

RIVERSIDE SOUTH TOILET BUILDING:

CITY OF LA CROSSE, WI

239 E Veterans Memorial Drive, LaCrosse, WI 54601

NEW STRUCTURE

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SCOPE OF WORK

THIS PROJECT CONSISTS OF A NEW 1,738 S.F. SINGLE STORY BUILDING USED FOR PUBLIC RESTROOMS.

THE OCCUPANCY TYPE IS B BUSINESS (AS IT IS AN ASSEMBLY OCCUPANCY WITH LESS THAN 49 OCCUPANTS).

THE BUILDING CONSTRUCTION TYPE IS II-B.

THE BUILDING CONSISTS OF A SLAB ON GRADE WITH CMU WALLS AND AN ENGINEERED WOOD ROOF TRUSS SYSTEM.

GENERAL NOTES

ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND THE ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH ANY WORK.

THE CONTRACTOR SHALL REVIEW ALL DOCUMENTS AND VERIFY ALL DIMENSIONS AND FIELD CONDITIONS AND SHALL CONFIRM THAT WORK IS BUILDABLE AS SHOWN. ANY CONFLICTS OR OMISSIONS, ETC., SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECTS FOR CLARIFICATION PRIOR TO THE PERFORMANCE OF ANY WORK IN QUESTION.

THE CONTRACTOR SHALL MAINTAIN FOR THE ENTIRE DURATION OF THE WORK ALL EXITS, EXIT LIGHTING, FIRE PROTECTION DEVICES AND ALARMS IN CONFORMANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

"TYP." SHOULD MEAN THAT THE CONDITION IS REPRESENTATIVE FOR SIMILAR CONDITIONS THROUGHOUT. UNLESS OTHERWISE NOTED, DETAILS ARE USUALLY KEYED AND NOTED "TYP." ONLY ONCE WHEN THEY FIRST OCCUR.

DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

EACH CONTRACTOR SHALL LEAVE THE SITE IN A NEAT, CLEAN AND ORDERLY CONDITION UPON THE COMPLETION OF HIS WORK ON A DAILY BASIS. ALL WASTE, RUBBISH AND EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE PROMPTLY. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL TRASH FOR THE DURATION OF THE PROJECT.

CONTRACTOR TO PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A/10BC WITHIN 75' TRAVEL DISTANCE TO ALL PORTIONS OF THE BUILDING DURING CONSTRUCTION.



ABBREVIATIONS

A	A.B. ANCHOR BOLT A.C. AIR CONDITIONING A.C.T. ACOUSTICAL CEILING TILE A.F.F. ABOVE FINISHED FLOOR ALUM. ALUMINUM ALT. ALTERNATE A.P. ACCESS PANEL APPROX. APPROXIMATE(LY) ASPH. ASPHALT	B	BD. BOARD BLDG. BUILDING BLKG. BLOCKING BM. BEAM, BENCH MARK B.O. BOTTOM OF BOT. BOTTOM BRG. BEARING B.S. BOTH SIDES BSMT. BASEMENT BTWN. BETWEEN	C	C.C. CENTER TO CENTER C.I.P. CAST IN PLACE CF. CUBIC FEET C.J. CONTROL JOINT CL. CENTERLINE CLG. CEILING CLR. CLEAR CLK. CAULKING CMU CONCRETE MASONRY UNIT CMNT. CEMENT CO. CLEAN OUT COLUMN. COLUMN CONC. CONCRETE CONTIN. CONTINUE, CONTINUOUS CONSTR. CONSTRUCTION CR. CURB RAMP CRPT. CARPET CT. CERAMIC TILE CTR. CENTER CY. CUBIC YARD	D	DBL. DOUBLE DET. DETAIL DIA. DIAMETER DIAG. DIAGONAL DIM. DIMENSION DIST. DISTANCE DN. DOWN DR. DOOR DRAIN DS. DOWN SPOUT DTL. DETAIL DW. DISH WASHER DWM. DRYWALL DWG. DRAWING DWLS. DOWELS	E	EA. EACH E.C.F. EACH FACE EIFS EXTERIOR INSULATION FINISH SYSTEM EL. ELEVATION ELEC. ELECTRIC(AL) ELEV. ELEVATOR, ELEVATION EPDM ETHYLENE, PROPYLENE, DIENE TERPOLYMER EPI. EXTRUDED POLYSTYRENE INSULATION EQ. EQUAL EQIP. EQUIPMENT E.W. EACH WAY EWC. ELECTRIC WATER COOLER EXH. EXHAUST EXIST. EXISTING EXP. EXPOSED, EXPANSION EXT. EXTERIOR	F	FAC. FIRE ACCESS CABINET F.D. FLOOR DRAIN F.E. FIRE EXTINGUISHER F.G. FIBERGLASS FIN. FINISH F.O. FINISH OPENING FRMG. FRAMING FLR. FLOOR FLUR. FLUORESCENT FBN. FOUNDATION FS. FAR SIDE FT. FOOT (FEET) FTG. FOOTING, FITTING FUT. FUTURE	G	G. GAS GA. GAUGE GALV. GALVANIZED G.B. GRAB BAR G.C. GENERAL CONTRACTOR GL. GLASS, GLAZING GYP. BD. GYPSUM WALL BOARD GYP. GYPSUM	H	H.B. HOSE BIB H.C. HOLLOW CORE HDR. HEADER HDWR. HARDWARE HGT. HEIGHT H.M. HOLLOW METAL HORIZ. HORIZONTAL HR. HOUR HTG. HEATING HVAC HEATING/VENTILATING/AIR CONDITIONING HW. HOT WATER H.W.S. HEADED WELDED STUDS HYD. HYDRANT	I	I.D. INSIDE DIAMETER I.E. INVERT ELEVATION I.F. INSIDE FACE IN. INCH INC. INCLUDE(D), INCLUDING INSUL. INSULATE(D), INSULATION INT. INTERIOR	J	JST. JOIST JT. JOINT	K	K.C.J. KEYED CONSTRUCTION JOINT KIT. KITCHEN K.O. KNOCKOUT KWY. KEYWAY	L	L. LENGTH L.V. LAVATORY LOC. LOCATE LF. LINEAR FOOT L.L. LINE LOAD L.L.H. LONG LEG HORIZONTAL L.L.V. LONG LEG VERTICAL L.T. WT. LIGHT WEIGHT	M	MAS. MASONRY MAX. MAXIMUM M.B. MACHINE BOLT MECH. MECHANICAL MEMB. MEMBRANE MEZZ. MEZZANINE MFR. MANUFACTURER MIN. MINIMUM MISC. MISCELLANEOUS M.O. MASONRY OPENING M.L. METAL M.R. MOISTURE RESISTANT	N	N.I.C. NOT IN CONTRACT NO. NUMBER NOM. NOMINAL N.S. NEAR SIDE N.T.S. NOT TO SCALE	O	O.C. ON CENTER O.D. OUTSIDE DIAMETER O.F. OUTSIDE FACE O.H. OVERHEAD, OVERHANG O.P. OPENING OPP. OPPOSITE OSB ORIENTATED STRAND BOARD	P	PART. PARTITION P.C.F. POUNDS PER CUBIC FOOT PED. PEDESTAL PERP. PERPENDICULAR PL. PLATE PLAM. PLASTIC LAMINATE PLAS. PLASTIC PLBG. PLUMBING PLF. POUNDS PER LINEAL FOOT PNL. PANEL POLY. POLYETHYLENE PROJ. PROJECT, PROJECTED PROP. PROPERTY PSF. POUNDS PER SQUARE FOOT PSI. POUNDS PER SQUARE INCH P.T. PRESSURE TREATED PNT. PAINTED PVC. POLYVINYL CHLORIDE PMT. PAVEMENT P.W.D. PLYWOOD	Q	Q.T. QUARRY TILE	R	R. RADIUS, RISER R.A. RETURN AIR R.D. ROOF DRAIN R.O.M. RANDOM RE. REFER TO REF. REFERENCE, REFRIGERATOR REINF. REINFORCING, REINFORCED, REINFORCEMENT REQD. REQUIRED REV. REVISED, REVISION RM. ROOM R.O. ROUGH OPENING RT. RIGHT RVL. REVEAL	S	S.A. SUPPLY AIR S.C. SOLID CORE SCHED. SCHEDULE SECT. SECTION SF. SQUARE FOOT SH. SHELF, SHELVING, SHOWER SHT. SHEET SHT. SHEET SIM. SIMILAR S.M.S. SHEET METAL SCREENS S.O.G. SLAB ON GRADE SPEC. SPECIFICATIONS SPKR. SPEAKER SQ. SQUARE S.S. STAINLESS STEEL S.T.C. SOUND TRANSMISSION COEFFICIENT STD. STANDARD STL. STEEL STRUCT. STRUCTURAL SUSP. SUSPENDED SY. SQUARE YARD SYM. SYMMETRICAL	T	T. TREAD T.G. TONGUE AND GROOVE T.B.B. TILE BACKER BOARD TBD. TO BE DETERMINED TELE. TELEPHONE THK. THICKNESS T.O. TOP OF T.O.L. TOP OF LEDGE T.O.F. TOP OF FOOTING T.O.S. TOP OF STEEL T.O.W. TOP OF WALL TYP. TYPICAL	U	U.H. UNIT HEATER U.N.O. UNLESS NOTED OTHERWISE	V	V.B. VAPOR BARRIER VCT. VINYL COMPOSITION TILE V.P.C. VINYL PANEL CEILING VERT. VERTICAL VT. VINYL TILE	W	W. WATER W. WITH WD. WOOD W.F. WIDE FLANGE WO. WITHOUT WP. WATERPROOFING W.P.C. WOOD PANEL CEILING W.SCT. WAINSCOT WT. WEIGHT WWF. WELDED WIRE FABRIC
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MATERIALS

EARTHWORK	EARTH
	GRAVEL - AGGREGATE BASE COURSE
	SAND, MORTAR, FIREPROOFING
CONCRETE	CONCRETE - CAST-IN-PLACE
MASONRY	CONCRETE MASONRY UNIT (CMU)
	BRICK MASONRY
	LIMESTONE, CUT STONE, PRECAST
METAL	STEEL
WOOD	WOOD - FINISH / MILL WORK
	WOOD - ROUGH
	WOOD - BLOCKING
	PLYWOOD
INSULATION	EIFS
	RIGID INSULATION
	SPRAY FOAM INSULATION
FINISHES	CERAMIC TILE
	MARBLE
	TERRAZZO
	COVER BOARD, PROTECTION BOARD
	COMPOSITE BOARD

SYMBOLS

	DETAIL NUMBER		WALL TYPE TAG
	DETAIL NUMBER		LEVEL LINE
	DETAIL NUMBER		SPOT ELEVATION
	DETAIL NUMBER		KEYNOTE TAG
	DETAIL NUMBER		DEMOLITION TAG
	ROOM NAME		STANDARD DIMENSION
	ROOM NUMBER		CENTERLINE DIMENSION
	EXISTING GRID IDENTIFICATION		REVISION CLOUD / TAG
	NEW GRID IDENTIFICATION		WINDOW TYPE / CURTAIN WALL TYPE
	TRUE NORTH		EXISTING CONDITIONS
	DRAWING TITLE / VIEW REFERENCE		NOT IN CONTRACT (NIC)

RIVERSIDE SOUTH
TOILET ROOMS

239 E Veterans Memorial Drive, LaCrosse, WI

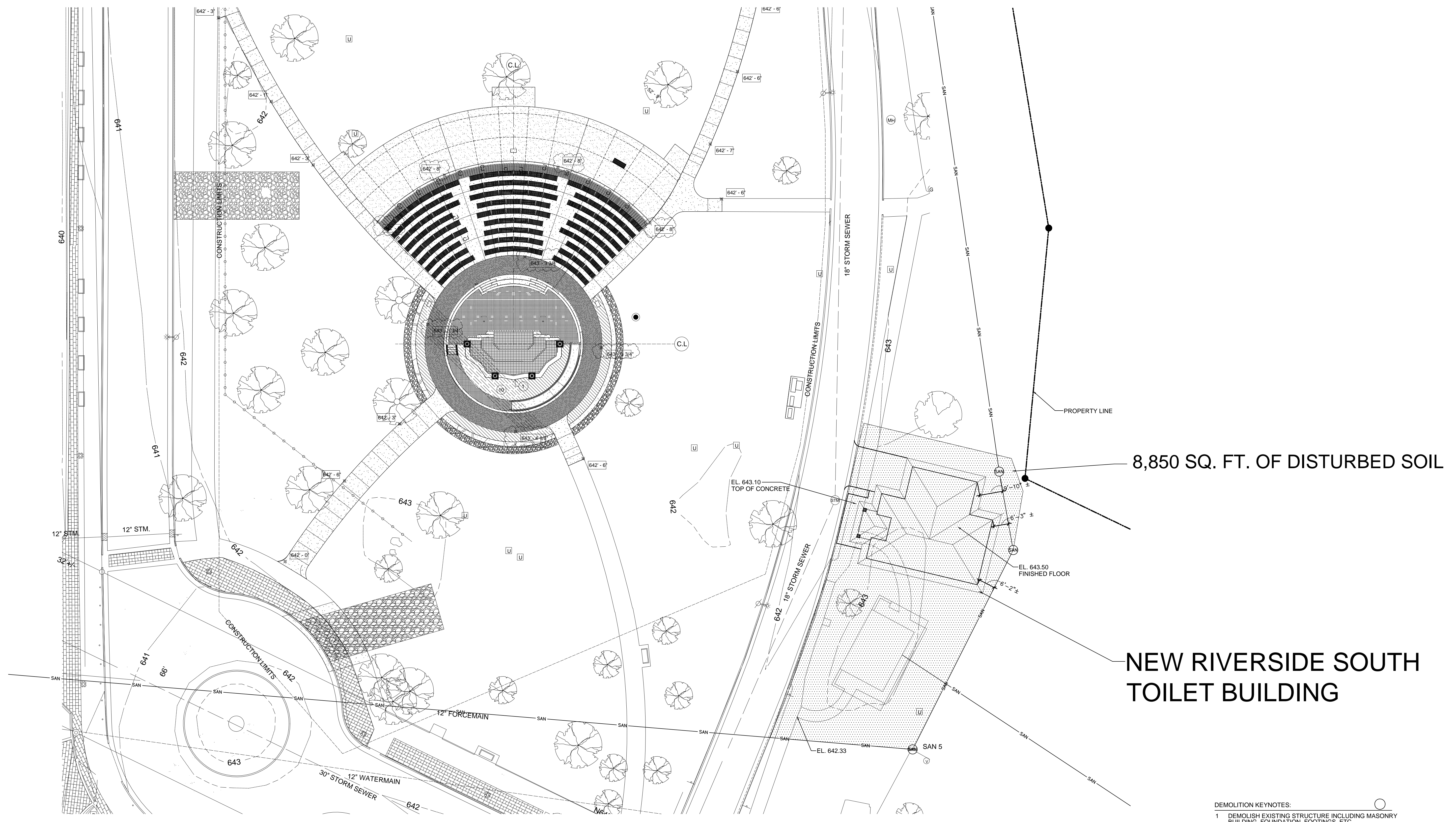
No.	Date	Description

TITLE SHEET

Project Number	
Date	07/22/22
Drawn By	TRB
Checked By	CHK

T1
Scale 1/8" = 1'-0"

**RIVERSIDE SOUTH
 TOILET BUILDING**
 LACROSSE, WI



8,850 SQ. FT. OF DISTURBED SOIL

**NEW RIVERSIDE SOUTH
 TOILET BUILDING**

- DEMOLITION KEYNOTES:**
- 1 DEMOLISH EXISTING STRUCTURE INCLUDING MASONRY BUILDING, FOUNDATION, FOOTINGS, ETC.
 - 2 REMOVE ALL EXISTING WIRING, CONDUITS, DEVICES BACK TO SERVICE ENTRANCE. CAP AT JUNCTION BOX.
 - 3 REMOVE ALL FIXTURES AND PIPING FOR WATER & SEWER. CAP AND CLEAN AT WATER ENTRANCE.
 - 4 REMOVE ANY HVAC EQUIPMENT & VENTILATION COMPLETELY.
 - 5 REMOVE EXISTING SIDEWALKS AND WALKWAYS (PER PLAN)
 - 6 REGRADE TO MATCH EXISTING CONTOURS. RESEED THESE LAWN AREAS.

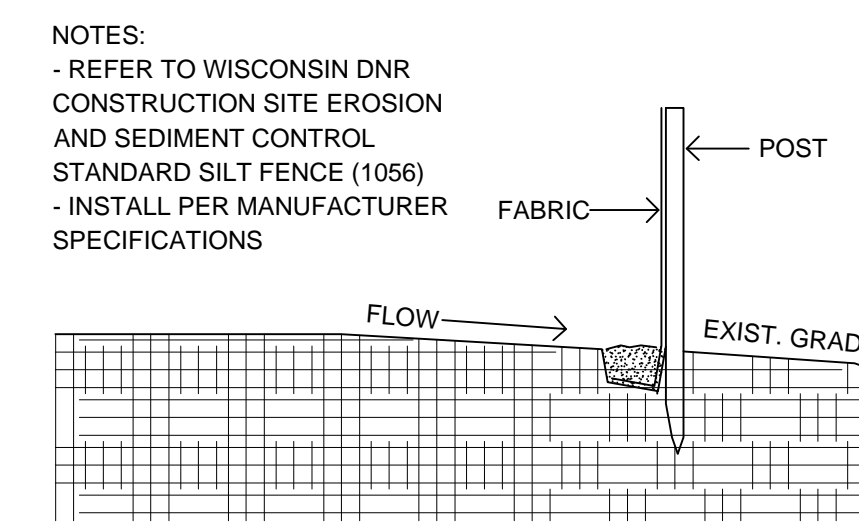
1 SITE PLAN
 C100 1" = 20'-0"

No.	Description	Date

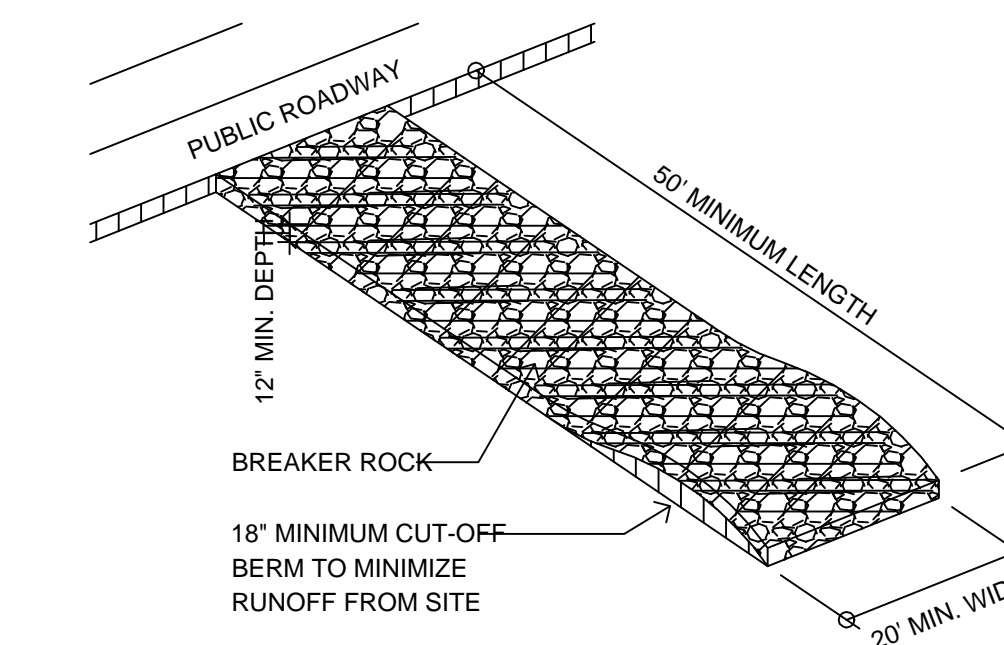
Project Number 22-136.001
 Date 7/13/22
 Drawn By CHK
 Checked By CHK

C100

Scale As indicated



2
 C200 SILT FENCE DETAIL
 3/8" = 1'-0"

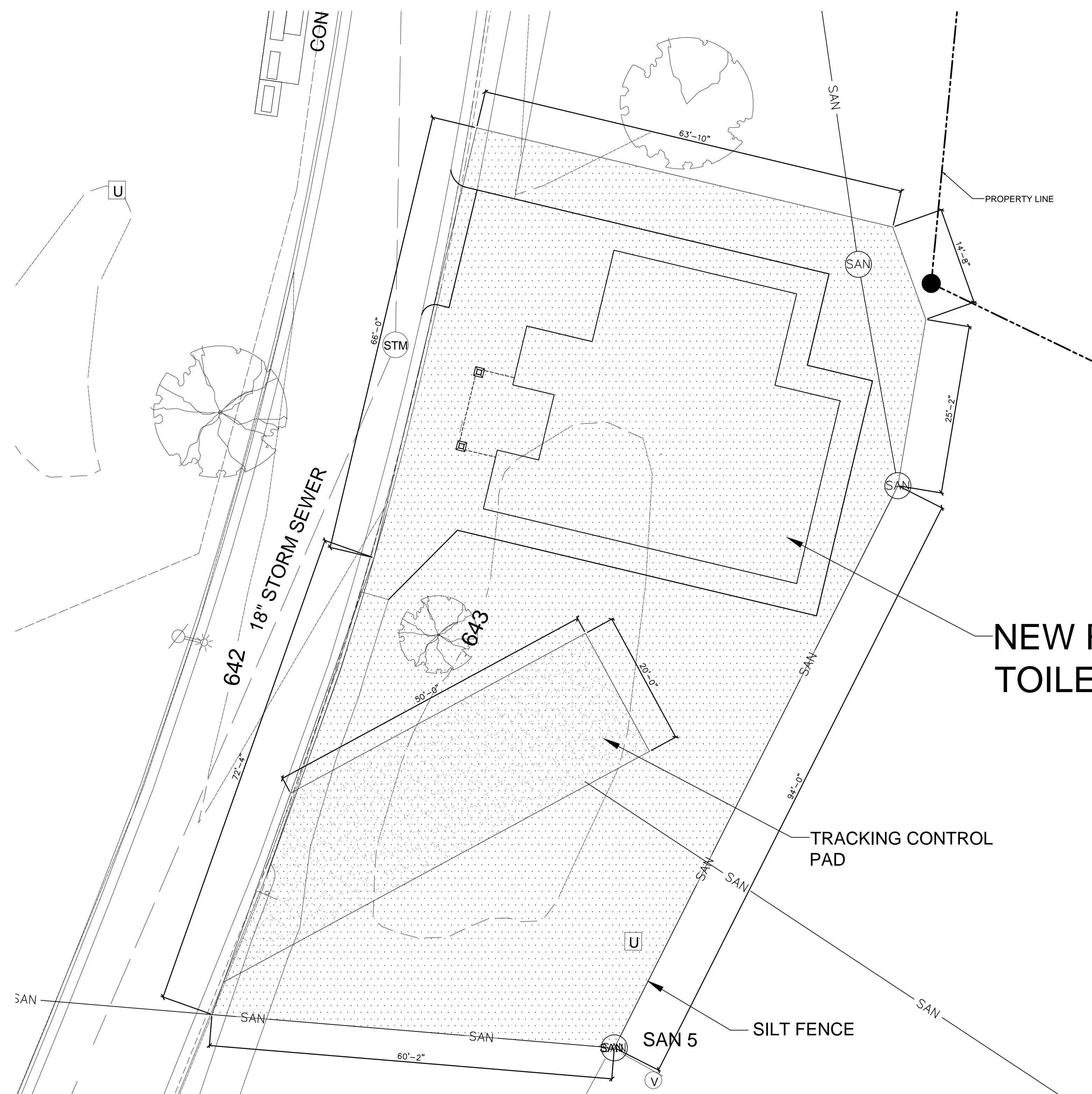


NOTES:
 -PLACE FILTER FABRIC (PROPEX 2002 OR EQUAL) UNDER BREAKER ROCK TO PREVENT MUD MIGRATION THROUGH ROCK.
 - ENTRANCE MUST BE MAINTAINED REGULARLY TO PREVENT SEDIMENTATION ON PUBLIC ROADWAYS. FUGITIVE ROCK WILL BE REMOVED FROM ADJACENT ROADWAYS DAILY OR MORE FREQUENTLY AS NECESSARY.

3
 C200 TRACKING CONTROL
 1/4" = 1'-0"

- GENERAL NOTES:
1. FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING BID AND NOTIFY ARCHITECT OF DISCREPANCIES.
 2. PRIOR TO ANY EARTHWORK ACTIVITY, ALL EROSION CONTROL MEASURES SHALL BE INSTALLED, AND APPROPRIATE PERMITS SHALL BE OBTAINED.
 3. THE LOCATION OF EXISTING UTILITIES, BOTH UNDERGROUND AND OVERHEAD, ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THESE PLANS OR NOT, BEFORE COMMENCING WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES. CALL DIGGER'S HOTLINE (800) 242-8511.
 4. THE UNDERGROUND LOCATIONS OF THE PUBLIC UTILITIES WERE MARKED BY REPRESENTATIVES OF THOSE COMPANIES. THE LOCATIONS OF THE PRIVATELY OWNED UNDERGROUND UTILITIES WERE NOT MARKED.
 5. THERE MAY BE MORE UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
 6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR ANY NECESSARY INSPECTIONS BY LOCAL GOVERNMENT THAT MAY BE REQUIRED.
 7. ANY AND ALL PARTIES UTILIZING VERTICAL DATUM SHALL ALWAYS CHECK INTO AT LEAST (2) BENCHMARKS TO AVOID MISTAKES DUE TO HYDRANT ADJUSTMENTS OR TRANSPOSITIONAL ERRORS.

- STORM WATER CONSTRUCTION POLLUTION PREVENTION NOTES:
1. SEDIMENT CONTROL STRUCTURES BELOW SEEDED AREAS MUST REMAIN IN PLACE UNTIL THE ENTIRE AREA HAS ESTABLISHED A MATURE COVERING OF HEALTHY VEGETATION.
 2. ALL DISTURBED AREAS SCHEDULED FOR LAWN SHALL HAVE TOPSOIL APPLIED, AND BE SEEDED AS SPECIFIED WITHIN 7 DAYS OF FINAL DISTURBANCE.
 3. SEED SHALL BE PLANTED IN A MANNER THAT ALLOWS THE SEED TO BE WORKED INTO THE SOIL AND COME IN FIRM CONTACT W/ THE SOIL.
 4. MAINTENANCE OF ALL INSTALLED EROSION AND SEDIMENT CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND REMOVED WHEN NO LONGER NECESSARY.
 5. SILT FENCE SHALL BE PLACED DOWN SLOPE OF ALL SOIL STOCK PILES DURING CONSTRUCTION IF LEFT IN PLACE MORE THAN 7 DAYS. STOCK PILES SHALL BE SEEDED AND MULCHED IF LEFT FOR MORE THAN 14 DAYS.
 6. SEDIMENT DEPOSITED IN ROADS OR RIGHT OF WAY DITCHES ADJACENT TO THE SITE AS A RESULT OF THIS WORK SHALL BE REMOVED. VEGETATION SHALL BE REESTABLISHED WHEN SEDIMENT REMOVAL DESTROYS THE EXISTING VEGETATION.



