GOODHUE COUNTY MINNESOTA

TO EFFECTIVELY PROMOTE THE SAFETY, HEALTH, AND WELL-BEING OF OUR RESIDENTS

PARK BOARD AGENDA

GOODHUE COUNTY LEC - EMERGENCY OPERATIONS CENTER
430 W 6TH ST, RED WING, MN

OCTOBER 7, 2021
1:00 PM

VIRTUAL MEETING OPTION NOTICE.

The Goodhue County Parks, Trails, and Recreation Advisory Board will be conducting a Park Board meeting on October 7, 2021, at 1:00 PM in the Goodhue County Law Enforcement Center's Emergency Operations Center. Goodhue County Public Works staff and some Park Board members will be present at the meeting location, with some Park Board members joining the meeting virtually. The public may attend the meeting from a remote site by logging into https://global.gotomeeting.com/join/705880437 or by calling 877-309-2073 OR 571-317-3129 any time during the meeting. Access Code: 705-880-437

Review And Approve Minutes From Previous Meeting.

Documents:

07-22-21 PB Minutes Draft.pdf

Review And Approve The Agenda.

Byllesby Park Pavilion Design.

Documents:

Byllesby Pavilion Design.pdf

Byllesby Park Berm Design.

Documents:

Byllesby Park Berm Planting Plan.pdf

Fishing At Lake Byllesby.

Documents:

Fishing at Lake Byllesby.pdf

Next Meeting Date.

Adjourn.

The minutes will be presented for approval at the next Park Board meeting.

Goodhue County Parks, Trails and Recreation Advisory Board

Meeting Date: July 22, 2021
Meeting Location: Goodhue County Public Works – Red Wing, MN
(Virtual Meeting Optional)
Meeting Time: 10:00 AM

Members

Brad Anderson	Commissioner
Todd Greseth	Commissioner
Mike Melstad	1st District Rep
Mairi Doerr	2nd District Rep
Bernie Overby	3rd District Rep
Barbara Pratt	4th District Rep
Janie Farrar	5th District Rep
Scott Roepke	Cannon Valley Trail Rep
Roxanne Bartsh	Goodhue Pioneer Trail Rep
Greg Isakson	Staff: Director of Public Works
Jennifer Ziemer	Staff: Admin Assistant- PW

Absent: Janie Farrar and Roxanne Bartsh.
Virtual: Barbara Pratt and Scott Roepke.

Bernie Overby called the meeting to order at 10:06 AM. It was moved by Commissioner Anderson, seconded by Mairi Doerr, and carried to approve the June 30, 2021, Park Board Minutes.

It was moved by Mike Melstad, seconded by Bernie Overby, and carried to approve the agenda.

The Park Board reviewed the draft Cascade Canoe & Kayak Launch Rules Ordinance. The Park Board approved the following changes to the ordinance:

- Correct spelling error in 2. f. from "personnel" to "personal"
- Add "(fireworks)" to 2. n. following the word "explosives"
- Add ", including fishing," after the words "other purposes" in #3
- Add "The intent of this facility is to provide canoe and kayak access to the Cannon River" to the beginning of #3 and move it up to the #1 position
- #1 will become #2
- #4 will become #3
- #5 will become #4
- Move #2 down to become #5

It was moved by Mike Melstad, seconded by Mairi Doerr, and carried to approve the draft ordinance with the changes listed above, and request approval and enactment by the County Board. Staff agreed to revise the ordinance document and send it out to the Park Board for their final review before enactment. The Park Board would like to see the rules posted in the same languages that Dakota County uses to post safety notices at Byllesby Dam.

It was moved by Commissioner Anderson, seconded by Mairi Doerr and Scott Roepke, and carried to name the new pavilion in honor of Richard Samuelson, and to use donations that were made in his memory to purchase a plaque that honors Richard's commitment to parks and trails. Commissioner Anderson, Scott Roepke, and Greg Isakson all noted how different facilities, properties, and amenities would not exist today if it was not for Richard's advocacy.

The Park Board discussed keeping a portable toilet at Byllesby Park year-round. It was moved by Commissioner Greseth, seconded by Mike Melstad, and carried to keep two portable toilets at Byllesby Park throughout the fall until temperatures drop, then reduce it to one portable over the colder winter months. Staff agreed to check with Rent 'N' Save regarding use during fall months to see if one portable would be sufficient in fall of 2022, or if two is most suitable. Mairi Doerr commented that she liked the idea of mirroring the services provided at Dakota County Lake Byllesby Regional Park to help create the image of one large regional park, and the rest of the Park Board supported that as well.

The Park Board discussed different options for playground replacement in 2027. They recommended considering moving the playground, and adding $20,000 per year to the budget in 2022-2027 for replacement costs. Possible grants and/or private funding will be researched before 2027.

Byllesby Park, Nielsen Memorial Preserve, and Cannon Valley Trail updates were provided as part of the agenda.

The next meeting date is to be determined.

It was moved by Mike Melstad, seconded by Bernie Overby, and carried to adjourn the meeting at 12:00 PM.

Respectfully submitted,
Jennifer Ziemer
Goodhue County Administrative Assistant

Greg Isakson, P.E.
Public Works Director/County Engineer
Goodhue County Public Works Department

2140 Pioneer Road
Red Wing, MN 55066
Office (651) 385.3025

TO: Goodhue County Parks, Trails, and Recreation Advisory Board

FROM: Greg Isakson, Public Works Director

RE: 07 Oct 21 Park Board Meeting
Byllesby Park Pavilion & Essential Services Project

Date: 01 Oct 21

Summary
It is requested that the Park Board review and approve or request changes to the 50% Byllesby pavilion construction plans that have been prepared by LOCUS Architecture.

Background
The future pavilion at Byllesby Park is part of the Greater MN Regional Parks & Trails Commission grant to bring a larger gathering space, modern restroom facilities, potable drinking water, and electrical outlets to the park.

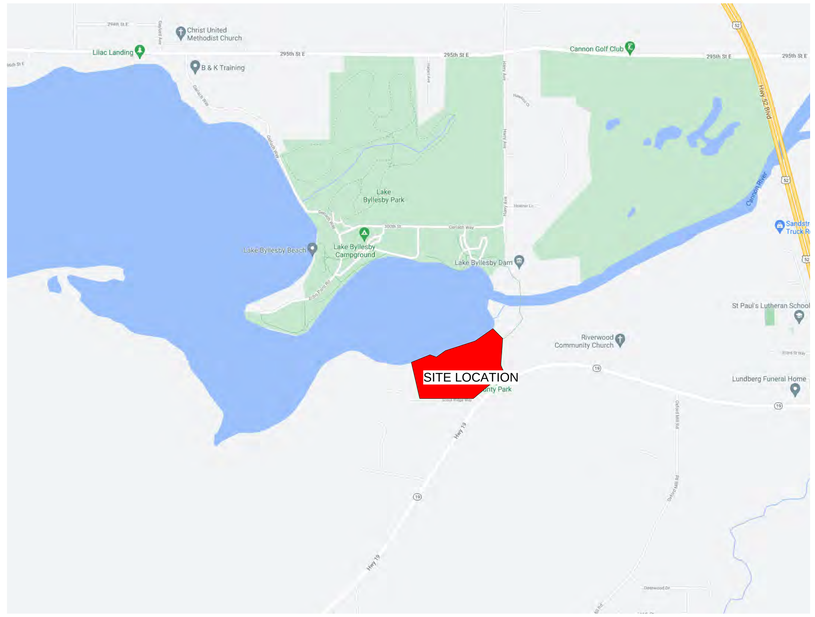
Once 100% complete, these plans will be presented to Stanton Township for approval of a Zoning Certificate, and submitted for a County Building Permit.

Archaeological work was completed on July 8th. The final report has been prepared and submitted to the State Historic Preservation Office (SHPO). The SHPO review is due back to the County by October 8th. Once the report is cleared and the review letter is submitted to the DNR, the existing middle picnic shelter can then be relocated. Several proposed sidewalk/septic locations are outside of the initial archaeological survey area, and staff will continue to work with the architect and/or SHPO to approve these locations or modify the construction plans.

Staff is hoping to post this project for bidding in late 2021 or early 2022, with the bulk of the construction occurring in 2022.

Recommendations
It is the recommendation of staff that the Park Board approve the 50% plans prepared by LOCUS Architecture.

1 PAVILION
NOT TO SCALE



2 LOCATION MAP
NOT TO SCALE

3 BEACH BATH
NOT TO SCALE

DRAWING ABBREVIATIONS

AC	air conditioner
	above counter
ACT	acoustical ceiling tile
ADA	Americans with Disabilities Act
AFF	above finish floor
APPROX	approximate(ly)
ARCH	architect(ural)
BC	base cabinet
	below counter
BLDG	building
B.O.	bottom of, back of
BSMT	basement
BTWN	between
CAB	cabinet
CJ	control joint
CL	center line
CLR	clear
CLG	ceiling
CMU	concrete masonry unit
CONC	concrete
CONT	continuous
DEMO	demolition, demolish
DIA	diameter
DIM	dimension
DR	door
DTL	detail
DW	dishwasher
DWG	drawing
ELEC	electrical
EQ	equal
(E)	existing
EXT	exterior
FFE	finish floor elevation
FLR	floor, flooring
FNDN	foundation
FTG	footing
F.O.	front of, face of
FRP	fiberglass reinforced panel
GA	gauge
GC	general contractor
GYP BD	gypsum board
HT	high, height
HM	hollow metal
HVAC	heating/ventilation/ air conditioning
INSUL	insulation, insulate
INT	interior
LAV	lavatory
LVL	laminated veneer lumber
MAX	maximum
MECH	mechanical
MIN	minimum
MISC	miscellaneous
MO	masonry opening
(N)	new
N/A	not applicable
NIC	not in contract
NTS	not to scale
OC	on center
PLAM	plastic laminate
R	riser
RCP	reflected ceiling plan
REF	refrigerator
REV	revised, revision
RO	rough opening
SF	square foot
SIM	similar
SIP	structural insulated panel
SS	stainless steel
STRUCT	structural
TR	tread
TBD	to be determined
T.O.	top of
TYP	typical
UC	upper cabinet
UNO	unless noted otherwise
VERT	vertical
VIF	verify in field
W/O	without
WDW	window
WRB	water resistant barrier
XPS	extruded polystyrene

LOCUS ARCHITECTURE

ARCHITECT OF RECORD

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Wynne Yelland
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LAKE BYLLESBY PARK PAVILION + BEACH BATH

50% PROGRESS SET

NOT FOR CONSTRUCTION

9/21/2021

CLIENT

GOODHUE COUNTY

No.	Description	Date

SHEET NAME

TITLE SHEET

SHEET NUMBER

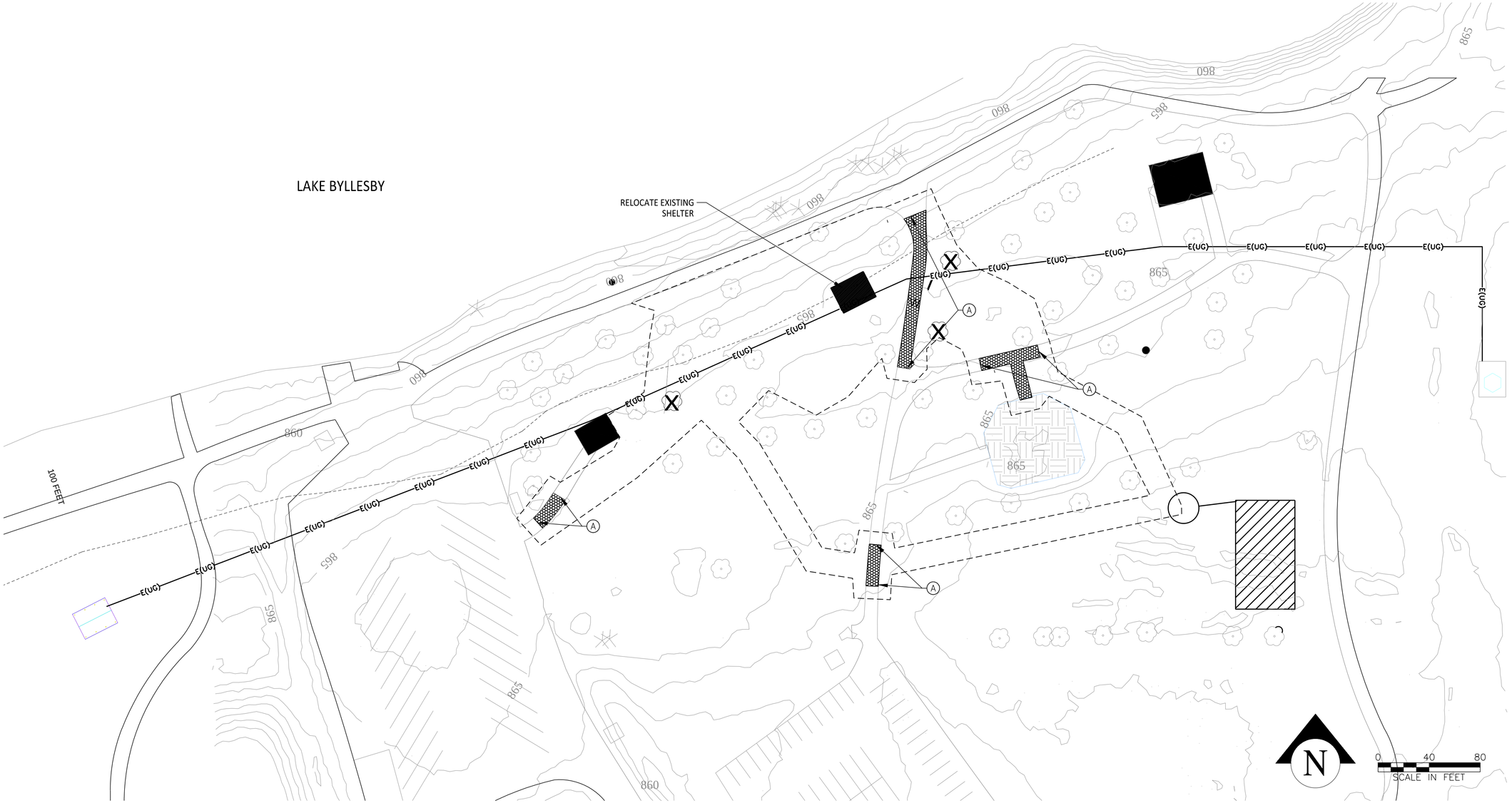
A-000

EXISTING CONDITIONS AND SITE REMOVALS NOTES

1. EXISTING CONDITIONS ARE BASED ON LiDAR, NO SURVEY WAS PERFORMED. SRF CANNOT BE HELD RESPONSIBLE FOR DISCREPANCIES BETWEEN EXISTING CONDITIONS AS SHOWN AND ACTUAL FIELD CONDITIONS.
2. CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS PRIOR TO THE START OF CONSTRUCTION, AND NOTIFYING THE CIVIL ENGINEER AND OWNER IMMEDIATELY OF ANY DISCREPANCIES. THIS INCLUDES, BUT NOT LIMITED TO, TOPOGRAPHY, ELEVATIONS, UTILITIES, VEGETATION, AND OTHER RELATED ITEMS.
3. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL UTILITY LOCATES. THE CONTRACTOR SHALL SUBMIT A TICKET FOR PUBLIC UTILITY LOCATES 48 HOURS PRIOR TO ANY GRADING, EXCAVATION, OR UTILITY WORK THROUGH "GOPHER STATE ONE CALL" (GSOC) AT WWW.GSOCSUBMIT.ORG, OR CALLING 811, ALONG WITH ANY FOLLOW-UP TO MISSING INFORMATION. THE CONTRACTOR MUST HIRE A PRIVATE UTILITY LOCATING SERVICE TO LOCATE PRIVATE UTILITIES IN THE CONSTRUCTION AREA PRIOR TO ANY EXCAVATION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
4. CONTRACTOR SHALL PLACE ALL NECESSARY EROSION CONTROL MEASURES REQUIRED TO MAINTAIN SITE STABILITY PRIOR TO EXECUTING ANY SITE REMOVALS AND IMPROVEMENTS. SEE EROSION CONTROL PLAN AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND RELATED DOCUMENTS.
5. CONTRACTOR SHALL COORDINATE LIMITS OF REMOVALS WITH PROPOSED IMPROVEMENTS AND FIELD VERIFY CONDITION OF EXISTING APPURTENANCES TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, REPAIRING, OR REPLACING MISCELLANEOUS ITEMS (SUCH AS FENCES, SIGNS, IRRIGATION HEADS, ETC.) THAT MAY BE DAMAGED BY CONSTRUCTION. CONTRACTOR SHALL PROTECT SURFACE AND SUBSURFACE FEATURES NOT NOTED FOR REMOVAL. PROVIDE SAWCUT AT PAVEMENT EDGE REMOVAL. PROVIDE SMOOTH TRANSITION OF ANY REMOVAL OR IMPROVEMENTS AT DISTURBANCE EDGE. HAUL AND DISPOSE OF ALL REMOVAL ITEMS OFF-SITE.
6. CONTRACTOR SHALL DEMOLISH AND REMOVE ALL ITEMS ILLUSTRATED ON THE PLANS AND OTHER ITEMS, AS NECESSARY FOR THE PROJECT AND RELATED IMPROVEMENTS. THIS INCLUDES ITEMS SUCH AS BUILDINGS, ACCESSORY STRUCTURES, FOUNDATIONS, PAVEMENTS, DEBRIS, VEGETATION, SUBSURFACE ITEMS (UTILITIES), UNDESIRED SOIL, AND OTHER RELATED ITEMS. VERIFY ALL SOIL CORRECTIONS WITH GEOTECH REPORT AND RECOMMENDATIONS, UNLESS NOTED OTHERWISE. HAUL AND DISPOSE OF ALL REMOVAL ITEMS OFF-SITE.
7. CONTRACTOR SHALL REMOVE, REPAIR AND/OR RELOCATE EXISTING PRIVATE OR PUBLIC UTILITIES AS NECESSARY, WHETHER STATED ON THE PLANS OR NOT, INCLUDING ANY RELATED PERMITS AND FEES. CONTRACTOR TO COORDINATE AND RECEIVE APPROVAL FOR ACTIVITIES WITH OWNER AND UTILITY COMPANIES BEFORE STARTING WORK.
8. CLEAR, GRUB, AND REMOVE ALL TREES AND VEGETATION WITHIN THE CONSTRUCTION LIMITS, OR AS NOTED. STRIP TOPSOIL, STOCKPILE, AND REDISTRIBUTE PER GRADING PLAN.
9. TREE PROTECTION FENCING SHALL BE INSTALLED AT THE DRIP LINE OF TREES TO REMAIN, OR AS ILLUSTRATED, WITHIN LIMITS OF DISTURBANCE PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED THROUGHOUT THE PROJECT. NO DETRIMENTAL CONDITIONS TO OCCUR AT TREE PRESERVATION AREAS, SUCH AS STORAGE OF EQUIPMENT/MATERIALS, CHEMICAL WASH, OR EXCAVATION.
10. CONTRACTOR SHALL PROVIDE ALL STAGING AND TEMPORARY TRAFFIC CONTROL FOR THE PROJECT, AS APPROVED BY THE OWNER AND GOVERNING AGENCY. PROVIDE MINIMAL DISRUPTION TO ADJACENT PROPERTIES AND STREETS, OR AS DIRECTED BY PROPERTY OWNER.
11. CONTRACTOR SHALL PROVIDE TEMPORARY CONDITIONS, SUCH AS CONSTRUCTION TRAILER, TEMPORARY FENCING, AND OTHER SECURITY MEASURES FOR THE LENGTH OF THE ENTIRE PROJECT.
12. ALL CONSTRUCTION PERMITS, APPLICATIONS AND FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS NOTED OTHERWISE.
13. FOR ANY SALVAGE AND/OR REINSTALL ITEMS, CONTRACTOR TO PROVIDE ALL WORK RELATED TO RE-LOCATION (TEMP AND PERMANENT), STORAGE, AND PROTECTION.

REMOVAL LEGEND

- PROPERTY LINE
- EXISTING TOPOGRAPHY TO REMAIN (GRAY/FADED LINEWORK, TYP.)
- ITEMS TO BE REMOVED (BLACK LINEWORK, TYP.)
- REMOVE BITUMINOUS TRAIL
- CLEAR AND GRUB (TREE)
- TREE PROTECTION
- SAWCUT PAVEMENT (FULL-DEPTH)
- REMOVE CURB AND GUTTER
- REMOVE CHAIN-LINK FENCE
- LIMITS OF DISTURBANCE



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LAKE BYLLESBY PARK PAVILION

50% PROGRESS SET

NOT FOR CONSTRUCTION

9/22/2021

CLIENT

GOODHUE COUNTY

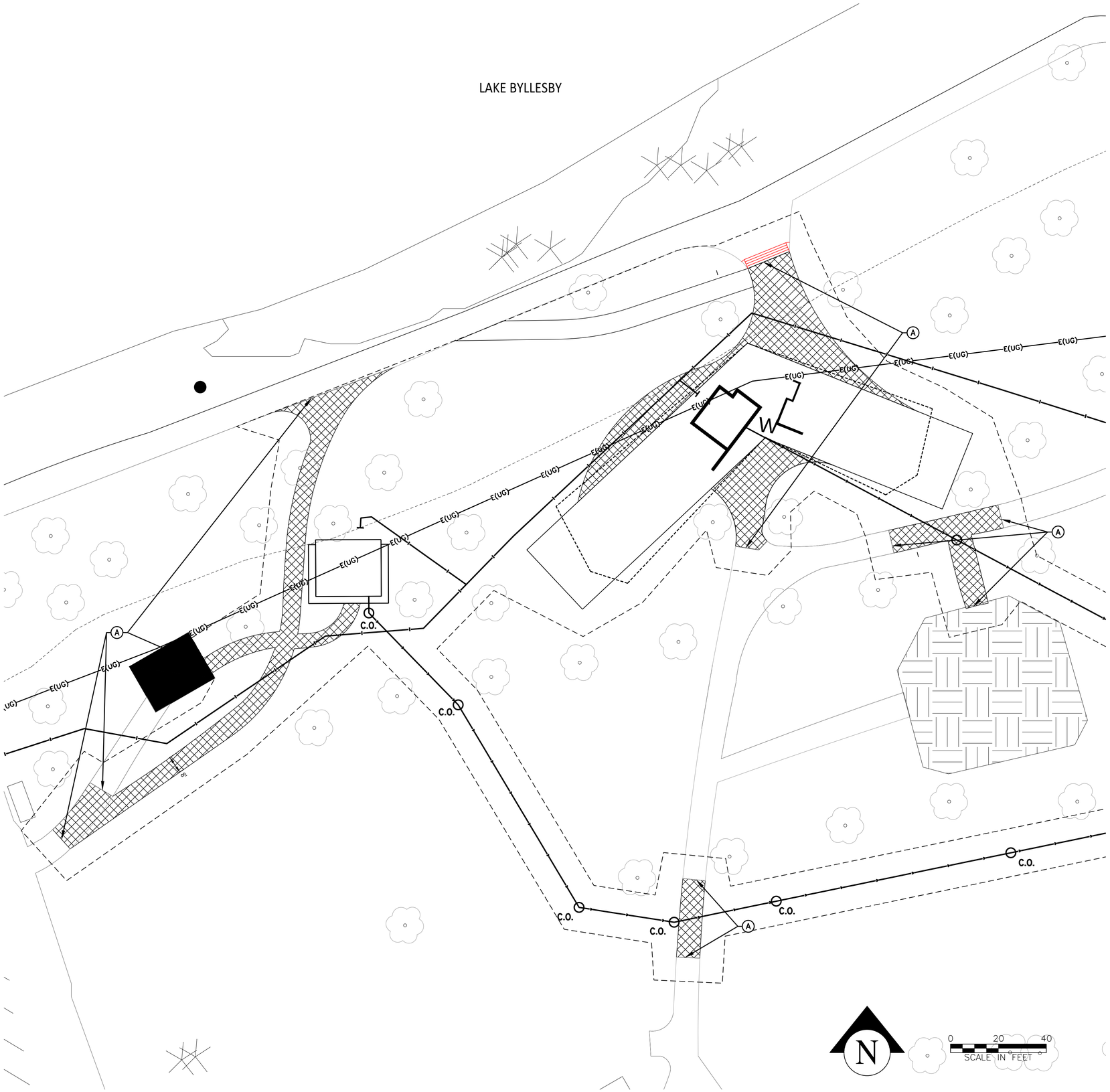
No.	Description

SHEET NAME

REMOVALS PLAN

SHEET NUMBER

C-100



SITE NOTES

1. SEE EXISTING CONDITIONS AND REMOVAL PLAN, ALONG WITH ANY RELATED SURVEYS FOR DETAILS ON PROPERTY BACKGROUND INFORMATION.
2. REFER TO ARCHITECTURAL PLANS FOR MORE INFORMATION ON BUILDINGS, MONUMENT SIGNS, TRASH ENCLOSURES, AND OTHER RELATED ITEMS. VERIFY WITH ARCHITECTURAL PLANS THE EXACT BUILDING DIMENSIONS AND LOCATIONS OF EXITS, RAMPS, TRUCK DOCKS/SERVICE, AND OTHER RELATED BUILDING ITEMS.
3. SITE LIGHTING SHOWN ON PLAN IS FOR REFERENCE ONLY. REFER TO LIGHTING PLAN PREPARED BY OTHERS FOR SITE LIGHTING LOCATIONS, DETAILS AND PHOTOMETRICS.
4. ALL DIMENSIONS ARE TO FACE OF CURB, EDGE OF CONCRETE, OR EXTERIOR FACE OF BUILDING, UNLESS NOTED OTHERWISE.
5. ALL CURB RADII SHALL BE 5.0 FEET (TO FACE OF CURB), UNLESS OTHERWISE NOTED.
6. ALL CURB AND GUTTER SHALL BE CONCRETE B612 UNLESS OTHERWISE NOTED.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGGERS, AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE CITY PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES IN PUBLIC RIGHT-OF-WAY SHALL CONFORM TO APPROPRIATE MNDOT STANDARDS, OR AS APPROVED.
8. BITUMINOUS PAVEMENT AND CONCRETE SECTIONS TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER, OR AS NOTED. PAVEMENT AND OTHER IMPROVEMENTS TO ADHERE TO ALL AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS FOR ACCESSIBILITY, INCLUDING SLOPE. CONTACT ENGINEER IMMEDIATELY INVOLVING ANY DISCREPANCIES.
9. CONTRACTOR SHALL MAINTAIN FULL ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES.
10. CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION STAKING.
11. CONTRACTOR SHALL PROVIDE ALL SITE GOVERNMENTAL PERMITS AND FEES.

SIGNAGE AND STRIPING NOTES

1. ALL TRAFFIC SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE STANDARDS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD), OR AS NOTED OTHERWISE.
2. PARKING LOT STRIPING SHALL BE 4" WIDE COLOR WHITE, TWO COATS OF PAINT. CONTRACTOR SHALL PAINT ANY/ALL DIRECTIONAL TRAFFIC ARROWS AS SHOWN IN WHITE (TWO COATS).
3. ACCESSIBLE PARKING SIGNS AND MARKINGS PER LATEST ADA CODE AND REQUIREMENTS. CONTRACTOR SHALL PAINT THE INTERNATIONAL SYMBOL OF ACCESSIBILITY IN EACH DESIGNATED ACCESSIBLE STALL IN BLUE BACKGROUND WITH WHITE BORDER (TWO COATS OF PAINT). CONTRACTOR SHALL PAINT THE WORDS "NO PARKING" IN EACH ACCESSIBLE ISLE ADJACENT TO AN ACCESSIBLE SPACE IN WHITE LETTERS MINIMUM 12" IN HEIGHT. SIGNS TO BE LOCATED AT THE HEAD OF THE PARKING SPACE. SEE ACCESSIBLE PARKING DETAILS.
4. ALL SIGNS SHALL INCLUDE MOUNTING HARDWARE, POST, CONCRETE FOOTING AND CASING WHERE REQUIRED. CONCRETE CASING REQUIRED IN LOCATIONS WHERE POST IS NOT PROTECTED BY CURB.
5. IF NOTED, ALL STOP SIGNS SHALL INCLUDE A 12" WIDE PAINTED STOP BAR IN WHITE PAINT (TWO COATS) PLACED AT THE STOP SIGN LOCATION, A MINIMUM OF 4' FROM CROSSWALK. ALL STOP BARS SHALL EXTEND FROM DIRECTIONAL TRANSITION BETWEEN LANES TO THE CURB.
6. ALL SIGNS SHALL BE PLACED 18" BEHIND THE BACK OF CURB, UNLESS OTHERWISE NOTED.

SITE LEGEND

- PROPERTY LINE
- EASEMENT
- SETBACK LINE (PER CODE)
- EXISTING CONDITIONS
- BITUMINOUS PAVEMENT
- 8" CONCRETE PAVEMENT
- 4" CONCRETE WALK
- COMPACTED AGGREGATE
- TRUNCATED DOMES
- CURB AND GUTTER
- CURB AND GUTTER (TIP-OUT)
- CURB AND GUTTER (TAPER TO FLUSH)
- PARKING LOT POLE LIGHT
- CONCRETE WHEEL STOP
- 16 PARKING SPACES PER ROW
- POND NORMAL WATER LINE (NWL)
- LIMITS OF DISTURBANCE

Ⓐ SITE KEY NOTES

A. BITUMINOUS PAVEMENT - MATCH INTO EXISTING

B.

