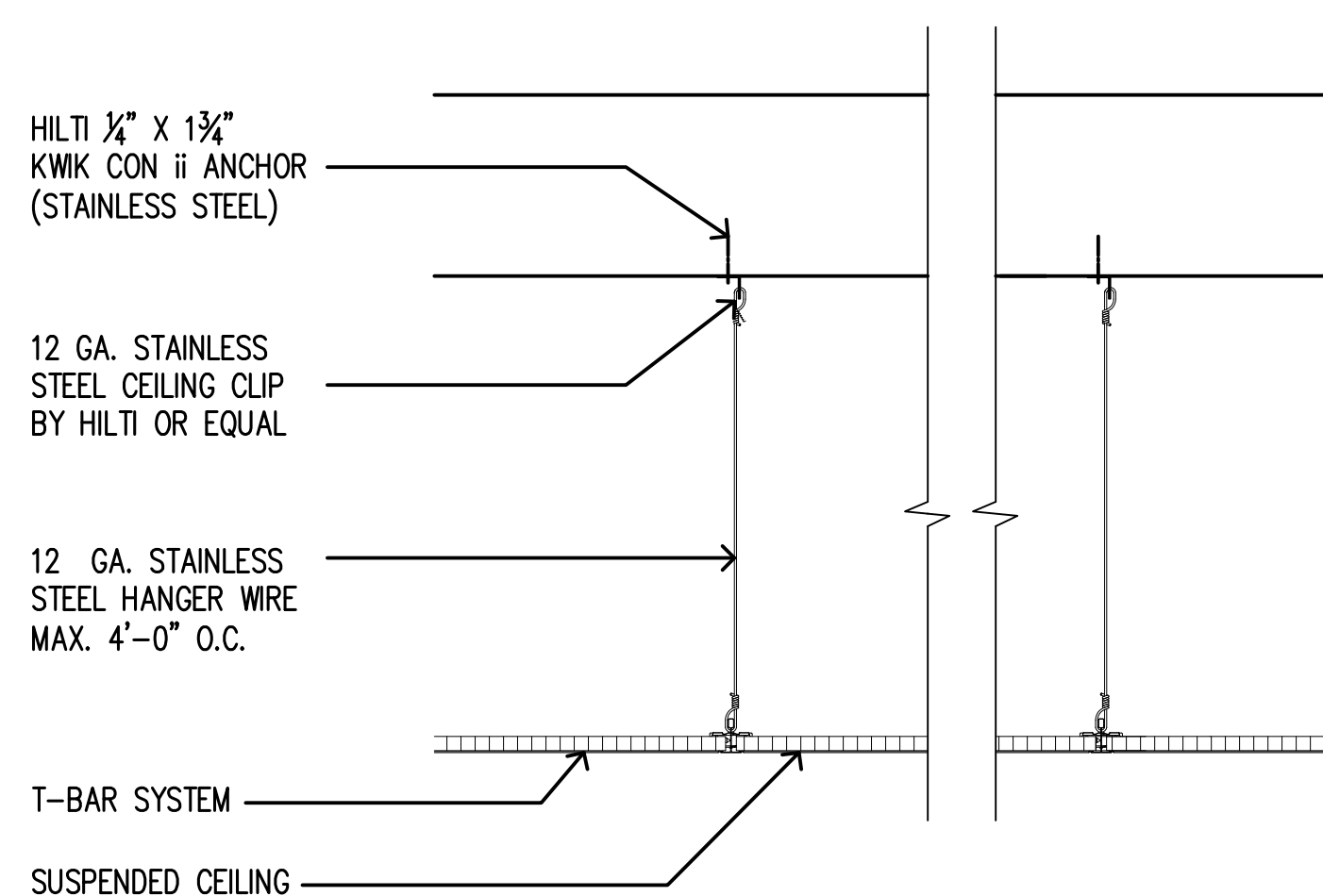
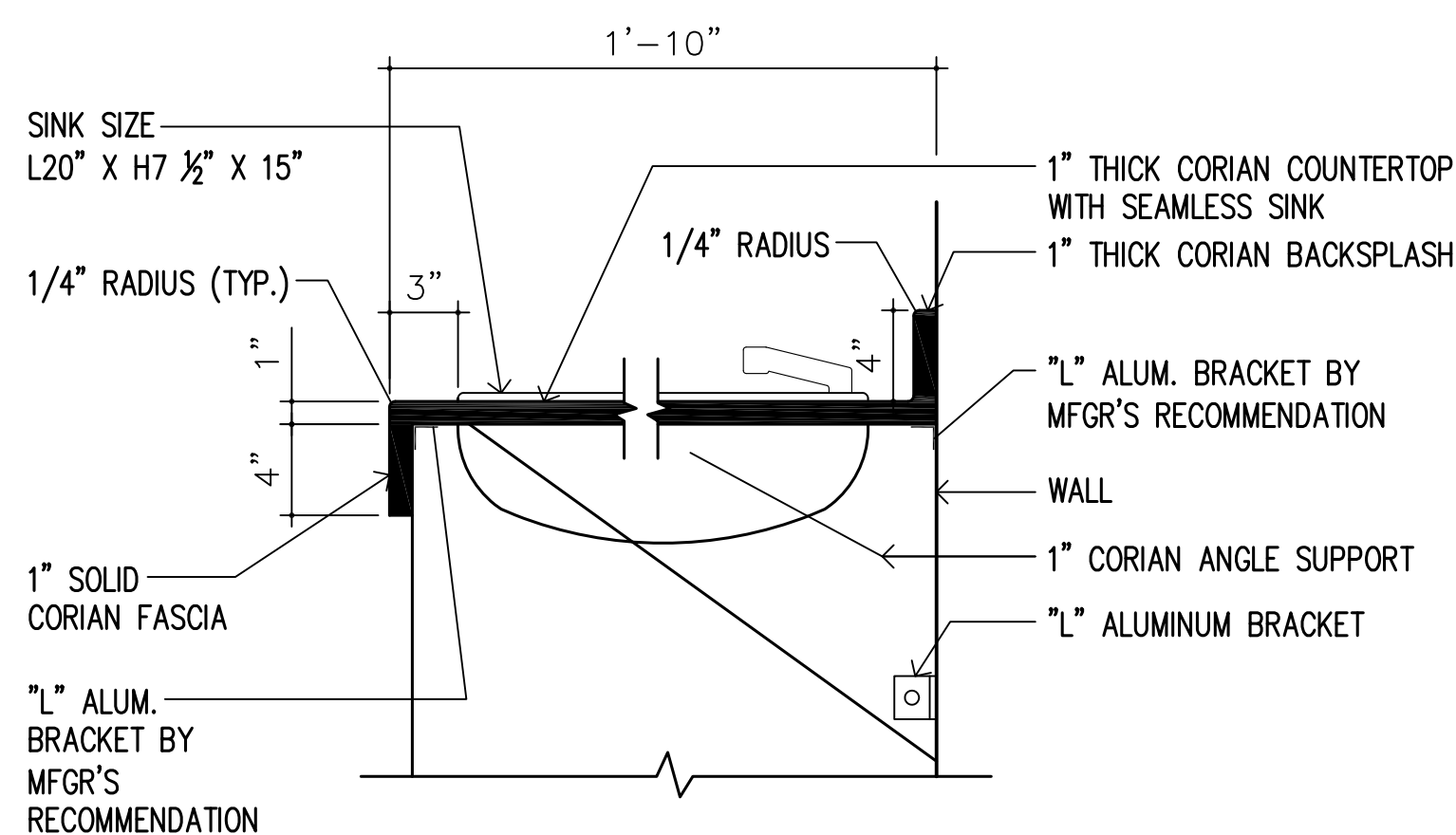
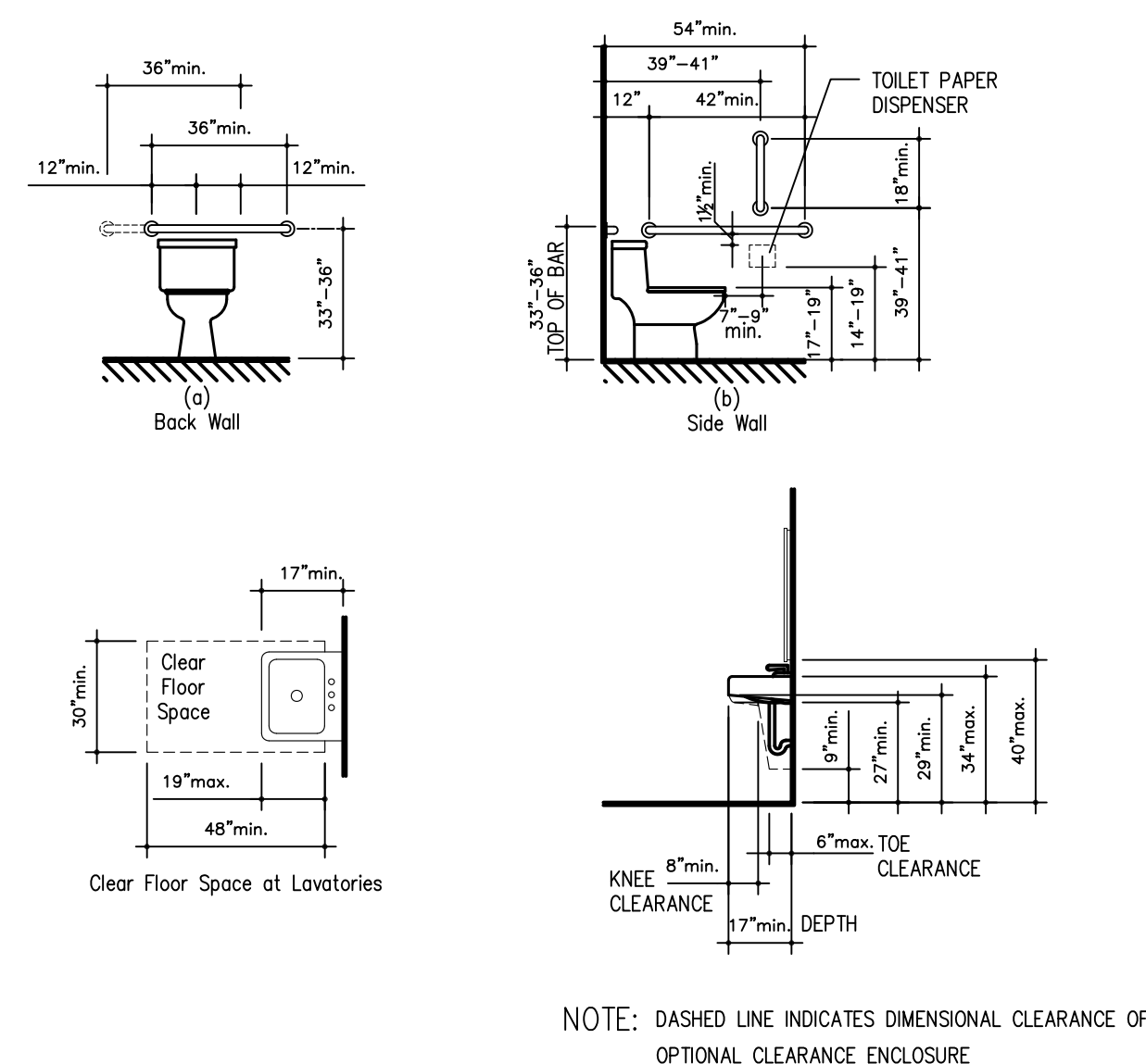


300 Pompton Road  
Wayne, New Jersey 07470

SHEA CENTER FOR PERFORMING ARTS, THEATRE - RESTROOMS & LOBBY RENOVATION  
(WP-17-03-01)



**PAINT (TYPICAL)**

- SKIM COAT ALL IMPERFECTIONS AND PATCH AT ALL REMOVAL AREAS. ALL PAINT BY BENJAMIN MORE AURA, 1 COAT PRIMER, 2 COATS PAINT.
- DOORS - SEMI-GLOSS
- WALLS - EGGSHELL
- CEILINGS - FLAT
- COLOR BY ARCHITECT.
- CONTRACTOR TO PROVIDE 2'-0" X 2'-0" MOCK-UP ON WALLS, CEILINGS AND DOOR FOR BATHROOMS AND LOBBY.

## CARPET #1

ATLAS B112 DONGARA  
28-TUFTED YARN WEIGHT  
STKFRS-287283  
WIDTH: 12.5 FT  
CONTACT: MIKE JUGAN (215)519-2473

## CARPET WALL BASE #1

4" RUBBER COVE BASE, IN COILS NO STRIPS  
BY JOHNSONITE. OR EQUAL.

## GENERAL NOTES

1. CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD.
2. THE CONTRACTOR SHALL VISIT THE SITE AND REVIEW AND SURVEY EXISTING CONDITIONS TO FULLY UNDERSTAND THE SCOPE OF WORK.
3. CONTRACTOR TO COORDINATE ALL WORK WITH ALL EQUIPMENT MANUFACTURERS ROUGH-IN REQUIREMENTS.
4. DO NOT SCALE DRAWINGS, DIMENSIONS GOVERN. ALL DIMENSIONS ARE TO FINISH FACE UNLESS OTHERWISE NOTED.
5. GENERAL CONTRACTOR SHALL CAREFULLY STUDY THE CONTRACT DOCUMENTS PRIOR TO CONSTRUCTION AND SHALL REPORT TO THE ARCHITECT ANY ERROR, INCONSISTENCY OR OMISSION HE MAY DISCOVER AND SHALL NOT PROCEED WITH THE WORK UNTIL THE INTENT OF THE DOCUMENT IS VERIFIED BY THE ARCHITECT.
6. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND INSPECTIONS AND PAY ALL APPLICATION FEES.
7. THE WORK SHALL CONFORM WITH IBC 2009, AND ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL CONDITIONS AND MATERIALS WITHIN THE PROPOSED CONSTRUCTION AREA. THE CONTRACTOR SHALL DESIGN AND INSTALL ADEQUATE SHORING AND BRACING FOR ALL STRUCTURAL OR REMOVAL TASKS. THE CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR ANY DAMAGE OR INJURIES CAUSED BY OR DURING THE EXECUTION OF THE WORK.
9. INSTALL 5/8" W.P. GYP. BD. AT ALL WET LOCATIONS & WONDERBOARD AT TILE LOCATIONS.
10. INSTALL G.F.I. OUTLETS AT ALL WET LOCATIONS.
11. PATCH AND REPAIR ALL SURFACES UPON REMOVAL AND DEMOLITION TO MATCH EXISTING THROUGHOUT.