1
 C200 EROSION CONTROL PLAN
 1" = 10'-0"

- SHEET KEYNOTES:
1. SILT FENCE - SEE DETAIL 2/C200 FOR TYPICAL INSTALLATION
 2. VEHICLE TRACKING CONTROL - SEE DETAIL 3/C200
 3. PROVIDE CONCRETE WASHOUT FACILITY IN THIS GENERAL AREA
 4. RESEED ALL DISTURBED LAWN AREAS, HYDROSEED OR PROVIDE STRAW MULCH BLANKETS. BLEND NEW GROUND COVER INTO UNDISTURBED AREAS
 5. REPAIR CONCRETE SIDEWALK DAMAGE TO MATCH EXISTING CONDITIONS AFTER CONSTRUCTION IS COMPLETED
 6. REPAIR ANY DAMAGE TO CONCRETE CURB RESULTING FROM CONSTRUCTION TRAFFIC. MATCH EXISTING CONDITIONS

**RIVERSIDE SOUTH
 TOILET BUILDING**
 LACROSSE, WI

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Project Number 22-136.001
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 Checked By CHK

C200

Scale As indicated

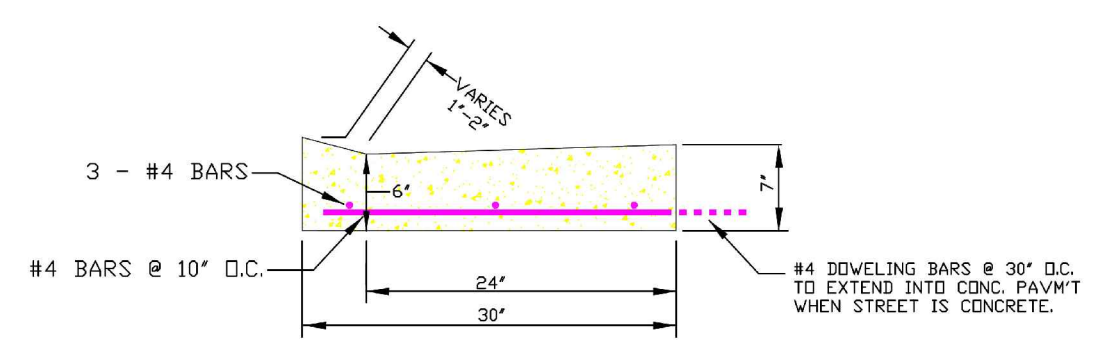
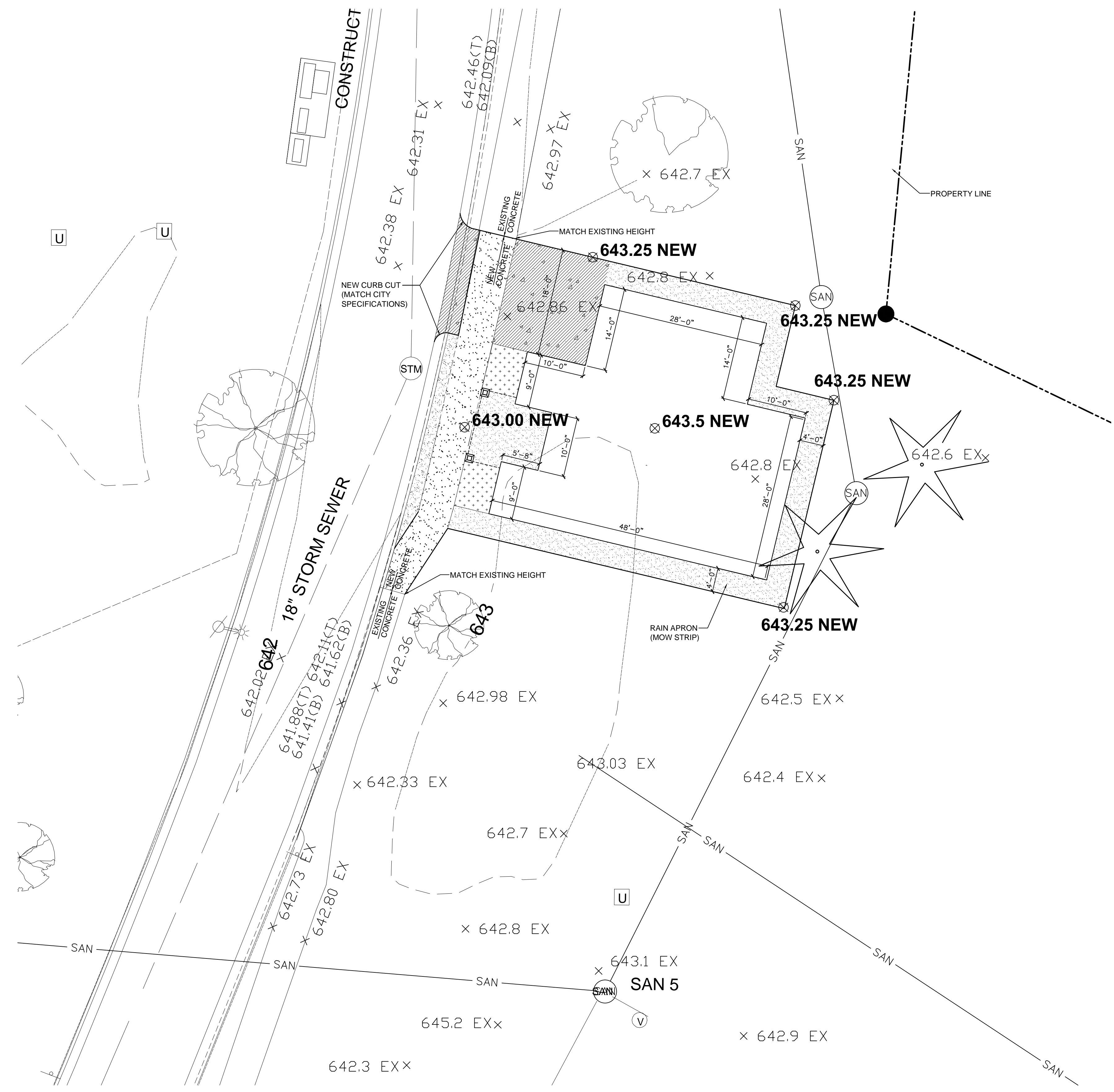
**RIVERSIDE SOUTH
 TOILET BUILDING**
 LACROSSE, WI

No.	Description	Date

Project Number 22-136.001
 Date 7/25/22
 Drawn By CHK
 Checked By CHK

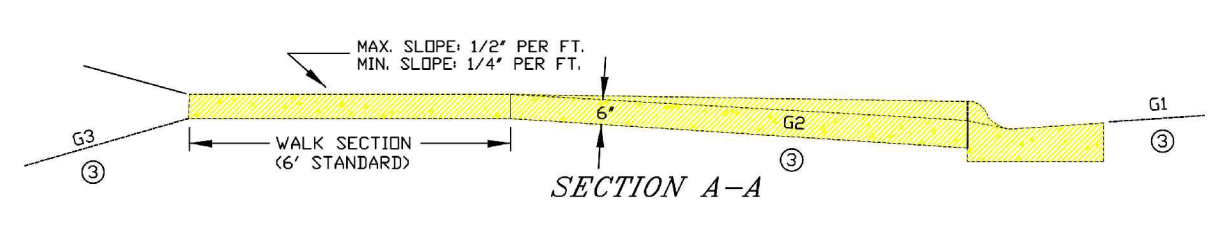
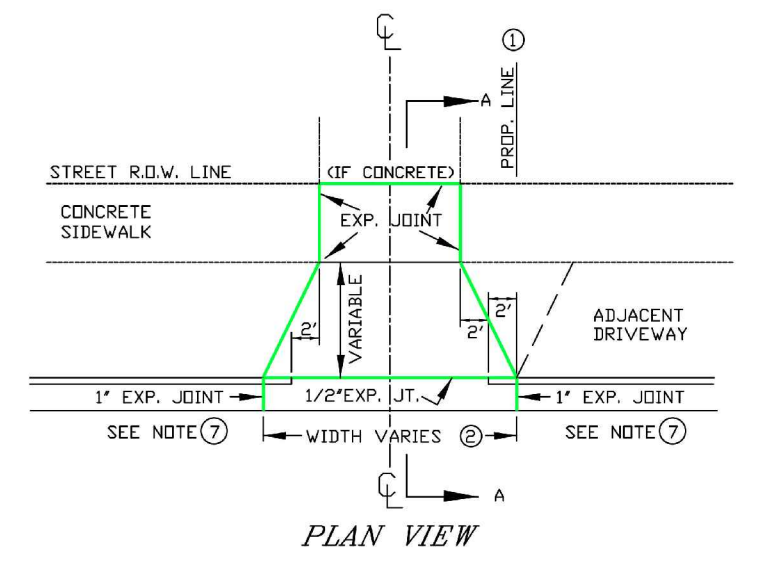
C300

Scale As indicated



REINFORCED DRIVEWAY
DRAWINGS
NOT TO SCALE

DRAWINGS
NOT TO SCALE

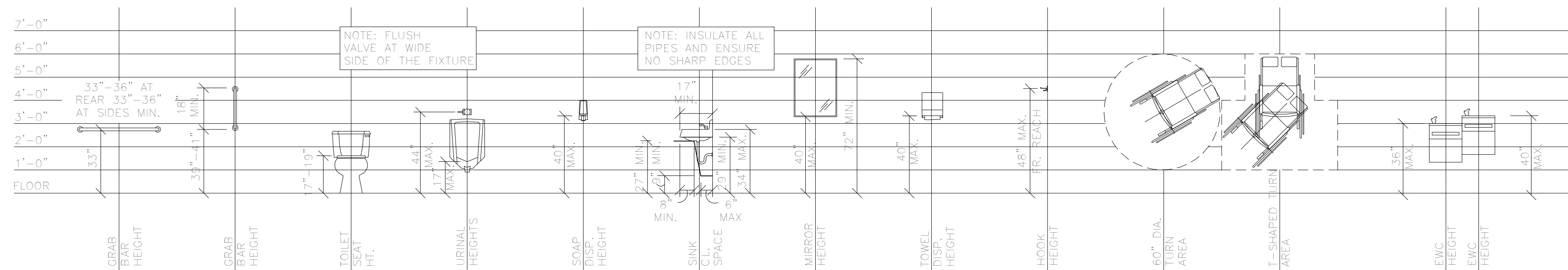


- 1 DRIVE SECTION SHALL NOT OVERLAP PROPERTY LINE EXTENDED, EXCEPT WHERE PERMITTED BY THE ENGINEER, OR WHEN A JOINT DRIVEWAY AGREEMENT IS EXECUTED BY OWNERS OF ADJACENT PROPERTIES.
- 2 MAX. DRIVEWAY WIDTH AT THE CURB AND SIDEWALK IS SET FORTH IN CITY ORDINANCE 5.03.
- 3 THE BREAKOVER ANGLE (CAUSE OF CARS BOTTOMING) BECOMES CRITICAL WHEN THE ALGEBRAIC DIFFERENCE OF GRADES (G1, G2, & G3) EXCEEDS 11%.
- 4 A REINFORCED DRIVE SECTION IS REQUIRED FOR CURB & GUTTER IN AREAS ZONED INDUSTRIAL OR COMMERCIAL.
- 5 BACK OF CURB TO FRONT OF CONC. SIDEWALK MUST BE CONCRETE, BRICK OR ASPHALTIC BITUMINOUS.
- 6 MECHANICAL COMPACTION OF SUBSOIL IN LAYERS LESS THAN 12" TO ACHIEVE MINIMUM COMPACTION OF 95% OF MAXIMUM DENSITY FROM MODIFIED PROCTOR IS REQUIRED. (INCLUDING STREET SIDE AFTER FORMS ARE REMOVED)
- 7 EXPANSION JOINT IS REQUIRED AT BOTH ENDS OF DRIVEWAY WHEN ONLY DRIVEWAY IS INSTALLED OR REPLACED. WHEN ENTIRE BLOCK OF CURB & GUTTER IS INSTALLED THE EXPANSION JOINT AT DRIVEWAY ENDS MAY BE OMITTED.

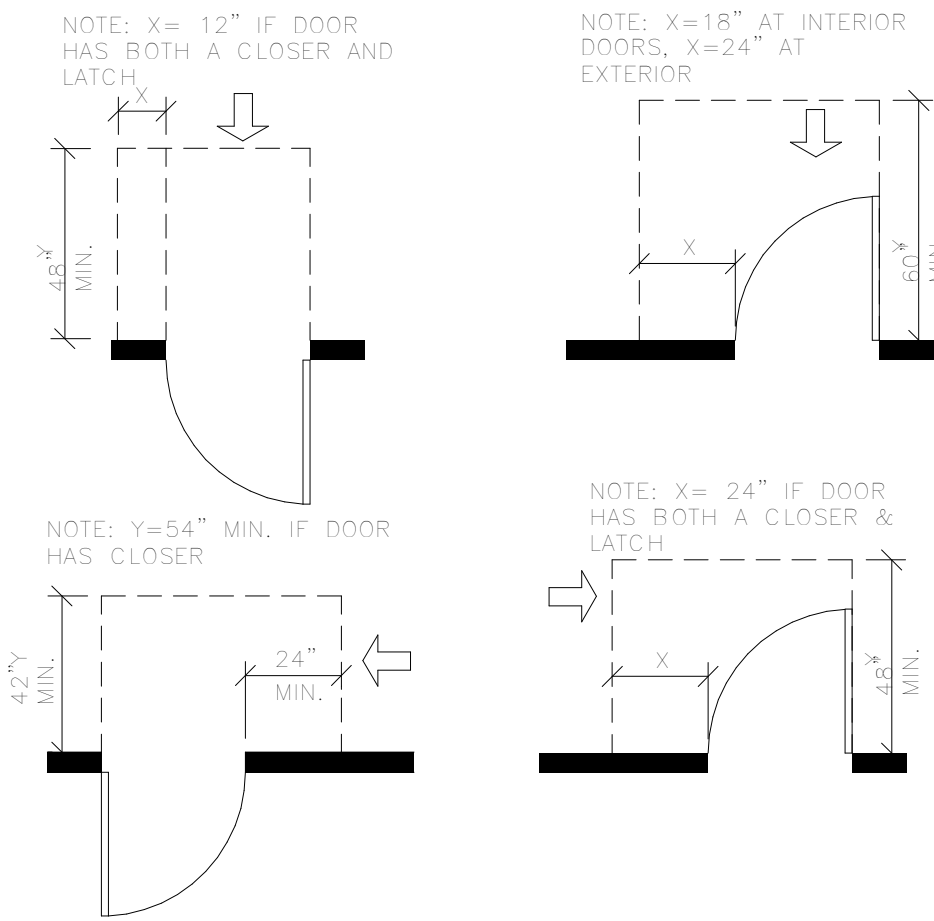
STANDARD DRIVEWAY DETAIL

	CITY SIDEWALK SPECIFICATIONS 360 SQ. FT.
	STANDARD SIDEWALK 765 SQ. FT.
	CITY DRIVEWAY SPECIFICATIONS 362 SQ. FT.
	LANDSCAPING 95 SQ. FT.

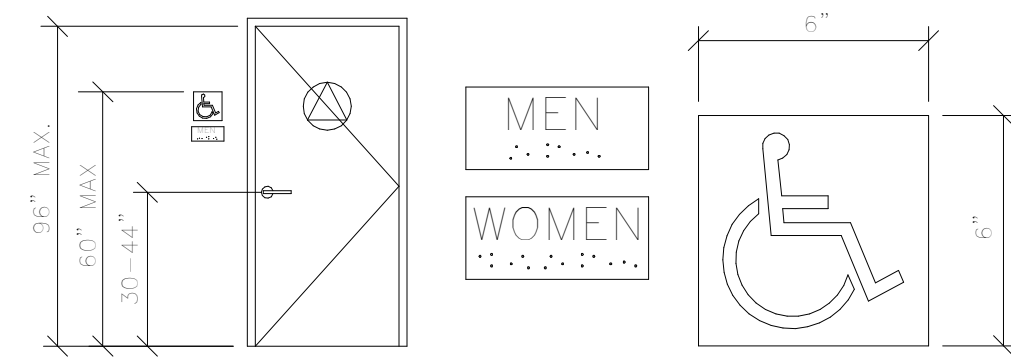
1 GRADING PLAN NORTH
 C300 1" = 10'-0"



2 ACCESSIBLE MOUNTING HEIGHTS
NO SCALE



3 MANEUVERING CLEARANCE AT DOORS
NO SCALE



THE TOILET ROOM SHALL BE IDENTIFIED WITH TWO SIGN TYPES: ONE ON THE DOOR- 12\"/>

A SYMBOL OF ACCESSIBILITY AND A TACTILE SIGN WHICH IS IN COMPLIANCE WITH IBC AND WHICH HAS A MIN. LETTER HEIGHT OF 5/8\"/>

THE SYMBOL OF ACCESSIBILITY SHALL BE PLACED NOT LESS THAN 60\"/>

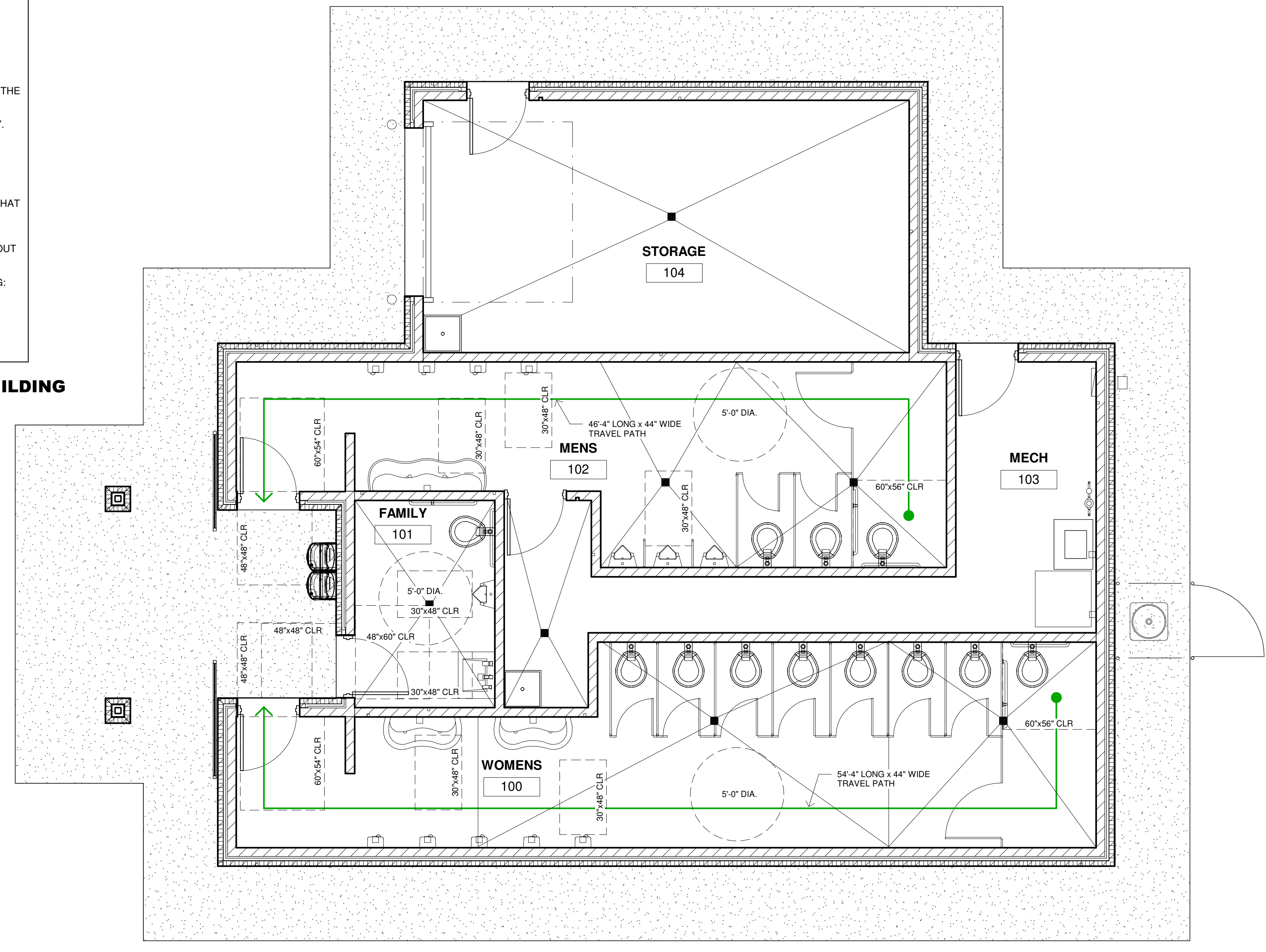
TACTILE SIGNS SHALL BE MOUNTED 60\"/>

4 TOILET ROOM SIGNAGE
NO SCALE

- ALL DOOR HANDLES SHALL BE LEVER TYPE, PUSH/PULL OR EQUIVALENT. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBS. FOR EXTERIOR AND INTERIOR DOORS.
- EXIT DOORS, AND TOILET ROOM DOOR TO BE OPERABLE FROM THE INSIDE WITHOUT SPECIAL KNOWLEDGE, FORCE OR NEED OF A KEY.
- PROVIDE DOOR STOPS FOR ALL INTERIOR DOORS, VERIFY WITH TENANT.
- ALL TOILET ROOM DOORS TO BE PROVIDED WITH SELF-CLOSERS.
- ALL RATED DOORS TO BE PROVIDED WITH SELF-CLOSERS.
- ALL EXTERIOR DOORS TO BE SELF-CLOSING WITH SECURITY HINGES AND HARDWARE.
- DOOR CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO AN OPEN POSITION OF 12 DEGREES WILL BE 5 SECONDS MINIMUM.
- FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY. THE REQUIRED FORCE FOR APPROPRIATE ADMINISTRATIVE AUTHORITY. THE REQUIRED FORCE FOR PUSHING OPEN OR PULLING OPEN DOORS OTHER THAN FIRE DOORS SHALL BE AS FOLLOWS:
-INTERIOR HINGED DOOR: 5.0 LB (22.2 N) MAXIMUM.
-SLIDING/FOLDING DOOR: 5.0 LB (22.2 N) MAXIMUM.
-EXTERIOR HINGED DOOR: 5.0 LB (22.2 N) MAXIMUM.
- THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT HOLD THE DOOR IN A CLOSED POSITION.
- THE BOTTOM 12 IN. OF ALL DOORS EXCEPT AUTOMATIC DOORS, POWER ASSISTED DOORS, AND SLIDING DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.
- SALES AREA EXIT DOORS TO HAVE SIGNAGE ABOVE DOOR IN 1\"/>

CODE DATA 1,736 SQUARE FEET - ONE STORY BUILDING
27,195 CUBIC FEET

- I. PROJECT SCOPE:**
THIS IS A NEW CONSTRUCTION OF A ONE STORY BUILDING USED AS A PUBLIC RESTROOMS "B" BUSINESS CLASSIFIED BUILDING. THE BUILDING CONTAINS A MULTI-USE MEN'S AND WOMEN'S RESTROOM, FAMILY RESTROOM & ON-SITE STORAGE FOR BATHROOM SUPPLIES. THE CONSTRUCTION CONSISTS OF TYPE "IB" WITH SLAB ON GRADE WITH CMU WALLS AND A CERTIFIED WOOD TRUSS ROOF SYSTEM.
- II. GOVERNING CODES - STATE OF WISCONSIN - CITY OF LACROSSE**
APPLICABLE CODES: ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS AND DRAWINGS, AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS OF ALL GOVERNING BODIES INVOLVED. ALL PERMITS AND LICENSES NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHALL BE PROCURED AND PAID FOR BY THE CONTRACTOR INVOLVED. APPLICABLE CODES INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING ADOPTED CODES:
2015 IBC WITH 2018 WISCONSIN AMENDMENTS (SPS 362)
2015 IMC WITH 2018 WISCONSIN AMENDMENTS (SPS 364)
2009 WISCONSIN ELECTRIC CODE (SPS 316)
2018 WISCONSIN PLUMBING CODE (SPS 381-387)
2015 IECC WITH 2018 WISCONSIN AMENDMENTS (SPS 362)
2015 NFPA 101 LIFE SAFETY CODE
2015 INTERNATIONAL FIRE CODE
ACCESSIBILITY: 2009 ANSI 117.1 (IBC CHP 11)
- III. BUILDING CLASSIFICATIONS:**
A. OCCUPANCY GROUP: -SEC. 300
-SEC. 304 - B - (BUSINESS) PUBLIC RESTROOMS
(AN ASSEMBLY PURPOSE SMALL BUILDING WITH AN OCCUPANCY LOAD OF LESS THAN 50 SHALL BE CLASSIFIED AS "B" OCCUPANCY)
B. CONSTRUCTION TYPE:
-TABLE 601- TYPE II B
C. SITE LOCATION
100 STATE STREET
LACROSSE, WI 54601
D. ALLOWABLE AREA (TABLE 506.2)
23,000 SQ. FT. ALLOWED FOR A "B" OCCUPANCY TYPE II-B CONSTRUCTION
E. ALLOWABLE BUILDING HEIGHT (TABLE 504.3)
55 FT. ALLOWED FOR A "B" OCCUPANCY TYPE II-B CONSTRUCTION
F. ALLOWABLE NUMBER OF STORIES (TABLE 504.4)
3 STORIES ALLOWED FOR A "B" OCCUPANCY TYPE II-B CONSTRUCTION
G. TOTAL OCCUPANT LOAD (TABLE 1004.1.2)
TOILET ROOMS 1,344 S.F. (1 PER 100 SQ FT = 14)
STORAGE 392 S.F. (1 PER 100 SQ FT = 4)
TOTAL OCCUPANTS 18 OCCUPANTS
H. EXITING (TABLE 1006.2.1)
ONE EXIT IS REQUIRED FOR A "B" OCCUPANCY WITH LESS THAN 49 OCCUPANTS
- IV. PLUMBING:**
A. RESTROOM FACILITIES:
-SEC. 2902.1 - MINIMUM PLUMBING FACILITIES
-TABLE 2902.1 - GROUP B BUSINESS
MIN. PLUMBING FACILITIES REQUIRED - 18 PEOPLE
50% MALE = 9 MALES
50% FEMALE = 9 FEMALES
WATER CLOSETS - 1 PER 25
WATER CLOSETS - 1 PER 25
REQUIRED: 1
PROVIDED: 8
LAVATORIES - 1 PER 40
REQUIRED: 1
PROVIDED: 4
(1) MOP SINK PROVIDED
(1) DRINKING FOUNTAIN PROVIDED
** 1 ADDITIONAL WATER CLOSET & ONE LAV ARE PROVIDED FOR THE FAMILY RESTROOM IN ADDITION TO ABOVE**



