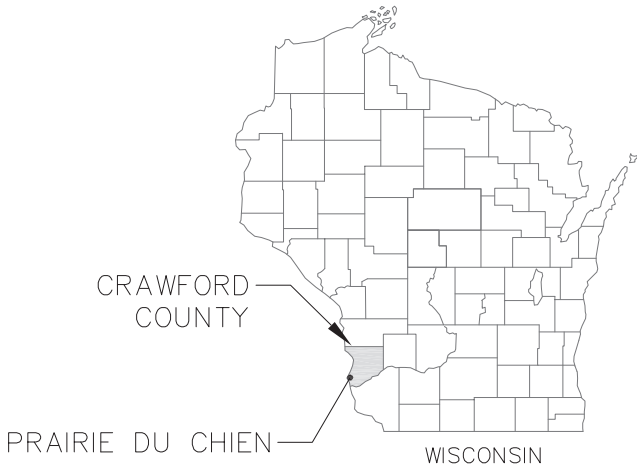
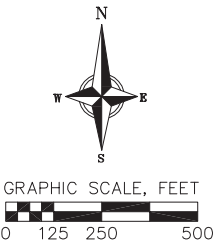


PUBLIC WATER SUPPLY WELL NO. 5 PUMPHOUSE & WELL NO. 2 PUMPHOUSE DEMOLITION

CITY OF PRAIRIE DU CHIEN



PROJECT LOCATION



SITE BENCHMARKS

- 1

PK NAIL
NORTHING: 115804.9510
EASTING: 323865.9590
ELEV = 642.10
- 2

PK NAIL
NORTHING: 116172.0230
EASTING: 323765.9250
ELEV = 643.12



THE LOCATION OF EXISTING UTILITIES, BOTH UNDERGROUND AND OVERHEAD ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. 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.

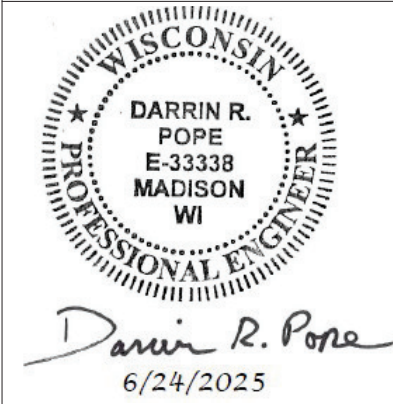
CALL DIGGER'S HOTLINE

DIRECTORY

OWNER:
CITY OF PRAIRIE DU CHIEN
214 E. BLACKHAWK ST.
PRAIRIE DU CHIEN, WI 53021
TELEPHONE: (608) 326-6400 X20
CONTACT:
LARRY GATES, UTILITY DIRECTOR

CIVIL, PROCESS PIPING, PLUMBING, & ELECTRICAL DESIGN, PROJECT MANAGER:

VIERBICHER ASSOCIATES, INC.
999 FOURIER DRIVE., SUITE 201
MADISON, WI 53717
TELEPHONE: (608) 821-3596
CONTACT:
DARRIN R. POPE, P.E.



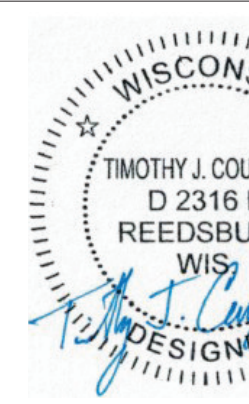
ARCHITECTURE:
ARCHITECTURAL DESIGN CONSULTANTS, INC.
30 WISCONSIN DELLS PARKWAY
LAKE DELTON, WI 53940
TELEPHONE: (608) 254-6181
CONTACT:
MICHAEL L. MAAS



STRUCTURAL DESIGN:
ARCHITECTURAL DESIGN CONSULTANTS, INC.
30 WISCONSIN DELLS PARKWAY
LAKE DELTON, WI 53940
TELEPHONE: (608) 254-6181
CONTACT:
ROBERT J. GROTHMAN



MECHANICAL DESIGN:
TC MECHANICAL & DESIGN, LLC
E9359 MAGNOLIA CT
WISCONSIN DELLS, WI 53965
(920) 285-5506
CONTACT:
TIMOTHY J. COUGHLIN



SHEET #	DESCRIPTION	SHEET #	DESCRIPTION
G000	TITLE SHEET	S101	FOUNDATION, ROOF FRAMING PLANS & STRUCTURAL DETAILS
G001	LEGENDS & GENERAL NOTES		
C101	SITE PLAN	S201	STRUCTURAL NOTES & SCHEDULES
C102	GRADING & E.C. PLAN	S202	STRUCTURAL NOTES & SCHEDULES
C103	UTILITY PLAN	Q101	PROCESS PIPING PLAN & SCHEDULE
C104	EXISTING CONDITIONS – WELL NO. 2 PUMPHOUSE	Q301	WELL PUMP SECTION & PIPING DETAILS
C105	DEMOLITION PLAN – WELL NO. 2 PUMPHOUSE	P000	SYMBOLS, ABBREVIATIONS & SCHEDULES – PLUMBING
C201	CONSTRUCTION DETAILS	P100	UNDERFLOOR PLAN – PLUMBING
C202	CONSTRUCTION DETAILS	P101	FLOOR PLAN – PLUMBING
C203	CONSTRUCTION DETAILS	M000	SYMBOLS & ABBREVIATIONS – HVAC
A101	FLOOR, CEILING & ROOF PLANS	M101	FLOOR PLANS – HVAC
A201	EXTERIOR ELEVATIONS	M102	SCHEDULES & DETAILS – HVAC
A301	BUILDING & WALL SECTIONS	M103	NOTES – HVAC
A302	BUILDING SECTION	E000	SYMBOLS & SCHEDULES – ELECTRICAL
A401	SCHEDULES, DOOR TYPES & DETAILS	E101	FLOOR PLANS – ELECTRICAL
		E800	SCHEMATICS AND ONE-LINE DIAGRAM

TITLE SHEET
PUBLIC WATER SUPPLY - WELL NO. 5 PUMPHOUSE
CITY OF PRAIRIE DU CHIEN
CRAWFORD COUNTY, WISCONSIN

REVISIONS		REVISIONS	
NO.	DATE	NO.	DATE
1	1-07-2026		
ISSUED FOR BIDDING			
DATE		JUNE 2025	
DRAFTER		PJUN	
CHECKED		DPOP	
PROJECT NO.		240564	
		G000	

ISSUED DATE: 01/07/2026

TOPOGRAPHIC SYMBOL LEGEND

- EXISTING BOLLARD
- EXISTING FLAG POLE
- EXISTING MAILBOX
- EXISTING MONITORING WELL
- EXISTING POST
- EXISTING SIGN (TYPE NOTED)
- EXISTING PARKING METER
- EXISTING CURB INLET
- EXISTING ENDWALL
- EXISTING FIELD INLET RECTANGULAR
- EXISTING FIELD INLET
- EXISTING ROOF DRAIN CLEANOUT
- EXISTING ROOF DRAIN
- EXISTING STORM MANHOLE
- EXISTING STORM MANHOLE RECTANGULAR
- EXISTING STORM TRACER WIRE BOX
- EXISTING SANITARY CLEANOUT
- EXISTING SANITARY MANHOLE
- EXISTING SEPTIC VENT
- EXISTING SANITARY TRACER WIRE BOX
- EXISTING FIRE HYDRANT
- EXISTING FIRE DEPARTMENT CONNECTION
- EXISTING WATER MAIN VALVE
- EXISTING CURB STOP
- EXISTING WELL
- EXISTING WATER MANHOLE
- EXISTING WATER TRACER WIRE BOX
- EXISTING GAS VALVE
- EXISTING GAS METER
- EXISTING AIR CONDITIONING PEDESTAL
- EXISTING DOWN GUY
- EXISTING ELECTRIC MANHOLE
- EXISTING ELECTRIC RECTANGULAR MANHOLE
- EXISTING ELECTRIC PEDESTAL
- EXISTING TRANSFORMER
- EXISTING ELECTRIC METER
- EXISTING GUY POLE
- EXISTING LIGHT POLE
- EXISTING GENERIC LIGHT
- EXISTING UTILITY POLE
- EXISTING TV MANHOLE
- EXISTING TV RECTANGULAR MANHOLE
- EXISTING TV PEDESTAL
- EXISTING TELEPHONE MANHOLE
- EXISTING TELEPHONE PEDESTAL
- EXISTING UNIDENTIFIED MANHOLE
- EXISTING UNIDENTIFIED UTILITY VAULT
- EXISTING HANDICAP PARKING
- EXISTING TRAFFIC SIGNAL
- EXISTING SHRUB
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- EXISTING TREE STUMP
- EXISTING BORING
- EXISTING ADA DETECTABLE WARNING FIELD

TOPOGRAPHIC LINEWORK LEGEND

- EXISTING UNDERGROUND CABLE TV
- EXISTING OVERHEAD CABLE TV
- EXISTING FIBER OPTIC LINE
- EXISTING OVERHEAD TELEPHONE LINE
- EXISTING UNDERGROUND TELEPHONE
- EXISTING RETAINING WALL
- EXISTING CHAIN LINK FENCE
- EXISTING GENERAL FENCE
- EXISTING WIRE FENCE
- EXISTING WOOD FENCE
- EXISTING GAS LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING GUY LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING OVERHEAD GENERAL UTILITIES
- EXISTING SANITARY FORCE MAIN (SIZE NOTED)
- EXISTING SANITARY SEWER LINE (SIZE NOTED)
- EXISTING STORM SEWER LINE (SIZE NOTED)
- EXISTING EDGE OF TREES
- EXISTING WATER MAIN (SIZE NOTED)
- EXISTING WETLAND DELINEATION
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL
- EXISTING WETLANDS
- EXISTING GRAVEL SURFACE
- EXISTING CONCRETE SURFACE
- EXISTING ASPHALT SURFACE

SURVEY LEGEND

- BENCHMARK
- FOUND CHISELED "X"
- PUBLIC LAND CORNER AS NOTED
- FOUND NAIL
- FOUND 1" Ø IRON PIPE
- FOUND 2" Ø IRON PIPE
- FOUND ____" Ø IRON PIPE
- FOUND P.K. NAIL
- FOUND 1-1/4" Ø IRON ROD
- FOUND 3/4" Ø IRON ROD
- FOUND ____" Ø IRON ROD
- FOUND RAILROAD SPIKE
- SET CHISELED "X"
- SET NAIL
- SET P.K. NAIL
- SET 1-1/4" X 18" SOLID IRON RE-ROD, MIN. WT. 4.30 LBS./FT.
- SET 3/4" X 18" SOLID IRON RE-ROD, MIN. WT. 1.50 LBS./FT.
- SET RAILROAD SPIKE
- SET 1.32" (O.D.) X 18" IRON PIPE WITH CAP WEIGHING 1.68 LBS/LIN FT
- SET 2.38" (O.D.) X 18" IRON PIPE WITH CAP WEIGHING 3.65 LBS/LIN FT
- GENERAL CONTROL POINT

GRADING LEGEND

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- DITCH CENTERLINE
- SILT FENCE
- DISTURBED LIMITS
- BERM
- DRAINAGE DIRECTION
- PROPOSED SLOPE ARROWS
- EXISTING SPOT ELEVATIONS
- PROPOSED SPOT ELEVATIONS
- STONE WEEPER
- VELOCITY CHECK
- INLET PROTECTION
- EROSION MAT CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- EROSION MAT CLASS III, TYPE C
- EROSION MAT CLASS II, TYPE A
- TRACKING PAD
- RIP RAP

CONSTRUCTION AND GENERAL NOTES

- INSTALL A 50'L X 20'W X 1.5'D ANTI TRACKING PAD AT THE ENTRANCE OF THE PROJECT. THE ANTI TRACKING PAD SHALL BE REPLACED AS NECESSARY TO ACCOMMODATE UTILITY CONSTRUCTION.
- THE CONTRACTOR IS REQUIRED TO MAKE EROSION CONTROL INSPECTIONS AT THE END OF EACH WEEK AND WHEN 0.5 INCHES OF RAIN FALLS WITHIN 24 HOURS. INSPECTION REPORTS SHALL BE PREPARED AND FILED AS REQUIRED BY THE DNR. ALL MAINTENANCE WILL FOLLOW AN INSPECTION WITHIN 24 HOURS. REPORTS SHALL BE SUBMITTED TO ENGINEER
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DURING CONSTRUCTION TO PUBLIC PROPERTY, PRIVATE
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW BY THE ENGINEER, PRIOR TO PLACING ORDER OF ANY
- EXISTING TOPOGRAPHIC INFORMATION IS BASED ON FIELD OBSERVATIONS AND/OR PLAN OF RECORD. CONTRACTOR SHALL VERIFY TOPOGRAPHIC INFORMATION PRIOR TO STARTING CONSTRUCTION.
- ALL FINAL GRADES FOR HYDRANTS ARE FINISHED GRADES AT BASE (FLANGE EL.) OF HYDRANT.
- THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES AND ENSURE PROPER CLEARANCE OF NEW UTILITIES.
- THE CONTRACTOR SHALL REMOVE ANY SEDIMENT TRACKED ONTO ADJACENT ROADS BY THE MEANS OF STREET SWEEPING (NOT FLUSHING) AT THE END OF EACH WORK DAY.
- ROW AND PROPERTY LINES ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING PROPERTY CORNER MONUMENTATION. ANY MONUMENTS DISTURBED BY CONTRACTOR SHALL BE REPLACED AT THE
- CONTRACTOR SHALL COORDINATE WITH DRY UTILITY COMPANY'S REGARDING ANY POTENTIAL CONFLICTS AND COORDINATE RELOCATIONS AS MAY BE REQUIRED. CONTRACTOR SHALL ALSO COORDINATE FOR THE INSTALLATION OF NEW
- CONTRACTOR SHALL COORDINATE w/ PROPERTY OWNERS/RESIDENTS REGARDING ACCESS TO DRIVEWAYS AND UTILITY SHUT-OFFS. THE CONTRACTOR SHALL NOTIFY THE VILLAGE, THE ENGINEER, AND UTILITIES 48 HOURS PRIOR TO ANY
- ALL WATER MAIN FITTINGS (BENDS, TEES, REDUCERS, CROSSES, ETC) WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCIDENTAL TO THE WATER MAIN.
- INSTALL WATER MAIN AT ADEQUATE DEPTH TO AVOID CONFLICT WITH PROPOSED SANITARY SEWER AND STORM SEWER. MAINTAIN MINIMUM 1.5' SEPARATION IF WATER CROSSES BELOW SEWER AND MINIMUM 0.5' IF WATER CROSSES
- ALL COPPER, OTHER METAL FITTINGS AND CASTINGS REMOVED DURING CONSTRUCTION IS THE PROPERTY OF THE CITY OF PRAIRIE DU CHIEN AND TO BE DELIVERED TO THE CITY.

PROPOSED UTILITY LEGEND

- STORM SEWER PIPE
- STORM SEWER MANHOLE
- STORM SEWER ENDWALL
- STORM SEWER CURB INLET
- STORM SEWER CURB INLET W/MANHOLE
- STORM SEWER FIELD INLET
- ROOF DRAIN CLEANOUT
- SANITARY SEWER PIPE (GRAVITY)
- SANITARY SEWER PIPE (FORCE MAIN)
- SANITARY SEWER LATERAL PIPE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- WATER MAIN
- WATER SERVICE LATERAL PIPE
- FIRE HYDRANT
- WATER VALVE
- CURB STOP
- WATER VALVE MANHOLE
- PROPOSED PIPE INSULATION
- GAS MAIN
- ELECTRIC SERVICE

ABBREVIATIONS	
STMH	STORM MANHOLE
FI	FIELD INLET
CI	CURB INLET
CB	CATCH BASIN
EW	ENDWALL
SMH	SANITARY MANHOLE

AGENCIES:

EMERGENCY – FIRE, RESCUE, AMBULANCE, POLICE
DIAL 911

CITY OF PRAIRIE DU CHIEN
214 E BLACKHAWK AVE
PRAIRIE DU CHIEN, WI 53821
TELEPHONE: (608) 326-6400 X20
CONTACT:
LARRY GATES, UTILITY DIRECTOR

UTILITIES:

GAS
MG&E
MARK OEHLER
62950 VINEYARD ROAD
PRAIRIE DU CHIEN, WI 53821
608-326-2417

TELEPHONE
CENTURYLINK
STEVE NELSON
135 NORTH BONSON ST
PLATTEVILLE, WI 53818
608-342-4369

ELECTRIC
ALLIANT ENERGY
AL MUMM
2200 E CAMPION BLVD
PRAIRIE DU CHIEN, WI 53821
608-732-7825

CABLE TV
MEDIACOM
100 N MARQUETTE RD, SUITE 116
PRAIRIE DU CHIEN, WI 53821
608-326-4487

WATER WORKS
CITY OF PRAIRIE DU CHIEN
214 E BLACKHAWK AVE
PRAIRIE DU CHIEN, WI 53821
LARRY GATES
608-306-0360

SANITARY
CITY OF PRAIRIE DU CHIEN
214 E BLACKHAWK AVE
PRAIRIE DU CHIEN, WI 53821
LARRY GATES
608-306-0360

CONSTRUCTION SEQUENCE OF WORK

- INSTALL TRACKING PAD PER DETAIL AT ALL ENTRANCES TO SITE
- INSTALL SILT FENCE AND INLET PROTECTION
- CONSTRUCT UNDERGROUND UTILITIES
- CONSTRUCT PUMPHOUSE, GRADING & SITE IMPROVEMENTS
- RESTORE WORK AREA(S)
- AFTER CONSTRUCTION SITE IS RESTORED
– REMOVE SILT FENCE AND INLET PROTECTION



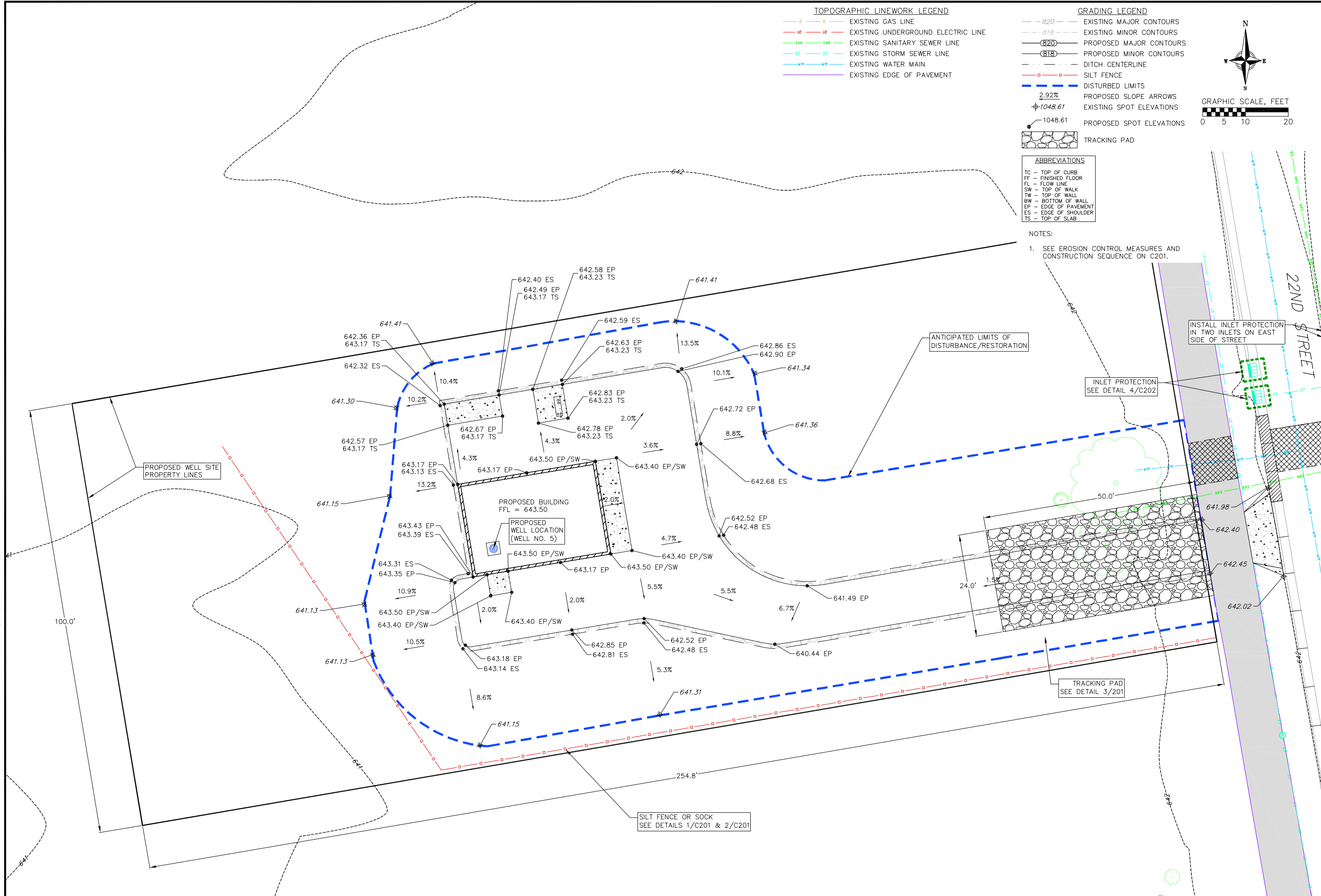
vierbicher
planners | engineers | advisors

LEGENDS & GENERAL NOTES

PUBLIC WATER SUPPLY - WELL NO. 5 PUMPHOUSE
CITY OF PRAIRIE DU CHIEN
CRAWFORD COUNTY, WISCONSIN

REVISIONS				REVISIONS							
NO.		DATE		REMARKS		NO.		DATE		REMARKS	
DATE				JUNE 2025							
DRAFTER				PJUN							
CHECKED				DPOP							
PROJECT NO.				240564							
G001											







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planners | engineers | advisors

SITE GRADING AND EROSION CONTROL PLAN

PUBLIC WATER SUPPLY WELL NO. 5 PUMPHOUSE
CITY OF PRAIRIE DU CHIEN
CRAWFORD COUNTY, WISCONSIN

REVISIONS		REVISIONS	
NO.	DATE	NO.	DATE

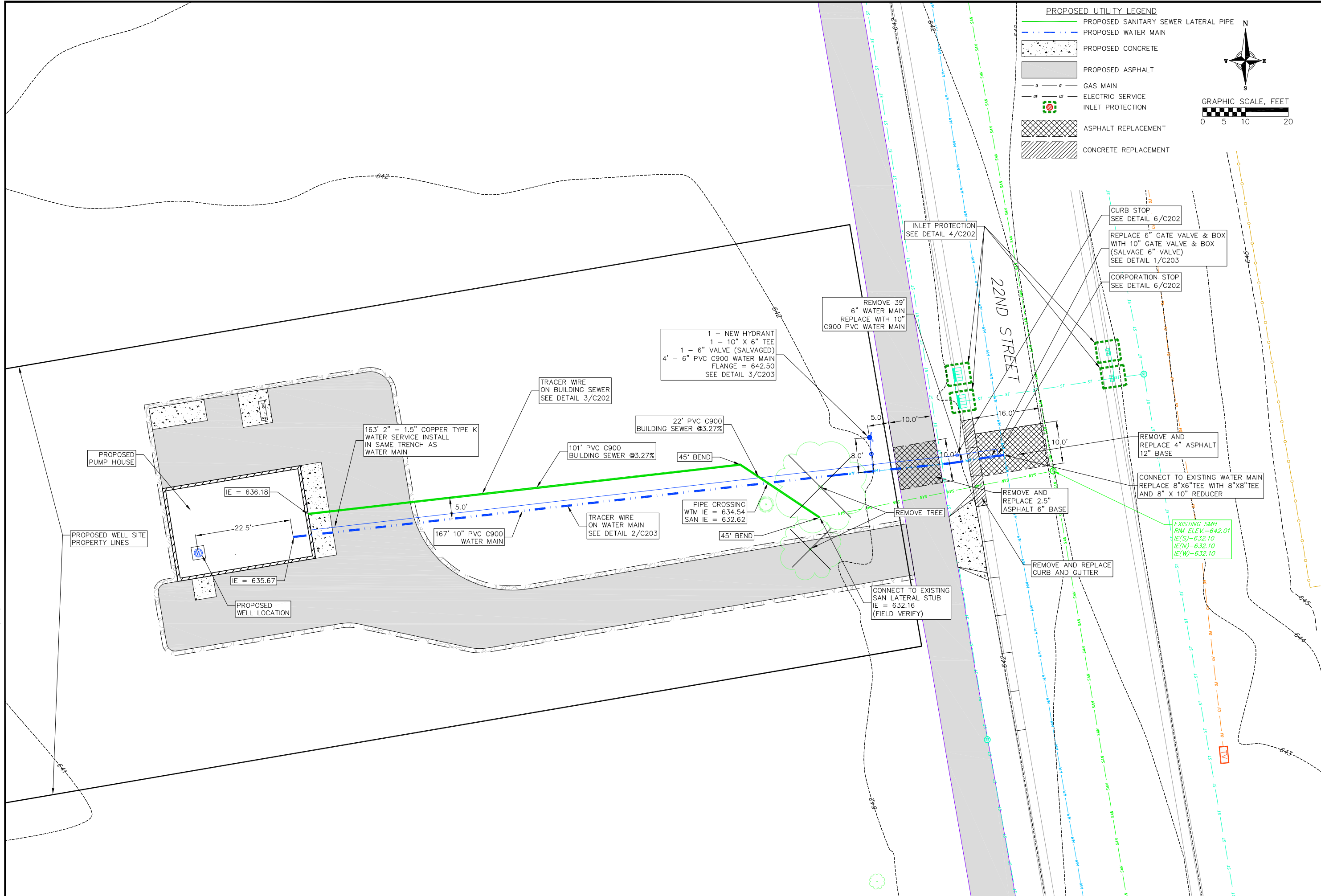
DATE
JUNE 2025

DRAFTER
JCHA/CLEN

CHECKED
DPOP

PROJECT NO.
240564

C102





1 NORTH EXTERIOR
C104



2 EAST EXTERIOR
C104



3 SOUTH EXTERIOR
C104



4 INTERIOR FACING WEST
C104



5 INTERIOR FACING EAST
C104



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EXISTING CONDITIONS - WELL NO. 2 PUMPHOUSE
PUBLIC WATER SUPPLY - WELL NO. 5 PUMPHOUSE
CITY OF PRAIRIE DU CHIEN
CRAWFORD COUNTY, WISCONSIN

REVISIONS		REVISIONS	
NO.	DATE	NO.	DATE
DATE DECEMBER 2025			
DRAFTER PJUN			
CHECKED DPOP			
PROJECT NO. 240564			
C104			



- AN ASBESTOS AND PB BASED PAINT INSPECTION BY ADVANCED TESTING & INSPECTIONS LLC INDICATED THE INTERIOR WALLS, AND ROOF FLASHING TESTED POSITIVE FOR ASBESTOS AND WILL NEED TO BE ABATED BY A LICENSED COMPANY UNDER A WDNR PERMIT (CONTRACTOR SHALL OBTAIN PERMIT). THIS REPORT IS PROVIDED AS AVAILABLE PROJECT INFORMATION. THERE MAY BE OTHER HAZARDOUS MATERIALS ENCOUNTERED DURING DEMOLITION. CONTRACTOR SHALL PROPERLY REMOVE AND DISPOSE ALL HAZARDOUS MATERIALS FOUND PRIOR TO AND DURING DEMOLITION.
- THE CONTRACTOR IS REQUIRED TO MAKE EROSION CONTROL INSPECTIONS AT THE END OF EACH WEEK AND WHEN 0.5" OF RAIN FALLS WITHIN 24 HOURS. INSPECTION REPORTS SHALL BE PREPARED AND FILLED AS REQUIRED BY THE WDNR.
- EXISTING INFORMATION IS BASED ON EXISTING CONDITIONS INFORMATION AVAILABLE AT THE TIME OF DRAFTING OF THIS DEMOLITION PLAN. THE OWNER AND THE ENGINEER DO NOT ASSUME RESPONSIBILITY IN THE EVENT THAT DURING CONSTRUCTION, UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED, AND THAT THE ACTUAL LOCATION OF THOSE WHICH ARE SHOWN MAY BE DIFFERENT FROM THE LOCATIONS SHOWN ON THE PLANS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS INFORMATION TO THEIR OWN SATISFACTION PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DURING CONSTRUCTION TO PUBLIC PROPERTY, PRIVATE PROPERTY, OR UTILITIES.
- THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES PRIOR TO STARTING CONSTRUCTION.
- ALL BUILDING MATERIALS AND EXCESS MATERIAL FROM THE PROJECT SHALL BE PROPERLY REMOVED BY THE CONTRACTOR AND DISPOSED OF OFF SITE.
- CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES REGARDING SERVICE DISCONNECTION AND ABANDONMENT REQUIREMENTS OF THE UTILITY COMPANIES.
- CONTRACTOR SHALL PROVIDE AND SHALL BE RESPONSIBLE FOR ANY NECESSARY TRAFFIC CONTROL SIGNAGE AND SAFETY MEASURES DURING DEMOLITION AND CONSTRUCTION OPERATIONS WITHIN OR NEAR THE PUBLIC ROADWAY.
- PERFORM AND VERIFY HAZARDOUS MATERIAL ABATEMENT IS COMPLETE BEFORE BEGINNING BUILDING DEMOLITION.
- CONTRACTOR TO DETERMINE WHERE REMOVALS MAY RESULT IN STRUCTURAL DEFICIENCY OR UNPLANNED BUILDING COLLAPSE DURING DEMOLITION. COORDINATE DEMOLITION SEQUENCE AND PROCEDURES TO PREVENT STRUCTURE FROM BECOMING UNSTABLE.
- CONTRACTOR SHALL OBTAIN ANY NECESSARY DEMOLITION PERMITS.
- PRIOR TO THE USE OF THESE DRAWINGS FOR CONSTRUCTION PURPOSES, THE USER SHALL VERIFY ALL DIMENSIONS AND LOCATIONS OF BUILDINGS. IF CONFLICTS EXIST THE USER OF THESE DRAWINGS SHALL CONTACT THE OWNER OR ENGINEER IMMEDIATELY.

