Monona Terrace Roof Garden Restrooms Alteration

1 John Nolen Drive Madison, WI 53703 Project #2014.41.00

Issued For Bidding

City of Madison Project No. 10914 City of Madison Construction Contract No. 7565

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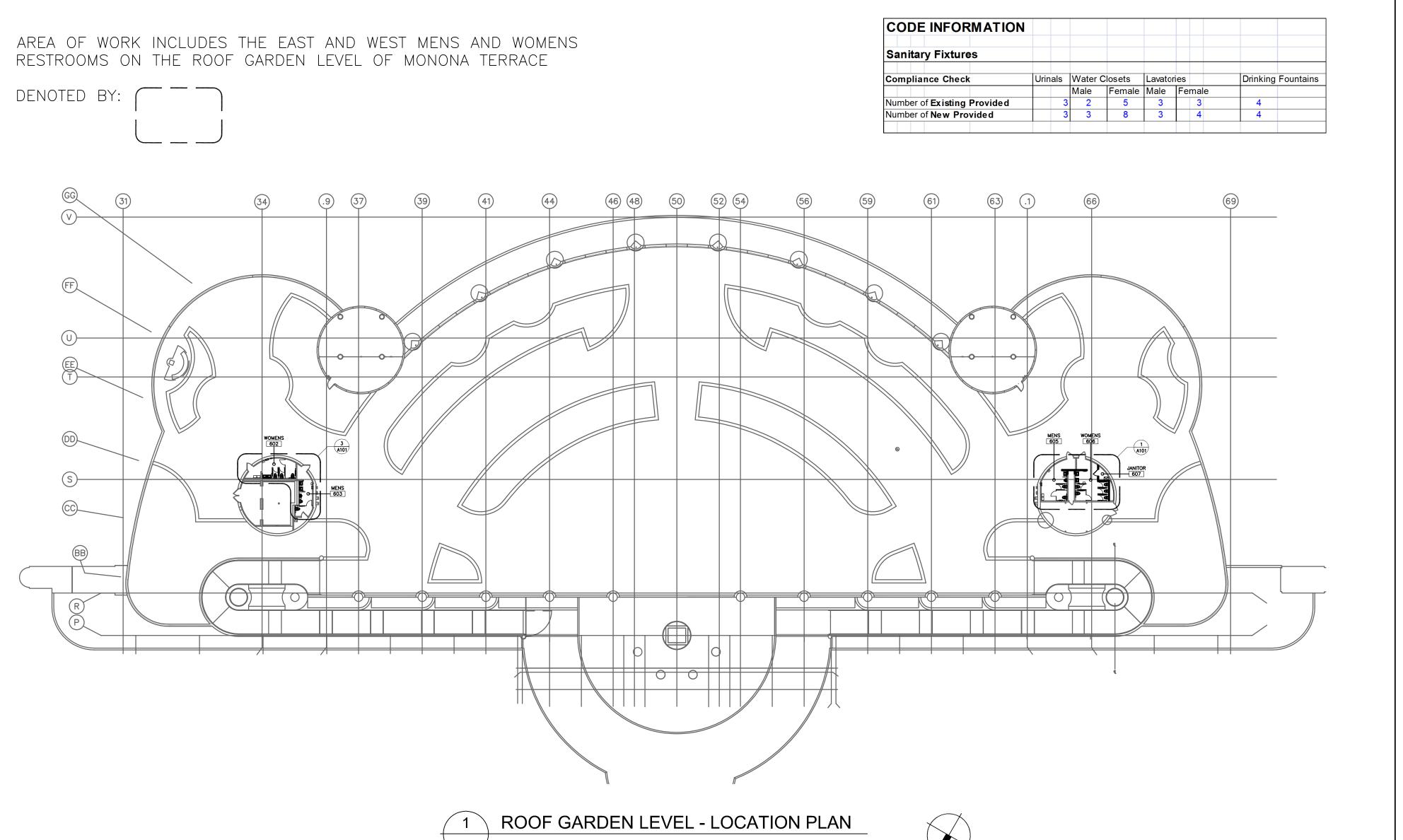
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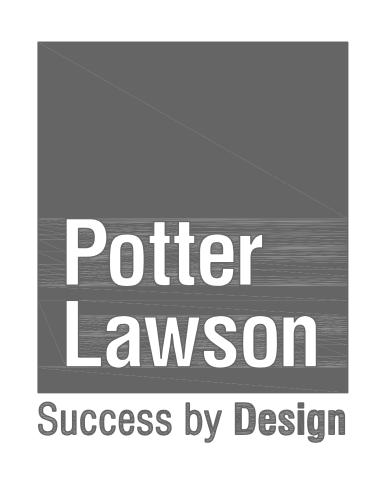
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Monona Terrace Roof Garden Restrooms Alteration

Madison, Wisconsin

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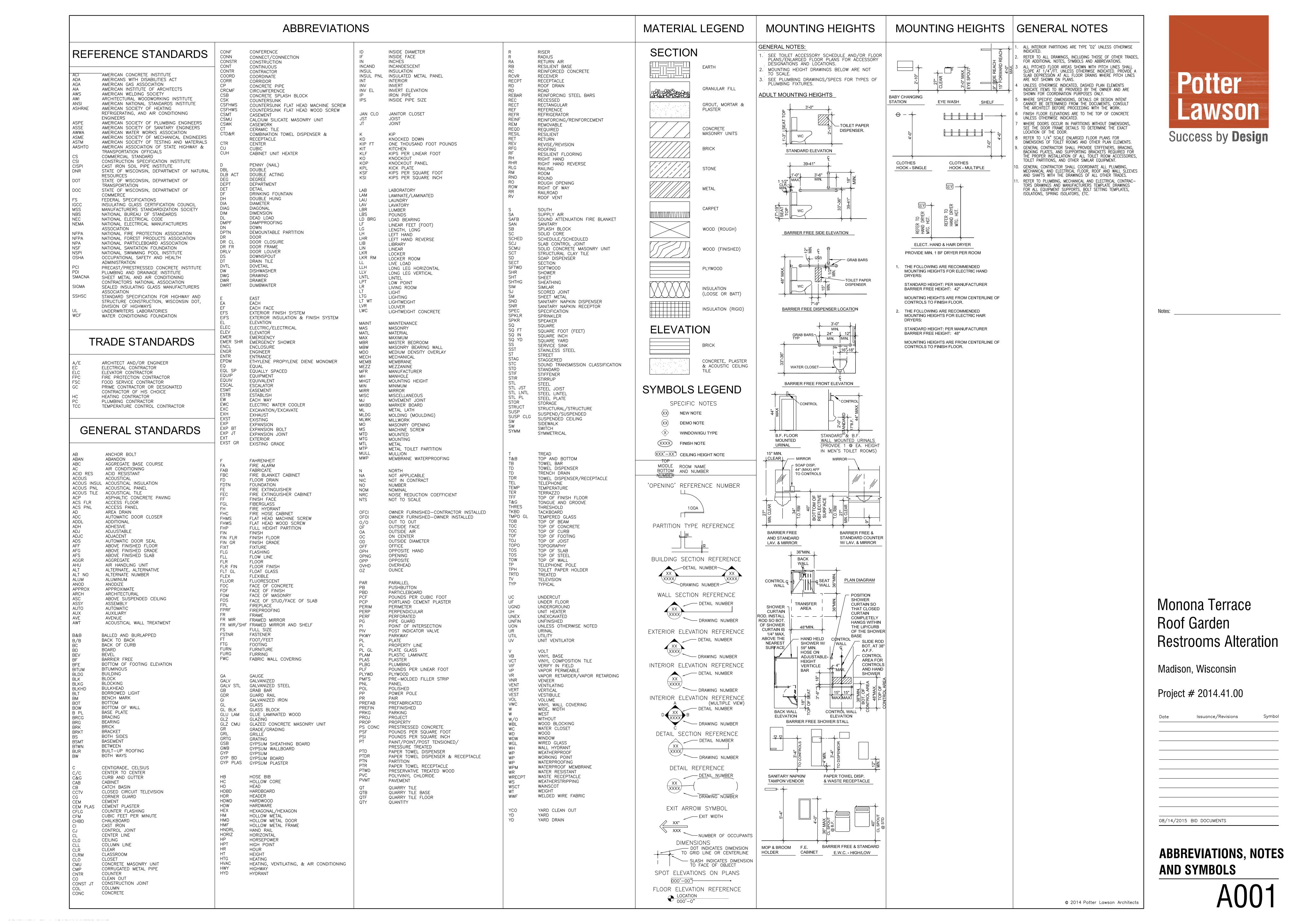
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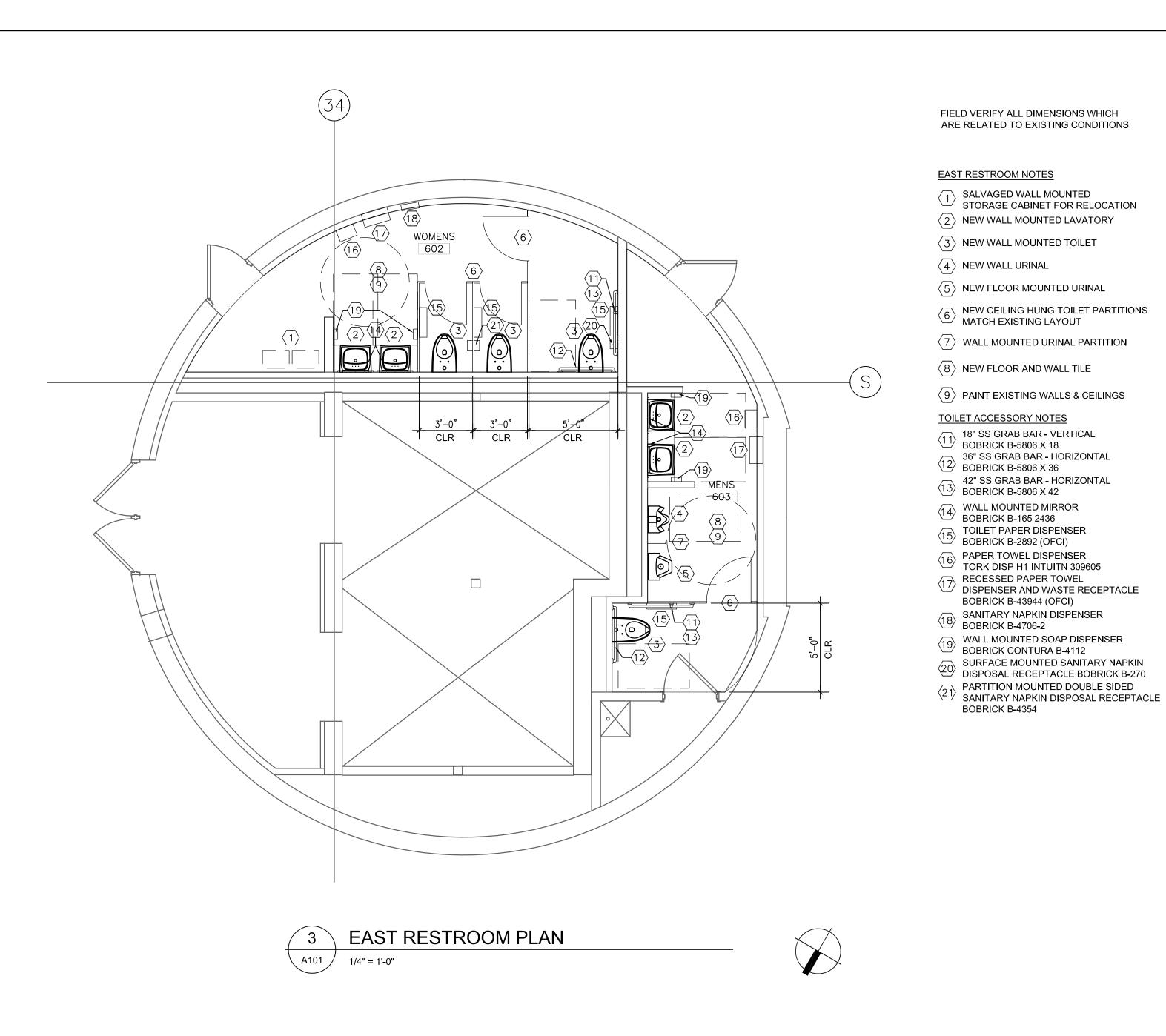
COVER DRAWING

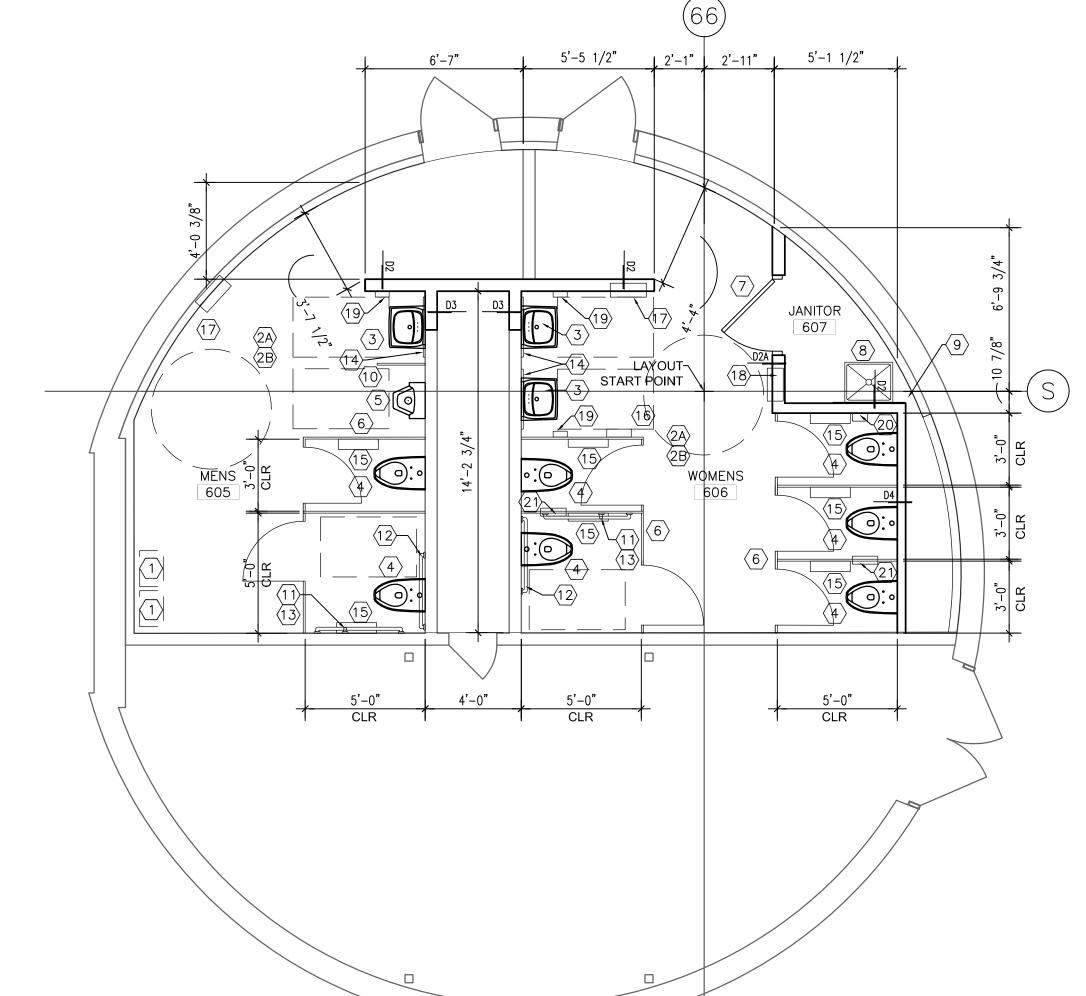
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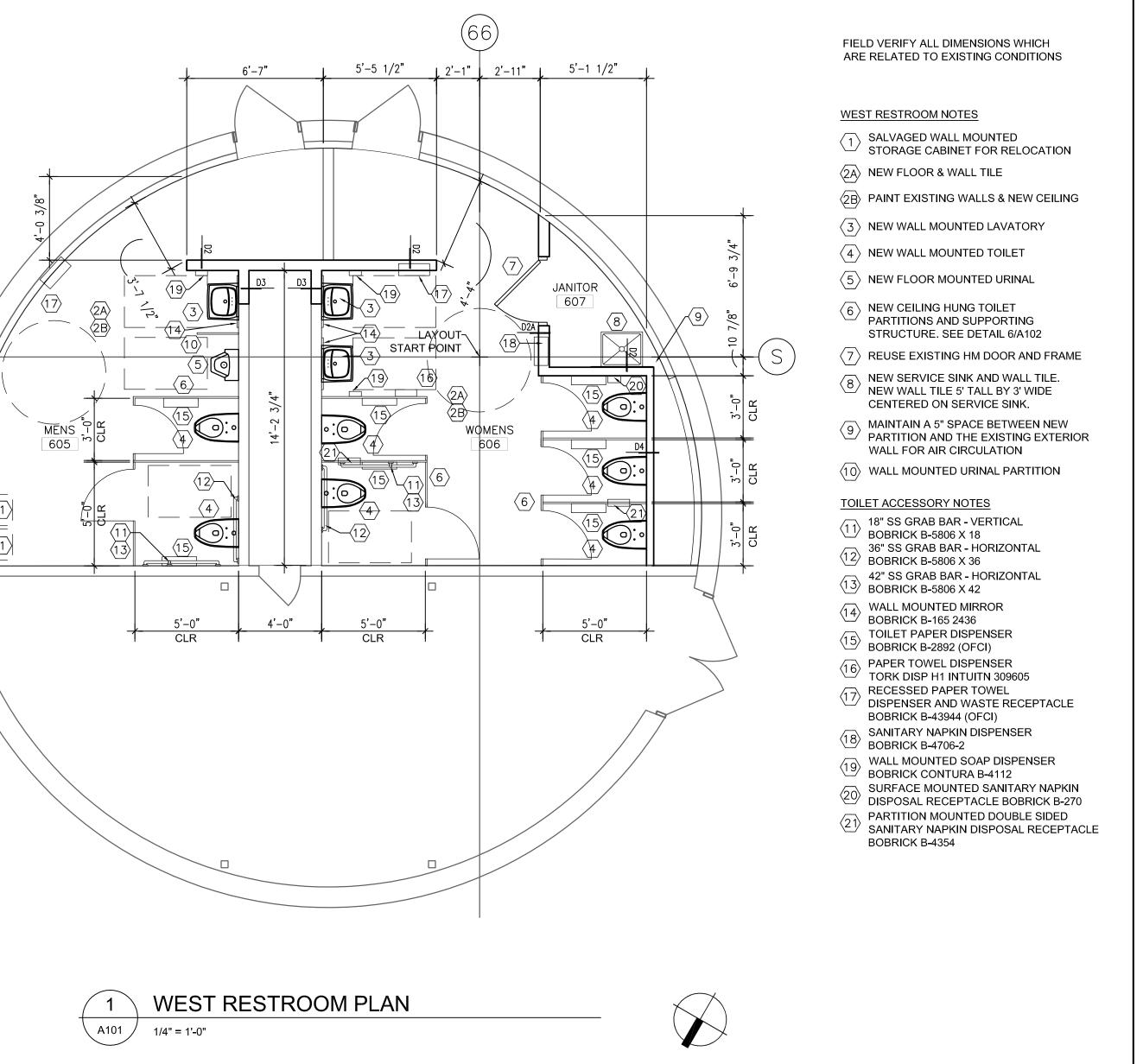
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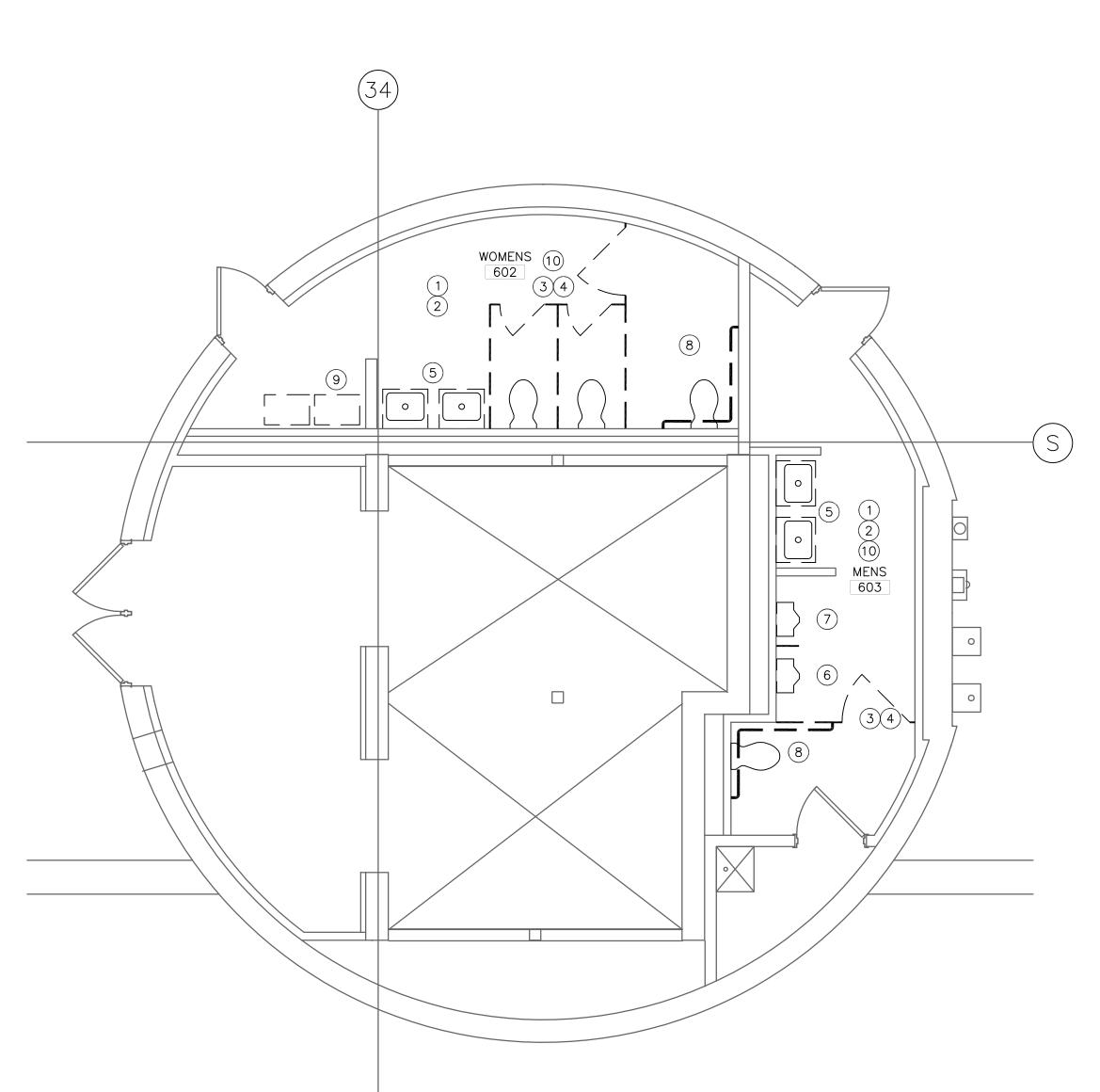
CD01











