
8. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN SHOWER LIGHTS ON/OFF AFTER HOURS.
9. LOW VOLTAGE 8 BUTTON SWITCHING TO CONTROL POOL LIGHTING. CONTROL TO BE MANUAL ON/ MANUAL OFF WITH A PRESET TIME OFF AT THE END OF THE DAY.

GENERAL NOTES - EL100.C

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.

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SEAL

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DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LOWER LEVEL LIGHTING AREA C
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL100.C

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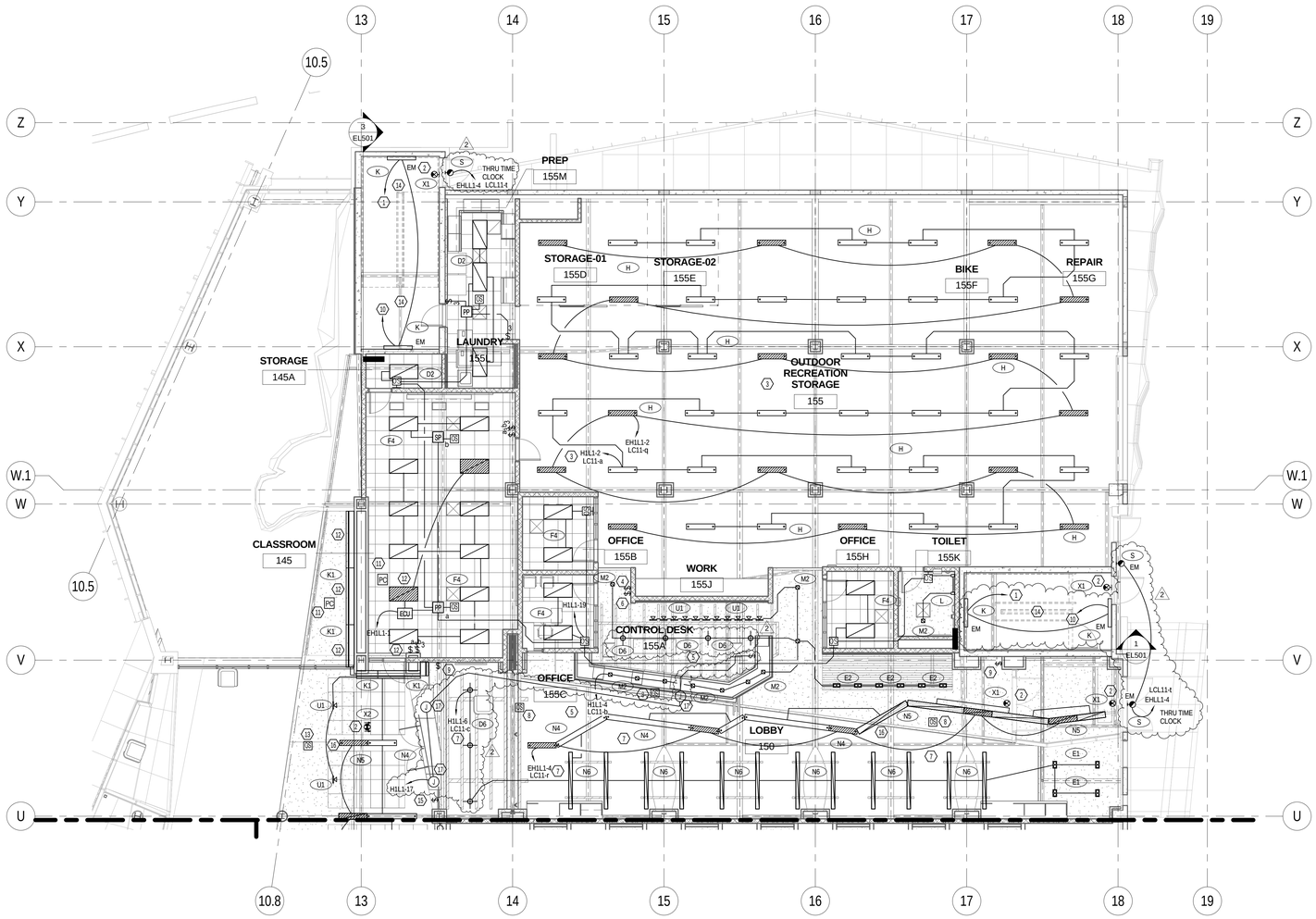

1 A ENLARGED LEVEL 1 RCP PLAN NORTH
EL101.A SCALE |1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"

KEYED NOTES - SHEET EL101.A

1. CONTINUATION ON LEVEL 2.
2. CONNECT ALL EXIT SIGNS TO UNSWITCHED EMERGENCY CIRCUIT.
3. OUTDOOR RECREATION STORAGE LIGHTING SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEMS'S TIME CLOCK.
4. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTM TO TURN RECREATION STORAGE LIGHTS ON/OFF AFTER HOURS.
5. CONTROL DEST LIGHTING SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEM'S TIME CLOCK.
6. LOW VOLTAGE 2 BUTTON OVERRIDE SWTICH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CONTROL DESK LIGHTS ON/OFF AFTER HOURS.
7. LOBBY LIGHTING SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEM'S TIME CLOCK.
8. LOBBY OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR SUCH THAT DURING OFF HOURS AND UPON SENSING OCCUPANCY SHALL TURN ON ALL EMERGENCY LIGHTS.
9. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE DELAY CONTROL SYSTEM TO TURN LOBBY LIGHTS ON/OFF AFTER HOURS.
10. CONTINUATION ON LEVEL 1.
11. DIMMING PHOTO SENSOR TO OPERATE A STANDARD 0-10V DC ELECTRONIC DIMMING BALLAST.
12. FIXTURES TO BE CONTROLLED BY PHOTOSENSOR.
13. CORRIDOR OCCUPANCY SENSORS SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL THE NORMAL LIGHTING IN ZONES AND THE EMERGENCY LIGHTING SHALL REMAIN ON DURING NIGHT TIME (UNOCCUPIED) MODE. NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK.DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
14. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR; ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
15. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.
16. ELECTRICAL CONTRACTOR TO COORDINATE WITH THE FRAMING CONTRACTOR FOR AREAS WHERE LINEAR FIXTURES TRANSITION FROM PENDANT MOUNT TO RECESS MOUNT. FIXTURE IS TO BE CONTINUOUS WITH NO SECTION BREAK. FRAMING AND GYP BOARD IS TO BE INSTALLED TO ACCOMODATE THE LIGHTING FIXTURE. ELECTRICAL CONTRACTOR TO COORDINATE THE FRAMING OPENING WITH THE FIXTURE SUBMITTED, NOT THE DIMENSION SHOWN ON THE LUMINAIRE SCHEDULE. ACTUAL FIXTURE WIDTHS MAY VARY FROM MANUFACTURER TO MANUFACTURER.
17. PROVIDE J-BOX, SWITCH, CONDUIT AND CONDUCTORS FOR LED LIGHT BOX IN THE MILLWORK. COORDINATE EXACT LOCATION WITH MILLWORK BEFORE ROUGH-IN.

GENERAL NOTES - SHEET EL101.A

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECTURAL PLAN DRAWINGS.

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SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00
DRAWN BY: KGE CHECKED BY: KGE

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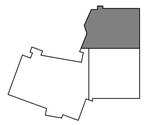
NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LEVEL 1
LIGHTING AREA
A
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL101.A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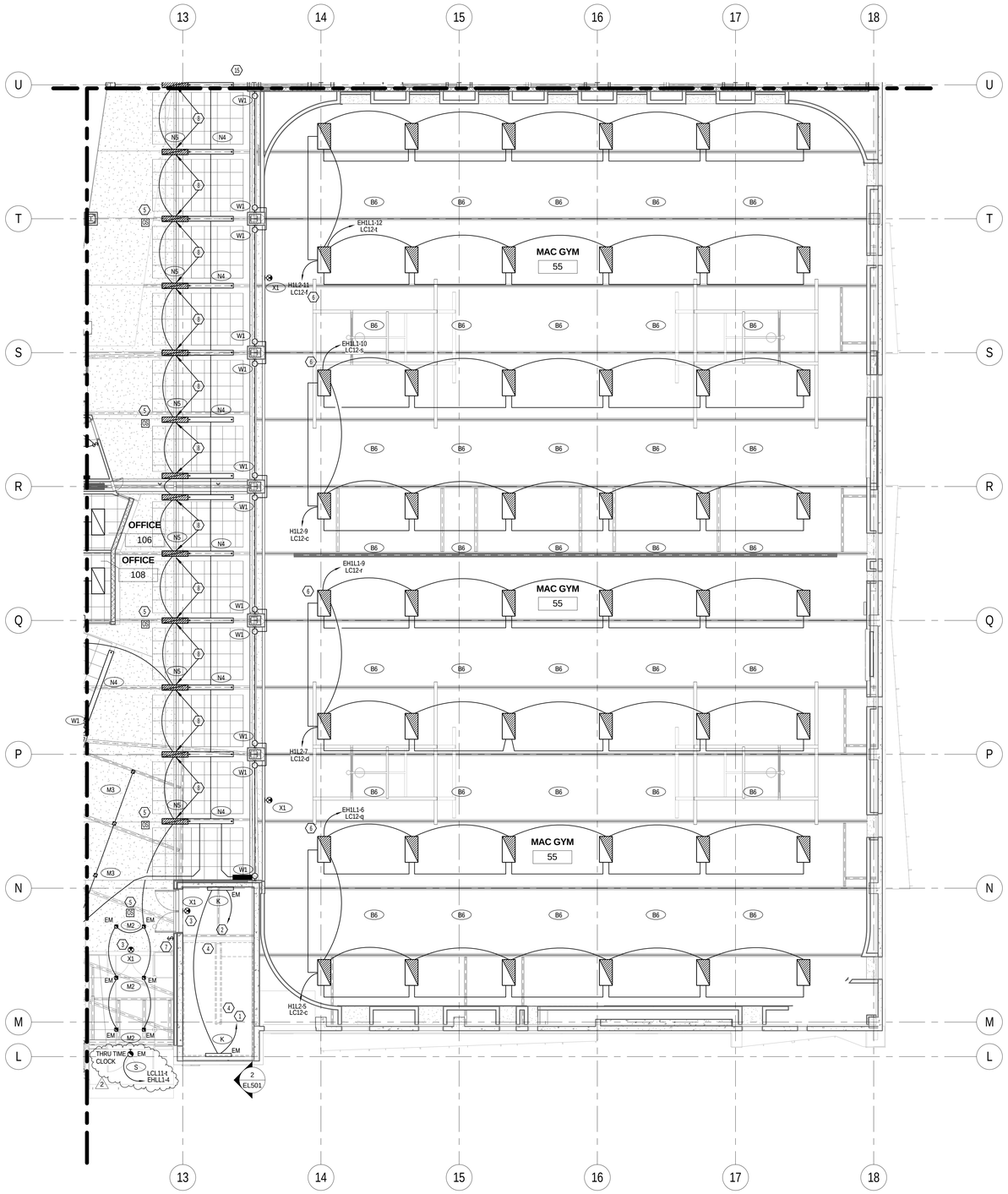


1 EL101.B B ENLARGED LEVEL 1 RCP PLAN SOUTH

SCALE |1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"

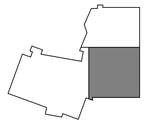
1/8" =1'-0"

KEYED NOTES - SHEET EL101.B

1. CONTINUATION ON LEVEL 2.
2. CONTINUATION ON LEVEL 1.
3. CONNECT ALL EXIT SIGNS TO UNSWITCHED EM. CIRCUIT.
4. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR; ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
5. CORRIDOR OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL THE NORMAL LIGHTING IN ZONES AND THE EMERGENCY LIGHTING SHALL REMAIN ON DURING NIGHT TIME (UNOCCUPIED) MODE. NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
6. MAC GYM BASKETBALL LIGHTING SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. EACH HIGH BAY FIXTURE SHALL HAVE 2 BALLASTS, ONE FOR 2-LAMPS TIED TO EMERGENCY CIRCUIT, THE OTHER FOR 4-LAMPS IN THE FIXTURE TIED TO NORMAL CIRCUIT. SWITCHING SHOWN ON SHEET EL100.B.
7. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.
8. ELECTRICAL CONTRACTOR TO COORDINATE WITH THE FRAMING CONTRACTOR FOR AREAS WHERE LINEAR FIXTURES TRANSITION FROM PENDANT MOUNT TO RECESS MOUNT. FIXTURE IS TO BE CONTINUOUS WITH NO SECTION BREAK. FRAMING AND GYP BOARD IS TO BE INSTALLED TO ACCOMODATE THE LIGHTING FIXTURE. ELECTRICAL CONTRACTOR TO COORDINATE THE FRAMING OPENING WITH THE FIXTURE SUBMITTED. NOT THE DIMENSION SHOWN ON THE LUMINAIRE SCHEDULE. ACTUAL FIXTURE WIDTHS MAY VARY FROM MANUFACTURER TO MANUFACTURER.

GENERAL NOTES - SHEET EL101.B

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECTURAL PLANS/DRAWINGS



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DRAWN BY: KGE CHECKED BY: KGE

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NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME

LEVEL 1
LIGHTING AREA
B
BID DOCUMENTS
May 15, 2013

SHEET NUMBER

EL101.B

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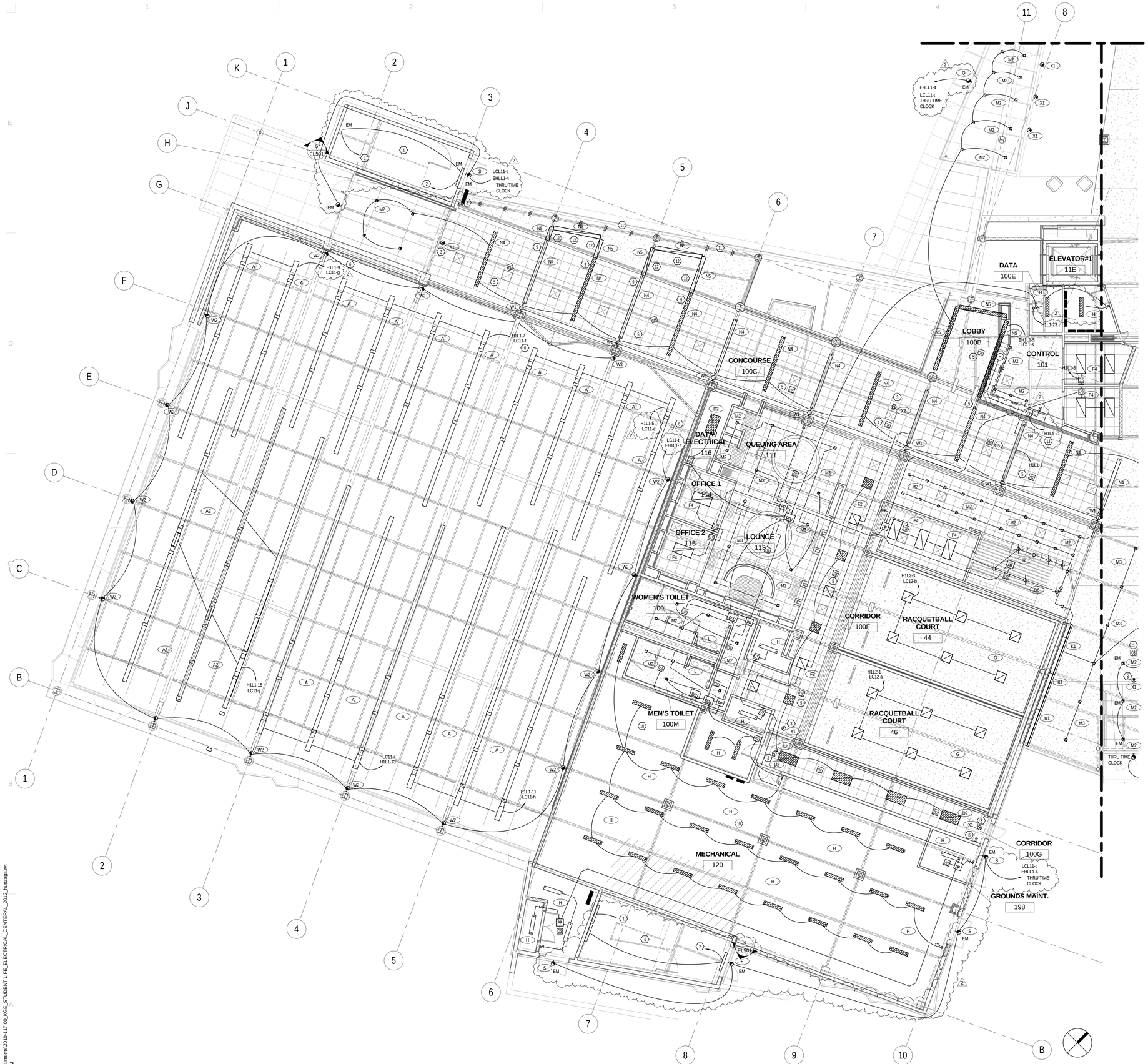


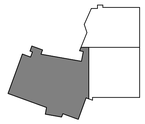
KEYED NOTES - SHEET EL101.C

1. CONTINUATION ON LEVEL 2.
2. CONTINUATION ON LEVEL 1.
3. CONNECT ALL EXIT SIGNS TO UNSWITCHED EM. CIRCUIT.
4. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR; ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
5. CORRIDOR OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE THE OCCUPANCY SENSORS SHALL CONTROL THE NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON.DURING NIGHT TIME (UNOCCUPIED) MODE: NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
6. POOL LIGHTING SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. PROVIDE GFCI BREAKER FOR POOL LIGHTINGS.
7. RACQUETBALL LIGHTING SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEM'S TIME CLOCK.
8. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.
9. ELECTRICAL CONTRACTOR TO COORDINATE WITH THE FRAMING CONTRACTOR FOR THE AREAS WHERE LINEAR FIXTURES TRANSITION FROM PENDANT MOUNT TO RECESS MOUNT. FIXTURE IS TO BE CONTINUOUS WITH NO SECTION BREAK, THE FRAMING AND GYP. BOARD IS TO BE INSTALLED TO ACCOMMODATE THE LIGHTING FIXTURE. ELECTRICAL CONTRACTOR IS TO COORDINATE THE FRAMING OPENING WITH THE FIXTURE SUBMITTED, NOT THE DIMENSION SHOWN ON THE LUMINARE SCHEDULE. ACTUAL FIXTURE WIDTHS MAY VARY FROM MANUFACTURER TO MANUFACTURER.
10. ADJUST LIGHTING AS NEEDED TO ACCOMMODATE MECHANICAL UNITS.
11. DIMMING PHOTOSENSOR TO OPERATE A STANDARD 0-10 VDC ELECTRONIC DIMMING DRIVER. COORDINATE THE PROPER HEIGHT AN LOCATION WITH MANUFACTURER AND ARCHETECTURAL PLANS.
12. FIXTURES TO BE CONTROLLED BY PHOTOSENSOR. CONTROL SCHEMS. WILL BE SET THROUGH PROGRAMING.
13. PROVIDE J-BOX, SWITCH, CONDUIT AND CONDUCTORS FOR LED LIGHT LOX IN THE MILLWORK. COORDINATE EXACT LOCATION WITH MILLWORK.

GENERAL NOTES - SHEET EL101.C

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECTURAL PLANS/DRAWINGS.

1 EL101.C C ENLARGED LEVEL 1 RCP PLAN WEST
SCALE |1/8" = 1'-0"



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NO.	DATE	DESCRIPTION
1	05-28-2013	ADDENDUM ONE
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LEVEL 1
LIGHTING AREA
C
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL101.C

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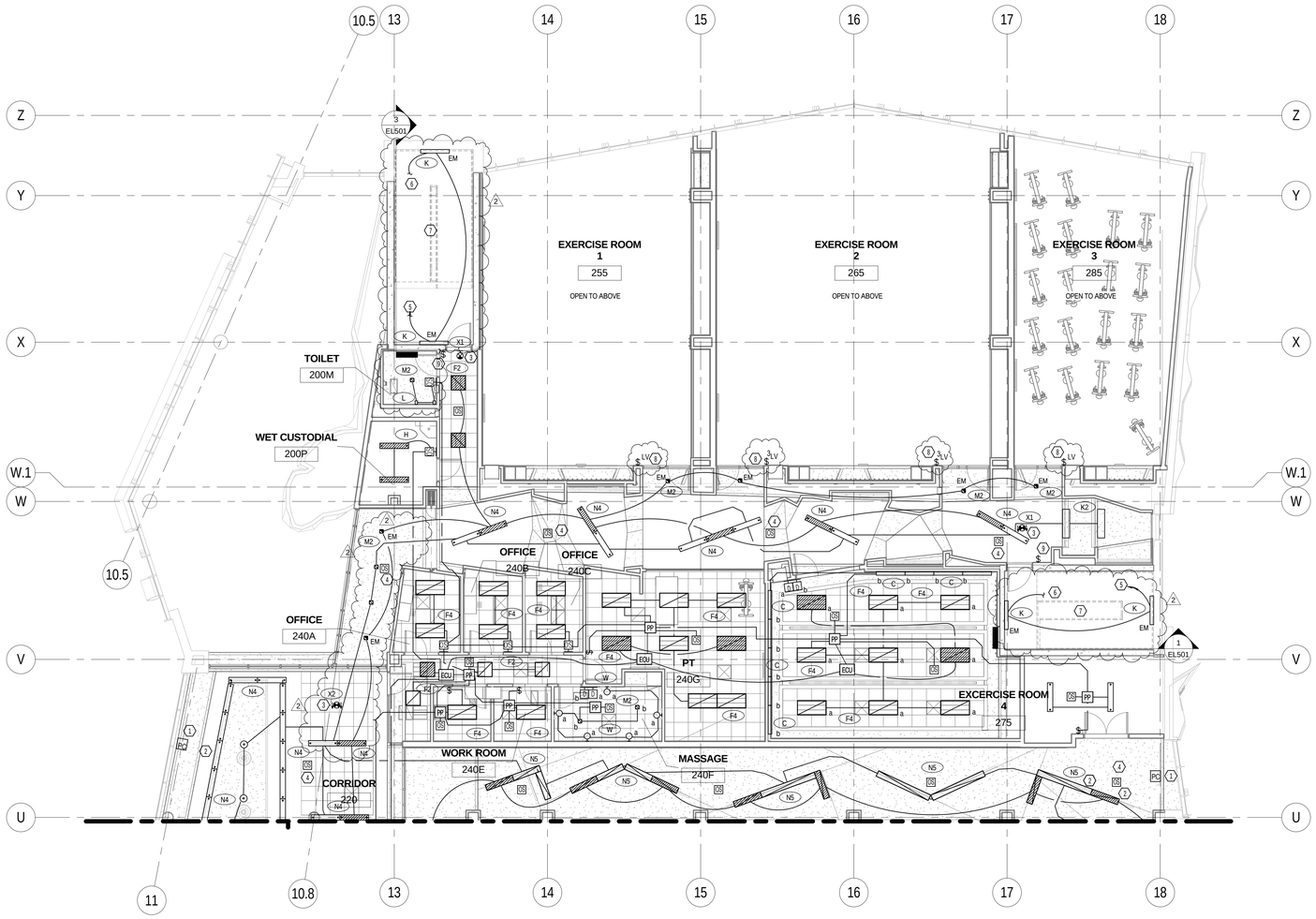
KEYED NOTES - SHEET EL102.A

1. DIMMING PHOTO SENSOR TO OPERATE A STANDARD 0-10 VCD ELECTRONIC DIMMING DRIVER. COORDINATE THE PROPER HEIGHT AND LOCATION WITH MANUFACTURER AND ARCHITECT PLANS.
2. FIXTURES TO BE CONTROLLED BY PHOTOSENSOR. CONTROL SCHEMES WILL BE SET THROUGH PROGRAMMING.
3. CONNECT EXIST SIGNS TO UNSWITCHED EM CIRCUITS.
4. CORRIDOR PHOTO SENSOR AND OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE CORRIDOR LIGHTING. DURING DAY TIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL THE NORMAL LIGHTING IN ZONES AND THE EMERGENCY LIGHTING SHALL REMAIN ON DURING NIGHT TIME (UNOCUPIED) MODE. THE NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY ALL EMERGENCY LIGHTS SHALL TURN ON.
5. CONTINUATION ON LEVEL 3.
6. CONTINUATION ON LEVEL 2.
7. STAIR WELL LIGHT FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR; ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
8. LOW VOLTAGE SCENE SWITCH FOR CONTROL OF THE EXERCISE ROOMS. WATTSTOPPER LMSW-105 OR EQUAL APPROVED.
9. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.

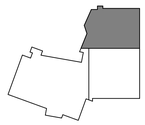
GENERAL NOTES - EL102.A

A. COORDINATE THE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION, COORDINATE THIS WITH ARCHITECTURAL PLANS/DRAWINGS.



1 EL102.A A ENLARGED LEVEL 2 RCP PLAN NORTH
SCALE |1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"



KEYPLAN

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Contact: Paris LeLaCheur
Project #: 2010-117.00

UNIVERSITY OF UTAH
STUDENT LIFE CENTER
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SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00
DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LEVEL 2
LIGHTING AREA
A
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL102.A

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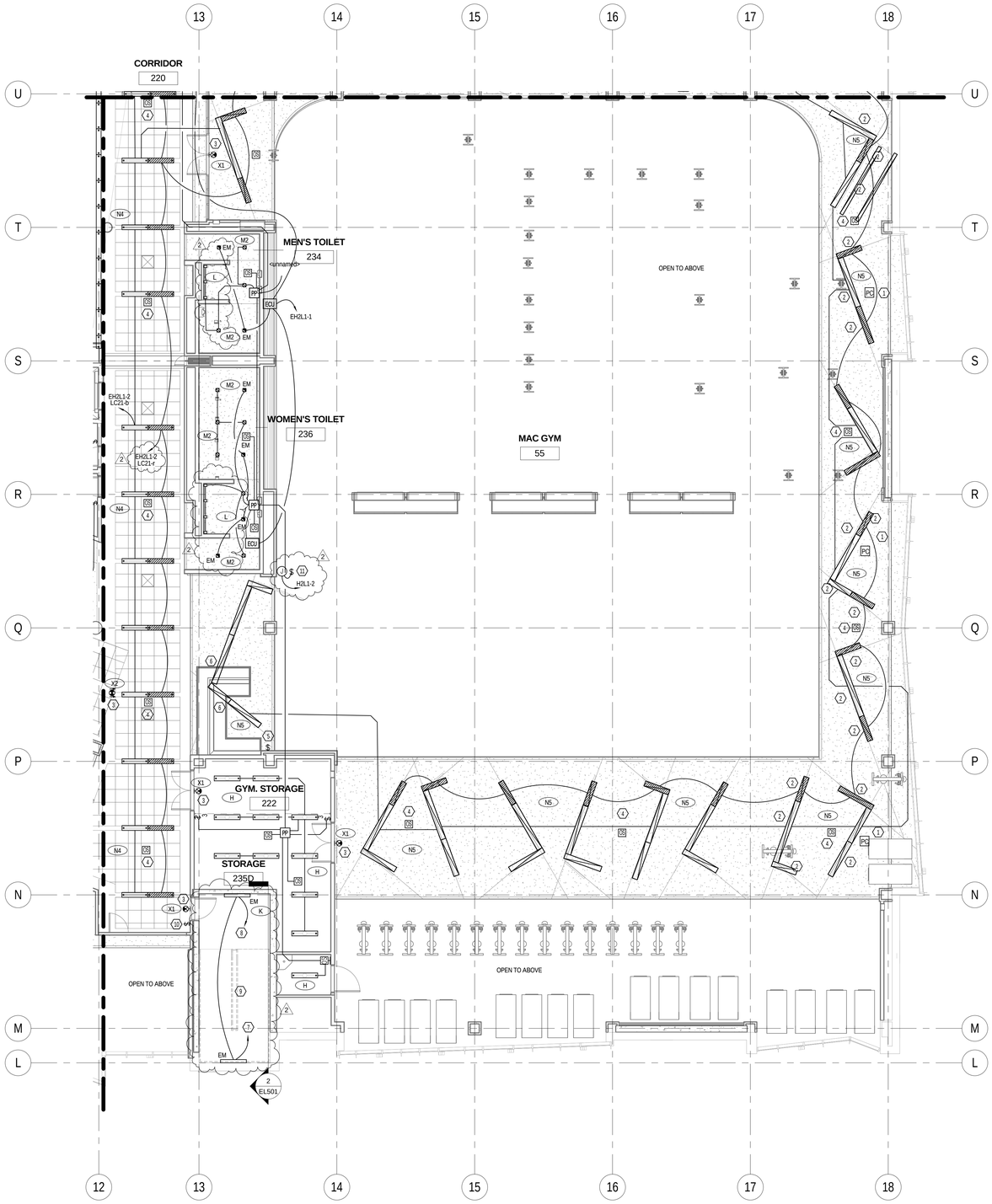


1 EL102.B B ENLARGED LEVEL 2 RCP PLAN SOUTH
SCALE | 1/8" = 1'-0"

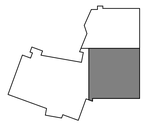
0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"

KEYED NOTES - SHEET EL102.B

1. DIMMING PHOTOSENSOR TO OPERATE A STANDARD 0-10 VDC ELECTRONIC DIMMING DRIVER. COORDINATE THE PROPER HEIGHT AND LOCATION WITH MANUFACTURER AND ARCHITECT PLANS.
2. FIXTURES TO BE CONTROLLED BY PHOTOSENSOR.
3. CONNECT EXIT SIGNS TO UNSWITCHED EM. CIRCUITS.
4. CORRIDOR PHOTOSENSORS AND OCCUPANCY SENSORS SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON DURING NIGHT TIME (UNOCCUPIED) MODE. NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
5. LOW VOLTAGE 4 BUTTON (X3) SWITCHING FOR CONTROL OF FITNESS CENTER LIGHTING. CONTROL IS TO BE MANUAL ON/ MANUAL OFF WITH A PRESET TIME OFF AT THE END OF THE DAY.
6. ELECTRICAL CONTRACTOR TO COORDINATE WITH THE FRAMING CONTRACTOR FOR AREAS WHERE LINEAR FIXTURES TRANSITION FROM PENDANT MOUNT TO RECESS MOUNT. FIXTURE IS TO BE CONTINUOUS WITH NO SECTION BREAK. FRAMING AND GYP BOARD IS TO BE INSTALLED TO ACCOMODATE THE LIGHTING FIXTURE. ELECTRICAL CONTRACTOR IS TO COORDINATE THE FRAMING OPENING WITH THE FIXTURE SUBMITTED, NOT THE DIMENSION SHOWN ON THE LUMINAIRE SCHEDULE. ACTUAL FIXTURE WIDTHS MAY VARY FROM MANUFACTURER TO MANUFACTURER.
7. CONTINUATION ON LEVEL 1.
8. CONTINUATION ON LEVEL 2.
9. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR; ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
10. LOW VOLTAGE 2-BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.
11. PROVIDE J-BOX, CONDUIT, SWITCH, CONDUCTORS FOR LED LIGHT BOX IN THE MILLWORK. COORDINATE EXACT LOCATION WITH MILLWORK BEFORE ROUGH-IN.

GENERAL NOTES - SHEET EL102.B

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.



KEYPLAN

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SEAL

MHTN PROJECT NO. 2010562.00

DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE:

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LEVEL 2
LIGHTING AREA
B
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL102.B

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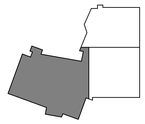
1 EL102.C C ENLARGED LEVEL 2 RCP PLAN WEST
SCALE |1/8" = 1'-0"

KEYED NOTES - SHEET EL102.C

1. DIMMING PHOTOSENSOR TO OPERATE A STANDARD 0-10 VDC ELECTRONIC DIMMING DRIVER. COORDINATE THE PROPER HEIGHT AND LOCATION WITH MANUFACTURER AND ARCHITECT PLANS.
2. FIXTURES TO BE CONTROLLED BY PHOTOSENSOR.
3. CONNECT EXIT SIGNS TO UNSWITCHED EM CIRCUITS.
4. CORRIDOR PHOTOSENSOR AND OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL THE NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON DURING NIGHT TIME (UNOCCUPIED) MODE. NORMAL LIGHTING SHALL REMAIN OFF EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEMS TIME CLOCK DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
5. ELECTRICAL CONTRACTOR TO COORDINATE WITH THE FRAMING CONTRACTOR FOR THE AREAS WHERE THE LINEAR FIXTURES TRANSITION FROM PENDANT MOUNT TO RECESS MOUNT. THE FIXTURE IS TO BE CONTINUOUS WITH NO SECTION BREAK, THE FRAMING AND GYP BOARD IS TO BE INSTALLED TO ACCOMMODATE THE LIGHTING FIXTURE. THE ELECTRICAL CONTRACTOR IS TO COORDINATE THE FRAMING OPENING WITH THE FIXTURE SUBMITTED, NOT THE DIMENSION SHOWN ON THE LUMINAIRE SCHEDULE, ACTUAL FIXTURE WIDTHS MAY VARY FROM MANUFACTURER TO MANUFACTURER.
6. LOW VOLTAGE 4-BUTTON (X3) SWITCHING FOR CONTROL OF THE 3 COURT GYMNASIUM CONTROL IS TO BE MANUAL ON/ MANUAL OFF WITH A PRESET TIME OFF AT THE END OF THE DAY.
7. CONTINUATION ON LEVEL 1.
8. CONTINUATION ON LEVEL 3.
9. STAIR WELL LIGHT FIXTURES SHALL HAVAE 2 BALLAST AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR; ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
10. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.

GENERAL NOTES - SHEET E.102 C

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/DRAWINGS. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITIOIN. COORDINATE THIS WITH ARCHITECT.



KEYPLAN

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SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00

DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LEVEL 2
LIGHTING AREA
C
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL102.C

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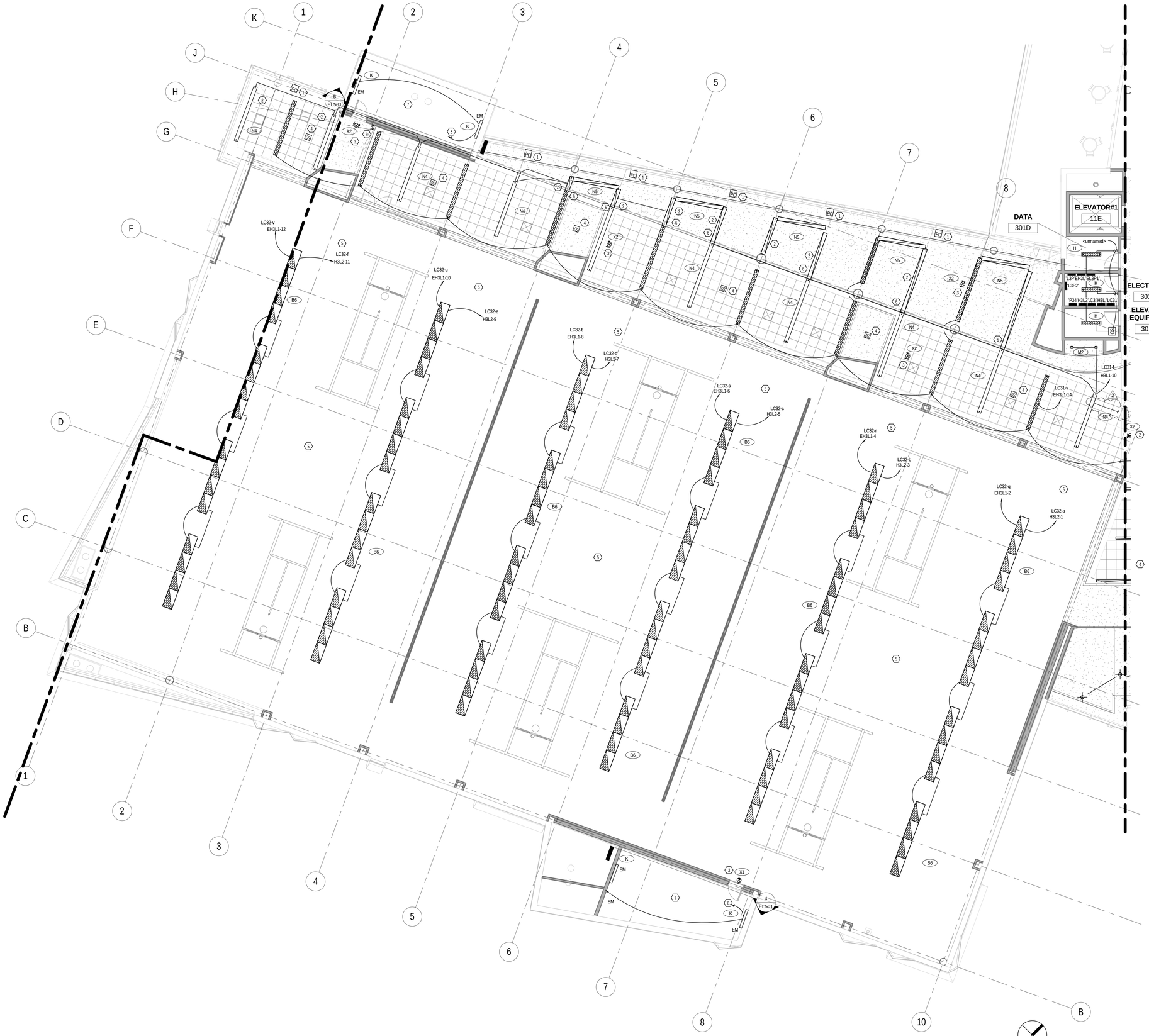

1 EL103.C C ENLARGED LEVEL 3 RCP PLAN WEST
SCALE |1/8" = 1'-0"

KEYPLAN

KEYED NOTES - SHEET EL103.C

1. DIMMING PHOTOSENSOR TO OPERATE A STANDARD 0-10 VDC ELECTRONIC DIMMING DRIVER. COORDINATE THE PROPER HEIGHT AND LOCATION WITH MANUFACTURER AND ARCHITECT PLANS.
2. FIXTURES TO BE CONTROLLED BY PHOTOSENSOR.
3. CONNECT EXIT SIGNS TO UNSWITCHED EM CIRCUIT.
4. CORRIDOR PHOTOSENSOR AND OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSOR SHALL CONTROL THE NORMAL LIGHTING IN ZONE AND EMERGENCY LIGHTING SHALL REMAIN ON DURING NIGHT TIME (UNOCCUPIED) MODE. NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEMS TIME CLOCK DURING OFF HOURS AND UPON SENSING OCCUPANCY. ALL EMERGENCY LIGHTS SHALL TURN ON.
5. 3 COURT GYMNASIUM LIGHTING SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. EACH HIGHBAY FIXTURE SHALL HAVE 2 BALLASTS, ONE FOR 2-LAMPS TIED TO EMERGENCY CIRCUIT. THE OTHER BALLAST FOR 4 LAMPS IN THE FIXTURE TIED TO NORMAL CIRCUIT SWITCHING SHOWN ON SHEET EL102.C.
6. ELECTRICAL CONTRACTOR TO COORDINATE WITH THE FRAMING CONTRACTOR FOR THE AREAS WHERE THE LINEAR FIXTURES TRANSITION FROM PENDANT MOUNT TO RECESS MOUNT. THE FIXTURE IS TO BE CONTINOUS WITH NO SECTION BREAK, THE FRAMING AND GYP BOARD IS TO BE INSTALLED TO ACCOMMODATE THE LIGHTING FIXTURE. THE ELECTRICAL CONTRACTOR IS TO COORDIANTE THE FRAMING OPENING WITH THE FIXTURE SUBMITTED, NOT THE DIMENSION SHOWN ON THE LUMINAIRE SCHEDULE, ACTUAL FIXTURE WIDTHS MAY VARY FROM MANUFACTURER TO MANUFACTURER.
7. STAIR WELL LIGHT FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPACY SENSOR; ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
8. CONTINUATION ON LEVEL 2.
9. LOW VOLTAGE 2 BUTTON OVERIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.

GENERAL NOTES - SHEET EL103.C

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.

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NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LEVEL 3
LIGHTING AREA
C
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL103.C

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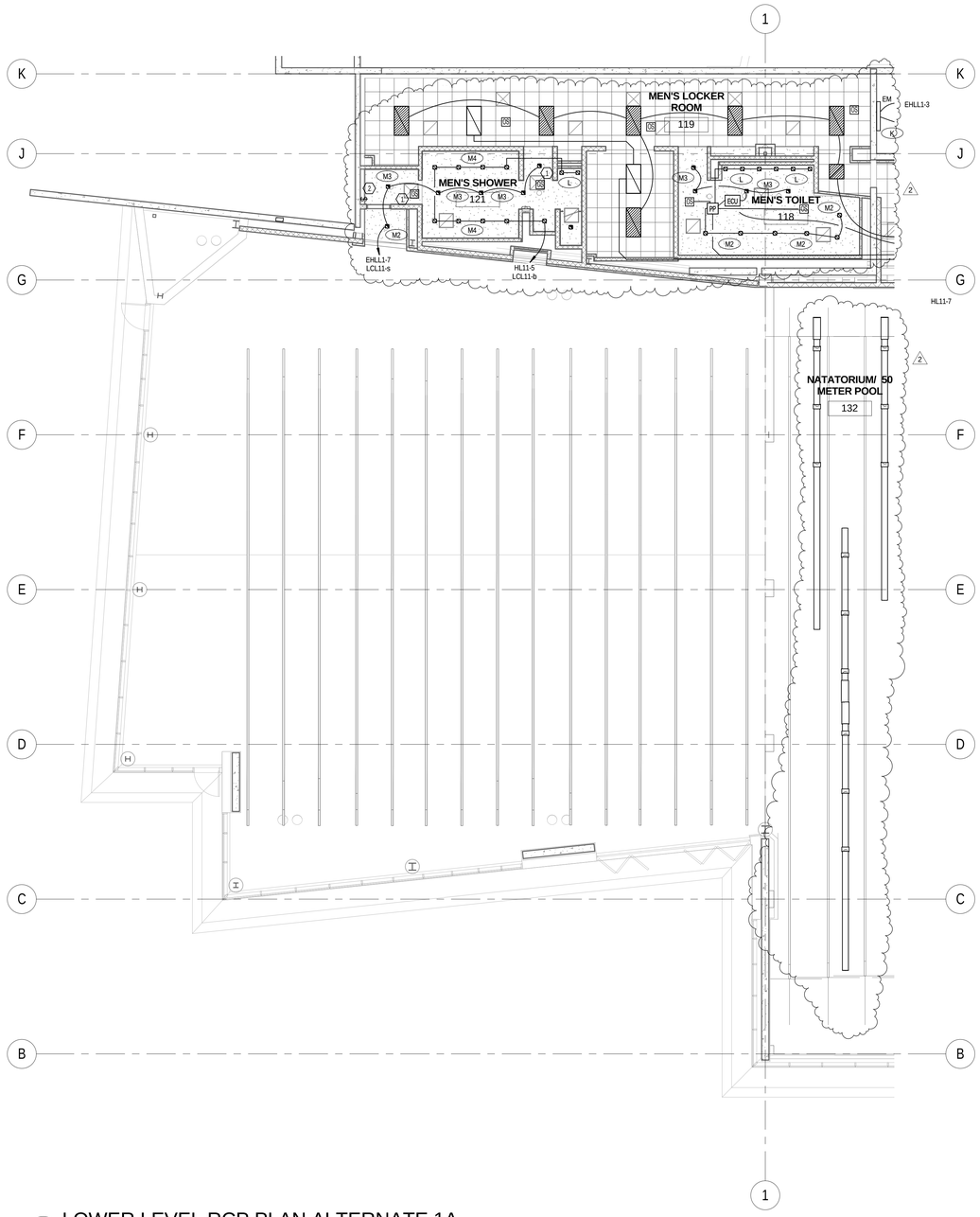
KEYED NOTES - SHEET EL200.C1

1. SHOWER OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE SHOWER/TOILET LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON. DURING NIGHT TIME (UNOCCUPIED) MODE, NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEMS TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
2. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN SHOWER LIGHTS ON/OFF AFTER HOURS.
3. LINEAR LED FIXTURE TYPE P2, SHALL BE INSTALLED IN MULLION AS SHOWN WHERE THE DONOR GLASS EXPOSED ABOVE GRADE.

GENERAL NOTES - SHEET EL200.C1

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.



1 EL200.C1 LOWER LEVEL RCP PLAN ALTERNATE 1A
SCALE |1/8" = 1'-0"

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MHTN PROJECT NO. 2010562.00

DRAWN BY: KGE CHECKED BY: KGE

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NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LOWER LEVEL LIGHTING - ALTERNATE 1A
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL200.C1

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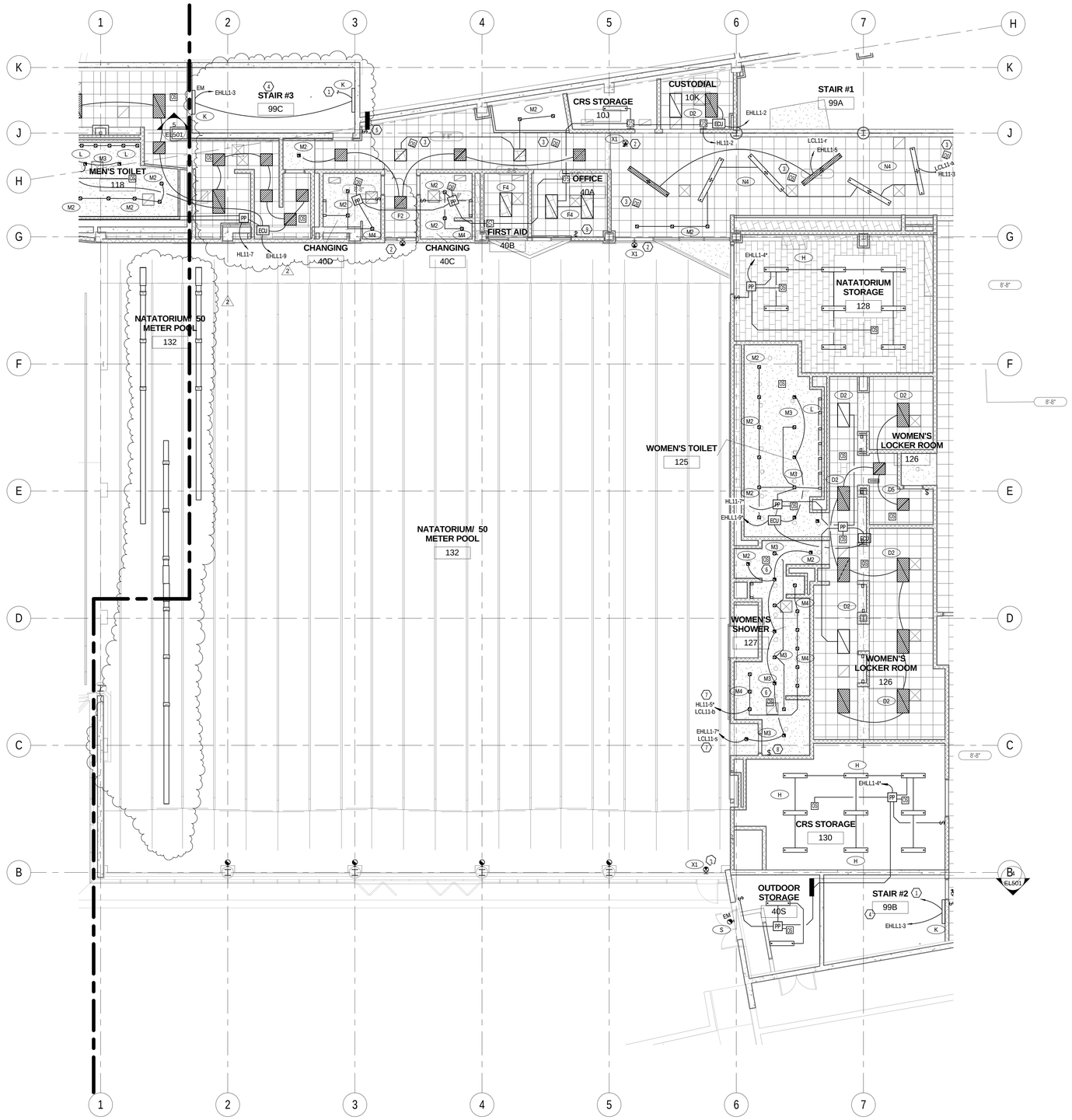

1 EL200.C2 LOWER LEVEL RCP PLAN ALTERNATE 1B

SCALE | 1/8" = 1'-0"

KEYED NOTES - SHEET EL200.C

1. CONTINUATION ON LEVEL ONE.
2. CONNECT ALL EXIT SIGNS TO UNSWITCHED CIRCUIT.
3. CORRIDOR OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL THE NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON DURING NIGHT TIME (UNOCCUPIED) MODE. NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
4. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR: ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
5. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.
6. SHOWER OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE SHOWER AREA LIGHTING.
7. SHOWER LIGHTING SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEM'S TIME CLOCK.
8. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN SHOWER LIGHTS ON/OFF AFTER HOURS.
9. LOW VOLTAGE 8 BUTTON SWITCHING FOR CONTROL OF THE POOL LIGHTING. CONTROL IS TO BE MANUAL ON/ MANUAL OFF WITH A PRESET TIME OFF AT THE END OF THE DAY.

GENERAL NOTES - SHEET EL200.C

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.

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SEAL

MHTN PROJECT NO. 2010562.00

DRAWN BY: RJB CHECKED BY: Checker

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NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LOWER LEVEL LIGHTING - ALTERNATE 1B
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL200.C2

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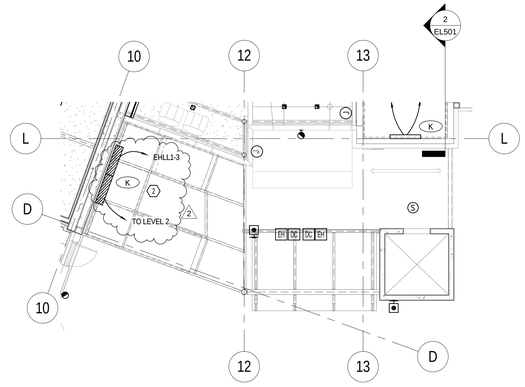
KEYED NOTES - SHEET EL201.B

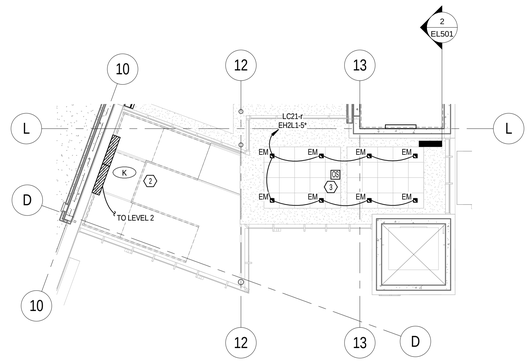
1. CONNECT ALL EXIT SIGNS TO UNSWITCHED EM. CIRCUIT.
2. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR: ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
3. CORRIDOR OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON. DURING NIGHT TIME (UNOCCUPIED) MODE, NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.

GENERAL NOTES - SHEET EL201.B

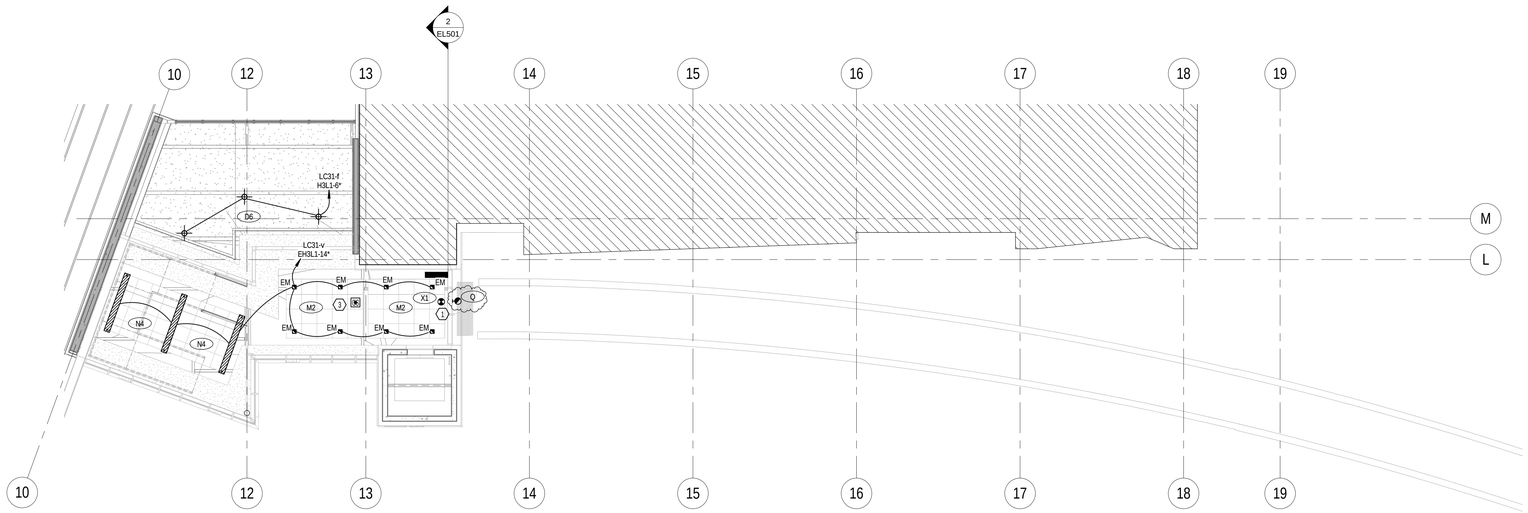
A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.



1 EL201.B LEVEL 1 RCP PLAN ALTERNATE 3
SCALE |1/8" = 1'-0"



2 EL201.B LEVEL 2 RCP PLAN ALTERNATE 3
SCALE |1/8" = 1'-0"



3 EL201.B LEVEL 3 RCP PLAN ALTERNATE 3
SCALE |1/8" = 1'-0"

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Project #: 2010-117.00

UNIVERSITY OF UTAH
STUDENT LIFE CENTER
1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00

DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
ALTERNATE 3
LIGHTING AREA
B
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL201.B

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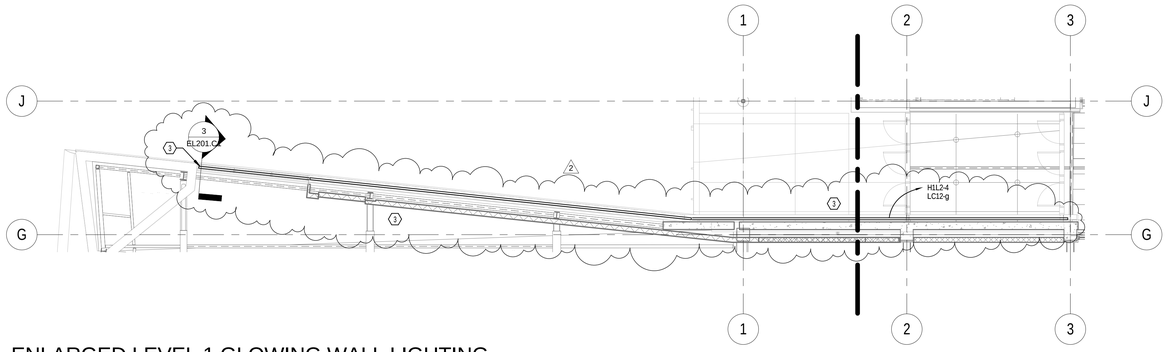


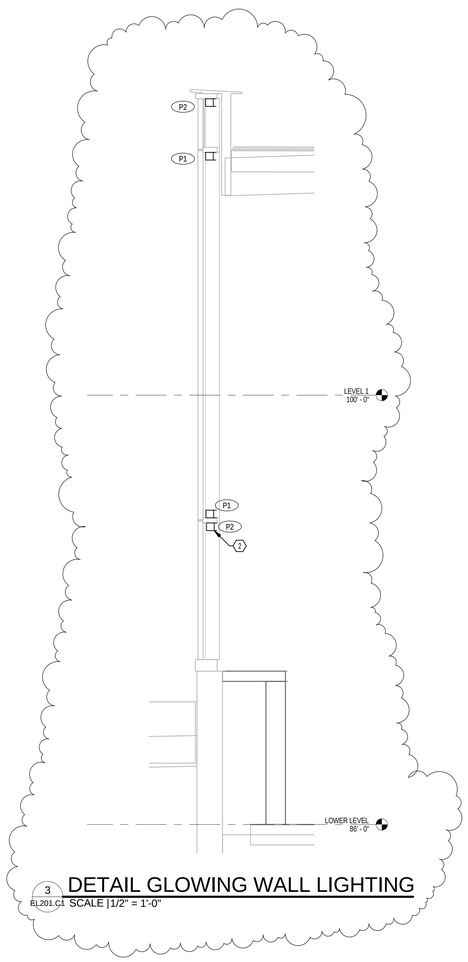
2 EL201.C1 ENLARGED LEVEL 1 GLOWING WALL LIGHTING
SCALE |1/8" = 1'-0"

KEYED NOTES - SHEET EL201.C1

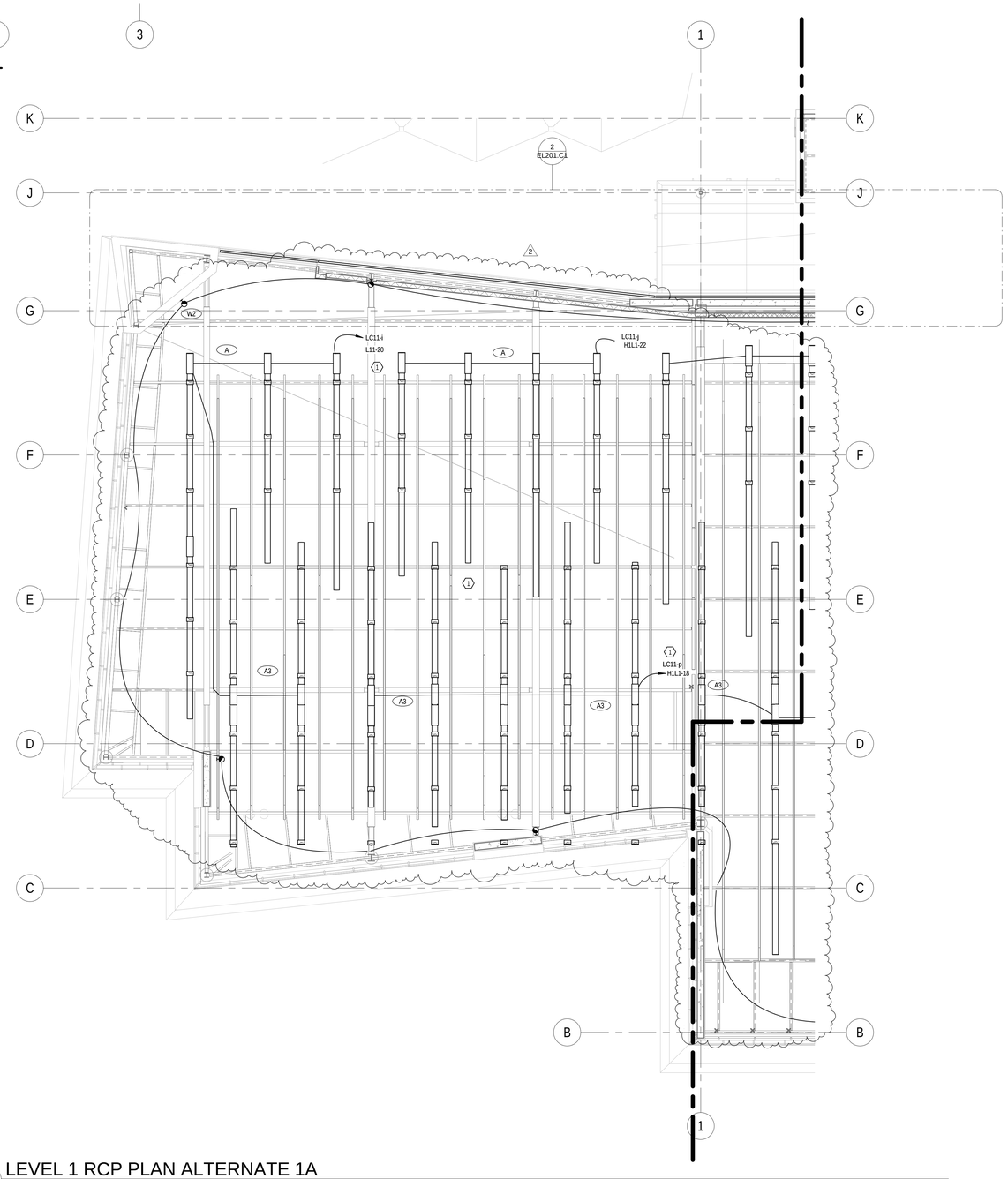
1. POOL LIGHTING SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. REFER TO SHEET EL100.C FOR LOCATION OF LOW VOLTAGE SWITCHING. PROVIDE GFCI BREAKER FOR POOL LIGHTING.
2. LINEAR LED FIXTURE TYPE P2, SHALL BE INSTALLED IN THE MULLION AS SHOWN WHERE THE DONOR GLASS EXPOSED ABOVE GRADE.
3. REFER TO DETAIL GLOWING WASS LIGHTING FOR TYPES OF LIGHT FIXTURES TO BE USED IN THE MULLION.

GENERAL NOTES - SHEET EL201.C1

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECTURAL PLANS/DRAWINGS.



3 EL201.C1 DETAIL GLOWING WALL LIGHTING
SCALE |1/2" = 1'-0"



1 EL201.C1 LEVEL 1 RCP PLAN ALTERNATE 1A
SCALE |1/8" = 1'-0"

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NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LEVEL 1
LIGHTING
ATERNATE 1A
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL201.C1

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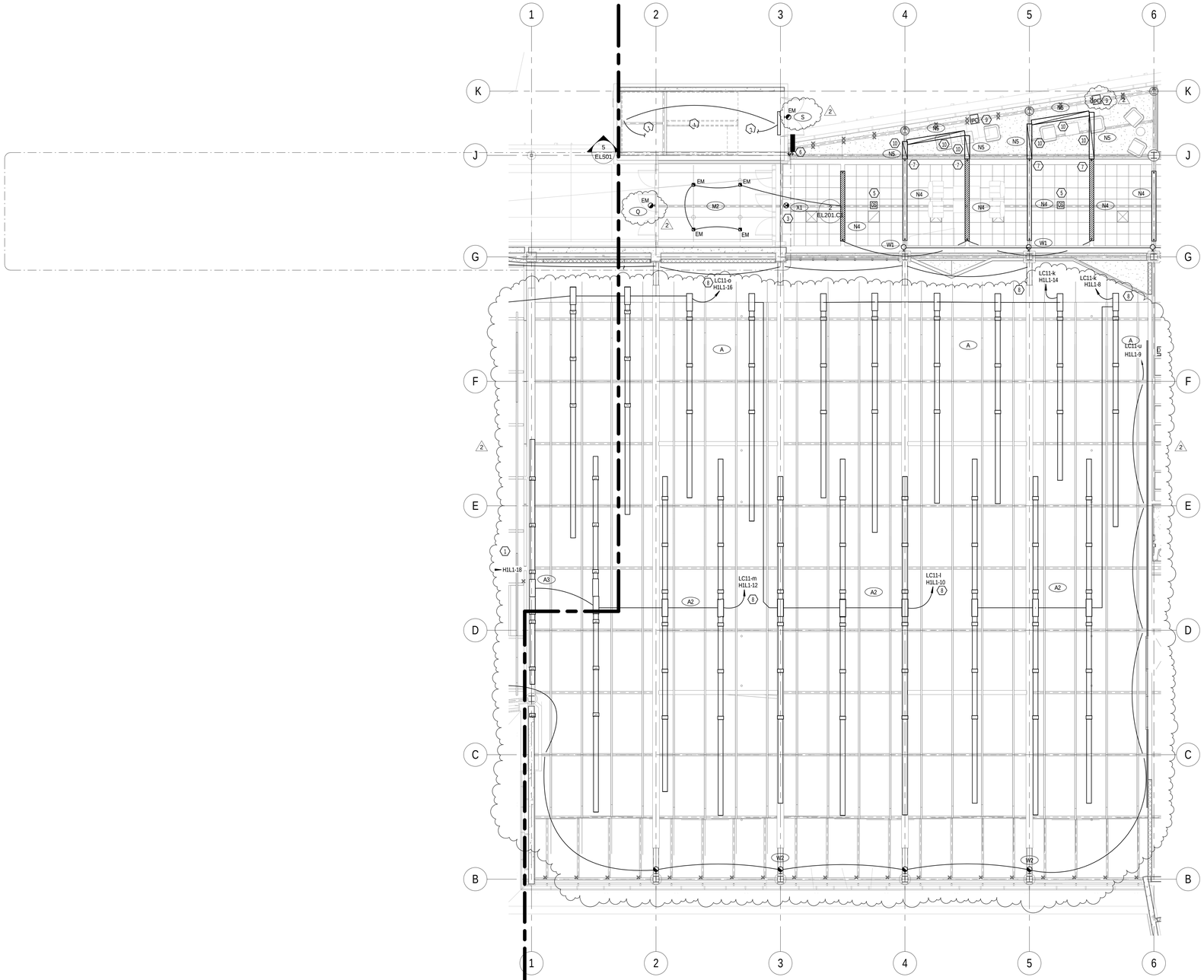

1 EL201.C2 LEVEL 1 RCP PLAN ALTERNATE 1B

SCALE | 1/8" = 1'-0"

KEYED NOTES - SHEET EL201.C2

1. CONTINUATION ON LEVEL 2.
2. CONTINUATION ON LEVEL 1.
3. CONNECT ALL EXIT SIGNS TO UNSWITCHED EM CIRCUIT.
4. STAIRWELL LIGHT FIXTURES SHALL HAVE TWO BALLASTS AND TWO LAMPS WITH INTEGRATED OCCUPANCY SENSOR; ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
5. CORRIDOR OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL THE NORMAL LIGHTING IN THE ZONES AND THE EMERGENCY LIGHTING SHALL REMAIN ON DURING THE (UNOCCUPIED) MODE. THE NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY, LIGHTS SHALL TURN ON.
6. LOW VOLTAGE TWO BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER
7. ELECTRICAL CONTRACTOR TO COORDINATE WITH THE FRAMING CONTRACTOR FOR THE AREAS WHERE TH LINEAR FIXTURES TRANSITION FROM PENDANT MOUNT TO RECESS MOUNT. THE FIXTURE IS TO BE CONTINUOUS WITH NO SECTION BREAK. THE FRAMING AND GYP BOARD IS TO BE INSTALLED TO ACCOMODATE THE LIGHTING FIXTURE. THE ELECTRICAL CONTRACTOR IS TO COORDINATE THE FRAMING OPENING WITH THE FIXTURE SUBMITTED, NOT THE DIMENSION SHOWN ON THE LUMINARE SCHEDULE. ACTUAL FIXTUREWIDTHS MAY VARY FROM MANUFACTURER TO MANUFACTURER.
8. POOL LIGHTING SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. PROVIDE GFCI BREAKER FOR POOL LIGHTING. REFER TO SHEET EL100C FOR LOCATION OF LOW VOLTAGE SWITCHING.
9. DIMMING PHOTOSENSOR TO OPERATE A STANDARD 0-10 VDC ELECTRONIC DIMMING DRIVER. COORDINATE THE PROPER HEIGHT AND LOCATION WITH MANUFACTURER AND ARCHITECTURAL PLANS.
10. FIXTURES TO BE CONTROLLED BY PHOTOSENSOR. CONTROL SCHEMS WILL BE SET THROUGH PROGRAMING.

GENERAL NOTES - SHEET EL201.C2

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECTURAL PLANS/DRAWINGS.

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SEAL

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NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LEVEL 1
LIGHTING
ALTERNATE 1B
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL201.C2

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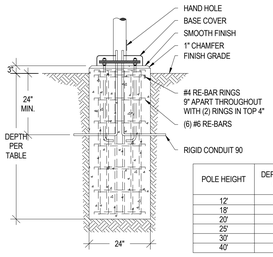
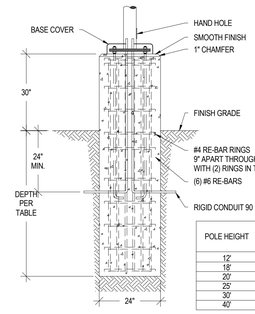


POLE HEIGHT	DEPTH BELOW GRADE
12'	42"
18'	48"
20'	48"
25'	54"
30'	60"
40'	72"

NOTES:
1. ANCHOR BOLTS SUPPLIED WITH POLE. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
2. BOND GROUND CONDUCTOR TO POLE.
3. SEAL CONDUIT TO PREVENT WATER INFILTRATION.
4. PROVIDE SPARE CONDUIT 36" BEYOND LAST POLE ON CIRCUIT, AND CAP FOR FUTURE EXTENSION.

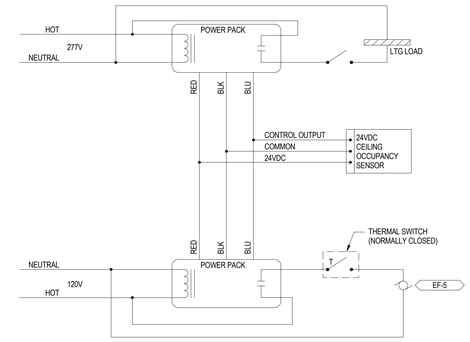
1 / EL702 LIGHTING POLE BASE DETAIL
SCALE | NTS



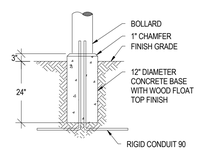
POLE HEIGHT	DEPTH BELOW GRADE
12'	54"
18'	60"
20'	60"
25'	66"
30'	72"
40'	84"

NOTES:
1. ANCHOR BOLTS SUPPLIED WITH POLE. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
2. BOND GROUND CONDUCTOR TO POLE.
3. SEAL CONDUIT TO PREVENT WATER INFILTRATION.
4. PROVIDE SPARE CONDUIT 36" BEYOND LAST POLE ON CIRCUIT, AND CAP FOR FUTURE EXTENSION.