N

0 20 40
SCALE IN FEET

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LAKE BYLLESBY PARK PAVILION

50% PROGRESS SET

NOT FOR CONSTRUCTION

9/22/2021

CLIENT

GOODHUE COUNTY

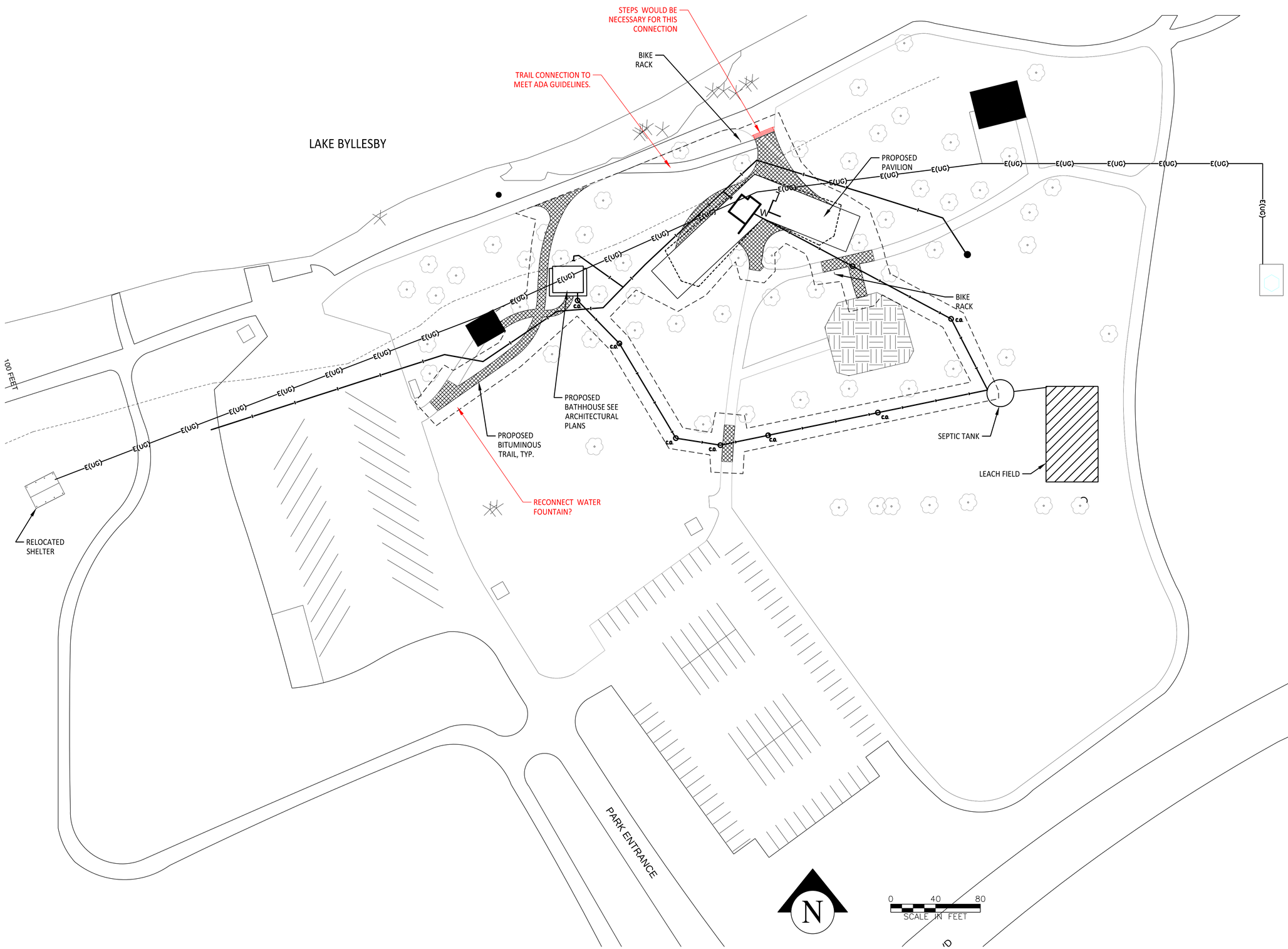
No.	Description

SHEET NAME

SITE PLAN

SHEET NUMBER

C-102



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GOODHUE COUNTY

No.	Description

SHEET NAME

SITE PLAN

SHEET NUMBER

C-101

GRADING, DRAINAGE, AND EROSION CONTROL NOTES

1. THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-2, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."
2. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM THE PLANS.
3. CONTRACTOR TO PROVIDE ALL WORK AND MATERIALS FOR GRADING, SUBSOIL CORRECTIONS (IMPORT/EXPORT), RETAINING WALLS, TOPSOIL, EROSION CONTROL AND OTHER RELATED ITEMS.
4. SPOT ELEVATIONS REPRESENT FINISHED SURFACE GRADES, GUTTER/FLOW LINE, FACE OF BUILDING, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.16 FEET. RIM ELEVATIONS SHOWN ON PLANS DO NOT REFLECT SUMPED ELEVATIONS.
6. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE MINIMUM OF 4 INCHES OF TOP SOIL AND SEED/MULCH OR SOD. THESE AREAS SHALL BE WATERED/MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION IS ESTABLISHED. STRIP, STOCKPILE, AND REDISTRIBUTE EXISTING TOPSOIL, AS SUITABLE.
7. FOR SITE RETAINING WALLS "TW" EQUALS SURFACE GRADE AT TOP FACE OF WALL (NOT TOP OF WALL), "GW" EQUALS SURFACE GRADE AT WALL GRADE TRANSITION, AND "BW" EQUALS SURFACE GRADE AT BOTTOM FACE OF WALL (NOT BOTTOM OF BURIED WALL COURSES).
8. STREETS MUST BE CLEANED AND SWEPT WHENEVER TRACKING OF SEDIMENTS OCCURS AND BEFORE SITES ARE LEFT IDLE FOR WEEKENDS AND HOLIDAYS. A REGULAR SWEEPING SCHEDULE MUST BE ESTABLISHED.
9. DUST SHALL BE ADEQUATELY CONTROLLED.
10. ALL SLOPES 1:3 (V:H) OR GREATER REQUIRED TO RECEIVE SURFACE EROSION CONTROL WHETHER IT IS INDICATED ON THE PLAN OR NOT: MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES.
11. ALL STORM DRAINS AND INLETS MUST BE PROTECTED UNTIL ALL SOURCES OF POTENTIAL DISCHARGE ARE STABILIZED.
12. TEMPORARY SOIL STOCKPILES MUST HAVE EFFECTIVE SEDIMENT CONTROL AND CAN NOT BE PLACED IN SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT AMOUNT OF SILT, CLAY, OR ORGANIC COMPOUNDS ARE EXEMPT EX: CLEAN AGGREGATE STOCK PILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES.
13. FINAL STABILIZATION REQUIRES THAT ALL SOIL DISTURBING ACTIVITIES HAVE BEEN COMPLETED AND THAT DISTURBED AREAS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH 70% OF THE EXPECTED FINAL DENSITY, AND THAT ALL PERMANENT PAVEMENTS HAVE BEEN INSTALLED. ALL TEMPORARY BMP'S SHALL BE REMOVED, DITCHES STABILIZED, AND SEDIMENT SHALL BE REMOVED FROM PERMANENT CONVEYANCES AND SEDIMENTATION BASINS IN ORDER TO RETURN THE POND/BASIN TO DESIGN CAPACITY.
14. THE WATERSHED DISTRICT OR THE CITY MAY HAVE REQUIREMENTS FOR INSPECTIONS VERIFYING PROPER CONSTRUCTION OF THE BEST MANAGMENT PRACTICES (BMP) - THE MORE RESTRICTIVE REQUIREMENT SHALL APPLY.
15. SEE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) NOTES AND DETAILS FOR ADDITIONAL EROSION CONTROL NOTES AND REQUIREMENTS. CONTRACTOR SHALL PROVIDE ALL REQUIRED EROSION CONTROL PERMITS/FEES, INSPECTORS, INSPECTIONS, AND DOCUMENTATION. PLAN REPRESENTS MINIMAL EROSION CONTROL, CONTRACTOR TO PROVIDE ADDITIONAL MEANS AND METHODS FOR THE PROJECT AS NECESSARY TO MAINTAIN COMPLIANCE.
16. CONTRACTOR TO PROVIDE ALL SUBGRADE SOIL CORRECTIONS, INCLUDING REMOVAL OF SUBGRADE DEBRIS, FOR PROJECT IMPROVEMENTS SUCH AS BUILDING, PAVEMENT, UTILITY, RETAINING WALLS, AND OTHER RELATED ITEMS. REFER TO THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT FOR ANY ADDITIONAL SITE PREPARATION INFORMATION OR REQUIREMENTS.
17. IF GROUND WATER IS PRESENT IN THE EXCAVATION, OR IF THE EXPOSED SOILS ARE WET AND UNSTABLE, CONTACT THE OWNER OR ENGINEER FOR A RECOMMENDATION FROM THE GEOTECHNICAL ENGINEER.
18. CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES PRIOR TO COMMENCING GRADING ACTIVITIES AND SHALL MAINTAIN SAID MEASURES FOR DURATION OF CONSTRUCTION ACTIVITIES. UPON ESTABLISHMENT OF TURF, THE CONTRACTOR SHALL REMOVE THE EROSION CONTROL MEASURES AND DISPOSE OF OFF SITE.
19. CONTRACTOR TO PREVENT DIRT AND/OR DEBRIS FROM ENTERING STORM SEWER OR BEING TRANSPORTED OFF SITE IN AN UNCONTROLLED MANOR. CONTRACTOR TO VERIFY AT PROJECT CLOSEOUT THAT STORM SEWER SYSTEM IS CLEAR OF SEDIMENT AND/OR DEBRIS AND IS FULLY FUNCTIONAL.
20. CONTRACTOR SHALL PROVIDE REQUIRED EROSION CONTROL MONITORING, PER REQUIREMENTS AND CERTIFICATION, TO INSPECT AND DOCUMENT ALL EROSION CONTROL MEASURES WEEKLY (EVERY 7 DAYS) AND AFTER EVERY 0.5 INCH RAINFALL EVENT, PER REQUIREMENTS. CONTRACTOR TO PROVIDE CORRECTIVE MEASURES IMMEDIATELY FOR ANY NON-COMPLIANCE OBSERVATIONS.
21. ALL DISTURBED NON-PAVED AREAS SHALL RECEIVE TEMPORARY PROTECTION OR PERMANENT COVER WITHIN 14 DAYS OF DISTURBANCE OPERATIONS.
22. WHEN TRAPPED SEDIMENT REACHES 1/3 OF THE HEIGHT OF SILT FENCE, IT SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.
23. CATCH BASIN SEDIMENT FILTER SACKS SHALL BE CLEANED WHEN SEDIMENT REACHES 1/3 THE CAPACITY OF THE SACK.
24. WHEN SEDIMENT IS TRACKED ON TO PAVED SURFACES, IT SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY.
25. ANY SEDIMENT FROM THE CONSTRUCTION SITE THAT ACCUMULATES ON OR OFF THE OWNER'S PROPERTY SHALL BE REMOVED BY THE CONTRACTOR AT HIS/HER EXPENSE. ANY DAMAGE THAT OCCURS FROM THE ACCUMULATED SEDIMENT OR FROM THE CONTRACTOR'S REMOVAL OF THE SEDIMENT, SHALL BE REPAIRED BY THE CONTRACTOR AT HIS/HER EXPENSE.
26. ALL EXCAVATIONS MUST COMPLY WITH THE REQUIREMENTS OF OSHA 29 CFR, PART 1926, SUBPART P, "EXCAVATIONS AND TRENCHES." THIS DOCUMENT STATES THAT EXCAVATION SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
27. THE CONTRACTOR MUST COMPLY WITH THE REQUIREMENTS OF THE PROJECT SPECIFIC STORM WATER POLLUTION PREVENTION PLAN. TEMPORARY STORMWATER IMPROVEMENTS SHALL BE PROVIDED UNTIL THE PERMANENT IMPROVEMENTS ARE ESTABLISHED. CONTRACTOR TO DESIGN AND SUBMIT ALL TEMPORARY STORMWATER ITEMS FOR ENGINEER APPROVAL.
28. CONTRACTOR TO PROVIDE ALL SURVEY CONSTRUCTION STAKING.

GRADING AND EROSION CONTROL LEGEND

PROPERTY LINE

960 / 964 — PROPOSED CONTOURS (MAJOR) / PROPOSED CONTOURS (MINOR)

960 / 964 — EXISTING CONTOURS (MAJOR) / EXISTING CONTOURS (MINOR)

813.56 — PROPOSED SPOT ELEVATION
TC = TOP OF CURB
GL = GUTTER LINE/BOTTOM OF CURB
HP/LP = HIGH/LOW POINT
± = MATCH EXISTING, FIELD VERIFY

944.50 EOF — EMERGENCY OVERFLOW

2.0% — PROPOSED SURFACE SLOPE

SILT FENCE

BIO ROLL

INLET PROTECTION

ROCK CONSTRUCTION ENTRANCE

EROSION CONTROL BLANKET

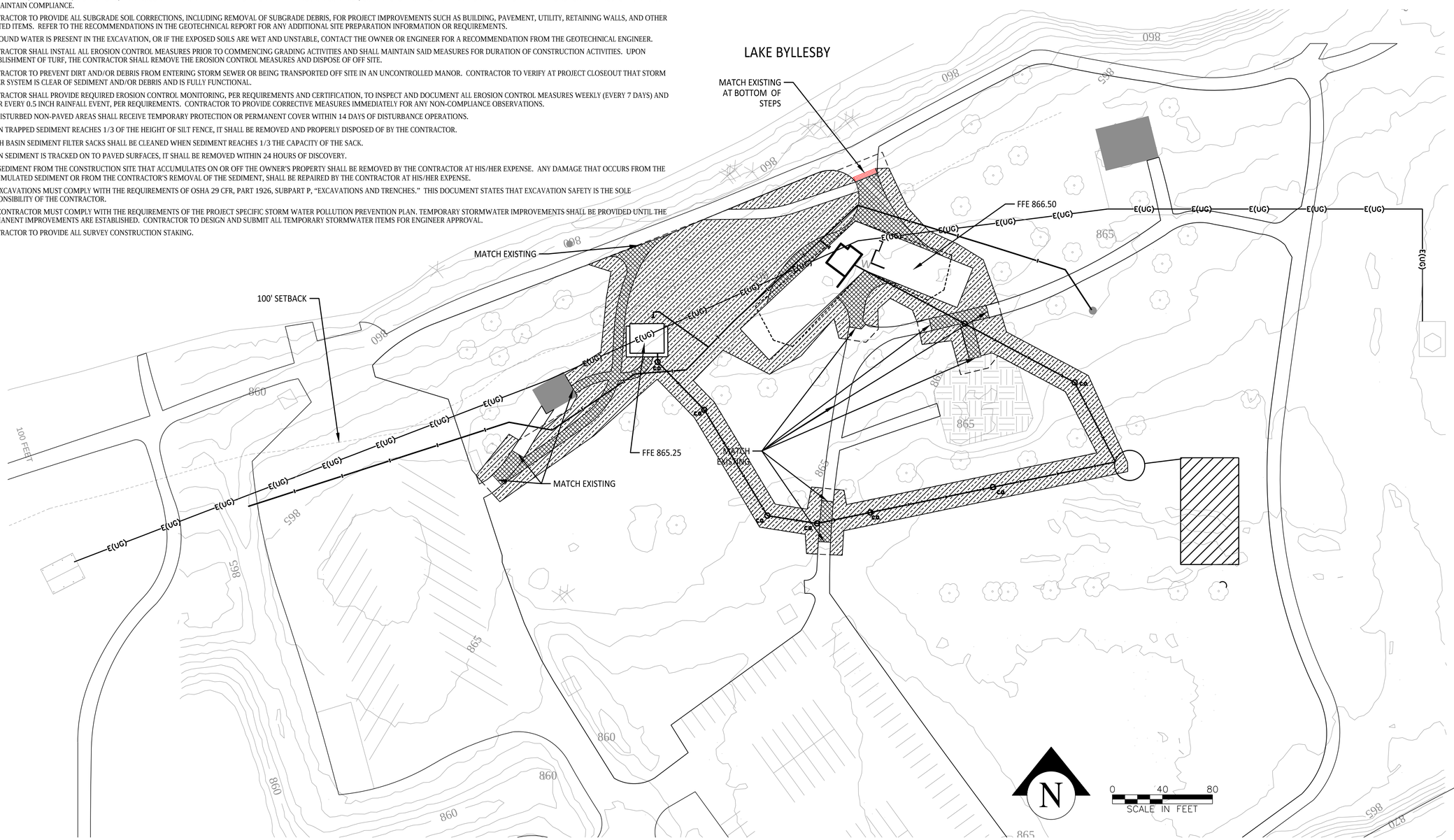
RIP-RAP

STORM SEWER (SEE UTILITY PLAN)

DRAIN TILE (SEE UTILITY PLAN)

LIMITS OF DISTURBANCE

SOIL BORING LOCATION



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LAKE BYLLESBY PARK PAVILION

50% PROGRESS SET

NOT FOR CONSTRUCTION

9/22/2021

CLIENT
GOODHUE COUNTY

No.	Description

SHEET NAME

GRADING AND EROSION CONTROL PLAN

SHEET NUMBER

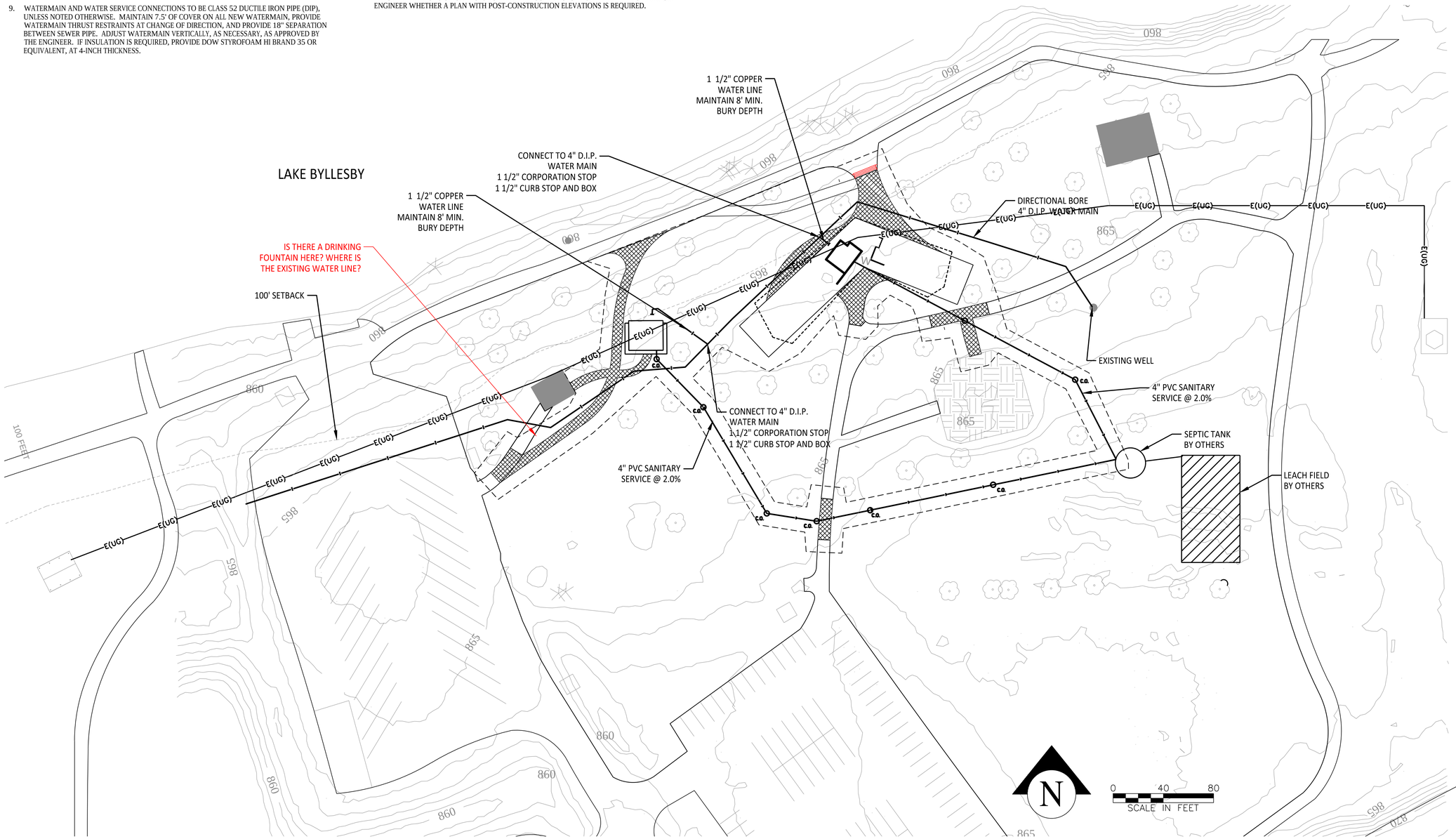
C-103

UTILITY NOTES

1. THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-2, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."
2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL UTILITY LOCATES. CONTACT GOPHER SATE ONE CALL PER STATE STATUTES FOR PUBLIC UTILITY LOCATES PRIOR TO ANY EXCAVATION. THE CONTRACTOR MUST HIRE A PRIVATE UTILITY LOCATING SERVICE TO LOCATE PRIVATE UTILITIES IN THE CONSTRUCTION AREA PRIOR TO ANY EXCAVATION.
3. SEE EXISTING CONDITIONS FOR SURVEY INFORMATION. THE ENGINEER CAN NOT BE HELD RESPONSIBLE FOR INACCURACIES RELATED TO THE SURVEY INFORMATION.
4. COMPLY WITH ALL LOCAL AND STATE REQUIREMENTS FOR UTILITY MATERIALS, INSTALLATION, AND TESTING.
5. OBTAIN ALL PERMITS OR APPROVALS FROM LOCAL UTILITY OWNERS PRIOR TO BEGINNING UTILITY INSTALLATIONS. NOTIFY UTILITY OWNERS OF THE START OF CONSTRUCTION FOR THE PROJECT AND ANY SPECIFIC UTILITY WORK AT LEAST 48 HOURS IN ADVANCE.
6. FIELD VERIFY AND COORDINATE ALL BUILDING UTILITY CONNECTIONS AND PUBLIC UTILITY SERVICE CONNECTIONS PRIOR TO CONSTRUCTION, INCLUDING LOCATION, TYPE, SIZE, AND INVERT ELEVATION. NOTIFY ENGINEER OF ANY DISCREPANCIES FROM THE PLAN FOR RESOLUTION PRIOR TO BEGINNING UTILITY INSTALLATIONS.
7. ADJUST, OR ARRANGE TO BE ADJUSTED BY UTILITY OWNER, ALL STRUCTURES, PUBLIC AND PRIVATE, TO PROPOSED GRADES WHERE DISTURBED. COMPLY WITH ALL REQUIREMENTS OF UTILITY OWNERS. STRUCTURES BEING RESET IN PAVED AREAS TO MEET OWNER'S REQUIREMENTS FOR TRAFFIC LOADING.
8. SERVICE UTILITIES, SUCH AS ELECTRIC (TRANSFORMER), GAS, TELEPHONE, CABLE, FIBER OPTIC, AND OTHER RELATED SMALL UTILITIES, MAY BE SHOWN FOR GENERAL REFERENCE AND ARE DEEMED CONCEPTUAL LOCATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND COORDINATING ALL LOCATIONS OF SERVICE UTILITY CONNECTIONS AND RELATED ITEMS WITH SERVICE PROVIDERS.
9. WATERMAIN AND WATER SERVICE CONNECTIONS TO BE CLASS 52 DUCTILE IRON PIPE (DIP), UNLESS NOTED OTHERWISE. MAINTAIN 7.5' OF COVER ON ALL NEW WATERMAIN, PROVIDE WATERMAIN THRUST RESTRAINTS AT CHANGE OF DIRECTION, AND PROVIDE 18" SEPARATION BETWEEN SEWER PIPE. ADJUST WATERMAIN VERTICALLY, AS NECESSARY, AS APPROVED BY THE ENGINEER. IF INSULATION IS REQUIRED, PROVIDE DOW STYROFOAM HI BRAND 35 OR EQUIVALENT, AT 4-INCH THICKNESS.
10. WATERMAIN SHALL BE INSTALLED IN CONFORMANCE WITH THE CITY ENGINEER'S ASSOCIATION OF MINNESOTA (CEAM) STANDARDS OR THE CITY'S WATERMAIN INSTALLATION STANDARDS. WHERE CONFLICTS OCCUR, THE MORE RESTRICTIVE REQUIREMENT SHALL GOVERN.
11. SANITARY SEWER PIPE OUTSIDE THE BUILDING SHALL BE POLYVINYL CHLORIDE (PVC) SDR35 OR 26. SDR 26 REQUIRED FOR DEPTHS GREATER THAN 15 FEET.
12. STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP), WITH R-4 GASKETS. RCP CLASS 5 FOR PIPE DIAMETERS 18" OR SMALLER, CLASS 3 FOR PIPE DIAMETERS 21" AND LARGER UNLESS OTHERWISE NOTED. POLYVINYL CHLORIDE PIPE (PVC) TO BE SCHEDULE 40. IF ALLOWED BY THE CITY, HIGH DENSITY POLYETHYLENE PIPE (HDPE) SHALL MEET REQUIREMENTS OF ASTM F2648. PIPE SHALL BE WATER TIGHT ACCORDING TO ASTM D3212 REQUIREMENTS. FLARED END SECTIONS SHALL BE RCP WITH TRASH GUARDS AND ROCK RIP-RAP.
13. OUTSIDE OF PUBLIC RIGHT OF WAY, INLET AND OUTLET CONNECTIONS TO SEWER STRUCTURES SHALL USE APPROVED RESILIENT RUBBER JOINTS TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCH BASINS, AND OTHER STRUCTURES.
14. ALL MANHOLE COVERS TO BE STAMPED EITHER SANITARY OR STORM SEWER.
15. PIPE LENGTHS THAT MAY BE SHOWN ARE HORIZONTALLY FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
16. SITE UTILITY SERVICES TYPICALLY TERMINATE 5 FEET FROM BUILDING, UNLESS NOTED OTHERWISE.
17. ALL EXCAVATIONS MUST COMPLY WITH THE REQUIREMENTS OF OSHA 29 CFR, PART 1926, SUBPART P, "EXCAVATIONS AND TRENCHES." THIS DOCUMENT STATES THAT EXCAVATION SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
18. DRAINTILE LOCATIONS AND QUANTITIES ARE APPROXIMATE AS ILLUSTRATED. FIELD VERIFY FINAL LOCATIONS.
19. AFTER CONSTRUCTION IS COMPLETE, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH AN AS-BUILT RECORD OF UTILITY CONSTRUCTION. THE AS-BUILT SHALL INCLUDE LOCATION AND LENGTH DEVIATIONS OR CHANGES TO THE PLAN. CONTRACTOR TO VERIFY WITH OWNER OR ENGINEER WHETHER A PLAN WITH POST-CONSTRUCTION ELEVATIONS IS REQUIRED.

UTILITY LEGEND

- PROPERTY LINE
- STORM SEWER
- DRAIN TILE
- SANITARY SEWER
- WATER MAIN
- E(UG) — ELECTRIC (BURIED)
- E(OH) — ELECTRIC (OVERHEAD)
- T-BUR — TELEPHONE (BURIED)
- OH-TEL — TELEPHONE (OVERHEAD)
- TV-BUR — TELEVISION (BURIED)
- OH-TV — TELEVISION (OVERHEAD)
- F/O-BUR — FIBER OPTIC (BURIED)
- OH-F/O — FIBER OPTIC (OVERHEAD)
- COMMUNICATION (UNDEFINED)
- G — NATURAL GAS LINE
- LIMITS OF DISTURBANCE
- DRAINAGE & UTILITY EASEMENTS
- STORM MANHOLE/CATCH BASIN
- STORM FLARED END SECTION
- CLEAN OUT (CO)
- SANITARY MANHOLE
- HYDRANT
- GATE VALVE



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9/22/2021

CLIENT

GOODHUE COUNTY

No.	Description

SHEET NAME

UTILITY PLAN

SHEET NUMBER

C-104

STRUCTURAL ABBREVIATIONS:

A	
ADDL	ADDITIONAL
ADJ	ADJACENT
ALT	ALTERNATE
ALUM	ALUMINUM
AR	ANCHOR ROD
ARCH	ARCHITECT
B	
BDE	BOTTOM OF DECK ELEVATION
BFE	BOTTOM OF FOOTING ELEVATION
BM	BEAM
BOT	BOTTOM
BP	BEARING PLATE / BASE PLATE
BR	BOTTOM REINFORCING
BTWN	BETWEEN
C	
CANTL	CANTILEVER
CFS	COLD-FORMED STEEL
CGS	CENTER OF GRAVITY STRAND
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTER LINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN(S)	CONNECTION(S)
CONST	CONSTRUCTION
CONT	CONTINUOUS
D	
d	NAIL DIAMETER
db	BAR DIAMETER
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DEG	DEGREE
DEMO	DEMOLITION
DF	DOUGLAS FIR-LARCH
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DL	DEAD LOAD
E	
EA	EACH
EF	EACH FACE
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EJ	EXPANSION JOINT
EMBED	EMBEDMENT
EQ	EQUAL
EQUIP	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
E-W	EAST - WEST DIRECTION
(E)	EXISTING
EXP	EXPANSION
F	
FDN	FOUNDATION
FD	FLOOR DRAIN
FFE	FINISHED FLOOR ELEVATION
FLR	FLOOR
FS	FOOTING STEP
FT	FEET
FTG	FOOTING
FV	FIELD VERIFY
G	
GA	GAGE/GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
GLB	GLUE LAMINATED BEAM
GR	GRADE
GSN	GENERAL STRUCTURAL NOTES
GWB	GYPSUM WALL BOARD

H	
HK	HOOK
HORIZ	HORIZONTAL
HSA	HEADED STUD ANCHOR
HSS	HOLLOW STRUCTURAL SHAPE
HT	HEIGHT
I	
ID	INSIDE DIAMETER
INCL	INCLUDE
ISF	INSIDE FACE
J	
JT	JOINT
JBE	JOIST BEARING ELEVATION
K	
K	KIPS
KLF	KIPS PER LINEAL FOOT
KSF	KIPS PER SQUARE FOOT
KSI	KIPS PER SQUARE INCH
KO	KNOCK OUT
L	
LB(S)	POUND(S)
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LSL	LAMINATED STRAND LUMBER
LSH	LONG SIDE HORIZONTAL
LSV	LONG SIDE VERTICAL
LWT	LIGHT WEIGHT
LVL	LAMINATED VENEER LUMBER
M	
MAX	MAXIMUM
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL & PLUMBING
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MSR	MACHINE STRESS RATED
MTL	METAL
N	
NIC	NOT IN CONTRACT
N-S	NORTH - SOUTH DIRECTION
NTS	NOT TO SCALE
NWT	NORMAL WEIGHT
O	
OC	ON CENTER
OD	OUTSIDE DIAMETER
OSF	OUTSIDE FACE
OPNG	OPENING
OPP	OPPOSITE
O/O	OUT TO OUT
P	
PAF	POWER ACTUATED FASTENER
PC	PRECAST CONCRETE
PL	PLATE
PLF	POUNDS PER LINEAL FOOT
PLYWD	PLYWOOD
PRE FAB	PREFABRICATED
PROJ	PROJECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
PT	POST TENSIONED

Q	
QTY	QUANTITY
R	
R	RADIUS
RD	ROOF DRAIN
REF	REFERENCE
REINF	REINFORCEMENT/REINFORCING
REQD	REQUIRED
REV	REVISION
RO	ROUGH OPENING
RSS	RUGGED STRUCTURAL SCREW
RTU	ROOF TOP UNIT
S	
SB	SOIL BORING
SC	SLIP CRITICAL
SCHED	SCHEDULE
SER	STRUCTURAL ENGINEER OF RECORD
SF	SQUARE FOOT
SIM	SIMILAR
SL	SNOW LOAD
SOG	SLAB ON GRADE
SPA	SPACES
SPEC	SPECIFICATION
SPF	SPRUCE PINE FIR
SS	STAINLESS STEEL
SSLT	SHORT-SLOT LOAD TRANSVERSE
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STRUCT	STRUCTURE / STRUCTURAL
SYM	SYMMETRICAL
SYP	SOUTHERN YELLOW PINE
T	
T/G	TONGUE AND GROOVED
TBE	TOP OF BEAM ELEVATION
TDE	TOP OF DECK ELEVATION
TEMP	TEMPORARY
TFE	TOP OF FOOTING ELEVATION
TGBE	TOP OF GRADE BEAM ELEVATION
TPCE	TOP OF PILE CAP ELEVATION
TPCPE	TOP OF PRECAST PLANK ELEVATION
TPE	TOP OF PIER ELEVATION
TR	TOP REINFORCING
TRANS	TRANSVERSE
TSE	TOP OF SHEATHING ELEVATION
TSE	TOP OF SLAB ELEVATION
TSE	TOP OF SUBFLOOR ELEVATION
TWE	TOP OF WALL ELEVATION
TYP	TYPICAL
U	
UNO	UNLESS NOTED OTHERWISE
URM	UNREINFORCED MASONRY
V	
VERT	VERTICAL
W	
W/	WITH
W/O	WITHOUT
WD	WOOD
WF	WIDE FLANGE
WL	WIND LOAD
WP	WORK POINT
WT	WEIGHT
WWF	WELDED WIRE FABRIC

MARKS AND SYMBOLS LEGEND:

MARKS:

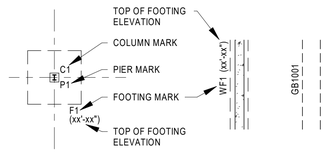
B1001	CONCRETE BEAM MARK NUMBER
B1001-PT	POST TENSIONED CONCRETE BEAM MARK NUMBER
BP1	BEARING / BASE PLATE MARK NUMBER
BRF1	BRACE FRAME MARK NUMBER
BR1	MILD STEEL BOTTOM REINFORCING MARK NUMBER
C1	COLUMN MARK NUMBER
CC1	CONCRETE COLUMN MARK NUMBER
CW1	CONCRETE WALL NUMBER
D1	STEEL DECK MARK NUMBER
DC1	DROP CAPITAL MARK NUMBER
DP1	DRILLED PIER MARK NUMBER
DPC1	DRILLED PIER CAP NUMBER
EP1	EMBEDDED PLATE MARK NUMBER
F1	SPREAD FOOTING MARK NUMBER
GB1	GRADE BEAM MARK NUMBER
H1	HEADER MARK NUMBER
HCP	HOLLOW CORE PLANK
HD1	HOLD DOWN MARK NUMBER
J10	JOIST MARK NUMBER
L1	LINTEL MARK NUMBER
LC1	LIGHT GAGE COLUMN MARK NUMBER
MC1	MASONRY COLUMN MARK NUMBER
MF1	MOMENT FRAME MARK NUMBER
MW1	MASONRY WALL NUMBER
P1	PIER MARK NUMBER
PC1	PILE CAP MARK NUMBER
RD1	ROOF DECK MARK NUMBER
S1	SLAB MARK NUMBER
SC1	STEEL COLUMN MARK NUMBER
SR1	STUD RAIL REINFORCING MARK NUMBER
SW1	SHEAR WALL MARK NUMBER
T1	TRUSS MARK NUMBER
TR1	MILD STEEL TOP REINFORCING MARK NUMBER
W1	WALL MARK NUMBER
WC1	WOOD COLUMN MARK NUMBER
WF1	WALL FOOTING MARK NUMBER
WO1	WEB OPENING

GENERAL SYMBOLS:

- APPROXIMATE LOCATION OF DRAIN TILE
- MATCH LINE
- LINE OF DEMOLITION
- (?'-?") (?'-?") — SLAB STEP LOCATION WITH ELEVATIONS
- SLAB STEP LOCATION
- CHANGE IN SLAB SLOPE
- CHANGE IN SLAB THICKNESS
- 1 — KEYNOTE MARK NUMBER
- ? — NEW BUILDING GRID LINE
- ? — EXISTING BUILDING GRID LINE
- ELEVATION MARKER
- SHADED AREA INDICATES CUT THROUGH EXISTING CONSTRUCTION
- SHADED AREA INDICATES PROJECTION OF EXISTING CONSTRUCTION
- W1 — WALL MARK NUMBER OR WALL TYPE
- APPROXIMATE LOCATION OF UTILITY PIPE PENETRATION THROUGH FOUNDATION WALL
- FS — FOOTING STEP LOCATION
- SB1 — APPROXIMATE LOCATION OF SOIL BORING
- COMPRESSION PILE
- T — TENSION / COMPRESSION PILE
- TEST PILE
- SPAN DIRECTION OF ELEMENT
- EXTENT OF ELEMENT
- CONTINUOUS EXTENT OF ELEMENT
- # / Sxxx — DETAIL CALLOUT
- # / Sxxx — ELEVATION CALLOUT

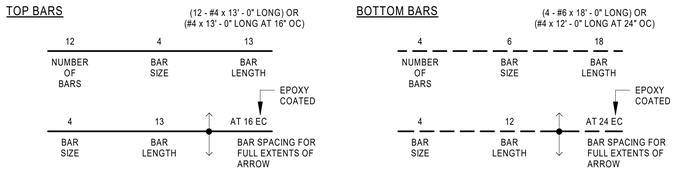
PLAN SYMBOLS LEGEND:

FOUNDATION SYSTEM:

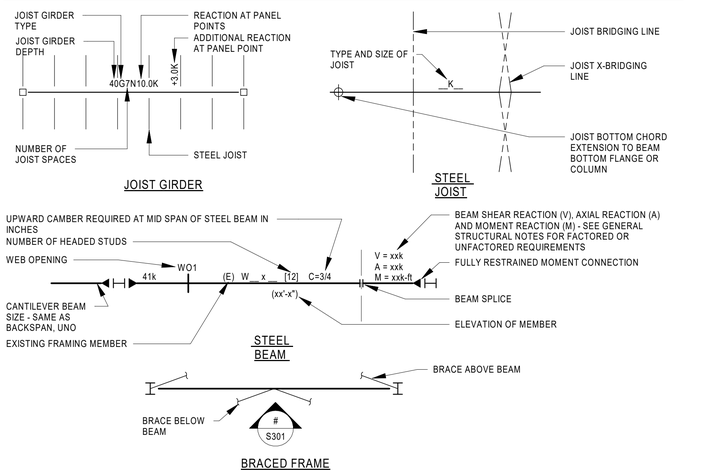


SPREAD FOOTING — WALL FOOTING — GRADE BEAM

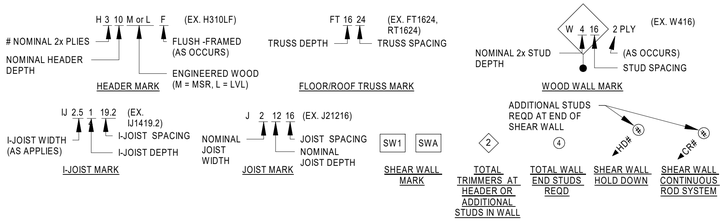
REBAR FRAMING SYSTEM:



STEEL FRAMING SYSTEM:



WOOD FRAMING SYSTEM:



SHEET LIST

SHEET #	SHEET NAME
S402	TYPICAL MASONRY SCHEDULES AND DETAILS
S501	TYPICAL FOUNDATION SCHEDULES AND DETAILS
S001	LEGEND SHEET
S002	GENERAL STRUCTURAL NOTES
S003	GENERAL STRUCTURAL NOTES
S201	FOUNDATION PLAN
S202	ROOF FRAMING PLANS
S401	TYPICAL SCHEDULES AND DETAILS
S701	FRAMING DETAILS

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LAKE BYLLESBY PARK PAVILION + BEACH BATH

50% PROGRESS SET

NOT FOR CONSTRUCTION

9/21/2021

CLIENT

GOODHUE COUNTY

5001 MN-19, Cannon Falls, MN 55009

No.	Description	Date

SHEET NAME

LEGEND SHEET

SHEET NUMBER

S001

TYPICAL NOTES:
These notes specify the requirements for the design represented in these documents. The construction and materials shall comply with all the pertinent codes and references, plans, and details, including (but not limited to) those shown in architectural, civil, mechanical and electrical drawings.