EAST RESTROOM DEMOLITION PLAN

EAST RESTROOM DEMOLITION NOTES

1 REMOVE EXISTING TILE FLOORING AND PREP FLOOR FOR NEW TILE FLOORING

2 REMOVE EXISTING WALL TILE WAINSCOT AND GWB BACKER. PROVIDE NEW GWB BACKER AND PREP WALL FOR NEW WALL TILE WAINSCOT.

(3) REMOVE ALL EXISTING TOILET PARTITIONS

(4) REMOVE ALL EXISTING TOILET ACCESSORIES

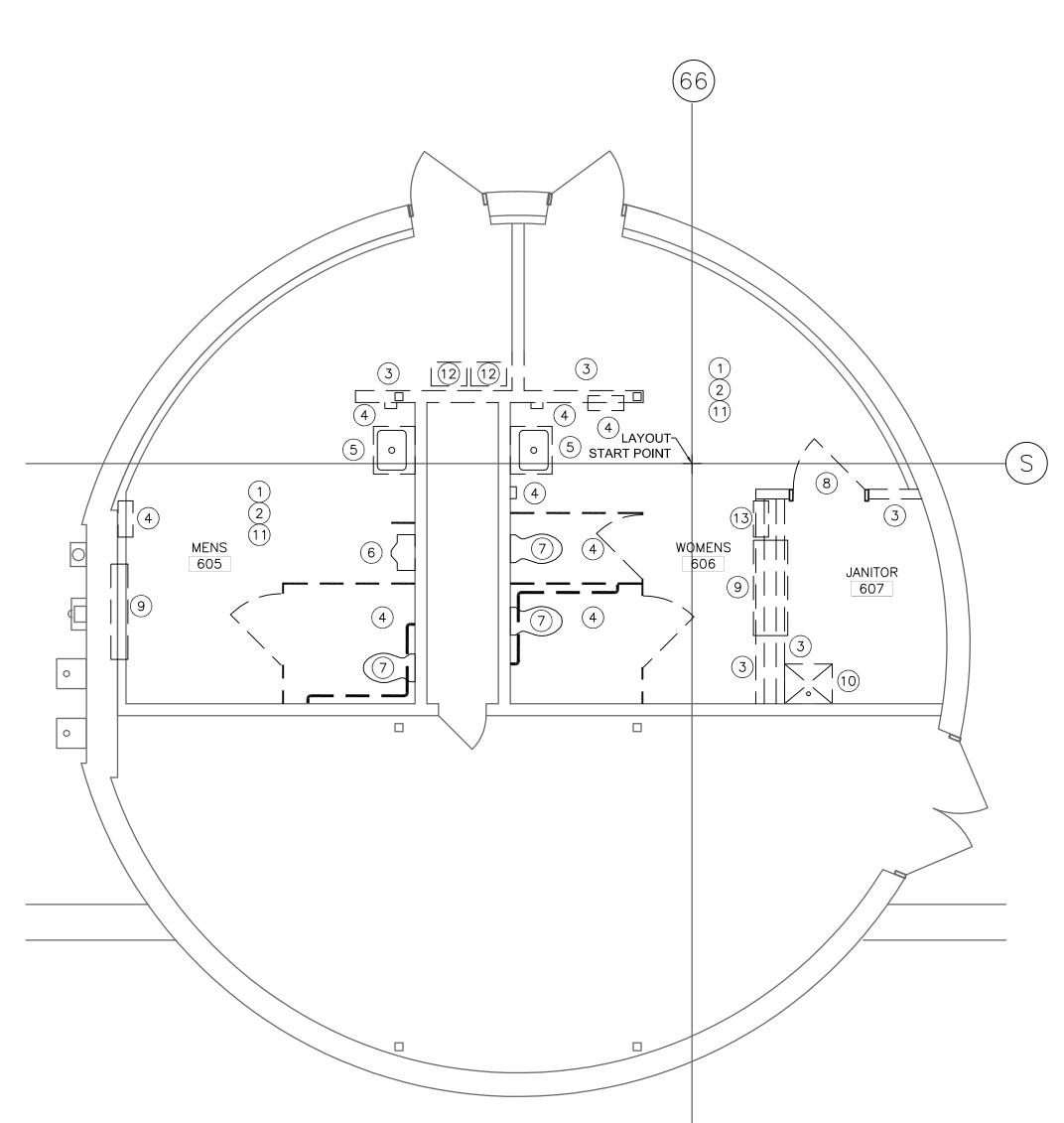
(5) REMOVE EXISTING WALL MOUNTED LAVATORIES (6) REMOVE EXISTING FLOOR MOUNTED URINAL

(7) REMOVE EXISTING WALL MOUNTED URINAL

(8) REMOVE EXISTING WALL MOUNTED TOILETS

9 REMOVE AND PROTECT WALL MOUNTED MANUFACTURED STORAGE CABINETS FOR REINSTALLATION

(10) EXISTING GWB CEILING & GWB LIGHT COVE TO REMAIN.



WEST RESTROOM DEMOLITION PLAN

REMOVE EXISTING TILE FLOORING AND $^\prime$ PREP FLOOR FOR NEW FLOOR TILE REMOVE EXISTING WALL TILE WAINSCOT

REMOVE ALL EXISTING TOILET

6 REMOVE EXISTING FLOOR MOUNTED URINAL AND PATCH FLOOR

(9) REMOVE EXISTING CABINET UNIT HEATER. REMOVE EXISTING MOP BASIN, WALL TILE,

REMOVE EXISTING SUSPENDED GWB CEILING & LIGHT COVE, AND MEP

REMOVE AND PROTECT WALL MOUNTED MANUFACTURED STORAGE CABINETS FOR

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(13) REMOVE RECESSED SANITARY NAPKIN

Issuance/Revisions

Monona Terrace

Restrooms Alteration

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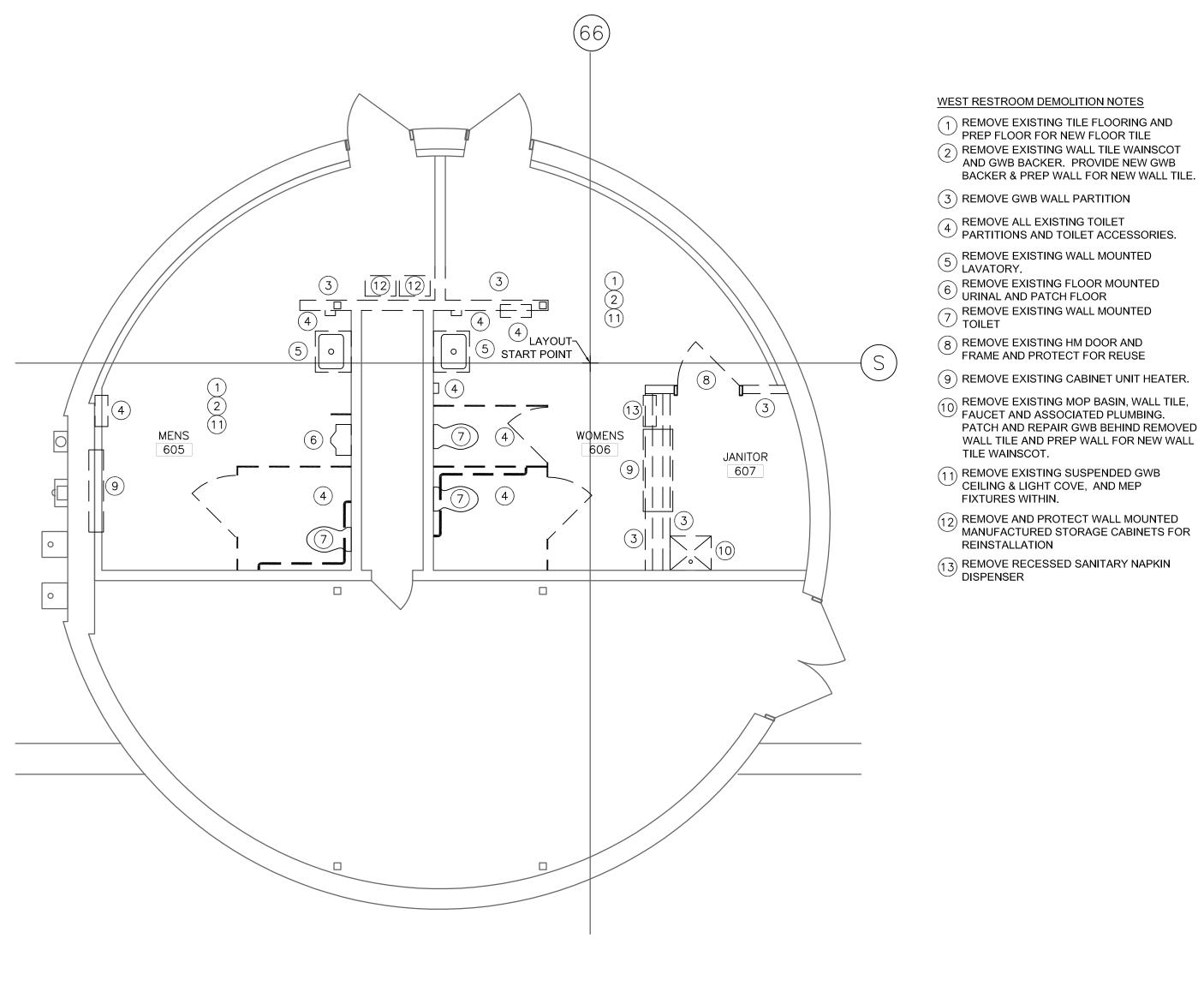
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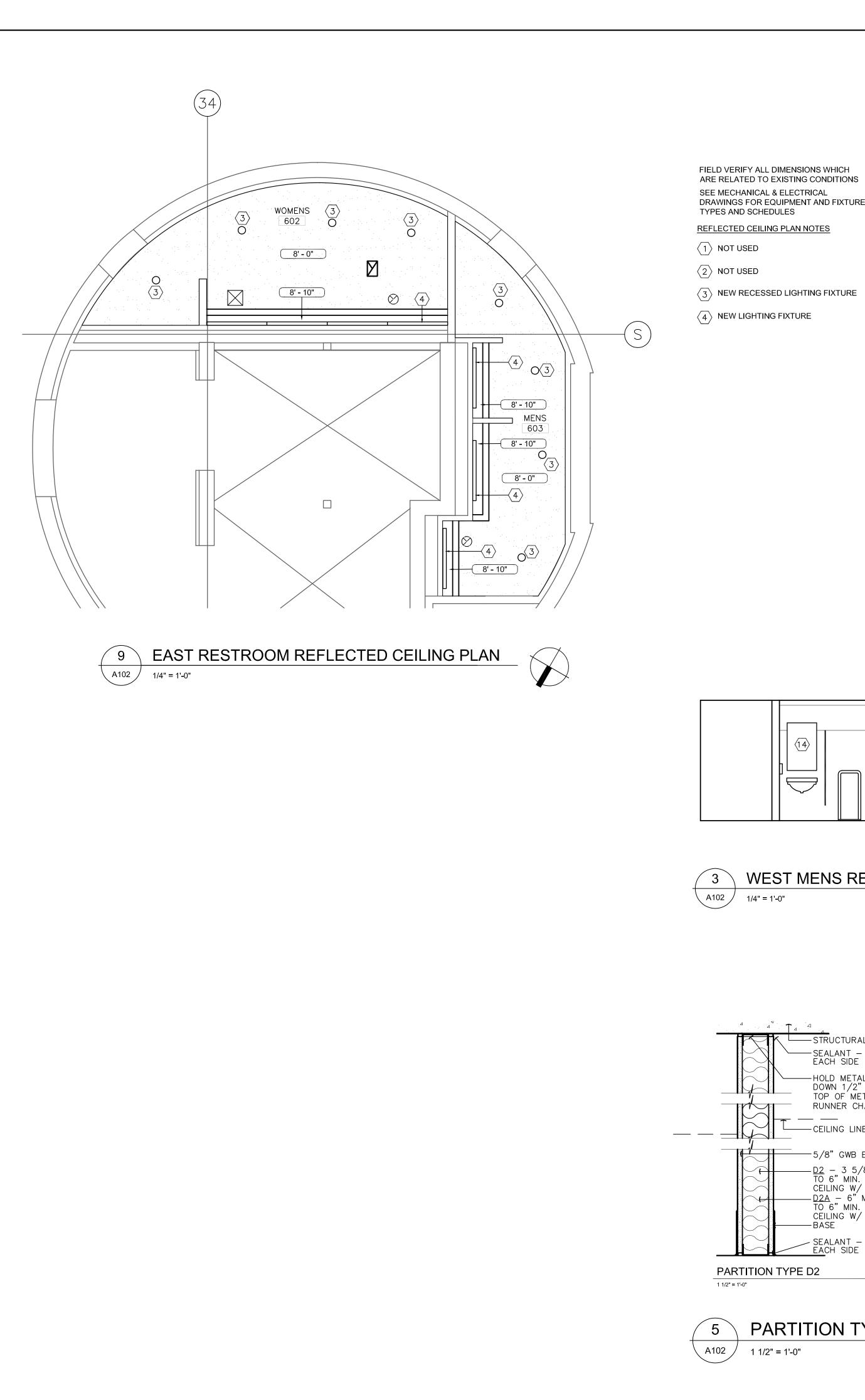
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Success by **Design**