2 / EL702 LIGHTING POLE BASE DETAIL
SCALE | NTS

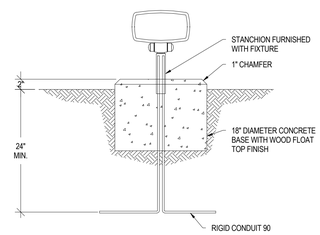


C4 / EL702 RESTROOM LIGHTING/EXHAUST FAN CONTROL DETAIL
SCALE | NTS



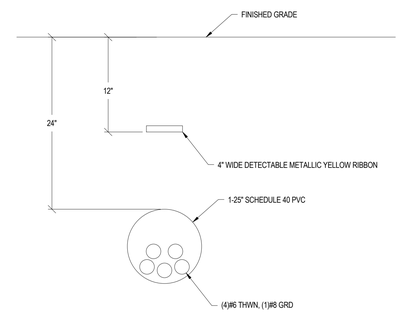
NOTES:
1. ANCHOR BOLTS SUPPLIED WITH BOLLARD. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
2. BOND GROUND CONDUCTOR TO BOLLARD.
3. SEAL CONDUIT TO PREVENT WATER INFILTRATION.

3 / EL702 LIGHTING BOLLARD BASE DETAIL
SCALE | NTS



NOTES:
1. VERIFY SETBACK DISTANCE PRIOR TO ROUGH-IN.
2. SEAL CONDUIT TO PREVENT WATER COLLECTING.

4 / EL702 FLOOD LIGHT BASE DETAIL
SCALE | NTS



A4 / EL702 EXTERIOR LIGHTING RACEWAY & CABLE DETAIL
SCALE | NTS

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SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00
DRAWN BY: KGE CHECKED BY: KGE

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NO.	DATE	DESCRIPTION

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NO.	DATE	DESCRIPTION

SHEET NAME
LIGHTING DETAILS

BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL702

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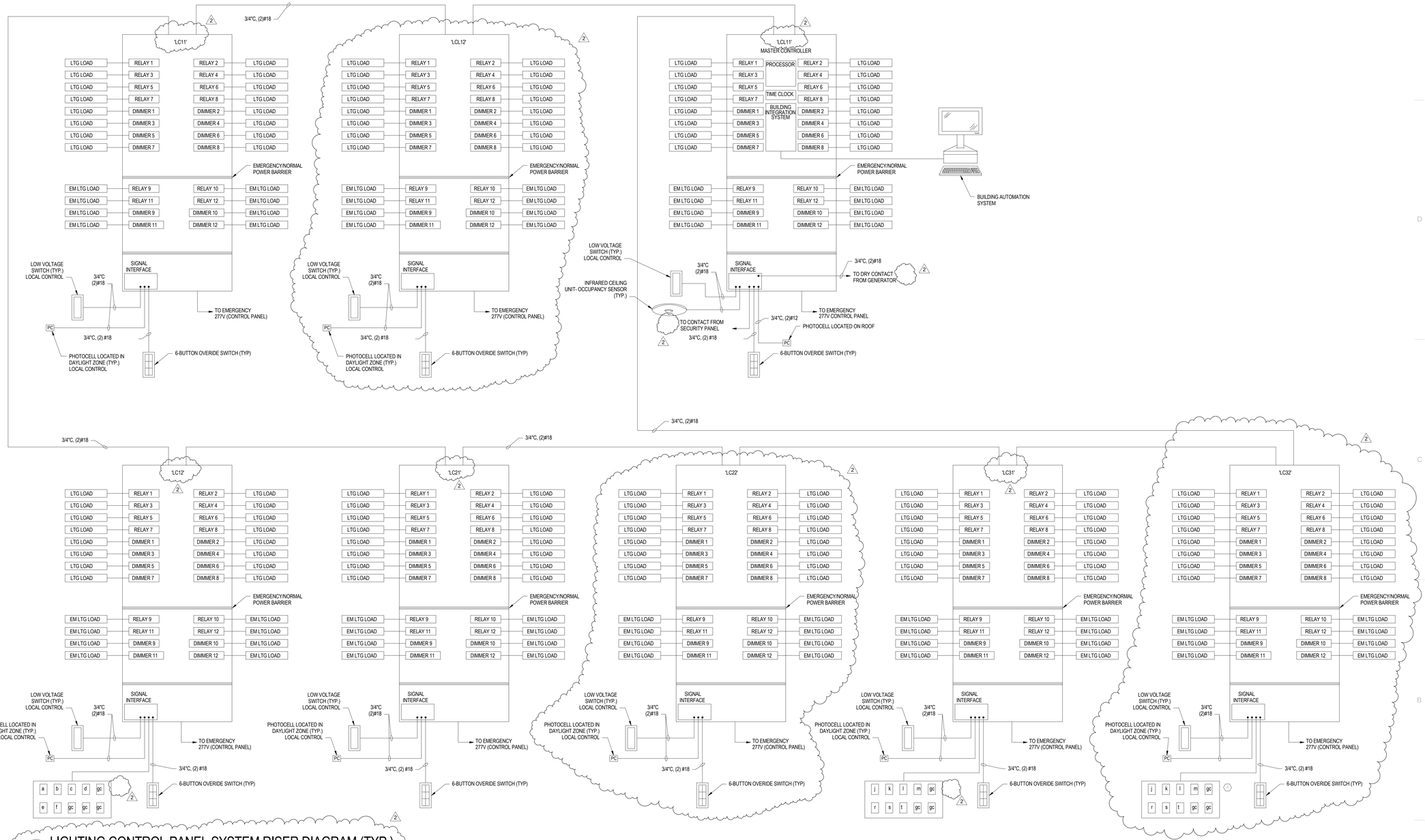

A2 EL703 LIGHTING CONTROL PANEL SYSTEM RISER DIAGRAM (TYP.)
SCALE | NOT TO SCALE

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NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LIGHTING CONTROL SYSTEM RISER
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL703

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KEYED NOTES - SHEET EP100.C

1. VFD PROVIDED BY OTHERS. COORDINATE WITH MECHANICAL FOR EXACT LOCATION.
2. J-BOX MOUNTED IN CEILING FOR 120V POWER TO MECHANICAL VAV BOX. COORDINATE WITH MECHANICAL FOR EXACT LOCATION.
3. CIRCUIT CONTINUES TO LIGHT FIXTURE IN PIT. SEE LIGHTING SHEET FOR CONTINUATION.
4. INSTALL A LCD TV HERE. SEE EQUIPMENT LIST FOR MANUFACTURERAND MODEL. (TV DISTRIBUTION SYSTEM, SHEET EY710)
5. INSTALL TOUCH PANEL INTERFACE HERE.
6. INSTALL LAN DROPS AND TV DROPS INSIDE THE EQUIPMENT CABINET #2.
7. DEDICATED 20A CIRCUITS FOR A/V EQUIPMENT CABINET.
8. J-BOX FOR CONTROL WIRING BETWEEN EMERGENCY SHUT OFF AND TIMER PUSH BUTTONS. PUSH BUTTONS PROVIDED BY POOL MANUFACTURER, INSTALLED BY DIV 26.
9. INSTALL RECEPTACLES HORIZONTALLY ABOVE COUNTER AND BELOW MIRROR. COORDINATE HEIGHT WITH MILLWORK.
10. POWER FOR RADIO CHARGING STATIONS.
11. POWER FOR OWNER PROVIDED TIME CLOCK.
12. ELEVATOR 2-WAY COMMUNICATION PER 2009 IBC 1007.8. COORDINATE WITH ELEVATOR MANUFACTURER FOR EXACT LOCATION.
13. 120V 20A DEDICATED DIRCUIT FOR ELEVATOR CAB LIGHTS.
14. J-BOX FOR ELEVATOR RECALL.
15. J-BOX FOR POWER TO DIGITAL CLOCK. COORDINATE WITH ARCHITECT FOR EXACT LOCATION.
16. PROVIDE J-BOX FOR POWER TO SPA UNDER WATER LIGHTS. REFER TO DETAILS 3 AND 5 ON SHET WF504 OF POOL DRAWINGS. LIGHTING CONTROL BY SPA MANUFACTURER. COORDINATE EXACT PLACEMENT. DIV.26 TO PROVIDE ALL CONDUIT AND WIRING REQUIRED.

GENERAL NOTES - SHEET EP100.C

A. PROVIDE (2) 3/4" CONDUITS TO EACH DATA LOCATION. EACH CONDUIT SHALL RUN FROM NEAREST CABLE TRAY TO OUTLET LOCATION AND SHALLHAVE A PULL STRING INSTALLED. ALL WIRING IS TO BE DONE BY UNIVERSITY OF UTAH NETCOM DEPARTYMENT.
B. UNIVERSITY OF UTAH NET COM SHALL PROVIDE ALL 19" TELECOM RACKS AND MAKE ALL FINAL CONNECTIONS.

1 EP100.C C ENLARGED LOWER LEVEL POWER PLAN WEST
SCALE |1/8" = 1'-0"

2 EP100.C ENLARGED ELEVATOR #1
SCALE |1/4" = 1'-0"

KEYPLAN

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NO.	DATE	DESCRIPTION
1	05-28-2013	ADDENDUM ONE
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LOWER LEVEL POWER PLAN AREA C
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP100.C

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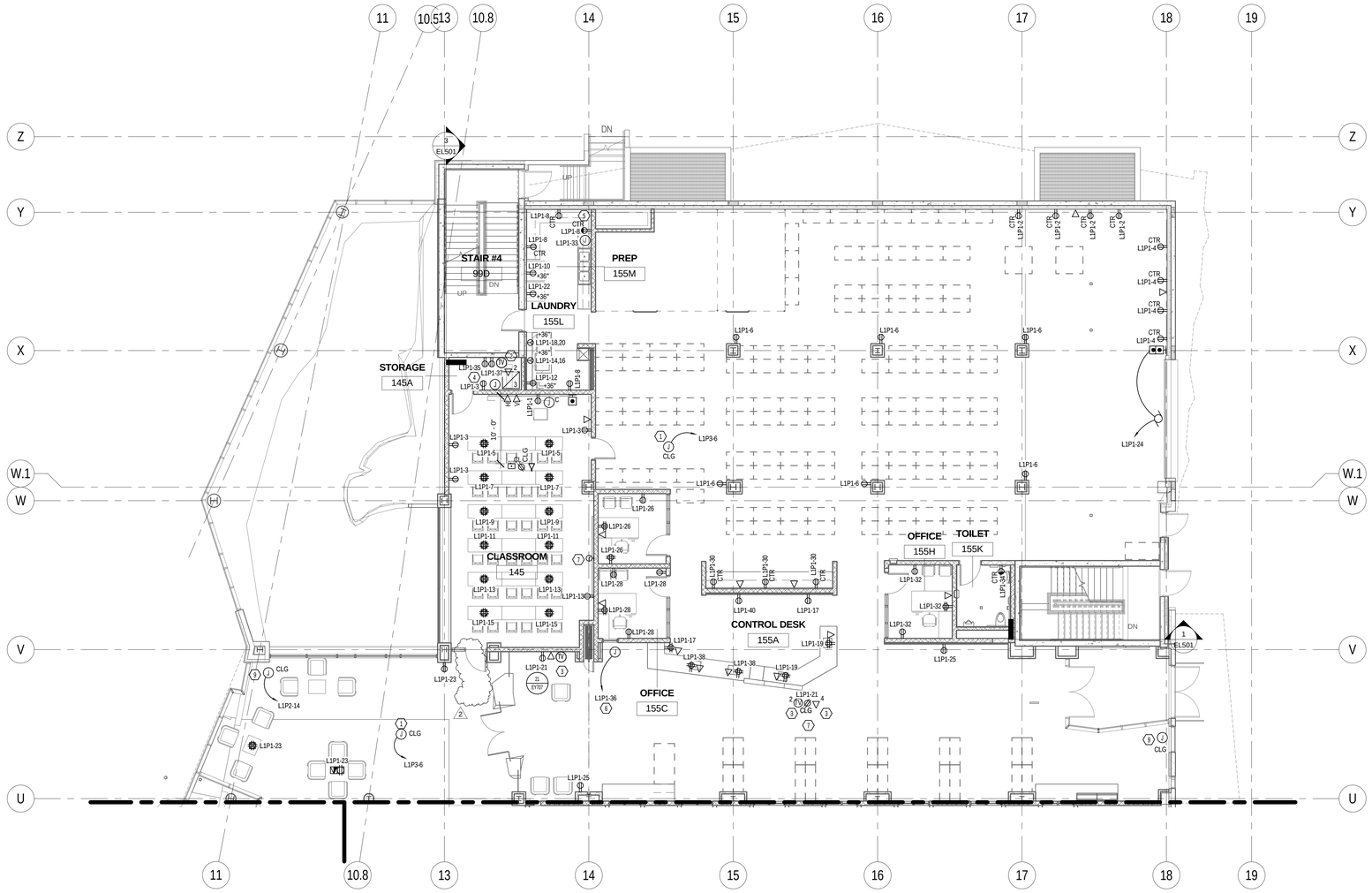
KEYED NOTES - SHEET EP101.A

1. J-BOX MOUNTED IN CEILING FOR 120V POWER TO MECHANICAL VAV BOX. COORDINATE WITH MECHANICAL FOR EXACT LOCATION.
2. INSTALL ONE TV DROP AND TWO LAN DROPS INSIDE THE EQUIPMENT CABINET.
3. INSTALL A LCD TV HERE. SEE EQUIPMENT LIST FOR MANUFACTURER AND MODEL. (TV DISTRIBUTION SYSTEM, SHEET EY710)
4. DEDICATED 20A CIRCUITS FOR A/V EQUIPMENT CABINET.
5. POWER FOR DISHWASHER. COORDINATE CONNECTION TYPE WITH EQUIPMENT PRIOR TO ROUGH-IN.
6. J-BOX FOR POWER TO FOLDING DOOR MOTOR. MOTOR AND DOOR CONTROL BY OTHERS. DIV.26 TO PROVIDE ALL REQUIRED CONDUIT, DISCONNECTS AND WIRING BETWEEN DOOR, MOTOR AND CONTROL LOCATIONS.
7. CEILING MOUNT TV OUTLET AND LCD TVS.
8. J-BOX FOR POWER TO MOTORIZED SHADES. MOUNT J-BOX IN SOFFIT.
9. J-BOX FOR POWER TO FUTURE MOTORIZED SHADES. PROVIDE J-BOX AND STUB CONDUIT TO ACCESSIBLE CIELING SPACE. COORDINATE EXACT J-BOX LOCATION WITH SHADE INSTALLER.

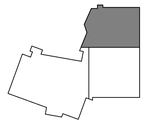
GENERAL NOTES - SHEET EP101.A

A. PROVIDE (2) 3/4" CONDUITS TO EACH DATA LOCATION. EACH CONDUIT SHALL RUN FROM NEAREST CABLE TRAY TO OUTLET LOCATION AND SHALL HAVE A PULL STRING INSTALLED. ALL WIRING IS TO BE DONE BY UNIVERSITY OF UTAH NETCOM DEPARTYMENT.
B. UNIVERSITY OF UTAH NET COM SHALL PROVIDE ALL 19" TELECOM RACKS AND MAKE ALL FINAL CONNECTIONS.



1 EP101.A A ENLARGED LEVEL 1 POWER PLAN NORTH
SCALE | 1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"



KEYPLAN

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DRAWN BY: KGE CHECKED BY: KGE

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NO.	DATE	DESCRIPTION
1	05-28-2013	ADDENDUM ONE
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LEVEL 1 POWER PLAN AREA A

BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP101.A

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1 EP101.C C ENLARGED LEVEL 1 POWER PLAN WEST
SCALE | 1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"

KEYPLAN

KEYED NOTES - SHEET EP101.C

1. COORDINATE LOCATION OF FLOOR BOX WITH ARCHITECTURAL DRAWINGS.
2. JUNCTION BOX MOUNTED IN CEILING FOR 120V POWER TO MECHANICAL VAV BOX. COORDINATE WITH MECHANICAL FOR EXACT LOCATION.
3. RECEPTACLES FOR FUTURE MOVEABLE CART. CART BY OTHERS.
4. INSTALL A LCD TV HERE. SEE EQUIPMENT LIST FOR MANUFACTURER AND MODEL. (TV DISTRIBUTION SYSTEM, SHEET EY710)
5. ELEVATOR 2-WAY COMMUNICATION PER 2009 IBC 1007.8. COORDINATE WITH ELEVATOR MANUFACTURER FOR EXACT LOCATION.
6. POWER FOR FIREPLACE BLOWER/EXHAUST. CONTROL BY INSTALLER. FIRE PLACE INSTALLER SHALL PROVIDE CONTROL AT CONTROL DESK. 101 2
7. RECEPTACLE ON CANOPY FOR SNOW MELT. PROVIDE A 120V DEDICATED CIRCUIT. PROVIDE A 30MA BREAKER IN PANEL.
8. J-BOX FOR POWER TO MOTORIZED SHADES.
9. J-BOX FOR POWER TO FUTURE MOTORIZED SHADES. PROVIDE J-BOX AND STUB CONDUIT TO ACCESSIBLE CIEILING SPACE COORDINATE EXACT J-BOX LOCATION WITH SHADE INSTALLER.
10. POWER / DATA FOR TURNSTILES. 2

GENERAL NOTES - SHEET EP101.C

A. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS, MATERIALS, FINISHES, AND DIMENSIONS BEFORE ANY WORK BEGINS.
B. CONTRACTOR TO ENSURE THAT ALL CORRIDORS OUTSIDE OF CONSTRUCTION AREA ARE KEPT CLEAN AND CLEAR OF DEBRIS AND OBSTRUCTIONS AT ALL TIMES.
C. PROTECT ALL ITEMS TO REMAIN FROM DAMAGE.

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Contact: Paris LeLaCheur
Project #: 2010-117.00

UNIVERSITY OF UTAH
STUDENT LIFE CENTER
1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00
DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE

NO.	DATE	DESCRIPTION
1	05-28-2013	ADDENDUM ONE
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LEVEL 1 POWER PLAN AREA C

BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP101.C

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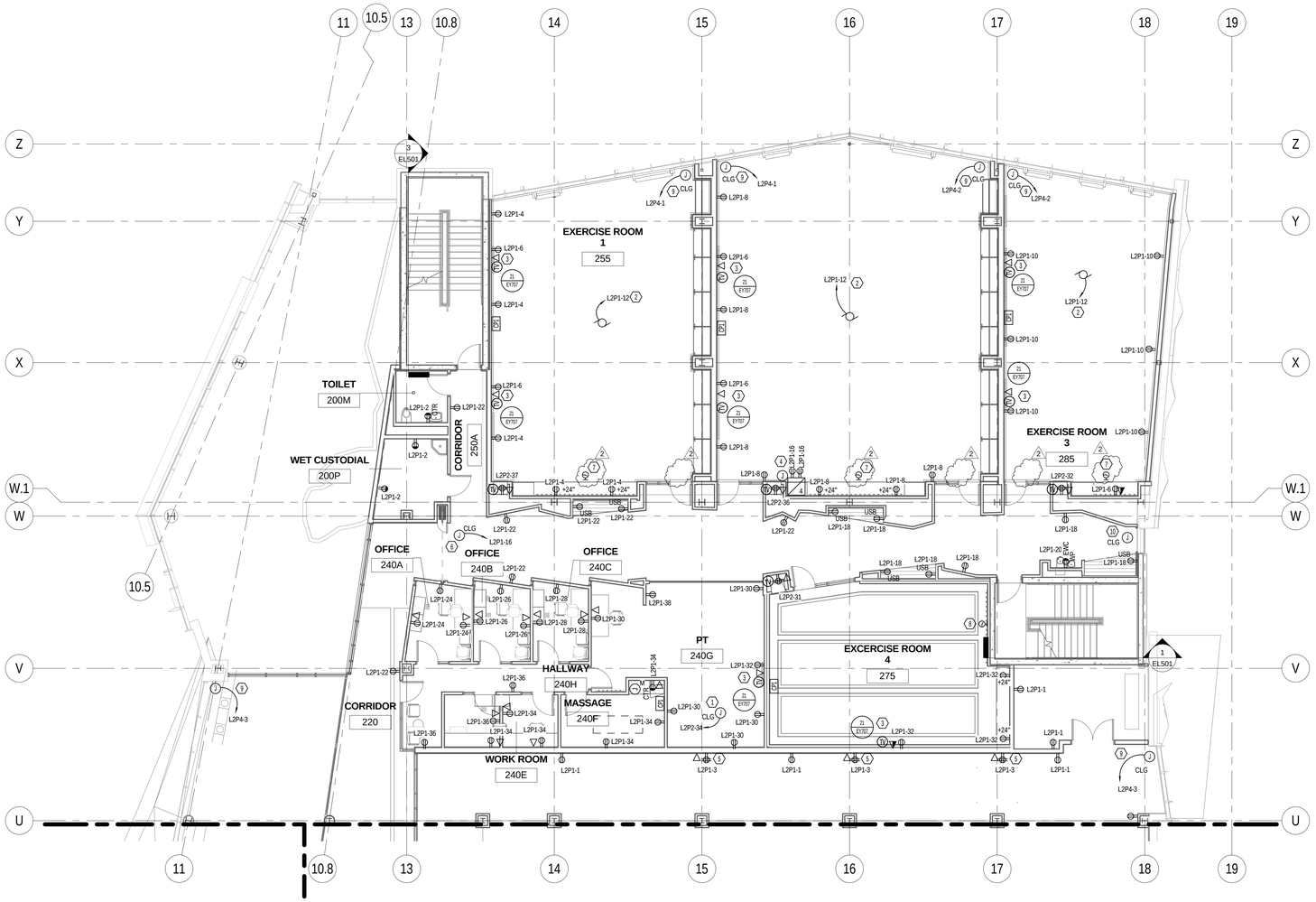
KEYED NOTES - SHEET EP102.A

1. J-BOX MOUNTED IN CEILING FOR 120V POWER TO MECHANICAL VAV BOX. COORDINATE WITH MECHANICAL FOR EXACT LOCATION.
2. BAF FANS WITH BUILT IN VFD. FANS CONTROLLED BY MANUFACTURER PROVIDED CONTROLLER. COORDINATE WITH MECH DWGS FOR LOCATION OF CONTROLLER. PROVIDE ALL REQUIRED CONDUIT AND J-BOXES FROM CONTROL LOCATION TO FAN VFD.
3. INSTALL A LCD TV HERE. SEE EQUIPMENT LIST FOR MANUFACTURERAND MODEL. (TV DISTRIBUTION SYSTEM, SHEET EY710)
4. DEDICATED 20A CIRCUITS FOR A/V EQUIPMENT CABINET.
5. CONTRACTOR SHALL COORDINATE RECEPTACLE HEIGHTS AND LOCATIONS WITH MIRRORS.
6. J-BOXFOR POWER TO FOLDING DOOR MOTOR. MOTOR AND DOOR CONTROL BY OTHERS. DIV. 26 TO PROVIDE ALL REQUIRED CONDUIT, DISCONNECTS AND WIRING BETWEEN DOOR, MOTOR AND CONTROL LOCATIONS.
7. MOUNT ABOVE DOOR.
8. MOUNT ABOVE COAT HOOK AT APPROXIMATLY 7'-0" A.F.F.

9. J-BOX FOR MOTORIZED SHADES. COORDINATE EXACT LOCATION OF J-BOX WITH SHADE INSTALLER.
10. J-BOX FOR POWER TO FUTURE MOTORIZED SHADES. PROVIDE J-BOX AND STUB CONDUIT TO ACCESSIBLE CIELING SPACE. COORDINATE EXACT LOCATION WITH SHADE INSTALLER.

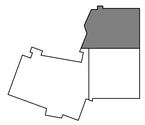
GENERAL NOTES - SHEET EP102.A

A. PROVIDE (2) 3/4" CONDUITS TO EACH DATA LOCATION. EACH CONDUIT SHALL RUN FROM NEAREST CABLE TRAY TO OUTLET LOCATION AND SHALLHAVE A PULL STRING INSTALLED. ALL WIRING IS TO BE DONE BY UNIVERSITY OF UTAH NETCOM DEPARTYMENT.
B. UNIVERSITY OF UTAH NET COM SHALL PROVIDE ALL 19" TELECOM RACKS AND MAKE ALL FINAL CONNECTIONS.



1 EP102.A A ENLARGED LEVEL 2 POWER PLAN NORTH
SCALE |1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"



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1	05-28-2013	ADDENDUM ONE
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LEVEL 2 POWER PLAN AREA A

BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP102.A

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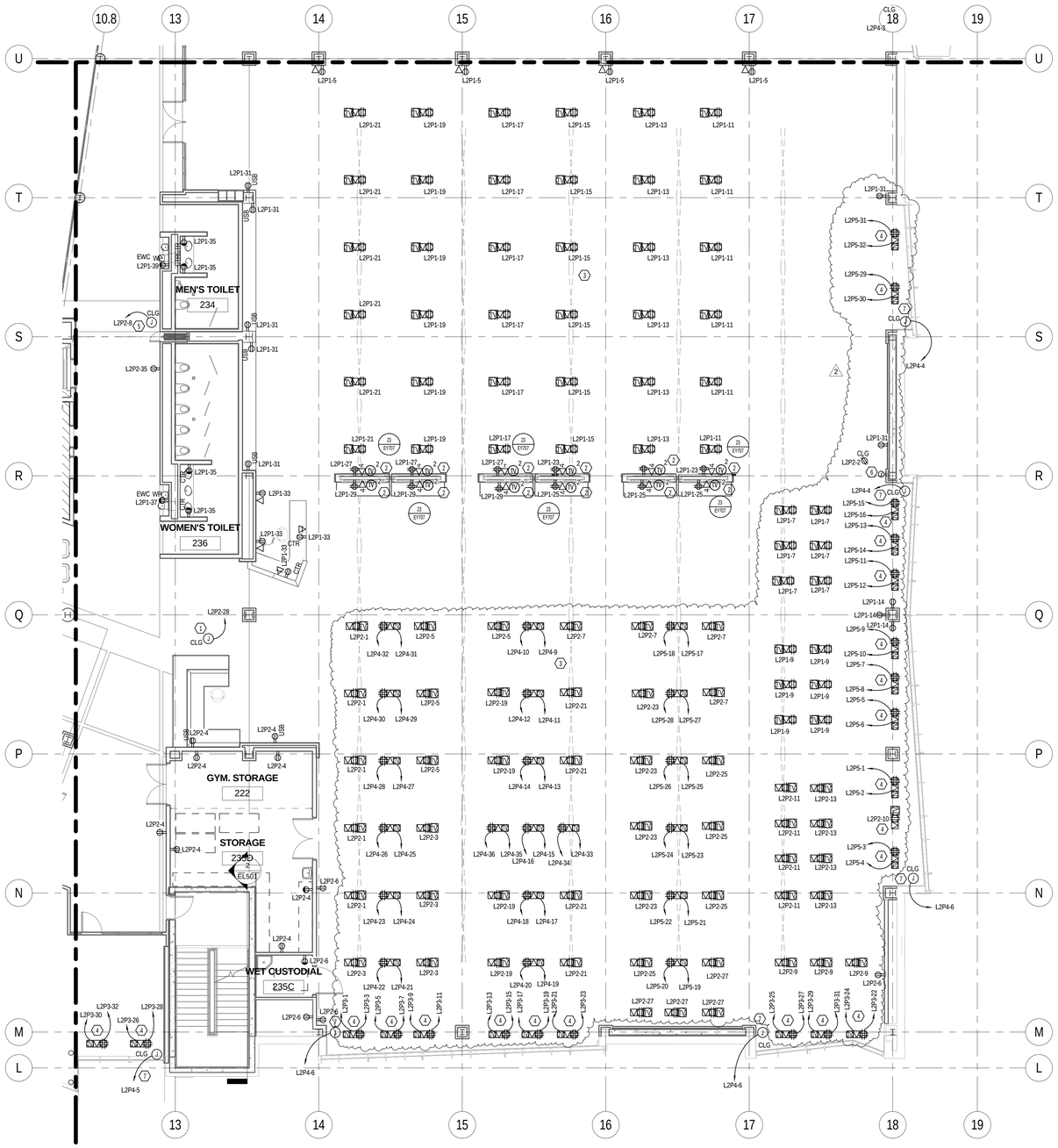

1 B ENLARGED LEVEL 2 POWER PLAN SOUTH
EP102.B SCALE |1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"

KEYPLAN

KEYED NOTES - SHEET EP102.B

1. J-BOX MOUNTED IN CEILING FOR 120V POWER TO MECHANICAL VAV BOX. COORDINATE WITH MECHANICAL FOR EXACT LOCATION.
2. INSTALL (2) LCD TVS HERE. SEE EQUIPMENT LIST FOR MANUFACTURER AND MODEL. (TV DISTRIBUTION SYSTEM. SHEET EY710).
3. ALL FLOOR BOXES IN FITTNESS ROOM SHALL BE INSTALLED SO COVER PLATE IS FLUSH WITH FLOOR FINISH. COORDINATE WITH ARCHITECTURAL FOR FINISHES.
4. TREADMILL RECEPTACLES SHALL BE A NEMA 5-20R. ALL TREADMILLS ARE DEDICATED 20A CIRCUITS AND CANNOT SHARE NEUTRAL.
5. J-BOX FOR POWER TO FOLDING DOOR MOTOR. MOTOR AND DOOR CONTROL BY OTHERS. DIV. 26 TO PROVIDE ALL REQUIRED CONDUIT, DISCONNECTS AND WIRING BETWEEN DOOR, MOTOR AND CONTROL LOCATIONS.
6. COORDINATE EXACT LOCATION AND HEIGHT WITH ARCHITECT FOR MOUNTING
7. J-BOX FOR MOTORIZED SHADES. COORDINATE EXACT LOCATION OF J-BOX WITH SHADE INSTALLER.
8. J-BOX FOR POWER TO FUTURE MOTORIZED SHADES. PROVIDE J-BOX AND STUB CONDUIT TO ACCESSIBE CEILING SPACE. COORDINATE EXACT J-BOX LOCATION WITH SHADE INSTALLER.

GENERAL NOTES - SHEET EP102.B

A. PROVIDE (2) 3/4" CONDUITS TO EACH DATA LOCATION. EACH CONDUIT SHALL RUN FROM NEAREST CABLE TRAY
TO OUTLET LOCATION AND SHALLHAVE A PULL STRING INSTALLED. ALL WIRING IS TO BE DONE BY UNIVERSITY OF UTAH NETCOM DEPARTYMENT .
B. UNIVERSITY OF UTAH NET COM SHALL PROVIDE ALL 19" TELECOM RACKS AND MAKE ALL FINAL CONNECTIONS.

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SHEET NAME
LEVEL 2 POWER PLAN AREA B

BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP102.B

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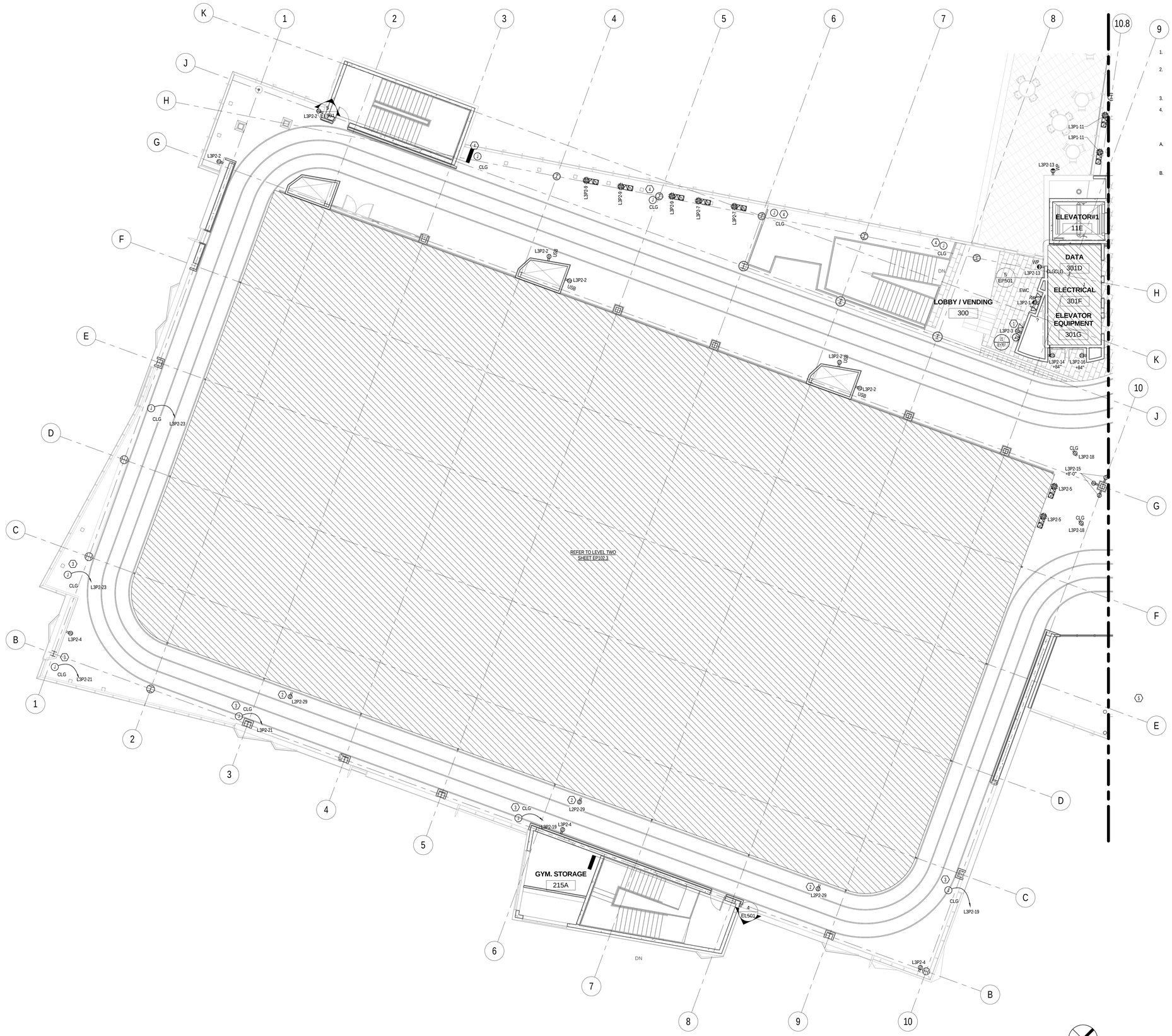

1 EP103.C C ENLARGED LEVEL 3 POWER PLAN WEST
SCALE |1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"

KEYPLAN

KEYED NOTES - SHEET EP103.C

1. INSTALL A LCD TV HERE. SEE EQUIPMENT LIST FOR MANUFACTURER AND MODEL. (TV DISTRIBUTION SYSTEM, SHEET EY710)
2. RECEPTACLES MOUNTED TO SUSPENDED TRACK FOR POWER TO SCORBOARDS. COORDINATE EXACT LOCATION WITH OTHER TRADES. RUN CONDUIT TIGHT AGAINS UNDER SIDE OF TRACK.
3. J-BOX FOR MOTORIZED SHADES. COORDINATE EXACT LOCATION OF J-BOX WITH SHADE INSTALLER.
4. J-BOXFOR POWER TO FUTURE MOTORIZED SHADES. PROVIDE J-BOX AND STUB CONDUIT TO ACCESSIBLE CIELING SPACE COORDINATE EXACT J-BOX LOCATION WITH SHADE INSTALLER.

GENERAL NOTES - SHEET EP104.A

A. PROVIDE (2) 3/4" CONDUITS TO EACH DATA LOCATION. EACH CONDUIT SHALL RUN FROM NEAREST CABLE TRAY TO OUTLET LOCATION AND SHALLHAVE A PULL STRING INSTALLED. ALL WIRING IS TO BE DONE BY UNIVERSITY OF UTAH NETCOM DEPARTYMENT.
B. UNIVERSITY OF UTAH NET COM SHALL PROVIDE ALL 19" TELECOM RACKS AND MAKE ALL FINAL CONNECTIONS.

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1	05-28-2013	ADDENDUM ONE

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LEVEL 3 POWER PLAN AREA C

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EP103.C

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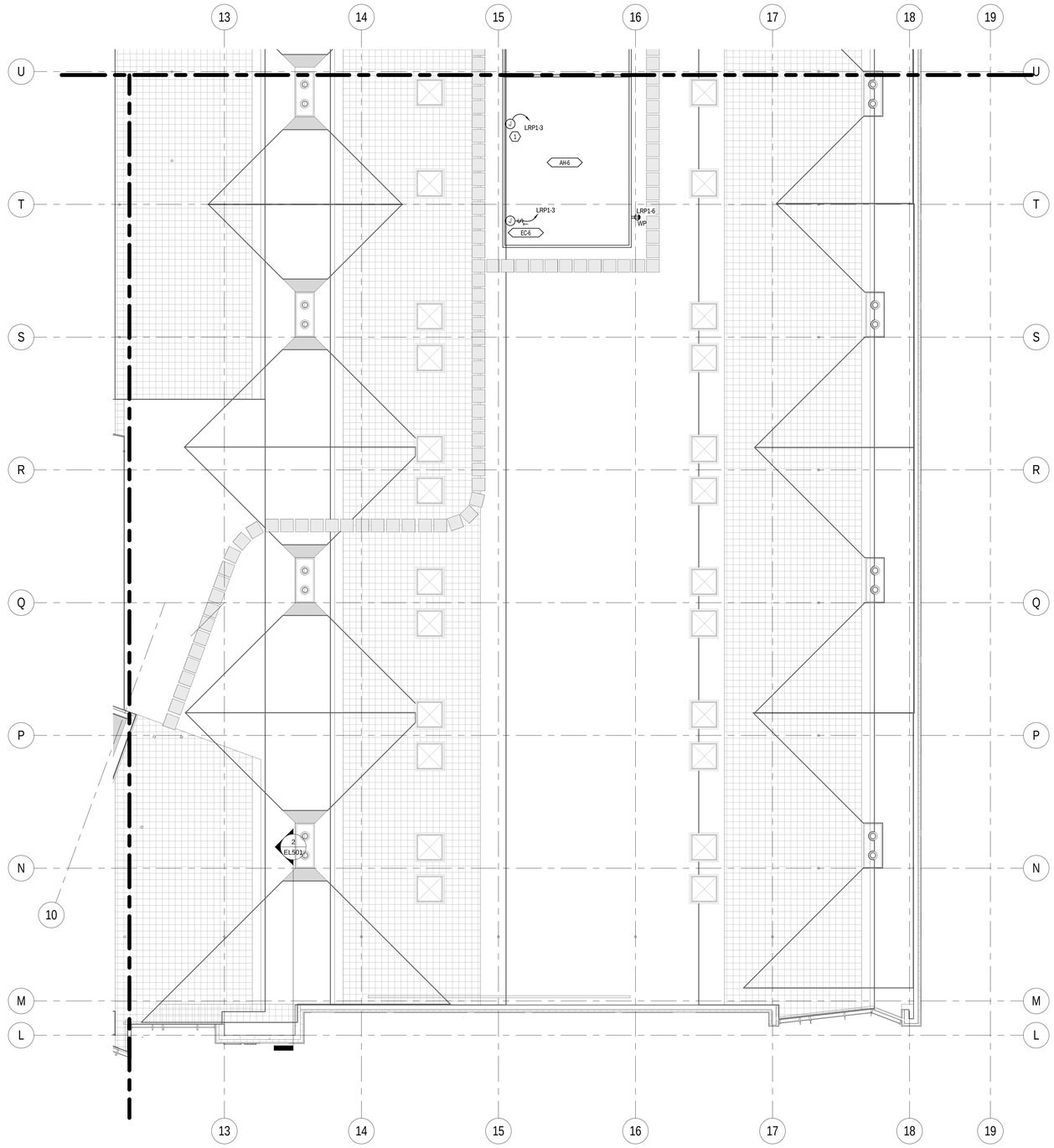
KEYED NOTES - SHEET EP104.B

1. CIRCUIT FOR 120V MARINE LIGHTS.

GENERAL NOTES - SHEET EP104.B

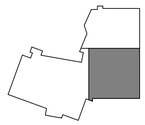
A. PROVIDE (2) 3/4" CONDUITS TO EACH DATA LOCATION. EACH CONDUIT SHALL RUN FROM NEAREST CABLE TRAY TO OUTLET LOCATION AND SHALLHAVE A PULL STRING INSTALLED. ALL WIRING IS TO BE DONE BY UNIVERSITY OF UTAH NETCOM DEPARTYMENT.

B. UNIVERSITY OF UTAH NET COM SHALL PROVIDE ALL 19" TELECOM RACKS AND MAKE ALL FINAL CONNECTIONS.



1 EP104.B B ENLARGED ROOF POWER PLAN SOUTH
SCALE |1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"



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SHEET NAME
ROOF POWER PLAN AREA B

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May 15, 2013

SHEET NUMBER
EP104.B

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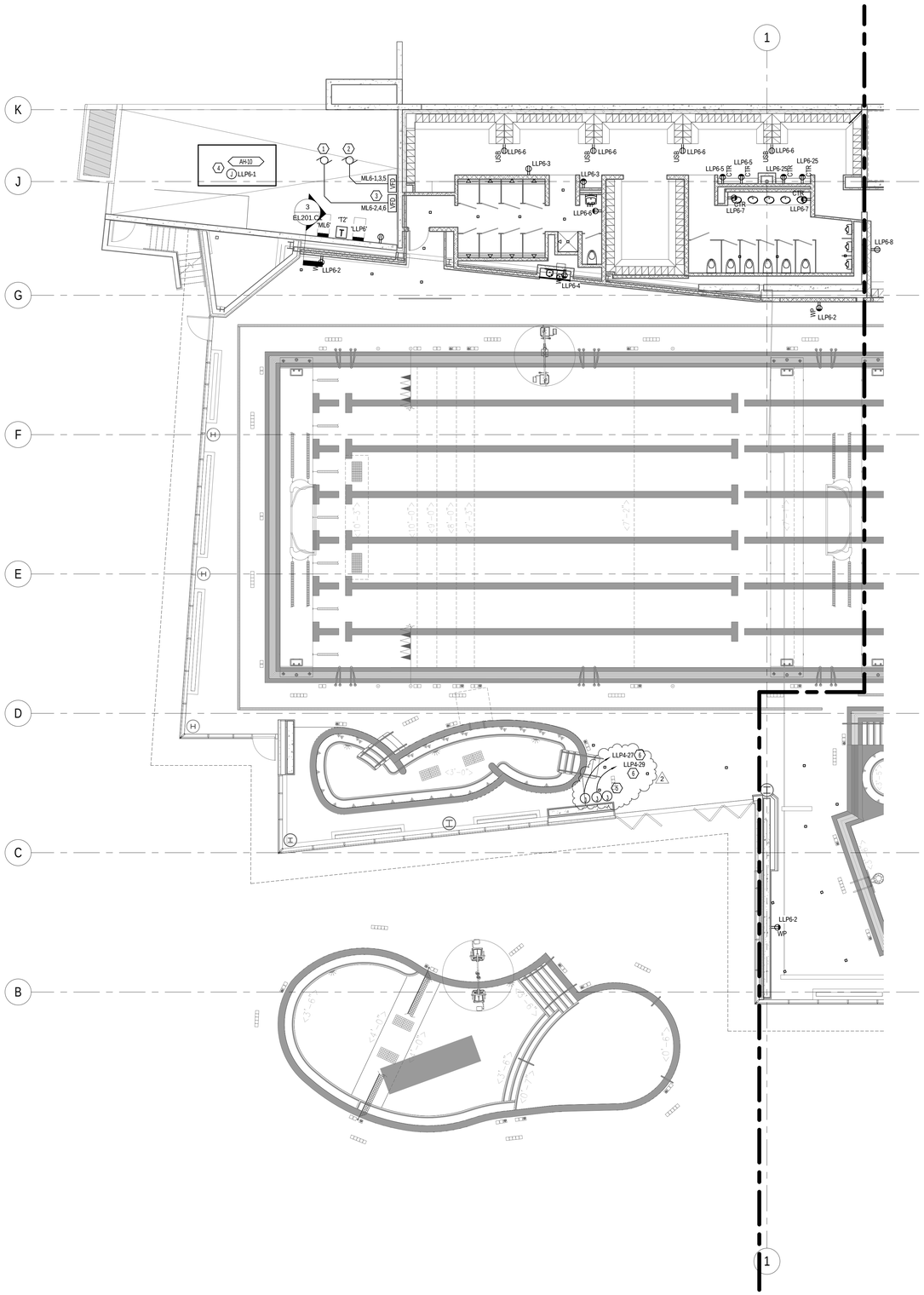
KEYED NOTES - SHEET EP200.C1

1. RELIEF FANS POWER. SEE MECHANICAL SCHEDULE AND DRAWINGS FOR COORDINATION.
2. SUPPLY FANS POWER. SEE MECHANICAL SCHEDULE AND DRAWINGS FOR COORDINATION.
3. VFD'S PROVIDED BY MECHANICAL.
4. PROVIDE 120V POWER TO AIR HANDLER MARINE LIGHTS. DIV.26 TO INSTALL LIGHTS AND MAKE ALL FINAL CONNECTION.
5. J-BOX FOR CONTROL WIRING BETWEEN EMERGENCY SHUTOFF AND TIMER PUSH BUTTONS. PUSH BUTTONS PROVIDED BY POOL MANUFACTURER. INSTALLED BY DIV.26.
6. PROVIDE J-BOX FOR POWER TO SPA AND OUTDOOR POOL UNDER WATER LIGHTS. REFER TO DETAILS 3 AND 4 ON SHEET WF504 OF POOL DRAWINGS. LIGHTING CONTROL BY SPA MANUFACTURER. COORDINATE EXACT PLACEMENT. DIV.26 TO PROVIDE ALL CONDUIT AND WIRING REQUIRED.



1 EP200.C1 LOWER LEVEL POWER PLAN ALTERNATE 1A
SCALE | 1/8" = 1'-0"

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1	05-28-2013	ADDENDUM ONE
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LOWER LEVEL POWER PLAN ALTERNATE 1A
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP200.C1

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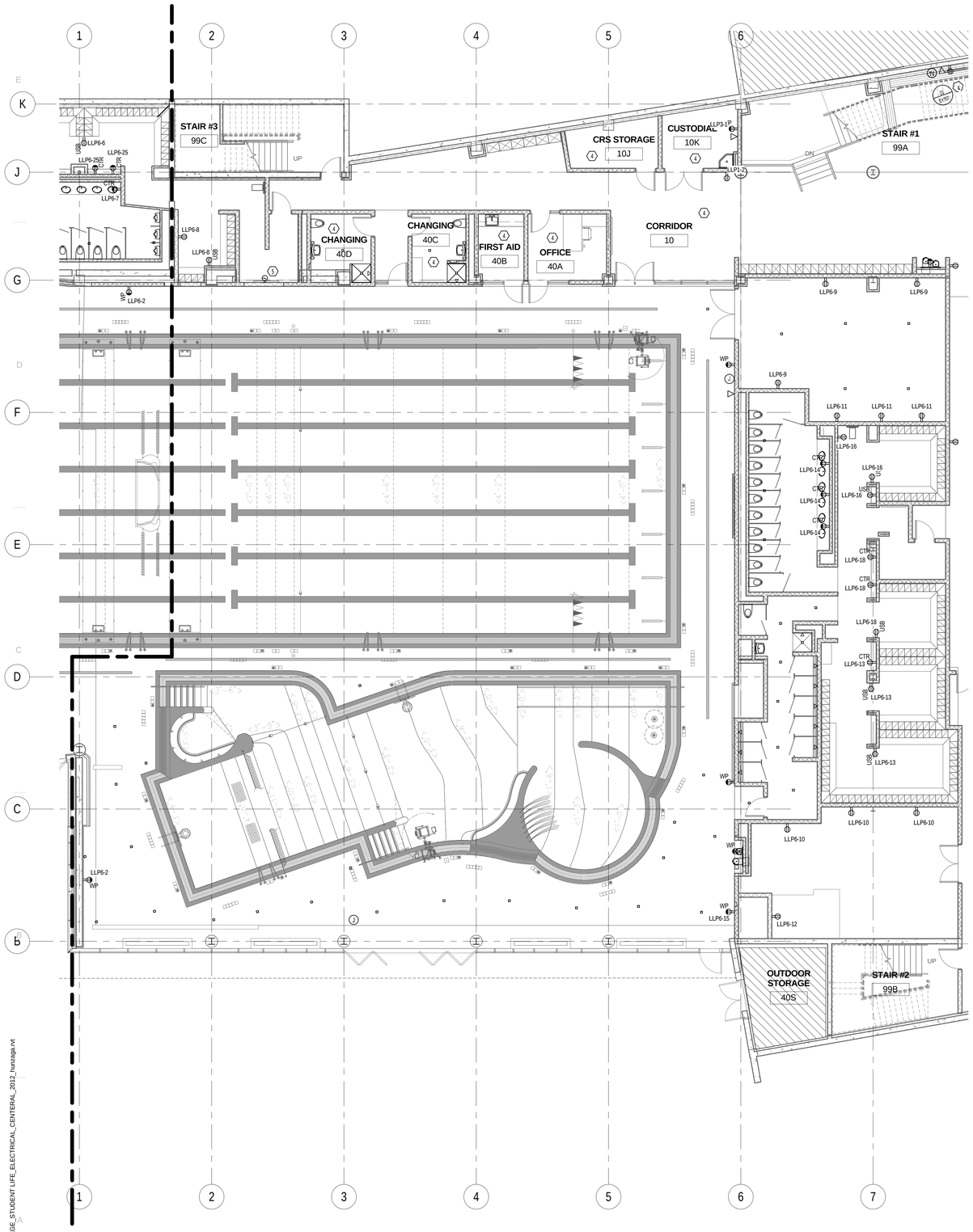
KEYED NOTES - SHEET EP200.C2

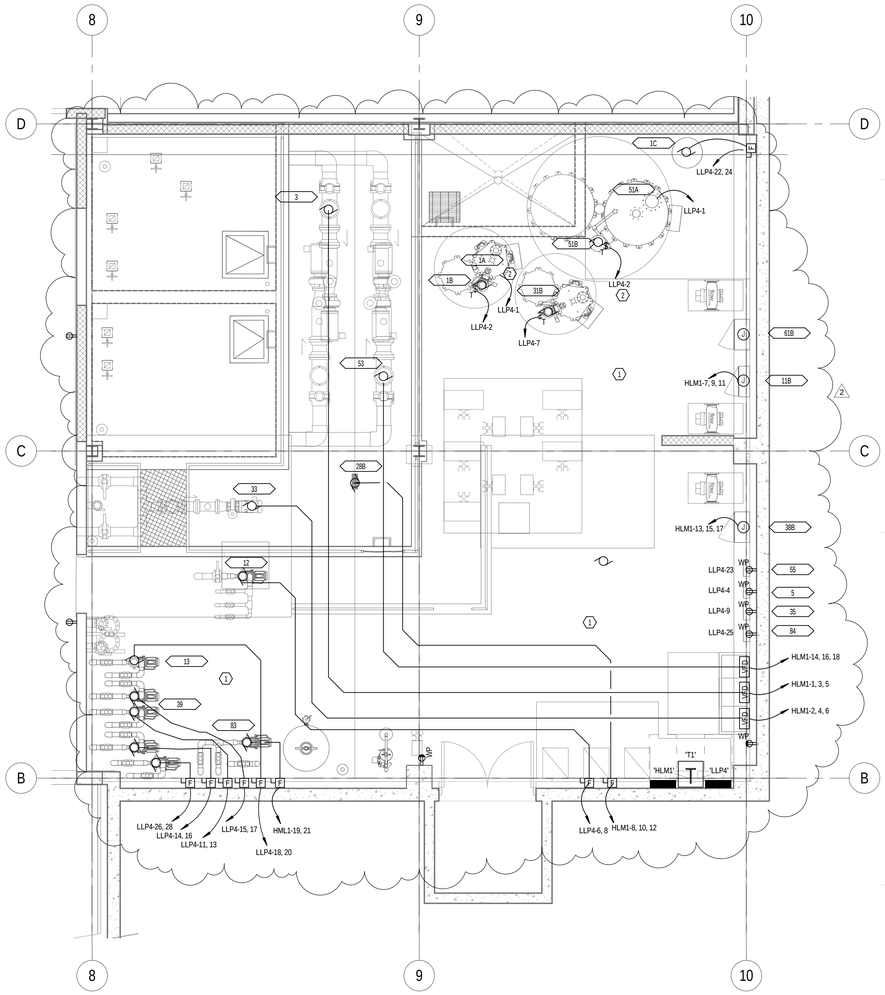
1. ALL ELECTRICAL PANELS, TRANSFORMERS, J-BOXES, AND RECEPTACLE ENCLOSURES IN POOL EQUIPMENT ROOM SHALL BE NEMA 4X RATED.
2. PROVIDE A 20A GFCI CIRCUIT BREAKER.
3. VFD'S PROVIDED BY MECHANICAL.
4. BASE BID AND ALTERNATE ARE THE SAME IN THIS AREA. SEE BASE BID SHEETS.
5. COORDINATE EXACT LOCATION WITH ARCHITECT.

GENERAL NOTES - SHEET EP200.C2

A. SEE POOL DRAWINGS SHEET WF406.0 FOR POOL EQUIPMENT INTERLOCKING. PROVIDE ALL REQUIRED CONTROL WIRING IN 3/4" PVC COATED RIGID CONDUIT.
B. ALL CONDUIT INSIDE POOL EQUIPMENT ROOM SHALL BE A PVC COATED RIGID CONDUIT.



1 EP200.C2 LOWER LEVEL POWER PLAN ALTERNATE 1B
SCALE |1/8" = 1'-0"



2 EP200.C2 ENLARGED POOL EQUIPMENT ROOM - ALTERNATE 1
SCALE |1/4" = 1'-0"

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BID DOCUMENTS
May 15, 2013

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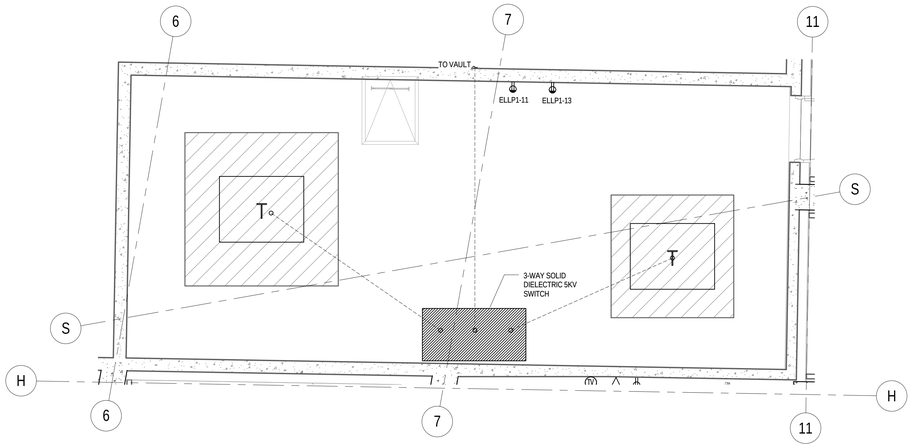
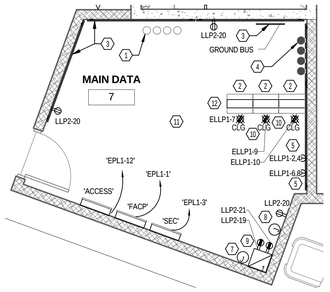


6 EP501 ENLARGED LOWER LEVEL POWER PLAN TRANSFORMER VAULT
SCALE | 1/4" = 1'-0"



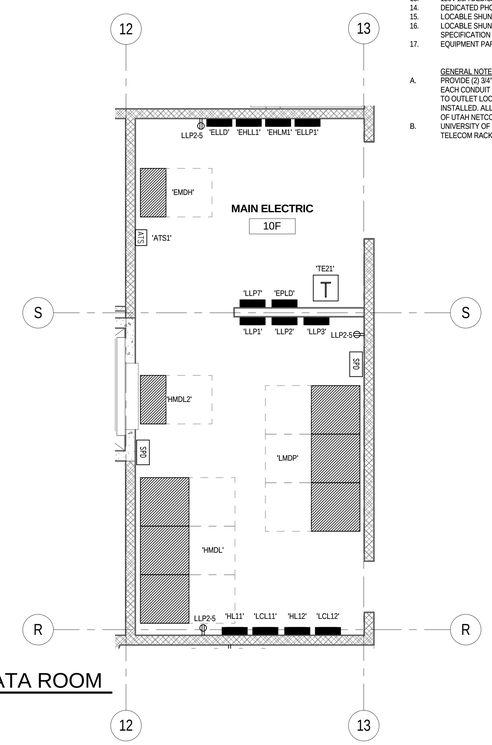
1 EP501 ENLARGED LOWER LEVEL POWER PLAN MAIN DATA ROOM
SCALE | 1/4" = 1'-0"

KEYED NOTES - SHEET EP501

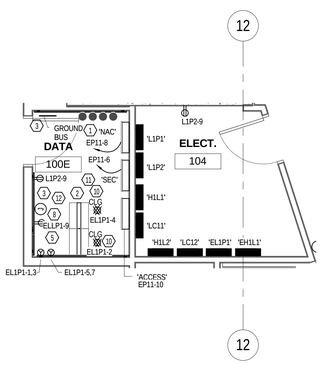
1. STUB UP (4) 4"C TO NEXT LEVEL IDF ROOM.
2. 19" TELECOM RACK, PROVIDED BY CAMPUS NETCOM.
3. PROVIDE 3/4" PAINTED AND FIRE TREATED PLYWOOD BACKBOARD. BACK BOARD SHALL COVER THE ENTIRE WALL WHERE SHOWN FROM A HEIGHT OF 6" AFF TO 8'-6" AFF.
4. STUB UP (3) 4"C FROM TUNNEL CABLE TRAY. (1) 4" INNER DUCT EXTENDING FIBER INTO BUILDING. (2) 4" C FOR COMMUNICATIONS.
5. PROVIDE AN L6-30 RECEPTACLE FOR UPS POWER AT THIS LOCATION.
6. (4) 4" C STUBBED UP FROM TELECOM ROOM BELOW.
7. JUNCTION BOX FOR EQUIPMENT CABINET #1.
8. JUNCTION BOX FOR TV DISTRIBUTION SYSTEM. (12"X12"X4").
9. DEDICATED 20A CIRCUITS FOR A/V EQUIPMENT CABINET.
10. INSTALL RECEPTACLE FOR TELECOM RACK ON LADDER TRAY ABOVE RACKS. COORDINATE EXACT LOCATION WITH U OF U NETCOM.
11. SEE SHEETS EY200-EY203 FOR CABLE TRAY LAYOUTS.
12. LADDER TRAY INSTALLED ON TOP OF TELECOM RACKS.
13. 120V 20A DEDICATED CIRCUIT FOR ELEVATOR CAB LIGHTS.
14. DEDICATED PHONE OUTLET FOR ELEVATOR EQUIPMENT.
15. LOCABLE SHUNT TRIP FUSED DISCONNECT FOR ELEVATOR CONTROL.
16. LOCABLE SHUNT TRIP ELEVATOR POWER MODULE. (REFER TO SPECIFICATION 260500 2.2 FOR DETAILS.)
17. EQUIPMENT PART OF ALTERNATE #3.

GENERAL NOTES - SHEET EP501

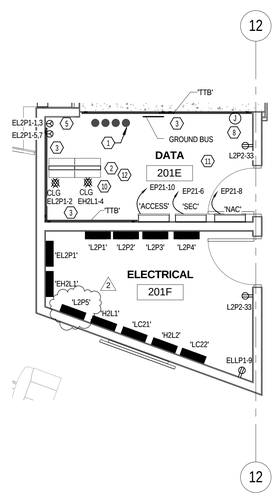
A. PROVIDE (2) 3/4" CONDUITS TO EACH DATA LOCATION. EACH CONDUIT SHALL RUN FROM NEAREST CABLE TRAY TO OUTLET LOCATION AND SHALL HAVE A PULL STRING INSTALLED. ALL WIRING IS TO BE DONE BY UNIVERSITY OF UTAH NETCOM DEPARTYMENT.
B. UNIVERSITY OF UTAH NET COM SHALL PROVIDE ALL 19" TELECOM RACKS AND MAKE ALL FINAL CONNECTIONS.



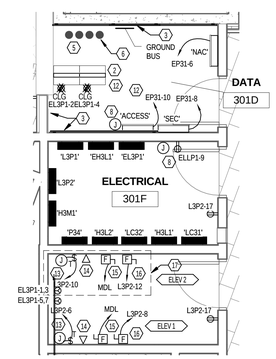
2 EP501 ENLARGED LOWER LEVEL POWER PLAN ELECTRICAL ROOM 10F
SCALE | 1/4" = 1'-0"



3 EP501 ENLARGED LEVEL 1 DATA & ELECT. ROOMS
SCALE | 1/4" = 1'-0"



4 EP501 ENLARGED LEVEL 2 DATA & ELECT. ROOMS
SCALE | 1/4" = 1'-0"



5 EP501 ENLARGED LEVEL 3 DATA & ELECT. ROOMS
SCALE | 1/4" = 1'-0"

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Project #: 2010-117.00

UNIVERSITY OF UTAH
STUDENT LIFE CENTER
1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00
DRAWN BY: Author CHECKED BY: Checker

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NO.	DATE	DESCRIPTION

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NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
ENLARGED ELECTRICAL AND DATA ROOMS
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP501

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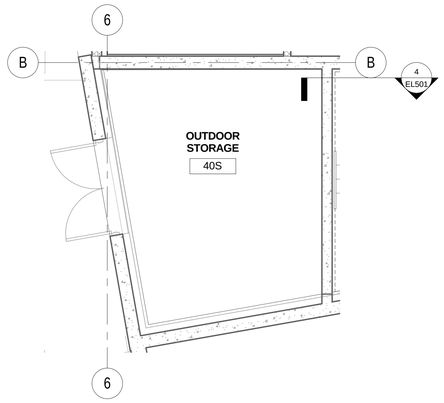
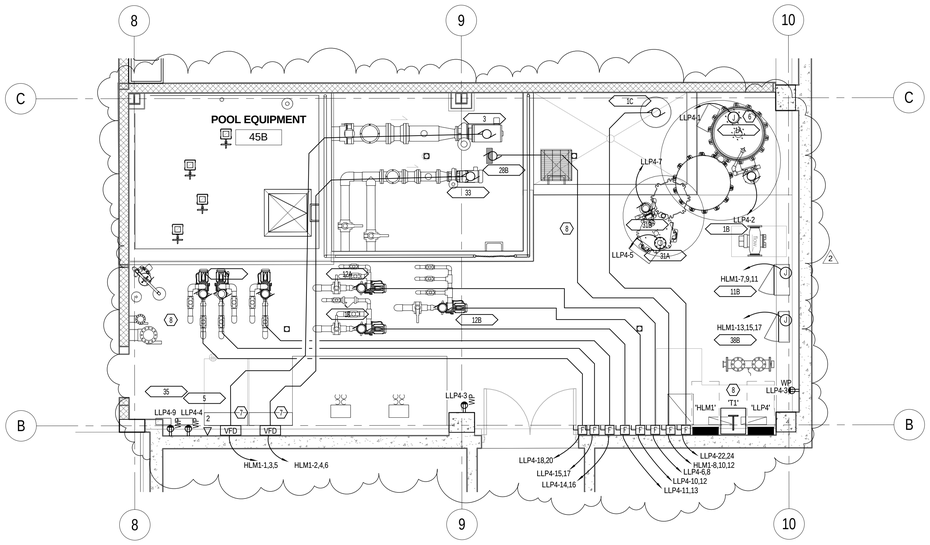
KEYED NOTES - SHEET EP502

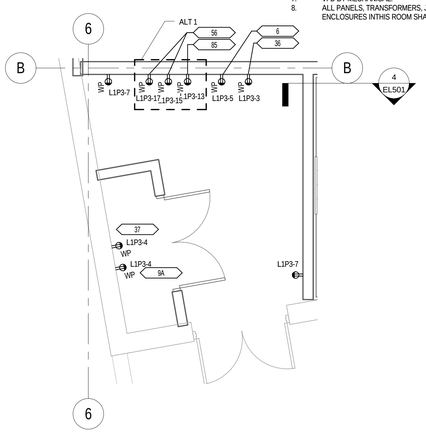
1. PROVIDE POWER TO 120V MARINE LIGHTS IN EACH AIR HANDLER. DIV. 26 TO INSTALL LIGHTS AND MAKE FINAL CONNECTIONS. PROVIDE SWITCH AND COORDINATE LOCATION.
2. VFD's PROVIDEED BY MECHANICAL. COORDEINATE EXACT LOCATION PRIOR TO ROUGH-IN.
3. REDUNDANT VFD PROVIDED BY MECHANICAL.
4. RELIEF FANS POWER. SEE MECHANICAL SCHEDULE AND MECHANICAL DRAWINGS FOR COORDINATION.
5. SUPPLY FANS POWER. SEE MECHANICAL SCHEDULE AND MECHANICAL DRAWINGS FOR COORDINATION.
6. PROVIDE A 20A GFCI CIRCUIT BREAKER.
7. VFD BY MECHANICAL.
8. ALL PANELS, TRANSFORMERS, J-BOXES AND RECEPTACLE ENCLOSURES INTHIS ROOM SHALL BE NEMA 4X.