The Contractor shall verify all dimensions and existing conditions in the field that affect construction prior to commencing work on the affected element or shop drawing submittals. Resolve any discrepancies with the Architect prior to construction.

The contract structural drawings and specifications represent the completed structure. The Contractor is responsible for bracing and shoring (without overstressing) all structural elements as necessary at any stage of construction until completion of the project. The Structural Engineer of Record is not responsible for the Contractor's means, methods, sequences or procedures of construction. Contractor shall recognize and consider effects of thermal movements of structural elements during construction period.

The Contractor is solely responsible for site safety including all temporary precautionary measures and safety programs. Site observation visits by the Structural Engineer of Record do not include review of the contractor's safety precautions.

Refer to architectural, mechanical and electrical drawings for locations, elevations, dimensions, and details of sleeves, inserts, openings, recesses, curbs, housekeeping pads, etc. that are not shown on the structural drawings and do not damage structural members.

Information shown in the structural drawings regarding existing conditions represents the current and general field conditions related to the new work, to the best of our knowledge. Report all discrepancies (unforeseen conditions) to the Architect for resolution prior to performing related new work.

Requests for information shall be submitted in writing and shall reference the part of the construction documents that is in question.

SPECIAL INSPECTIONS:
Special inspections required by the building code and these documents shall be provided in addition to inspections to be performed by the city in which the project is located.

Contractor shall read and understand their duties in the specification and under the building code for special inspections and coordinate as necessary the Owner's responsibilities.

The Special Inspectors shall be provided by the Owner and shall use current structural drawings incorporating all revisions and approved shop drawings.

Special inspection reports are to be submitted promptly and within 24 hours to the Structural Engineer of Record and Contractor from the time when inspections are performed.

The General Contractor shall provide timely notice (minimum 24 hours) to the Special Inspector and sufficient time for the Inspector to perform their inspection.

For a schedule of Special Structural Inspections required by the building code for this project, see the Special Inspection Schedule.

STRUCTURAL TEST AND SPECIAL INSPECTION SCHEDULE:

		Continuous	Periodic	None
1.	STEEL CONSTRUCTION: Section 1705.2.1 and Table 1705.2.2			
1.1	Fabricator Documentation - Note (1)	☐	■	☐
1.2	High Strength Bolting-Bearing Material	☐	■	☐
1.3	High-Strength Bolting-Slip-Critical and Material	☐	☐	■
1.4	Steel Material, Seismic - Section 1705.11.1	☐	☐	■
1.5	Welds: Full and Part Pen and Multi-Pass Fillet	■	☐	☐
1.6	Welds: Single Pass Fillet for All Sections	☐	■	☐
1.7	Frame Joint Detail Compliance	☐	■	☐
2.	CONCRETE CONSTRUCTION: Section 1705.3 Table 1705.3			
2.1	Member Shape and Size Compliance in Formwork	☐	■	☐
2.2	Reinf Steel and PT Tendons Size, Quantity and Placement	☐	■	☐
2.3	Weldability of Reinforcing and Welds	☐	■	☐
2.4	Anchors in Concrete	■	☐	☐
2.5	Use of Required Mix Design	☐	■	☐
2.6	Sample for Specimens and Tests	■	☐	☐
2.7	Placement of CIP Concrete and Shotcrete	■	☐	☐
2.8	Curing Compliance	☐	■	☐
2.9	Strength for Stressing PT Tendons	☐	■	☐
2.10	Prestressing Force Application	■	☐	☐
2.11	Grouting Bonded Tendons - Seismic	☐	☐	■
2.12	Strength for Formwork Removal	☐	■	☐
2.13	Erection of Precast Members	☐	■	☐
3.	WOOD CONSTRUCTION: Section 1705.5			
3.1	Fabricator, Prefab Trusses and Panels, Note 1	☐	☐	■
3.2	High Load Diaphragms - Table 2306.2 (2)	☐	☐	■
4.	SOILS: Section 1705.6 and Table 1705.6			
4.1	Bearing Material, Capacity and Depth	☐	■	☐
4.2	Compacted Fill Compliance With Soils Report	■	☐	☐
5.	PIER FOUNDATIONS: Section 1705.8 and Table 1705.8			
5.1	Observation, Compliance and Records per Pier	☐	☐	■

Notes:
1. When the fabricator does not meet the requirements of 1704.2.5.2 and where applicable the exception in 1705.2, Special Inspection in the Fabricator's shop is required.
2. Empirically designed masonry is excluded.

SHOP DRAWINGS:
Submit shop drawing schedule with construction schedule that includes consideration for review period. See specification for additional information.

General contractor shall submit shop drawings in digital format for structural review. Digital drawings shall meet the following requirements.

1. All pages are native .pdf files, rotated, printed to scale with searchable text.
2. All transmittals shall be located as the first page of the submittal or as a separate file within one digital package.
3. Contractor digital review comments and their digital stamp shall be attached. Our review will not occur until the contractor has reviewed, coordinated with other trades and provided shop stamp.
4. MBJ will mark-up the digital set in red and return a digital file via email, ftp site or other means.

DEFERRED SUBMITTALS:
The following items shall be issued as deferred submittals per IBC:
- Concrete Formwork and Shoring
- Carbon Fiber Reinforced Polymer Concrete Strengthening
- Post-Tensioned Concrete Tendon Design
- Precast Concrete Hollow Core Planks
- Precast Structural Concrete
- Precast Concrete Wall Panels
- Architectural Precast Concrete
- Structural Steel Connections
- Steel Joist and Joist Girders
- Cold-Formed Steel Framing
- Metal Stairs, Handrails and Guardrails
- Shop Fabricated Metal Balconies
- Cable Barrier Systems
- Metal Building Systems
- Continuous Anchor Rod System
- Metal Plate Connected Wood Trusses
- Wood I-Joist
- Glued-Laminated Wood Construction
- Curtain Wall Framing
- Skylight Systems
- Fall Protection Systems
- Helical Piers

All engineering design provided by others and submitted for review shall bear the certification stamp and signature of a qualified Professional Engineer who is licensed in the state where the project is located. Under no circumstances will MBJ review shop drawings that are considered to be scanned/copied construction document submittals. The Detailer shall produce and submit original documents for review.

All items issued as deferred submittals shall be issued a minimum of 30 days prior to installation and shall not be installed until their design and submittal documents have been reviewed for general conformance to the drawings by the General Contractor, the Structural Engineer of Record and the Building Official. A copy of the deferred submittal shall be forwarded to the Building Official after the Structural Engineer of Record has reviewed the documents and prior to the erection of the deferred submittal items.

DESIGN CODES AND STANDARDS:

2012 International Building Code, as amended and adopted by the *state and city.*

MATERIAL PROPERTIES:
Reinforcing Steel (Fy):

Typical	60,000 psi	ASTM A615 Grade 60
Weldable	60,000 psi	ASTM A706 Grade 60

Cast-in-Place Concrete (f'c) at 28 days, u.n.o.:

Controlled Low Strength Material (CLSM)	1,200 psi Maximum 50 psi Minimum
Footings	4,000 psi
Concrete for Underpinning	3,000 psi
Concrete Fill for Pipe Piles	3,000 psi
Pile Caps	4,000 psi
Grade Beams	4,000 psi
Drilled Piers	4,000 psi
Micropiles	4,000 psi
Precast Prestressed Driven Piles	5,000 psi
Piers and Walls (non-shear)	4,000 psi
Non P-T Structural Slabs, and Beams	5,000 psi
P-T Slab and Beams	6,000 psi 3,000 psi at 24 hours
Shear Walls	4,000 psi
Shear Walls, see schedule	Varies
Columns	4,000 psi
Columns, see schedule	Varies
Concrete placed over Metal Floor Deck	4,000 psi
Slabs on Grade	4,000 psi
Exterior Concrete	4,500 psi w/ air entrainment
All Concrete not otherwise noted	4,000 psi

Structural Steel (Fy):

Wide Flanges:	50,000 psi ASTM A992
Angles, Channels, Plates, and Bars	36,000 psi ASTM A36
Rectangular HSS	46,000 psi ASTM A500, Grade B
Round HSS	42,000 psi ASTM A500, Grade B
Steel Pipe	35,000 psi ASTM A53, Grade B

Structural Fasteners:

Typical High-Strength Bolts	120,000 psi ASTM F3125 Grade A325
Twist-off Tension Control Bolts	120,000 psi ASTM F3125 Grade1852, Type 1
High-Strength Bolts where noted	150,000 psi ASTM F3125 Grade A490
Carbon Steel, Threaded Rods	36,000 psi ASTM A36
Threaded Rods Grade B7 where noted	125,000 psi ASTM A193
Stainless Steel, Threaded Rods	85,000 psi ASTM F593
Anchor Rods, Grade 36 U.N.O.	36,000 psi ASTM F1554
Anchor Rods, Grade 55 where noted	55,000 psi ASTM F1554
Anchor Rods Grade 105 where noted	105,000 psi ASTM F1554
Direct Tension Indicator Washers where noted	ASTM F959

SAWN LUMBER:

Hem Fir (HF) No. 2 or better: (Joists and Headers):	Fb 850 psi Fc 1300 psi parallel to grain Fv 150 psi E 1,300,000 psi

STRUCTURAL COMPOSITE LUMBER:

Hem Fir (HF) No. 2 or better: (Joists and Headers):	Fb 850 psi Fc 1300 psi parallel to grain Fv 150 psi E 1,300,000 psi
Doug Fir (DF) No. 2 or better: (Joists, Ledgers and Headers):	Fb 900 psi Fv 180 psi E 1,600,000 psi
Spruce-Pine-Fir (SPF) No. 2 or better: (Studs and Built-up Posts)	Fb 875 psi Fc 1150 psi parallel to grain Fc 425 psi perpendicular to grain E 1,400,000 psi
Doug Fir (DF) #2 or better: (Studs and Built-up Posts)	Fb 900 psi Fc 1350 psi parallel to grain Fc 625 psi perpendicular to grain E 1,600,000 psi
Southern Yellow Pine (SYP) No. 2 or better: (Preservative Treated Wood)	Fb 1500 psi Fv 175 psi Fc 1600 psi parallel to grain Fc 565 psi perpendicular to grain E 1,600,000 psi
Southern Yellow Pine (SYP): (Machine Stress Rated (MSR)):	Fb 2400 psi Fv 190 psi Fc 1975 psi parallel to grain Fc 805 psi perpendicular to grain E 2,000,000 psi
Douglas Fir-Larch (DFL) No. 1 or better: (Heavy Timber, full sawn) (Beams and columns wider than 5")	Fb 1200 psi Fv 170 psi Fc 1000 psi parallel to grain Fc 625psi perpendicular to grain Fl 825 psi E 1,600,000 psi
Cedar No. 2 grade: (Wood Decks and Railings)	Fb 1050 psi parallel to grain Fv 75 psi perpendicular to grain E 1,000,000 psi

STRUCTURAL COMPOSITE LUMBER:

Laminated Veneer Lumber (LVL): (Beams and Headers) (1 3/4" x Depth)	Fb 2900 psi Fv 285 psi Fc 750 psi perpendicular to grain E 2,000,000 psi
Parallel Strand Lumber (PSL): (Columns and Posts)	Fb 2400 psi tabulated Fc 2500 psi parallel to grain E 1,800,000 psi
Laminated Strand Lumber (LSL): (Rim Board)	Fb 1700 psi Fv 410 psi Fc 750 psi perpendicular to grain E 1,350,000 psi
Oriented Strand Board (OSB): (APA Rated Rim Board)	Fbe 600 psi Fve 270 psi Fce 550 psi perpendicular to grain E 550,000 psi

DESIGN LOADS:
LATERAL LOADS:

Risk Category:	II
Wind Loads:	
Primary Frame Wind Data:	
Basic Wind Speed:	V ult = 115 mph
Exposure Category:	C
Internal Pressure Coefficient (Gcpi):	+0.18 or –0.18
Components and Cladding Wind Loads:	
Exterior Component/Cladding:	Supplier to develop based on code criteria and indicate on shop drawings.
Seismic Loads:	
Primary Seismic Data:	No design required
Primary Seismic Data:	
Mapped Spectral Response Accelerations:	Ss: 0.171 S1: 0.057
Site Class:	D
Site Coefficients:	Fa = 1.2 Fv = 1.6
Design Spectral Acceleration Parameters:	Sds: 0.182 Sd1: 0.091
Importance Factor:	1.0
Seismic Design Category:	B
Basic Seismic-Force- Resisting System:	Steel Systems Not Specifically Detailed For Seismic Resistance, Excluding Cantilever Column Systems
Response Modification Factor:	R = 3.0
Overstrength Factor:	Ω_0 = 3.0
Seismic Response Coefficient:	Cs = 0.061
Ultimate Design Base Shear:	V = 0.061(W)
Analysis Procedure:	Equivalent Lateral Force Procedure

(User Note: Edit for appropriate lateral load resisting system type for project. Content below is just an example)

LATERAL LOAD RESISTING SYSTEM:
Steel frame is a "non-self-supporting" steel frame requiring interaction of the steel framing, floor/roof diaphragms and shear walls/ braced frames/moment frames. Contractor shall provide temporary bracing as necessary to provide support of framing until all attachments are complete, including structural steel, structural steel to diaphragm/shear walls, and diaphragm to shear walls.

The lateral-load-resisting system and diaphragm elements that provide for lateral strength and stability in the completed structure include the following:
- Floor and roof deck and attachments including concrete topping on steel deck.
- Fully connected moment frames, brace frames, masonry shear walls, or concrete shear walls
- Framing members indicated as drag struts.
- Framing members with axial loads indicated for connection design.

GRAVITY LOADS:

Dead Load:	
Roof:	psf
Floor:	psf
Snow Load:	
Ground Snow Load, Pg:	50 psf
Flat-Roof Snow Load, Pf:	35 psf
Snow Exposure Factor, Ce:	1.0
Snow Load Importance Factor, I:	1.0
Thermal Factor, Ct:	1.0
Unbalanced/Drift Snow Load:	Refer to plan, U.N.O.
Roof Live Load:	
Live Load, (reducible):	20 psf
Net Uplift for Joist Design:	__ psf
Mechanical Room Hanging Loads:	40 psf
Hanging Catwalks:	75 psf
Mechanical and Electrical Equipment Units:	Refer to drawings, for the units' locations, sizes, and weights.
Future Mechanical and Electrical Units:	This project is not designed for future units. Refer to drawings, for the future units' locations, sizes, and weights used for framing design.
Floor Live Loads:	
Floor Topping and Finish Allowance:	20 psf
Public Assembly:	100 psf

FOUNDATIONS:
Refer to geotechnical report number _____ by _____, dated _____.

The Contractor shall verify the location of all existing and new underground utilities and tanks prior to beginning excavation.

For underground utilities adjacent to foundations and through foundations reference drawings for typical detail showing step footings below utilities as required to avoid undermining of structure by utilities.

CONVENTIONAL FOOTINGS:
Footings are designed for a maximum allowable soil bearing pressure of _____ pounds per square foot on undisturbed natural soil or compacted engineered fill. Soil bearing pressure is to be verified in the field during construction by a qualified Geotechnical Engineer.

-or-

Footings are designed for an assumed soil bearing pressure of 1,500 pounds per square foot per Section 1806.2 Presumptive Load Bearing Values. It shall be the Contractor's/Owner's responsibility to retain a Geotechnical Engineer to verify that this value may be achieved at the bottom of footing elevation with out damaging, differential settlement.

The quality of the bedrock shall be explored by the Owner's Geotechnical Engineer for the presence of soil filled seams at each column location. This shall be accomplished by drilling a 1 1/2" diameter test hole into the bedrock at each footing location prior to the placing of concrete. The depth of test hole will depend of the quality of the exposed rock,but shall not be less than 6'-0" below the bottom of the footing.

All topsoil, fill, organic, and/or other unsuitable bearing material shall be removed below the footings and/or within the building area to the depths indicated in the geotechnical engineering report and extent of removal shall be field verified by the Geotechnical Engineer.

All excavations shall be observed by a qualified Geotechnical Engineer to verify removal of all unsuitable material,and confirm the proper preparation of bearing conditions. Rock excavation for individual footings is not expected to exceed five foot depth, U.N.O. No mass excavation is anticipated. Blasting is not permitted.

For footings that do not bear on natural undisturbed soil, extend engineered fill laterally beyond bottom edge of footing per recommendations in the geotechnical report.

Foundation and retaining walls shall be back filled with free draining fill approved by the Geotechnical Engineer. Provide drainage board and perforated pipe as required by the contract documents and verify with the Architect and Civil Engineer.

Backfill equally on both sides of foundation walls to prevent overturning or lateral wall movement, or brace as necessary.

For stepping of wall footings reference drawings for detail.

REINFORCED CONCRETE:
The detailing, fabrication and erection of all reinforcing shall be done in accordance with the latest edition of ACI-315, "Manual of Standard Practice for Detailing Reinforced Concrete Structures and ACI-318, "Building Code Requirements for Structural Concrete."

All reinforcing bars are deformed and continuous, unless noted otherwise. Refer to drawings for reinforcing lap length schedule.

Provide suitable wire spacers, chairs, etc. for support of reinforcing steel in proper position while placing concrete. All bars shall be tied to prevent displacement while placing concrete. All chairs and slab bolsters shall be plastic or steel with plastic tips. When reinforcing steel is epoxy coated or p/t tendons are fully encapsulated, all chairs and slab bolsters shall be epoxy coated or plastic and all support bars shall be epoxy coated. Chairs are to be stable and resist tipping.

The fabricator shall submit a complete list of accessories and placing details with the shop drawings.

No horizontal construction joints shall be placed in beams, joists, or slabs, unless shown on drawings.

Locate vertical construction joints in beams and slabs at central one third of span. Refer to drawings for details. Submit proposed construction joint locations to the Structural Engineer of Record for review prior to placement of concrete. Where new concrete is placed against existing concrete, the existing concrete shall be roughened to a minimum 1/4" amplitude.

Refer to drawings and ACI 318 Chapter 6 for placement guidelines of embedded pipes, sleeves, and conduits. Conduits are not permitted in slabs 3 inches or less in thickness.

Aluminum conduit, aluminum sleeves and aluminum embeds are not permitted in concrete.

All conduits shall be placed within the middle one-third of the slab thickness.

The maximum size of conduits shall be 1 1/4" diameter and shall be spaced no closer (to each other or reinforcing steel) than 4 inches unless prior approval is obtained from the structural engineer.

Sleeves and conduits shall pass perpendicularly through beams in the center third of the beam's depth. Embedded boxes shall not be located on the bottom face of beams and shall meet clearance requirements for beam reinforcing tendons and reinforcing steel.

Embedded boxes, sleeves and conduits shall not be placed within a distance of 2'-6" from the face of any column and shall not be placed within 1'-6" of any anchor without prior approval from the structural engineer.

In areas of high conduit concentration where it is not possible to meet the above requirements, consult the structural engineer prior to placement.

Provide a 3/4 inch chamfer for all exposed concrete corners. See architectural drawings for details and additional requirements.

Formwork and all shoring for flatwork shall be left in place until the concrete reaches at least 75 percent of the 28-day compressive strength. Design of shoring and reshoring is the responsibility of the Contractor and shall conform to ACI 347R and ACI 347.2R.
Concrete compressive strength testing used to determine flatwork stripping times shall be performed using one of the following methods:

CIPPOC and standard cylinders cured and stored in the same conditions as the flatwork.

Maturity testing properly calibrated and conducted by an approved testing agency.

Calcium chloride is not permitted as a concrete additive.

Concrete Cover on Reinforcing:

Topping Slab:	3/4" clear top
Slab on Grade:	upper third of slab
Concrete covers are intended to meet the requirements of the IBC 2012 Section 722.2.3 prescriptive fire protection.	
Footings:	3" clear bottom and sides
Columns:	1 1/2" clear to ties or stirrups
Slabs:	1" clear top 3/4" clear bottom carbonate aggregate 1" clear bottom siliceous aggregate

CONCRETE SLABS ON GRADE:
Slabs on grade shall be place in lane fashion.

The control or construction joints shall be placed as shown on the drawings. The joints shall align with the column grids and be spaced as noted below:

Exterior slabs	24 times slab thickness, maximum;
Interior slabs	36 times slab thickness, maximum;
Interior slabs with carpeting	48 times slab thickness, maximum.

The panels formed by control or construction joints shall not be "L" shaped, and a rectangular panel's aspect ratio shall not exceed 1.5.

Refer to the drawings for the typical slab on grade construction and saw cut control joint detail. Control and construction joints must be continuous and not offset.

Refer to drawings for detail of isolation diamonds or circles at columns.

Refer to drawings for reinforcing at re-entrant corners. Bend bars as necessary at obstructions.

Refer to the specification for the existence, type, and thickness of interior ground vapor retarder. Locate a vapor retarder directly beneath the slab on grade on top of a 6 inch compactable granular base. Refer to the specification for requirements for the compactable granular base.

Mechanically vibrate concrete around trench drains, floor ducts, construction joint dowels, loading docks, architectural features and other embedded items.

Refer to the specification for slab on grade pre-pour meeting.

Refer to the specification for acceptable methods of curing the concrete.

Refer to flooring manufacturer's specification for levelness, flatness and curing of concrete slabs on grade to receive special architectural floor finishes.

Where slab demolition occurs in slabs on grade, curbs and sidewalk areas, typically saw cut slabs for new work to the widths indicated on plan. Where such saw cuts would occur within 3 feet or less of an existing control or construction joint, remove slabs to the nearest existing control or construction joint. Dowel edges as indicated for typical slabs in other areas. Provide slab control joints in new slabs at locations to match existing slab control joints, and also a spacing to keep slab panel aspect ratios as square as possible, but at a spacing not to exceed 10'-0". Slab finishes shall match original existing finishes of surrounding slabs, subject to review of Architect.

POST-INSTALLED ANCHORS:
Post installed anchors to be installed in concrete base material shall have current ICC approval for use in both cracked and un-cracked concrete in accordance with ACI 355.2, ACI 355.4, ICC ES AC193 and ICC ES AC308.

Post-installed anchors to be installed in masonry base material shall have a current ICC approval for use in uncracked, fully grouted concrete masonry unit construction in accordance with ICC-ES AC01, ICC-ES AC58 and ICC-ES AC106. Contact Engineer of Record for anchorage to hollow masonry or unreinforced clay masonry not covered by this section.

Post-installed anchors shall only be used where specified on the construction documents. The Contractor shall obtain approval from the Engineer of Record prior to installing post-installed anchors in place of missing or misplaced cast-in-place anchors. Submit a work plan including proposed products for approval prior to commencing corrective work.

Post-installed adhesive anchors shall not be used for fire rated components supporting gravity loads.

Verify that supporting substrate and environmental conditions are consistent with the manufacturer's installation instructions and the ICC-ES report.

Post-installed anchors shall be installed in accordance with the manufacturer's installation instructions and the ICC-ES report, including hole drilling and cleaning.

The general contractor shall engage a testing company to locate existing reinforcing and other embedded items by non-destructive means (GPR, pacometer or other approved means) as necessary to accurately locate existing elements prior to beginning drilling operations. Do not cut or damage existing reinforcing or other embedded items unless explicitly approved by the Engineer of Record. Notify the EOR if there is a conflict between the anchor location and an embedded item.

Pre-approved products for post-installed anchors are listed below. See specifications for additional pre-approved products and substitution request requirements.

The following wedge anchor products are pre-approved:

Base Material	Product	ICC-ES Report
Concrete	Hilti Kwik Bolt TZ	ESR-1917
Concrete	Simpson Strong Bolt	ESR-3037
Concrete	Dewalt Power Stud+ SD2	ESR-2502

The following sleeve anchor products are pre-approved:

Base Material	Product	ICC-ES Report
Concrete	Hilti HSL-3	ESR-1545
Concrete	Dewalt Power Bolt +	ESR-3260

The following screw anchor products are pre-approved:

Base Material	Product	ICC-ES Report
Concrete	Hilti HUS-EZ	ESR-3027
Concrete	Simpson DEWAL HD	ESR-2713
Concrete	Dewalt Screw Bolt+	ESR-3889

The following adhesive anchor products are pre-approved:

Base Material	Product	ICC-ES Report
Concrete	Hilti HIT HY 200	ESR-3187
Concrete	Hilti HIT HY 100	ESR-3574
Concrete	Hilti HIT RE 500-V3	ESR-3814
Concrete	Simpson AT XP	IAPMO ER-0263
Concrete	Dewalt AC100+ Gold	ESR-2582

The following power-actuated fastener products are pre-approved:

Base Material	Product	ICC-ES Report
Steel/Concrete/Masonry/Wood	Hilti Low Velocity	ESR-1663
Steel/Concrete/Masonry/Wood	Hilti X-U	ESR-2269
Steel/Concrete/Masonry/Wood	Simpson Powder-Actuated	ESR-2138
Steel/Concrete/Masonry/Wood	Dewalt Power-Driven	ESR-2024
Steel/Concrete/Masonry/Wood	Dewalt Trak-It	ESR-3275

(*) Indicates products listed are for anchorage to solid grouted concrete masonry units only.
(**) Indicated products listed are for anchorage to solid grouted or ungrouted concrete masonry units. Do not use anchors in ungrouted cells unless shown explicitly directed by Engineer of Record.

LOCUS ARCHITECTURE

ARCHITECT OF RECORD
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CLIENT
GOODHUE COUNTY
5001 MN-19, Cannon Falls, MN 55009

No.	Description	Date

SHEET NAME
GENERAL STRUCTURAL NOTES

SHEET NUMBER
S002

STRUCTURAL STEEL:
Structural steel shall be detailed, fabricated and erected in compliance with AISC Specification for the design, fabrication, erection of structural steel for building, and Code of Standard Practice, and OSHA steel erection standards.

All beams and girders shall be cambered at mid-span as indicated on the structural drawings. The cambers indicated shall be present in the beam in its erected position after completion of the end connections and shall be verified prior to placing concrete. Cambering tolerances shall be (-0", +1/2"). No center point cambering allowed.

Splicing structural members where not detailed on the drawings is prohibited without prior approval of the Structural Engineer of Record.

Modification of structural steel members in the field is not allowed without written approval by the Structural Engineer of Record.

All composite beams using the concrete slab as a compression flange are designed for unshored construction unless noted otherwise.

Anchor rods shall be minimum 3/4" diameter or as detailed in drawings.

(Note: For complex, significant or unusual structural systems, consider providing written guidance in the note below. Otherwise delete.)

Per Section 7.10.1 of the Code of Standard Practice For Steel Buildings and Bridges. The lateral-load-resisting system and diaphragm elements that provide for lateral strength and stability in the completed structure.

STRUCTURAL STEEL CONNECTIONS:
All steel connections are as indicated on the drawings.

-or-

The following steel connections shall be designed by the Steel Fabricator for the criteria indicated on the drawings unless noted or detailed otherwise.
- All shear connections
- All brace frame connections
- All truss connections
- All beam connections with axial loads indicated
- All moment connections
- All miscellaneous connections where indicated as "By Connection Engineer"

Submit calculations certified by a Professional Engineer who is licensed in the state where the project is located.

Unless noted otherwise, design simple beam shear connections per the AISC Manual connection tables. Design connections for the reactions indicated on the plans or the minimum connection requirements indicated in the connection schedule. Reactions indicated on plan or within details supersede those indicated in the connection schedule.

Shear connections shall be designed to resist eccentricity within the connection considering the resultant at the following locations:
- Beam to beam connections: at center of supporting beam
- Beam to column flange: at face of column flange
- Beam to column web: at face of column web
- Beam to HSS columns: at face of column
- Beam to column moment connection: at centerline of column
- Beam to embed plate: at face of embed

Unless detailed otherwise, beam shop connections may be welded or bolted and field connections are to be bolted. Bolts shall be a minimum 3/4" diameter for connections specified or detailed in the drawings. The fabricator may submit an alternate connection with the calculations that is certified by a professional engineer who is licensed in the state where the project is located.

All re-entrant corners must be shaped notch free per AWS D1.1 to a minimum radius of 1" except corners in connection material and beam copes.

Provide stiffeners and doublers where shown. Member reinforcements shall be the minimum of the size as indicated or as required by engineering analysis of the connection.

For beam to spandrel beam connections provide full depth stiffeners and fill maximum bolt rows.

Welded connections shall be made in accordance with AWS D1.1 Structural Welding Code using E70XX electrodes unless noted otherwise. Weld sizes not shown or controlled by the required forces shall be AWS code minimum size. Welds shall be visually inspected for compliance with the AWS code visual inspection criteria. Welders shall be qualified in accordance with AWS D1.1 and shall be experienced in welding structural steel.

Full penetration welds shall be tested using NDT methods such as ultrasonic, magnetic particle or other methods referenced in the AWS code. Welds subject to NDT methods shall also have been found compliant with the AWS visual inspection criteria.

STEEL JOISTS AND JOIST GIRDERS:
Manufacturer shall be a current member of the Steel Joist Institute (SJI).

Detail, fabricate and erect steel joists, joist girders and bridging in accordance with SJI Specifications, AISC Specifications and Codes, and OSHA steel erection standards.

The Manufacturer shall submit certified structural calculations by a qualified Structural Engineer licensed in the state in which the project is located for all joists that support concentrated or varying uniform loads, or non-standard loads as indicated on the drawings. See plans and details for special joist loads.

Welded connections shall be made in accordance with AWS D1.1 using E70XX electrodes unless noted otherwise. Welders shall be qualified in accordance with AWS D1.1.