REVISIONS			REVISIONS		
NO.	DATE	REMARKS	NO.	DATE	REMARKS

DATE	DECEMBER 2025
DRAFTER	PJUN
CHECKED	DPOP
PROJECT NO.	240564

C105

Vierbicher Associates, Inc.

- 25 Jun 2025 - 5:41p R:\Prairie du Chien, City of\240564 - Well No. 5\CADD\240564 - Base Eng.dwg by: icha

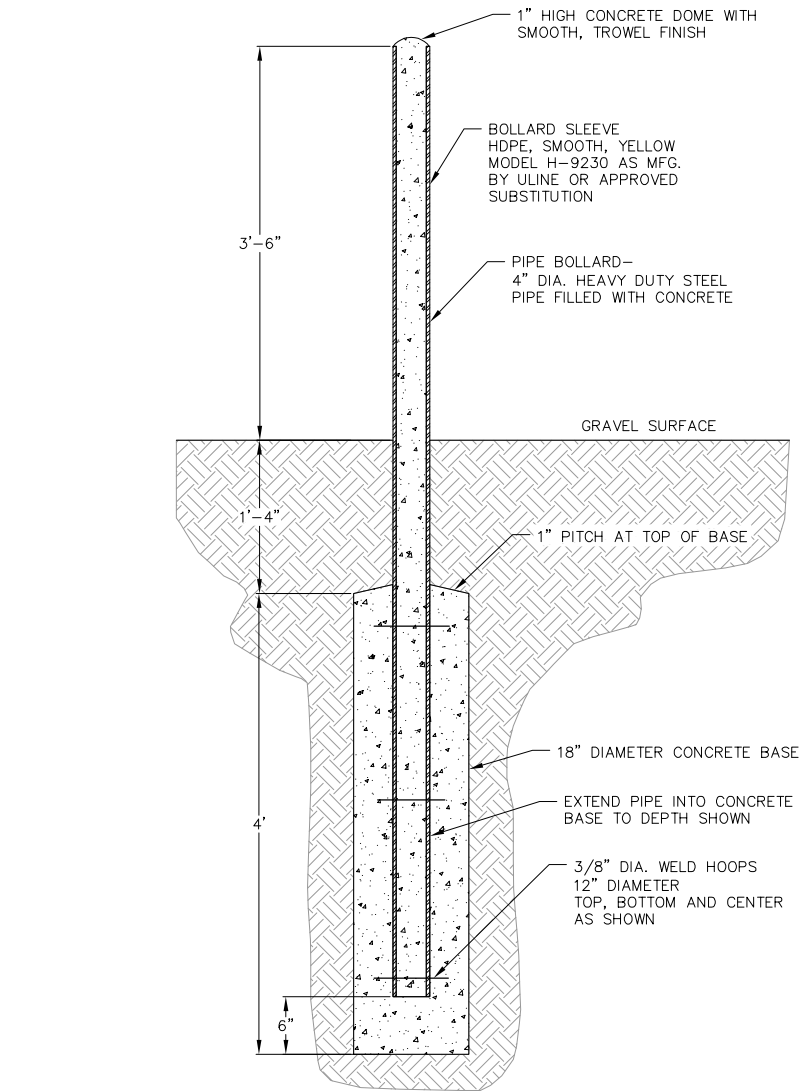
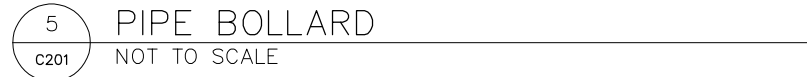
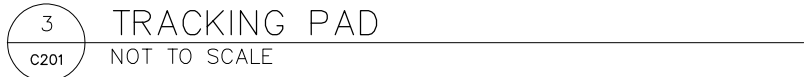
1. INSTALL SILT FENCE OR SILT SOCK AND TRACKING PAD
2. STRIP TOPSOIL AND STOCKPILE.
3. INSTALL SILT FENCE OR SILT SOCK AROUND STOCKPILES.
4. CONSTRUCT UNDERGROUND UTILITIES.
5. ROUGH GRADE SITE.
6. CONSTRUCT PUMPHOUSE.
7. RE-GRADE SITE.
8. CONSTRUCT PAVEMENT.
9. RESTORE SITE WITH SEED, FERTILIZER & MULCH.

TEMPORARY:
1. USE ANNUAL OATS AT 3.0 LB./1,000 S.F. FOR SPRING AND SUMMER PLANTINGS.
2. USE WINTER WHEAT OR RYE AT 3.0 LB./1,000 SF FOR FALL PLANTINGS STARTED AFTER SEPTEMBER 15.

1. USE WISCONSIN D.O.T. SEED MIX #40 AT 2 LB./1,000 S.F.

TEMPORARY AND PERMANENT:
USE WISCONSIN D.O.T. TYPE A OR B AT 7 LB./1,000 S.F.

TEMPORARY AND PERMANENT:
USE 1/2" TO 1-1/2" STRAW OR HAY MULCH, CRIMPED PER
SECTION 607.3.2.3, OR OTHER RATE AND METHOD PER SECTION
627, WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR
HIGHWAY AND STRUCTURE CONSTRUCTION

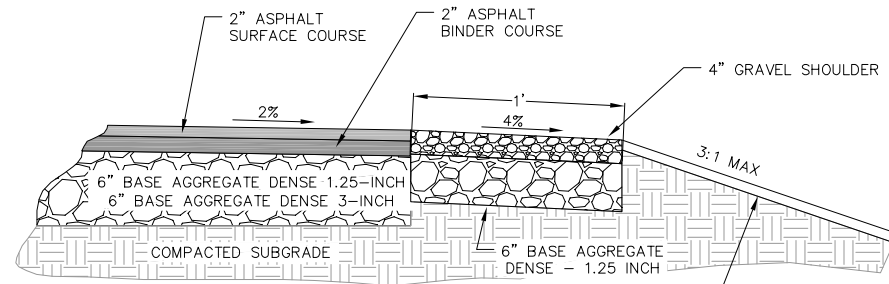


DETAILS

NEPTUNG		NEPTUNG			
NO.	DATE	REMARKS	NO.	DATE	REMARKS

DATE	JUNE 2025
RAFTER	JCHA
CHECKED	
PROJECT NO.	240564

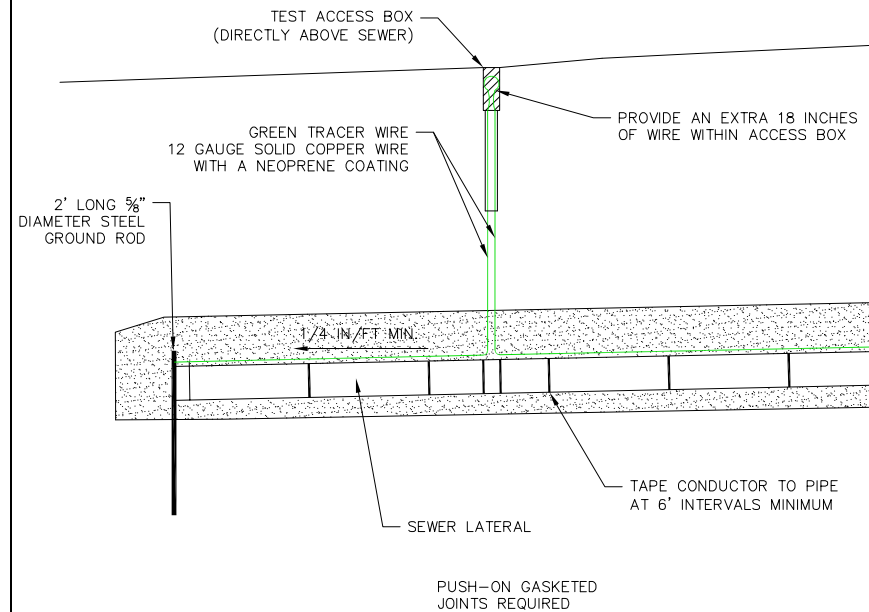
C201



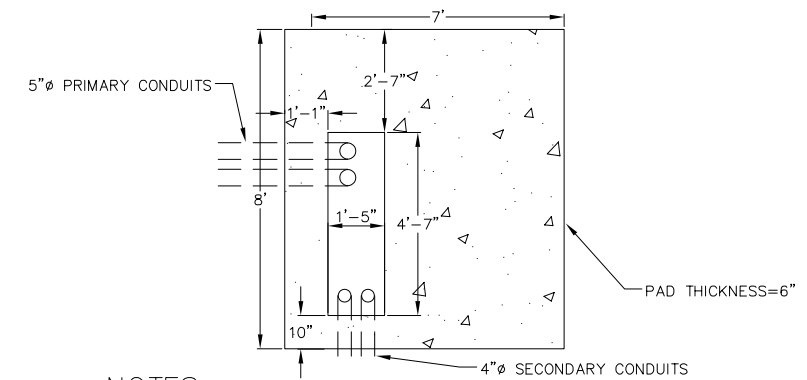
AFTER FINAL SITE GRADING, THE SUB-GRADE SOILS SHOULD BE PROOF-ROLLED WITH A LOADED TRI-AXLE DUMP TRUCK. SOFT/YIELDING AREAS SHOULD BE UNDERCUT/REMOVED AND REPLACED WITH BASE COURSE.

PROPOSED BLEND
TO EXISTING GRADE

1 SITE PAVEMENT
C202 NOT TO SCALE



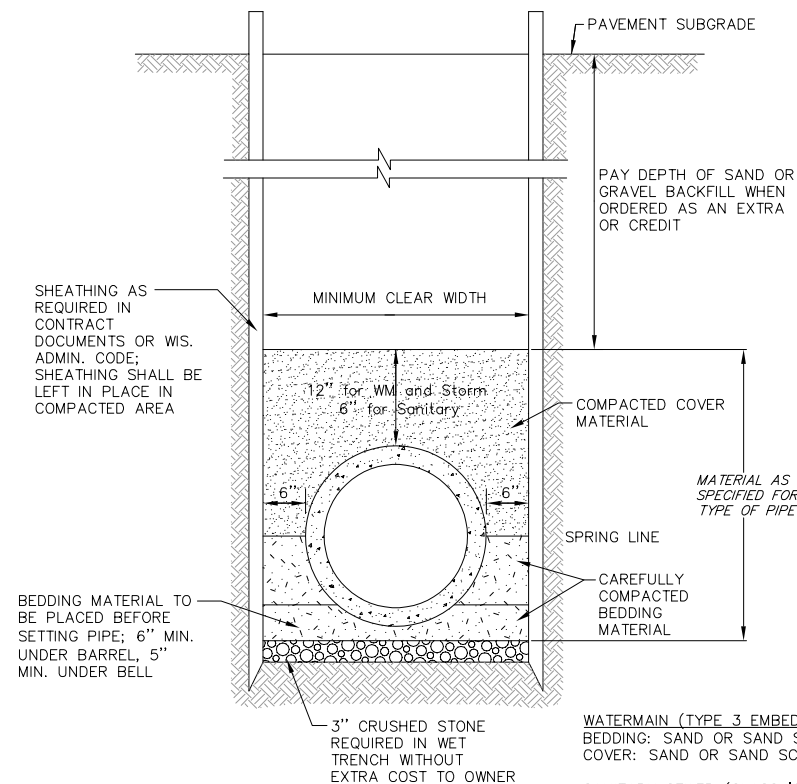
3 SANITARY SEWER LATERAL TRACER WIRE
C202 NOT TO SCALE



NOTES:

1. ALL CONDUITS SHALL ENTER THROUGH THE WINDOW OPENING PROVIDED IN THE PAD FOUNDATION AND SHALL BE CUT OFF SO THE TOP OF THE CONDUIT IS FLUSH WITH THE SURFACE OF THE PAD.
2. ALL METALLIC CONDUITS (IF INSTALLED) SHALL BE FITTED WITH AN INSULATING BUSHING.
3. WHEN AN OIL SUMP IS REQUIRED, EXCAVATE 18" UNDER, AND AROUND PAD AND FILL WITH COARSE CRUSHED ROCK - CHECK WITH LOCAL BUILDING CODE TO DETERMINE IF REQUIRED.
4. CONCRETE MIX SHALL HAVE A MINIMUM STRENGTH OF 4000 LB./SQ.IN. AFTER 28 DAYS.
5. THE TOP OF THE PAD SHALL BE LEVEL AND ALL EDGES AND CORNERS ROUNDED OFF.
6. THE PAD SHALL BE REINFORCED WITH #4 WIRE, 4"x4" WELDED MESH OR EQUIVALENT MATERIALS WITH ADDITIONAL 3/8 REINFORCING RODS AROUND THE CABLE OPENING. THE MESH SHALL NOT BE LESS THAN 1" FROM THE EDGES AND OPENING, AND 3" BELOW THE SURFACE. IF THE #4 WIRE, 4"x4" MESH IS NOT AVAILABLE, 2 LAYERS OF #10 WIRE, 6"x6" MESH, HORIZONTALLY STAGGERED, MAY BE SUBSTITUTED.

5 TRANSFORMER PAD DETAIL
C202 NOT TO SCALE

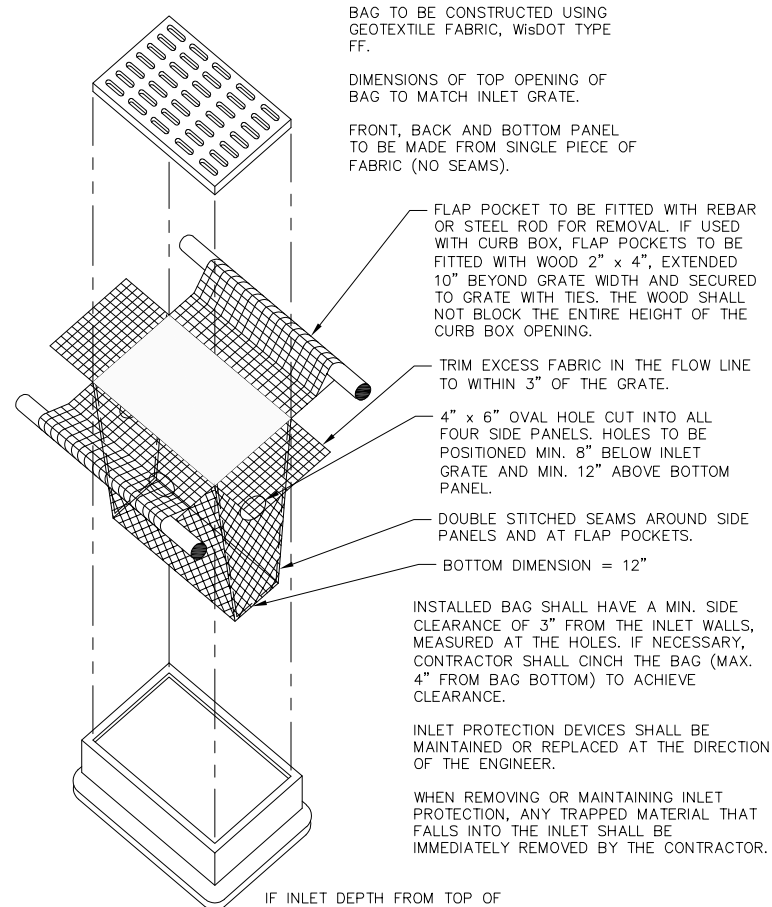


WATERMAIN (TYPE 3 EMBEDMENT):
BEDDING: SAND OR SAND SCREENINGS

SANITARY SEWER (CLASS 'C' BEDDING):
BEDDING: CLASS 1: $\frac{3}{8}$ " TO $1\frac{1}{2}$ " CLEAR STONE
COVER: $\frac{3}{8}$ " TO $1\frac{1}{2}$ " CLEAR STONE

STORM SEWER (CLASS 'B' BEDDING):
BEDDING: CLASS 1: $\frac{3}{8}$ " TO $1\frac{1}{2}$ " CLEAR STONE
COVER: NATIVE OR GRANULAR BACKFILL AS
REQ'D

2 STANDARD TRENCH SECTION
C202 NOT TO SCALE



TO BE CONSTRUCTED USING
TEXTILE FABRIC, WisDOT TYPE

DIMENSIONS OF TOP OPENING OF
BAG TO MATCH INLET GRATE.

FRONT, BACK AND BOTTOM PANEL
TO BE MADE FROM SINGLE PIECE OF
FABRIC (NO SEAMS).

— FLAP POCKET TO BE FITTED WITH REBAR OR STEEL ROD FOR REMOVAL. IF USED WITH CURB BOX, FLAP POCKETS TO BE FITTED WITH WOOD 2" x 4", EXTENDED 10" BEYOND GRATE WIDTH AND SECURED TO GRATE WITH TIES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

— TRIM EXCESS FABRIC IN THE FLOW LINE
TO WITHIN 3" OF THE GRATE.

— 4" x 6" OVAL HOLE CUT INTO ALL FOUR SIDE PANELS. HOLES TO BE POSITIONED MIN. 8" BELOW INLET GRATE AND MIN. 12" ABOVE BOTTOM PANEL.

— DOUBLE STITCHED SEAMS AROUND SIDE PANELS AND AT FLAP POCKETS.

— BOTTOM DIMENSION = 12"

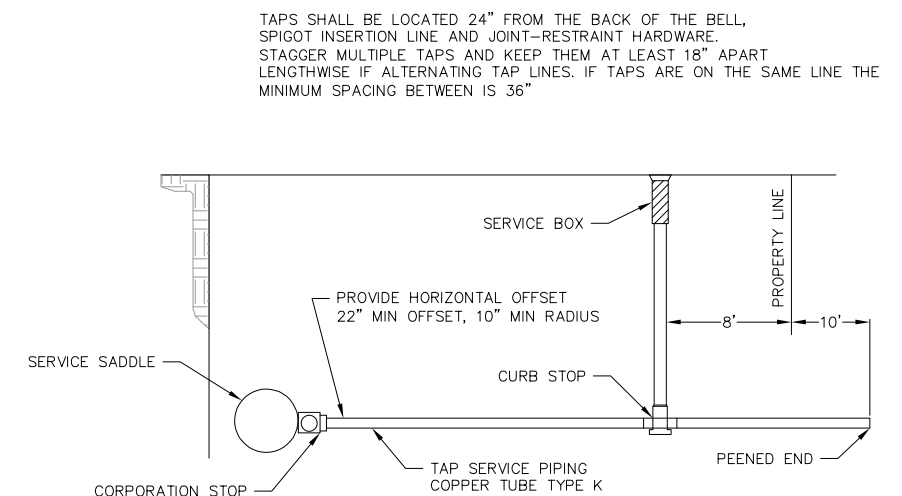
INSTALLED BAG SHALL HAVE A MIN. SIDE CLEARANCE OF 3" FROM THE INLET WALLS, MEASURED AT THE HOLES. IF NECESSARY, CONTRACTOR SHALL CINCH THE BAG (MAX. 4" FROM BAG BOTTOM) TO ACHIEVE CLEARANCE.

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, ANY TRAPPED MATERIAL THAT FALLS INTO THE INLET SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.

IF INLET DEPTH FROM TOP OF
GRATE TO BOTTOM OF INLET IS
LESS THAN 30", CONTRACTOR
SHALL SUBSTITUTE WisDOT TYPE C
INLET PROTECTION.

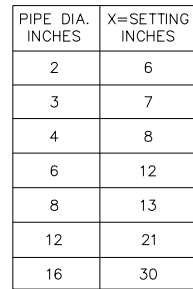
4 INLET PROTECTION TYPE D
c202 NOT TO SCALE



TAPS SHALL BE LOCATED 24" FROM THE BACK OF THE BELL,
SPIGOT INSERTION LINE AND JOINT-RESTRAINT HARDWARE.
STAGGER MULTIPLE TAPS AND KEEP THEM AT LEAST 18" APART
LENGTHWISE IF ALTERNATING TAP LINES. IF TAPS ARE ON THE SAME LINE THE
MINIMUM SPACING BETWEEN IS 36"

6 C900 - WATER SERVICE
C902 NOT TO SCALE

NEPOTING		NEPOTING	
NO.	DATE	NO.	DATE

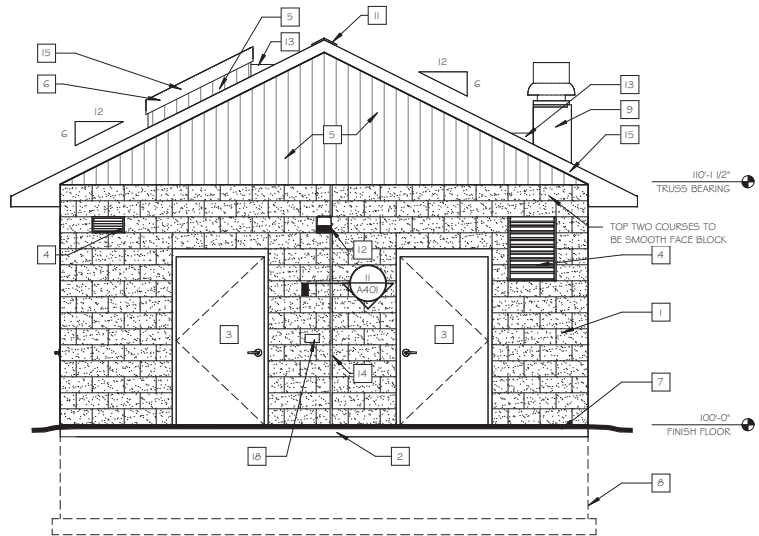


1 STANDARD GATE VALVE BOX SETTING



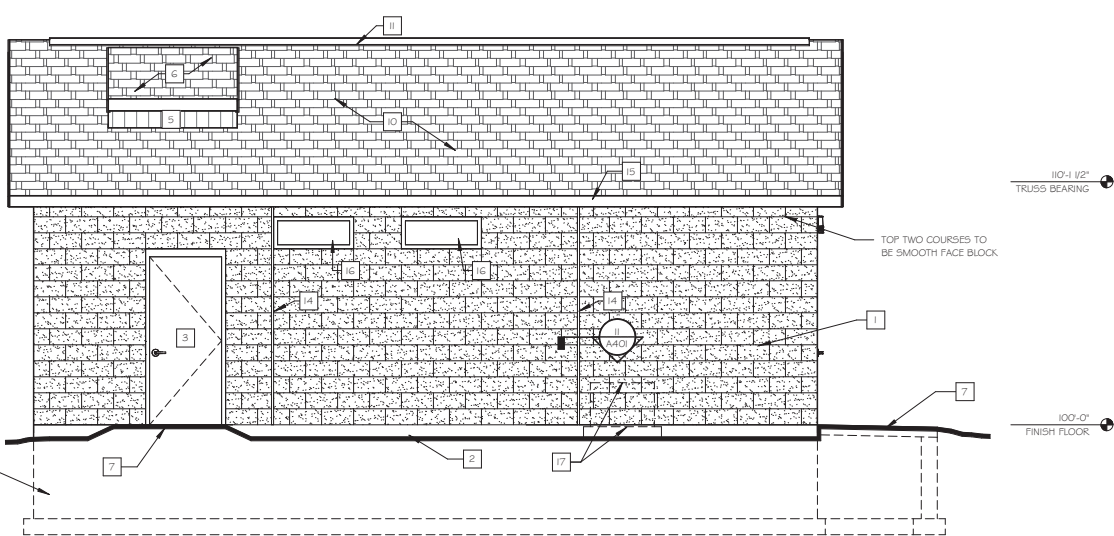
DATE		JUNE 2025	
DRAFTER		JCHA	
CHECKED		DPOP	
PROJECT NO.		240564	
C203			





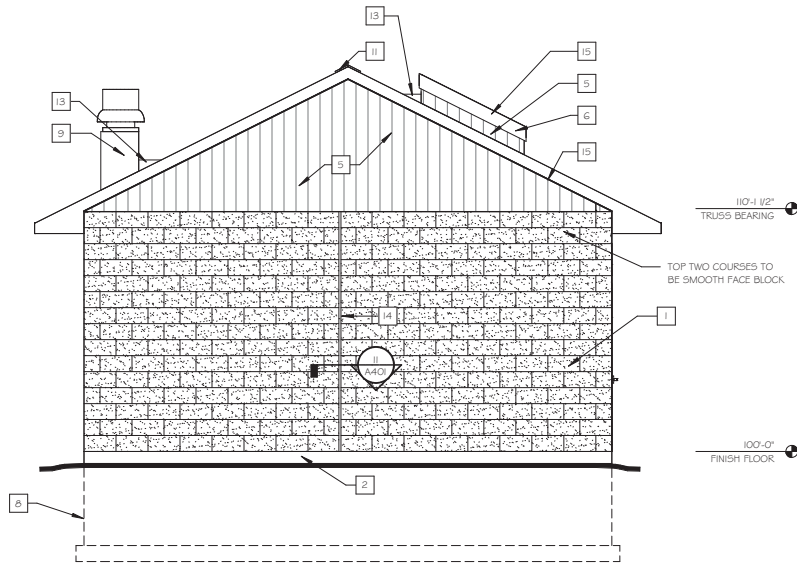
ELEVATION 'A'