1 CODE COMPLIANCE PLAN
1/4" = 1'-0"

No.	Date	Description

CODE COMPLIANCE PLAN

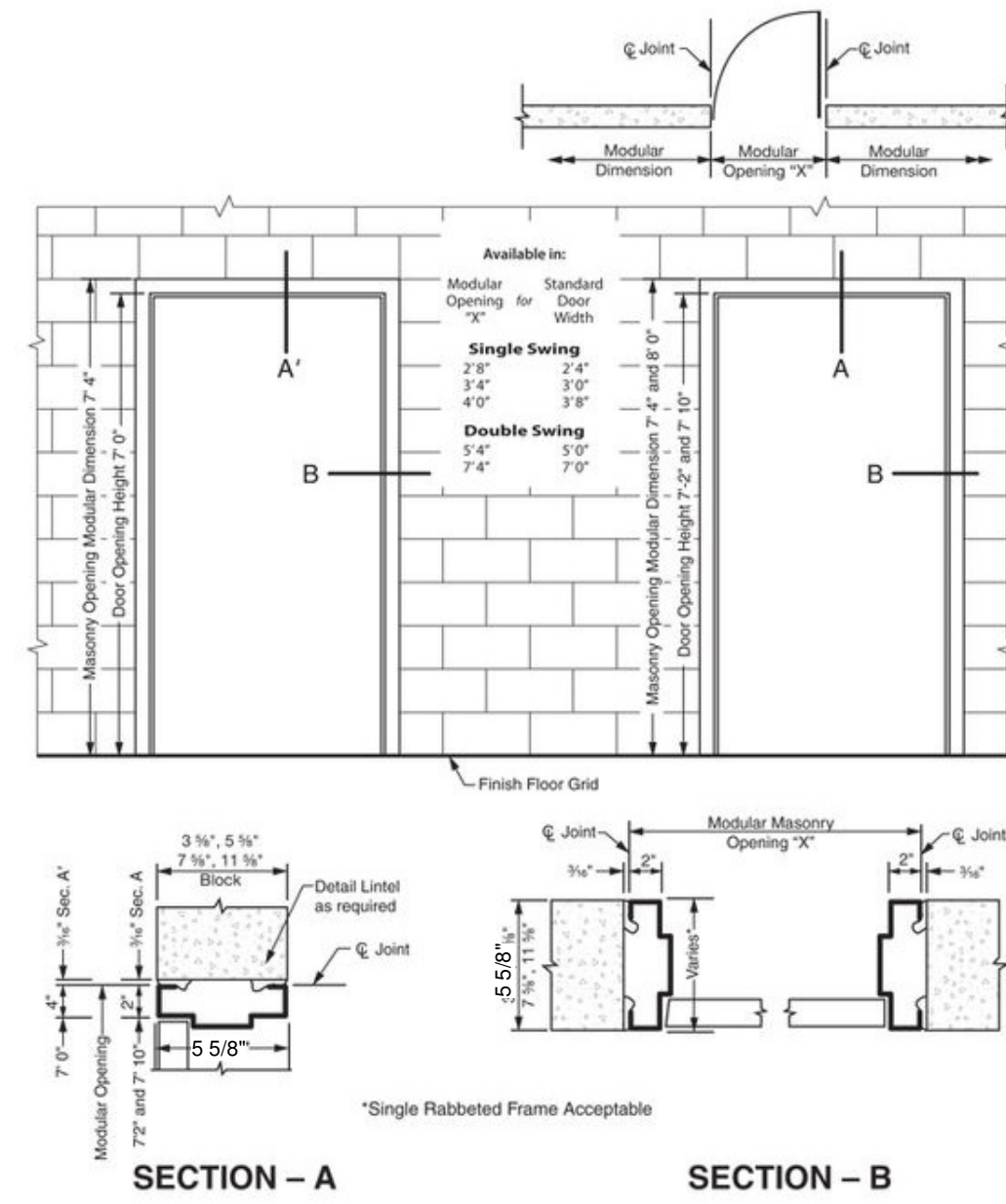
Project Number	
Date	07/22/22
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Checked By	CHK

CC1
Scale As indicated

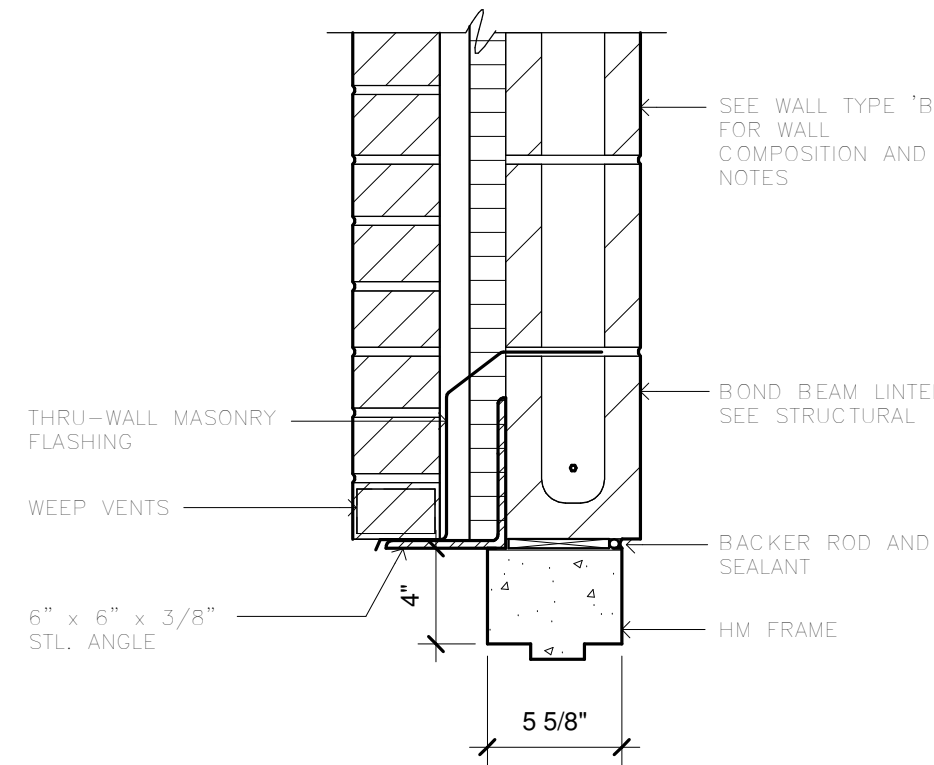
No.	Date	Description

Project Number
Date 07/22/22
Drawn By TRB
Checked By CHK
A1
Scale As indicated

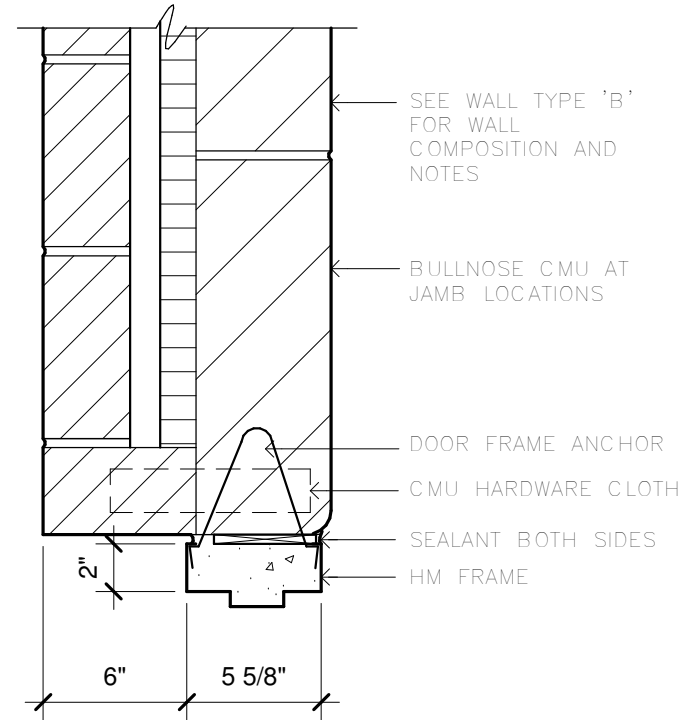
DOOR SCHEDULE									
Mark	Width	Height	Door Type	Frame Type	Frame Material	Finish	Head Detail	Jamb Detail	Description
100	3' - 0"	7' - 0"	HM	HM	HM	PAINT	H2/A1	J2/A1	INSULATED
102	3' - 0"	7' - 0"	HM	HM	HM	PAINT	H2/A1	J2/A1	INSULATED
101	3' - 0"	7' - 0"	HM	HM	HM	PAINT	H2/A1	J2/A1	INSULATED
103A	3' - 0"	7' - 0"		HM	HM	PAINT	H1/A1	J1/A1	
103B	3' - 0"	7' - 0"	HM	HM	HM	PAINT	H2/A1	J2/A1	INSULATED
104A	3' - 0"	7' - 0"	HM	HM	HM	PAINT	H2/A1	J2/A1	INSULATED
104B	9' - 0"	8' - 0"	STL				H3/A1	J3/A1	OVERHEAD DOOR



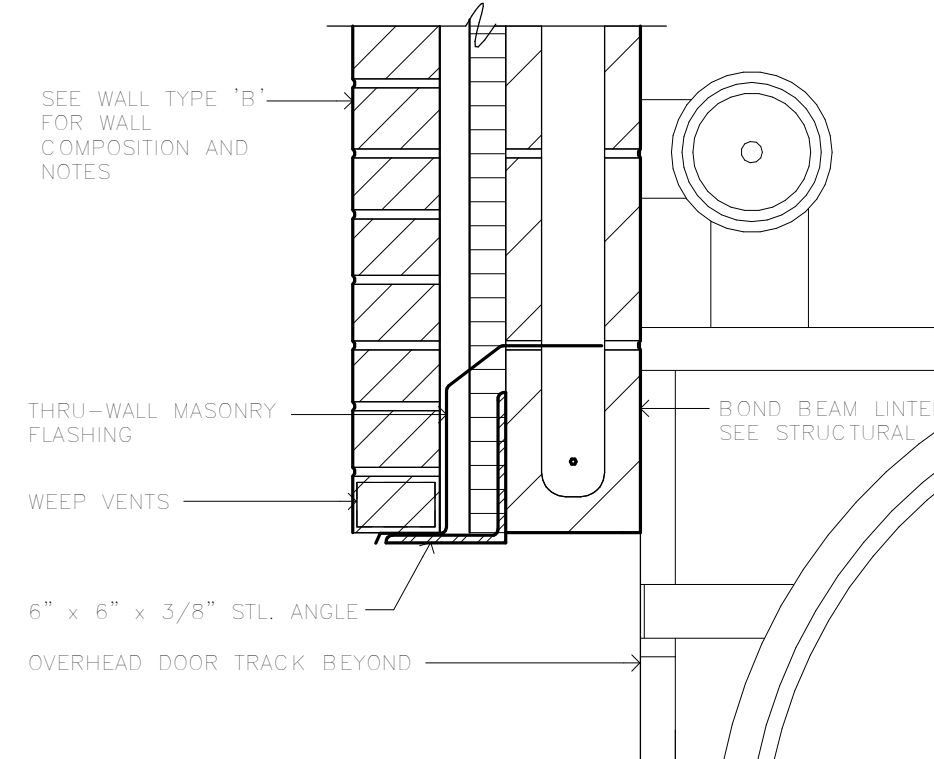
4 TYP. INT. DOOR DETAILS H1 & J1
1 1/2" = 1'-0"



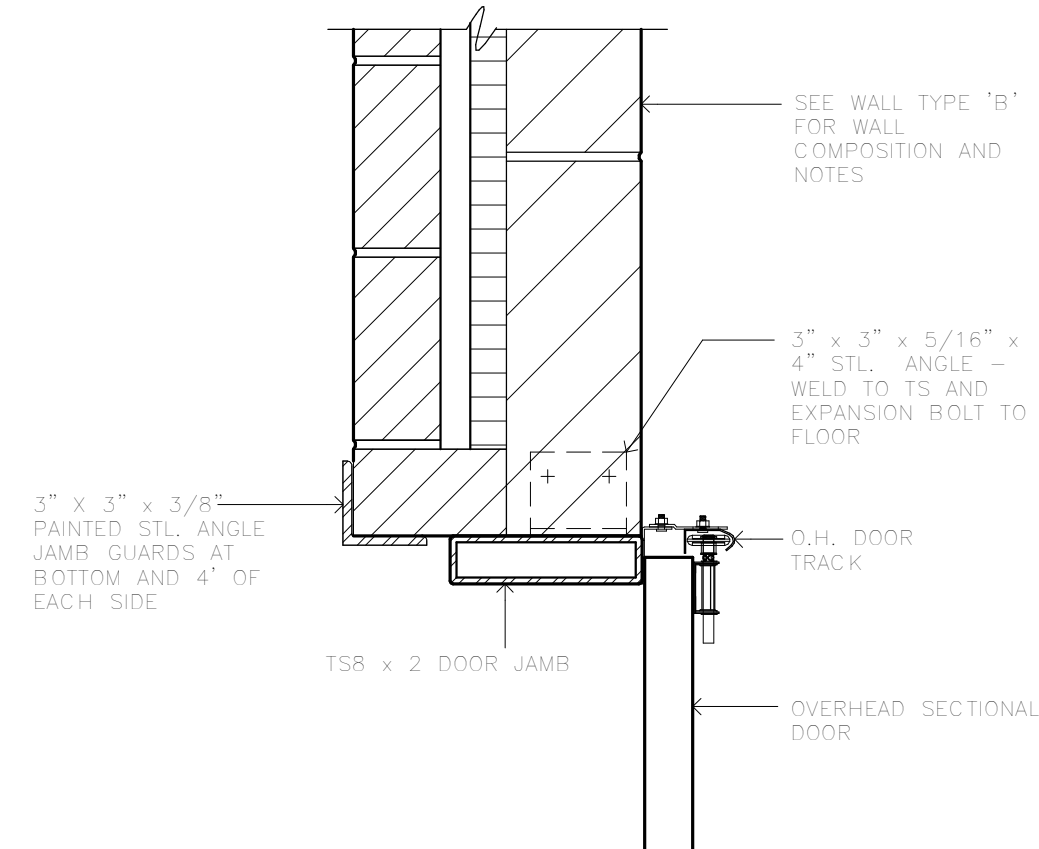
2H TYP. EXT. DOOR HEAD DETAIL
1 1/2" = 1'-0"



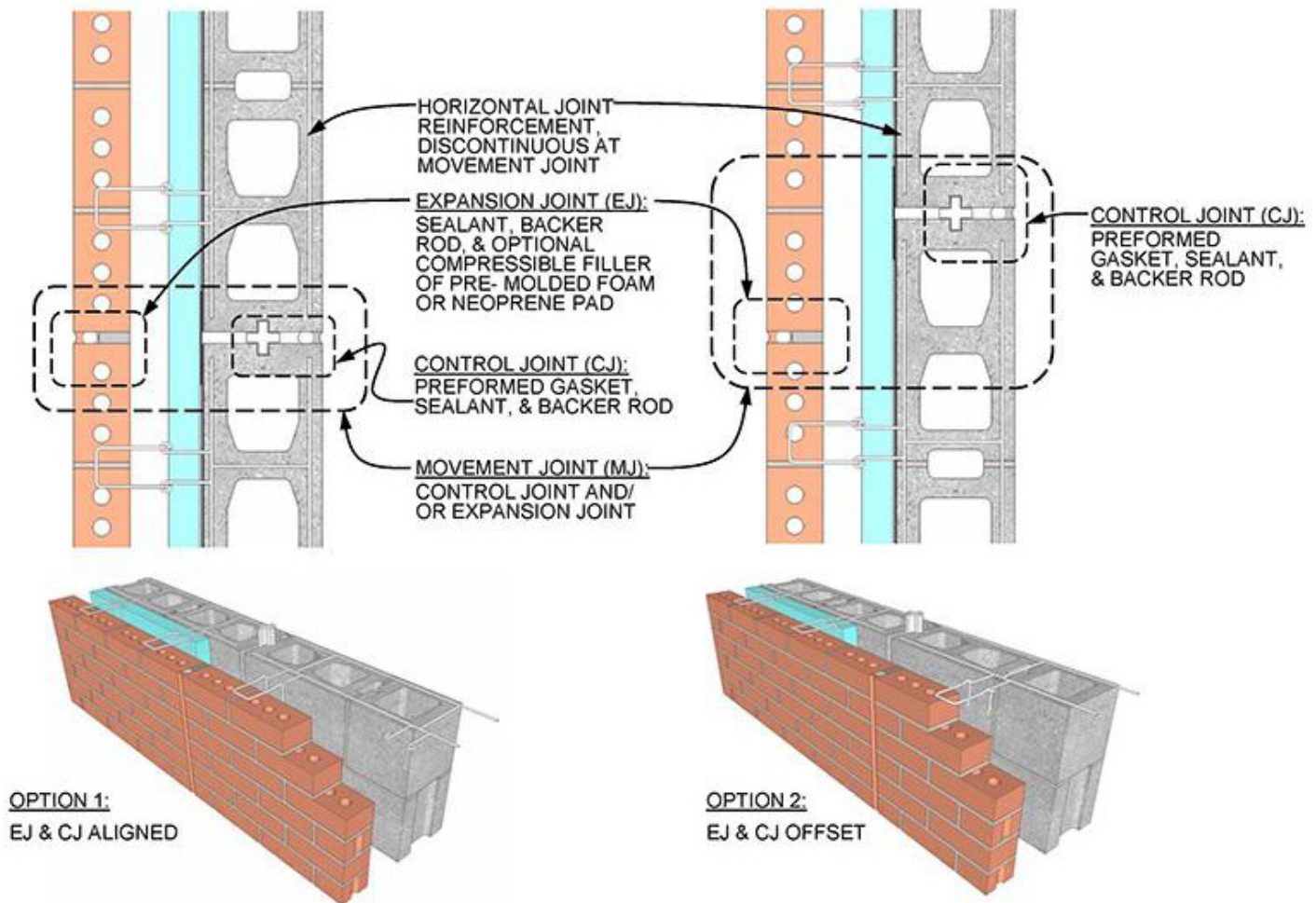
2J TYP. EXT. DOOR JAMB DETAIL
1 1/2" = 1'-0"



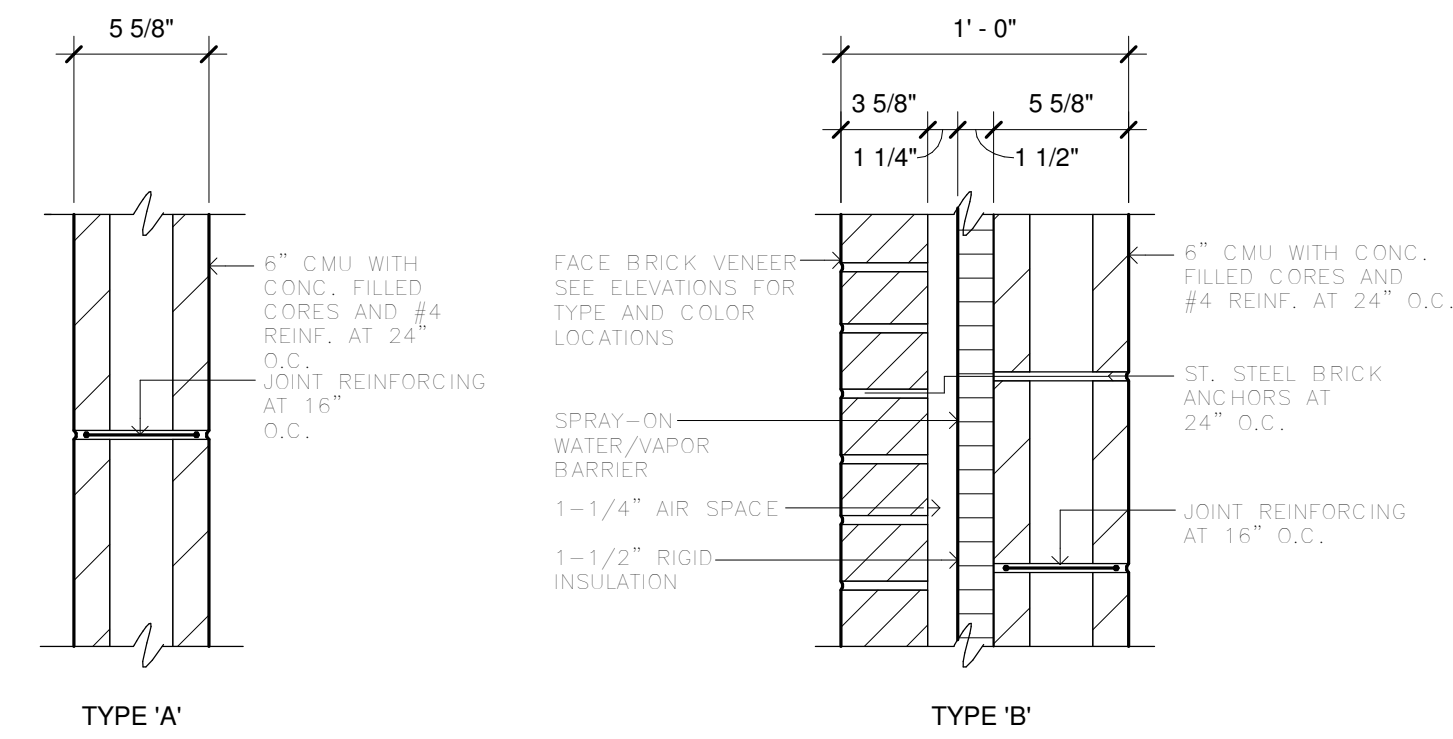
H3 OH DOOR HEAD DETAIL
1 1/2" = 1'-0"



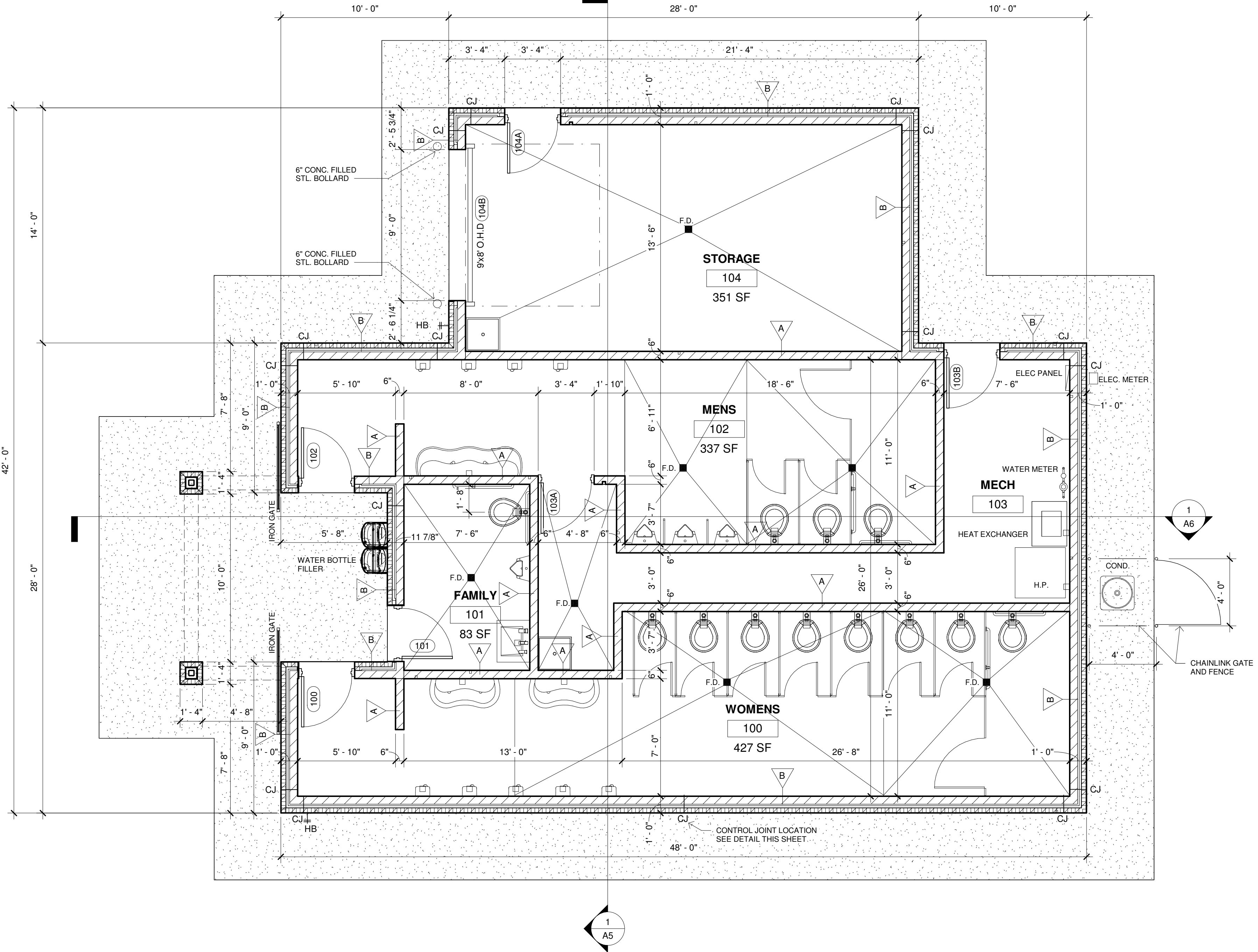
H3 OH DOOR JAMB DETAIL
1 1/2" = 1'-0"



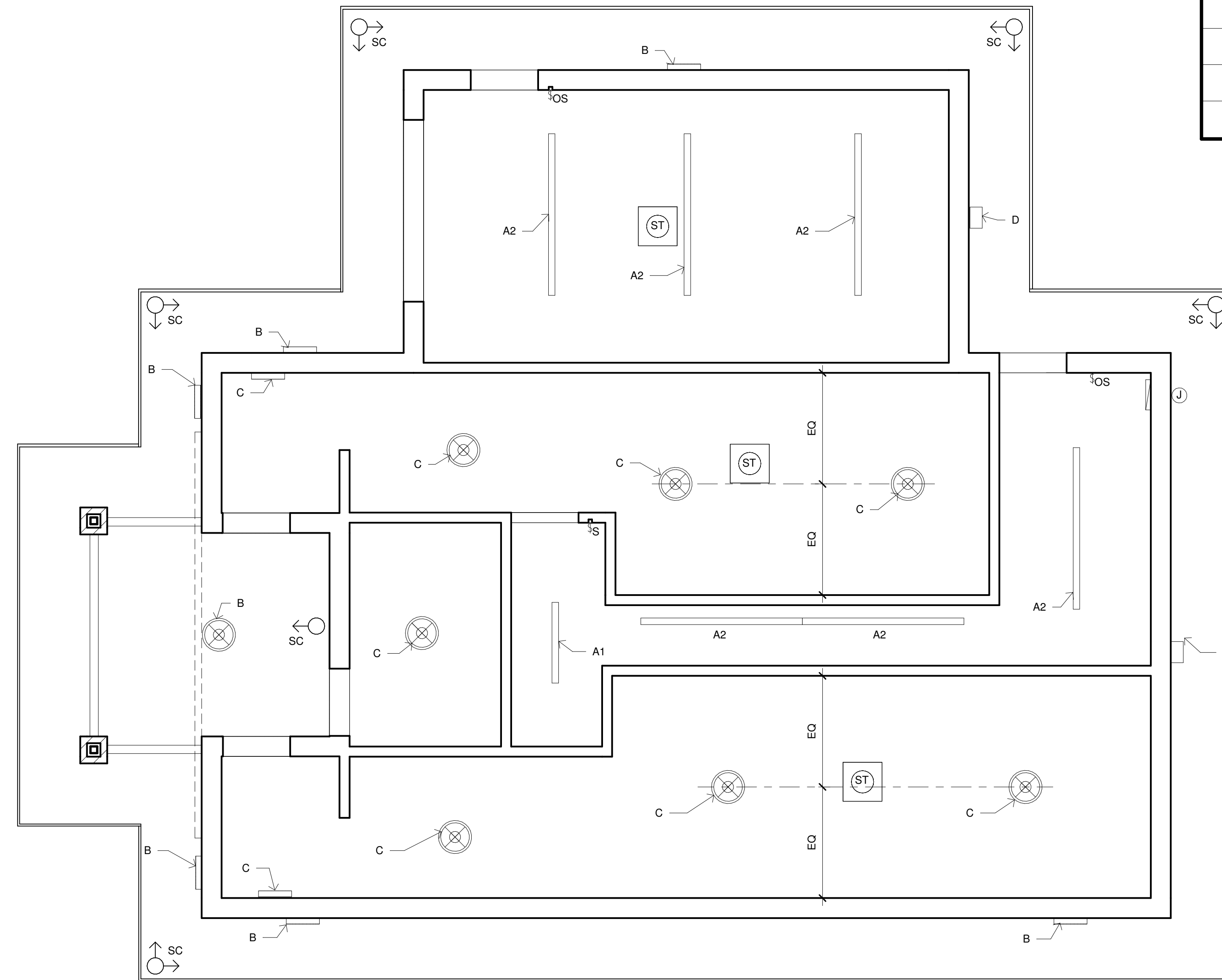
2 CONTROL JOINT DETAILS
NO SCALE



3 WALL TYPES
1 1/2" = 1'-0"

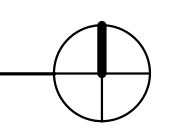


1 PROPOSED FLOOR PLAN
1/4" = 1'-0"



ELECTRICAL FIXTURE SCHEDULE		
A1		4' - LED STRIP SURFACE MOUNT-WALL
A2		8' - LED STRIP SURFACE MOUNT - WALL/CEILING
B		LED H.O. DOME FIXTURE
C		LED DOME FIXTURE
D		WALL PACK
ST		14" SOLAR TUBE
SC		SECURITY CAMERA