When uplift forces are indicated in the design loads section or on the drawings, the Joist Manufacturer shall consider them in the design of the joists and bridging. A single line of bottom chord bridging must be provided near the first bottom chord panel points at all uplift conditions.

Design roof joists for uplift due to wind as indicated on the drawings.

Design joists for mechanical unit loads shown on plan. The General Contractor verify and coordinate the size, weight and location of mechanical units with the mechanical contractor for use by the Joist Manufacturer.

In addition to the loads indicated on the drawings design joist to support a 250 add load pound concentrated dead load at any point on the top and bottom chords simultaneously.

In addition to the loads indicated on the drawings design joist to support a 250 pound bend-check load on the top chord and bottom chord.

Design joists for hanging loads including but not limited to rain water leaders, process piping, cable trays, etc. General Contractor to verify location and magnitude of all such loads prior to fabrication of joists and joist girders.

General Contractor to verify if special joist panel point alignment or bridging configuration is required to accommodate the location of sprinkler lines, duct work, etc. As necessary align all joist web members throughout a bay and align similarly for each bay.

Design joists for the load from the diagonal braces to the bottom flange of beams at and near columns due to beam stability requirements. See plans and details for special joist loads.

Design joists for the load from the diagonal braces to the exterior spandrel wall due to wind.

Design joists for point load due to brick veneer from an exterior wall above. Reference drawings for detail.

Camber joist per the SJI specification or as noted on the plans and details.

Provide bottom chord extensions for ceiling support as required by the Architect.

When beams have joists bearing from one side only, bear joist on full beam flange.

Bridging shall conform to SJI specifications and codes. Provide diagonal bridging for all LH and DLH joist. Anchor all bridging to walls and beams parallel to joists and provide horizontal bridging in end space adjacent to the wall. Reference drawings for details.

All bridging, bridging anchors and building structure that resist the bridging loads, shall be completely installed before construction loads are placed on the joists.

Refer to drawings for joist bearing plates in masonry or concrete.

Items to be suspended from the roof structure (other than lightweight ceiling grids) shall be connected to top chord panel points only unless noted or detailed otherwise. Reference drawings for typical detail of reinforcing at concentrated loads.

Joist reinforcement is required where concentrated loads are not applied to a panel point. Reference the drawings for the detail.

Joist Supported Cranes:

Design joists with crane loads for CMAA service class 'C'. Cranes are to be mounted and braced to bottom chord panel points.

Joist Deflection Criteria:	
Snow + Crane Load	< L/450
Crane Load	< L/1920
Snow Load	< L/360
Total Load	< L/240

WOOD FRAMING:
DIMENSION LUMBER:
With Type 3A or 3B construction, all lumber in exterior walls shall be fire retardant treated wood.

All member sizes given in the drawings are nominal dimensions.

All lumber shall be kiln-dried, maximum moisture content 15% and grade marked according to the National Forest Products Association Regulations.

All joists (greater than 2x8) shall be supported laterally at the ends and at each support by solid blocking except where ends of joists are nailed to a header, band or rim joist or to an adjoining stud. Solid blocking shall be not less than 2" in thickness and the full depth of the joist.

Wood joists shall bear on the full width of supporting members, stud walls, beams, etc., unless otherwise noted.

Do not notch or cut joist unless approved by the Structural Engineer of Record.

All beams and joists not bearing on supporting members shall be framed with "Simpson Strong- Tie" joist hangers or equal. Use type "LUS" (or equal) for single 2x's and double 2x's and type "UTF" for framing to trusses where required. The joist hangers shall be nailed using special nails supplied by the hanger manufacturer. Proposed nail type substitutions shall conform to the ICC report for equal or greater load capacity and shall be submitted with the ICC report to the Structural Engineer of Record for written approval.

Wood headers or posts made up of 2 or more 2x's shall be spiked together per the nailing schedule.

Provide minimum 2 - 2x trim studs at bearing ends of all headers. Where posts are shown on drawings, headers shall bear fully on the posts.

Wood columns shall have solid vertical blocking through the floors to the support below.

All holes drilled through studs or posts in walls shall strictly conform to the detail in the drawings. Wood columns are not to be notched or drilled for utilities.

For walls 10'-0" and greater provide blocking at mid-height for construction stability.

All walls shall have single bottom plate and double top plate.

Double top plate splices shall lap 4'-0" and be nailed with 16 - 0.131" x 3" nails equally spaced with 1 1/2" end distance, unless noted otherwise on plan.

Unless otherwise noted, bottom plates of all exterior stud walls and interior bearing walls shall be anchored to new concrete with 1/2" diameter anchor bolts, at 4'-0" oc, or with equivalent anchors, as approved by the structural engineer.

All exterior lumber and all lumber in contact with concrete or masonry, or exposed to the exterior shall be treated Southern Yellow Pine. Each sill plate shall have a minimum of 2 anchor rods with an anchor rod located within 12" of each end.

All connectors in contact with treated lumber shall have corrosion protection.

For nailing/fastener schedule refer to the drawings.

STRUCTURAL COMPOSITE LUMBER:
Structural composite lumber shall be provided with member strengths as specified in the general structural notes.

All members shall be stamped with the Manufacturer's name and/or logo, name of inspection agency and the applicable evaluation report numbers.

Structural composite lumber such as laminated veneer lumber (LVL), parallel strand lumber (PSL), and laminated strand lumber (LSL), shall be the size and type shown on the drawings, manufactured by Truss-Joist or approved equal.

LVL, PSL, and LSL shall be manufactured under a process approved by the national research board.

All LVL shall be manufactured in accordance with NER-126
All PSL shall be manufactured in accordance with NER-292
All LSL shall be manufactured in accordance with NER-481

The manufacturing process shall use a waterproof adhesive meeting the requirements of ASTM D2559. All grain shall be parallel with the length of the member.

Structural composite lumber shall be installed with a moisture content of 12% or less. The Contractor shall make provisions during construction to prevent the moisture content of installed beams from exceeding 12%.

The Supplier is to furnish all connection materials required to fasten members to each other and to supports, exclusive of anchors embedded in masonry or concrete, and items to be field welded to structural steel.

All beams and joists not bearing on supporting members shall be framed with "Simpson Strong- Tie" joist hangers or equal. Use type "HU" (or equal) matching or exceeding the depth of the joist or beam. Install the hanger with the maximum number of fasteners specified by the manufacturer. The joist hangers shall be nailed using special nails supplied by the hanger manufacturer. Proposed nail type substitutions shall conform to the ICC report for equal or greater load capacity and shall be submitted with the ICC report to the Structural Engineer of Record for written approval.

Complete shop drawings including an erection plan, details of each member and each connection and design notes shall be submitted for review by the Architect and Structural Engineer of Record prior to fabrication.

Shop drawings and complete structural calculations shall be certified by a qualified Professional Engineer licensed in the state where the project occurs.

Comply with all recommendations by the Manufacturer and with approved shop drawings for the proper storage, handling, protection, installation and temporary bracing requirements of these materials.

Bear members full width of supporting member, stud walls, posts, trim studs, beams, etc.

Notching of the bearing end or the top and bottom face is not permitted.

When installing lag screws, drill a lead hole.

WOOD FASTENERS – NAILING:
Framing nail sizes specified on the drawings are based on the following specification U.N.O.:

Size	Length	Diameter
6d common	2"	0.113"
8d common	2 1/2"	0.131"
10d common	3"	0.148"
12d common	3 1/4"	0.148"
16d common	3 1/2"	0.162"

Size	Length	Diameter
6d box	2"	0.099"
8d box	2 1/2"	0.113"
10d box	3"	0.128"
16d box	3 1/4"	0.135"

Size	Length	Diameter
6d cooler	1 7/8"	0.092"
8d cooler	2 3/8"	0.113"

All framing nails shall conform to ASTM F667, "Standard Specification for Power Driven Fasteners: Nails, Spikes and Staples" and NER-272 "Power Driven Staples and Nails for Use in All Types of Building Construction". Cooler nails shall comply with ASTM C514.

Refer to nailing schedule in the drawings for nail size and spacing at a specified condition.

Nails shall be identified by labels attached to their containers that show the Manufacturer's name and NES report number, nail shank diameter, and length. Submit this information prior to framing.

If the Contractor proposes the use of alternate nails, they shall submit prior to construction nail specifications with certified calculations showing structural equivalence to the Structural Engineer of Record for review and approval.

Nails fastening APA rated plywood sheathing shall be driven flush to the face of sheathing with no counter sinking permitted. Renail sheathing as necessary to comply.

WOOD FASTENERS – STRUCTURAL WOOD SCREWS:
Structural wood screws as specified in the drawings refer to threaded steel screws that are self-drilling, dowel-type fasteners used primarily for wood-to-wood connections. These carbon steel screws are manufactured by a cold-formed process and are heat-treated with rolled threads. No pre-drilling is required.

Screws are specified in the drawings per nominal diameter and length. The diameter refers to a nominal measure of the threads, which is larger than the unthreaded shaft of the fastener. Length specified does not include fastener head. Actual dimensions and available lengths vary with Manufacturer.

Acceptable products are listed below. Contractor may submit alternate products for approval by Structural Engineer of Record.

The following minimum dimensions and material properties shall apply:

Size specified	Minimum Shank:	Root Diameters (in)	Acceptable Products
1/4" Diam	0.169"	0.150"	GRK RSS
5/16" Diam	0.189"	0.172"	GRK RSS Simpson SDWH FastenMasterTimberlok
3/8" Diam	0.219"	0.191"	GRK RSS Simpson SDWS FastenmasterLedgerlok

Minimum Allowable Tension strength of fastener (lbs):	
1/4" Diameter	1112 lbs
5/16" Diameter	1210 lbs
3/8" Diameter	1505 lbs

Minimum Allowable Shear strength of fastener (lbs):	
1/4" Diameter	754 lbs
5/16" Diameter	770 lbs
3/8" Diameter	910 lbs

Minimum Bending Yield Strength:	165,000 psi

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LAKE BYLLESBY PARK PAVILION + BEACH BATH

50% PROGRESS SET

NOT FOR CONSTRUCTION

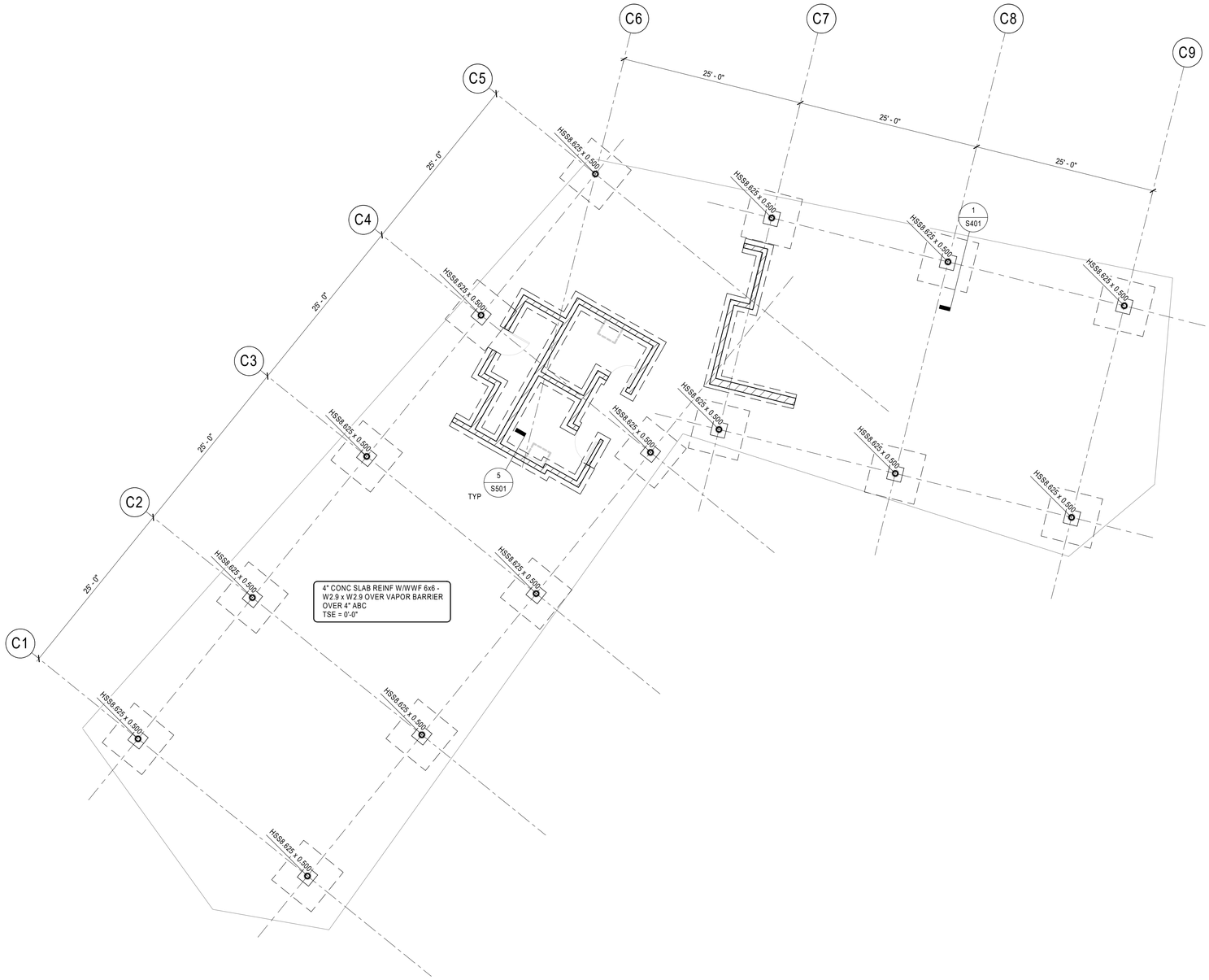
9/21/2021

CLIENT
GOODHUE COUNTY
5001 MN-19, Cannon Falls, MN 55009

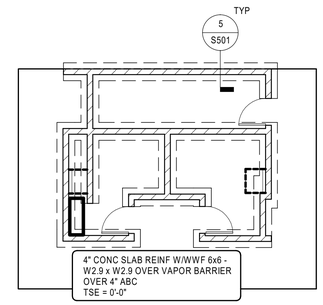
No.	Description	Date

SHEET NAME
GENERAL STRUCTURAL NOTES

SHEET NUMBER
S003



1 NEW PAVILION FOUNDATION PLAN
1/8" = 1'-0"



2 BEACH BATH FOUNDATION PLAN
1/8" = 1'-0"

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GOODHUE COUNTY

5001 MN-19, Cannon Falls, MN 55009

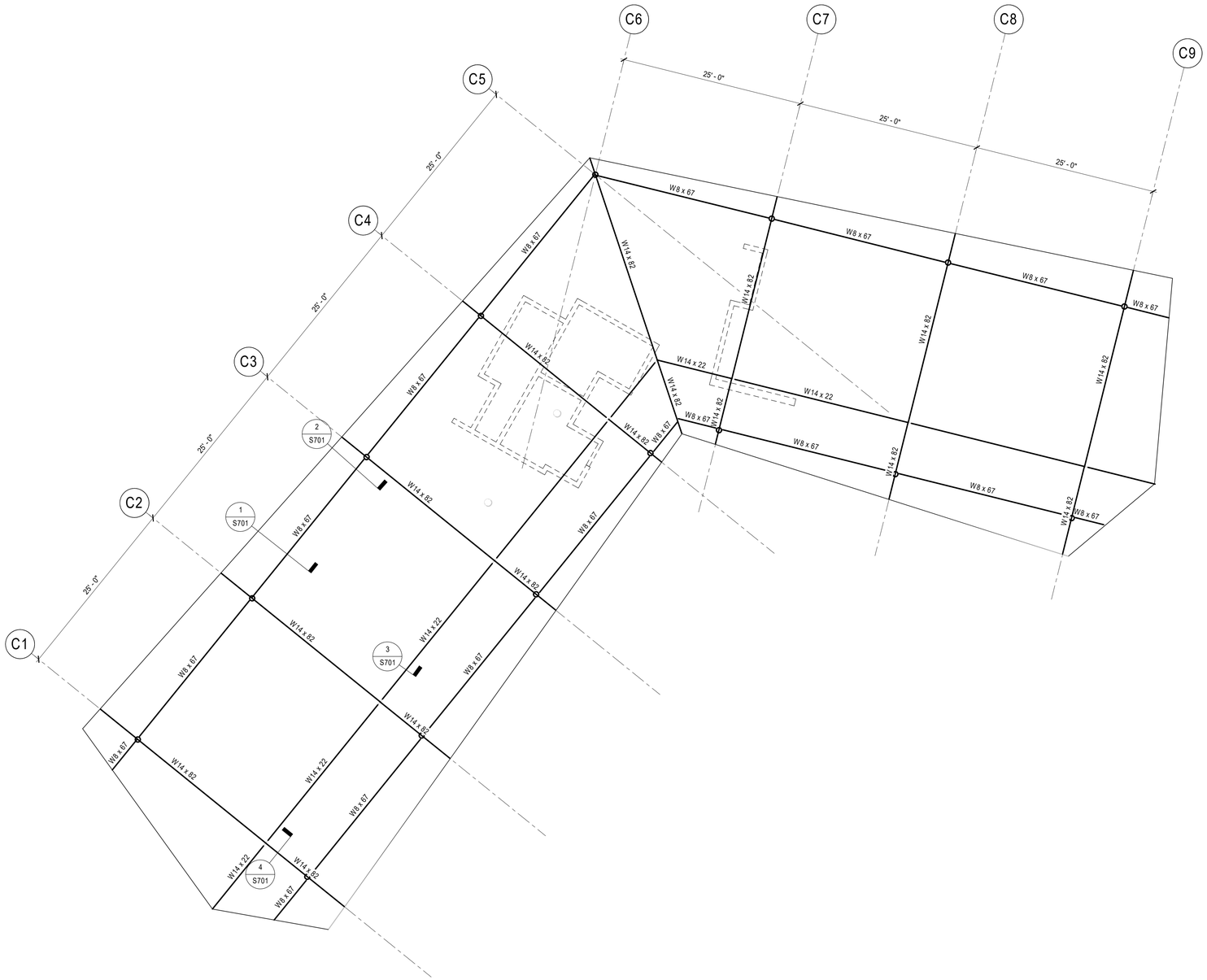
No.	Description	Date

SHEET NAME

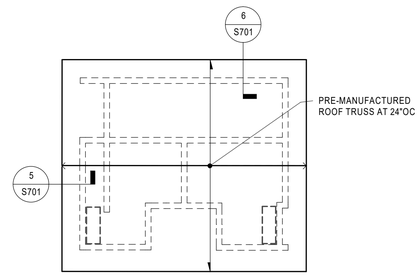
FOUNDATION PLAN

SHEET NUMBER

S201



1 NEW PAVILION ROOF FRAMING PLAN
1/8" = 1'-0"



2 BEACH BATH ROOF FRAMING PLAN
1/8" = 1'-0"

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9/21/2021

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GOODHUE COUNTY

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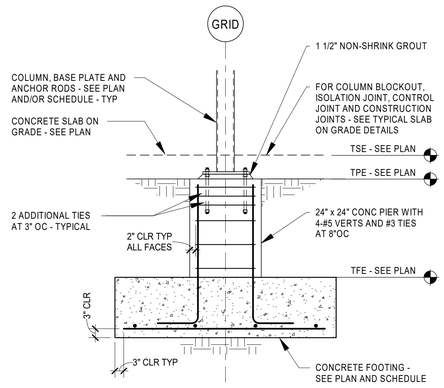
No.	Description	Date

SHEET NAME

ROOF FRAMING PLANS

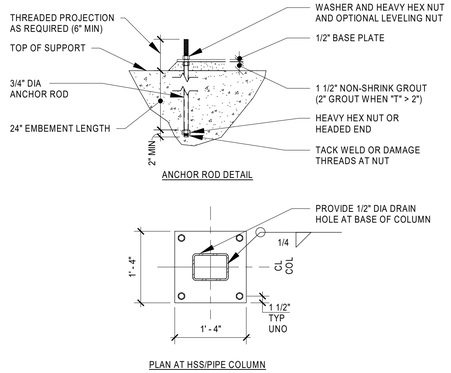
SHEET NUMBER

S202



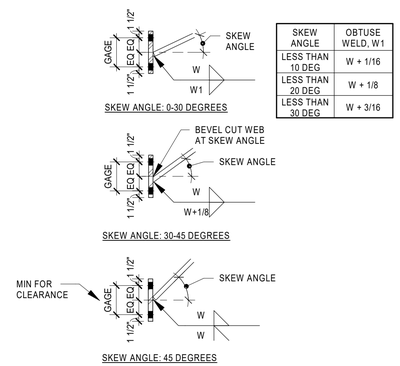
1 TYPICAL HSS/PIPE COLUMN, CONCRETE PIER AND FOOTING DETAIL

S401 NO SCALE



2 TYPICAL COLUMN BASE PLATE DETAILS

S401 NO SCALE

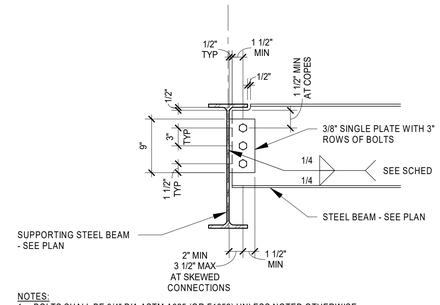


SKEW ANGLE	OBTUSE WELD, W1
LESS THAN 10 DEG	W + 1/16
LESS THAN 20 DEG	W + 1/8
LESS THAN 30 DEG	W + 3/16

NOTES:
1. SEE TYPICAL BOLTED / WELDED SHEAR END PLATE CONNECTION SCHEDULE AND DETAIL FOR ADDITIONAL INFORMATION.
2. "W" INDICATES NOMINAL WELD SIZE SHOWN ON BOLTED / WELDED END PLATE SCHEDULE.
3. PROVIDE STANDARD HEX HEAD BOLTS WHERE FIT-UP DOES NOT ALLOW USE OF TENSION-CONTROL BOLTS.

3 TYPICAL SKEWED BOLTED / WELDED SHEAR END PLATE DETAIL

S401 NO SCALE



NOTES:
1. BOLTS SHALL BE 3/4" DIA ASTM A325 (OR F1852) UNLESS NOTED OTHERWISE.
2. ALL PLATES ARE ASTM A36 STEEL UNLESS NOTED OTHERWISE.
3. PROVIDE STANDARD OR SHORT-SLOT LOAD TRANSVERSE HOLES IN PLATE.

4 TYPICAL SINGLE PLATE CONNECTION DETAIL

S401 NO SCALE

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CLIENT

GOODHUE COUNTY

5001 MN-19, Cannon Falls, MN 55009

No.	Description	Date

SHEET NAME

TYPICAL SCHEDULES AND DETAILS

SHEET NUMBER

S401

LINTEL SCHEDULE			
MARK	SIZE	DETAIL NUMBER	COMMENTS
L1	W? x ??	S/___	???

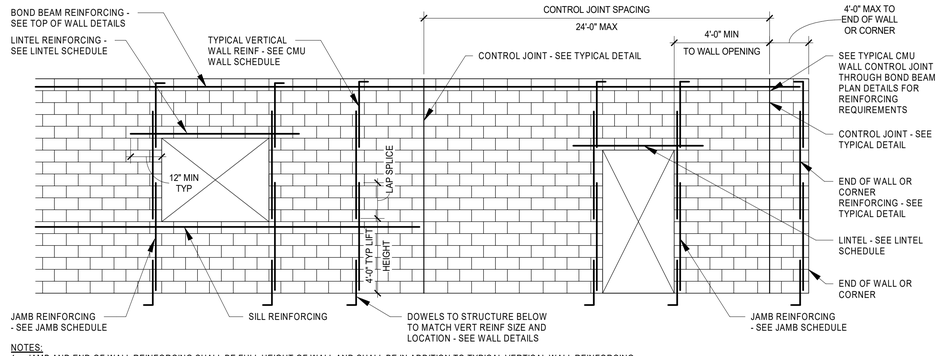
UNLESS NOTED OTHERWISE:
1. USE LINTEL BLOCKS FOR BOTTOM OF CMU LINTELS.
2. BEAR CMU LINTEL 8" MIN ON CMU JAMBS EACH END OF OPENING - SEE DETAIL _____.
3. NO VERTICAL CONTROL JOINTS (VCJ) THROUGH LINTEL OR BEARING.
4. BEAR STEEL LINTEL 8" MIN ON CMU JAMB EACH END OF OPENING - SEE DETAIL _____.
5. CORE FILL CONTINUOUS ONE (1) COURSE ABOVE STEEL LINTEL W/2 - #5 CONT.
6. GROUT SOLID AROUND BEAM.
7. BOTTOM PLATES TO BE HELD BACK 1/2" FROM EDGE OF JAMB.
8. PROVIDE 1/2" DIA x 0'-5" HAS AT 16" OC.
9. PROVIDE BEARING PLATE 5/8 x 7 x 0'-7 1/2" W/2 - 3/4" DIA x 0'-6" LONG HSA AND 3/4" GROUT UNDER PLATE EACH END OF STEEL LINTEL.
10. PROVIDE BEARING PLATE 3/4" x 15" x 1'-3 1/2" W/4 - 3/4" DIA x 0'-6" LONG HSA AND 3/4" GROUT UNDER PLATE EACH END OF STEEL LINTEL.
11. BEAR STEEL LINTEL 1'-2" MIN ON CMU JAMB EACH END OF OPENING - SEE DETAIL _____.

1 S402 LINTEL SCHEDULE
NO SCALE

CMU REINFORCING BAR LAP SPLICE SCHEDULE: f'm = 2000 PSI							
BAR SIZE	6" CMU	8" CMU		10" CMU		12" CMU	
	CASE 1	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2
#3	14"	14"	15"	14"	14"	14"	14"
#4	21"	18"	25"	18"	24"	18"	22"
#5	32"	22"	39"	22"	37"	22"	35"
#6	-	38"	54"	35"	54"	35"	54"
#7	-	52"	-	40"	63"	40"	63"
#8	-	-	-	61"	-	53"	72"

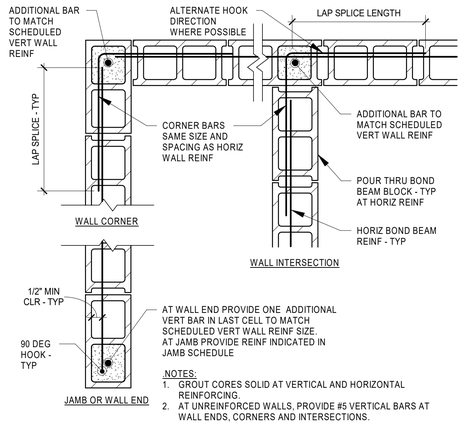
NOTES:
1. REINFORCING BAR LAP SPLICE SCHEDULE APPLIES TO UNCOATED, GRADE 60 REINFORCING BARS IN ASTM C 90 HOLLOW UNITS.
2. CASE 1: ONE BAR PER CELL LOCATED IN THE CENTER OF THE CELL.
   CASE 2: ALL OTHER CONDITIONS, INCLUDING TWO BARS PER CELL AND SINGLE BARS NOT LOCATED IN THE CENTER OF THE CELL.
3. FOR EPOXY COATED BAR, MULTIPLY THE ABOVE LENGTHS BY 1.5.
4. MAXIMUM SPACING OF BARS BEING LAPPED IS ONE FIFTH THE LAP SPLICE LENGTH, NOT TO EXCEED 8".
5. REINFORCING BARS SHALL BE LAPPED IN THE SAME CMU CELL.
6. ALL BARS MUST BE PLACED IN FULLY GROUTED CELLS OR BOND BEAMS.

2 S402 CMU REINFORCING BAR LAP SPLICE SCHEDULE
NO SCALE



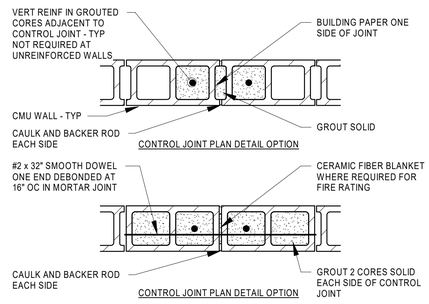
NOTES:
1. JAMB AND END OF WALL REINFORCING SHALL BE FULL HEIGHT OF WALL AND SHALL BE IN ADDITION TO TYPICAL VERTICAL WALL REINFORCING.
2. PROVIDE CONTROL JOINTS TO MEET SPACING REQUIREMENTS SHOWN AND AT LOCATIONS WHERE CHANGES IN WALL HEIGHT OCCUR, WHERE CHANGES IN WALL THICKNESS OCCUR, AND WHERE MOVEMENT JOINTS IN THE FLOOR ABOVE AND/OR BELOW OCCUR.
3. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS AT NON-LOAD BEARING WALLS NOT SHOWN ON STRUCTURAL DRAWINGS.
4. SEE ARCHITECTURAL DRAWINGS FOR WALL OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS.
5. PROVIDE CLEANOUT AT BOTTOM COURSE FOR GROUT POURS GREATER THAN 5'-0" HIGH.
6. SILL REINFORCING SHALL BE LADDER JOINT REINFORCING IN THE FIRST OR SECOND MORTAR JOINT BELOW THE SILL OR A REINFORCED BOND BEAM. SILL REINFORCING SHALL EXTEND BETWEEN CONTROL JOINTS.
7. SEE NON-LOAD BEARING INTERIOR CMU WALL REINFORCING SCHEDULE FOR LINTEL AND JAMB REINFORCING REQUIRED AT NON-LOAD BEARING INTERIOR WALLS.

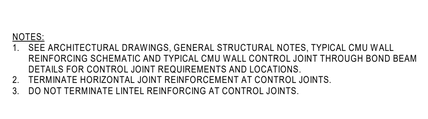
3 S402 TYPICAL CMU WALL REINFORCING SCHEMATIC
NO SCALE



NOTES:
1. GROUT CORES SOLID AT VERTICAL AND HORIZONTAL REINFORCING.
2. AT UNREINFORCED WALLS, PROVIDE #5 VERTICAL BARS AT WALL ENDS, CORNERS AND INTERSECTIONS.

4 S402 TYPICAL CMU WALL REINFORCING PLAN DETAILS
NO SCALE





NOTES:
1. SEE ARCHITECTURAL DRAWINGS, GENERAL STRUCTURAL NOTES, TYPICAL CMU WALL REINFORCING SCHEMATIC AND TYPICAL CMU WALL CONTROL JOINT THROUGH BOND BEAM DETAILS FOR CONTROL JOINT REQUIREMENTS AND LOCATIONS.
2. TERMINATE HORIZONTAL JOINT REINFORCEMENT AT CONTROL JOINTS.
3. DO NOT TERMINATE LINTEL REINFORCING AT CONTROL JOINTS.

5 S402 TYPICAL CMU WALL CONTROL JOINT PLAN DETAILS
NO SCALE

NON-LOAD BEARING EXTERIOR CMU WALL REINFORCING SCHEDULE			
WALL THICKNESS	WALL HEIGHT	REINFORCING VERTICAL	COMMENTS
6"	≤ 10'-0"	#4 AT 48" OC	
	≤ 12'-0"	#4 AT 24" OC	
8"	≤ 14'-0"	#4 AT 48" OC	
	≤ 18'-0"	#4 AT 24" OC	
10"	≤ 16'-0"*	#4 AT 48" OC	
	≤ 19'-0"	#4 AT 24" OC	
12"	≤ 19'-0"	#5 AT 48" OC	
	≤ 23'-0"	#5 AT 24" OC	

NOTES:
1. WALL HEIGHT INDICATES MAXIMUM ALLOWABLE VERTICAL CLEAR DISTANCE BETWEEN POINTS OF CONTINUOUS LATERAL WALL SUPPORT.
2. VERTICAL REINFORCEMENT SHALL BE LOCATED IN THE CENTER OF THE WALL.
3. SEE TYPICAL CMU WALL DETAILS FOR ADDITIONAL INFORMATION.

7 S402 NON-LOAD BEARING EXTERIOR CMU WALL REINFORCING SCHEDULE
NO SCALE

LOAD BEARING CMU WALL REINFORCING SCHEDULE						
		REINFORCING				
		VERTICAL			HORIZ	
MARK	THICKNESS	CENTERED IN WALL	INSIDE FACE	OUTSIDE FACE	BOND BEAM	COMMENTS
MW1	__'-__"	#__ AT __"	#__ AT __"	#__ AT __"	__#__ AT __" OC	???

NOTES:
1. SEE TYPICAL CMU WALL DETAILS FOR ADDITIONAL INFORMATION.
2. PROVIDE DOWELS AT FOUNDATION TO MATCH SIZE AND SPACING OF VERTICAL REINFORCING.