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



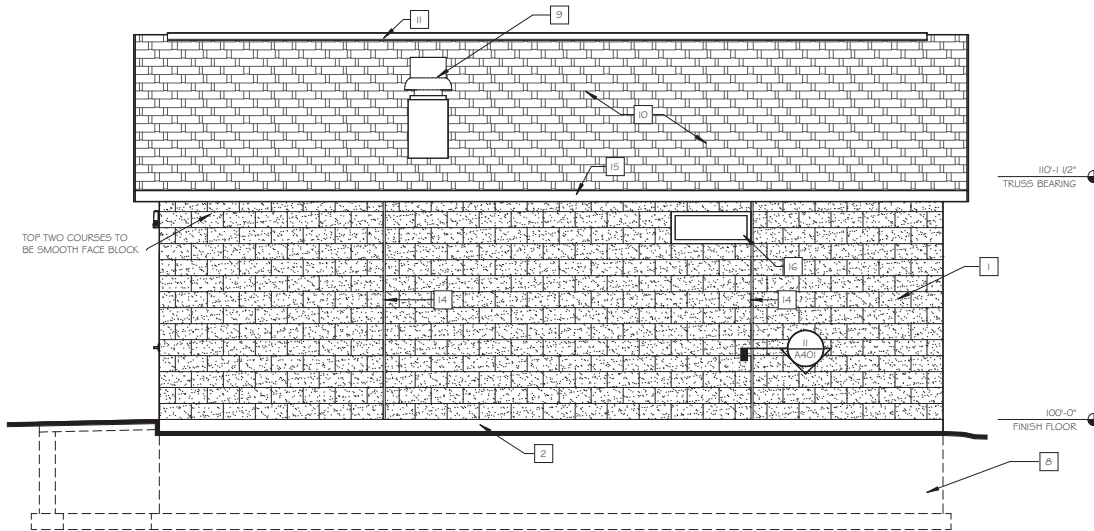
ELEVATION 'B'

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



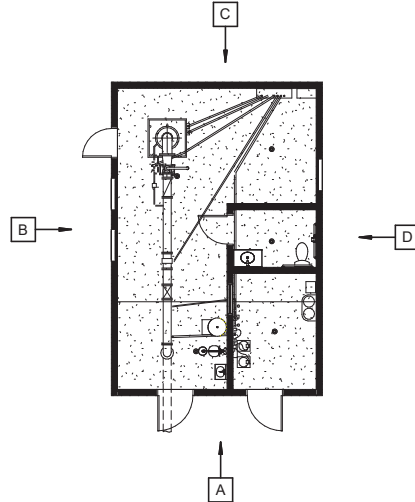
ELEVATION 'C'

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



ELEVATION 'D'

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



KEY PLAN

EXTERIOR FINISH SCHEDULE			
BOX	MATERIAL / MANUFACTURER	DESCRIPTION / COLOR	NOTES
1	8" SPLIT-FACED INTEGRAL COLOR CONCRETE MASONRY UNITS, COUNTY MATERIALS.	COLOR SELECTED BY ARCHITECT CIVIL ENGINEER DURING SUBMITTAL PHASE.	---
2	EXPOSED CONCRETE FOUNDATION WALL.	NATURAL GRAY	NOTE: 1
3	DOOR # FRAME ASSEMBLY, REFER TO SHEET A401 - DOOR SCHEDULE.	COLOR SELECTED BY ARCHITECT CIVIL ENGINEER DURING SUBMITTAL PHASE.	---
4	LOUVER ASSEMBLY, PREFINISHED.	COLOR SELECTED BY MECHANICAL ENGINEER CIVIL ENGINEER DURING SUBMITTAL PHASE.	---
5	CORRUGATED METAL EXPOSED FASTENER PANEL. PAC-CLAD, 7.2 PANEL.	COLOR SELECTED BY ARCHITECT CIVIL ENGINEER DURING SUBMITTAL PHASE.	---
6	MULTIPLE MATERIALS. ROOF ACCESS HATCH ASSEMBLY - SEE DETAIL 6/A301	MULTIPLE COLORS.	---
7	CONCRETE STOOP.	NATURAL GRAY, MEDIUM BROOM FINISH.	---
8	CONCRETE FOUNDATION SYSTEM (DASHED LINES), REFER TO SHEET S101 - FOUNDATION PLAN.	NATURAL GRAY	---
9	EXHAUST FAN CURB WITH SLOPED BOTTOM. INSULATED METAL. SEE MECHANICAL DRAWINGS.	NATURAL METAL	NOTE: 2
10	ASPHALT SHINGLE ROOF SYSTEM.	COLOR SELECTED BY ARCHITECT CIVIL ENGINEER DURING SUBMITTAL PHASE.	---
11	CONTINUOUS RIDGE VENT.	RIDGE VENT COLOR TO MATCH ASPHALT SHINGLE COLOR.	---
12	EXTERIOR LIGHT FIXTURE, LED TYPE. SEE ELECTRICAL DRAWINGS.	SEE ELECTRICAL DRAWINGS.	---
13	ROOF CRICKET WITH METAL FLASHING.	PREFINISHED METAL TO MATCH ASPHALT SHINGLE COLOR.	---
14	JOINT SEALANT.	CONTROL JOINT, TYPICAL JOINT SEALANT COLOR TO CLOSELY MATCH SPLIT-FACE CMU COLOR.	---
15	PREFINISHED ALUMINUM FASCIA	COLOR SELECTED BY ARCHITECT/CIVIL ENGINEER	---
16	FIXED ALUM WINDOW	LOW-E GLAZING, COLOR SELECTED BY ARCHITECT/CIVIL ENGINEER	---
17	ACCU ON GROUND IN FOREGROUND - SEE MECHANICAL PLANS.	SEE MECHANICAL PLANS.	---
18	FIRE DEPARTMENT LOCK BOX	---	---

GENERAL EXTERIOR ELEVATION NOTES:

- PROVIDE SEALANT IN COLOR TO MATCH EXTERIOR WALL CLADDING AROUND ALL NEW ELECTRICAL OUTLETS AND OTHER MECHANICAL | PLUMBING APPLIANCE/UNIT.
- EXTERIOR MEP EQUIPMENT SHOWN ON THESE DRAWINGS ARE SHOWN TO THE BEST ABILITY OF THE ARCHITECT BUT IT REMAINS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE THE WORK AND REVIEW FOR CONFLICTS.
- ALL EXTERIOR MATERIAL COLOR, STYLE, AND SHEEN SELECTIONS TO BE CONFIRMED VIA SHOP DRAWINGS, PRODUCT DATA CUT SHEETS, AND MATERIAL SAMPLE SUBMITTALS OUTLINED IN THE PROJECT SPECIFICATIONS.
- SEE ALSO PROJECT SPECIFICATIONS FOR ADDITIONAL ALLOWED MANUFACTURERS FOR VARIOUS EXTERIOR MATERIALS.

EXTERIOR FINISH SCHEDULE KEYNOTES:

- HOLD GRADE MINIMUM 6" BELOW FINISHED FLOOR WITH EXCEPTION FOR STOOP AREA.
- GENERAL CONTRACTOR SHALL CUT FLYWOOD DECKING WHERE EXHAUST DUCT IS TO BE LOCATED, CURB AND EXHAUST FAN BY MECHANICAL CONTRACTOR.



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Crawford County, WI 54431

EXTERIOR ELEVATIONS

REVISIONS		REVISIONS	
NO.	DATE	NO.	DATE
1		1	
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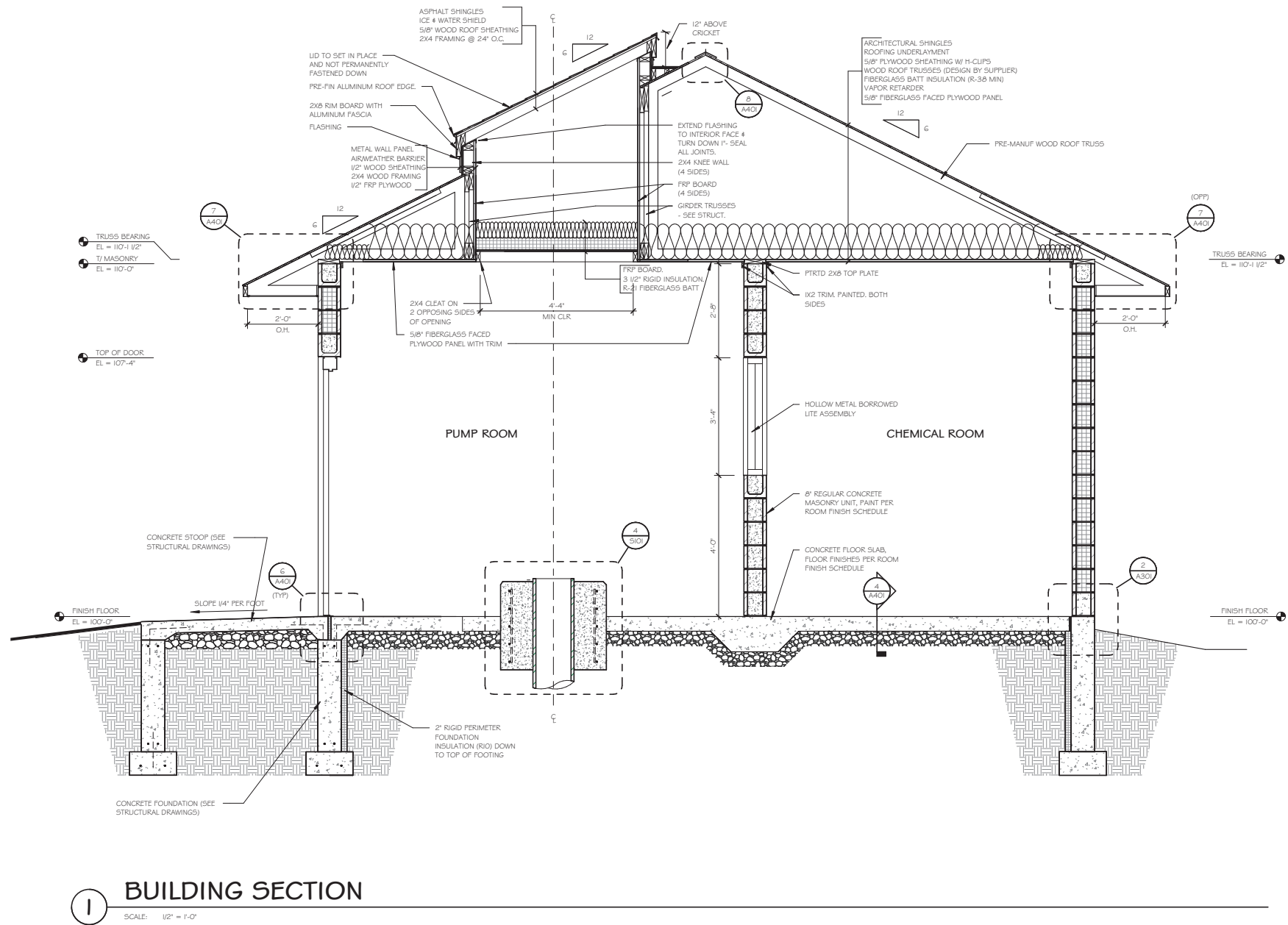
DATE
06.30.2025

DRAFTER
J.PHANEUF

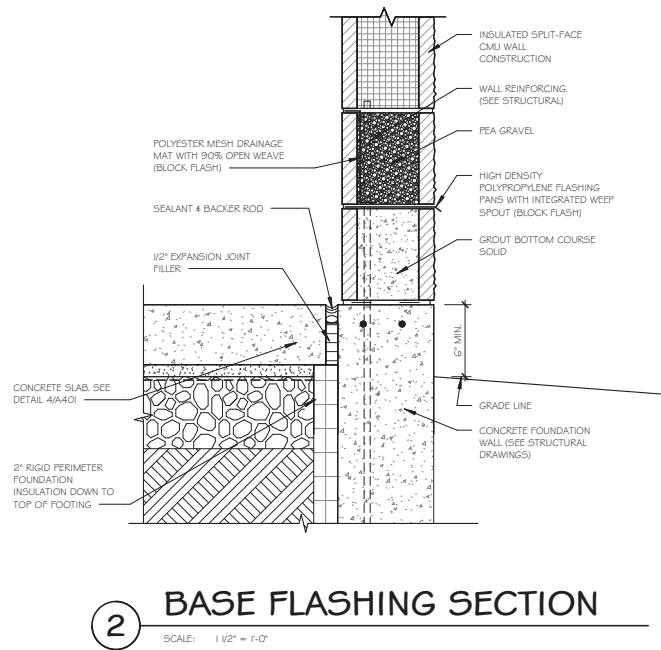
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M.MAAS

PROJECT NO.
240564

SHEET
A201



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



2 BASE FLASHING SECTION
SCALE: 1/2" = 1'-0"



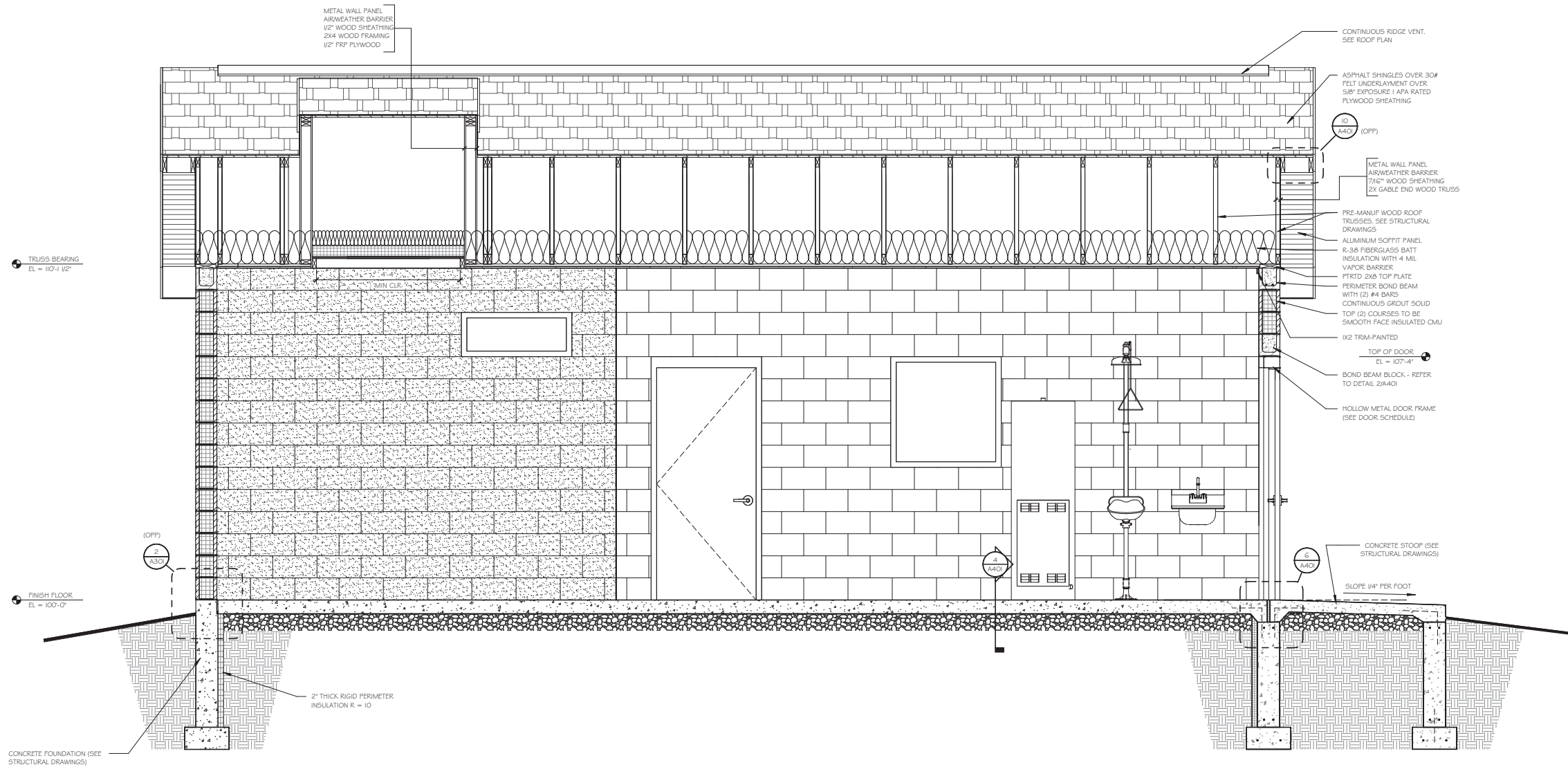
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BUILDING SECTIONS & WALL SECTIONS
WELL NO.5 PUMP HOUSE
CITY OF PRAIRIE DU CHIEN
CRAWFORD COUNTY, WISCONSIN

REVISIONS	REVISIONS		REMARKS
	NO.	DATE	
	1		
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	3		

DATE	06.30.2025
DRAFTER	J.PHANEUF
CHECKED	M.MAAS
PROJECT NO.	240564
SHEET	A301



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



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30 Wisconsin Avenue, P.O. Box 288
Prairie du Chien, WI 53593-0288

BUILDING SECTION
WELL NO.5 PUMP HOUSE
CITY OF PRAIRIE DU CHIEN
CRAWFORD COUNTY, WISCONSIN

REVISIONS		REVISIONS	
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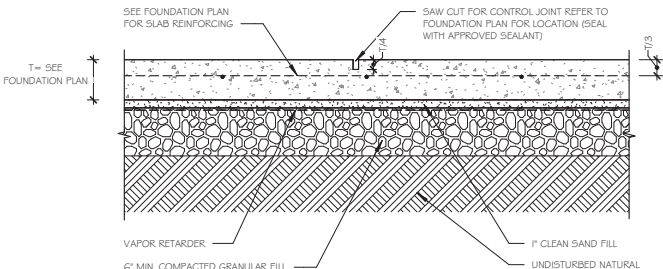
ROOM FINISH SCHEDULE															
NO	NAME	FLOOR	BASE	NORTH WALL		WEST WALL		SOUTH WALL		EAST WALL		CEILING		NOTES	
				MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	CEILING MATERIAL	CEILING FINISH		CEILING HEIGHT
FIRST FLOOR															
101	PUMP ROOM	SEALED CONCRETE	---	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	FRP	WHITE	10'-0"	EPOXY PAINT
102	CHEMICAL ROOM	SEALED CONCRETE	---	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	FRP	WHITE	10'-0"	EPOXY PAINT
103	TOILET ROOM	SEALED CONCRETE	---	CMU	PAINT	CMU	PAINT	CMU	PAINT	CMU	PAINT	FRP	WHITE	10'-0"	EPOXY PAINT

ROOM FINISH SCHEDULE ABBREVIATIONS:													
CONC = CONCRETE													
CMU = CONCRETE MASONRY UNITS													
EPOK = EPOXY													
FRP = FIBERGLASS REINFORCED PANEL													
GEP = GLOSS EMERALD PAINT													
GCS = GROUTING SYSTEM BY DOOR MANUFACTURER													
INSUL STL = INSULATED STEEL													
SFP = SEMI-GLOSS FINISH PAINT													
STS = SEMITRANSSPARENT STAIN													
STL = STEEL													
TXT = TEXTURED													
WHT = WHITE													

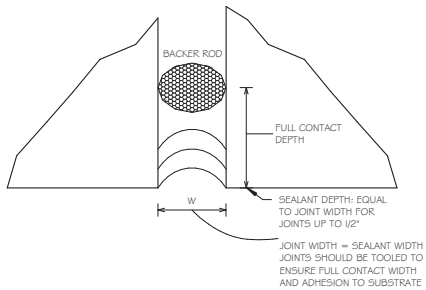
DOOR & FRAME SCHEDULE																
NO.	SIZE			TYPE	DOOR			GLAZING	FRAME			FIRE RATING	HARDWARE SET	DETAILS		
	WIDTH	HEIGHT	THICKNESS		MATERIAL	FINISH	MATERIAL		FINISH	HEAD	JAMB			THRESHOLD	NOTES	
101A	3'-8"	7'-0"	1 3/4"	PF : I	GALVANIZED INSULATED H.M.	G.E.P.	---	F : I	GALVANIZED H.M.	G.E.P.	---	1	2/A4OI	1/A4OI	G/A4OI	1
101B	3'-0"	7'-0"	1 3/4"	PF : I	GALVANIZED INSULATED H.M.	G.E.P.	---	F : I	GALVANIZED H.M.	G.E.P.	---	1	2/A4OI	1/A4OI	G/A4OI	1
102A	3'-8"	7'-0"	1 3/4"	PF : I	GALVANIZED INSULATED H.M.	G.E.P.	---	F : I	GALVANIZED H.M.	G.E.P.	---	2	2/A4OI	1/A4OI	G/A4OI	1
103A	3'-0"	7'-0"	1 3/4"	PF : I	GALVANIZED INSULATED H.M.	G.E.P.	---	F : I	GALVANIZED H.M.	G.E.P.	---	3	2/A4OI	1/A4OI	---	1, 2

GENERAL DOOR & FRAME NOTES:													
A. PROVIDE (CC) AND (MT) ADA COMPLIANT HARDWARE AS REQUIRED BY CODE.													
B. SEE SPECIFICATIONS FOR GLAZING TYPES AND HARDWARE SETS.													
DOOR & FRAME SCHEDULE NOTES:													
1. REFER TO SPECIFICATIONS FOR PAINTING FINISH REQUIREMENTS.													
2. BLOCK TYPE MAY VARY - SEE FLOOR PLAN NOTES FOR WALL TYPE INFORMATION.													

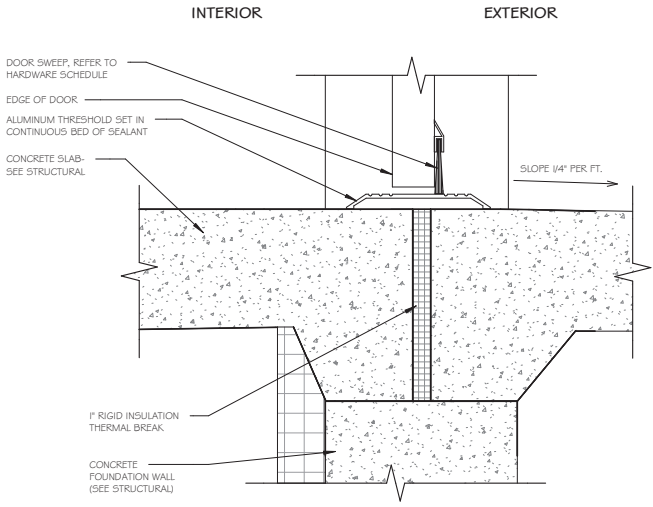
WINDOW SCHEDULE													
NO	SIZE		ELEV	STYLE	MATERIAL	GLAZING	HEAD HT (AFF)	DETAIL				NOTES	
	W	HT						HEAD	JAMB 1	JAMB 2	SILL		
1	3'-4"	7'-4"	W-1	FIXED	ALUM.	GLI	8'-8"	---	---	---	---	---	---
2	3'-4"	3'-4"	W-2	FIXED	H.M.	GLI	7'-4"	---	---	---	---	---	---



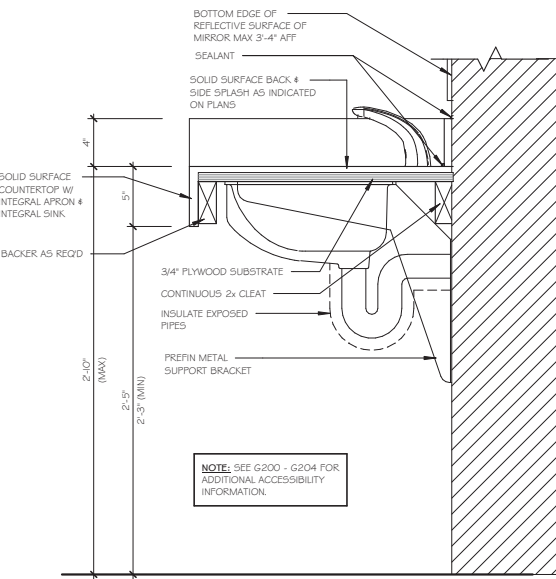
4 SLAB ON GRADE DETAIL- C.J.
SCALE: 1" = 1'-0"



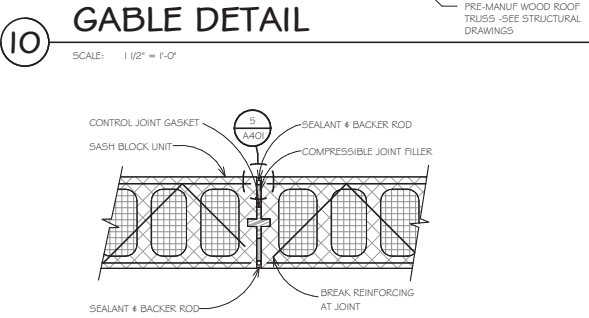
5 SEALANT JOINT DETAIL
SCALE: 12" = 1'-0"



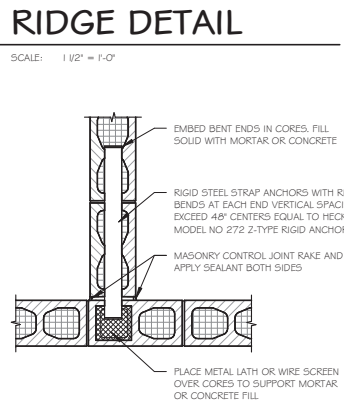
6 DOOR SILL DETAIL
SCALE: 3" = 1'-0"



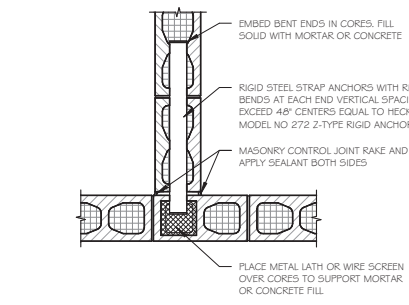
12 COUNTER WITH SINK DETAIL
SCALE: 1 1/2" = 1'-0"



10 GABLE DETAIL
SCALE: 1 1/2" = 1'-0"

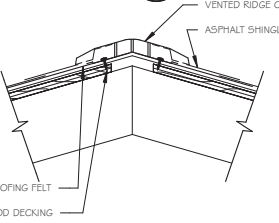


8 RIDGE DETAIL
SCALE: 1 1/2" = 1'-0"

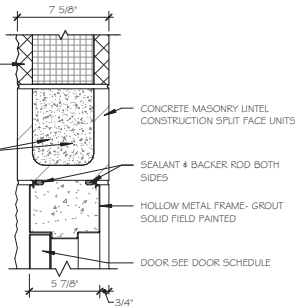


9 CMU INTERSECTION DETAIL
SCALE: 3/4" = 1'-0"

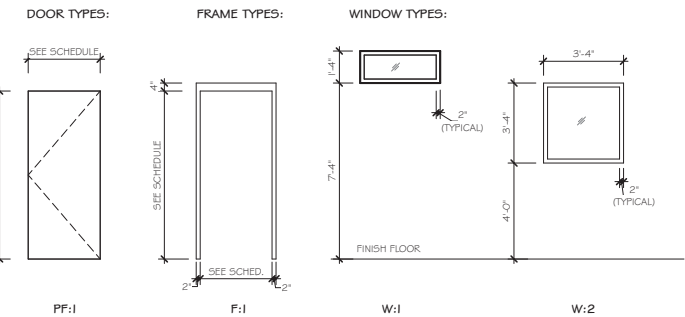
3 ATTIC ACCESS DETAIL
SCALE: 1" = 1'-0"



2 DOOR HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



2 DOOR HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



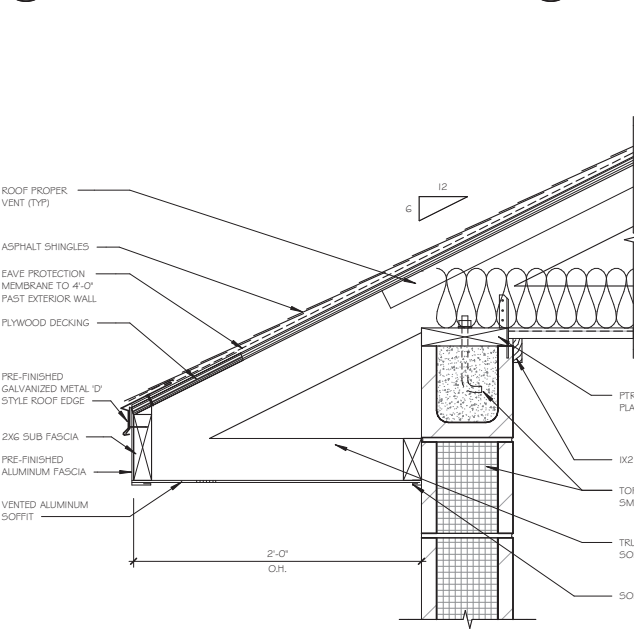
DOOR TYPES:

FRAME TYPES:

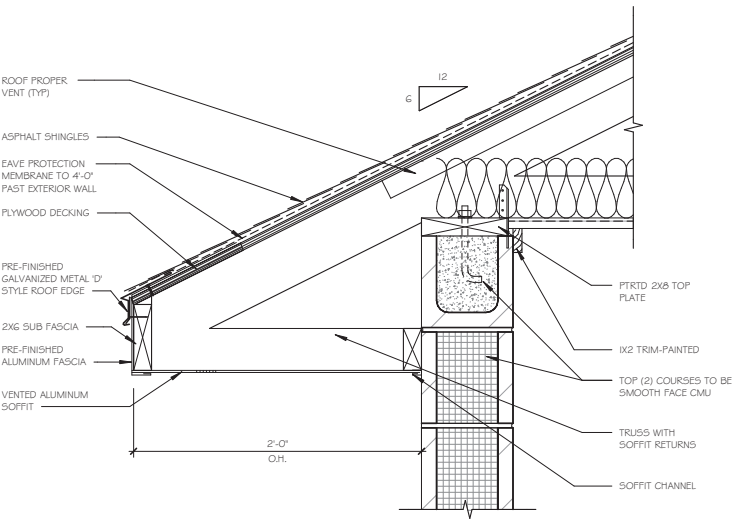
WINDOW TYPES:

NOTE:
FURNISH & INSTALL GASKET AND SEALANT TO MAKE LEAK INSTALLATION AIR TIGHT.