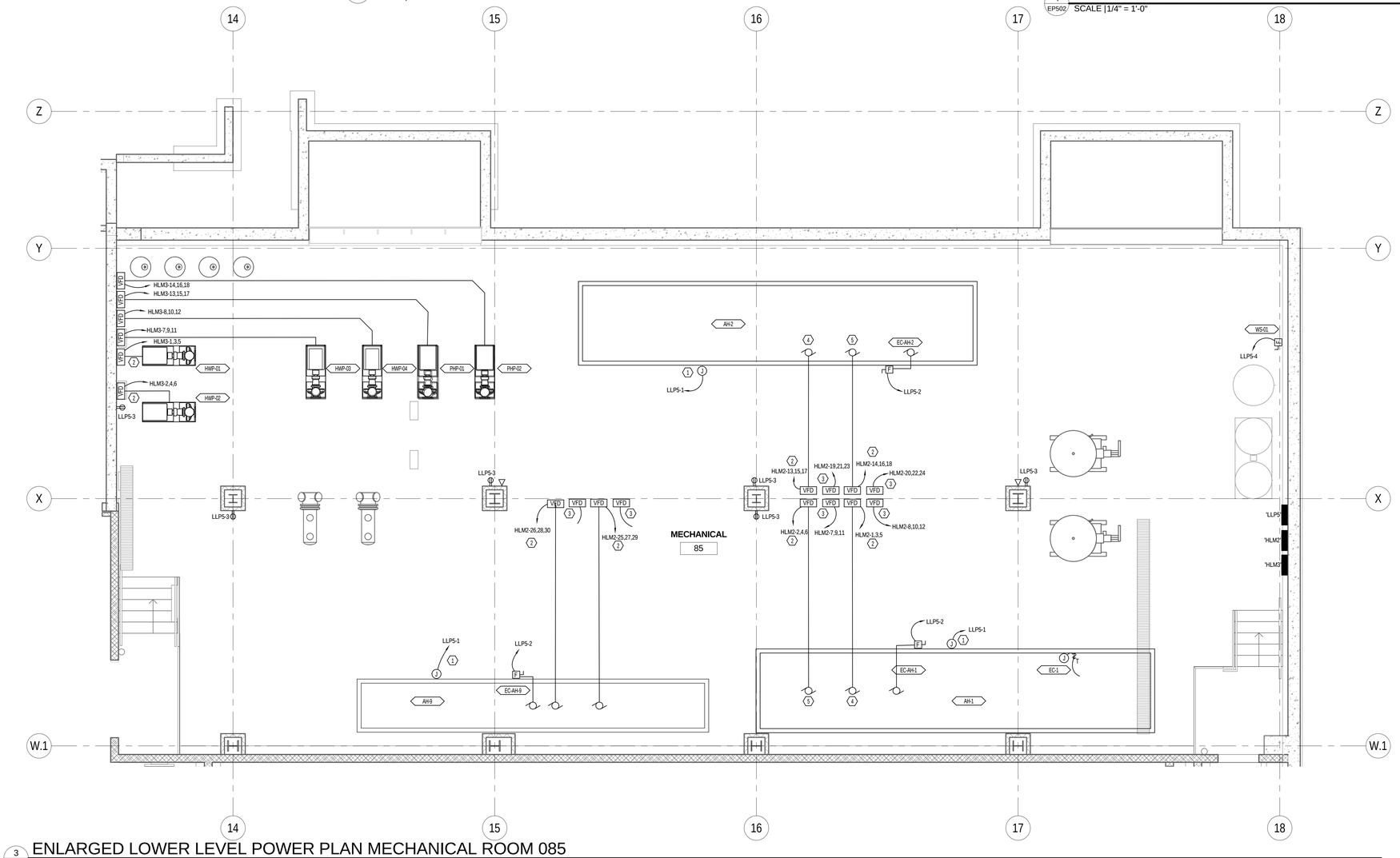
2 EP502 ENLARGED STORAGE ROOM 40S
SCALE |1/4" = 1'-0"



1 EP502 ENLARGED POOL EQUIPMENT ROOM 45B
SCALE |1/4" = 1'-0"



4 EP502 ENLARGED CHEMICAL ROOM
SCALE |1/4" = 1'-0"



3 EP502 ENLARGED LOWER LEVEL POWER PLAN MECHANICAL ROOM 085
SCALE |1/4" = 1'-0"

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SHEET NAME
ENLARGED LOWER LEVEL ROOMS
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP502

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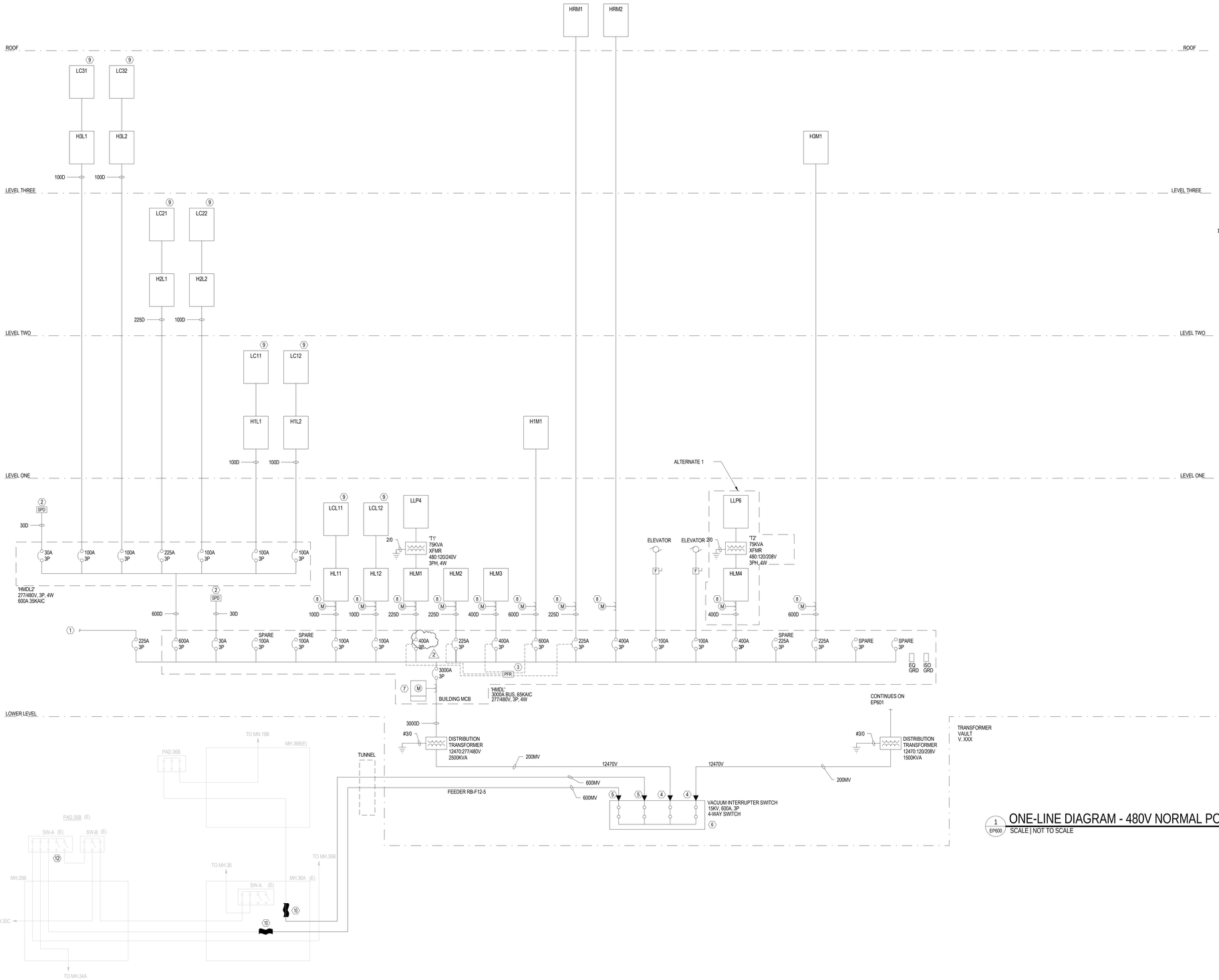

1 EP600 ONE-LINE DIAGRAM - 480V NORMAL POWER DISTRIBUTION
SCALE | NOT TO SCALE

KEYED NOTES - EP600

1. SEE SHEET EP602 FOR CONTINUATION TO EMERGENCY DISTRIBUTION SYSTEM.
2. TVSS: 277/480V.
3. PHASE FAILURE RELAY.
4. PROVIDE AND INSTALL 200A MOLDED PRODUCT LOADBREAK TERMINATIONS.
5. PROVIDE AND INSTALL 600A MOLDED PRODUCT DEADBREAK TERMINATIONS.
6. PROVIDE AND INSTALL NEW 15.5KV SOLID DIELECTRIC VFI SWITCH. SWITCH IS TO BE SINGLE SIDED. SWITCH IS ONLY AND INSTALLED ON STAINLESS STEEL MOUNTING FRAME.
7. METERING AT MAIN SWITCHBOARDS (SERVICE ENTRANCE). PROVIDE SQUARE D POWER LOGIC CIRCUIT MONITOR, CLASS 3000, MODEL CM-3350. PROVIDE METERS, CURRENT AND POTENTIAL TRANSFORMERS, SELECTOR SWITCHES, WIRING , ETC. AS REQUIRED FOR COMPLETE METERING SYSTEM WITH THE CAPABILITY TO CONNECT BY ETHERNET TO THE MAIN CAMPUS UTILITY MANAGEMENT SYSTEM.
8. PROVIDE POWER METERING FOR LEED MEASUREMENT AND VERIFICATION. PROVIDE ONE GROUP OF THE METERS TO MEASURE ALL MECHANICAL LOADS. PROVIDE SECOND GROUP OF METERS TO MEASURE ALL LIGHTING LOADS. PROVIDE THIRD GROUP OF METERS TO MEASURE ALL OTHER ELECTRICAL LOADS. PROVIDE CURRENT AND POTENTIAL TRANSFORMERS AS REQUIRED. PROVIDE DATA RECORDER AND SOFTWARE FOR DATA RECORDING AND PROCESSING PROVIDE INTERFACE BETWEEN LEED METERING EQUIPMENT AND BUILDING MANAGEMENT SYSTEM.
9. LIGHTING CONTROL PANEL.
10. PROVIDE NEW MEDIUM VOLTAGE 15KV COLD SHRINK CABLE SPLICE IN MH.36A. SEE SHEET ES500 FOR MANHOLE DETAILS AND SPLICE LOCATIONS.

GENERAL NOTES - SHEET EP600

A. ALL SWITCHING RESULTING IN A BUILDING OUTAGE SHALL BE COMPLETED AT NIGHT AND ON WEEKENDS. OUTAGES ARE TO BE COORDINATED THROUGH UNIVERSITY ELECTRIC SHOP TWO WEEKS PRIOR TO THE DESIRED OUTAGE DATE.
B. DIVISION 26 SHALL COMPLETE THE FOLLOWING IN EACH MANHOLE WHERE ANY DEMOLITION OR NEW WORK OCCURS: REMOVE ALL DEBRIS, SWEEP OUT MANHOLE, CLEAN UP OF OLD OIL SPILLS, CLEAN UP OF NEW OIL SPILLS, LEAVE MANHOLE IN CLEAN CONDITION.
C. EACH FEEDER IS TO BE LOOPED INSIDE EACH MANHOLE FOR AT LEAST 360°.
D. CONTRACTOR IS TO PROVIDE AND INSTALL MEDIUM VOLTAGE CABLE SPLICES AS NECESSARY TO ENSURE PROPER CABLE PULLING TENSIONS ARE MAINTAINED THROUGHOUT THE ENTIRE LENGTH OF THE CABLE PULL. MINIMIZE THE USE OF CABLE SPLICES THROUGHOUT THE PROJECT. ALL CABLE TO CABLE MEDIUM VOLTAGE SPLICES ARE TO BE 1583 RAYCHEM HEATSHRINK SPLICES OR 3M COLDSHRINK SPLICES UNLESS NOTED OTHERWISE. PROVIDE ONE SPLICE KIT PER PHASE AND SUPPORT CABLES TO MANHOLE WALL WITHIN 12" ON EITHER SIDE OF THE SPLICE.
E. ALL MEDIUM VOLTAGE CABLING IS TO CONSIST OF (3)#500KCM COPPER EPR (15KV) SINGLE CONDUCTOR CABLES WITH (1)#4/0 (THWN) 600V GRND FOR MAIN DISTRIBUTION LINES AND (3)#4/0 COPPER EPR (15KV) SINGLE CONDUCTOR CABLES WITH (1)#4 (THWN) 600V GRND FOR RUNS FROM VFI SWITCHES TO TRANSFORMERS.
F. MEDIUM VOLTAGE CABLING IN VAULTS IS TO BE BUNDLED AND RUN IN EITHER RIGID METAL CONDUIT OR SUPPORTED BY HOOKS FROM SWITCH TO TRANSFORMER(S). CABLES WILL NOT BE RUN ALONG THE FLOOR IN THE VAULTS.

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NO.	DATE	DESCRIPTION
1	05-28-2013	ADDENDUM ONE
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
ONE-LINE
DIAGRAM - 480V

BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP600

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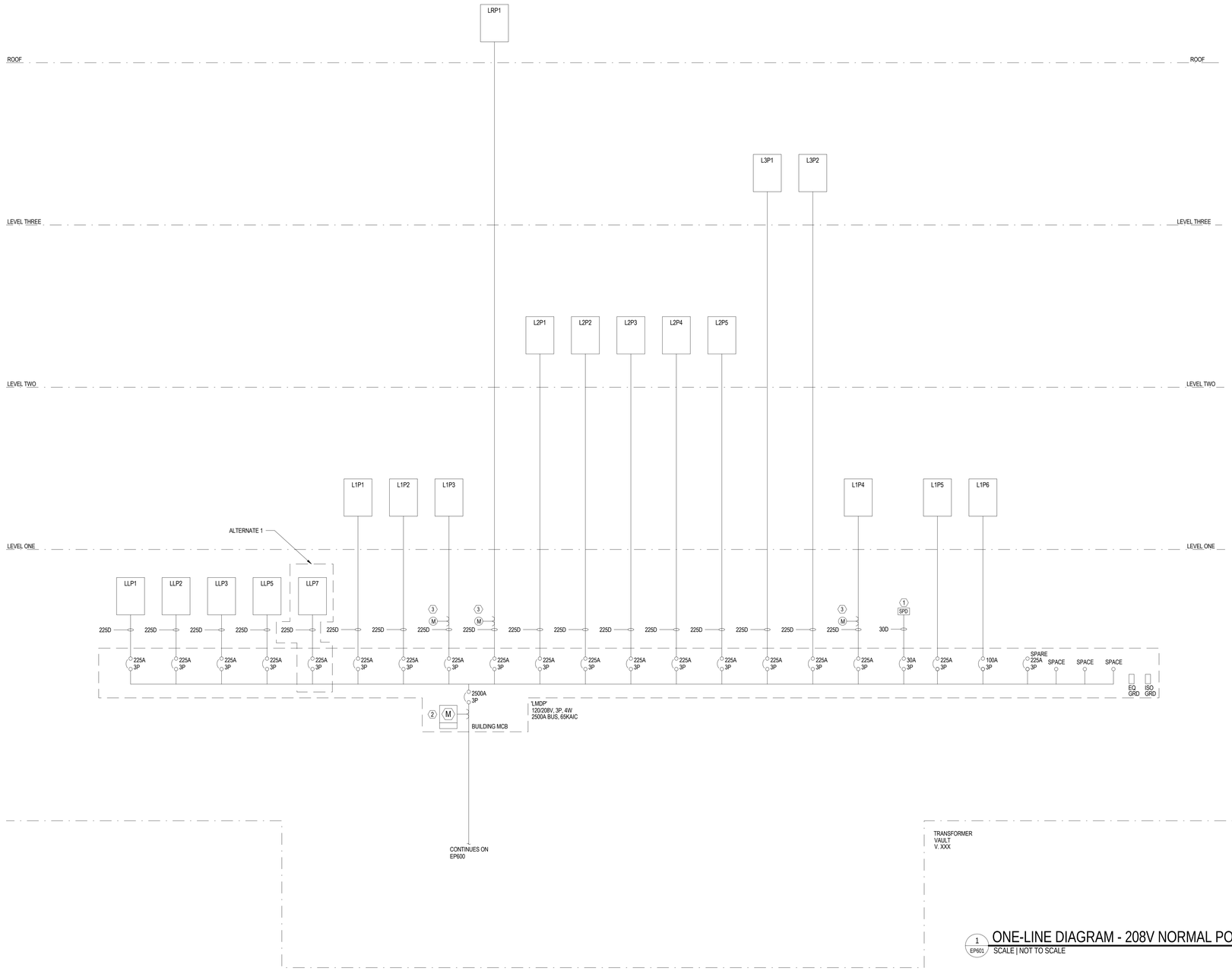

1 EP601 ONE-LINE DIAGRAM - 208V NORMAL POWER DISTRIBUTION

SCALE | NOT TO SCALE

KEYED NOTES - EP601

1. TVSS 120/208V
2. METERING MAIN SWITCHBOARDS (CERVICE ENTRANCE). PROVIDE SQUARE D POWER LOGIC CIRCUIT MONITOR. ALASS 3000.MODEL CM3350. PROVIDE METERS CURRENT AND POTENTIAL TRANSFORMERS, SELECTOR SWITCHES WIRING , ETC. AS REQUIRED FOR COMPLETE METERING SYSTEM WITH THE CAPABILITY TO CONNECT BY ETHERNET TO THE MAION CAMPUS UTILITY MANAGEMENT SYSTEM.
3. PROVIDE POWER METERING FOR LEED MEASUREMENT AND VERIFICATION. PROVIDE ONE GROUP OF THE METERS TO MEASURE ALL MECHANICAL LOADS. PROVIDE SECOND GROUP OF METERS TO MEASURE ALL LIGHTING LOADS. PROVIDE THIRD GROUP OF METERS TO MEASURE ALL OTHER ELECTRICAL LOADS. PROVIDE CURRENT AND POTENTIAL TRANSFORMERS AS REQUIRED. PROVIDE DATA RECORDER AND SOFTWARE FOR DATA RECORDING AND PROCESSING PROVIDE INTERFACE BETWEEN LEED METERING EQUIPMENT AND BUILDING MANAGEMENT SYSTEM.

GENERAL NOTES - SHEET EP601

A. ALL SWITCHING RESULTING IN A BUILDING OUTAGE SHALL BE COMPLETED AT NIGHT AND ON WEEKENDS. OUTAGES ARE TO BE COORDINATED THROUGH UNIVERSITY ELECTRIC SHOP TWO WEEKS PRIOR TO THE DESIRED OUTAGE DATE.
B. DIVISION 26 SHALL COMPLETE THE FOLLOWING IN EACH MANHOLE WHERE ANY DEMOLITION OR NEW WORK OCCURS: REMOVE ALL DEBRIS, SWEEP OUT MANHOLE, CLEAN UP OF OLD OIL SPILLS, CLEAN UP OF NEW OIL SPILLS, LEAVE MANHOLE IN CLEAN CONDITION.
C. EACH FEEDER IS TO BE LOOPED INSIDE EACH MANHOLE FOR AT LEAST 360°.
D. CONTRACTOR IS TO PROVIDE AND INSTALL MEDIUM VOLTAGE CABLE SPLICES AS NECESSARY TO ENSURE PROPER CABLE PULLING TENSIONS ARE MAINTAINED THROUGHOUT THE ENTIRE LENGTH OF THE CABLE PULL. MINIMIZE THE USE OF CABLE SPLICES THROUGHOUT THE PROJECT. ALL CABLE TO CABLE MEDIUM VOLTAGE SPLICES ARE TO BE 1583 RAYCHEM HEATSHRINK SPLICES OR 3M COLDSHRINK SPLICES UNLESS NOTED OTHERWISE. PROVIDE ONE SPLICE KIT PER PHASE AND SUPPORT CABLES TO MANHOLE WALL WITHIN 12" ON EITHER SIDE OF THE SPLICE.
E. ALL MEDIUM VOLTAGE CABLING IS TO CONSIST OF (3)#500KCM COPPER EPR (15KV) SINGLE CONDUCTOR CABLES WITH (1)#4/0 (THWN) 600V GRND FOR MAIN DISTRIBUTION LINES AND (3)#4/0 COPPER EPR (15KV) SINGLE CONDUCTOR CABLES WITH (1)#4 (THWN) 600V GRND FOR RUNS FROM VFI SWITCHES TO TRANSFORMERS.
F. MEDIUM VOLTAGE CABLING IN VAULTS IS TO BE BUNDLED AND RUN IN EITHER RIGID METAL CONDUIT OR SUPPORTED BY HOOKS FROM SWITCH TO TRANSFORMER(S). CABLES WILL NOT BE RUN ALONG THE FLOOR IN THE VAULTS.
G. ALL 120/208V POWER PANELS AND DISTRIBUTION BOARDS TO HAVE EQUIPMENT AND ISOLATED GROUND BUS PER UNIVERSITY STANDARDS.
H. ALL CONDUITS ABOVE GRADE SHOULD BE EMT OR RGC METAL CONDUITS. MINIMUM CONDUIT SIZE SHOULD BE 3/4". INSTALLATION OF THE MC CABLE IS NOT ALLOWED.
I. FLEXIBLE CONDUITS IN LENGTHS GREATER THAN 6 FEET SHOULD NOT BE USED.
J. ALL CONDUCTORS SHOULD BE COPPER WITH CODE APPROVED INSULATION SUITABLE FOR THE INTENDED LOCATION. THE MINIMUM CONDUCTOR SIZE FOR POWER AND LIGHT CIRCUITS TO BE #12. ALUMINUM CONDUCTORS ARE NOT ALLOWED.
K. ALL DISTRIBUTION AND BRANCH PANELS TO BE PROVIDED WITH MINIMUM 50% SPARE CAPACITY FOR FUTURE LOADS. ALL PANELS TO BE PROVIDED WITH COPPER BUS AND COPPER RATED LUGS. ALUMINUM BUS AND COPPER-ALUMINUM RATED LUGS ARE NOT ALLOWED.
L. ALL DISTRIBUTION AND BRANCH PANELS TO BE PROVIDED WITH MINIMUM 50% SPARE CIRCUIT BREAKER SPACE.
M. ALL DISTRIBUTION TRANSFORMERS TO BE OIL-FILLED WITH FR3 FLUID AND TO HAVE COPPER WINDINGS. REFER TO THE UNIVERSITY OF UTAH SPECIFICATION STANDARDS FOR ADDITIONAL INFORMATION REGARDING IMPEDANCE, TAPS, LOAD-BREAK SWITCHES, AND ALL OTHER ACCESSORIES.

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1	05-28-2013	ADDENDUM ONE

SHEET NAME
ONE LINE DIAGRAM - 208V

BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP601

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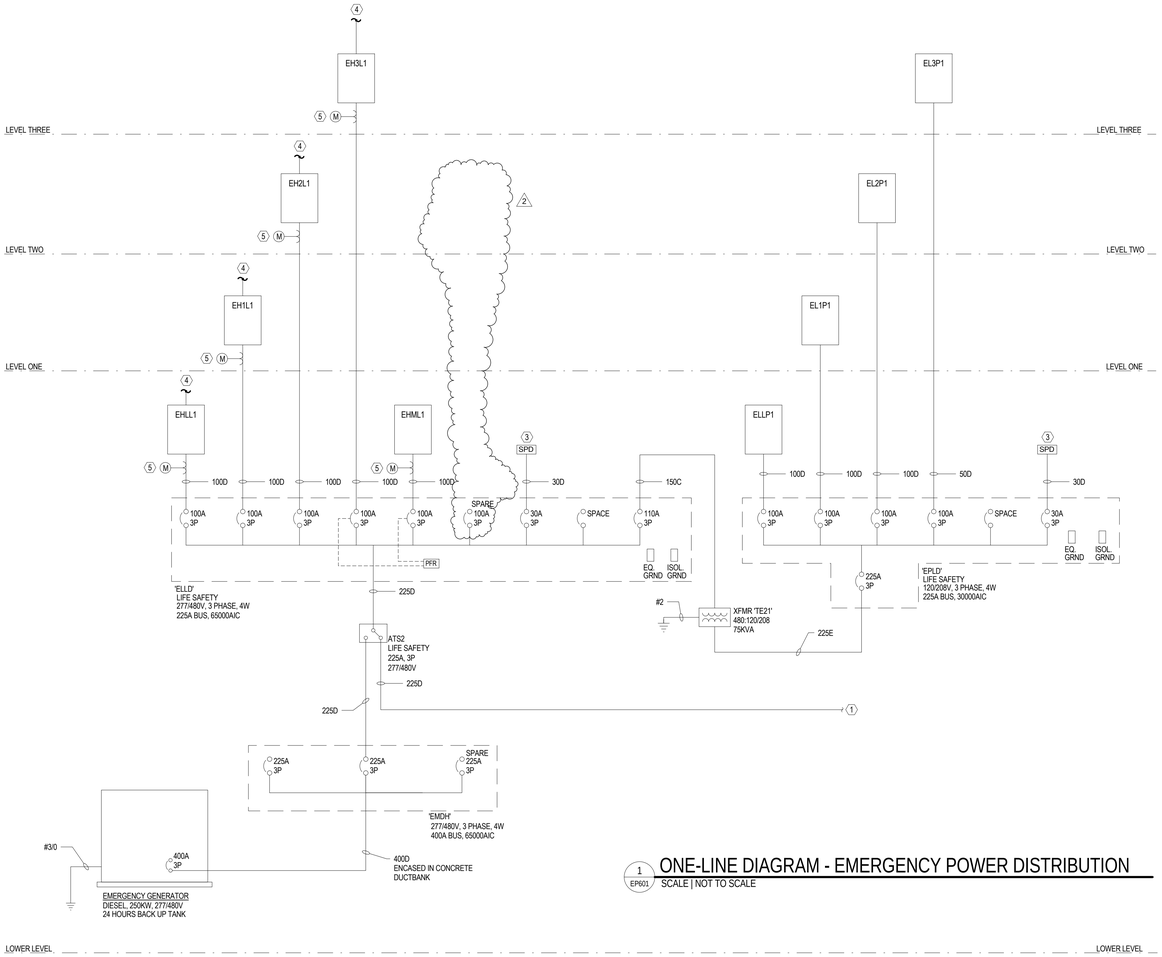
FEEDER SCHEDULE
SYMBOL CONDUIT & WIRE SIZE

20A	0.75"C 3#12
20C	0.75"C 3"12, 1#12 GRD
20D	0.75"C 4"12, 1#12 GRD
20E	0.75"C 4"12, 1#12 GRD, 1#12 ISOLATED GRD
30A	0.75"C 3#10
30B	0.75"C 4#10
30C	0.75"C 3#10, 1#10 GRD
30D	0.75"C 4#10, 1#10 GRD
30E	0.75"C 4#10, 1#10 GRD, 1#10 ISOLATED GRD
40C	0.75"C 3#8, 1#10 GRD
40D	0.75"C 4#8, 1#10 GRD
40E	0.75"C 4#8, 1#10 GRD, 1#10 ISOLATED GRD
60C	0.75"C 3#6, 1#10 GRD
60D	1"C 4#6, 1#10 GRD
60E	1"C 4#6, 1#10 GRD, 1#10 ISOLATED GRD
70C	1"C 3#4, 1#8 GRD
70D	1.25"C 4#4, 1#8 GRD
70E	1.25"C 4#4, 1#8 GRD, 1#8 ISOLATED GRD
80C	1.25"C 3#3, 1#8 GRD
80D	1.25"C 4#3, 1#8 GRD
80E	1.25"C 4#3, 1#8 GRD, 1#8 ISOLATED GRD
100C	1.25"C 3#2, 1#8 GRD
100D	1.25"C 4#2, 1#8 GRD
100E	1.25"C 4#2, 1#8 GRD, 1#8 ISOLATED GRD
125A	1.25"C 3#1
125B	1.5"C 4#1
125C	1.5"C 3#1, 1#6 GRD
125D	2"C 4#1, 1#6 GRD
125E	2"C 4#1, 1#6 GRD, 1#6 ISOLATED GRD
150C	2"C 3#1/0, 1#6 GRD
150D	2"C 4#1/0, 1#6 GRD
150E	2"C 4#1/0, 1#6 GRD, 1#6 ISOLATED GRD
175C	2"C 3#2/0, 1#6 GRD
175D	2"C 4#2/0, 1#6 GRD
175E	2"C 4#2/0, 1#6 GRD, 1#6 ISOLATED GRD
200C	2"C 3#3/0, 1#6 GRD
200D	2.5"C 4#3/0, 1#6 GRD
200E	2.5"C 4#3/0, 1#6 GRD, 1#6 ISOLATED GRD
225A	2"C 3#4/0
225B	2.5"C 4#4/0
225C	2.5"C 3#4/0, 1#4 GRD
225D	2.5"C 4#4/0, 1#4 GRD
225E	2.5"C 4#4/0, 1#4 GRD, 1#4 ISOLATED GRD
250C	2.5"C 3#250KCM, 1#4 GRD
250D	3"C 4#250KCM, 1#4 GRD
250E	3"C 4#250KCM, 1#4 GRD, 1#4 ISOLATED GRD
300C	3"C 3#350KCM, 1#4 GRD
300D	3"C 4#350KCM, 1#4 GRD
300E	3"C 4#350KCM, 1#4 GRD, 1#4 ISOLATED GRD
400C	(2) SETS 2.5"C 3#4/0, 1#3 GRD
400D	(2) SETS 2.5"C 4#4/0, 1#3 GRD
400E	(2) SETS 2.5"C 4#4/0, 1#3 GRD, 1#3 ISOLATED GRD
500C	(2) SETS 2.5"C 3#250KCM, 1#2 GRD
500D	(2) SETS 3"C 4#250KCM, 1#2 GRD
500E	(2) SETS 3"C 4#250KCM, 1#2 GRD, 1#2 ISOLATED GRD
600C	(2) SETS 3"C 3#350KCM, 1#1 GRD
600D	(2) SETS 3.5"C 4#350KCM, 1#1 GRD
600E	(2) SETS 3.5"C 4#350KCM, 1#1 GRD, 1#1 ISOLATED GRD
800C	(3) SETS 3"C 3#350KCM, 1#1/0 GRD
800D	(3) SETS 3.5"C 4#350KCM, 1#1/0 GRD
800E	(3) SETS 3.5"C 4#350KCM, 1#1/0 GRD, 1#1/0 ISOLATED GRD
1000C	(3) SETS 3"C 3#500KCM, 1#2/0 GRD
1000D	(3) SETS 3.5"C 4#500KCM, 1#2/0 GRD
1000E	(3) SETS 3.5"C 4#500KCM, 1#2/0 GRD, 1#2/0 ISOLATED GRD
1200C	(4) SETS 3"C 3#400KCM, 1#3/0 GRD
1200D	(4) SETS 3"C 4#400KCM, 1#3/0 GRD
1200E	(4) SETS 3.5"C 4#400KCM, 1#3/0 GRD, 1#3/0 ISOLATED GRD
1600C	(5) SETS 3"C 3#500KCM, 1#4/0 GRD
1600D	(5) SETS 3.5"C 4#500KCM, 1#4/0 GRD
1600E	(5) SETS 3.5"C 4#500KCM, 1#4/0 GRD, 1#4/0 ISOLATED GRD
2000C	(6) SETS 3"C 3#500KCM, 1#250 GRD
2000D	(6) SETS 3.5"C 4#500KCM, 1#250 GRD
2000E	(6) SETS 3.5"C 4#500KCM, 1#250 GRD, 1#250 ISOLATED GRD
2500D	(8) SETS 3.5"C 4#500KCM, 1#350 GRD
2500E	(8) SETS 4"C 4#500KCM, 1#350 GRD, 1#350 ISOLATED GRD
3000D	(9) SETS 3.5"C 4#500KCM, 1#400 GRD



1 EP601 ONE-LINE DIAGRAM - EMERGENCY POWER DISTRIBUTION
SCALE | NOT TO SCALE

KEYED NOTES - EP602

1. SEE SHEET EP600 FOR CONTINUATION TO NORMAL POWER DISTRIBUTION.
2. SURGE PROTECTION 120/208V.
3. SURGE PROTECTION 277/480V.
4. LIGHTING CONTROL PANEL.
5. PROVIDE POWER METERING FOR LEED MEASUREMENT AND VERIFICATION. PROVIDE ONE GROUP OF THE METERS TO MEASURE ALL MECHANICAL LOADS. PROVIDE SECOND GROUP OF METERS TO MEASURE ALL LIGHTING LOADS. PROVIDE THIRD GROUP OF METERS TO MEASURE ALL OTHER ELECTRICAL LOADS. PROVIDE CURRENT AND POTENTIAL TRANSFORMERS AS REQUIRED. PROVIDE DATA RECORDER AND SOFTWARE FOR DATA RECORDING AND PROCESSING PROVIDE INTERFACE BETWEEN LEED METERING EQUIPMENT AND BUILDING MANAGEMENT SYSTEM.

GENERAL NOTES - SHEET EP602

A. CONTRACTOR TO ENSURE THAT ALL CORRIDORS OUTSIDE OF CONSTRUCTION AREA ARE KEPT CLEAN AND CLEAR OF DEBRIS AND OBSTRUCTIONS AT ALL TIMES.
B. ALL 120/208V POWER PANELS AND DISTRIBUTION BOARDS TO HAVE EQUIPMENT AND ISOLATED GROUND BUS PER UNIVERSITY STANDARDS.
C. ALL CONDUITS ABOVE GRADE SHOULD BE EMT OR RGC METAL CONDUITS. MINIMUM CONDUIT SIZE SHOULD BE 3/4". INSTALLATION OF THE MC CABLE IS NOT ALLOWED.
D. FLEXIBLE CONDUITS IN LENGTHS GREATER THAN 6 FEET SHOULD NOT BE USED.
E. ALL CONDUCTORS SHOULD BE COPPER WITH CODE APPROVED INSULATION SUITABLE FOR THE INTENDED LOCATION. THE MINIMUM CONDUCTOR SIZE FOR POWER AND LIGHT CIRCUITS TO BE #12. ALUMINUM CONDUCTORS ARE NOT ALLOWED.
F. ALL DISTRIBUTION AND BRANCH PANELS TO BE PROVIDED WITH MINIMUM 50% SPARE CAPACITY FOR FUTURE LOADS. ALL PANELS TO BE PROVIDED WITH COPPER BUS AND COPPER RATED LUGS. ALUMINUM BUS AND COPPER-ALUMINUM RATED LUGS ARE NOT ALLOWED.
G. ALL DISTRIBUTION AND BRANCH PANELS TO BE PROVIDED WITH MINIMUM 50% SPARE CIRCUIT BREAKER SPACE.
H. ALL DISTRIBUTION TRANSFORMERS TO BE OIL-FILLED WITH FR3 FLUID AND TO HAVE COPPER WINDINGS. REFER TO THE UNIVERSITY OF UTAH SPECIFICATION STANDARDS FOR ADDITIONAL INFORMATION REGARDING IMPEDANCE, TAPS, LOAD-BREAK SWITCHES, AND ALL OTHER ACCESSORIES.

480V ELECTRICAL LOAD CALCULATION

PROJECT NAME:	STUDENT LIFE CENTER	SERVICE VOLTAGE:	480
PROJECT NUMBER:	10117	PHASE & WIRE:	3Ø-4W
SERVICE DESIGNATION:	CS	SERVICE SIZE (AMPS):	3,000

LOAD DESCRIPTION	CALCULATIONS				CONNECTED LOAD (VA)	DEMAND FACTOR	DEMAND LOAD (VA)
BUILDING INTERIOR LIGHTING	158,922	FT2 @	0.9	VA/FT2	143,030	1.25	178,787
EXTERIOR SITE LIGHTING	100,000	FT2 @	0.3	VA/FT3	30,000	1.25	37,500
POOL EQUIPMENT	10,812	FT2 @	10	VA/FT2	108,120	1.00	108,120
MISC POWER	158,922	FT2 @	2	VA/FT2	317,844	1.00	317,844
HVAC EQUIPMENT							
AIR HANDLERS	9	UNIT(S)	53,000	VA EACH	477,000	1.00	477,000
PUMPS	15	UNIT(S)	19,273	VA EACH	289,095	1.00	289,095
OTHER MISC LOADS							
MECH MISC LOAD	1	EQUIPMENT	20,000	VA EACH	20,000	1.00	20,000
KITCHEN	1	EQUIPMENT	10,000	VA EACH	10,000	1.00	10,000
				VA/CKT	0	1.25	0
LARGEST MOTOR (25%)	1	50HP	54,015	VA	54,015	0.25	13,504

TOTAL DEMAND LOAD		1,452	KVA	1,746	A
FUTURE CAPACITY	50%	726	KVA	873	A
TOTAL CALCULATED LOAD		2,178	KVA	2,619	A

208V ELECTRICAL LOAD CALCULATION

PROJECT NAME:	STUDENT LIFE CENTER	SERVICE VOLTAGE:	208
PROJECT NUMBER:	10117	PHASE & WIRE:	3Ø-4W
SERVICE DESIGNATION:	CS	SERVICE SIZE (AMPS):	2,500

LOAD DESCRIPTION	CALCULATIONS				CONNECTED LOAD (VA)	DEMAND FACTOR	DEMAND LOAD (VA)
BUILDING INTERIOR LIGHTING	158,922	FT2 @	0.1	VA/FT2	15,892	1.25	19,865
RECEPTACLES	158,922	FT2 @	1.5	VA/FT2	238,383		
		FIRST	10,000	VA		1.00	10,000
		REMAINDER	228,383	VA		0.50	114,192
POOL EQUIPMENT	10,812	FT2 @	1	VA/FT2	10,812	1.00	10,812
MISC POWER	158,922	FT2 @	2	VA/FT2	317,844	1.00	317,844
HVAC EQUIPMENT							
AIR HANDLERS	9	UNIT(S)	618	VA EACH	5,562	1.00	5,562
PUMPS	7	UNIT(S)	693	VA EACH	4,851	1.00	4,851
OTHER MISC LOADS							
MECH MISC LOAD	1	EQUIPMENT	10,000	VA EACH	10,000	1.00	10,000
KITCHEN	1	EQUIPMENT		VA EACH	0	1.00	0
LARGEST MOTOR (25%)	1	1/2HP	1,176	VA	1,176	0.25	294

TOTAL DEMAND LOAD		493	KVA	1,370	A
FUTURE CAPACITY	50%	247	KVA	685	A
TOTAL CALCULATED LOAD		740	KVA	2,054	A

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Project #: 2010-117.00

UNIVERSITY OF UTAH
STUDENT LIFE CENTER
1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00
DRAWN BY: Author CHECKED BY: Checker

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE:

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
EMERGENCY ONE-LINE DIAGRAM
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP602

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Branch Panel: EHLL1

Location: MAIN ELECTRIC 10F **Volts:** 480/277 Wye **A.I.C. Rating:**
Supply From: **Phases:** 3 **Mains Type:** MB
Mounting: SURFACE **Wires:** 4 **Mains Rating:** 225 A
Enclosure: TYPE 1 **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	RM 7,10F,	L	974	20 A	1	976	94					1	20 A	94	L	CUSTODIAL CLOSET	2
3	STAIRWELL LIGHTING	L	1763	20 A	1			1763	840			1	20 A	840	L	EXTERIOR EXIT	4
5	LL CORRIDORS EM LTG	L	340	20 A	1					340	756	1	20 A	753	L	CORRIDOR LOWER LVL	6
7	LL SHOWER RM LTG	L	576	20 A	1	576	2350					1	20 A	2350	L	RM 10D,60C, 65A,85	8
9	LL LOCKER RM LTG	L	600	20 A	1			605									10
11	LOCKER RMS LOWER	L	624	20 A	1					628							12
13																	14
15									0			1	20 A	0	--	SPARE	16
17	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	18
19	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	20
21	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	22
23	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	24
25	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	26
27	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	28
29	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	3996		3208		1724							
					Total	15 A		12 A		6 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
L	8928	125.00%	11160		
				Total Conn. Load:	8928
				Total Est. Demand:	11160
				Total Conn. Current:	11 A
				Total Est. Demand	13 A

Notes:

Branch Panel: EHLM1

Location: MAIN ELECTRIC 10F **Volts:** 120/208 Wye **A.I.C. Rating:**
Supply From: **Phases:** 3 **Mains Type:** MB
Mounting: SURFACE **Wires:** 4 **Mains Rating:** 225 A
Enclosure: TYPE 1 **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1																	2
3																	4
5																	6
7																	8
9																	10
11																	12
13																	14
15																	16
17																	18
19																	20
21																	22
23																	24
25																	26
27																	28
29																	30
31																	32
33																	34
35																	36
37																	38
39																	40
41																	42
					Total	0		0		0							
					Total	0 A		0 A		0 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
				Total Conn. Load:	0
				Total Est. Demand:	0
				Total Conn. Current:	0 A
				Total Est. Demand	0 A

Notes:

Branch Panel: ELLP1

Location: MAIN ELECTRIC 10F **Volts:** 120/208 Wye **A.I.C. Rating:**
Supply From: **Phases:** 3 **Mains Type:** MB
Mounting: SURFACE **Wires:** 4 **Mains Rating:** 225 A
Enclosure: TYPE 1 **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	'FACP' RM 7	--	500	20 A	1	500	1000					2	20 A	2000	R	UPS BACKUP	2
3	'SEC' RM 7	--	500	20 A	1			500	1000								4
5											1000	2	20 A	2000	R	UPS BACKUP	6
7	RECEPTACLES	R	180	20 A	1	180	1000										8
9	RECEPTACLES	R	720	20 A	1			720	180			1	20 A	180	R	RECEPTACLES	10
11	RECEPT. TRANS.	R	180	20 A	1					180							12
13	RECEPT. TRANS.	R	180	20 A	1	180											14
15																	16
17																	18
19																	20
21																	22
23																	24
25																	26
27																	28
29																	30
31																	32
33																	34
35																	36
37																	38
39																	40
41																	42
					Total	2860		2400		1180							
					Total	25 A		22 A		10 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	5440	100.00%	5440		
				Total Conn. Load:	6440
				Total Est. Demand:	6440
				Total Conn. Current:	18 A
				Total Est. Demand	18 A

Notes:

Branch Panel: HL11

Location: MAIN ELECTRIC 10F **Volts:** 480/277 Wye **A.I.C. Rating:**
Supply From: **Phases:** 3 **Mains Type:** MB
Mounting: SURFACE **Wires:** 4 **Mains Rating:** 225 A
Enclosure: TYPE 1 **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	RM 6, 21, 22, 25B, 25C,	L	579	20 A	1	582	184					1	20 A	182	L	RM 10K, 10J, 40A, 40B,	2
3	LL CORRIDOR	L	1579	20 A	1			1585	470			1	20 A	470	L	CRS STORAGE 45A	4
5	LL SHOWER RM LTG	L	327	20 A	1					327	1176	1	20 A	1167	L	LL WOMEN LOCKER RM	6
7	LL LOCKER RM LTG	L	108	20 A	1	109	0					1	0 A	0	--	SPARE	8
9	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	10
11	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	12
13	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	14
15	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	16
17	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	18
19	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	20
21	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	22
23	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	24
25	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	26
27	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	28
29	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	875		2055		1503							
					Total	3 A		8 A		6 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
L	4433	125.00%	5541		
				Total Conn. Load:	4433
				Total Est. Demand:	5541
				Total Conn. Current:	5 A
				Total Est. Demand	7 A

Notes:

Branch Panel: HL12

Location: MAIN ELECTRIC 10F **Volts:** 120/208 Wye **A.I.C. Rating:**
Supply From: **Phases:** 3 **Mains Type:** MB
Mounting: SURFACE **Wires:** 4 **Mains Rating:** 225 A
Enclosure: TYPE 1 **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	2
3	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	4
5	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	6
7	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	8
9	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	10
11	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	12
13	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	14
15	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	16
17	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	18
19	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	20
21	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	22
23	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	24
25	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	26
27	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	28
29	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	0		0		0							
					Total	0 A		0 A		0 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
				Total Conn. Load:	0
				Total Est. Demand:	0
				Total Conn. Current:	0 A
				Total Est. Demand	0 A

Notes:

Branch Panel: HLM1

Location: **Volts:** 480/277 Wye **A.I.C. Rating:**
Supply From: **Phases:** 3 **Mains Type:** ML
Mounting: SURFACE **Wires:** 4 **Mains Rating:** 400 A
Enclosure: TYPE 1 **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1						3047	3047										2
3	EQUIPMENT 3	M	9141	20 A	3			3047	3047			3	20 A	9141	M	EQUIPMENT 33	4
5										3047	3047						6
7						8864	582										8
9	EQUIPMENT 11B	M	26592	40 A	3			8864	582			3	20 A	1745	M	EQUIPMENT 28B	10
11										8864	582						12
13						8864	9418										14
15	EQUIPMENT 38B	M	26592	40 A	3			8864	9418			3	50 A	28254	--	EQUIPMENT 53	16
17										8864	9418						18
19						17240	3878										20
21	T1 EQUIP ROOM 45B	Other;	31120	150 A	3			13880	3878			3	20 A	11634	--	EQUIPMENT 83	22
23										3000	3878						24
25						8864	0					1	40 A	0	--	SPARE	26
27	61B	--	26592	40 A	3			8864	0			1	40 A	0	--	SPARE	28
29										8864	0	1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	63804		60444		49564							
					Total	236 A		224 A		179 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
Other	0	0.00%	0		
R	720	100.00%	720	**Total Conn. Load:**	170811
M	100691	100.00%	100691	**Total Est. Demand:**	170811
				Total Conn. Current:	205 A
				Total Est. Demand	205 A

Notes:

Branch Panel: HLM2

Location: MECHANICAL 85 **Volts:** 480/277 Wye **A.I.C. Rating:**
Supply From: **Phases:** 3 **Mains Type:** ML
Mounting: SURFACE **Wires:** 4 **Mains Rating:** 225 A
Enclosure: TYPE 1 **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1						2327	8421										2
3	AH-1 RELIEF FANS	M	6980	20 A	3			2327	8421			3	20 A	25264	M	AH-1 SUPPLY FANS	4
5										2327	8421						6
7						0	0										8
9	AH-1 REDUNDANT VFD	M	0	20 A	3			0	0			3	20 A	0	M	AH-1 REDUNDANT VFD	10
11										0	0						12
13						2642	12632										14
15	AH-2 RELIEF FANS	M	7926	20 A	3			2642	12632			3	60 A	37896	M	AH-2 SUPPLY FANS	16
17										2642	12632						18
19						0	0										20
21	AH-2 REDUNDANT VFD	M	0	20 A	3			0	0			3	20 A	0	M	AH-2 REDUNDANT VFD	22
23										0	0						24
25						887	2659										26
27	AH-9 RELIEF FANS	M	2660	20 A	3			887	2659			3	20 A	7976	M	AH-9 SUPPLY FANS	28
29										887	2659						30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	29567		29567		29567							
					Total	107 A		107 A		107 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
M	88702	100.00%	88702		
				Total Conn. Load:	88702
				Total Est. Demand:	88702
				Total Conn. Current:	107 A
				Total Est. Demand	107 A

Notes:

Branch Panel: HLM3

Location: MECHANICAL 85 **Volts:** 480/277 Wye **A.I.C. Rating:**
Supply From: **Phases:** 3 **Mains Type:** ML
Mounting: SURFACE **Wires:** 4 **Mains Rating:** 600 A
Enclosure: TYPE 1 **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1						18005	18005										2
3	HWP-01	M	54015	100 A	3			18005	18005			3	100 A	54015	M	HWP-02	4
5										18005	18005						6
7						5817	5817										8
9	HWP-03	M	17451	60 A	3			5817	5817			3	60 A	17451	M	HWP-04	10
11										5817	5817						12
13						7479	7479										14
15	HWP-05	M	22437	20 A	3			7479	7479			3	20 A	22437	M	HWP-06	16
17										7479	7479						18
19						22437	22437										20
21	CHWP-1	M	67311	40 A	3			22437	22437			3	40 A	67311	M	CHWP-02	22
23										22437	22437						24
25	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	26
27	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	28
29	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	107476		107476		107476							
					Total	388 A		388 A		388 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
M	322428	100.00%	322428		
				Total Conn. Load:	322428
				Total Est. Demand:	322428
				Total Conn. Current:	388 A
				Total Est. Demand	388 A

Notes:

Branch Panel: LLP1

Location: MAIN ELECTRIC 10F **Volts:** 120/208 Wye **A.I.C. Rating:**
Supply From: **Phases:** 3 **Mains Type:** ML
Mounting: SURFACE **Wires:** 4 **Mains Rating:** 250 A
Enclosure: TYPE 1 **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	RECEPTACLES CORR	R	1440	20 A	1	1440	1440					1	20 A	1440	R	R CORRIDOR 20	2
3	RECEPTACLES LOWER	R	720	20 A	1			720									4
5	RECEPTACLES LOWER	R	540	20 A	1					540	180	1	20 A	180	R	VENDING 5B	6
7	RECEPTACLES GEN	R	1260	20 A	1	1260	180					1	20 A	180	R	VENDING 5B	8
9	RCPTCL TRAINING RM	R	1080	20 A	1			1080	180			1	20 A	180	R	VENDING 5B	10
11	RECEPTACLES TR	R	720	20 A	1					720	540	1	20 A	540	R	RCPTCLES IM OFFICE	12
13	HYDRO EQUIPMENT	R	180	20 A	1	180	1080					1	20 A	1080	R	RCPTCLES ISSUE	14
15	RECEPTACLES	R	540	20 A	1			540	360			1	20 A	360	R	RADIO CHARGER	16
17	RCPTCL EXAM RM 60B	R	900	20 A	1					900	720	1	20 A	720	R	RADIO/TIME CLOCK	18
19							0					1	20 A	0	--	SPARE	20
21	TR ROOM EQUIPMENT	R	180	20 A	1			180	0			1	20 A	0	--	SPARE	22
23	TR ROOM EQUIPMENT	R	540	20 A	1					540	0	1	20 A	0	--	SPARE	24
25	TR ROOM EQUIPMENT	R	180	20 A	1	180	0					1	20 A	0	--	SPARE	26
27	TR ROOM EQUIPMENT	R	360	20 A	1			360	0			1	20 A	0	--	SPARE	28
29	TR ROOM EQUIPMENT	R	360	20 A	1					360	0	1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	5760		3420		4500							
					Total	49 A		29 A		39 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	13680	86.55%	11840		
				Total Conn. Load:	13680
				Total Est. Demand:	11840
				Total Conn. Current:	38 A
				Total Est. Demand	33 A

Notes:

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Project #: 2010-117.00

UNIVERSITY OF UTAH

STUDENT LIFE CENTER

1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00
DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
1	05-28-2013	ADDENDUM ONE
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
PANEL SCHEDULES

BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP603

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Branch Panel: LLP2

Location: MAIN ELECTRIC 10F
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating:
Mains Type: ML
Mains Rating: 250 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	TEAM BOX RECEPT	R	720	20 A	1	720	720					1	20 A	720	R	RECEPTACLES	2
3	BACKBOARD MOTOR	M	0	20 A	1			0	540			1	20 A	540	R	RECEPTACLES	4
5	RECEPTACLES	R	1080	20 A	1					1080	180	1	20 A	180	R	WASHER	6
7	BACKBOARD MOTOR	M	0	20 A	1	0	180					1	20 A	180	R	WASHER	8
9	SCOREBOARD POWER	R	720	20 A	1			720	180			2	20 A	360	R	DRYER	10
11	COMPUTERS	R	720	20 A	1					720	180						12
13	COMPUTERS	R	1080	20 A	1	1080	180					2	20 A	360	R	DRYER	14
15	T.V. RECEPTACLES	R	540	20 A	1			540	180								16
17	REFRIDGERATOR	R	180	20 A	1					180	180	1	20 A	180	R	T.V. RECEPTACLE	18
19	A/V EQUIPMENT	R	180	20 A	1	180	540					1	20 A	540	R	RECEPTACLES	20
21	A/V EQUIPMENT	R	180	20 A	1			180	180			1	20 A	180	R	MICROWAVE	22
23	RECEPTACLES	R	540	20 A	1					540	1500	1	20 A	1500	M	MOTORIZED SHADES	24
25	MOTORIZED SHADES	M	500	20 A	1	500	1080					1	20 A	1080	R	RECEPTACLES	26
27									720			1	20 A	720	R	RECEPTACLES	28
29																	30
31																	32
33																	34
35																	36
37																	38
39																	40
41																	42
					Total	5180		3240		4560							
					Total	45 A		27 A		40 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	10980	95.54%	10490		
M	2000	100.00%	2000	Total Conn. Load:	12980
				Total Est. Demand:	12490
				Total Conn. Current:	36 A
				Total Est. Demand	35 A

Notes:

Branch Panel: LLP3

Location: MAIN ELECTRIC 10F
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating:
Mains Type: ML
Mains Rating: 250 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	RECEPTACLES	R	540	20 A	1	540	900					1	20 A	900	R	RECEPTACLES	2
3	RECEPTACLES	R	720	20 A	1			720	720			1	20 A	720	R	RECEPTACLES	4
5	RECEPTACLES	R	1080	20 A	1					1080	540	1	20 A	540	R	RECEPTACLES	6
7	RECEPTACLES	R	360	20 A	1	360	360					1	20 A	360	R	RECEPTACLES	8
9	RECEPTACLES	R	1080	20 A	1			1080	900			1	20 A	900	R	RECEPTACLES	10
11	RECEPTACLES	R	360	20 A	1					360	180	1	20 A	180	R	EWC	12
13	RECEPTACLES	R	720	20 A	1	720	360					1	20 A	360	--	RECEPTACLES POOL	14
15	CLOCK	C	500	20 A	1			500	540			1	20 A	540	--	RECEPTACLES POOL	16
17	L	L	0	20 A	1					18	360	1	20 A	360	R	RECEPTACLES	18
19	R	R	360	20 A	1	360	60					1	20 A	60	L	L	20
21																	22
23																	24
25																	26
27																	28
29																	30
31																	32
33																	34
35																	36
37																	38
39																	40
41																	42
					Total	3660		4460		2538							
					Total	32 A		39 A		21 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	9180	100.00%	9180		
L	78	125.00%	97	Total Conn. Load:	10658
C	500	100.00%	500	Total Est. Demand:	10677
				Total Conn. Current:	30 A
				Total Est. Demand	30 A

Notes:

Branch Panel: LLP4

Location:
Supply From: T1
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/240 Single
Phases: 1
Wires: 3
A.I.C. Rating:
Mains Type: MB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		P	BKR	LOAD	DF	Circuit Description	CKT
1	1A, 51A	M	1800	20 A	1	1800	2400			1	20 A	2400	M	1B, 51B	2
3	RECEPTACLES RM 45B	R	360	20 A	1			360	180	1	20 A	180	R	RECEPTACLES RM 45B	4
5	5	R	0	20 A	1	0	2040			2	30 A	4080	M	12A	6
7	31B	M	2400	20 A	1			2400	2040						8
9	35	R	180	20 A	1	180	2040			2	30 A	4080	M	12B	10
11	13	M	4080	30 A	2			2040	2040						12
13						2040	960			2	30 A	1920	M	39	14
15	39	M	1920	30 A	2			960	960						16
17						960	960								18
19	SPARE	--	0	40 A	1			0	960	2	30 A	1920	M	39	20
21	SPARE	--	0	40 A	1	0	1440			2	20 A	2880	M	1C	22
23	55	--	500	20 A	1			500	1440						24
25	84	--	500	20 A	1	500	1920			2	20 A	1920	--	39	26
27	POOL Space 100N	Oth	0	20 A	1			0	0						28
29	M	M	0	20 A	1	0	0			1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1			0	0	1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1	0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1			0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0			1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0	1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1	0	0			1	20 A	0	--	SPARE	42
					Total	17240		13880							
					Total	144 A		116 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
Other	0	0.00%	0		
R	720	100.00%	720	Total Conn. Load:	31120
M	27480	100.00%	27480	Total Est. Demand:	31120
				Total Conn. Current:	130 A
				Total Est. Demand	130 A

Notes:

Branch Panel: LLP5

Location: MECHANICAL 85
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating:
Mains Type: MB
Mains Rating: 250 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	AH-1, 2, 9 MARINE	M	0	20 A	1	0	2256					1	20 A	2256	M	EC-AH-1,2,9	2
3	RECEPTACLES	R	1080	20 A	1			1080	1000			1	20 A	1000	M	WS-01	4
5	CEILING J-BOX	R	900	20 A	1					900							6
7																	8
9																	10
11																	12
13																	14
15																	16
17																	18
19																	20
21																	22
23																	24
25																	26
27																	28
29																	30
31																	32
33																	34
35																	36
37																	38
39																	40
41																	42
					Total	2256		2080		900							
					Total	20 A		19 A		8 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	1980	100.00%	1980		
M	3256	100.00%	3256	Total Conn. Load:	5236
				Total Est. Demand:	5236
				Total Conn. Current:	15 A
				Total Est. Demand	15 A

Notes:

Branch Panel: LLP6

Location:
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating:
Mains Type: MB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	R	R	180	20 A	1	180	540					1	20 A	540	R	R	2
3	R	R	360	20 A	1			360	180			1	20 A	180	R	R	4
5	R	R	360	20 A	1					360	900	1	20 A	900	R	R	6
7	R	R	360	20 A	1	360	360					1	20 A	360	R	50 M POOL REC.	8
9	ALT 1 NAT STORAGE	R	540	20 A	1			540	540			1	20 A	540	R	ALT 1 CRS STORAGE	10
11	ALT 1 NAT STORAGE	R	540	20 A	1					540	180	1	20 A	180	R	ALT 1 CRS STORAGE	12
13	ALT 1 REC.	R	540	20 A	1	540	540					1	20 A	540	R	ALT 1 REC.	14
15	50 M POOL REC.	R	180	20 A	1			180	540			1	20 A	540	R	ALT 1 REC.	16
17											540	1	20 A	540	R	ALT 1 REC.	18
19																	20
21																	22
23																	24
25	R	R	360	20 A	1	360											26
27																	28
29																	30
31																	32
33																	34
35																	36
37																	38
39																	40
41																	42
					Total	2880		2340		2520							
					Total	24 A		20 A		21 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	7740	100.00%	7740		
				Total Conn. Load:	7740
				Total Est. Demand:	7740
				Total Conn. Current:	21 A
				Total Est. Demand	21 A

Notes:

Branch Panel: LLP7

Location: MAIN ELECTRIC 10F
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating:
Mains Type: MB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1																	2
3																	4
5																	6
7																	8
9																	10
11																	12
13																	14
15																	16
17																	18
19																	20
21																	22
23																	24
25																	26
27																	28
29																	30
31																	32
33																	34
35																	36
37																	38
39																	40
41																	42
					Total	0		0		0							
					Total	0 A		0 A		0 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
				Total Conn. Load:	0
				Total Est. Demand:	0
				Total Conn. Current:	0 A
				Total Est. Demand	0 A

Notes:

Branch Panel: ML6

Location:
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 480/277 Wye
Phases: 3
Wires: 4
A.I.C. Rating:
Mains Type: MB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1						987	987										2
3	M	M	2960	20 A	3			987	987			3	20 A	2960	M	M	4
5										987	987						6
7																	8
9																	10
11																	12
13																	14
15																	16
17																	18
19																	20
21																	22
23																	24
25																	26
27																	28
29																	30
31																	32
33																	34
35																	36
37																	38
39																	40
41																	42
					Total	1973		1973		1973							
					Total	7 A		7 A		7 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
M	5920	100.00%	5920		
				Total Conn. Load:	5920
				Total Est. Demand:	5920
				Total Conn. Current:	7 A
				Total Est. Demand	7 A

Notes:

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Contact: Paris LeLaCheur
Project #: 2010-117.00

UNIVERSITY OF UTAH
STUDENT LIFE CENTER
1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00
DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE:

NO.	DATE	DESCRIPTION
1	05-28-2013	ADDENDUM ONE
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
PANEL SCHEDULES

BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP604

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Branch Panel: L2P4

Location: ELECTRICAL 201F
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: ML
Mains Rating: 250 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A	B	C	P	BKR	LOAD	DF	Circuit Description	CKT
1	MOTORIZED SHADES	M	1000	20 A	1	1000 1000			1	20 A	1000	M	MOTORIZED SHADES	2
3	MOTORIZED SHADES	M	1000	20 A	1		1000 1000		1	20 A	1000	M	MOTORIZED SHADES	4
5	MOTORIZED SHADES	M	1000	20 A	1			1000 1500	1	20 A	1500	M	MMOTORIZED SHADES	6
7	MOTORIZED SHADES	M	500	20 A	1	500 1000			1	20 A	1000	M	MOTORIZED SHADES	8
9	TREADMILL	R	360	20 A	1		360 360		1	20 A	360	R	TREADMILL	10
11	TREADMILL	R	360	20 A	1			360 360	1	20 A	360	R	TREADMILL	12
13	TREADMILL	R	360	20 A	1	360 360			1	20 A	360	R	TREADMILL	14
15	TREADMILL	R	360	20 A	1		360 360		1	20 A	360	R	TREADMILL	16
17	TREADMILL	R	360	20 A	1			360 360	1	20 A	360	R	TREADMILL	18
19	TREADMILL	R	360	20 A	1	360 360			1	20 A	360	R	TREADMILL	20
21	TREADMILL	R	360	20 A	1		360 360		1	20 A	360	R	TREADMILL	22
23	TREADMILL	R	360	20 A	1			360 360	1	20 A	360	R	TREADMILL	24
25	TREADMILL	R	360	20 A	1	360 360			1	20 A	360	R	TREADMILL	26
27	TREADMILL	R	360	20 A	1		360 360		1	20 A	360	R	TREADMILL	28
29	TREADMILL	R	360	20 A	1			360 360	1	20 A	360	R	TREADMILL	30
31	TREADMILL	R	360	20 A	1	360 360			1	20 A	360	R	TREADMILL	32
33	TREADMILL	R	360	20 A	1		360 360		1	20 A	360	R	TREADMILL	34
35	TREADMILL	R	360	20 A	1			360 360	1	20 A	360	R	TREADMILL	36
37	SPARE	--	0	20 A	1	0 0			1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1		0 0		1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1			0 0	1	20 A	0	--	SPARE	42
						Total 6380	5600	6100						
						Total 54 A	47 A	51 A						

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	10080	99.60%	10040		
M	8000	100.00%	8000	**Total Conn. Load:**	18080
				Total Est. Demand:	18040
				Total Conn. Current:	50 A
				Total Est. Demand	50 A

Notes:

Branch Panel: L2P5

Location: ELECTRICAL 201F
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: ML
Mains Rating: 250 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A	B	C	P	BKR	LOAD	DF	Circuit Description	CKT
1	TREADMILL	R	360	20 A	1	360 360			1	20 A	360	R	TREADMILL	2
3	TREADMILL	R	360	20 A	1		360 360		1	20 A	360	R	TREADMILL	4
5	TREADMILL	R	360	20 A	1			360 360	1	20 A	360	R	TREADMILL	6
7	TREADMILL	R	360	20 A	1	360 360			1	20 A	360	R	TREADMILL	8
9	TREADMILL	R	360	20 A	1		360 360		1	20 A	360	R	TREADMILL	10
11	TREADMILL	R	360	20 A	1			360 360	1	20 A	360	R	TREADMILL	12
13	TREADMILL	R	360	20 A	1	360 360			1	20 A	360	R	TREADMILL	14
15	TREADMILL	R	360	20 A	1		360 360		1	20 A	360	R	TREADMILL	16
17	TREADMILL	R	360	20 A	1			360 360	1	20 A	360	R	TREADMILL	18
19	TREADMILL	R	360	20 A	1	360 360			1	20 A	360	R	TREADMILL	20
21	TREADMILL	R	360	20 A	1		360 360		1	20 A	360	R	TREADMILL	22
23	TREADMILL	R	360	20 A	1			360 360	1	20 A	360	R	TREADMILL	24
25	TREADMILL	R	360	20 A	1	360 360			1	20 A	360	R	TREADMILL	26
27	TREADMILL	R	360	20 A	1		360 360		1	20 A	360	R	TREADMILL	28
29	TREADMILL	R	360	20 A	1			360 360	1	20 A	360	R	TREADMILL	30
31	TREADMILL	R	360	20 A	1	360 360			1	20 A	360	R	TREADMILL	32
33	SPARE	--	0	20 A	1		0 0		1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1			0 0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0 0			1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1		0 0		1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1			0 0	1	20 A	0	--	SPARE	42
						Total 4320	3600	3600						
						Total 36 A	30 A	30 A						

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	11520	93.40%	10760		
				Total Conn. Load:	11520
				Total Est. Demand:	10760
				Total Conn. Current:	32 A
				Total Est. Demand	30 A

Notes:

Branch Panel: EH3L1

Location: ELECTRICAL 301F
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A	B	C	P	BKR	LOAD	DF	Circuit Description	CKT
1	FITNESS CENTER 235	L	0	20 A	1	0 0			1	20 A	0	L	3 COURT GYM 215	2
3	FITNESS CENTER 235	L	0	20 A	1		0 0		1	20 A	0	L	3 COURT GYM 215	4
5	FITNESS CENTER 235	L	0	20 A	1			0 0	1	20 A	0	L	3 COURT GYM 215	6
7	FITNESS CENTER 235	L	0	20 A	1	0 0			1	20 A	0	L	3 COURT GYM 215	8
9	FITNESS CENTER 235	L	0	20 A	1		0 0		1	20 A	0	L	3 COURT GYM 215	10
11	WET CUSTODIAL 307	L	94	20 A	1			94 0	1	20 A	0	L	3 COURT GYM 215	12
13						29			1	20 A	29	L	JOGGING TRACK 315	14
15														16
17														18
19														20
21														22
23														24
25														26
27														28
29														30
31														32
33														34
35														36
37														38
39														40
41														42
					Total	29	0	94						
					Total	0 A	0 A	0 A						

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
L	123	125.00%	154		
				Total Conn. Load:	123
				Total Est. Demand:	154
				Total Conn. Current:	0 A
				Total Est. Demand	0 A

Notes:

Branch Panel: EL3P1

Location: ELECTRICAL 301F
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A	B	C	P	BKR	LOAD	DF	Circuit Description	CKT
1	R DATA 301D	R	360	20 A	2	180 180			1	20 A	180	R	R DATA 301D	2
3							180 180		1	20 A	180	R	R DATA 301D	4
5	R DATA 301D	R	360	20 A	2			180 0	--	--	--	--	'NAC'	6
7						180 0			--	--	--	--	'SEC'	8
9														10
11														12
13														14
15														16
17														18
19														20
21														22
23														24
25														26
27														28
29														30
31														32
33														34
35														36
37														38
39														40
41														42
					Total	540	360	180						
					Total	5 A	3 A	2 A						

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	1080	100.00%	1080		
				Total Conn. Load:	1080
				Total Est. Demand:	1080
				Total Conn. Current:	3 A
				Total Est. Demand	3 A

Notes:

Branch Panel: H3L1

Location: ELECTRICAL 301F
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A	B	C	P	BKR	LOAD	DF	Circuit Description	CKT
1	L	L	360	20 A	1	360 29			1	20 A	29	L	L EXERCISE ROOM 1	2
3	L	L	360	20 A	1		360 0		1	20 A	0	L	L OFFICE 341	4
5	L	L	360	20 A	1			360 0	1	0 A	0	--	Spare - ALT. 3	6
7	L	L	360	20 A	1	360 580			1	20 A	580	L	L	8
9	L	L	360	20 A	1		360 29		1	20 A	29	L	L	10
11														12
13														14
15														16
17														18
19														20
21														22
23														24
25														26
27														28
29														30
31														32
33														34
35														36
37														38
39														40
41														42
					Total	1329	749	360						
					Total	5 A	3 A	1 A						

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
L	2438	125.00%	3048		
				Total Conn. Load:	2438
				Total Est. Demand:	3048
				Total Conn. Current:	3 A
				Total Est. Demand	4 A

Notes:

Branch Panel: H3L2

Location: ELECTRICAL 301F
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 480/277 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: MB
Mains Rating: 225 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A	B	C	P	BKR	LOAD	DF	Circuit Description	CKT
1	L	L	360	20 A	1	360								2
3	L	L	360	20 A	1		360							4
5	L	L	360	20 A	1			360						6
7	L	L	360	20 A	1	360								8
9	L	L	360	20 A	1		360							10
11	L	L	360	20 A	1			360						12
13														14
15														16
17														18
19														20
21														22
23														24
25														26
27														28
29														30
31														32
33														34
35														36
37														38
39														40
41														42
					Total	720	720	720						
					Total	3 A	3 A	3 A						

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
L	2160	125.00%	2700		
				Total Conn. Load:	2160
				Total Est. Demand:	2700
				Total Conn. Current:	3 A
				Total Est. Demand	3 A

Notes:

Branch Panel: L3P1

Location: ELECTRICAL 301F
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: ML
Mains Rating: 250 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A	B	C	P	BKR	LOAD	DF	Circuit Description	CKT
1	R BREAK ROOM 350	R	180	20 A	1	180 720			1	20 A	720	R	R Room 300H, 300N,	2
3	R BREAK ROOM 350	R	540	20 A	1		540 1260		1	20 A	1260	R	R Room 320, 353	4
5	R WORK ROOM 360	R	720	20 A	1			720 360	1	20 A	360	R	R BREAK ROOM 350	6
7	R Room 360	R	540	20 A	1	540 720			1	20 A	720	R	R OFFICE 341	8
9	R FITNESS 320	R	720	20 A	1		720 720		1	20 A	720	R	R OFFICE 343	10
11	R FITNESS 320	R	720	20 A	1			720 720	1	20 A	720	R	R OFFICE 345	12
13	R STRETCHING-2 305-2	R	720	20 A	1	720 720			1	20 A	720	R	R OFFICE 347	14
15	R Room 307	R	720	20 A	1		720 720		1	20 A	720	R	R OFFICE 349	16
17	R Space 40G	R	720	20 A	1			720 720	1	20 A	720	R	R OFFICE 351	18
19	R Space 40G	R	1080	20 A	1	1080 1080			1	20 A	1080	R	R DIRECTOR OFFICE	20
21	R STRETCHING-2 305-2	R	720	20 A	1		720 720		1	20 A	720	R	R CONFERENCE ROOM	22
23	R Space 100R	R	540	20 A	1			540 360	1	20 A	360	R	R CONFERENCE ROOM	24
25	M CONFERENCE ROOM	M	1012	20 A	1	1012 720			1	20 A	720	R	R STAFF 340F	26
27	R	R	540	20 A	1		540 540		1	20 A	540	R	R STAFF 340F	28
29	M DIRECTOR OFFICE	M	1000	20 A	1			1000 1000	1	20 A	1000	M	MOTORIZED SHADES	30
31	MOTORIZED SHADES	M	1000	20 A	1	1000 1500			1	20 A	1500	M	MOTORIZED SHADES	32
33	MOTORIZED SHADES	M	500	20 A	1		500							34
35														36
37														38
39														40
41														42
					Total	9992	7700	6860						
					Total	84 A	65 A	57 A						

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	18540	76.97%	14270		
M	6012	100.00%	6012	**Total Conn. Load:**	24552
				Total Est. Demand:	20282
				Total Conn. Current:	68 A
				Total Est. Demand	56 A

Notes:

Branch Panel: L3P2

Location: ELECTRICAL 301F
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: ML
Mains Rating: 250 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A	B	C	P	BKR	LOAD	DF	Circuit Description	CKT
1	R LOBBY/ VENDING 300	R	180	20 A	1	180 1080			1	20 A	1080	R	RECEPTACLES	2
3	R LOBBY/ VENDING 300	R	180	20 A	1		180 540		1	20 A	540	R	RECEPTACLES	4
5	R STRETCHING-2 305-2	R	720	20 A	1			720 500	1	20 A	500	M	ELEVATOR LIGHTS	6
7	RECEPTACLES	R	720	20 A	1	720 1500			1	20 A	1500	M	ELEVATOR CONTROLS	8
9	RECEPTACLES	R	1080	20 A	1		1080 500		1	20 A	500	M	ELEVATOR LIGHTS	10
11	M	M	936	20 A	1			936 1500	1	20 A	1500	M	ELEVATOR CONTROLS	12
13	RECEPTACLES	R	360	20 A	1	360 180			1	20 A	180	R	R LOBBY / VENDING	14
15	R STRETCHING 305	R	540	20 A	1		540 180		1	20 A	180	R	R LOBBY / VENDING	16
17	R Room 301G, 301F	R	360	20 A	1			360 360	1	20 A	360	R	R STRETCHING 305	18
19	MOTORIZED SHADES	M	1000	20 A	1	1000								20
21	MOTORIZED SHADES	M	1000	20 A	1		1000							22
23	MOTORIZED SHADES	M	1000	20 A	1			1000						24
25														26
27														28
29														30
31														32
33														34
35														36
37														38
39														40
41														42
					Total	5020	4020	5376						
					Total	43 A	34 A	46 A						

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	6480	100.00%	6480		
M	7936	100.00%	7936	**Total Conn. Load:**	14416
				Total Est. Demand:	14416
				Total Conn. Current:	40 A
				Total Est. Demand	40 A

Notes:

Branch Panel: P34

Location: ELECTRICAL 301F
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating:
Mains Type: ML
Mains Rating: 250 A
MCB Rating:

CKT	Circuit Description	DF	LOAD	BKR	P	A	B	C	P	BKR	LOAD	DF	Circuit Description	CKT
1	ROCK WALL LIGHT HOIST	M	1800	20 A	3	600 105			1	20 A	0	L	ROCK WALL LIGHTING	2
3							600 105		1	20 A	0	L	ROCK WALL LIGHTING	4
5								600 105	1	20 A	0	L	ROCK WALL LIGHTING	6
7	ROCK WALL LIGHT HOIST	M	1800	20 A	3	600 18			1	20 A	0	L	ROCK WALL LIGHTING	8
9							600							10
11								600						12
13	ROCK WALL LIGHT HOIST	M	1800	20 A	3	600								14
15							600							16
17								600						18
19														20
21														22
23														24
25														26
27														28
29														30
31														32
33														34
35														36
37														38
39														40
41														42
					Total	1923	1905	1905						
					Total	16 A	16 A	16 A						

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
M	5400	100.00%	5400		
L	333	125.00%	416	**Total Conn. Load:**	5733
				Total Est. Demand:	5816
				Total Conn. Current:	16 A
				Total Est. Demand	16 A

Notes:

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UNIVERSITY OF UTAH
STUDENT LIFE CENTER
1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00
DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
PANEL SCHEDULES

BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP607

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MECHANICAL EQUIPMENT LIST

ID	DESCRIPTION	V	PH	HP	VA	MCA	AMPS	DISCONNECT SIZE	DISCONNECT FUSED	STARTER	FEEDER	LOCATION	REMARKS
DOF-1	OUTSIDE AIR	460	3	1/2	841		1.10				20D		
AH-1	AIR HANDLER											NORTH LOWER LEVEL MECH ROOM	1,2,3
EC-AH-1	EVAPORATIVE COOLER PUMP	120	1	0.25	696		7.20	30	20.00	DIV. 26	20A	AH-1	
EC-1	AIR WASH	120	1	0.2	528		4.40	THERMAL	SWITCH		20A	AH-1	
RLF-AH-1.1	RELIEF AIR FAN	460	3	1	1745		2.10	VFD			20D	AH-1	2,3
RLF-AH-1.2	RELIEF AIR FAN	460	3	1	1745		2.10	VFD			20D	AH-1	2,3
RLF-AH-1.3	RELIEF AIR FAN	460	3	1	1745		2.10	VFD			20D	AH-1	2,3
RLF-AH-1.4	RELIEF AIR FAN	460	3	1	1745		2.10	VFD			20D	AH-1	2,3
SF-AH-1.1	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-1	2,3
SF-AH-1.2	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-1	2,3
SF-AH-1.3	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-1	2,3
SF-AH-1.4	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-1	2,3
AH-2	AIR HANDLER											NORTH LOWER LEVEL MECH ROOM	1,2,3
EC-AH-2	EVAPORATIVE COOLER PUMP	120	1	0.25	696		7.20	30	20.00	DIV. 26	20A	AH-2	
EC-2	AIR WASH	120	1	0.2	528		4.40	THERMAL	SWITCH		20A	AH-2	
RLF-AH-2.1	RELIEF AIR FAN	460	3	0.75	1321		1.60	VFD			20D	AH-2	2,3
RLF-AH-2.2	RELIEF AIR FAN	460	3	0.75	1321		1.60	VFD			20D	AH-2	2,3
RLF-AH-2.3	RELIEF AIR FAN	460	3	0.75	1321		1.60	VFD			20D	AH-2	2,3
RLF-AH-2.4	RELIEF AIR FAN	460	3	0.75	1321		1.60	VFD			20D	AH-2	2,3
RLF-AH-2.5	RELIEF AIR FAN	460	3	0.75	1321		1.60	VFD			20D	AH-2	2,3
RLF-AH-2.6	RELIEF AIR FAN	460	3	0.75	1321		1.60	VFD			20D	AH-2	2,3
SF-AH-2.1	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-2	2,3
SF-AH-2.2	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-2	2,3
SF-AH-2.3	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-2	2,3
SF-AH-2.4	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-2	2,3
SF-AH-2.5	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-2	2,3
SF-AH-2.6	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-2	2,3
AH-3	AIR HANDLER											WEST ENTRY LEVEL MECH ROOM	1,2,3
RLF-AH-3.1	RELIEF AIR FAN	460	3	25	28254		34.00	VFD			50D	AH-3	2,3
RLF-AH-3.2	RELIEF AIR FAN	460	3	25	28254		34.00	VFD			50D	AH-3	2,3
SF-AH-3.1	SUPPLY AIR FAN	460	3	15	17451		21.00	VFD			30D	AH-3	2,3
SF-AH-3.2	SUPPLY AIR FAN	460	3	15	17451		21.00	VFD			30D	AH-3	2,3
ER-AH-3	RECOVERY												
AH-4	AIR HANDLER											WEST ENTRY LEVEL MECH ROOM	1,2,3
EC-AH-4	EVAPORATIVE COOLER PUMP	120	1	0.25	696		7.20	30	20.00	DIV. 26	20A	AH-4	
EC-4	AIR WASH	120	1	0.2	528		4.40	THERMAL	SWITCH		20A	AH-4	
RLF-AH-4.1	RELIEF AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-4	2,3
RLF-AH-4.2	RELIEF AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-4	2,3
RLF-AH-4.3	RELIEF AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-4	2,3
RLF-AH-4.4	RELIEF AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-4	2,3
SF-AH-4.1	SUPPLY AIR FAN	460	3	10	11634		14.00	VFD			20D	AH-4	2,3
SF-AH-4.2	SUPPLY AIR FAN	460	3	10	11634		14.00	VFD			20D	AH-4	2,3
SF-AH-4.3	SUPPLY AIR FAN	460	3	10	11634		14.00	VFD			20D	AH-4	2,3
SF-AH-4.4	SUPPLY AIR FAN	460	3	10	11634		14.00	VFD			20D	AH-4	2,3
AH-5	AIR HANDLER											ROOF	1,2,3
EC-AH-5	EVAPORATIVE COOLER PUMP	120	1	0.25	696		7.20	30	20.00	DIV. 26	20A	AH-5	
EC-5	AIR WASH	120	1	0.2	528		4.40	THERMAL	SWITCH		20A	AH-5	
RLF-AH-5.1	RELIEF AIR FAN	460	3	3	3989		4.80	VFD			20D	AH-5	2,3
RLF-AH-5.2	RELIEF AIR FAN	460	3	3	3989		4.80	VFD			20D	AH-5	2,3
RLF-AH-5.3	RELIEF AIR FAN	460	3	3	3989		4.80	VFD			20D	AH-5	2,3
RLF-AH-5.4	RELIEF AIR FAN	460	3	3	3989		4.80	VFD			20D	AH-5	2,3
SF-AH-5.1	SUPPLY AIR FAN	460	3	15	17451		21.00	VFD			30D	AH-5	2,3
SF-AH-5.2	SUPPLY AIR FAN	460	3	15	17451		21.00	VFD			30D	AH-5	2,3
SF-AH-5.3	SUPPLY AIR FAN	460	3	15	17451		21.00	VFD			30D	AH-5	2,3
SF-AH-5.4	SUPPLY AIR FAN	460	3	15	17451		21.00	VFD			30D	AH-5	2,3
AH-6	AIR HANDLER											ROOF	1,2,3
EC-AH-6	EVAPORATIVE COOLER PUMP	120	1	0.25	696		7.20	30	20.00	DIV. 26	20A	AH-6	
EC-6	AIR WASH	120	1	0.2	528		4.40	THERMAL	SWITCH		20A	AH-6	
RLF-AH-6.1	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-6	2,3
RLF-AH-6.2	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-6	2,3
RLF-AH-6.3	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-6	2,3
RLF-AH-6.4	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-6	2,3
RLF-AH-6.5	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-6	2,3
RLF-AH-6.6	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-6	2,3
RLF-AH-6.7	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-6	2,3
RLF-AH-6.8	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-6	2,3
RLF-AH-6.9	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-6	2,3
RLF-AH-6.10	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-6	2,3
RLF-AH-6.11	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-6	2,3
RLF-AH-6.12	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-6	2,3
SF-AH-6.1	SUPPLY AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-6	2,3
SF-AH-6.2	SUPPLY AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-6	2,3
SF-AH-6.3	SUPPLY AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-6	2,3
SF-AH-6.4	SUPPLY AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-6	2,3
SF-AH-6.5	SUPPLY AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-6	2,3
SF-AH-6.6	SUPPLY AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-6	2,3
SF-AH-6.7	SUPPLY AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-6	2,3
SF-AH-6.8	SUPPLY AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-6	2,3
SF-AH-6.9	SUPPLY AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-6	2,3
SF-AH-6.10	SUPPLY AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-6	2,3
SF-AH-6.11	SUPPLY AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-6	2,3
SF-AH-6.12	SUPPLY AIR FAN	460	3	7.5	9141		11.00	VFD			20D	AH-6	2,3
AH-7	AIR HANDLER											NORTH PENTHOUSE	1,2,3
EC-AH-7	EVAPORATIVE COOLER PUMP	120	1	0.25	696		7.20	30	20.00	DIV. 26	20A	AH-7	
EC-7	AIR WASH	120	1	0.2	528		4.40	THERMAL	SWITCH		20A	AH-7	
RLF-AH-7.1	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-7	2,3
RLF-AH-7.2	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-7	2,3
RLF-AH-7.3	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-7	2,3
RLF-AH-7.4	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-7	2,3
RLF-AH-7.5	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-7	2,3
RLF-AH-7.6	RELIEF AIR FAN	460	3	1.5	2493		3.00	VFD			20D	AH-7	2,3
SF-AH-7.1	SUPPLY AIR FAN	460	3	10	11634		14.00	VFD			20D	AH-7	2,3
SF-AH-7.2	SUPPLY AIR FAN	460	3	10	11634		14.00	VFD			20D	AH-7	2,3
SF-AH-7.3	SUPPLY AIR FAN	460	3	10	11634		14.00	VFD			20D	AH-7	2,3
SF-AH-7.4	SUPPLY AIR FAN	460	3	10	11634		14.00	VFD			20D	AH-7	2,3
SF-AH-7.5	SUPPLY AIR FAN	460	3	10	11634		14.00	VFD			20D	AH-7	2,3
SF-AH-7.6	SUPPLY AIR FAN	460	3	10	11634		14.00	VFD			20D	AH-7	2,3
AH-8	AIR HANDLER											NORTH PENTHOUSE	1,2,3
EC-AH-8	EVAPORATIVE COOLER PUMP	120	1	0.25	696		7.20	30	20.00	DIV. 26	20A	AH-8	
EC-8	AIR WASH	120	1	0.2	528		4.40	THERMAL	SWITCH		20A	AH-8	
RLF-AH-8.1	RELIEF AIR FAN	460	3	1	1745		2.10	VFD			20D	AH-8	2,3
RLF-AH-8.2	RELIEF AIR FAN	460	3	1	1745		2.10	VFD			20D	AH-8	2,3
RLF-AH-8.3	RELIEF AIR FAN	460	3	1	1745		2.10	VFD			20D	AH-8	2,3
RLF-AH-8.4	RELIEF AIR FAN	460	3	1	1745		2.10	VFD			20D	AH-8	2,3
SF-AH-8.1	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-8	2,3
SF-AH-8.2	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-8	2,3
SF-AH-8.3	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-8	2,3
SF-AH-8.4	SUPPLY AIR FAN	460	3	5	6316		7.60	VFD			20D	AH-8	2,3
AH-9	AIR HANDLER											NORTH LOWER LEVEL MECH ROOM	1,2,3
EC-AH-9	EVAPORATIVE COOLER PUMP	120	1	0.25	696		7.20	30	20.00	DIV. 26	20A	AH-9	
EC-9	AIR WASH	120	1	0.2	528		4.40	THERMAL	SWITCH		20A	AH-9	
RLF-AH-9.1	RELIEF AIR FAN	460	3	0.75	1330		1.60	VFD			20D	AH-9	2,3
RLF-AH-9.2	RELIEF AIR FAN	460	3	0.75	1330		1.60	VFD			20D	AH-9	2,3
RLF-AH-9.3	RELIEF AIR FAN	460	3	0.75	1330		1.60	VFD			20D	AH-9	2,3
RLF-AH-9.4	RELIEF AIR FAN	460	3	0.75	1330		1.60	VFD			20D	AH-9	2,3
SF-AH-9.1	SUPPLY AIR FAN	460	3	3	3988		4.80	VFD			20D	AH-9	2,3
SF-AH-9.2	SUPPLY AIR FAN	460	3	3	3988		4.80	VFD			20D	AH-9	2,3
SF-AH-9.3	SUPPLY AIR FAN	460	3	3	3988		4.80	VFD			20D	AH-9	2,3
SF-AH-9.4	SUPPLY AIR FAN	460	3	3	3988		4.80	VFD			20D	AH-9	2,3
EAH-4	AIR HANDLER											WEST ENTRY LEVEL MECH ROOM	2,3
EF-EAH-4.1	EXHAUST AIR FAN	460	3	3	3988		3.00	VFD			20D	EAH-4	2,3
EF-EAH-4.2	EXHAUST AIR FAN	460	3	3	3988		3.00	VFD			20D	EAH-4	2,3
EF-EAH-4.3	EXHAUST AIR FAN	460	3	3	3988		3.00	VFD			20D	EAH-4	2,3
EF-EAH-4.4	EXHAUST AIR FAN	460	3	3	3988		3.00	VFD			20D	EAH-4	2,3
ATC	ATC CONTROL	120	1		500		4.10	30	10.00		20A	SEE PLANS	5
EWC-1	ELECTRIC WATER COOLER	120	1								20A	SEE PLANS	
CHWP-1	PUMP	460	3	30	24930		40.00	60	60.00	DIV. 26	60D	MECH ROOM 10N	2
CHWP-2	PUMP	460	3	30	24930		40.00	60	60.00	DIV. 26	60D	MECH ROOM 10N	2
CP-01	PUMP	460	3	0.5	914		1.10	30	5.00	DIV. 26	20D	HC-01	
CP-03	PUMP	460	3	1.5	2493		3.00	30	10.00	DIV. 26	20D	HC-03	
CP-04	PUMP	460	3	0.5	914		1.10	30	5.00	DIV. 26	20D	HC-04	
CP-05	PUMP	120	1	0.125	500		4.10	30	10.00	DIV. 26	20A	HC-05	
CP-06	PUMP	120	1									HC-6	
CP-09	PUMP	460	3	0.5	914		1.10	30	5.00	DIV. 26	20D	HC-09	
CP-9	PUMP	120	1	0.125	500		4.10	30	10.00	DIV. 26	20A	HC-9	
CP-10	PUMP	120	1	0.125	500		4.10	30	10.00	DIV. 26	20A	HC-10	
HWP-01	PUMP	460	3	50	54015		65.00	VFD			100D	BOILER ROOM	
HWP-02	PUMP	460	3	50	54015		65.00	VFD			100D	BOILER ROOM	
HWP-03	PUMP	460	3	5	17451		7.60	VFD			20D	BOILER ROOM	
HWP-04	PUMP	460	3	5	17451		7.60	VFD			20D	BOILER ROOM	
P-1	PUMP	460	3	20	22437		27.00	30	10.00	DIV. 26	40D	SW MECH ROOM	
SMP-01	PUMP	460	3	5	6316		7.60	VFD			20D	BOILER ROOM	
SMP-02	PUMP	460	3	5	6316		7.60	VFD			20D	BOILER ROOM	
RCP-1	RECIRCULATING PUMP	120	1	0.75	1656		13.80	30	20.00	DIV. 26	20A	BOILER ROOM	
WS-1	WATER SOFTENER	120	1										
SCF-01	ROOF UPBLAST DOME	460	3	7.5	8141		11.00	30	20.00	DIV. 26	20D	ROOF	
SCF-02	ROOF UPBLAST DOME	460	3	7.5	8141		11.00	30	20.00	DIV. 26	20D	ROOF	
DMV-1	MIXING STATION	120	1										
EF-1	EXHAUST AIR FAN	120	1	0.25	726		6.00	30	20.00	DIV.26	20A	ROOF	
EF-2	EXHAUST AIR FAN	120	1	0.25	726		6.00	30	20.00	DIV.26	20A	ROOF	
EF-3	EXHAUST AIR FAN	480	3	1	13296		16.00	30	30.00	DIV.26	30A	ROOF	
FC-1	COOLING UNIT	208	1				2.20	30	20.00	DIV.26	20A	MDF AND IDF ROOMS	5
CU-1	CONDENSING UNIT	208	1				21.30	30	30.00	DIV.26	30A	ROOF	5,6

NOTES:

1. VERIFY ELECTRICAL REQUIREMENTS WITH MANUFACTURER
2. VFD BY MECHANICAL. COORDINATE LOCATIONS.
3. PROVIDE A 120V CIRCUIT FOR MARINE LIGHTS.
4. SINGLE POINT CONNECTION
5. ON EMERGENCY POWER. SEE PANEL SCHEDULES AND PLANS
6. PROVIDE DISCONNECT ON ROOF. COORDINATE WITH MECH. PLANS FOR LOCATIONS

POOL EQUIPMENT LIST

ID	DESCRIPTION	V	PH	HP	VA	MCA	AMPS	DISCONNECT SIZE	DISCONNECT FUSED	STARTER	FEEDER	LOCATION	REMARKS
1A	RMF CONTROLLER	120	1		1800		15.00	GFCI PLUG			20A	POOL EQUIPMENT ROOM	
1B	FILTER VACUUM SYSTEM	120	1		2400		20.00	THERMAL	SWITCH		30A	POOL EQUIPMENT ROOM	
1C	FILTER AIR COMPRESSOR	120	1	2	500		15.00	GFCI PLUG			20A	POOL EQUIPMENT ROOM	
3	CIRCULATION PUMP	460	3	25	28254		34.00	VFD			20C	POOL EQUIPMENT ROOM	
5	CHEMICAL CONTROLLER	120	1		500		1.00	GFCI PLUG			20A	POOL EQUIPMENT ROOM	
6	LIQUID CHLORINE FEED PUMP	120	1		1000			GFCI PLUG			20A	CHEMICAL ROOM	
9A	CO2 FEED SYSTEM	120	1		500			GFCI PLUG			20A	CHEMICAL ROOM	
11B	UV SYSTEM CONTROL PANEL	480	3		26592		32.00	BREAKER			40C	POOL EQUIPMENT ROOM	
12A	FEATURES PUMP	230	1	3			9.60	30	20.00		20C	POOL EQUIPMENT ROOM	
12B	FEATURES PUMP	230	1	3			9.60	30	20.00		20C	POOL EQUIPMENT ROOM	
13	FEATURES PUMP	230	1	3			9.60	30	20.00		20C	POOL EQUIPMENT ROOM	
28B	CHAIN HOIST	460	3	1			2.10	30	15.00		20C	POOL EQUIPMENT ROOM	
31A	RMF CONTROLLER	120	1		1800		15.00	GFCI PLUG			20A	POOL EQUIPMENT ROOM	
31B	FILTER VACUUM SYSTEM	120	1		2400		20.00	THERMAL	SWITCH		30A	POOL EQUIPMENT ROOM	
33	CIRCULATION PUMP	460	3	7.5			11.00	VFD			20C	POOL EQUIPMENT ROOM	
35	CHEMICAL CONTROLLER	120	1		500		1.00	GFCI PLUG			20A	POOL EQUIPMENT ROOM	
36	LIQUID CHLORINE FEED PUMP	120	1		1000							CHEMICAL ROOM	
37	CO2 FEED SYSTEM	120	1		1000			GFCI PLUG			20A	CHEMICAL ROOM	
38B	UV SYSTEM CONTROL PANEL	480	3		26592		32.00	BREAKER			40C	POOL EQUIPMENT ROOM	
39	HYDRO-THERAPY PUMP	230	1				8.00	30	20.00		20C	POOL EQUIPMENT ROOM	

POOL EQUIPMENT LIST - ALTERNATE 1

ID	DESCRIPTION	V	PH	HP	VA	MCA	AMPS	DISCONNECT SIZE	DISCONNECT FUSED	STARTER	FEEDER	LOCATION	REMARKS
3	CIRCULATION PUMP	460	3	10	11634		14.00	VFD			20C	POOL EQUIPMENT ROOM	
51A	RMF CONTROLLER	120	1		1800		15.00	GFCI PLUG			20A	POOL EQUIPMENT ROOM	
51B	FILTER VACUUM SYSTEM	120	1		2400		20.00	THERMAL	SWITCH		30A	POOL EQUIPMENT ROOM	
53	CIRCULATION PUMP	460	3	25			34.00	VFD			60C	POOL EQUIPMENT ROOM	
55	CHEMICAL CONTROLLER	120	1		500		1.00	GFCI PLUG			20A	POOL EQUIPMENT ROOM	
61B	UV SYSTEM CONTROL PANEL	480	3		26592		32.00	BREAKER			40C	POOL EQUIPMENT ROOM	
83	CIRCULATION PUMP	460	3	3			14.00	VFD			20C	POOL EQUIPMENT ROOM	
84	CHEMICAL CONTROLLER	120	1		500		1.00	GFCI PLUG			20A	POOL EQUIPMENT ROOM	
85	LIQUID CHLORINE FEED PUMP	120	1		1000			GFCI PLUG			20A	CHEMICAL ROOM	

KITCHEN EQUIPMENT SCHEDULE - FRESHENS

	DESCRIPTION	V	PH	HP	KW	AMPS	DISCONNECT SIZE	DISCONNECT FUSE SIZE	FURN. BY	WIRES	CONDUIT	QUANTITY	REMARKS
K-1	TWO-WELL DROP IN REFRIG COLD PAN	120	1	1/5		3.9			DIV 16			1	
K-2	REFRIGERATED CREPE STATION								DIV 16			1	
K-3	CREPE MAKERS	277	3		3.7			20A	DIV 16			3	
K-4	DROP-IN REFRIG COLD PAN	120	1	1/5		2.4	NEMA 5-15P		DIV 16			1	
K-5	MICROWAVE OVEN	120	1			13.4	NEMA 5-15R		DIV 16			1	
K-6	DROP-IN REFRIG COLD PAN	120	1	1/5		2.4	NEMA 5-15P		DIV 16			1	
K-7	BLENDER	120	1			13.0			DIV 16			2	
K-8	DROP-IN 3 WELL COLD PAN	120	1	1/5		3.9	NEMA 5-15P		DIV 16			1	
K-9	AIR SCREEN - SALAD GREENS	120	1	3/4		13.0	NEMA L14-20		DIV 16			1	
K-10	AIR SCREEN - BEVERAGES	120	1	3/4		13.0	NEMA L14-20		DIV 16			1	
K-11A	SOFT SERVE MACHINE	208	3	1.5		19.0		25A	DIV 16			1	LEFT AIR COOLED
K-11B	SOFT SERVE MACHINE	208	3	1.5		15.0		20A	DIV 16			1	RIGHT AIR COOLED
K-12	ICE MAKER	120	1			9.7		20A	DIV 16			1	
K-13	TWO DOOR REFRIGERATORS	120	1			9.0	NEMA 5-15P	15A	DIV 16			2	
K-14	TWO DOOR REACH-IN FREEZER	120	1			11.0	NEMA 5-20P	15A	DIV 16			1	

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Contact: Paris LeLaCheur
Project #: 2010-117.00

UNIVERSITY OF UTAH

STUDENT LIFE CENTER

1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO: 2010562.00

DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME

ELECTRICAL SCHEDULES

BID DOCUMENTS
May 15, 2013

SHEET NUMBER

EP609

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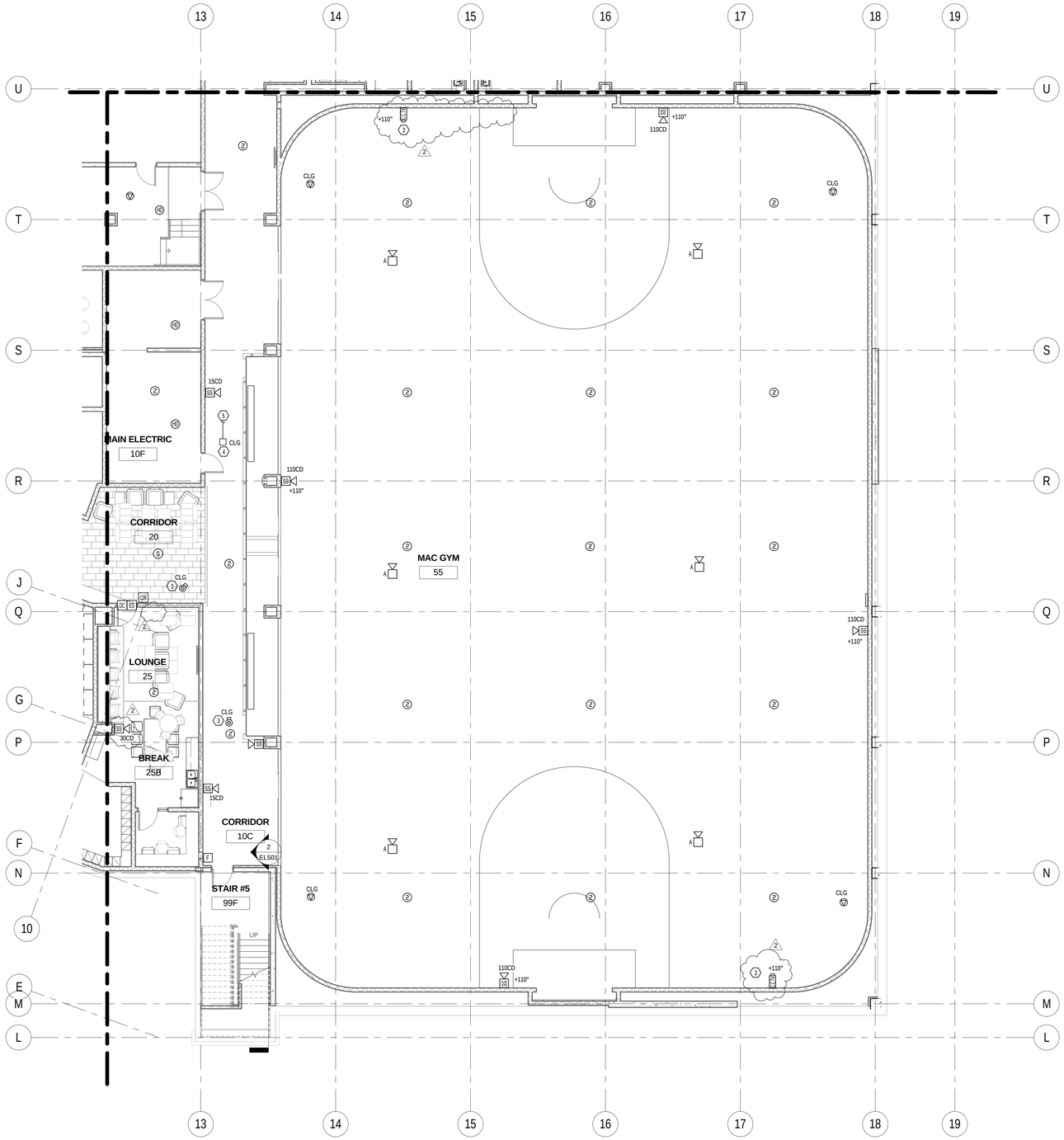
KEYED NOTES - SHEET EY100.B

1. PROVIDE FINAL ELECTRICAL CONNECTION TO ELECTRONIC SCORE BOARD PER MANUFACTURERS REQUIREMENTS.
2. INSTALL THE WIRELESS ACCESS POINT AND THE GUARD ON THE WALL. CHOOSE THE WIRE GUARD TO FIT.
3. DIV. 26 TO PULL CONDUIT ONLY TO LOCATION OF CCTV CAMERA AND PROVIDE JUNCTION BOX AND PULLSTRING CAMERA AND WIRE BY OTHERS.
4. PROVIDE A 12"x12"x8" PULLBOX IN CEILING. LABEL BOX FOR USE AS FIRST RESPONDER ANTENNA BOOST.
5. 1" CONDUIT BACK TO MDF ROOM. ROUTE THROUGH ACCESSIBLE CEILING. PROVIDE GROMMET AT CONDUIT STUB-OUT IN MDF ROOM.

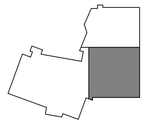
GENERAL NOTES - SHEET EY100.B

A. ALL FIRE ALARM CONDUIT COUPLINGS AND JUNCTION BOX COVERS ARE TO BE RED.
B. ALL BACKBOXES FOR SPEAKER-STROBE DEVICES MUST BE DEEP OR EXTRA DEEP.
C. SPEAKER CIRCUITS AND ADDRESSABLE LOOPS SHALL BE INSTALLED IN SEPARATE RACEWAYS. SPEAKER CIRCUIT AND STROBE CIRCUIT MAY BE RUN IN THE SAME RACEWAY.
D. CONTRACTOR IS TO PROVIDE COMPLETE CONDUIT HOMERUNS WITH PULLSTRINGS FOR ALL LOW VOLTAGE SYSTEMS INCLUDING SECURITY, AUDIO/VISUAL, TELECOMMUNICATIONS, FIRE ALARM, ETC.
E. ALL WALL-MOUNTED FIRE ALARM AND SECURITY DEVICES IN GYMS SHALL BE PROVIDED WITH WIREGUARDS FOR PROTECTION.



1 EY100.B B ENLARGED LOWER LEVEL SYSTEMS PLAN SOUTH
SCALE | 1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"



KEYPLAN

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Project #: 2010-117.00

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STUDENT LIFE CENTER
1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00

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CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LOWER LEVEL SYSTEMS PLAN AREA B
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EY100.B

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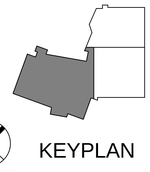
KEYED NOTES - SHEET EY100.C

1. DIV. 26 TO PULL CONDUIT ONLY TO LOCATION OF CCTV CAMERA AND PROVIDE JUNCTION BOX AND PULLSTRING CAMERA AND WIRE BY OTHERS.
2. PROVIDE A 12"x12"x8" PULLBOX IN CEILING. LABEL BOX FOR USE AS FIRST RESPONDER ANTENNA BOOST.
3. 1" CONDUIT BACK TO MDF ROOM. ROUTE THROUGH ACCESSIBLE CEILING. PROVIDE GROMMET AT CONDUIT STUB-OUT IN MDF ROOM.
4. PROVIDE CONDUIT AND J-BOXES FOR FUTURE ADA ACCESS. STUB CONDUIT INTO ACCESSIBLE CEILING SPACE. PROVIDE A STAINLESS STEEL BLANK COVER PLATE FOR J-BOXES.

GENERAL NOTES - SHEET EY100.C

A. ALL FIRE ALARM CONDUIT COUPLINGS AND JUNCTION BOX COVERS ARE TO BE RED.
B. ALL BACKBOXES FOR SPEAKER-STROBE DEVICES MUST BE DEEP OR EXTRA DEEP.
C. SPEAKER CIRCUITS AND ADDRESSABLE LOOPS SHALL BE INSTALLED IN SEPARATE RACEWAYS. SPEAKER CIRCUIT AND STROBE CIRCUIT MAY BE RUN IN THE SAME RACEWAY.
D. CONTRACTOR IS TO PROVIDE COMPLETE CONDUIT HOMERUNS WITH PULLSTRINGS FOR ALL LOW VOLTAGE SYSTEMS INCLUDING SECURITY, AUDIOVISUAL, TELECOMMUNICATIONS, FIRE ALARM, ETC.



KEYPLAN

C ENLARGED LOWER LEVEL SYSTEMS PLAN WEST

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EY100.C SCALE |1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"

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Project #: 2010-117.00

UNIVERSITY OF UTAH

STUDENT LIFE CENTER

1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00

DRAWN BY: KGE CHECKED BY: KGE

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NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME

LOWER LEVEL SYSTEMS PLAN AREA C

BID DOCUMENTS

May 15, 2013

SHEET NUMBER

EY100.C

KEYED NOTES - SHEET EY102.C

1. DIV. 26 TO PULL CONDUIT ONLY TO LOCATION OF CCTV CAMERA AND PROVIDE JUNCTION BOX AND PULLSTRING CAMERA AND WIRE BY OTHERS.
2. PROVIDE A 12"x12"x8" PULLBOX IN CEILING. LABEL BOX FOR USE AS FIRST RESPONDER ANTENNA BOOST.
3. 1" CONDUIT BACK TO MDF ROOM. ROUTE THROUGH ACCESSIBLE CEILING. PROVIDE GROMMET AT CONDUIT STUB-OUT IN IDF ROOM.

GENERAL NOTES - SHEET EY102.C

A. ALL FIRE ALARM CONDUIT COUPLINGS AND JUNCTION BOX COVERS ARE TO BE RED.
B. ALL BACKBOXES FOR SPEAKER-STROBE DEVICES MUST BE DEEP OR EXTRA DEEP.
C. SPEAKER CIRCUITS AND ADDRESSABLE LOOPS SHALL BE INSTALLED IN SEPARATE RACEWAYS. SPEAKER CIRCUIT AND STROBE CIRCUIT MAY BE RUN IN THE SAME RACEWAY.
D. CONTRACTOR IS TO PROVIDE COMPLETE CONDUIT HOMERUNS WITH PULLSTRINGS FOR ALL LOW VOLTAGE SYSTEMS INCLUDING SECURITY, AUDIOVISUAL, TELECOMMUNICATIONS, FIRE ALARM, ETC.
E. ALL WALL-MOUNTED FIRE ALARM AND SECURITY DEVICES IN GYMS SHALL BE PROVIDED WITH CAGES FOR PROTECTION.
F. ALL WALL MOUNTED FIRE ALARM AND SECURITY DEVICES IN GYMS SHALL BE PROVIDED WITH WIRE GUARDS FOR PROTECTION.

1 EY102.C C ENLARGED LEVEL 2 SYSTEMS PLAN WEST
SCALE |1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"

KEYPLAN

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MHTN PROJECT NO. 2010562.00

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CONTRACTOR TO VERIFY DRAWINGS IN FIELD-USE REFLECT LAST REVISION DATE:

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME
LEVEL 2
SYSTEMS PLAN
AREA C
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EY102.C

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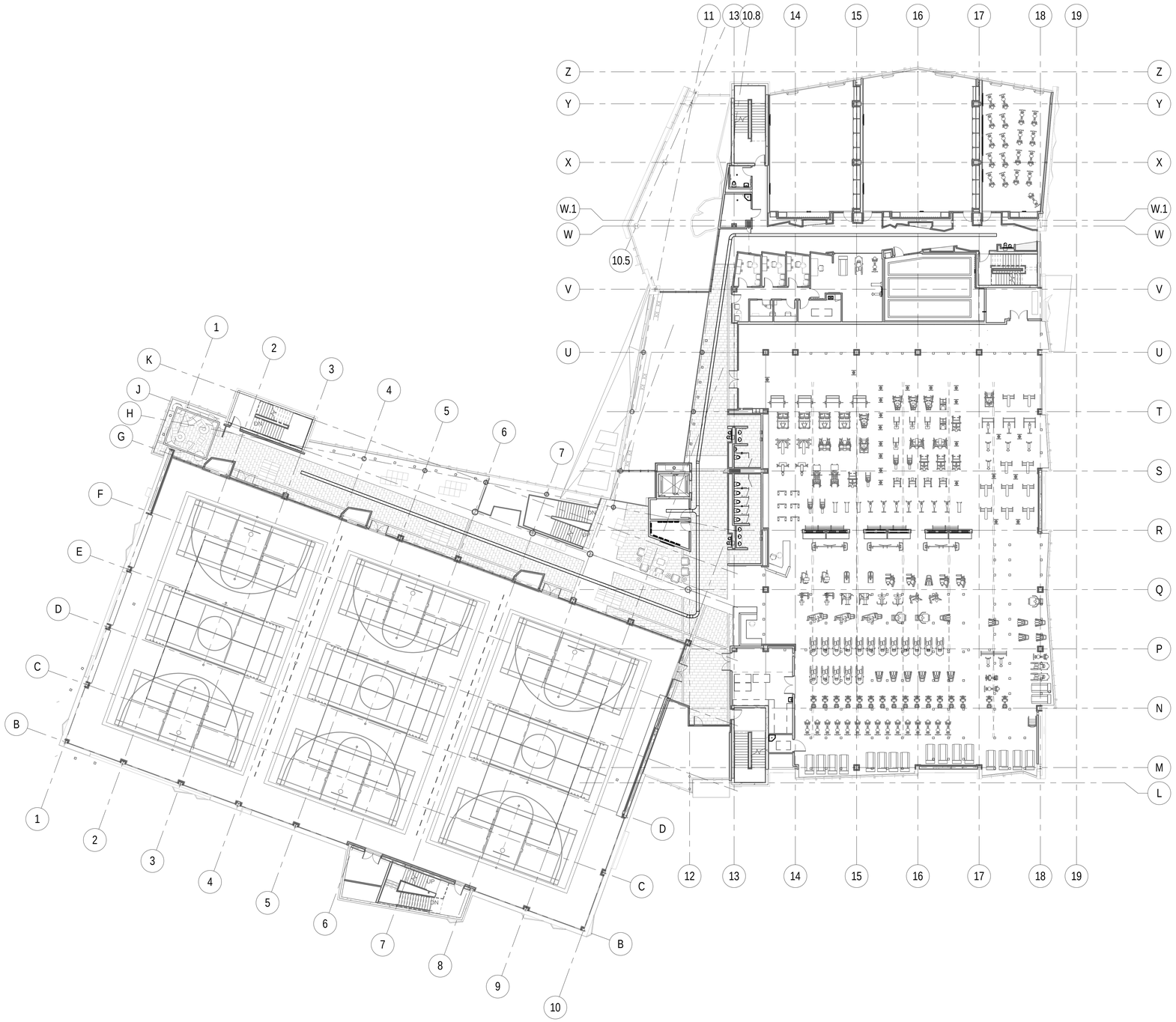
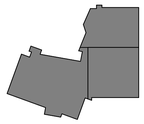


1 EY302 LEVEL 2 CABLETRAY PLAN
SCALE | 1/16" = 1'-0"



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MHTN PROJECT NO. 2010562.00

DRAWN BY: Author CHECKED BY: Checker

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
1	05-28-2013	ADDENDUM ONE

SHEET NAME
LEVEL 2 CABLETRAY PLAN
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EY302

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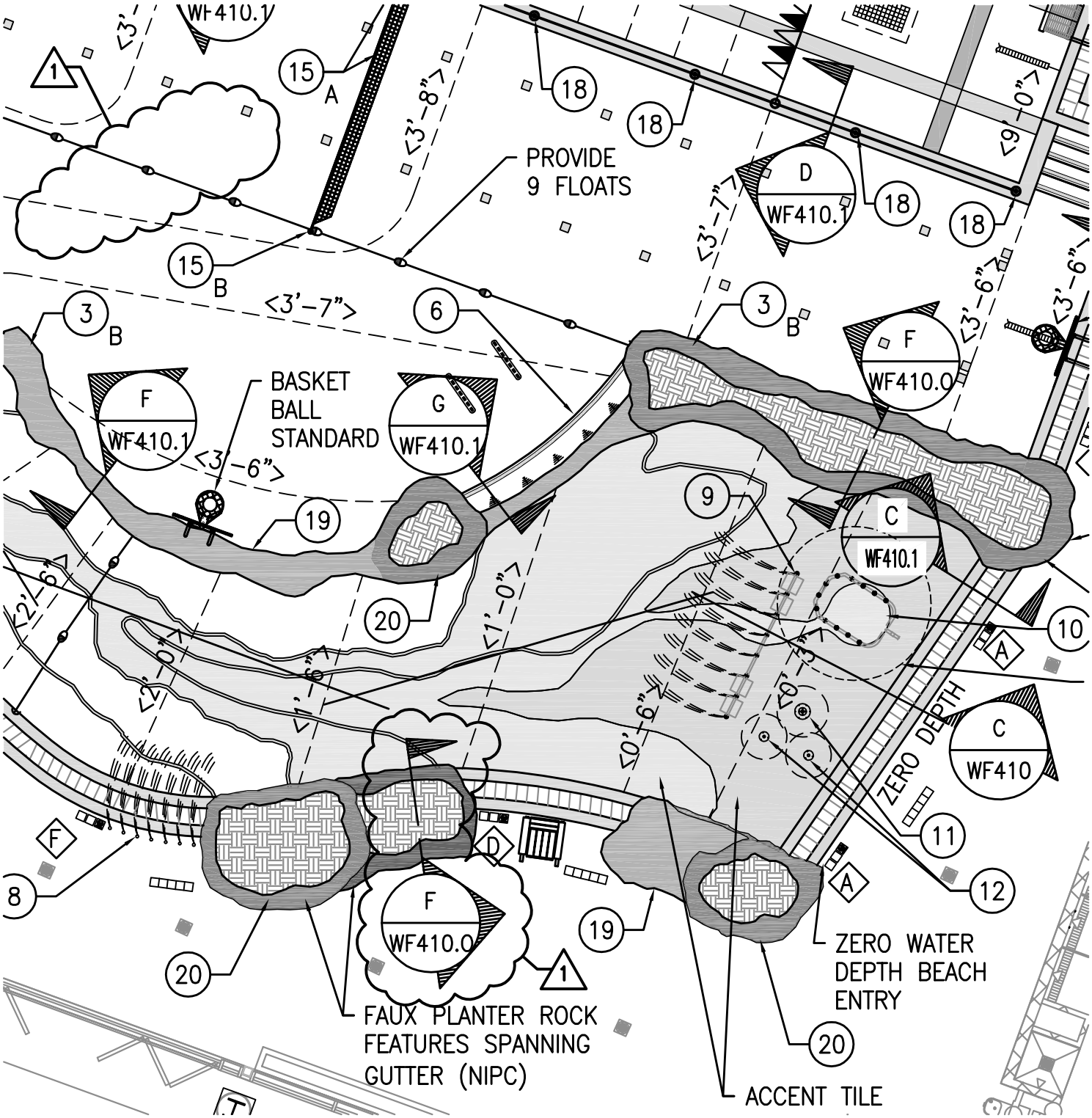

ENLARGED ACTIVITY POOL PLAN

SCALE: 1/8" = 1'-0"

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UNIVERSITY OF UTAH
STUDENT LIFE CENTER

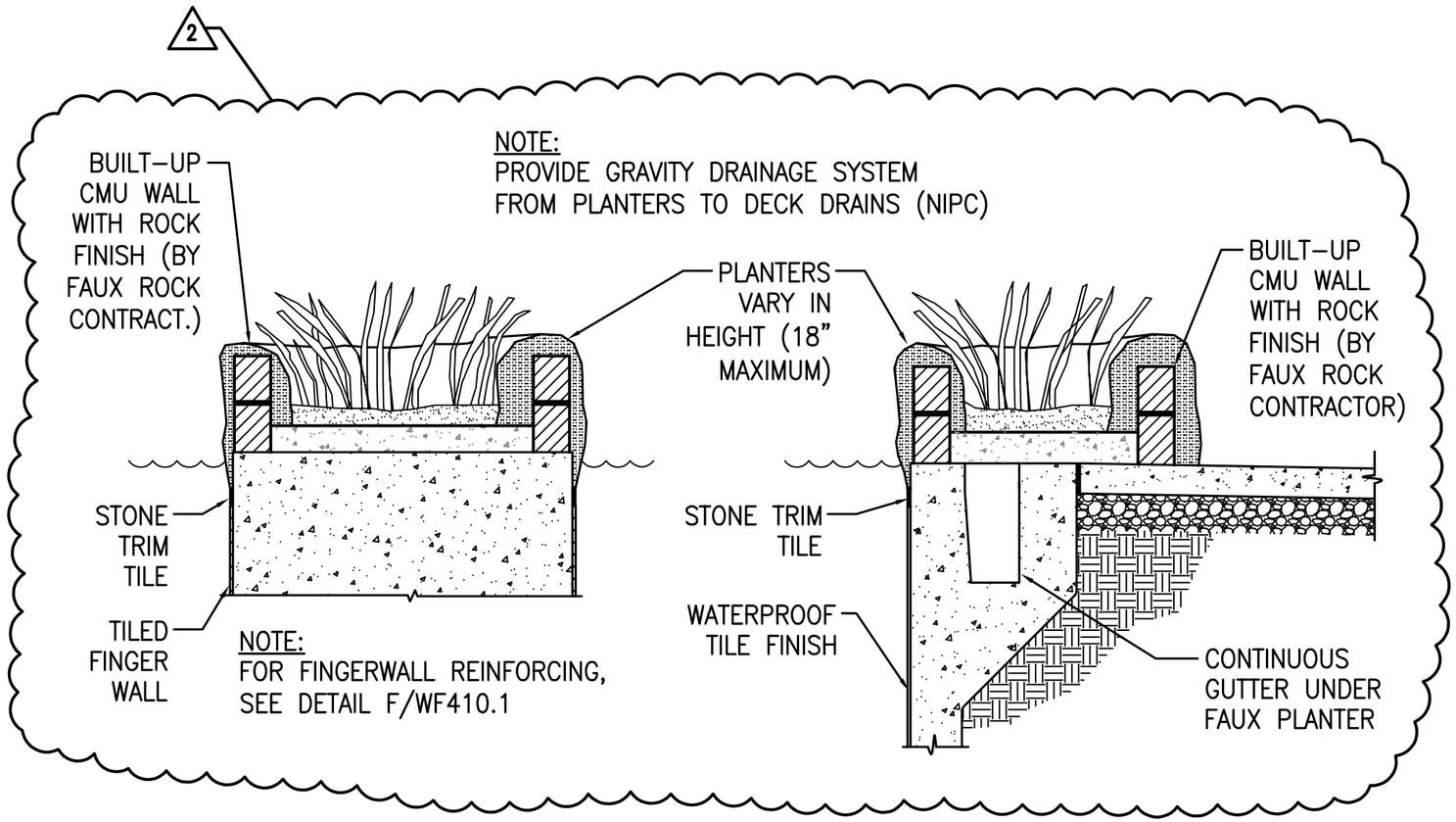
PROJECT NO. 2010562

DATE: June 11, 2013

Water Design Inc.
5047 S. Galleria Dr.
Murray, Utah 84123

SHEET NUMBER
AD03-WF01

SHEET REFERENCE
WF400.0



FAUX ROCK / PLANTER SECTION

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

F
WF410

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STUDENT LIFE CENTER

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PROJECT NO. 2010562

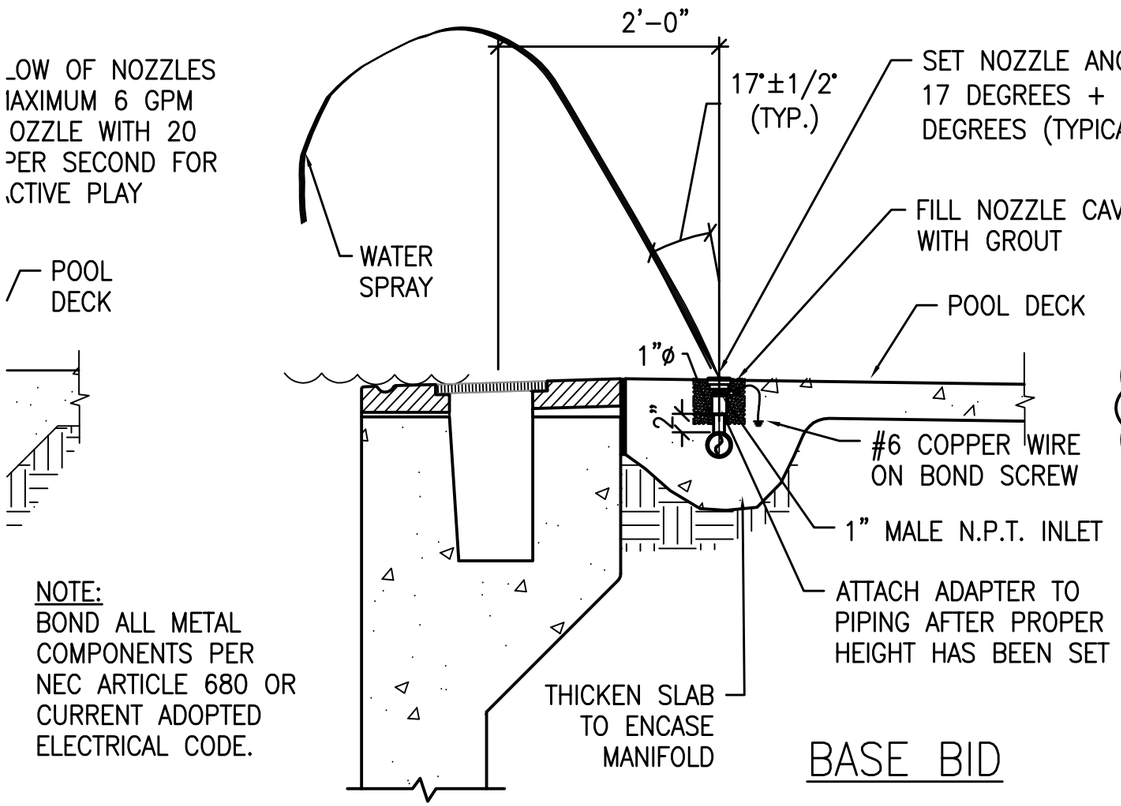
DATE: JUNE 11, 2013

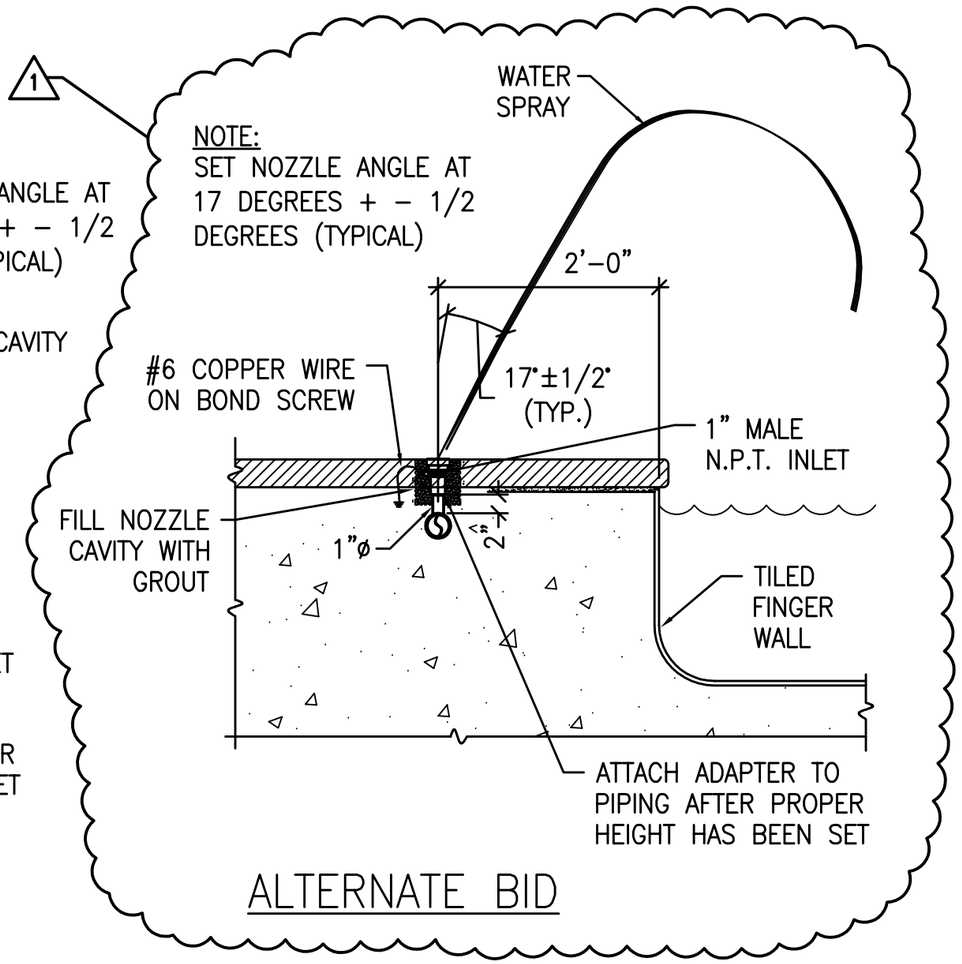
SHEET REFERENCE

WF410.0

SHEET NUMBER

AD03-WF02





ANGLED DECK SPRAY DETAIL

SCALE: 3/4" = 1'-0"

6
WF505

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PROJECT NO. 2010562
DATE: JUNE 11, 2013

SHEET REFERENCE
WF505

SHEET NUMBER
AD03-WF03

MHTN ARCHITECTS

Addendum No. 4 Issued: 06/13/13

Addendum No. Four
for the
Student Life Center
Bid Package
MHTN Project No. 2010562

All Contractors submitting proposals on the above captioned project shall be governed by the following addendum, changes and explanations to the bidding documents dated May 15, 2013 and shall submit their bids in accordance therewith:

Changes to the Project Manual:

A4.01 Section 015639 – TEMPORARY TREE AND PLANT PROTECTION. This section is reissued as an attachment to this addendum.

A4.02 Section 033000 – CAST-IN-PLACE CONCRETE. Cast-in-place concrete coping may be provided in lieu of pre-cast concrete coping, for the skimmer pools and finger walls, with the following provisions:

1. The coping edge profile design must match the pre-cast stone edge profile.
2. The color, finish, and joint scoring of the cast-in-place coping needs to be selected and approved by the Architect/Consultant.
3. Contractor to provide shop drawings showing proposed reinforced coping detail for approval.
4. The pool contractor is required to provide a mock-up for review and approval prior to placing concrete, per the requirements of the specifications.
5. A mock-up of the pre-cast gutter stones (front stone and back stone) must also be provided for review and approval, per the requirements of the specifications

A4.03 Section 042000 – UNIT MASONRY ASSEMBLIES. Make the following correction:

1. Add Paragraph 3.4.C.1: Corners at 4-inch CMU should use L-shaped CMU with 8-inch leg and 16-inch scored leg to continue the appearance of 8-inch stock bond.

2. Revise Paragraph 3.4.G. to read: "Fill scored joint in all scored units to match end joints between units.

3. Revise Paragraph 3.5.A. to read: "Tool all exposed scored CMU unit joints with a V-groove tool."

A4.04 Section 051200 – STRUCTURAL STEEL FRAMING. Note the following:

1. Change the wording of Paragraph 1.2.S.5 to read: "See Division 07 and Division 09 Sections for surface preparation and priming requirements for high performance coatings and intumescent protective coatings."

2. Delete Paragraph 1.5.B. The installer is not required to be AISC-Certified.

A4.05 Section 068000 – COMPOSITE FABRICATIONS. Make the following correction:

1. Paragraph 2.2.C.7. Mounting Hardware Basis-of-Design (for Credit Union Offices Epoxy Resin Doors) is Carvart Sliding tech V-3000 (rather than V-300).

A4.06 Section 071413 – HOT-FLUID-APPLIED WATERPROOFING. Make the following revisions:

1. Paragraph 1.8.A.3: Change the warranty period to 15 years after date of Substantial Completion.
2. Paragraph 3.16.C: Add a 48 hour flood test to the testing requirements.

A4.07 Section 074243 – COMPOSITE METAL WALL SYSTEMS. Make the following revisions:

1. Paragraph 2.1.A.1 Add Citadel as an approved manufacturer of Composite Aluminum Wall Panel Systems, for the Citadel Envelope 2000 RS system.

2. Paragraph 2.2.B.1 Add Citadel as an approved manufacturer of Aluminum Composite Material.

3. Paragraph 2.1.A.1 Add Noorda Architectural Metals Inc. as an approved manufacturer of Composite Aluminum Wall Panel Systems, for the NRS 2000 Pressure Equalized Rainscreen Panel System. The system backing must be per the specifications (no plywood).

A4.08 Section 075419 – SINGLE-PLY MEMBRANE ROOFING. Make the following revisions:

1. Paragraph 1.2.A.5 Change the warranty period to 30 years.

2. Provide and install a metal Warranty Sign at all roof access points inside a building (i.e. adjacent to the roof hatch ladder). Sign to be minimum 20 gauge thickness; maximum dimensions 14" wide x 10" high; with rounded corners and without sharp protrusions or edges. Provide vinyl lettering with wording as indicated under Roofing Warranties and History Records on DFCM Design Standards website (http://dfcm.utah.gov/downloads/Roofing/Roof Design Requirements.pdf)

3. FiberTite "KEE" 60 mil XT Membrane is approved as equivalent to the specified PVC roofing system.

A4.09 Section 078123 – INTUMESCENT FIREPROOFING. Add the following Paragraph: "1.2.B.2. Exposed steel structure requiring intumescent fireproofing is indicated on Life Safety Plans."

A4.10 Section 083326 – OVERHEAD COILING GRILLES. This Section is issued as an attachment to this addendum.

A4.11 Section 084111 – FOLDING GLASS DOOR. Make the following revisions:

1. Revise Paragraph 2.02.B 1. to read "Triple- pane safety glazing with low-E coating to glazing of adjacent curtainwall."

2. Add Panda Windows to the list of acceptable manufacturers. Product is Panda Bifold Exterior Door. Triple glazed units shall be provided in door as indicated in drawings and specifications.

A4.12 Section 084413 – GLAZED ALUMINUM CURTAIN WALLS. Note the following clarifications:

1. Delete Paragraph 1.3.L Average Thermal Conductance.

2. Revise Paragraph 1.3.N.1 Thermal Conductance to read: Provide aluminum-framed systems with U-factors tested in accordance with NFRC 100 by an accredited independent laboratory, and labeled and certified by the Manufacturer / Installer. Provide aluminum-framed systems with fixed glazing and framing areas having average U-factors as noted below when tested according to NFRC 100:

    a. Triple-Pane Glazing: Not more than 0.23 Btu/sq. ft. x h x deg F.
    b. Double-Pane Glazing: Not more than 0.31 Btu/sq. ft. x h x deg F.

A4.13 Section 086300 – METAL-FRAMED SKYLIGHTS. Paragraph 2.1.A – add the following to the list of acceptable manufacturers:

1. Acurlite Structural Skylights, Inc.
2. Aladdin Industries Skylights.

A4.14 Section 087100 – DOOR HARDWARE. Note the following:

1. Add Assa Abloy Pemko to the list of approved manufacturers for continuous geared hinges.

2. Add Assa Abloy Norton 6000 Series Low Energy Power Operator to the list of approved manufacturers / products for door operators / ADA special closers.

3. Assa Abloy Sargent 8200 Series full mortise locksets with large format cylinders are approved as an equivalent manufacturer / product to those specified.

A4.15 Section 087102 – HARDWARE SCHEDULE. This Section is reissued as an attachment to this addendum.

A4.16 Section 088900 – STRUCTURAL GLAZED CANOPIES. Paragraph 2.1.A. – add Paragon to the list of acceptable manufacturers. Product is 2-layer lamination with acid-etched glass on one side.

A4.17 Section 093000 – TILING. Make the following revisions:

1. Basis-of-Design tile products are noted in the Color & Material Legend in the drawings. Additional manufacturers that may bid are listed below, subject to compliance with requirements and Basis-of-Design product quality level, size, shape, and finish.

    A. Porcelain Tile – Large Dimension, Mosaic, Bullnose and Cove Base. Approved manufacturers include American Olean, Dal Tile and Marazzi.
    B. Ceramic Tile – Unglazed Mosaic Tile. Approved manufacturers include American Olean and Dal Tile.
    C. Stone Tile – Mosaic Stone and Border. Approved manufacturers include Dal Tile, Marazzi and Roca.
    D. Stone Tile – Limestone. Approved manufacturers/suppliers include Dal Tile and Global Granite & Marble.
    E. Glass Tile – Mosaic. Approved manufacturers include American Olean, Dal Tile and Marazzi.

2. Change the wording of Paragraph 2.8.B to the following:

    A. Polymer-Modified Tile Grout: ANSI A118.7.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

   a. Boiardi Products; a QEP company.
   b. Bonsal American; an Oldcastle company.
   c. Bostik, Inc.
   d. C-Cure.
   e. Custom Building Products.
   f. Jamo Inc.
   g. Laticrete International, Inc.
   h. MAPEI Corporation.
   i. Southern Grouts & Mortars, Inc.
   j. Summitville Tiles, Inc.
   k. TEC; a subsidiary of H. B. Fuller Company.

2. Polymer Type: Acrylic resin or styrene-butadiene rubber in liquid-latex form for addition to prepackaged dry-grout mix.

3. Change the wording of Paragraph 2.8.D to the following:

   A. Water-Cleanable Epoxy Grout: ANSI A118.3. for small dimension joints in large dimension floor and wall tiles.

   1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

      a. Atlas Minerals & Chemicals, Inc.
      b. Boiardi Products; a QEP company.
      c. Bonsal American; an Oldcastle company.
      d. Bostik, Inc.
      e. C-Cure.
      f. Custom Building Products.
      g. Jamo Inc.
      h. Laticrete International, Inc.
      i. MAPEI Corporation.
      j. Mer-Kote Products, Inc.
      k. Southern Grouts & Mortars, Inc.
      l. Summitville Tiles, Inc.
      m. TEC; a subsidiary of H. B. Fuller Company.

   2. Provide product capable of withstanding continuous and intermittent exposure to temperatures of up to 140 deg F (60 deg C) and 212 deg F (100 deg C), respectively, and certified by manufacturer for intended use.

A4.18 Section 096556 – RESILIENT ATHLETIC TRACK.

1. Mats Inc.'s ProCourt is an approved alternate to the Basis-of-Design listed under Paragraph 2.2.A.

2. Correction: Change Paragraph 2.2.G. Thickness to 10 mm (rather than 6 mm).

A4.19 Section 096720 – SPECIAL SPORTS FLOORING. Mats Inc. Spectation is an approved alternate to the Basis-of-Design listed under Paragraph 1.2.A.

A4.20 Section 103100 – FIREPLACE. Paragraph 2.2 – make the following revisions:

1. On/Off Control to be located at the Control Desk.
2. Dual pane tempered front glass rather than single pane.
3. 7 gage steel firebox, double welded inside and out.

A4.21 Section 104500 – TURNSTILES. This Section is issued as an attachment to this addendum.

A4.22 Section 116623 – SPORTS EQUIPMENT. Make the following revisions:

1. Add Scoreboards to the Section. Basis-of-Design: Nevco Model 2700. Interior, multi-purpose basketball / volleyball / wrestling electronic scoreboard with two integral horns, LED displays for time, scores, period, bonus, double bonus, and next possession arrows.

    a. Size: 8' wide x 3' high x 8" thick.
    b. Digit Size and Color: 13" / 9" Super Bright Red and Amber.
    c. Approximate Hanging Weight: 71 lbs.
    d. Controls: Wireless.
    e. Scoreboard Quantity: Five.

2. AALCO Manufacturing/SportsCon LLC is an acceptable manufacturer for the following:

    a. Basketball equipment.
    b. Volleyball equipment.
    c. Wall pads.
    d. Gymnasium divider curtains.

3. Add Ballet / Dance Barres to the Section.

    a. BALLET / DANCE BARRES. Provide manufacturer's standard wall-mounted, non-adjustable, double ballet barres complete with 1-3/4" hand sanded oak bars, brackets with chrome plated hardened steel extensions. Verify length requirements on drawings.

        i. Acceptable Product: Distributed by Gibson Athletic, Inc. 800-275-5999.

4. Add Bag Brackets to the Section.

    a. BAG BRACKETS. Provide commercial-grade, heavy-duty, wall-mounted bag brackets. Fabricated of 11-gauge steel; main support frame attached directly to wall with bolts or self-tapping screws and braced by two angle supports, each attached to wall with bolts or self-tapping screws. Bag supported by shaft assembly and heavy-duty gear hook or spring. Capacity for bag weighing 150 lbs. Bag not included.

        i. Acceptable Products:

            ii. TKO Model 522CWM, Commercial Heavy Bag Wall Mount.
            iii. XMark Fitness Series Model XM-2832.

5. Add Wallyball Equipment to the Section.

    a. WALLYBALL EQUIPMENT. Basis-of-Design: HD-WBN Heavy Duty Wallyball Net (Competition). (VolleyballUSA.com)

i. Competition-grade, heavy-duty regulation net with: reinforced top and bottom corners; 2-inch black vinyl tape on top, bottom and side edges; wood-dowel reinforcing at side edges; 1/4-inch Kevlar top and bottom rope; 36-inch width; length as indicated on drawings; side tie straps on top and bottom, permanently attached to net; tension hardware for top and bottom edges; clip-on / clip-off design for fast set-up and take-down; Kevlar net stitching, black color. With hardware for complete installation.

A4.23 Section 116640 – CLIMBING WALL STRUCTURES. AALCO Manufacturing/SportsCon LLC is an acceptable manufacturer for climbing wall structures.

A4.24 Section 129300 – SITE FURNISHINGS. Add Trash Receptacles to Part 2. Basis-of-Design Product: Landscape Forms Plexus II Collection Litter Receptacle; 30 gallon, side opening, 20 inch diameter, 40 inches high, surface mount. Finish: powder-coated metal, color to be selected by Architect from Manufacturer's full range.

A4.25 Section 131811 – MULTI-ACTIVITY COURT DASHER BOARD SYSTEM. This Section is issued as an attachment to this addendum.

A4.26 Section 142100 – ELECTRIC TRACTION ELEVATORS. Clarifications:

1. As noted in Paragraph 2.03.K, counterweight safeties are to be provided only where required by code. Contractor to determine if counterweight safeties are required for this project.

2. Elevators 1 and 2 are the same elevator type (Gen2 gearless machine room-less traction).

3. Elevator 1 is to have a 4'-0" wide opening with side-sliding door.

4. Elevator 2 is to have a 3'-6" wide opening with center-opening door.

5. Elevator 2 is provided only as part of Add Alternate 3. Under Add Alternate 3, Elevator 2 will share the control room of Elevator 1.

6. Paragraph 1.02.R: Revise the paragraph that begins "Duplex Collective Operation…" to: "Simplex Collective Operation: Using a microprocessor-based controller, operation shall be automatic by means of the car and hall buttons. If all calls in the system have been answered, the car shall park at the last landing served."

7. Paragraph 1.02.S: Strike the paragraph that begins "If car selection is changed by Manual Override while…"

8. Delete Paragraph 1.07.D Continuing Maintenance Proposal.

A4.27 Section 238123 – COMPUTER-ROOM AIR CONDITIONERS. This Section is issued as an attachment to this addendum.

A4.28 Section 238219 – FAN-COIL UNITS. Delete this Section from the Project Manual.

A4.29 Section 321445 – AGGREGATE PATHWAYS. This section is issued as an attachment to this addendum.

A4.30 Section 329301 – LANDSCAPE PLANTING. Add the following to Part 2:

1. 2.23. AGGREGATE CRUSHED

A. Aggregate shall be clean washed crushed stone, 1 to 3″ in size. Color to match 'woodland blend' (at the USTAR project) or similar as approved by the University Project Manager.

A4.31 Section 131100 – SPECIAL CONSTRUCTION – SWIMMING POOLS

PART 5 – POOL CIRCULATION EQUIPMENT

5.07 A FILTERS (REGENERATIVE MEDIA)

PART 2 – FILTER SYSTEM

B. FILTER SYSTEM CAPACITY: Shall be revised to read:

1. The filter system shall be capable of filtering each pool at the flow rates as specified on the drawings.

2. Each pool's system shall consist of one Defender filter tank with a total effective filter surface area as specified in the schedules on the pool drawings and operate at a rate of the pool's respective flow rate range divided by the square footage area of the specified filter.

C. FILTER TANKS: Item 1 shall be revised to read:

1. The filter tank shall be the diameter as shown on the pool plans, suitable for 50 psi working pressure and hydrostatically tested to 75 psi. Tank shell shall be not less than 1/4″ thick. Bottom dished head shall be not less than 1/4″ thick. Top flat head shall be not less than 1 1/2″ thick. All material to be Type A-36 carbon steel.

A4.32 SECTION 230594

1. Part 1.5.A. Diamond Test and Balance is added as an approved agent.

A4.33 SECTION 230900 Instrumentation and Control For HVAC

1. Part 1.1.H. is deleted.
2. Part 1.4.A.5. Visio is added for compatible as-built drawings.
3. Part 2.1.B. Is to read: "Johnson Controls, Metasys, Branch Office Only"
4. Part 1.5.A.
5. Part 2.6.A.9. This sentence is deleted.
6. Part 2.6.O.
7. Part 2.13. Is deleted.
8. Part 2.15. Is deleted.
9. Part 2.16. Ebtron is listed as an acceptable manufacturer.
10. Part 2.17. Ebtron is listed as an acceptable manufacturer.

A4.34 SECTION 237424 Custom Air Handling Units with VFD's

1. In part 1.2.4., the following is added: "Each air handler shall be provided with at least the same quantity of fans as specified."
2. In part 2.3.A &B., the casing and insulation is to be 4" instead of 2".
3. In part 2.5.A, the access doors are to be 4", with 4" insulation and a thermal break.
4. In part 2.6.B., The 1500 hour salt test is changed to a 7000 hour salt test.
5. In part 2.7.C, an insulated fan housing silencer is acceptable.
6. In part 2.7., the following is added as note I: "A hoist beam is to be factory installed in the fan section to allow for a portable hoist to be connected to remove motors."

7. In part 2.21.D., the sentence is changed to read: "Provide and Install a 12,000 BTUH unit heater and thermostat. Unit heater to be hydronic."
8. Part 2.22 is added which states:

DIRECT EVAPORATIVE COOLER

Evaporative coolers shall be of heavy-duty construction, and be designed for industrial application. Evaporative media is fabricated from large glass fibers impregnated with insoluble rigidifying saturants in a cross-fluted design. Cooler shall be of a self cleaning design. Media shall meet or exceed the required capacity and be at least as thick as listed on the mechanical equipment schedule. Cooler housing shall be constructed of 16 gauge 304 stainless steel. Sump shall be constructed from 10 gauge 304 stainless steel welded watertight at the corners. Dual distribution header shall be provided for media depths that exceed 12 inches. The distribution header shall be fabricated from PVC pipe. The distribution supply piping and flush out line piping shall be PVC. Make up line and level controls shall consist of a brass float valve, copper float, steel drain and overflow connections, water makeup, and fast fill connection. The copper bleed line shall be furnished with an adjustable ball valve. Coolers shall be furnished with a submersible pump. All connections shall be piped to the exterior. The pump shall be located outside of the air handler.

A4.35 SECTION 238123 Computer Room Units

1. This section is issued in its entirety.

A4.36 SECTION 238219 Fan Coil Units

1. This section is deleted.

A4.37 SECTION 26 51 00 – LIGHTING

1. PRIOR APPROVAL TO BID

The following manufacturers are prior approved to bid the project. All manufacturers must bid an equal to that specified, as determined by the Engineer. Products approved, but later proving not to be equal, may be disqualified at a later date, and the contractor shall then supply the original specified products. Products not listed did not meet the prior approval deadline, or are not considered equal to those specified.