1 REFLECTED CEILING PLAN
 1/4" = 1'-0"



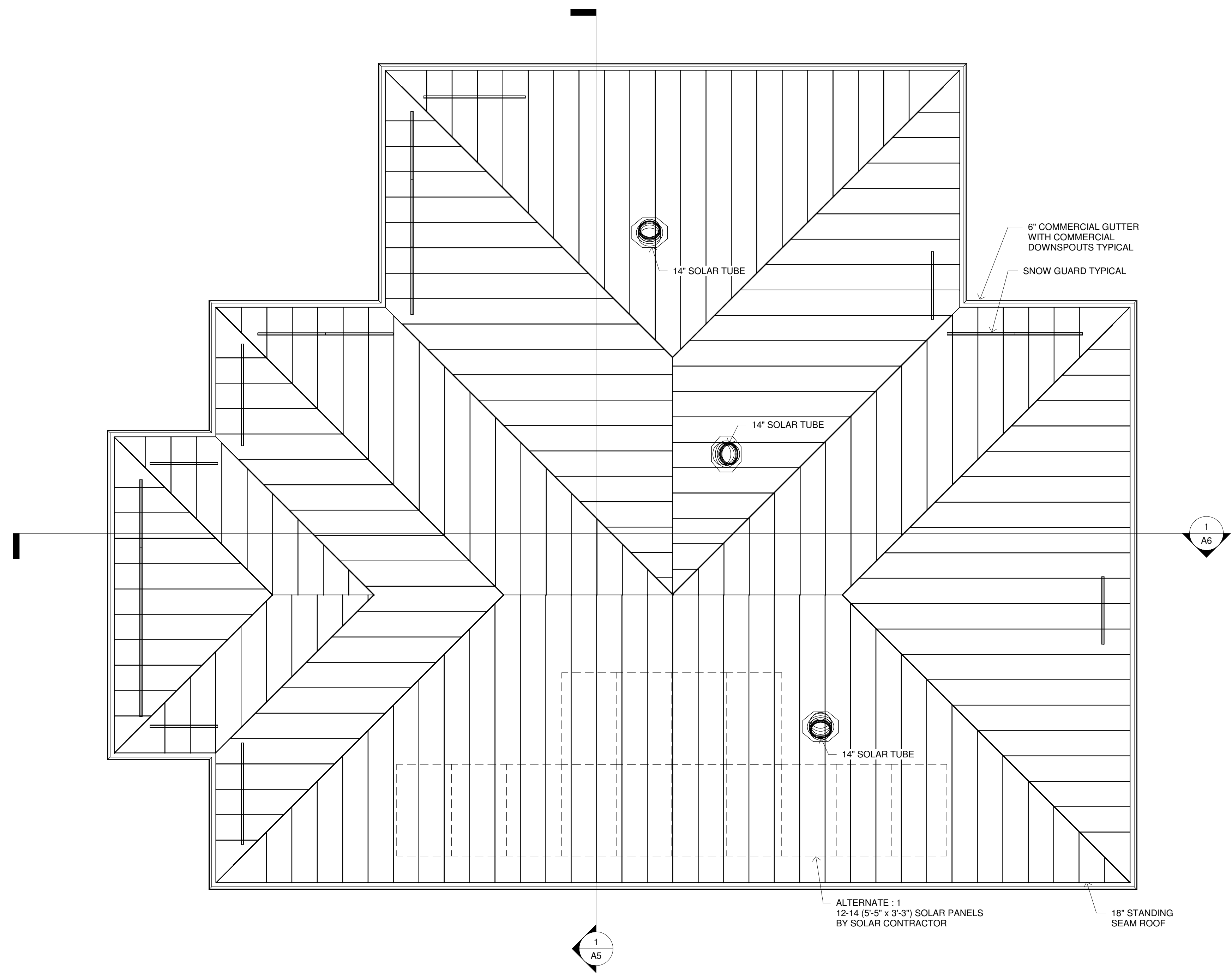
No.	Date	Description

REFLECTED CEILING PLAN

Project Number
 Date 07/22/22
 Drawn By TRB
 Checked By CHK

A2
 Scale 1/4" = 1'-0"

**RIVERSIDE SOUTH
 TOILET ROOMS**
 239 E Veterans Memorial Drive, LaCrosse, WI



1 ROOF PLAN
 1/4" = 1'-0"

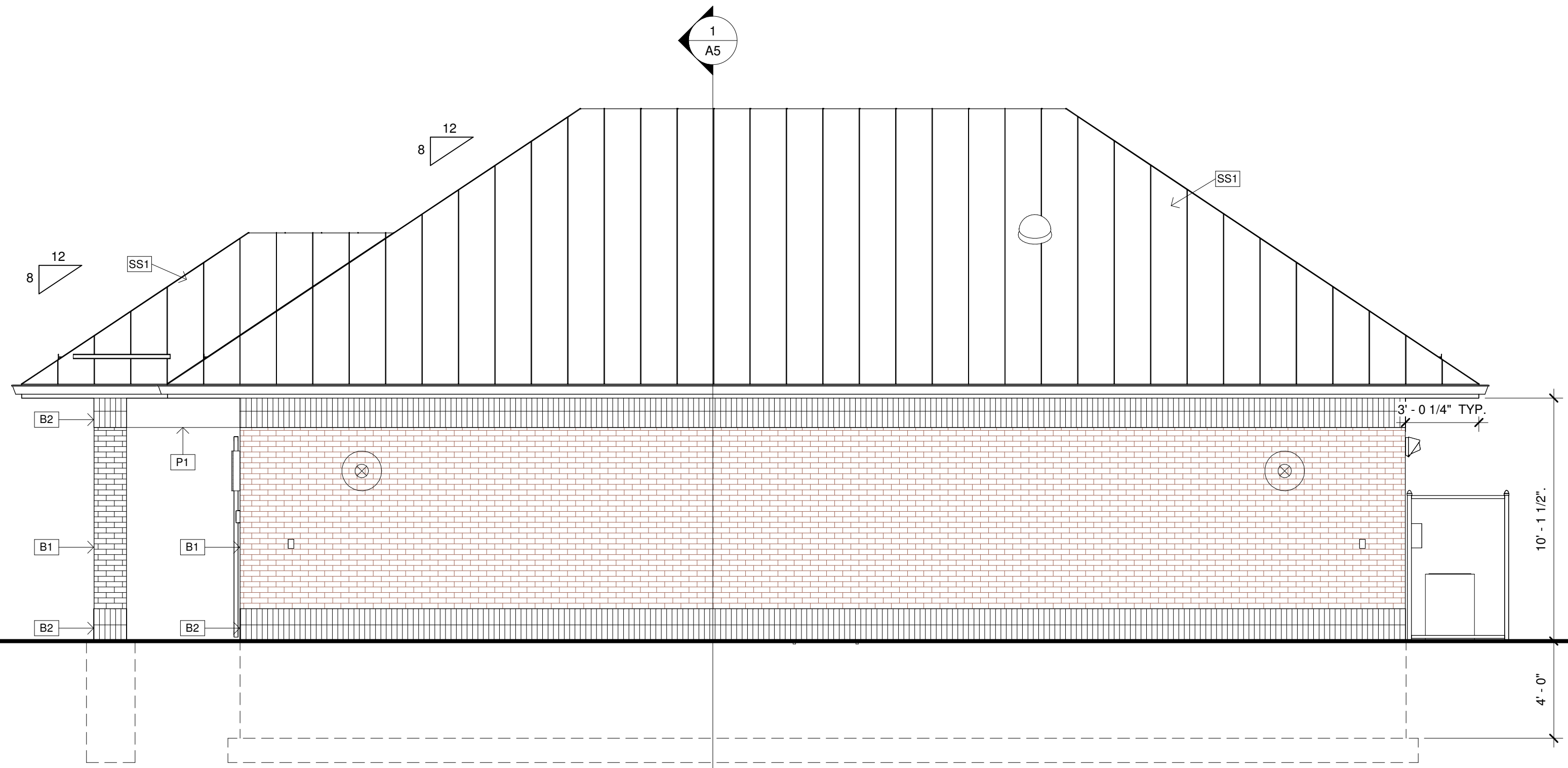
No.	Date	Description

ROOF PLAN

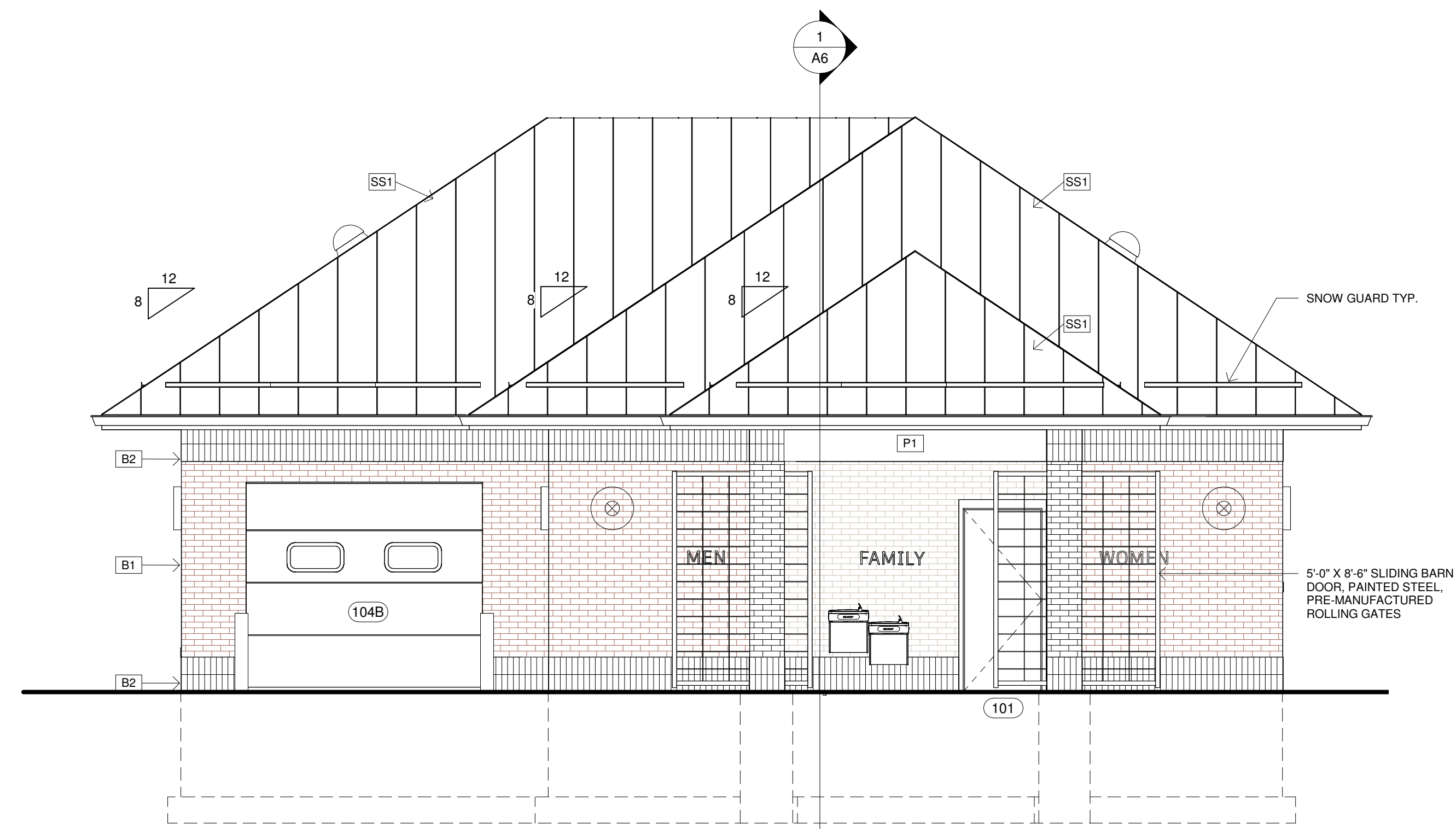
Project Number	
Date	07/22/22
Drawn By	TRB
Checked By	CHK

A3
 Scale 1/4" = 1'-0"

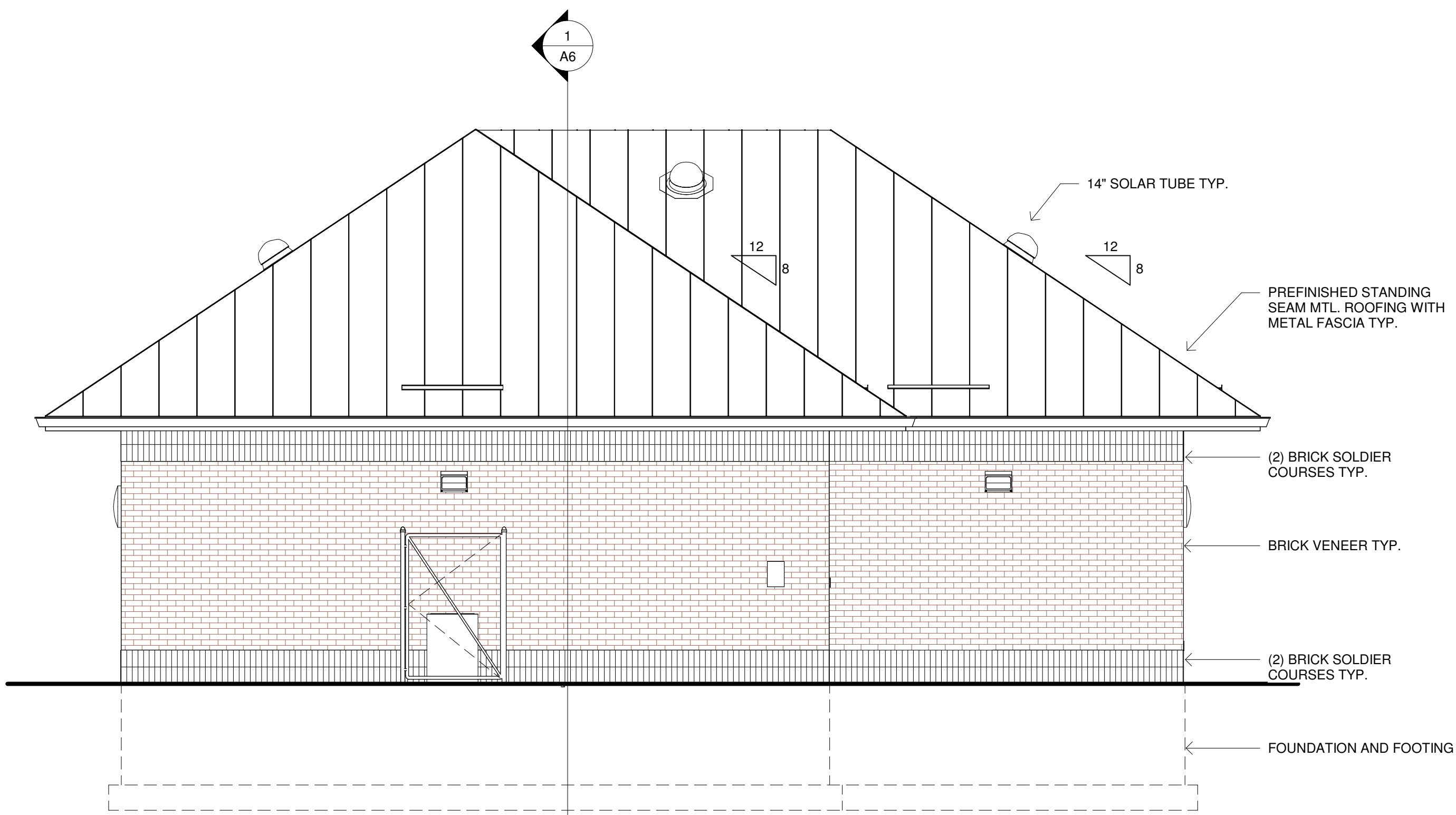
**RIVERSIDE SOUTH
 TOILET ROOMS**
 239 E Veterans Memorial Drive, LaCrosse, WI



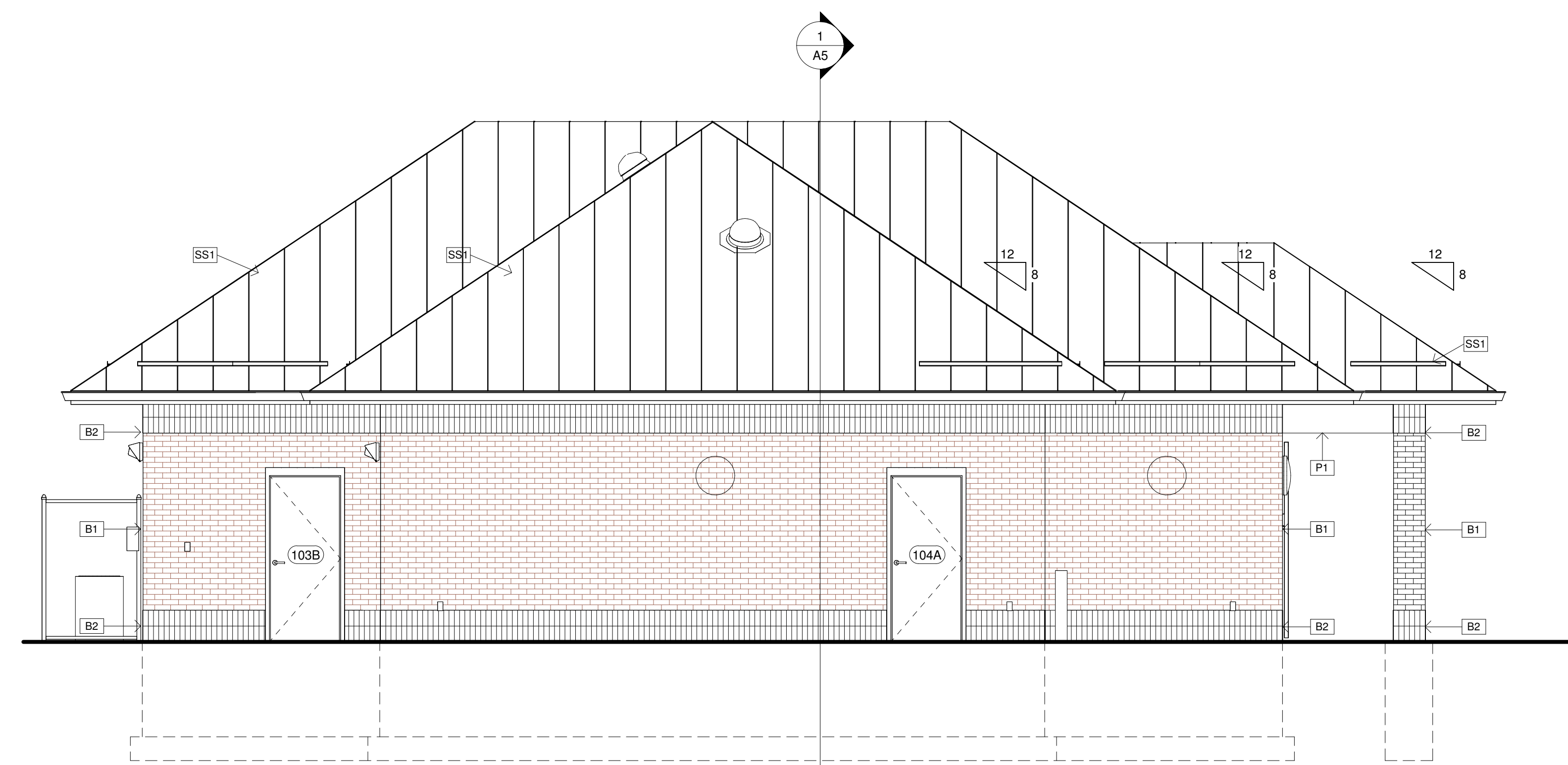
2 SOUTH EXTERIOR ELEVATION
 1/4" = 1'-0"



1 WEST EXTERIOR ELEVATION
 1/4" = 1'-0"



3 EAST EXTERIOR ELEVATION
 1/4" = 1'-0"



4 NORTH EXTERIOR ELEVATION
 1/4" = 1'-0"

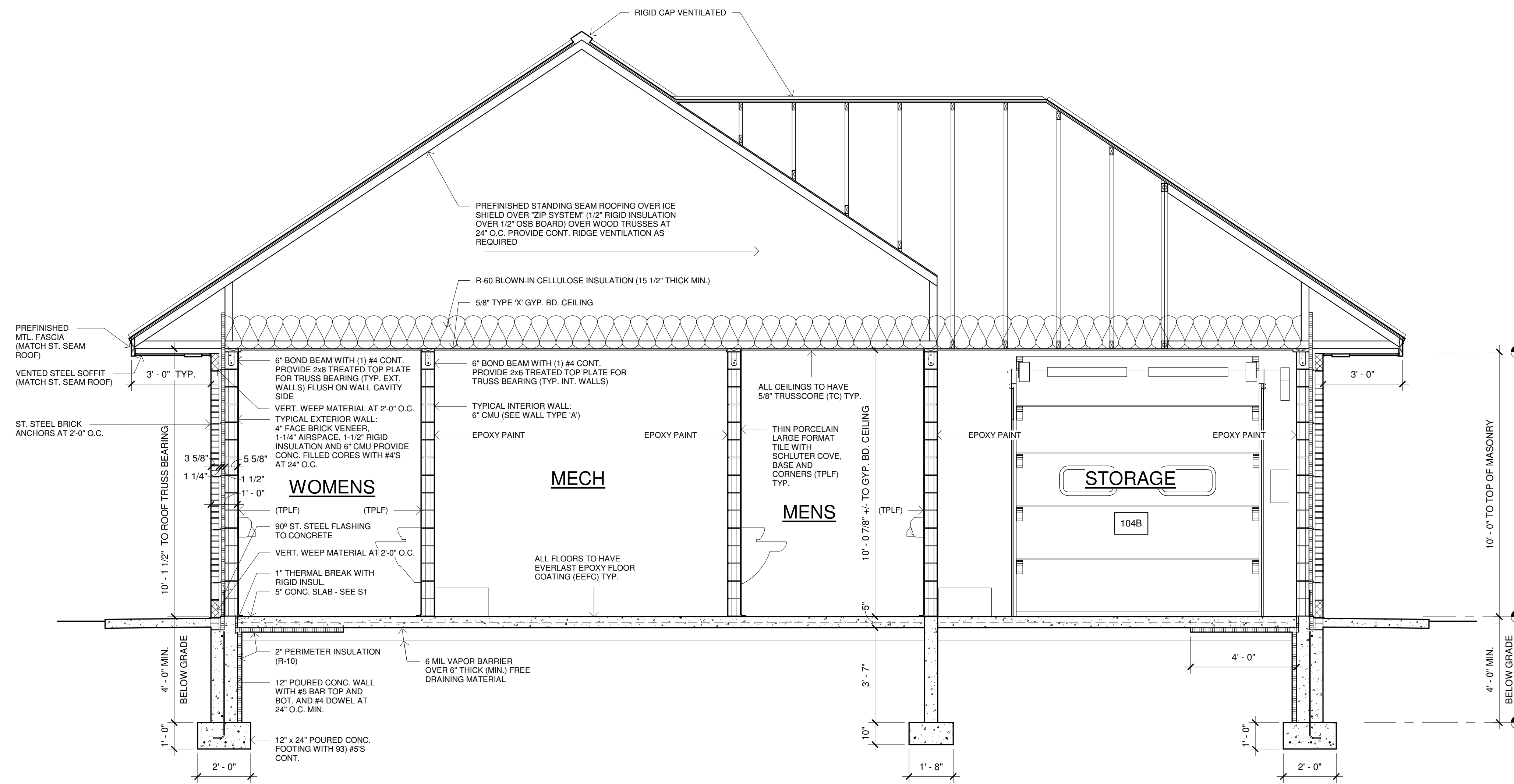
No.	Date	Description

EXTERIOR ELEVATIONS

Project Number
 Date 07/22/22
 Drawn By TRB
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A4

Scale 1/4" = 1'-0"



1. NORTH / SOUTH BUILDING SECTION
3/8" = 1'-0"

**RIVERSIDE SOUTH
TOILET ROOMS**
239 E Veterans Memorial Drive, LaCrosse, WI

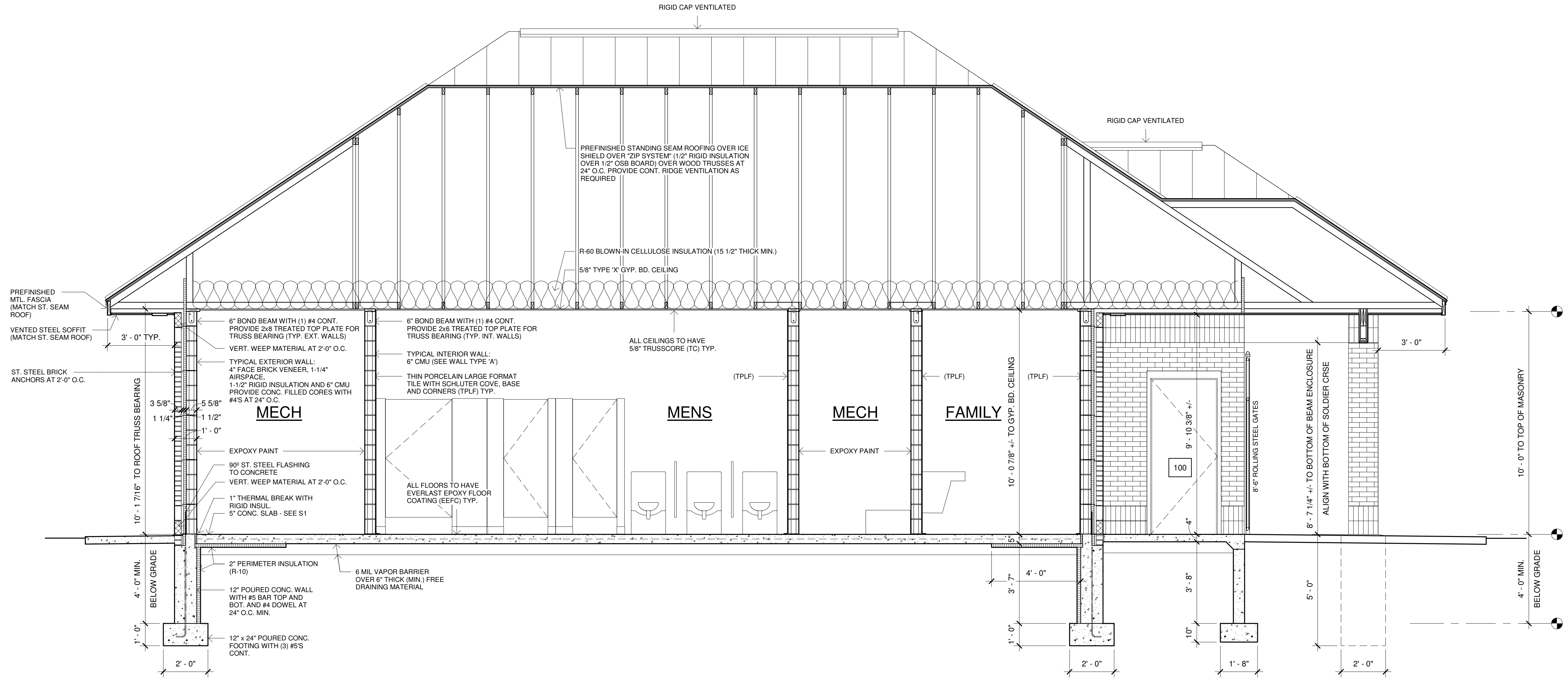
No.	Date	Description

BUILDING SECTION

Project Number	
Date	07/22/22
Drawn By	TRB
Checked By	CHK

A5
Scale 3/8" = 1'-0"

**RIVERSIDE SOUTH
 TOILET ROOMS**
 239 E Veterans Memorial Drive, LaCrosse, WI



1. WEST / EAST BUILDING SECTION
 3/8" = 1'-0"

No.	Date	Description

BUILDING SECTION

Project Number	
Date	07/22/22
Drawn By	TRB
Checked By	CHK

A6
 Scale 3/8" = 1'-0"

GENERAL REQUIREMENTS

NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES

ALL MATERIALS AND WORK PERFORMED SHALL CONFORM TO THE REQUIREMENTS OF THE 2018 WISCONSIN COMMERCIAL BUILDING CODE INCLUDING LOCAL ORDINANCES AND AMENDMENTS

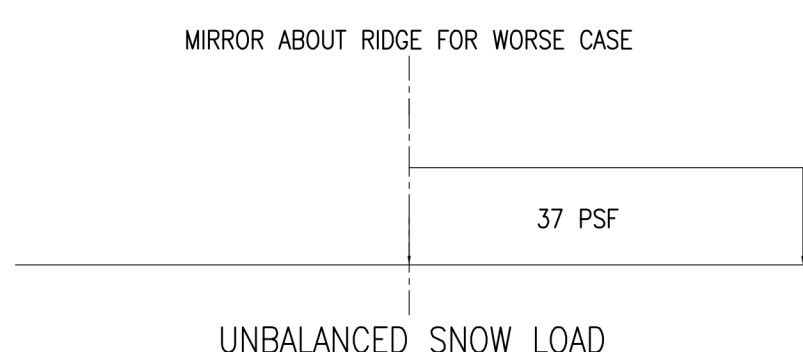
ALL MATERIAL SHALL BE FURNISHED AS SHOWN HEREIN UNLESS THE OWNER OR ENGINEER OF RECORD APPROVES EQUAL ALTERNATIVES

NO CHANGES ARE TO BE MADE TO THESE PLANS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE ENGINEER OF RECORD. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, AND SHORING. OBSERVATION VISITS TO THE SITE BY THE ENGINEER OF RECORD AND/OR THE ENGINEER'S REPRESENTATIVE (S) SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OF THE CONSTRUCTION PROCEDURES

DESIGN LOADS

Table listing design loads: DEAD (ROOF DEAD LOAD = 21 PSF), SNOW (GROUND SNOW LOAD (Pg) = 40 PSF), LIVE (ROOF LIVE LOAD = 20 PSF), WIND (BASIC WIND SPEED = 115 MPH), SEISMIC (USE GROUP = II), and LOADS TO BE APPLIED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2018 WISCONSIN COMMERCIAL BUILDING CODE.