1 DOOR JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



7 EAVE DETAIL
SCALE: 1 1/2" = 1'-0"



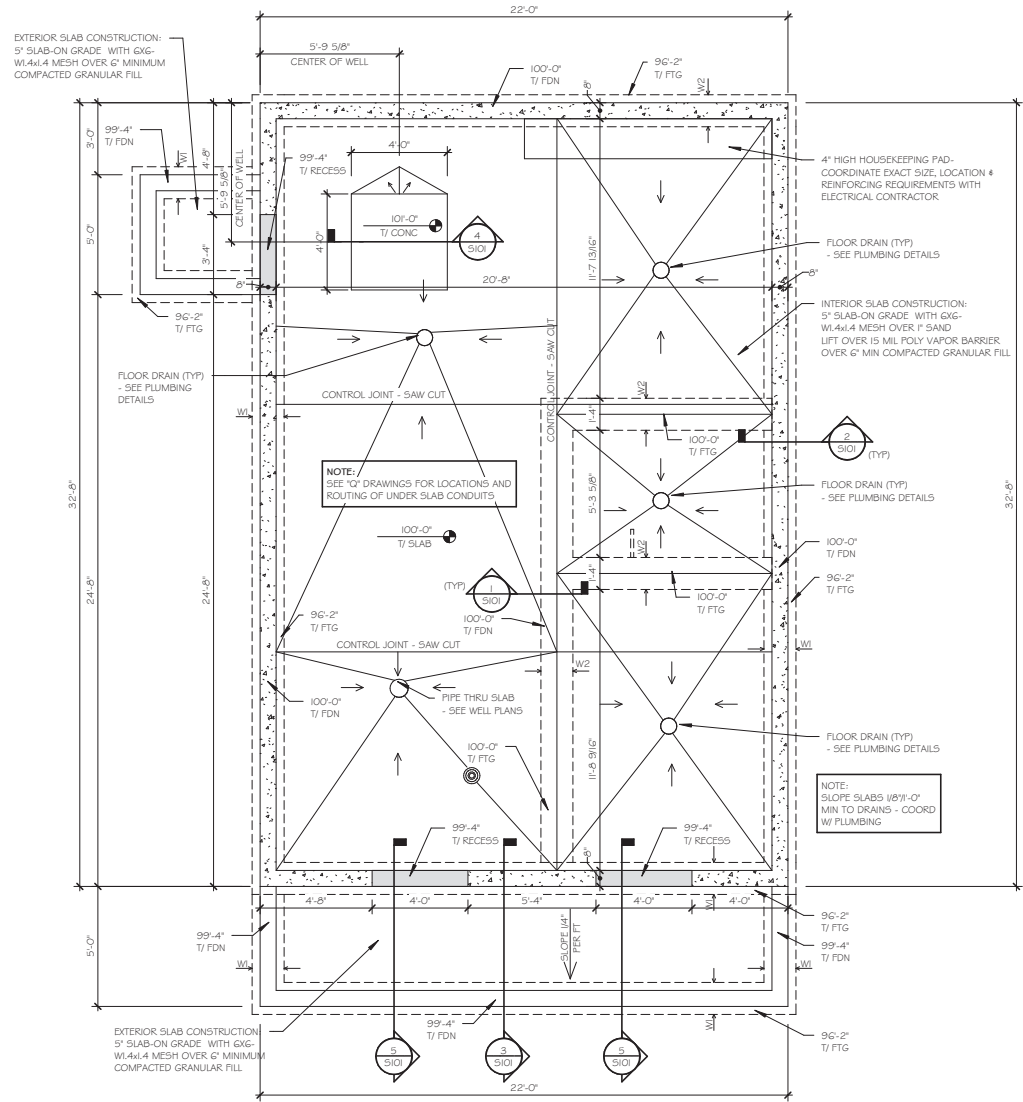
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SCHEDULES, DOOR TYPES, & DETAILS
WELL NO.5 PUMP HOUSE
CITY OF PRAIRIE DU CHIEN
CRAWFORD COUNTY, WISCONSIN

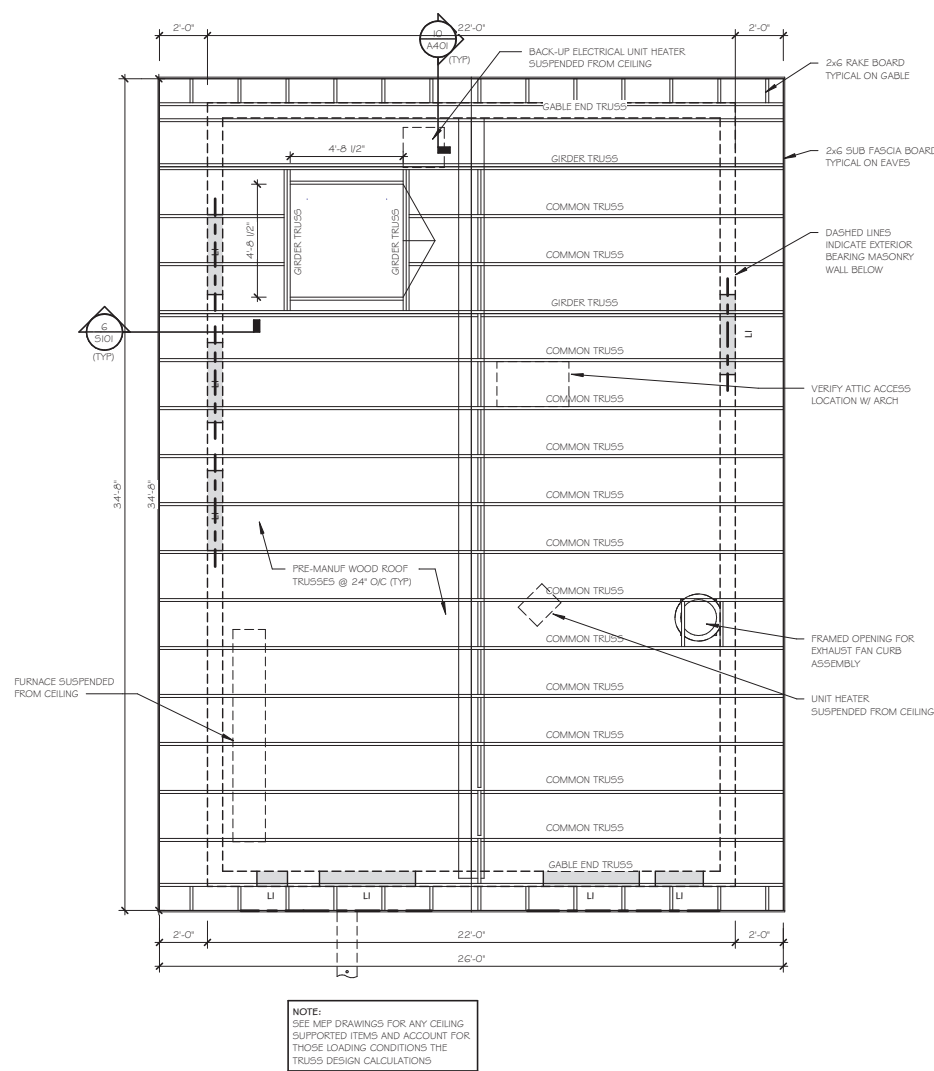
REVISIONS		REVISIONS	
NO.	DATE	NO.	DATE
1	06.30.2025	1	06.30.2025
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
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10		10	
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12		12	

A401



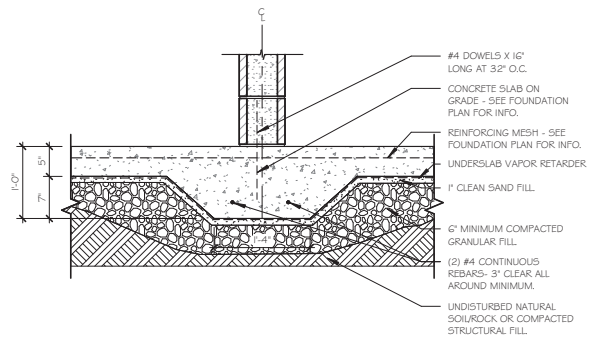
FOUNDATION PLAN

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



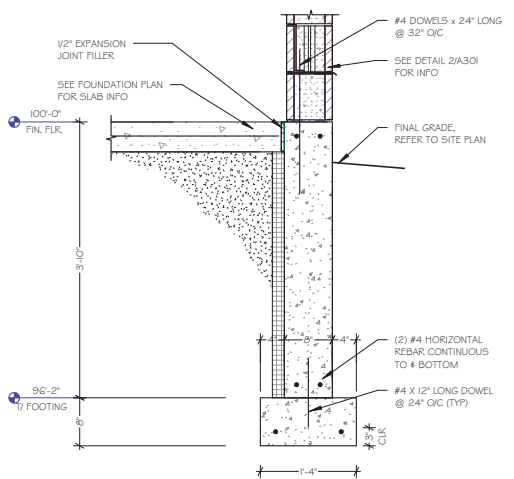
ROOF FRAMING PLAN

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



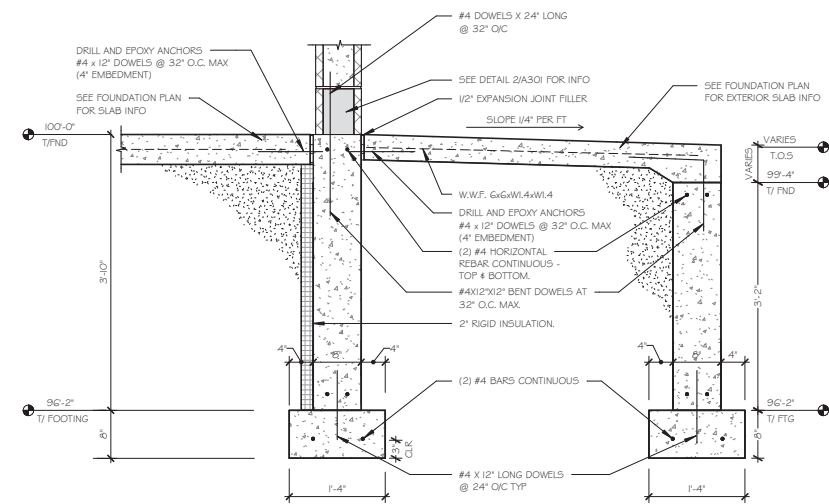
THICKENED SLAB DETAIL

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



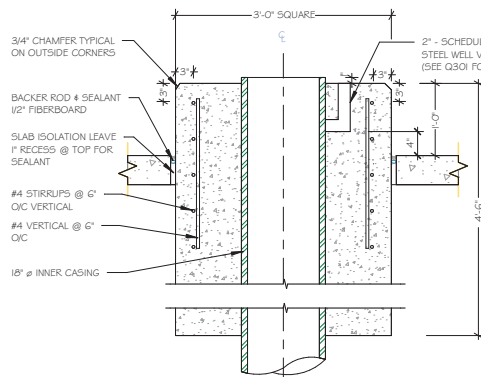
EXTERIOR FOUNDATION DETAIL

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



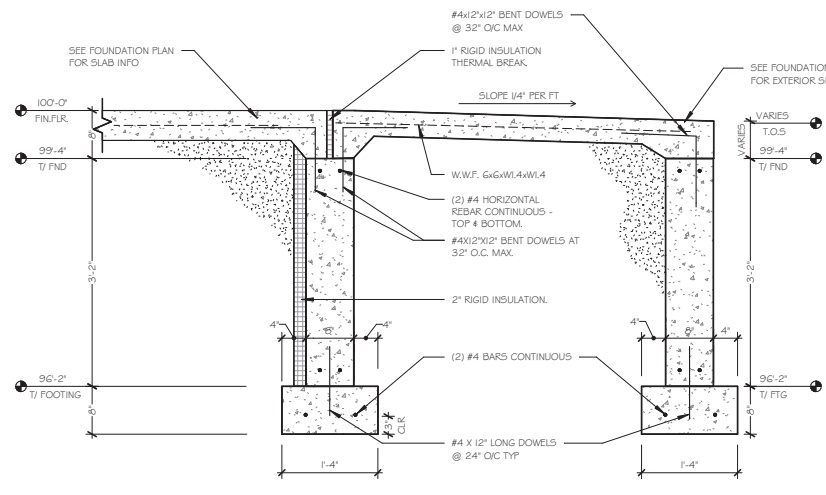
EXTERIOR STOOP DETAIL

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



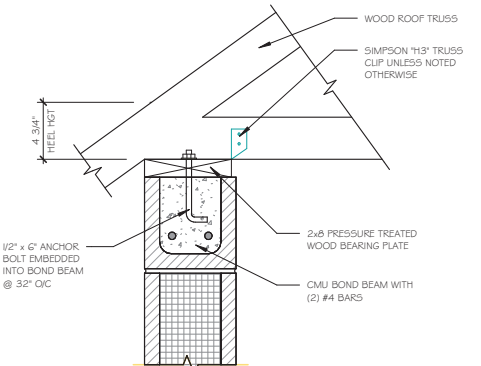
WELL BASE DETAIL

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



EXTERIOR STOOP DETAIL

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



TRUSS CONNECTION DETAIL

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

DESIGN DATA

DESIGN CODE: 2015 INTERNATIONAL BUILDING CODE (IBC) W/ WISCONSIN AMENDMENTS				
LIVE LOADS: SLAB ON GRADE	125 PSF			
WIND LOAD INFORMATION:				
ULTIMATE DESIGN WIND SPEED	120 MPH			
NOMINAL DESIGN WIND SPEED	92.95 MPH			
BUILDING OCCUPANCY CATEGORY	IV			
EXPOSURE CATEGORY	C			
ENCLOSURE CATEGORY	PARTIALLY ENCLOSED			
INTERNAL PRESSURE COEFFICIENT	+/-0.55			
DIRECTIONAL FACTOR (Kd)	0.85			
MAIN WIND FORCE RESISTING SYSTEM (MWFRS)				
TRANSVERSE DIRECTION:				
INTERIOR ZONE:				
WALL	25 PSF			
ROOF	9.3 PSF			
END ZONE:				
WALL	33.6 PSF			
ROOF	10.5 PSF			
LONGITUDINAL DIRECTION:				
INTERIOR ZONE WALL:	18.4PSF			
END ZONE WALL:	27.7 PSF			
COMPONENTS AND CLADDING (GROSS WIND PRESSURES):				
(FOR ZONE DEFINITIONS & DIAGRAMS SEE DESIGN GUIDE ASCESSEI 7 SECTION G)				
WIDTH OF PRESSURE COEFFICIENT ZONE (A)	3.0 FT			
TRIBUTARY WIND LOAD AREAS:				
ROOF (GABLE/HIP/MONOSLOPE):				
10' 5" F	20' 5" F	50' 5" F	100' 5" F	
NEGATIVE ZONE 1	-38.6 PSF	-37.8 PSF	-36.7 PSF	-35.9 PSF
NEGATIVE ZONE 2	-59.8 PSF	-55.9 PSF	-50.5 PSF	-46.5 PSF
NEGATIVE ZONE 3	-83.8 PSF	-83.8 PSF	-72.6 PSF	-67.8 PSF
POSITIVE PRESSURE ALL ZONES	27.91 PSF	26.3 PSF	24.2 PSF	22.6 PSF
OVERHANGS/CANOPIES:				
OVERHANG ZONE 2	-58.5 PSF	-58.5 PSF	-58.5 PSF	-58.5 PSF
OVERHANG ZONE 3	-98.4 PSF	-88.8 PSF	-76.1 PSF	-66.5 PSF
WALLS:	10' 5" F	100' 5" F	200' 5" F	500' 5" F
NEGATIVE ZONE 4	-43.9 PSF	-39.2 PSF	-37.8 PSF	-35.9 PSF
NEGATIVE ZONE 5	-51.9 PSF	-42.5 PSF	-38.6 PSF	-35.9 PSF
POSTIVE ZONE 4 & 5	41.2 PSF	36.5 PSF	35.1 PSF	33.2 PSF
SEISMIC LOAD INFORMATION:				
SEISMIC USE GROUP/OCCUPANCY CATEGORY	IV			
SEISMIC LOAD IMPORTANCE FACTOR (Ie)	1.50			
SEISMIC SITE CLASS	D (ASSUMED)			
MAPPED SPECTRAL RESPONSE ACCELERATION (Ss)	0.062			
MAPPED SPECTRAL RESPONSE ACCELERATION (S1)	0.042			
SPECTRAL RESPONSE COEFFICIENT (Sds)	0.066			
SPECTRAL RESPONSE COEFFICIENT (S1d)	0.067			
SEISMIC DESIGN CATEGORY	C			
BASIC SEISMIC FORCE RESISTING SYSTEM	ORDINARY REINFORCED MASONRY SHEAR WALLS			
RESPONSE MODIFICATION FACTOR	2			
SEISMIC RESPONSE COEFFICIENT (Ca)	0.05			
DESIGN BASE SHEAR	0.05W			
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE ANALYSIS			
SNOW LOAD INFORMATION:				
GROUND SNOW LOAD (Pg)	30 PSF			
SNOW EXPOSURE FACTOR (Ce)	1.20			
OCCUPANCY CATEGORY	IV			
SNOW LOAD IMPORTANCE FACTOR (Ia)	1.20			
THERMAL FACTOR (Ct)	1.10			
SLOPED ROOF FACTOR (Cs)	1.00			
RAIN ON SNOW SURCHARGE	0 PSF			
FLAT ROOF SNOW LOAD (Pf)	30.5 PSF			
UNBALANCED SNOW LOADS:				
WINDWARD SNOW LOAD	91 PSF			
LEEWARD SNOW LOAD (RIDGE TO 5.74')	48.7 PSF			
LEEWARD SNOW LOAD (5.74' TO EAVE)	30.5 PSF			
ROOF TRUSS DESIGN LOADS:				
DESIGN / BALANCED SNOW LOAD (Pb)	SEE SNOW LOAD INFO			
UNBALANCED SNOW LOADS	SEE SNOW LOAD INFO			
DESIGN DEAD LOADS:				
TOP CHORD	10 PSF			
BOTTOM CHORD	10 PSF			
DEFLECTION LIMITS:				
LIVE LOAD	L / 360			
TOTAL LOAD	L / 240			
COORDINATE SIZE AND LOCATION OF RTUS, IF ANY, WITH SUPPLIER				
SOIL LOAD INFORMATION:				
ALLOWABLE NET SOIL BEARING PRESSURE	2,000 PSF (ASSUMED)			

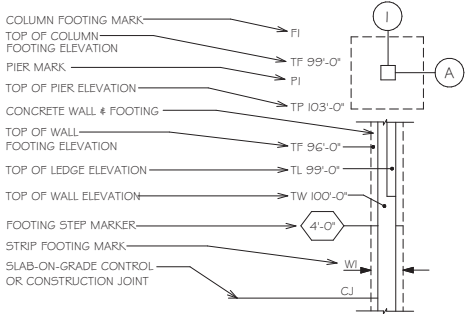
MATERIAL DESIGN PROPERTIES

CONCRETE STRENGTHS (AT 28 DAYS):	
FOOTINGS	f _c = 3,000 psi
CONCRETE WALLS, PIERS, GRADE BEAMS	f _c = 3,500 psi
SLAB ON GRADE, TOPPING SLAB	f _c = 4,000 psi
REINFORCING STEEL STRENGTHS:	
BARs (ASTM A 615, GRADE 60)	F _y = 60,000 psi
WVF (ASTM A 185)	F _y = 65,000 psi
WOOD STRENGTHS:	
DIMENSIONAL LUMBER (SEE PLANS & WOOD FRAMING NOTES)	E = 1,900 ksi
LAMINATED VENEER LUMBER:	F _b = 2,600 psi
	F _v = 285 psi
	F _c (perp) = 750 psi
	F _c (para) = 2,510 psi
PARALLEL STRAND LUMBER:	E = 2,000 ksi
	F _b = 2,900 psi
	F _v = 400 psi
	F _c (perp) = 750 psi
	F _c (para) = 2,900 psi
LAMINATED STRAND LUMBER:	E = 1,500 ksi
	F _b = 2,250 psi
	F _v = 400 psi
	F _c (perp) = 750 psi
	F _c (para) = 1,950 psi
MASONRY STRENGTHS:	
CMU (ASTM C 90, GRADE N)	f _m = 1,500 psi
MORTAR (ASTM C 270)	
TYPE M (BELOW GRADE)	f _u = 2,500 psi
TYPE S (ABOVE GRADE)	f _u = 1,800 psi
GROUT (ASTM C 419)	f _c = 3,000 psi
STRUCTURAL STEEL STRENGTHS:	
WF SHAPES (ASTM A 992, GRADE 50)	F _y = 50,000 psi
ANGLES, CHANNELS, PLATES, & BARs (ASTM A 36)	F _y = 36,000 psi
SQUARE & RECTANGULAR HSS MEMBERS (ASTM A 500 GRADE B)	F _y = 46,000 psi
ROUND HSS MEMBERS (ASTM A 500 GRADE B)	F _y = 42,000 psi
STEEL PIPE (ASTM A 53, GRADE B)	F _y = 35,000 psi
HIGH STRENGTH BOLTS (ASTM A 325)	

FOUNDATION AND SLAB CONSTRUCTION NOTES

- CONTRACTOR SHALL PROVIDE FROST PROTECTION AND MOISTURE PROTECTION FOR FOOTINGS EXPOSED DURING CONSTRUCTION.
- REFER TO ARCHITECTURAL DRAWINGS OR PLUMBING DRAWINGS FOR SPECIFIC FLOOR DRAIN LOCATIONS AND ELEVATIONS.
- REFER TO STRUCTURAL DETAIL PLAN SHEETS FOR MISCELLANEOUS DETAILS NOT INDICATED ON PLAN.
- BEAR ALL FOOTINGS ON UNDISTURBED SOIL OR COMPACTED FILLS HAVING A MINIMUM NET ALLOWABLE BEARING CAPACITY INDICATED IN THE DESIGN DATA SOIL LOAD INFORMATION.
- WHERE REQUIRED, REMOVE UNSUITABLE EXISTING SOILS BELOW FOOTINGS, SLABS-ON-GRADE, ETC. TO APPROVED BEARING SOIL. REPLACE WITH ENGINEERED FILL (COMPACTED TO 95% OF THE MODIFIED PROCTOR DENSITY) TO THE REQUIRED FOOTING BEARING ELEVATION. FILL MATERIAL SHALL HAVE A MINIMUM BEARING CAPACITY AS INDICATED IN THE DESIGN DATA SOIL LOAD INFORMATION.
- PROVIDE A MINIMUM OF 6" OF WELL COMPACTED GRANULAR FILL BELOW ALL SLABS ON GRADE. COMPACT TO 95% OF THE MODIFIED PROCTOR DENSITY.
- DELIVERY TICKETS FOR EACH LOAD OF CONCRETE DELIVERED TO THE JOB SITE SHALL BE FURNISHED UPON REQUEST TO THE ARCHITECT / ENGINEER. TICKET INFORMATION SHALL CONTAIN ALL PERTINENT DESIGN INFORMATION, INCLUDING AMOUNT OF WATER ADDED AT THE JOB SITE, IF ANY.
- FORMWORK FOR FOOTINGS SHALL CONSIST OF A MANUFACTURED FORM SYSTEM OR A MINIMUM 1 1/2" THICK WOOD PLANK SECURED TO WOOD OR STEEL STAKES. POURING TO EXCAVATION BANK MAY NOT BE DONE WITHOUT PRIOR APPROVAL OF THE ARCHITECT / ENGINEER.
- CONCRETE SLABS ON GRADE CONTAINING WELDED WIRE MESH (WWM) SHALL HAVE THE WWM LOCATED IN THE MIDDLE TO THE UPPER 1/3' OF THE SLAB. WWM SHALL BE SUPPORTED WITH APPROVED MATERIALS OR SUPPORTS AT SPACING NOT TO EXCEED 3 FEET OR IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION. INSTALL WWM IN MAXIMUM LENGTHS POSSIBLE.
- PROVIDE SNAP-OFF PLASTIC FIXED LENGTH CONCRETE FORM TIES WITH 1" BREAK-BACK.
- WHERE FIBERMESH IS SPECIFIED TO BE INCLUDED IN SLABS-ON-GRADE, PROVIDE FIBERMESH 300 AT RATE OF 1.5 LB/CU YD. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR MIXING, PLACING, AND FINISHING.
- PROTECT AND CURE CONCRETE SLABS PER ACI 308.
- MOLD AND CURE THREE CONCRETE TEST CYLINDERS AND PROVIDE ONE SLUMP TEST FOR EVERY 100 CU. YDS. OF CONCRETE POURED FOR EACH TYPE OF MIX DESIGN USED. HAVE INDEPENDENT TESTING AGENCY TEST ONE CYLINDER AT 7 DAYS AND TWO CYLINDERS AT 28 DAYS. PROVIDE TEST RESULTS TO A / E.
- CONTROL JOINTS SHALL BE PLACED IN SLAB-ON-GRADE CONSTRUCTION WITHIN 24 HOURS OF INITIAL POUR.