8 S402 LOAD BEARING CMU WALL REINFORCING SCHEDULE
NO SCALE

ARCHITECT OF RECORD
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LAKE BYLLESBY PARK PAVILION + BEACH BATH

50% PROGRESS SET

NOT FOR CONSTRUCTION

9/21/2021

CLIENT
GOODHUE COUNTY
5001 MN-19, Cannon Falls, MN 55009

No.	Description	Date

SHEET NAME
TYPICAL MASONRY SCHEDULES AND DETAILS

SHEET NUMBER
S402

CONCRETE PAD FOOTING SCHEDULE						
	SIZE			REINFORCING - BOTTOM BARS		
MARK	LENGTH	WIDTH	THICKNESS	LONG	TRANS	COMMENTS

NOTES:
1. SEE TYPICAL FOOTING DETAILS FOR ADDITIONAL INFORMATION.
2. LONGITUDINAL (LONG) BARS ARE PARALLEL TO FOOTING LENGTH DIMENSION AND TRANSVERSE (TRANS) BARS ARE PARALLEL TO FOOTING WIDTH DIMENSION
3. CENTER FOOTING ON COLUMN, PIER OR WALL UNLESS NOTED OTHERWISE.
4. SEE GEOTECHNICAL REPORT FOR SUBGRADE REQUIREMENTS.
5. FOR RECTANGULAR FOOTINGS, LONGITUDINAL BARS ARE TO BE THE BOTTOM LAYER OF REINFORCING.

1 S501 CONCRETE PAD FOOTING SCHEDULE
NO SCALE

PIER SCHEDULE				
PIER MARK	SIZE	REINFORCING		COMMENTS
		VERTICAL BARS	TIES	

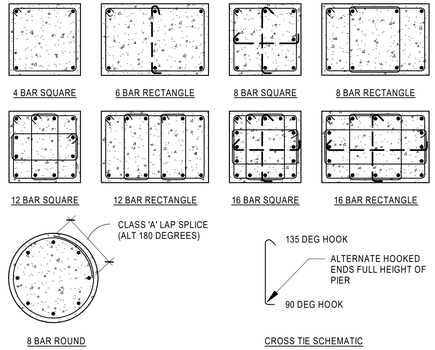
NOTES:
1. SEE TYPICAL COLUMN, PIER AND FOOTING DETAIL FOR ADDITIONAL INFORMATION.
2. SEE TYPICAL CONCRETE PIER BAR AND TIE LAYOUT FOR REINFORCING CONFIGURATIONS.
3. PROVIDE STANDARD 90 DEGREE HOOK AT VERTICAL (VERT) BARS TO FOOTING.
4. CONTRACTORS OPTION PROVIDE HOOKED DOWELS LAP SPLICED TO VERTICAL REINFORCING. MATCH SIZE AND LOCATION OF VERTICAL REINFORCING.

2 S501 CONCRETE PIER SCHEDULE
NO SCALE

CONCRETE REINFORCING BAR LAP SPLICE SCHEDULE								
BAR SIZE	f'c = 3,000 PSI		f'c = 4,000 PSI		f'c = 5,000 PSI		f'c ≥ 6,000 PSI	
	CLASS A	CLASS B	CLASS A	CLASS B	CLASS A	CLASS B	CLASS A	CLASS B
#3	18"	22"	16"	20"	14"	18"	12"	16"
#4	22"	30"	20"	26"	18"	22"	16"	20"
#5	28"	36"	24"	32"	22"	28"	20"	26"
#6	34"	44"	30"	38"	26"	34"	24"	32"
#7	48"	64"	42"	54"	38"	50"	34"	44"
#8	56"	72"	48"	62"	44"	56"	40"	52"
#9	62"	82"	54"	70"	48"	64"	44"	58"
#10	70"	92"	62"	80"	54"	70"	50"	64"
#11	78"	102"	68"	88"	60"	78"	56"	72"

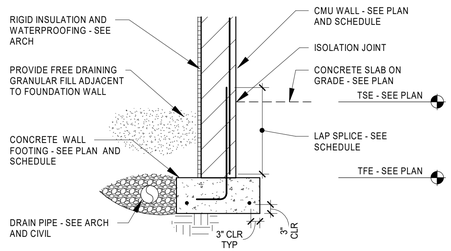
NOTES:
1. REINFORCING BAR LAP SPLICE SCHEDULE APPLIES TO UNCOATED, GRADE 60 REINFORCING BARS IN NORMAL WEIGHT CONCRETE.
2. PROVIDE CLASS A LAP UNLESS NOTED OTHERWISE.
3. FOR EPOXY COATED BAR, MULTIPLY THE ABOVE LENGTHS BY 1.5.
4. FOR LIGHT WEIGHT CONCRETE, MULTIPLY THE ABOVE LENGTHS BY 1.3.
5. FOR TOP BARS IN BEAMS AND HORIZONTAL WALL REINFORCING, MULTIPLY THE ABOVE LENGTHS BY 1.3.
6. MAXIMUM SPACING OF BARS BEING LAPPED IS ONE FIFTH THE LAP SPLICE LENGTH, NOT TO EXCEED 6".

3 S501 REINFORCING BAR LAP SPLICE SCHEDULE
NO SCALE



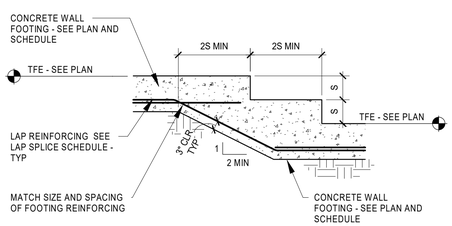
NOTES:
1. IF CLEAR SPACING BETWEEN VERTICAL BARS IS GREATER THAN 6", PROVIDE ADDITIONAL CROSS TIES, SHOWN DASHED.

4 S501 CONCRETE PIER BAR AND TIE LAYOUT
NO SCALE



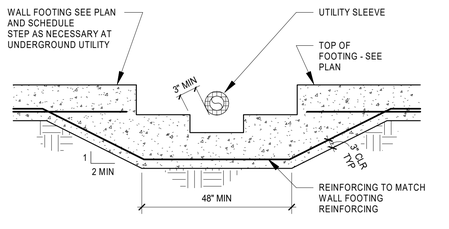
NOTES
1. STRUCTURAL SLAB AT TOP OF WALL MUST BE IN PLACE WITH POSITIVE CONNECTION TO TOP OF ALL AND CURED A MINIMUM OF 72 HOURS BEFORE BACKFILL IS PLACED ABOVE LEVEL OF CONCRETE SLAB ON GRADE.

5 S501 TYPICAL CMU WALL AND FOOTING DETAIL
NO SCALE



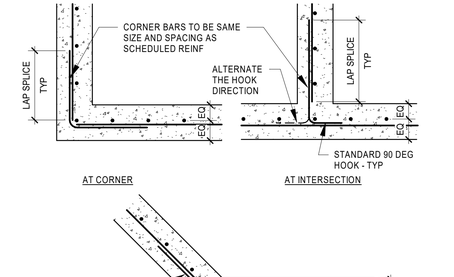
NOTES:
1. SEE PLAN FOR FOOTING STEP LOCATIONS.
2. 'S' SHALL NOT EXCEED 16" FOR CMU WALLS OR 24" FOR CAST-IN-PLACE OR PRECAST CONCRETE WALLS.

6 S501 TYPICAL WALL FOOTING STEP
NO SCALE

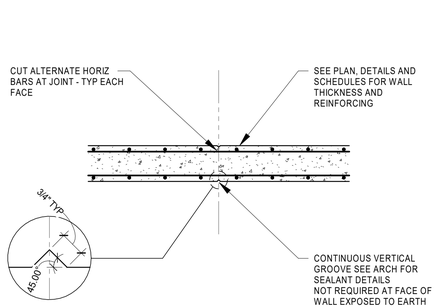


NOTES:
1. SEE TYPICAL WALL FOOTING STEP DETAIL FOR ADDITIONAL INFORMATION.
2. UTILITY SLEEVE DIAMETER TO BE 2" GREATER THAN UTILITY PIPE OUTSIDE DIAMETER. INSULATE WITH 1" COMPRESSIBLE MATERIAL BETWEEN SLEEVE AND UTILITY.
3. AT FOOTINGS BELOW CMU WALLS, COORDINATE WALL FOOTING STEP LOCATIONS WITH CMU COURSING.

7 S501 TYPICAL STEPPED WALL FOOTING AT UTILITIES
NO SCALE

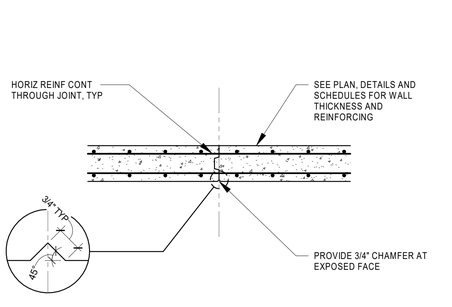


8 S501 TYPICAL CORNER BAR PLACING DETAIL
NO SCALE



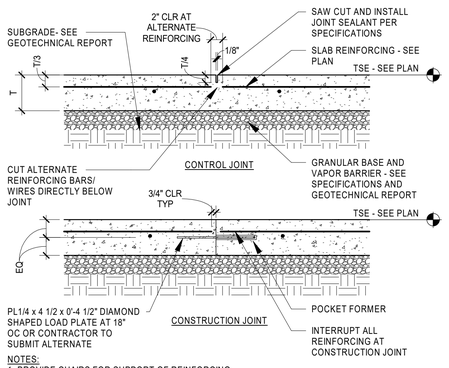
NOTES:
1. SUBMIT PROPOSED JOINT LOCATIONS FOR APPROVAL IF NOT SHOWN ON DRAWINGS.
2. MAXIMUM SPACING OF CONTROL JOINTS IS 20 FT ON CENTER OR 1 1/2 TIMES THE WALL HEIGHT ON CENTER, WHICHEVER IS LESS.
3. DO NOT USE THIS DETAIL FOR SHEAR WALLS OR WALLS THAT SPAN HORIZONTALLY.

9 S501 TYPICAL VERTICAL CONTROL JOINT FOR CONCRETE WALLS
NO SCALE



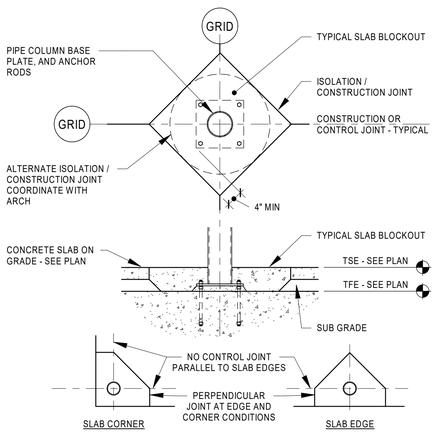
NOTES:
1. SUBMIT PROPOSED JOINT LOCATIONS FOR APPROVAL.
2. JOINTS SHALL BE LOCATED NO CLOSER THAN 5'-0" FROM WALL CORNERS OR PILASTERS.
3. JOINTS SHALL BE SPACED A MAXIMUM OF 60 FT OC.
4. WHERE WALL SPANS HORIZONTALLY, LOCATE JOINT WITHIN THE MIDDLE THIRD SPAN, UNO.
5. USE 2X4 KEYWAY (1 1/2" x 3 1/2") FOR WALLS UP TO 16" THICK. USE 2x6 KEYWAY (1 1/2" x 5 1/2") FOR WALLS >16" TO 24" THICK.

10 S501 TYPICAL VERTICAL CONSTRUCTION JOINTS FOR CONCRETE WALLS
NO SCALE



NOTES:
1. PROVIDE CHAIRS FOR SUPPORT OF REINFORCING.
2. AT EXTERIOR SLAB ON GRADE LOCATIONS, VAPOR BARRIER IS NOT REQUIRED.
3. PROVIDE DIAMOND SHAPED LOAD PLATE COMPLIANT WITH ACI 302.1 R.

11 S501 TYPICAL SLAB ON GRADE CONSTRUCTION
NO SCALE



12 S501 TYPICAL COLUMN ISOLATION JOINT
NO SCALE

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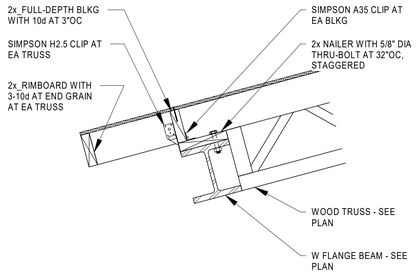
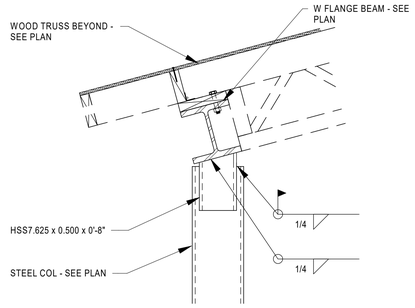
No.	Description	Date

SHEET NAME
TYPICAL FOUNDATION SCHEDULES AND DETAILS

SHEET NUMBER
S501

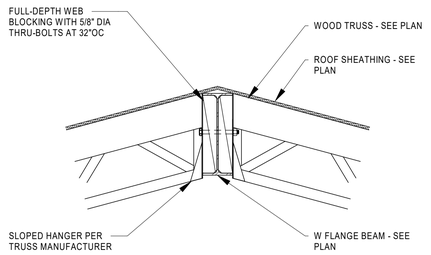


1 S701 SECTION
1" = 1'-0"

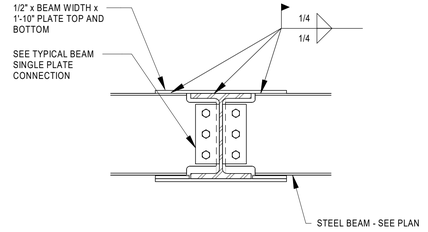


NOTES:
1. SEE 1/S701 FOR INFO NOT SHOWN

2 S701 SECTION
1" = 1'-0"

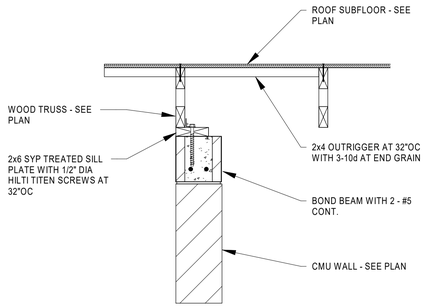


3 S701 SECTION
1" = 1'-0"

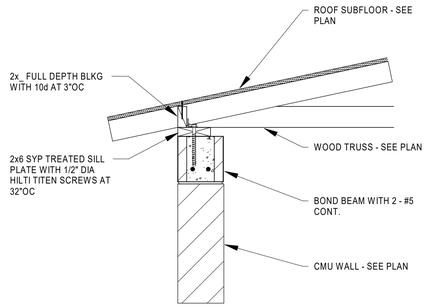


NOTES:
1. WOOD TRUSS NOT SHOWN FOR CLARITY.

4 S701 SECTION
1" = 1'-0"



5 S701 SECTION
1" = 1'-0"



6 S701 SECTION
1" = 1'-0"

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GOODHUE COUNTY

5001 MN-19, Cannon Falls, MN 55009

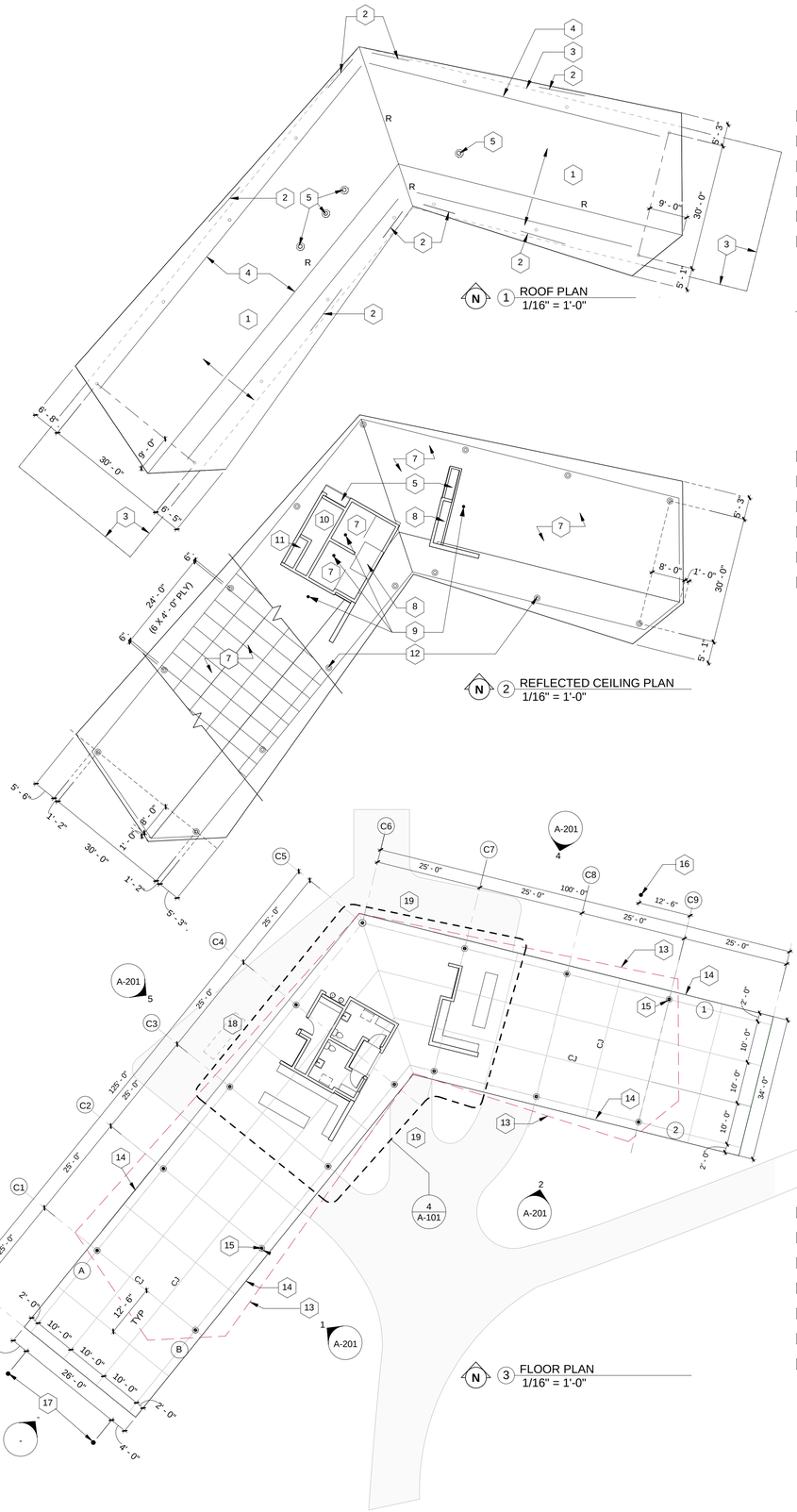
No.	Description	Date

SHEET NAME

FRAMING DETAILS

SHEET NUMBER

S701



ROOF PLAN KEYNOTES

1. STANDING SEAM METAL ROOFING
2. DIVERTERS, CONFIRM EXACT LOCATION W/ ARCH.
3. SLAB EDGE BELOW
4. SNOW GUARDS
5. SOLATUBE
6. NOT USED

KEY

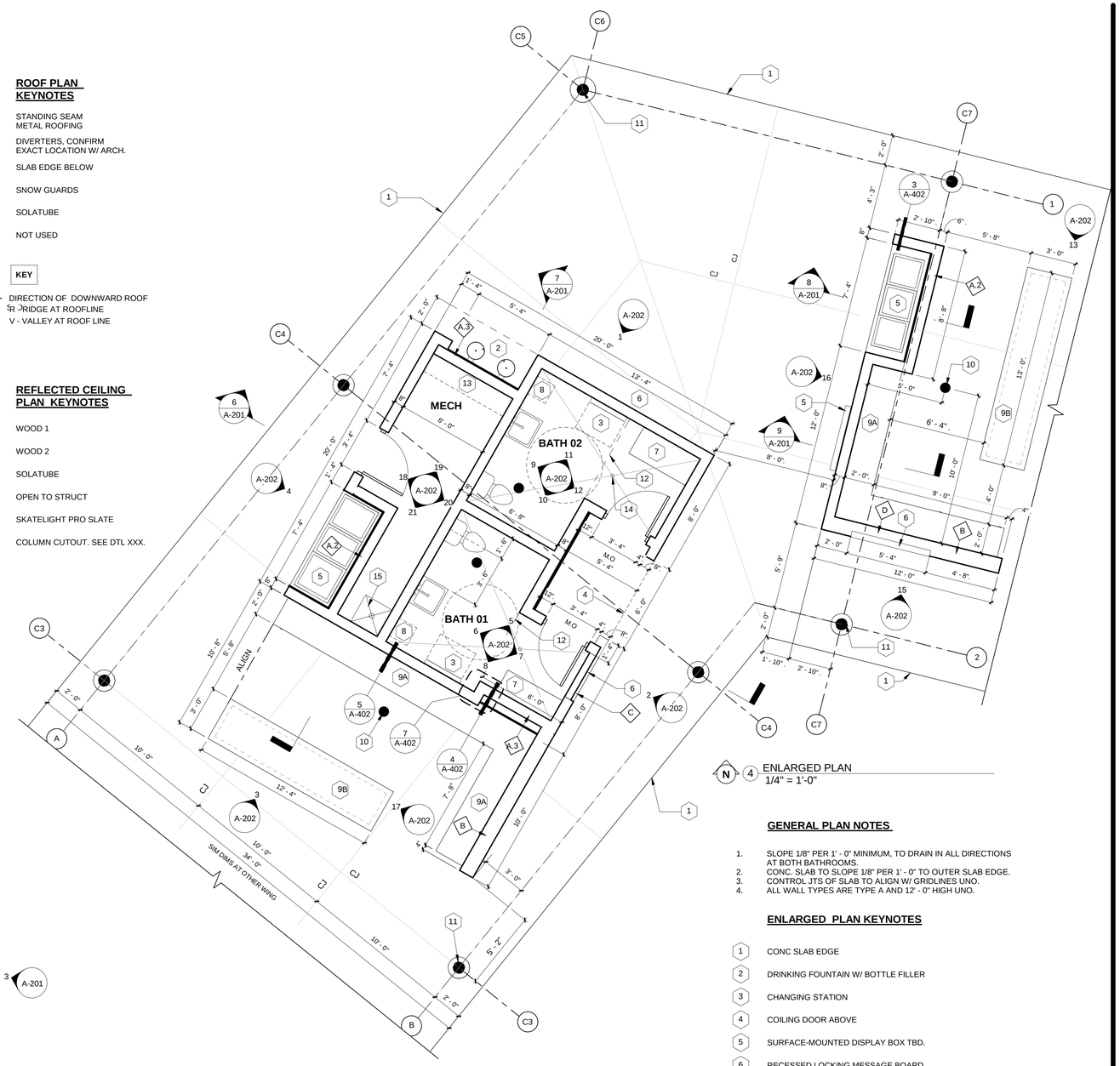
DIRECTION OF DOWNWARD ROOF SLOPE
R - RIDGE AT ROOFLINE
V - VALLEY AT ROOF LINE

REFLECTED CEILING PLAN KEYNOTES

7. WOOD 1
8. WOOD 2
9. SOLATUBE
10. OPEN TO STRUCT
11. SKATELIGHT PRO SLATE
12. COLUMN CUTOUT. SEE DTL XXX.

FLOOR PLAN KEYNOTES

13. EDGE OF ROOF LINE ABOVE
14. CONCRETE SLAB EDGE
15. STEEL COLUMN WITH GRAVEL BASE
16. BAR B Q STANDS/SMALL
17. BAR B Q STANDS/LARGE
18. PIG ROASTER SLAB- SEE CIVIL FOR LOCATION.
19. PAVED PATH - SEE CIVIL.



GENERAL PLAN NOTES

1. SLOPE 1/8" PER 1' - 0" MINIMUM, TO DRAIN IN ALL DIRECTIONS AT BOTH BATHROOMS.
2. CONC. SLAB TO SLOPE 1/8" PER 1' - 0" TO OUTER SLAB EDGE.
3. CONTROL JTS OF SLAB TO ALIGN W/ GRIDLINES UNO.
4. ALL WALL TYPES ARE TYPE A AND 12' - 0" HIGH UNO.

ENLARGED PLAN KEYNOTES

1. CONC SLAB EDGE
2. DRINKING FOUNTAIN W/ BOTTLE FILLER
3. CHANGING STATION
4. COILING DOOR ABOVE
5. SURFACE-MOUNTED DISPLAY BOX TBD.
6. RECESSED LOCKING MESSAGE BOARD
7. BUILT-IN BENCH
8. HAND DRYER
9A. COUNTER 1 (STAINLESS STEEL)
9B. COUNTER 2 (STONE). DIM SHOWN TO T.O. COUNTER. TYP 6" OVERHANG ALL AROUND.
10. SOLATUBE ABOVE.
11. STEEL COLUMN W/ GRAVEL BASE.
12. DROPPED CLG ABOVE, SEE RCP
13. SHELVING- BY OWNER, NIC.
14. FLOOR DRAIN. SLOPE FLOOR SLAB TO DRAIN.
15. MOP SINK

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GOODHUE COUNTY

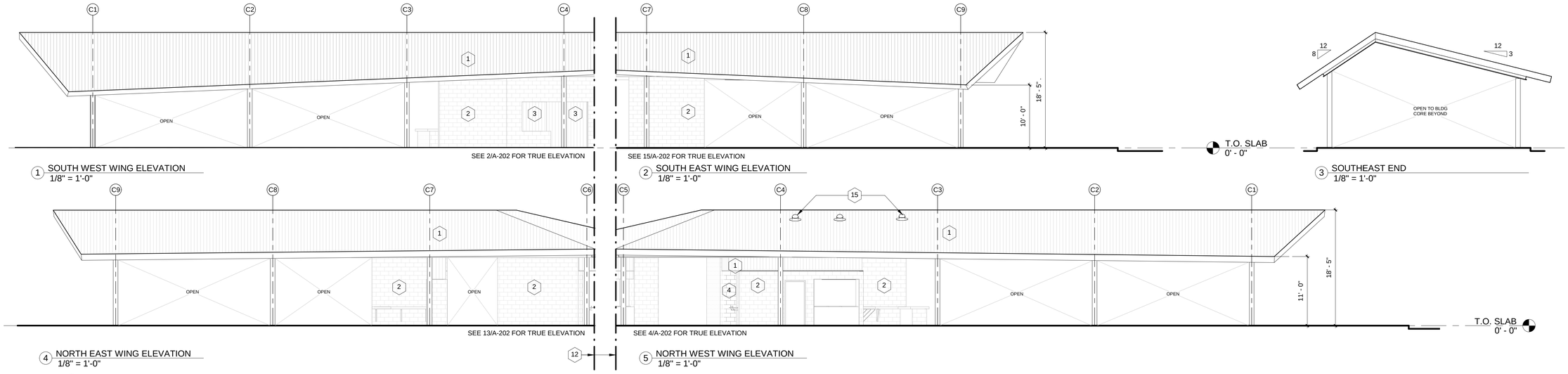
No.	Description	Date

SHEET NAME

PAVILION PLANS

SHEET NUMBER

A-101



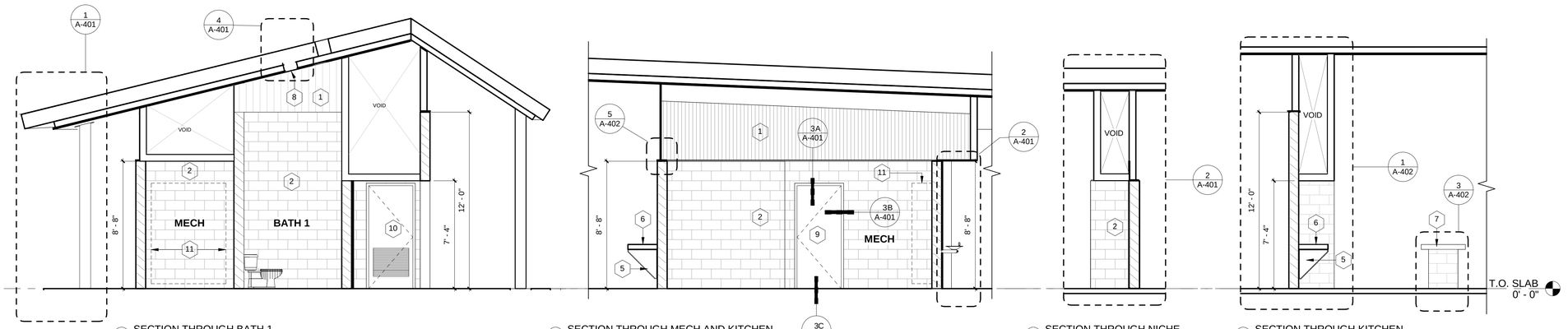
1 SOUTH WEST WING ELEVATION
1/8" = 1'-0"

2 SOUTH EAST WING ELEVATION
1/8" = 1'-0"

3 SOUTHEAST END
1/8" = 1'-0"

4 NORTH EAST WING ELEVATION
1/8" = 1'-0"

5 NORTH WEST WING ELEVATION
1/8" = 1'-0"

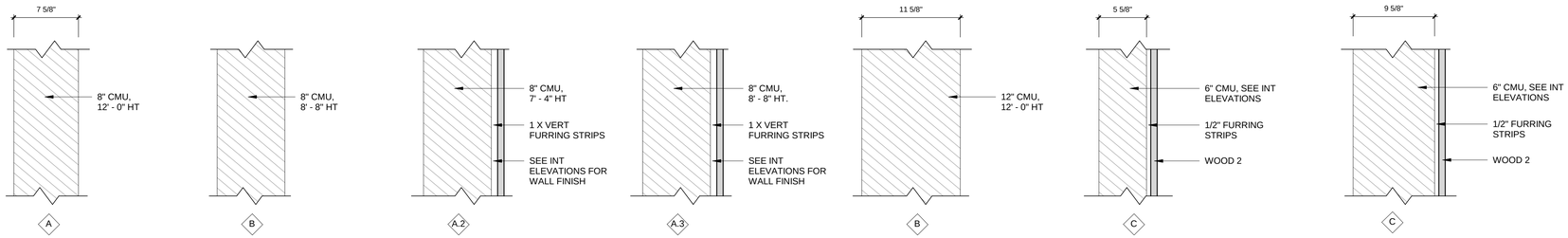


6 SECTION THROUGH BATH 1
1/4" = 1'-0"

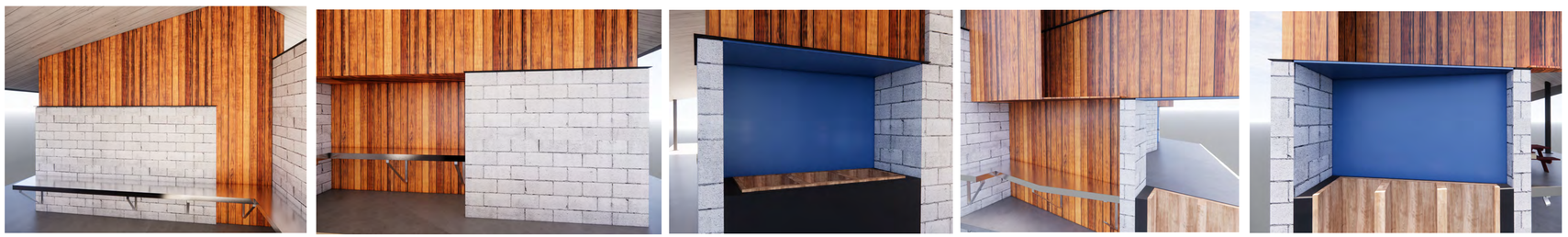
7 SECTION THROUGH MECH AND KITCHEN
1/4" = 1'-0"

8 SECTION THROUGH NICHE
1/4" = 1'-0"

9 SECTION THROUGH KITCHEN
1/4" = 1'-0"



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



ELEVATION AND SECTION KEYNOTES

1. STANDING SEAM METAL ROOFING
2. BURNISHED OR GROUNDFACED MASONRY UNITS (DESIGNER SERIES 754 GLACIAL WHITE)
3. WOOD 2
4. SKATELITE PRO SLATE
5. BRACKET 1
6. COUNTER 1 (STAINLESS STEEL)
7. COUNTER 2 (STONE)
8. SOLATUBE
9. METAL FRAME AND DOOR
10. METAL FRAME AND DOOR W/ LOUVER
11. SHELVING BY OWNER, NIC.
12. MITERED CORNER OF ROOF