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FLOOR AND DEMOLITION PLANS





GWB AS REQUIRED BY -PARTITION TYPE

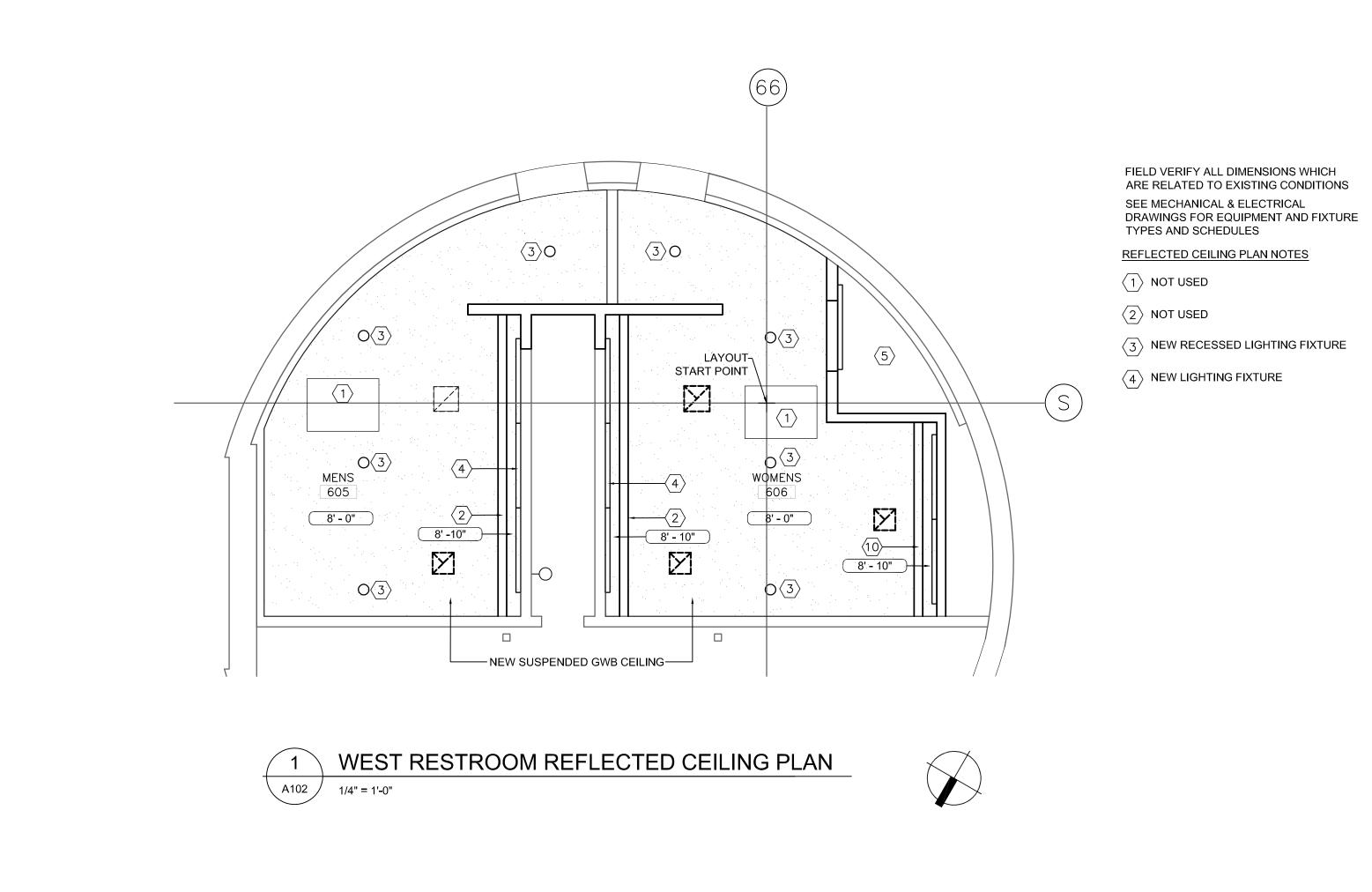
SLIP TYPE JOINT USING

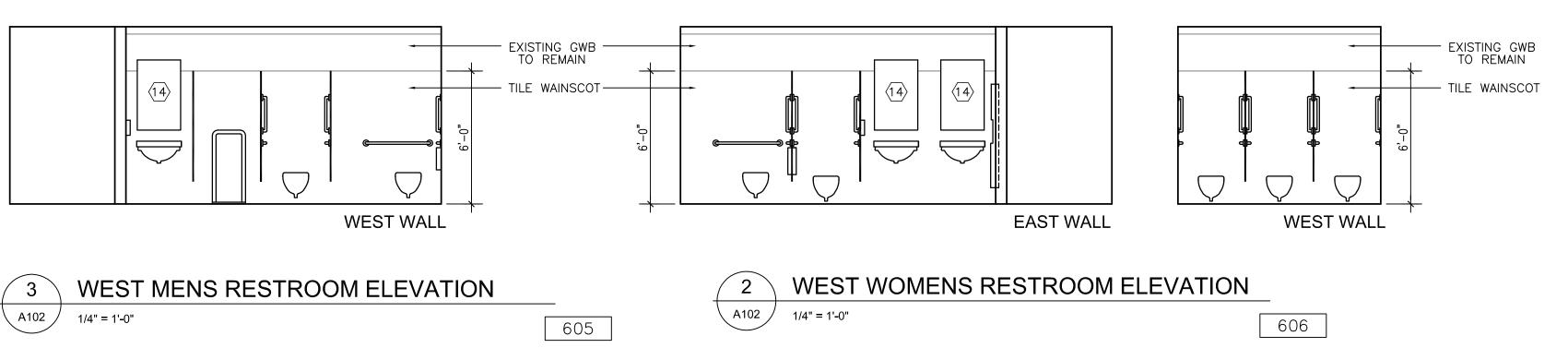
EITHER DOUBLE-TRACK

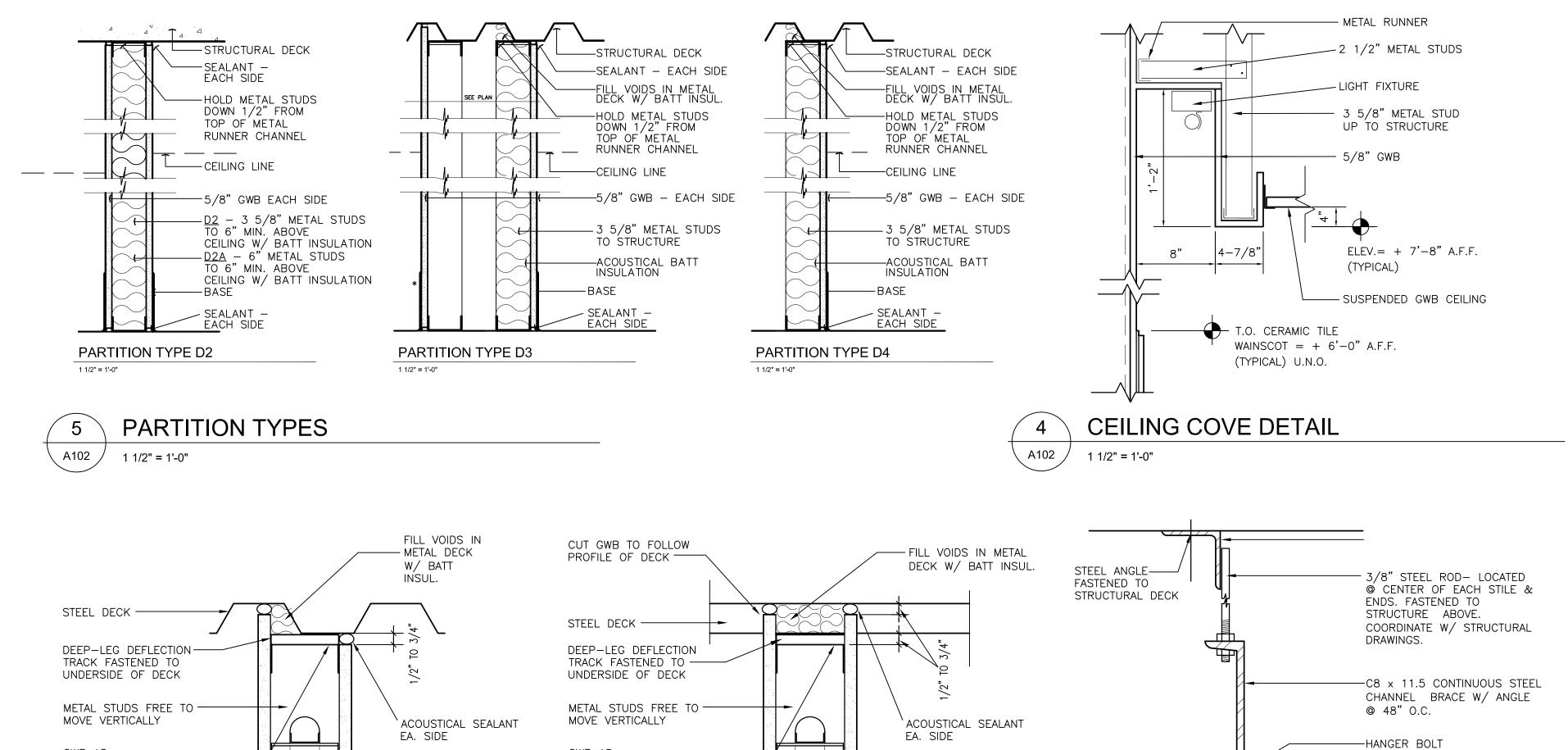
SYSTEM OR CHANNEL

BRACED SYSTEM

A102 3" = 1'-0"







SLIP JOINT AT GYP. BD. PARTITION

DO NOT FASTEN
GWB TO
DEEP-LEG

DEFLECTION TRACK

NON-RATED PARTITION $\left\langle A102 \right\rangle$ 3" = 1'-0"

-FINISH CEILING

TOILET PARTITION SUPPORT DETAIL

—CEILING HUNG TOILET PARTITION

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GWB AS REQUIRED BY -PARTITION TYPE

SLIP TYPE JOINT USING

EITHER DOUBLE-TRACK

SYSTEM OR CHANNEL

BRACED SYSTEM

NON-RATED PARTITION A102 3" = 1'-0"

DO NOT FASTEN GWB TO

DEFLECTION TRACK

DEEP-LEG

SLIP JOINT AT GYP. BD. PARTITION



Monona Terrace
Roof Garden
Restrooms Alteration

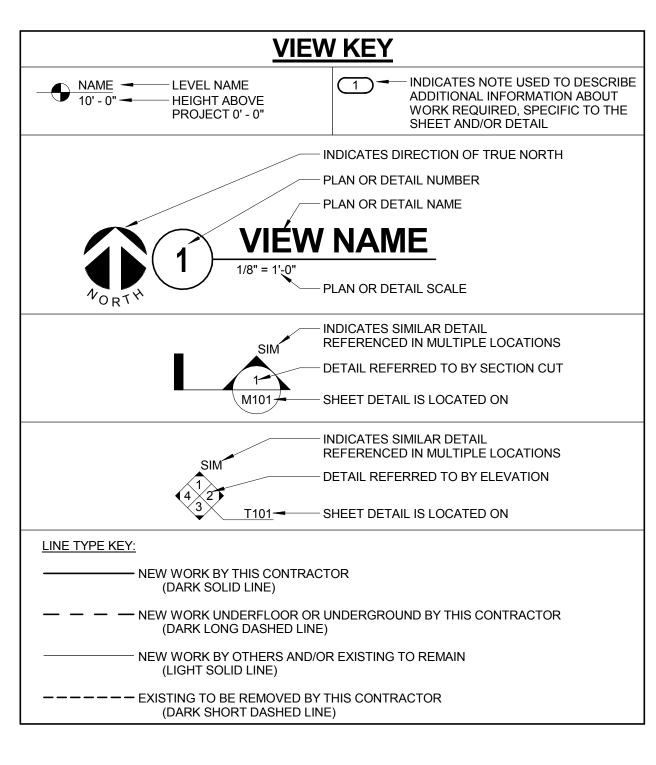
Madison, Wisconsin

Project # 2014.41.00

Date	Issuance/Revisions	Sym
 08/14/2015	BID DOCUMENTS	

REFLECTED CEILING PLANS, ELEVATIONS, PARTITION TYPES AND DETAILS

A102



	FIRE PROTECTION SYMBOL LIST
	NOT ALL SYMBOLS MAY APPLY.
SYMBOL:	DESCRIPTION:
—DFP——	DRAIN
—_FP——	FIRE PROTECTION
 3	PIPE CAP
	PIPE DOWN
 0	PIPE UP OR UP/DOWN
——————————————————————————————————————	NEW CONNECTION
₩	SHUTOFF VALVE NORMALLY OPEN
NO HATCH	LIGHT HAZARD
	ORDINARY GROUP 1
	ORDINARY GROUP 2
	DEMOLITION

	CONTRACTOR ABBREVIATION KEY					
ABBR:	DESCRIPTION:					
E.C.	ELECTRICAL CONTRACTOR					
F.P.C.	FIRE PROTECTION CONTRACTOR					
G.C.	GENERAL CONTRACTOR					
M.C. P.C.	MECHANICAL CONTRACTOR PLUMBING CONTRACTOR					

FIRE / SMOKE BARRIER DESIGNATIONS

THE LINE TYPES SHOWN ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY RATINGS WITH THE LATEST SET OF ARCHITECTURAL PLANS AND FURNISH ALL MATERIALS REQUIRED TO COMPLY WITH THOSE RATINGS WHETHER SHOWN OR NOT. ALL FLOOR ASSEMBLIES SHALL BE DESIGNATED AS 2 HOUR FIRE, BARRIER(S), UNLESS NOTED OTHERWISE ON THE PLANS. RATINGS WERE ACQUIRED FROM THE ARCHITECTURAL PLANS DATED

FIRE SPRINKLER USAGE SCHEDULE

NOTES: 1. SEE FLOOR PLANS FOR ZONING REQUIREMENTS. 2. SPRINKLER SHALL HAVE COLOR CODED BULB THERMAL ELEMENT. 3. ALL SPRINKLERS SHALL BE UL AND FM LISTED. 4. CONTRACTOR TO VERIFY

				•	•		PLAN AND NFPA 13 REQUIF R TYPES TO BE USED. 6. SPACES.	REMENTS. 5. TAG NAME IS PRIMARILY FOR IDENTIFIYING SPRINKLERS IN SUBMITTALS. IT MA AREAS ARE GENERAL IN NATURE. CONTRACTOR TO MATCH UNSCHEDULED AREAS TO SIMILA
			SPRINKI	LER				
AREA TYPE	AREA	TAG NAME	SPRINKLER	RESPONSE		TEMPERATURE	MANUFACTURER &	
(NOTE 1 & 6)	HAZARD	(NOTE 4 & 5)	TYPE	CATEGORY	FINISH	RATING	MODEL	NOTES
PLUMBING	SEE PLANS	SPR-1	UPRIGHT	QUICK	ROUGH BRASS	155		NOTE 3
CHASE, JANITOR CLOSET							TYCO TY-FRB, VICTAULIC V2704	
BATHROOMS	SEE PLANS	SPR-2	RECESSED PENDENT	QUICK	CHROME	155	VIKING VK, RELIABLE F1FR,	NOTES 2, 3
BATTINGONIO	OLLILANO	Of IX-2	INCOCOOLD I CINDLINI	QUICIT	PLATED	100	TYCO TY-FRB, VICTAULIC V2708	, , , , , , , , , , , , , , , , , , ,

FIRE PROTECTION GENERAL NOTES:

- 1. FIRE PROTECTION PIPE ROUTING IS SHOWN FOR GENERAL LAYOUT. DETERMINE EXACT NUMBER OF SPRINKLERS, PIPE SIZING, AND PIPE ROUTING.
- 2. CENTER SPRINKLERS IN CEILING TILES IN BOTH DIRECTIONS IN ALL AREAS. IN AREAS WITH 2'X4' CEILING TILES CENTERING USING A 2'X2' CEILING PATTERN IS ACCEPTABLE.

MECHANICAL RENOVATION NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO,

1. EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS,

2. NOT ALL EXISTING DUCTWORK AND PIPING IS SHOWN. VERIFY EXISTING CONDITIONS BEFORE

FABRICATION. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING FIELD 4. EACH CONTRACTOR SHALL FIELD VERIFY ACCESSIBILITY TO THE AREA OF HIS WORK AND

SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO BIDDING IF OTHER UTILITIES ARE REQUIRED TO BE REMOVED OR RELOCATED TO ALLOW ACCESS TO HIS AREA OF WORK

6. PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING

7. OBTAIN PERMISSION FROM OWNER BEFORE SHUTTING DOWN ANY SYSTEM FOR ANY REASON. MAINTAIN SERVICE TO ALL COMPONENTS THAT ARE TO REMAIN UNTIL NEW SYSTEMS ARE

IN AND SWITCHOVER. DRAIN SYSTEM ONLY TO MAKE SWITCHOVERS AND CONNECTIONS.

. MAINTAIN EXISTING SYSTEM IN SERVICE UNTIL NEW SYSTEM IS COMPLETE AND READY FOR TIE

OBTAIN PERMISSION FROM OWNER BEFORE PARTIALLY OR COMPLETELY DRAINING SYSTEM.

9. DISCONNECT AND REMOVE MECHANICAL DEVICES AND EQUIPMENT SERVING EQUIPMENT THAT

. WHERE EXISTING MECHANICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW

EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, PIPING, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT

CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING MECHANICAL SYSTEMS TO ALLOW

EXISTING BUILDING DOCUMENTS, AND STAFF. VERIFY EXISTING CONDITIONS AND REPORT ANY

FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL.

STARTING WORK. NOTIFY ENGINEER OF ANY CONFLICTS WITH NEW WORK. 3. FIELD VERIFY THE AVAILABLE CLEARANCES FOR DUCTWORK AND PIPING BEFORE

FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK.

MAKE CHANGEOVER TO NEW SYSTEMS WITH MINIMUM OUTAGE.

CONFLICTS BEFORE PROCEEDING.

CONSTRUCTION.

HAS BEEN REMOVED.

MECHANICAL GENERAL NOTES:

THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL. 1. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT ALWAYS REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS

- 2. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM
- ARCHITECTURAL, STRUCTURAL, SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES. 3. COORDINATE ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES FOR ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OR

4. REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE

- REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS. 5. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR EXPENSE
- 6. EACH CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF DESIGN.
- 7. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES. OTHER THAN SPRINKLERS. 8. EACH CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS TO WALLS, FLOORS, CEILINGS, AND ROOFS. THE CONTRACTOR WHOSE WORK CAUSES DAMAGE IS
- RESPONSIBLE FOR PATCHING TO MATCH ORIGINAL CONSTRUCTION, FIRE RATING, AND FINISH. 9. IN AREAS WITH DRYWALL CEILINGS COORDINATE LOCATIONS OF ACCESS PANELS WITH THE GC FOR ACCESS TO VALVES, DUCTWORK ACCESSORIES, DAMPERS, ETC. COORDINATE PANEL TYPE AND COLOR WITH ARCHITECT. NOTIFY THE GC OF THE REQUIRED ACCESS PANELS PRIOR 10. CAULK ALL PIPE AND DUCT PENETRATIONS OF FULL HEIGHT NON-FIRE RATED WALL, PARTITION,
- FLOOR, AND ROOF ASSEMBLIES. THIS IS ESSENTIAL TO PREVENT NOISE TRANSMISSION FROM ONE ROOM TO ANOTHER AND TO PROVIDE THE DESIRED NC LEVELS WITHIN ROOMS. 11. WHERE PIPES AND DUCTS ARE SHOWN TO PENETRATE FLOORS, PROVIDE SLEEVED OPENINGS WITH THE TOP EDGE RAISED ABOVE FLOOR SURFACE IN ACCORDANCE WITH ALL RELEVANT SPEC SECTIONS. SEAL SLEEVE PERIMETER TO BE WATERTIGHT. 12. EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY BETWEEN DIFFERENT
- MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING,
- 13. DO NOT BLOCK TUBE PULL OR EQUIPMENT SERVICE CLEARANCES.
- 14. MAINTAIN MINIMUM 3'-6" CLEARANCE IN FRONT OF ALL ELECTRICAL PANELS, MOTOR STARTERS, SWITCHES, AND DISCONNECTS. 15. DO NOT SUPPORT EQUIPMENT, PIPING, OR DUCTWORK FROM METAL DECKING OR OTHER NON-STRUCTURAL BUILDING ELEMENTS. ANCHORS EMBEDDED IN CONCRETE SHALL BE CRACKED

FIRE PROTECTION SHEET INDEX

FIRE PROTECTION COVER SHEET PARTIAL FLOOR PLANS - FIRE PROTECTION

CONCRETE APPROVED IN ACCORDANCE WITH SPECIFICATIONS.

Success by **Design**

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CONSULTANTS
MADISON, WISCONSIN 53713-1839
608.223.9600 FAX: 608.223.9601 KJWW ENGINEERING RESERVES PROPRIETARY RIGHTS, INCLUDING COPYRIGHTS, TO THIS DRAWING AND THE DATA SHOWN THEREON. SAID DRAWING AND/OR DATA ARE THE EXCLUSIVE PROPERTY OF KJWW ENGINEERING AND SHALL NOT BE USED OR REPRODUCED FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN APPROVAL AND PARTICIPATION OF KJWW ENGINEERING. © 2015 KJWW, P.C. REFERENCE SCALE IN INCHES

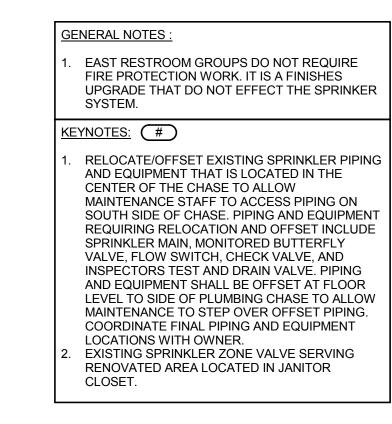
Monona Terrace Roof Garden **Restrooms Alteration**

Madison, Wisconsin

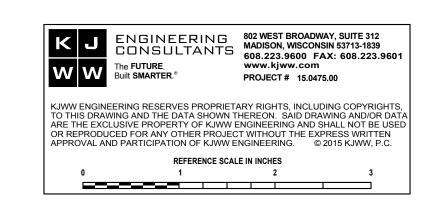
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FIRE PROTECTION **COVER SHEET**







Notes:

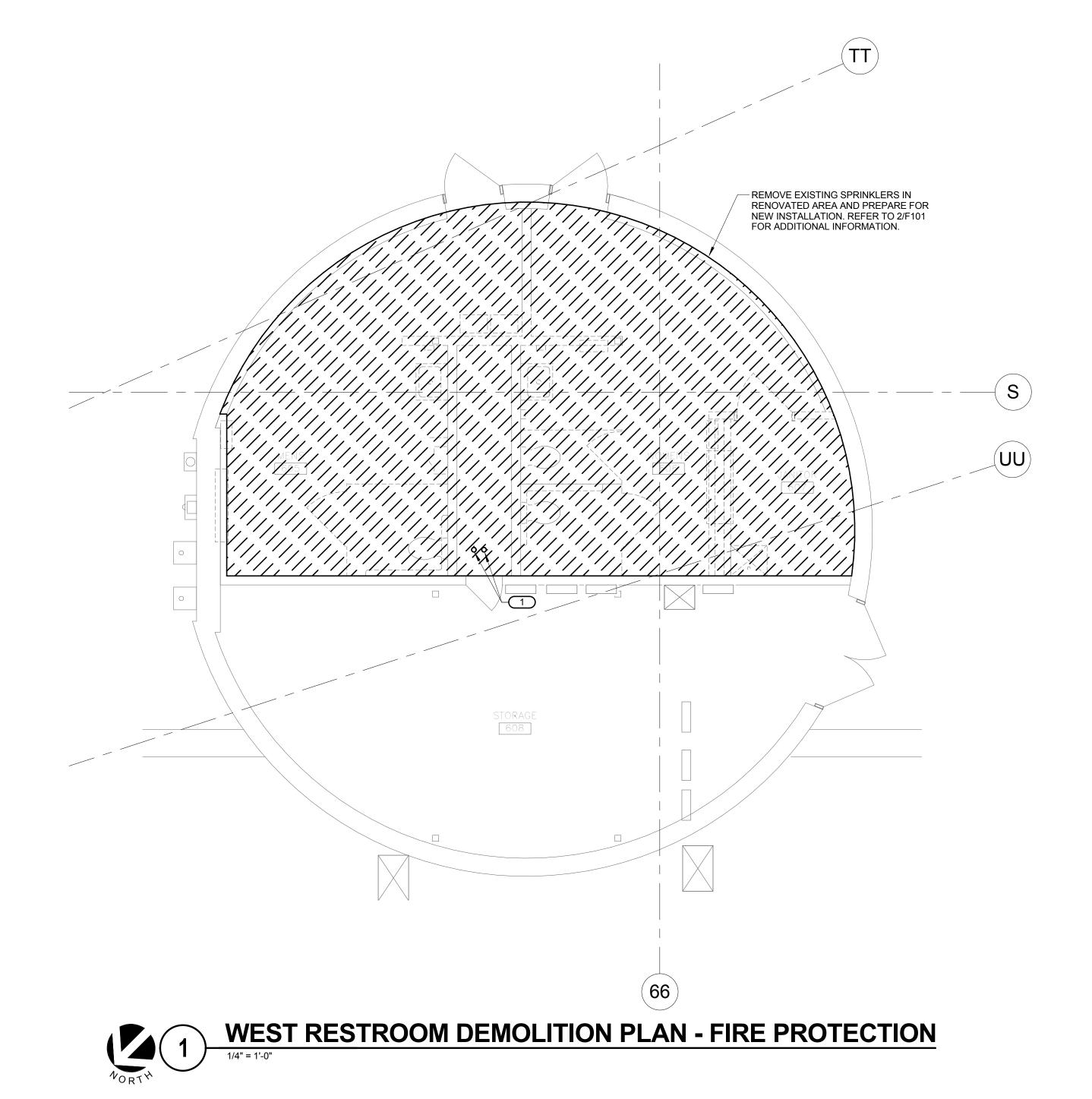
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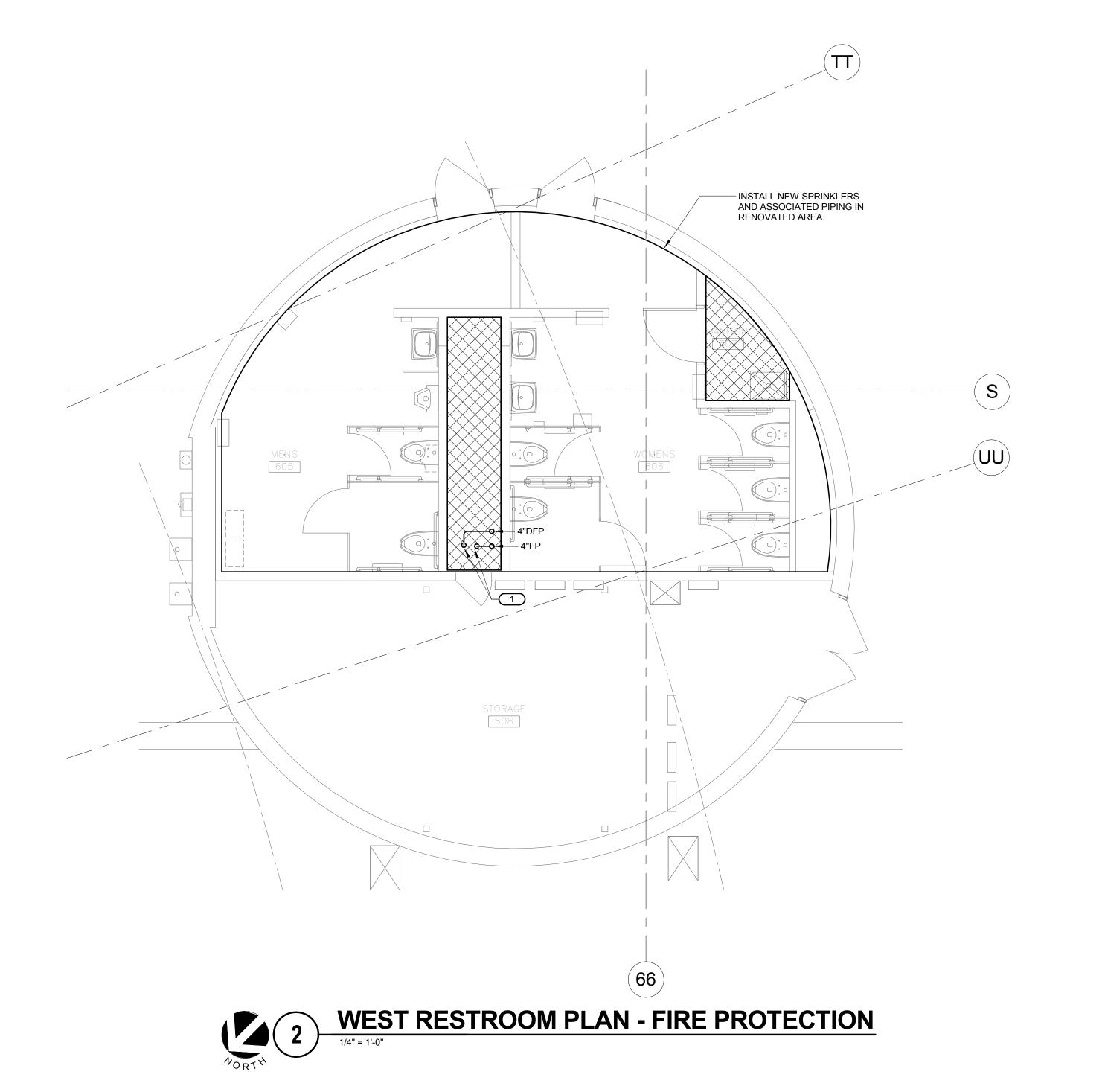
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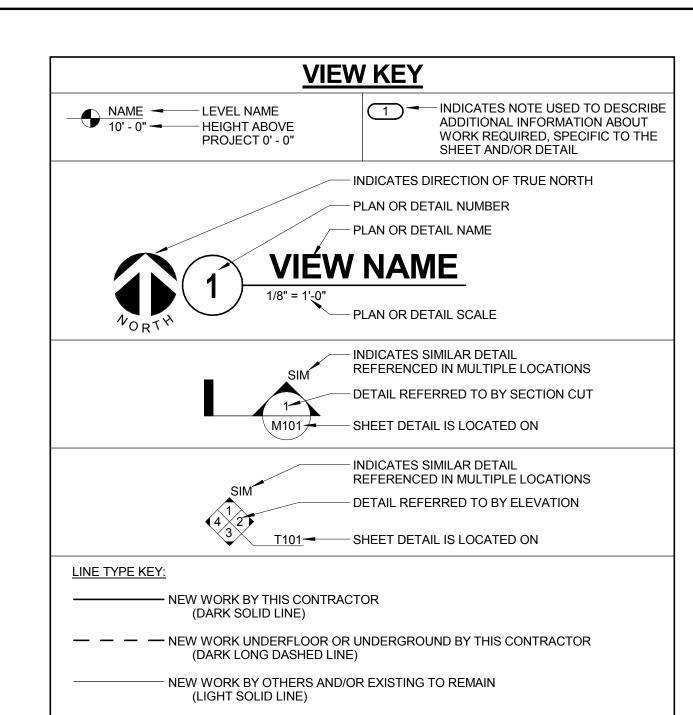
08/14/15 BID DOCUMENTS

PARTIAL FLOOR PLANS - FIRE PROTECTION





0/2015 4·11·55 PM



FIRE / SMOKE BARRIER DESIGNATIONS

---- EXISTING TO BE REMOVED BY THIS CONTRACTOR

(DARK SHORT DASHED LINE)

THE LINE TYPES SHOWN ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY RATINGS WITH THE LATEST SET OF ARCHITECTURAL PLANS AND FURNISH ALL MATERIALS REQUIRED TO COMPLY WITH THOSE RATINGS WHETHER SHOWN OR NOT. ALL FLOOR ASSEMBLIES SHALL BE DESIGNATED AS 2 HOUR FIRE, BARRIER(S), UNLESS NOTED OTHERWISE ON THE PLANS. RATINGS WERE ACQUIRED FROM THE ARCHITECTURAL PLANS DATED 06/24/2015.

	CONTRACTOR ABBREVIATION KEY				
ABBR:	DESCRIPTION:				
E.C.	ELECTRICAL CONTRACTOR				
F.P.C.	FIRE PROTECTION CONTRACTOR				
G.C.	GENERAL CONTRACTOR				
M.C.	MECHANICAL CONTRACTOR				
P.C.	PLUMBING CONTRACTOR				

	NOT ALL SYMBOLS MAY APPLY.				
SYMBOL:	DESCRIPTION:				
CW	COLD WATER - POTABLE				
D	DRAIN				
——HW——	HOT WATER - POTABLE				
HWC	HOT WATER CIRCULATING - POTABLE				
—ST(1.000)—	STORM DRAINAGE (ROOF SQUARE FOOTAGE)				
——SAN——	SANITARY DRAINAGE				
V	VENT				
	PIPE CAP				
	PIPE DOWN				
	PIPE UP OR UP/DOWN				
——o _{FD}	PIPE SERVING FIXTURE ON FLOOR ABOVE (EXAMPLE: FD = FLOOR DRAIN)				
	PITCH PIPE IN DIRECTION				
-	DIRECTION OF FLOW IN PIPE				
	NEW CONNECTION				
──	DIELECTRIC CONNECTION				
	UNION/FLANGE				
—₩—	SHUTOFF VALVE NORMALLY OPEN				
—	SHUTOFF VALVE NORMALLY CLOSED				
Ğ PM	BALANCING VALVE (NUMBER INDICATES GPM)				
	CHECK VALVE				
	REDUCER - REFERENCE SPECIFICATION FOR CONCENTRIC/ECCENTRIC AND FOT/FOB				

ABBR: DESCRIPTION: AD ACCESS DOOR AFF ABOVE FINISHED FLOOR CO CLEANOUT DF DRINKING FOUNTAIN E EXISTING EWC ELECTRIC WATER COOLER FCO FLOOR CLEANOUT FD FLOOR DRAIN	
AFF ABOVE FINISHED FLOOR CO CLEANOUT DF DRINKING FOUNTAIN E EXISTING EWC ELECTRIC WATER COOLER FCO FLOOR CLEANOUT FD FLOOR DRAIN	
CO CLEANOUT DF DRINKING FOUNTAIN E EXISTING EWC ELECTRIC WATER COOLER FCO FLOOR CLEANOUT FD FLOOR DRAIN	
DF DRINKING FOUNTAIN E EXISTING EWC ELECTRIC WATER COOLER FCO FLOOR CLEANOUT FD FLOOR DRAIN	
E EXISTING EWC ELECTRIC WATER COOLER FCO FLOOR CLEANOUT FD FLOOR DRAIN	
EWC ELECTRIC WATER COOLER FCO FLOOR CLEANOUT FD FLOOR DRAIN	
FCO FLOOR CLEANOUT FD FLOOR DRAIN	
FD FLOOR DRAIN	
'	
LID LIGGE DIDD	
HB HOSE BIBB	
I.E. INVERT ELEVATION (FOR REFERENCE ONLY)	
LAV LAVATORY	
MB MOP BASIN	
NC NEW CONNECTION	
RD ROOF DRAIN	
SH SHOWER	
TYP TYPICAL	
SK SINK	
UR URINAL	
VTR VENT THROUGH ROOF	
WC WATER CLOSET	
WCO WALL CLEANOUT	
WF WASH FOUNTAIN	
WHA WATER HAMMER ARESSTOR	
UNO UNLESS NOTED OTHERWISE	

	NOT ALL SYMBOLS MAY APPLY.					
SYMBOL:	DESCRIPTION:					
CW	COLD WATER - POTABLE					
D	DRAIN					
——HW——	HOT WATER - POTABLE					
——HWC——	HOT WATER CIRCULATING - POTABLE					
—ST(1.000)—	STORM DRAINAGE (ROOF SQUARE FOOTAGE)					
—SAN—	SANITARY DRAINAGE					
V	VENT					
	PIPE CAP					
	PIPE DOWN					
——о	PIPE UP OR UP/DOWN					
o _{FD}	PIPE SERVING FIXTURE ON FLOOR ABOVE (EXAMPLE: FD = FLOOR DRAIN)					
_	PITCH PIPE IN DIRECTION					
_	DIRECTION OF FLOW IN PIPE					
	NEW CONNECTION					
——————————————————————————————————————	DIELECTRIC CONNECTION					
	UNION/FLANGE					
—₩—	SHUTOFF VALVE NORMALLY OPEN					
—	SHUTOFF VALVE NORMALLY CLOSED					
GPM_	BALANCING VALVE (NUMBER INDICATES GPM)					
	CHECK VALVE					
D	REDUCER - REFERENCE SPECIFICATION FOR CONCENTRIC/ECCENTRIC AND FOT/FOB					

			ט	CIAILINER	OUGH-IN SIZE.		
FIXTUF DESCRIP	RE	OMESTIC CW (NOTE 3)	DOMESTIC HW (NOTE 3)	DOMESTIC TW (NOTE 3)	SANITARY (NOTE 3)	VENT (NOTE 3)	
FLOO AIN/FL SINK	OOR	-	-	-	3"	1 1/2"	-
LAVATO	DRY	-	-	1/2"	1 1/4"	1 1/4"	NO
RVICE	SINK	3/4"	3/4"	-	2"	1 1/2"	-
URINA	AL	3/4"	-	-	2"	1 1/2"	-
WATE CLOSE		1 1/4"	-	-	4"	2"	-
	W	ATER	R CALC	ULATIO	ON WOR	KSHEE	T
90	MINIMU	JM PRESSU	JRE AT CONN	ECTION TO CI	TY MAIN OR WE	LL TANK (PSIG	3)
. 0					OM SERVICE CO DEMAND PER S)
				AT COITICAL	FIXTURE AT MA	\(\(\alpha\) \(\beta\) \(\alpha\)	TION
30	RESIDI	UAL PRESS	SURE NEEDED	AT CRITICAL		XIMUM ELEVA	
20	PRESS	SURE DROF	OF ELEVATION	ON DIFFEREN	CE FROM SERVI E IN FEET X 0.434	CE CONNECTION	
	PRESS LIMITIN	SURE DROF NG FIXTURI	OF ELEVATION	ON DIFFEREN	CE FROM SERVI E IN FEET X 0.434	CE CONNECTION	
- 20	PRESS LIMITIN PRESS	SURE DROF NG FIXTURI SURE DROF	P OF ELEVATION E. ELEVATION P THROUGH 4	ON DIFFERENCE ' WATER METE	CE FROM SERVI E IN FEET X 0.434	CE CONNECTION 4 = PSI.	
· 20 · 4 = 36	PRESS LIMITIN PRESS	SURE DROF NG FIXTURI SURE DROF	P OF ELEVATION THROUGH 4 AVAILABLE F	ON DIFFERENCE ' WATER METE FOR PIPING SY	CE FROM SERVI E IN FEET X 0.434 ER.	CE CONNECTION 4 = PSI.	
- 20	PRESS LIMITIN PRESS PRESS MULTIF	SURE DROF SURE DROF SURE DROF PLY TO CO	P OF ELEVATION THROUGH 4' P AVAILABLE F	ON DIFFERENCE ' WATER METE FOR PIPING SY PSI/FOOT TO	CE FROM SERVI E IN FEET X 0.434 ER. (STEM LOSSES)	CE CONNECTION 4 = PSI. (PSI)	
- 20 - 4 = 36 X 100	PRESS LIMITIN PRESS PRESS MULTIF DIVIDE FIXTUR	SURE DROF SURE DROF SURE DROF PLY TO CO S BY EQUIVA RE (FEET)	P OF ELEVATION THROUGH 4' AVAILABLE F NVERT FROM ALENT LENGT X 1.5 (FITTING	ON DIFFERENCE ' WATER METE FOR PIPING SY PSI/FOOT TO TH OF PIPING IS LOSS))	CE FROM SERVI E IN FEET X 0.434 ER. (STEM LOSSES OPENI/100 FEET.	CE CONNECTION 4 = PSI. (PSI) C CRITICAL	

MECHANICAL RENOVATION NOTES:

- THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL. EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS. EXISTING BUILDING DOCUMENTS, AND STAFF. VERIFY EXISTING CONDITIONS AND REPORT ANY
- CONFLICTS BEFORE PROCEEDING. 2. NOT ALL EXISTING DUCTWORK AND PIPING IS SHOWN. VERIFY EXISTING CONDITIONS BEFORE STARTING WORK. NOTIFY ENGINEER OF ANY CONFLICTS WITH NEW WORK. 3. FIELD VERIFY THE AVAILABLE CLEARANCES FOR DUCTWORK AND PIPING BEFORE
- 4. EACH CONTRACTOR SHALL FIELD VERIFY ACCESSIBILITY TO THE AREA OF HIS WORK AND SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO BIDDING IF OTHER UTILITIES ARE

FABRICATION. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING FIELD

- REQUIRED TO BE REMOVED OR RELOCATED TO ALLOW ACCESS TO HIS AREA OF WORK. 5. WHERE EXISTING MECHANICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, PIPING, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT
- CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING MECHANICAL SYSTEMS TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK. 6. PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING
- CONSTRUCTION. 7. OBTAIN PERMISSION FROM OWNER BEFORE SHUTTING DOWN ANY SYSTEM FOR ANY REASON. MAINTAIN SERVICE TO ALL COMPONENTS THAT ARE TO REMAIN UNTIL NEW SYSTEMS ARE
- 8. MAINTAIN EXISTING SYSTEM IN SERVICE UNTIL NEW SYSTEM IS COMPLETE AND READY FOR TIE IN AND SWITCHOVER. DRAIN SYSTEM ONLY TO MAKE SWITCHOVERS AND CONNECTIONS.
- OBTAIN PERMISSION FROM OWNER BEFORE PARTIALLY OR COMPLETELY DRAINING SYSTEM. MAKE CHANGEOVER TO NEW SYSTEMS WITH MINIMUM OUTAGE. 9. DISCONNECT AND REMOVE MECHANICAL DEVICES AND EQUIPMENT SERVING EQUIPMENT THAT HAS BEEN REMOVED.

PLUMBING FIXTURE ROUGH-IN SCHEDULE

NOTES: 1. SANITARY RISER UP IN WALL TO FIXTURE SHALL BE A MINUMUM OF 2". 2. 1/2" CW AND HW APPLIES ONLY TO THE FINAL VERTICAL RISE-DROP TO EACH FIXTURE, BRANCH PIPING TO VERTICAL RISE-DROP SHALL BE A MINIMUM OF 3/4" UNLESS NOTED OTHERWISE. 3. SIZES SHOWN ARE MINIMUMS. SIZES SHOWN ON THE DRAWING THAT ARE LARGER THAN THE SIZES LISTED IN THE SCHEDULE SHALL DICTATE THE ROUGH-IN SIZE.

		U	ICIAIL IIIL N	COGIT-IN SIZE.			
FIXTURE DESCRIPTION	DOMESTIC CW (NOTE 3)	DOMESTIC HW (NOTE 3)	DOMESTIC TW (NOTE 3)	SANITARY (NOTE 3)	VENT (NOTE 3)	REMARKS	
FLOOR DRAIN/FLOOR SINK	-	-	-	3"	1 1/2"	-	
LAVATORY	-	-	1/2"	1 1/4"	1 1/4"	NOTE 1 & 2	
SERVICE SINK	3/4"	3/4"	-	2"	1 1/2"	-	
URINAL	3/4"	-	-	2"	1 1/2"	-	
WATER CLOSET	1 1/4"	-	-	4"	2"	-	

WATER CALCULATION WORKSHEET IMUM PRESSURE AT CONNECTION TO CITY MAIN OR WELL TANK (PSIG) SSURE DROP IN 170 FEET OF 8" PIPE FROM SERVICE CONNECTION TO ER AT 228 GPM CALCULATED BUILDING DEMAND PER STATE CODE. IDUAL PRESSURE NEEDED AT CRITICAL FIXTURE AT MAXIMUM ELEVATION. SSURE DROP OF ELEVATION DIFFERENCE FROM SERVICE CONNECTION TO 「ING FIXTURE. ELEVATION DIFFERENCE IN FEET X 0.434 = PSI SSURE DROP THROUGH 4" WATER METER. SSURE DROP AVAILABLE FOR PIPING SYSTEM LOSSES (PSI) TIPLY TO CONVERT FROM PSI/FOOT TO PSI/100 FEET. IDE BY EQUIVALENT LENGTH OF PIPING FROM METER TO CRITICAL JRE (FEET) X 1.5 (FITTING LOSS))

PLUMBING GENERAL NOTES:

- 1. REFER TO THE PLUMBING ROUGH-IN SCHEDULE FOR THE SIZES OF BRANCH PIPES TO PLUMBING FIXTURES.
- 2. REFER TO PLUMBING MATERIAL LIST AND ROUGH-IN SCHEDULE.

MECHANICAL GENERAL NOTES:

- THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL. 1. DRAWINGS SHOWING LOCATIONS OF FOUIPMENT, DUCTWORK, PIPING, FTC, ARE DIAGRAMMATIC AND MAY NOT ALWAYS REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS
- 2. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM
- ARCHITECTURAL, STRUCTURAL, SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES. 3. COORDINATE ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES FOR ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OR
- EQUIPMENT ORDERS. 4. REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS. 5. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO
- COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR EXPENSE
- 6. EACH CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF DESIGN. 7. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATIONS OF ALL CEILING
- 8. EACH CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS TO WALLS, FLOORS, CEILINGS, AND ROOFS. THE CONTRACTOR WHOSE WORK CAUSES DAMAGE IS RESPONSIBLE FOR PATCHING TO MATCH ORIGINAL CONSTRUCTION, FIRE RATING, AND FINISH. 9. IN AREAS WITH DRYWALL CEILINGS COORDINATE LOCATIONS OF ACCESS PANELS WITH THE GC FOR ACCESS TO VALVES, DUCTWORK ACCESSORIES, DAMPERS, ETC. COORDINATE PANEL

MOUNTED DEVICES, OTHER THAN SPRINKLERS.

- TYPE AND COLOR WITH ARCHITECT. NOTIFY THE GC OF THE REQUIRED ACCESS PANELS PRIOR 10. CAULK ALL PIPE AND DUCT PENETRATIONS OF FULL HEIGHT NON-FIRE RATED WALL, PARTITION, FLOOR, AND ROOF ASSEMBLIES. THIS IS ESSENTIAL TO PREVENT NOISE TRANSMISSION FROM ONE ROOM TO ANOTHER AND TO PROVIDE THE DESIRED NC LEVELS WITHIN ROOMS.
- 11. WHERE PIPES AND DUCTS ARE SHOWN TO PENETRATE FLOORS, PROVIDE SLEEVED OPENINGS WITH THE TOP EDGE RAISED ABOVE FLOOR SURFACE IN ACCORDANCE WITH ALL RELEVANT SPEC SECTIONS. SEAL SLEEVE PERIMETER TO BE WATERTIGHT.
- 12. EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY BETWEEN DIFFERENT MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING, DUCTWORK, ETC. 13. DO NOT BLOCK TUBE PULL OR EQUIPMENT SERVICE CLEARANCES.
- 14. MAINTAIN MINIMUM 3'-6" CLEARANCE IN FRONT OF ALL ELECTRICAL PANELS, MOTOR STARTERS, SWITCHES, AND DISCONNECTS. 15. DO NOT SUPPORT EQUIPMENT, PIPING, OR DUCTWORK FROM METAL DECKING OR OTHER NON-STRUCTURAL BUILDING ELEMENTS. ANCHORS EMBEDDED IN CONCRETE SHALL BE CRACKED

PLUMBING SHEET INDEX

COVER SHEET - PLUMBING PARTIAL DEMOLITION FLOOR PLANS - PLUMBING PARTIAL FLOOR PLANS - PLUMBING P200 RISER DIAGRAMS - PLUMBING

CONCRETE APPROVED IN ACCORDANCE WITH SPECIFICATIONS.