CHART CC: ENCLOSED, PARTIALLY ENCLOSED BUILDINGS COMPONENT & CLADDING DESIGN SUCTION (psf) h <= 60 FT. BUILDING. Table with columns for BUILDING AREA, INTERIOR WALL (4), CORNER WALL (5), INTERIOR ROOF (1), EDGE ROOF (2), CORNER ROOF (3), and EDGE ZONE STRIP WIDTH (FT).



DESIGN METHOD

2018 WISCONSIN COMMERCIAL BUILDING CODE (IBC 2015 AMENDED)

BUILDING CODE REQUIREMENT FOR STRUCTURAL CONCRETE (ACI 318-14)

BUILDING CODE REQUIREMENT FOR MASONRY STRUCTURES AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530-13)

SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (AISC 360-10)

STEEL DECK INSTITUTE (SDI). SPECIFICATIONS FOR ROOF AND FLOOR DECK, LATEST EDITION

NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NDS 15)

NATIONAL DESIGN STANDARDS FOR METAL-PLATE-CONNECTED WOOD TRUSS CONSTRUCTION (TPI 1-14)

ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES (ICC/ANSI A117.1-09)

DESIGN CRITERIA

MINIMUM COMPRESSIVE STRENGTH OF CONCRETE (fc) AT 28 DAYS SHALL BE: SLAB-ON-GRADE 4000 PSI (MAX 3/4" AGGREGATE), FOOTINGS 3500 PSI (MAX 1 1/2" AGGREGATE), FOUNDATION WALLS 4000 PSI (MAX 3/4" AGGREGATE), WALLS 4000 PSI (MAX 3/4" AGGREGATE), TOPPING 5000 PSI (MAX 3/8" AGGREGATE), GROUT FOR BASE PLATES 4000 PSI. MINIMUM COMPRESSIVE STRENGTH OF MASONRY (fm) AT 28 DAYS SHALL BE: TYPE M OR S MORTAR 1500 PSI, CONCRETE GROUT 3000 PSI.

REINFORCING STEEL SHALL BE: NON WELDABLE Fy = 60 KSI (ASTM A615, GRADE 60), WELDABLE MARKED AS GRADE 60W.

STRUCTURAL STEEL SHALL BE: W SHAPES Fy = 50 KSI (ASTM A992), HSS RECT. Fy = 46 KSI (ASTM 500, GRADE B), HSS ROUND Fy = 42 KSI (ASTM 500, GRADE B), PIPES Fy = 35 KSI (ASTM A53, GRADE B), PLATES AND MISC. Fy = 36 KSI (ASTM A36), WELDING ELECTRODES E70XX (AWS D1.1-04).

WOOD MEMBERS SPECIES AND GRADES ARE TO BE CALLED OUT ON PLANS AND SHALL HAVE THE FOLLOWING STRENGTHS:

Table listing wood member strengths: SPF #2 (Fb = 875 PSI, Fv = 135 PSI, E = 1,400,000 PSI), SPF MSR 1650 (Fb = 1650 PSI, Fv = 135 PSI, E = 1,500,000 PSI), SYP #1 (Fb = 1,850 PSI, Fv = 175 PSI, E = 1,700,000 PSI), LVL (Fb = 2950 PSI, Fv = 285 PSI, E = 2,900,000 PSI).

SPECIAL INSPECTIONS

THE FOLLOWING ELEMENTS OF CONSTRUCTION SHALL REQUIRE SPECIAL INSPECTION PER IBC 2015 SECTION 17. CONTRACTOR TO FURNISH INSPECTION UNLESS INSTRUCTED OTHERWISE BY THE CONSTRUCTION CONTRACT.

SOILS FOUNDATION CONCRETE MASONRY STRUCTURAL STEEL

1. SPECIAL INSPECTION IS NOT A SUBSTITUTE FOR INSPECTION BY A CITY/COUNTY INSPECTOR. SPECIALLY INSPECTED WORK WHICH IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE CITY/COUNTY INSPECTOR IS SUBJECT TO REMOVAL OR EXPOSURE.

2. THE SPECIAL INSPECTORS MUST BE CERTIFIED BY THE CITY/COUNTY TO PERFORM THE TYPES OF INSPECTIONS SPECIFIED.

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE SPECIAL INSPECTOR OR INSPECTION AGENCY AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION. A WORK PERFORMED WITHOUT REQUIRED SPECIAL INSPECTION IS SUBJECT TO REMOVAL.

4. SUBMIT WRITTEN REPORTS WITHIN TWO DAYS OF TESTING TO ENGINEER OF RECORD

FOUNDATIONS

FOUNDATIONS SHALL NOT BE PLACED PRIOR TO CONFIRMATION OF THE SOIL TYPE AT A DEPTH OF THE FOOTING ELEVATION. THE CONTRACTOR SHALL PROVIDE TEST HOLE REPORT TO THE ENGINEER OF RECORD. THE SOIL BEARING CAPACITY IS PRESUMED TO BE 2,000 PSF. SOIL TYPE IS PRESUMED TO BE SAND

COMPLETE NORMAL CLEARING AND GRUBBING OPERATION OVER THE ENTIRE BUILDING PAD AREA. THE BUILDING PAD AREA IS DEFINED AS AN AREA EXTENDING A MINIMUM OF 5 FEET BEYOND THE PROPOSED BUILDING LINES

REMOVE UNSUITABLE MATERIAL BELOW FOUNDATION. THE DEPTH OF THE REMOVAL IS DICTATED BY THE UNSUITABLE SOILS ENCOUNTERED SUCH AS SILT, ORGANIC MATTER SUCH AS ROOTS AND VEGETATION, AND RANDOM FILL MATERIALS SUCH AS WOOD, TINS, ASPHALT, MUCK, ETC.

FILL MATERIALS REQUIRED SHALL BE PLACED IN LIFTS NOT TO EXCEED 12 INCHES AND COMPACTED TO 95% MODIFIED PROCTOR (ASTM D1557, LATEST EDITION) AT OPTIMUM MOISTURE CONTENT WITHIN A DISTANCE OF 5 FEET BEYOND ALL FOOTING EDGES

SIX INCHES MINIMUM GRANULAR MATERIAL TO BE PLACED UNDER THE FLOOR SLAB

CONCRETE

TRANSIT MIXED CONCRETE SHALL CONFORM TO ASTM C94, SPECIFICATION FOR READY-MIXED CONCRETE

THE WATER CEMENT RATIO SHALL BE KEPT TO A MINIMUM AND CONCRETE SLUMP SHALL NOT EXCEED 4 INCHES WHEN TESTED IN ACCORDANCE WITH ASTM C143

CONCRETE SHALL HAVE THE REQUIRED MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS WHEN TESTED ACCORDING TO ASTM C39

PORTLAND CEMENT SHALL CONFORM TO ASTM C150 – SPECIFICATION FOR PORTLAND CEMENT

FINE AND COURSE AGGREGATES SHALL CONSIST OF CLEAN HARD STRONG AND DURABLE INERT MATERIAL FREE OF INJURIOUS AMOUNTS OF DELETERIOUS SUBSTANCES AND CONFORM TO ASTM C33 – SPECIFICATION FOR CONCRETE AGGREGATES

MIXING WATER SHALL BE FREE OF ANY ACID, ALKALI, OIL OR ORGANIC MATERIAL THAT MAY INTERFERE WITH THE SETTING OF THE CEMENT

ALL EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED. THE ENGINEER OF RECORD SHALL APPROVE ALL ADMIXTURE

REINFORCING BARS TO BE WELDED SHALL BE IDENTIFIED AS GRADE 60W

WELDED WIRE FABRIC SHALL CONFORM TO THE MOST CURRENT ASTM STANDARD

REINFORCING SHALL HAVE THE MINIMUM COVER REQUIREMENTS AS INDICATED IN ACI 318-14 WITH THE FOLLOWING MINIMUM VALUES:

Table for reinforcement cover: CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH = 3", EXPOSED TO EARTH OR WEATHER: #5 AND SMALLER = 1 1/2", #6 AND LARGER = 2"

ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED, IN ACCORDANCE WITH ACI DETAILING MANUAL, LATEST EDITION (SP-66)

ALL REINFORCING SHALL BE SUPPORTED IN FORMS, SPACED WITH NECESSARY ACCESSORIES AND SHALL BE SECURELY WIRED TOGETHER IN ACCORDANCE WITH CRSI "REINFORCING BAR DETAILING" (LATEST EDITION)

ALL CONCRETE SHALL CURE A MINIMUM OF 7 DAYS. IF FORMS ARE REMOVED BEFORE THE END OF THE CURING PERIOD, COAT SURFACES WITH LIQUID CURING COMPOUND

SAW CUTTING OF CONTROL JOINTS IS TO BE PERFORMED AS SOON AS CONDITIONS PERMIT, BUT NO MORE THAN 12 HOURS AFTER THE CONCRETE IS Poured

PROVIDE STANDARD HOOKED DOWELS IN WALL FOOTINGS WITH EQUAL SIZE AND SPACING AS VERTICAL WALL STEEL, UNLESS NOTED OTHERWISE

ALL CONCRETE SLABS SHALL BE REINFORCED AS INDICATED ON THE DRAWINGS. FIBER REINFORCED CONCRETE MAY BE USED IN THE FLOOR SLABS IN ADDITION TO THE REQUIRED REINFORCING AT DOSAGE RATES ACCORDING TO SUPPLIERS

USE NON-SHRINK, NON-METALLIC GROUT UNDER BASE PLATES

DIMENSIONS OF THE FINISHED PRODUCT SHALL BE WITHIN THE LIMITS RECOMMENDED BY ACI 117

THE CONCRETE CONTRACTOR SHALL COORDINATE ALL OTHER TRADES FOR SIZE AND LOCATION OF ALL OPENINGS IN WALLS AND FLOORS. ALL OPENINGS IN STRUCTURAL CONCRETE SHALL BE DETAILED OR APPROVED BY THE ENGINEER

CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED

- NOTES: 1) NORMAL WEIGHT CONCRETE 2) CLEAR COVER > BAR DIAMETER 3) MINIMUM SPACING S >= BAR DIA. W/STRUPS 4) MINIMUM SPACING S >= 2" BAR DIA. W/O STRUTRUPS 5) fc' = 3000 PSI , Fy = 60,000 PSI 6) FOR TOP BARS MULTIPLY BY 1.3 7) UNCOATED REINFORCING BARS

Table for reinforcement: BAR SIZE, MIN. LAP LENGTH (INCHES). Values for 3, 4, 5, 6, 7, 8.

WOOD TRUSSES

WOOD TRUSSES SHALL BE FABRICATED BY AN AUTHORIZED TRUSS MANUFACTURER IN ACCORDANCE WITH THE DESIGN(S) AS PREPARED BY THE ENGINEER OF RECORD

FIVE BOUND SETS OF ENGINEERING DRAWINGS, SHOWING CONFORMANCE TO THE DESIGN LOADS AND CODE DEFLECTION CRITERIA AND INDICATING MEMBER SIZES SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR DESIGN CONCEPT APPROVAL. DESIGN CALCULATIONS AND DRAWINGS ARE TO BE PREPARED BY AND BEAR THE SEAL AND SIGNATURE OF A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED

DESIGN STANDARDS SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THE NDS 2015 AND THE LATEST "DESIGN SPECIFICATION FOR METAL PLATE CONNECTION TO WOOD TRUSSES"

BOTTOM CHORD AND WEB BRACING REQUIREMENTS ARE TO BE DETERMINED BY THE TRUSS MANUFACTURER. BRACING TO BE INSTALLED BY THE GENERAL CONTRACTOR. CONSULT TRUSS MANUFACTURER FOR SIZE, LOCATION AND NAILING REQUIREMENTS BEFORE BIDDING

AT ALL ENDS OF THE BUILDING AND AT INTERVALS ALONG THE LENGTH OF THE BUILDING, AS DETERMINED BY THE TRUSS MANUFACTURER, "X" BRACING SHALL BE INSTALLED ALONG LATERALLY BRACED WEBS

ALL TRUSS SPANS ARE TO BE FIELD VERIFIED PRIOR TO FABRICATION OF TRUSSES

CONTRACTOR IS RESPONSIBLE FOR ERECTION PROCEDURE OF ROOF TRUSSES. ROOF TRUSSES TO BE ERECTED AND BRACED PER THE LATEST BCISI STANDARDS

ROOF FRAMING PLAN IS A SCHEMATIC ONLY. TRUSS MANUFACTURER IS TO PREPARE A TRUSS SETTING PLAN FOR CONTRACTOR'S USE IN FIELD

MASONRY

MASONRY UNITS FOR HOLLOW UNIT MASONRY CONSTRUCTION SHALL CONFORM TO ASTM C90

CONCRETE BRICK SHALL CONFORM TO ASTM C55, STANDARD SPECIFICATION FOR CONCRETE BUILDING BRICK

MORTAR SHALL BE TYPE "M" OR "S", FRESHLY PREPARED AND UNIFORMLY MIXED, CONFORMING TO ASTM 270

GROUT AND MORTAR FOR REINFORCED MASONRY SHALL CONFORM TO ASTM 476

CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED

WIRE OR METAL ANCHORS WHICH SERVE AS TIES IN MULTI-WYTHE MASONRY WALLS OR VENEER WALLS, SHALL BE CORROSION RESISTANT METAL OR COATED WITH A CORROSION RESISTANT METAL

HORIZONTAL REINFORCEMENT, TRUSS TYPE 9GA GALVANIZED, SHALL BE PLACED 16" ON CENTER MINIMUM

ALL VERTICAL STEEL TO BE FULLY GROUTED SOLID

GROUTING THE CELLS OF MASONRY UNITS SHALL BE PERFORMED IN LOW LIFTS

CONTROL JOINTS TO BE LOCATED AS SHOWN ON PLAN. SEE TYPICAL CONTROL JOINT DETAIL

BOND BEAM AT TOP OF WALL IS TO BE CONTINUOUS WITH CONTINUOUS STEEL

INTERMEDIATE BOND BEAMS ARE TO BE DISCONTINUOUS WITH STEEL JOINT AT CONTROL JOINT

STRUCTURAL STEEL

ALL STRUCTURAL STEEL SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF ASTM AND SHALL BE FABRICATED AND ERECTED ACCORDING TO AISC SPECIFICATIONS

STEEL FABRICATOR/SUPPLIER SHALL DESIGN CONNECTIONS TO RESIST REACTIONS CALCULATED FROM THE UNIFORM LOAD CONSTANTS SHOWN IN THE AISC BEAM TABLES UNLESS REACTIONS ARE NOTED ON THE DRAWINGS OR SHOWN FULLY DETAILED ON THE CONSTRUCTION DOCUMENTS. CONNECTIONS SHALL BE SHOP WELDED AND FIELD BOLTED UNLESS NOTED OTHERWISE ON THE DRAWINGS. PROVIDE AN MINIMUM OF TWO (2) BOLTS FOR EACH CONNECTION AND USE MINIMUM 3/4" DIAMETER BOLTS AND 3/8" MINIMUM THICKNESS PLATES

ALL SHOP AND FIELD BOLTED CONNECTIONS SHALL USE A325 BOLTS AND NUTS, UNLESS OTHERWISE NOTED. AISC INSTALLATION PROCEDURES FOR A325 BOLTS AND NUTS MUST BE FOLLOWED

WELDING SHALL CONFORM TO THE LATEST EDITION OF AWS D1.1. ALL WELDING SHALL BE PERFORMED BY APPROVED CERTIFIED WELDERS

NO HOLES, OTHER THAN THOSE SPECIFICALLY DETAILED, SHALL BE ALLOWED THROUGH STRUCTURAL STEEL MEMBERS

THE STEEL FABRICATOR SHALL SUBMIT FOUR BOUND SETS OF ERECTION/SHOP DRAWINGS TO THE ENGINEER OF RECORD FOR DESIGN CONCEPT APPROVAL

FABRICATE ALL BEAMS WITH THE MILL CHAMBER UP

STRUCTURAL WOOD CONSTRUCTION

STRUCTURAL WOOD SHALL BE VISUALLY GRADED IN ACCORDANCE WITH ASTM D245. WOOD SHALL BE IDENTIFIED BY A GRADE MARK OR CERTIFICATE OF INSPECTION ISSUED BY A RECOGNIZED INSPECTION AGENCY

ALL WOOD SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 15% PRIOR TO INSTALLATION

ALL WOOD PERMANENTLY EXPOSED TO THE WEATHER, IN CONTACT WITH EXTERIOR, IN CONTACT WITH THE GROUND, SHALL HAVE A PRESERVATIVE TREATMENT EQUAL TO 0.4 P.C.F. RETENTION OF PRESSURE INJECTED CCA

NO WOOD MEMBER SHALL BE CUT, NOTCHED, OR DRILLED WITHOUT SPECIFIC WRITTEN APPROVAL OF THE ENGINEER OF RECORD

ALL JOISTS AND RAFTERS SHALL BE SUPPORTED BY DIRECT END BEARING ON BEAMS, PARTITIONS, OR JOIST HANGERS. ALL ROOF AND FLOOR TRUSSES MUST BE LOCATED ABOVE WALL STUDS

DO NOT EMBED WOOD MEMBERS IN CONCRETE UNLESS THEY ARE TREATED PLYWOOD SHALL BE LAID WITH FACE GRAIN PERPENDICULAR TO SUPPORTS, STAGGER ALL JOINTS

PLYWOOD SHALL BE CAPABLE OF SUPPORTING DESIGN LOADS AT REQUIRED SUPPORT SPACING AND BEAR APPROPRIATE GRADING STAMP FROM AMERICAN PLYWOOD ASSOCIATION

PLYWOOD SHEAR WALL SHALL BE FASTENED TO SUPPORTS WITH 10d NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS, UNLESS OTHERWISE NOTED

PLYWOOD DIAPHRAGM SHALL BE FASTENED TO SUPPORTS WITH 10d NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS, UNLESS OTHERWISE NOTED

USE COMMON WIRE NAILS UNLESS NOTED OTHERWISE

ALL BOLTS AND LAG SCREWS SHALL CONFORM TO ASTM A307. USE STEEL WASHERS BETWEEN HEAD OF BOLT OR LAG SCREW AND WOOD. USE STEEL WASHERS BETWEEN NUT AND WOOD

ALL FASTENERS USED FOR PRESERVATIVE TREATED WOOD SHALL BE GALVANIZED OR STAINLESS STEEL

ALL NAILING SHALL CONFORM TO TABLE 2304.9 OF IBC 2015, UNLESS NOTED OTHERWISE

LAP ALL DOUBLE TOP PLATES A MINIMUM OF FOUR FEET AND FASTEN TOGETHER WITH MINIMUM TWELVE 10d NAILS

MIDWEST Design & Development, LLC N5560 CTH ZM, Suite 3 Onalaska, WI 54650 PH: 608-785-2760

RIVERSIDE SOUTH TOILET ROOMS 239 E Veterans Memorial Drive, LaCrosse, WI

Table with 3 columns: No., Date, Description.

GENERAL / STRUCTURAL NOTES

Project Number

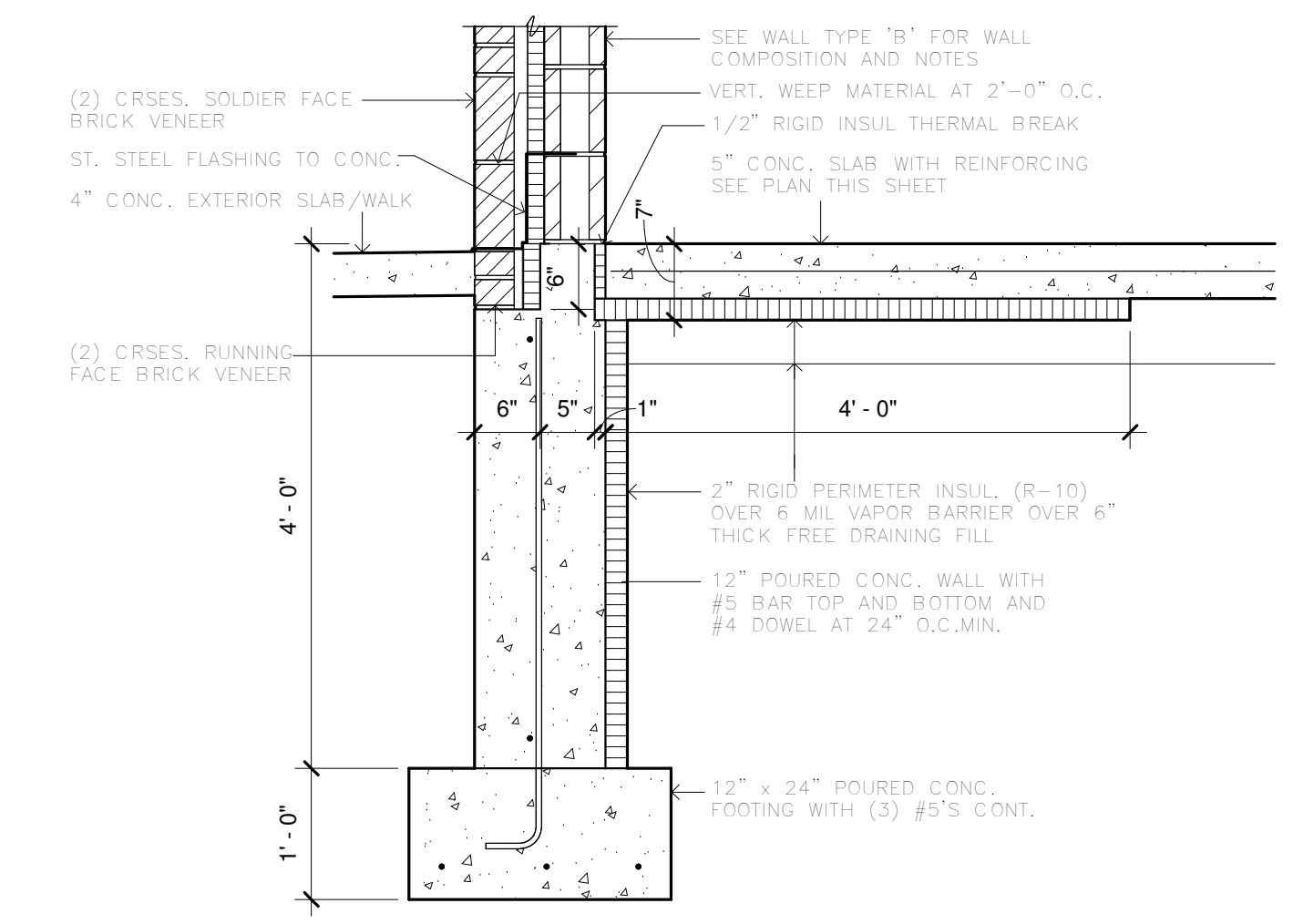
Date 07/22/22

Drawn By TRB

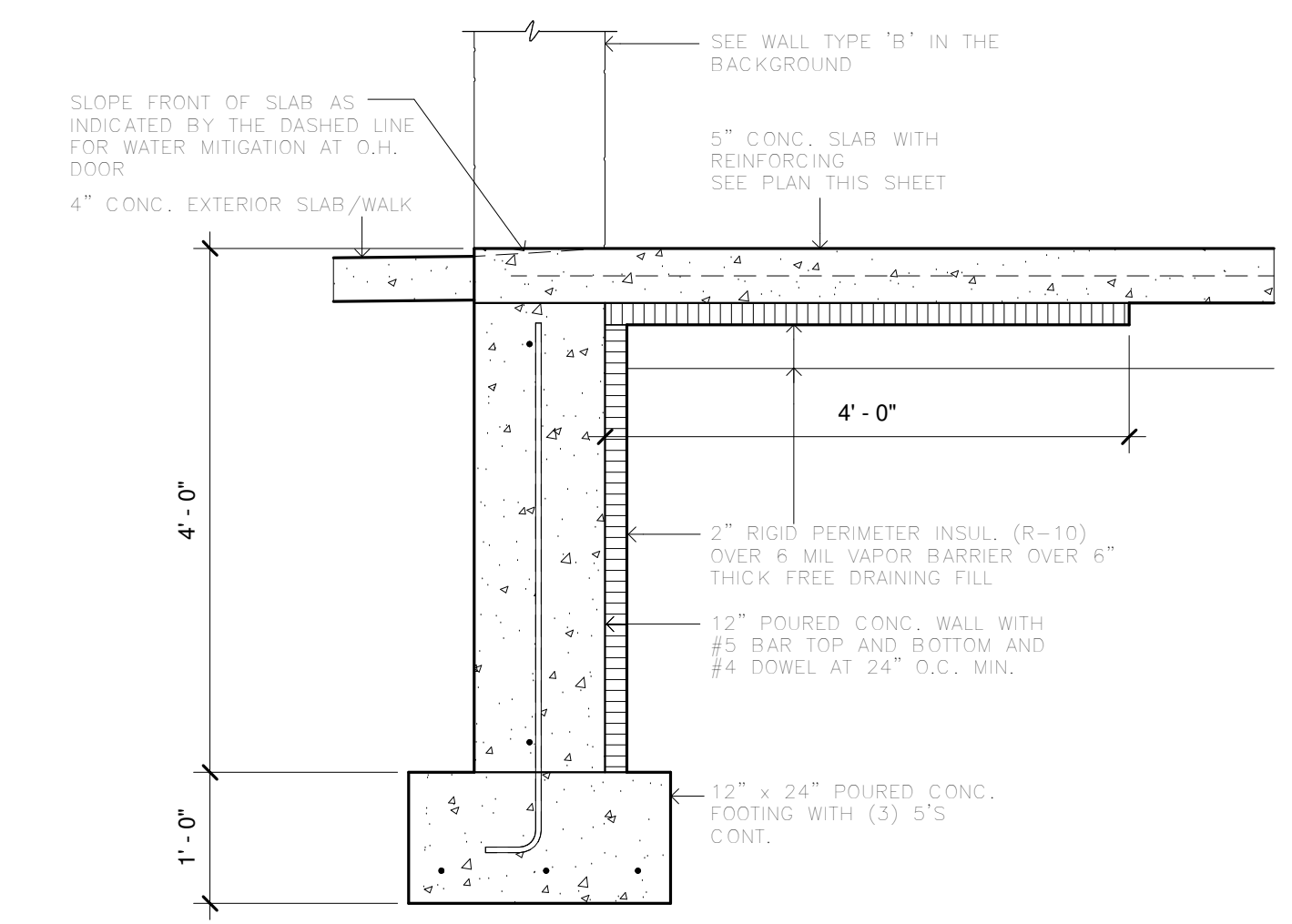
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SO