FOUNDATION LEGEND



FOOTING SCHEDULE

MARK	DIMENSIONS			REINFORCEMENT	REMARKS
	WIDTH	LENGTH	DEPTH		
W1	1'-4"	CONT	8"	2- #4 CONT	---
W2	1'-4"	CONT	12"	2- #4 CONT	THICKENED SLAB

REINFORCING COVER

CONCRETE CAST AGAINST EARTH AND PERMANENTLY EXPOSED TO EARTH:
FOOTINGS: 3"

CONCRETE EXPOSED TO EARTH OR WEATHER:
WALLS, COLUMNS, BEAMS:
UP THRU #5 BARS 1 1/2"
#6 THRU #18 BARS 2"

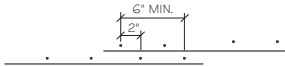
CONCRETE NOT EXPOSED TO EARTH OR WEATHER:

WALLS:
UP THRU #11 BARS 3/4"
#14 AND #18 BARS 1 1/2"
ELEVATED SLABS:
TOP 3/4"
BOTTOM 1"
BEAMS:
TOP/BOTTOM/SIDE 1 1/2"
COLUMNS:
SIDES 1 1/2"

(DIMENSIONS ABOVE ARE MINIMUMS, UNO IN DETAILS)

REINFORCING NOTES

- REINFORCING SHALL BE DETAILED IN ACCORDANCE WITH ACI 315 (CURRENT EDITION).
- ALL LAPS SHALL BE CLASS 'B' PER ACI 318 UNLESS OTHERWISE NOTED ON THE DESIGN DRAWINGS, OR UNLESS THE DETAILER TAKES SPECIAL CARE TO PROVIDE STAGGERED LAPS. USE TOP BAR LAP LENGTHS FOR ALL HORIZONTAL WALL BARS AND FOR TOP BARS IN SLABS AND BEAMS OVER 12 INCHES DEEP.
- LAP LENGTH SHALL BE SPECIFICALLY NOTED ON PLACING DRAWINGS WHERE MORE THAN ONE BAR MAKES UP A CONTINUOUS STRING.
- CORNER BARS WITH CLASS 'B' LAPS PER ACI 318 SHALL BE PROVIDED AT ALL WALL CORNERS AND INTERSECTIONS.
- HORIZONTAL BARS, EXCEPT FOR CONTINUOUS STRINGS FROM ONE CORNER OF OPENING TO ANOTHER, SHALL BE DETAILED TO SHOW THE DISTANCE FROM AT LEAST ONE END OF THE BAR TO THE NEAREST BUILDING GRID LINE OF WALL.
- WELDED WIRE FABRIC SHALL BE LAPPED AND/OR ANCHORED TO DEVELOP F_y PER ACI 315.



- PROVIDE MINIMUM COVER PER ACI 318, 7.7.1.
- PROVIDE ISOLATION BOARD WHERE SLABS ABUT VERTICAL SURFACES.

CAST-IN-PLACE CONCRETE NOTES

- ALL CONCRETE DESIGN AND CONSTRUCTION SHALL CONFORM TO THE LOCAL BUILDING CODE REQUIREMENTS AND THOSE OF THE LATEST EDITION OF THE FOLLOWING STANDARDS: ACI 318, ACI 315, ACI 301, AND ACI 307.
- CONTRACTOR SHALL NOTIFY ARCHITECT / ENGINEER AT LEAST 48 HOURS PRIOR TO PLACING CONCRETE TO FACILITATE ON-SITE OBSERVATION OF REBAR.
- WHEN AMBIENT AIR OR CONCRETE TEMPERATURE EXCEEDS 90 DEGREES FAHRENHEIT, STEEL REINFORCING AND/ OR FORMING SURFACES ARE ABOVE 120 DEGREES FAHRENHEIT, OR WHEN WIND VELOCITY, HUMIDITY, OR SOLAR RADIATION CREATE CONDITIONS OF ACCELERATED MOISTURE LOSS AND INCREASE RATE OF HYDRATION, HOT WEATHER CONCRETING REQUIREMENTS SHALL BE FOLLOWED. REFER TO ACI 305R.
- PLACING OF CONCRETE SHALL BE DONE IN ACCORDANCE WITH ACI-306 FOR COLD WEATHER AND ACI-305 FOR HOT WEATHER.
- CONCRETE SHALL BE CURED ABOVE 50°F (10°C) AND IN A MOIST CONDITION FOR AT LEAST THE FIRST SEVEN (7) DAYS AFTER PLACEMENT.
- ALL CONCRETE SUBJECT TO EXTERIOR EXPOSURE (RETAINING WALLS, EXTERIOR SLABS, CURBS, ETC. BUT EXCLUDING EXPOSED FOUNDATION WALLS) SHALL BE AIR ENTRAINED TO 6% (+/- 1.5%) AND HAVE A MAXIMUM 1" AGGREGATE. ALL CONCRETE WITHOUT SUPERPLASTICIZERS SHALL HAVE A MAXIMUM SLUMP OF 4".
- UNLESS THE MIX DESIGN INCLUDES THE USE OF SUPERPLASTICIZERS, CONCRETE WITH A SLUMP GREATER THAN 5" SHALL BE REFUSED.
- CONCRETING OPERATIONS SHALL BE CARRIED ON AT SUCH A RATE THAT THE CONCRETE IS AT ALL TIMES PLASTIC AND FLOWS READILY INTO SPACES BETWEEN REINFORCEMENT.
- MIXING AND PLACING OF CONCRETE TO BE IN ACCORDANCE WITH ACI 318. CONCRETE SHALL BE DEPOSITED AS NEARLY AS PRACTICAL IN ITS FINAL POSITION TO AVOID SEGREGATION DUE TO REHANDLING OR FLOWING. ALL CONCRETE SHALL BE THOROUGHLY CONSOLIDATED BY SUITABLE MEANS DURING PLACEMENT AND SHALL BE THOROUGHLY WORKED AROUND REINFORCEMENT AND EMBEDDED FIXTURES AND INTO CORNERS OF FORMS.
- CALCIUM CHLORIDE AND/ OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED. OTHER ACCELERATORS ARE NOT RECOMMENDED.
- ALL CONCRETE SURFACES SHALL BE FORMED UNO OR APPROVED BY THE ARCHITECT/ ENGINEER.
- PROVIDE A 3/4" CHAMFER ON EXPOSED CORNERS OF CONCRETE UNO.
- PIPE SLEEVES OVER 1 1/2" IN DIAMETER WHICH PASS THOUGH CONCRETE WALLS OR SLABS SHALL BE SCHEDULE 40 GALVANIZED STEEL PIPE. ALL OTHER SLEEVES SHALL BE 1/8 GAUGE METAL. SLEEVES SHALL BE ONE SIZE LARGER THAN OUTSIDE DIAMETER OF PIPE PASSING THROUGH SLEEVE. VERIFY SIZE AND NUMBER WITH MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS. SLEEVES, CONDUITS, OR PIPES THROUGH SLABS AND WALLS SHALL BE PLACED AT THREE DIAMETERS O/C, OR 4" MINIMUM.
- ALUMINUM CONDUIT OR PIPING SHALL NOT BE EMBEDDED IN CONCRETE.
- UNLESS NOTED OTHERWISE ON THE DRAWINGS ANCHOR BOLTS TO BE A36 THREADED RODS OR A307 HEADED OR L-SHAPED BOLTS WITH A 6" MINIMUM EMBEDMENT FOR 1/2" RODS / BOLTS, 9" FOR 3/4" RODS / BOLTS, AND 15" FOR 1" RODS / BOLTS UNLESS NOTED OTHERWISE. THREADED RODS SHALL HAVE A NUT AND WASHER SECURED TO THE EMBEDDED END EITHER BY WELD OR DOUBLE NUT.



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STRUCTURAL NOTES AND SCHEDULES

REVISIONS	NO.	DATE	REMARKS	NO.	DATE	REMARKS
	1					
	2					
	3					
DATE: 06.30.2025						
DRAFTER: J.PHANEUF						
CHECKED: M.MAAS						
PROJECT NO.: 240564						
SHEET: S201						

WELL NO.5 PUMP HOUSE
CITY OF PRAIRIE DU CHIEN
CRAWFORD COUNTY, WISCONSIN

2015 IBC TABLE 2304.10.1 - MINIMUM FASTENING SCHEDULE		
CONNECTION TYPE	LOCATION	FASTENING
JOIST TO SILL OR GIRDER	TOENAIL	3-8d COMMON
BRIDGING TO JOIST	TOENAIL EACH END	2-8d COMMON
1x6 SUBFLOOR OR LESS TO EACH JOIST	FACE NAIL	2-8d COMMON
WIDER THAN 1x6 SUBFLOOR TO EACH JOIST	FACE NAIL	3-8d COMMON
2" SUBFLOOR TO JOIST OR GIRDER	BLIND AND FACE NAIL	2-16d COMMON
SOLE PLATE TO JOIST OR BLOCKING	TYPICAL FACE NAIL	16d @ 16" O/C COMMON
	AT BRACED WALL PANELS	3-16d @ 16" O/C COMMON
TOP PLATE TO STUD	END NAIL	2-16d COMMON
STUD TO SOLE PLATE	TOENAIL	4-8d COMMON
	END NAIL	2-16d COMMON
DOUBLE STUDS	FACE NAIL	16d @ 24" O/C
	TYPICAL FACE NAIL	16d @ 16" O/C
DOUBLE TOP PLATES	LAP SPLICE	8-16d COMMON
	TOENAIL	3-8d COMMON
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	TOENAIL	3-8d COMMON
RIM JOIST TO TOP PLATE	TOENAIL	8d @ 6" O/C
TOP PLATES, LAPS & INTERSECTIONS	FACE NAIL	2-16d COMMON
CONTINUOUS HEADER, TWO PIECES	16" O/C ALONG EDGE	16d COMMON
CEILING JOIST TO PLATE	TOENAIL	3-8d COMMON
CONTINUOUS HEADER TO STUD	TOENAIL	4-8d COMMON
CEILING JOIST, LAPS OVER PARTITIONS	FACE NAIL	3-16d COMMON, MINIMUM
CEILING JOIST TO PARALLEL RAFTER	FACE NAIL	3-16d COMMON, MINIMUM
RAFTER TO PLATE	TOENAIL	3-8d COMMON
1" DIAGONAL BRACE TO EACH STUD AND PLATE	FACE NAIL	2-8d COMMON
1x8 SHEATHING TO EACH BEARING	FACE NAIL	3-8d COMMON
WIDER THAN 1x8 SHEATHING TO EACH BEARING	FACE NAIL	3-8d COMMON
BUILT-UP CORNER STUDS	24" O/C	16d COMMON
BUILT-UP GIRDERS AND BEAMS	FACE NAIL AT TOP & BOTTOM STAGGERED ON OPPOSITE SIDES	20d COMMON @ 32" O/C
	FACE NAIL AT ENDS & AT EACH SPLICE	2-20d COMMON
2" PLANKS	AT EACH BEARING	16d COMMON
COLLAR TIE TO RAFTER	FACE NAIL	3-10d COMMON
JACK RAFTER TO HIP	TOENAIL	3-10d COMMON
	FACE NAIL	2-16d COMMON
ROOF RAFTER TO 2x RIDGE BEAM	TOENAIL	2-16d COMMON
	FACE NAIL	2-16d COMMON
JOIST TO BAND JOIST	FACE NAIL	3-16d COMMON
LEDGER STRIP	FACE NAIL	3-16d COMMON
WOOD STRUCTURAL PANELS AND PARTICLEBOARD (NAILS SPACED @ 6" O/C AT EDGES, 12" O/C AT INTERMEDIATE SUPPORTS), SUBFLOOR, ROOF, AND WALL SHEATHING (TO FRAMING)	1/2" AND LESS	6d COMMON
	19/32" TO 3/4"	8d OR 6d COMMON
	7/8" TO 1"	8d COMMON
SINGLE FLOOR (COMBINATION SUBFLOOR & UNDERLAYMENT TO FRAMING)	1-1/8" TO 1-1/4"	10d COMMON
	3/4" AND LESS	6d DEFORMED SHANK
	7/8" TO 1"	8d DEFORMED SHANK
PANEL SIDING (TO FRAMING) (USE CORROSION RESISTANT SIDING / CASING NAIL)	1-1/8" TO 1-1/4"	10d COMMON
	1/2" OR LESS	6d
FIBERBOARD SHEATHING (NAILS SPACED AT 3" O/C AT EDGES & 6" O/C AT INTERMEDIATE SUPPORTS)	5/8"	8d
	1/2"	6d COMMON
INTERIOR PANELING (NAILS SPACED AT 6" O/C AT EDGES & 12" O/C AT INTERMEDIATE SUPPORTS)	25/32"	8d COMMON
	1/4"	4d CASING OR FINISH
	3/8"	6d CASING OR FINISH
FASTENING SCHEDULE NOTES:		
1. NAILING PER SCHEDULE ABOVE IS TO BE USED WHERE NAILING IS NOT SPECIFIED ON PLANS OR DETAILS. NAILING PER PLANS & DETAILS SUPERCEDES THIS NAILING SCHEDULE UNLESS APPROVED BY THE ARCHITECT / ENGINEER.		
2. COMMON OR BOX NAILS MAY BE USED EXCEPT WHERE OTHERWISE NOTED.		

ROOF TRUSS BRACING NOTES

- ALL BRACING SHOWN OR DESCRIBED SHALL BE MINIMUM 2x4 WITH 2- 16d IN EVERY TRUSS IT CROSSES.
- ALL TRUSS TOP CHORDS SHALL BE CONTINUOUSLY BRACED BY THE ROOF DECKING.
- ALL TRUSS WEB MEMBERS SHALL BE BRACED @ 4'-0" O/C UNLESS CALCULATIONS SHOW OTHERWISE.
- ALL ROOF TRUSS HORIZONTAL BRACING SHALL BE STIFFENED @ 20'-0" O/C WITH EITHER:
 - DIAGONAL BRACING EXTENDED TO A SHEAR WALL PARALLEL TO THE ORIGINAL BRACING.
 - 1/2" APA RATED SHEATHING EXTENDED TO ROOF DECK OR SHEAR WALL.
- ALL TRUSS BOTTOM CHORDS SHALL BE BRACED @ 8'-0" O/C UNLESS CALCULATIONS SHOW OTHERWISE. CONTINUOUS SHEATHING APPLIED TO BOTTOM CHORD WILL SATISFY THIS BRACING REQUIREMENT.

ROOF TRUSS SUBMITTAL NOTES

- NOTE: TRUSS MANUFACTURER MAY NOT DEViate FROM THE FRAMING PLANS UNLESS PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER HAS BEEN GIVEN. IT IS THE TRUSS MANUFACTURER'S RESPONSIBILITY TO SEEK SUCH APPROVAL PRIOR TO MANUFACTURE AND INSTALLATION OF FRAMING MEMBERS.
- INFORMATION THAT THE RESPONSIBLE BUILDING DESIGN PROFESSIONAL WILL CHECK FOR COMPLIANCE WITH CONTRACT DOCUMENTS:
 - ERECTION PLAN: SHOWING DIMENSIONED LOCATIONS AND TRUSS IDENTIFICATION.
 - BEARING DETAILS: SHOWING BEARING LENGTH, WIDTH, AND DEPTH INDICATING CONFORMANCE TO DESIGN CALCULATIONS.
 - DESIGN LOADS: ALL DEAD AND LIVE LOADS SHALL BE SHOWN ON THE FRAMING PLAN OR TRUSS ELEVATION INDICATING CONFORMANCE TO TRUSS CALCULATIONS.
 - ALL PERMANENT BRACING: SHOW TOP CHORD, BOTTOM CHORD, AND WEB MEMBER BRACING ON FRAMING PLAN AND TRUSS ELEVATION. SUPPLIER AND INSTALLER OF THIS BRACING SHALL ALSO BE INDICATED.
 - TRUSS DIMENSIONS: SHOW DEPTH, SPAN, BEARING, HEIGHT, AND SLOPES AT ALL CRITICAL POINTS.
 - INFORMATION THAT SHALL BE THE RESPONSIBILITY OF THE FABRICATOR AND TRUSS DESIGNER AND SHALL BE PROVIDED WITH THE SHOP DRAWING SUBMITTAL:
 - MEMBER DESIGN: INCLUDING WEB CONFIGURATION, MEMBER SIZE, GRADE OF LUMBER, FABRICATED SPLICES, AND MEMBER BRACING REQUIRED BY TRUSS DESIGN.
 - MEMBER CONNECTIONS: DESIGN AND INDICATE ALL NECESSARY HARDWARE FOR PROPER INSTALLATION OF TRUSSES INCLUDING, BUT NOT LIMITED TO, GIRDER PLY CONNECTIONS, TRUSS-TO-GIRDER CONNECTIONS, TIE-DOWNS, AND FIELD SPLICES.
 - INTERIOR CONNECTIONS: DESIGN AND SHOW DETAIL OF WEB AND CHORD CONNECTIONS, INCLUDING CONNECTOR PLATE SIZES, CAPACITIES, AND BOLT SIZES.
 - ERECTION PLAN: SHOW SPACING AND LAYOUT OF ANY TEMPORARY BRACING REQUIRED FOR ERECTION.
 - STRUCTURAL DESIGN OF TRUSSES: SUBMIT COMPLETE TRUSS CALCULATIONS STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER IN THE STATE OF WISCONSIN AND OBTAIN ALL APPROVALS NECESSARY FOR CONFORMANCE TO BUILDING CODE. VERIFY SUBMITTAL AND APPROVAL BY SENDING A COPY TO THE BUILDING DESIGN PROFESSIONAL.
 - PROVIDE CONTRACTOR/INSTALLER WITH ALL DATA NECESSARY FOR PROPER INSTALLATION.

MASONRY WALL CONSTRUCTION NOTES

- PRODUCTION AND CONSTRUCTION OF CONCRETE MASONRY SHALL BE IN ACCORDANCE WITH ACI 530 LATEST EDITION "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES", AND NCMA "TEK MANUAL FOR CONCRETE MASONRY DESIGN AND CONSTRUCTION (LATEST EDITION). VERIFY FM REQUIRED USING THE UNIT STRENGTH METHOD.
- ALL MASONRY SHALL BE NORMAL WEIGHT UNITS IN ACCORDANCE WITH ASTM C90.
- CMU SHALL BE LAID IN RUNNING BOND WITH TYPE S MORTAR (TYPE M BELOW GRADE).
- CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.
- PROVIDE MINIMUM 1- #4 VERTICAL BAR AT ALL WALL CORNERS, ENDS OF WALLS, AROUND OPENINGS, AND EACH SIDE OF CONTROL JOINTS.
- ALL REINFORCED CELLS SHALL BE GROUTED WITH PEA GRAVEL CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.
- HORIZONTAL REINFORCING AND BOND BEAM REINFORCING AT CORNERS SHALL BE LAPPED A MINIMUM OF 48 BAR DIAMETERS, OR 24" INCHES, WHICHEVER IS LARGER.
- CLEANOUTS SHALL BE PROVIDED IN THE BOTTOM COURSE OF MASONRY FOR EACH GROUT POUR, WHEN THE POUR HEIGHT EXCEEDS 4 FEET.
- GROUT LIFTS SHALL NOT EXCEED 4 FEET. CONSOLIDATE GROUT AT TIME OF PLACEMENT.
- FACE SHELLS AND WEB FORMING CELLS SHALL BE FULL-BEDDED IN THE STARTING COURSE ON FOUNDATIONS, AND IN ALL COURSES OF PIERS AND PILASTERS.
- PROVIDE CONTINUOUS 9 GAUGE LADDER TYPE HORIZONTAL JOINT REINFORCING AT 16" O/C VERTICALLY, UNO.
- HORIZONTAL JOINT REINFORCING SHALL BE TERMINATED AT CONTROL JOINTS, BOND BEAM REINFORCING SHALL BE CONTINUOUS.
- REFER TO ARCHITECTURAL DRAWINGS FOR CONTROL JOINT SPACINGS.
- SOLID OR SOLID GROUTED CMU SHALL BE PROVIDED IN COURSES IMMEDIATELY ABOVE.

WOOD FRAMING NOTES

- THE DESIGN AND FABRICATION OF ALL STRUCTURAL FRAMING SHALL COMPLY WITH "NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION" , AMERICAN FOREST & PAPER ASSOCIATION (AFPA) (CURRENT ADOPTED EDITION).
- LUMBER SHALL BE KILN-DRIED WITH MAXIMUM MOISTURE CONTENT 19%, GRADE MARKED AND TRADE MARKED, ACCORDING TO AFPA REGULATIONS.
- USE PRESSURE TREATED LUMBER FOR ALL PLATES AND SILLS IN CONTACT WITH CONCRETE OR MASONRY. ALSO USE PRESSURE TREATED LUMBER WITH END GRAIN EXPOSED TO CONCRETE OR MASONRY.
- THE DESIGN AND FABRICATION OF ALL PLYWOOD FRAMING SHALL COMPLY WITH "PLYWOOD DESIGN SPECIFICATIONS", AMERICAN PLYWOOD ASSOCIATION.
- SHEATHING SHALL CONFORM TO PRODUCT STANDARD PS-2 AND BEAR THE APA GRADE-TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION.
- CONTRACTOR SHALL CONSTRUCT BUILDING FINISHES TO ACCOMMODATE AN EXPECTED BUILDING SHRINKAGE OF APPROXIMATELY 3/16" TO 3/8" PER FLOOR OF WOOD CONSTRUCTION. PROPER CARE SHALL BE TAKEN TO PREVENT STORED AND INSTALLED LUMBER FROM THE ELEMENTS. DO NOT ALLOW LUMBER TO REST ON THE GROUND OR IN STANDING WATER.
- SHEATHING PANEL EDGES SHALL BEAR ON THE FRAMING MEMBERS AND BUTT ALONG THEIR CENTERLINES. NAILS SHALL BE PLACED NOT LESS THAN 3/8" IN FROM THE PANEL EDGE.
- THE ENDS OF BEAMS OR GIRDERS SUPPORTED ON MASONRY OR CONCRETE SHALL HAVE NOT LESS THAN 4" LENGTH OF BEARING.
- FRAMING MEMBERS:
 - LOAD BEARING WALL STUDS2 x 5, SPRUCE PINE FIR STUD GRADE KILN DRIED; MOISTURE CONTENT 15% - 19% SIZE AND SPACING AS NOTED ON THE PLANS.
 - TOP & BOTTOM WALL PLATESSAME GRADE AND SPECIES AS STUD 2 x 5 SOUTHERN YELLOW PINE NO. 1 / 2 FOR SILL PLATES ON CONCRETE.
 - JOISTS / RAFTERS2 x 5, HEM FIR NO. 2 KILN DRIED; MOISTURE CONTENT 15% - 19% SIZE AND SPACING AS NOTED ON PLANS
 - JOISTS EXPOSED TO WEATHER2 x 5, SOUTHERN YELLOW PINE NO. 1 / 2, TREATED SIZE AND SPACING AS NOTED ON PLANS.
- ROOF SHEATHING SHALL BE 5/8" APA RATED SHEATHING ATTACHED TO THE ROOF FRAMING MEMBERS WITH 8d COMMON OR BOX NAILS @ 6" O/C ALONG THE EDGES AND 12" O/C ALONG INTERMEDIATE MEMBERS (1" MINIMUM EMBEDMENT INTO FRAMING MEMBER). STAGGER PANEL EDGES. INSTALL EDGE CLIPS ON PANEL EDGES BETWEEN FRAMING MEMBERS.
- EXTERIOR WALL SHEATHING (WHERE REQ'D) SHALL BE 7/16" APA RATED SHEATHING: ATTACH WITH 8d COMMON OR BOX NAILS @ 6" O/C ALONG EDGES AND 12" O/C ALONG INTERMEDIATE MEMBERS.
- AT A MINIMUM, ALL CONNECTIONS SHALL CONFORM TO 2015 IBC TABLE 2304.10.1 FASTENING SCHEDULE. DRAWING DETAILS SHALL GOVERN IF THEIR CONNECTION CAPACITY IS GREATER THAN THOSE SPECIFIED IN TABLE 2304.10.1.
- USE JOIST HANGERS DESIGNED FOR GIVEN MEMBER SIZE TO SUPPORT ALL JOISTS / HEADERS FRAMING INTO SIDES OF OTHER MEMBERS.
- PROVIDE CROSS BRIDGING / BLOCKING BETWEEN JOISTS / RAFTERS AT 8'-0" INTERVALS MINIMUM.
- SOLID BLOCKING: ALL SAWN LUMBER ROOF JOISTS / RAFTERS SHALL BE SUPPORTED Laterally AT THE ENDS AND AT EACH SUPPORT BY SOLID BLOCKING OR OTHER APPROVED METHODS. SOLID BLOCKING SHALL BE NOT LESS THAN 2" NOMINAL THICKNESS AND THE FULL DEPTH OF THE JOIST.
- DO NOT CUT, NOTCH, OR DRILL HOLES IN SAWN LUMBER BEAMS, JOISTS, OR RAFTERS WHO ARCHITECTS OR ENGINEERS APPROVAL. VERIFY WITH MANUFACTURER'S REQUIREMENTS.
- JOIST / RAFTER SUPPORT: SAWN LUMBER ROOF RAFTERS SHALL NOT BE TOENAILED INTO SIDE OF BEAMS, TRUSSES, OR GIRDERS FOR SUPPORT. SUCH RAFTERS SHALL BE SUPPORTED BY JOIST HANGERS, LEDGERS, OR METAL PLATE CONNECTORS OF ADEQUATE STRUCTURAL CAPACITY.

CMU LINTEL SCHEDULE

MARK	SIZE	REINFORCEMENT
LI	8"x8" CMU BOND BEAM	(2) #4 BARS

- NOTES:
- PROVIDE 8" END BEARING FOR ALL LINTELS, UNO.
 - COORDINATE BOTTOM OF LINTEL ELEVATION WITH ARCHITECTURAL PLANS.
 - SHORE ALL CMU LINTELS UNTIL GROUT HAS CURED AND REACHED DESIGN STRENGTH.
 - DO NOT PLACE CONTROL OR EXPANSION JOINTS AT LINTEL BEARING POINTS OR ANYWHERE WITHIN THE LINTEL.