## DRAWING LIST

- A1 TITLE SHEET  
A2 SHEA PLANS  
A3 SHEA RESTROOM PLANS & ELEVATIONS  
A4 SHEA ELEVATIONS  
A5 NOTES & SPECIFICATIONS

## CODES

- 2015 INTERNATIONAL BUILDING CODE  
2015 INTERNATIONAL FIRE CODE  
2015 NATIONAL STANDARD PLUMBING CODE  
2014 NATIONAL ELECTRICAL CODE

NOTE: CONTRACTOR TO SUBMIT  
PRODUCT SPECIFICATIONS &  
SAMPLES FOR ALL PRODUCTS ON  
PROJECT

NOTE: CONTRACTOR TO SUBMIT  
SHOP DRAWINGS FOR TOILET  
PARTITIONS, PLUMBING FIXTURES  
& LIGHTING (TYP)

## BATHROOM DETAILS

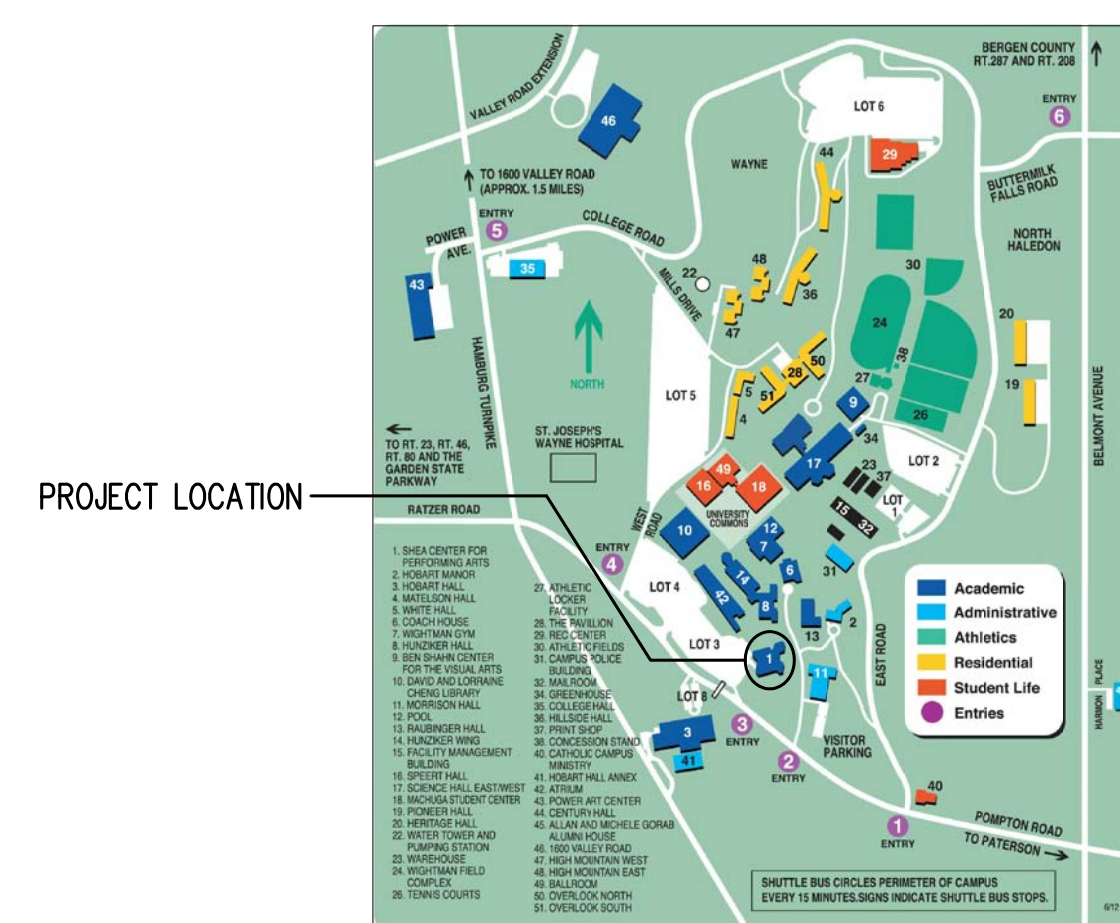
N.T.S.

## COUNTERTOP DETAIL

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

PLUMBING FIXTURE / ACCESSORIES SCHEDULE		
NO.	ITEM	DESCRIPTION
1	TOILET PAPER DISPENSER	B-2888 BY BOBRICK OR EQUAL.
2	SURFACE MOUNTED LIQUID SOAP DISPENSER	ENMOTION GEN 2 AUTOMATED TOUCHLESS SOAP DISPENSER, BLACK 52057 BY GEORGIA PACIFIC OR EQUAL.
3	SURFACE MOUNTED HAND DRYER	XLERATOR ECO XL-SB-ECO, STAINLESS STEEL (BRUSHED).
4	SURFACE MOUNTED FRAMELESS MIRROR	FRAMELESS MIRROR, BRIGHT POLISHED STAINLESS STEEL. MIRROR HAS 1/4" RETURN CONCEALING 1/4" TEMPERED MASONITE BACKING BY BOBRICK OR EQUAL.
5	FREESTANDING WASTE RECEPTACLE	B-2250 FLOOR STANDING SWING TOP STAINLESS STEEL RECEPTACLE BY BOBRICK OR EQUAL.
6	1 1/4" DIAM. STAINLESS STEEL GRAB BARS (VERIFY ALL SIZES)	1 1/4" CONCEALED MOUNTING, STAIGHT GRAB BAR, PEENED GRIP, STAINLESS STEEL SATIN FINISH BY BOBRICK OR EQUAL.
7	MIRROR WITH STAINLESS STEEL UTILITY SHELF	STAINLESS STEEL, 16 GA., 3/4" HEMMED FRONT BY BOBRICK OR EQUAL.
8	FLOOR MOUNTED SOLID PLASTIC TOILET PARTITIONS	HINY HIDER FLOOR MOUNTED OVERHEAD BRACED, 1" THICK COLOR - STAINLESS, ORANGE PEEL TEXTURE, ALL HARDWARE & BRACKETS STAINLESS STEEL BY SCRANTON PRODUCTS. <a href="http://WWW.SCRANTONPRODUCTS.COM">WWW.SCRANTONPRODUCTS.COM</a> .
9	1" THICK CORIAN COUNTERTOP WITH INTEGRAL SINK	1" THICK, CORIAN WITH INTEGRAL SINK & 4" BACKSPLASH. SINK SIZE, SEE DTL 2/A1
10	WALL MOUNT CHANGING TABLE	KB200-01SS GREY, HORIZONTAL WALL MOUNTED BABY CHANGING STATION BY KOALA KARE PRODUCTS OR EQUAL.
11	AUTOMATIC PAPER TOWEL DISPENSER	GP ENMOTION, TRANSLUCENT SMOKE WALL MOUNT AUTOMATED TOUCHLESS TOWEL DISPENSER #59462 BY GEORGIA PACIFIC OR EQUAL.
-	TOILET	K-4325, K-4731-C (WALL MOUNT), K-4302, K-4654A (FLOOR MOUNT) BY KOHLER OR EQUAL.
-	TOILET FLUSHOMETER	TEU6GA32#CP, ECOPOWER, 1.6 GPF BY TOTO OR EQUAL.
-	URINAL	K-4991 BY KOHLER OR EQUAL.
-	URINAL FLUSHOMETER	TEU1GA12#CP, TEU1GA22#CP ECO POWER 1.0 GPF BY TOTO OR EQUAL.
-	HANDS FREE FAUCET	K-13461, HANDS FREE FAUCET BY KOHLER OR EQUAL.

TILE SCHEDULE	
(ALL TILE BY MOSA TILE, WWW.MOSA.COM) THINSET ALL WALLS, 1" MUDSET @ FLOORS	
TILE #	DESCRIPTION
1	MOSA GLOBAL COLLECTION 75620V 12" X 12"
2	MOSA GLOBAL COLLECTION 75620, COVE BASE 4" X 6"
3	MOSA COLORS 16660 6" X 6"
4	MOSA TILES GLOBAL COLLECTION 16770 6" X 6"