FAO 1:4:	PLUMBING FIXTURE SO	_
L-1	DESCRIPTION LAVATORY - ACCESSIBLE, WALL MOUNTED, WHITE	MANF. & MODEL LAVATORY -
L-1	VITREOUS CHINA, 20"x18", 4" HIGH CONTOURED BACKSPLASH, SINGLE FAUCET HOLE, DRILLED FOR CONCEALED ARM CARRIER.	KOHLER (K-2007) LAVATORY TRIM - KOHLER (K-13462)
	LAVATORY TRIM - LAVATORY TRIM - SENSOR ACTIVATED MIXING FAUCET, HARD-WIRED, BRASS CONSTRUCTION, CHROME-PLATED FINISH, CONVENTIONAL SPOUT WITH VANDAL RESISTANT OUTLET, SINGLE HOLE, PERFORATED GRID STRAINER WITH 1-1/4" 17 GAUGE TAILPIECE, SOLID BRASS SOLENOID WITH BUILT-IN FILTER, SOLID BRASS THERMOSTATIC MIXING VALVE MEETING ASSE 1070 REQUIREMENTS WITH ADJUSTABLE TEMPERATURE LIMIT STOP AND INTEGRAL CHECK VALVES, WATERPROOF CONNECTORS AND CABLE, UL APPROVED TRANSFORMER.	INSULATION KIT - TRUEBRO (LAV-GUARD), BROCAR PRODUCTS (TRAP WRAP), MCGUIRE (PROWRAP), PLUMBEREX (PRO-EXTREME)
	ELECTRICAL REQUIREMENTS - 120 VAC INPUT	
	MOUNT CONTROLS AND TRANSFORMER FOR EAST TOILET ROOM IN PLUMBING CHASE BETWEEN TOILET ROOMS. MOUNT CONTROLS AND TRANSFORMER FOR WEST TOILET ROOM IN EXISTING ACCESS PANEL CONTAINING MIXING VALVE. PROVIDE TRANSFORMER WITH CABLE EXTENSIONS (AS REQUIRED) OR PLUG-IN TRANSFORMER. MOUNT TRANSFORMER IN ACCESSIBLE PIPE CHASE. SELECT TRANSFORMER TO SERVE MAXIMUM NUMBER OF ELECTRONIC VALVES TO REDUCE AMOUNT OF TRANSFORMERS.	
	MAXIMUM FLOW TO BE 0.5 GPM IN COMPLIANCE WITH ENERGY POLICY ACT OF 2005 AND ASME/ANSI STANDARD A112.18.1M.FAUCET SHALL COMPLY WITH FEDERAL ACT S.3874. PROVIDE RESTRICTIVE DEVICE AS REQUIRED.	
	INSULATION KIT - PRE-MANUFACTURED FOR P-TRAP, STOP VALVES AND SUPPLY LINES.	
	ACCESSORIES - QUARTER-TURN 3/8" CHROME PLATED HEAVY BRASS ANGLE SUPPLY LOOSE KEY STOPS, CHROME PLATED SOFT COPPER SUPPLY LINES, DRAIN AND OFFSET TAILPIECE, 1-1/4" 20 GAUGE CAST BRASS P-TRAP, SUPPORT CARRIER.	
	MOUNT LAVATORY WITH SUPPORT CARRIER BOLTED SECURELY TO FLOOR. TOP OF RIM SHALL BE AT 34" ABOVE FLOOR IN COMPLIANCE WITH LATEST ADA STANDARD. PROVIDE 29" MINIMUM CLEARANCE FROM FLOOR TO BOTTOM OF APRON IN COMPLIANCE WITH LATEST ANSI A117.1 AND ADA STANDARDS. ARMAFLEX WITH TAPE IS NOT ACCEPTABLE IN LIEU OF INSULATION KIT.	
MV-1	MIXING VALVE - POINT-OF-USE ANTI-SCALD THERMOSTATIC MIXING VALVE ARRANGEMENT FOR TEMPERED WATER CONTROL, ALL BRONZE/BRASS CONSTRUCTION, ROUGH FINISH, UNION/THREADED INLETS WITH CHECK STOPS/STRAINERS.	LEONARD (170-LF/270-LF/370-LF), ACORN CONTROLS (ST7069), APOLLO (34BLF), BRADLEY (S59 SERIES), LAWLER (310/570), POWERS (SERIES LFLM495), SYMMONS (MAXLINE SERIES), WATTS (LFMMV), WILKINS (ZW1070XL)
	RATED FOR 1.5 GPM OUTPUT MAXIMUM AT 5 PSI DIFFERENTIAL AND 0.5 GPM OUTPUT MINIMUM. UNIT TO MIX 120 DEGREE F HOT WATER SUPPLY AND 40 DEGREE F COLD WATER SUPPLY FOR 110 DEGREE F OUTLET.	
	UNIT SHALL BE ASSE 1070 LISTED AND APPROVED. VALVE SHALL COMPLY WITH FEDERAL ACT S.3874.	
SS-1	SERVICE SINK - SINGLE TUB, MOLDED-STONE CONSTRUCTION, FLOOR [WALL] MOUNTED, 23"x22", 14" DEEP, DRAINING SOAP TRAY, [WHITE BAKED ENAMEL SELF-LEVELING LEGS WITH FLOOR ANCHORS][HEAVY-DUTY WALL BRACKET AND ASSOCIATED HANGERS], DRAIN OPENING.	SINK - FIAT (FL-1)(L-1), SWAN (MF-1F)(MF-1W) TRIM - DELTA (28C2393), AMERICAN STANDARD (8344.012), MOEN (8124), SPEAKMAN (SC-5812), SYMMONS (S-2490), ZURN (Z841M1-XL)
	TRIM - EXPOSED TWO HANDLE MIXING FAUCET, BRASS CONSTRUCTION, CHROME-PLATED FINISH, SINGLE WING HANDLES, 1/4 TURN CERAMIC DISC CARTRIDGE, 3/4" HOSE THREAD SPOUT WITH SCREW TYPE VACUUM BREAKER SIMILIAR TO WATTS 8A, WALL BRACE, PAIL HOOK, CHECK STOPS OR INLINE CHECK VALVES TO PREVENT THERMAL CROSSOVER. FAUCET SHALL COMPLY WITH FEDERAL ACT S.3874.	
	ACCESSORIES - REMOVABLE STRAINER PLATE AND NEOPRENE STOPPER, 1-1/2" 17 GAUGE CHROME PLATED BRASS TAILPIECE, 1-1/2" CAST BRASS P-TRAP, QUARTER-TURN 3/8" CHROME PLATED BRASS ANGLE SUPPLIES WITH ILOOSE KEYI STOPS, INLINE CHECK	

SUPPLIES WITH [LOOSE KEY] STOPS, INLINE CHECK VALVES TO PREVENT THERMAL CROSSOVER, CHROME

PLATED SOFT COPPER SUPPLY LINES.

TAG NAME	DESCRIPTION	MANF. & MODEL
UR-1	URINAL - ACCESSIBLE, FLOOR MOUNTED, WHITE VITREOUS CHINA, FLUSH VALVE TYPE, WASHOUT ACTION, LOW CONSUMPTION, 3/4" TOP SPUD, 2" OUTLET.	URINAL - KOHLER (K-4920-T) FLUSH VALVE - ZURN (ZEMS6003AV), SLOAN (ROYAL 186 ES-S), AMERICAN STANDARD (6062.101), DELANY (1351),
	FLUSH VALVE - EXPOSED, SENSOR OPERATION, HARD WIRED, 1.0 GALLON PER FLUSH, 11-1/2" ROUGH-IN, CHROME-PLATED, 3/4" I.P.S. SCREWDRIVER STOP-CHECK VALVE WITH VANDAL RESISTANT CAP, HIGH BACK PRESSURE VACUUM BREAKER, NON-HOLD-OPEN HANDLE, ADJUSTABLE TAILPIECE, SPUD COUPLING AND FLANGE, WALL FLANGE WITH SET SCREW, MANUAL OVER-RIDE, RANGE ADJUSTMENT SCREW, BEAM DEFLECTOR, CHROME-PLATED COVER PLATE WITH TAMPER-PROOF SCREWS, TRANSFORMER AND LOW VOLTAGE WIRING, TRANSFORMER CAPABLE OF OPERATING UP TO 10 UNITS, LOW VOLTAGE WIRING FROM TRANSFORMER TO EACH FLUSH VALVE, CHLORAMINE RESISTANT MATERIALS, 3-YEAR WARRANTY.	HYDROTEK (H-8000C), MOEN (8312AC10)
	ELECTRICAL REQUIREMENTS - 120VAC INPUT	
	MOUNT CONTROLS/TRANSFORMER FOR SENSOR ACTIVATED IN PLUMBING CHASE BETWEEN TOILET ROOMS IN WEST TOILET ROOM. EAST TOILET ROOM CONTROLS/TRANSFORMER REMAIN IN SAME LOCATION AS NOTED ON PLUMBING PLAN.	
UR-2	URINAL - WALL MOUNTED, WHITE VITREOUS CHINA, FLUSH VALVE TYPE, WASHOUT ACTION, LOW CONSUMPTION,	URINAL - KOHLER (K-4991-ET)
	ELONGATED RIM, EXTENDED SIDE SHIELDS, 3/4" TOP SPUD, 2" OUTLET.	FLUSH VALVE - ZURN (ZEMS6003AV), SLOAN (ROYAL 186 ES-S), AMERICAN STANDARD (6062.101), DELANY (1351), HYDROTEK (H-8000C), MOEN (8312AC10)
	FLUSH VALVE - EXPOSED, SENSOR OPERATION, HARD WIRED, 1.0 GALLON PER FLUSH, 11-1/2" ROUGH-IN, CHROME-PLATED, 3/4" I.P.S. SCREWDRIVER STOP-CHECK VALVE WITH VANDAL RESISTANT CAP, HIGH BACK PRESSURE VACUUM BREAKER, NON-HOLD-OPEN HANDLE, ADJUSTABLE TAILPIECE, SPUD COUPLING AND FLANGE, WALL FLANGE WITH SET SCREW, MANUAL OVER-RIDE, RANGE ADJUSTMENT SCREW, BEAM DEFLECTOR, CHROME-PLATED COVER PLATE WITH TAMPER-PROOF SCREWS, TRANSFORMER AND LOW VOLTAGE WIRING, TRANSFORMER CAPABLE OF OPERATING UP TO 10 UNITS, LOW VOLTAGE WIRING FROM TRANSFORMER TO EACH FLUSH VALVE, CHLORAMINE RESISTANT MATERIALS, 3-YEAR WARRANTY.	TITUROTER (IF-6000C), WOLN (6312AC10)
	ACCESSORIES - SUPPORT CARRIER WITH TOP AND BOTTOM BEARING PLATES.	
	ELECTRICAL REQUIREMENTS - 120VAC INPUT	
	MOUNT WITH CARRIER BOLTED SECURELY TO FLOOR. TOP OF BOWL RIM SHALL BE AT 22" ABOVE FLOOR.	
	MOUNT CONTROLS/TRANSFORMER FOR SENSOR ACTIVATED IN PLUMBING CHASE BETWEEN TOILET ROOMS IN WEST TOILET ROOM. EAST TOILET ROOM CONTROLS/TRANSFORMER REMAIN AS NOTED ON PLUMBING PLAN.	
WC-1	WATER CLOSET - WALL MOUNTED, FLUSH VALVE TYPE, WHITE VITREOUS CHINA, SIPHON JET, WATER SAVING,	WATER CLOSET - KOHLER (K-4325-0)
	ELONGATED BOWL, 1-1/2" TOP SPUD.	FLUSH VALVE - KOHLER (K-13516-CP)
	FLUSH VALVE - FLUSH VALVE - EXPOSED, MANUAL OPERATION, 1.6 GALLONS PER FLUSH, 11-1/2" ROUGH-IN, CHROME PLATED, 1" I.P.S. SCREWDRIVER STOP-CHECK VALVE WITH VANDAL RESISTANT CAP, HIGH BACK PRESSURE VACUUM BREAKER, NON-HOLD-OPEN HANDLE, ADJUSTABLE TAILPIECE, SPUD COUPLING AND FLANGE, WALL FLANGE WITH SET SCREW, CHLORAMINE RESISTANT MATERIALS, ADA COMPLIANT, 3 YEAR WARRANTY.	SEAT - KOHLER (K-4731-C)
	SEAT - WHITE, EXTRA HEAVY, OPEN FRONT, INJECTION MOLDED SOLID ANTI-MICROBIAL PLASTIC, SELF-SUSTAINING HINGE, STAINLESS STEEL OR PLATED STEEL POSTS AND NUTS.	
	ACCESSORIES - WATER CLOSET SUPPORT CARRIER RATED FOR 500 LBS.	
	MOUNT WATER CLOSET WITH CARRIER BOLTED SECURELY TO FLOOR. TOP OF SEAT SHALL BE AT 16"-17" ABOVE FINISHED FLOOR (VERIFY EXACT MOUNTING HEIGHT WITH MANUFACTURER). VERIFY EQUIPMENT REQUIREMENTS AND ROUGH-IN LOCATIONS.	

PLUMBING FIXTURE SCHEDULE

TAG NAME	DESCRIPTION	MANF. & MODEL
WC-2	WATER CLOSET - ACCESSIBLE, WALL MOUNTED, FLUSH VALVE TYPE, WHITE VITREOUS CHINA, SIPHON JET, WATER	WATER CLOSET - KOHLER (K-4325-0)
	SAVING, ELONGATED BOWL, 1-1/2" TOP SPUD.	FLUSH VALVE - KOHLER (K-13516-CP)
	FLUSH VALVE - FLUSH VALVE - EXPOSED, MANUAL OPERATION, 1.6 GALLONS PER FLUSH, 11-1/2" ROUGH-IN, CHROME PLATED, 1" I.P.S. SCREWDRIVER STOP-CHECK VALVE WITH VANDAL RESISTANT CAP, HIGH BACK PRESSURE VACUUM BREAKER, NON-HOLD-OPEN HANDLE, ADJUSTABLE TAILPIECE, SPUD COUPLING AND FLANGE, WALL FLANGE WITH SET SCREW, CHLORAMINE RESISTANT MATERIALS, ADA COMPLIANT, 3 YEAR WARRANTY.	SEAT - KOHLER (K-4731-C)
	SEAT - WHITE, EXTRA HEAVY, OPEN FRONT, INJECTION MOLDED SOLID ANTI-MICROBIAL PLASTIC, SELF-SUSTAINING HINGE, STAINLESS STEEL OR PLATED STEEL POSTS AND NUTS.	
	ACCESSORIES - WATER CLOSET SUPPORT CARRIER RATED FOR 500 LBS.	
	MOUNT WATER CLOSET WITH CARRIER BOLTED SECURELY TO FLOOR. TOP OF SEAT SHALL BE AT 17"-19" ABOVE FINISHED FLOOR (VERIFY EXACT MOUNTING HEIGHT WITH MANUFACTURER). FLUSH HANDLE SHALL BE LOCATED ON THE WIDE SIDE OF THE TOILET STALL AND BE AT 12" (MAXIMUM) ABOVE BOWL RIM AND OPERATE WITH NO GREATER THAN 5 LB FORCE IN COMPLIANCE WITH LATEST ADA STANDARDS. VERIFY EQUIPMENT REQUIREMENTS AND ROUGH-IN LOCATIONS.	
WCO-1	WALL CLEANOUT - END CAP, CAST IRON ACCESS BODY, GAS AND WATERTIGHT BRONZE OR BRASS THREADED PLUG, ROUND STAINLESS STEEL ACCESS COVER, EXTENDED MACHINE SCREW.	ZURN (Z-1441), SMITH (4422), WADE (W-8480-R/8550), JOSAM (58600-CO), WATTS (CO-380-RD)
WHA-1	WATER HAMMER ARRESTER - BELLOWS TYPE, PRE-CHARGED, ALL LEAD FREE STAINLESS STEEL CONSTRUCTION, ASSE 1010 APPROVED, PDI CERTIFIED, RATED FOR 1-11 FIXTURE UNITS.	ZURN (Z1700), JR SMITH (5005-5050), WADE (W5-100), JOSAM (75000 SERIES), WATTS (SS), MIFAB (WHB)
	INSTALL PER MANUFACTURER'S RECOMMENDATIONS.	
WHA-2	WATER HAMMER ARRESTER - BELLOWS TYPE, PRE-CHARGED, ALL LEAD FREE STAINLESS STEEL CONSTRUCTION, ASSE 1010 APPROVED, PDI CERTIFIED, RATED FOR 12-32 FIXTURE UNITS.	ZURN (Z1700), JR SMITH (5005-5050), WADE (W5-100), JOSAM (75000 SERIES), WATTS (SS), MIFAB (WHB)
	INSTALL PER MANUFACTURER'S RECOMMENDATIONS.	



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Monona Terrace Roof Garden Restrooms Alteration