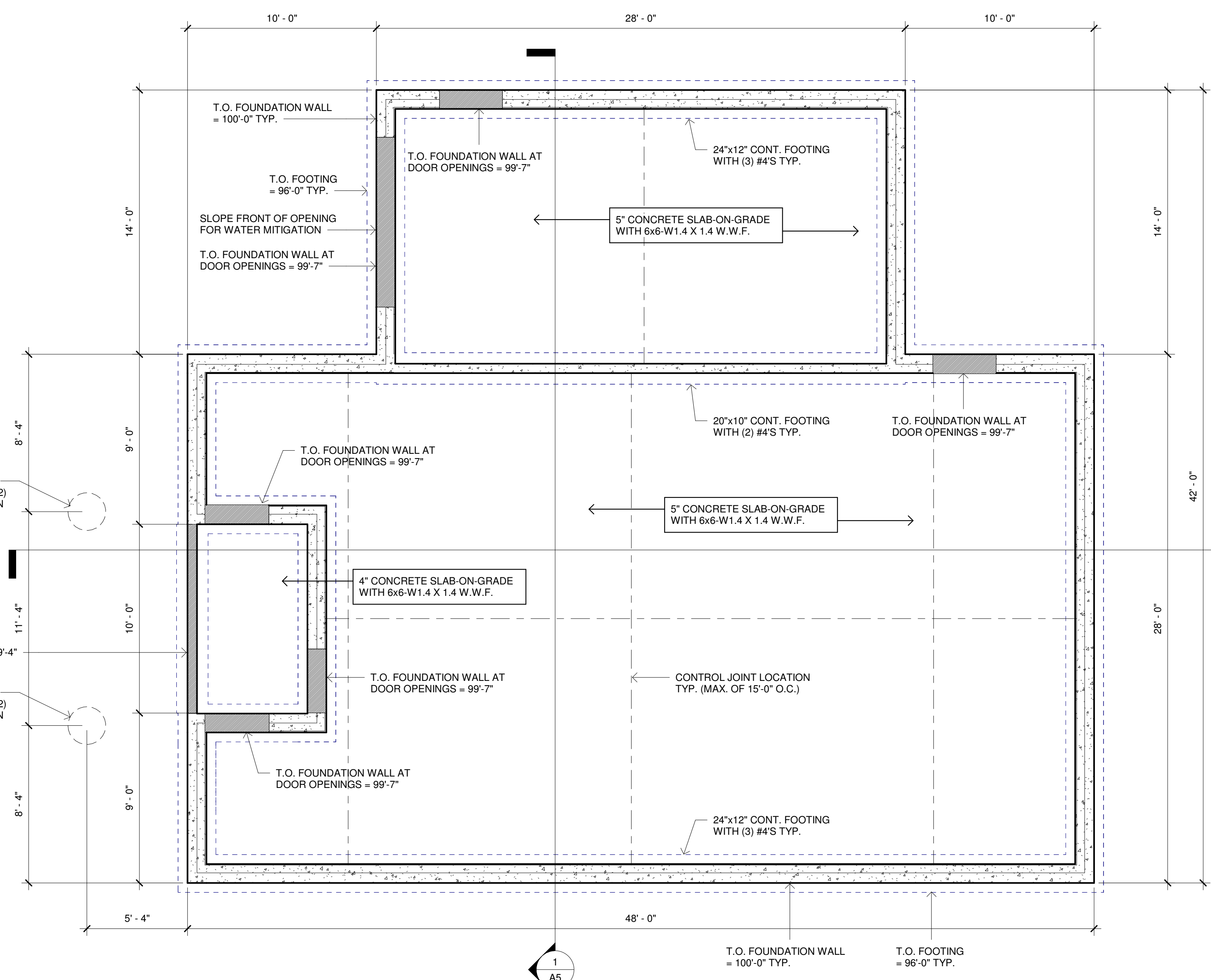
Scale



2 TYP. FOUNDATION WALL AND FOOTING
 3/4" = 1'-0"



3 TYPICAL WALL AT DOOR DETAIL
 3/4" = 1'-0"



1 FOUNDATION PLAN
 1/4" = 1'-0"

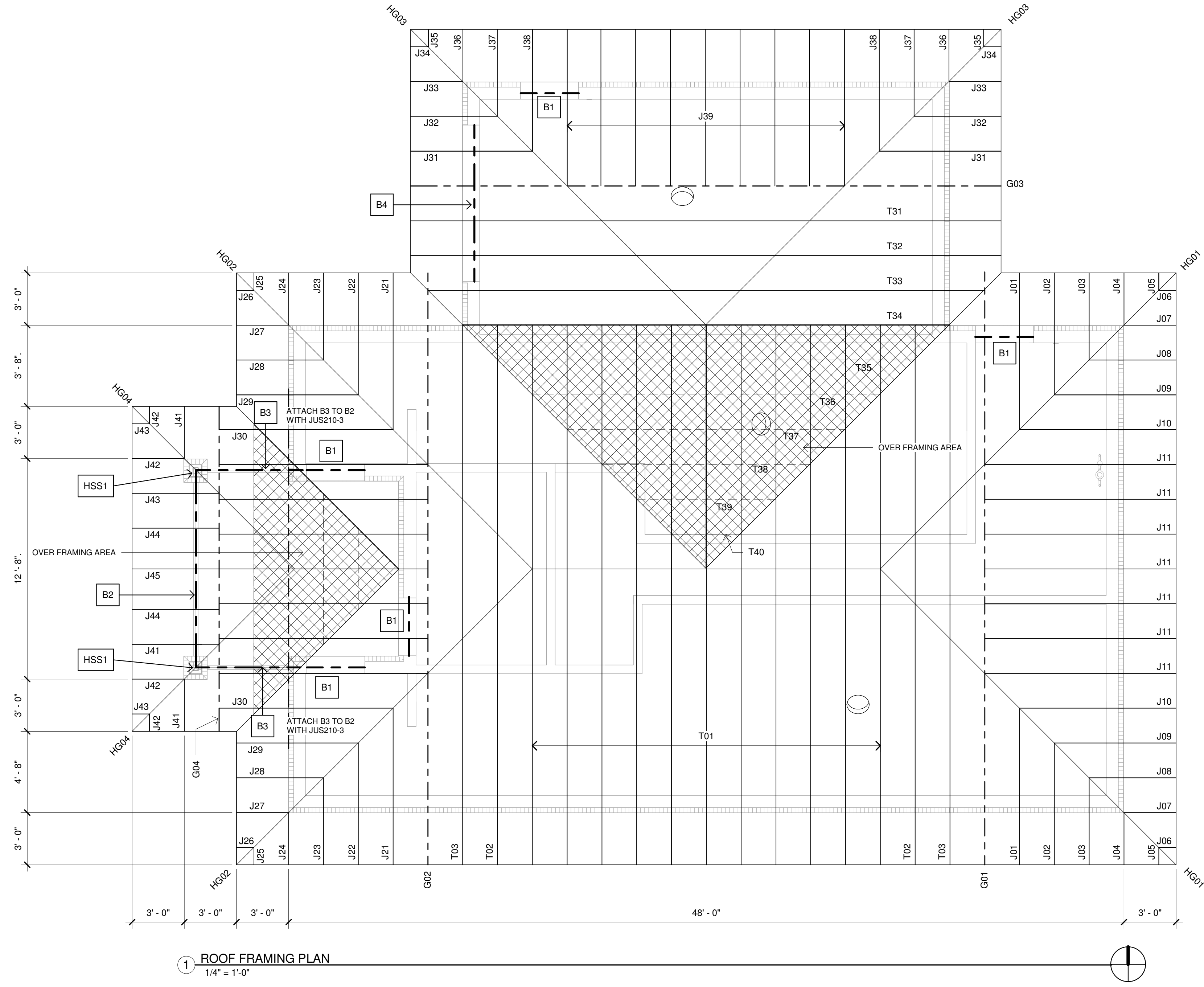
- GENERAL FOUNDATION NOTES:**
1. ALL CMU WALLS TO HAVE #4 BAR AT 48" O.C. IN FULLY GROUTED CELLS.
 2. ALL CMU WALLS TO HAVE 8" BOND BEAM ALONG TOP COURSE WITH #4 CONT. BAR.
 3. ALL CMU WALLS TO HAVE FULLY GROUTED VERTICAL CELLS AT ALL ENDS AND OPENINGS.
 4. ALL CMU WALLS TO HAVE 9GA. LADDER REINFORCING AT 16" O.C.

No.	Date	Description

FOUNDATION PLAN

Project Number	
Date	07/22/22
Drawn By	TRB
Checked By	CHK

S1
 Scale As indicated



1 ROOF FRAMING PLAN
 1/4" = 1'-0"

- GENERAL ROOF FRAMING NOTES:**
1. ALL SLOPES SHOWN ARE 8/12 PITCH.
 2. TOP OF PLATE BEARING = 10'-1 1/2" A.F.F.
 3. ALL OVERHANGS ARE 4'-0" (UNO).
 4. ALL TRUSSES TO BE ATTACHED TO TREATED TOP PLATE WITH SIMPSON H3.
 5. ALL GIRDER TRUSSES TO BE ATTACHED TO TREATED TOP PLATE WITH (2) SIMPSON H3'S.
 6. ALL TREATED TOP PLATES TO BE ATTACHED TO CMU WITH 1/2" ADHESIVE ANCHORS (6" EMBED) AT 24" O.C.
 7. ALL BRICK LINTEL SUPPORTS TO BE A MIN. ANGLE 4x4x3/8" WITH 8" BEARING ON EACH END. HORIZONTAL LENGTH MAY BE INCREASED DEPENDENT ON AIR GAP.

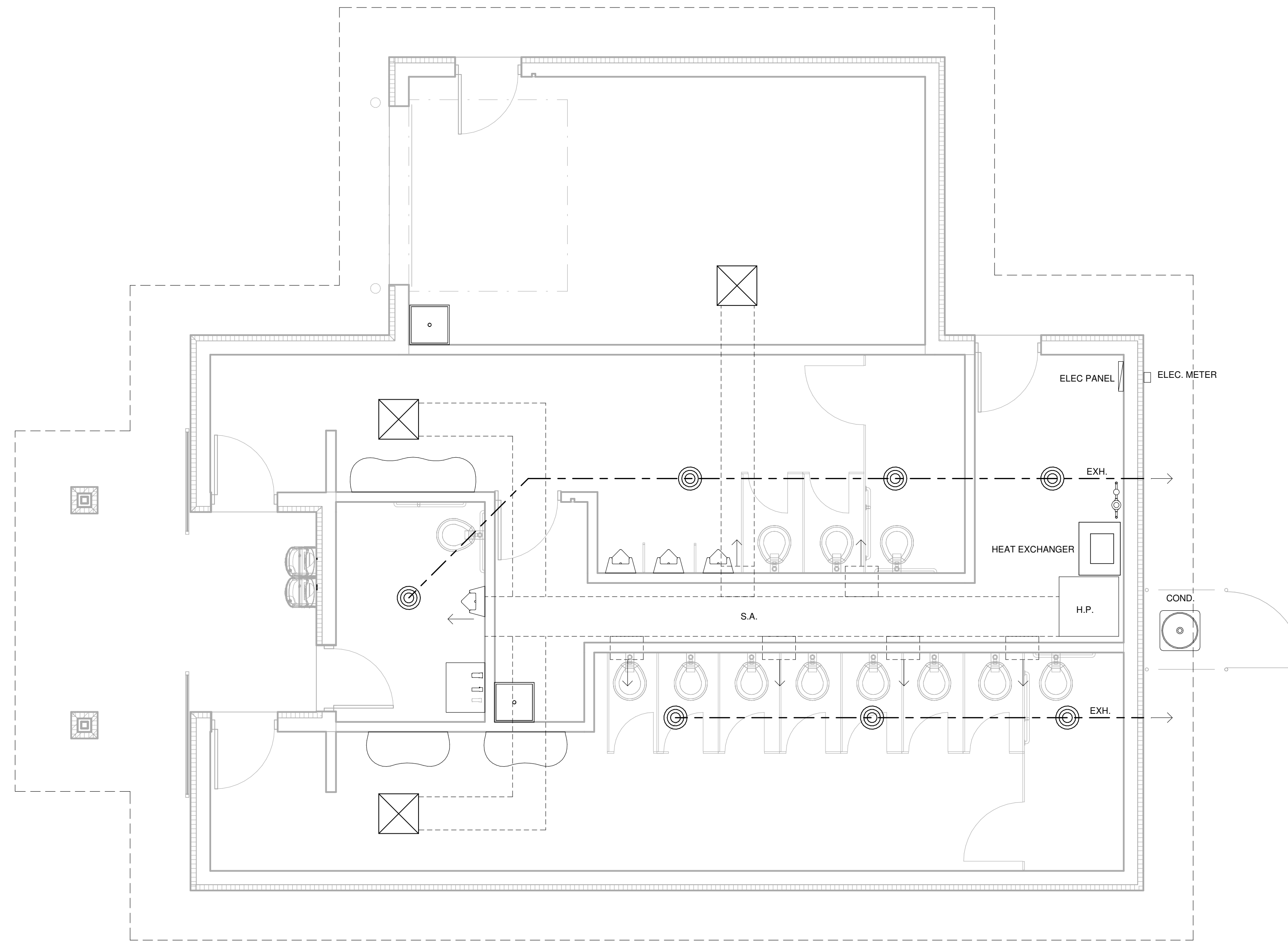
ROOF FRAMING SCHEDULE	
B1	8" BOND BEAM WITH (1) #5 BAR
B2	3-PLY 2x10 SYP, #1
B3	3-PLY 2x10 SYP, #1 - BEAR ON CMU WITH A SGNLLE TREATED TOP PLATE AND ATTACH WITH (2) SIMPSON H3'S
B4	24" DEEP BOND BEAM WITH (1) #5 BAR
HSS1	HSS 4x4x1/4" ENTRY COLUMN. PROVIDE 1/4" BENT PLATE (5"x6"x9") STEEL AT TOP TO 200 AMP PANELDER B2 WITH 9/2) 1/2" A307 BOLTS EACH END. J-BONIDE 10"x10"x3/8" BASE PLATE WITH (4) 9/16" DIA. HOLES FOR ATTACHMENT TO PIER WITH (4) 1/2" X 12" ANCHOR BOLTS. ALL WELDS TO BE 3/16" FILLET MIN. ALL AROUND.

No.	Date	Description

ROOF FRAMING PLAN

Project Number
 Date 07/22/22
 Drawn By TRB
 Checked By CHK

S2
 Scale 1/4" = 1'-0"



THESE DRAWINGS ARE SCHEMATIC ONLY.
 MECHANICAL CONTRACTOR IS RESPONSIBLE
 FOR PERMIT AND CONSTRUCTION DRAWINGS.

① SCHEMATIC HVAC PLAN
 1/4" = 1'-0"

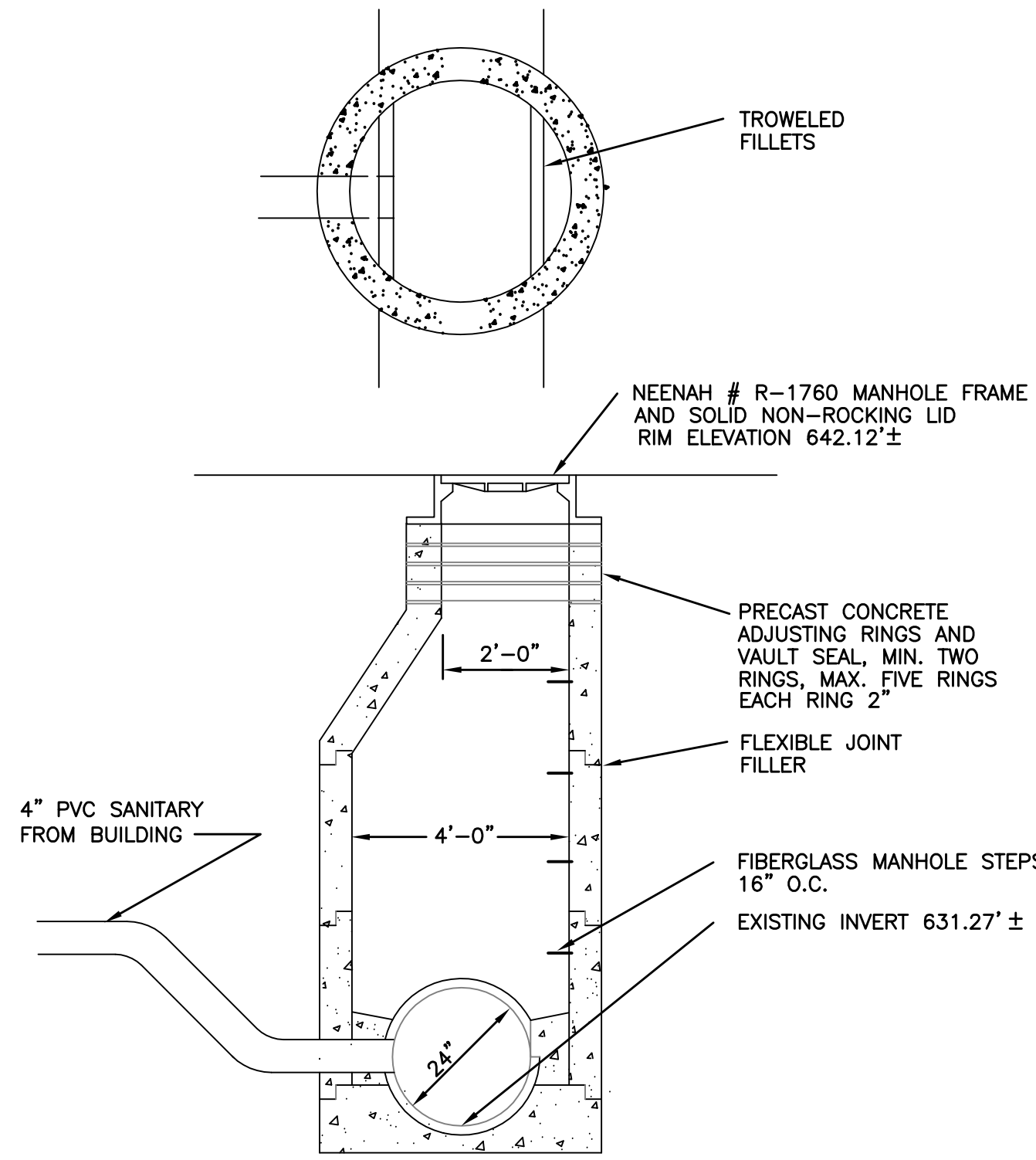
No.	Date	Description

SCHEMATIC HVAC
 PLAN

Project Number	
Date	07/22/22
Drawn By	TRB
Checked By	CHK

SM-1

Scale 1/4" = 1'-0"



3 EXISTING MANHOLE DETAIL
NO SCALE

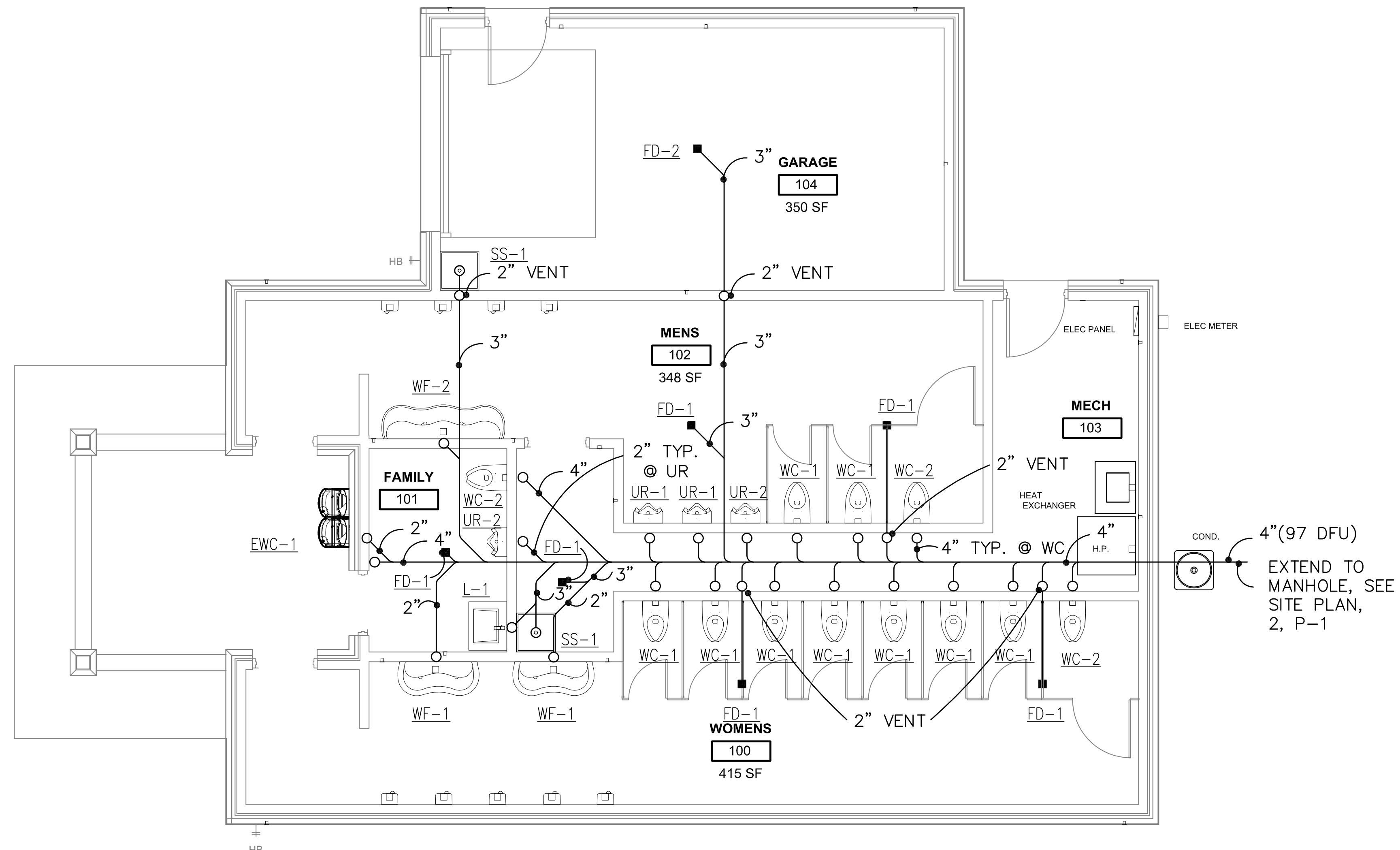
PLUMBING FIXTURE SCHEDULE											
PLAN NUMBER	FIXTURE DESCRIPTION	RIM HEIGHT	MANUFACTURER AND MODEL	MATERIAL	TRIM	VALVE	CONNECTIONS				REMARKS
							WASTE	VENT	CW	HW	
WC-1	WALL HUNG WATER CLOSET	15"	KOHLER K-4329	VITREOUS CHINA	SLOAN CX-8158-1.28-GR-OR FLUSH VALVE	STOP	4"	2"	1"		3,4
WC-2	ADA WALL HUNG WATER CLOSET	17"	KOHLER K-4329	VITREOUS CHINA	SLOAN CX-8158-1.28-GR-OR FLUSH VALVE	STOP	4"	2"	1"		1,3,4
L-1	WALL HUNG LAVATORY	34"	KOHLER K-126432 20"x18"	VITREOUS CHINA	SLOAN EAF-150-BAT FAUCET	STOP	1½"	1½"	½"	½"	6
UR-1	WALL HUNG URINAL	24"	KOHLER K-4960-ER	VITREOUS CHINA	SLOAN CX-8198-.25-PB-OR FLUSH VALVE	STOP	2"	1½"	¾"		5
UR-2	ADA WALL HUNG URINAL	17"	KOHLER K-4960-ER	VITREOUS CHINA	SLOAN CX-8198-.25-PB-OR FLUSH VALVE	STOP	2"	1½"	1"		5
WF-1	WASHFOUNTAIN		BRADLEY S93-709 2 PERSON	WHITE SAND, TERREON	SENSOR OPERATED	STOP	2"	1½"	½"	½"	
WF-2	WASHFOUNTAIN		BRADLEY S93-710 3 PERSON	WHITE SAND, TERREON	SENSOR OPERATED	STOP	2"	1½"	½"	½"	
SS-1	SERVICE SINK		MUSTEE 63M 24"x24"	FIBERGLASS	CHICAGO 911 W/VB	STOP	2"	1½"	½"	½"	
EWC-1	WATER COOLER		ELKAY LZ00TLBWSSK WATER COOLER	STAINLESS STEEL		STOP	1½"	1½"	½"		7
HB-1	HOSE BIBB		WOODFORD MODEL 67	C P BRASS		STOP			¾"		
FD-1	FLOOR DRAIN		SIOUX CHIEF 863-3NR	PVC			3"				
FD-2	FLOOR DRAIN		SIOUX CHIEF 852-4NR	PVC	SEDIMENT BUCKET		4"				
CO-1	FLOOR CLEANOUT		SIOUX CHIEF 852- NR	PVC							2