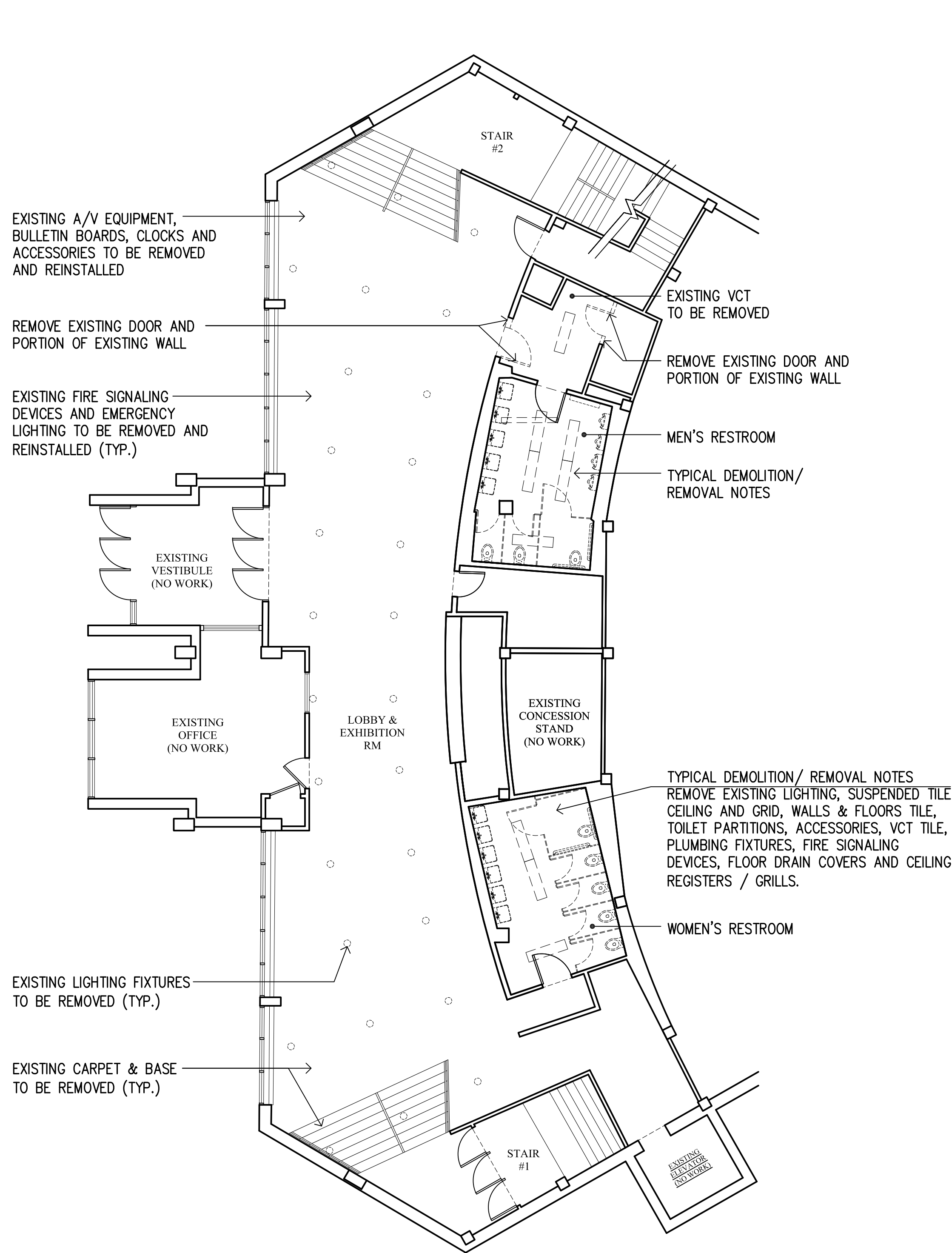
## SITE MAP

NTS

**NOTE: SHEA CENTER LOBBY  
WORK IS ADD. ALTERNATE 1**

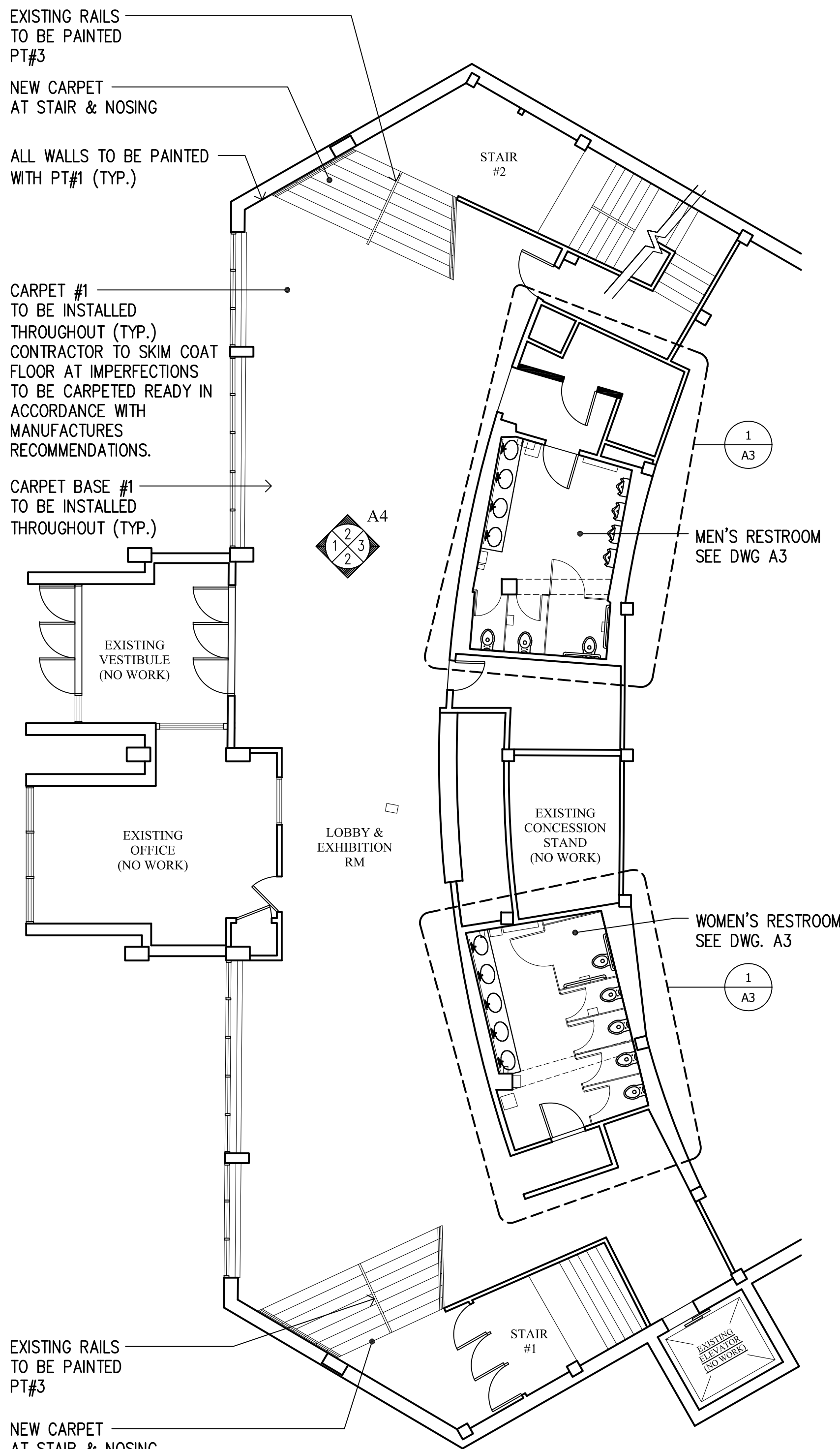
PETER JOHNSTON, ARCHITECT, PC 84 WASHINGTON STREET 2ND FLOOR HOBOKEN N.J. 07030 N.J. LICENSE AIO 13073	
PROJECT: SHEA CENTER RESTROOMS & LOBBY RENOVATION WILLIAM PATERSON UNIVERSITY WAYNE, NJ 07470	
TITLE: TITLE SHEET	
ZONING:	DATE: 04-11-2017
REV.:	SCALE: As Noted
	DRAWN BY: M.F.
	DRAWING NO: <div style="font-size: 2em; font-weight: bold; text-align: center;">A1</div>



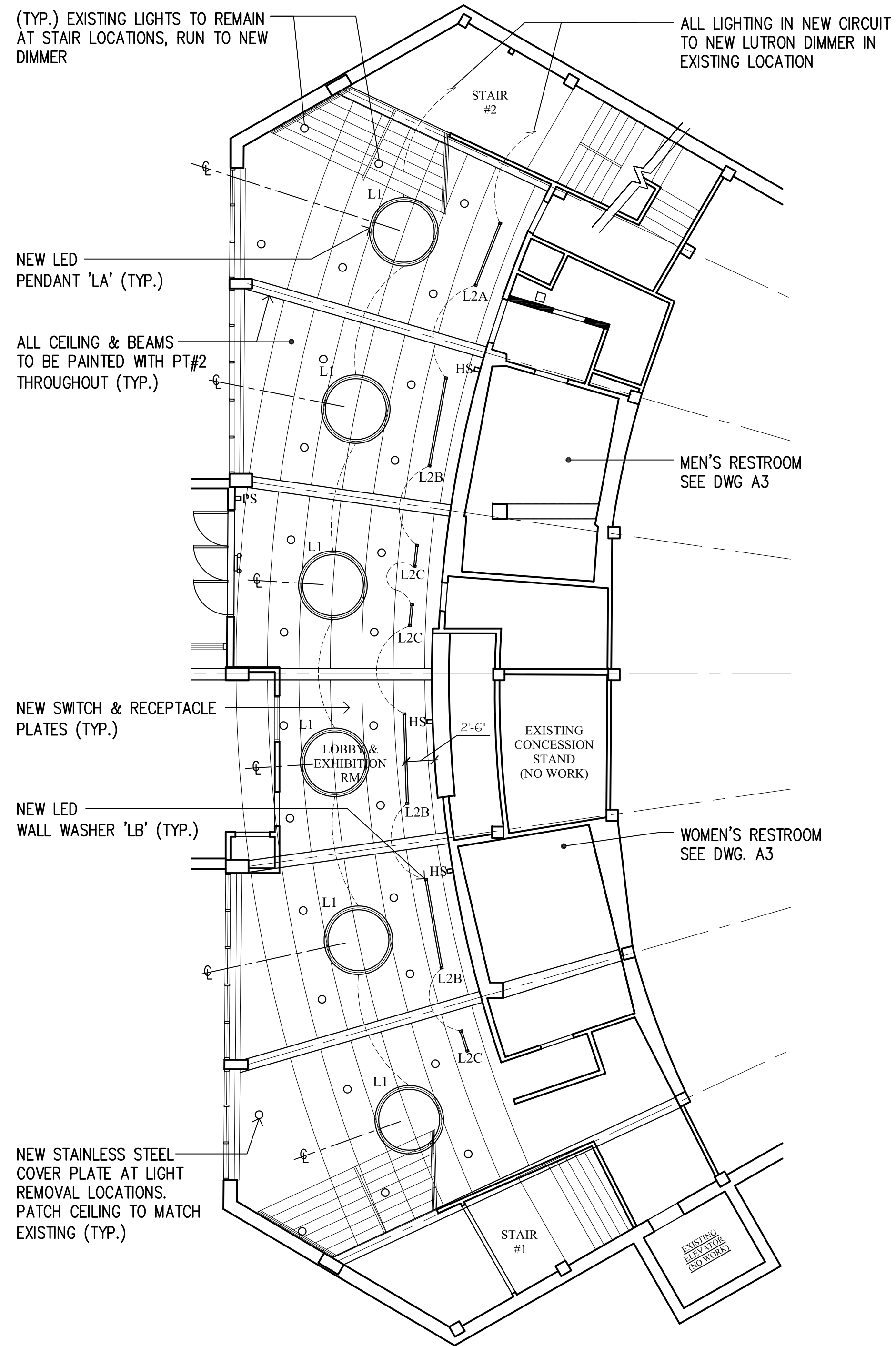


**1 DEMOLITION @ SHEA CENTER LOBBY**  
SCALE: 1/8" = 1'-0"

**NOTE: FIRE SIGNALING DEVICES TO BE REMOVED & REINSTALLED.**



**2 FLOOR PLAN @ SHEA CENTER LOBBY**  
SCALE: 1/8" = 1'-0"

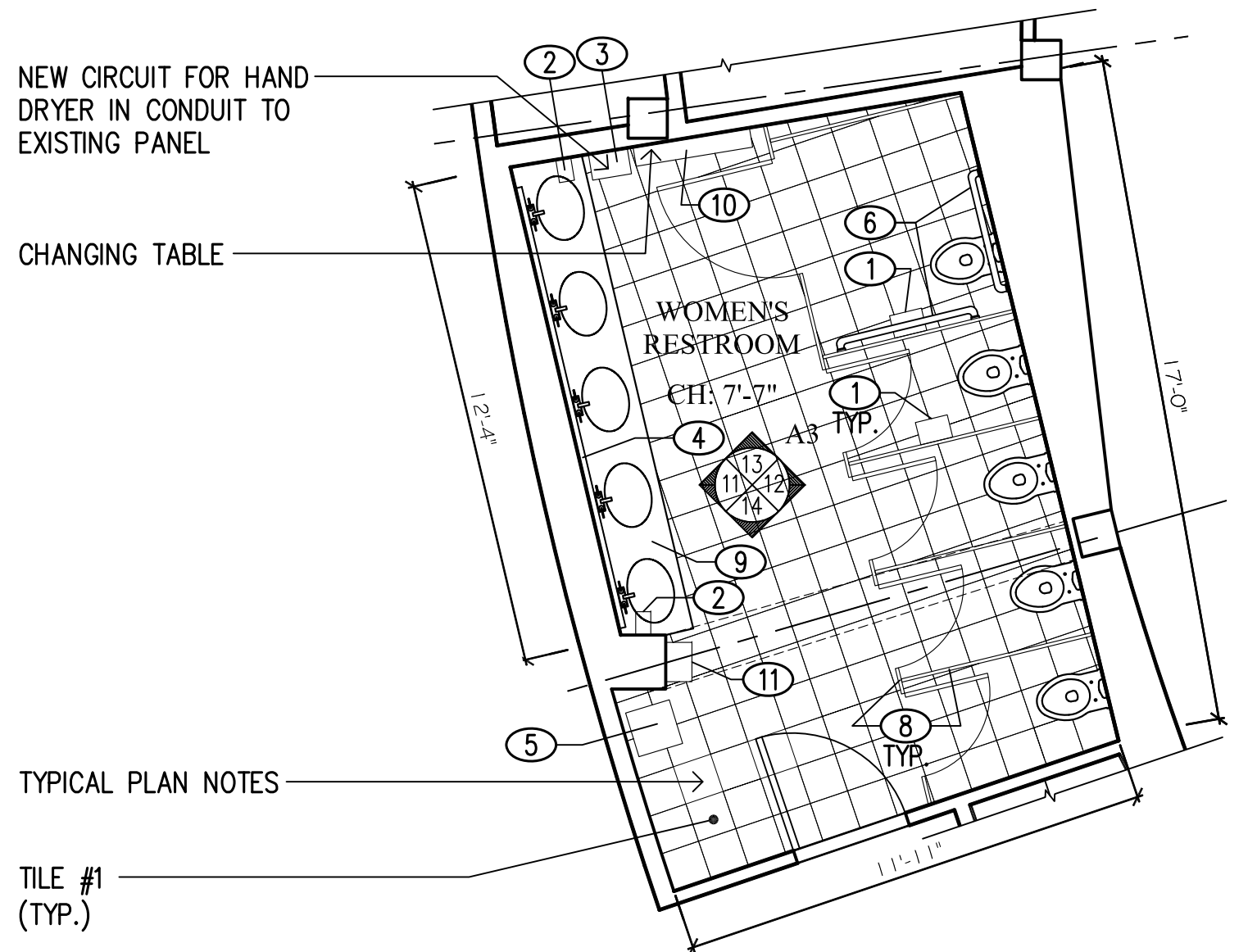
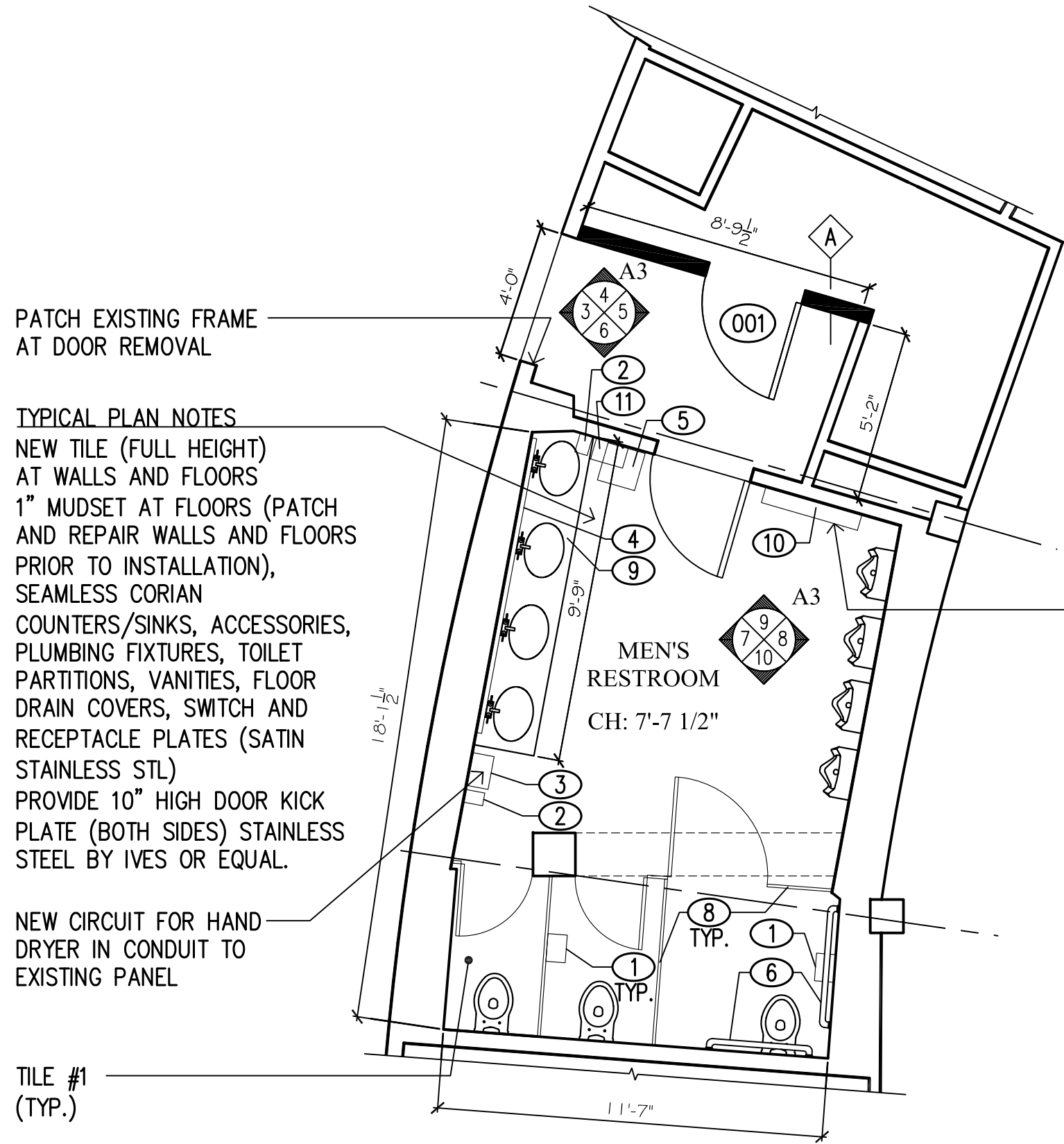