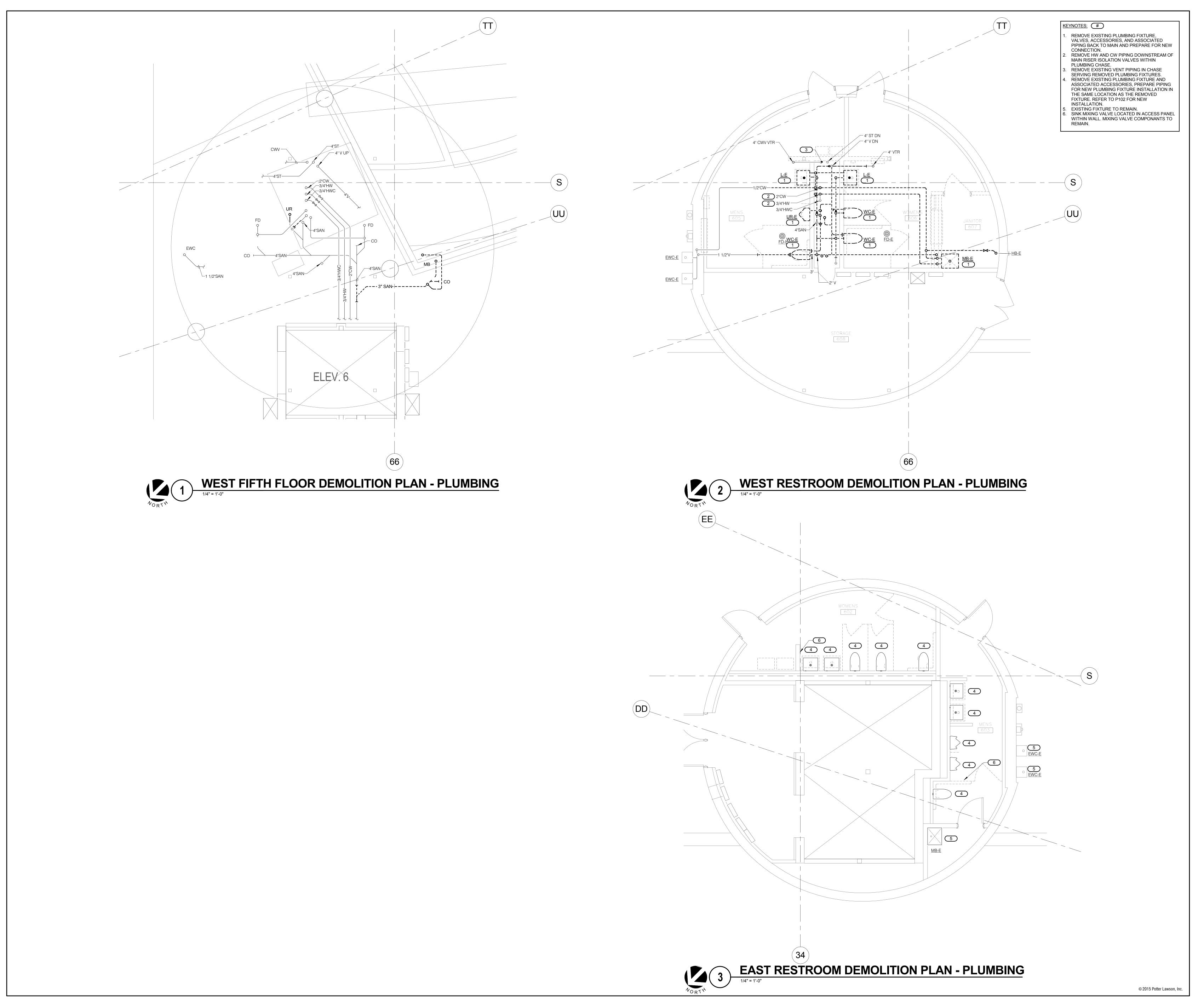
Madison, Wisconsin

Project # 2014.41.00

Date	Issuance/Revisions	Syn

COVER SHEET -PLUMBING

08/14/15 BID DOCUMENTS



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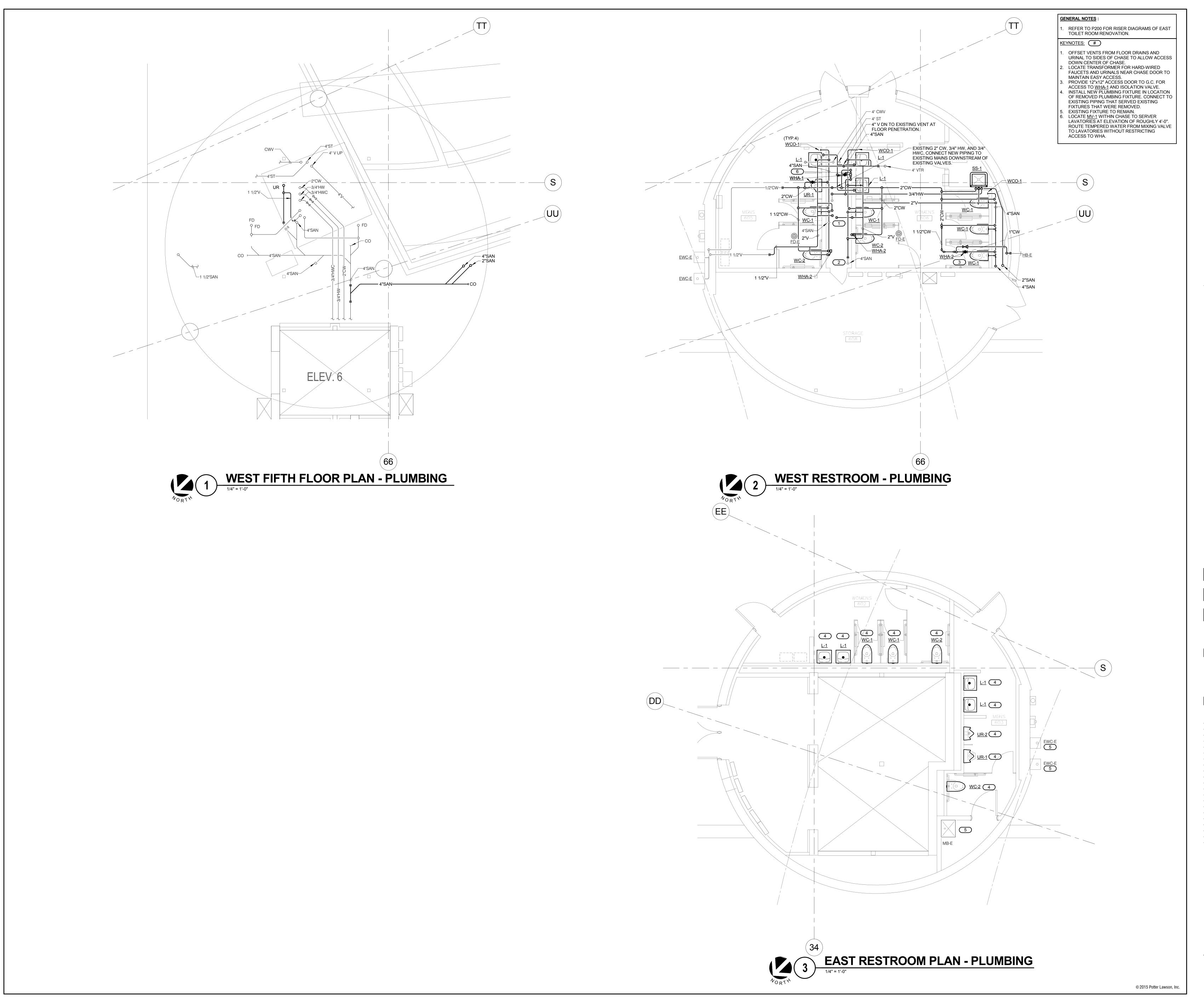
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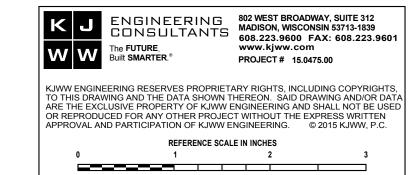
Madison, Wisconsin

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Date Issuance/Revisions Symbol

PARTIAL
DEMOLITION
FLOOR PLANS PLUMBING





Notes:

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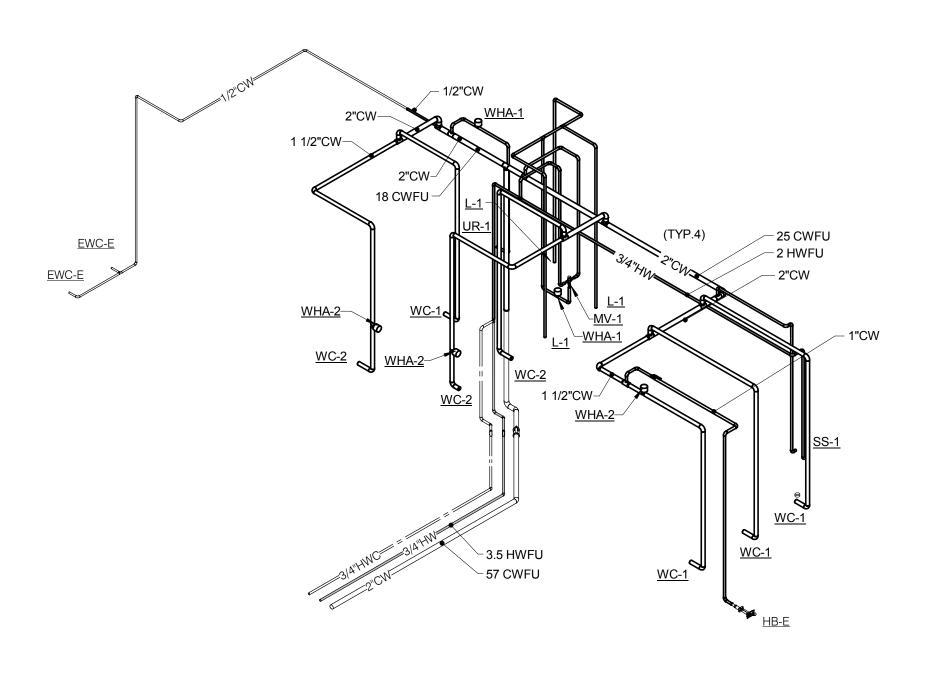
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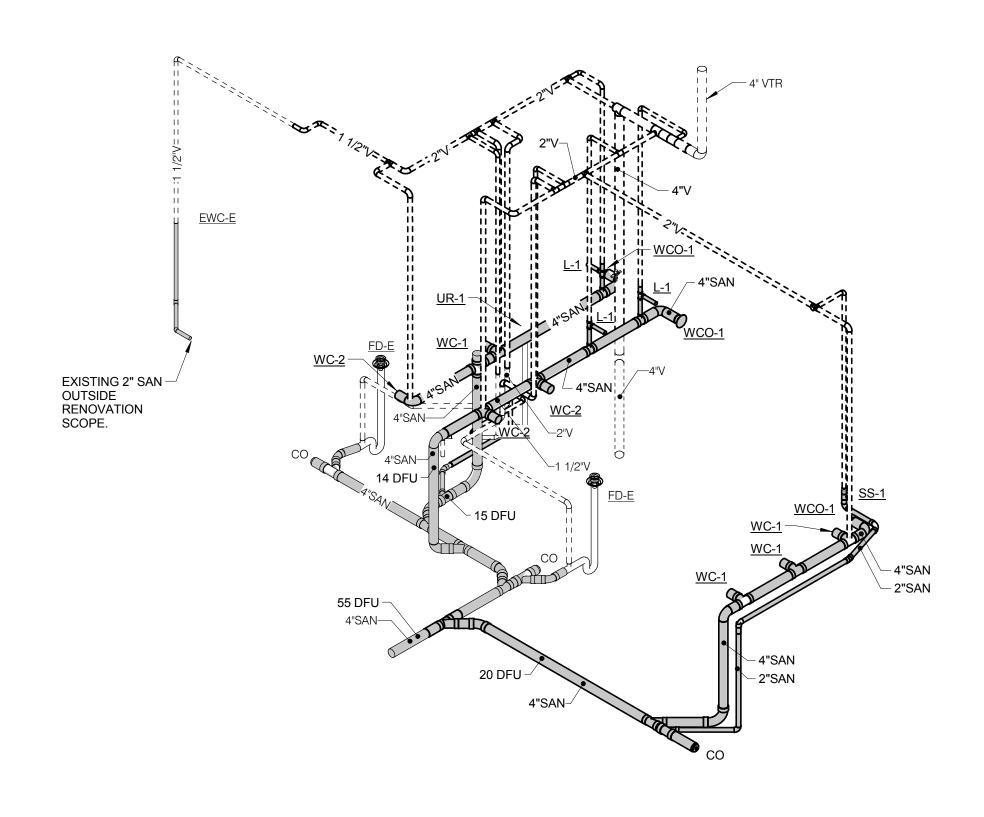
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PARTIAL FLOOR PLANS -PLUMBING

P102





DOMESTIC RISER DIAGRAM - WEST RESTROOM - PLUMBING
NO SCALE

2 SAN/VENT RISER DIAGRAM - WEST RESTROOM - PLUMBING
NO SCALE



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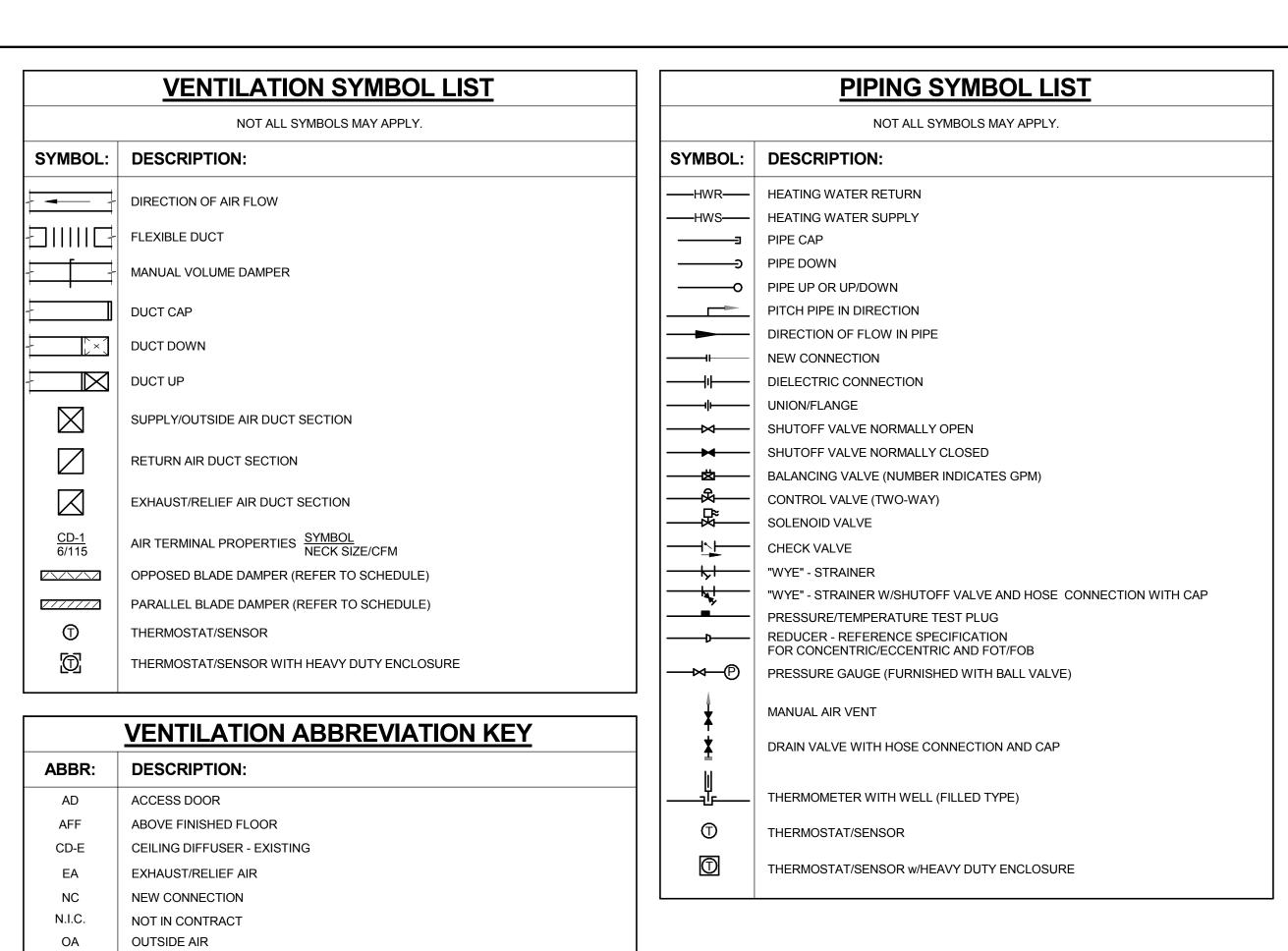
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08/14/15 BID DOCUMENTS

RISER DIAGRAMS -

PLUMBING



RETURN AIR SUPPLY AIR TRANSFER DUCT

TYPICAL

TAG NAME | CONFIGURAT

HORIZONTAL

HORIZONTAL

UNLESS NOTED OTHERWISE

TYP

UNO

CAB-2

	CONTRACTOR ABBREVIATION KEY									
ABBR:	DESCRIPTION:									
E.C.	ELECTRICAL CONTRACTOR									
F.P.C.	FIRE PROTECTION CONTRACTOR									
G.C.	GENERAL CONTRACTOR									
M.C.	MECHANICAL CONTRACTOR									
P.C.	PLUMBING CONTRACTOR									

FIRE / SMOKE BARRIER DESIGNATIONS

THE LINE TYPES SHOWN ARE FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY RATINGS WITH THE LATEST SET OF ARCHITECTURAL PLANS AND FURNISH ALL MATERIALS REQUIRED TO COMPLY WITH THOSE RATINGS WHETHER SHOWN OR NOT. ALL FLOOR ASSEMBLIES SHALL BE DESIGNATED AS 2 HOUR FIRE, BARRIER(S), UNLESS NOTED OTHERWISE ON THE PLANS. RATINGS WERE ACQUIRED FROM THE ARCHITECTURAL PLANS DATED

MECHANICAL SHEET INDEX

MECHANICAL COVER SHEET PARTIAL FLOOR PLANS - MECHANICAL

										CA	BINET HEA	TER SCH	HEDULE - HO	T WATER						
									CABINET					ELECT	RICAL					
						MAX									DISCO	ONNECT	CONTROLLER/ STARTER			
	NOMINAL						CONTROL								BY	TYPE				
ATION	CFM	MBH	GPM	EWT °F	LWT °F	HD	TYPE	HEIGHT	WIDTH	LENGTH	FAN HP	RPM	VOLTAGE	PHASES	(NOTE A)	(NOTE B)	BY (NOTE A)	MANUFACTURER	MODEL	NOTES:
AL	320	31	2.1	180	150	8.00	1/M000	10"	41"	30"	0.05	1050	115	1	MFR	NF	M.C.	TRANE	FFE040	COORDINATE COLOR SELECTION WITH ARCHITECT.
٩L	320	31	2.1	180	150	8.00	1/M000	10"	41"	30"	0.05	1050	115	1	MFR	NF	M.C.	TRANE	FFE040	COORDINATE COLOR SELECTION WITH ARCHITECT.

												FAN SO	CHEDULE								
									VIBRATION	ISOLATION	I			ELECT	ΓRICAL						
															DISCO	NNECT		OLLER/ RTER			
			S.P. IN.	FAN RPM	DRIVE	MAX. AMCA	BACKDRAFT	CURB TYPE							BY	TYPE	BY	TYPE			
T	TAG NAME	CFM	W.C.	(NOTE F)	TYPE	SONES	DAMPER TYPE	(NOTE G)	TYPE	DEFL.	BHP	MHP	VOLTAGE	PHASES	(NOTE A)	(NOTE B)	(NOTE A)	(NOTE C)	MANUFACTURER	MODEL	NOTES:
	EF-1	675	0.50	1085	BELT	8	MOD-1	NA	SPRING	0.75"	0.18	0.25	115	1	MFR	NF	M.C.	FV	COOK	SQI	
	EF-2	525	0.50	980	BELT	7	MOD-3	NA	SPRING	0.75"	0.14	0.25	115	1	MFR	NF	EXISTING	FV	COOK	SQI	

									MOTOR OPERA	TED DAMPER S	CHEDULE	
	S	IZE	С	FM						POWER	POSITIVE POSITION	
					BLADE	BLADE		ACTUATOR	ACTUATOR	FAILURE	FEEDBACK	
TAG NAME	WIDTH	HEIGHT	MAX.	MIN.	CONFIGURATION	ORIENTATION	INSULATED	TYPE	STYLE	POSITION	REQUIRED	NOTES
MOD-1	14	14	675	0	PARALLEL	HORIZONTAL	Yes	ELECTRIC	TWO POSITION	NORMALLY	No	
										CLOSED		
MOD-2	14	14	675	0	PARALLEL	HORIZONTAL	Yes	ELECTRIC	TWO POSITION	NORMALLY	No	
										CLOSED		
MOD-3	14	14	525	0	PARALLEL	HORIZONTAL	Yes	ELECTRIC	TWO POSITION	NORMALLY	No	
										CLOSED		

					GRILLES RE	GISTERS & DIFF	USERS SCHEDI	JLE		
	NOTE	S: 1. CONTRACTOR SHALL DET	FRMINE PRO	PER MARGIN STYLE TO MA	TCH CEILING C	ONSTRUCTION	2. ALL RUN C	UT DUCTWORK TO DIFFU	SERS SHALL BE	NECK SIZE UNLESS OTHERWISE NOTED.
					TOTA OLILING O	VOLUME	ZI ALL ROR C			THE STATE OF THE S
TACNAME	MATERIAL	CONFIGURATION	MARGIN	INLET SIZE (IN.) (NOTE	FACE SIZE	DAMPER	FINICIA	MANUEACTURER	MODEL	NOTES
TAG NAME	MATERIAL	CONFIGURATION	(NOTE 1)	2)	(IN.)	REQUIRED	FINISH	MANUFACTURER	MODEL	NOTES
ER-1	STEEL	35 DEGREE DEFLECTION	1 1/4"	SEE DWG.	INLET +2	YES	WHITE	TITUS	350R	
TG-1	STEEL	PERFORATED FACE	LAY-IN		24x24	NO	WHITE	TITUS	PAR	
TG-2	STEEL	35 DEGREE DEFLECTION	1 1/4"	SEE DWG.	INLET +2	NO	WHITE	TITUS	350R	

								UN	IIT HEATI	ER SCHEDUL	.E - HOT WA	ATER						
											EL	ECTRICAL						
												DISCO	NNECT	CONTROLLER/ STARTER				
TAG NAME	CONFIGURATION	CFM	МВН	GPM	EWT °F	LWT °F	W.P.D. FT. HEAD	НР	RPM	VOLTAGE	PHASES	BY (NOTE A)	TYPE (NOTE B)	BY (NOTE A)	CONTROL	MANUFACTURER	MODEL	NOTES
UH-1	HORIZONTAL	210	6.8	0.8	180	150	1.0	0.05	1350	115	1	MFR	NF	M.C.	2/M000	TRANE	S-A08	

MECHANICAL GENERAL NOTES:

- THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL. 1. DRAWINGS SHOWING LOCATIONS OF EQUIPMENT, DUCTWORK, PIPING, ETC. ARE DIAGRAMMATIC AND MAY NOT ALWAYS REFLECT EXACT INSTALLATION CONDITIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF DUCTWORK, PIPING, EQUIPMENT, ETC., AND MAY NOT INCLUDE ALL OFFSETS AND FITTINGS REQUIRED FOR COMPLETE INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION AND THE WORK OF OTHERS WILL PERMIT.
- 2. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SUBMITTALS, AND OTHER APPROPRIATE DRAWINGS OR PHYSICALLY AT SITE. REVIEW ALL DRAWINGS, INCLUDING THOSE OF OTHER TRADES. 3. COORDINATE ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, CODE COMPLIANCE, AND TO VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF NECESSARY CLEARANCES FOR ALL TRADES. BRING ANY INTERFERENCES OR CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH FABRICATION OR EQUIPMENT ORDERS.
- REASONABLE ACCOMMODATIONS IN LAYOUT AND POSITIONING TO PROVIDE PROPER ACCESS. ANY CHANGES REQUIRED TO ELIMINATE CONFLICTS OR THAT RESULT FROM A FAILURE TO COORDINATE SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COST OR EXPENSE TO OTHERS. 6. EACH CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ELECTRICAL CHANGES REQUIRED FOR EQUIPMENT PROPOSED THAT DIFFERS FROM THE BASIS OF DESIGN. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATIONS OF ALL CEILING

REVIEW SPACE REQUIREMENTS OF EQUIPMENT SPECIFIED OR SUBSTITUTED AND MAKE

- MOUNTED DEVICES, OTHER THAN SPRINKLERS. 8. EACH CONTRACTOR IS RESPONSIBLE FOR DAMAGE CAUSED BY THEIR ACTIONS TO WALLS, FLOORS, CEILINGS, AND ROOFS. THE CONTRACTOR WHOSE WORK CAUSES DAMAGE IS RESPONSIBLE FOR PATCHING TO MATCH ORIGINAL CONSTRUCTION, FIRE RATING, AND FINISH. 9. IN AREAS WITH DRYWALL CEILINGS COORDINATE LOCATIONS OF ACCESS PANELS WITH THE GC FOR ACCESS TO VALVES, DUCTWORK ACCESSORIES, DAMPERS, ETC. COORDINATE PANEL TYPE AND COLOR WITH ARCHITECT. NOTIFY THE GC OF THE REQUIRED ACCESS PANELS PRIOR
- 10. CAULK ALL PIPE AND DUCT PENETRATIONS OF FULL HEIGHT NON-FIRE RATED WALL PARTITION. FLOOR, AND ROOF ASSEMBLIES. THIS IS ESSENTIAL TO PREVENT NOISE TRANSMISSION FROM ONE ROOM TO ANOTHER AND TO PROVIDE THE DESIRED NC LEVELS WITHIN ROOMS. 11. WHERE PIPES AND DUCTS ARE SHOWN TO PENETRATE FLOORS, PROVIDE SLEEVED OPENINGS WITH THE TOP EDGE RAISED ABOVE FLOOR SURFACE IN ACCORDANCE WITH ALL RELEVANT
- SPEC SECTIONS. SEAL SLEEVE PERIMETER TO BE WATERTIGHT. 12. EQUIPMENT SIZES AND SERVICE CLEARANCE REQUIREMENTS VARY BETWEEN DIFFERENT MANUFACTURERS. CONSULT APPROVED SHOP DRAWINGS FOR EQUIPMENT SIZES AND REQUIRED SERVICE CLEARANCES. COORDINATE WITH LAYOUT OF EQUIPMENT PADS, PIPING, DUCTWORK, ETC.