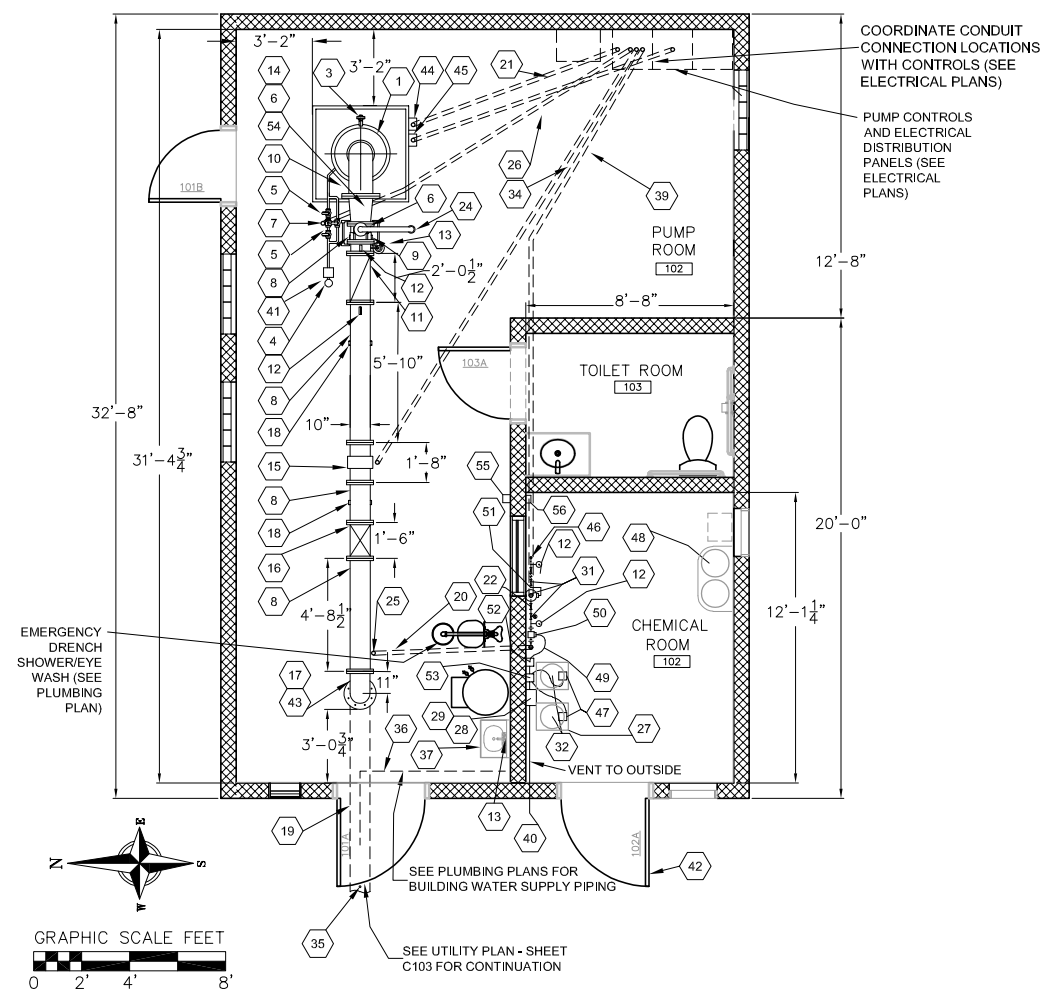


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planners | engineers | advisors

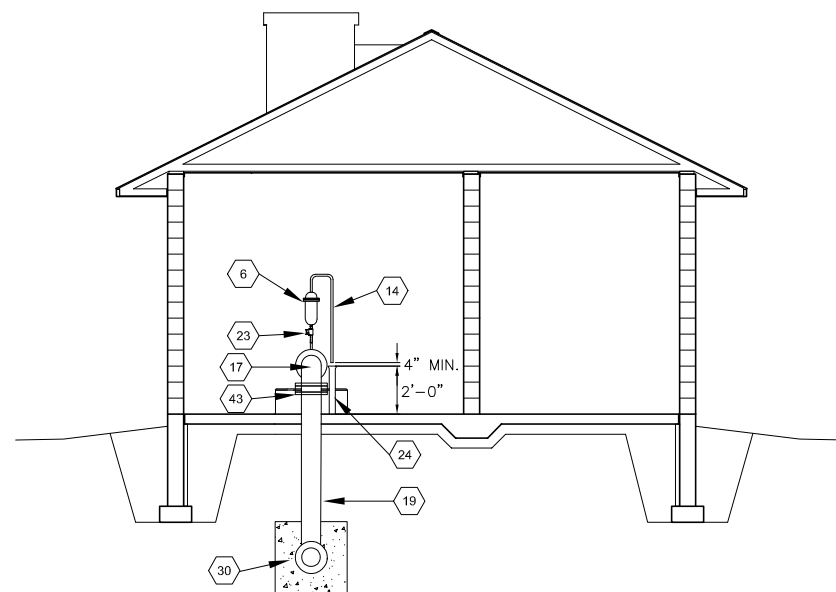


STRUCTURAL NOTES & SCHEDULES
WELL NO.5 PUMP HOUSE
CITY OF PRAIRIE DU CHIEN
CRAWFORD COUNTY, WISCONSIN

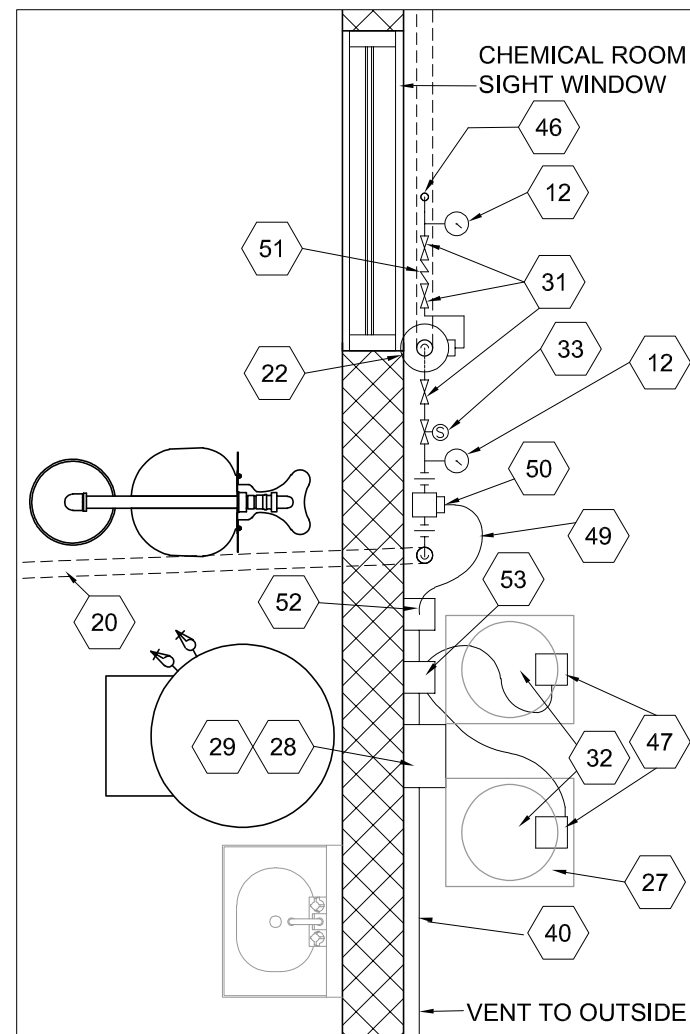
REVISIONS	NO.	DATE	REVISIONS		REMARKS
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DATE					
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DRAFTER					
J.PHANEUF					
CHECKED					
M.MAAS					
PROJECT NO.					
240564					
SHEET					
S202					



1 PROCESS PIPING FLOOR PLAN
Q101 SCALE: 1/4" = 1'-0" (22"x34")
1/8" = 1'-0" (11"x17")



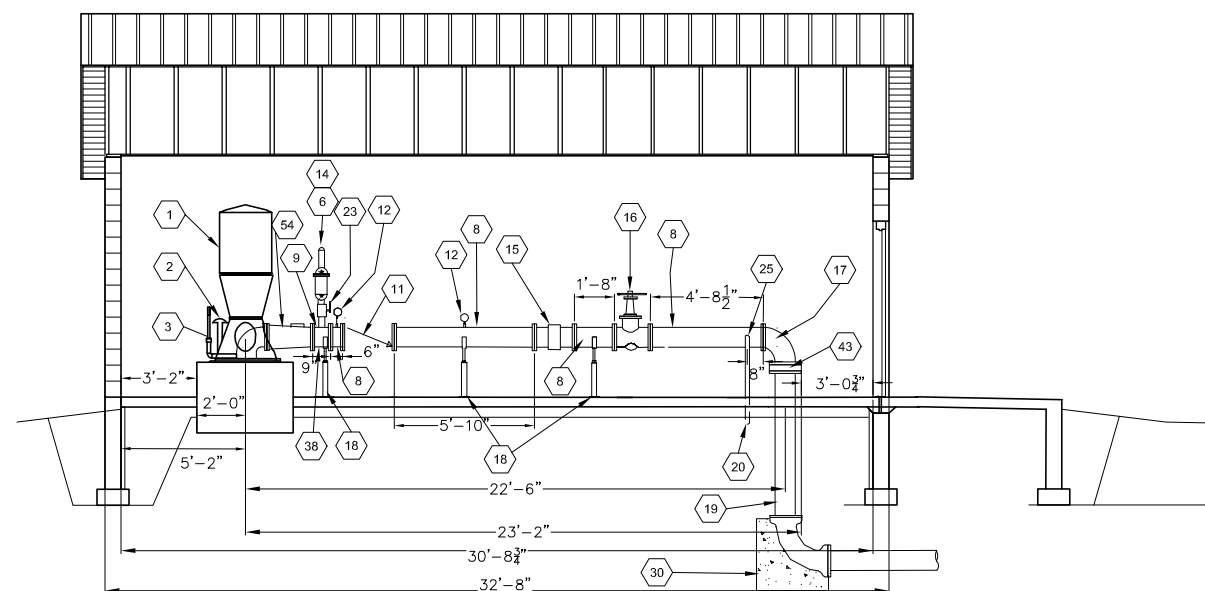
4 PROCESS PIPING ELEVATION
Q101 SCALE: 1/4" = 1'-0" (22"x34")
1/8" = 1'-0" (11"x17")



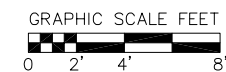
2 CHLORINE FEED EQUIPMENT LAYOUT
Q101 NOT TO SCALE

LIST OF MATERIALS	
NUMBER	DESCRIPTION
1	WELL PUMP (10"Ø X 10"Ø DISCHARGE HEAD)
2	WELL VENT W/ 24 MESH NON-CORRODIBLE SCREEN (Min. 24" above finished floor) – 2" MIN. DIA.
3	AIRLINE & DRAWDOWN ASSEMBLY (2 REQ'D)
4	1/2" PRELUBE WATER SUPPLY PIPING. SEE PLUMBING PLANS.
5	1/2" BALL VALVE
6	AIR/VACUUM RELEASE VALVE W/DISCHARGE PIPING TO HUB DRAIN
7	PRELUBE SOLENOID VALVE (INTERWIRED W/ PUMP CONTROLS)
8	10" PIPE SPOOL (D.I. – CLASS 53)
9	10" DIA. FLANGED COUPLING ADAPTER
10	THREADED TIE RODS
11	10" CHECK VALVE
12	PRESSURE GAGE
13	SMOOTH END SAMPLING TAP
14	2" GALV. STEEL PIPE (VERIFY SIZE WITH AIR/VAC. VALVE MANUFACTURER) TERMINATING W/24 MESH NONCORRODIBLE SCREEN DOWN-TURNED OVER HUB DRAIN – LEAVE 2" AIR GAP – TERMINATE 24" ABOVE FLOOR
15	10" FLOW METER W/4 –20 M.A. OUTPUT TRANSMITTER
16	10" GATE VALVE
17	10" x 10" DIA. 90 DEGREE ELBOW (D.I. – CLASS 53)
18	ADJUSTABLE PIPE SUPPORT (3 REQ'D)
19	10" DIA. D.I. PIPE (CLASS 52)
20	1" DIA CHEMICAL POLYETHYLENE TUBING FEED LINE, CONTAINED WITHIN 2" CONDUIT (STUB UP THRU FLOOR 12") SEAL BOTH ENDS
21	CONDUITS FROM CONTROLS TO LEVEL TRANSDUCER & PUMP MOTOR
22	BOOSTER PUMP
23	2" BALL VALVE (VERIFY WITH AIR/VAC. VALVE MANUFACTURER)
24	4" DIAMETER HUB DRAIN PIPE (LOCATE MIN. 2' FROM WELL CASING)
25	CHLORINE INJECTOR
26	1" CONDUIT FROM SOLENOID VALVE TO CONTROLS
27	SCALES
28	SCALE INDICATOR (MOUNTED ON WALL)
29	CHEMICAL ID TAG (MOUNTED ON WALL ABOVE CHEM. FEEDER AND SCALE INDICATOR)
30	10" DIA. 90 DEGREE ELBOW – MECHANICAL JOINT – WITH CONCRETE THRUST BLOCK
31	1" BALL VALVE
32	CHLORINE GAS CYLINDER TANKS
33	1" SOLENOID VALVE (INTERWIRED WITH WELL PUMP & FLOW METER)
34	CONDUITS FROM CONTROLS TO FLOW METER – SIZE & NUMBER AS REQUIRED BY METER MANUFACTURER
35	1–1/2" CORPORATION STOP
36	1–1/2" COPPER PIPE
37	SAMPLE SINK
38	10" PIPE – FLANGE/PLAIN END (D.I. – CLASS 53)
39	1" CONDUIT FROM CONTROLS TO CHEMICAL FEED ROOM
40	1" MIN. DIA. PE OR PVC TANK VENT WITH 24 MESH NON–CORRODIBLE SCREEN COVER ON 90 DEGREE DOWN TURNED ELBOW AT EXTERIOR
41	1/2" MECHANICAL FLOW METER
42	EXTERIOR DOOR WITH VIEWING WINDOW & WARNING SIGN "DANGER–CHLORINE GAS"
43	10" WAFER BUTTERFLY VALVE WITH HANDWHEEL & GEAR BOX
44	LEVEL TRANSDUCER TERMINATION ENCLOSURE
45	PUMP MOTOR POWER CABLE J–BOX (MAY BE FED FROM OVER HEAD CONDUIT IN CEILING)
46	1" WATER SUPPLY PIPE TO CHLORINE BOOSTER PUMP INLET
47	CHLORINATORS
48	SPARE CYLINDERS WITH CHAIN AND WALL HOOKS
49	VACUUM TUBING
50	CHLORINE EJECTOR WITH UNIONS
51	REDUCED PRESSURE BACKFLOW PREVENTOR
52	PRESSURE RELIEF VALVE
53	FLOWMETER/RATE VALVE
54	10"x12" CONCENTRIC REDUCER
55	CHLORINE GAS LEAK DETECTION MONITOR WITH ALARM HORN & LIGHT
56	CHLORINE GAS LEAK DETECTION SENSOR

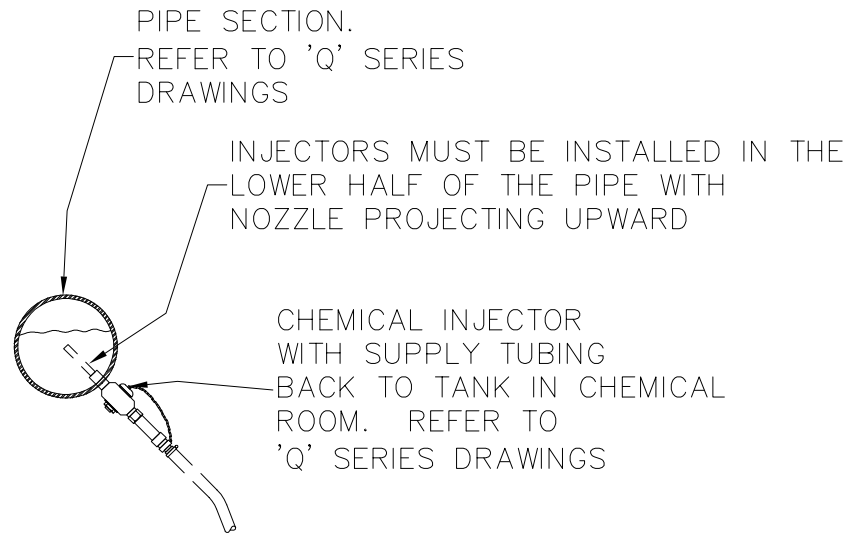
3 LIST OF MATERIALS



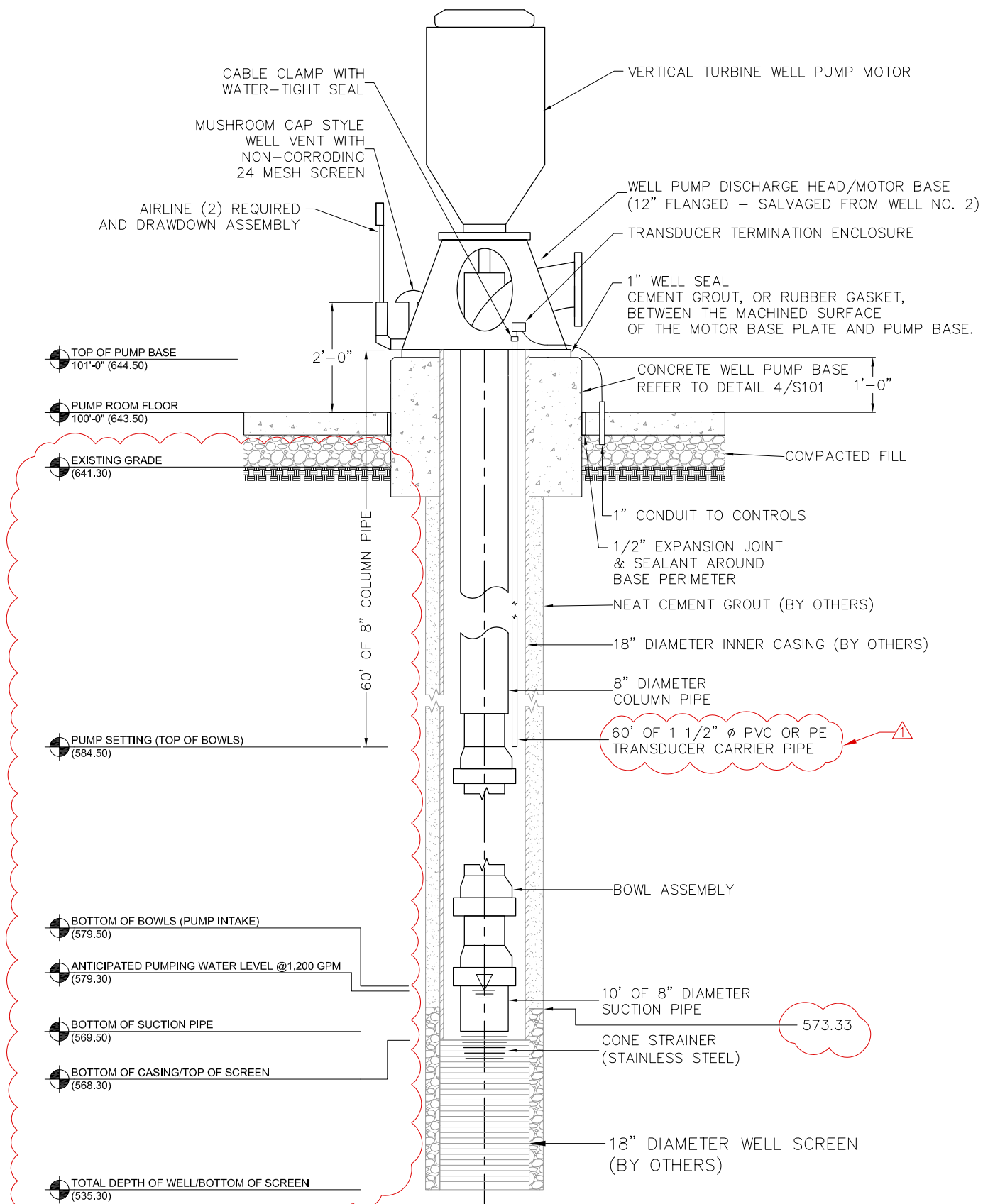
5 PROCESS PIPING ELEVATION
Q101 SCALE: 1/4" = 1'-0" (22"x34")
1/8" = 1'-0" (11"x17")



DATE		JUNE 2025	
DRAFTER		CLEN	
CHECKED		DPOP	
PROJECT NO.		240564	
Q101			



1 **CHEMICAL INJECTOR DETAIL**
Q301 Not to Scale



- BASE BID:
1. PROVIDE A NEW MOTOR.
 2. SALVAGE PUMP BASE, COLUMN PIPE, LINE SHAFT, BOWL ASSEMBLY, & SUCTION PIPE FROM WELL NO. 2
 3. REBUILD SALVAGED BOWL ASSEMBLY WITH NEW BEARINGS, WEAR RINGS & SHAFT.
 4. ADD ONE STAGE TO BOWL ASSEMBLY TO PROVIDE 1,200 GPM AT NEW REQUIRED TDH.
- ALTERNATE BID:
1. PROVIDE A NEW MOTOR.
 2. SALVAGE PUMP BASE, COLUMN PIPE, LINE SHAFT, & SUCTION PIPE FROM WELL NO. 2.
 3. PROVIDE A NEW BOWL ASSEMBLY TO PROVIDE 1,200 GPM AT REQUIRED TDH.

2 **WELL PUMP SECTION**
Q301 Not to Scale

REVISIONS		REVISIONS	
NO.	DATE	NO.	DATE
1	10/06/25	2	
PER TEST WELL			
JUNE 2025			
DRAFTER			
CLEN/PJUN			
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PROJECT NO.			
240564			
Q301			

REFER TO SPECIFICATION SECTION 22 40 00 FOR ACCEPTABLE EQUAL MANUFACTURERS

The diagram illustrates the plumbing for a shower stall. A vertical pipe runs along the wall, labeled 'WALL' on the right. At the top, a 'THERMOSTATIC MIXING VALVE' is connected to '1-1/2" CW / HW SUPPLIES' (cold water/hot water). Below this, 'SHUTOFF VALVES' are shown. The main supply line is labeled '1-1/2" TEMPERED WATER SUPPLY'. A 'STAY OPEN BALL VALVE' is located on a horizontal branch that leads to a 'SHOWER HEAD' and a 'PULL HANDLE'. Further down the wall pipe, a 'STAY OPEN VALVE' is connected to an 'EYE WASH'. At the bottom, a 'DRAIN TOWARD FLOOR DRAIN' is shown. The floor is labeled 'FLOOR' on the right. A 'FLOOR DRAIN IN CENTER OF ROOM' is shown as a U-shaped pipe extending from the wall drain into the room.

	COLD WATER
	HOT WATER
	TEMPERED WATER
	SANITARY DRAIN, WASTE OR SEWER (SAN)
	VENT (V)
	NATURAL GAS
	DOMESTIC WATER SERVICE
	TEE (BRANCH TO SIDE)
	TEE (BRANCH DOWN)
	RISER UP
	RISER DOWN
	CLEANOUT (CO)
	WALL CLEANOUT (WCO)
	FLOOR CLEANOUT (FCO)
	YARD CLEANOUT (YCO)
	UNION
	FLANGE
	FLOW
	CHECK VALVE
	PRESSURE REGULATING VALVE
	HOSE BIBB (HB) OR WALL HYDRANT (WH)
	CAP
	BALANCING VALVE
	SHUTOFF VALVE
	PIPE STRAINER
	FIXTURE STOP
	VALVE IN RISER
	THERMOMETER
	PRESSURE GAUGE
	WATER HAMMER ARRESTOR
	RELIEF VALVE
	FLOOR DRAIN (FD)
	HUB DRAIN (HD)
	NEW WORK KEYED NOTE
	REVISION KEYED NOTE
	TAG FOR CONTINUATION MATCH POINTS

1
000

EMERGENCY SHOWER & EYE WASH DETAIL

SCALE: NONE

2 BARRIER FREE LAVATORY DETAIL

SCALE: NONE

The diagram illustrates the installation of a water heater (WHR-1) on a 4" concrete pad. Key components and connections include:

- Water Supply:** A vertical pipe with a 1-1/2" and 1/2" connection at the top. It includes a T&P relief valve (TYP) and a water heater (WHR-1) with a water inlet valve.
- Gas Supply:** A vertical pipe with a 1/2" connection at the top. It includes a gas valve (GV) and a water heater (WHR-1) with a gas inlet valve.
- Venting:** A 4" vent pipe with a 4" dirt leg (TYP) and a 4" exhaust vent (TYP) at the bottom. The vent pipe is labeled "ROUTE CONDENSATE DRAIN TO FLOOR DRAIN".
- Other Components:** A combustion air intake (TYP), a 4" valve and union (TYP), and a 4" concrete pad by PC.

3 WATER HEATER DETAIL (WHR-1)
SCALE: NONE

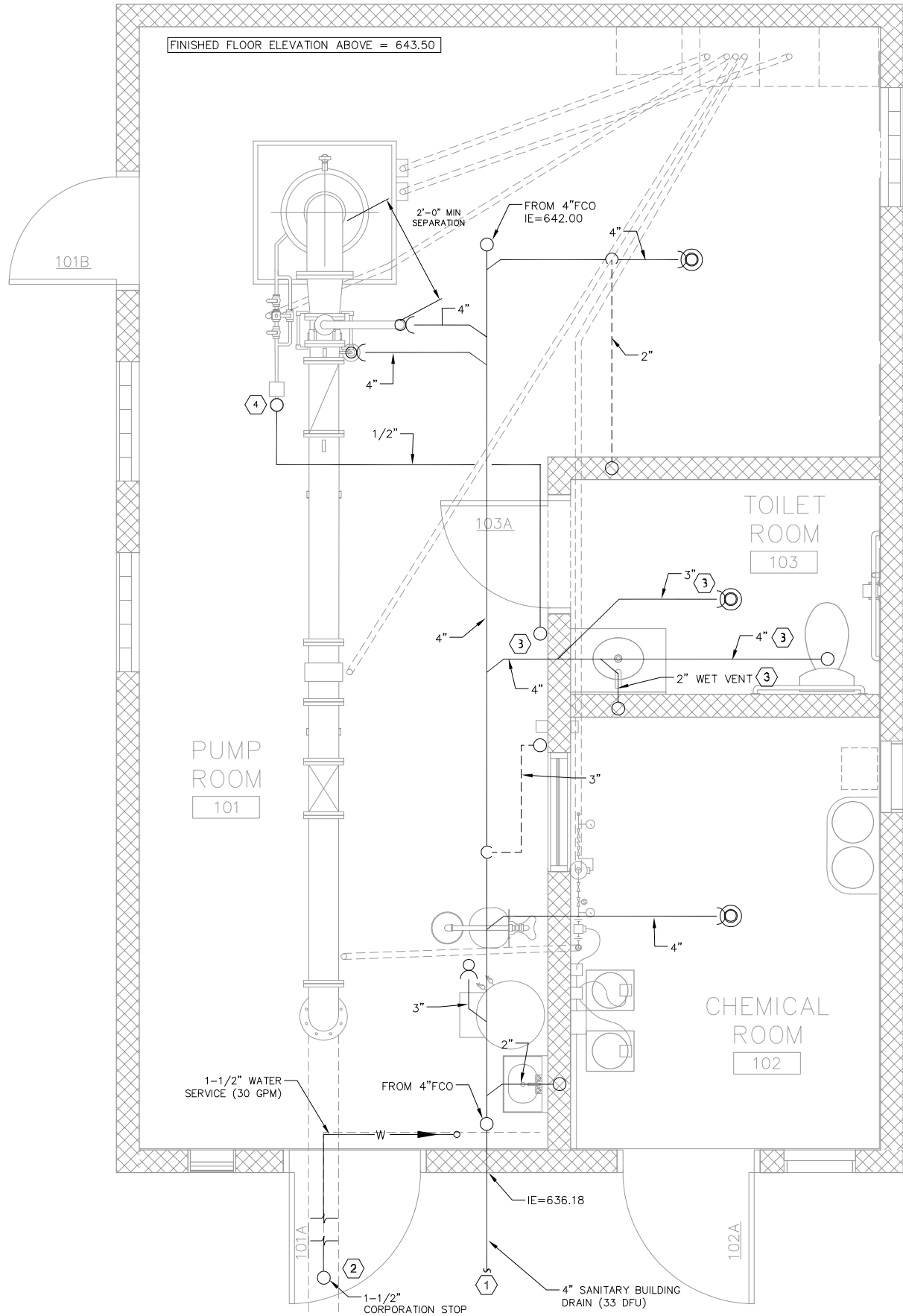
P000 / SCALE: NONE

Water Calc Worksheet		Well No. 5 Pumphouse - Prairie du Chien, WI	
F.	Pressure loss due to water treatment devices and backflow preventers which serve the <u>controlling fixture</u> . (Water softeners, filters, etc.)		
	(Pressure loss due to: Emergency Shower Thermo. Mix Valve		
F1.	WSFU Downstream of Water Treatment Device:		
F2.	Convert wsfu to GPM using Table 382.40-3:		
	<u>or</u>		
F3.	Convert wsfu to GPM using Table 382.40-3e* (for individual dwellings only).		
F4.	Refer to manuf. graph to obtain pressure loss: (If no water treatment device enter "0")	25.0	
	Subtract value of F4	25.0	
	Subtotal		13.60
G.	Pressure loss through tankless water heaters, combination boiler / hot water heaters, heat exchangers <u>which serve the controlling fixture</u> :		
	Hot water WSFU: <u> </u> convert to: GPM = <u> </u> (Table 382.40-3)		
	Refer to manufacturer's pressure loss graph to determine loss at the required GPM:		
	<u> </u> pressure loss.	Subtract value of 'G'	0.0
		Subtotal	13.60
H.	Developed length from building control valve to <u>controlling fixture</u> in feet	20.0	
	x 1.5	Divide by value of 'H'	30.0
		Subtotal	0.45
		Multiply by:	100
A.	Pressure available for uniform loss		'A' = 45.3
	Water distribution piping material is: <u>Copper - Type K</u>		
	<u>(Copper, Pex, CPVC, etc.)</u>		
*Note: The "A" value obtained by using Table 382.40-3e can only be used for an individual dwelling when sizing the water treatment device (water softeners, etc) and no hose bibbs, hydrants, or high flow fixtures are being served by the water treatment device.			
Note: High flow fixtures are defined as fixtures that exceed a flow rate of 4 gpm @ 80 psi, and water velocity not exceeding 8 ft. per second.			
Note: "A" = Pressure available for uniform loss. This number is only an indicator for using the pipe sizing SPS Tables 382.40-4 thru 11.			