ALL FIXTURES WILL BE SUPPLIED BY OWNER, GC INSTALLED
(ALL FIXTURES, ACCESSORIES, TOILET PARTITIONS, ETC)

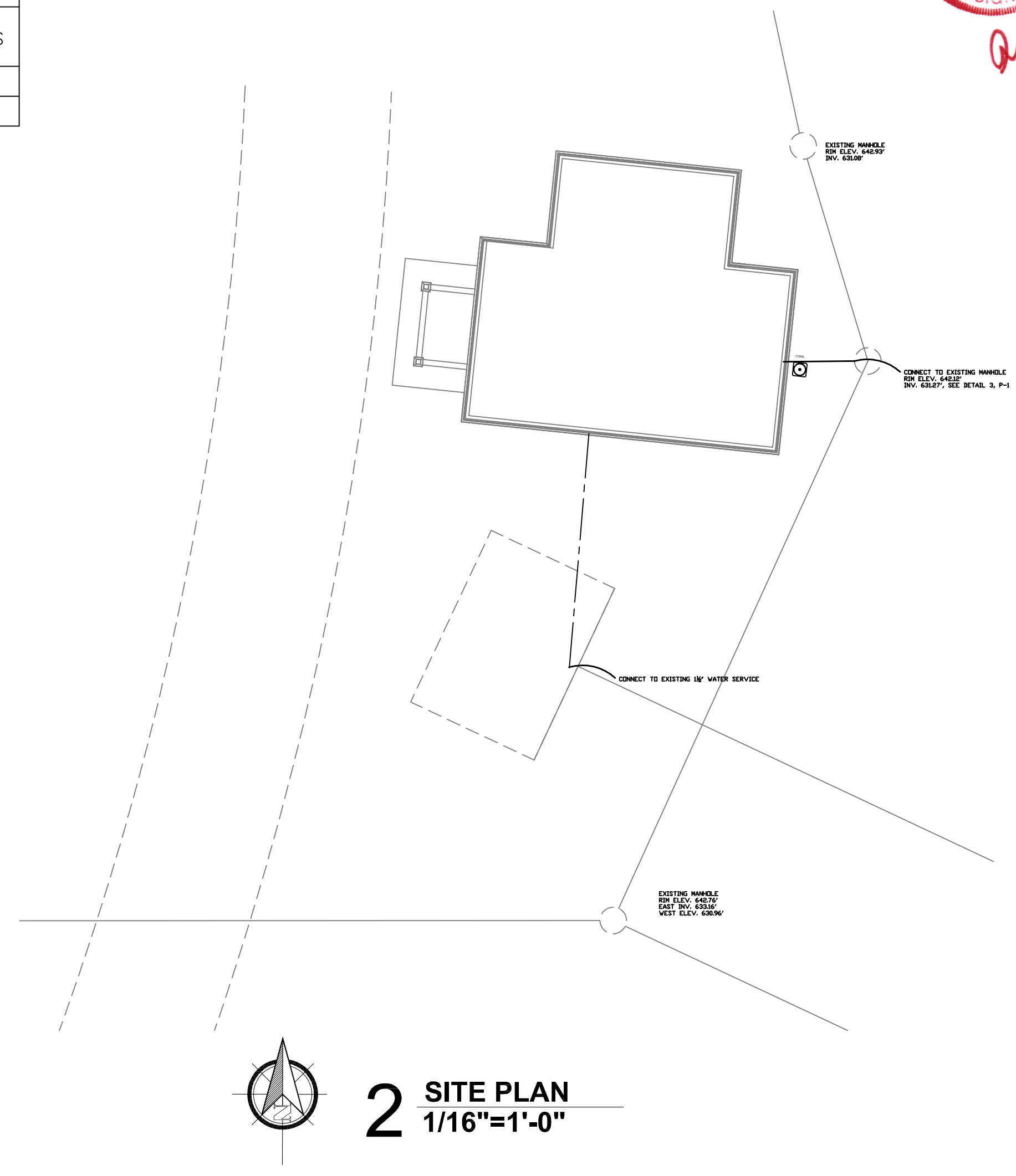
- REMARKS:
- GRAB BARS BY GENERAL CONTRACTOR.
 - SEE PLAN FOR SIZE
 - FURNISH AND INSTALL ZURN Z-1208-H44 NO-HUB VERTICAL CLOSET CARRIER.
 - BEMIS 9400SSCT WHITE SELF RISING OPEN FRONT SEAT LESS COVER.
 - FURNISH AND INSTALL ZURN Z-1222 URINAL CARRIER.
 - FURNISH AND INSTALL ZURN Z-1231 CONCEALED ARM FLOOR SUPPORTED LAVATORY CARRIER.
 - WITH BOTTLE FILLER, HANDS FREE, FILTERED.

WATER HEATER SCHEDULE											
(BASED ON A.O. SMITH)											
PLAN MARK	VOLUME GALLONS	INPUT MBH	RECOVERY GPM	°F TEMPERATURE RISE	FUEL	MODEL NUMBER	REMARKS	ELECTRICAL REQUIREMENTS			
								POWER DRAW	VOLTS	PHASE	REMARKS
WH-1	100	199	8	45	NAT.	AT10-540HX3-N	1,2,3,4	10 AMPS	120	1	

- REMARKS:
- INSTALL PER MANUFACTURER'S INSTRUCTIONS.
 - FURNISH AND INSTALLED BY PLUMBING CONTRACTOR.
 - FURNISH AND INSTALL POUNDS TO INCHES GAS REGULATOR.
 - FURNISH AND INSTALL 3" PVC INTAKE AND VENT THRU ROOF.



NOTE:
REFER TO WASTE AND
1 UNDERFLOOR PLAN
1/4"=1'-0"



2 SITE PLAN
1/16"=1'-0"

SHEET INDEX

- P-1 UNDER FLOOR PLAN, SITE PLAN, SCHEDULES, AND DETAIL
- P-2 FIRST FLOOR PLAN AND DETAIL
- P-3 WASTE AND VENT DIAGRAM
- P-4 WATER PIPING DIAGRAM
- P-5 SPECIFICATIONS AND PIPING CALCULATIONS

MIDWEST
Design & Development, LLC
N5560 CTH ZM, Suite 3 Onalaska, WI 54650
PH: 608-785-2760

UNDER FLOOR PLAN,
SITE PLAN, DETAILS,
AND SCHEDULES

RIVERSIDE SOUTH
TOILET ROOMS
LaCrosse, WI

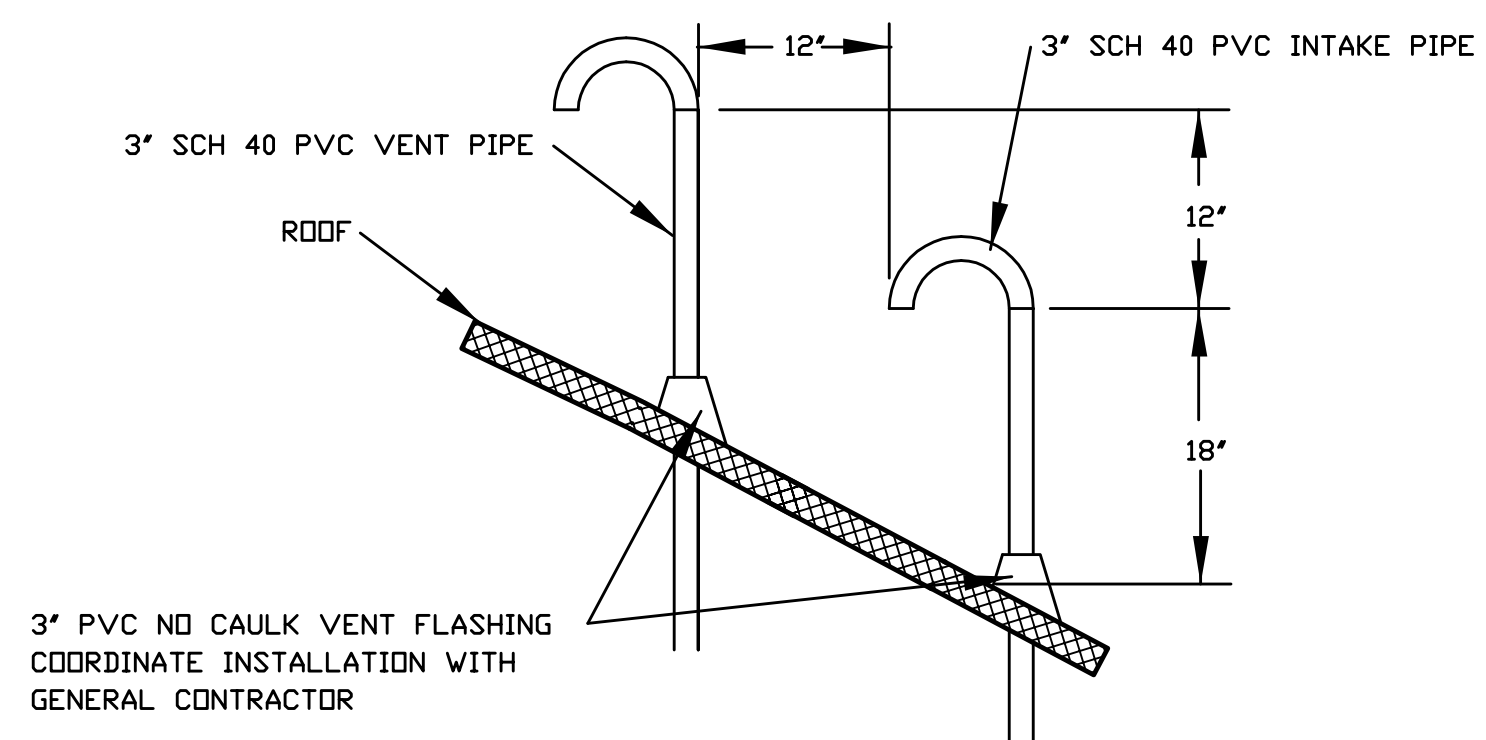
1 6-14-22 PERMIT SET

No.	Date	Description

Date
Drawn By
Checked By

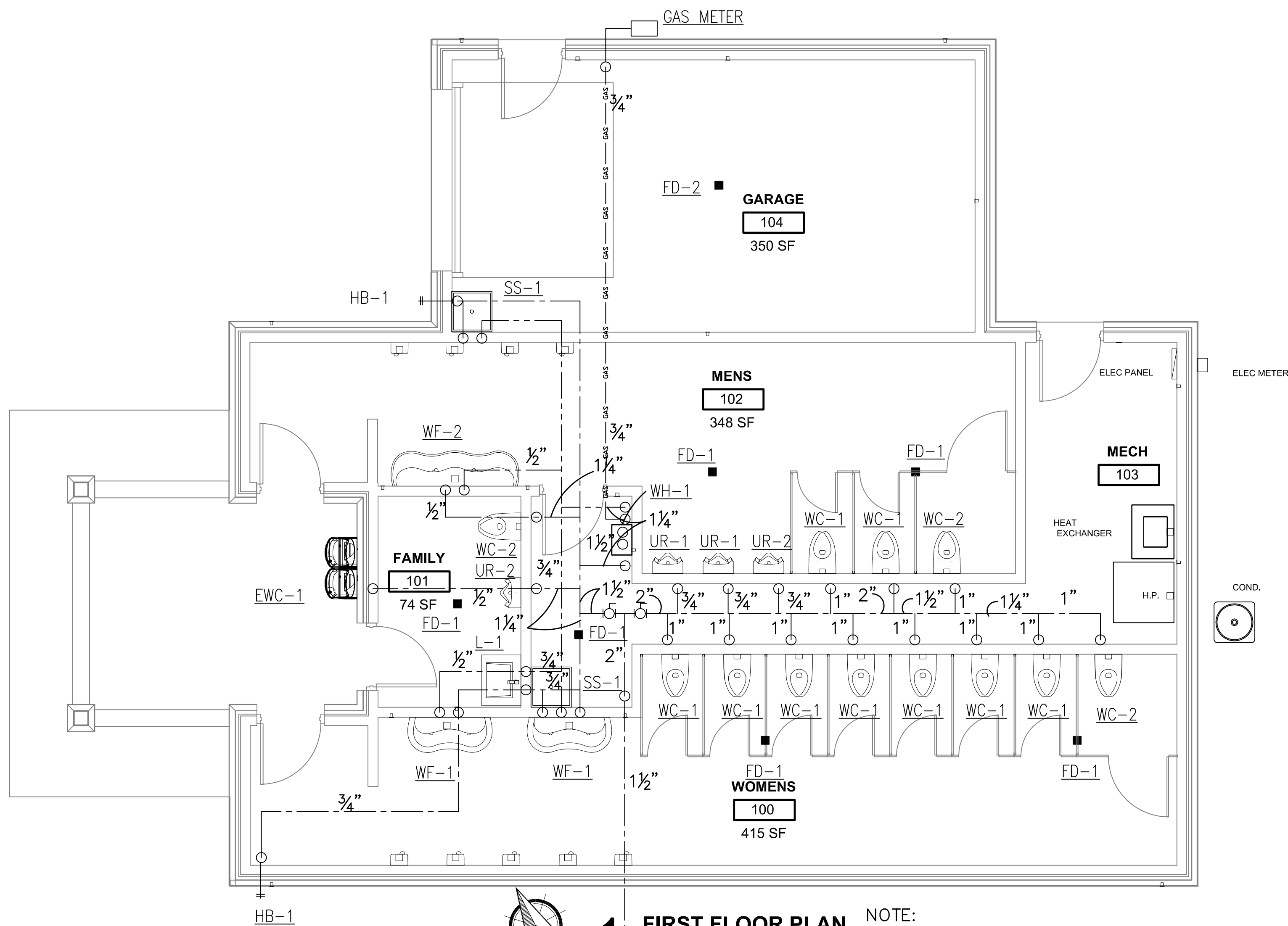
P-1
Scale

HVAC & Plumbing Designer
ALP DESIGN
812 JANICE COURT
LA CROSSE, WISCONSIN
TELEPHONE : 608-790-2832
E-MAIL : arnie-gbdesign@charter.net



3" PVC NO CAULK VENT FLASHING
COORDINATE INSTALLATION WITH
GENERAL CONTRACTOR

2 WATER HEATER VENT AND INTAKE THROUGH ROOF DETAIL
NO SCALE



1 FIRST FLOOR PLAN
1/4" = 1'-0"
CONTINUATION
NOTE: REFER TO WATER PIPING
DIAGRAM 1, P-4 FOR
PIPE SIZES

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FIRST FLOOR PLAN
AND DETAILS

RIVERSIDE SOUTH
TOILET ROOMS
LaCrosse, WI

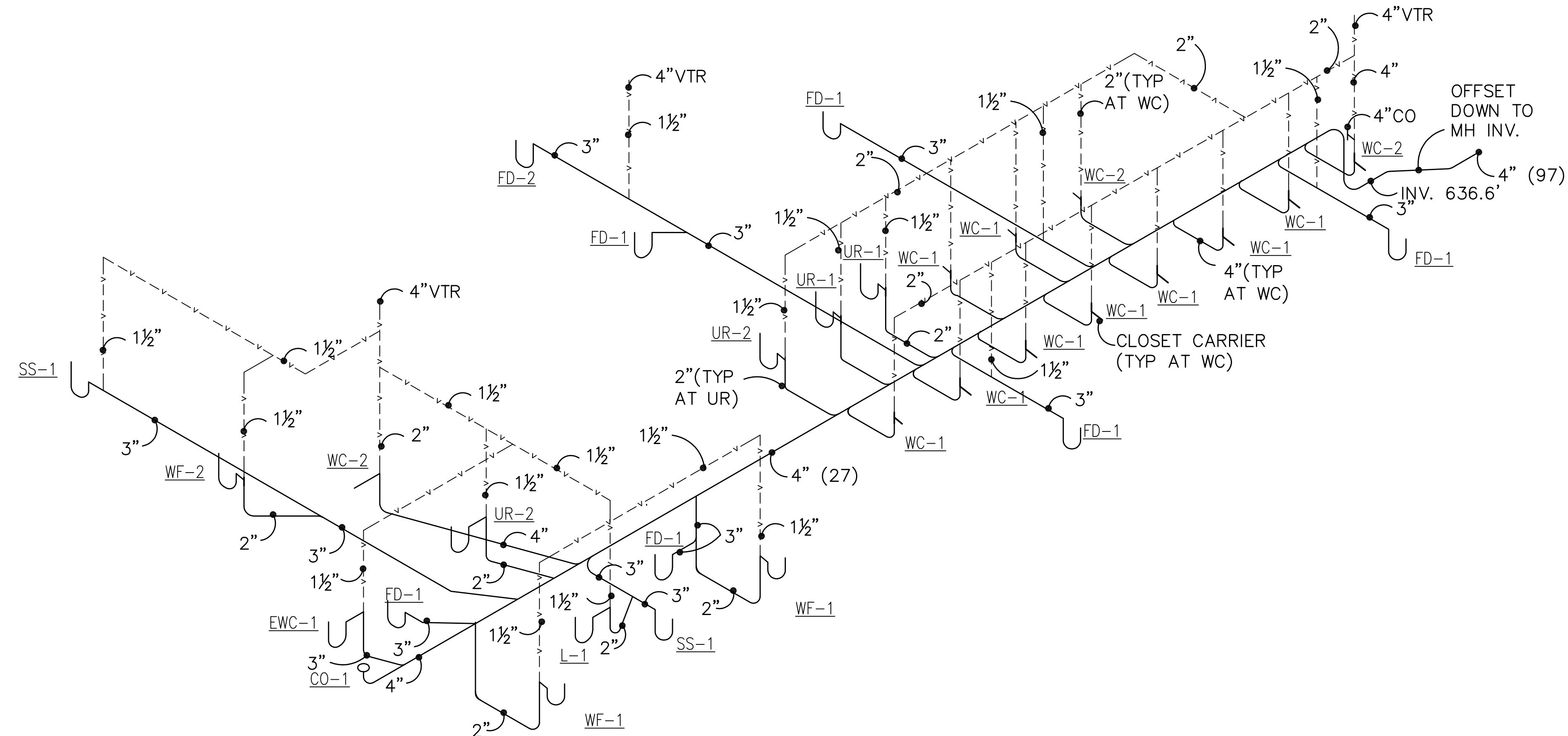
1 6-14-22 PERMIT SET

No.	Date	Description

Project Number
Date
Drawn By
Checked By

P-2

Scale



1 WASTE AND VENT DIAGRAM

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WASTE AND VENT
 DIAGRAM

**RIVERSIDE SOUTH
 TOILET ROOMS**
 LaCrosse, WI

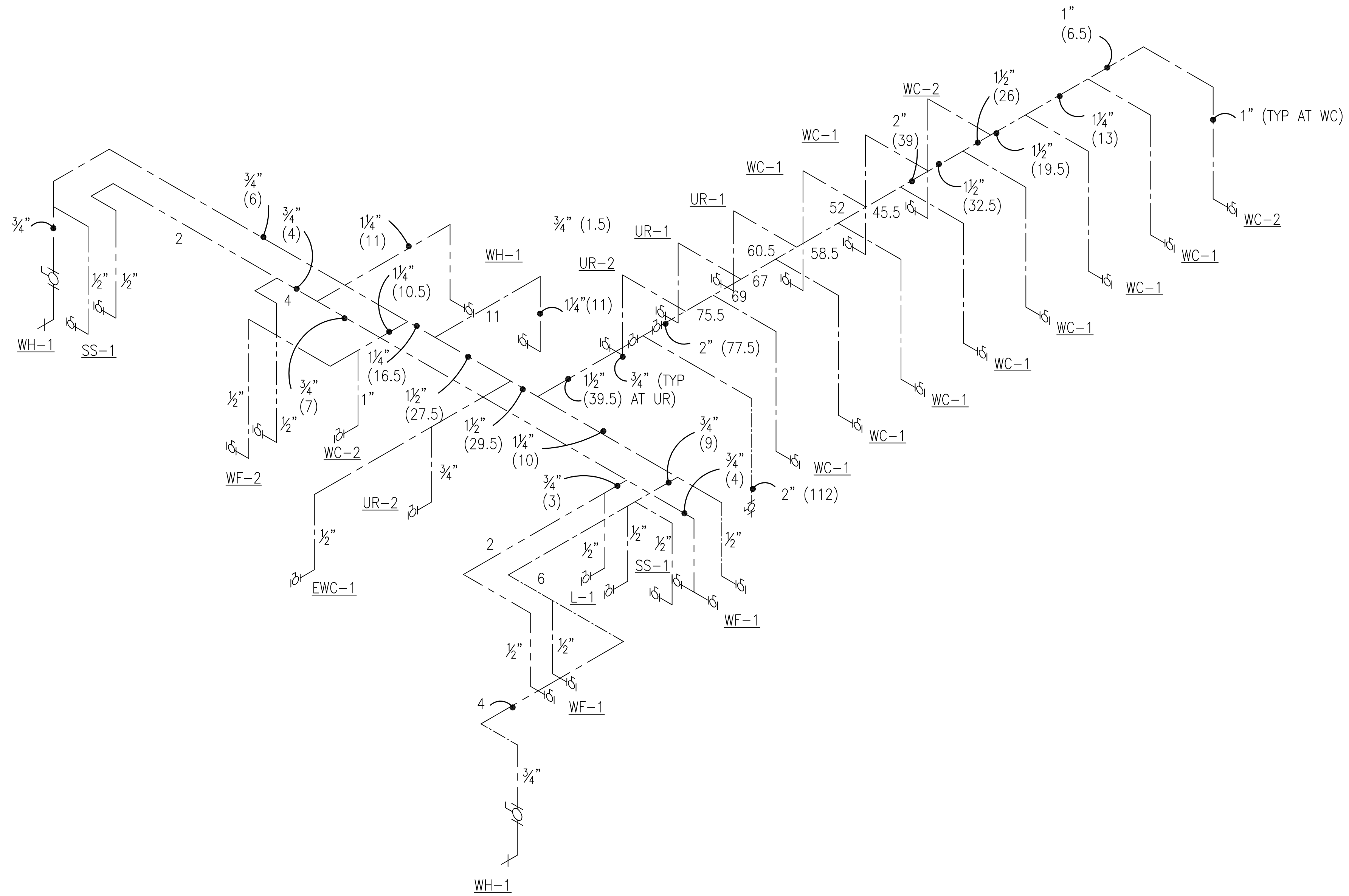
1 6-14-22 PERMIT SET

No.	Date	Description

Project Number
 Date
 Drawn By
 Checked By

P-3

Scale



1 WATER PIPING DIAGRAM

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WATER PIPING
 DIAGRAM

RIVERSIDE SOUTH
 TOILET ROOMS
 LaCrosse, WI

1 6-14-22 PERMIT SET

No.	Date	Description

Project Number
 Date
 Drawn By
 Checked By

P -4
 Scale

SECTION 15000 – PLUMBING GENERAL PROVISIONS

PART 1. GENERAL

- 1.01 SCOPE**
- A. Any General Provisions distributed by the Architect shall apply to all Sections of Division 15.
 B. Provide all materials, labor, services and incidentals necessary for the completion of this Division of the Work.
 C. The requirements of Section 15000 apply to all Sections of Division 15.

- 1.02 CODES AND STANDARDS**
- A. Comply with the latest applicable Codes and Standards as set forth by the following:

AMCA	Air Moving and Conditioning Association
ANSI	American National Standards Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
DNR	Department of Natural Resources
EPA	U.S. Environmental Protection Agency
NEC	National Electric Code
NFPA	National Fire Protection Association
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
UL	Underwriters Laboratories

- B. Comply with and pay fees for all required permits and inspections.
 C. Where drawings and specifications call for materials or workmanship in excess of these requirements, drawings and specifications shall govern.

1.03 DELIVERY, STORAGE AND HANDLING

- A. Cover and protect all materials and equipment stored at Project Site from weather. Support above ground on temporary bases.
 B. Cover all mechanical products and control devices from damage, dust, plaster and other construction debris. After installation is completed or while storing inside building, wrap and enclose all fixtures, equipment and control devices with canvas or heavy mill plastic, secured with wire or cord. Fixtures may be protected with the factory applied heavy paper or carton they are shipped in. Do not remove protection device until room or area is cleaned and free of dust and debris.

PART 2. PRODUCTS

2.01 MATERIALS, FIXTURES AND EQUIPMENT

- A. Provide all new materials and equipment to complete Work, unless otherwise specified.
 B. All pipe sizes are I.D. unless otherwise indicated.
 C. All duct sizes are clear inside dimensions.

2.02 PRODUCT BID APPROVAL

- A. Submit Bid based on materials and equipment of manufacturers specified. Catalog numbers of base manufacturer establishes quality required. Other manufacturers listed may be bid without prior approval of Engineer, providing quality of product is equal to base specification.
 1. All items specified shall be the latest type or model produced by manufacturer specified. If descriptive specification or model number is obsolete, substitute current product.
 B. Whenever a product of a manufacturer other than the Base Specification is furnished, the respective Mechanical Contractor shall include in his Bid, any additional costs for labor and/or materials required to adapt the substituted equipment variations, to the original system design. This includes full compensation to other Trades for changes required in their work. Variations include, but are not limited to:
 1. Additional breaching, piping extensions, stack revisions, etc. for changes in location of boiler outlets.
 2. Additional piping or ductwork extensions for equipment tapping variations.
 3. Additional structural support for heavier equipment.
 4. Changes in sizes of roof curbs, equipment supports and equipment pads.
 5. Added cost for changes in electrical work; larger motors, wiring, disconnects, starters, lighting relocation, etc. When motors are varied from Base Specification, an additional shop drawing of equipment shall be submitted to the Electrical Contractor, with changes noted thereon.
 6. Drawings shall be submitted to Engineer for approval, when variations require extensive piping, ductwork or system revisions.

2.03 GUARDS

- A. All equipment having belt-driven motors shall include OSHA-approved belt guards.
 B. All motor shafts shall have OSHA-approved guards.
 C. Guards shall be sheet steel, cast iron, expanded metal or wire mesh. Include access hole for speed measurement.

2.04 STEEL SUPPORT AND HANGERS

- A. Steel angle or pipe supports for floor mounted equipment and steel hangers for suspended equipment, including supplemental beams or angles mounted to building structure, will be furnished and installed by respective Mechanical Contractor; designed to carry total supported weight.

PART 3. EXECUTION

3.01 INSTALLATION

- A. Piping, ducts and similar items are shown on Project Drawings in approximate position desired; do not scale.
 B. Determine exact location at Project Site by preliminary layout of systems (electrical, mechanical, structural, etc.) and resolve all conflicts.
 C. Install exposed piping parallel to building lines, at uniform grade and at sufficient distance from walls to allow proper connections to risers and drops.
 D. Close openings and open ends of all piping and ductwork during construction to exclude dust, debris and vandalism.
 E. Seal openings around piping, pipe sleeves and ducts penetrating walls, floors and ceilings; including areas above suspended ceilings, as follows:
 1. Required fire rated penetrations:
 a. Fire-resistant acoustic material, or
 b. Grace "FS 1900" fire stop "Flame Safe" putty, or
 c. 3M "Fire Barrier" Caulk #CP-25, or #CP25WB, or
 d. "Chase Foam" CTC PR-855 fire resistant silicone foam sealant, or
 e. "ProSet" piping penetration systems.
 2. Sound rated and return air zone penetration, that are not a required fire rated assembly:
 a. Fiberglass blanket insulation.
 F. Exterior walls and floors on grade:
 1. Thicoalk or equal waterproofing caulking.
 2. Penetrations such as exterior walls, attics, roofs, etc., separating heated from unheated spaces (to prevent freezing temperatures from infiltrating into pipe spaces):
 a. Rock Wool safin insulation in fire-rated areas.
 b. Fiberglass blanket insulation in non-fire-rated areas.
 G. No piping shall be permitted to be installed in, enter or pass through spaces dedicated for electrical switchboards, panelboards, distribution boards, etc. Dedicated spaces extend from floor to structural ceiling with a width and depth that of the electrical equipment plus the working space in front of same with a width matching the equipment but not less than 30 inches, a depth of 36 inches and a height to at least 75 inches above floor. (Sections 110-16 and 384-4 of NFPA 70.)