CONCRETE APPROVED IN ACCORDANCE WITH SPECIFICATIONS.

13. DO NOT BLOCK TUBE PULL OR EQUIPMENT SERVICE CLEARANCES. 14. MAINTAIN MINIMUM 3'-6" CLEARANCE IN FRONT OF ALL ELECTRICAL PANELS, MOTOR STARTERS, SWITCHES, AND DISCONNECTS. 15. DO NOT SUPPORT EQUIPMENT, PIPING, OR DUCTWORK FROM METAL DECKING OR OTHER NON-STRUCTURAL BUILDING ELEMENTS. ANCHORS EMBEDDED IN CONCRETE SHALL BE CRACKED

MECHANICAL RENOVATION NOTES:

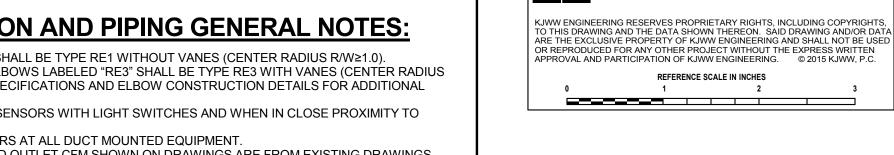
- THESE NOTES APPLY TO ALL MECHANICAL SHEETS AND TRADES, INCLUDING BUT NOT LIMITED TO, FIRE PROTECTION, PLUMBING, VENTILATION, PIPING AND TEMPERATURE CONTROL. 1. EXISTING CONDITIONS ARE SHOWN BASED ON INFORMATION OBTAINED FROM FIELD SURVEYS, EXISTING BUILDING DOCUMENTS, AND STAFF. VERIFY EXISTING CONDITIONS AND REPORT ANY
- CONFLICTS BEFORE PROCEEDING. NOT ALL EXISTING DUCTWORK AND PIPING IS SHOWN. VERIFY EXISTING CONDITIONS BEFORE STARTING WORK, NOTIFY ENGINEER OF ANY CONFLICTS WITH NEW WORK.
 - FIELD VERIFY THE AVAILABLE CLEARANCES FOR DUCTWORK AND PIPING BEFORE FABRICATION. RISES AND DROPS MAY BE NECESSARY BECAUSE OF EXISTING FIELD

4. EACH CONTRACTOR SHALL FIELD VERIFY ACCESSIBILITY TO THE AREA OF HIS WORK AND

- SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO BIDDING IF OTHER UTILITIES ARE REQUIRED TO BE REMOVED OR RELOCATED TO ALLOW ACCESS TO HIS AREA OF WORK. WHERE EXISTING MECHANICAL SYSTEMS ARE LOCATED IN AREAS THAT CONFLICT WITH NEW EQUIPMENT, PIPING, OR DUCTWORK TO BE INSTALLED, EACH CONTRACTOR SHALL EITHER ARRANGE NEW EQUIPMENT, PIPING, OR DUCTWORK IN SUCH A FASHION THAT IT DOES NOT CONFLICT WITH EXISTING SYSTEMS, OR REWORK EXISTING MECHANICAL SYSTEMS TO ALLOW
- FOR INSTALLATION OF NEW EQUIPMENT, PIPING, OR DUCTWORK. PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING CONSTRUCTION. OBTAIN PERMISSION FROM OWNER BEFORE SHUTTING DOWN ANY SYSTEM FOR ANY REASON. MAINTAIN SERVICE TO ALL COMPONENTS THAT ARE TO REMAIN UNTIL NEW SYSTEMS ARE
- INSTALLED. MAINTAIN EXISTING SYSTEM IN SERVICE UNTIL NEW SYSTEM IS COMPLETE AND READY FOR TIE IN AND SWITCHOVER. DRAIN SYSTEM ONLY TO MAKE SWITCHOVERS AND CONNECTIONS.
- OBTAIN PERMISSION FROM OWNER BEFORE PARTIALLY OR COMPLETELY DRAINING SYSTEM. MAKE CHANGEOVER TO NEW SYSTEMS WITH MINIMUM OUTAGE. 9. DISCONNECT AND REMOVE MECHANICAL DEVICES AND EQUIPMENT SERVING EQUIPMENT THAT HAS BEEN REMOVED.

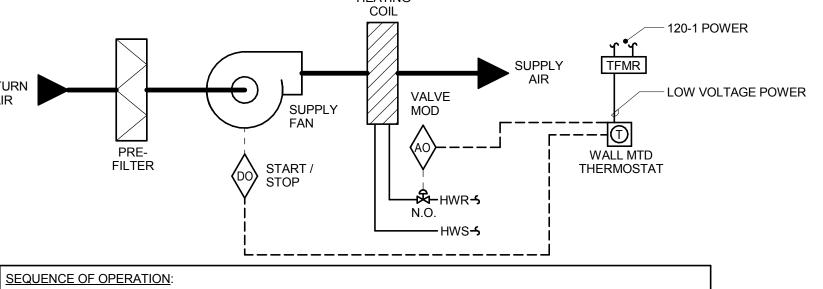
VENTILATION AND PIPING GENERAL NOTES:

- ALL RADIUS ELBOWS SHALL BE TYPE RE1 WITHOUT VANES (CENTER RADIUS R/W≥1.0) EXCEPTION: RADIUS ELBOWS LABELED "RE3" SHALL BE TYPE RE3 WITH VANES (CENTER RADIUS R/W=0.6). REFER TO SPECIFICATIONS AND ELBOW CONSTRUCTION DETAILS FOR ADDITIONAL REQUIRÉMENTS. ALIGN TEMPERATURE SENSORS WITH LIGHT SWITCHES AND WHEN IN CLOSE PROXIMITY TO EACH OTHER.
- PROVIDE ACCESS DOORS AT ALL DUCT MOUNTED EQUIPMENT. 4. EXISTING AIR INLET AND OUTLET CFM SHOWN ON DRAWINGS ARE FROM EXISTING DRAWINGS,
- AND ARE FOR REFERENCE ONLY. BALANCING CONTRACTOR SHALL USE PRE-BALANCE VALUES, AND NOT EXISTING CFM SHOWN ON DRAWINGS. CONTRACTOR MAY REUSE PORTIONS OF EXISTING DUCT PROVIDED SIZES AND PRESSURE CLASSES ARE CORRECT, DUCT IS THOROUGHLY CLEANED AND FREE OF DEFECTS, AND ALL
- TRANSVERSE JOINTS, LONGITUDINAL SEAMS, AND DUCT WALL PENETRATIONS ARE SEALED AS SPECIFIED FOR NEW DUCTWORK. 6. ALL PIPING SHALL BE 3/4" UNLESS OTHERWISE NOTED.



Success by **Design**

ENGINEERING 802 WEST BROADWAY, SUITE 312 MADISON, WISCONSIN 53713-1839 608.223.9600 FAX: 608.223.9601

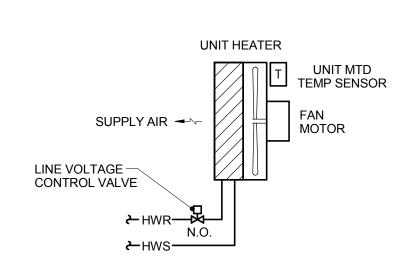


CONDITIONS.

THE CABINET HEATER SHALL BE FURNISHED WITH A UNIT MOUNTED FAN SPEED SELECTOR SWITCH (OFF-HIGH-THE THERMOSTAT SHALL MODULATE THE CONTROL VALVE AND CYCLE THE UNIT FAN TOGETHER TO MAINTAIN SETPOINT OF 70°F (ADJ.).

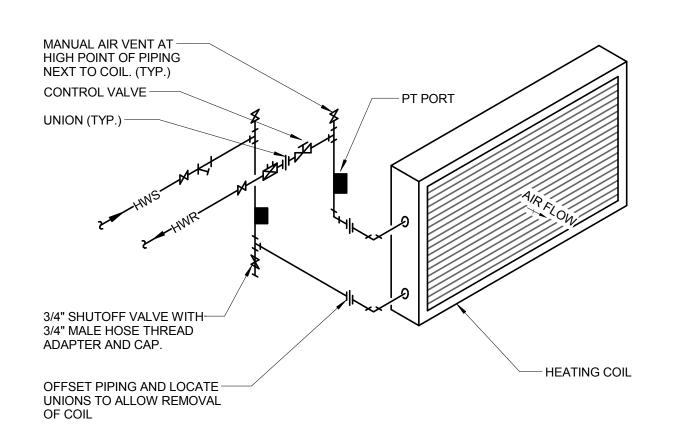
CABINET HEATER CONTROL - HYDRONIC

1. THERMOSTAT SHALL BE POWERED BY LOW VOLTAGE TRANSFORMER LOCATED IN PLUMBING CHASE PROVIDED BY M.C. 2. PROVIDE THERMOSTAT WITH HEAVY DUTY ENCLOSURE



HE THERMOSTAT SHALL MODULATE THE SOLENOID VALVE AND CYCLE THE UNIT FAN TOGETHER TO MAINTAIN A SPACE TEMPERATURE OF 70°F







FOR BALANCE VALVE SIZING REQUIREMENTS.

1. SEE SPECIFICATION SECTION 23 21 00 - HYDRONIC PIPING

Monona Terrace Roof Garden Restrooms Alteration

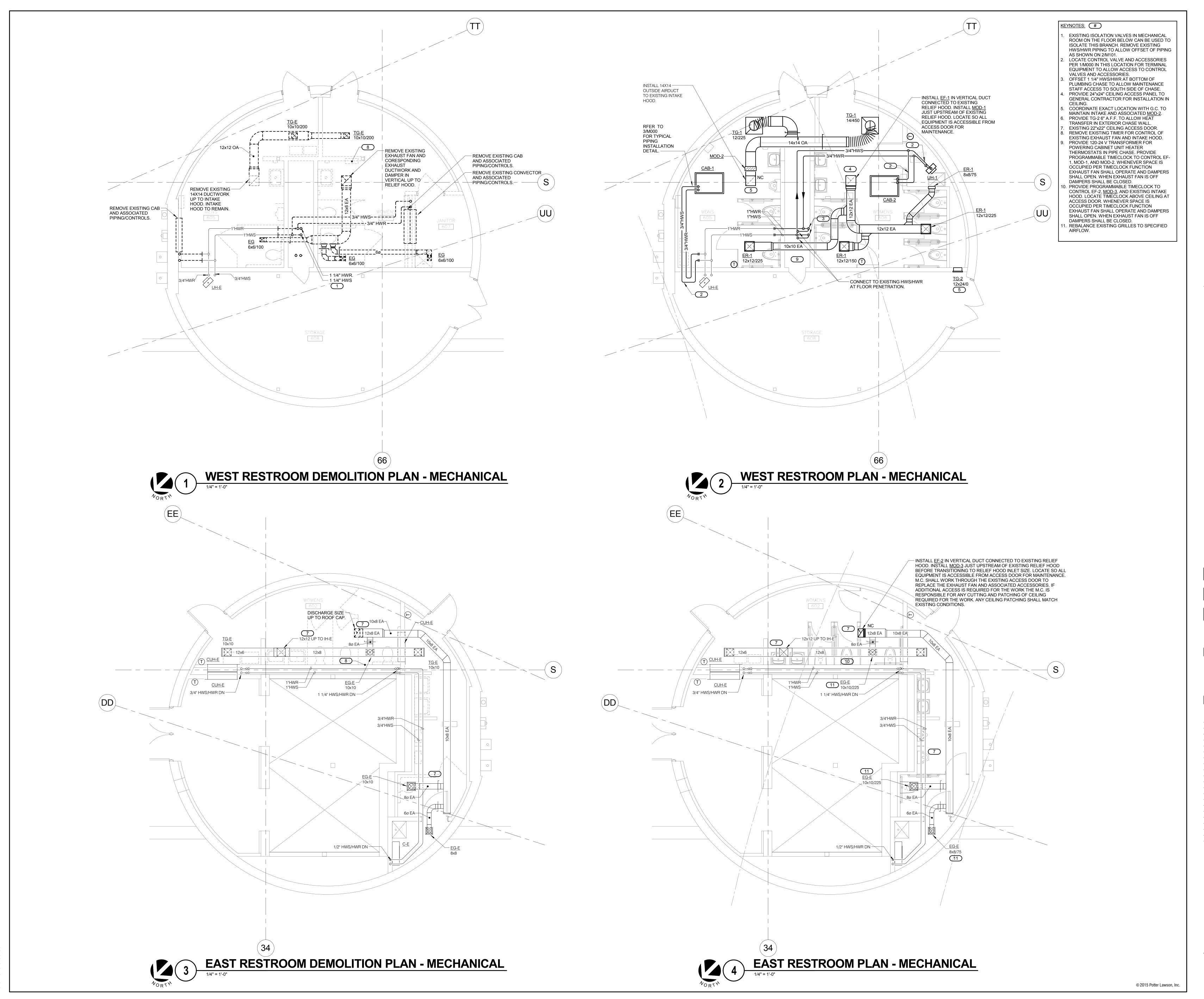
Madison, Wisconsin

Project # 2014.41.00

Date	Issuance/Revisions	Syml

MECHANICAL COVER SHEET

08/14/15 BID DOCUMENTS



ENGINEERING MADISON, WISCONSIN 53713-1839 608.223.9600 FAX: 608.223.9601 www.kjww.com
PROJECT # 15.0475.00

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REFERENCE SCALE IN INCHES

0 1 2 3

Notes:

Monona Terrace
Roof Garden
Restrooms Alteration

Madison, Wisconsin

Project # 2014.41.00

Date Issuance/ Revisions Symbol

PARTIAL FLOOR PLANS -MECHANICAL

M101

	LUMINAIRE SCHEDI	JLE
(MTG) MOUNTING:	(TYPE) LAMP TECHNOLOGY:	(L/L) LENS / LOUVER:
RE - RECESSED	FL - FLUORESCENT	A125 ACRYLIC
SP - SUSPENDED	CF - COMPACT FLUORESCENT	B - BLACK BAFFLE
CL - CEILING SURFACE	HL - HALOGEN	C - CLEAR ALZAK
WL - WALL	IN - INCANDESCENT	D - PARABOLIC
UC - UNDER CABINET	LED - LIGHT EMITTING DIODE	F - FRESNEL
CV - COVE	HS - HIGH PRESSURE SODIUM	G - TEMPERED GLASS
PL - POLE	MH - METAL HALIDE	H - WALL WASHER
FR - FLANGED RECESSED	SMH - SUPER METAL HALIDE	P - POLYCARBONATE
O - OTHER (SEE DESCRIPTION)	PSMH - PULSE START METAL HALIDE	K - KSH12 .125" ACRYLIC
	CMH - CERAMIC METAL HALIDE	K19 - KSH19 .156" ACRYLIC
DOOR:	O - OTHER (SEE DESCRIPTION	L - LOW IRIDESCENT SPECULAR ALUM.
FA - FLAT ALUMINUM	XL - EXTENDED LIFE	N - NONE
FS - FLAT STEEL	XLP - EXTENDED LIFE & OUTPUT	R - HIGH IMPACT OR ACRYLIC
RA - REGRESSED ALUMINUM		O - OTHER (SEE DESCRIPTION)
RS - REGRESSED STEEL		
	(TYPE) BALLAST:	(TYPE) BALLAST:
FINISH:	DIM07 - LINE DIMMING BALLAST	EB - ELECTRONIC BALLAST
PAF - PAINT AFTER FABRICATION	DIM10 - 0-10V DIMMING BALLAST	EM - EMERGENCY BATTERY / BALLAST
CSA - FINISH SELECTION BY ARCHITECT	HL - HIGH / LOW LEVEL BALLAST	DALI - DIGITAL DIMMING BALLAST
	ML - MULTI-LEVEL SWITCHING	MV - MULTI-VOLTAGE ELECTRONIC 120V-277V
	HP - HIGH PERFORMANCE / LBF	PRS - ELECTRONIC PROGRAM RAPID START BALLAST

CATALOG NUMBER SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. THE COMPLETE DESCRIPTION AND THE SPECIFICATION SHALL BE COORDINATED WITH THE CATALOG NUMBER TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE FIRST MANUFACTURER LISTED IS THE BASIS FOR DESIGN.

REFER TO SPECIFICATION SECTIONS LIGHTING 26 51 00 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

ALL LAMPS FOR THIS PROJECT SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED.
FLUORESCENT LAMP CORRELATED COLOR TEMPERATURE 3500°K, COLOR RENDERING INDEX (CRI) AT OR ABOVE 80, UNLESS NOTED OTHERWISE.
LED LAMP COLOR RENDERING INDEX (CRI) AT OR ABOVE 85 FOR INTERIOR APPLICATIONS.