Type	Manufacturer		
A		N3	PAL
A1		N4	PAL
A2		N5	PAL
A3		N6	PAL
B6	H.E. Williams, Columbia	O	
C	Exitronix, WAC	P1	Cree, Visa
D2	H.E. Williams, Prescolite	P2	Exitronix
D5	H.E. Williams, Columbia	P3	SSL
D6	Vantage Luminaires, Prescolite	Q	Exitronix, Visa
E	Time square	R	Cree
E1	Time square	S	Premier, Hubbell
E2	Time square	SE	Premier, Hubbell
F2	Time square	S4	Spaulding
F4	H.E. Williams, Columbia	S5	Beacon
G	Paramount, Columbia	T	Time square
H	H.E. Williams	U	H.E. Williams, Columbia
I		UE	H.E. Williams, Columbia
J	Duraguard, Hubbell	UB	Time square
K	Lutron, New star	US	Time square

K1	Day-o-light, Axis	U1	Time square
K2	Day-o-light, Columbia	V	H.E. Williams
L	Visa	W	Vantage Luminaires
M2	H.E. Williams	W1	Visa
M3	Cree	W2	Lumini, Visa
M4	H.E. Williams, Prescolite	X1	Exitronix
		X2	Exitronix

A4.38 SECTION 26 32 00 – GENERATORS
1. MTU Onsite Energy

A4.39 SECTION 26 36 23 – AUTO TRANSFER
1. MTU Onsite Energy

A4.40 SECTION 26 43 00 – SURGE PROTECTIVE DEVICES
2. Advanced Protection Technologies, Inc
3. Siemens SPD

A4.41 SECTION 27 06 40 – IR CLASSROOM SOUND AMPLIFICATION SYSTEM
1. General Communications

A4.42 SECTION 27 41 16 – INTEGRATED AUDIO-VIDEO SYSTEMS AND EQUIPMENT
1. General Communications

A4.43 SECTION 27 51 00 – MATV
1. General Communications

A4.44 SECTION 27 53 13 – WIRELESS CLOCK SYSTEM
1. General Communications

A4.45 SECTION 28 23 00 – CCTV
1. General Communications
2. PST (Professional Systems Technology)

Changes to the Drawings:

GENERAL

A4.46 SHEET GI002.1:
1. Added deferred submittal schedule to sheet. See sketch AD04-A005.

A4.47 SHEETS AE001, AE010, AE011, AE012, AE013, AE014, AE015, AE016:
1. Add general note 8.

"8. ALL EXPOSED STEEL SHALL BE FIRE PROTECTED WITH INTUMESCENT PAINT UNLESS SPECIFICALLY NOTED BY KEYNOTE #6. REFER TO FLOOR PLANS, REFLECTED CEILING PLANS, INTERIOR ELEVATIONS AND SECTIONS FOR LOCATIONS OF STEEL EXPOSED TO VIEW."

CIVIL

A4.48 SHEET CU302 AND CU302a
1. See supplemental drawing AD04-C1.0

STRUCTURE

A4.49 Sheet SB602:

1. In the masonry wall schedule add a note to solid grout wall mark MW-1.

ARCHITECTURAL

A4.50 SHEET AS501

1. Detail D2 – delete reference to detail 12/A107. Stainless steel plate at top shall be 3/8" x 2-1/2" SS. Recess below plate shall be constructed of .12 g 3/8" x 2" SS tube (tack weld to post below at all 4 corners). Below recess top of post shall have a top stainless steel closure plate welded to post and ground smooth.
2. Detail D3 – revise reference 8/A107 to D2/AS501.

A4.51 Sheet AE101B

1. Revise note: "DOORS BY BLEACHER MFG. (TYP.)" to "DOORS BY DASHER BOARD MFG. (TYP.)" AD04-AE003

A4.52 Sheet AC110 REISSUE SHEET

1. Graphic clarification – removed lights and acoustical panels from RCP

A4.53 Sheet AC111 REISSUE SHEET

1. Graphic clarification – removed lights and acoustical panels from RCP

A4.54 Sheet AF100A, AF104

1. Add note: WATERLINE TILE TO BE ST-12.

A4.55 Sheet AE431 C1

1. Revise note: "ADA BENCH" to "ADA BENCH - QTZ-75". AD04-AE002

A4.56 Sheet AE448 REISSUE SHEET

1. C2- revise drawings to show correct elevation.

A4.57 Sheet AE510 C2

1. Revise note: "BULLNOSE CORNERS (TYP.)" to "4" "L" SHAPED CMU W/ BULLNOSE CORNERS (TYP. @ ALL 4" CMU CORNER CONDITIONS)".

A4.58 Sheet AE552 D4

1. Add standard coat hook detail. AD004-AE001

A4.59 Sheet AE606

1. COLOR & MATERIAL LEGEND
   a. Add: BLINDS – HORIZONTAL (B-H) #115, MFG: LEVOLOR, TYPE/FINISH: RIVERIA, NUMBER: 961, COLOR: BRUSHED SILVER, SIZE: 1"
2. FINISH GENERAL NOTES
   a. Revise note to read: B-H-115 TO BE LOCATED ON OFFICE, WORKROOM, and CONFERENCE ROOM WINDOWS AND SIDELITES.

A4.60 Sheet AE610

1. Remove 60 min rating at doors 40A-2 and 40B
2. Add hardware group numbers:
   a. Door #100D-1 46
   b. Door #100D-2 01
   c. Door #100E 14

d.	Door #100P	42
e.	Door #100Q	42
f.	Door #114	01
g.	Door #115	01
h.	Door #117	01
i.	Door #150-1	46
j.	Door #150-2	01
k.	Door #205-1	46
l.	Door #205-2	01
m.	Door #215-2a	25
n.	Door #215-3a	25
o.	Door #220-1	46
p.	Door #220-2	01
q.	Door #235A	28
r.	Door #240G	30

MECHANICAL

A4.61 SHEET MS301

1. See supplemental drawing AD04-MS001.

A4.62 SHEET MH100B

1. A fire damper has been added to the return air transfer duct at grids J & 10.

A4.63 SHEET MH100C

1. A fire damper has been added to the return air transfer duct serving rooms CHANGING ROOM 25E AND STAFF 25D between grids 9 &10 and F & G.

A4.64 SHEET MH103A

1. Two fire dampers have been added to the supply and return air ductwork that penetrates the wall at the ROCK CLIMBING 75 room.
2. Keyed note #3 has been added. DUCT TO BE LINED FOR 25' FROM AIR HANDLER OPENING. This note is pointed to the 38/174 return air duct penetration at grids U between 15 & 16.

A4.65 SHEET MH103B

1. Keyed note #4 has been added. DUCT MAIN TO BE INSULATED DOUBLE WALL DUCT. This note is pointed at the supply air duct penetration from above and the two 56" round take off duct on either side.

A4.66 SHEET MH103C

1. Keyed note #6 has been added. DUCT MAIN TO BE INSULATED DOUBLE WALL DUCT. This note is pointed at the supply air duct penetration from above and the two 50 and 52"" round take off duct on either side.
2. Keyed note #7 has been added. RETURN DUCT TO BE LINED FOR 15' FROM AIR HANDLER OPENING. This note is pointed to the 70/174 return air duct penetration from above at grids D between D & E.

A4.67 MH401, MH402, MH403, MH404

1. Add the following General Note: "COORDINATE WITH ELECTRICAL LOCATION OF ATC PANEL TO BE INSTALLED IN EACH MECHANICAL ROOM."

A4.68 SHEET MH504

1. Entire sheet re-issued.

A4.69 SHEET MH507

1. See supplemental drawing AD04-MH001, which changes the AH-1 detail.

A4.70 SHEET MH602

1. The following two pumps have been added.

PUMP SCHEDULE

				FLUID			PUMP		ELECTRICAL				
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLOW RATE (GPM)	WORKING FLUID	HEAD LOSS (FT)	EFFICIENCY (%)	ONSTRUCTIO	MOTOR SIZE (HP)	MOTOR BHP (HP)	MOTOR SPEED (RPM)	VOLT/PH/HZ	NOTES
P-72	B & G 4GB	SOUTH CHILLER PLANT	HORIZ FRAME-MOUNT END-SUCTION	670	WATER	120	79.4	IRON	40	25.92	1750	460/3/60	3
P-73	B & G 4GB	SOUTH CHILLER PLANT	HORIZ FRAME-MOUNT END-SUCTION	670	WATER	120	79.4	IRON	40	25.92	1750	460/3/60	3

1. SUCTION DIFFUSER MODEL (SUCTION SIDE): SD050050, NON-GROOVED
2. PUMP ON VFD
3. SUCTION DIFFUSER

2. On the COMPUTER ROOM UNIT SCHEDULE the model number for FC-1 has changed to LIEBERT MMD36E and the following notes have been changed or added.

   4. CEILING MOUNTED WITH COMBINATION SUPPLY/RETURN PLENUM

   5. PROVIDE COMMUNICATION CARD FOR REMOTE MONITORING

   8. 5 YEAR COMPRESSOR WARRANTY

A4.71 SHEET MH604

1. On the plumbing fixture schedule, DD-1 is changed to be: "ZURN MODEL Z880-POG, 3" WIDE TRENCH DRAIN WITH HDPE GRATE, BOTTOM OUTLET, WITH DEEP SEAL P-TRAP. FIELD COORDINATE SECTION LENGTHS."

A4.72 SHEET MH704

1. The two new chilled water pumps P-72 & P-73 have been added to the schematic at the central plant.

A4.73 SHEET PP100A

1. This sheet is re-issued with additional fire protection notes and piping.

A4.74 SHEET PP100B

1. This sheet is re-issued with additional fire protection notes and piping.

A4.75 SHEET PP100C

1. This sheet is re-issued with additional fire protection notes and piping.

A4.76 SHEET PP106

1. At grid G.5 and between grids 0.5 & 0.6 a vent pipe was added to the waste line just before it drops down to the Mechanical room.

A4.77 SHEET PP401

1. Entire sheet re-issued with additional pipe sizes and routing indicated.

A4.78 SHEET PP402

1. Entire sheet re-issued with additional pipe sizes and routing indicated.

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. Additionally, the manufacturer and product must meet the approval of the University, especially when not listed specifically in the University Design Standards.

Item	Manufacturer	Comments
High Temperature Water Converter	JFD Tube and Coil	The approval of this manufacturer is contingent upon University approval after review of additional materials and information as requested by the university, and will need to be approved by campus facilities management prior to being submitted by the contractor

ELECTRICAL

A4.79 Sheets ELxxx Series – All Lighting Plans

1. Change: The photocells shown to dim the common space lighting for day lighting control do not have to tie back to the lighting contactor panels. The photocells may locally control the fixtures in the space.

A4.80 Sheet ES100, ES100A –Site Lighting Plans

1. Delete: Delete all Type S5 fixtures.
2. Delete: Delete Keyed Note 4.
3. Add: Add (1) Type S1 fixture by the southwest stair.

A4.81 Sheet EL100.C – Lower Level Lighting – Area C

1. Add: Control Desk 21; add junction box and a switch to control the LED lighting that is part of the millwork. Circuit to HL11-9. Lighting is provided by others.

A4.82 Sheet EL102.A – Level 2 Lighting – Area A

1. Add: Add fixture callout H to the room adjacent to Exercise Room 4-275.

A4.83 Sheet EL102.B – Level 2 Lighting – Area B

1. Add: Add fixture callout N5 to the room above Mens Toilet 234.

A4.84 Sheet EL200.C2 – Lower Level Lighting Alternate 1

1. Add: Add fixture callout H to Outdoor Storage 40S.
2. Remove: Wall sconce fixtures along Grid B are to be removed from this view.

A4.85 Sheet EL201.B – Alternate 3 Lighting – Area B

1. Add: Add fixture callout M2 to Level 2 Elevator Lobby.

A4.86 Sheet ES100.5 – Enlarged Electrical Tunnel Plan

1. Add: Lighting fixtures in tunnel shall be type 'Z'.
2. Clarification: Tunnel cable tray ends at building foundation. Provide (4) 4" conduit from cable tray to stub up into main MDF room in lower level. See sheet EP501 for stub locations. (1) 4"C shall be innerduct and (3) for communication.

A4.87 Sheet EP100.C – Lower Level Power Plan – Area C

1. Add: add J-box on west wall of Changing Room 40D south of sink for power to electric hand dryer. Provide a 20A circuit to panel 'LLP1'. Coordinate location with architectural drawings.
2. Add: add J-box on shower wall south of sink for in Changing Room 40C for power to electric hand dryer. Provide a 20A circuit to Panel 'LLP1'. Coordinate location with architectural drawings.

A4.88 Sheet EP104.A – Roof Power Plan – Area A

1. Clarification: CP-7 and CP-8 are located in AH-7 and AH-8 respectively. Circuit both to LRP1-7 and provide a 20A breaker.

A4.89 Sheet EP104.B – Roof Power Plan – Area B

1. Clarification: CP-6 is located in AH-6. Circuit to LRP1-9 and provide a 20A breaker.

A4.90 Sheet EP104.C – Roof Power Plan – Area C

2. Clarification: CP-5 is located in AH-5. Circuit to LRP1-9 and provide a 20A breaker.

A4.91 Sheet EP501 – Enlarged Electrical and Data Rooms

1. Clarification: Renamed panel. EPL1 circuit designations shall be circuited to ELLP1.
2. Clarification: Renamed panel. EP11 circuit designations shall be circuited to EL1P1.
3. Clarification: Renamed panel. EP21 circuit designations shall be circuited to EL2P1.
4. Clarification: Renamed panel. EP31 circuit designations shall be circuited to EL3P1.
5. Clarification: Medium Voltage Switch is 15KV not 5KV

A4.92 Sheet EP502 – Enlarged Lower Level Rooms

1. Clarification: Circuit AH-9 supply fan redundant VFD to HLM2-32,34,36.
2. Clarification: Circuit AH-9 relief fan redundant VFD to HLM2-31,33,35.
3. Clarification: CP-1, CP-2 and CP-9 are located in AH-1, AH-2 and AH-9 respectively. Circuit all 3 to LLP5-7 and provide a 20A breaker.
4. Clarification: Circuit EC-1 to LLP5-9

A4.93 Sheet EP503 – Power plans enlarged views

1. Clarification: CP-3, CP-4 are located in AH-3 and AH-4 respectively. Circuit both to L1P3-9 and provide a 20A breaker.

A4.94 Sheet EP600 – Oneline Diagram – 480V

1. Add: Feeder to HLM1 shall be 400D.
2. Add: Feeder from HLM1 to 'T1' shall be 125D.
3. Add: Feeder from 'T1' to LLP4 shall be 225C.

4. Add: Feeder from HLM4 to 'T2' shall be 125D.
5. Add: Feeder from 'T2' to LLP6 shall be 225D.

A4.95 Sheet EP603 – Panel Schedules

1. Change: Circuit names clarified on panel HLM3.

A4.96 Sheets EY Series – System Plans

1. Clarification: The CCTV system is to be provided and installed by the bidding contractor. The bidding contractor is to provide and install all devices, cable, raceway, etc. for a complete operating system.
2. Clarification: The fire alarm installer is to provide monitoring for each fire extinguisher location. Refer to detail 2/EY703. Refer to architectural plans for accurate locations for extinguisher cabinets.

A4.97 Sheet EY201.B – Lower Level Systems Plan Area B Alternate 3

1. Clarification: Change Speaker symbol on detail 3 outside elevator to a smoke detector symbol

A4.98 Sheet EY200.C1 – Lower Level Systems Plan Alternate 1

1. Clarification: clarified layout of speaker strobes and their candela ratings.
2. Add: Speakers 'Type A' in pool area
3. Add: Keyed note #1 – see attached sheet.

A4.99 Sheet EY200.C2 – Lower Level Systems Plan Alternate 1

1. Clarification: clarified layout of speaker strobes and their candela ratings.
2. Add: Smoke detectors to womens restroom area.
3. Add: Wireless transmitter to womens restroom area.

POOL

A4.100 Sheet WF101.0 First Floor Pool Chemical Room Plan:

1. Activity Pool Chemical Feed Equipment Schedule –Item 9A: CO2 Bulk storage vessel shall be a CHART Carbomizer-450.

A4.101 Sheet WF400.0 Activity Pool Plan:

1. Activity Pool Deck Equipment Schedule –Item 4: Descriptions and remarks revised. Waterline tile identified. See attached AD04-WF01.
(REFRERRED TO IN ADDENDUM 3 – INADVERTENTLY NOT INCLUDED)

A4.102 Sheet WF401.0 Activity Pool Plan –Alt 1:

1. Activity Pool Deck Equipment Schedule item: -ADA Lift and Anchor revised. See attached AD04-WF02.

A4.103 Sheet WF402.0 50 Meter Lap Pool Plan –Alt 1:

1. 50 Meter Lap Pool Deck Equipment Schedule item: -ADA Lift and Anchor revised. See attached AD04-WF03.

A4.104 Sheet WF503 Details:

1. ADA Lift Detail – Hydraulic Detail 3: Detail revised. See attached AD04-WF04.

Attachments:

Civil

1. AD04-C1.0
2. AD04-C2.0

Architectural

1. AD04-AE001
2. AD04-AE002
3. AD04-AE003
4. AD04-AE004
5. AD04-AE005
6. AC110
7. AC111
8. AE448

Mechanical

1. MH504
2. MH507
3. MS301
4. PP100A
5. PP100B
6. PP100C
7. PP401
8. PP402
9. Specification Section 238123

Electrical

1. EL100.C
2. EL102.A
3. EL102.B
4. EL200.C1
5. EL200.C2
6. EL201.B
7. EP502
8. EP600
9. EP603
10. ES100.2
11. ES100.5
12. ES500
13. EY200.C1
14. EY200.C2
15. EY201.C

Pool

1. AD04-WF01
2. AD04-WF02
3. AD04-WF03
4. AD04-WF04

End of Addendum No. 4

The Project Team Leader has reviewed this document and found it in compliance with internal standards

Angelica M. Pavoni 6/13/2013

Team Leader Date

SECTION 238123 - COMPUTER-ROOM AIR-CONDITIONERS

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. These specifications describe requirements for a mission critical environmental control system. The system shall be designed to control temperature and humidity conditions in rooms containing electronic equipment, with good insulation and vapor barrier. The manufacturer shall design and furnish all equipment to be fully compatible with the heat dissipation requirements of the room.

1.3 DEFINITION

A. BAS: Building automation system.

1.4 DESIGN REQUIREMENTS

A. The precision environmental control system shall be a Liebert self-contained factory assembled unit. The system shall have a sensible cooling capacity of 33,100 BTU/HR. The unit is to be supplied with 208 volt 1 phase 60 Hz electrical service. Net capacities shall include losses due to fan motor heat. Standard 60 Hz units shall be CSA (NRTL-C) certified.

1.5 PERFORMANCE REQUIREMENTS

A. Seismic Performance: Computer-room air conditioners shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.

1. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified and the unit will be fully operational after the seismic event."

1.6 SUBMITTALS

A. Product Data: For each type of product indicated. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.

B. Shop Drawings: For computer-room air conditioners. Include plans, elevations, sections, details, and attachments to other work.

1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
2. Wiring Diagrams: For power, signal, and control wiring.

C. Color Samples: For unit cabinet, discharge grille, and exterior louver and for each color and texture specified.

D. Coordination Drawings: Plans, elevations, and other details, drawn to scale, using input from Installers of the items involved.

E. Seismic Qualification Certificates: For computer-room air conditioners, accessories, and components, from manufacturer.

1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.

F. Field quality-control reports.

G. Operation and Maintenance Data: For computer-room air conditioners to include in emergency, operation, and maintenance manuals.

H. Warranty: Sample of special warranty.

1.7 QUALITY ASSURANCE

A. 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.

B. ASHRAE Compliance:

1. Fabricate and label refrigeration system to comply with ASHRAE 15, "Safety Standard for Refrigeration Systems."

C. ASHRAE/IESNA Compliance: Applicable requirements in ASHRAE/IESNA 90.1

D. ASME Compliance: Fabricate and label water-cooled condenser shell to comply with ASME Boiler and Pressure Vessel Code: Section VIII, "Pressure Vessels," Division 1.

1.8 COORDINATION

A. Coordinate layout and installation of computer-room air conditioners and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies.

B. Coordinate installation of computer-room air conditioners with computer-room access flooring Installer.

C. Coordinate sizes and locations of concrete bases with actual equipment provided.

D. Coordinate sizes and locations of roof curbs, equipment supports, and roof penetrations with actual equipment provided.

1.9 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of computer-room air conditioners that fail in materials or workmanship within specified warranty period.

1. Warranty Period for Compressors: Manufacturer's standard, but not less than five years from date of Substantial Completion.
2. Warranty Period for Humidifiers: Manufacturer's standard, but not less than three years from date of Substantial Completion.
3. Warranty Period for Control Boards: Manufacturer's standard, but not less than three years from date of Substantial Completion.

1.10 EXTRA MATERIALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Fan Belts: One set(s) for each belt-driven fan.
2. Filters: One set(s) of filters for each unit.

PART 2 - PRODUCTS

2.1 CEILING MOUNTED COOLING UNITS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Data Aire Inc.
2. Liebert Corporation
3. Airflow

B. Description: Packaged, factory assembled, pre-wired, and pre-piped; consisting of cabinet, fans, filters, and controls.

2.2 STANDARD FEATRUES/ALL SYSTEMS

A. Evaporator Cabinet Construction

1. The cabinet and chassis shall be constructed of heavy gauge galvanized steel, and shall be serviceable from one side. Mounting brackets shall be factory-attached to the cabinet. Internal cabinet insulation shall meet ASHRAE 62.1 requirements for Mold Growth, Humidity & Erosion, tested per UL 181 & ASTM 1338 standards.

B. Air Distribution

1. The fan shall be the centrifugal type, double width, double inlet. The shaft shall be heavy-duty steel with self-aligning ball bearings with minimum life of 100,000 hours. The fan motor shall be 1750 rpm (1450 rpm @ 50Hz) and mounted on an adjustable base. The drive package shall be equipped with an adjustable motor pulley. The fan/motor assembly shall be mounted on vibration isolators.
2. The evaporator system shall be capable of delivering ____CFM (CMH) at ___ inches (mm) of external static pressure. The fan motor shall be ____hp (W).
3. System shall be suitable for ducted air distribution.

C. Microprocessor Control

1. The control system shall be microprocessor-based, factory-wired into the system and tested prior to shipment. The wall-mounted control enclosure shall include a 2-line by 16-character LCD providing continuous display of operating status and alarm condition. A 7-key membrane keypad for setpoint/program control and unit On/Off shall be located below the display. The control display shall be field-wired to the control board using 4-conductor field-supplied thermostat wire.
2. Temperature and humidity sensors shall be located in the wall box, which shall be capable of being located up to 300 ft (91.4m) from the evaporator unit.

D. Monitoring

1. The LCD shall provide On/Off indication, operating mode indication (cooling, heating, humidifying, dehumidifying) and current day, time, temperature and humidity (if applicable) indication. The monitoring system shall be capable of relaying unit operating parameters and alarms to the Liebert SiteScan® monitoring system.

E. Control Setpoint Parameters

- Temp. Setpoint 65-85°F (18 to 29°C)
- Temp. Sensitivity 1 to 9.9°F (1 to 5°C)
- Humidity Setpoint 20-80% RH
- Humidity Sensitivity 1-30% RH

F. Unit Controls

1. Compressor Short-Cycle Control
   a. The control system shall prevent compressor short-cycling by a 3 minute timer from compressor stop to the next start.
2. Common Alarm and Remote On/Off
   a. A common alarm relay shall be provided to provide a contact closure to a remote alarm device. Two (2) terminals shall also be provided for remote On/Off control. Individual alarms shall be “enabled” or “disabled” from reporting to the common alarm.
3. Setback Control
   a. The control shall be user configurable to use a manual setpoint control or a programmable time-based setback control. The setback control will be based on a 5

day/2 day program weekly schedule with capability of accepting 2 events per program day.

4. Temperature Calibration
   a. The control shall include the capabilities to calibrate the temperature and humidity sensors and adjust the sensor response delay time from 10 to 90 seconds. The control shall be capable of displaying temperature values in °F or °C.
5. System Auto Restart
   a. For startup after power failure, the system shall provide automatic restart with a programmable (up to 9.9 minutes in 6-second increments) time delay. Programming can be performed either at the wall-mounted controller or from the central site monitoring system.

G. Alarms

1. Unit Alarm
   a. The control system shall monitor unit operation and activate an audible and visual alarm in the event of the following factory preset alarm conditions:
      - High Temperature
      - Low Temperature
      - High Humidity
      - Low Humidity
      - High Water Alarm – Lockout Unit Operation
      - High Head Pressure
      - Loss of Power
      - Compressor Short Cycle
2. Custom Alarms (2x)
   - Humidifier Problem
   - Filter Clog
   - Water Detected
   - Smoke Detected

   User customized text can be entered for the tow (2) custom alarms.
3. Alarm Controls
   a. Each alarm (unit and custom) shall be separately enabled or disabled, selected to activate the common alarm (except for high head pressure).
4. Audible Alarm
   a. The audible alarm shall annunciate any alarm that is enabled by the operator.
5. Common Alarm
   a. A programmable common alarm shall be provided to interface user selected alarms with a remote alarm device.
6. Remote Monitoring
   a. **All alarms shall be communicated to the building automation system with the following information: date and time of occurrence, unit number and present temperature. Status and alarms shall be communicated via a Bacnet card in the unit.**

2.3 DIRECT EXPANSION SYSTEM EVAPORATOR COMPONENTS

A. Direct Expansion Coil

1. The evaporator section shall include evaporator coil, thermostatic expansion valve and filter drier.
2. The evaporator coil shall have 5.6 sq.ft. (0.52 sq.m) face area, four rows deep. It shall be constructed of copper tubes and aluminum fins and have a maximum face velocity of 444 FPM (2.26 m/s) at 2500 CFM (4248 CMH). An externally equalized thermostatic expansion valve shall control refrigerant flow. The evaporator coil shall be factory-charged with R-407C refrigerant and sealed. The evaporator unit can be coupled directly with the condensing unit or mounted remote to the condensing unit.
3. The coil shall be provided with a stainless steel or aluminum drain pan, with an internally trapped drain line.

2.4 OUTDOOR AIR-COOLED PROP FAN CONDENSING UNIT

1. Condensing unit components shall include a condenser coil, a direct-drive propeller-type fan, a scroll compressor, high pressure switch, Liebert Lee-Temp receiver and head pressure control valve, hot gas bypass system and liquid line solenoid valve. A hot gas bypass system shall be provided to reduce compressor cycling and improve operation under low load conditions.
2. All components shall be factory-assembled, charged with R-407C refrigerant and sealed. No internal piping, brazing, dehydration or charging shall be required. Condensing unit shall be designed for 95°F (35°C) ambient and be capable of operation to -30°F (-34.4°C).
3. The condenser coil shall be constructed of copper tubes and aluminum fins.
4. (Option) The condensing unit shall be designed to operate at a sound level less than 58 dBA.
5. (Option) The outdoor condensing unit shall be designed for design ambient operation of 105°F (40.6°C).

2.6 FACTORY-INSTALLED OPTIONS

A. Disconnect Switch, Non-Locking

1. The non-autic, non-locking, molded case circuit breaker shall be factory-mounted in the high-voltage section of the electrical panel. The switch handle shall be accessible from the front of the indoor unit.

B. High Temperature Sensor

1. The high temperature sensor shall immediately shut down the system when high temperatures are detected. The high temperature sensor shall be mounted with the sensing element in the return air.

C. Smoke Sensor

1. The smoke sensor shall immediately shut down the environmental control system and activate the alarm system when activated. The sensing element shall sense the return air conditions. This smoke sensor shall not function or replace any room smoke detector that may be required by local or national codes.

D. Filter Clog Switch

1. The filter clog switch senses pressure drop across the filters and shall annunciate the wall-box display upon reaching the adjustable setpoint.

2.7 SHIP-LOOSE ACCESSORIES

A. Integral Supply/Return Plenum

B. Condensate Pump

1. The condensate pump shall have the capacity of 60 GPH at 20 ft. head. It shall be complete with integral float switch, pump, motor assembly, discharge check valve, duct/wall mountable bracket and reservoir. A secondary float switch shall be provided to permit field wiring to the unit control to shut down the evaporator upon a high water level condition.

C. Condensate Pump Bracket

1. A condensate pump bracket shall be provided to mount condensate pump directly to the end of the unit, allowing for easier installation and alignment of the condensate pump.

D. Refrigerant Line Sweat Adapter Kit

1. Provide a sweat adapter kit to permit field brazing of refrigerant line connections.

E. Single Point Power Kit

1. A single point power kit shall be provided for a close-coupled system to allow a single electrical power feed to supply power to both the evaporator and indoor close-coupled condensing unit.

PART 3 - EXCEUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Examine roughing-in for hydronic piping systems to verify actual locations of piping connections before equipment installation.

C. Examine walls, floors, and roofs for suitable conditions where computer-room air conditioners will be installed.

D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION OF PRECISION COOLING UNITS

A. General: Install precision cooling units in accordance with manufacturer’s installation instructions. Install units plumb and level, firmly anchored in locations indicated, and maintain manufacturer’s recommended clearances.

B. Electrical Wiring: Install and connect electrical devices furnished by manufacturer but not specified to be factory mounted. Furnish copy of manufacturer's electrical connection diagram submittal to electrical contractor.

C. Piping Connections: Install and connect devices furnished by manufacturer but not specified to be factory-mounted. Furnish copy of manufacturer's piping connection diagram submittal to piping contractor.

3.3 FIELD QUALITY CONTROL

A. Start up mainframe coolant units in accordance with manufacturer's startup instructions. Test controls and demonstrate compliance with requirements.

Start up cooling units in accordance with manufacturer's startup instructions. Test controls and demonstrate compliance with requirements. These specifications describe requirements for a computer room environmental control system. The system shall be designed to maintain temperature and humidity conditions in the rooms containing electronic equipment.

The manufacturer shall design and furnish all equipment to be fully compatible with heat dissipation requirements.

B. Supply and Drain Water Piping: Connect water supply and drains to air conditioning unit. Provide pitch and trap as manufacturer's instructions and local codes require.

3.4 ADJUSTING

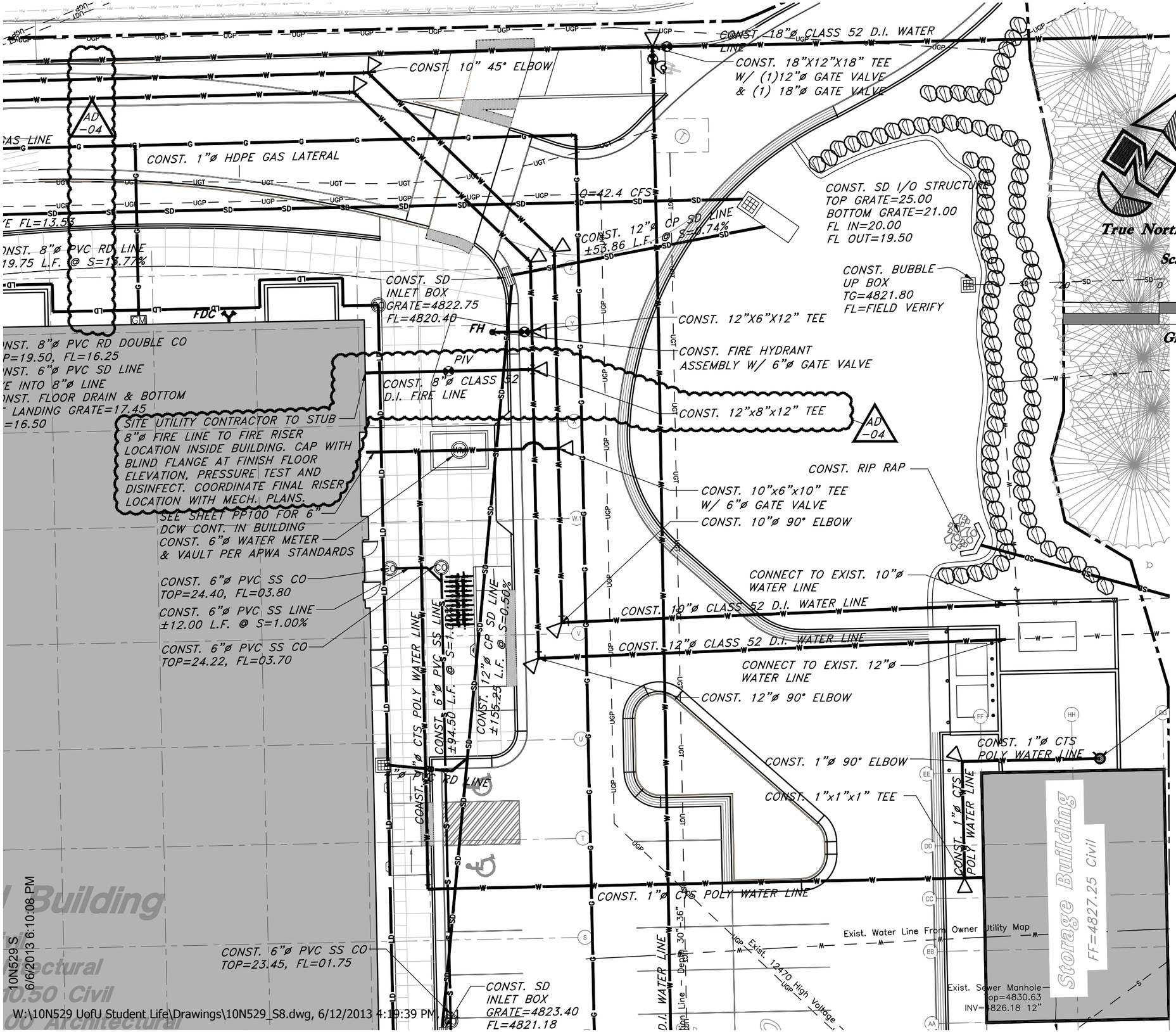
A. Adjust initial temperature and humidity set points.

B. Set field-adjustable switches and circuit-breaker trip ranges as indicated.

C. Occupancy Adjustments: When requested within 12 months of date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to two visits to Project during other-than-normal occupancy hours for this purpose.

3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain computer-room air conditioners.



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SHEET REFERENCE

CU302 & CU302a

SHEET NUMBER

AD04-C1.0

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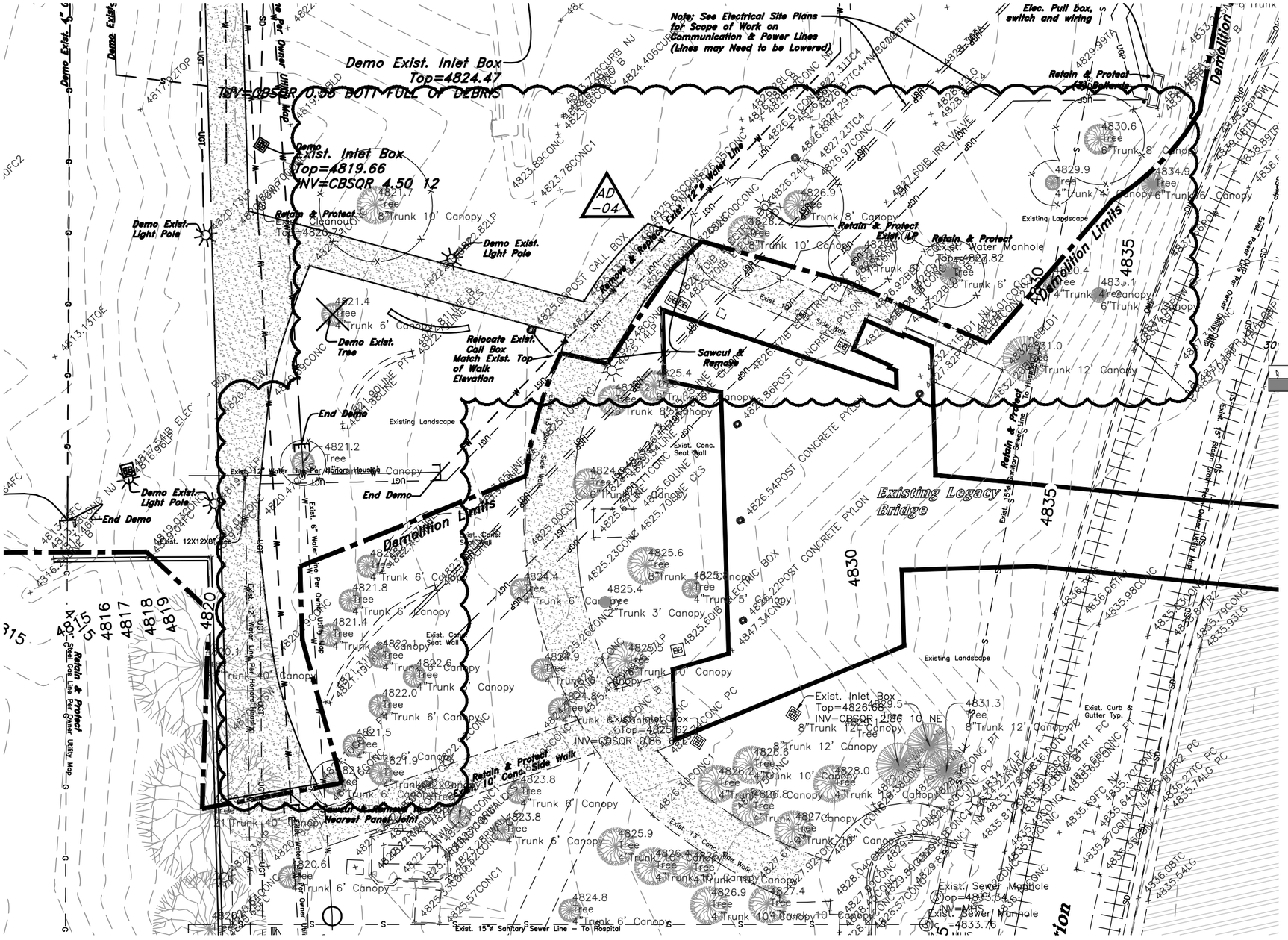

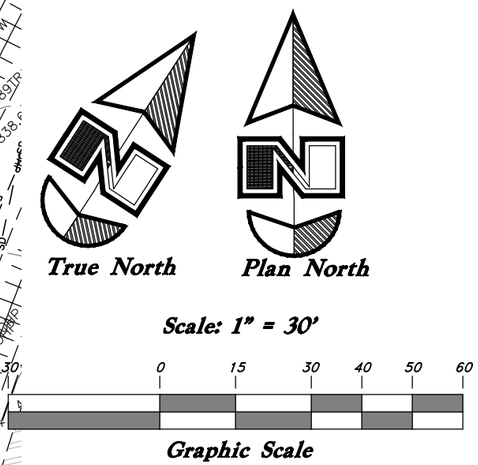

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TREE PROTECTION NOTE:

AD -04

Trees located within construction limit lines shall have a six foot tall chain link protection fence placed around drip line of tree. Fencing shall be placed 1.5x the radius of the tree's canopy. Fencing shall remain in place throughout the course of construction and shall not be removed without written approval from the architect and owner. Any trees removed or damaged will be paid for by the contractor at the schedule of values shown in specifications.

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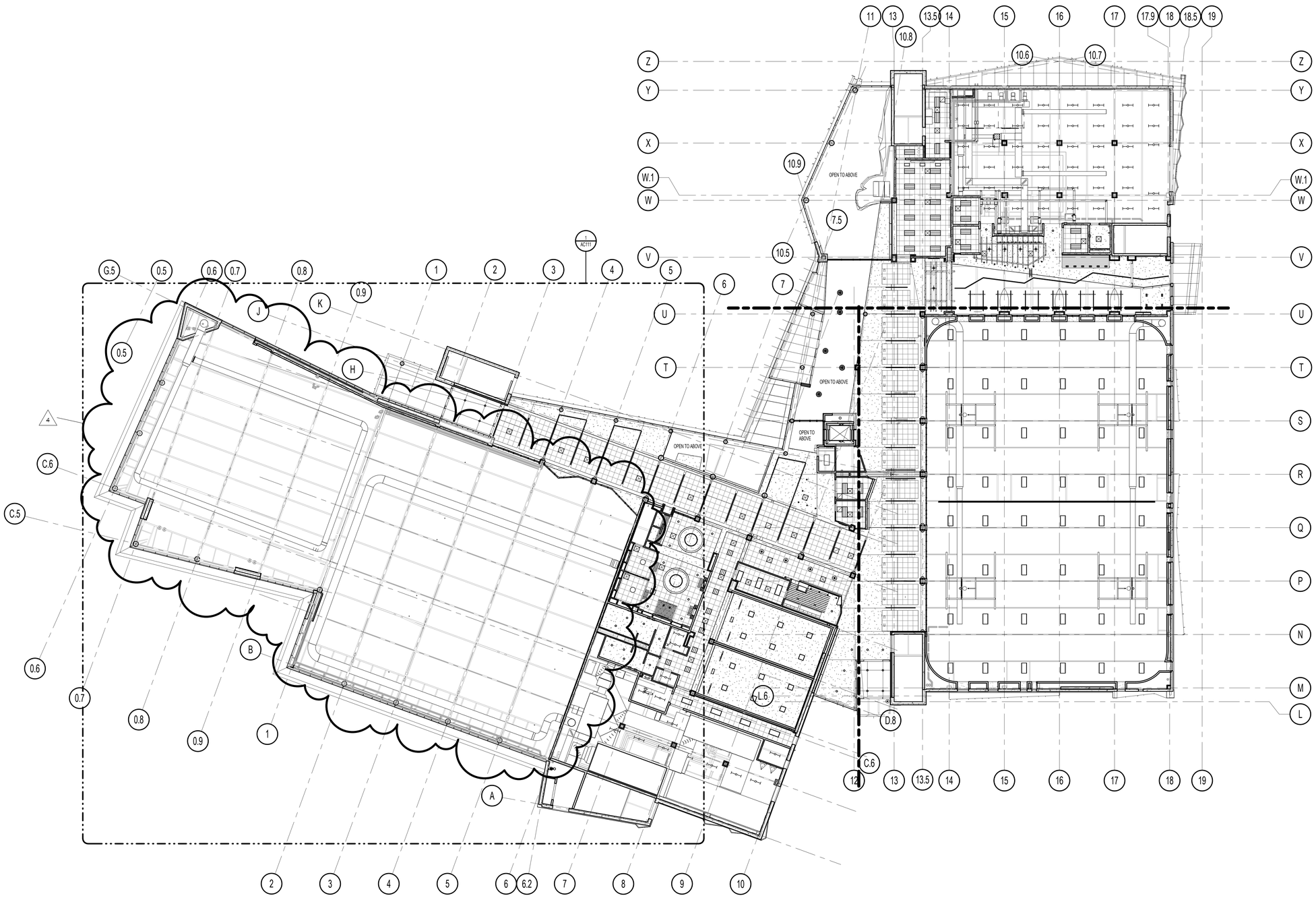

OVERALL LEVEL 1 REFLECTED CEILING PLAN 50M POOL

SCALE | **1/16" = 1'-0"**

SEE SHEET A6.01 FOR LEGENDS

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NO.	DATE	DESCRIPTION
4	06-13-2013	Addendum #4

SHEET NAME

OVERALL
LEVEL 1 RCP
ALTERNATE 1
BID DOCUMENTS
June 11, 2013

SHEET NUMBER

AC110

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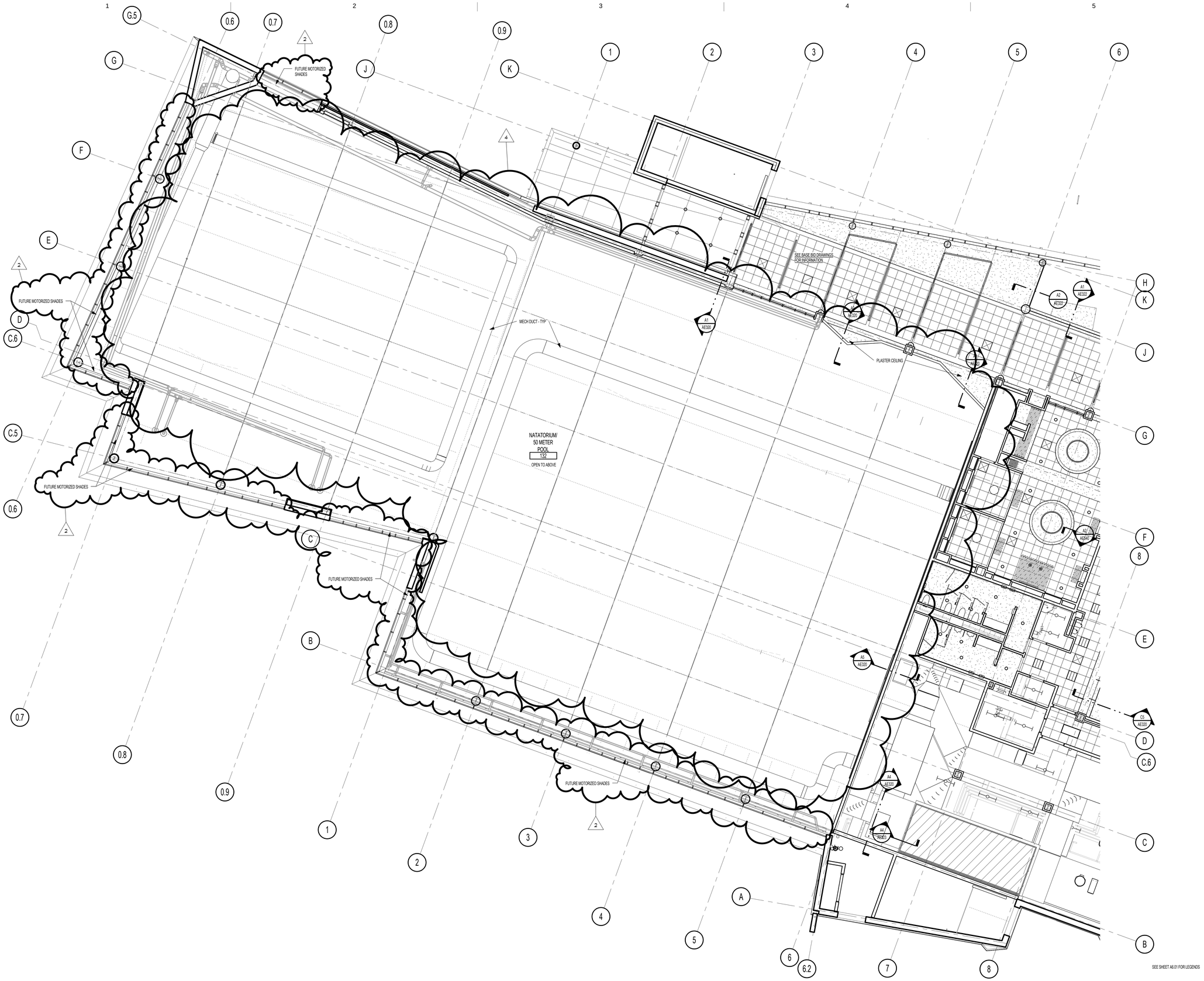

LEVEL 1 REFLECTED CEILING PLAN C (50M POOL)

NOTE: SEE SHEET AC100C FOR ADDITIONAL NOTES AND DIMENSIONS.

SCALE | 1/8" = 1'-0"

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NO.	DATE	DESCRIPTION
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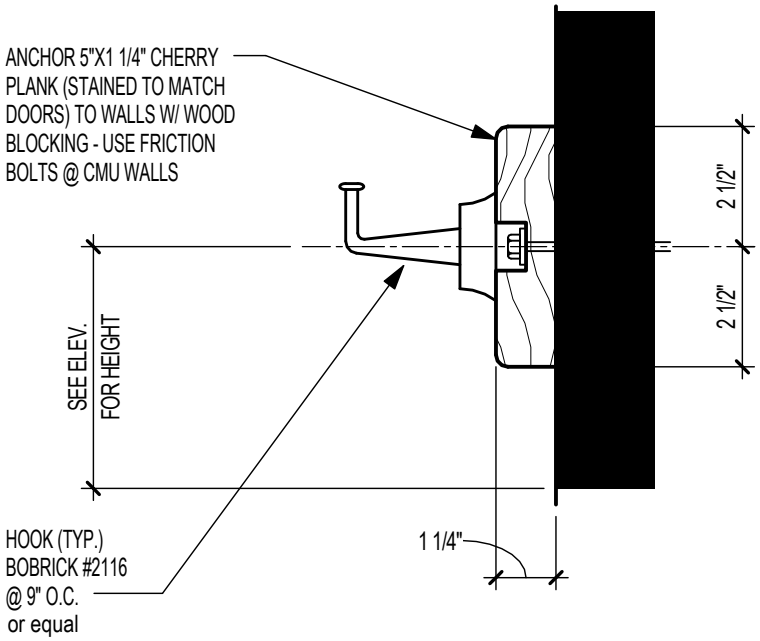
4	06-13-2013	Addendum #4

SHEET NAME
ENLARGED
LEVEL 1 CEILING
PLAN - ALT 1
BID DOCUMENTS
June 11, 2013

SHEET NUMBER
AC111



COAT HOOK DETAIL.

SCALE | **3" = 1'-0"**

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AD04-AE001

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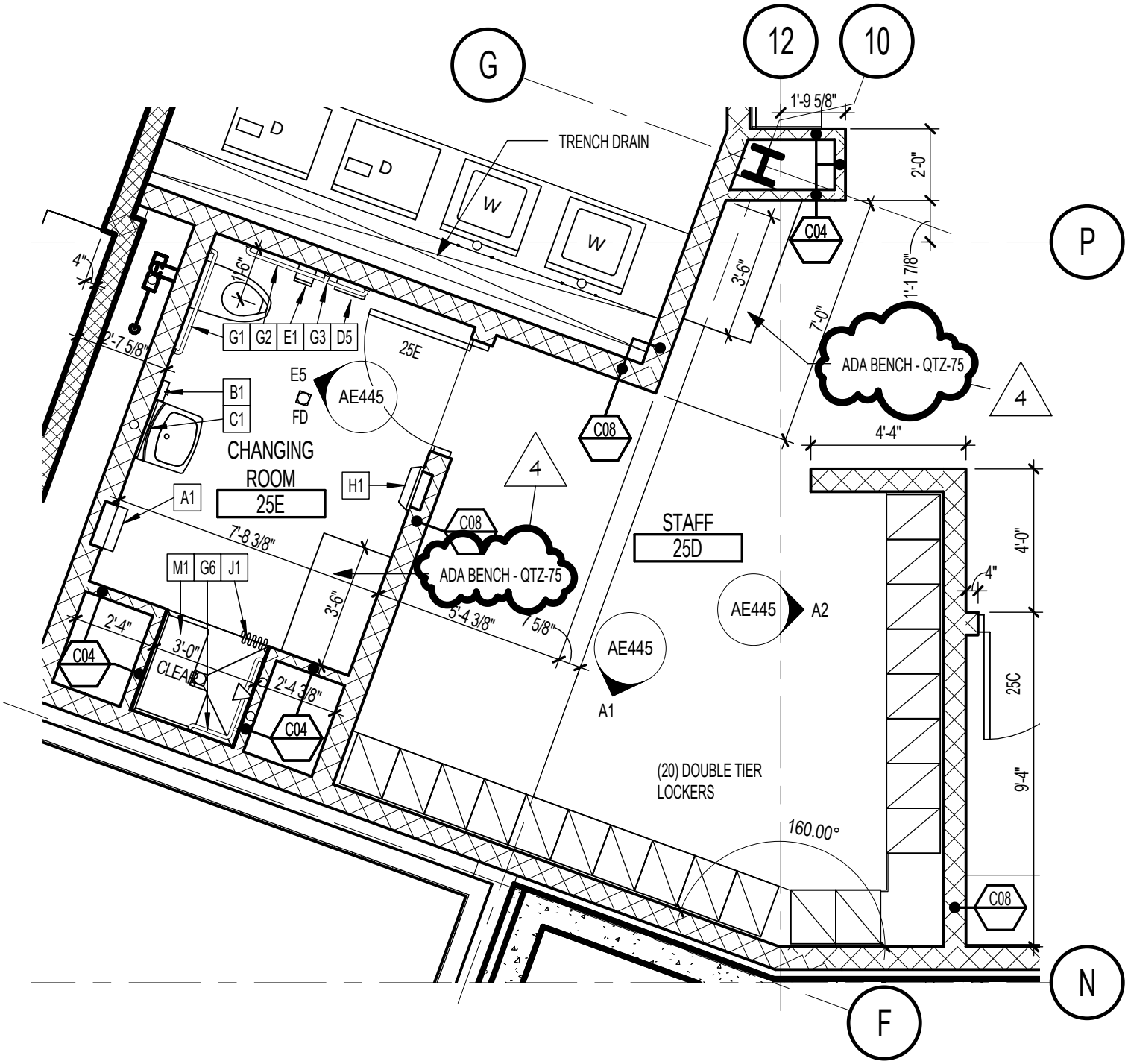

PARTIAL ENLARGED LOWER LEVEL PLAN - STAFF.

SCALE | **1/4" = 1'-0"**

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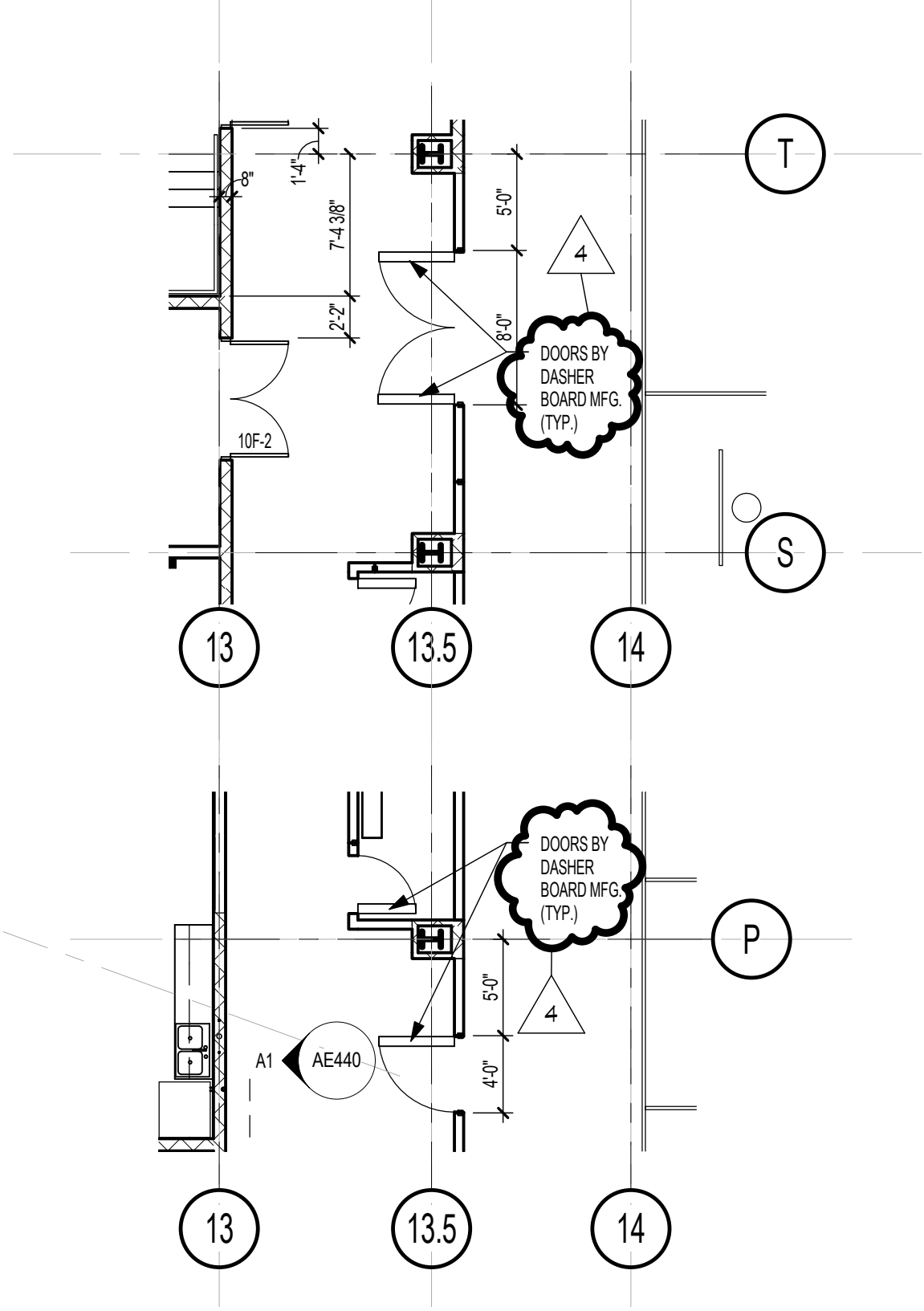

PARTIAL LOWER LEVEL ENLARGED PLANS B

SCALE | **1/8" = 1'-0"**

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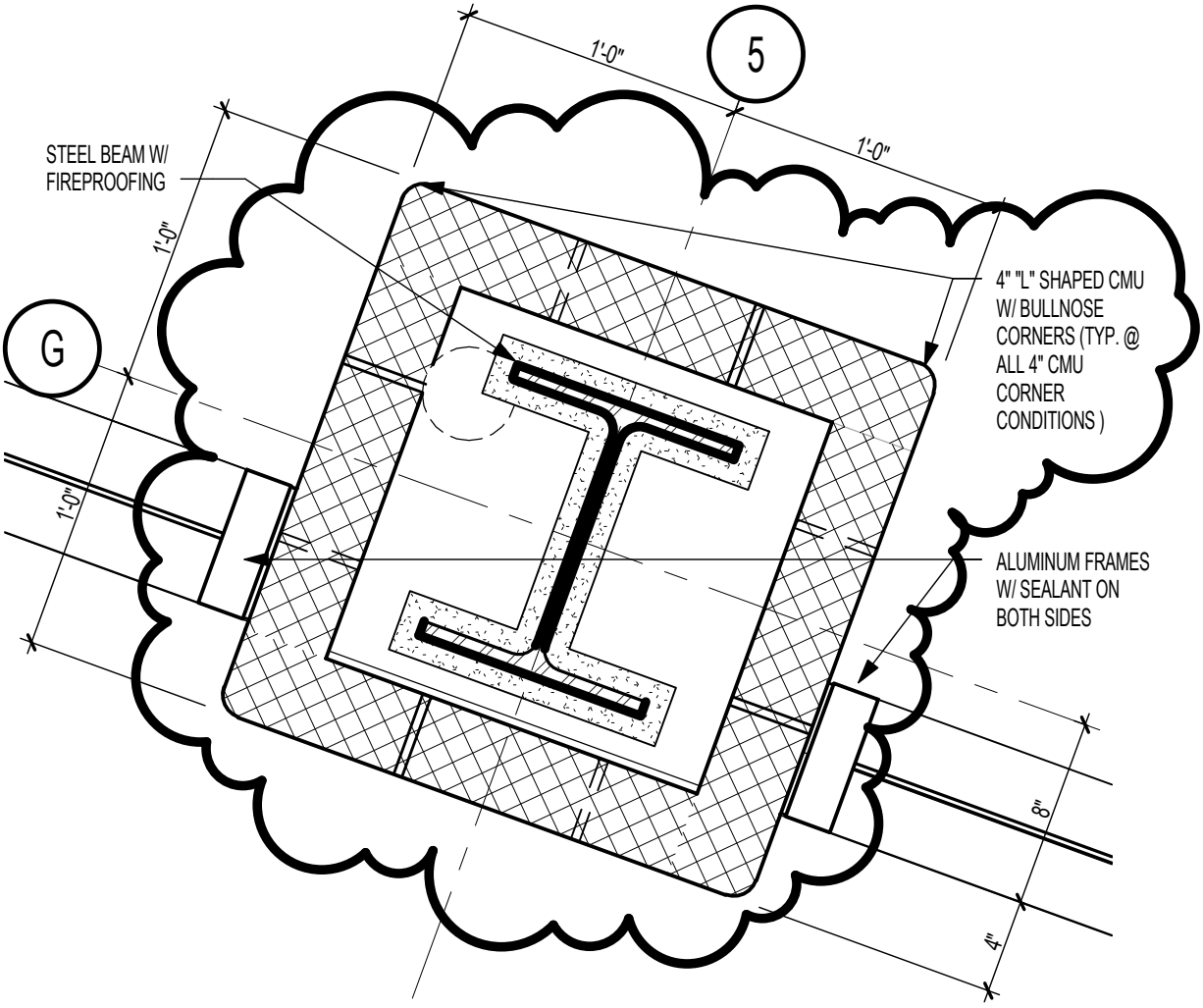
SHEET NUMBER
AD04-AE003

SHEET REFERENCE
AE100B



FIRST LEVEL PLAN DETAIL @ 5 - G.

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

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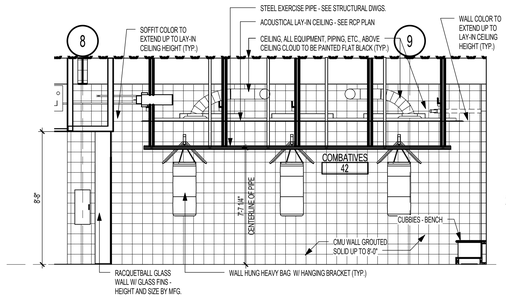
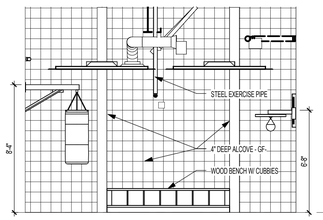
DATE: 06-13-2013

SHEET NUMBER
AD04-AE004

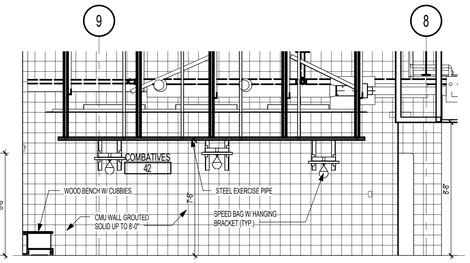
SHEET REFERENCE
C2/AE510



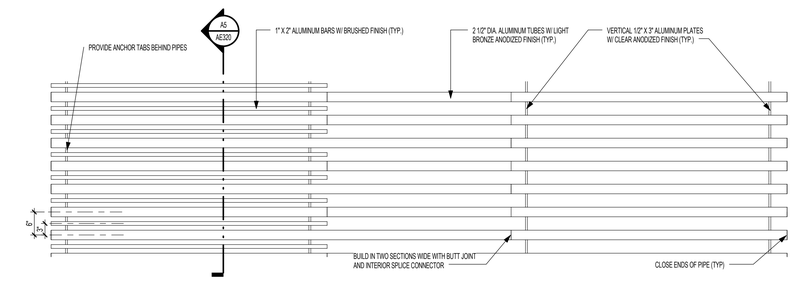
E1 AE448 COMBATIVES - NORTH
SCALE | 1/4" = 1'-0"



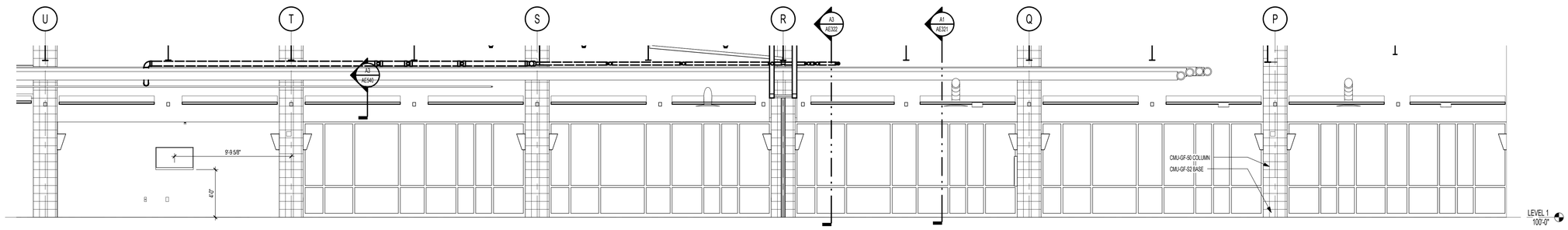
E2 AE448 COMBATIVES - EAST
SCALE | 1/4" = 1'-0"



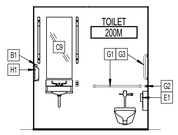
E3 AE448 COMBATIVES - SOUTH
SCALE | 1/4" = 1'-0"



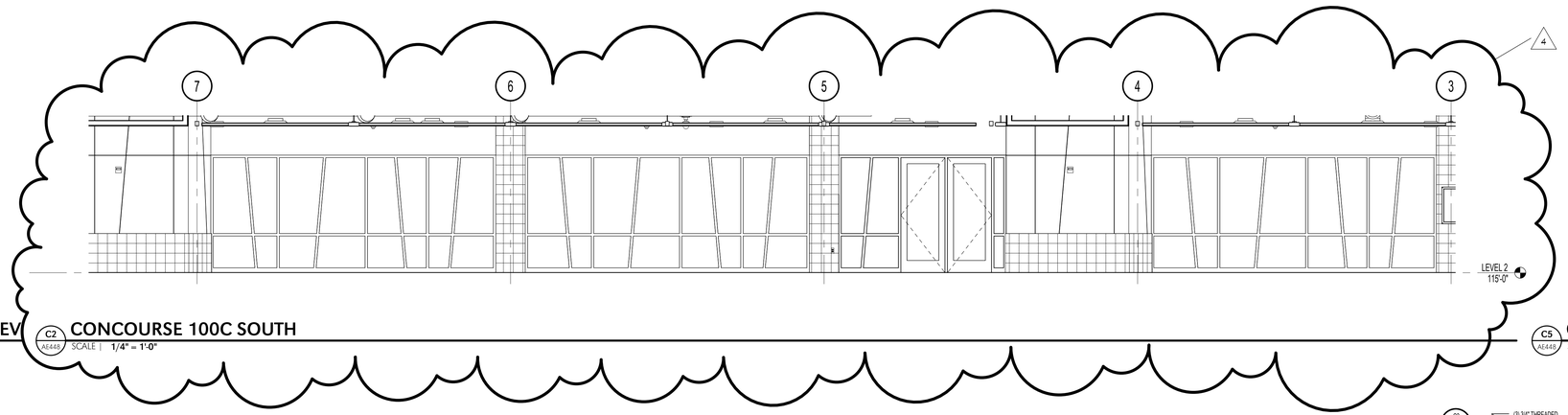
E4 AE448 NATATORIUM DECORATIVE GRILLE ELEVATION
SCALE | 3/4" = 1'-0"



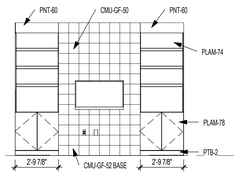
D1 AE448 CONCOURSE EAST INTERIOR ELEVATION
SCALE | 1/4" = 1'-0"



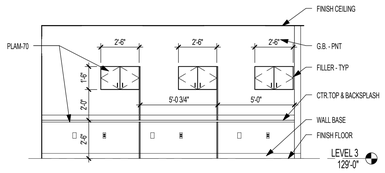
C1 AE448 TOILET 200M ELEV
SCALE | 1/4" = 1'-0"



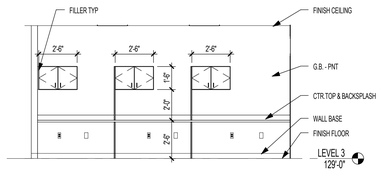
C2 AE448 CONCOURSE 100C SOUTH
SCALE | 1/4" = 1'-0"



C5 AE448 C. U. OFFICES W. INT. ELEV.
SCALE | 1/4" = 1'-0"



B1 AE448 STAFF 340F WEST INT ELEV
SCALE | 1/4" = 1'-0"



B2 AE448 STAFF 340F EAST INT ELEV
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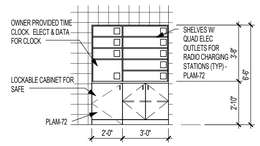

B3 AE448 ISSUE STORAGE 22 CHARGING STATION
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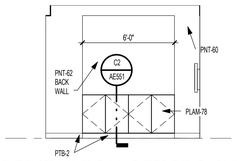

B4 AE448 CREDIT UNION OFFICE S. INT. ELV.
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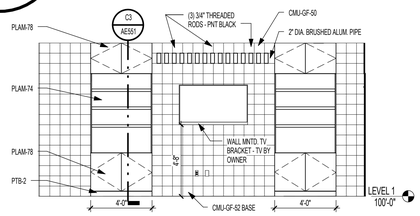

B5 AE448 CREDIT UNION SOUTH INT. ELEV.
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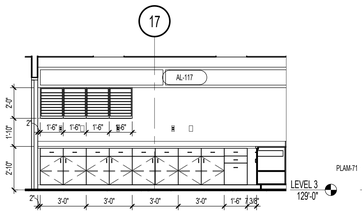
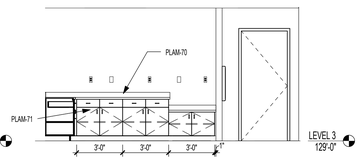
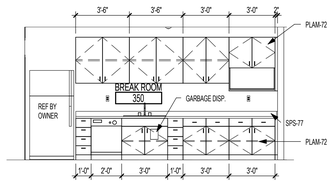


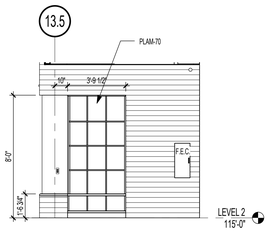
A1 AE448 WORK ROOM 360 S. INT. ELEV.
SCALE | 1/4" = 1'-0"



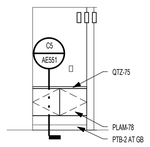
A2 AE448 WORK ROOM 360 W. INT. ELEV.
SCALE | 1/4" = 1'-0"



A3 AE448 BREAK ROOM 3087 WEST INT. ELEV.
SCALE | 1/4" = 1'-0"



A4 AE448 PARTIAL ELEV. @ RM. 235 N.
SCALE | 1/4" = 1'-0"



A5 AE448 TELLER INT. ELEV.
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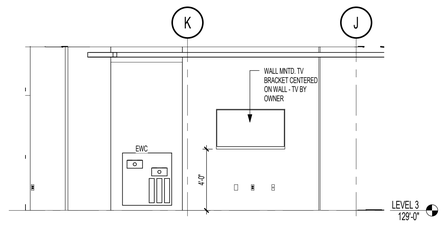

A6 AE448 LOBBY/VENDING 300 EAST ELEV
SCALE | 1/4" = 1'-0"

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STUDENT LIFE CENTER
1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. PROJ 2010562
DRAWN BY: Author CHECKED BY: Checker

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE:

NO.	DATE	DESCRIPTION
4	06-13-2013	Addendum #4

SHEET NAME
INTERIOR ELEVATIONS

BID DOCUMENTS
June 11, 2013

SHEET NUMBER
AE448

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6/11/2013 11:07:41 AM

DEFERRED SUBMITTAL SCHEDULE

SUBMITTAL	DUE DATE OF INITIAL SUBMISSION	SUBMITTAL	DUE DATE OF INITIAL SUBMISSION
STEEL TRUSSES AND JOISTS	August 30, 2013	CABINET ATTACHMENT AND BRACING	November 22, 2013
EXTERIOR/INTERIOR ALUMINUM CURTAIN WALL AND STOREFRONT	September 30, 2013	EXTERIOR/INTERIOR SIGNAGE LAYOUT, ATTACHMENT AND BRACING	Nobember 22, 2013
EXTERIOR/INTERIOR COMPOSITE METAL WALL PANELS	September 30, 2013	FIRESPRINKLERS	September 30, 2013
EXTERIOR TERRA COTTA WALL PANEL SYSTEM	September 30, 2013	MECHANICAL COMPONENT BRACING	September 30, 2013
ALUMINUM FRAMED SKYLIGHTS	September 30, 2013	ELECTRICAL COMPONENT BRACING	September 30, 2013
ORNAMENTAL GLASS CANOPY	September 30, 2013	POOL ENGINEERING	September 30, 2013
INTERIOR STEEL STAIRS	September 30, 2013	NOTES: 1. GENERAL CONTRACTOR MAY DECIDE TO MOVE DEADLINES UP TO ADJUST FOR PROPOSED CONSTRUCTION SCHEDULE. 2. LISTED DEFERRED SUBMITTALS AFTER A/E REVIEW WILL BE SUBMITTED TO THE STATE OF UTAH FOR REVIEW. NO WORK PERTAINING TO SUBMISSIONS LISTED MAY PROCEED UNTIL NOTIFICATION OF COMPLETION AND APPROVAL OF BUILDING OFFICIAL.	
INTERIOR GUARDRAILS AND HAND RAILS	September 30, 2013		
CLIMBING WALL SUPPORT STRUCTURE	September 30, 2013		

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FAX 314.863.2823

UNIVERSITY OF UTAH
STUDENT LIFE CENTER
1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

PROJECT NO. PROJ 2010562
DATE:
SHEET REFERENCE
GI002.1
SHEET NUMBER
AD04-A005

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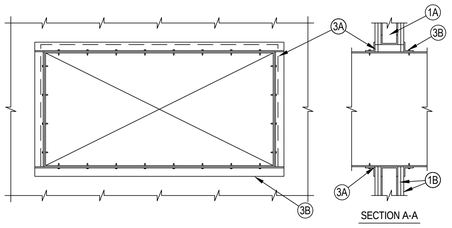
System No. W-L-7040

F Ratings — 1 and 2 Hrs (See Items 1 and 3)

T Rating — 0 Hr

WL 7040



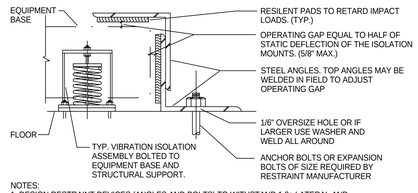
1. Wall Assembly — The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 2-1/2 in. wide and spaced max 24 in. Additional framing members shall be used to completely frame around opening.
   B. Gypsum Board* — Nom 5/8 in. thick with square or tapered edges. The gypsum wallboard type, number of layers and sheet orientation shall be as specified in the individual Wall and Partition Design Number. Max area of opening is 1300 in. with the dimension of 50 in. The hourly F rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.
2. Steel Duct — Nom 24 in. by 48 in. (or smaller) No. 24 gauge (or heavier) galv steel duct to be installed within the firestop system. The annular space shall be min 0 (point contact) in. to a max 2 in. Duct to be rigidly supported on both sides of the wall assembly.
3. Firestop System — The firestop system shall consist of the following:
   A. Fill, Void or Cavity Material* —Sealant — Min 5/8 in. thickness of fill material applied within annulus flush with both surfaces of wall. At point contact location, a min 1/2 in. diam bead of fill material shall be applied to the wall/duct interface on both surfaces of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant, CP601S Elastomeric Firestop Sealant or CP606 Flexible Sealant.
   B. Steel Retaining Angle — No. 18 MSG (0.048 in.) galv steel angles cut to fit contour of duct with a 2 in. overlap on the duct and a min 1 in. overlap on the gypsum board assembly on both sufaces of wall. 2 in. leg of angle secured to duct with min No. 8 by 3/4 in. long sheet metal screws, spaced a max of 6 in. OC. When bead of fill material is used at joint contact locations, angles shall be installed prior to full material curing.