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GOODHUE COUNTY

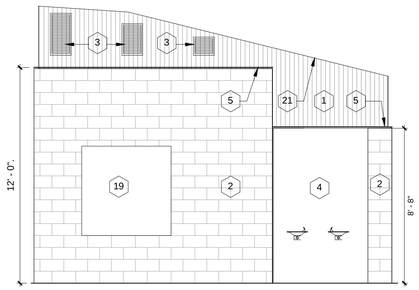
No.	Description	Date

SHEET NAME

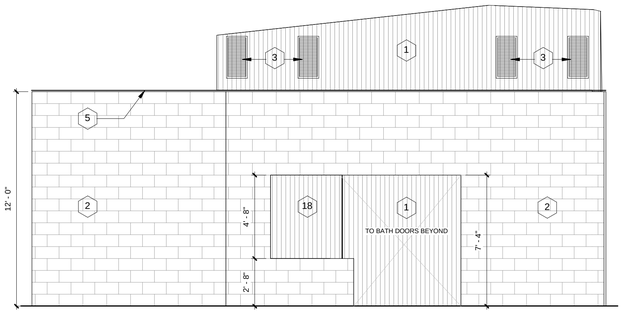
PAVILION EXTERIOR ELEVATIONS & SECTIONS

SHEET NUMBER

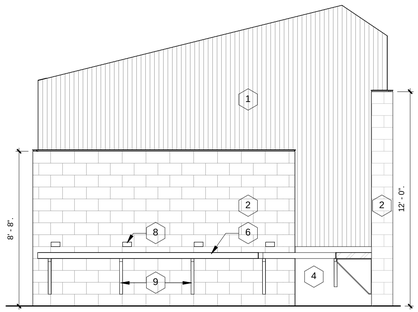
A-201



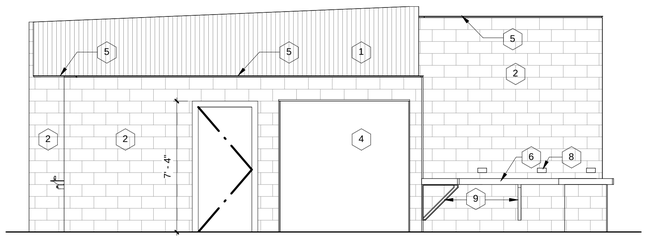
1 BATHROOM CORE - NE SIDE
1/4" = 1'-0"



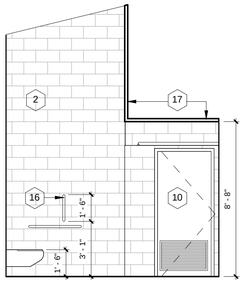
2 BATHROOM CORE - SE SIDE
1/4" = 1'-0"



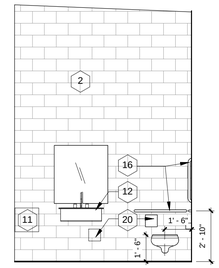
3 BATHROOM CORE - SW SIDE
1/4" = 1'-0"



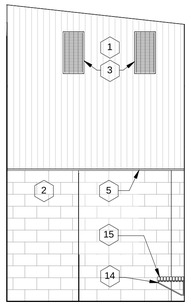
4 BATHROOM CORE - NW SIDE
1/4" = 1'-0"



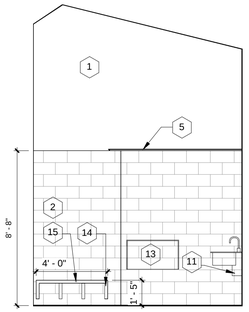
5 BATH 1 - NORTH
1/4" = 1'-0"



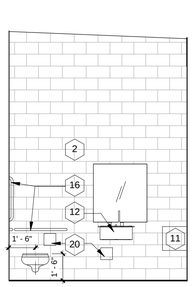
6 BATH 1 - WEST
1/4" = 1'-0"



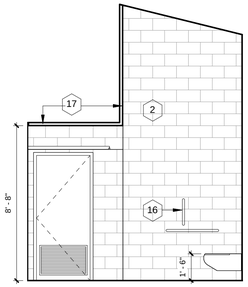
7 BATH 1 - EAST
1/4" = 1'-0"



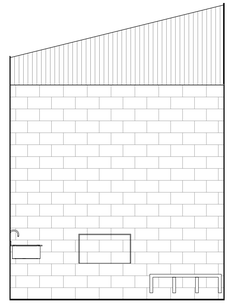
8 BATH 1 - SOUTH
1/4" = 1'-0"



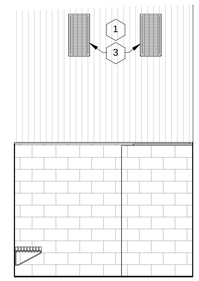
9 BATH 2 - WEST
1/4" = 1'-0"



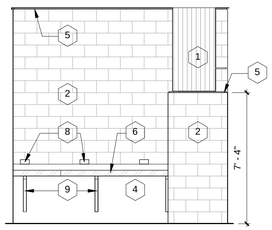
10 BATH 2 - NORTH
1/4" = 1'-0"



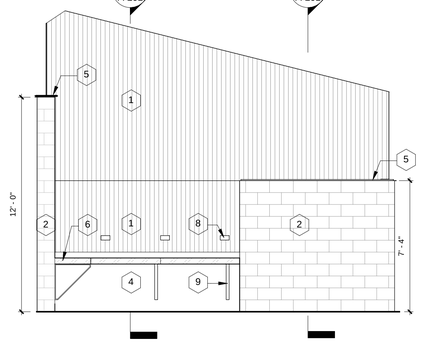
11 BATH 2 - EAST
1/4" = 1'-0"



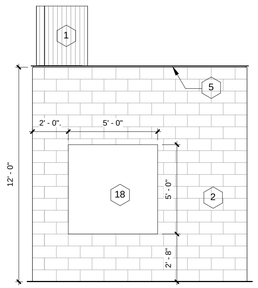
12 BATH 2 - SOUTH
1/4" = 1'-0"



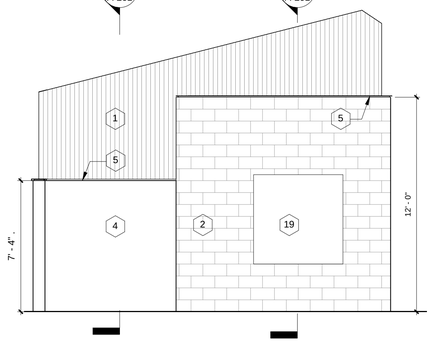
13 KITCHEN LOOKING SOUTH
1/4" = 1'-0"



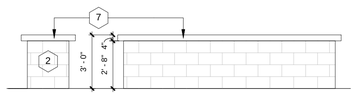
14 KITCHEN LOOKING WEST
1/4" = 1'-0"



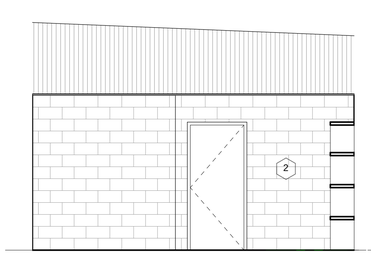
15 DISPLAY WALL
1/4" = 1'-0"



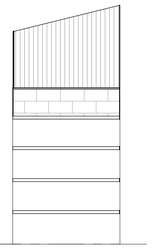
16 KITCHEN WEST
1/4" = 1'-0"



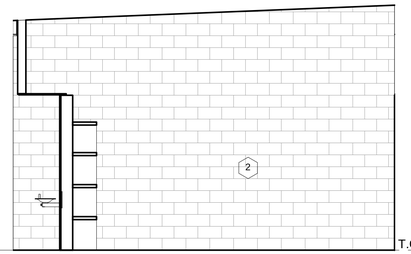
17 ISLAND
1/4" = 1'-0"



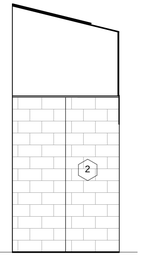
18 MECHANICAL - WEST
1/4" = 1'-0"



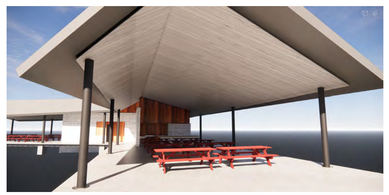
19 NORTH
1/4" = 1'-0"

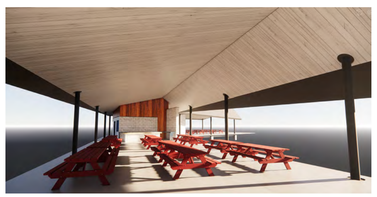


20 MECHANICAL - EAST
1/4" = 1'-0"



21 SOUTH
1/4" = 1'-0"





ELEVATION KEYNOTES

1	WOOD 2
2	BURNISHED OR GROUNDFACED MASONRY UNITES (DESIGNER SERIES 754 GLACIAL WHITE)
3	VENT
4	SKATELIGHT PRO SLATE
5	1/4" STEEL PLATE
6	COUNTER 1 (S.S.)
7	COUNTER 2 (STONE)
8	POWER OUTLET
9	BRACKET 1
10	METAL FRAME & DOOR W/ LOUVER
11	HAND DRYER
12	SINK
13	CHANGING STATION
14	BRACKET 2
15	BUILT-IN BENCH
16	GRAB BARS
17	WOOD 2 ON 2X WD FRAMING
18	RECESSED LOCKING MESSAGE BOARD
19	SURFACE-MOUNTED DISPLAY BOX TBD.
20	ACCESS DOOR TO PIPING.
21	WALL TO MEET UNDERSIDE OF ROOF CANOPY CEILING.

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LAKE BYLLESBY PARK PAVILION + BEACH BATH

50% PROGRESS SET

NOT FOR CONSTRUCTION

9/21/2021

CLIENT

GOODHUE COUNTY

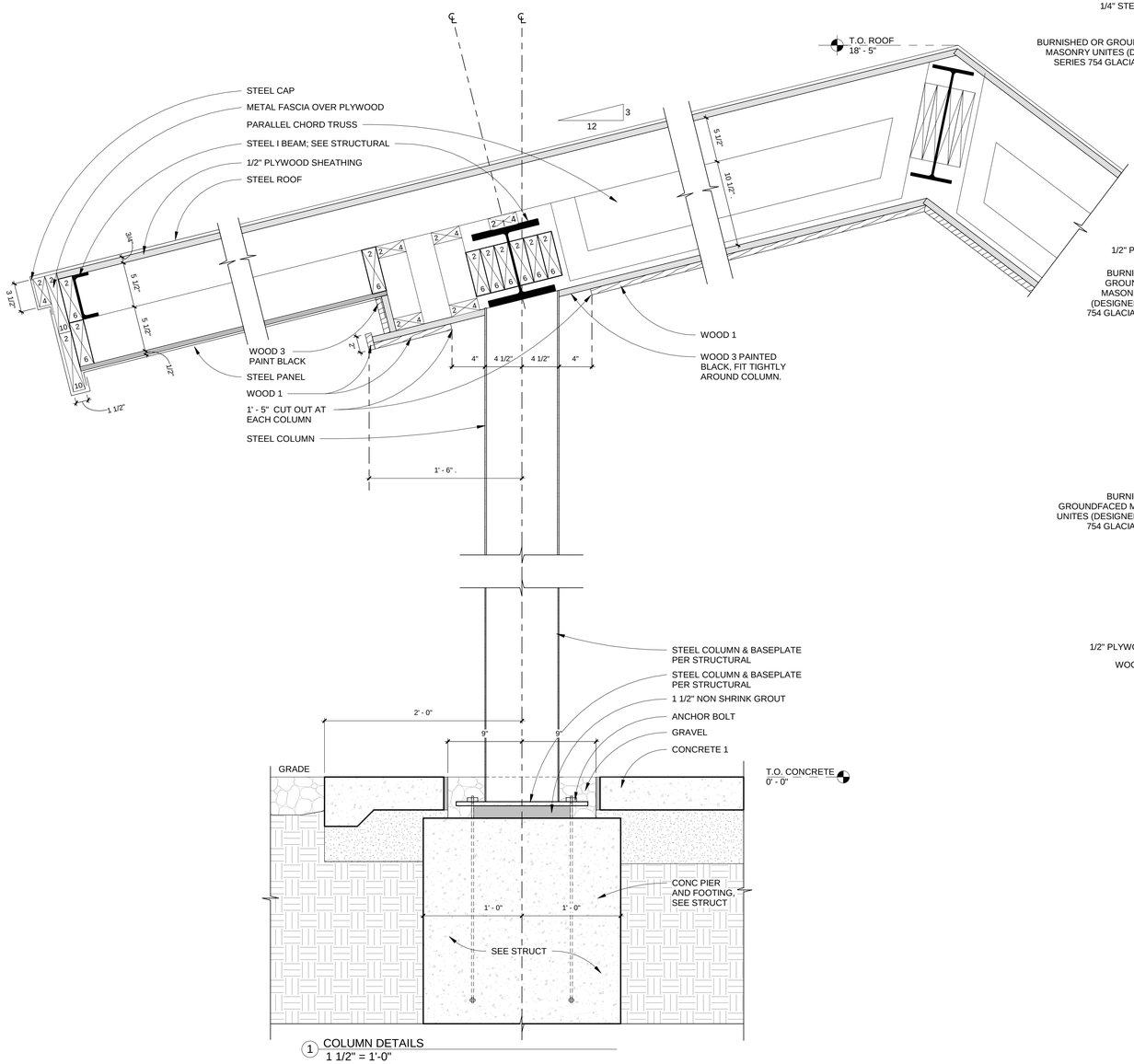
No.	Description	Date

SHEET NAME

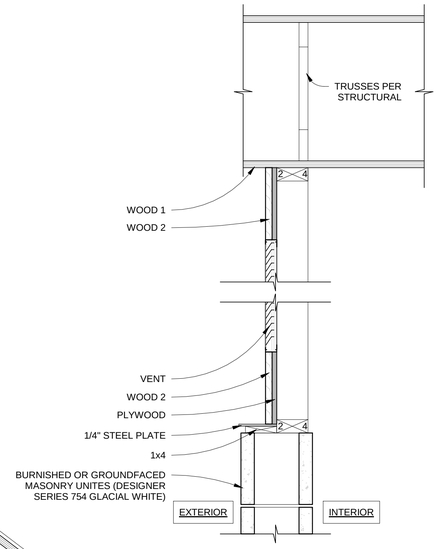
PAVILION INTERIOR ELEVATIONS

SHEET NUMBER

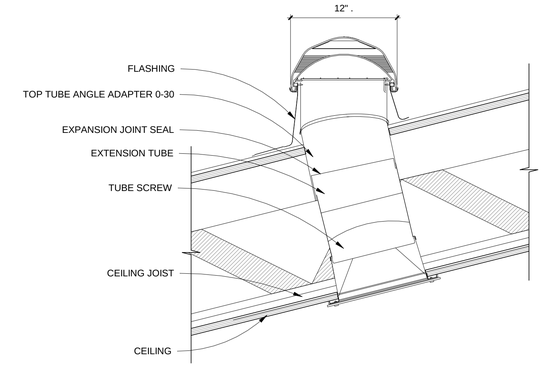
A-202



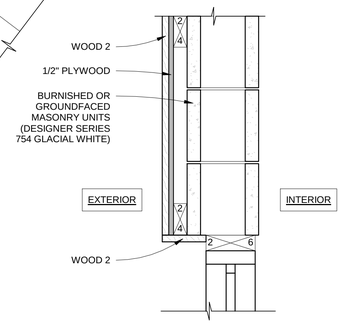
1 COLUMN DETAILS
1 1/2" = 1'-0"



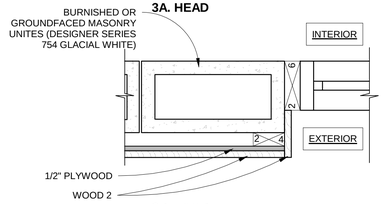
5 DETAIL OF THE LOUVER
1 1/2" = 1'-0"



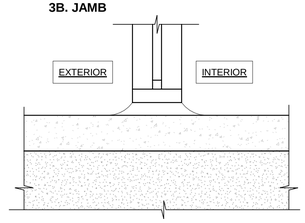
4 DETAIL OF SOLATUBE
1 1/2" = 1'-0"



3A. HEAD

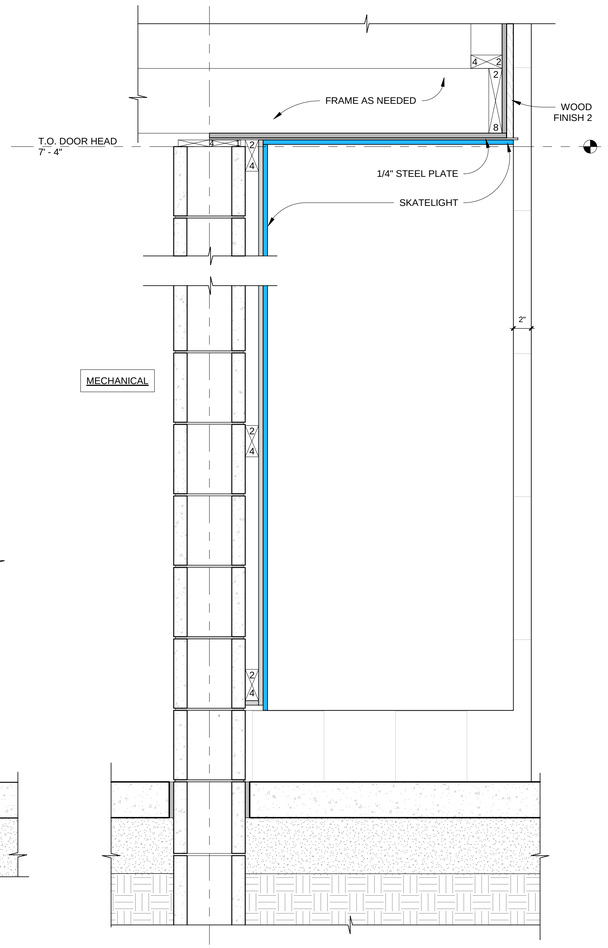


3B. JAMB



3C. SILL

3 DETAIL OF DOOR IN BATHROOM
1 1/2" = 1'-0"



2 DETAIL AT TRASH ENCLOSURE
1 1/2" = 1'-0"

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9/21/2021

CLIENT

GOODHUE COUNTY

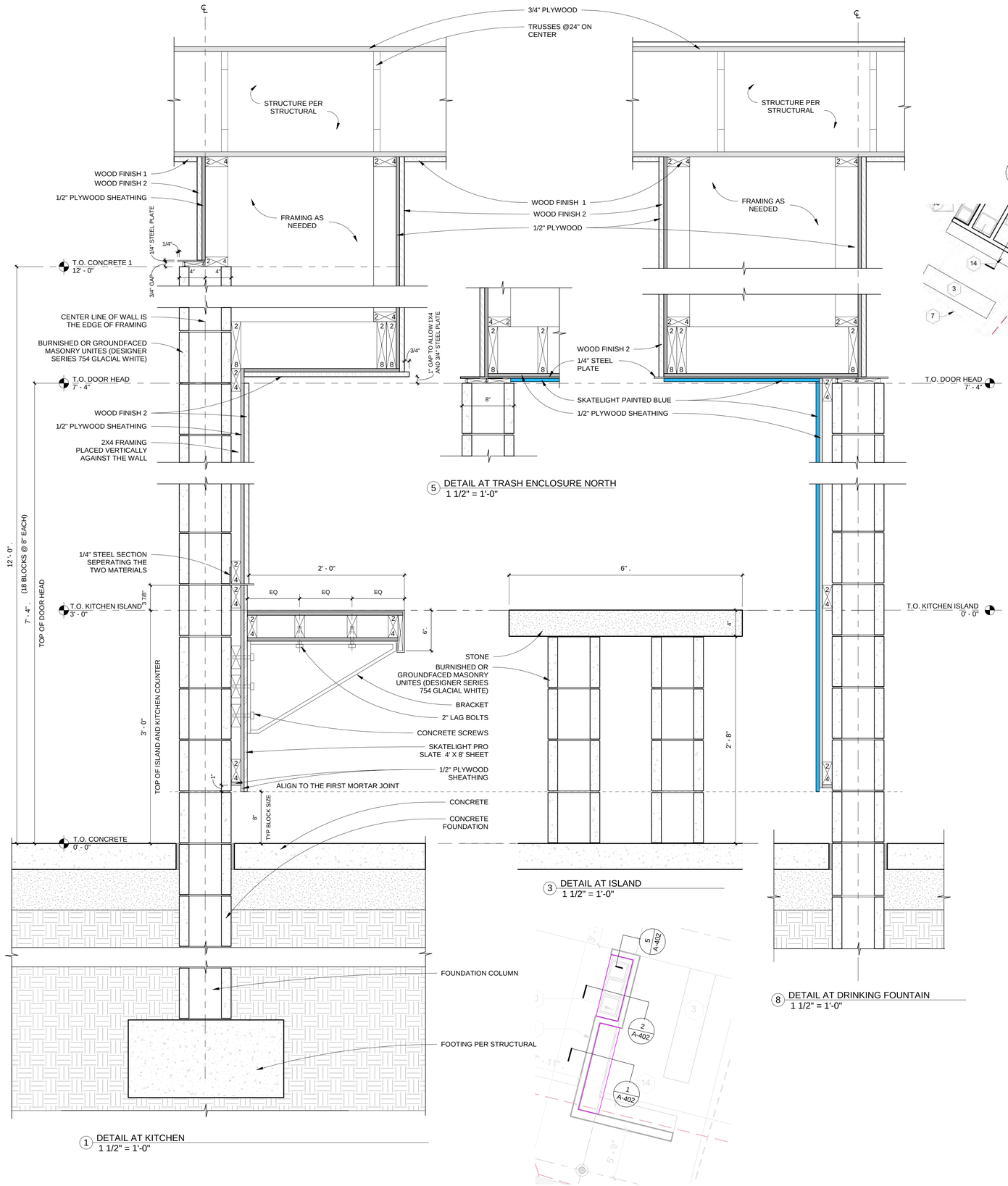
No.	Description	Date

SHEET NAME

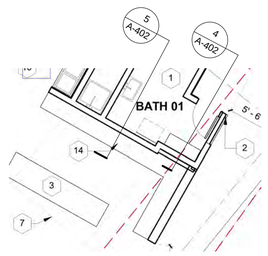
PAVILION DETAILS

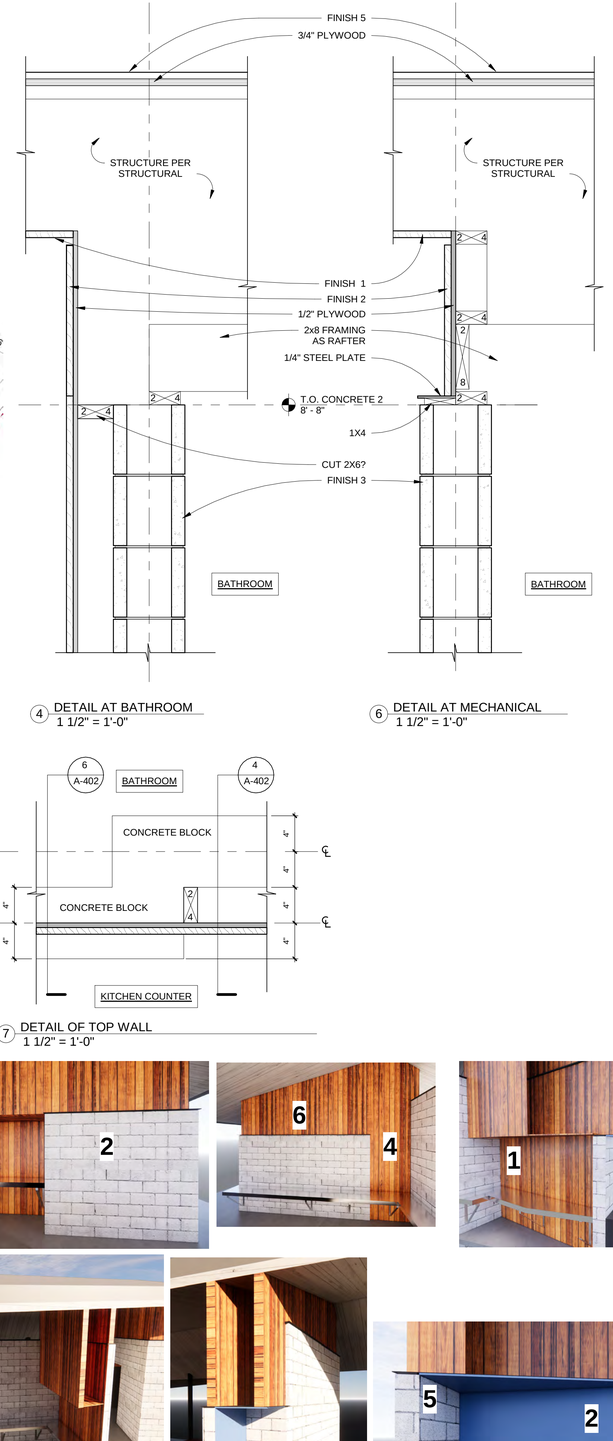
SHEET NUMBER

A-401



1 DETAIL AT KITCHEN
1 1/2" = 1'-0"





4 DETAIL AT BATHROOM
1 1/2" = 1'-0"

6 DETAIL AT MECHANICAL
1 1/2" = 1'-0"

7 DETAIL OF TOP WALL
1 1/2" = 1'-0"

8 DETAIL AT DRINKING FOUNTAIN
1 1/2" = 1'-0"

LOCUS ARCHITECTURE

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9/21/2021

CLIENT

GOODHUE COUNTY

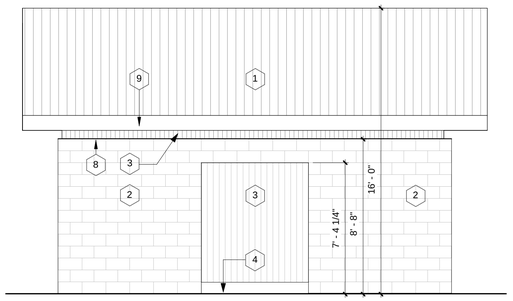
No.	Description	Date

SHEET NAME

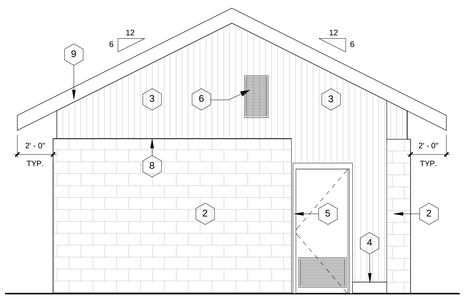
PAVILION DETAILS

SHEET NUMBER

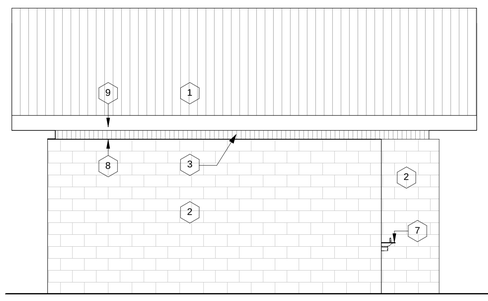
A-402



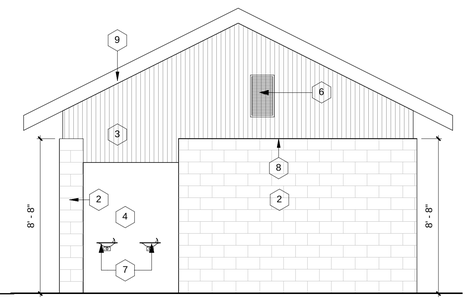
1 SOUTH ELEVATION
1/4" = 1'-0"



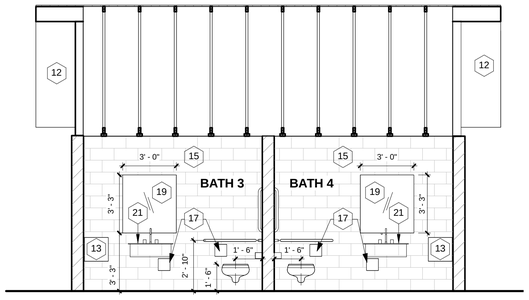
2 EAST ELEVATION
1/4" = 1'-0"



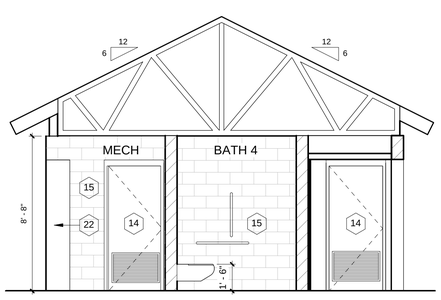
3 NORTH ELEVATION
1/4" = 1'-0"



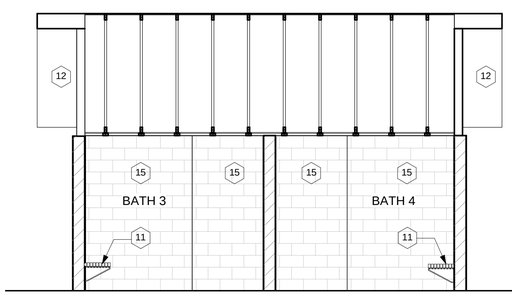
4 WEST ELEVATION
1/4" = 1'-0"



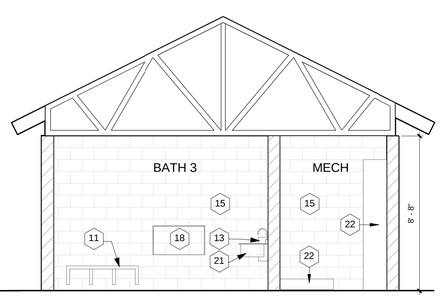
5 SECTION 1
1/4" = 1'-0"



6 SECTION 2
1/4" = 1'-0"



7 SECTION 3
1/4" = 1'-0"



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

EXTERIOR ELEVATION KEYNOTES

1. STANDING SEAM METAL ROOFING
2. BURNISHED OR GROUNDFACED MASONRY UNITS
3. WOOD 2
4. SKATELIGHT PRO SLATE 4' X 8' SHEET
5. METAL FRAME AND DOOR W/ LOUVER
6. VENT
7. DRINKING FOUNTAIN
8. 1/4" STEEL PLATE
9. FASCIA
10. NOT USED

INTERIOR ELEVATION KEYNOTES

11. BUILT IN BENCH
12. MATERIAL TBD
13. HAND DRYER
14. METAL FRAME AND DOOR WITH LOUVER.
15. BURNISHED OR GROUNDFACED MASONRY UNITS
16. VENT
17. ACCESS DOOR TO PIPING
18. CHANGING STATION
19. MIRROR
20. MOP SINK
21. WALL-MOUNTED SINK
22. SHELVING

GENERAL PLAN NOTES

1. WALLS ARE DIMENSIONED TO F.O. CMU.
2. ALL EXT WALLS AND INT PARTITIONS ARE NOMINAL 8" CMUs UNO.
3. CMU WALL FINISH: PAINT 1.
4. CMU FLOOR SLAB FINISH: XXX.
5. CONCRETE SLAB CONTROL JOINTS TBD.

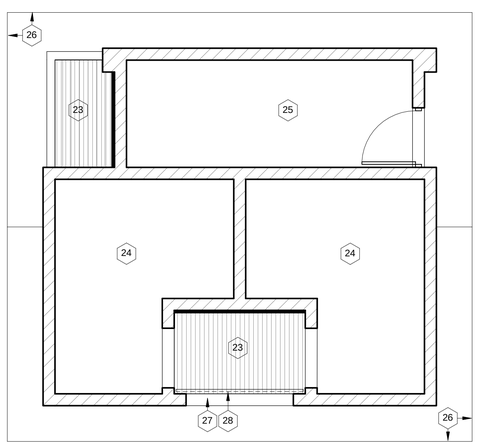
9 ROOF PLAN
1/4" = 1'-0"

ROOF PLAN NOTES

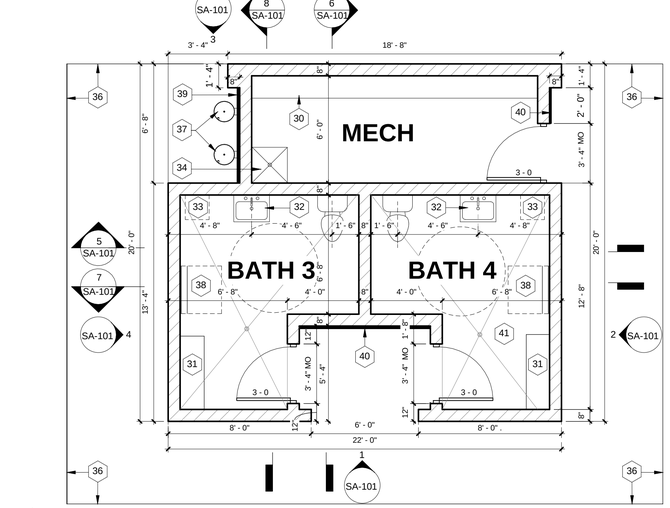
1. STANDING SEAM METAL ROOFING.
2. 6:12 ROOF SLOPE, TYP.

RCP KEYNOTES

23. WOOD 2
24. TBD
25. OPEN TO STRUCT.
26. EDGE OF ROOF ABOVE
27. HEADER AT 7' - 4" ABOVE CONC. SLAB
28. RECESSED COILING DOOR
29. NOT USED.



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



11 BEACH BATH
1/4" = 1'-0"

FLOOR PLAN KEYNOTES

30. SHELVING
31. BENCH
32. WALL-MOUNTED SINK
33. HAND DRYER
34. MOP SINK
35. NOT USED
36. EDGE OF CONC SLAB
37. DRINKING FOUNTAIN
38. CHANGING STATION
39. SKATELITE OVER 2X FURRING OVER CMU
40. WOOD 2 OVER FURRING
41. FLOOR DRAIN. SLOPE CONC SLAB TO DRAIN.