3.04 ADJUSTMENTS

- A. Adjust all specialty items, dampers and controls to normal operating position.
 B. Start and operate all mechanical equipment and systems prior to occupancy by Owner.
 C. Lubricate all motors, bearings and similar items, prior to completion of project and before operating equipment.
 D. All motor belt drives shall be checked for proper alignment, belt tension and fan RPM.
 E. All mechanical couplings shall be checked for alignment.

3.05 ACCESSIBILITY

- A. All access panels to valves, dampers, controls and equipment in walls or above inaccessible ceilings, will be furnished by the general contractor.
 B. Provide access to all concealed mechanical equipment or accessories requiring same, not indicated on Architectural Drawings.
 C. Size of panels shall be larger than the devices requiring access, but shall be not less than 6" square for wall panels and not less than 12" square for ceiling panels. Where the openings must allow adequate room for a person to pass through, a 24" X 24" panel shall be provided.
 D. Construction of panels shall comply with the following:
 1. For Masonry, Tile or Wallboard Surfaces – 16 gage steel frame with 1" wide flange, 16 gage steel panels, concealed hinges, screwdriver operated cam lock, baked enamel prime coat. Panel shall be Milcor Style M, or approved equal.
 2. For Acoustical Tile Ceilings – Flangeless construction of even tile module, 16 gage steel frame, 18 gage recessed door panel for receiving acoustic tile, continuous hinge, flush screwdriver operated cam latch, white prime coat finish; Milcor Style A or approved equal. Access panels will not be required in accessible type ceilings.
 3. For Plastered Ceilings or Walls – Concealed flange, recessed door panel to receive plaster by others, 16 gage galvanized steel frame, 18 gage galvanized steel panel, 3/4 gage galvanized steel lath continuous hinges, flush latch, white prime coat finish; Milcor Type B or approved equal.

3.06 CLEAN-UP

- A. Remove all dust, plaster and construction debris from ductwork, piping, fixtures and equipment prior to painting or occupancy by Owner.
 B. Touch-up paint on all mechanical equipment which has rusted or has had finish marred during construction. Replace if satisfactory repair cannot be made.
 C. Pipe system cleansing, sterilizing and other cleaning is specified in appropriate Sections of this Division.

3.07 MAINTENANCE DATA AND OPERATING INSTRUCTIONS

- A. Deliver to the Owner, through the Architect/Engineer maintenance and operating instructions, with replacement parts list for all fixtures and equipment.
 B. Include a complete lubrication schedule for all mechanical equipment, with type of lubricant and frequency recommended.
 C. Instruct and demonstrate to the Owner or his representative, the operation and servicing (normal maintenance) of all equipment and systems provided.

PART 4. ELECTRICAL WORK

- 4.01 Furnish electric motors with mechanical equipment. Motors shall conform to the standard specifications of the IEEE, bearing nameplate of manufacturer, with current and operating characteristics noted thereon.

- A. Motors shall conform to the latest N.E.M.A. Standards.
 B. Motor horsepower voltage and phase is indicated on equipment schedules or under equipment specification.
 C. Motors up to 1/2 H.P., will be standard type.
 D. Motors shall have service factors of not less than 1.15.
 E. Mechanical equipment with motors 3/4 horsepower or larger, (rated greater than 1,000 watts), shall have power factors of at least 90 percent. Motors shall be Baldor Super E or equal, energy efficient Type 1.
 F. Receive, unload, set and align all separately shipped motors; adjust and align drive and adjust belt tension.

4.02 Electrical characteristics for motors shall be as follows:

A. Motors 3/4 horsepower and smaller:		
Voltage Rating	Operating Range	Phase
120 Volt	103.5V – 125.6 V	Single

- 4.04 Disconnect switches for mechanical equipment will be furnished by others, except that some mechanical equipment may include a built-in disconnect switch.

- 4.05 Wiring of electric motors and starters furnished in connection with mechanical work, including mounting of starters furnished under Division 15, will be done by electrical contractor.

- 4.06 Interconnecting wiring for boiler controls and/or temperature controls shall be furnished and installed complete under Division 15, Mechanical.

- A. All line voltage wiring shall be installed in EMT conduit.
 B. All low voltage wiring in boiler rooms and mechanical equipment rooms shall be installed in EMT conduit.
 C. Low voltage wiring installed above suspended ceilings may be run "loose" if adequately securely at 4' intervals to insulated piping or structural members. All low voltage cable installed in ceiling plenums shall be "Plenum-Rated" for installation in an air distribution plenum.

- 4.07 Complete wiring diagrams for all mechanical equipment, systems and controls shall be provided under Division 15, Mechanical.

- 4.08 All wiring done in connection with mechanical systems and equipment shall be installed to meet the requirements of Division 16, Electrical.

END SECTION 15000

SECTION 15400 – PLUMBING SYSTEMS

1.01 PIPE AND PIPEFITTINGS

- A. All pipe and pipe fittings shall be new and of materials as scheduled below:
Water distribution piping: Seamless copper tube, Type L, hard temper (ASTM B-88) with wrought solder joint or "Pro Press" pressure fittings (ANSI B16.22).
Sanitary drainage and vent piping: Polyvinyl Chloride (PVC), schedule 40 DWV (ASTM D-2665) with glue joints.
 B. Any other pipe or pipefitting material approved for its respective use by the State of Wisconsin, Department of Health may be used in lieu of the scheduled materials. It shall be the contractor's responsibility to ensure that a substitute material meets all applicable building codes and to re-size or re-design the piping distribution system as required.

1.02 PIPING SUPPORT DEVICES

- A. Pipe hangers shall be rated for the load to be carried. Include all supplemental angles, channels, plates, etc. of adequate size and design, where supports shall be required between building structural members. Water distribution piping may be grouped on trapeze hangers.
 B. No dissimilar support shall come in contact with copper or PEX piping; use rubber isolator between plastic or copper pipe and pipe clamp.
 C. Horizontal steel pipe shall be supported as below:

D. Horizontal lines of copper tubing and PEX shall be supported as below:		
<u>Nom. Tubing Size</u> <u>Rod Diameter</u> <u>Maximum Spacing</u>		
Up to 1-1/4 inch	3/8 inch	5 feet

- E. Horizontal PVC piping (polyvinyl chloride) shall be supported on plastic supports and hangers or on steel padded split ring or clevis hangers as follows:

Maximum Spacing (feet)		
<u>Pipe Size</u>	<u>SCH. 40</u>	
1/2 thru 1-1/4	3	
1-1/2 thru 2	3	
3 and over	4	

- F. Vertical sections of PVC piping shall be secured and supported at sufficiently close intervals to keep the system in alignment and to adequately support the weight of the pipe and its contents.

1.03 VALVES

- A. All valves shall be new and of type and materials as scheduled below:
Isolation and service valves: Two-piece bronze body ball valve, full port, rated for 600 PSI WOG, NIBCO model S-585-70 or equal. (Gate valves will not be allowed.)
Swing-type check valve: NIBCO Model T-413 (or S-413), bronze body, removable check assembly, 200 PSI W.O.G.
Ring-type check valve: NIBCO Model T-480 (or S-480), bronze body, two-piece body with spring actuated TFE seat, 250 PSI W.O.G.
 B. Use ball valves for isolating branches or equipment. Install valves as indicated, full size of piping. Install valves in piping to isolate all equipment. All valves shall be accessible.

1.04 PIPE INSULATION

- A. All hot and cold water mains shall be insulated with ARMACELL AP/Armaflex flexible elastomeric insulation. Fittings shall be fabricated with mitered and glued fittings. (Underground cold water piping is not required to be insulated.) Insulation shall be continuous into wall cavities to final fixture stop valve.
 B. Insulation thickness shall be as follows:
 Cold water piping – 3/4" (except 1/2" on 1/2" piping)
 Hot water piping – 1" (except 1/2" on 1/2" piping)
 Rain leader piping – 1 1/2"
 D. Insulation shall meet surface burning characteristics as follows:
 Flame Spread less than 25
 Smoke Developed less than 50

1.05 WATER DISTRIBUTION PIPING SYSTEM

- A. Flushing: Upon completion of the water distribution system, test all valves to insure their full opening and flush out the system progressively by opening building outlets and permitting the flow to continue from each until the water runs clear.
 B. At completion of all piping, fill system with sanitizing solution per Wisconsin Department of Commerce requirements and circulate for a minimum of 24 hours. Rinse thoroughly after sanitizing solution with clean water. Certify system has been cleaned and submit certificate to Owner. Obtain water test for coliform bacteria from an independent testing laboratory and submit test report to Owner.

1.07 DRAINS AND CLEANOUTS

- A. CLEANOUTS: Cleanouts shall be as follows:
 Floor: Use PVC glue-on cleanout fitting with threaded plug and polished metal ring and cover. Plug shall be brass. Metal ring shall be flush with finished floor material.
 B. Floor drains are scheduled on the Drawings.

1.08 PLUMBING FITTINGS AND SPECIALTIES

- A. In general, fittings and specialties are scheduled on the Drawings.

1.09 PLUMBING FIXTURES AND ACCESSORIES

- A. Refer to Schedule on Drawings.

FIXTURE WATER AND SANITARY TOTAL LOADS

WATER			SANITARY	
WC-1	9 X 6.5	= 58.5	9 X 6.0	= 54
WC-2	3 X 6.5	= 19.5	3 X 6.0	= 18
UR-1	2 X 2.0	= 4	2 X 2.0	= 4
UR-2	2 X 2.0	= 4	2 X 2.0	= 4
WF-1	1 X 3.0	= 3	1 X 3.0	= 3
WF-2	2 X 2.0	= 4	2 X 2.0	= 4
L-1	1 X 1.0	= 1	1 X 1.0	= 1
SS-1	2 X 2.0	= 4	2 X 3.0	= 6
EWC-1	1 X 2.0	= 2	1 X 2.0	= 2
HB-1	2 X 4.0	= 8		
FD-1	6 X 3.0	= 18		
FD-2	1 X 3.0	= 3		
TOTAL		= 125 SFU		= 97 DFU

WHOLE BUILDING WATER CALCULATION WORKSHEET

Information Needed for Water Service Sizing.

- 75 Demand of building in gallons per minute.
 - 80 Low pressure at main in street (or at external pressure tank).
 - 6' Difference in elevation from main to meter (or external pressure tank to building control valve).
 - 15" Size of water meter (if applicable).
 - 100' Developed length from main to meter (or external pressure tank to building control valve).
- You Must First Find the Available Pressure After the Water Meter (or at building control valve). To obtain this pressure, you must:
- 19 Find pressure loss due to friction in 15 inch diameter water service.
 - 174 Find pressure loss due to elevation, main to meter (or external pressure tank to building control valve). Multiply the difference in elevation by .434 psi/Ft.
 - 11 Find pressure loss due to meter. (from manufacturer or AWWA).
 - 483 Subtract the loss due to friction (Step 6), loss due to elevation (Step 7), and loss due to meter (Step 8), from the low main pressure (or low pressure at external pressure tank)(Step 2). This calculation is the available pressure after the water meter (or at the building control valve). This answer is entered in Line B. below.

Information Needed for Water Distribution Sizing

Using the following formula, find the pressure available for uniform loss (psi/100' of pipe).

$$A = \frac{B - (C+D+E) \times 100}{F}$$

WHERE:

$$A = 31.56 \text{ Pressure available for uniform loss (psi/100' of pipe)}$$

B. 48.3 Available pressure after water meter (at the building control valve or internal pressure tank) and Tank). (See Step 9, above).

C. 15 Pressure needed at controlling fixture.

D. 174 Difference in elevation between water meter (building control valve or internal pressure tank) and controlling fixture in feet 4 x .434 psi/Ft.

E. 0 Pressure loss due to water softeners, water treatment devices, instantaneous water heaters, and backflow preventers which serve the controlling fixture. Conventional water heaters usually do not have a pressure loss.

F. 66 Developed length from water meter (building control valve or internal pressure tank) to controlling fixture in feet 44 x 1.5

With pressure available for uniform loss, go to applicable table for distribution sizing.

HVAC & Plumbing Designer

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PLUMBING SPECIFICATIONS AND WATER PIPING CALC

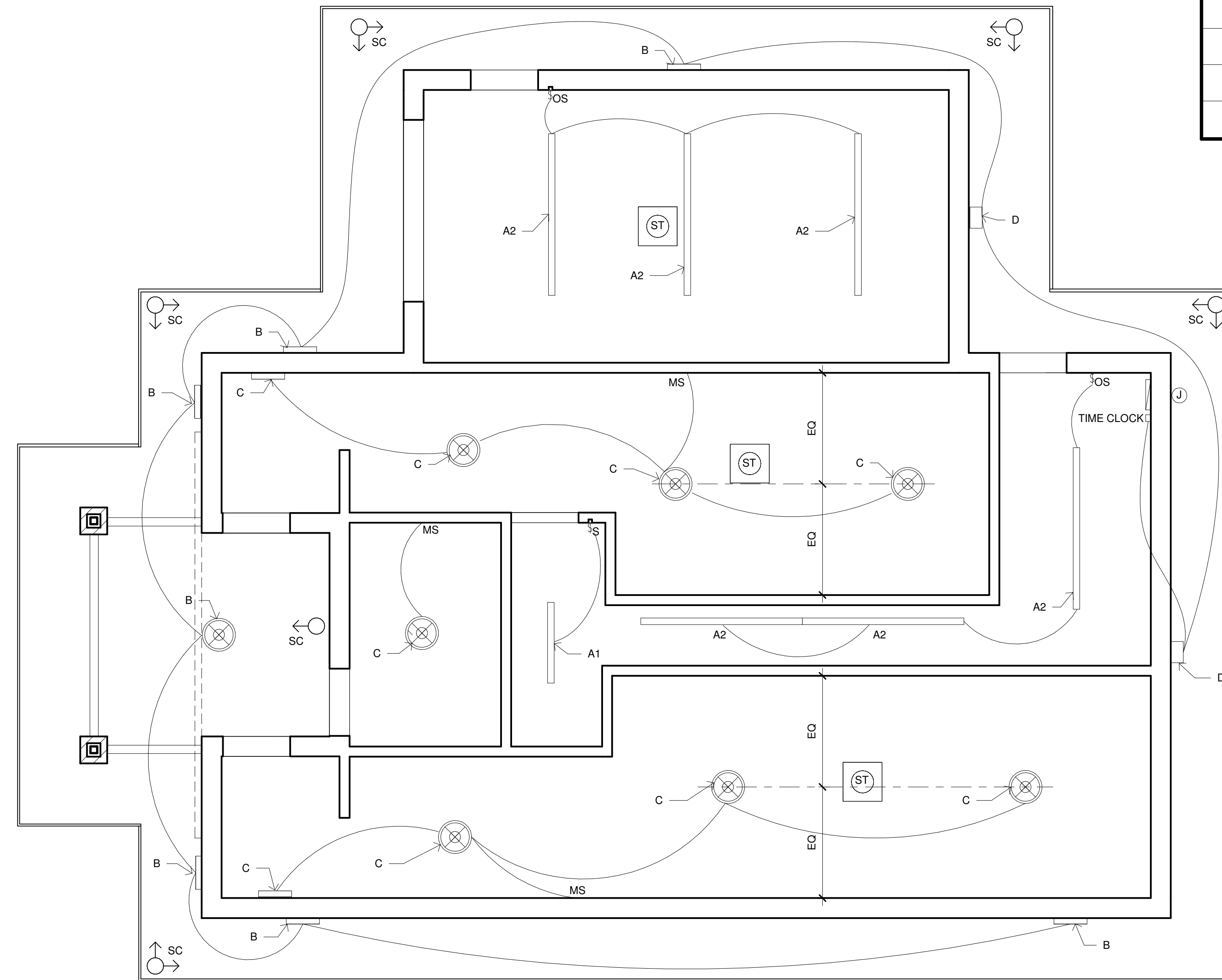
RIVERSIDE SOUTH TOILET ROOMS
 LaCrosse, WI

No.	Date	Description
1	6-14-22	PERMIT SET

Project Number _____
 Date _____
 Drawn By _____
 Checked By _____

P - 5

Scale _____



ELECTRICAL FIXTURE SCHEDULE		
A1		4" - LED STRIP SURFACE MOUNT-WALL
A2		8" - LED STRIP SURFACE MOUNT - WALL/ CEILING
B		LED H.O. DOME FIXTURE
C		LED DOME FIXTURE
D		WALL PACK
ST		14" SOLAR TUBE
SC		SECURITY CAMERA

THESE DRAWINGS ARE SCHEMATIC ONLY.
 ELECTRICAL CONTRACTOR IS RESPONSIBLE
 FOR PERMIT AND CONSTRUCTION DRAWINGS.

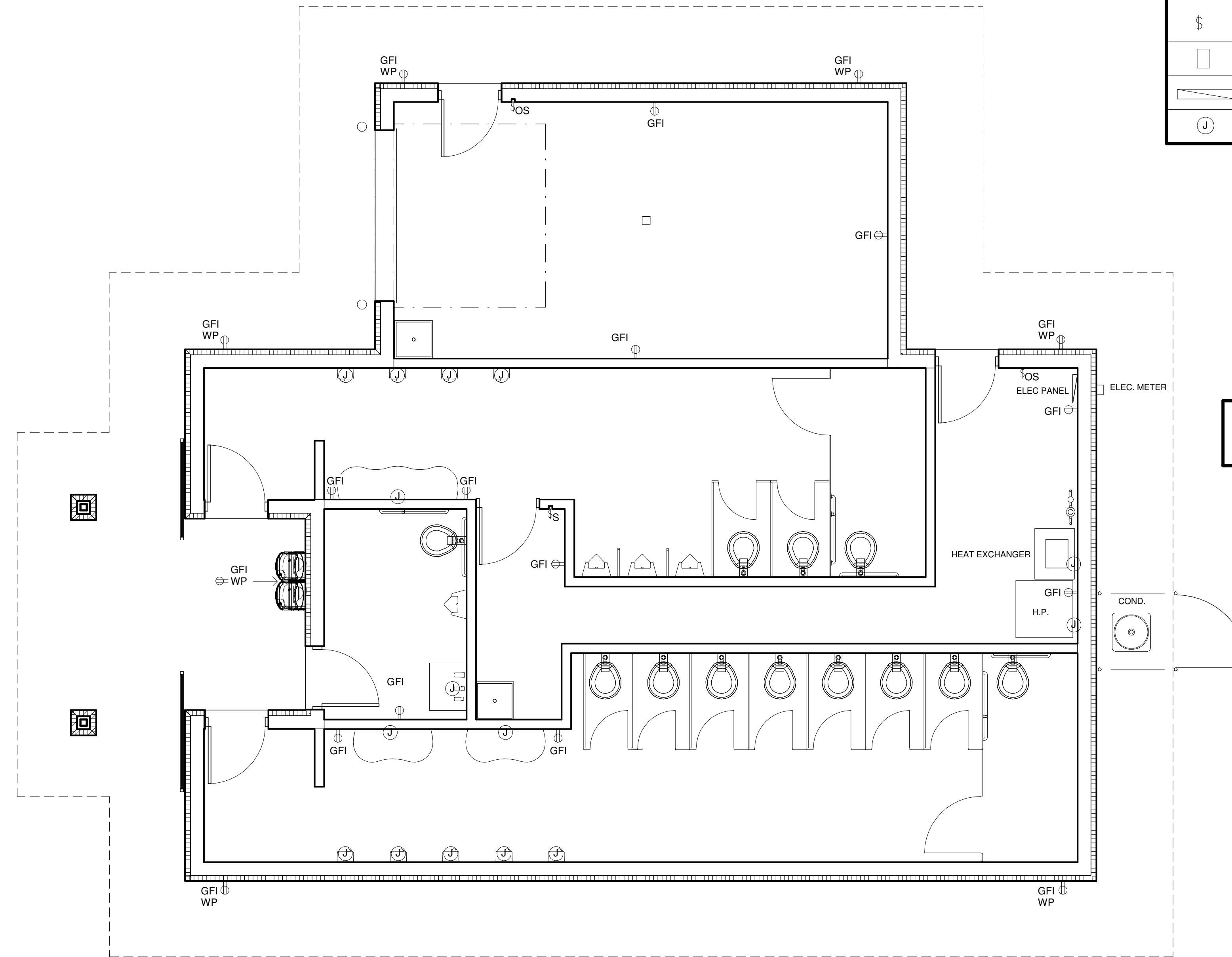
1 SCHEMATIC LIGHTING PLAN
 1/4" = 1'-0"

No.	Date	Description

SCHEMATIC LIGHTING PLAN	
Project Number	
Date	07/22/22
Drawn By	TRB
Checked By	CHK

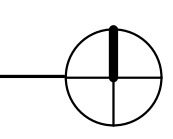
SE-1
 Scale 1/4" = 1'-0"

ELECTRICAL DEVICE SCHEDULE	
	DUPLEX RECEPTACLE
	GROUND FAULT INTERCEPTOR RECEPTACLE
	GROUND FAULT INTERCEPTOR RECEPTACLE WEATHER-PROOF
	OCCUPANCY SENSOR
	SWITCH
	ELECTRICAL METER
	200 AMP PANEL
	J-BOX



THESE DRAWINGS ARE SCHEMATIC ONLY.
 ELECTRICAL CONTRACTOR IS RESPONSIBLE
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① SCHEMATIC POWER PLAN
 1/4" = 1'-0"

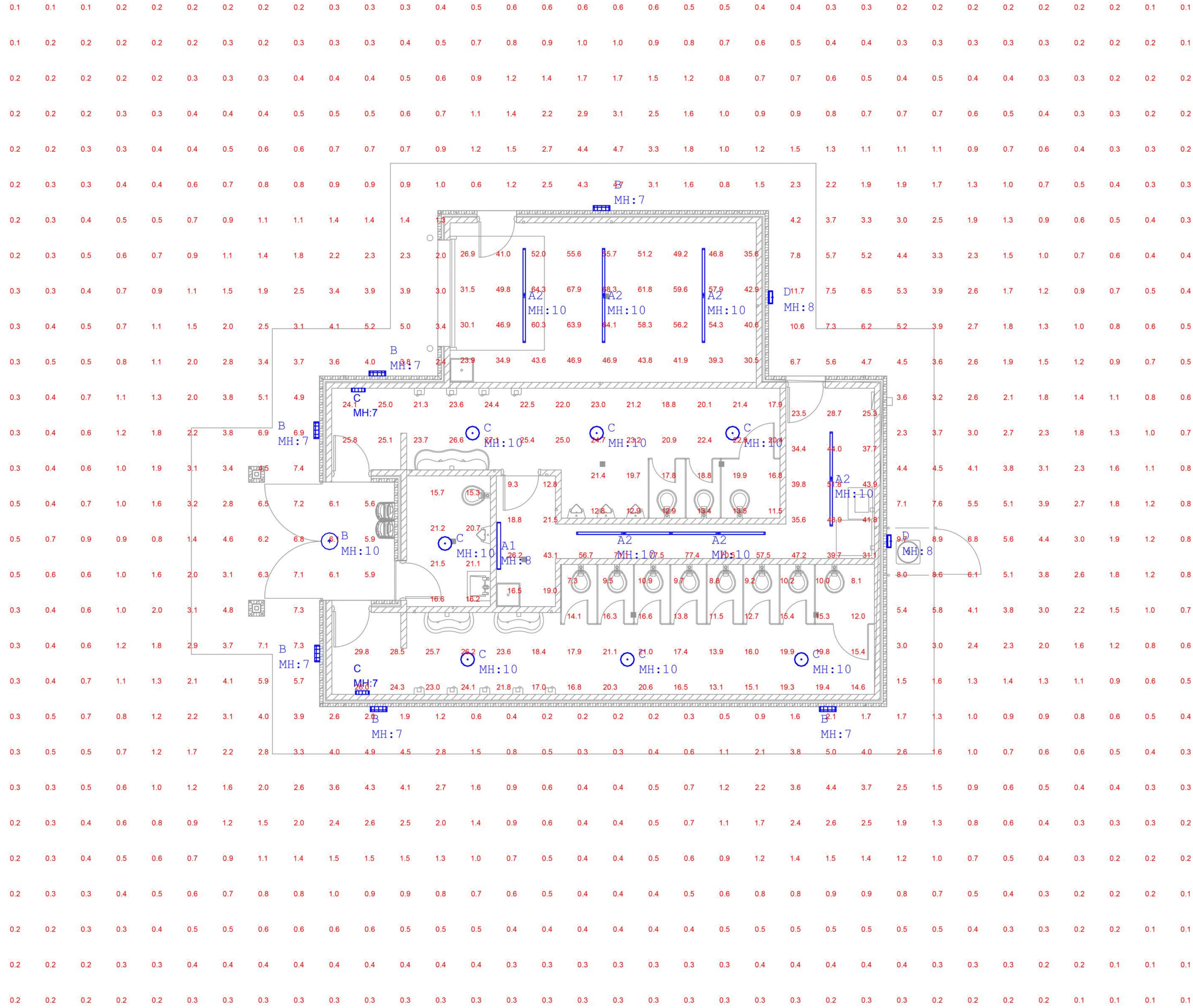


No.	Date	Description

SCHEMATIC POWER PLAN

Project Number	
Date	07/22/22
Drawn By	TRB
Checked By	CHK

SE-2
 Scale 1/4" = 1'-0"



Luminaire Schedule

QTY	TYPE	MFR	PART NUMBER	LLF	Lum. Watts	Total Watts
1	A1	Lithonia	CSS L48 ALO3 MVOLT SWW3 80CRI @ 4000LM	0.900	36	36
6	A2	Lithonia	CSS L96 ALO4 MVOLT SWW3 80CRI @ 8000LM	0.900	72	432
7	B	Luminaire	ARV17 (trim) (drivers) 25W xxK MVOLT CLP (finish)	0.900	25.7	179.9
9	C	Luminaire	ARV17 (trim) (drivers) 40W xxK MVOLT CLP (finish)	0.900	42.9	386.1
2	D	Lithonia	TWX2 LED ALO xxK MVOLT PE (finish)	0.950	22	44

Calculation Summary

AREA	AVG	MAX	MIN	AVG/MIN	MAX/MIN
100 Womens_Workplane	17.04	29.8	7.3	2.33	4.08
101 Family_Workplane	18.54	21.5	15.3	1.21	1.41
102 Mens_Workplane	20.79	27.1	11.5	1.81	2.36
103 Mech_Workplane	39.70	77.5	9.3	4.27	8.33
104 Garage_Workplane	48.46	68.3	23.9	2.03	2.86
Exterior_At Grade	1.43	11.7	0.1	14.30	117.00

1 LIGHTING CALCULATIONS
3/16" = 1'-0"

No.	Date	Description

PHOTOMETRICS

Project Number	
Date	07/22/22
Drawn By	TRB
Checked By	CHK

SE-3
Scale 3/16" = 1'-0"