*Bearing the UL Classification Mark

Hilti Firestop Systems

Reproduced by HILTI, Inc. Courtesy of Underwriters Laboratories, Inc. November 13, 2001

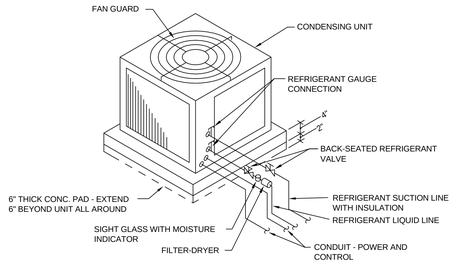
CLASSIFIED C UL US



NOTES:
1 DESIGN RESTRAINT DEVICES (ANGLES AND BOLTS) TO WITHSTAND 1.0g LATERAL AND VERTICAL LOADS.
2 INSTALL LATERAL RESTRAINING DEVICES ON ALL SIDES OF EQUIPMENT BASE

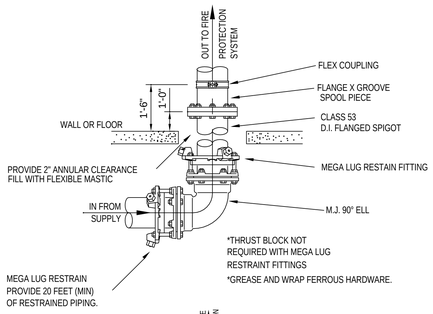
5 / MH504 SPRING ISOLATOR RESTRAINT DETAIL

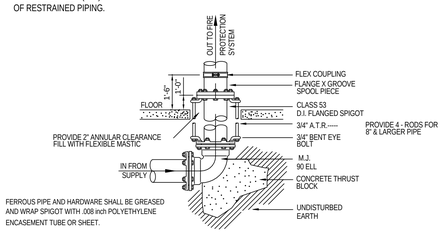
NO SCALE



6 / MH504 AIR-COOLED CONDENSING UNIT SLAB MOUNTED AT GRADE

NO SCALE



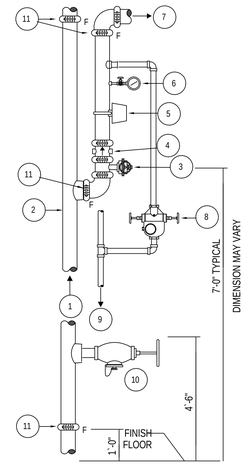


3 / MH504 FLANGED SPIGOT THRU FLOOR

NO SCALE

DETAIL L E G E N D

1. FROM SUPPLY.
2. VERTICAL RISER.
3. INDICATING TYPE FLOOR CONTROL VALVE WITH SUPERVISORY SWITCH.
4. CHECK VALVE.
5. VANE TYPE WATERFLOW SWITCH WIRING BY DIVISION 16.
6. PRESSURE GAUGE, AND 3 WAY VALVE WITH PLUG AND NIPPLES.
7. TO SPRINKLER SYSTEM.
8. DRAIN/TEST VALVE WITH ORIFICE, SIZED AS REQUIRED.
9. EXPRESS DRAIN.
10. 2 1/2" HOSE VALVE, WITH 1 1/2" REDUCER AND CAP.
11. FLEXIBLE COUPLINGS AS REQUIRED FOR SEISMIC PROTECTION OF PIPING.



FLOOR CONTROL ASSEMBLY & HOSE VALVE

1 / MH504 COMBINED STANDPIPE DETAIL

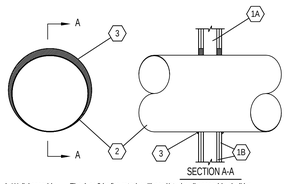
NO SCALE

System No. W-L-7042

F Ratings - 1 and 2 Hr (See Items 1 and 3)

T Rating - 0 Hr

WL 7042



1. Wall Assembly The 1 or 2 hr fire rated wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features.
   A. Studs Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 2-1/2 in. wide and spaced 24 in. OC.
   B. Gypsum Board* For 1 hr assembly, one layer of min 5/8 in. thick wallboard as required in the individual Wall and Partition Design. For 2 hr assembly, two layers of min 5/8 in. thick wallboard as required in the individual Wall and Partition Design. Max diam of opening is 14-1/2 in. for wood stud walls and 21-3/4 for steel stud walls.

The hourly F and T Ratings of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. Through Penetrant Galv steel duct to be installed concentrically or eccentrically within the firestop system. The annular space between the duct and periphery of opening shall be 0 in. (point contact) and max 1-1/2 in. Duct to be rigidly supported on both sides of wall assembly.
   A. Spiral Wound HVAC Duct Nom 20 in. diam (or smaller) No. 24 MSG (or heavier) galv steel spriral wound duct.
   B. Sheet Metal Duct Nom 12 in. diam (or smaller) No. 28 MSG (or heavier) galv sheet steel duct.
3. Fill, Void or Cavity Material*–Sealant Min 5/8 in. and 1-1/4 in. thickness of fill material applied within annulus, flush with both surfaces of wall assembly for 1 or 2 hr rated walls, respectively. At the point contact location between duct and wallboard, a min 1/2 in. diam bead of sealant shall be applied at the wallboard/duct interface on both surfaces of wall assembly.
   HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP601S Elastomeric Firestop Sealant, FS-ONE Sealant or CP606 Flexible Firestop Sealant

*Bearing the UL Classification Mark

Hilti Firestop Systems

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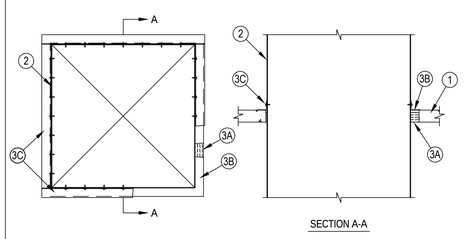
CLASSIFIED C UL US

System No. C-AJ-7111

F Rating -- 2 Hr

T Rating -- 0 Hr

CAJ 7111



Hilti Firestop Systems

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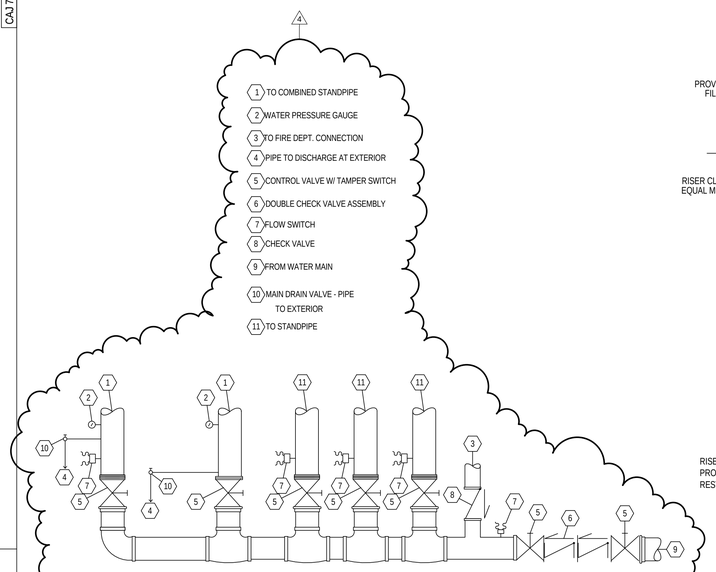
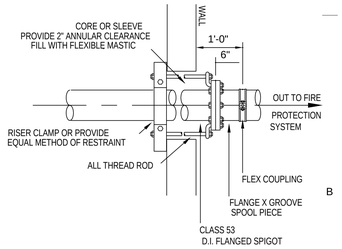
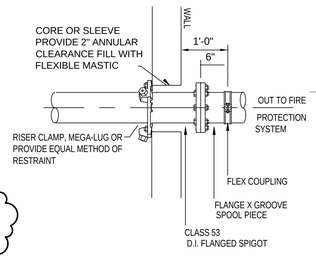


4 / MH504 FIRE SPRINKLER AND STANDPIPE RISER MANIFOLD ASSEMBLY

NO SCALE





2 / MH504 FLANGED SPIGOT THRU WALL

NO SCALE

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Salt lake City, UT 84111 801.530.3150 F
VBF# Project 1002

REGISTERED PROFESSIONAL ENGINEER No. 324030 BRADLY W. ROSENHAN STATE OF UTAH

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SEAL

MHTN PROJECT NO.

DRAWN BY: CHECKED BY:

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
4	JUNE 12, 2013	ADDENDUM FOUR

SHEET NAME

MECHANICAL DETAILS

BID DOCUMENTS
JUNE 05, 2013

SHEET NUMBER

MH504

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ECM 53"X62" EVAP MEDIA MODULE

CC (2)-33"X60" COOLING COILS

PC (2)-33"X60" PRE HEAT COILS

SF (4)-18.25" DIRECT DRIVE 5 HP SUPPLY PLENUM FANS

FLT (6)-24"X24"X2" / (3)-12"X24" FILTERS

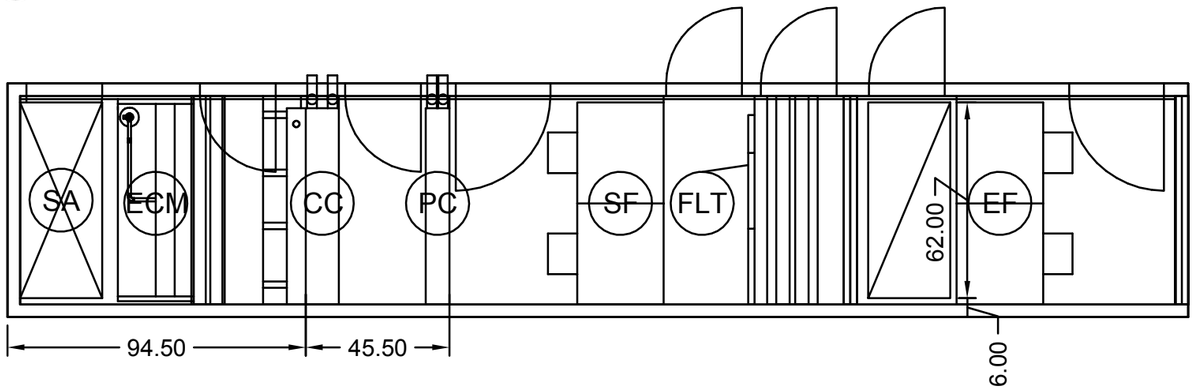
RD 16"X66" RETURN AIR DAMPER

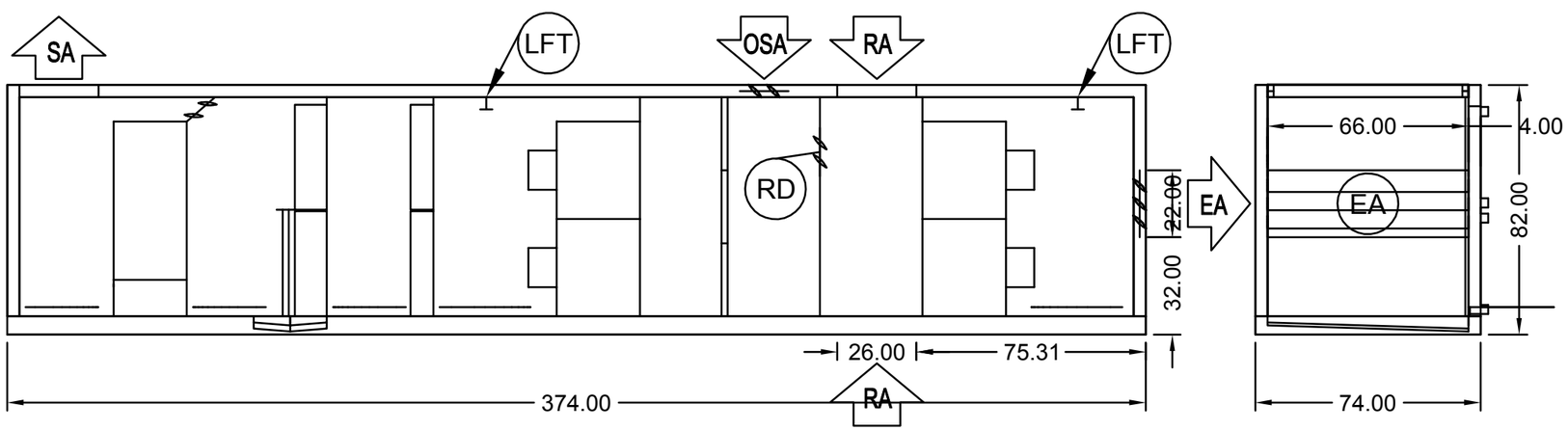
OSA 16"X66" OUTSIDE AIR OPENING WITH DAMPER

EF (4)-18.25" DIRECT DRIVE 2 HP SUPPLY PLENUM FANS

EA 22"X66" EXHAUST AIR OPENING WITH DAMPER

LFT MOTOR REMOVAL BEAM





1 / MH507 **AH-1**

NO SCALE

4

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PROJECT NO. 10452

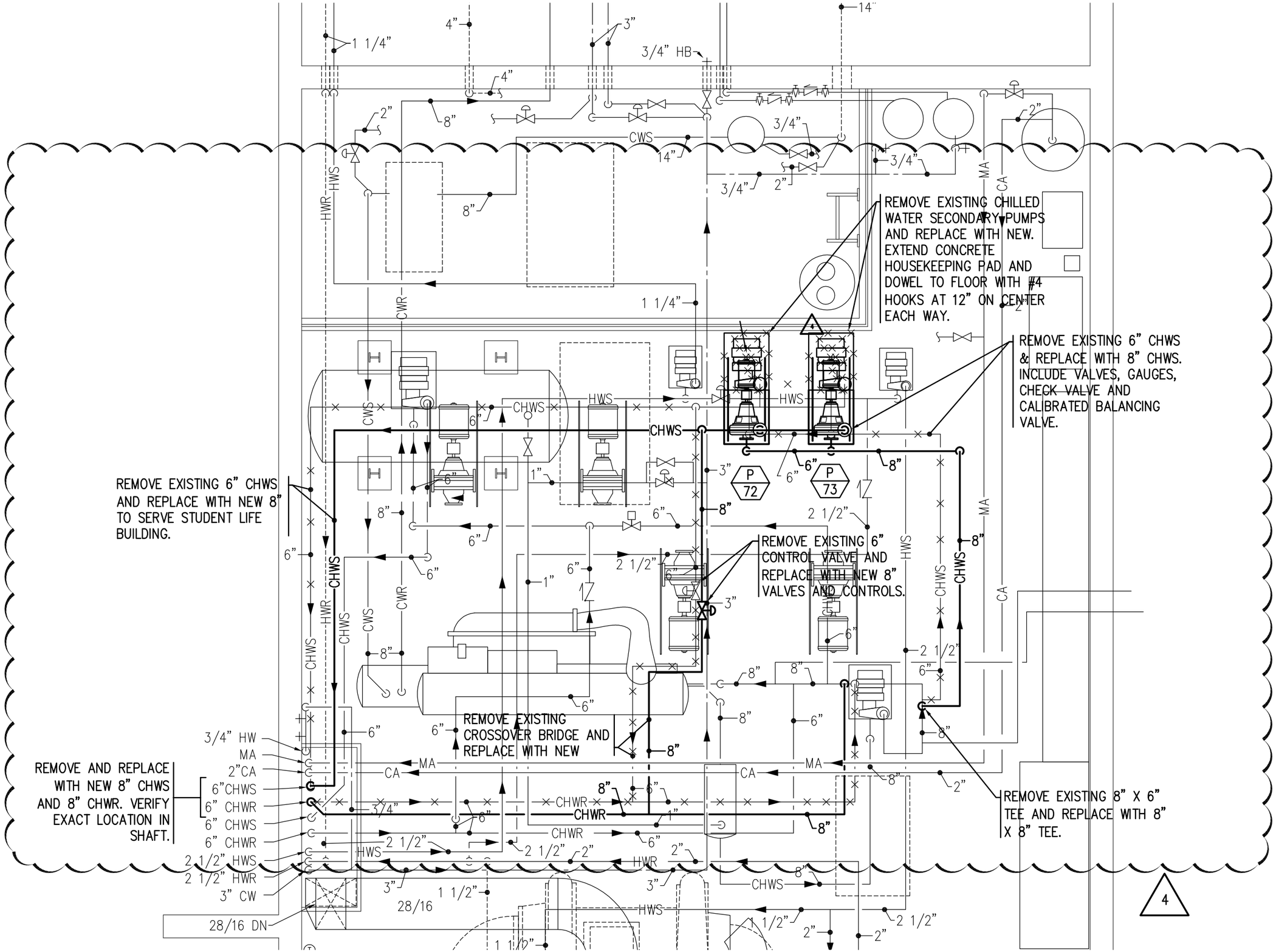
DATE: JUNE 14, 2013

SHEET REFERENCE

MH507

SHEET NUMBER

AD04-MH001



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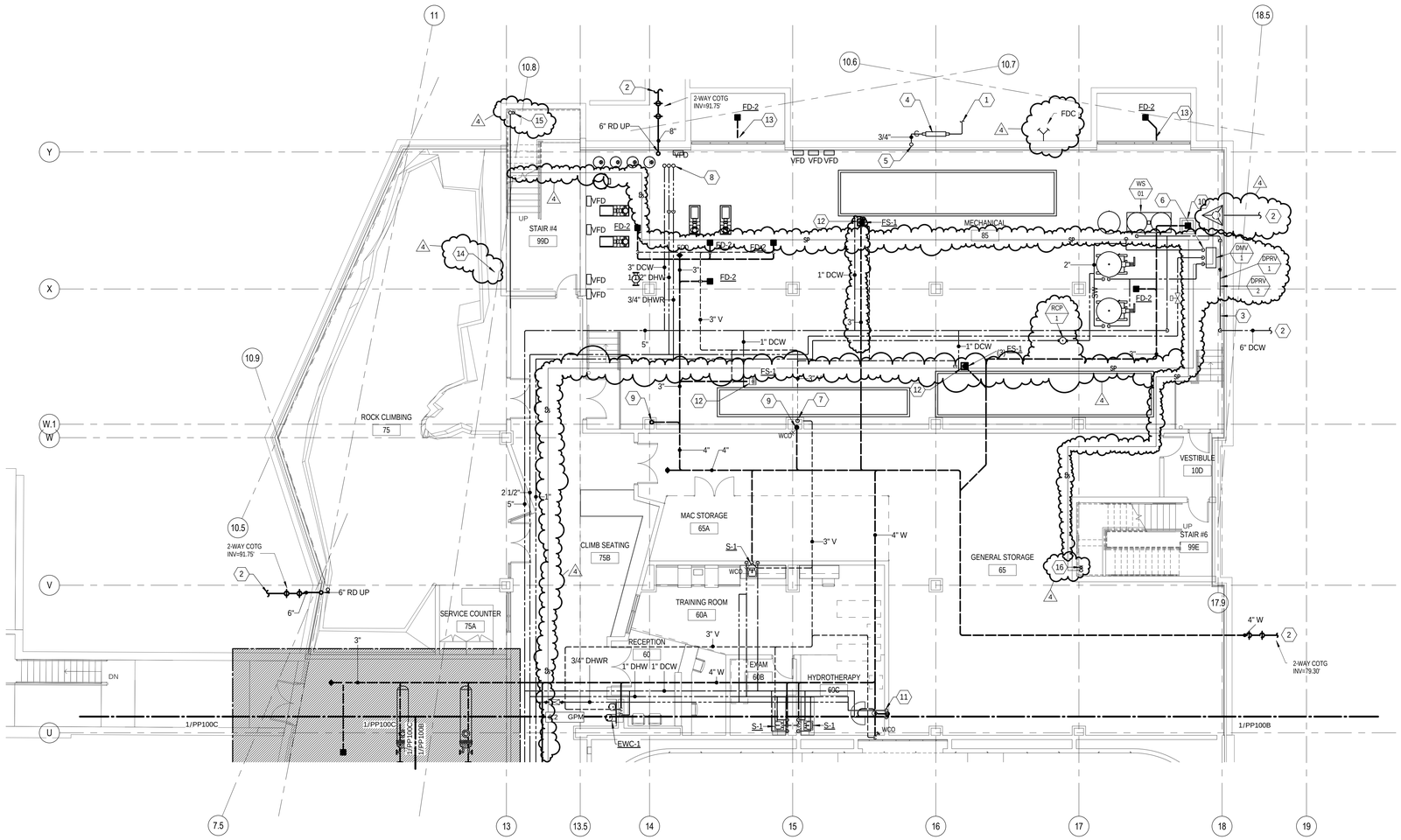
SHEET REFERENCE

MS301

SHEET NUMBER

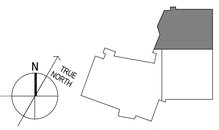
AD04-MS001



LOWER LEVEL PLUMBING PLAN A

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"



KEYPLAN

SHEET KEYNOTES

1 COORDINATE WITH LOCAL UTILITY TO PROVIDE NEW GAS METER. PROVIDE CAPACITY FOR 200,000 BTUH.

2 SEE CIVIL SITE UTILITY PLAN FOR CONTINUATION.

3 WATER HEADER.

4 COORDINATE WITH LOCAL UTILITY TO PROVIDE GAS METER. PROVIDE FOR 200 CFH AT 2 PSIG. COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE 20'-0" X 5'-0" CONCRETE PAD WITH A MINIMUM THICKNESS OF 6 INCHES.

5 NATURAL GAS UP TO FIRST LEVEL.

6 DROP AND CONNECT 2" PIPE TO WATER SOFTENER.

7 3" VENT STACK UP.

8 DCW/DHW/DHWR UP TO FIRST FLOOR.

9 4" WASTE STACK UP.

10 24" X 24" X 12" HIGH CONCRETE SUMP.

11 ROUGH-IN AND CONNECT TO OWNER PROVIDED EQUIPMENT.

12 EVAPORATIVE SECTION AND COILS TO DRAIN TO FLOOR SINK.

13 CONNECT TO FOUNDATION DRAIN.

14 PROVIDE SPRINKLERS WITH GUARDS BEHIND ROCK WALL, TYPICAL.

15 COMBINED STAND PIPE. PROVIDE MANUAL WET CLASS I STANDPIPE WITH 2 1/2" X 1 1/2" REDUCING CAP.

16 MANUAL WET CLASS I STANDPIPE WITH 2 1/2" X 1 1/2" REDUCING CAP.

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NO.	DATE	DESCRIPTION
1	MAY 28, 2013	ADDENDUM ONE
4	JUNE 12, 2013	ADDENDUM FOUR

SHEET NAME

PARTIAL PLUMBING PLAN

BID DOCUMENTS
JUNE 05, 2013

SHEET NUMBER

PP100A

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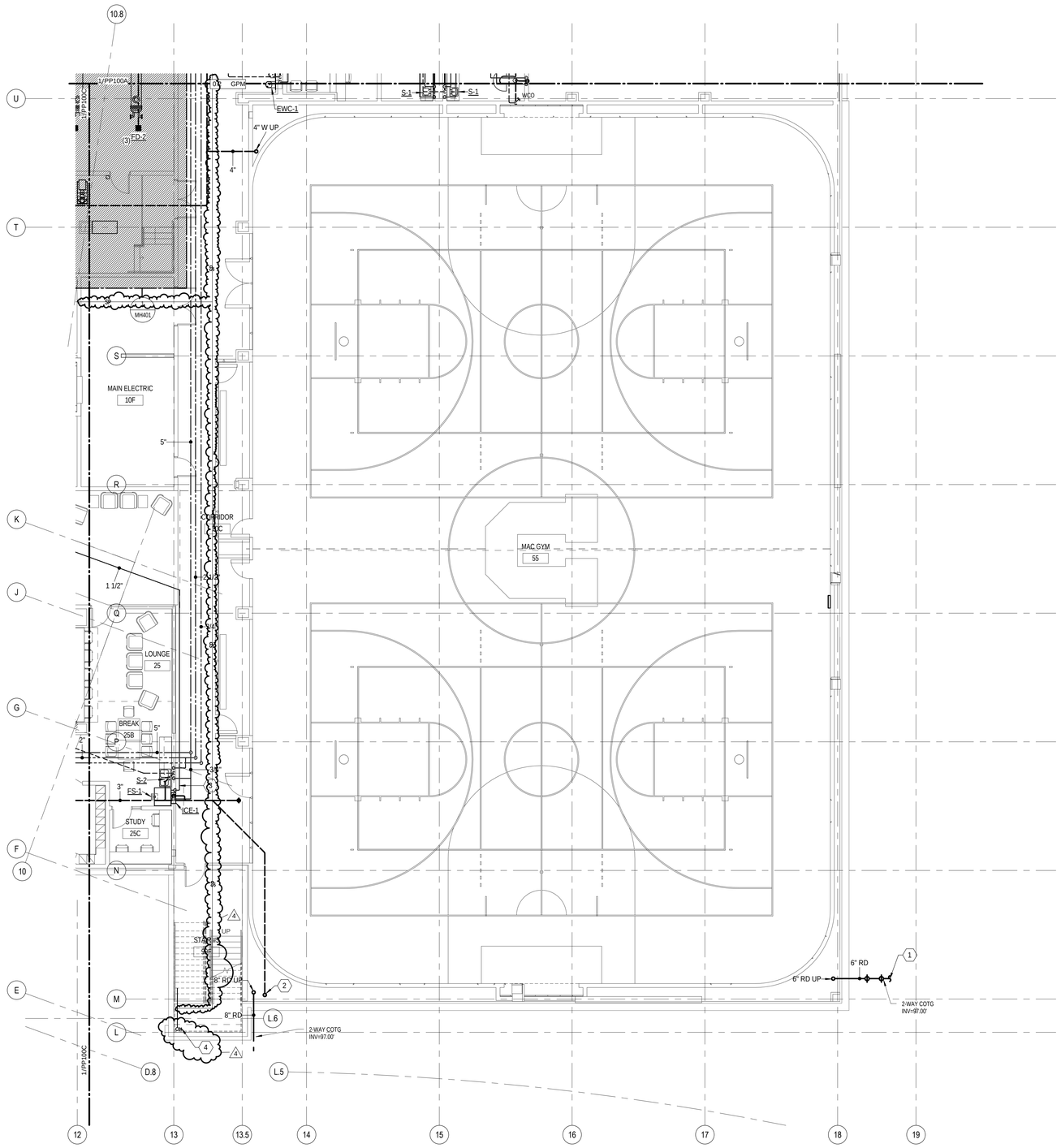
SHEET KEYNOTES

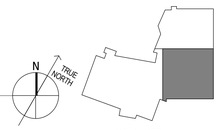
1. SEE CIVIL SITE UTILITY PLAN FOR CONTINUATION.
2. 3" WASTE STACK UP TO FIRST LEVEL.
3. CONDENSATE LINE TO DROP DOWN WALL AND DRAIN TO FLOOR SINK.
4. MANUAL WET CLASS I STANDPIPE WITH 2 1/2" X 1 1/2" REDUCING CAP.



LOWER LEVEL PLUMBING PLAN B

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"



KEYPLAN

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PARTIAL PLUMBING PLAN

BID DOCUMENTS
JUNE 05, 2013

SHEET NUMBER
PP100B

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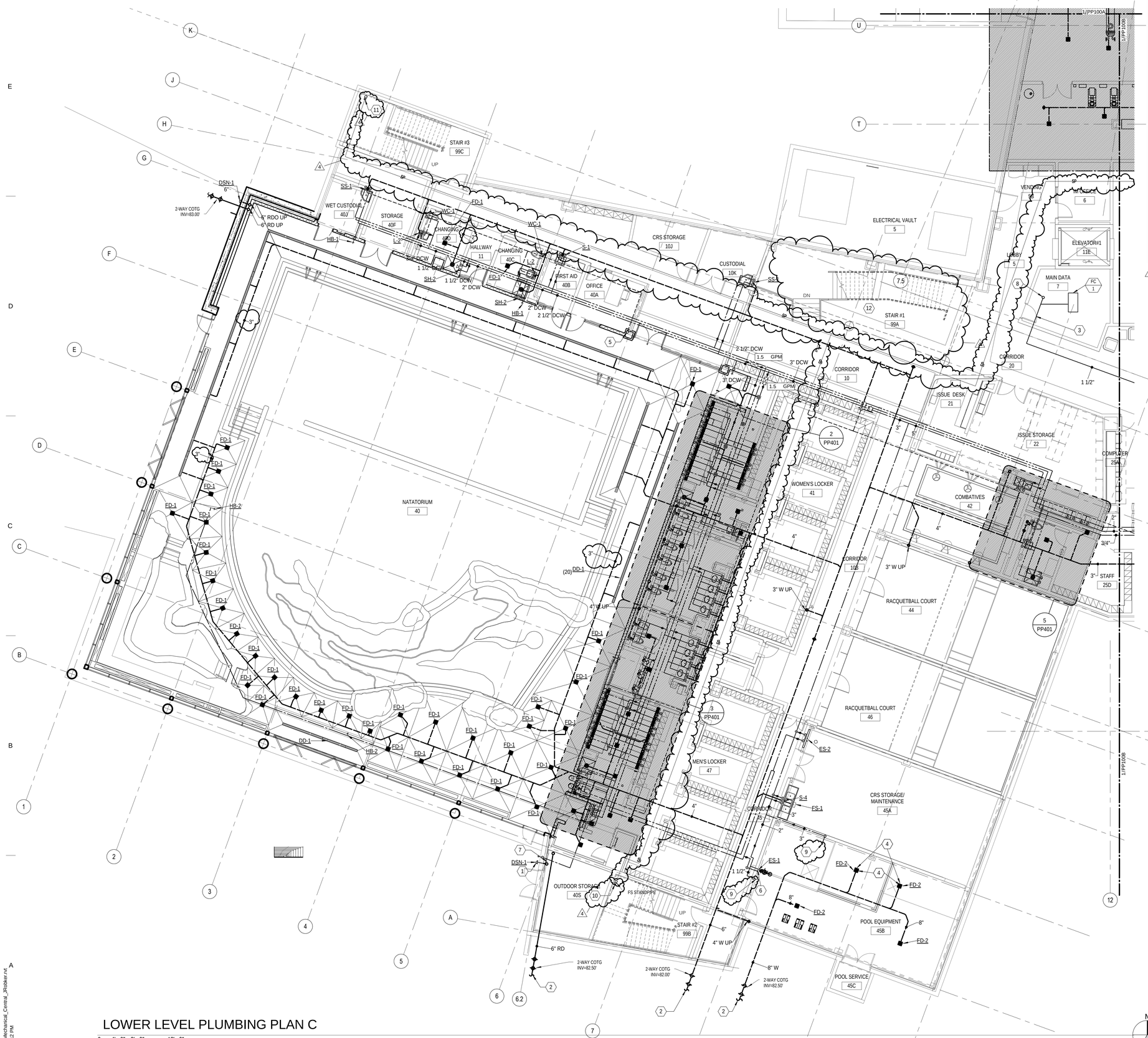


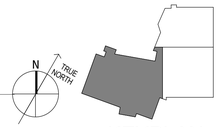
SHEET KEYNOTES

1. LOCATE DOWNSPOUT NOZZLE 18" ABOVE GRADE.
2. SEE CIVIL SITE UTILITY PLAN FOR CONTINUATION.
3. INSTALL DRAIN PAN UNDER PIPING ABOVE DATA ROOM.
4. COORDINATE LOCATION OF FLOOR DRAIN WITH SUMP PITS. REFER TO POOL EQUIPMENT PLANS.
5. 3" VENT STACK UP.
6. CONNECT TO EMERGENCY EYEWASH/SHOWER.
7. ROOF DRAIN PIPING DOWN TO SECOND LEVEL.
8. CONDENSATE WASTE UP.
9. WATER CONNECTION TO POOL EQUIPMENT, COORDINATE WITH POOL EQUIPMENT DRAWINGS.
10. MANUAL WET CLASS I STANDPIPE WITH 2 1/2" X 1 1/2" REDUCING CAP.
11. COMBINED STAND PIPE. PROVIDE MANUAL WET CLASS I STANDPIPE WITH 2 1/2" X 1 1/2" REDUCING CAP.
12. PROVIDE WATER CURTAIN IN STAIRWELL WHERE OPEN TO ATRIUM.

LOWER LEVEL PLUMBING PLAN C

0 4' - 0" 8' - 0" 16' - 0"

SCALE: 1/8" = 1'-0"



KEYPLAN

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SHEET NAME

PARTIAL PLUMBING PLAN

BID DOCUMENTS
JUNE 05, 2013

SHEET NUMBER

PP100C

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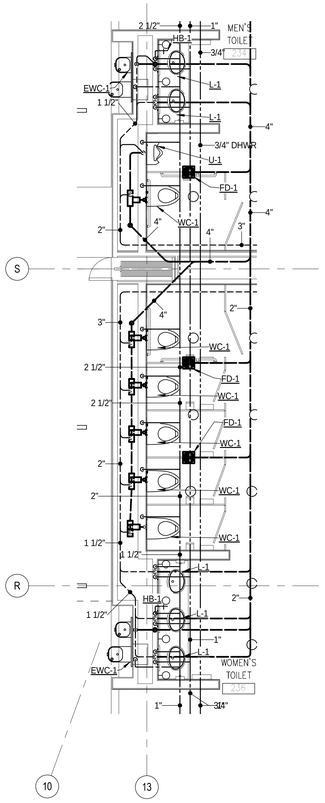
SHEET KEYNOTES

1 2" WASTE UP.

2 ROUGH IN AND CONNECT TO OWNER PROVIDED EQUIPMENT.

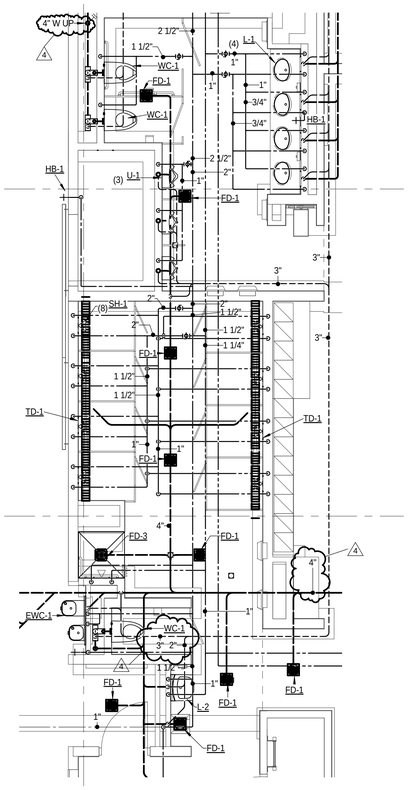


ENLARGED LEVEL 2 PLUMBING PLAN

4

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

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

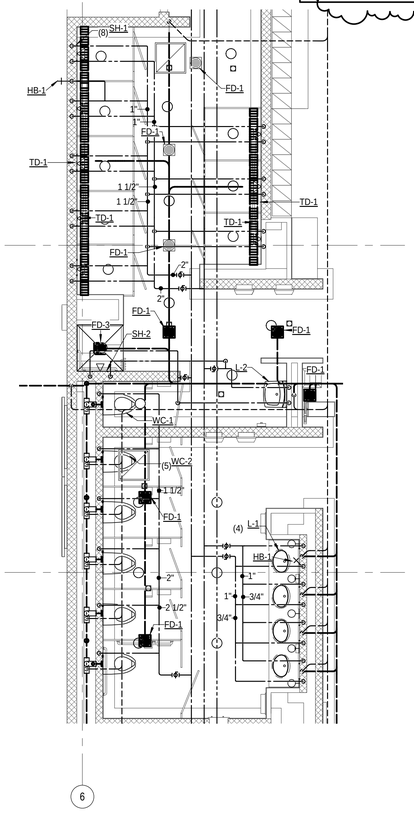


ENLARGED MEN'S SHOWER PLUMBING PLAN

3

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

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

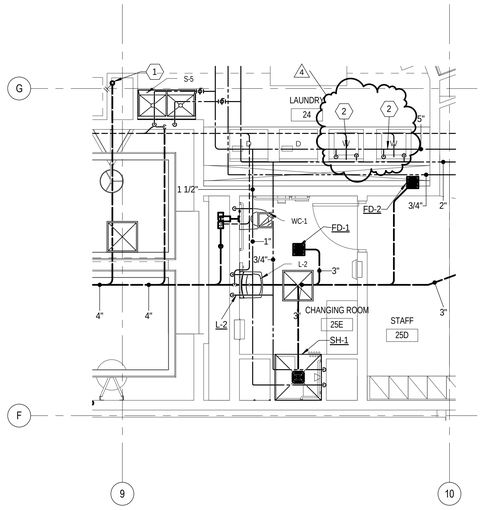


ENLARGED WOMENS SHOWER PLUMBING PLAN

2

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

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

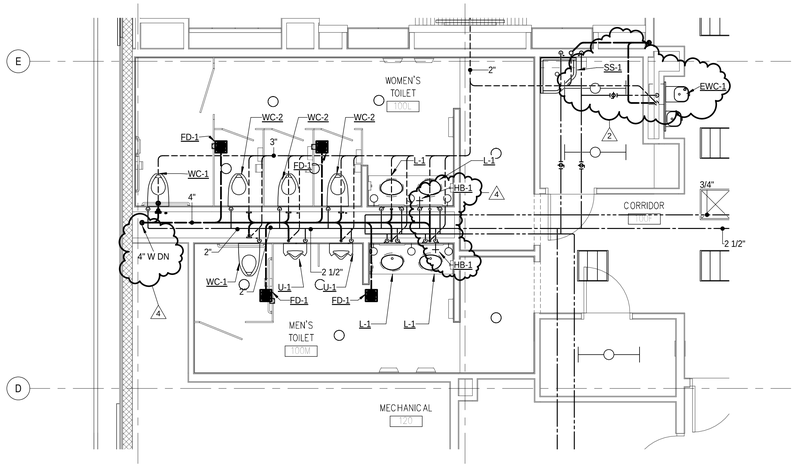


ENLARGED LOWER LEVEL CHANGING ROOM

5

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

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



ENLARGED LEVEL 1 PLUMBING PLAN

1

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

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

ENTIRE SHEET

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4	JUNE 12, 2013	ADDENDUM FOUR

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SHEET NUMBER
PP401

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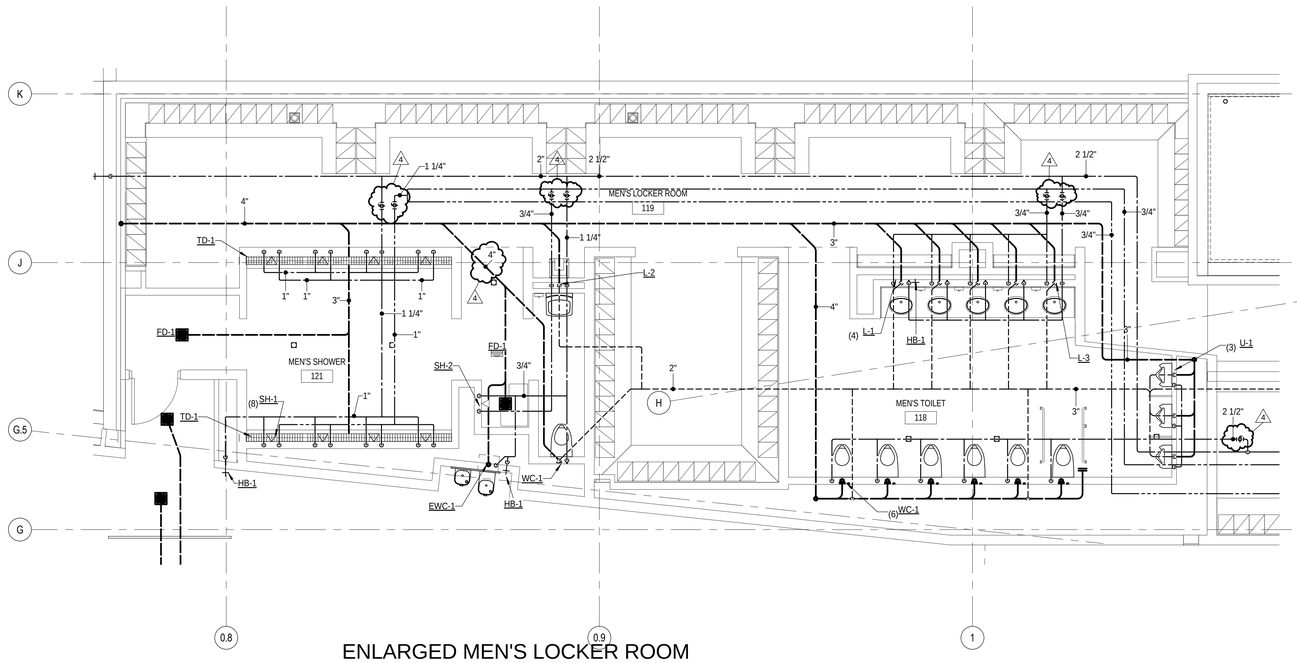
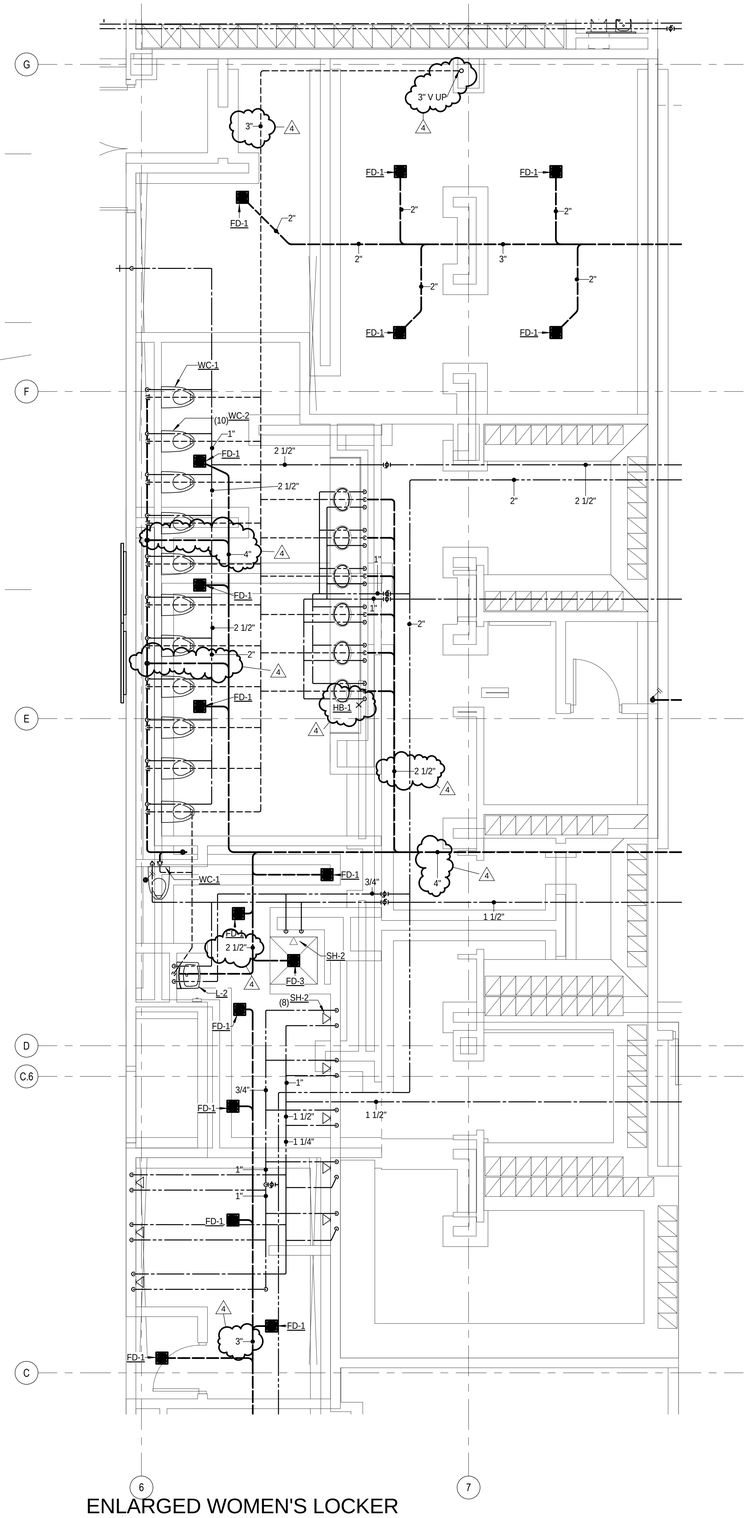


ENLARGED MEN'S LOCKER ROOM PLUMBING ALT #1

1

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

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



ENLARGED WOMEN'S LOCKER ROOM PLUMBING ALT #1

2

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

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

ENTIRE SHEET

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No. 324030
BRADLY W. ROSENHAN
STATE OF UTAH

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4	JUNE 12, 2013	ADDENDUM FOUR

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ENLARGED ALTERNATE 1 PLUMB PLANS
BID DOCUMENTS
JUNE 05, 2013

SHEET NUMBER
PP402

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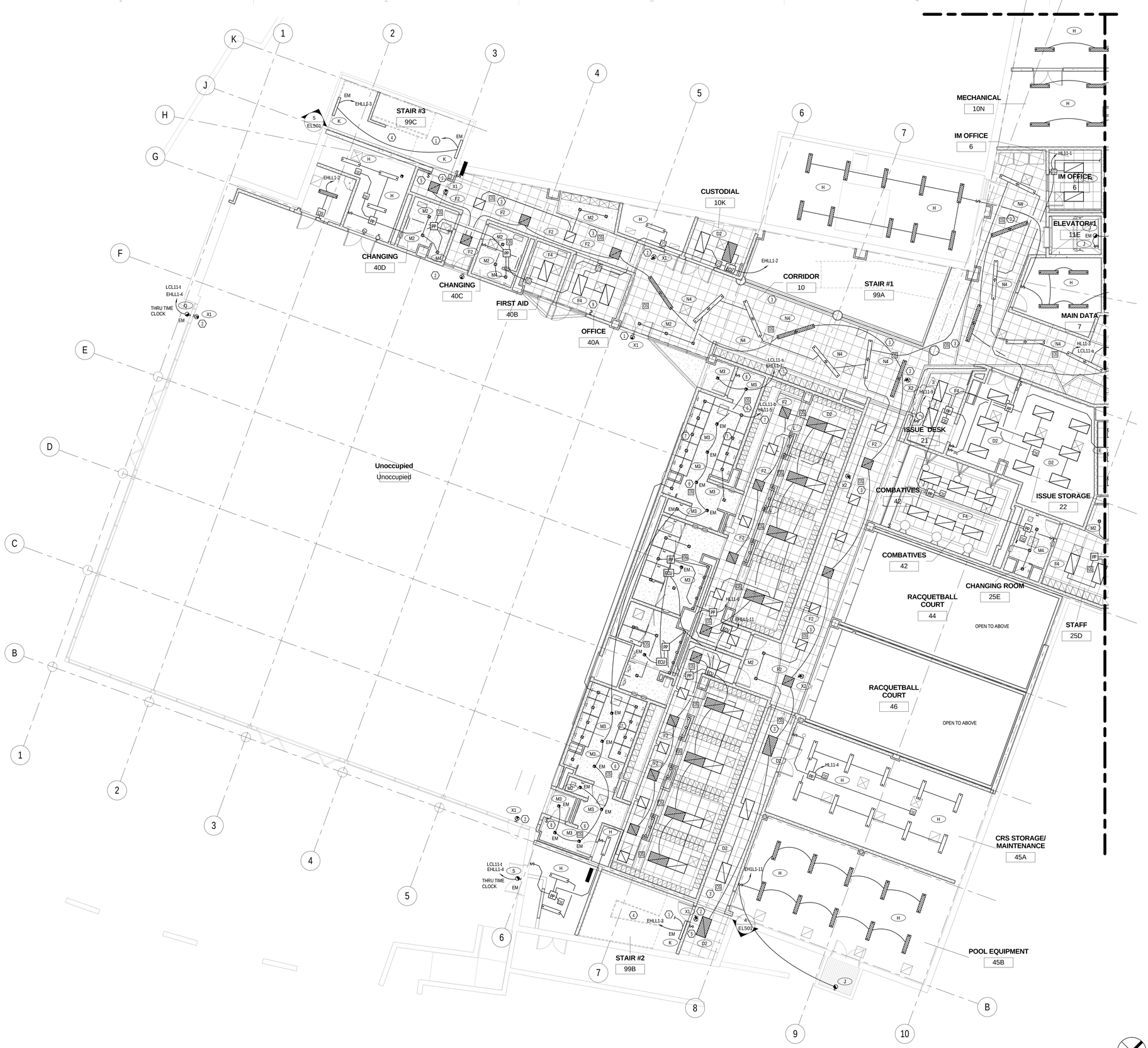

1 EL100.C C ENLARGED LOWER LEVEL RCP PLAN WEST
SCALE |1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"

KEYPLAN

KEYED NOTES - SHEET EL100.C

1. CONTINUATION ON LEVEL ONE.
2. CONNECT ALL EXIT SIGNS TO UNSWITCHED EM CIRCUIT.
3. CORRIDOR OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON. DURING NIGHT TIME (UNOCCUPIED) MODE, NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY THE LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
4. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSORS: ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
5. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS. LOCKER OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL LOCKER/ TOILET LIGHTING.
6. SHOWER AREA OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL SHOWER AREA LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON. DURING NIGHT TIME (UNOCCUPIED) MODE, NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY THE LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
7. SHOWER AREA LIGHTING SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEM'S TIME CLOCK.
8. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN SHOWER LIGHTS ON/OFF AFTER HOURS.
9. LOW VOLTAGE 8 BUTTON SWITCHING TO CONTROL POOL LIGHTING. CONTROL TO BE MANUAL ON/ MANUAL OFF WITH A PRESET TIME OFF AT THE END OF THE DAY.

GENERAL NOTES - EL100.C

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.

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2	06-11-2013	ELECT ADDEN 2
3	06-12-2013	ELECT ADDEN 3

SHEET NAME
LOWER LEVEL LIGHTING AREA C
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL100.C

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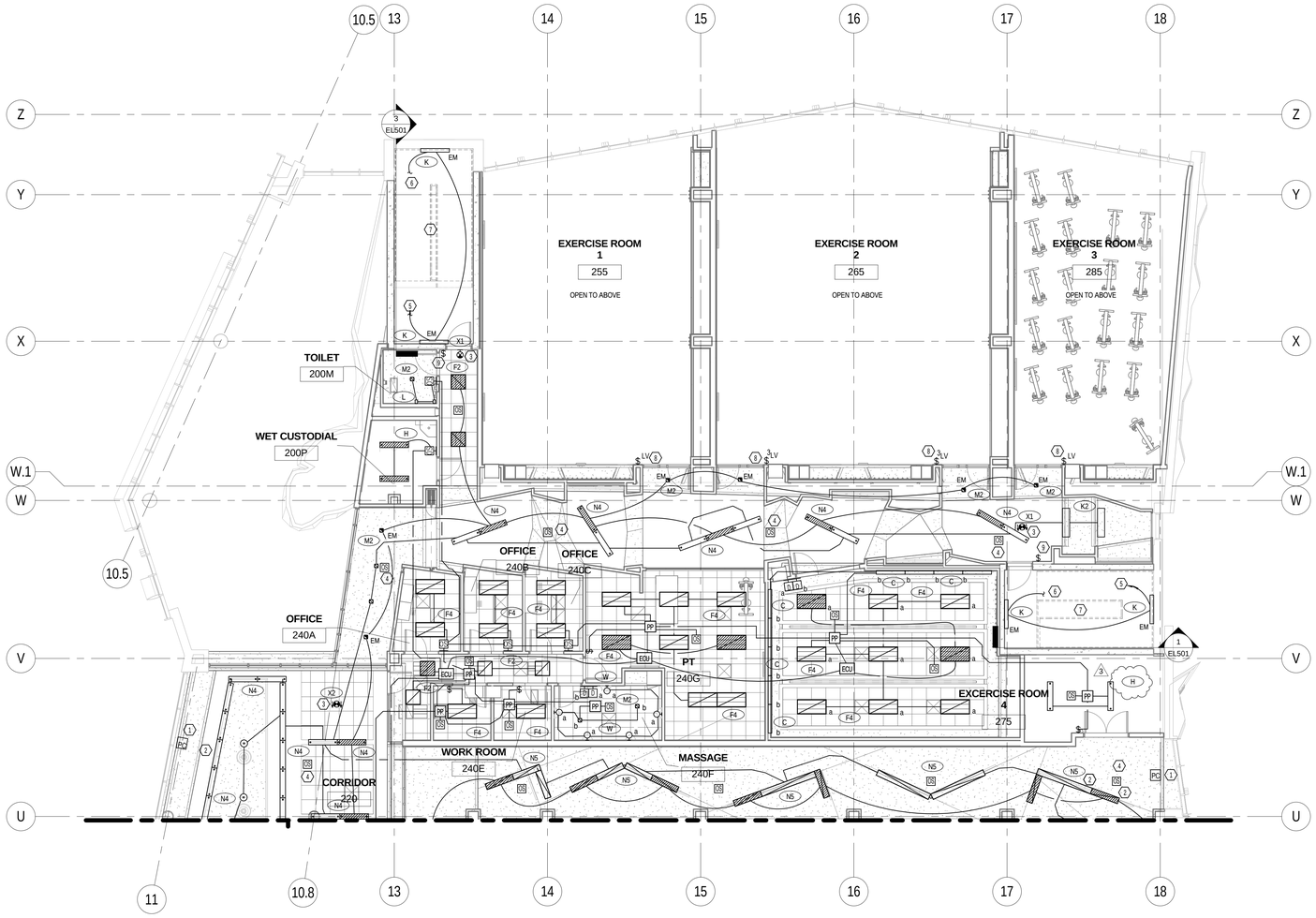
KEYED NOTES - SHEET EL102.A

1. DIMMING PHOTO SENSOR TO OPERATE A STANDARD 0-10 VCD ELECTRONIC DIMMING DRIVER. COORDINATE THE PROPER HEIGHT AND LOCATION WITH MANUFACTURER AND ARCHITECT PLANS.
2. FIXTURES TO BE CONTROLLED BY PHOTOSENSOR. CONTROL SCHEMES WILL BE SET THROUGH PROGRAMMING.
3. CONNECT EXIST SIGNS TO UNSWITCHED EM CIRCUITS.
4. CORRIDOR PHOTO SENSOR AND OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE CORRIDOR LIGHTING. DURING DAY TIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL THE NORMAL LIGHTING IN ZONES AND THE EMERGENCY LIGHTING SHALL REMAIN ON DURING NIGHT TIME (UNOCUPIED) MODE. THE NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY ALL EMERGENCY LIGHTS SHALL TURN ON.
5. CONTINUATION ON LEVEL 3.
6. CONTINUATION ON LEVEL 2.
7. STAIR WELL LIGHT FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR; ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
8. LOW VOLTAGE SCENE SWITCH FOR CONTROL OF THE EXERCISE ROOMS. WATTSTOPPER LMSW-105 OR EQUAL APPROVED.
9. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.

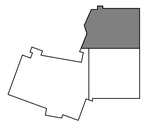
GENERAL NOTES - EL102.A

A. COORDINATE THE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION, COORDINATE THIS WITH ARCHITECTURAL PLANS/DRAWINGS.



1 EL102.A A ENLARGED LEVEL 2 RCP PLAN NORTH
SCALE | 1/8" = 1'-0"

0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"



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Contact: Paris LeLaCheur
Project #: 2010-117.00

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MHTN PROJECT NO. 2010562.00
DRAWN BY: KGE CHECKED BY: KGE

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CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE:

NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2
3	06-12-2013	ELECT ADDEN 3

SHEET NAME
LEVEL 2
LIGHTING AREA
A
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL102.A

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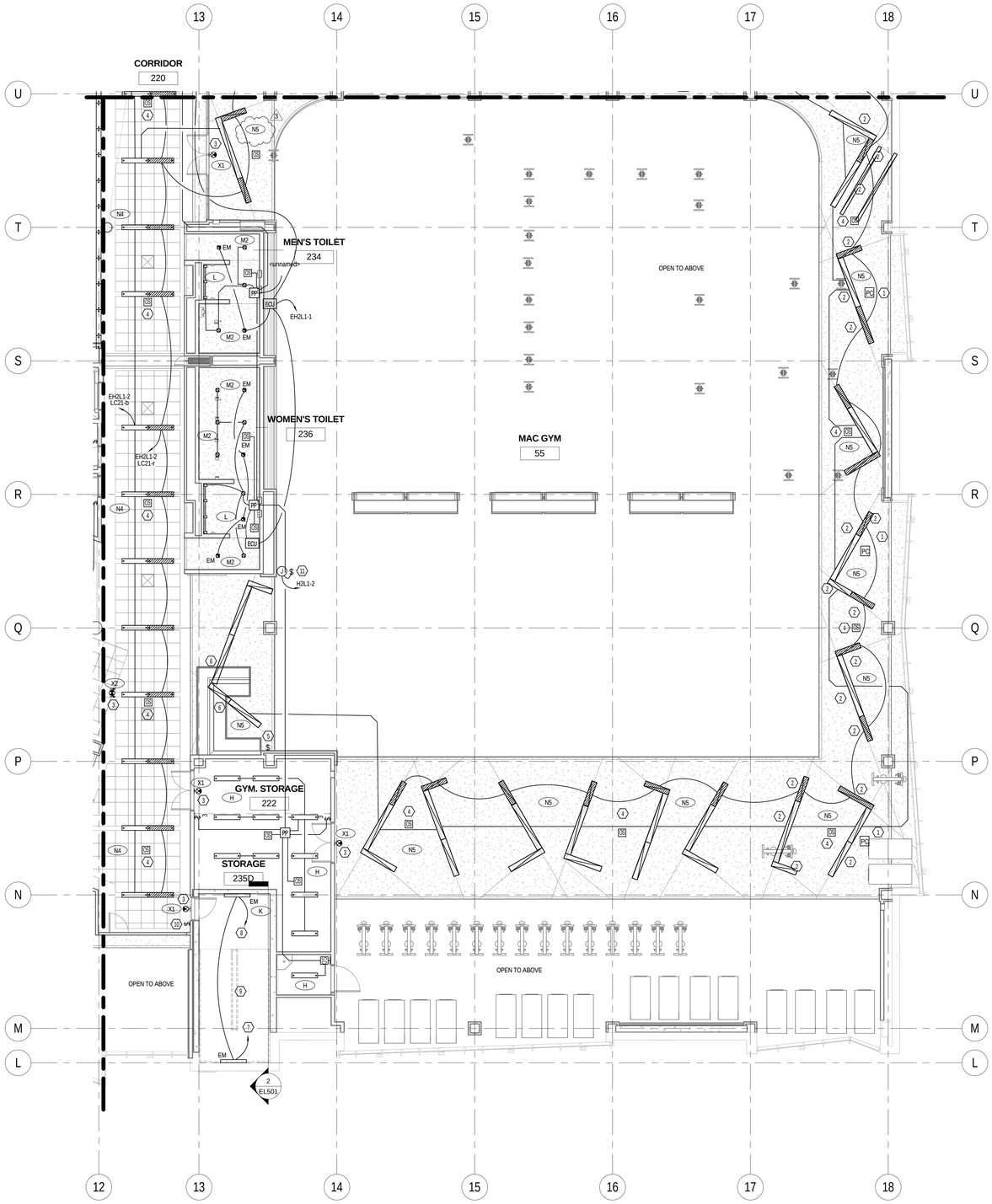


1 EL102.B B ENLARGED LEVEL 2 RCP PLAN SOUTH
SCALE | 1/8" = 1'-0"

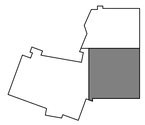
0' 4'-0" 8'-0" 16'-0"
1/8" =1'-0"

KEYNOTES - SHEET EL102.B

1. DIMMING PHOTOSENSOR TO OPERATE A STANDARD 0-10 VDC ELECTRONIC DIMMING DRIVER. COORDINATE THE PROPER HEIGHT AND LOCATION WITH MANUFACTURER AND ARCHITECT PLANS.
2. FIXTURES TO BE CONTROLLED BY PHOTOSENSOR.
3. CONNECT EXIT SIGNS TO UNSWITCHED EM. CIRCUITS.
4. CORRIDOR PHOTOSENSORS AND OCCUPANCY SENSORS SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON DURING NIGHT TIME (UNOCCUPIED) MODE. NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
5. LOW VOLTAGE 4 BUTTON (X3) SWITCHING FOR CONTROL OF FITNESS CENTER LIGHTING. CONTROL IS TO BE MANUAL ON/ MANUAL OFF WITH A PRESET TIME OFF AT THE END OF THE DAY.
6. ELECTRICAL CONTRACTOR TO COORDINATE WITH THE FRAMING CONTRACTOR FOR AREAS WHERE LINEAR FIXTURES TRANSITION FROM PENDANT MOUNT TO RECESS MOUNT. FIXTURE IS TO BE CONTINUOUS WITH NO SECTION BREAK. FRAMING AND GYP BOARD IS TO BE INSTALLED TO ACCOMODATE THE LIGHTING FIXTURE. ELECTRICAL CONTRACTOR IS TO COORDINATE THE FRAMING OPENING WITH THE FIXTURE SUBMITTED, NOT THE DIMENSION SHOWN ON THE LUMINAIRE SCHEDULE. ACTUAL FIXTURE WIDTHS MAY VARY FROM MANUFACTURER TO MANUFACTURER.
7. CONTINUATION ON LEVEL 1.
8. CONTINUATION ON LEVEL 2.
9. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR; ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
10. LOW VOLTAGE 2-BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.
11. PROVIDE J-BOX, CONDUIT, SWITCH, CONDUCTORS FOR LED LIGHT BOX IN THE MILLWORK. COORDINATE EXACT LOCATION WITH MILLWORK BEFORE ROUGH-IN.

GENERAL NOTES - SHEET EL102.B

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.



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NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2
3	06-12-2013	ELECT ADDEN 3

SHEET NAME
LEVEL 2
LIGHTING AREA
B
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL102.B

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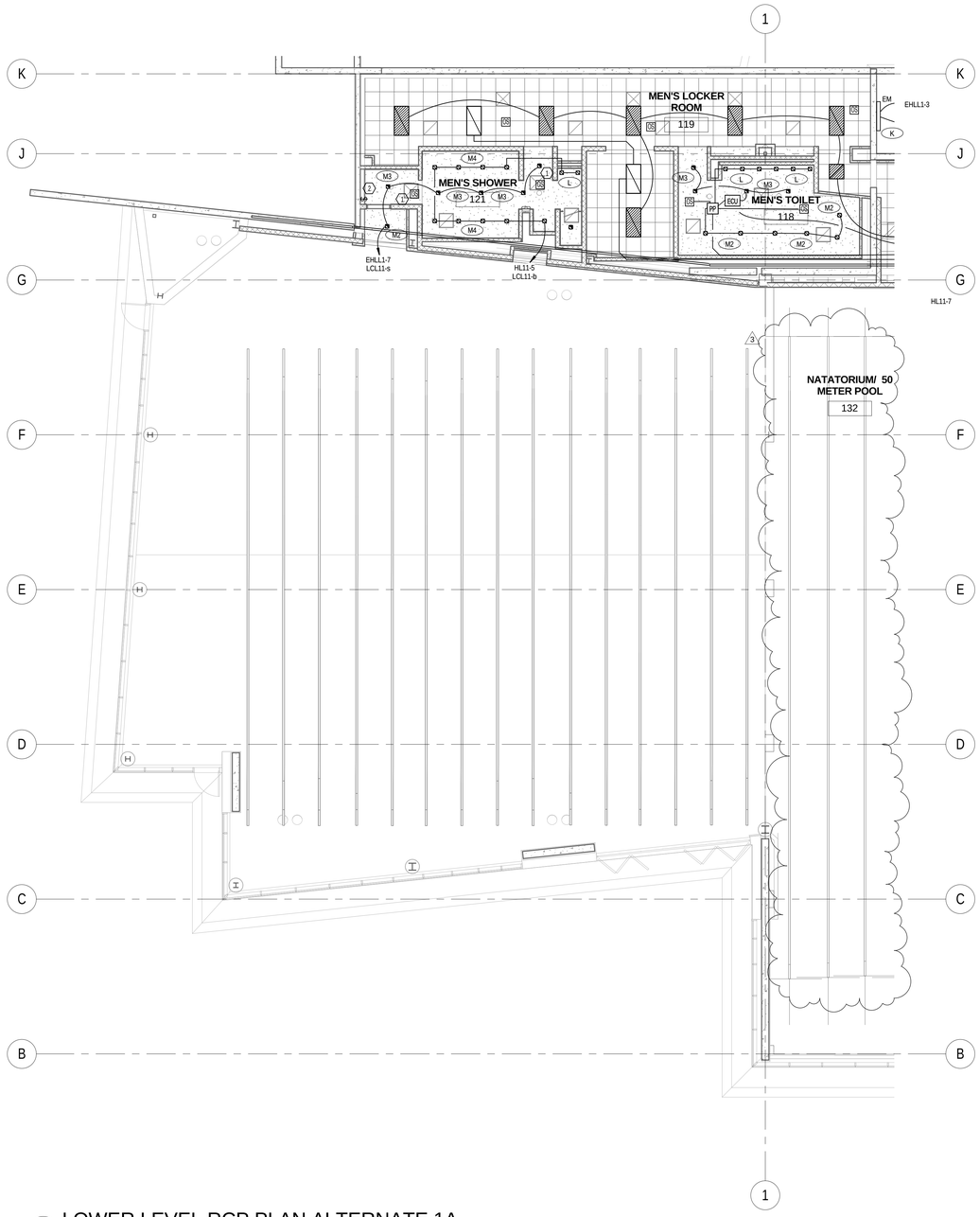
KEYED NOTES - SHEET EL200.C1

1. SHOWER OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE SHOWER/TOILET LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON. DURING NIGHT TIME (UNOCCUPIED) MODE, NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEMS TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
2. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN SHOWER LIGHTS ON/OFF AFTER HOURS.
3. LINEAR LED FIXTURE TYPE P2, SHALL BE INSTALLED IN MULLION AS SHOWN WHERE THE DONOR GLASS EXPOSED ABOVE GRADE.