**3 REFLECTED CEILING PLAN @ LOBBY**  
SCALE: 1/8" = 1'-0"

THEATRE LIGHTING SCHEDULE							
FIXTURE TYPE	DESCRIPTION	FIXTURE MANUFACTURER & CATALOGUE NUMBER	QUANTITY PER FIXTURE	LAMPS			
				DESIGNATION (LAMP MANUFACTURERS STANDARD ABBREVIATION)	VOLTS	VOLT AMPS	
L1	PENDANT 6'-0" DIAMETER RUN CIRCUIT IN CONDUIT TO NEAREST PANEL	EUREKA EUREKA#4800-72-LED.174.30-120V-DV-AC-60-RCA-WHM-WHM					
L2	PENDANT L2A 6'-0" LENGTH L2B 8'-0" LENGTH L2C 2'-0" LENGTH	PRUDENTIAL LTG. PRUDENTIAL LTG#MWR-LED3-S0-LENGTH-TMW-SC-UNV-24"-X3-DIM10 (SEE PLAN FOR ACTUAL LENGTHS)					

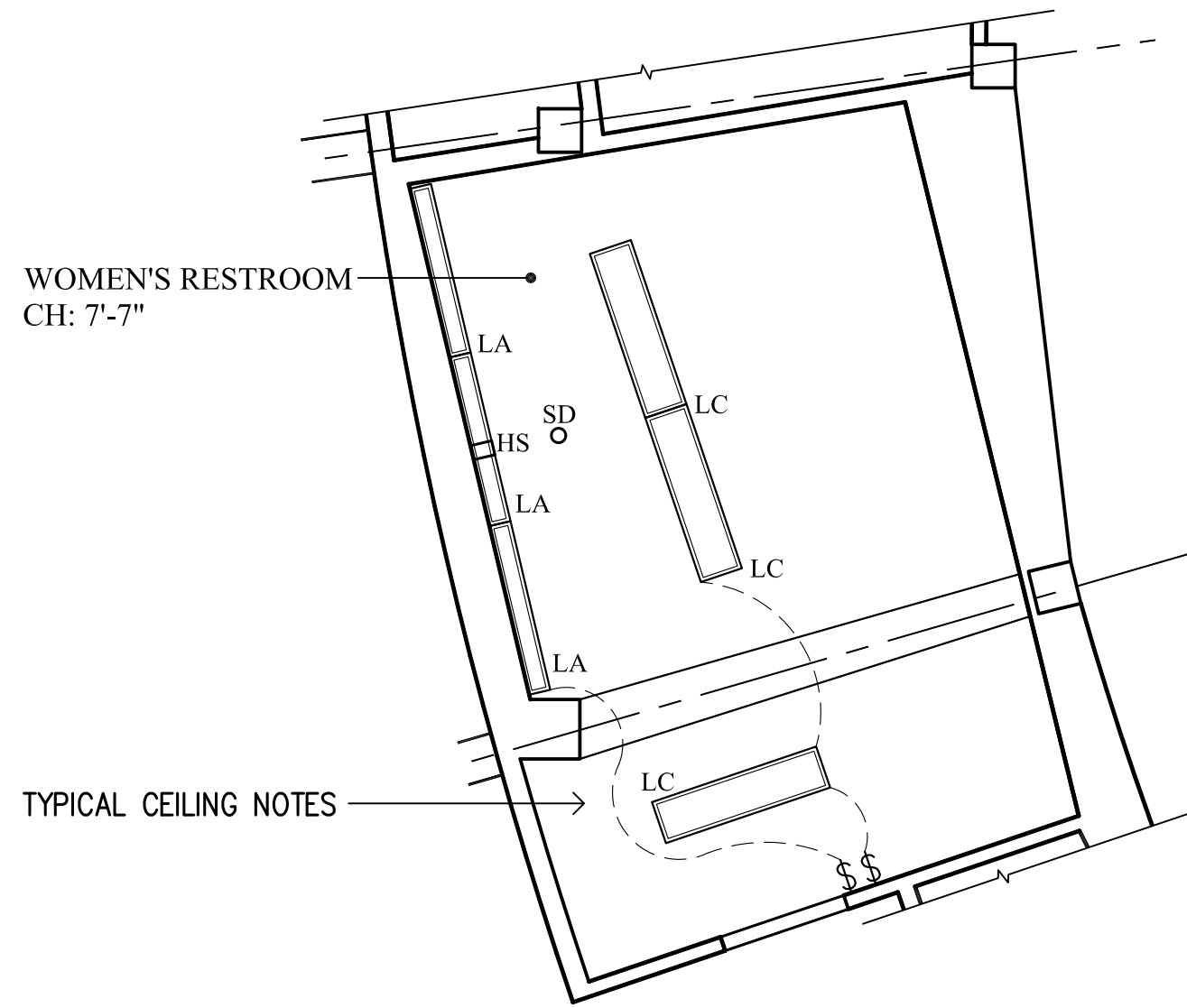
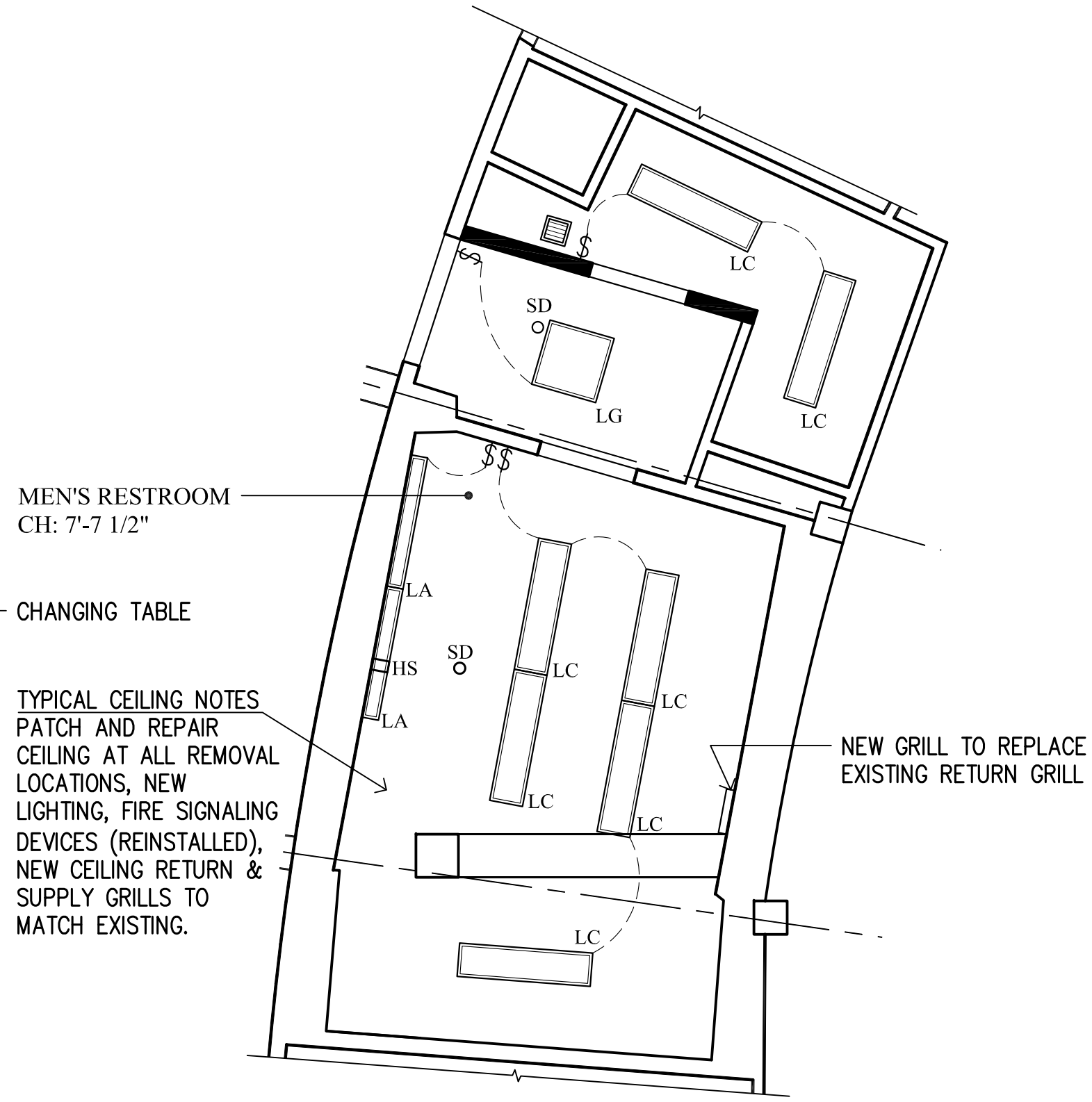
\*NOTE: CONTRACTOR TO VERIFY VOLTAGE. CONTRACTOR TO SUPPLY ALL CABLES, MOUNTING / BRACKETS.

PETER JOHNSTON, ARCHITECT, PC 84 WASHING TON STREET 2ND FLOOR HOBOKEN N.J. 07030 N.J. LICENSE AIO 13073	
PROJECT: SHEA CENTER RESTROOMS & LOBBY RENOVATION WILLIAM PATERSON UNIVERSITY WAYNE, NJ 07470	
TITLE: SHEA PLANS	
ZONING: REV.:	DATE: 04-11-2017 SCALE: As Noted DRAWN BY: M.F. DRAWING NO:
<b>A2</b>	



**1 FLOOR PLAN - SHEA RESTROOMS**  
SCALE: 1/4" = 1'-0"

NOTE: PROVIDE TILE AT ALL VCT REMOVAL LOCATIONS.



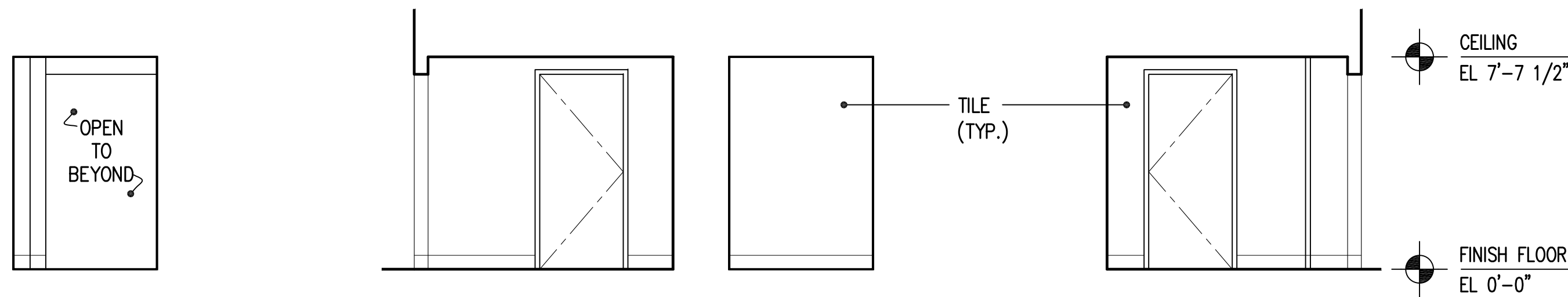
**2 REFLECTED CEILING PLAN - SHEA RESTROOMS**  
SCALE: 1/4" = 1'-0"

FIXTURE TYPE	DESCRIPTION	FIXTURE MANUFACTURER & CATALOGUE NUMBER
LA	SURFACE MOUNTED NOTE: RUN CONDUIT TIGHT TO WALL, RUN CIRCUIT	CORONET CORONET#LS2 LED-XX-LTG1-3000K-UNV
LC (ALTERNATE)	SURFACE MOUNTED 1'-0" x 4'-0"	CORONET CORONET#TDJAS LED-1X4-LTG3-3000K-UNV-SM

\*NOTE: ALL LIGHTS TO NEW SWITCH IN EXISTING LOCATION.

BATHROOM LIGHTING SCHEDULE						
FIXTURE TYPE	DESCRIPTION	FIXTURE MANUFACTURER & CATALOGUE NUMBER	LAMPS			
			QUANTITY PER FIXTURE	DESIGNATION (LAMP MANUFACTURERS STANDARD ABBREVIATION)	VOLTS	VOLT AMPS
LA	SURFACE MOUNTED NOTE: RUN CONDUIT TIGHT TO WALL, RUN CIRCUIT	CORONET CORONET#LS2 LED-XX-LTG1-3000K-UNV				
LC	SURFACE MOUNTED 1'-0" x 4'-0"	CORONET CORONET#BPR LED-LTG3-3000K-UNV-SM				
LG	SURFACE MOUNTED 2'-0" x 2'-0"	CORONET CORONET#TDJAS LED-2X2-LTG3-3000K-UNV-SM				

\*NOTE: CONTRACTOR TO VERIFY VOLTAGE.