			DIMEN	ISIONS			LAMPS			BALLAST			APPROVED
ITEM	DESCRIPTION	L	W	Н	DIA.	MTG	TYPE	QTY	MODEL	VOLTS	TYPE	L/L	MANUFACTURER
F1	6" APERTURE LED OPEN DOWNLIGHT, MATTE CLEAR SELF TRIMMING REFLECTOR.0.75-1.2 SPACING RATIO.			7"	6"	RE	LED	1	31 WATT LED MAX MIN. 1300 LUMENS	277 V	ЕВ	С	INDY (21W) L615-35/L600PCS GOTHAM (31W) EVO 4114 CALCULITE (27W) C6L1520DLM PORTFOLIO LD615
F2	4' NARROW CHANNEL STRIP	4'-0"	2 3/4"	2 3/4"		CV	FL	1	F32T8RS	277 V	EB	N	LITHONIA S132 DAY-BRITE N132 H.E. WILLIAMS 75-4-132 COLUMBIA CH4-132 METALUX SN-132

ELECTRICA	L DEMOLITON SYMBOL LIST
SYMBOL:	DESCRIPTION:
E E	ELECTRICAL CONNECTION
*⊜	DUPLEX GFI RECEPTACLE, 125V
=	DUPLEX RECEPTACLE, 125V
	PANELBOARD - SURFACE MOUNT
\boxtimes	TRANSFORMER
S	SWITCH - SINGLE POLE
s _o	SWITCH - OCCUPANCY SENSOR WALL SWITCH
<u>©</u>	OCCUPANCY SENSOR
	LINEAR LUMINAIRES
\circ	DOWNLIGHT LUMINAIRE
2	WALL BRACKET LUMINAIRE
\longrightarrow	INDUSTRIAL LUMINAIRE
\bigcirc	WALL SCONCE LUMINAIRE
SD	FIRE ALARM SMOKE DETECTOR - CEILING MOUNTED
F	FIRE ALARM MANUAL PULL STATION
A#	FIRE ALARM AUDIO/VISUAL NOTIFICATION DEVICE - WALL MOUNTED
MM	MONITOR MODULE
TS	TAMPER SWITCH

ELECTRICAL SYMBOL LIST						
SYMBOL:	TAG:	SPEC SECTION:	DESCRIPTION:			
E E	<u>ECONN</u>	26 05 33	ELECTRICAL CONNECTION			
₩	REC-DUP-GFI	26 27 26	DUPLEX GFI RECEPTACLE, 125V			
s _o	SW-OC-P-0	26 27 26	SWITCH - OCCUPANCY SENSOR WALL SWITCH			
© _∪	SW-OC-U	26 27 26	OCCUPANCY SENSOR - ULTRASONIC 360 DEGREE COVERAGE			
	<u>F#</u>	26 51 00	LINEAR LUMINAIRES			
0	<u>F#</u>	26 51 00	DOWNLIGHT LUMINAIRE			

	ELECTRICAL ABBREVIATION KEY					
ABBR:	DESCRIPTION:					
AFF	ABOVE FINISHED FLOOR					
С	CONDUIT					
GFI	GROUND FAULT INTERRUPTER					
N.C.	NORMALLY CLOSED					
N.I.C.	NOT IN CONTRACT					
N.O.	NORMALLY OPEN					
SV	SOLENOID VALVE					
TYP	TYPICAL					
UNO	UNLESS NOTED OTHERWISE					

ELECTRICAL GENERAL NOTES:

 ##-### INDICATES ELECTRICAL EQUIPMENT DEFINED IN ELECTRICAL SCHEDULES OR SPECIFICATION. REFER TO DRAWINGS CONTAINING ELECTRICAL SCHEDULES. PERMANENT NAMEPLATE SHALL MATCH FINAL EQUIPMENT NOMENCLATURE, NOT ELECTRICAL EQUIPMENT TAG NAME, REFER TO SPECIFICATIONS.

LUMINAIRE KEY:

F1 = FIXTURE TAG
1 = CIRCUIT NUMBER
a = SWITCH DESIGNATIO

LUMINAIRE A = SWITCH DESIGNATION
NL = SUBSCRIPT (IF APPLICABLE)

*IF LABEL IS ORIENTED HORIZONTALLY A SLASH WILL SEPARATE THIS INFORMATION. EX: F1 / 1 / α / NL

DEVICE KEY:

DEVICE

A = MOUNTING (IF APPLICABLE)

1 = CIRCUIT NUMBER

*IF LABEL IS ORIENTED HORIZONTALLY A SLASH WILL SEPARATE THIS INFORMATION.

ELECTRICAL MOUNTING SUBSCRIPT KEY:

A MOUNT AT +6" TO CENTERLINE ABOVE COUNTER OR BACKSPLASH

- C MOUNT AT +6 TO CENTERLINE ABOVE
 C MOUNT AT CEILING
 H MOUNT ORIENTED HORIZONTALLY
 - MOUNT IN CASEWORK
 MOUNT IN MODULAR FURNITURE
 MOUNT IN SURFACE RACEWAY

ELECTRICAL INSTALLATION NOTES:

- 1. THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE ADA STANDARDS FOR ACCESSIBLE DESIGN. REFER TO THE ADA GUIDELINES FOR ALL CONFIGURATIONS DETAIL ON THIS PAGE FOR ADDITIONAL INFORMATION.
- THIS PAGE FOR ADDITIONAL INFORMATION.

 2. CIRCUIT NUMBERS ARE SHOWN FOR CIRCUIT IDENTIFICATION. CIRCUITING SHALL AGREE WITH NUMBERING ON THE PANEL PROVIDED. COMMON NEUTRALS MAY NOT BE USED FOR BRANCH CIRCUITS. BALANCE THE LOAD ON PANEL AS EVENLY AS POSSIBLE BETWEEN EACH
- PHASE.
 3. CIRCUITS SERVING EMERGENCY AND EXIT LUMINAIRES WILL BE RUN IN A SEPARATE
- RACEWAY FROM ALL OTHER CIRCUITS.
 4. FLUSH MOUNT ALL LIGHTING CONTROL DEVICES AT +42" FROM FLOOR (CENTERLINE
- DIMENSION), EXCEPT WHERE OTHERWISE NOTED. DEVICES MAY BE SÜRFACE MOUNTED WHEN CONDUIT IS SPECIFIED EXPOSED.

 5. FLUSH MOUNT ALL DUPLEX RECEPTACLES AND TECHNOLOGY OUTLETS AT +18" FROM FLOOR
- (CENTERLINE DIMENSION), EXCEPT WHERE OTHERWISE NOTED. RECEPTACLES AND OUTLETS MAY BE SURFACE MOUNTED WHEN CONDUIT IS SPECIFIED EXPOSED.
 6. ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS. REFER TO SPECIFICATIONS FOR ADDITIONAL
- INFORMATION AND REQUIREMENTS SPECIFIC TO FIRESTOPPING.

 7. CONNECTION FOR ELECTRIC WATER COOLERS (EWC) SHALL BE A JUNCTION BOX CONCEALED BEHIND WATER COOLER ACCESS PLATE OR BE A GFI RECEPTACLE LOCATED DIRECTLY
- BELOW AND CENTERED ON EWC. CONTRACTOR SHALL VERIFY TYPE OF EWC TO BE INSTALLED.

 8. MOUNT ALL FIRE ALARM PULL STATIONS AT +42" FROM FLOOR (CENTERLINE DIMENSION)
- EXCEPT WHERE OTHERWISE NOTED.

 9. INSTALL ALL WALL MOUNTED FIRE ALARM NOTIFICATION DEVICES AT 90" ABOVE FINISHED FLOOR OR 6" BELOW THE CEILING, WHICHEVER IS LOWER, EXCEPT WHERE OTHERWISE
- NOTED. HEIGHT SHALL BE MEASURED TO THE TOP OF THE DEVICE.

 10. CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL CEILING MOUNTED DEVICES AND EQUIPMENT WITH LUMINAIRES, SPRINKLER, AND CEILING DIFFUSERS. CENTER ALL DEVICES IN CEILING TILE PATTERN. SMOKE DETECTORS AND OCCUPANCY/VACANCY SENSORS SHALL
- BE LOCATED NO CLOSER THAN 3 FEET TO AN AIR SUPPLY DIFFUSER OR RETURN GRILLE.

 11. CONTRACTOR SHALL VERIFY ALL FURNITURE, MODULAR FURNITURE, AND EQUIPMENT LOCATIONS WITH ARCHITECTURAL PLANS, ELEVATIONS, AND REVIEWED SHOP DRAWINGS. PRIOR TO MAKING THE ACTUAL ELECTRICAL INSTALLATION, THIS CONTRACTOR SHALL ADJUST
- AND/OR EQUIPMENT.

 12. ELECTRICAL AND TECHNOLOGY EQUIPMENT SHALL BE MOUNTED TO AVOID IMPEDANCE OF, OPERATION OF, AND/OR ACCESS TO ELECTRICAL AND MECHANICAL EQUIPMENT. ALL MOUNTING OF ELECTRICAL AND TELECOMMUNICATIONS EQUIPMENT, ON EQUIPMENT

RECEPTACLES, OUTLETS, OR CONNECTION LOCATIONS TO ACCOMMODATE FURNITURE

- SUPPLIED BY ANOTHER CONTRACTOR, SHALL BE APPROVED IN ADVANCE BY THE OTHER CONTRACTOR.

 13. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE
- EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.
 14. ALL WELDING SHALL BE ACCORDING TO AMERICAN WELDING SOCIETY STANDARDS. CONTRACTOR SHALL FURNISH TO THE ARCHITECT/ENGINEER CERTIFICATES QUALIFYING EACH WELDER, PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER RESERVES THE RIGHT TO REQUIRE QUALIFYING DEMONSTRATION, AT THE CONTRACTOR'S EXPENSE, OF ANY WELDERS
- ASSIGNED TO THE JOB.

 15. CONTRACTOR SHALL REMOVE AND REINSTALL ALL CEILING TILES AS REQUIRED FOR THE EXECUTION OF ELECTRICAL WORK. CONTRACTOR SHALL REPLACE CEILING TILES WITH

IDENTICAL MATERIAL WHERE DAMAGED BY THIS CONTRACTOR.



Success by **Design**

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REFERENCE SCALE IN INCHES

0 1 2 3

Notes:

Monona Terrace
Roof Garden
Restrooms Alteration

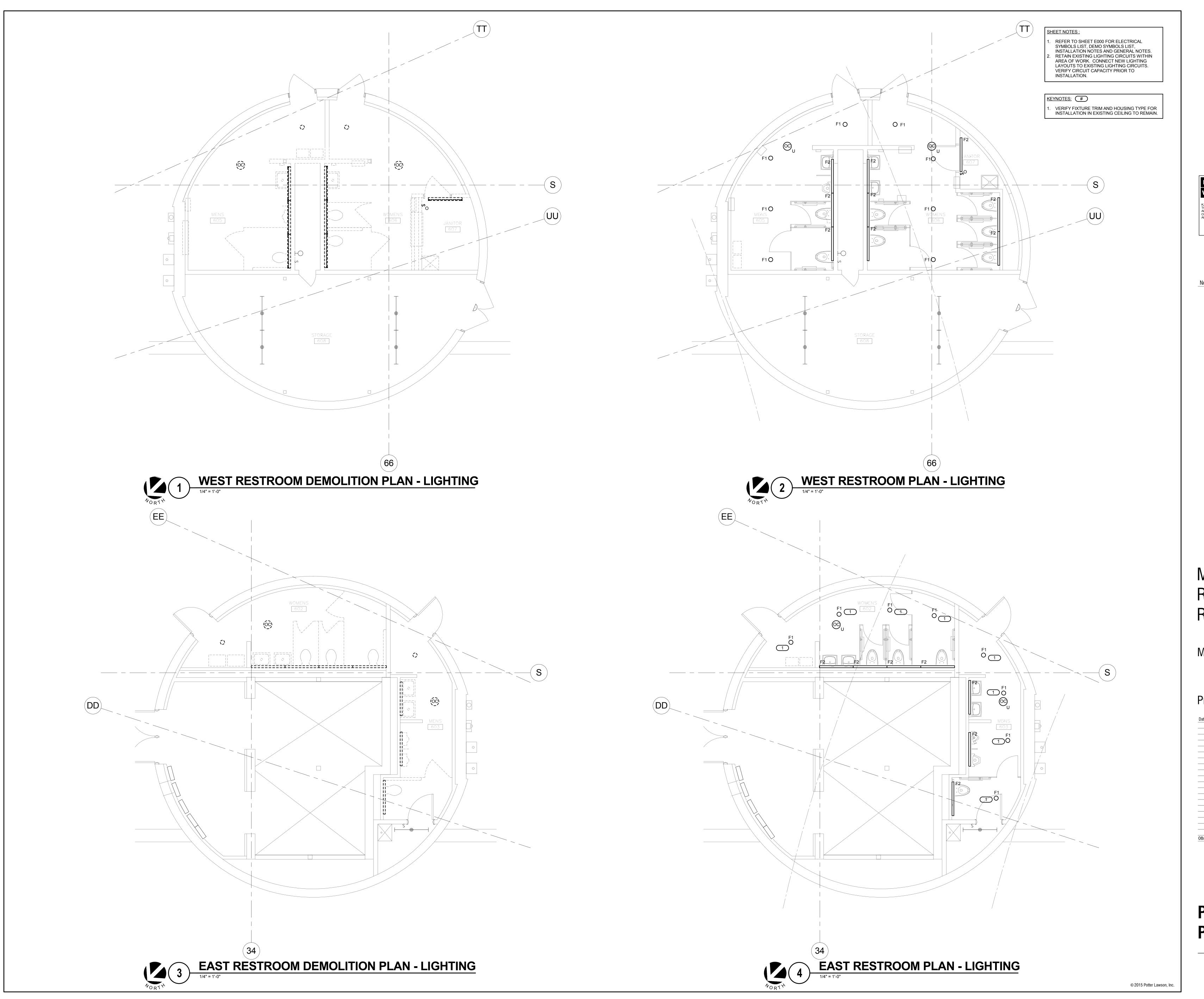
Madison, Wisconsin

Project # 2014.41.00

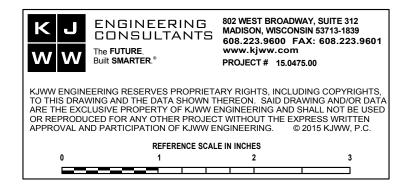
Date Issuance/Revisions Symbol

08/14/15 BID DOCUMENTS

ELECTRICAL COVER SHEET







Notes:

Monona Terrace Roof Garden Restrooms Alteration

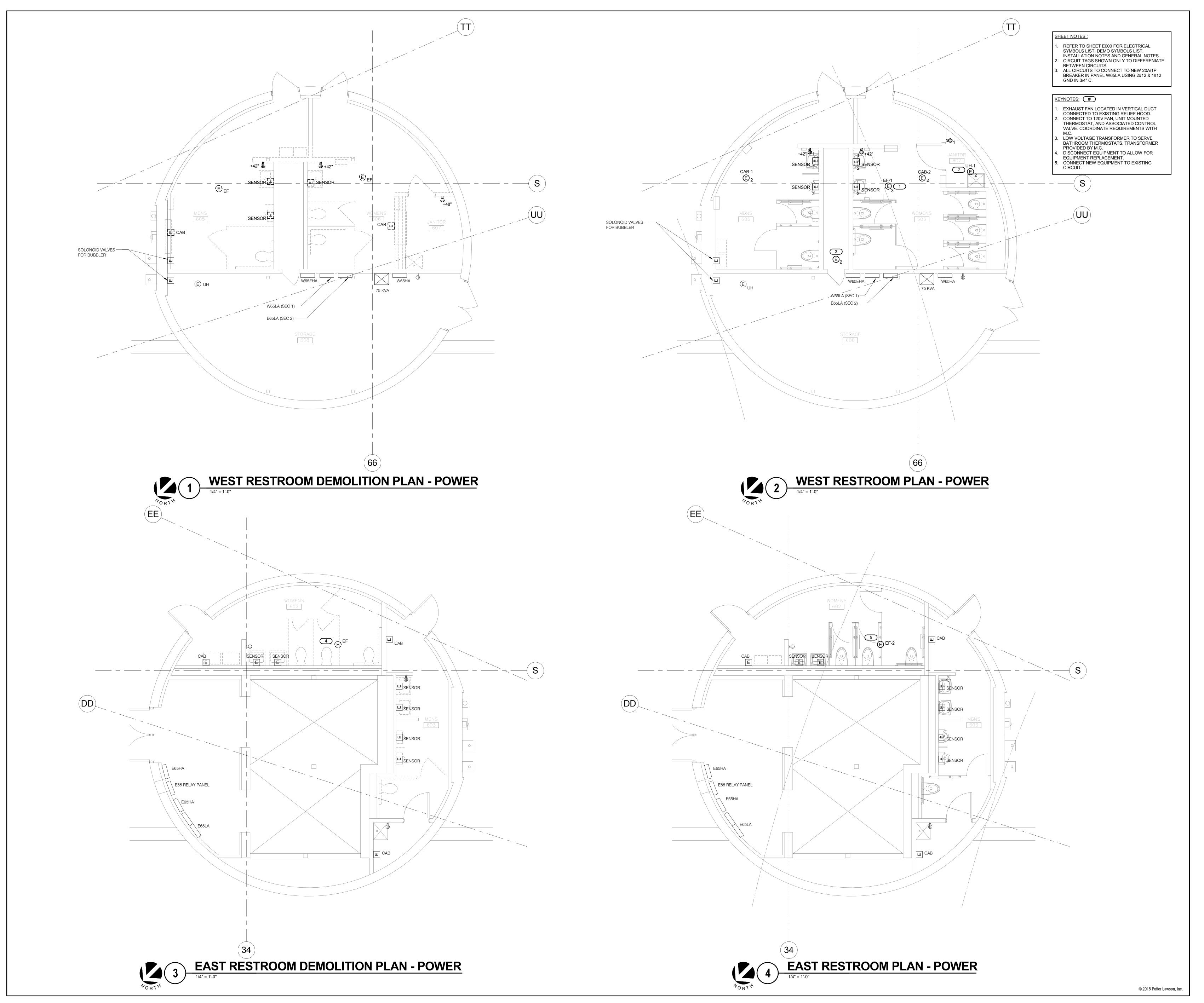
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Project # 2014.41.00

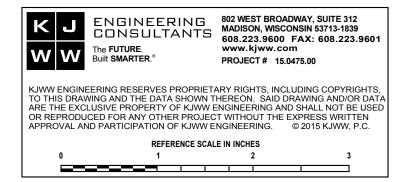
Date Issuance/Revisions Symbol

PARTIAL FLOOR PLANS - LIGHTING

EL101







Notes:

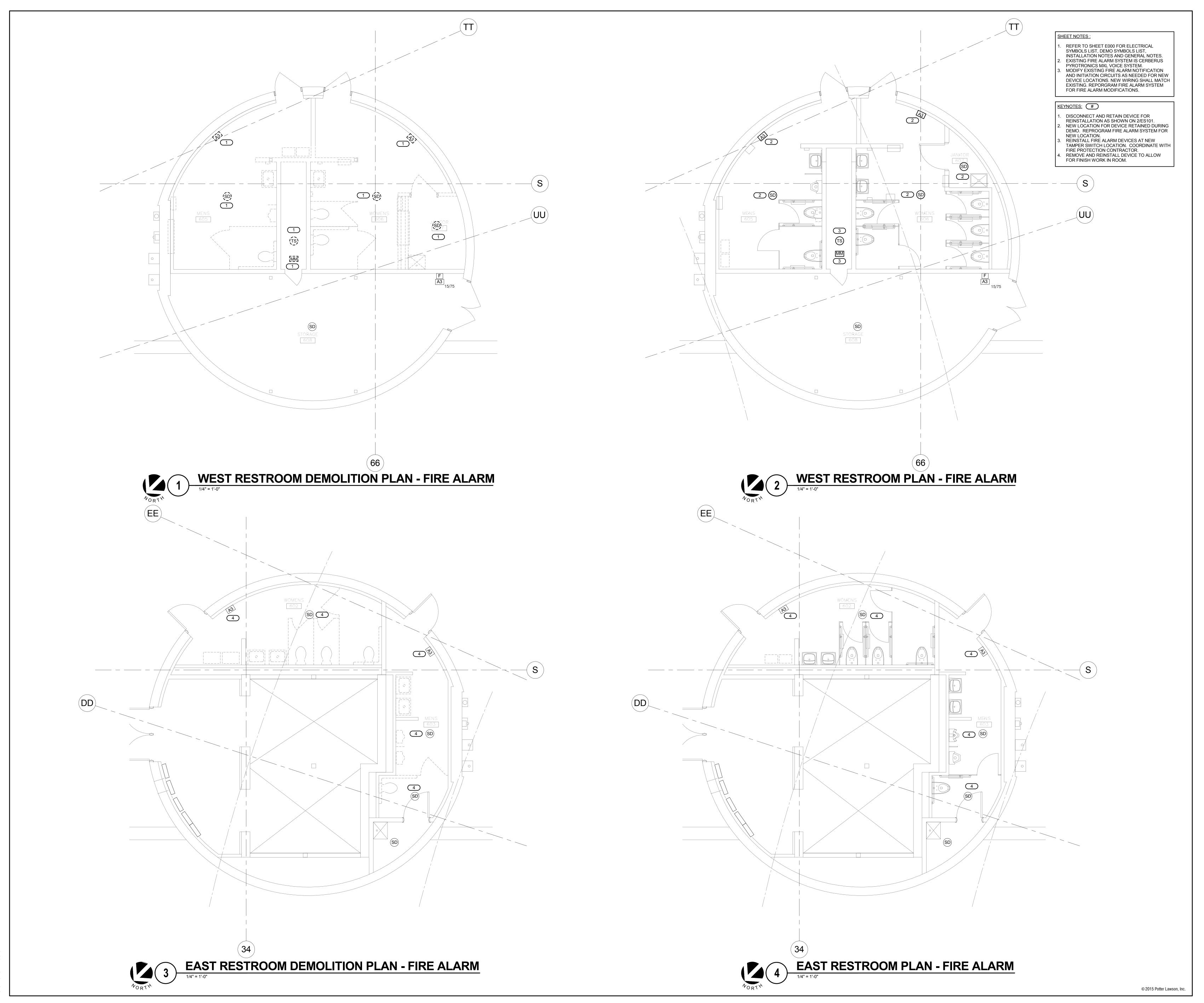
Monona Terrace Roof Garden Restrooms Alteration

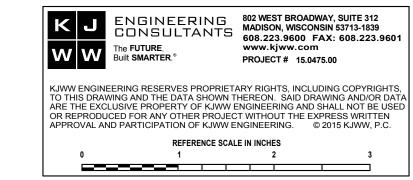
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PARTIAL FLOOR PLANS - POWER





Notes:

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PARTIAL FLOOR PLANS - FIRE ALARM

ES101