GENERAL NOTES - SHEET EL200.C1

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.



1 EL200.C1 LOWER LEVEL RCP PLAN ALTERNATE 1A
SCALE |1/8" = 1'-0"

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NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2
3	06-12-2013	ELECT ADDEN 3

SHEET NAME
LOWER LEVEL LIGHTING - ALTERNATE 1A
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL200.C1

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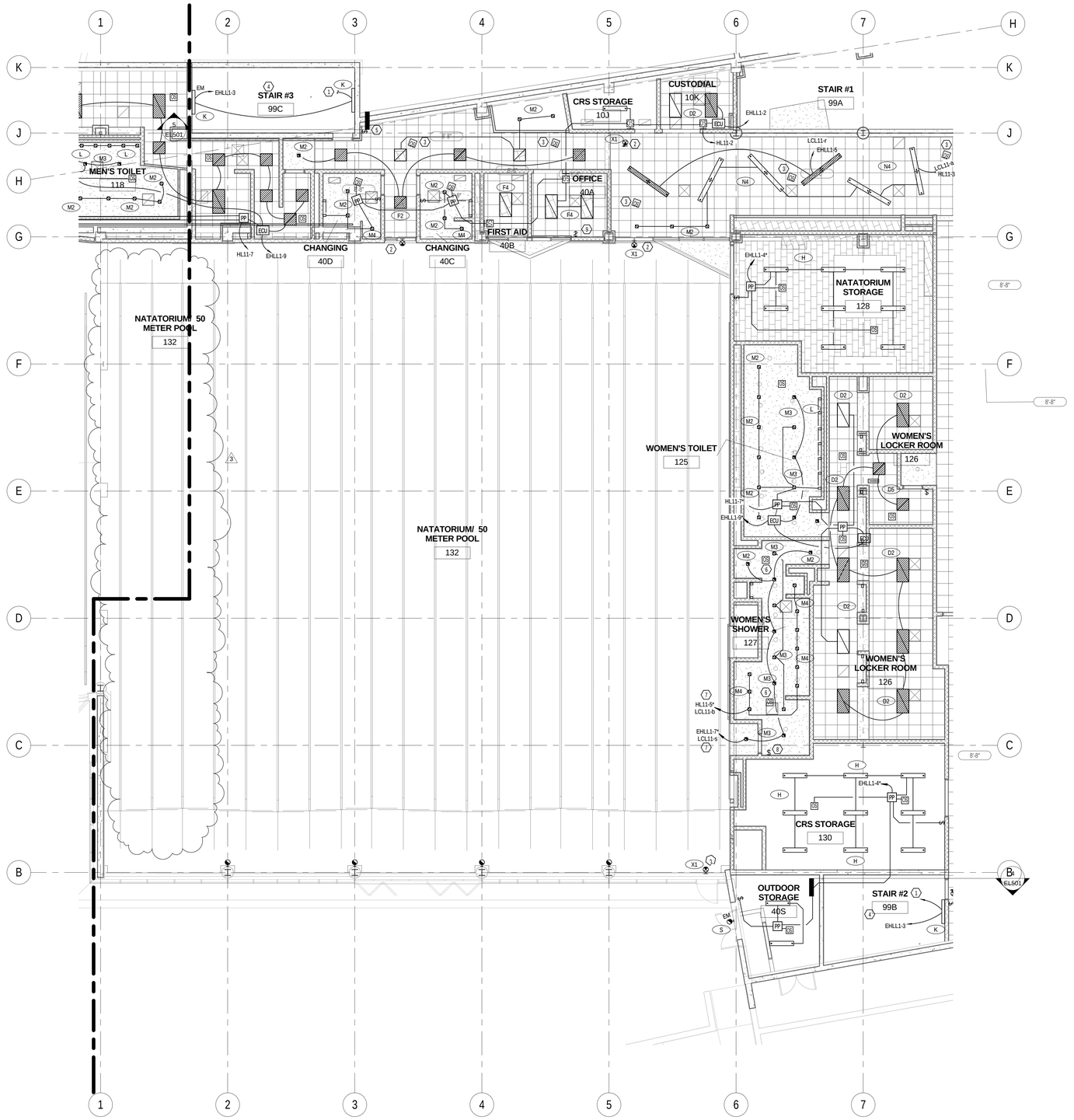

1 EL200.C2 LOWER LEVEL RCP PLAN ALTERNATE 1B

SCALE | 1/8" = 1'-0"

KEYED NOTES - SHEET EL200.C

1. CONTINUATION ON LEVEL ONE.
2. CONNECT ALL EXIT SIGNS TO UNSWITCHED CIRCUIT.
3. CORRIDOR OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL THE NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON DURING NIGHT TIME (UNOCCUPIED) MODE. NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.
4. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR: ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
5. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN CORRIDOR LIGHTS ON/OFF AFTER HOURS.
6. SHOWER OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE SHOWER AREA LIGHTING.
7. SHOWER LIGHTING SHALL BE CONNECTED TO RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL THE LIGHTING IN THIS ZONE BY LIGHTING CONTROL SYSTEM'S TIME CLOCK.
8. LOW VOLTAGE 2 BUTTON OVERRIDE SWITCH SHALL BE CONNECTED TO THE RELAY CONTROL SYSTEM TO TURN SHOWER LIGHTS ON/OFF AFTER HOURS.
9. LOW VOLTAGE 8 BUTTON SWITCHING FOR CONTROL OF THE POOL LIGHTING. CONTROL IS TO BE MANUAL ON/ MANUAL OFF WITH A PRESET TIME OFF AT THE END OF THE DAY.

GENERAL NOTES - SHEET EL200.C

A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.

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NO.	DATE	DESCRIPTION
2	06-11-2013	ELECT ADDEN 2

SHEET NAME

LOWER LEVEL LIGHTING - ALTERNATE 1B
BID DOCUMENTS
May 15, 2013

SHEET NUMBER

EL200.C2

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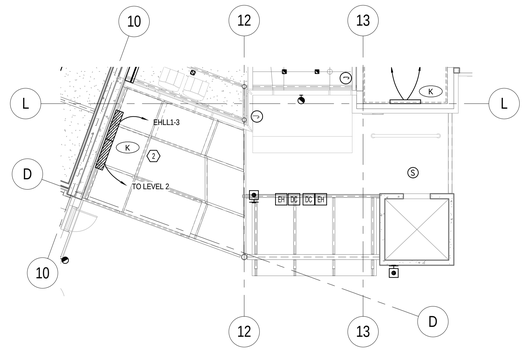
KEYED NOTES - SHEET EL201.B

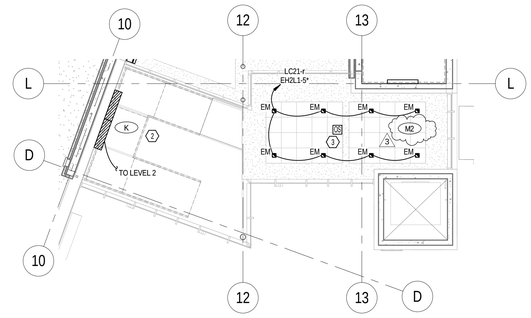
1. CONNECT ALL EXIT SIGNS TO UNSWITCHED EM. CIRCUIT.
2. STAIRWELL LIGHTING FIXTURES SHALL HAVE 2 BALLASTS AND 2 LAMPS WITH INTEGRATED OCCUPANCY SENSOR: ONE LAMP CONSTANTLY ON, ONE LAMP SENSORED.
3. CORRIDOR OCCUPANCY SENSORS SHALL BE CONNECTED TO THE RELAY CONTROL PANEL ON THIS FLOOR TO CONTROL CORRIDOR LIGHTING. DURING DAYTIME (OCCUPIED) MODE, THE OCCUPANCY SENSORS SHALL CONTROL NORMAL LIGHTING IN ZONES AND EMERGENCY LIGHTING SHALL REMAIN ON. DURING NIGHT TIME (UNOCCUPIED) MODE, NORMAL LIGHTING SHALL REMAIN OFF. EMERGENCY LIGHTING SHALL BE TURNED OFF BY LIGHTING CONTROL SYSTEM'S TIME CLOCK. DURING OFF HOURS AND UPON SENSING OCCUPANCY, ALL EMERGENCY LIGHTS SHALL TURN ON.

GENERAL NOTES - SHEET EL201.B

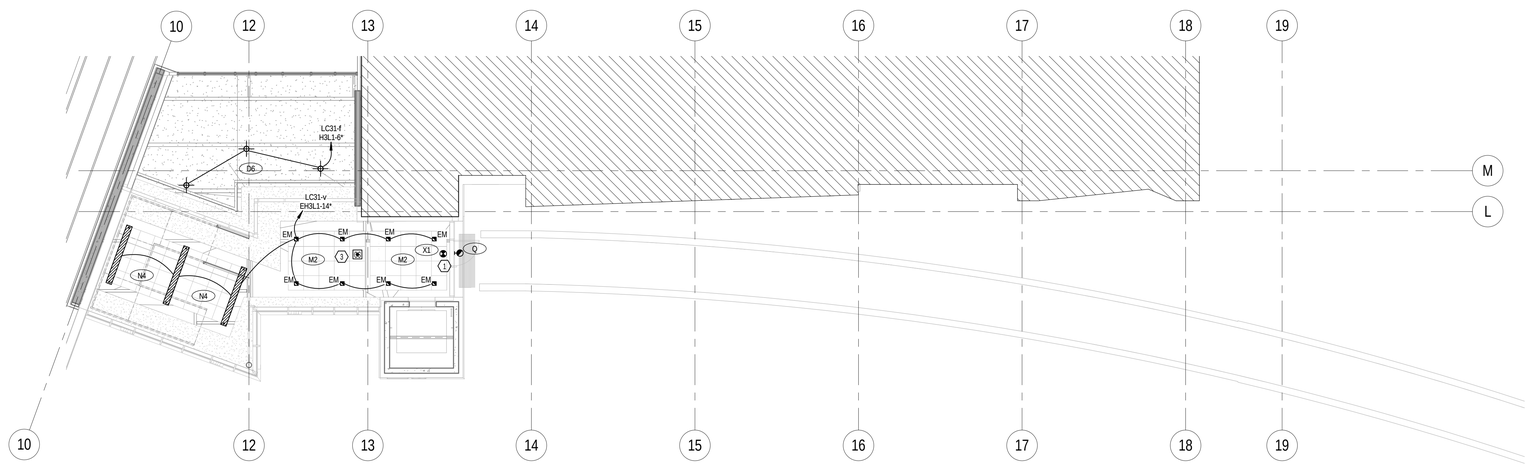
A. COORDINATE MOUNTING HEIGHT OF ALL LIGHT FIXTURES WITH ARCHITECTURAL PLANS/ DRAWINGS.
B. MAKE SMOOTH TRANSITION FOR LIGHT FIXTURES WITH RESPECT TO CEILING TRANSITION. COORDINATE THIS WITH ARCHITECT.



1 EL201.B LEVEL 1 RCP PLAN ALTERNATE 3
SCALE |1/8" = 1'-0"



2 EL201.B LEVEL 2 RCP PLAN ALTERNATE 3
SCALE |1/8" = 1'-0"



3 EL201.B LEVEL 3 RCP PLAN ALTERNATE 3
SCALE |1/8" = 1'-0"

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SHEET NAME
ALTERNATE 3
LIGHTING AREA
B
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EL201.B

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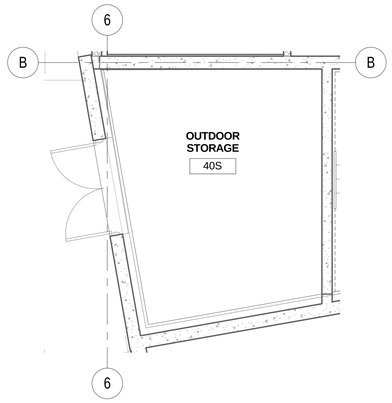
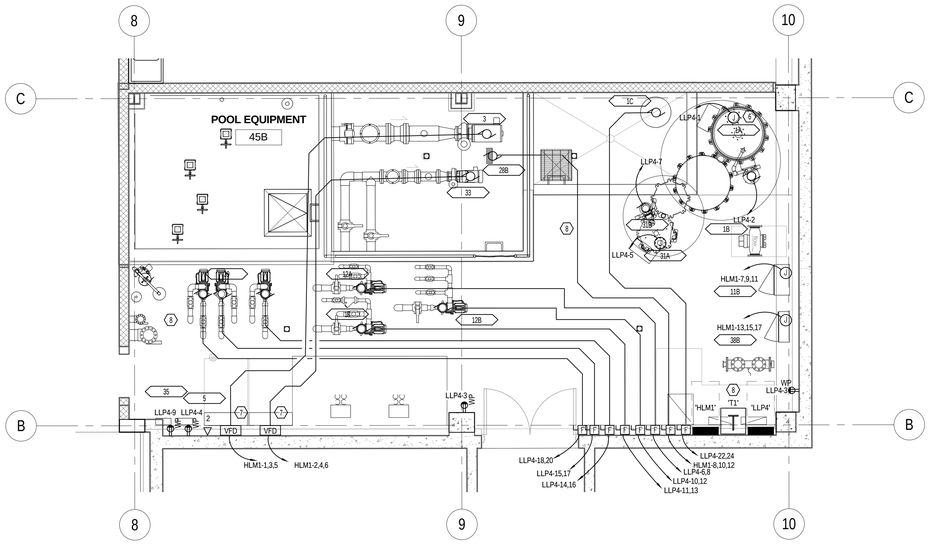
KEYED NOTES - SHEET EP502

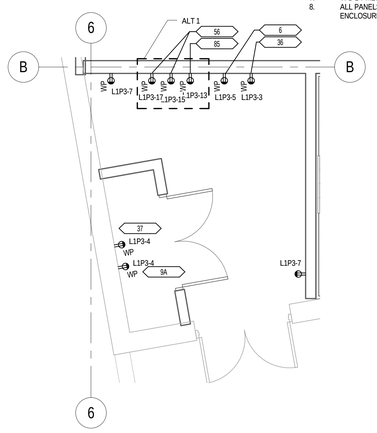
1. PROVIDE POWER TO 120V MARINE LIGHTS IN EACH AIR HANDLER. DIV. 26 TO INSTALL LIGHTS AND MAKE FINAL CONNECTIONS. PROVIDE SWITCH AND COORDINATE LOCATION.
2. VFD's PROVIDEED BY MECHANICAL. COORDEINATE EXACT LOCATION PRIOR TO ROUGH-IN.
3. REDUNDANT VFD PROVIDED BY MECHANICAL.
4. RELIEF FANS POWER. SEE MECHANICAL SCHEDULE AND MECHANICAL DRAWINGS FOR COORDINATION.
5. SUPPLY FANS POWER. SEE MECHANICAL SCHEDULE AND MECHANICAL DRAWINGS FOR COORDINATION.
6. PROVIDE A 20A GFCI CIRCUIT BREAKER.
7. VFD BY MECHANICAL.
8. ALL PANELS, TRANSFORMERS, J-BOXES AND RECEPTACLE ENCLOSURES INTHIS ROOM SHALL BE NEMA 4X.



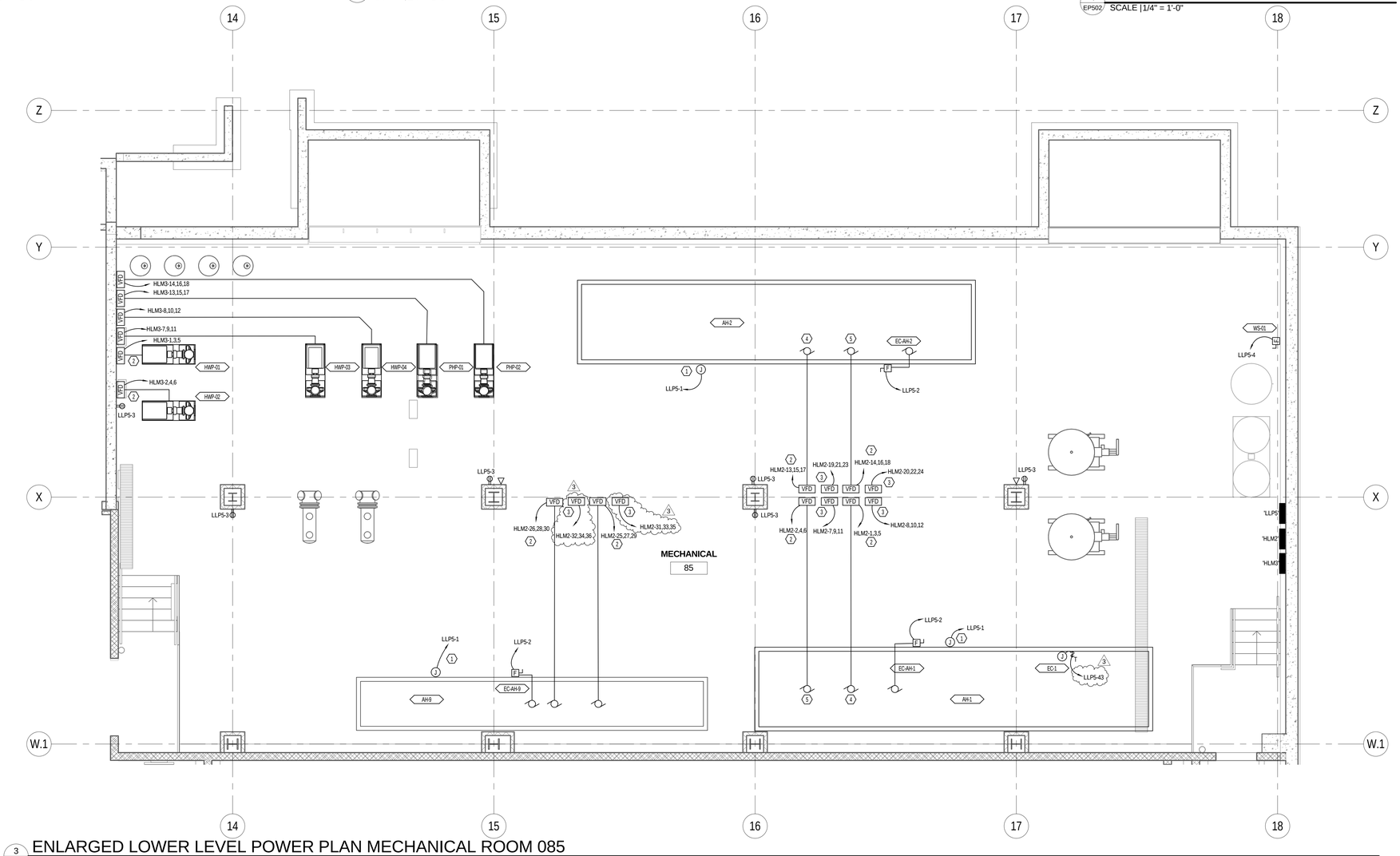
2 EP502 ENLARGED STORAGE ROOM 40S
SCALE |1/4" = 1'-0"



1 EP502 ENLARGED POOL EQUIPMENT ROOM 45B
SCALE |1/4" = 1'-0"



4 EP502 ENLARGED CHEMICAL ROOM
SCALE |1/4" = 1'-0"



3 EP502 ENLARGED LOWER LEVEL POWER PLAN MECHANICAL ROOM 085
SCALE |1/4" = 1'-0"

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DRAWN BY: Author CHECKED BY: Checker

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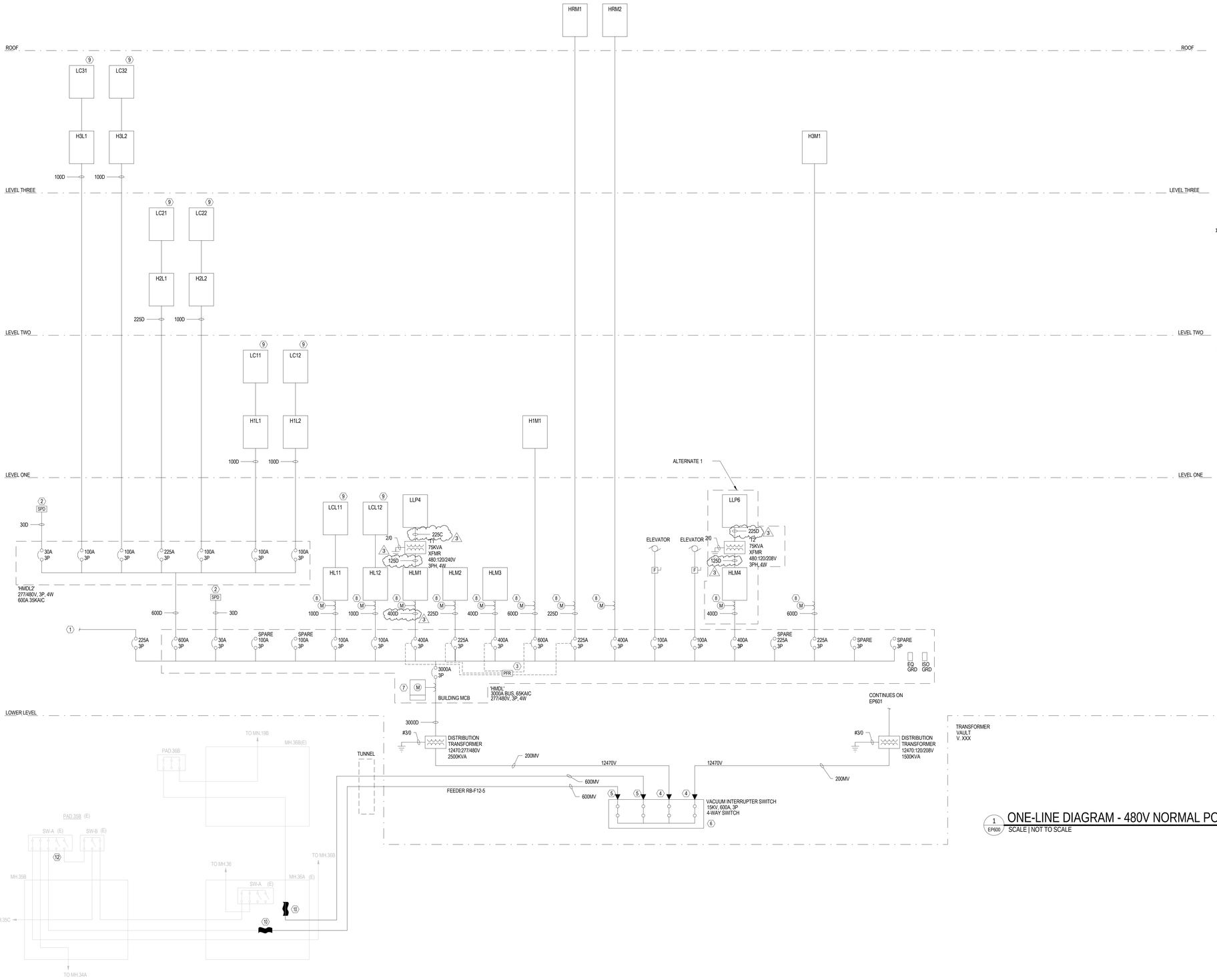
SHEET NAME
ENLARGED LOWER LEVEL ROOMS
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP502



1 EP600 ONE-LINE DIAGRAM - 480V NORMAL POWER DISTRIBUTION

SCALE | NOT TO SCALE

KEYED NOTES - EP600

1. SEE SHEET EP602 FOR CONTINUATION TO EMERGENCY DISTRIBUTION SYSTEM.
2. TVSS: 277/480V.
3. PHASE FAILURE RELAY.
4. PROVIDE AND INSTALL 200A MOLDED PRODUCT LOADBREAK TERMINATIONS.
5. PROVIDE AND INSTALL 600A MOLDED PRODUCT DEADBREAK TERMINATIONS.
6. PROVIDE AND INSTALL NEW 15.5KV SOLID DIELECTRIC VFI SWITCH. SWITCH IS TO BE SINGLE SIDED. SWITCH IS ONLY AND INSTALLED ON STAINLESS STEEL MOUNTING FRAME.
7. METERING AT MAIN SWITCHBOARDS (SERVICE ENTRANCE). PROVIDE SQUARE D POWER LOGIC CIRCUIT MONITOR, CLASS 3000, MODEL CM-3350. PROVIDE METERS, CURRENT AND POTENTIAL TRANSFORMERS, SELECTOR SWITCHES, WIRING , ETC. AS REQUIRED FOR COMPLETE METERING SYSTEM WITH THE CAPABILITY TO CONNECT BY ETHERNET TO THE MAIN CAMPUS UTILITY MANAGEMENT SYSTEM.
8. PROVIDE POWER METERING FOR LEED MEASUREMENT AND VERIFICATION. PROVIDE ONE GROUP OF THE METERS TO MEASURE ALL MECHANICAL LOADS. PROVIDE SECOND GROUP OF METERS TO MEASURE ALL LIGHTING LOADS. PROVIDE THIRD GROUP OF METERS TO MEASURE ALL OTHER ELECTRICAL LOADS. PROVIDE CURRENT AND POTENTIAL TRANSFORMERS AS REQUIRED. PROVIDE DATA RECORDER AND SOFTWARE FOR DATA RECORDING AND PROCESSING PROVIDE INTERFACE BETWEEN LEED METERING EQUIPMENT AND BUILDING MANAGEMENT SYSTEM.
9. LIGHTING CONTROL PANEL.
10. PROVIDE NEW MEDIUM VOLTAGE 15KV COLD SHRINK CABLE SPLICE IN MH.36A. SEE SHEET ES500 FOR MANHOLE DETAILS AND SPLICE LOCATIONS.

GENERAL NOTES - SHEET EP600

A. ALL SWITCHING RESULTING IN A BUILDING OUTAGE SHALL BE COMPLETED AT NIGHT AND ON WEEKENDS. OUTAGES ARE TO BE COORDINATED THROUGH UNIVERSITY ELECTRIC SHOP TWO WEEKS PRIOR TO THE DESIRED OUTAGE DATE.
B. DIVISION 26 SHALL COMPLETE THE FOLLOWING IN EACH MANHOLE WHERE ANY DEMOLITION OR NEW WORK OCCURS: REMOVE ALL DEBRIS, SWEEP OUT MANHOLE, CLEAN UP OF OLD OIL SPILLS, CLEAN UP OF NEW OIL SPILLS, LEAVE MANHOLE IN CLEAN CONDITION.
C. EACH FEEDER IS TO BE LOOPED INSIDE EACH MANHOLE FOR AT LEAST 360°.
D. CONTRACTOR IS TO PROVIDE AND INSTALL MEDIUM VOLTAGE CABLE SPLICES AS NECESSARY TO ENSURE PROPER CABLE PULLING TENSIONS ARE MAINTAINED THROUGHOUT THE ENTIRE LENGTH OF THE CABLE PULL. MINIMIZE THE USE OF CABLE SPLICES THROUGHOUT THE PROJECT. ALL CABLE TO CABLE MEDIUM VOLTAGE SPLICES ARE TO BE 1583 RAYCHEM HEATSHRINK SPLICES OR 3M COLDSHRINK SPLICES UNLESS NOTED OTHERWISE. PROVIDE ONE SPLICE KIT PER PHASE AND SUPPORT CABLES TO MANHOLE WALL WITHIN 12" ON EITHER SIDE OF THE SPLICE.
E. ALL MEDIUM VOLTAGE CABLING IS TO CONSIST OF (3)#500KCM COPPER EPR (15KV) SINGLE CONDUCTOR CABLES WITH (1)#4/0 (THWN) 600V GRND FOR MAIN DISTRIBUTION LINES AND (3)#4/0 COPPER EPR (15KV) SINGLE CONDUCTOR CABLES WITH (1)#4 (THWN) 600V GRND FOR RUNS FROM VFI SWITCHES TO TRANSFORMERS.
F. MEDIUM VOLTAGE CABLING IN VAULTS IS TO BE BUNDLED AND RUN IN EITHER RIGID METAL CONDUIT OR SUPPORTED BY HOOKS FROM SWITCH TO TRANSFORMER(S). CABLES WILL NOT BE RUN ALONG THE FLOOR IN THE VAULTS.

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Project #: 2010-117.00

UNIVERSITY OF UTAH
STUDENT LIFE CENTER
1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00

DRAWN BY: Author CHECKED BY: Checker

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
1	05-28-2013	ADDENDUM ONE
2	06-11-2013	ELECT ADDEN 2
3	06-12-2013	ELECT ADDEN 3

SHEET NAME
ONE-LINE
DIAGRAM - 480V

BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP600

C:\Users\rbrown.KGE\Documents\2010-117.00_KGE_STUDENT LIFE_ELECTRICAL_CENTERAL_2012_rbrown.rvt
6/12/2013 8:34:14 AM

Branch Panel: EHLL1

Location: MAIN ELECTRIC 10F | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** MB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: TYPE 1 | | **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	RM 7,10F,	L	974	20 A	1	976	94					1	20 A	94	L	CUSTODIAL CLOSET	2
3	STAIRWELL LIGHTING	L	1763	20 A	1			1763	840			1	20 A	840	L	EXTERIOR EXIT	4
5	LL CORRIDORS EM LTG	L	340	20 A	1					340	756	1	20 A	753	L	CORRIDOR LOWER LVL	6
7	LL SHOWER RM LTG	L	576	20 A	1	576	2350					1	20 A	2350	L	RM 10D,60C, 65A,85	8
9	LL LOCKER RM LTG	L	600	20 A	1			605									10
11	LOCKER RMS LOWER	L	624	20 A	1					628							12
13																	14
15									0			1	20 A	0	--	SPARE	16
17	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	18
19	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	20
21	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	22
23	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	24
25	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	26
27	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	28
29	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	3996		3208		1724							
					Total	15 A		12 A		6 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
L	8928	125.00%	11160		
				Total Conn. Load:	8928
				Total Est. Demand:	11160
				Total Conn. Current:	11 A
				Total Est. Demand	13 A

Notes:

Branch Panel: EHLM1

Location: MAIN ELECTRIC 10F | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** MB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: TYPE 1 | | **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1																	2
3																	4
5																	6
7																	8
9																	10
11																	12
13																	14
15																	16
17																	18
19																	20
21																	22
23																	24
25																	26
27																	28
29																	30
31																	32
33																	34
35																	36
37																	38
39																	40
41																	42
					Total	0		0		0							
					Total	0 A		0 A		0 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
				Total Conn. Load:	0
				Total Est. Demand:	0
				Total Conn. Current:	0 A
				Total Est. Demand	0 A

Notes:

Branch Panel: ELLP1

Location: MAIN ELECTRIC 10F | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** MB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: TYPE 1 | | **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	'FACP' RM 7	--	500	20 A	1	500	1000					2	20 A	2000	R	UPS BACKUP	2
3	'SEC' RM 7	--	500	20 A	1			500	1000								4
5											1000	2	20 A	2000	R	UPS BACKUP	6
7	RECEPTACLES	R	180	20 A	1	180	1000										8
9	RECEPTACLES	R	720	20 A	1			720	180			1	20 A	180	R	RECEPTACLES	10
11	RECEPT. TRANS.	R	180	20 A	1					180							12
13	RECEPT. TRANS.	R	180	20 A	1	180											14
15																	16
17																	18
19																	20
21																	22
23																	24
25																	26
27																	28
29																	30
31																	32
33																	34
35																	36
37																	38
39																	40
41																	42
					Total	2860		2400		1180							
					Total	25 A		22 A		10 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	5440	100.00%	5440		
				Total Conn. Load:	6440
				Total Est. Demand:	6440
				Total Conn. Current:	18 A
				Total Est. Demand	18 A

Notes:

Branch Panel: HL11

Location: MAIN ELECTRIC 10F | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** MB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: TYPE 1 | | **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	RM 6, 21, 22, 25B, 25C,	L	579	20 A	1	582	184					1	20 A	182	L	RM 10K, 10J, 40A, 40B,	2
3	LL CORRIDOR	L	1579	20 A	1			1585	470			1	20 A	470	L	CRS STORAGE 45A	4
5	LL SHOWER RM LTG	L	327	20 A	1					327	1176	1	20 A	1167	L	LL WOMEN LOCKER RM	6
7	LL LOCKER RM LTG	L	108	20 A	1	109	0					1	0 A	0	--	SPARE	8
9	LL CONTRL DESK 21	L	200	20 A	1			200	0			1	20 A	0	--	SPARE	10
11	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	12
13	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	14
15	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	16
17	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	18
19	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	20
21	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	22
23	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	24
25	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	26
27	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	28
29	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	875		2255		1503							
					Total	3 A		8 A		6 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
L	4633	125.00%	5791		
				Total Conn. Load:	4633
				Total Est. Demand:	5791
				Total Conn. Current:	6 A
				Total Est. Demand	7 A

Notes:

Branch Panel: HL12

Location: MAIN ELECTRIC 10F | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** MB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: TYPE 1 | | **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	2
3	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	4
5	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	6
7	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	8
9	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	10
11	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	12
13	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	14
15	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	16
17	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	18
19	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	20
21	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	22
23	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	24
25	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	26
27	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	28
29	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	0		0		0							
					Total	0 A		0 A		0 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
				Total Conn. Load:	0
				Total Est. Demand:	0
				Total Conn. Current:	0 A
				Total Est. Demand	0 A

Notes:

Branch Panel: HLM1

Location: | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** ML
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 400 A
Enclosure: TYPE 1 | | **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1						3047	3047										2
3	EQUIPMENT 3	M	9141	20 A	3			3047	3047			3	20 A	9141	M	EQUIPMENT 33	4
5										3047	3047						6
7						8864	582										8
9	EQUIPMENT 11B	M	26592	40 A	3			8864	582			3	20 A	1745	M	EQUIPMENT 28B	10
11										8864	582						12
13						8864	9418										14
15	EQUIPMENT 38B	M	26592	40 A	3			8864	9418			3	50 A	28254	--	EQUIPMENT 53	16
17										8864	9418						18
19						17240	3878										20
21	T1 EQUIP ROOM 45B	Other;	31120	150 A	3			13880	3878			3	20 A	11634	--	EQUIPMENT 83	22
23										3000	3878						24
25						8864	0					1	40 A	0	--	SPARE	26
27	61B	--	26592	40 A	3			8864	0			1	40 A	0	--	SPARE	28
29										8864	0	1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	63804		60444		49564							
					Total	236 A		224 A		179 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
Other	0	0.00%	0		
R	720	100.00%	720	Total Conn. Load:	170811
M	100691	100.00%	100691	Total Est. Demand:	170811
				Total Conn. Current:	205 A
				Total Est. Demand	205 A

Notes:

Branch Panel: HLM2

Location: MECHANICAL 85 | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** ML
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: TYPE 1 | | **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1						2327	8421										2
3	AH-1 RELIEF FANS	M	6980	20 A	3			2327	8421			3	20 A	25264	M	AH-1 SUPPLY FANS	4
5										2327	8421						6
7						0	0										8
9	AH-1 REDUNDANT VFD	M	0	20 A	3			0	0			3	20 A	0	M	AH-1 REDUNDANT VFD	10
11										0	0						12
13						2642	12632										14
15	AH-2 RELIEF FANS	M	7926	20 A	3			2642	12632			3	60 A	37896	M	AH-2 SUPPLY FANS	16
17										2642	12632						18
19						0	0										20
21	AH-2 REDUNDANT VFD	M	0	20 A	3			0	0			3	20 A	0	M	AH-2 REDUNDANT VFD	22
23										0	0						24
25						887	2659										26
27	AH-9 RELIEF FANS	M	2660	20 A	3			887	2659			3	20 A	7976	M	AH-9 SUPPLY FANS	28
29										887	2659						30
31						0	0										32
33	AH-9 REDUNDANT VFD	M	0	20 A	3			0	0			3	20 A	0	M	AH-9 REDUNANT VFD	34
35										0	0						36
37																	38
39																	40
41																	42
					Total	29567		29567		29567							
					Total	107 A		107 A		107 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
M	88702	100.00%	88702		
				Total Conn. Load:	88702
				Total Est. Demand:	88702
				Total Conn. Current:	107 A
				Total Est. Demand	107 A

Notes:

Branch Panel: HLM3

Location: MECHANICAL 85 | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** ML
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 600 A
Enclosure: TYPE 1 | | **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1						18005	18005										2
3	HWP-01	M	54015	100 A	3			18005	18005			3	100 A	54015	M	HWP-02	4
5										18005	18005						6
7						5817	5817										8
9	HWP-03	M	17451	60 A	3			5817	5817			3	60 A	17451	M	HWP-04	10
11										5817	5817						12
13						7479	7479										14
15	PHP-01	M	22437	20 A	3			7479	7479			3	20 A	22437	M	PHP-02	16
17										7479	7479						18
19						22437	22437										20
21	CHWP-1	M	67311	40 A	3			22437	22437			3	40 A	67311	M	CHWP-02	22
23										22437	22437						24
25	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	26
27	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	28
29	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	107476		107476		107476							
					Total	388 A		388 A		388 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
M	322428	100.00%	322428		
				Total Conn. Load:	322428
				Total Est. Demand:	322428
				Total Conn. Current:	388 A
				Total Est. Demand	388 A

Notes:

Branch Panel: LLP1

Location: MAIN ELECTRIC 10F | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** ML
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 250 A
Enclosure: TYPE 1 | | **MCB Rating:**

CKT	Circuit Description	DF	LOAD	BKR	P	A		B		C		P	BKR	LOAD	DF	Circuit Description	CKT
1	RECEPTACLES CORR	R	1440	20 A	1	1440	1440					1	20 A	1440	R	R CORRIDOR 20	2
3	RECEPTACLES LOWER	R	720	20 A	1			720									4
5	RECEPTACLES LOWER	R	540	20 A	1					540	180	1	20 A	180	R	VENDING 5B	6
7	RECEPTACLES GEN	R	1260	20 A	1	1260	180					1	20 A	180	R	VENDING 5B	8
9	RCPTCL TRAINING RM	R	1080	20 A	1			1080	180			1	20 A	180	R	VENDING 5B	10
11	RECEPTACLES TR	R	720	20 A	1					720	540	1	20 A	540	R	RCPTCLES IM OFFICE	12
13	HYDRO EQUIPMENT	R	180	20 A	1	180	1080					1	20 A	1080	R	RCPTCLES ISSUE	14
15	RECEPTACLES	R	540	20 A	1			540	360			1	20 A	360	R	RADIO CHARGER	16
17	RCPTCL EXAM RM 60B	R	900	20 A	1					900	720	1	20 A	720	R	RADIO/TIME CLOCK	18
19							0					1	20 A	0	--	SPARE	20
21	TR ROOM EQUIPMENT	R	180	20 A	1			180	0			1	20 A	0	--	SPARE	22
23	TR ROOM EQUIPMENT	R	540	20 A	1					540	0	1	20 A	0	--	SPARE	24
25	TR ROOM EQUIPMENT	R	180	20 A	1	180	0					1	20 A	0	--	SPARE	26
27	TR ROOM EQUIPMENT	R	360	20 A	1			360	0			1	20 A	0	--	SPARE	28
29	TR ROOM EQUIPMENT	R	360	20 A	1					360	0	1	20 A	0	--	SPARE	30
31	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	32
33	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	34
35	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	36
37	SPARE	--	0	20 A	1	0	0					1	20 A	0	--	SPARE	38
39	SPARE	--	0	20 A	1			0	0			1	20 A	0	--	SPARE	40
41	SPARE	--	0	20 A	1					0	0	1	20 A	0	--	SPARE	42
					Total	5760		3420		4500							
					Total	49 A		29 A		39 A							

Legend:
DEMAND FACTORS: (R-RECEPTACLES 100%<10,000VA, 50%>10,000VA) (L-LIGHTING 125%) (M-MECHANICAL 100%) (C-CONTINUOUS 125%) (K-KITCHEN PER NEC TABLE 220.56) (L-LIGHTING 125%)

Load Classification	Connected Load	Demand Factor	Estimated	Panel Totals	
R	13680	86.55%	11840		
				Total Conn. Load:	13680
				Total Est. Demand:	11840
				Total Conn. Current:	38 A
				Total Est. Demand	33 A

Notes:

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Project #: 2010-117.00

UNIVERSITY OF UTAH

STUDENT LIFE CENTER

1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

SEAL

MHTN PROJECT NO. 2010562.00
DRAWN BY: KGE CHECKED BY: KGE

ISSUED:

NO.	DATE	DESCRIPTION

CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
1	05-28-2013	ADDENDUM ONE
2	06-11-2013	ELECT ADDEN 2
3	06-12-2013	ELECT ADDEN 3

SHEET NAME
PANEL SCHEDULES

BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EP603

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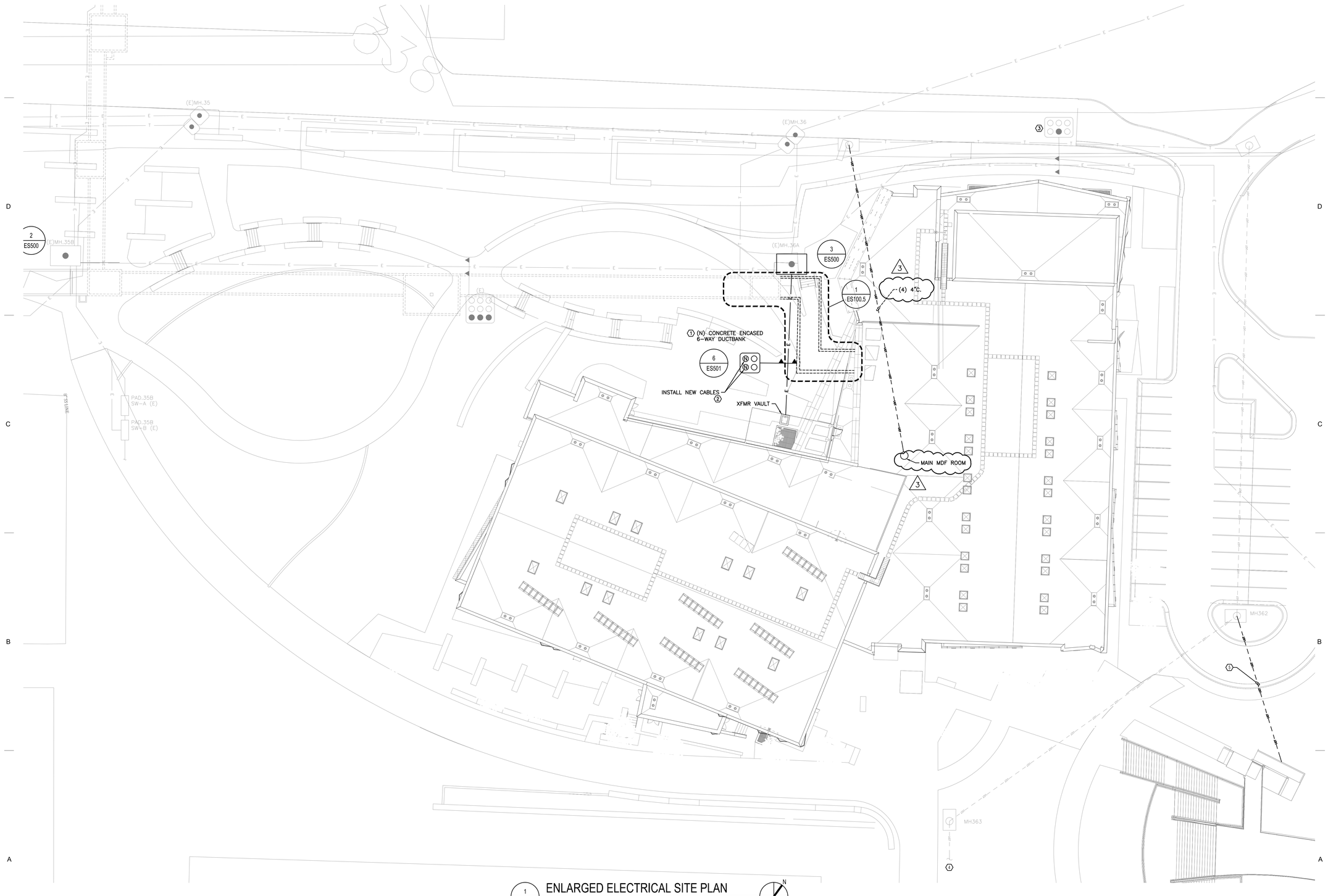
KEYED NOTES - SHEET ES100.2

1. PROVIDE AND INSTALL NEW CONCRETE ENCASED DUCT BANK FROM MH 36A TO NEW XFMR VAULT. DUCT BANK SHALL BE INSTALLED OVER TOP OF TUNNEL EXTENSION TO BUILDING. COORDINATE WITH OTHER TRADES FOR EXACT ROUTING.
2. PROVIDE AND INSTALL NEW MEDIUM VOLTAGE CABLING IN DUCT BANK BETWEEN MH 36A AND XFMR VAULT. SEE ONE LINE DIAGRAM SHEET EP600
3. EXISTING DUCTBANK AND MEDIUM VOLTAGE CABLE TO REMAIN AND BE PROTECTED DURING CONSTRUCTION. CONTRACTOR RESPONSIBLE FOR SHORING DUCT BANK DURING BUILDING EXCAVATION. CONTRACTOR SHALL VERIFY EXACT ROUTING OF DUCTBANK BEFORE ANY WORK BEGINS. COORDINATE ANY DISCREPANCIES WITH ENGINEER.
4. CONTINUES TO HONORS HOUSING. PROTECT AND MAINTAIN.
5. REFEED BRIDGE TELECOM FROM MH362. PROVIDE (1) 4" CONDUIT FROM MH362. COORDINATE WITH U OF U NETCOM AND CENTURY LINE FOR NEW CABLE. CABLE AND CABLE INSTALL BY NETCOM.



1 / ES100.2 ENLARGED ELECTRICAL SITE PLAN

SCALE: 1" = 20'

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MHTN PROJECT NO. 2010562.00

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CONTRACTOR TO VERIFY DRAWINGS IN FIELD USE REFLECT LAST REVISION DATE.

NO.	DATE	DESCRIPTION
1	05-24-2013	ADDENDUM ONE
3	06-12-2013	ELECT ADDEN 3

SHEET NAME

ENLARGED ELECTRICAL SITE PLAN
BID DOCUMENTS
MAY 15, 2013

SHEET NUMBER

ES100.2

By: rbrown; Jun 12, 2013 – 10:22am
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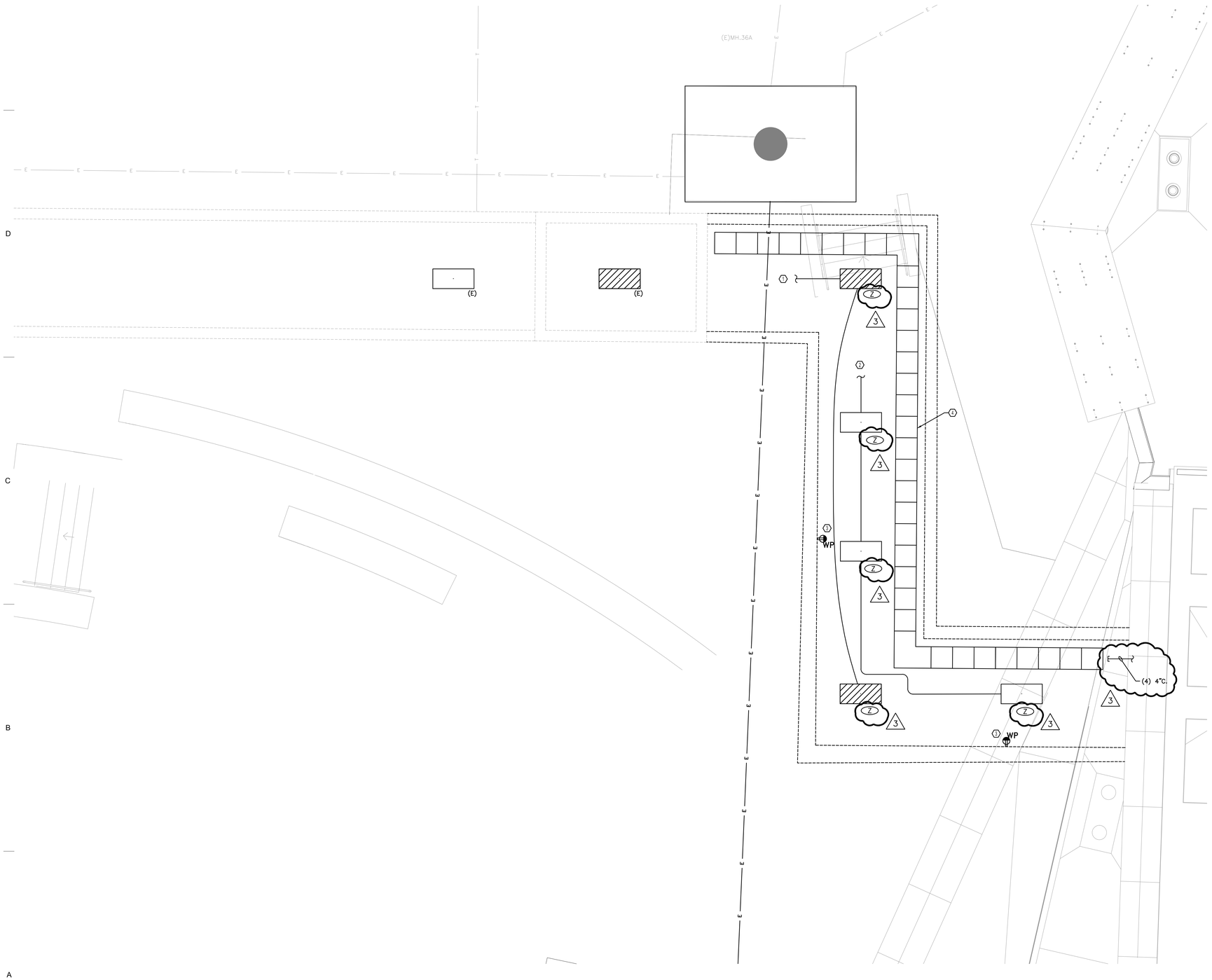

1 ES100.5 ENLARGED ELECTRICAL TUNNEL PLAN

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

KEYED NOTES - SHEET ES100.5

1. TIE NEW EMERGENCY LIGHTING INTO EXISTING EMERGENCY CIRCUIT IN TUNNEL.
2. TIE NEW LIGHTING INTO EXISTING LIGHTING CIRCUIT IN TUNNEL.
3. EXTEND EXISTING RECEPTACLE CIRCUIT IN TUNNEL TO INCLUDE THESE RECEPTACLES.
4. PROVIDE AND INSTALL 24"x4" ALUMINUM LADDER TRAY. COORDINATE INSTALL WITH WATER PIPE AND RACK PRIOR TO ROUGH IN.

GENERAL NOTES - SHEET ES100.5

A. PROVIDE ALL REQUIRED CONDUIT, WIRE AND DEVICES TO TIE IN NEW LIGHTING AND RECEPTACLES. CONTRACTOR SHALL VERIFY TOTAL LOAD ON CIRCUIT.

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NO.	DATE	DESCR□PT□N
3	06-12-2013	ELECT ADDEN□3

SHEET NAME

ENLARGED ELECTR□CAL TUNNEL PLAN
B□D DOCUMENTS
MA□ 15, 2013

SHEET NUMBER

ES100.5

By: rbrown; Jun 12, 2013 – 8:26am
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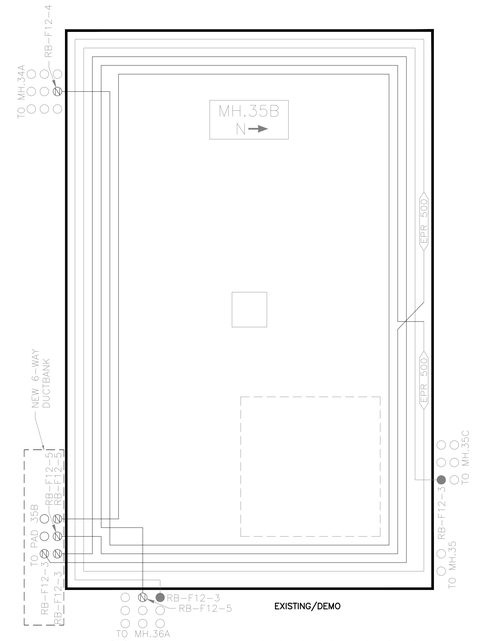
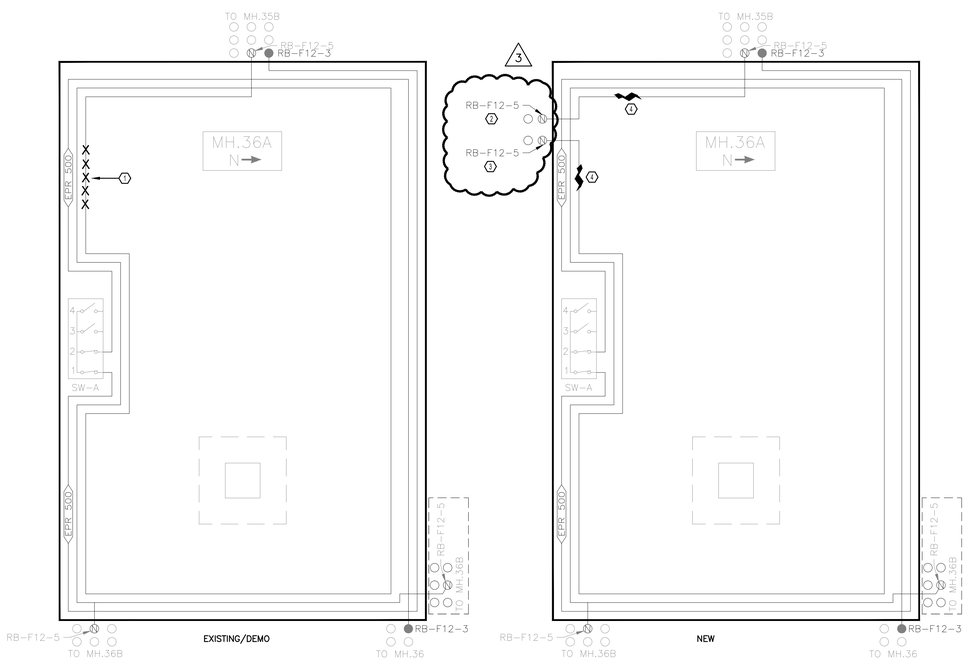
KEYED NOTES - SHEET ES500

1. CUT 600 MV CABLE AT THIS LOCATION IN PREPARATION FOR SPLICE.
2. NEW 600 MV CABLE TO STUDENT LIFE XFMR VAULT VFI SWITCH.
3. NEW 600 MV CABLE FROM STUDENT LIFE XFMR VAULT VFI SWITCH.
4. NEW MEDIUM VOLTAGE SPLICE. SEE ONE LINE DIAGRAM SHEET EP600 FOR TYPE.



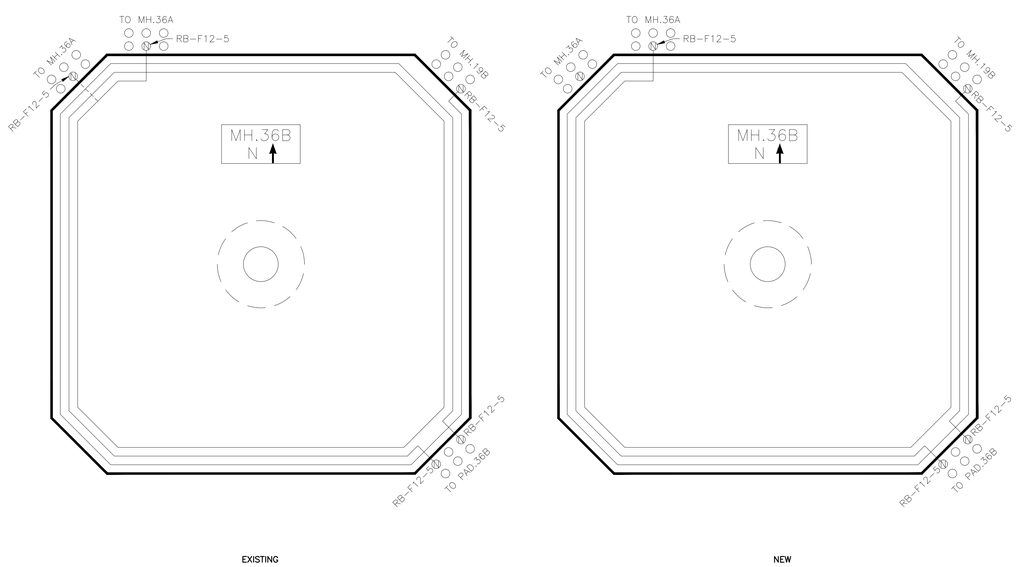
2 ES500 MH.35B - EXISTING CONDITIONS

SCALE: 1" = 20'



3 ES500 MH.36A - EXISTING/DEMO/NEW

SCALE: 1" = 20'



4 ES500 MH.36B DEMO/NEW

SCALE: 1" = 20'

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NO.	DATE	DESCR□PT□ON
3	06-12-2013	ELECT ADDEN 3

SHEET NAME

MANHOLE DETA□LS

B□D DOCUMENTS
MA□ 15, 2013

SHEET NUMBER

ES500

By: rbrown; Jun 12, 2013 – 11:32am
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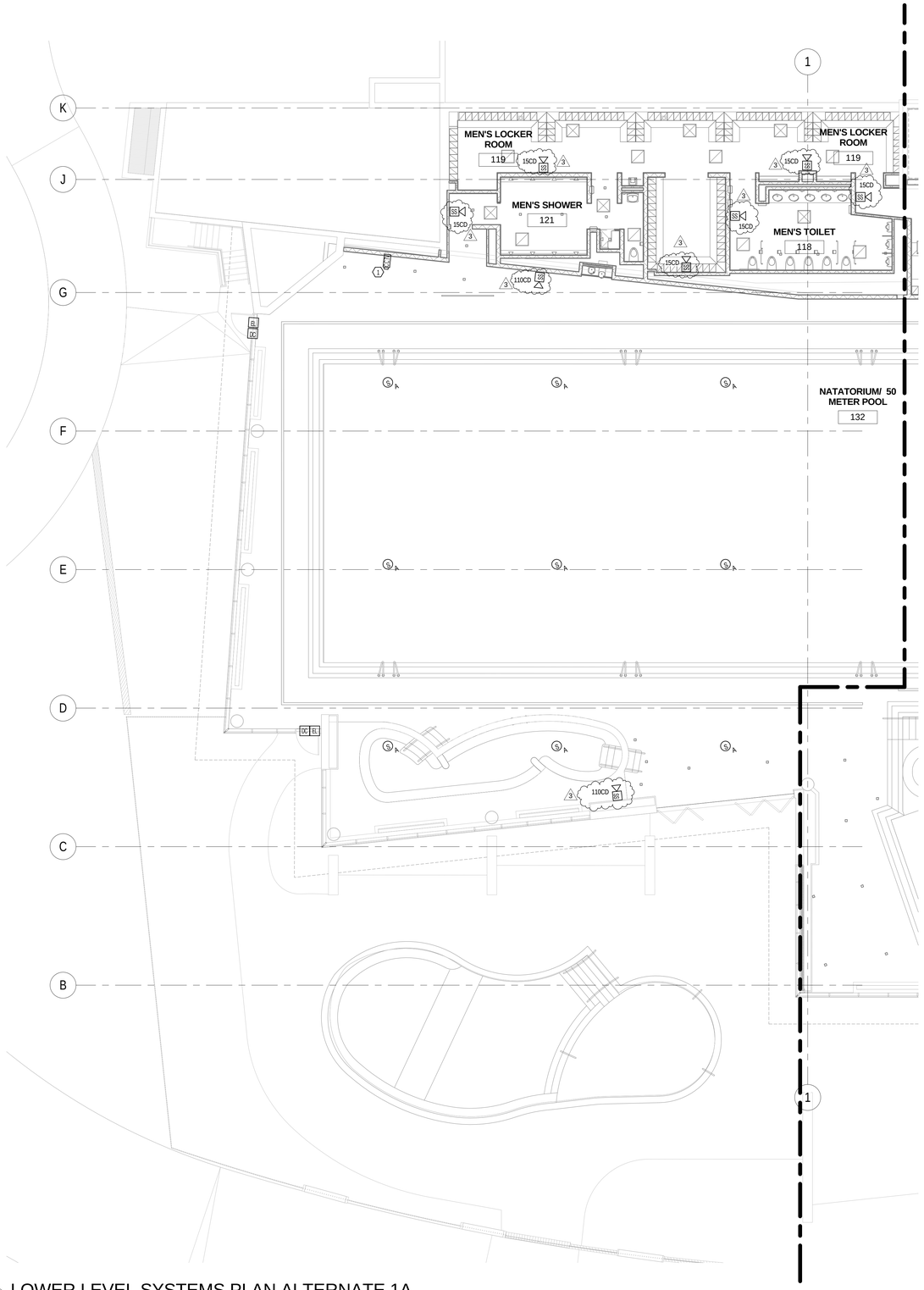
KEYED NOTES - SHEET EY200.C1

1. DIV.26 TO PULL CONDUIT ONLY TO LOCATION OF CCTV CAMERA AND PROVIDE JUNCTION BOX AND PULLSTRING. CAMERA AND WIRES BY OTHERS.



1 LOWER LEVEL SYSTEMS PLAN ALTERNATE 1A
EY200.C1 SCALE |1/8" = 1'-0"

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1	05-28-2013	ADDENDUM ONE
3	06-12-2013	ELECT ADDEN 3

SHEET NAME
LOWER LEVEL SYSTEMS PLAN ALTERNATE 1A
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EY200.C1

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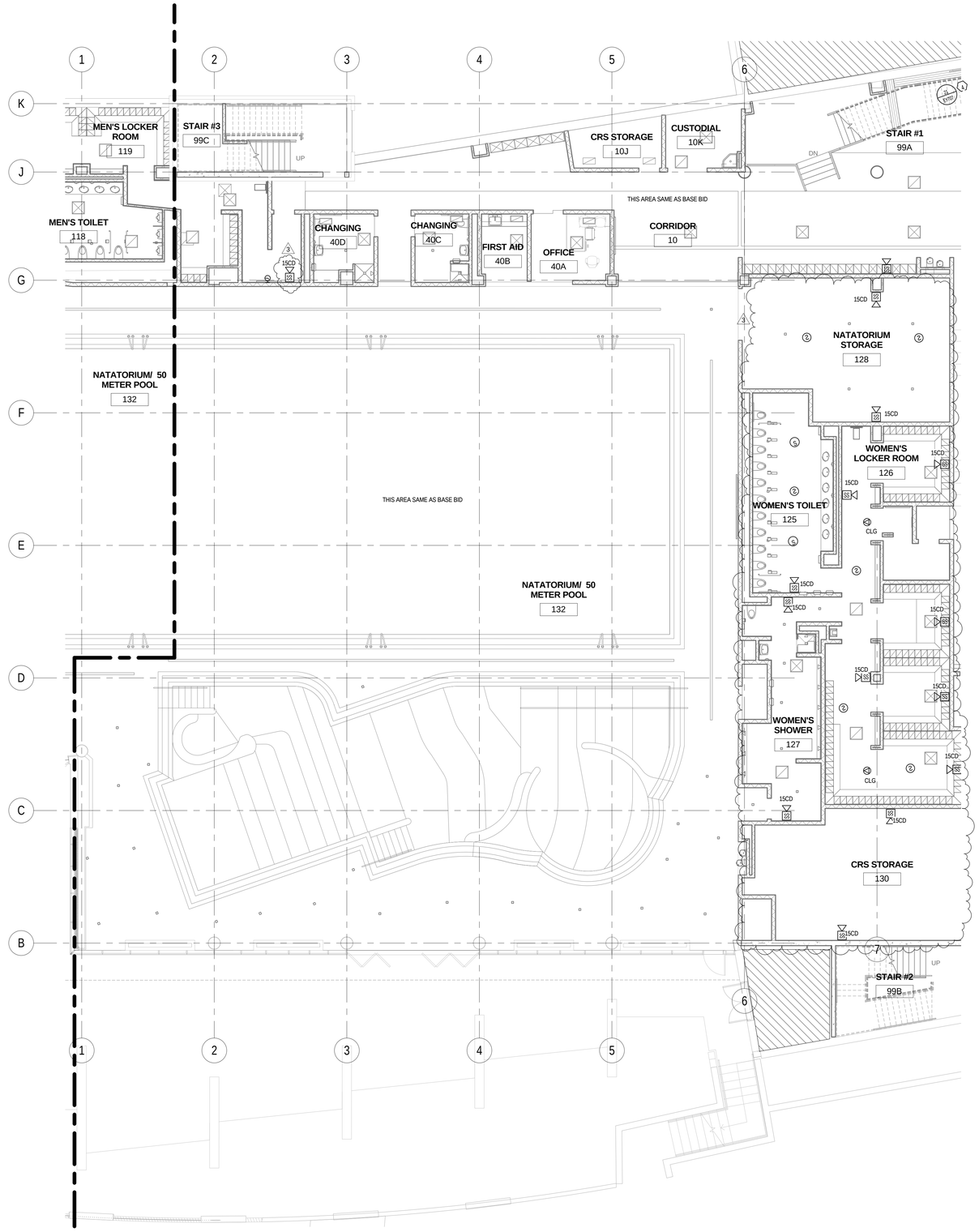

1 LOWER LEVEL SYSTEMS PLAN ALTERNATE 1B
EY200.C2 SCALE | 1/8" = 1'-0"

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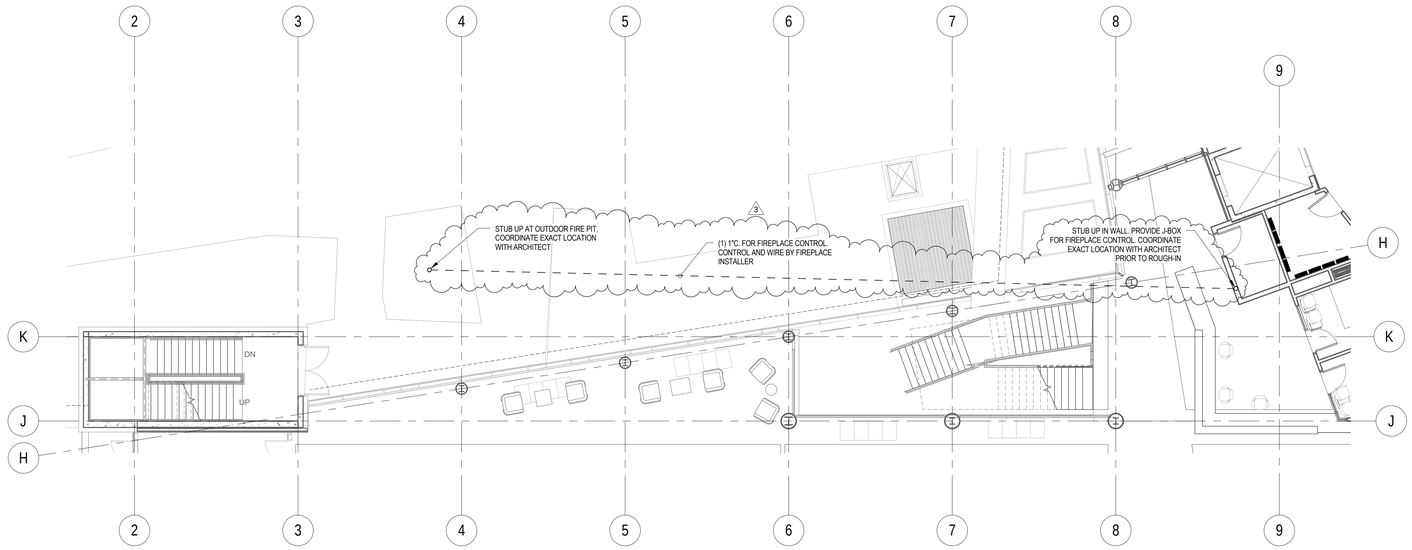
SHEET NAME
LOWER LEVEL SYSTEMS PLAN ALTERNATE 1B
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EY200.C2



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NO.	DATE	DESCRIPTION

SHEET NAME
LEVEL 1
SYSTEMS
ATERNATE 1
BID DOCUMENTS
May 15, 2013

SHEET NUMBER
EY201.C

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ACTIVITY POOL
DECK EQUIPMENT SCHEDULE

MARK	DESCRIPTION	QUANTITY	DETAIL	REQUIREMENT
3 B	FINGER WALL WITH FAUX ROCK AND COPING	SEE PLAN	4 / WF410.0	PRE-CAST COPING (BY PC) AND FAUX ROCK (BY FR CONTRACTOR)

REMARKS: STEEL REINFORCED CONCRETE WALLS WITH WATERPROOF TILE FINISH ON THE SIDE OF THE WALLS. TOP OF WALL SHALL BE ABOVE THE WATER LINE WITH A FAUX ROCK PLANTERS AND PRE-CAST CONCRETE COPING. FOR FAUX ROCK, SEE ARCHITECTURAL SPECIFICATIONS. PROVIDE COPING AND FAUX ROCK SAMPLES TO THE ARCHITECT FOR SELECTION. COLOR SELECTIONS BY ARCHITECT.

4	POOL WALL AND FLOOR INTERIOR FINISH	AS REQUIRED	N/A	NON-SLIP CERAMIC TILE

REMARKS: FINISH SHALL BE WATERPROOF AND FREE FROM DEFECTS. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR THE TILE FINISH DESIGN. PROVIDE TILE SAMPLES TO ARCHITECT FOR REVIEW. COLOR SELECTION BY ARCHITECT. FLOOR PATTERN MAY BE PROVIDED AS A DRAWING FILE TO ASSIST IN LAYOUT.

4	WATERLINE TILE	PERIMETER AND FINGERWALLS	N/A	STONE TILE

REMARKS: FINISH SHALL BE WATERPROOF AND FREE FROM DEFECTS. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR TILE SELECTION. PROVIDE TILE SAMPLES TO ARCHITECT FOR REVIEW. COLOR SELECTION BY ARCHITECT.