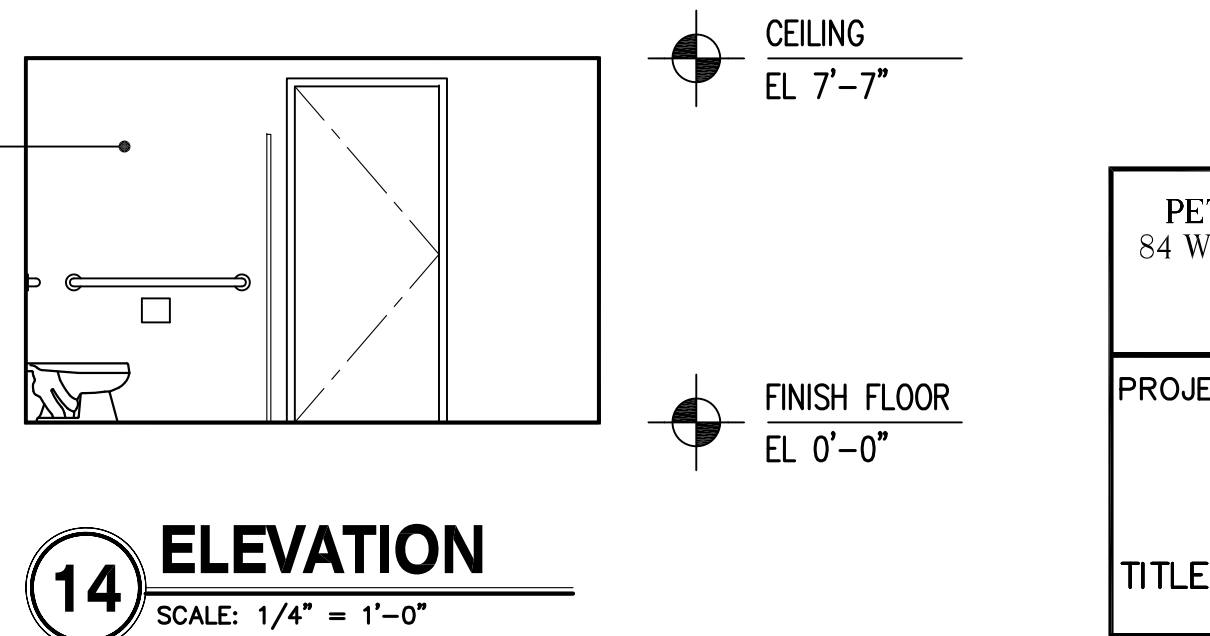
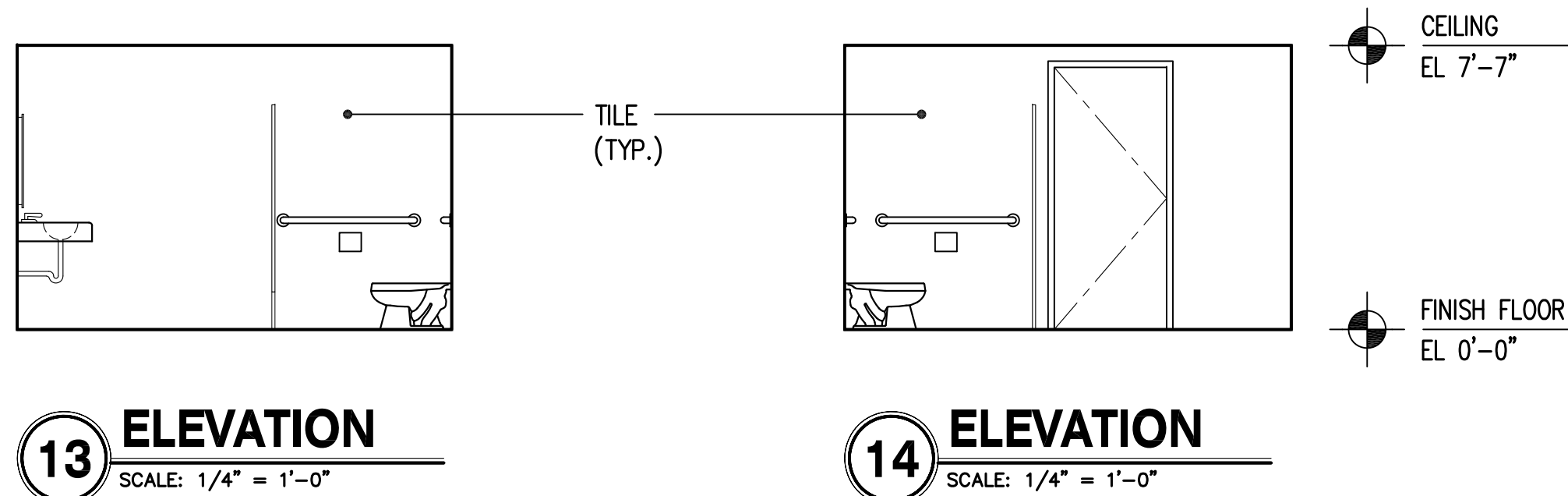
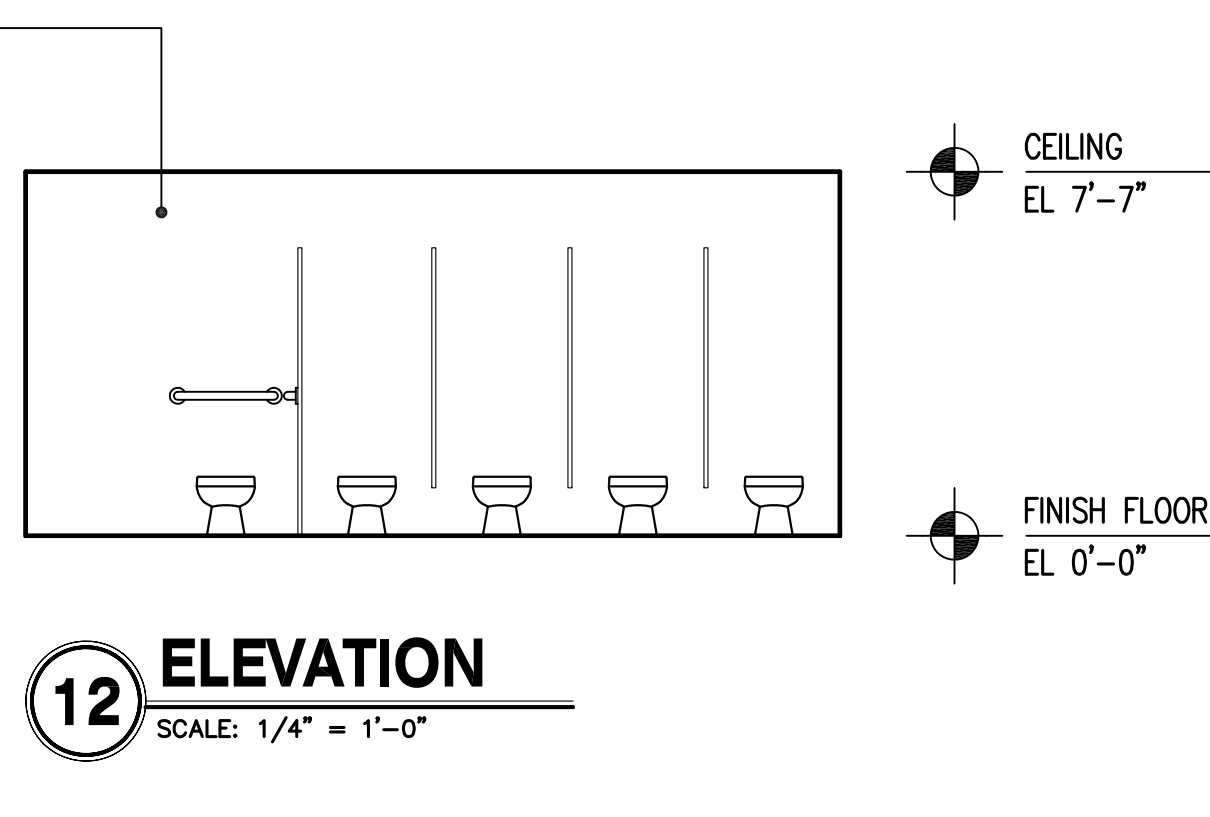
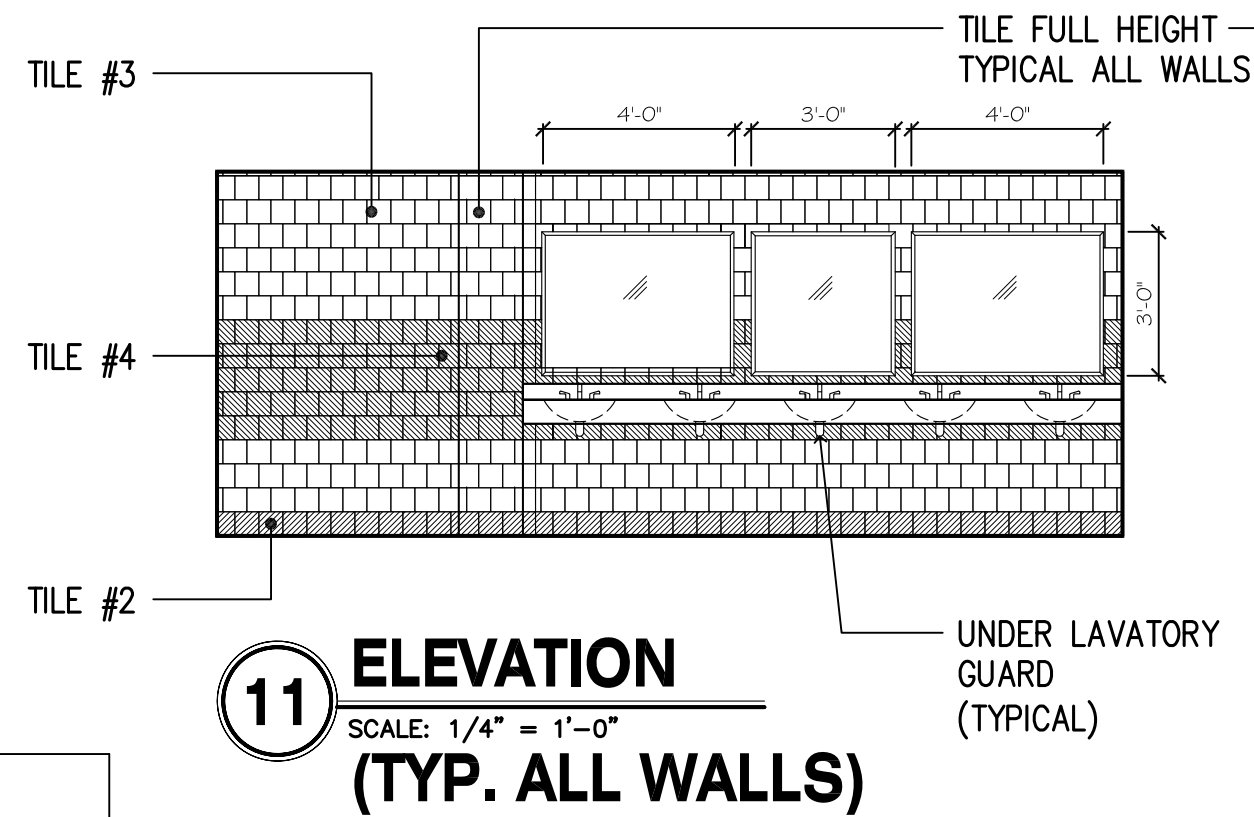
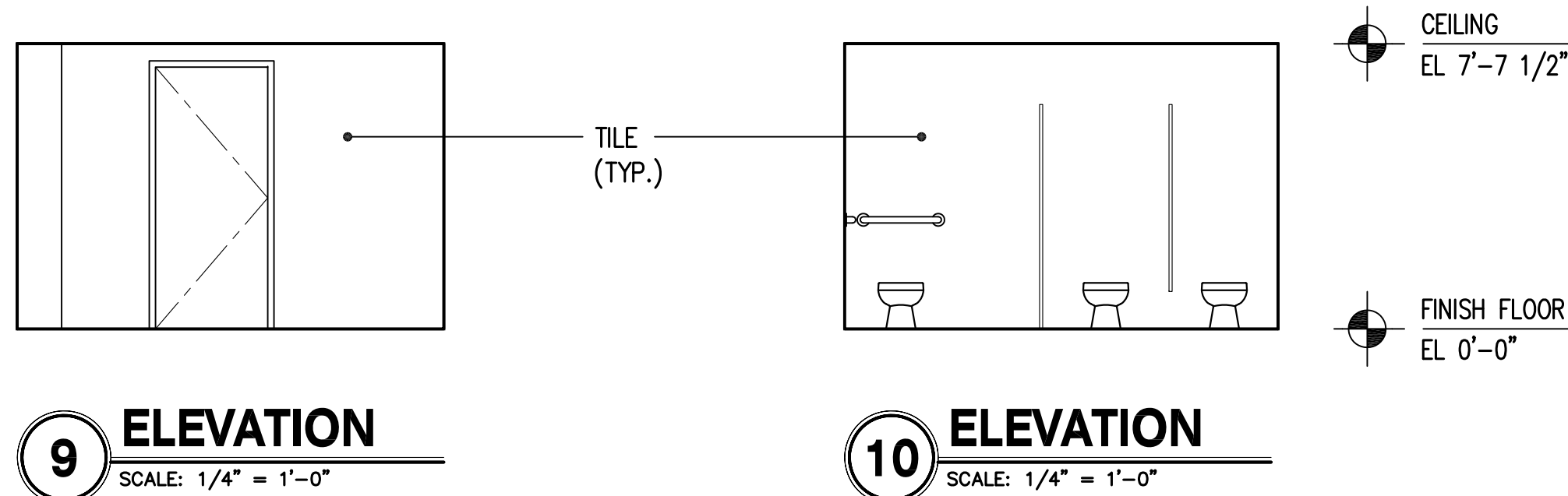
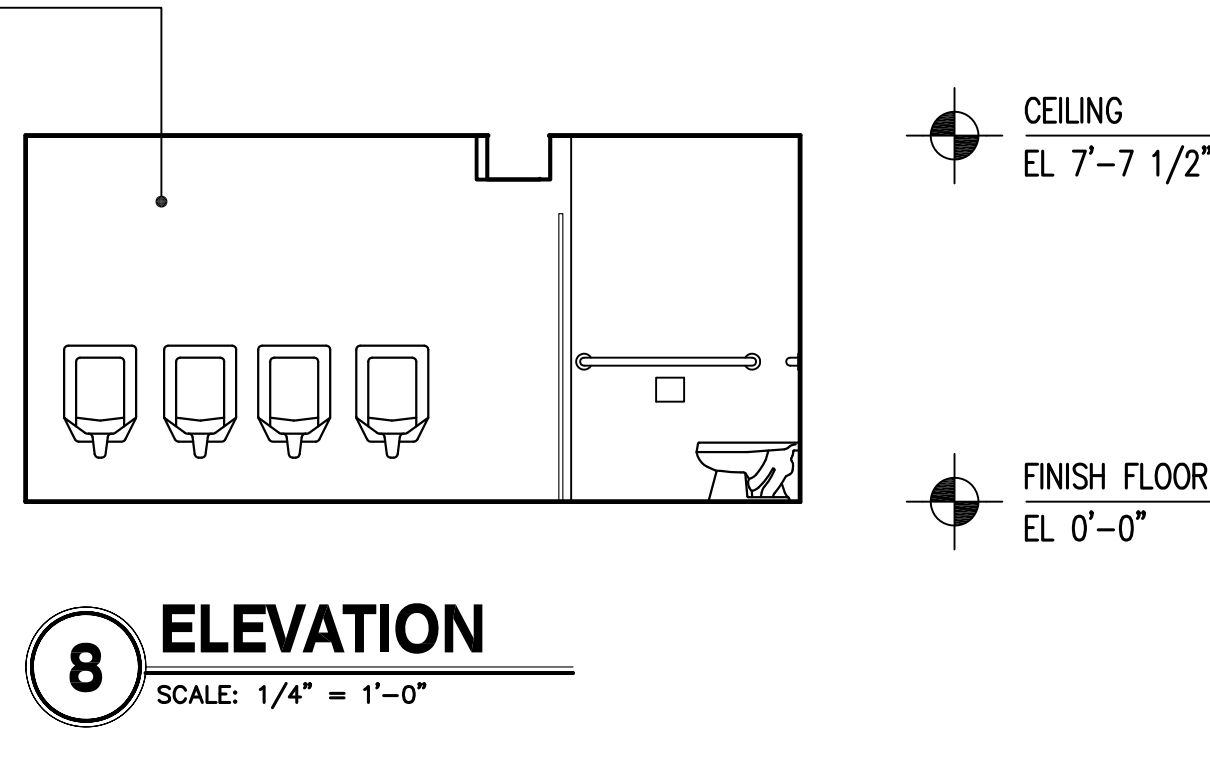
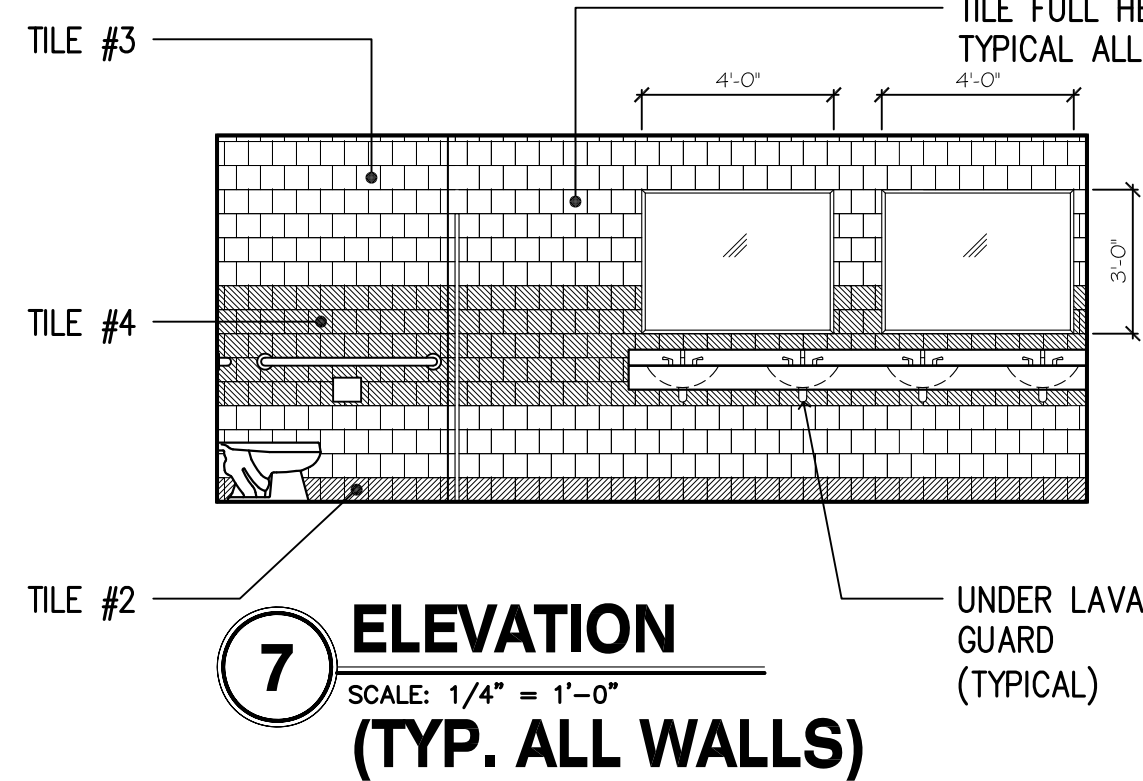