N

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LAKE BYLLESBY PARK PAVILION + BEACH BATH

50% PROGRESS SET

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9/24/2021

CLIENT

GOODHUE COUNTY

No.	Description	Date

SHEET NAME

BEACH BATH DRAWINGS

SHEET NUMBER

SA-101

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	ADA	COLD (IN)	HOT (IN)	WASTE (IN)	VENT (IN)	FIXTURE		TRIM		NOTES
							MANUFACTURER	MODEL	MANUFACTURER	MODEL	
DF-1	BI-LEVEL, HEAVY DUTY VANDAL RESISTANT, FREEZE RESISTANT, STAINLESS STEEL DRINKING FOUNTAIN	Yes	1/2	-	1 1/2	1 1/2	ELKAY	EHWM17FPK			
L-1A	WALL MOUNTED BATHROOM SINK WITH MANUAL 2 HANDLE 0.5 GPM FAUCET	Yes	1/2	1/2	1 1/2	1 1/2	KOHLER	KINGSTON K-2005	KOHLER	CORALAIS K-15240-4NDRA	1
MB-1	24"x24" MOLDED STONE MOP SERVICE BASIN WITH SERVICE FAUCET	No	3/4	3/4	3	1 1/2	FIAT PRODUCTS	MSBIDTG2424			2
WC-1A	FLOOR MOUNTED PRESSURE ASSIST TANK TYPE TOILET, ENLONGATED BOWL, ADA HEIGHT, WHIITE, 1.6 GPF	Yes	1/2	-	4	2	KOHLER	K-3493-SS	KOHLER	K-4650	

NOTES:
1. PROVIDE WITH MOLDED COVERING FOR WATER AND WASTE PIPING, TRUBRO LAV GUARD2.
2. PACKAGE INCLUDES FAUCET, HOSE AND BRACKET, MOP HANGER.

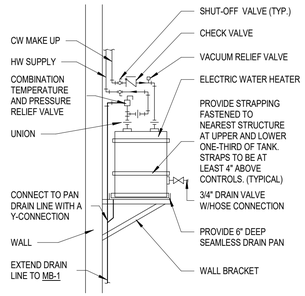
ELECTRIC WATER HEATER SCHEDULE

MARK	LOCATION	NUMBER OF ELEMENTS	KW (EACH)	VOLTAGE	PHASE	HZ	STORAGE CAPACITY (GALLONS)	TEMPERATURE SEETING (°F)	RECOVERY		MANUFACTURER	MODEL	NOTES	EXPANSION TANK	
									WATER GPH	TEMP RISE (°F)				MANUFACTURER	MODEL
EWH 1	MECH	1	2	120	1	60	6	120	8	100	A O SMITH	DEL-6		AMTROL	ST-5

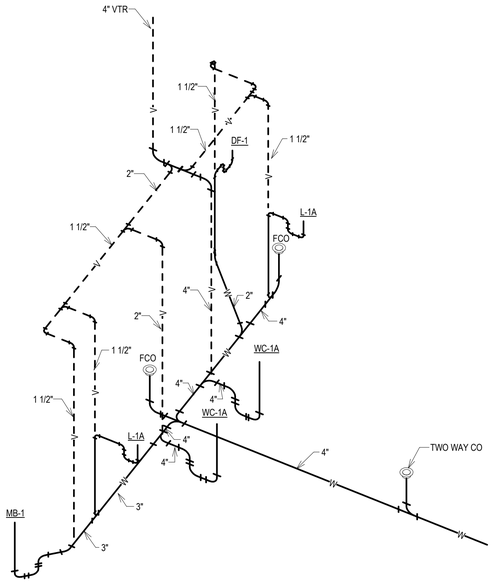
ELECTRIC WALL HEATER SCHEDULE

MARK	LOCATION	AIRFLOW (CFM)	ELECTRICAL DATA				MANUFACTURER	MODEL	NOTES
			WATTS	VOLTAGE	PHASE	HZ			
EH 1	MECH	65	500	120	1	60	QMARK	CWH1101DSF	1
EH 2	BATH 01	65	500	120	1	60	QMARK	CWH1101DSF	1
EH 3	BATH 02	65	500	120	1	60	QMARK	CWH1101DSF	1

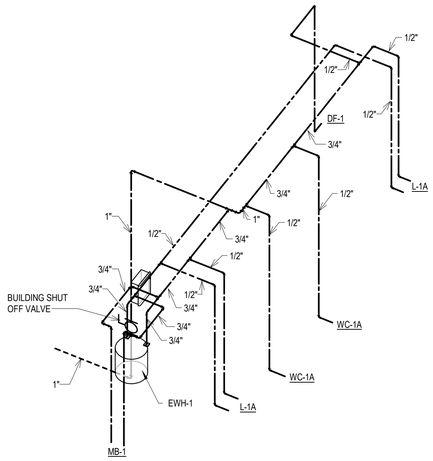
NOTES:
1. PROVIDE WITH SURFACE MOUNTING FRAME.



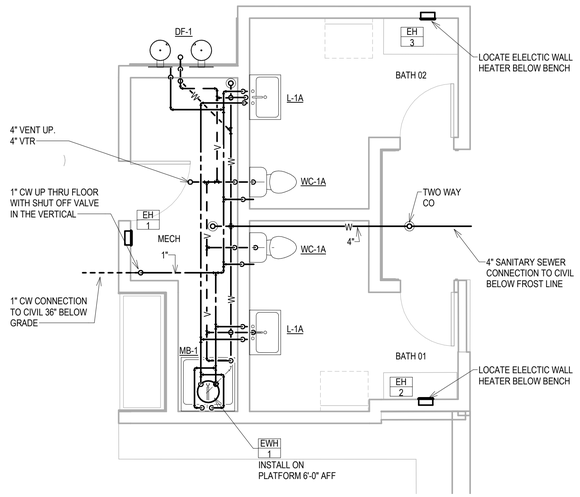
4 P-101 WALL MOUNTED ELECTRIC WATER HEATER DETAIL
NO SCALE



3 P-101 SANITARY WSTE AND VENT RISER DIAGRAM
NO SCALE



2 P-101 DOMESTIC WATER RISER DIAGRAM
NO SCALE



1 P-101 PAVILION PLUMBING PLAN
1/4" = 1'-0"

PLUMBING GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH REQUIREMENTS OF NATIONAL AND LOCAL CODES, WHICHEVER IS MORE STRINGENT.
2. PROVIDE OFFSETS AS REQUIRED TO MEET SPACE REQUIREMENTS AND TO AVOID INTERFERENCE WITH OTHER TRADES. NOT ALL PIPING RISERS AND DROPS ARE SHOWN. ROUTE ALL PIPING AS HIGH AS POSSIBLE UNLESS NOTED OTHERWISE.
3. COORDINATE FINAL LOCATION OF NEW PIPING AND PLUMBING FIXTURES WITH STRUCTURE, LIGHTING, ARCHITECTURAL ELEMENTS, DUCTWORK, PIPING AND SPRINKLERS.
4. REFER TO PLUMBING DETAILS FOR ACCESSORIES AND FINAL CONNECTIONS TO PLUMBING EQUIPMENT.
5. PROVIDE SHUTOFF VALVES IN EACH PRESSURE PIPING BRANCH TAKEOFF AND EACH BRANCH SERVING THREE OR MORE FIXTURES.
6. PROVIDE ADEQUATE CLEARANCE FOR INSULATION IN HANGERS, FROM STRUCTURE AND FROM EQUIPMENT.
7. SLOPE SANITARY WASTE AND VENT PIPING AT 1/4 INCH PER FOOT (2%) UNLESS OTHERWISE INDICATED.
8. INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION AND TO MINIMIZE STRESSING OF EQUIPMENT AND FIXTURE CONNECTIONS.
9. WHERE ANY CONTROL VALVE, MANUAL VALVE, DRAIN OR AIR VENT CANNOT BE ACCESSED OR VIEWED THROUGH LAY-IN CEILINGS OR OTHER CONVENIENT MEANS, COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE A MINIMUM 24 INCH x 24 INCH ARCHITECTURALLY ACCEPTABLE RATED ACCESS PANEL AT EACH INACCESSIBLE LOCATION.
10. CONNECT PIPE AND EQUIPMENT HANGERS TO TOP CHORD OF ROOF JOISTS, BEAM FLANGES OR CONCRETE FLOOR DECK, BY APPROVED MEANS.
11. CONCRETE CURBS AND PADS ARE PROVIDED BY OTHERS. COORDINATE EXACT SIZES AND LOCATIONS.
12. REFER TO ARCHITECTURAL FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF FIXTURES AND EQUIPMENT.
13. ALL PLUMBING VENT-THRU-ROOF SHALL BE LOCATED A MINIMUM OF 2'-0" FROM ANY WALL OR VERTICAL SURFACE AND A MINIMUM OF 10'-0" FROM FRESH AIR INTAKES.
14. PROVIDE 2-WAY CLEANOUT FOR SANITARY WASTE IMMEDIATELY OUTSIDE OF EXTERIOR WALL.

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LAKE BYLLESBY PARK PAVILION + BEACH BATH

50% PROGRESS SET

NOT FOR CONSTRUCTION

09/22/2021

CLIENT
GOODHUE COUNTY

No.	Description	Date

SHEET NAME

PLUMBING PLAN, SCHEDULES AND DETAILS

SHEET NUMBER

P-101

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	ADA	COLD (IN)	HOT (IN)	WASTE (IN)	VENT (IN)	FIXTURE		TRIM		NOTES
							MANUFACTURER	MODEL	MANUFACTURER	MODEL	
DF-1	BI-LEVEL, HEAVY DUTY VANDAL RESISTANT, FREEZE RESISTANT, STAINLESS STEEL DRINKING FOUNTAIN	Yes	1/2	-	1 1/2	1 1/2	ELKAY	EHWM17FPK			
L-1A	WALL MOUNTED BATHROOM SINK WITH MANUAL 2 HANDLE 0.5 GPM FAUCET	Yes	1/2	1/2	1 1/2	1 1/2	KOHLER	KINGSTON K-2005	KOHLER	CORALAIS K-15240-4NDRA	1
MB-1	24"x24" MOLDED STONE MOP SERVICE BASIN WITH SERVICE FAUCET	No	3/4	3/4	3	1 1/2	FIAT PRODUCTS	MSBIDTG2424			2
WC-1A	FLOOR MOUNTED PRESSURE ASSIST TANK TYPE TOILET, ENLONGATED BOWL, ADA HEIGHT, WHIITE, 1.6 GPF	Yes	1/2	-	4	2	KOHLER	K-3493-SS	KOHLER	K-4650	

NOTES:
1. PROVIDE WITH MOLDED COVERING FOR WATER AND WASTE PIPING, TRUBRO LAV GUARD2.
2. PACKAGE INCLUDES FAUCET, HOSE AND BRACKET, MOP HANGER.

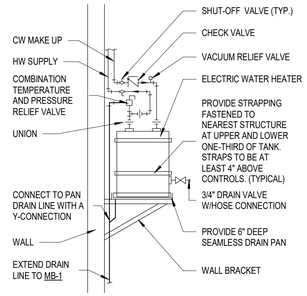
ELECTRIC WATER HEATER SCHEDULE

MARK	LOCATION	ELECTRICAL DATA					STORAGE CAPACITY (GALLONS)	TEPERATURE SETTING (°F)	RECOVERY		MANUFACTURER	MODEL	NOTES	EXPANSION TANK	
		NUMBER OF ELEMENTS	KW (EACH)	VOLTAGE	PHASE	HZ			WATER GPH	TEMP RISE (°F)				MANUFACTURER	MODEL
EWH 1	MECH	1	2	120	1	60	6	120	8	100	A O SMITH	DEL 6		AMTROL	ST-5

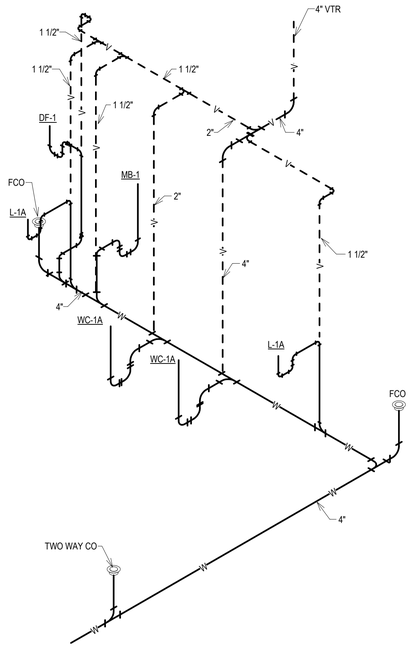
ELECTRIC WALL HEATER SCHEDULE

MARK	LOCATION	AIRFLOW (CFM)	ELECTRICAL DATA				MANUFACTURER	MODEL	NOTES
			WATTS	VOLTAGE	PHASE	HZ			
EH 1	MECH	65	500	120	1	60	QMARK	CWH1101DSF	1
EH 2	BATH 01	65	500	120	1	60	QMARK	CWH1101DSF	1
EH 3	BATH 02	65	500	120	1	60	QMARK	CWH1101DSF	1

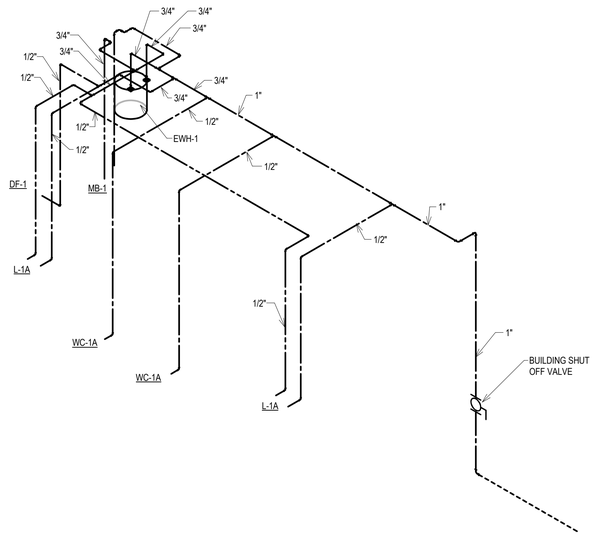
NOTES:
1. PROVIDE WITH SURFACE MOUNTING FAME.



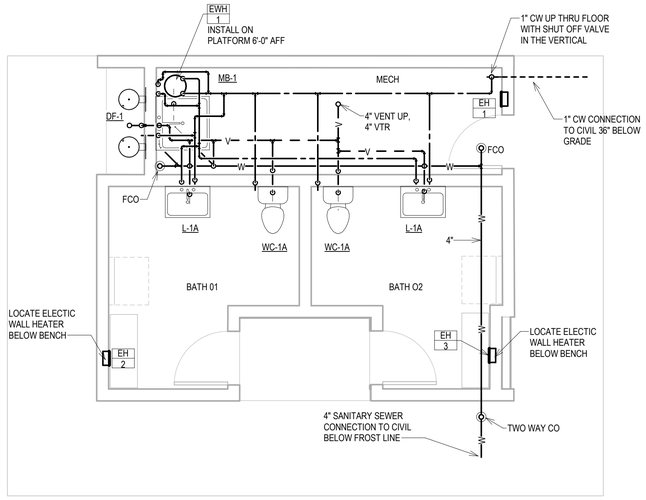
4 SP-101 WALL MOUNTED ELECTRIC WATER HEATER DETAIL
NO SCALE



3 SP-101 SANITARY WASTE AND VENT RISR DIAGRAM
NO SCALE



2 SP-101 DOMESTIC WATER RISER DIAGRAM
NO SCALE



1 SP-101 BEACH BATH PLUMBING PLAN
1/4" = 1'-0"

PLUMBING GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH REQUIREMENTS OF NATIONAL AND LOCAL CODES, WHICHEVER IS MORE STRINGENT.
2. PROVIDE OFFSETS AS REQUIRED TO MEET SPACE REQUIREMENTS AND TO AVOID INTERFERENCE WITH OTHER TRADES. NOT ALL PIPING RISERS AND DROPS ARE SHOWN. ROUTE ALL PIPING AS HIGH AS POSSIBLE UNLESS NOTED OTHERWISE.
3. COORDINATE FINAL LOCATION OF NEW PIPING AND PLUMBING FIXTURES WITH STRUCTURE, LIGHTING, ARCHITECTURAL ELEMENTS, DUCTWORK, PIPING AND SPRINKLERS.
4. REFER TO PLUMBING DETAILS FOR ACCESSORIES AND FINAL CONNECTIONS TO PLUMBING EQUIPMENT.
5. PROVIDE SHUTOFF VALVES IN EACH PRESSURE PIPING BRANCH TAKEOFF AND EACH BRANCH SERVING THREE OR MORE FIXTURES.
6. PROVIDE ADEQUATE CLEARANCE FOR INSULATION IN HANGERS, FROM STRUCTURE AND FROM EQUIPMENT.
7. SLOPE SANITARY WASTE AND VENT PIPING AT 1/4 INCH PER FOOT (2%) UNLESS OTHERWISE INDICATED.
8. INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION AND TO MINIMIZE STRESSING OF EQUIPMENT AND FIXTURE CONNECTIONS.
9. WHERE ANY CONTROL VALVE, MANUAL VALVE, DRAIN OR AIR VENT CANNOT BE ACCESSED OR VIEWED THROUGH LAY-IN CEILINGS OR OTHER CONVENIENT MEANS, COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE A MINIMUM 24 INCH x 24 INCH ARCHITECTURALLY ACCEPTABLE RATED ACCESS PANEL AT EACH INACCESSIBLE LOCATION.
10. CONNECT PIPE AND EQUIPMENT HANGERS TO TOP CHORD OF ROOF JOISTS, BEAM FLANGES OR CONCRETE FLOOR DECK, BY APPROVED MEANS.
11. CONCRETE CURBS AND PADS ARE PROVIDED BY OTHERS. COORDINATE EXACT SIZES AND LOCATIONS.
12. REFER TO ARCHITECTURAL FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF FIXTURES AND EQUIPMENT.
13. ALL PLUMBING VENT-THRU-ROOF SHALL BE LOCATED A MINIMUM OF 2'-0" FROM ANY WALL OR VERTICAL SURFACE AND A MINIMUM OF 10'-0" FROM FRESH AIR INTAKES.
14. PROVIDE 2-WAY CLEANOUT FOR SANITARY WASTE IMMEDIATELY OUTSIDE OF EXTERIOR WALL.

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LAKE BYLLESBY PARK PAVILION + BEACH BATH

50% PROGRESS SET

NOT FOR CONSTRUCTION

09/22/2021

CLIENT
GOODHUE COUNTY

No.	Description	Date

SHEET NAME

PLUMBING PLAN, SCHEDULES, AND DETAILS

SHEET NUMBER

SP-101

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
	SURFACE LIGHT (TYPE DENOTED)
	WALL MOUNTED FLOODLIGHT (TYPE DENOTED)
	RECESSED LIGHT (TYPE DENOTED)
	POLE MOUNTED LIGHT (TYPE DENOTED)
	POLE MOUNTED FLOODLIGHT (TYPE DENOTED)
	SURFACE LINEAR LIGHT (TYPE DENOTED)
	SUSPENDED OR PENDANT LIGHT (TYPE DENOTED)
	RECESSED LINEAR LIGHT (TYPE DENOTED)
	STRIP LIGHT (TYPE DENOTED)
	TRACK AND TRACK LIGHT (TYPES DENOTED)
	EMERGENCY BATTERY LIGHT (TYPE DENOTED)
	EXIT SIGN (TYPE DENOTED)
	LIGHT FIXTURE ON (EM) LIFE SAFETY BRANCH
	LIGHT FIXTURE ON (EM) CRITICAL BRANCH
	LIGHT ON CORD REEL (TYPE DENOTED)
	LIGHTING CHANNEL WIRE (TYPE DENOTED)
S	SINGLE POLE SW.
S^{2}	2 POLE SINGLE THROW SW.
S_3	3-WAY SW.
S_4	4-WAY SW.
S^{K}	KEYED SW.
S^{P}	SW. W/PILOT
S_D	DIMMER SWITCH
S_{OC}	OCCUPANCY SENSOR SWITCH
S_{MC}	MOMENTARY CONTACT SWITCH
S_T	TIMER SWITCH
S_{TD}	TIME DELAY SWITCH
	PUSH BUTTON
	SINGLE RECEPT.
	DUPLEX RECEPT.
	SPLIT DUPLEX RECEPT.
	ISOLATED GROUND RECEPT (DUPLEX SHOWN)
	RECEPT ON EMERGENCY CKT (DUPLEX SHOWN)
	FOURPLEX RECEPT.
	FOURPLEX RECEPTACLE ON EMERGENCY CIRCUIT
	240 VOLT RECEPT.
	FLOOR RECEPT. (DUPLEX SHOWN)
	RECEPT ON DROP CORD (DUPLEX SHOWN)
	RECEPT ON CORD REEL (DUPLEX SHOWN)

SYMBOL	DESCRIPTION
	MULTIOUTLET ASSEMBLY (TYPE DENOTED)
	CLOCK (TYPE DENOTED)
P	POWER POLE (OPEN OFFICE STYLE)
	SURGERY SERVICE COLUMN
	STATIC GROUND RECEPTACLE (TYPE DENOTED)
	LIGHTNING PROTECTION AIR TERMINAL
	LIGHTNING PROTECTION CONDUCTOR SPLICE
	GROUND ROD (PLAN VIEW)
P	UTILITY SERVICE POWER POLE (SITE)
	SPECIAL RECEPT. OR CONN. (SEE SCHEDULE)
J	JUNCTION BOX
PB	PULL BOX
	CIRCUIT BREAKER PANEL
	POWER OR DISTRIBUTION PANEL
	TRANSFORMER (TYPE DENOTED)
XX-1	MOTOR (SEE SCHEDULE)
	COMB. MOTOR STARTER (FUSED)
	SAFETY DISC. SW. (NON-FUSED)
	SAFETY DISC. SW. (FUSED)
	BUS DUCT WITH PLUG IN DISCONNECT (FUSED)
R	RELAY
	ENCLOSED CIRCUIT BREAKER
	PRESSURE SWITCH
	FLOAT SWITCH
OS	OCCUPANCY SENSOR - TYPE DENOTED
LS	LIGHT LEVEL SENSOR - TYPE DENOTED
PC	PHOTOCELL
TS	TIME CONTROL SWITCH (TIME SWITCH)
H	HUMIDISTAT
T	THERMOSTAT
	SOLENOID VALVE
	HALFTONE SYMBOL INDICATES EXISTING
	DASHED SYMBOL INDICATES REMOVED

SYMBOL	DESCRIPTION
	TELEPHONE OUTLET (TYPE DENOTED)
	WALL TELEPHONE OUTLET (TYPE DENOTED)
	INFORMATION OUTLET (TYPE DENOTED)
	WIRELESS ACCESS POINT
	TELEVISION OUTLET
	BELL
	BUZZER
	CHIME
	DOOR SIGNAL - APT. UNIT
	SPEAKER (WALL OR CEILING MT.)
	HORN TYPE SPEAKER
	VOLUME CONTROL
	MICROPHONE OUTLET
	ANTENNA
HL	FIRE ALARM HORN W/STROBE (CANDELAS)
HL	FIRE ALARM BELL
HL	FIRE ALARM BELL W/STROBE (CANDELAS)
HL	FIRE ALARM CHIME W/STROBE (CANDELAS)
HL	FIRE ALARM STROBE (CANDELAS)
HL SO	FIRE ALARM SPEAKER W/STROBE (CANDELAS)
	FIRE ALARM REMOTE ANNUNCIATOR
	SMOKE DETECTOR (TYPE DENOTED)
	HEAT DETECTOR (TYPE & TEMP DENOTED)
	LINEAR HEAT DETECTOR
	DUCT SMOKE DETECTOR (TYPE DENOTED)
	REMOTE TEST/STATUS STATION
	FLAME DETECTOR (TYPE DENOTED)
	GAS DETECTOR (TYPE DENOTED)
FA	F.A. PULLSTATION (TYPE DENOTED)
	F.A. ZONE ADDRESSABLE MODULE
	F.A. INDIVIDUAL ADDRESSABLE MODULE
	F.A. DOOR HOLDER
	F.A. DOOR CLOSER
	FIRE ALARM SHUT DOWN RELAY
	SPRINKLER FLOW SWITCH
	SPRINKLER VALVE TAMPER SWITCH
	SPRINKLER LEVEL SWITCH
	SPRINKLER PRESSURE SWITCH
	SPRINKLER TEMPERATURE SWITCH
	END OF LINE RESISTOR

SYMBOL	DESCRIPTION
	ELECTRIC STRIKE
	MAGNETIC LOCK
	COMBINATION LOCK
	DOOR CONTACTS
	CARD READER
	KEYPAD
	MOTION DETECTOR (TYPE DENOTED)
	NURSE CALL EMERG. STATION
	NURSE CALL CODE BLUE EMERG. STATION
	NURSE CALL DUTY STATION
	NURSE CALL STAFF STATION
	NURSE CALL SINGLE PATIENT STATION
	NURSE CALL DUAL PATIENT STATION
	NURSE CALL DOME LIGHT (2 LAMP)
	CCTV CAMERA
	CCTV CAMERA WITH PAN/TILT DRIVE
1	KEYED NOTE (SEE SCHEDULE)

ELECTRICAL SYMBOL NOTES

THE LIGHTING FIXTURE TYPE IS INDICATED BY AN UPPER CASE LETTER. THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER. THE SWITCH DESIGNATION IS INDICATED BY A LOWER CASE LETTER.

A2 / 12b — EXAMPLE 1: LIGHTING FIXTURE TYPE "A" IS CONNECTED TO CIRCUIT 12 AND CONTROLLED BY SWITCH "b".

* P2DII * 2aba — EXAMPLE 2: THE FIXTURE TYPE SHOWN AS A NUMERATOR INDICATES ALL LIGHTING FIXTURES IN THE ROOM OR SPACE ARE THE SAME TYPE. THE CIRCUIT NUMBER AND SWITCH DESIGNATION SHOWN AS A DENOMINATOR INDICATES ALL LIGHTING FIXTURES IN THE ROOM OR SPACE ARE CONNECTED TO THE SAME CIRCUIT, CONTROLLED BY THE SAME SWITCHES, CENTER/OUTBOARD MULTILEVEL SWITCHING.

E 14 — EXIT LIGHTS. STEM INDICATES WALL MOUNTING. NO STEM INDICATES CEILING MOUNTING. SHADED AREA INDICATES ILLUMINATED FACE(S). ARROW INDICATES DIRECTIONAL ARROW ON ILLUMINATED FACE(S). THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER. EXAMPLE: THE WALL MOUNTED EXIT LIGHT TYPE "E" WITH SINGLE FACE AND DIRECTIONAL ARROW IS CONNECTED TO CIRCUIT 14.

16c — DEVICES. THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER. THE SWITCH DESIGNATION IS INDICATED BY A LOWER CASE LETTER. EXAMPLE: SPLIT DUPLEX RECEPTACLE IS CONNECTED TO CIRCUIT 16 AND ONE RECEPTACLE OUTLET IS CONTROLLED BY SWITCH "c".

d — THE CONTROL DEVICE DESIGNATION IS INDICATED BY A LOWER CASE LETTER. EXAMPLE: SINGLE POLE SWITCH "d" TO CONTROL LIGHTING FIXTURES INDICATED BY "d".

D600 e — WALL BOX DIMMER WITH SIZE AS INDICATED AT DEVICE. EXAMPLE: 600 WATT WALL BOX DIMMER TO CONTROL LIGHTING FIXTURES INDICATED BY "e". SEE SPECIFICATIONS FOR WATTAGE IF NOT INDICATED.

1 / 1,3,5 — SPECIAL CONNECTIONS. THE EQUIPMENT IS INDICATED BY A NUMBER IN A CIRCLE. SEE THE MOTOR AND EQUIPMENT SCHEDULE FOR THE LOAD DESCRIPTION AND TYPE OF CONNECTION. THE CIRCUIT DESIGNATION IS INDICATED BY NUMBER(S) ADJACENT TO THE SYMBOL. EXAMPLE: EQUIPMENT NO. 1; 3 PHASE CONNECTION TO CIRCUITS 1, 3, 5.

SF-1 / 2,4,6 — MOTOR CONNECTIONS. THE MOTOR IS INDICATED BY A NUMBER WITHIN OR CHARACTERS ADJACENT TO THE MOTOR SYMBOL. SEE THE MOTOR AND EQUIPMENT SCHEDULE FOR THE MOTOR DESCRIPTION AND ELECTRICAL REQUIREMENTS. THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER(S) ADJACENT TO THE SYMBOL. EXAMPLE: MOTOR SF-1; 3 PHASE CONNECTION TO CIRCUITS 2, 4, 6.

7,9 H1 — ELECTRIC HEATER CONNECTIONS. THE HEATER TYPE IS INDICATED BY A NUMBER FOLLOWING THE UPPER CASE LETTER "H". SEE THE HEATER SCHEDULE FOR ELECTRICAL REQUIREMENTS. THE CIRCUIT DESIGNATION IS INDICATED BY NUMBER(S) ADJACENT TO THE HEATER. EXAMPLE: ELECTRIC BASEBOARD HEATER TYPE "H1" CONNECTED TO CIRCUITS 7, 9.

T1 — TRANSFORMERS. THE TRANSFORMER TYPE IS INDICATED BY A NUMBER FOLLOWING THE UPPER CASE LETTER "T". SEE THE TRANSFORMER SCHEDULE OR THE SINGLE LINE DIAGRAM FOR THE TRANSFORMER DESCRIPTION AND REQUIREMENTS. EXAMPLE: TRANSFORMER TYPE "T1".

LPN-102 — PANELBOARDS. PANELBOARD DOORS MAY BE SHOWN TO INDICATE OPENING SIDE OF RECESSED PANELBOARDS. SEE PANELBOARD IDENTIFICATION FOR DESIGNATION CODES.

1 — SPECIAL NOTE. SEE THE SPECIAL NOTES ON THAT SHEET FOR THE NOTE NUMBER INDICATED IN THE HEXAGON.

CONDUIT SHOWN WITHOUT SLASH MARKS SHALL CONTAIN 2 # 12 CONDUCTORS IN 3/4" CONDUIT UNLESS SPECIFIC EQUIPMENT REQUIRES A DIFFERENT SIZE.

#10 — CONDUIT SHOWN WITH SLASH MARKS SHALL CONTAIN 1 # 10 CONDUCTOR PER SLASH MARK IN 3/4" CONDUIT UNLESS A CONDUCTOR AND CONDUIT SIZE IS SHOWN ADJACENT TO THE SLASH MARKS. SLASH MARK INDICATORS ARE: SHORT STRAIGHT=PHASE CONDUCTOR, LONG STRAIGHT=NEUTRAL CONDUCTOR, LONG STRAIGHT WITH A DOT=GROUND CONDUCTOR, SHORT BENT ENDED=SWITCH LEGS, CHEVRON=CATEGORY 6, HALF CHEVRON=CATEGORY 3, TWIST=SHIELDED TWISTED PAIR, CONCENTRIC CIRCLE AND DOT=COAX CABLE.

LPN-102 1,3,5 — HOME RUN TO BRANCH CIRCUIT PANELBOARD. THE PANELBOARD DESIGNATION IS SHOWN ADJACENT TO THE HOME RUN ARROW AS A NUMERATOR AND THE CIRCUIT DESIGNATION IS SHOWN AS THE DENOMINATOR. CIRCUIT BREAKER SIZES (AMPS/NUMBER OF POLES) ARE SHOWN IN THE PANELBOARD SCHEDULE WITH THE CORRESPONDING PANELBOARD AND CIRCUIT DESIGNATION. EXAMPLE: HOME RUN TO PANELBOARD LPN-102; CIRCUITS 1, 3, 5.

SYMBOL NOTATIONS: UPPER CASE LETTERS ADJACENT TO SYMBOLS INDICATE A UNIT TYPE. SEE APPROPRIATE SCHEDULE OR SPECIFICATIONS.

SPECIFIC CODE NOTES

FIRE PROTECTION REQUIREMENTS

A. PENETRATIONS IN WALLS REQUIRING PROTECTED OPENINGS MUST BE FIRESTOPPED WITH AN APPROVED MATERIAL.
   1. CONDUITS MAY PENETRATE WALLS OR PARTITIONS, PROVIDED THEY ARE FIRE-STOPPED.
   2. OPENINGS FOR STEEL ELECTRICAL BOXES NOT EXCEEDING 16 SQUARE INCHES ARE PERMITTED PROVIDED OPENINGS DO NOT AGGREGATE MORE THAN 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL OR PARTITION.
   3. OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITIONS MUST BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.

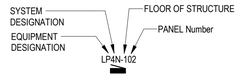
B. LIGHT FIXTURES AND OTHER APPARATUS SUPPORTED BY THE ACOUSTICAL CEILING GRID MUST MEET THE REQUIREMENTS OF NEC SECTION 410.36, MEANS OF SUPPORT.