SYMBOLS, ABBREVIATIONS, & SCHEDULES - PLUMBING
PUBLIC WATER SUPPLY - WELL NO. 5 PUMPHOUSE
CITY OF PRAIRIE DU CHIEN
CRAWFORD COUNTY, WISCONSIN

REVISIONS			REVISIONS		
NO.	DATE	REMARKS	NO.	DATE	REMARKS

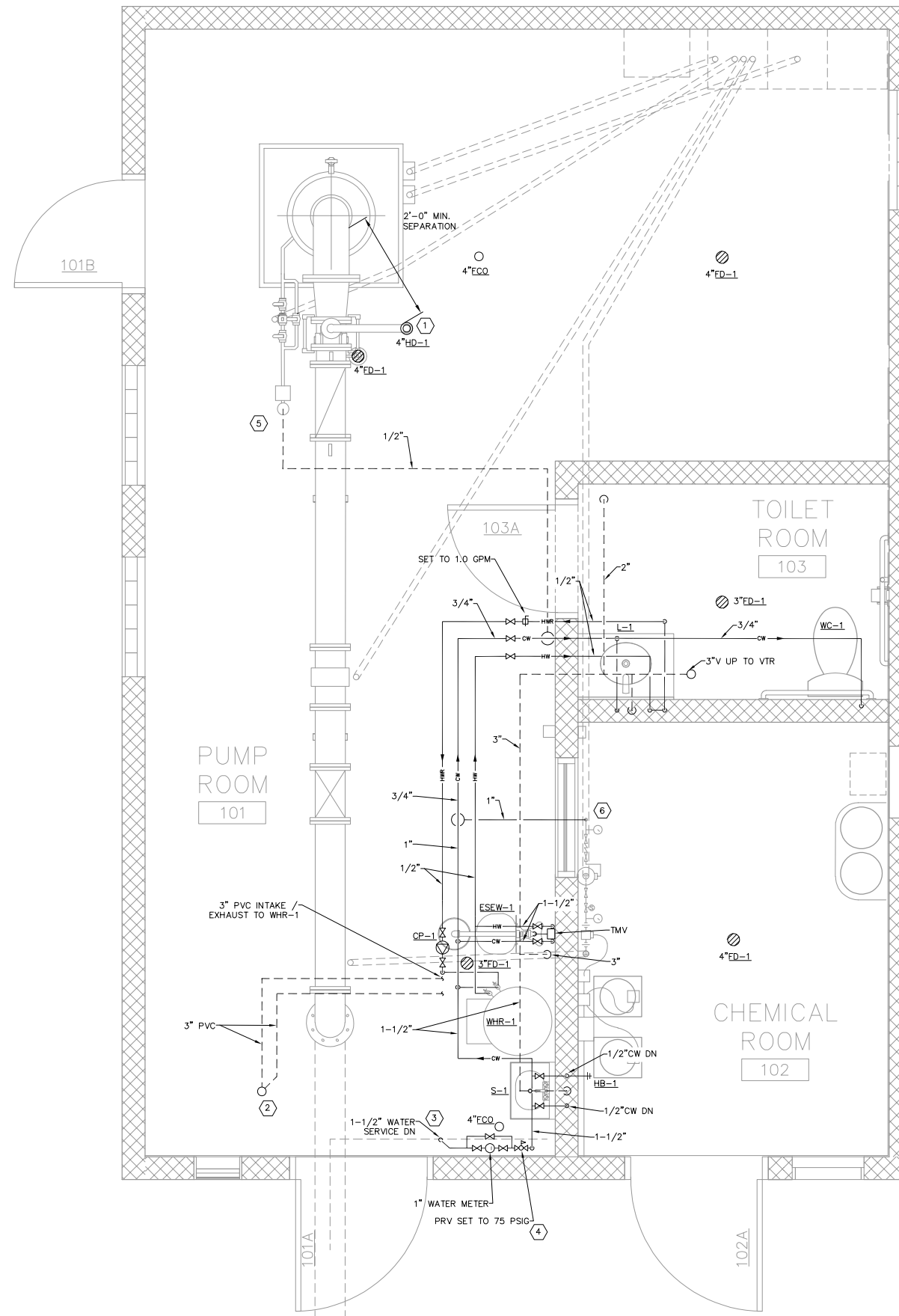
DATE	JUNE 2025
DRAFTER	CLEN
CHECKED	DPOP
PROJECT NO.	240564
P000	



1 UNDERFLOOR PLAN - PLUMBING
P100 SCALE: 1/2" = 1'-0"

KEYED NOTES:

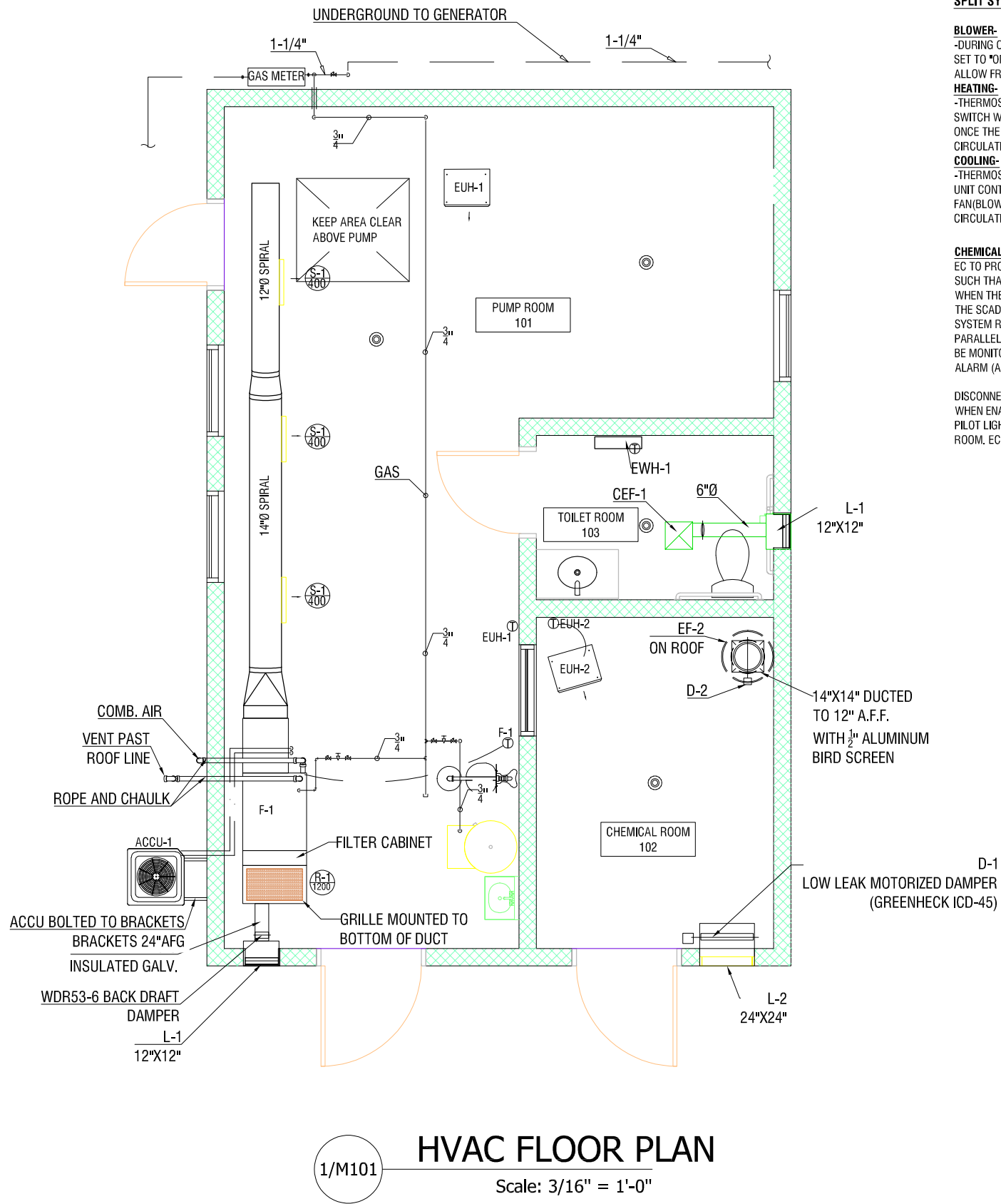
- 1 INSTALL UTILITY TO 5'-0" FROM BUILDING PERIMETER, CONTINUATION BY SITE UTILITY CONTRACTOR. COORDINATE LOCATION AND DEPTH WITH SITE UTILITY CONTRACTOR.
- 2 CONNECT 1-1/2" BUILDING TO WATER SERVICE TO WATER MAIN. SEE C103.
- 3 BLACK OR GRAY WASTE WATER (FROM TOILET ROOM) SHALL MAINTAIN A MINIMUM 8'-0" OF SEPARATION FROM WELL CASING.
- 4 CONNECT TO WELL PUMP PRELUBE WATER METER. SEE Q101.



1 FLOOR PLAN - PLUMBING
P101 SCALE: 1/2" = 1'-0"

- ① HUB DRAIN INLET SHALL BE INSTALLED TO 24" AFF FOR DISCHARGE FROM WELL PUMP AIR/VACUUM RELEASE VALVE. REFER TO Q101.
- ② INSTALL 3" PVC INTAKE AND EXHAUST FROM WATER HEATER (WHR-1) AND TERMINATE THROUGH ROOF WITH CONCENTRIC FITTING. COORDINATE WITH HC AND LOCATE TERMINATION IN-LINE WITH FURNACE PENETRATIONS THRU ROOF.
- ③ CONNECT TO WATER MAIN PROVIDED BY SITE UTILITY CONTRACTOR AS SHOWN ON UTILITY PLAN.
- ④ INSTALL PRV RATED TO REDUCE FROM 110 PSI TO 75 PSI. COORDINATE PRESSURE RATING OF WATER METER WITH CITY AND LOCATE PRV BEFORE METER IF WATER METER IS NOT CAPABLE OF HANDLING HIGHER WATER PRESSURE.
- ⑤ CONNECT TO WELL PUMP PRELUBE WATER METER. SEE Q101.
- ⑥ CONNECT TO BOOSTER PUMP SUPPLY PIPING IN CHEMICAL ROOM. SEE Q101.

	REVISIONS		REVISIONS	
	DATE	NO.	REMARKS	NO.
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	DRAFTER			
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PROJECT NO. 240564		P101		



SPLIT SYSTEM WITH FRESH AIR DAMPER ORDER OF OPERATIONS:

BLOWER-
-DURING OCCUPIED HOURS THE SCHEDULE OF THE THERMOSTAT WILL HAVE THE FAN SET TO "ON" TO CIRCULATE AIR THROUGHOUT. BACK DRAFT DAMPER WILL OPEN ALLOW FRESH AIR TO THE SPACE TO MAKE UP THE BATHROOM EXHAUST.

HEATING-
-THERMOSTAT CALL FOR HEAT THE VENT MOTOR WILL START, PROVING THE AIR SWITCH WHICH WILL ALLOW THE GAS AND IGNITION SYSTEM TO START THE BURNER. ONCE THE SET TIME FOR BLOWER DELAY IS PASTED THE BLOWER WILL RUN CIRCULATING HEAT THROUGHOUT THE SPACE.

COOLING-
-THERMOSTAT CALL FOR COOLING WILL SEND 24V TO THE OUTDOOR CONDENSING UNIT CONTACT STARTING THE FAN AND COMPRESSOR, AT THE SAME TIME THE INDOOR FAN(BLOWER) WILL START AND RUN AT THE SET COOLING SPEED(SEE I&O MANUAL) CIRCULATING CONDITIONED AIR THROUGHOUT THE SPACE.

CHEMICAL(102) STORAGE EXHAUST SYSTEM:
EC TO PROVIDE LIMIT SWITCH ON 102 CHEM ROOM DOOR AND WIRE SUCH THAT THE ROOM LIGHTS, E-2, D-1 AND D-2 TO TURN ON / OPEN WHEN THE DOOR IS OPENED. THE LIMIT SWITCH SHALL BE WIRED TO THE SCADA SYSTEM SUCH THAT THE LIGHTS AND CHEM. ROOM EXHAUST SYSTEM REMAIN ON FOR SETTABLE TIME. THIS CONTROL IS TO BE IN PARALLEL WITH THE (2) INTERIOR LIGHT SWITCHES. EF-2 STATUS SHALL BE MONITORED BY THE SCADA SYSTEM AND AN EXCESS RUN TIME ALARM (ADJ.) SHOULD BE PROVIDED THROUGH THE SCADA SYSTEM.

DISCONNECT FACTORY MOUNTED. EF-2 TO OPERATE CONTINUOUSLY WHEN ENABLED BY LIGHT SWITCH. EC TO PROVIDE LIGHT SWITCH WITH PILOT LIGHT LOCATED IN PUMP ROOM AND LIGHT SWITCH IN CHEM. ROOM. EC TO INTERLOCK FAN WITH BOTH LIGHTS.

EXHAUST FAN OPERATION: (BATH ROOMS/ REST ROOMS)

CONSTANT ON OPERATION
-THE OPERATION OF THE EXHAUST FAN DURING OCCUPIED HOURS MUST BE INTERLOCKED WITH A TIME CLOCK OR WITH THE HVAC FAN OPERATION IF THE SPACE IS HEATED OR COOLED BY THE HVAC SYSTEM.

INTERMITTENT OPERATION
-THE OPERATION OF THE EXHAUST FAN DURING OCCUPIED HOURS MUST BE INTERLOCKED WITH THE LIGHTS IF THE SPACE IS UNHEATED OR HEATED WITH OTHER MEANS BESIDES THE HVAC THAT SERVES THE REST OF THE BUILDING.

EXHAUST FAN OPERATION : JANITOR CLOSET / MOD SINK
-THE OPERATION OF THE EXHAUST FAN DURING OCCUPIED HOURS MUST BE INTERLOCKED WITH THE LIGHTS FOR INTERMITTENT OPERATION WHEN THE ROOM IS BEING USED.

FLOOR PLAN - HVAC
PUBLIC WATER SUPPLY - WELL NO. 5 PUMPHOUSE
CITY OF PRAIRIE DU CHIEN
CRAWFORD COUNTY, WISCONSIN

REVISIONS		REVISIONS	
NO.	DATE	NO.	DATE
DATE JUNE 2025			
DRAFTER TJC			
CHECKED TJC			
PROJECT NO. 240564			
M101			

GENERAL HVAC PLAN NOTES:

1. ALL WORK SHALL CONFORM TO CURRENT STATE AND LOCAL CODES WHETHER OR NOT SPECIFICALLY SHOWN ON THE PLANS.
2. THE HVAC DESIGNER SHALL BE RESPONSIBLE FOR HVAC PLAN SUBMITTAL. IT SHALL BE THE HVAC CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL STATE AND LOCAL CODES.
3. ALL HVAC PLANS AND DRAWINGS SHALL BE CONSIDERED DIAGRAMMATIC. THE HVAC CONTRACTOR MUST CONSULT AND COOPERATE WITH THE GENERAL CONTRACTOR, AND THE CONTRACTORS OF ALL OTHER TRADES, AS WELL AS THE BUILDING OWNER(S) SO AS TO AVOID EQUIPMENT AND DUCTWORK COLLISION, AS WELL AS OTHER PROJECT CONTROVERSIES. THE GENERAL CONTRACTOR AND THE HVAC CONTRACTOR SHALL VERIFY ANY AND ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE PROCEEDING WITH THE INSTALLATION OF THE HVAC SYSTEM.
4. EQUIPMENT MANUFACTURER SUBSTITUTIONS SHALL NOT BE ALLOWED WITHOUT THE CONSENT OF THE HVAC DESIGNER. MANUFACTURERS AS SPECIFIED IN THE EQUIPMENT SCHEDULES SHALL BE CONSIDERED AS STRICT EQUIPMENT SPECIFICATIONS AND MUST BE FURNISHED AND INSTALLED WITHOUT SUBSTITUTION. EQUIPMENT MANUFACTURER SUBSTITUTIONS UNBENOUNCED TO THE HVAC DESIGNER SHALL ABSOLVE THE DESIGNER OF THE RESPONSIBILITY OF THE ADEQUATE PERFORMANCE OF THE HVAC SYSTEM.
5. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY/ALL LINE VOLTAGE WIRING, (115 VOLT OR HIGHER). THE HVAC CONTRACTOR SHALL FURNISH AND INSTALL ANY/ALL 24 VOLT CONTROL WIRING.
6. THE STRUCTURAL ENGINEER SHALL DETERMINE WHETHER THE BUILDING STRUCTURE CAN SUPPORT THE WEIGHT OF THE SUSPENDED EQUIPMENT, ROOF MOUNTED EQUIPMENT, PIPING, AND DUCTWORK. IF THE STRUCTURE IS UNABLE TO SUPPORT THE WEIGHT OF THE EQUIPMENT AND/OR DUCTWORK AND PIPING, IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ADEQUATELY REINFORCE THE STRUCTURE TO SUPPORT THE WEIGHT.
7. ALL GAS PIPING SHALL COMPLY TO ALL STATE AND LOCAL CODES IN EFFECT AT THE TIME OF INSTALLATION. REFER TO NFPA 54 FOR SIZING AND INSTALLATION PRACTICES.
8. ALL DUCTS ARE TO BE INSTALLED IN ACCORDANCE OF STATE CODE AND S.M.A.C.N.A'S GUIDELINES.
9. ALL FLEX DUCT TO BE INSTALLED PER IMC 603.6.
10. ALL DUCTS ARE TO BE SEALED IN ACCORDANCE OF STATE CODE (SEE TABLE)
11. ALL DUCT LOCATED IN AN UNCONDITIONED SPACE TO BE INSULATED PER CODE: (SEE TABLE)
12. ALL FRESH AIR INTAKES ARE TO BE LOCATED NO CLOSER THAN 10' FROM ANY EXHAUST OR FLUE HORIZONTALLY OR 3' BELOW ANY EXHAUST OR FLUE.
13. ALL INTAKES TO BE LOCATED NO CLOSER THAN 12" FROM FINISHED GROUND HEIGHT.
14. THE 2015 IBC & IFC REQUIRE DOMESTIC COOKING HOODS IN I-2, CONDITION 1, OCCUPANCIES TO BE EQUIPPED WITH AN AUTOMATIC FIRE EXTINGUISHING SYSTEM RECOGNIZED FOR PROTECTION OF DOMESTIC COOKING EQUIPMENT & REQUIRES A MANUAL ACTIVATION DEVICE OR K-TYPE FIRE EXTINGUISHER TO BE WITHIN 30' OF DOMESTIC COOKING EQUIPMENT.
15. OWNER TO PROVIDE LETTER EXPLAINING TYPE OF USE FOR DOMESTIC KITCHEN HOOD/ STOVE FOR STATE RECORDS.
16. NO EQUIPMENT, EXHAUSTS, FLUE VENTS, INTAKES OR FRESH AIR VENTS TO BE LOCATED ANY CLOSER THAN 10' FROM PROPERTY LINE. IF AN INSTANCES ARISES WHERE THIS IS NOT CLEARANCE A VARIANCE WITH THE LOCAL INSPECTOR, TOWN, CITY IS TO BE FILED OR DISCUSSED TO COME TO A SOLUTION.
17. PROVIDE FOR CONDENSATE REMOVAL FOR FURNACES, FAN COILS & A.C. COILS.
18. IF RETURN AIR VOLUME (SINGLE OR COMBINED) IS 2000 CFM OR GREATER LISTED OR TESTED, SMOKE SENSOR IN RETURN AIR DUCT TO BE INSTALLED & WIRED TO ALARM OR CONTROL SMOKE/FIRE CENTER AS REQUIRED BY CODE.
19. EXHAUST FANS TO BE CONTROLLED BY TIME CLOCK TO OPERATE DURING BUILDING'S OCCUPIED SCHEDULE. OVERRIDE SWITCH TO BE PROVIDED TO OPERATE FAN DURING BUILDING UNOCCUPIED SCHEDULE.
20. PROVIDE BALANCING DAMPER IN EACH SUPPLY OR EXHAUST DUCT RUN OUT. ACCESS TO DAMPER TO BE PROVIDED AT EACH LOCATION IF HIDDEN.
21. THERMOSTAT TO BE LOCATED WITH IN A.D.A SPECS. 48" A.F.F., LOCATION OF THERMOSTAT OR SENSOR PER PLAN. IF RELOCATION NEEDED CONFIRM WITH PLAN DESIGNER.
22. THERMOSTAT TO BE SET UP WITH CONTINUOUS FAN OPERATION DURING OCCUPIED HOURS. OWNER TO PROVIDE THIS INFORMATION TO THE HVAC CONTRACTOR.
23. THE SYSTEM IS TO BE BALANCED PER PLAN AND RECORDED FOR THE INSPECTOR TO FILE WITH THE STATE.
24. THE SYSTEM IS TO BE BALANCED PER CODE. BUILDING BALANCE TO BE WITH IN 10% PLUS OR MINUS OF TOTAL EXHAUST FROM THE SPACE. PERFORM AIR BALANCE AND PROVIDE A RECORDED REPORT STATING THE BALANCE AND TO BE FILES WITH SYSTEM BALANCE REPORT.
25. WHEN PROJECT IS COMPLETE THERE IS TO BE A FINAL COMPLETION STATEMENT RECORDED AND FILED WITH THE STATE BY THE DESIGNER OF RECORD.