5	POOL SHELL, FINGERWALL AND BENCH WATERPROOFING	AS REQUIRED	N/A	2 / AQUAFIN 2K/M OR EQUAL

REMARKS: PRIOR TO THE TILE FINISH INSTALLATION, WATERPROOF INTERIOR OF POOL. PREPARE SURFACE PER MANUFACTURER'S SPECIFICATIONS. SEE WATERPROOFING SPECIFICATIONS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

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UNIVERSITY OF UTAH
STUDENT LIFE CENTER

PROJECT NO. 2010562

DATE: June 13, 2013

Water Design Inc.
5047 S. Galleria Dr.
Murray, Utah 84123

SHEET NUMBER
AD04-WF01

SHEET REFERENCE
WF400.0

ACTIVITY POOL
DECK EQUIPMENT SCHEDULE

MARK	DESCRIPTION	QUANTITY	DETAIL	REQUIREMENT
	"PRETZEL TYPE" GRABRAILS, ANCHORS AND RECESSED STEPS	1 SET	6 / WF503	SPECTRUM 30" BURBOT .065" THICKNESS CUSTOM LENGTH

REMARKS: PROVIDE STAINLESS STEEL PRETZEL STYLE GRABRAILS PROVIDE CUSTOM LENGTH TO ACCOMMODATE INSTALLATION BEHIND THE WIDE POOL WALL BOND BEAM. PROVIDE STAINLESS STEEL GRABRAILS WITH 4" BRONZE INSTITUTIONAL ANCHOR ASSEMBLY AND STAINLESS STEEL ROUND ESCUTCHEON PLATE (SPECTRUM #24097). FOUR ANCHORS AND FOUR ESCUTCHEON PLATES REQUIRED FOR EACH GRABRAIL SET. POOL CONTRACTOR SHALL VERIFY THAT ALL ANCHORS ARE SET AT THE CORRECT ELEVATION JUST PRIOR TO THE DECK PLACEMENT. PROVIDE THREE WHITE RECESSED STEPS PER GRABRAIL LOCATION (S.R. SMITH #62-209-4001).

3

	ADA LIFT AND ANCHOR	1	5 / WF503	SPECTRUM PRODUCTS GALLATIN WP400 BASE STAND 20"-30"

REMARKS: PROVIDE THE LIFT WITH A CUSTOM LEVELER FOOT AS REQUIRED TO ACCOMMODATE INSTALLATION OVER THE POOL COPING AND GUTTER GRATING. POOL CONTRACTOR SHALL PROVIDE THE LIFT COMPLETE WITH ANCHOR, FLEXIBLE HOSE, AND LIFT COVER. POOL CONTRACTOR SHALL PROVIDE CUSTOM INSTALLATION WITH CUSTOM ANCHORS FOR INSTALLATION THRU THE COPING STONE AND INTO THE POOL BOND BEAM. THE FLUSH MOUNTED WATER BOX SHALL BE MOUNTED IN THE DECK BY THE GENERAL CONTRACTOR AT THE LOCATION PER THE MANUFACTURER'S DETAIL. THE DECK BOX SHALL BE PROVIDED WITH A DRAIN PIPE TO WASTER TO PREVENT ACCUMULATION OF WATER IN THE HOSE BIB BOX. PLUMBING CONTRACTOR SHALL PROVIDE THE SUPPLY LINE, FLUSH MOUNTED HOSE BIB BOX AND A HOSE SPIGOT WITH MINIMUM 55 PSI AND MAXIMUM 65 PSI FOR INSTALLATION INTO THE WATER BOX. HOSE BIB BOXES SHALL HAVE DRAINS TO WASTE.

Hastings+Chivetta
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UNIVERSITY OF UTAH
STUDENT LIFE CENTER

PROJECT NO. 2010562

DATE: June 13, 2013

Water Design Inc.
5047 S. Galleria Dr.
Murray, Utah 84123

SHEET NUMBER
AD04-WF02

SHEET REFERENCE
WF401.0

50 METER LAP POOL
DECK EQUIPMENT SCHEDULE

MARK	DESCRIPTION	QUANTITY	DETAIL	REQUIREMENT
	"PRETZEL TYPE" GRABRAILS, ANCHORS AND RECESSED STEPS	1 SET	6 / WF503	SPECTRUM 30" BURBOT .065" THICKNESS CUSTOM LENGTH

REMARKS: PROVIDE STAINLESS STEEL PRETZEL STYLE GRABRAILS PROVIDE CUSTOM LENGTH TO ACCOMMODATE INSTALLATION BEHIND THE WIDE POOL WALL BOND BEAM. PROVIDE STAINLESS STEEL GRABRAILS WITH 4" BRONZE INSTITUTIONAL ANCHOR ASSEMBLY AND STAINLESS STEEL ROUND ESCUTCHEON PLATE (SPECTRUM #24097). FOUR ANCHORS AND FOUR ESCUTCHEON PLATES REQUIRED FOR EACH GRABRAIL SET. POOL CONTRACTOR SHALL VERIFY THAT ALL ANCHORS ARE SET AT THE CORRECT ELEVATION JUST PRIOR TO THE DECK PLACEMENT. PROVIDE THREE WHITE RECESSED STEPS PER GRABRAIL LOCATION (S.R. SMITH #62-209-4001).

3

	ADA LIFT AND ANCHOR	1	5 / WF503	SPECTRUM PRODUCTS GALLATIN WP400 BASE STAND 20"-30"

REMARKS: PROVIDE THE LIFT WITH A CUSTOM LEVELER FOOT AS REQUIRED TO ACCOMMODATE INSTALLATION OVER THE POOL COPING AND GUTTER GRATING. POOL CONTRACTOR SHALL PROVIDE THE LIFT COMPLETE WITH ANCHOR, FLEXIBLE HOSE, AND LIFT COVER. POOL CONTRACTOR SHALL PROVIDE CUSTOM INSTALLATION WITH CUSTOM ANCHORS FOR INSTALLATION THRU THE COPING STONE AND INTO THE POOL BOND BEAM. THE FLUSH MOUNTED WATER BOX SHALL BE MOUNTED IN THE DECK BY THE GENERAL CONTRACTOR AT THE LOCATION PER THE MANUFACTURER'S DETAIL. THE DECK BOX SHALL BE PROVIDED WITH A DRAIN PIPE TO WASTER TO PREVENT ACCUMULATION OF WATER IN THE HOSE BIB BOX. PLUMBING CONTRACTOR SHALL PROVIDE THE SUPPLY LINE, FLUSH MOUNTED HOSE BIB BOX AND A HOSE SPIGOT WITH MINIMUM 55 PSI AND MAXIMUM 65 PSI FOR INSTALLATION INTO THE WATER BOX. HOSE BIB BOXES SHALL HAVE DRAINS TO WASTE.

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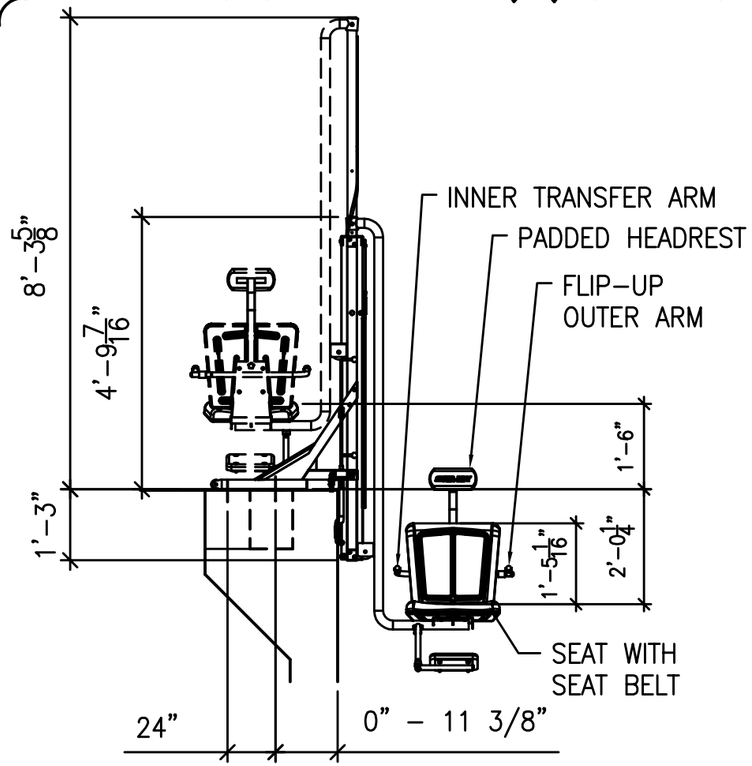
PROJECT NO. 2010562

DATE: June 13, 2013

Water Design Inc.
5047 S. Galleria Dr.
Murray, Utah 84123

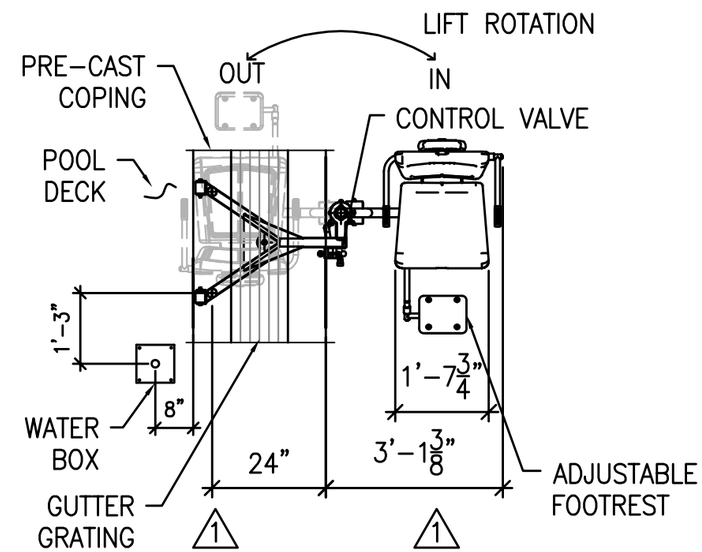
SHEET NUMBER
AD04-WF03

SHEET REFERENCE
WF402.0

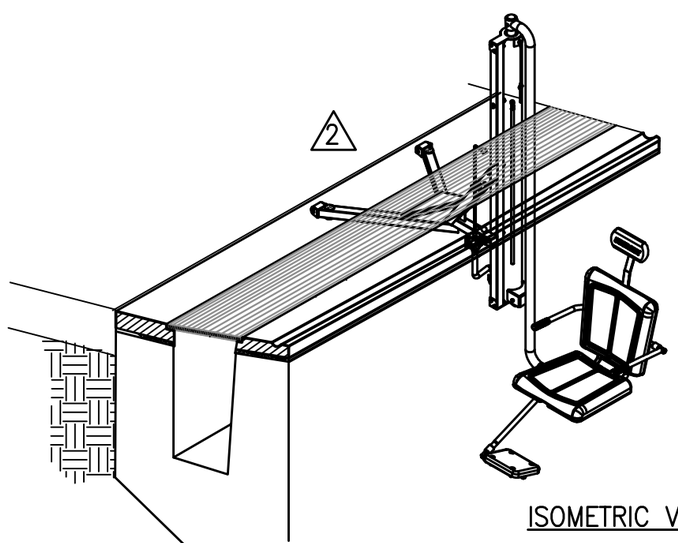


SECTION

NOTE:
1. COORDINATE WITH MANUFACTURER WITH CUSTOM GUTTER ANCHORAGE REQUIREMENT. PROVIDE CUSTOM LEVELER FOOT AS REQUIRED.
2. POOL CONTRACTOR SHALL PROVIDE THE MANUFACTURER WITH AN ACCURATE GUTTER PROFILE WHEN ORDERING LIFT.



PLAN VIEW



ISOMETRIC VIEW

1 DIMENSIONS VARY WITH SPECIFIC APPLICATIONS. *NOTE: SPECIFICATIONS ARE NORMAL AND ARE SUBJECT TO CHANGE. PLEASE CONTACT SPECTRUM PRODUCTS FOR CUSTOM APPLICATIONS.

2 *NOTE: CLEAR DECK SPACE SHALL BE PROVIDED PARALLEL TO THE WATER 36" WIDE x 48" MINIMUM FROM A LINE LOCATED 12" BEHIND THE REAR EDGE OF THE SEAT. (15.8.5.3 ADA GUIDELINES)

ADA LIFT DETAIL - Hydraulic

SCALE: 3/8" = 1'-0"

5
WF503

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UNIVERSITY OF UTAH
STUDENT LIFE CENTER
1836 E. BALLIF ROAD
SALT LAKE CITY, UTAH 84112

PROJECT NO. 2010562
DATE: JUNE 13, 2013
SHEET REFERENCE
WF503
SHEET NUMBER
AD04-WF04

Addenda Questions

Owner:	DFCM	Principal:	Peggy McDonough
Project Name:	George S. Eccles SLC	Project Manager:	Brent Agnew
Project Number:	2010562/08015750	Technical Manager:	Angelica Pavoni
		Design Manager:	Rui Morais
		Prepared on:	6/11/2013

Bid Date: June 19, 2013, 2pm
Bid Time: Announcement will be made June 28, 2013

QUESTIONS

Date	Who's Asking	Question	Comments	Action
6/6/13	Steel Encounters	1. Please confirm that we will or will not provide you with a bid bond with our glazing/cladding proposal?	Question to GC's.	N/A
6/6/13	Steel Encounters	2. The RFP to the GC's calls for a Value Based Selection. Will there be any VBS criteria for the subcontract candidates?	Subcontractors bid bonds will be confirmed. Subcontractors must meet the requirements of Utah for licensing and insurance	N/A
6/6/13	Okland Construction	3. Section 018112 Owner Project Requirements page 4-14. This section seems to be wright for the School of Business. Has this document been prepared for the Student Life Center project?	Section will be deleted from Specification	See MHTN Addendum#3.
6/6/13	Okland Construction	4. Please provide drawings or a narrative describing the Mockup required by section 019115 Building Envelope Commissioning and section 019117 Building Envelope Commissioning – Functional Performance Test Protocol	See Specification Section 019117 1.3 Mockup Test Requirements	N/A
6/6/13	Okland Construction	5. In the RFP section 15 December 12 is listed as the desired completion date. What is the actual desired completion date?	December 1st, 2014 is the completion date.	N/A
6/6/13	Okland Construction	6. What location (floor and gridline) are the AL-101 frames (AE615) found? We found 2 that were fire-rated, where are the non-fire-rated frames?	See floor plan AE101B along column line 13.5.	N/A
6/6/13	Okland Construction	7. For alternate #3 on sheet AE630… Are frames 25(ALT3), 26(ALT3), 28(ALT3) supposed to replace 25,26,27	Yes, Refer to floor plans AE101 Ext. and AE114.	N/A

Addenda Questions

Date	Who's Asking	Question	Comments	Action
		on sheet AE622 on the base bid?		
6/6/13	Okland Construction	8. What type of low E coating is required in spec. 088000? Solarban 60 or VE1-2M on #2 ?	VE1-2M is the base of design	See MHTN Addendum#3.
6/6/13	Okland Construction	9. In 088000 3.6 Glazing schedule… What are the expected silkscreen patterns? The % coverage is indicated, but are these glass silkscreen types expected to be dots, lines, or gradients in each case?	Organic Patterns Designed by Architect.	See MHTN Addendum#3.
6/6/13	Okland Construction	10. Is AL-125 fire-rated or non-rated? On window schedule AE616 it is listed as 1hr fire-rated, but on the door schedule AE610, there is no rating. Please clarify?	Door #240 is to be rated. AE610 will be revised accordingly	See MHTN Addendum#3.
6/6/13	Okland Construction	11. On AE616 What location (floor and gridline) are frames AE127, GL-02?	Al-127 is on sheet AE102C at col grid J between 1 and 2. GL-02 is at the west wall of Classroom 145.	N/A
6/6/13	Okland Construction	12. In spec. 088810 1.03A Is the Fire-rated Glass and Framing intended to be 60 min. or 120min? (all indications on AE615, 616 & AE630ALT3 appear to be 1hr rated…is that the intent?)	Yes, Glazing is supposed to be 60 Min.	See MHTN Addendum#3.
6/6/13	Okland Construction	13. Elevation E3 / AE447 shows the taping tables to be solid surface. However, the cross section view shows them to be foam. What is the surface of the taping tables?	There are two seats that are to be the foam (COM-112) and the counter surface is to be SPS-77	N/A
6/6/13	Okland Construction	14. Corner guards are specified in Section 102600, but no locations are shown on the drawings. Please clarify locations.	They are located at all openings in the East, North and South walls in MAC Gym 55. See AE440 interior elevations and AE515 for details	N/A
6/6/13	Okland Construction	15. What is the required corner guard height?	Varies per opening. See AE440 for interior elevations and AE515 for details	N/A
6/6/13	Okland Construction	16. What is the color of the quartz on the fitness help desk (E1 / AE452)	QTZ-75	N/A
6/6/13	Okland Construction	17. What is the material of the countertops on the southeast wall of the lobby room #150 (B2 / AE456 & A4 / AE 454)?	SPS-77	See MHTN Addendum#3.
6/6/13	Okland Construction	18. Is the mechanical or electrical responsible for the VFD's?	Mechanical	N/A
6/6/13	Okland Construction	19. What are the benches in the changing rooms made of?	QTZ-75	Will be addressed

Addenda Questions

Date	Who's Asking	Question	Comments	Action
				MHTN Addendum#4
6/6/13	Okland Construction	20. The material legend states that the quartz is 3cm thick, but the drawings show 2cm with a bullnose edge. What is required?	3 cm	Will be addressed MHTN Addendum#4
6/6/13	Okland Construction	21. Section 09 9120 Part 2 2.1B Painting. This section refers to Sherwin Williams paint to match phase 1. What is phase 1? What are we to match?	There are no phases. Remove all references to phases.	See MHTN Addendum #3.
6/6/13	Okland Construction	22. Division 10-2800 spec called soap dispenser as "Owner Provided and Installed" in 3.3 but in 3.6 D it calls soap dispenser at Owner Provided Contractor Installed. Which is correct?	Soap dispenser, toilet paper dispenser and paper towel dispenser is Owner Provided and Installed.	See MHTN Addendum #3.
6/6/13	Okland Construction	23. Exercise Rooms 255,265,285 show rows of Coat Hooks. No specifications are given as to type desired, please clarify.	Standard detail has been added to the documents.	Will be added to MHTN Addendum #4 AD04-AE001
6/6/13	Okland Construction	24. Exercise Room 275 shows a Ballet Bar. No specification is given to type desired, please clarify.	Providing spec section	Will be added to MHTN Addendum #4
6/6/13	Okland Construction	25. Sheet EL101.C: At Grid lines F-10, there are (8) pendant-type fixtures drawn without a type-designation.	These fixture types are shown on the Addenda	See MHTN Addendum #3.
6/6/13	Okland Construction	26. I have been trying yo find the marker boards for the U of U student life building. I found 3 tack boards. Can you tell me where the marker boards are found	general note will be added referencing index sheet on AE601 on floor plans and reflected ceiling plans. See marker board and tack board symbols on the plans	See MHTN Addendum #3.
6/6/13	Okland Construction	27. Sheets EL200.C1 / EL200.C2: The match-line on sheet EL200.C2 dissects a couple of type "A" fixtures. It appears probable that ALL of the type "A" fixtures shown on EL200.C1 were intended to be included in Alternate 1B, shown on EL200.C2. Please confirm?	These fixtures were adjusted to show properly on the Addenda	See MHTN Addendum #3.
6/6/13	Okland Construction	28. Specification section 14 2100-9 2.03k references counterweight safeties. These are only necessary when there is occupied space below the elevator pit. Please verify no counterweight safeties are required.	Spec has been revised	See MHTN Addendum#3
6/6/13	Okland	29. AE532 Elevator Pit depth shows 4'-0''. Please verify	This depth is determined by	N/A

Addenda Questions

Date	Who's Asking	Question	Comments	Action
	Construction	5'-0'' is acceptable	the selected Elevator MFG.	
6/6/13	Okland Construction	30. Sheet LI101 (and other locations) note 38 reads for alternate #1. Please confirm that this should be Alternate #3.	Right, it should be Alternate#3	See MHTN Addendum#3
6/6/13	Okland Construction	31. Sheet SF203 detail A2 please confirm the filled area is to remove if alternate#3 is accepted not alternate #1.	Yes	See MHTN Addendum#3
6/6/13	Okland Construction	32. Sheet AS101, AS101A, AS102 note 65 and AS401, AS401A, AS402 note 43should this note read Pool see alternate #2?	Yes	See MHTN Addendum#3
6/6/13	Okland Construction	33. Please provide a specification for the Dasherboard walls shown on sheet AE100B.	Specification Item will be provided	Will be added to MHTN Addednum#4
6/6/13	Okland Construction	34. Sheet AE101A Please provide a speciation for the chainlink enclosure in outdoor rec storage 1555 d&e and in Storage 235D.	Specification Provided	See MHTN Addendum#3
6/6/13	Okland Construction	35. Sheet AS401A detail C3 the Exterior pool has a note 47 should this be 43?	Yes	See MHTN Addendum#3
6/6/13	Okland Construction	36. Sheet AE100Cf & AE448 please confirm the Heavy bags, speed bags and other equipment is not in this contract.	The brackets are in the contract, the bags are equipment outside the contract.	N/A
6/6/13	Okland Construction	37. Sheet AE103 C and AE411 please confirm the scoreboards are not in this contract.	The scoreboards are included in the contract.	Will be addressed MHTN Addendum#4
6/6/13	Okland Construction	38. Sheet AE101C, AE401 C3 and AE441 show Pedestrian Control Equipment. Please confirm these are not our contract.	The Pedestrian Control Equipment (Entry gates) are included in the contract.	Will be addressed MHTN Addendum#4
6/6/13	Big-D Construction	39. Elevation C1 on Sheet AE455 shows PLAM-71 with TRP-100 as the finish for the cabinetry. The elevation for the same cabinetry is also shown on C4 AE456, but here it shows just the PLAM-71 without the TRP-100. Is the TRP-100 desired at the juice bar/freshens cabinetry?	Yes	See MHTN Addendum#3
6/6/13	Big-D Construction	40. Will this project be exempt from state/local sales tax?	Tax Exemption which will be used for all materials on the project.	See DFCM Addendum#4
6/6/13	Big-D Construction	41. Landscape Forms is the only manufacturer listed to provide benches, tables, and shades from Spec section 129300	No. The furniture called out is the University standard.	N/A

Addenda Questions

Date	Who's Asking	Question	Comments	Action
		2.4. Will any other manufacturers be accepted		
6/6/13	Big-D Construction	42. Sheet CS100 and CS102 refer to the parking lot as "Pervious paving (Bid Alternate #5)". There are no details showing cut sections at this area, nor is there a space for alternate #5 on the bid form. Detail A3 on Sheet CS401 has a note that "Bid Alternate #5 Pricing for Parking Lot For the Following Surface Courses: A. Pervious Concrete B. Pervious Asphalt C. Pervious Concrete Pavers". Is an alternate for the parking lot being requested? If so, are we to give 3 different prices for alternate #5, one for each material listed? If alternate #5 is being requested, will a new bid form be given? It is assumed that the base bid is to be asphalt paving per Detail A3 on Sheet CS401 – please confirm if this is correct.	No Pervious pavers alternate.	See MHTN Addendum#3
6/6/13	Big-D Construction	43. Sheet AS101 calls out keynote 19 for asphalt paving at the south side of the building adjacent to cobble paving. Sheet AS401 shows Sheet CS103 shows this area to be a colored concrete fire lane. Please clarify which is desired – colored concrete or asphalt.	The fire lane areas on the south side of the project are to be colored concrete as noted on the civil plan.	See MHTN Addendum#3
6/6/13	Big-D Construction	44. Section A1 on Sheet AE311 calls out for detail C5 on AE522 at Level 3. This detail does not match the wall section. Please clarify.	Detail matches section.	N/A
6/6/13	Big-D Construction	45. EY sheets 100.A-103.C all include note 1 which indicates that CCTV camera and wire will be by others. Spec 282300 section 1.1 states that we are to furnish and install all equipment, accessories, cable, material, and labor for a complete and operations CCTV system. Are we to provide and install cameras and wiring for those cameras or will this be done by another owner contractor?	The contractor is to provide and install the CCTV system. This will be clarified in the Addenda.	Will be clarified on MHTN Addendum#4
6/6/13	Big-D Construction	46. The project schedule notes that the last day to submit questions is June 6. Due to the Memorial Day holiday and high amount of jobs that bid May 27-31, many subcontractors have not had sufficient time to get into the drawings in great detail. Can more time be given for the submission of questions?	Date for Last day to submit questions has been changed.	See DFCM Addendum No. 4
6/6/13	Big-D Construction	47. No mention is made in the RFP or specifications regarding local taxes. Can you please clarify if this project will be tax exempt?	Exemption which will be used for all materials on the project.	See DFCM Addendum No. 4
6/6/13	Big-D Construction	48. Please confirm that copies of subcontractors' bid bonds are required to be turned in by all general contractors at the same time as the list of subcontractors.	Required bid bonds for subcontractors as described in Section 23 of the RFP are	See DFCM Addendum No. 4

Addenda Questions

Date	Who's Asking	Question	Comments	Action
			required to be submitted at the time the Generals are required to submit the list of subcontractors	
6/6/13	Big-D Construction	49. If any general contractor proposes/names a subcontractor in the list of subcontractors that was unable to furnish a bid bond, will the general contractor be disqualified from the bid?	If a general contractor proposes a subcontractor in the list of subcontractors that was unable to furnish a bid bond as required in the RFP, then the bid may be deemed nonresponsive, unless the failure to comply is determined by the DFCM Director to be nonsubstantial. Failure to submit an acceptable bid security may be deemed nonsubstantial if requirements of Utah Administrative Rules R23-1-40-(2) are met	See DFCM Addendum No. 4
6/6/13	Big-D Construction	50. Spec 064023 F.1 states that all woodwork must comply with AWI's Quality Certification Program (QCP). AWI membership does not include participation in QCP. Please confirm that AWI Quality Certification Program participation is required for woodwork subcontractors and that AWI certification will not be sufficient to meet the specification.	Correct, Current specification requires AWI Certification Program Certificate.	N/A
6/6/13	Big-D Construction	51. Elevator 1 is called out as a Gen2 gearless traction elevator in Spec 142100 1.02 A. Elevator 2 does not specify if it is Gen2 or a traction/hydraulic elevator. Please clarify.	Both elevators are specified under a 142100 Electric Traction Elevators.	N/A
6/6/13	Big-D Construction	52. Elevator 1 has an equipment room (room 301G). Elevator 2 does not have an equipment room shown on any of the Alternate #3 drawings. Will elevator 2 require an equipment room?	Elevator 2 will share equipment room with elevator 1.	N/A
6/6/13	Big-D Construction	53. Who is providing the cable from the prodigy hoist to the connector strip?	The electrical contractor	N/A
5/29/13	Tim Hadden, RCDD	54. I would like to ask to be added as an approved CCTV, Access controls and Intrusion systems provider/designer/installer for the George S. Eccles Student Life Center. Avtec a division of Cache Valley Electric has been in business since 1985. Avtec is approved and certified to work on all of the systems listed in section 2823000 of the Student Life Center. Avtec can and does provide 24/7 support to many of our customers in the valley, such as the Salt Lake Airport,	The University has its own security system that the building would be linked to, 24/7 support would not be required from bidders	N/A

Addenda Questions

Date	Who's Asking	Question	Comments	Action
		Rocky Mountain Power, Questar Gas and others. I look forward your response, if you want more information on Avtec please look at the Cache Valley Electric web page at www.cve.com		
6/3/13	Okland Construction	55. Is it possible to get the Revit model from the design team for the U of U Student Life Building?	A revit model would be available to the awarded contractor	N/A
5/3/13	McDraw Hill Construction	56. I was just on your site and noticed that Plan Sheet SF102B is not posted with the plans (Volume 1). Is it possible to have this sheet emailed to me?	It can not be e-mailed to you. It is issued on addendum	Sheet SF102B issued on Addendum#1
6/6/13	Layton Construction	57. Sheet WF010.0 makes reference to an alternate pool bid item that is a stainless steel pool. Are there plans and specs for this option, if no how are we to bid this option? How will the bids for this option be evaluated when compared to the shotcrete and tile pool options?	The stainless steel pool liner with be an Alternate	See MHTN Addendum # 3
6/6/13	Layton Construction	58. The faux rock planters shown on WF400.0 for the base bid pool do not seem to correspond with the structural details shown for the wall that divides the pool from the beach entry. The structural details show a 12" thick pool wall for the wall that divides the beach entry from the deeper section. The faux rock shown is much wider than 12". The detail that is referred to is detail F on sheet WF410.0. This detail shows the faux rock spanning the deck in this instance there is not deck as there is water on both sides. Please clarify how the faux rock interfaces with this 12" wall.	Detail was revised.	See MHTN Addendum # 3
6/6/13	Layton Construction	59. At the beach entry for the base bid pool on sheet WF400.0 please clarify the tile floor details in this area. There is a series of wandering lines in the beach entry that look like they denote some type of pattern. The plans say accent tile pattern in pool floor, if this is some type of pattern we need more information. Are all tiles the same size? Are tiles different colors? How do we make the tile interface between uneven lines?	Refer to Architectural Finish Plans	N/A
6/6/13	Layton Construction	60. There is some reference in the plan sheets to a stone water line tile material – sheets WF410.0 details 1, 3 and 4. There is no specification for this stone tile. Please provide specifications for this tile. Please clarify where the tile is to be installed, is it the water line tile around the complete pool perimeter?	The border tile 3" high below the gutter line Specification will be provided. Manufactured by Roca ¼" thick. It will require Grout and an Initial sealer	Will be added On MHTN Addendum #4
6/6/13	Layton Construction	61. The pool specification section 131100-17 item 2.13 fifth paragraph says "Samples to Architect samples of all available finishes and colors, including premium colors for selection.	Refer to Architectural Finish Plans.	N/A

Addenda Questions

Date	Who's Asking	Question	Comments	Action
		Paragraph three lists three acceptable tile manufacturers. This is a very wide range of tile to select from and there could be a very wide range of tile pricing – please specify groups of tile to be selected from and color ranges.		
6/6/13	Layton Construction	62. The Site Plans indicate the location of a 10″ Microwave Beam that should not be disturbed. I understanding the location and Elevation of the beam it appears that vertical hoisting could potentially be in conflict with this beam. To what extent should the beam be protected, avoided, redirected?	Our response was to be that as stated on the drawings that the 10′ diameter beam cannot be crossed at all.	N/A
6/6/13	Layton Construction	63. Drawing MS100 shows 10" & 8" pipes East out of Area A making a 45 degree offset and going to CT-1. There is no CT-1 on the equipment schedule and we can't find where the piping enters the building or where they go. Please clarify.	CT-1 is deleted	See MHTN Addendum #3
6/6/13	Layton Construction	64. The manufacturers for the high temp heat exchanger's lists. A. Howards Engineering B. Prior approved manufacturer of University's choice Howards Engineering is being used on a current project at the U and they are having difficulty meeting the schedule & providing the equipment required for that project. Does the University have another manufacturer that can be used?	Currently, Howard's is the only approved manufacturer	N/A
6/6/13	Layton Construction	65. The chilled water piping from Area A lower level up through level three to AH-5 goes from 8" to 4" and then back to 6". Please clarify proper pipe sizes.	The pipe sizing is modified and clarified in Addendum #3.	See MHTN Addendum #3
6/6/13	Layton Construction	66. MH401 detail 1 shows 8" HAWS-1 Air Separator on the Hot Water Heat pipe inside the high temp Mechanical Room 10M and then again in Mechanical Room 85 by Pumps HWP-1 & 2. Is this correct are there two HWAS-1 Air Separators on the same system. Please clarify.	HWAS-1 in Mech Room 85 is correct, the air separator in Mech Room 10M is deleted.	See MHTN Addendum #3
6/6/13	Layton Construction	67. No trap primers are shown on the drawings but all drains are scheduled for trap primer connections. Are trap primers required on all floor drains, floor sinks, trench drains, and deck drains?	Per university standard, all P-traps are to be deep seal traps, with no trap primers or trap primer connections	See MHTN Addendum #3
6/6/13	Layton Construction	68. TP-1 is the only specified trap primer. These are electronic trap primers typically for mechanical room or multi-drain locations. I there another option for bathroom trap	The TP-1 is deleted in Addendum #3, only deep seal traps are used.	See MHTN Addendum #3

Addenda Questions

Date	Who's Asking	Question	Comments	Action
		primers? (I.E. flushometer tail pieces or Lav tail pieces that can be used?)		
6/6/13	Layton Construction	69. PP100C & PP105 (Alt#1) There is no venting shown for the FD-1 & DD-1 drains around the pool area. There is also no sizing for the waste piping serving these drains. Are trap primers required for these drains? Please clarify.	These are combination waste/vent systems, the dry vent for each system is off the main where it crosses into the locker rooms, or out of the natatorium. This is clarified in Addendum #3. The sizing was added in Addendum #1, it is all 3" piping.	See MHTN Addendum #3
6/6/13	Layton Construction	70. PP101A grid V & 7.5 Notes 8 & 9 do not correspond with piping. Please provide correct notes.	Keynote #8 should read: "Gas piping to level above." Keynote #9 should read: "See Sheet PP101C for Continuation." This is clarified in Addendum #3.	See MHTN Addendum #3
6/6/13	Layton Construction	71. All mechanical referenced drawings for addendum # 2 are not included in the addendum. Please provide.	No drawings were issued in addendum #2, only written descriptions. If written descriptions are not clear, provide a question as to which descriptions are not clear enough to bid.	N/A
6/6/13	Layton Construction	72. MP105 drawing has note 1, and 2 but no schedule to tell what the notes are. Please clarify.	The keynotes are added in Addendum #3 to read: #1-" CHILLED WATER AND HEATING WATER PIPING UP TO NEXT LEVEL." #2- "SLHX-1 IS FUTURE EQUIPMENT." #3-" FINNED TUBE IS TO CONNECT TO THERMOSTAT ON LEVEL 2."	See MHTN Addendum #3
6/6/13	Layton Construction	73. There are no details for piping the water softeners, domestic water heaters, or mixing station. Can a domestic water schematic be provided?	Details are added in Addendum #3	See MHTN Addendum #3
6/6/13	Okland Construction	74. On page SB100A, between grid 13.5 and 18 on grid W the wall type is hatched as CMU, however the plan denotes this wall to be CFW-1. This also found on grid 13.5 between W and X, Page SB100A. Grid 13, between U and V, page SB100A. Between grid S and T, running left to right on page, SB100C. Please clarify	The slab on grade elevation changes at the locations listed. There is a concrete wall between the upper and lower slabs with a masonry wall above as shown in detail C2/SB503. The masonry walls which are not labeled are	N/A

Addenda Questions

Date	Who's Asking	Question	Comments	Action
			non-bearing walls to be reinforced per the General Structural Notes	
6/6/13	Okland Construction	75. The concrete wall type is missing on SB100C between grid T and U, running left to right. Please clarify	The wall is a CFW-1	See MHTN Addendum # 3
6/6/13	Okland Construction	76. Sheet AS505 detail A3 shows the ornamental gates for the Generator enclosure. The gates appear to have panic hardware is this correct?	Yes.	N/A
6/6/13	Okland Construction	77. Sheet AE100b Please provide more information on the 2- 12'x10'' aluminum benches behind the dasherboards in the MAC GYM.	They are typical Aluminum benches for indoor rec	See MHTN Addendum # 3
6/6/13	Big-D Construction	78. Sheet AE100B shows a dasher board wall system on the west side of Mac Gym (room 55). The section cut A1 on AE321 does not provide any detail regarding the makeup of this dasher board wall. This section also notes dasher board glazing. There is no mention in the specifications regarding either a dasher board wall or dasher board glazing. Can you please clarify how this wall system is to be made?	Specification Section will be provided	Will be added on MHTN Addendum#4
6/6/13	Big-D Construction	79. Architectural sheets show the supports for the glass canopy as stainless steel (see A2 on AE503 and A4 on AE311). The structural drawings also show these supports, but makes no mention of whether they are stainless. Please specify if the glass canopy support steel is stainless or mild steel.	Canopy Supports to be stainless steel	See MHTN Addendum # 3
6/6/13	Big-D Construction	80. There are no section views through skylights in architectural drawings. What are the out to out curb dimensions? Drawings call out 4'x4' and 4'x6' skylights – are these rough openings? Will the skylights be parallel to the roof slope?	Refer to Details C3/AE502, C4/AE502 and C5/AE502. 4'X4' and 4'X6' are area of opening. Min. Slope of 30 degrees.	N/A
6/6/13	Big-D Construction	81. Are there multiple bays (glass panels) or one glass panel per skylight?	Single Sloped glass	N/A
6/6/13	Big-D Construction	82. The specs call out the glazing to be laminated insulated Low E glass. What type of Low E on the 2nd surface? Is the inner layer of the laminated glass white translucent?	Glass to match Building Glazing standard VE1-2M. The Inner Layer to be white translucent.	See MHTN Addendum # 3
6/6/13	Big-D Construction	83. Pool suppliers have stated that the schedule for the pool scope will take 9 months for alternate 1. Will any overall project extension be granted due to this or any of the alternates	It is not anticipated to grant any time extensions for the pool alternates	N/A

Addenda Questions

Date	Who's Asking	Question	Comments	Action
6/6/13	Big-D Construction	84. Sheet WF010.0 makes reference to an alternate pool bid item that is a stainless steel pool. Are there plans and specs for this option, if no how are we to bid this option? How will the bids for this option be evaluated when compared to the shotcrete and tile pool options?	The stainless steel pool specifications was added to the documents.	See MHTN Addendum # 3
6/6/13	Big-D Construction	85. The fixture schedule shows that the electrical contractor is to install the hoist and equipment for the climbing wall lighting. The detail on Sheet EL705 shows that this is by the rigging installer and for the rigging installer to provide it. Please clarify who is providing and installing this equipment.	The electrical contractor is to provide and install the hoist, if the electrical contractor chooses to sub this to a rigging installer like Oasis Stage Werks that is acceptable	N/A
6/6/13	Big-D Construction	86. Is the cable tray at the end of the tunnel on the building side ended as the building starts? Does the cable try need to be brought into the building?	The cable tray stops in the tunnel, this is clarified in the Addenda.	See MHTN Addendum # 3
6/6/13	Big-D Construction	87. What is the Nema rating required for disconnects inside the pool equipment room?	Keyed Note 8, sheet EP502 requires Nema 4X	N/A
6/4/13	Enter-Prise Climbing Walls	88. *Do you have a ratio or percentages of 3D wood vs. 3D fiberglass desired in the design?*	Yes	See MHTN Addendum#2
6/4/13	Enter-Prise Climbing Walls	89. A. Climbing wall manufacturer to provide flooring for *bouldering* area. All other floor climbing area. *Do you require flooring in the top rope area and, if so, what is the spec?*	Yes	See MHTN Addendum#2
6/4/13	Michelle Call Protective Coating Intermountain, Inc	90. In Section 099600-7 In 2.2 E. it states "EPOXY POLYAMIDE where schedule "EXPD" (except exposed steel roof/ceiling structure) in Natatorium/Swimming Pool Areas" Why does this section "except" the exposed steel roof/ceiling structure? What system is intended in this excepted area? In 2.2 E. 2.d. it states the Natatorium deck is to be factory primed on both sides with epoxy paint system compatible with finish coats – In what section is the natatorium deck specified?	099600-7 2.2E will be revised to: **"EPOXY where schedule "EXPD" in Natatorium/Swimming Pool Areas"** Deck is specified in 053100	See MHTN Addendum #3
6/10/13	Okland Construction	91. On sheet AE440 it calls for Corner Guards in 2 locations; are these typical to each column or only the 2 locations shown?	They are NOT on the columns. They are at all the window openings on the North, East and South walls. Also see details @ AE513 and AE515.	N/A
6/10/13	Okland Construction	92. Are the Corner Guards shown on AE440 the only location where they are needed, or are they required at all	That is the only place they are needed. They are called out	N/A

Addenda Questions

Date	Who's Asking	Question	Comments	Action
		exterior corners?	nowhere else in the documents	
6/10/13	Okland Construction	93. I see that there are several data rooms. Do these need to be protected by a clean agent or pre-action system?	A pre-action system is not part of the design	N/A
6/10/13	Okland Construction	94. Is fire protection going to be required in the tunnel?	No	N/A
6/10/13	Okland Construction	95. Will the storage shed require fire sprinklers?	No	N/A
6/10/13	Okland Construction	96. No spec is provided for the Medium Voltage Transformers. Will this be added? Or are they transformers existing?	The transformers are to be dry-type, refer to specification section 26 22 00-2.4	N/A
6/10/13	Okland Construction	97. The Lighting alternate sheets show lighting duplicated over the swimming-pool, on the lower level and on the 1st-floor level. This is causing some confusion with supply-chain / lighting vendors. Please clarify	The Pool alternate is a double high space. Coordinate with section. Revised drawing will be provided on addendum	Will be addressed on MHTN Addendum#4
6/10/13	Okland Construction	98. The door schedule on sheet AE610 calls for doors 40A-2 and 40B to be 60 minute fire rated. These doors install in aluminum frame AL-106 which does not call out any fire rating requirements. It does not appear that these frames are in a fire rated wall. Please verify that these doors do not need to be fire rated	It will be revised to no rating.	Will be addressed on MHTN Addendum #4
6/5/13	Janet Quinn Dow Building Solutions	99. I have had a long review with Bryan Taylor at Superior Insulation and we are confused about what is required. We see a hybrid of materials specified under the Thermal and Air Barrier Spray Foam Insulation section 07129 and we not see a compete air and thermal barrier system. The specification look very similar to the Dow Thermax Wall System with all the testing requirements but I do not think that is what you want so we are puzzled. Perhaps if we knew what was used as the basis of design we might be able to bid this to meet your needs. I do appreciate the Dow SPF is included and we want to bid this correctly. We believe all the SPF is on the interior on the wall. There is a tape required for transitions and penetrations and you cannot tape to SPF. I am not just referring to Dow SPF but to SPF in general. If all the insulation is on the inside of the wall – this may be a condensation issue. If at a minimum we understood the basis of design we might	Spray foam insulation that was questioned is a closed cell on the interior side of below grade and above grade concrete wall. Sections show interior metal stud is shown not in contact with concrete directly. At exterior cold formed framing typical assembly shown is batt insulation in the stud cavity with mineral wool insulation on the exterior face of sheathing for continuous insulation.	N/A

Addenda Questions

Date	Who's Asking	Question	Comments	Action
		be able to respond accurately to this bid request. Thank you for your consideration and direction. I really do not want to bother you but we are at a loss as to what is required.		
6/10/13	Okland Construction	100. What type of glass is required in Folding Glass Doors Type H?	Folding Glass Door Type H is a Triple Glazing insulated Panel with low E value to match curtain wall.	It will be revised On MHTN Addendum#4

Addenda Questions

Owner:	DFCM	Principal:	Peggy McDonough
Project Name:	George S. Eccles SLC	Project Manager:	Brent Agnew
Project Number:	2010562/08015750	Technical Manager:	Angelica Pavoni
		Design Manager:	Rui Morais
		Prepared on:	6/13/2013

Bid Date: June 19, 2013, 2pm
Bid Time: Announcement will be made June 28, 2013

QUESTIONS Continuation from previous addenda questions

Date	Who's Asking	Question	Comments	Action
6/6/13	Okland Construction	101. Please provide panel schedules for panels: ML4, H3L2, H3M1, L1P5, L1P6, EHML1, and EH2M1?	Addressed in Addenda	See MHTN Addendum#3 and 4
6/6/13	Okland Construction	102. On sheet EP607 panel schedule P34 is note on the single line. Where do you want it on the single line? This is the panel for the rock wall. What size feeders are for this panel?	Addressed in Addenda	See MHTN Addendum#3 and 4
6/6/13	Okland Construction	103. On sheet EP200.C2 Alternate 1B has panels ML1 and PL4 and a transformer T1. These items are note on the single line and do not have panel schedules or a transformer size for them. Can we get this information plus what feeder sizes you want for them?	Addressed in Addenda	See MHTN Addendum#3 and 4
6/6/13	Okland Construction	104. On sheet EP604 panel schedule ML6 is not located on the single line. What is this panel for? Where is it located in the building and what are the feeder sizes for this panel?	Addressed in Addenda	See MHTN Addendum#3 and 4
6/6/13	Okland Construction	105. Can I get a location for L1P5 power panel?	Addressed in Addenda	See MHTN Addendum#3 and 4
6/6/13	Okland Construction	106. Do you have a wire sizing chart you want us to use? For example: if a 120 circuit is longer than 65' us #10 AWG or use #8 if it is longer than 125'. Usually there is on the drawings or in the specification I don't see one can you tell us what is required?	Do not allow voltage drop to fall below 2% on feeders and 3% on branch circuits. Actual lengths of feeders and branch circuits will be determined by the chosen path by the contractor.	N/A

Addenda Questions

Date	Who's Asking	Question	Comments	Action
6/6/13	Okland Construction	107. Section 01 5639 3.8 B Please provide a map with the location & ID numbers of the trees to be saved.	Specification was revised	See MHTN Addendum#4
6/6/13	Big-D Construction	108. Sheet EL102.A room 200M has a light in the middle of the room with no designation. I have assumed this fixture to be a type M2. Please confirm this is the correct type required or provide the type desired.	Type is M2, shown in Addenda 3	See MHTN Addendum#3
6/6/13	Big-D Construction	109. Sheet EL102.A room in the bottom right corner of the drawing shows two fixtures without a fixture type. Please clarify what type fixture is required.	Fixture is Type H, callout added in Addenda 4	See MHTN Addendum#4
6/6/13	Big-D Construction	110. Sheet EL102.A room in the bottom left corner of the drawing shows two fixtures without a fixture type. Please clarify what type fixture is required.	Room without callouts is not found.	See MHTN Addendum#4
6/6/13	Big-D Construction	111. Sheet EL102.B room in the top left corner of the drawing shows three fixtures without a fixture type. Please clarify what type fixture is required.	Fixture is Type N5, callout added in Addenda 4	See MHTN Addendum#4
6/6/13	Big-D Construction	112. Sheet ES100.5 shows new light fixtures without a fixture type designated. Please provide desired fixture type.	Type 'Z'. See updated luminaire schedule Sheet EL602 and Sheet ES100.5	See MHTN Addendum#4
6/6/13	Big-D Construction	113. EP600 the feed that goes form the 12470 transformer to LMDP doesn't have a cable or conduit designation. Please provide what size, type of cable and conduit are required.	Provide a 2500D from Feeder schedule on sheet EP602	N/A
6/6/13	Big-D Construction	114. Sheet EP600 the feed from HMDL to HRM2 doesn't have a cable designation. Please provide the required cable and conduit size	Addressed in Addendum 4	See MHTN Addendum#4
6/6/13	Big-D Construction	115. Sheet EL701 detail A3 please clarify what specific types of fixtures this detail is applicable to. Also is this a detail for each fixture location or just the power connection locations.	This is a typical detail for suspended fixtures below lay-in ceilings. This is typical for power connection locations as well as non power connection locations	N/A
6/6/13	Big-D Construction	116. Sheet ED100.1 key note 7 makes reference to removing both the electrical and the telecomm in another project. However later in the paragraph it says that the rerouting of the Telecomm is part of this package. Please clarify if the rerouting of either the telecomm or the electrical part of the scope of work. If it is please provide the desired routing, conduit and cables desired.	Determination of new route of existing ductbank is under another concurrent project. The other project will pay for rerouting of ductbank and electrical in ductbank. Coordinate with other project and reroute existing telecom using rerouted ductbank	N/A

Addenda Questions

Date	Who's Asking	Question	Comments	Action
6/6/13	Big-D Construction	117. Sheet ES500 MH.36A detail shows a note four, for one of the feeds leaving the man hole. Is this detail supposed to be a note three? Please clarify.	This will be modified in Addenda 4	See MHTN Addendum#4
6/6/13	Big-D Construction	118. Is there a detail that shows the distance between the new VFI switch and the new 12470V transformers?	See 1/EP501	N/A
6/6/13	Big-D Construction	119. Sheet EY302 has no identifiable cable tray shown. Please verify that there is no cable tray on level 2 of this project.	Addressed in Addendum 4	See MHTN Addendum#4
6/6/13	Big-D Construction	120. Sheet ES100.2 note 5 at the end of the sentence is says that the "cable and cable install by NETCOM" Is this supposed to say conduit and cable? If not please clarify if this was simply a text error, or if there is something to be added.	Conduit and pull string only. Netcom to provide and install wire	N/A
6/6/13	Big-D Construction	121. Sheet ES100.2 in addendum #2 it shows a UGT type duct bank from the top of the page to the center. I am unable to decipher what I am supposed to do with this. Please provide a narrative as to what the intention is for this run.	Provide (1) 4" innerduct to stub up in main MDF room. Provide (3) 4" conduit to stub up in Main MDF room.	N/A
6/6/13	Big-D Construction	122. Sheet EP501 enlarged lower level transformer vault show the new dielectric switch as a 5KV switch, but the one-line shows this same switch as a 15KV switch. Please clarify which is correct	15kV switch	N/A
6/6/13	Big-D Construction	123. Sheet EP600 shows panels H3L2 and H3M1. However I am unable to locate these panels on the panel schedule sheets. Please provide panel schedules for these panels.	Addressed in Addendum 4	See MHTN Addendum#4
6/6/13	Big-D Construction	124. Sheet EP102.A note #2 indicates that the BAF fans will come with a control box, and that we are to look to the mechanical drawing for its location. I am unable to find this control panel on the mechanical drawing. Please provide the location for these fans. Who is responsible to mount the control box for the fans.	Fans are provided by mechanical and installed by Div. 26	N/A

Addenda Questions

Date	Who's Asking	Question	Comments	Action
6/6/13	Big-D Construction	125. Sheet EP502 there is a disconnect designated as WS-01. Please provide what size and type this disconnect is.	30A Disconnect, 20A fuse, 120V Single Phase.	N/A
6/6/13	Big-D Construction	126. Sheet EL200.C2 room 10K, the lights in this room do not have a type designation. This is also the case in room 128 and room 40S on the same sheet. Please provide what type of light is required in these rooms.	Room 10K is fixture Type D2, clarified in Electrical Addenda 2. Room 128 is fixture Type H, clarified in Electrical Addenda 2. Room 40S is fixture Type H, this is added to Addenda 4	See MHTN Addendum#4
6/6/13	Big-D Construction	127. Sheet EL200.C2 the room left of room 10J the lights don't have a designation. Please provide what type is desired in this area. Also just outside of stair well #3 there is a light with the designation of M1. This light type is not provided on the light schedule. Please clarify if this is the correct designation. If it is please provide the proper information. If it is a misprint. Please clarify what type it should be.	The lights in the room adjacent to 10J are Type M2, this was added to Electrical Addenda. The fixture outside of Stairwall #3 is Type M2, this was changed in Addenda	See MHTN Addendum#3 and 4.
6/6/13	Big-D Construction	128. Sheet EL200.C2 there is a symbol that appears at various locations surrounding the Natatorium/ 50 meter pool that appears to be the same as the one on sheet EL100.C to designate a type J fixture. Please verify that this is in fact a J type fixture.	These fixtures are Type W2 and are shown on EL101.C and EL201.C2, they will be removed from this plan to ensure they are not counted twice.	See MHTN Addendum#4
6/6/13	Big-D Construction	129. Sheet EL101.C Just above the racquetball court 44 there are some fixtures with no type designation. Please provide what type of fixture they are.	This was modified and the fixtures called out in Electrical Addenda	See MHTN Addendum#3
6/6/13	Big-D Construction	130. Sheet EL201.B shows a fixture on levels 2 with not fixture designation. I have assumed them to be type M2 fixtures. Please confirm this is the desired type. If not please provide the correct type desired.	These fixtures are Type M2, the callout was added in Addenda	See MHTN Addendum#4
6/6/13	Big-D Construction	131. Section 27 05 33, Miscellaneous Raceway-Only Systems, lists the TV antenna system as raceway only. Section 27 51 00, Television Systems, details the equipment requirements for the TV antenna system. Is the MATV system raceway only, or is it a complete system? Please resolve the conflict between these two specification sections	The MATV system is to be a complete system. The reference in 27 05 33 has been removed in Addenda	See MHTN Addendum#4
6/6/13	Big-D Construction	132. In the symbol legend on AE001- AE016, FEC is "FIRE EXTINGUISHER CABINET (DIVISION 10) - FIRE	Detail 2/EY703 was added in Addenda 1. A clarification that all locations are to be	See MHTN Addendum#1

Addenda Questions

Date	Who's Asking	Question	Comments	Action
		EXTINGUISHERS BY FIRE ALARM CONTRACTOR (DIVISION 28)" There is no mention of portable fire extinguishers in division 28 specification. Portable fire extinguishers are specified and provided with electronic monitoring, in section 10 44 13, Fire Protection Specialties. Please correct references to fire extinguishers provided by division 28.	monitored is in Electrical Addenda	and 4
6/6/13	Big-D Construction	133. In the symbol legend on AE001-AE016, FE is "FIRE EXTINGUISHER BY FIRE ALARM CONTRACTOR (DIVISION 28)" There is no mention of portable fire extinguishers in division 28. Portable fire extinguishers are specified and provided with electronic monitoring, in section 10 44 13. Fire Protection Specialties. Please correct references to fire extinguishers provided by division 28.	Detail 2/EY703 was added in Electrical Addenda 1. A clarification that all locations are to be monitored in Addenda	See MHTN Addendum#4
6/6/13	Big-D Construction	134. Sheet EP501 Detail 1 identifies circuits feeding the ACCESS, FACP and ACCESS panels as EPL1-12, EPL1-1 and EPL1-3 respectively. This panel is not shown on the one-line or in the panel schedules. Please verify circuits feeding these panels.	EPL1 was renamed ELLP1	See MHTN Addendum#3
6/6/13	Big-D Construction	135. Sheet EP501 Detail 3 identifies circuits feeding the NAC, SEC, and ACCESS panels as EP11-8, EP11-6 and EP11-10 respectively. This panel is not shown on the one-line or in the panel schedules. Please verify circuits feeding these panels.	EPL11 was renamed EL1P1	See MHTN Addendum#3
6/6/13	Big-D Construction	136. Sheet EP501 Detail 4 identifies circuits feeding the NAC, SEC, and ACCESS panels as EP21-8, EP21-6 and EP21-10 respectively. This panel is not shown on the one-line or in the panel schedules. Please verify circuits feeding these panels.	EP21 was renamed EL2P1	See MHTN Addendum#3
6/6/13	Big-D Construction	137. Sheet EP501 Detail 5 identifies circuits feeding the NAC, SEC, and ACCESS panels as EP31-6, EP31-8 and EP31-10 respectively. This panel is not shown on the one-line or in the panel schedules. Please verify circuits feeding these panels.	EP31 was renamed EL3P1	See MHTN Addendum#3
6/6/13	Big-D Construction	138. Sheet EY100.A General Note #D, "CONTRACTOR IS TO PROVIDE COMPLETE CONDUIT HOMERUNS WITH PULL STRINGS FOR ALL LOW VOLTAGE SYSTEMS INCLUDING SECURITY, AUDIO/VISUAL, TELECOMMUNICATIONS, FIRE	The conduit stub up is for Telecom only. Stub conduit up to accessible ceiling spaces and provide bushings. Provide conduit in areas that are not accessible. All other sections are to be complete	See MHTN Addendum#4

Addenda Questions

Date	Who's Asking	Question	Comments	Action
		ALARM, ETC". Specification section 27 05 33.3.1.A states "Stub raceways from wall outlets up 6 inches above accessible ceilings and terminate with insulating bushing." This specification section applies to telephone, data processing, TV antenna, and security systems. Please verify the extent of raceway required for low voltage systems	systems. The references in 27 05 33 have been removed in Addenda	
6/6/13	Big-D Construction	139. Sheets EY100.B, EY100.C, EY101.A, EY101.B, EY101.C, EY102.A, EY102.B, EY102.C, EY103.A, EY103.B, EY103.C General Note #D, "CONTRACTOR IS TO PROVIDE COMPLETE CONDUIT HOMERUNS WITH PULL STRINGS FOR ALL LOW VOLTAGE SYSTEMS INCLUDING SECURITY, AUDIO/VISUAL, TELECOMMUNICATIONS, FIRE ALARM, ETC". Specification section 27 05 33.3.1.A states "Stub raceways from wall outlets up 6 inches above accessible ceilings and terminate with insulating bushing." This specification section applies to telephone, data processing, TV antenna, and security systems. Please verify the extent of raceway required for low voltage systems.	The conduit stub up is for Telecom only. Stub conduit up to accessible ceiling spaces and provide bushings. Provide conduit in areas that are not accessible. All other sections are to be complete systems. The references in 27 05 33 have been removed in Addenda	See MHTN Addendum#4
6/6/13	Big-D Construction	140. Sheets EY100.B, EY100.C, EY200.C1, EY200.C2, EY101.A, EY101.B, EY101.C, EY102.A, EY102.B, EY102.C, EY103.A, EY103.B, EY103.C, EY201.C - Locations of portable fire extinguishers are not shown. Each portable fire extinguisher is monitored by the fire alarm system. Please show location of portable fire extinguishers on drawings	Detail 2/EY703 was added in Electrical Addenda 1. A clarification that all locations are to be monitored in Addenda	See MHTN Addendum#4
6/6/13	Big-D Construction	141. On Sheet EY200.C1 near grid lines 0.7, G, is a key note #1 near a CCTV camera. There are no key notes on this page. Please provide missing information.	Addressed in Addendum 4	See MHTN Addendum#4
6/6/13	Big-D Construction	142. On sheet EY200.C2, fire alarm and other system devices do not match layout of walls for alternate #1. Please adjust layout of these devices to match alternate floor plan	Addressed in Addendum 4	See MHTN Addendum#4
6/6/13	Big-D Construction	143. On sheet EY200.C2, near grid lines 7, D, is a key note #2. There are no key notes on this page. Please provide missing information.	Note has been removed	See MHTN Addendum#4
6/6/13	Big-D Construction	144. On Sheet EY201.B, should the speaker symbol in detail 3, in front of the elevator be a fire alarm smoke	Change Speaker symbol to Smoke Detector symbol.	See MHTN Addendum#4

Addenda Questions

Date	Who's Asking	Question	Comments	Action
		sensor instead of a speaker? Please verify.		
6/6/13	Big-D Construction	145. Sheet EY603 fire alarm riser shows Remote Fire Alarm Annunciator on Level 1. Please provide location of remote fire alarm annunciator on fire alarm drawings.	Annunciator shall be placed in Vestibule 100A on south east framed wall	N/A
6/6/13	Big-D Construction	146. Sheet EY603 fire alarm riser shows an Intelligent Network Command Center. Please provide location of intelligent network command center on fire alarm drawings.	Command Center shall be placed behind control desk on west wall of data center	N/A
6/6/13	Big-D Construction	147. The panel schedules for AHUs do not match up with the drawings. Should the VFDs be removed from the panel schedule? If so, what the M's for on the panel schedule? Do you want VFD cable from the panel to the VFDs and from the VFDs to the motors?	The air handler specification requires that all of the fans are pre-wired to the VFD's.	See MHTN Addendum#4
6/6/13	Big-D Construction	148. Who is providing the connector strip with 6 outlets shown on sheet EL705?	The electrical contractor is responsible for this equipment. If the electrical contractor subs this work to a theatrical installer like Oasis Stage Werks, then the theatrical installer will provide this with the equipment.	N/A
6/6/13	Big-D Construction	149. Who is provided the rigging controller for the climbing wall lights?	The electrical contractor is responsible for this equipment. If the electrical contractor subs this work to a theatrical installer like Oasis Stage Werks, then the theatrical installer will provide this with the equipment.	N/A
6/6/13	Layton Construction	150. 1B is not real clear to me anyway, in its delineation. There doesn't seem to be a defined break-point that matches-up with anything in the base. Reference EL200.C2, to the right of grid line 7; none of that coincides with anything I'm seeing on EL100.C. It doesn't leave me anything by which to designate "this is base and this is alternate".	In the Lower Level, the only space that does not get modified for Alternate 1 is Corridor 10	N/A
6/6/13	Okland Construction	151. On page SB100A, between grid 13.5 and 18 on grid W the wall type is hatched as CMU, however the plan denotes this wall to be CFW-1. This also found on grid 13.5 between W and X, Page SB100A. Grid 13, between U and V, page SB100A. Between grid S and T, running left to right on page, SB100C. Please clarify	The slab on grade elevation steps down at the locations listed. There is a concrete wall between the upper and lower slabs with a masonry wall above as shown in detail C2/SB503.	N/A

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6/6/13	Big-D Construction	152. Specification 051200 1.5 A requires that an AISC-Certified Erector is required on the project. If a general contractor names and erector in their list of subcontractors that is not AISC-Certified, will the general be disqualified from the bid?	Contractor will not be disqualified just because their erector is not AISC certified. Specification was revised.	See MHTN Addendum#4
6/6/13	Big-D Construction	153. Sheet AE100B shows several doors on the west side of the Mac Gym (room 55) with a note "Doors by bleacher mfg. (Typ.)". This project does not include any bleachers. Please clarify who is to provide these doors. Will they be included by the dasher board wall and glazing manufacturer?	Note to be revised by Addendum #4. DOORS BY DASHER BOARD MFG..	See MHTN Addendum#4
6/6/13	Big-D Construction	154. Is there a fixture type required in the tunnel?	Type 'Z'. See updated luminaire schedule Sheet EL602 and Sheet ES100.5	See MHTN Addendum#4
6/6/13	Big-D Construction	155. No location is given for DEF-4, DEF-5, DEF-6, ATC, RCP-1, RCP-2, DMV-1, SCF-01, SCF-02, HWP-5, HWP-6. Please specify locations.	DEF-4, DEF-5, DEF-6, RCP-2, SCF-01, SCF-02, HWP-5, HWP-6 were all deleted in the Bid set. ATC is still in the drawings, there should be an ATC panel in each mechanical room.	See MHTN Addendum#4
6/6/13	Big-D Construction	156. Can the panels and circuit numbers for ACP pumps be provided?	There are no ACP pumps in the project.	N/A
6/6/13	Big-D Construction	157. What are the feeder sizes for lighting control panels and HRM2?	The lighting control panels require a 120V circuit for control. The lighting circuits are feed from the panelboards designated.	N/A
6/6/13	Big-D Construction	158. What are the feeder sizes for HLM1 to the XFMR and LLP4?	Addressed in Addendum 4	See MHTN Addendum#4
6/6/13	Big-D Construction	159. What are the feeder sizes for ML4 to the XFMR and LLP6,, L1P5, and L1P6?	Addressed in Addendum 4	See MHTN Addendum#4
6/6/13	Big-D Construction	160. Sheet EP502 shows a single conduit going from the VFD to the supply fan as well as a single conduit going from the VFD to the relief fan for AH-1, AH-2 and AH-9. However on sheet EP609 it gives a cable and conduit designation for each supply and relief fan. Do each supply and relief fan require their own conduit and wire or is it a single point connection to each bank of fans. Please clarify	The air handler specifications in the bid set require that the air handler manufacturer factory wire all of the fans to the VFD so that there is single point elec. connection to the VFD	N/A
6/6/13	Big-D Construction	161. Sheet EP502 shows two redundant VFD's next to the VFD's for AH-9 with not panel designation for their power feed. There is also no reference to them on the panel schedule for HLM2 which is the panel feeding	Addressed in Addendum 4	See MHTN Addendum#4

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		all the other VFD's in this area. Please provide the panel that is to feed these VFD's.		
6/6/13	Big-D Construction	162. Sheet EP502 the designation for PHP-01 and PHP-02 do not match with the panel schedule for HLM3. Please clarify that the home runs are going to the proper panel.	Addressed in Addendum 4	See MHTN Addendum#4
6/6/13	Big-D Construction	163. Sheet EP502 enlarged pool equipment room. 11B, 1B and 31B do not have home run designations. Please provide which panels and circuits these items are feed from.	Addressed in Addendum 4	See MHTN Addendum#4
6/6/13	Big-D Construction	164. Sheet EP502 mechanical room. How many light fixtures will need to be mounted per air handler unit?	Approximately 8 per AHU	N/A
6/6/13	Big-D Construction	165. Sheet EP502 EC-1 doesn't have a home run designation. Please provide what panel it is feed from.	Addressed in Addendum 4	See MHTN Addendum#4
6/6/13	Big-D Construction	166. Sheet EP503 shows a single conduit going from the VFD to the supply fan as well as a single conduit going from the VFD to the relief fan for AH-3 and AH-4. However on sheet EP609 it gives a cable and conduit designation for each supply and relief fan. Do each supply and relief fan require their own conduit and wire or is it a single point connection to each bank of fans. Please clarify.	The air handler specifications in the bid set require that the air handler manufacturer factory wire all of the fans to the VFD so that there is single point elec. connection to the VFD	N/A
6/6/13	Big-D Construction	167. In Section 051200-1 1.2 A.3. It states in this section that it includes Steel Tube Trusses at Natatorium and 1.2 B.5 It states that, this sections relates to Division 09 Section for surface preparation and priming requirements for hi performance coatings and in tumescent protective coatings. When reviewing the 09 sections I feel that it isn't clear what surface preparation and primer should be used on the trusses. I am afraid that the bidders will not estimate the intended system of an SP6 Commercial Blast Cleaning and a prime coat of Series 90-97. In a Natatorium environment is important that the surface preparation and primer application be applied by the fabricator.	Refer to Division 7 Specifications	See MHTN Addendum#4
6/10/13	Okland Construction	168. Is a cast in place concrete coping acceptable for the base and alternate skimmer pools? Creating custom molds for a precast coping on those skimmer	We're ok with cast-in place-coping being provided in lieu of pre-cast coping (for the	See MHTN Addenda#4

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		pools will increase costs significantly? Each radius of the free form shapes would have to have a custom mold made. We have had great success pouring a reinforced concrete coping on free form skimmer pools.	skimmer pools and for the finger walls). We recommend the following: • The coping edge profile design must match the pre-cast stone edge profile. • The color, finish, and joint scoring of the cast-in-place coping needs to be selected and approved by the Architect/Consultant. • Contractor to provide shop drawings showing proposed reinforced coping detail for approval. • The pool contractor is required to provide a mock-up for review and approval prior to placing concrete, per the requirements of the specifications. A mock-up of the pre-cast gutter stones (front stone and back stone) are also to be provided for review and approval, per the requirements of the specifications.	
6/10/13	Okland Construction	169. Is a cast in place island and finger wall cap acceptable for the Alternate Activity Pool? We ask this question for the same reason as question 1. The cost would be very high to create custom mold pieces for each of the stone illustrated on the finger wall caps.	Same answer as above	Same answer as above
6/10/13	Okland Construction	170. Will Nemato Regenerative Filters for the swimming pools be accepted as equal to the specified Neptune Benson Defender Filters? We have successfully had these Nemato Filters approved as equals on past jobs by this same engineer. I have enclosed the Nemato Filter Submittals?	It appears that the contractor has submitted a substitution request for the base bid pools only (not any of the alternates). The filter area for the proposed activity pool filter equivalent does not match the 812 sq. ft. of filter area	Rejected

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			specified in the equipment schedule and therefore the proposed filter equivalent has to be rejected. All of the pool filters on the project must be of the same type/make therefore the base bid spa filter cannot be accepted either. There is a concern that a filter with a matching filter surface area will not fit through the access shaft/door for installation/removal. Per specification 131100 section 1.08 Substitutions. Plans were not submitted showing how the filters would fit into the space and if changes would be required (with accompanying costs) nor was filter clear height requirements indicated on the submittal. Further analysis cannot be completed without this information being provided.	
6/10/13	Okland Construction	171. Addendum 2 says that the make and model for the Activity Pool CO2 bulk Container on sheet WF101 are revised, but I don't see where that new make and model # is listed. Please confirm.	The correct information is: **Chart, model Carbomizer 450**	See MHTN Addendum#4
6/10/13	Okland Construction	172. I can see that there are standpipes in some of the stair wells but it doesn't show them in all of them. Are standpipes required in all stairwells? Do the standpipes need to extend through the roof to roof manifolds?	The stairwell standpipes are required on most of the stairwells, not all. The standpipes extend through the roof.	See MHTN Addendum#4
6/10/13	Okland Construction	173. Is there a preference to where the floor control valves are located?	There is a preference	See MHTN Addendum#4
6/10/13	Okland Construction	174. Do we start from a flange inside the building or is there underground work that I need to include in the bid?	The fire line was not shown on the site plan and will be added in Addendum #4. The GC will need to coordinate between the site utility contractor and the fire protection contractor as to who will extend the fire line into the building to the flange. Typically, we recommend that the site utility contractor take the fire line all the way into the building, but this will need to be coordinated.	See MHTN Addendum#4

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6/10/13	Okland Construction	175. Will there be a coordination study required, and if so, will there be a specification added for such?	The GC will need to coordinate between the site utility contractor and the fire protection contractor as to who is to extend the fire line into the building to the flange.	N/A
6/10/13	Okland Construction	176. On the landscape legend it shows Aggregate Crushed 1"-3", Stabilized Crushed Aggregate, and Stone Mulch. What material would you like included in our bid?	All three materials are called out on the plans to be provided. Specification was revised	See MHTN Addendum#4
6/10/13	Okland Construction	177. Is there a specification for the Aggregate paving?	This specification is provided in Addendum #4	See MHTN Addendum#4
6/10/13	Okland Construction	178. Door 45B-1 on the door schedule on sheet AE611 calls for the door material to be H.M. and the frame to be Aluminum. Please verify that the frame for door 45B-1 needs to be H.M.	The schedule calls out the door to be HM-101.	N/A
6/10/13	Okland Construction	179. There is a large area near south west corner of the building that shows that it is in turf. There is no irrigation drawn for this area. Is it going to be turf? If so do we need to provide irrigation?	This area is turf. The revised irrigation was provided in Addendum #3	See MHTN Addendum#3
6/10/13	Okland Construction	180. Also, in the fire lane it says there is a 4' landscape strip in grass pavers. There is no irrigation shown	There are no grass pavers and no lawn in the landscape strip in the fire lane. Thus now irrigation was designed	N/A