**3 ELEVATION**  
SCALE: 1/4" = 1'-0"

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

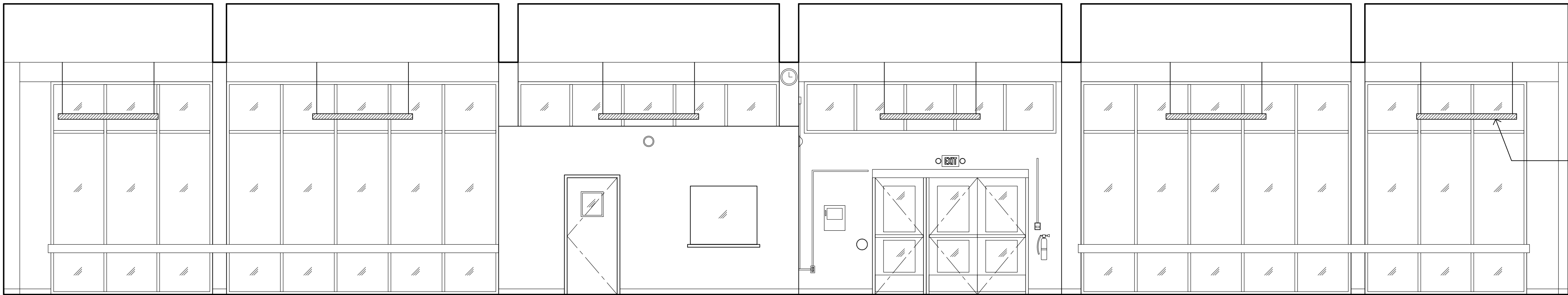
**5 ELEVATION**  
SCALE: 1/4" = 1'-0"

**6 ELEVATION**  
SCALE: 1/4" = 1'-0"

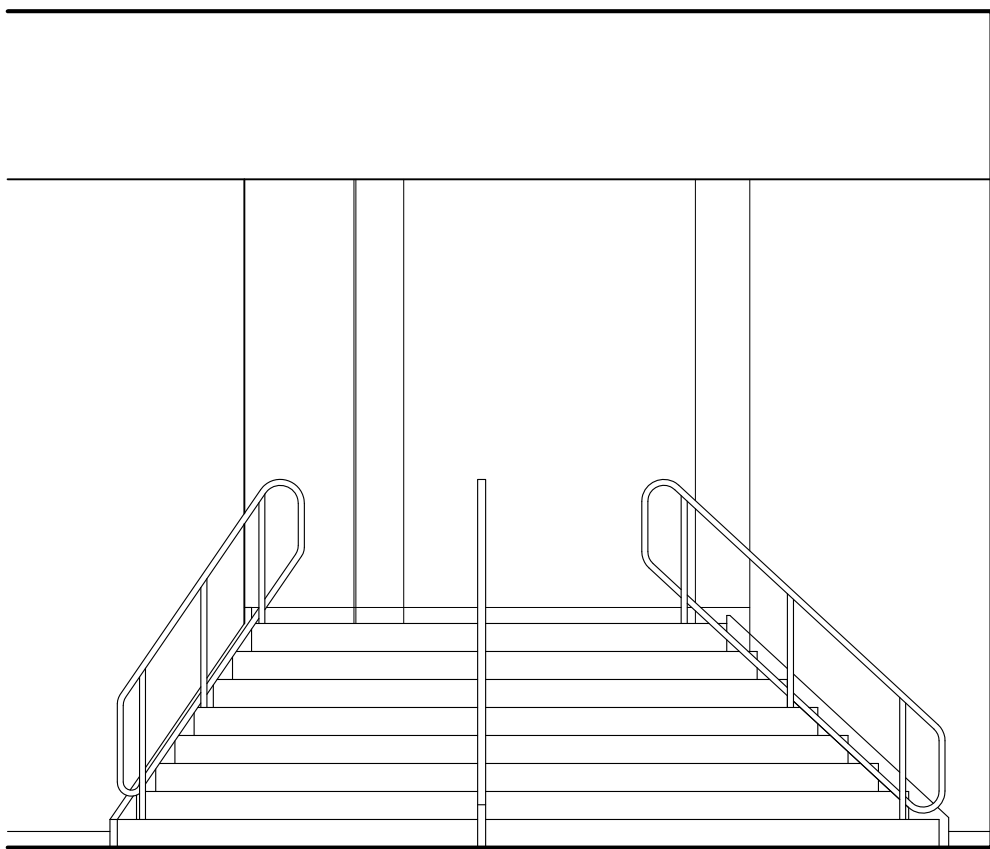


**SHEA RESTROOMS**  
(SEE ELEVATIONS 7 & 11 FOR PATTERN, TILE FULL HEIGHT ALL WALLS THROUGHOUT)

PETER JOHNSTON, ARCHITECT, PC 84 WASHINGTON STREET 2ND FLOOR HOBOKEN N.J. 07030 N.J. LICENSE AIO 13073	
PROJECT:	SHEA CENTER RESTROOMS & LOBBY RENOVATION WILLIAM PATERSON UNIVERSITY WAYNE, NJ 07470
TITLE:	SHEA RESTROOM PLANS & ELEVATIONS
ZONING:	DATE: 04-11-2017
REV.:	SCALE: As Noted
	DRAWN BY: M.F.
	DRAWING NO:
	<b>A3</b>

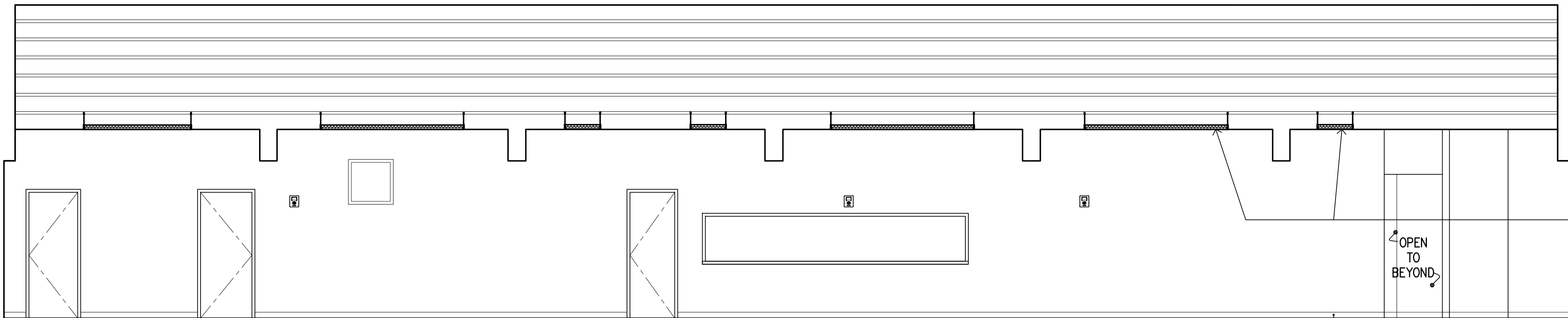


- CEILING HIGH  
EL 17'-5"
- BOTTOM OF BEAM HIGH  
EL 13'-11"
- BOTTOM OF LIGHT FIXTURE 10'-6"  
EL 10'-6"
- L1 LIGHT FIXTURE  
BOTTOM OF LIGHT FIXTURE 10'-6"  
PROVIDE HILTI ANCHOR  
AT ALL CABLE LOCATIONS  
(TYP.)
- FINISH FLOOR  
EL 0'-0"