SPLIT SYSTEM WITH FRESH AIR DAMPER ORDER OF OPERATIONS:

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vierbicher
planners | engineers | advisors



NOTES - HVAC
PUBLIC WATER SUPPLY - WELL NO. 5 PUMPHOUSE
CITY OF PRAIRIE DU CHIEN
CRAWFORD COUNTY, WISCONSIN

REVISIONS		REVISIONS	
NO.	DATE	NO.	DATE
DATE JUNE 2025			
DRAFTER TJC			
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PROJECT NO. 240564			
M103			

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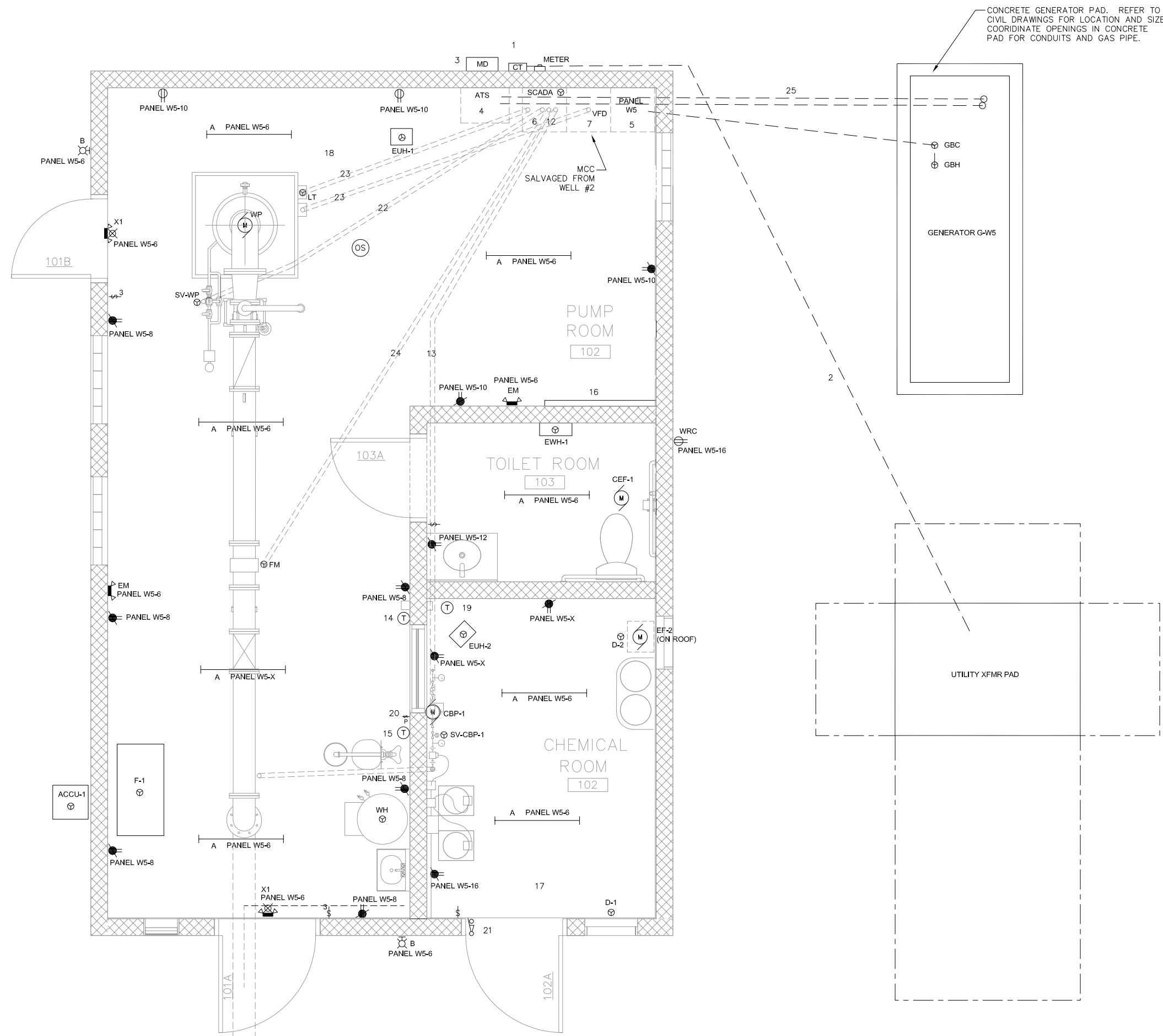
ELECTRICAL CONNECTION SCHEDULE										
TAG	SYMBOL	DESCRIPTION	VOLTS	HP	AMPS	KVA	BREAKER	WIRE SIZE	CIRCUIT	NOTES
ACCU-1		AIR COOLED CONDENSING UNIT	240V 2P 3W	-	17.5	34.20	25/2	(2)#10, #10N, #10G - 3/4"C	PANEL W5-13,15	2
CEF-1		CEILING EXHAUST FAN	120V 1P 2W	FRAC	0.67	0.08	20/1	(1)#12, #12N, #12G - 3/4"C	PANEL W5-23	9
CBP-1		CHLORIDE BOOSTER	240V 2P 3W	3 HP	12.5	3	20/2	(2)#10, #10N, #10G - 3/4"C	PANEL W5-9	3,4
CP-1		CIRCULATION PUMP	120V 1P 2W	FRAC	1.04	0.13	20/1	(1)#12, #12N, #12G - 3/4"C	PANEL W5-29	1
D-1		DAMPER ACTUATOR LOUVER	120V 1P 2W	-	0.83	0.1	20/1	(1)#12, #12N, #12G - 3/4"C	PANEL W5-31	4
D-2		DAMPER ACTUATOR EXHAUST FAN	120V 1P 2W	-	0.83	0.1	20/1	(1)#12, #12N, #12G - 3/4"C	PANEL W5-25	4
EF-2		ROOF EXHAUST FAN	120V 1P 2W	1/10 HP	3.7	0.42	20/1	(1)#12, #12N, #12G - 3/4"C	PANEL W5-25	8,10
EUH-1		ELECTRIC UNIT HEATER	240V 2P 3W	-	31.3	7.5	45/2	(2)#8, #8N, #10G - 3/4"C	PANEL W5-1,3	5
EUH-2		ELECTRIC UNIT HEATER	240V 2P 3W	-	41.7	10	60/2	(2)#6, #6N, #10G - 3/4"C	PANEL W5-5,7	5
EWH-1		ELECTRIC WALL HEATER	120V 1P 2W	-	8.3	1.0	15/1	(1)#12, #12N, #12G - 3/4"C	PANEL W5-19	2
F-1		FURNACE	120V 1P 2W	-	11.7	1.4	15/1	(1)#12, #12N, #12G - 3/4"C	PANEL W5-17	1
GBC		GENERATOR BATTERY CHARGER	120V 1P 2W	-	16.67	2	20/1	(1)#12, #12N, #12G - 3/4"C	PANEL W5-2	
GBH		GENERATOR BLOCK HEATER	120V 1P 2W	-	20.83	2.5	30/1	(1)#10, #10N, #10G - 3/4"C	PANEL W5-4	
SCADA		SCADA CONTROL PANEL		-	1.67	0.2	20/1	(1)#12, #12N, #12G - 3/4"C	PANEL W5-21	6
WH		WATER HEATER	120V 1P 2W	-	16.67	2	20/1	(1)#12, #12N, #12G - 3/4"C	PANEL W5-27	1
WP		WELL PUMP	480V 3P 3W	150 HP	176	140.23	225/3	(3)#4/0, #4G - 3"C	MCC	2,7
NOTES: <div>1. PROVIDE DISCONNECT NEAR UNIT. 2. PROVIDE DISCONNECT NEAR UNIT, NEMA 3R ENCLOSURE. 3. CHLORINE BOOSTER PUMP TO BE WIRED IN SERIES WITH WELL PUMP AND FLOW METER SIGNAL RELAY. 4. PROVIDE DISCONNECT NEAR UNIT, NEMA 4X ENCLOSURE. 5. DISCONNECT IS FACTORY MOUNTED. EC TO INSTALL AND WIRE THERMOSTAT AND SUMMER/WINTER FAN SWITCH. 6. DIRECT CONNECTION. 7. CONNECT TO VFD. 8. DISCONNECT IS FACTORY MOUNTED. EF-1 TO OPERATE CONTINUOUSLY WHEN ENABLED BY LIGHT SWITCH. EC TO PROVIDE LIGHT SWITCH WITH PILOT LIGHT LOCATED IN PUMP ROOM AND LIGHT SWITCH IN CHEM ROOM. EC TO INTERLOCK FAN WITH BOTH LIGHT SWITCHES. 9. EC TO WIRE AND INSTALL SPEED CONTROLLER PROVIDED BY HC. PROVIDE DISCONNECT AT FAN. INTERLOCK FAN WITH LIGHT SWITCH. 10. EC TO PROVIDE LIMIT SWITCH ON 102 CHEM ROOM DOOR AND WIRE SUCH THAT THE ROOM LIGHTS, EF-1, D-1, D-2 AND TURNED ON / OPENED WHEN THE DOOR IS OPENED. THE LIMIT SWITCH SHALL BE WIRED TO THE SCADA SYSTEM SUCH THAT THE LIGHTS AND CHEM ROOM EXHAUST SYSTEM REMAIN ON FOR A SETTABLE TIME. THIS CONTROL IS TO BE IN PARALLEL WITH THE (2) INTERIOR LIGHT SWITCHES. EF-1 STATUS SHALL BE MONITORED BY THE SCADA SYSTEM AND AN EXCESS RUN TIME ALARM (ADJ.) SHOULD BE PROVIDED THROUGH THE SCADA SYSTEM.</div>										

GENERATOR SCHEDULE								
TAG	TOTAL CONN. KVA	TOTAL CONN. AMPS	VOLTS	MAX RATED kW	MAX RATED AMPS	POWER FACTOR	MANF / MODEL	NOTES
G-W5	189	277	480Y/277V 3P 4W	200	301	0.91	GENERAC / SG200 200 kW, 14.2L ENGINE, K0200124Y21-200kW/ ALTERNATOR	NATURAL GAS FUEL, 24.6 THERMS/HR. CONSUMPTION, SUPPLY GAS PRESSURE: 15 INCHES H2O. PROVIDE 300A MAIN CIRCUIT BREAKER ON GENERATOR.

TRANSFER SWITCH SCHEDULE							
TAG	TOTAL CONN. KVA	TOTAL CONN. AMPS	TYPE	VOLTS	RATED AMPS	MANF / MODEL	NOTES
ATS-W5	189	277	AUTOMATIC	480Y/277V 3P 4W	300	GENERAC / TX301	

LUMINAIRE SCHEDULE									
TAG	SYMBOL	DESCRIPTION	MOUNTING	MANUFACTURER/MODEL	INPUT WATTS	LUMENS	COLOR TEMP	VOLTS	NOTES
A		WET LOCATION VAPOR TIGHT LED	CEILING	METALUX 4VT2-LD5-4-DR-UNV-L840 -CD1-WL-U OR EQUAL	32	4000	4000K	120V 1P 2W	
B		EXTERIOR WALL MOUNT LED	WALL	EATON ALL-PRO WP-18-50L-PC OR EQUAL	18	1600	5000K	120V 1P 2W	INTEGRAL PHOTO CELL. FIELD VERIFY HEIGHT.
EM		EMERGENCY LIGHTING UNIT	WALL	SURE LITES SEL-25-SD OR EQUAL	5	100	-	120V 1P 2W	BATTERY PACK WITH SELF-DIAGNOSTICS
X1		COMBINATION EXIT SIGN/EM LIGHTING UNIT	WALL	SURE-LITES LPXC-25-SD OR EQUAL	5	100	-	120V 1P 2W	BATTERY PACK WITH SELF-DIAGNOSTICS

PANEL SCHEDULE											
PANEL DESIGNATION: W5											
LOCATION: <u>PUMP ROOM (101)</u>			VOLTS: <u>120/240</u>		PHASE: <u>1</u>		BUS AMPS: <u>400</u>				
MOUNTING: <u>MCC</u>			WIRES: <u>3</u>		POLES: <u>2</u>						
MAIN BREAKER: <u>150 amps</u>			FEED FROM: <u>XFMR-1</u>								
CIRCUIT #	BREAKER AMPS	POLES	DESCRIPTION		LOAD (KVA)		CIRCUIT #	BREAKER AMPS	POLES	LOAD (KVA)	
					A	B				A	B
1	45	2	EHU-1		3.75		2	20	1	GBC	2.00
3						3.75	4	30	1	GBH	2.50
5	60	2	EUH-2		5.00		6	20	1	LIGHTING	0.29
7						5.00	8	20	1	RECPTS - PUMP RM.	1.08
9	25	2	CBP-1 (3 hp)		1.44		10	20	1	RECPTS - PUMP RM.	0.72
11						1.44	12	20	1	RECPTS - TOILET RM.	0.18
13	25	2	ACCU-1		2.10		14	20	1	RECPTS - CHEM. RM.	0.54
15						2.10	16	20	1	RECPT - EXTERIOR	0.18
17	15	1	F-1		1.40		18	20	1	SPACE	
19	15	1	EWH-1			1.00	20	20	1	SPACE	
21	20	1	SCADA		0.20		22	20	1	SPACE	
23	20	1	CEF-1			0.08	24	20	1	SPACE	
25	20	1	D-2, EF-2		0.52		26	20	1	SPACE	
27	30	1	WH			2.00	28	20	1	SPACE	
29	20	1	CP-1		0.13		30	20	1	SPACE	
31	20	1	D-1			0.10	32	20	1	SPACE	
TOTAL CONNECTED PHASE LOADS										17.98	19.52
TOTAL CONNECTED LOADS										37.50	
<u>CONNECTED</u>			<u>ADJUSTED</u>		<u>LOAD FACTOR</u>		<u>CONNECTED</u>			<u>ADJUSTED</u>	
LIGHTING: 0.29			0.37		(125%)		HEATING: 18.50			18.50 (100%)	
LARGEST MOTOR (CBP-1): 2.88			5.10		(125%)		COOLING: 4.20			0.00 (0%)	
OTHER MOTORS: 0.00			0.00		(100%)		ALL OTHER: 8.93			(100%)	
RECEPTACLES: 2.70			2.70		(100%) (1st 10 kVA)		TOTAL LOAD: 37.50 KVA			35.59 KVA	
RECEPTACLES: 0.00			0.00		(50%) (> 10 kVA)		1-PHASE LOAD: 156.2 AMPS			148.3 AMPS	




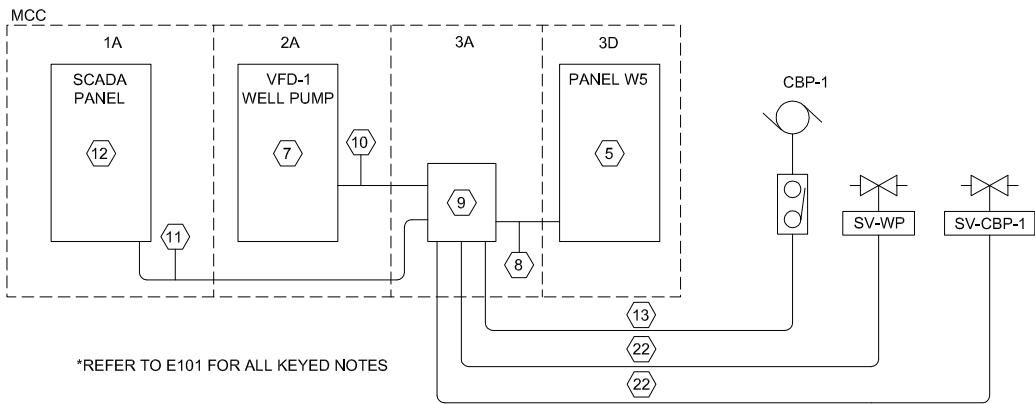
NOTES

1. ALL UNDERGROUND RACEWAY SHALL BE SCHEDULE 80 PVC.
2. ALL RACEWAY AND BOXES SERVING DEVICES SHALL BE ROUTED CONCEALED IN MASONRY WALLS.
3. GFCI RECEPTACLES TO BE INDIVIDUALLY PROTECTED. STANDARD RECEPTACLES PROTECTED DOWNSTREAM FROM OTHER GFCI RECEPTACLES ARE NOT PERMITTED.
4. ALL RECEPTACLES TO HAVE A WR (WEATHER RESISTANT) LISTING.
5. ALL EXTERIOR RECEPTACLES SHALL HAVE "IN USE" STYLE WEATHERPROOF COVERS.
6. EC RESPONSIBLE FOR ELECTRICAL INSTALLATION 33 09 10 WATER SYSTEM SUPERVISION CONTROL & DATA ACQUISITION SYSTEM UPDATE.

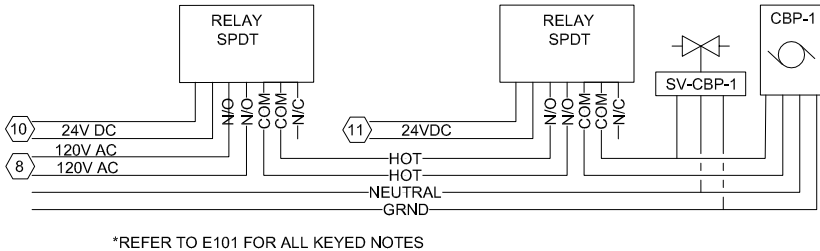
KEYED NOTES:

- 1 PROVIDE SERVICE ENTRANCE PER UTILITY REQUIREMENTS. COORDINATE WITH ALLIANT ENERGY. SEE SITE PLAN FOR EXACT TRANSFORMER LOCATION.
- 2 CONTRACTOR TO INSTALL CONDUCTORS FROM TRANSFORMER TO SERVICE ENTRANCE. COORDINATE WORK WITH ALLIANT ENERGY.
- 3 400 AMP MAIN DISCONNECT. 400A/3P IN NEMA 3R ENCLOSURE.
- 4 AUTOMATIC TRANSFER SWITCH, REFER TO SCHEDULE.
- 5 DISTRIBUTION PANEL, SQUARE D NQ SERIES 150A/3P MCB LA36150MB, INTERIOR NQ442L4C, IN MCC SECTION 3D.
- 6 TRANSIENT VOLTAGE SURGE SUPPRESSOR (TVSS) IN MCC SECTION. 1J
- 7 VARIABLE FREQUENCY DRIVE FOR WELL PUMP IN MCC SECTION 2A.
- 8 CIRCUIT FOR BOOSTER PUMP IN CHEMICAL ROOM.
- 9 CONTROL RELAYS.
- 10 24V DC CONTROL SIGNAL FROM VFD.
- 11 24V DC CONTROL SIGNAL FROM SCADA PANEL.
- 12 SCADA PANEL IN MCC SECTION 1A, REFER TO SCADA DESIGN DOCUMENTS (BY OTHERS).
- 13 3/4" CONDUIT AND CIRCUIT TO BOOSTER PUMP IN CHEM. ROOM.
- 14 THERMOSTAT FOR EUH-1. PROVIDE BY HC INSTALLED BY EC.
- 15 THERMOSTAT FOR F-1. PROVIDE BY HC INSTALLED BY EC.
- 16 PROVIDE A 4' X 4' X 3/4" PAINTED PLYWOOD COMMUNICATIONS BACKBOARD. PROVIDE ONE 4" CONDUIT STUB OUT TO EXTERIOR OF BUILDING FOR COMMUNICATIONS CABLING. COORDINATE WITH COMMUNICATIONS SERVICE PROVIDER.
- 17 ALL EXPOSED ELECTRICAL ENCLOSURES IN THIS ROOM TO BE NEMA 4X CORROSIVE RESISTANT.
- 18 ALL EXPOSED ELECTRICAL ENCLOSURES IN THIS ROOM TO BE NEMA 3R.
- 19 LINE VOLTAGE THERMOSTAT AND WINTER/SUMMER SWITCH FOR EUH-2. PROVIDED BY HC INSTALLED BY EC.
- 20 REMOTE SWITCH WITH PILOT LIGHT TO OPERATE EF-1. NEMA 3R ENCLOSURE REFER TO ELECTRICAL CONNECTION SCHEDULE NOTE #8.
- 21 EC TO PROVIDE LIMIT SWITCH ON THIS DOOR. REFER TO ELECTRICAL CONNECTION SCHEDULE NOTE #10.
- 22 1" CONDUIT & CIRCUIT FROM SOLENOID VALVE TO CONTROLS.
- 23 1" CONDUIT FROM CONTROLS TO LEVEL TRANSDUCER AND CONDUIT FOR PUMP MOTOR (REFER TO SCHEDULE FOR SIZE).
- 24 CONTROLS FROM CONTROLS TO FLOW METER - SIZE & NUMBER AS REQUIRED BY METER MANUFACTURER.
- 25 CONDUITS FOR GENERATOR POWER FEEDER AND DATA TO GENERATOR CONTROL PANEL.

DATE		REVISIONS		REVISIONS	
JUNE 2025		NO.	DATE	NO.	DATE
DRAFTER		REMARKS		REMARKS	
JCRA/P/JUN		PER		WONIR	
CHECKED		7/10/25			
DPOP					
PROJECT NO.					
240564					



1 CHLORINE BOOSTER PUMP & SOLENOID VALVES HARDWARE SCHEMATIC
E800 SCALE: NONE



2 CHLORINE BOOSTER PUMP & SOLENOID VALVE CONTROL SCHEMATIC
E800 SCALE: NONE

FEEDER SCHEDULE				
ID	AMPS	CONDUCTORS & CONDUIT SIZES		DEVICES FEED
20/3W	20	(2) #10, #10N, #10G - 3/4" EMT		CHLORINE BOOSTER PUMP (CBP-1)
50/3W	50	(2) #1/0, #1/0N, #6G - 1.5" EMT		PANEL W5
180/3W	180	(3) #4/0, #4G - 3" EMT		WELL PUMP (WP)
300/4W	300	(3) #300, #300N, #4G - 3" EMT		ATS, MCC
300/S	300	(3) #300, #300N, #4G - 3" EMT		CT, MD

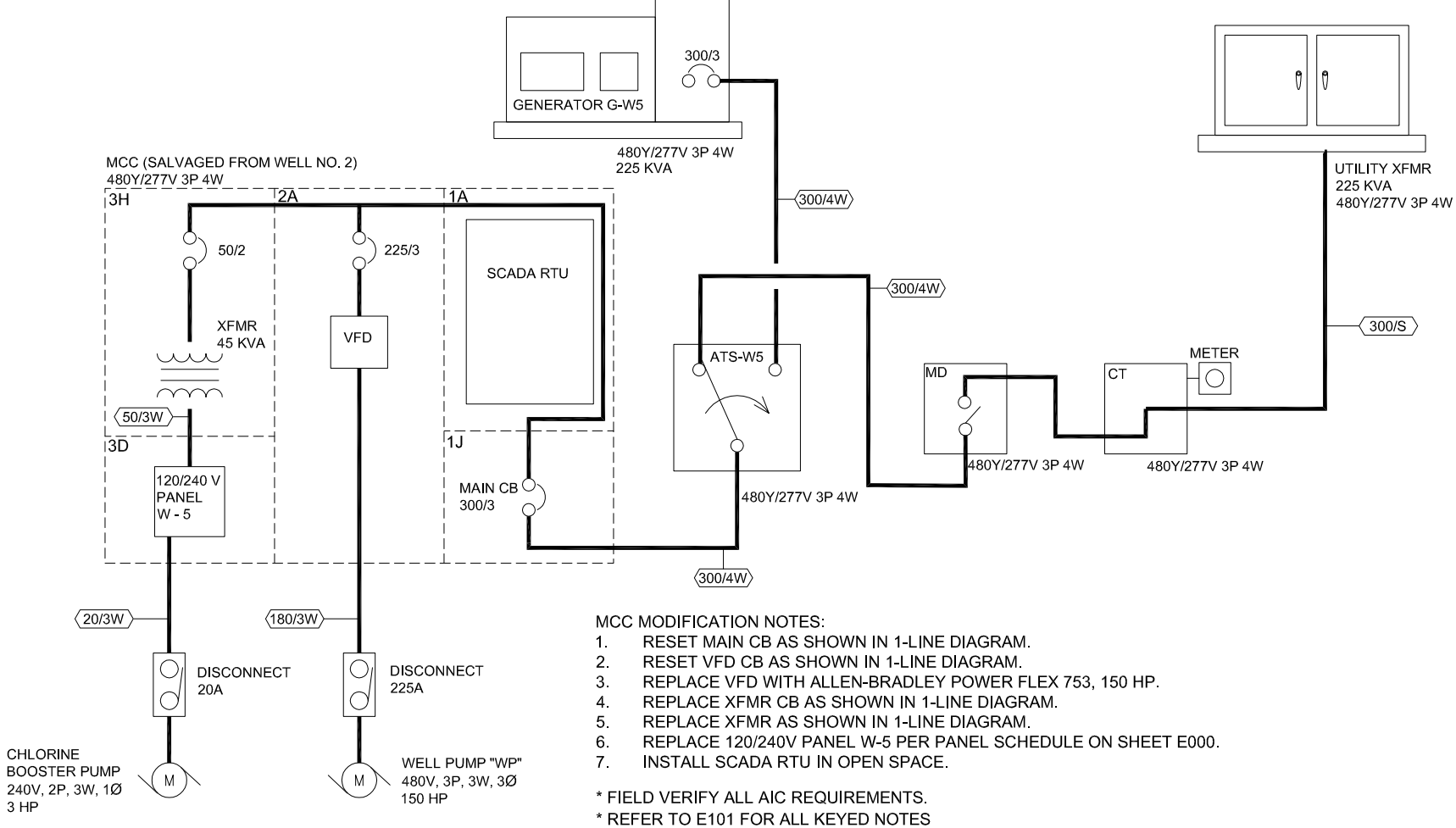
CONDUCTOR MATERIAL: COPPER

PANEL SCHEDULE

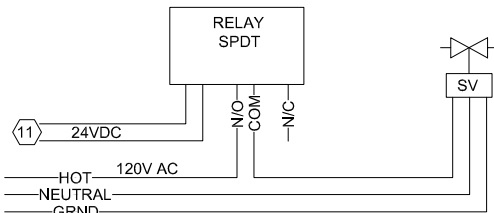
PANEL DESIGNATION: MCC
LOCATION: PUMP ROOM (101)
MOUNTING: FLOOR
MAIN BREAKER: 300 amps
VOLTS: 480/277
WIRES: 4
FEED FROM: ATS-W5
PHASE: 3
POLES: 3
BUS AMPS: 400

CIRCUIT #	BREAKER AMPS	POLES	DESCRIPTION	LOAD (KVA)		
				A	B	C
1	225	3	WP-1 (2A)	47.80	47.80	47.80
2	50	3	XFMR-1 (3H)	15.00	15.00	15.00
3			OPEN SPACE (1H)			
4			OPEN SPACE (3A)			
5						
TOTAL CONNECTED PHASE LOADS				62.80	62.80	62.80
TOTAL CONNECTED LOADS				188.41		

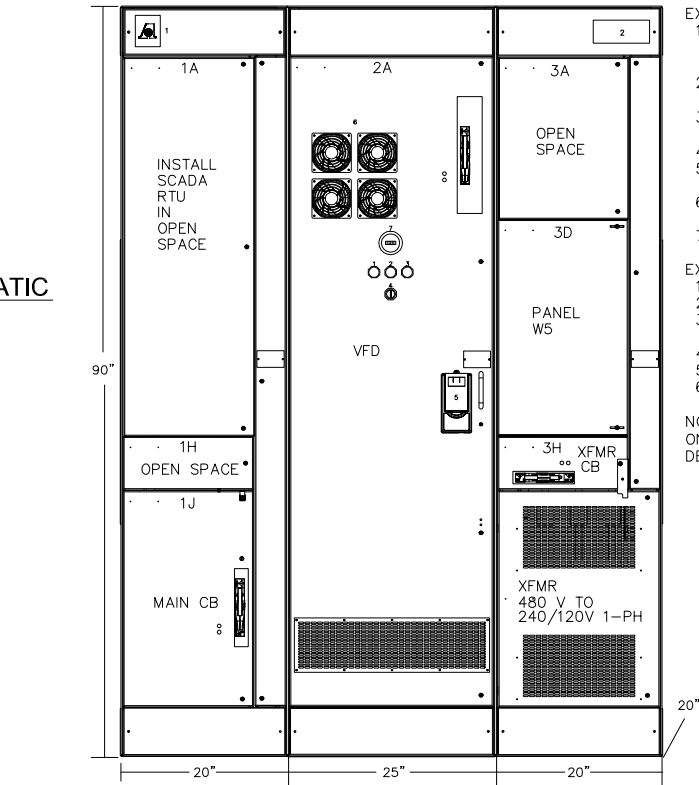
CONNECTED			ADJUSTED	LOAD FACTOR	CONNECTED			ADJUSTED	LOAD FACTOR
LIGHTING:			0.29	0.37	(125%)	HEATING:			18.50
LARGEST MOTOR (WP-1):			143.41	179.27	(125%)	COOLING:			4.20
OTHER MOTORS (CBP-1):			2.88	2.88	(100%)	ALL OTHER:			16.43
RECEPTACLES:			2.70	2.70	(100%)	TOTAL LOAD:			188.41 KVA
RECEPTACLES:			0.00	0.00	(50%)	BALANCED 3-PHASE LOAD:			226.6 AMPS



3 ELECTRICAL ONE-LINE DIAGRAM
E800 SCALE: NONE



4 WELL PUMP PRELUBE SOLENOID VALVE CONTROL SCHEMATIC
E800 SCALE: NONE



5 EXISTING WELL NO. 2 MOTOR CONTROL CENTER (SALVAGE FOR WELL NO.5)
E800 SCALE: NONE

- EXISTING MCC INFORMATION:
- ALLEN-BRADLEY BULLETIN 2100 CETNERLINE MCC (S/N: 6503130834/0001).
 - NEMA TYPE 1G ENCLOSURES WITH GASKETED DOORS.
 - PAINTED FINISH - GRAY (ANSI-61) EXTERIOR AND WHITE INTERIOR.
 - 42,000 AIC BUS BRACING.
 - 600 AMP TIM PLATED COPPER HORIZONTAL BUS.
 - 300 AMP TIM PLANTED COPPER VERTICAL BUS.
 - CLASS IIB WIRING.
- EXISTING DEVICES:
- MAIN CB: 300A SET @ 225A.
 - VFD CB: 250A SET @ 180A.
 - VFD: ALLEN-BRADLEY POWER FLEX 753, 125 HP.
 - XFMR CB: 40A.
 - XFMR: 15KVA.
 - PANEL W5: 18 CRTS., 100A MB.
- NOTE: SEE 3/E800 - ELECTRICAL ONE-LINE DIAGRAM FOR NEW REQUIRED DEVICES.