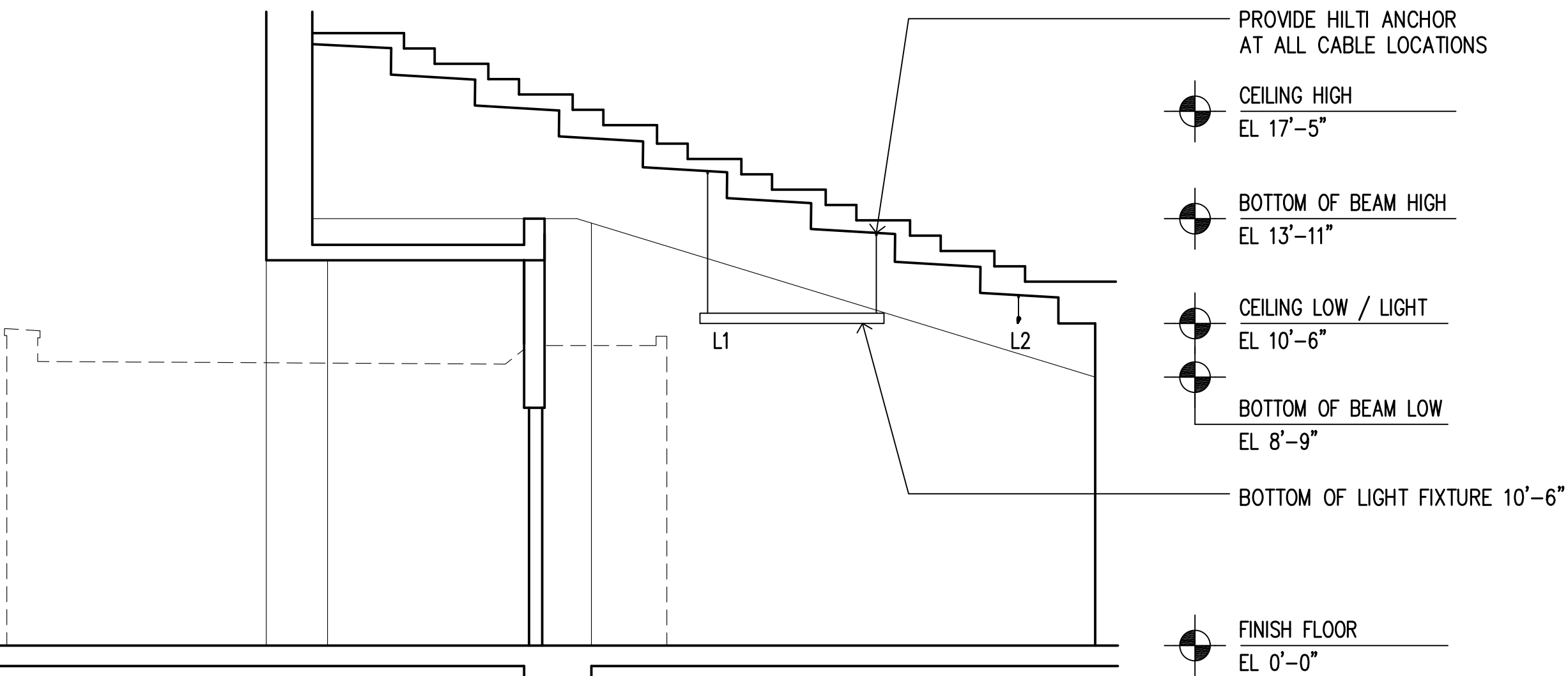
**1 SHEA LOBBY ELEVATION**  
SCALE: 1/4" = 1'-0"

**2 SHEA LOBBY ELEVATION**  
SCALE: 1/4" = 1'-0"



- CEILING HIGH  
EL 17'-5"
- BOTTOM OF BEAM HIGH  
EL 13'-11"
- CEILING LOW / LIGHT  
EL 10'-6"
- BOTTOM OF BEAM LOW  
EL 8'-9"
- L2 LIGHT FIXTURE  
BOTTOM OF LIGHT FIXTURE 10'-6"  
PROVIDE HILTI ANCHOR  
AT ALL CABLE LOCATIONS  
(TYP.)
- FINISH FLOOR  
EL 0'-0"
- NEW BASE  
(TYP.)

**3 SHEA LOBBY ELEVATION**  
SCALE: 1/4" = 1'-0"



**4 SECTION @ LOBBY (TYPICAL)**  
SCALE: 1/4" = 1'-0"

PETER JOHNSTON, ARCHITECT, PC 84 WASHINGTON STREET 2ND FLOOR HOBOKEN N.J. 07030 N.J. LICENSE AIO 13073	
PROJECT:	SHEA CENTER RESTROOMS & LOBBY RENOVATION WILLIAM PATERSON UNIVERSITY WAYNE, NJ 07470
TITLE:	SHEA ELEVATIONS
ZONING:	DATE: 04-11-2017
REV.:	SCALE: As Noted
	DRAWN BY: M.F.
	DRAWING NO:
A4	



PLUMBING SPECIFICATIONS

NOTE: ALL FIXTURES TO BE INSTALLED IN EXISTING LOCATIONS

PART 1 GENERAL

- 1.01 GENERAL REQUIREMENTS
- A. MATERIALS AND WORKMANSHIP, UNLESS OTHERWISE NOTED, SHALL BE INDUSTRY STANDARD. ALL MATERIALS AND EQUIPMENT TO BE NEW UNLESS OTHERWISE NOTED.
  - B. ALL APPLICABLE CODES, LAWS AND REGULATIONS, GOVERNING OR RELATING TO ANY PORTION OF THIS WORK, ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS. THESE PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR WHO SHALL INFORM THE OWNER, PRIOR TO SUBMITTING A PROPOSAL, OF ANY WORK OR MATERIALS WHICH VIOLATE ANY OF THE LAWS AND REGULATIONS, ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATIONS SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
  - C. CONTRACTOR BIDDING THIS JOB SHALL VISIT AND INSPECT THE JOB SITE TO BECOME FULLY KNOWLEDGEABLE OF EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID. CONTRACTOR SHALL COORDINATE THE SITE VISIT WITH OWNER. CONTRACTOR SHALL ASK ARCHITECT ANY QUESTIONS HE MAY HAVE PERTAINING TO STANDARDS AND EXISTING CONDITIONS THAT PROHIBIT THE PROPER INSTALLATION OF HIS WORK AS PER PLANS AND SPECIFICATIONS.
  - D. THIS CONTRACTOR IS RESPONSIBLE FOR FIELD CONDITIONS AND FIELD COORDINATION WITH ALL OTHER TRADES.

PART 2 PRODUCTS (ALL PIPING TO MATCH EXISTING)

- 2.01 WATER PIPING
- A. ALL WATER PIPE SHALL BE TYPE L COPPER (ASTM B88).
  - B. ALL WATER PIPE SHALL CONFORM TO ASTM B88 OR ASTM A53.
  - C. ALL COPPER PIPE JOINTS SHALL BE SOLDERED WITH LEAD FREE SOLDER.
  - D. ALL GALVANIZED STEEL JOINTS AND FITTINGS SHALL BE MALEABLE IRON THREADED AND SHALL CONFORM TO ASTM B16.3.
  - E. ALL COPPER PIPE FITTINGS SHALL BE WROUGHT COPPER.
  - F. INSULATE ALL HOT AND COLD WATER PIPE WITH 1" THICK FIBERGLASS INSULATION WITH VAPOR BARRIER AS MANUFACTURER BY OWENS CORNING. TEPID WATER PIPE DOES NOT NEED TO BE INSULATED.
  - G. ALTERNATE PROPPSS FITTINGS WITH EPDM GASKET FOR H & CW MUST BE SUBMITTED AND APPROVED BY ENGINEER.
- 2.02 SANITARY AND VENT PIPING
- A. ALL SANITARY PIPE SHALL BE FLAME RETARDANT SCHEDULE 40 POLYPROPYLENE.
  - B. ALL VENT PIPING SHALL BE CAST IRON AND SHALL CONFORM WITH ASTM A888.

- 2.03 VALVES
- A. SHUT-OFF VALVES SHALL BE BALL VALVES AND SHALL BE CAST BRONZE BODY, TWO PIECE TYPE WITH FULL PORT CHROME PLATED BRASS BALL AND TFE SEATS AND PACKING.

PART 3 EXECUTION

- 3.01 CUTTING AND PATCHING
- A. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, FITTING, PATCHING, WATERPROOFING, AND FLASHING THAT MAY BE REQUIRED, DUCTWORK, EQUIPMENT, ETC.
  - B. THIS CONTRACTOR SHALL COORDINATE SUPPORTS AND FLASHING WITH ARCHITECT AND SUBMIT THE METHOD OF SUPPORT, AND FLASHING METHODS. FOR REVIEW TO THE ARCHITECT.
  - C. THIS CONTRACTOR SHALL PROVIDE SLEEVES FOR DUCTS AND PIPING AND PROVIDE ESCUTHEONS, SEAL OPENINGS AROUND DUCTS AND PIPING THOROUGH PARTITIONS, WALLS AND FLOOR (NOT IN SHAFTS) WITH MINERAL WOOL OR OTHER NON-COMBUSTIBLE MATERIAL.
  - D. PROVIDE ALL NECESSARY FLASHING AND COUNTERFLASHING TO MAINTAIN THE WATERPROOF INTEGRITY OF THIS BUILDING AS REQUIRED BY THE REMOVAL AND/OR INSTALLATION OF PIPES, DUCTS, CONDUITS AND EQUIPMENT.
- 3.02 EQUIPMENT, DUCTWORK AND PIPING INSTALLATION
- A. SUPPORT ALL CEILING MOUNTED EQUIPMENT, DUCTWORK AND PIPING FROM BUILDING STRUCTURE AND/OR FRAMING IN AN APPROVED MANNER WHERE OVERHEAD CONSTRUCTION DOES NOT PERMIT FASTENING OF SUPPORTS AND EQUIPMENT, PROVIDE ADDITIONAL STEEL FRAMING.
  - B. CEILING MOUNTED EQUIPMENT SHALL BE INSTALLED WITH THREADED HANGER RODS AND VIBRATION ISOLATORS.
- 3.03 SLEEVES
- A. SLEEVES FOR WEATHERPROOF AND FIRERATED WALLS, FLOORS, AND MECHANICAL EQUIPMENT ROOM SHALL BE CAST IRON OR STEEL PIPE EXTENDING THROUGH CONSTRUCTION. EXTEND SLEEVES MINIMUM 2" ABOVE FLOOR. SLEEVES FOR WEATHERPROOF CONSTRUCTION SHALL BE OF THE FLASHING TYPE AND SHALL BE AS REQUIRED BY THE BUILDING OWNER.

ELECTRICAL SPECIFICATIONS

PART 1 GENERAL

- 1.01 GENERAL REQUIREMENTS
- A. MATERIALS AND WORKMANSHIP, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH INDUSTRY STANDARDS. ALL MATERIALS AND EQUIPMENT TO BE NEW UNLESS OTHERWISE NOTED.
  - B. ALL APPLICABLE CODES, LAWS AND REGULATIONS, GOVERNING OR RELATING TO ANY PORTION OF THIS WORK, ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS. THE CONTRACTOR SHALL INFORM ARCHITECT PRIOR TO SUBMITTING A PROPOSAL, OF ANY WORK OR MATERIALS WHICH VIOLATE ANY OF THE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATIONS SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
  - C. CONTRACTOR BIDDING THIS JOB SHALL VISIT AND INSPECT THE JOB SITE TO BECOME FULLY KNOWLEDGEABLE OF EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID. CONTRACTOR SHALL COORDINATE THE SITE VISIT WITH OWNER. CONTRACTOR SHALL BECOME FAMILIAR WITH DIFFICULTIES THAT WILL IMPEDE THE EXECUTION OF HIS WORK, INCLUDING AVAILABILITY OF SPACE, EXACT LOCATION AND MOUNTING METHOD OF ANY ELECTRICAL PANEL(S), TRANSFORMER(S) AND OTHER SUCH DEVICES SHOWN IN THE DRAWING. DURING THIS INSPECTION, IF THE CONTRACTOR FINDS ANY OBSTRUCTION OR INTERFERENCE THAT MAY PROHIBIT THE PROPER INSTALLATION OF HIS WORK,, HE IS TO MAKE IT KNOWN TO THE ENGINEER BEFORE AND AT THE TIME OF SUBMITTING HIS BID.
  - D. THIS CONTRACTOR IS RESPONSIBLE FOR FIELD CONDITIONS AND FIELD COORDINATION WITH ALL OTHER TRADES.
  - E. GENERAL CONTRACTOR SHALL PROVIDE COMPOSITE COORDINATION DRAWINGS FOR REVIEW AND SUBSEQUENT MEETING WITH THE ARCHITECT, ENGINEER AND LANDLORD TO DISCUSS CONFLICTS.
- 1.02 SCOPE OF WORK
- A. SECURE ALL PERMITS, CERTIFICATES, LICENSES, ETC. AND PROVIDE ALL REQUIRED LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR A COMPLETE AND SAFE INSTALLATION OF ELECTRICAL ITEMS AS INDICATED ON THE DRAWINGS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
    - 1. ALL PANELBOARDS, CONDUITS, WIRING, ETC.
    - 2. LIGHTING FIXTURES AND LAMPS.
    - 3. SWITCHES, RECEPTACLES, ETC. STAINLESS STEEL PLATES, BLACK RECEPTACLES/TOGGLES, ETC.
    - 4. RACEWAYS AND CIRCUIT WIRING.
- 1.03 SUBMITTALS
- A. OVER CURRENT PROTECTION DEVICES (SWITCHES AND BREAKERS).
  - B. LIGHTING FIXTURES
  - C. ALL DEVICES

PART 2 PRODUCTS

- 2.01 WIRE AND CABLE:
- A. ALL CONDUCTORS SHALL BE COPPER, TYPE THHN/THWN INSULATED. ALL CONDUCTORS SHALL HAVE 600 VOLT RATED INSULATION, UNLESS OTHERWISE NOTED.
  - B. THE MINIMUM WIRE SIZE FOR BRANCH CIRCUIT SHALL BE NO. 12 AWG EXCEPT 120V CIRCUITS OVER 100' IN LENGTH WHICH SHALL BE NO. 10 AWG MIN.
- 2.02 PULLBOXES, JUNCTION BOXES AND OUTLET BOXES:
- A. PULL BOXES, JUNCTION BOXES AND OUTLET BOXES SHALL BE MANUFACTURED FROM GALVANIZED SHEET METAL AND SHALL BE SIZED TO ACCOMMODATE BENDING RADIUS CRITERIA SPECIFIED BY WIRE AND CABLE MANUFACTURER.
  - B. SWITCH, RECEPTACLE AND WALL OUTLET BOXES SHALL BE NOMINAL 4 INCH SQUARE, WITH A RAISED COVER. PROVIDE 3/8 INCH FIXTURE STUD AS REQUIRED. GANGED OUTLET BOXES SHALL BE SUFFICIENT LENGTH TO SUIT CONDITIONS.
  - C. LIGHTING FIXTURE BOXES SHALL BE OCTAGONAL WITH 3/8 INCH FIXTURE STUD. FOR SUSPENDED CEILING WORK, PROVIDE REMOVABLE BACKPLATE AS REQUIRED.
  - D. BOXES SHALL BE BY AMERICAN ELECTRIC, RACO INC. OR BOWERS MFG.
- 2.03 CIRCUIT BREAKERS, FUSES AND DISCONNECTS:
- A. CIRCUIT BREAKERS SHALL BE THE "THERMAL-MAGNETIC" TYPE HAVING IMMETALLIC ELEMENT TIME DELAY OVERLOAD PROTECTION AND MAGNETIC ELEMENT FOR SHORT CIRCUIT PROTECTION.
  - B. CIRCUIT BREAKERS SHALL BE OF THE SAME MANUFACTURER AND SHALL BE COMPATIBLE WITH PANELBOARD.
  - C. PROVIDE HANDLE-LOCKS FOR ALL CIRCUIT BREAKERS FOR "NITE LITE" AND "EXIT" LIGHTS BATTERY PACKS AND SMOKE DETECTORS.
  - D. FEEDERS FOR ALL NEW PANELBOARDS SHALL BE RUN IN FULL WEIGHT RIGID STEEL, NOT GALVANIZED CONDUIT, U.O.N. ON DRAWINGS. ALL ELBOWS HOT DIPPED GALVANIZED RIGID STEEL AND ALL FITTINGS SHALL BE OF CAST IRON OR CAST IRON ALLOY GALVANIZED OR CADMIUM PLATED.
  - E. PROVIDE A CIRCUIT DIRECTORY WITH METAL FRAME AND GLASSINE PANEL ON THE INSIDE OF DOOR OF EVERY PANELBOARD.
- 2.04 DEVICES:
- A. WIRING DEVICES SHALL BE OF THE SPECIFICATION GRADE.
  - B. SINGLE POLE SWITCHES SHALL BE 120/277 VOLT, 20 AMPERES, QUIET OPERATION TYPE.
  - C. CONVENIENCE POWER OUTLETS SHALL BE 20 AMPERE, 2 POLE, 3 WIRE GROUNDED, COLOR AS SPECIFIED BY ARCHITECT.

- 2.05 LIGHT FIXTURES:
- A. PROVIDE GROUNDING CONNECTIONS FOR LUMINARIES AS REQUIRED.
  - B. ALL FIXTURES SHALL BE AS INDICATED ON DRAWINGS OR EQUAL UNLESS OTHERWISE NOTED.

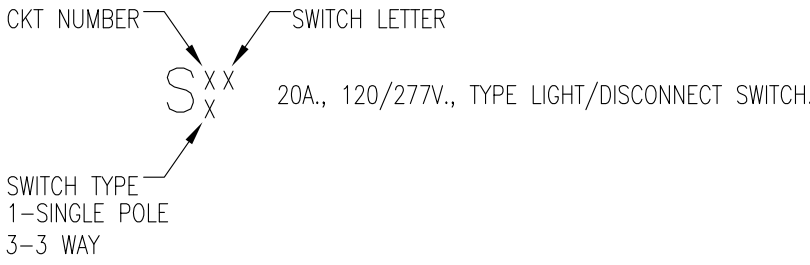
PART 3 EXECUTION

- 3.01 CONDUITS AND RACEWAYS:
- A. RIGID METAL CONDUIT SHALL BE USED IN ALL EXPOSED SPACES BELOW 5 FT. A.F.F., UNLESS OTHERWISE NOTED
  - B. BRANCH CIRCUIT WIRING FOR POWER AND LIGHTING ABOVE CEILING AND IN CONCEALED LOCATIONS MAY BE TYPE AC OR MC CABLE.
  - C. SCHEDULE 40 PVC CONDUIT SHALL BE USED FOR ALL UNDERGROUND CONDUIT RUNS.
  - D. BRANCH CIRCUIT WIRING FOR POWER AND LIGHTING ABOVE CEILING AND IN CONCEALED LOCATIONS MAY BE TYPE AC OR MC CABLE.
- 3.02 PANELBOARDS:
- A. COMPLETE PANEL DIRECTORY IN TYPEWRITTEN TEXT, INDICATING THE SERVICE CONTROLLED BY EACH CIRCUIT.
  - B. CLEAN, VACUUM AND TIGHTEN ALL CONNECTORS AND CONNECTIONS IN EXISTING ELECTRICAL EQUIPMENT REUSED.
  - C. SEAL EXISTING PANEL KNOCK-OUTS NOT REUSED.
- 3.03 GROUNDING:
- A. PROVIDE A GREEN GROUND CONDUCTOR IN ALL CIRCUIT CONDUCTORS. ALSO, PROVIDE SEPARATE ISOLATED GROUND CONDUCTORS, MINIMUM #12, FOR ALL DEVICES ISOLATED GROUND TYPE AND RUN BACK TO ISOLATED GROUND BUS IN PANELBOARD. THIS DOES NOT RELIEVE THE REQUIREMENT FOR GROUNDING THE RACEWAY SYSTEM AND OUTLET BOX OF I.G. TYPE RECEPTACLE.
  - B. ALL GROUND WIRES SHALL BE SUITABLY PROTECTED FROM MECHANICAL DAMAGE.
  - C. GROUND ALL CONDUITS, CABINETS, MOTORS, PANELS AND OTHER EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ALL PROVISIONS OF THE NATIONAL ELECTRIC CODE, OR LOCAL CODES THAT MAY APPLY.
- 3.04 PULLBOXES, JUNCTION BOXES AND OUTLET BOXES:
- A. PROVIDE ALL REQUIRED JUNCTION/PULL BOXES AND OUTLET BOXES NECESSARY TO PROVIDE A COMPLETE INSTALLATION.
  - B. BOXES: PROVIDE BARRIERS BETWEEN EMERGENCY AND NORMAL WIRING.
  - C. SET BOXES SQUARE AND TRUE WITH BUILDING FINISH.
  - D. BOXES INSTALLED WITHIN 10" OF FINISHED FLOOR SHALL BE LISTED FOR WET LOCATIONS.
- 3.05 DEVICES:
- A. ALL DEVICE PLATES SHALL BE PLUMB AND SHALL FIT FLAT AGAINST SURFACE AND SHALL BE 302 STAINLESS STEEL UNLESS OTHERWISE NOTED BY ARCHITECT.
  - B. MULTIPLE DEVICES AT A COMMON LOCATION SHALL BE INSTALLED IN A MULTIGANG DEVICE PLATE.
  - C. INSTALL RECEPTACLES 16" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED.

- 3.06 SUPPORTS:
- A. SECURE ALL SUPPORTS TO BUILDING STRUCTURE AS REQUIRED. SUPPORT HORIZONTAL RUNS OF METALLIC RACEWAYS NOT MORE THAN 10 FEET APART. SUPPORT RACEWAY RISERS AT EACH FLOOR LEVEL. RUN EXPOSED RACEWAYS PARALLEL WITH OR AT RIGHT ANGLES TO WALL.
  - B. SUPPORT PANEL, JUNCTION AND PULL BOXES INDEPENDENTLY TO BUILDING STRUCTURE WITH NO WEIGHT BEARING ON RACEWAYS.
  - C. ALL ANCHORS, FASTENERS, CLAMPS, ETC., SHALL BE MADE OF STEEL AND SHALL NOT CONTAIN ANY LEAD, WOOD, PLASTIC, ETC.
- 3.07 SLEEVES:
- A. PROVIDE WATERPROOF SLEEVES, AS APPROVED FOR ROOF, FLOOR AND WALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS OR PARTITIONS SHALL BE SEALED TO PREVENT THE SPREAD OF SMOKE AND FIRE THROUGH THEM. THE FIRE RATING OF THE PENETRATION SEAL SHALL BE AT LEAST THAT OF THE FLOOR OR WALL INTO WHICH IT IS INSTALLED BY ART. #300-21 OF THE NATIONAL ELECTRIC CODE.
  - B. THE FOAM SEALANT SHALL MEET ALL OF THE FIRE TEST AND HOUSE STREAM TEST REQUIREMENTS OF ASTM E-119-73 AND SHALL BE UL CLASSIFIED AS A WALL OPENING PROTECTIVE DEVICE, AS MANUFACTURED BY CHASE TECHNOLOGY CORPORATION.
- 3.08 CUTTING AND PATCHING:
- A. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, FITTING AND PATCHING THAT MAY BE REQUIRED FOR ELECTRICAL WORK. ALL PATCHING SHALL BE OF THE SAME MATERIALS, WORKMANSHIP, AND FINISH AND SHALL ACCURATELY MATCH ALL SURROUNDING WORK.
- 3.09 LOAD BALANCING:
- A. ELECTRICAL CONTRACTOR SHALL BALANCE THE LOAD BETWEEN THE PHASES 10% MAX. WITH AMPERE ON ALL PANELS, SUBSEQUENT TO COMPLETION OF INSTALLATION, WITH ALL EQUIPMENT OPERATING SIMULTANEOUSLY. ELECTRICAL CONTRACTOR SHALL SUBMIT LOAD BALANCING REPORT TO PROJECT MANAGER FOR APPROVAL.
- 3.10 TEST AND GUARANTEES:
- A. UPON COMPLETION OF ALL ELECTRICAL WORK, CONTRACTOR SHALL TEST FOR GROUNDS AND SHORTS, TO INSURE PROPER OPERATION OF ELECTRICAL EQUIPMENT. REPAIR OR REPLACE FAULTY EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER.
  - B. GUARANTEE FOR ONE YEAR AFTER FINAL ACCEPTANCE BY OWNER OF ALL WORKMANSHIP AND MATERIALS FURNISHED.

ELECTRICAL NOTES

- ELECTRICAL INSTALLATION SHALL COMPLY WITH N.F.P.A.-70-2014 N.E.C.
- CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH LAYOUT AND DETAIL CONDITIONS BY CONSULTING THE ARCHITECTURAL, MECHANICAL, PLUMBING, ETC., DRAWINGS.
- CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS WITH OTHER TRADES PRIOR TO ANY JOB DIMENSIONS, FABRICATION AND INSTALLATION OF ELECTRICAL EQUIPMENT.
- ALL CONDUIT AND J-BOXES SHALL BE RUN IN A FUNCTIONAL PATTERN OR DIRECT UNIFORMITY (PARALLEL TO OR VERTICAL) WITH OTHER TRADES. (SPRINKLERS, PLUMBING LINES, DUCTS, STRUCTURAL MEMBERS, ETC.)
- ELECTRICAL CONTRACTOR SHALL SUPPLY ALL ELECTRICAL EQUIPMENT, CONDUIT, WIRING, JUNCTION AND PULL BOXES, AND HARDWARE, ETC., AS REQUIRED TO PROVIDE A COMPLETE AND WORKING ELECTRICAL SYSTEM, EXCEPT AS NOTED BELOW.
- UNLESS OTHERWISE NOTED ALL WIRING SHALL BE STRANDED COPPER, 600V., TYPE THHN/THWN POWER WIRING, MINIMUM SIZE TO BE #12 AWG; CONTROL SIZE AS NOTED ON PLANS.
- UNLESS OTHERWISE NOTED, ALL INTERIOR CONDUIT TO BE 3/4" OR LARGER SIZE E.M.T. METAL CONDUIT. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT ROUTING OF CONDUIT. EXTERIOR CONDUIT TO BE RIGID GAL. STEEL, PCV OR LIQUIDTIGHT FLEX AS REQUIRED. CONDUIT TERMINATING AT MOTORS SHALL BE LIQUIDTIGHT FLEXIBLE METAL CONDUIT.
- ALL RECEPTACLES SHALL BE IDENTIFIED AS TO PANEL AND CIRCUIT DESIGNATION (I.E.: PP2-14) LOCATED NEAR BOTTOM OF RECEPTACLE.
- ALL CONDUITS AND RACEWAYS SHALL CONTAIN SEPARATE GREEN COLORED EQUIPMENT GROUNDING CONDUCTOR SIZED PER N.E.C. TABLE 250.95.
- WHERE ELECTRICAL WORK IS INDICATED FOR CONTRACTOR TO "PROVIDE" MEANS TO "FURNISH AND INSTALL".
- AT CONDUIT TERMINATIONS, PROVIDE INSULATED BUSHINGS FOR CONDUCTOR PROTECTION.
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING AND SIZING OF BRANCH CIRCUIT AND PANEL HOME RUN CONDUIT AND WIRING PER WIRE SIZE AND CONDUIT FILL SCHEDULE, SHOWN ON THIS DRAWING, AND N.F.P.A.-2014 NEC CONDUIT AND WIRE TABLES INCLUDING DERATING OF WIRING AS REQUIRED.
- ELECTRICAL CONTRACTOR TO VERIFY CIRCUITS AND CIRCUIT NUMBERS BEING USED AND ADJUST AS REQUIRED.
- ELECTRICAL CONTRACTOR TO UPDATE AND POST TYPED PANEL SCHEDULES IN ALL PANELS.
- UPON COMPLETION OF WORK, ELECTRICAL CONTRACTOR TO SUBMIT MARKED UP, AS BUILT, ELECTRICAL DRAWINGS TO THE PROJECT ENGINEER.
- CONTRACTOR TO CONSULT WITH OWNER AND OR EQUIPMENT VENDORS FOR EXACT ELECTRICAL REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL NECESSARY EQUIPMENT IN ORDER TO PROVIDE A COMPLETE WORKING SYSTEM. ELECTRIC CONTRACTOR WILL PROVIDE PATHWAYS FOR DATA INSTALL.



WIRE SIZE AND CONDUIT FILL SCHEDULE FOR	
20A-120, 208 AND 277V., 1ø CIRCUITS	
# OF CIRCUITS	WIRE SIZE, FILL AND CONDUIT SIZE
1	2#12, 1#12G-3/4"
2	4#12, 1#12G-3/4"
3	6#12, 1#12G-3/4"
4	8#10, 1#10G-3/4"

SEE NOTE #12, THIS DWG  
OTHER SIZES AND FILL AS NOTED ON PLANS  
IF RUNS EXCEED 100 FEET, WIRE SIZE IN TABLE SHALL BE INCREASED  
ONE WIRE SIZE FOR EACH 100 FEET. IF WIRE HAS NOT ALREADY BEEN  
INCREASED DUE TO CONDUIT FILL DERATING FACTORS.

PETER JOHNSTON, ARCHITECT, PC 84 WASHINGTON STREET 2ND FLOOR HOBOKEN N.J. 07030 N.J. LICENSE NO 13073	
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