C. RECESSED LIGHTING FIXTURES INSTALLED IN FIRE RATED CEILING ASSEMBLIES SHALL BE FIRE RATED FIXTURES BEARING THE UL FIRE RATED LABEL. FIXTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE UL FIRE RESISTANCE DIRECTORY, AND SHALL INCLUDE A FIRE RATED ENCLOSURE INSTALLED OVER THE FIXTURE THAT MEETS THE REQUIREMENTS OF THE UL FIRE RESISTANCE DIRECTORY.

PANELBOARD IDENTIFICATION

EQUIPMENT DESIGNATION	CODE
HIGH VOLTAGE 3Ø4W. 277/480	HP4
HIGH VOLTAGE 3Ø3W. 480	HP3
LOW VOLTAGE 3Ø4W. 120/208	LP4
LOW VOLTAGE 3Ø3W. 208	LP3
LOW VOLTAGE 1Ø3W. 120/240	LP2
LOW VOLTAGE 1Ø3W. 120/208	LP1

SYSTEMS DESIGNATION	CODE
NORMAL	N
EMERGENCY	E
POWER CONDITIONED	C
ELECTRONIC GRADE	EG
UNINTERRUPTIBLE POWER SOURCE	UPS



ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (2P, 3P, 4P, ETC.)	CTR	CENTER	HT	HEIGHT	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION	SWBD	SWITCHBOARD
A	AMPERE	CU	COPPER	HTG	HEATING			SYM	SYMMETRICAL
AC	ABOVE COUNTER OR AIR CONDITIONER	DCP	DOMESTIC WATER CIRCULATING PUMP	HTR	HEATER	NFDS	NON-FUSED SAFETY DISCONNECT SWITCH	SYS	SYSTEM
		DEPT	DEPARTMENT	HV	HIGH VOLTAGE			TEL	TELEPHONE
ACLG	ABOVE CEILING	DET	DETAIL	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	NIC	NOT IN CONTRACT	TEL/DATA	TELEPHONE/DATA
ADO	AUTOMATIC DOOR OPENER	DIA	DIAMETER			NL	NIGHT LIGHT	TERM	TERMINAL
AF	AMP FRAME	DISC	DISCONNECT	HWP	HYDRONIC WATER PUMP	N.O	NORMALLY OPEN	TL	TWIST LOCK
AFF	ABOVE FINISHED FLOOR	DIST	DISTRIBUTION	IC	INTERRUPTING CAPACITY	NPF	NORMAL POWER FACTOR	TR	TAMPER RESISTANT
AFG	ABOVE FINISHED GRADE	DN	DOWN	IG	ISOLATED GROUND	NTS	NOT TO SCALE	T-STAT	THERMOSTAT
AFI	ARC FAULT CIRCUIT INTERRUPTER	DPR	DAMPER	IMC	INTERMEDIATE METAL CONDUIT	OH	OVERHEAD	TTC	TELEPHONE TERMINAL CABINET
		DS	SAFETY DISCONNECT SWITCH	INCAND	INCANDESCENT	OL	OVERLOADS	TV	TELEVISION
AHU	AIR HANDLING UNIT	DT	DOUBLE THROW	IR	INFRARED	PA	PUBLIC ADDRESS	TVTC	TELEVISION TERMINAL CABINET
AL	ALUMINUM	DWG	DRAWING	IW	INTERLOCK WITH	PB	PULL BOX OR PUSHBUTTON	TYP	TYPICAL
ALT	ALTERNATE	EC	ELECTRICAL CONTRACTOR	J-BOX	JUNCTION BOX	PE	PNEUMATIC ELECTRIC	UC	UNDER COUNTER
AMP	AMPERE	ELEC	ELECTRIC, ELECTRICAL	KV	KILOVOLT	PED	PEDESTAL	UE	UNDERGROUND ELECTRICAL
AMPL	AMPLIFIER	ELEV	ELEVATOR	KVA	KILOVOLT-AMPERE	PF	POWER FACTOR	UG	UNDERGROUND
ANNUN	ANNUNCIATOR	EM	EMERGENCY	KVAR	KILOVOLT-AMPERE REACTIVE	PH	PHASE	UH	UNIT HEATER
APPROX	APPROXIMATELY	EMS	ENERGY MANAGEMENT SYSTEM	KW	KILOWATT	PIV	POST INDICATING VALVE	UT	UNDERGROUND TELEPHONE
AQ-STAT	AQUASTAT	EMT	ELECTRICAL METALLIC TUBING	KWH	KILOWATT HOUR	PNL	PANEL	UTIL	UTILITY
ARCH	ARCHITECT, ARCHITECTURAL	EP	ELECTRIC PNEUMATIC	LOC	LOCATE OR LOCATION	PP	POWER POLE	UV	UNIT VENTILATOR OR ULTRAVIOLET
AS	AMP SWITCH	EQUIP	EQUIPMENT	LT	LIGHT	PR	PAIR		
AT	AMP TRIP	EWC	ELECTRIC WATER COOLER	LTG	LIGHTING	PRI	PRIMARY	V	VOLT
ATS	AUTOMATIC TRANSFER SWITCH	EXIST	EXISTING	LTNG	LIGHTNING	PROJ	PROJECTION	VA	VOLT-AMPERES
AUTO	AUTOMATIC	EXH	EXHAUST	LV	LOW VOLTAGE	PRV	POWER ROOF VENTILATOR	VDT	VIDEO DISPLAY TERMINAL
AUX	AUXILIARY	EXP	EXPLOSION PROOF	MAX	MAXIMUM	PT	POTENTIAL TRANSFORMER	VERT	VERTICAL
AV	AUDIO VISUAL	FA	FIRE ALARM	MAG.S	MAGNETIC STARTER	PVC	POLYVINYL CHLORIDE (CONDUIT)	VFD	VARIABLE FREQUENCY DRIVE
AWG	AMERICAN WIRE GAUGE	FABP	FIRE ALARM BOOSTER POWER	MC	MOMENTARY CONTACT	PWR	POWER	VOL	VOLUME
BATT	BATTERY		SUPPLY PANEL	MC	MECHANICAL CONTRACTOR	QUAN	QUANTITY	W	WATT
BD	BOARD	FACP	FIRE ALARM CONTROL PANEL	MCB	MAIN CIRCUIT BREAKER	RCPT	RECEPTACLE	W	WITH
BLDG	BUILDING	FCU	FAN COIL UNIT	MCC	MOTOR CONTROL CENTER	REQD	REQUIRED	WG	WIRE GUARD
BMS	BUILDING MANAGEMENT SYSTEM	FIXT	FIXTURE	MDC	MAIN DISTRIBUTION CENTER	RM	ROOM	WH	WATER HEATER
C	CONDUIT	FLR	FLOOR	MDP	MAIN DISTRIBUTION PANEL	RSC	RIGID STEEL CONDUIT	W/O	WITHOUT
CAB	CABINET	FLUOR	FLUORESCENT	MFR	MANUFACTURER	RTU	ROOF TOP UNIT	WP	WEATHERPROOF
CAT	CATALOG	FU	FUSE	MFS	MAIN FUSED DISCONNECT SWITCH	SC	SURFACE CONDUIT	XFMR	TRANSFORMER
CATV	CABLE TELEVISION	FUDS	FUSED SAFETY DISCONNECT SWITCH	MH	MANHOLE	SEC	SECONDARY	XFR	TRANSFER
CB	CIRCUIT BREAKER	GA	GAUGE	MIC	MICROPHONE	SHT	SHEET		
CCTV	CLOSED CIRCUIT TELEVISION	GAL	GALLON	MIN	MINIMUM	SIM	SIMILAR		
CKT	CIRCUIT	GALV	GALVANIZED	MISC	MISCELLANEOUS	S/N	SOLID NEUTRAL		
CLG	CEILING	GC	GENERAL CONTRACTOR	MLO	MAIN LUGS ONLY	SPEC	SPECIFICATION	∠	ANGLE
COMB	COMBINATION	GEN	GENERATOR	MMS	MANUAL MOTOR STARTER	SPKR	SPEAKER	@	AT
CMPR	COMPRESSOR	GFI	GROUND FAULT CIRCUIT INTERRUPTER	MOA	MULTIOUTLET ASSEMBLY	SP	SPARE	▲	DELTA
CONN	CONNECTION	GFP	GROUND FAULT PROTECTOR	MSP	MOTOR STARTER PANELBOARD	SR	SURFACE RACEWAY	'	FEET
CONST	CONSTRUCTION	GND	GROUND	MSBD	MAIN SWITCHBOARD	SS	STAINLESS STEEL	"	INCHES
CONT	CONTINUATION OR CONTINUOUS	GRS	GALVANIZED RIGID STEEL (CONDUIT)	MT	MOUNT	SSW	SELECTOR SWITCH	#	NUMBER
CONTR	CONTRACTOR	GYP BD	GYPSUM BOARD	MT.C	EMPTY CONDUIT	S/S	STOP/START PUSHBUTTONS	Ø	PHASE
CONV	CONVECTOR	HOA	HANDS-OFF-AUTOMATIC SWITCH	MTS	MANUAL TRANSFER SWITCH	STA	STATION	C	CENTER LINE
CP	CIRCULATING PUMP	HORIZ	HORIZONTAL	MTR	MOTOR, MOTORIZED	STD	STANDARD	P	PLATE
CRT	CATHODE-RAY TUBE	HP	HORSEPOWER	N.C.	NORMALLY CLOSED	SURF	SURFACE MOUNTED		
CT	CURRENT TRANSFORMER	HPF	HIGH POWER FACTOR	NEC	NATIONAL ELECTRICAL CODE	SW	SWITCH		

GENERAL ELECTRICAL NOTES

A. ALL CONDUCTORS OPERATING AT 50 VOLTS OR GREATER SHALL BE IN RACEWAY. ALL RACEWAY WITHIN THE STRUCTURE ABOVE THE FLOOR SLAB SHALL BE METAL. RACEWAY BELOW THE FLOOR SLAB AND UNDERGROUND RACEWAY OUTSIDE THE STRUCTURE SHALL BE PVC.

B. ALL LOW VOLTAGE CABLES OR CONDUCTORS OPERATING AT LESS THAN 50 VOLTS SHALL BE IN METAL RACEWAY WHERE INSTALLED WITHIN WALLS OR INACCESSIBLE SPACES. LOW VOLTAGE CABLES MAY BE RUN IN CABLE TRAY WHERE NOTED. LOW VOLTAGE CABLES MAY BE RUN IN CABLE SUPPORT HOOKS ABOVE ACCESSIBLE CEILINGS WHERE NOTED.

C. COORDINATE LOCATIONS OF DEVICES WITH ARCHITECTURAL ELEVATIONS AND DETAILS. ARCHITECTURAL ELEVATIONS AND DETAILS TAKE PRECEDENCE OVER LOCATIONS SHOWN ON ELECTRICAL DRAWINGS. SEE ARCHITECTURAL ELEVATIONS FOR LOCATIONS OF ELECTRICAL DEVICES AT PATIENT BED HEADWALLS.

D. VERIFY LOCATIONS AND ROUGH-IN REQUIREMENTS OF ALL OWNER FURNISHED EQUIPMENT PRIOR TO ROUGH-IN.

E. CONDUIT AND WIRE SHALL NOT BE INSTALLED BELOW FLOOR SLAB UNLESS INDICATED ON PLAN BY DASHED CONDUIT.

F. CONTRACTOR SHALL BE RESPONSIBLE FOR WIRING ALL ELECTRICAL ITEMS SHOWN ON DRAWINGS EXCEPT FOR ITEMS LISTED IN NOTE G.

G. DATA OUTLETS, AND FIRE ALARM DEVICES SHALL CONSIST OF A BACK BOX WITH CONDUIT STUBBED ABOVE THE ACCESSIBLE CEILING, SEE STUB UP DETAIL. VERIFY SIZE OF BACK BOX REQUIRED WITH DEVICE TO BE INSTALLED. LOCATE BACK BOXES 6" FROM ADJACENT POWER RECEPTACLE INTENDED FOR COMPUTER USE.

H. FURNISH AND INSTALL CONDUIT FROM BACK BOXES FOR THE FOLLOWING DEVICES INTO THE ACCESSIBLE CEILING SPACE IN THE CORRIDOR, UNLESS NOTED OTHERWISE:

3/4"C	INFORMATION OUTLETS
3/4"C	FIRE ALARM DEVICES

ELECTRICAL DRAWINGS

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LAKE BYLLESBY PARK PAVILION + BEACH BATH

50% PROGRESS SET

NOT FOR CONSTRUCTION

09/22/2021

CLIENT
GOODHUE COUNTY

No.	Description	Date

SHEET NAME

ELECTRICAL TITLE SHEET

SHEET NUMBER

E-000

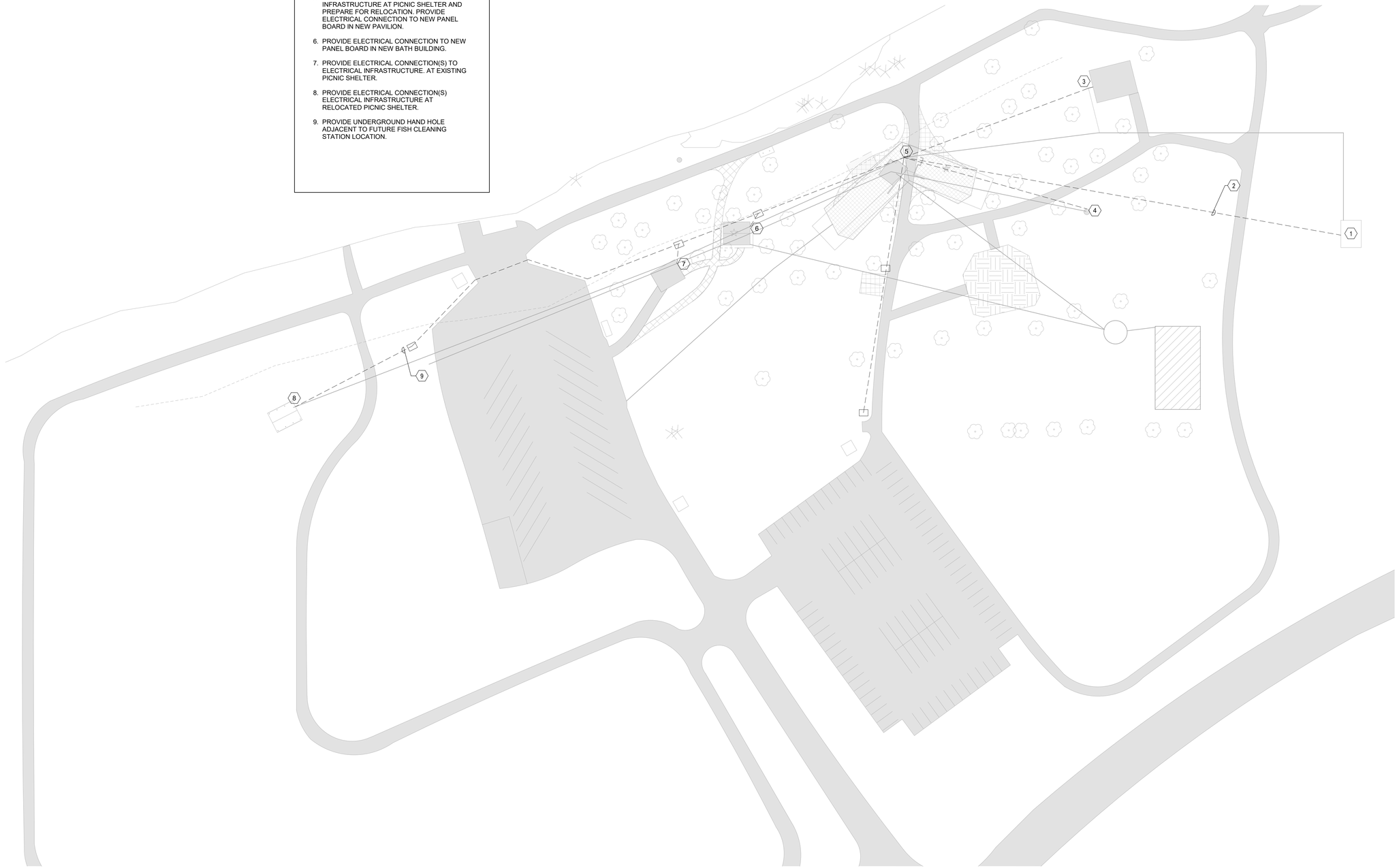
KEYED SHEET NOTES

1. PROVIDE NEW 240 V 200 A ELECTRICAL SERVICE FROM EXISTING OVERHEAD UTILITY. PROVIDE METER AND CT CABINET PER UTILITY REQUIREMENTS.
2. PROVIDE NEW ELECTRICAL SERVICE CONDUCTORS PAVILION.
3. PROVIDE ELECTRICAL CONNECTION(S) TO ELECTRICAL INFRASTRUCTURE AT EXISTING PICNIC SHELTER..
4. DISCONNECT EXISTING ELECTRICAL WELL AND EQUIPMENT AND PREPARE FOR REMOVAL. PROVIDE ELECTRICAL CONNECTION(S) AS REQUIRE TO NEW WELL EQUIPMENT.
5. DISCONNECT EXISTING ELECTRICAL INFRASTRUCTURE AT PICNIC SHELTER AND PREPARE FOR RELOCATION. PROVIDE ELECTRICAL CONNECTION TO NEW PANEL BOARD IN NEW PAVILION.
6. PROVIDE ELECTRICAL CONNECTION TO NEW PANEL BOARD IN NEW BATH BUILDING.
7. PROVIDE ELECTRICAL CONNECTION(S) TO ELECTRICAL INFRASTRUCTURE. AT EXISTING PICNIC SHELTER.
8. PROVIDE ELECTRICAL CONNECTION(S) ELECTRICAL INFRASTRUCTURE AT RELOCATED PICNIC SHELTER.
9. PROVIDE UNDERGROUND HAND HOLE ADJACENT TO FUTURE FISH CLEANING STATION LOCATION.

GENERAL SHEET NOTES

A. ALL ELECTRICAL CONDUCTORS INSTALLED BELOW GRADE SHALL HAVE TYPE XHHW-2 INSULATION AND SHALL BE A MINIMUM OF #8 AWG CU.

B. ALL BURIED ELECTRICAL CONDUIT SHALL BE SCHEDULE 40 PVC. PROVIDE SCHEDULE 80 PVC WHERE CONDUIT PASSES UNDER PAVED ROADWAYS OR WALKWAYS. BURY ALL ELECTRICAL CONDUIT A MINIMUM OF 24" BELOW GRADE.



1 E-101 ELECTRICAL SITE PLAN
1" = 50'-0"

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LAKE BYLLESBY PARK PAVILION + BEACH BATH

50% PROGRESS SET

NOT FOR CONSTRUCTION

09/22/2021

CLIENT
GOODHUE COUNTY

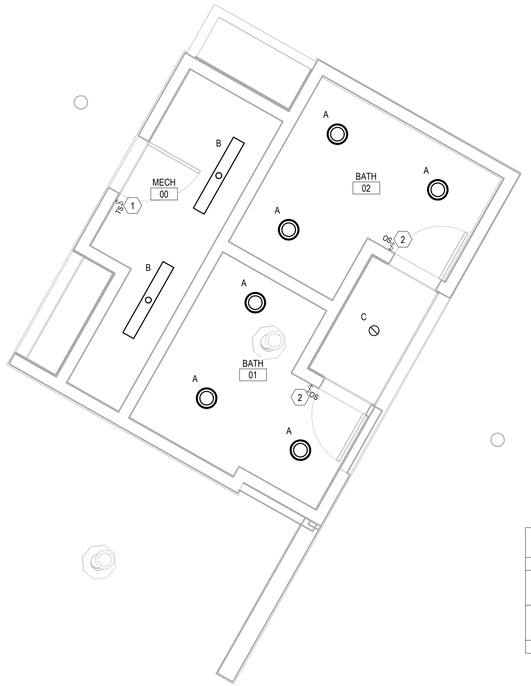
No.	Description	Date

SHEET NAME

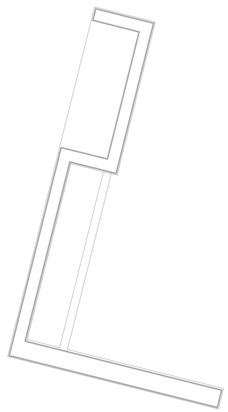
ELECTRICAL SITE PLAN

SHEET NUMBER

E-101

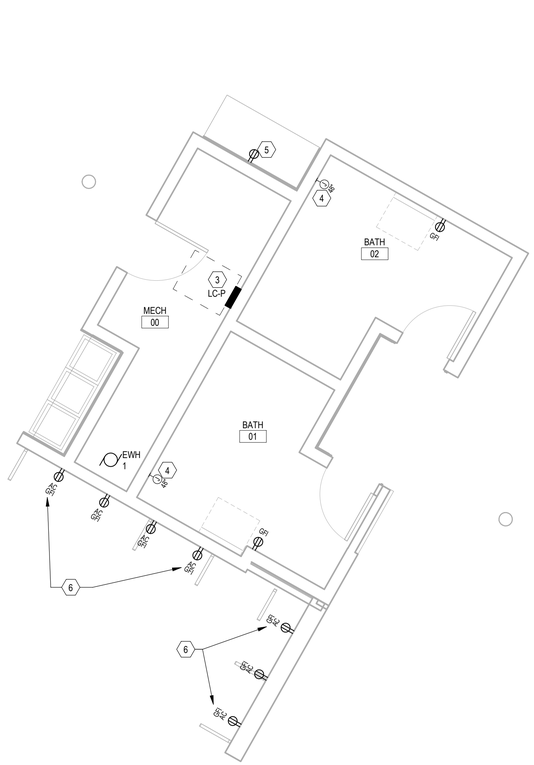


1 E-201 LEVEL 1 LIGHTING PLAN
1/4" = 1'-0"

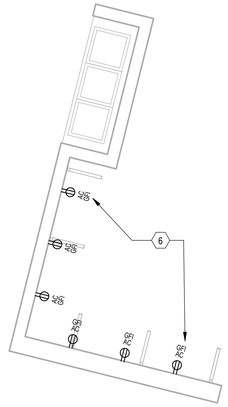


LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MOUNTING	LAMP	VOLT	WATT	MFR	CATALOG SERIES	NOTE
A	13" DIAMETER LOW-PROFILE VANDAL RESISTANT ROUND LED WITH POLYCARBONATE LENS	SURFACE	3500K/80+ CRI	120 V	10 W	KENALL	MR13FL PP XX 10L35K DV	
B	8" WIDE, 54" LONG VANDAL RESISTANT VAPORTIGHT LED WITH POLYCARBONATE LENS, WIDE DISTRIBUTION, 4000LM.	CHAIN SUSPENDED	3500K/80+ CRI	120 V	33 W	LITHONIA	VAP 4000LM FST WD MVOLT GZ10 35K 80CRI	
C	RECESSED DOWNLIGHT	RECESSED	2700K/80+ CRI	120 V	19 W	TBD	TBD	



2 E-201 LEVEL 1 POWER PLAN
1/4" = 1'-0"



ELECTRICAL EQUIPMENT SCHEDULE

NO.	DESCRIPTION	LOCATION		VOLT	PHASE	CONDUIT & WIRE SIZE	NOTES
		NAME	NUMBER				
EWH 1	ELECTRIC WATER HEATER	MECH	00	120 V	1	3/4"C, 2#10, #12G	

GENERAL SHEET NOTES

A. ALL ELECTRICAL LUMINAIRES, EQUIPMENT, AND DEVICES ON THIS SHEET ARE NEW, UNLESS NOTED OTHERWISE.

B. CIRCUIT WIRING IS NOT SHOWN. PROVIDE NUMBER OF CONDUCTORS NEEDED TO ACHIEVE CIRCUITING AND SWITCHING ARRANGEMENTS INDICATED.

C. CONFIGURE LIGHTING CONTROL DEVICES FOR OCCUPANCY (AUTO-ON, AUTO-OFF) OPERATION, UNLESS NOTED OTHERWISE.

D. SET TIME DELAY OF ALL OCCUPANCY SENSING DEVICES TO TWENTY (20) MINUTES, UNLESS NOTED OTHERWISE.

E. WHERE CONNECTED TO A 20 A BRANCH CIRCUIT SUPPLYING AN INDIVIDUAL RECEPTACLE (SIMPLEX OR DUPLEX), THE RECEPTACLE SHALL BE RATED FOR 20 A.

F. CONNECT ALL NEW BRANCH CIRCUITS TO PANEL LC-P. NUMERICAL TAGS AT ELECTRICAL DEVICES INDICATE CIRCUIT/BREAKER NUMBER

G. PROVIDE DEDICATED CIRCUIT FOR EACH RECEPTACLE SHOWN.

KEYED SHEET NOTES

1. PROVIDE WALL MOUNTED DIGITAL TIME SWITCH, ADJUSTMENT RANGE 5 MINUTES TO 12 HOURS, AUDIBLE AND FLASH WARNING, WITH POWER PACK AND CONTROLLER. WATTSTOPPER TS-400 OR EQUIVALENT.
2. PROVIDE COMBINATION PIR OCCUPANCY SENSOR/SWITCH, WALL MOUNTED, LINE VOLTAGE, WITH ON-OFF PUSHBUTTON. WATTSTOPPER PW-301-W OR EQUIVALENT
3. PROVIDE 240/120 V SINGLE-PHASE, SURFACE-MOUNTED PANELBOARD WITH A SERVICE-RATED 200A MCB.
4. PROVIDE DEDICATED 240V SINGLE-PHASE CONNECTION TO ELECTRIC HAND DRYER. PROVIDE 20A CIRCUIT BREAKER. COORDINATE EXACT INSTALLATION HEIGHT WITH EQUIPMENT MANUFACTURER.
5. PROVIDE DEDICATED 120V 15A RECEPTACLE FOR WATER FOUNTAIN/BOTTLE FILLER.
6. INSTALL RECEPTACLES HORIZONTALLY ABOVE EXTERIOR COUNTER. TYP ALL RECEPTACLES ABOVE COUNTER.

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LAKE BYLLESBY PARK PAVILION + BEACH BATH

50% PROGRESS SET

NOT FOR CONSTRUCTION

09/22/2021

CLIENT
GOODHUE COUNTY

No.	Description	Date

SHEET NAME

PAVILLION ELECTRICAL PLANS

SHEET NUMBER

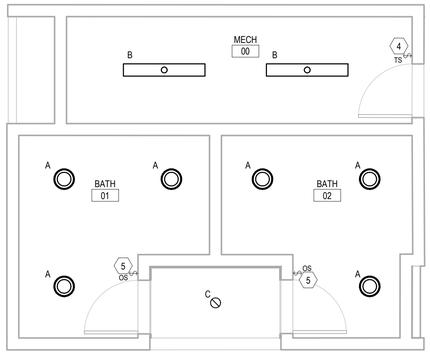
E-201

LIGHTING FIXTURE SCHEDULE

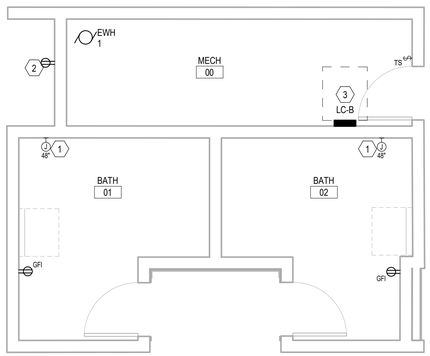
TYPE	DESCRIPTION	MOUNTING	LAMP	VOLT	WATT	MFR	CATALOG SERIES	NOTE
A	13" DIAMETER LOW-PROFILE VANDAL RESISTANT ROUND LED WITH POLYCARBONATE LENS	SURFACE	3500K/80+ CRI	120 V	10 W	KENALL	MR13FL PP XX 10L35K DV	
B	8' WIDE, 54" LONG VANDAL RESISTANT VAPORTIGHT LED WITH POLYCARBONATE LENS, WIDE DISTRIBUTION, 4000LM.	CHAIN SUSPENDED	3500K/80+ CRI	120 V	33 W	LITHONIA	VAP 4000LM FST WD MVOLT GZ10 35K 80CRI	
C	RECESSED DOWNLIGHT	RECESSED	2700K/80+ CRI	120 V	19 W	TBD	TBD	

ELECTRICAL EQUIPMENT SCHEDULE

NO.	DESCRIPTION	LOCATION		VOLT	PHASE	CONDUIT & WIRE SIZE	NOTES
		NAME	NUMBER				
EWH 1	ELECTRIC WATER HEATER	MECH	00	120 V	1	3/4"C, 2#10, #12G	



1 ES-101 LEVEL 1 LIGHTING PLAN
1/4" = 1'-0"



2 ES-101 LEVEL 1 POWER PLAN
1/4" = 1'-0"

GENERAL SHEET NOTES

A. ALL ELECTRICAL LUMINAIRES, EQUIPMENT, AND DEVICES ON THIS SHEET ARE NEW, UNLESS NOTED OTHERWISE.

B. CIRCUIT WIRING IS NOT SHOWN. PROVIDE NUMBER OF CONDUCTORS NEEDED TO ACHIEVE CIRCUITING AND SWITCHING ARRANGEMENTS INDICATED.

C. CONFIGURE LIGHTING CONTROL DEVICES FOR OCCUPANCY (AUTO-ON, AUTO-OFF) OPERATION, UNLESS NOTED OTHERWISE.

D. SET TIME DELAY OF ALL OCCUPANCY SENSING DEVICES TO TWENTY (20) MINUTES, UNLESS NOTED OTHERWISE.

E. WIRE COUNTS FOR CIRCUIT CONDUCTORS ARE NOT SHOWN. PROVIDE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUIT AND SWITCHING CONNECTIONS SHOWN.

F. WHERE CONNECTED TO A 20 A BRANCH CIRCUIT SUPPLYING AN INDIVIDUAL RECEPTACLE (SIMPLEX OR DUPLEX), THE RECEPTACLE SHALL BE RATED FOR 20 A.

G. CONNECT ALL NEW BRANCH CIRCUITS TO PANEL LC-B. NUMERICAL TAGS AT ELECTRICAL DEVICES INDICATE CIRCUIT/BREAKER NUMBER.

H. PROVIDE DEDICATED CIRCUIT FOR EACH RECEPTACLE SHOWN.

KEYED SHEET NOTES

1. PROVIDE DEDICATED 240V SINGLE-PHASE CONNECTION TO ELECTRIC HAND DRYER. PROVIDE 20A CIRCUIT BREAKER. COORDINATE EXACT INSTALLATION HEIGHT WITH EQUIPMENT MANUFACTURER.
2. PROVIDE DEDICATED 120V 15A RECEPTACLE FOR WATER FOUNTAIN/BOTTLE FILLER.
3. PROVIDE 240/120 V SINGLE-PHASE, SURFACE-MOUNTED, 12-POLE (MINIMUM) LOAD CENTER WITH A MINIMUM AMPACITY RATING OF 60 A.
4. PROVIDE WALL MOUNTED DIGITAL TIME SWITCH, ADJUSTMENT RANGE 5 MINUTES TO 12 HOURS, AUDIBLE AND FLASH WARNING, WITH POWER PACK AND CONTROLLER. WATTSTOPPER TS-400 OR EQUIVALENT.
5. PROVIDE COMBINATION PIR OCCUPANCY SENSOR/SWITCH, WALL MOUNTED, LINE VOLTAGE, WITH ON-OFF PUSHBUTTON. WATTSTOPPER PW-301-W OR EQUIVALENT.

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LAKE BYLLESBY PARK PAVILION + BEACH BATH

50% PROGRESS SET

NOT FOR CONSTRUCTION

09/22/2021

CLIENT
GOODHUE COUNTY

No.	Description	Date

SHEET NAME

BEACH BUILDING ELECTRICAL PLANS

SHEET NUMBER

ES-101

Greg Isakson, P.E.
Public Works Director/County Engineer
Goodhue County Public Works Department

2140 Pioneer Road
Red Wing, MN 55066
Office (651) 385.3025

TO: Goodhue County Parks, Trails, and Recreation Advisory Board

FROM: Greg Isakson, Public Works Director

RE: 07 Oct 21 Park Board Meeting
Byllesby Park Berm Planting Plan

Date: 01 Oct 21

Summary
It is requested that the Park Board review and approve Byllesby Park berm planting concepts, plant sizes, budget goals, and project funding.

Background
The eastern 26 acres of Byllesby Park, commonly referred to as "the Goudy Property" or the "Savanna Campground" in the 2017 Byllesby Park Master Plan, is currently an undeveloped and underutilized portion of the park. The Park Board has identified building a berm on this property along Highway 19 as the next priority grant project, with the goal of creating a sound, visual, and light buffer between the highway and the proposed walking trails/campground. Even if the campground is not developed for many years, this will give plant material an opportunity to grow enough to help block noise and light.

Goodhue County has utilized the soil stockpile from the Mill Towns State Trail construction, along with soil removed during routine county road ditch cleaning/maintenance, to create a berm along Highway 19. The berm follows the elevation of the highway, has been seeded to prevent erosion, and will later be planted with layers of trees and shrubs to create a visual and noise barrier between the park and Highway 19. Plantings and wood mulch may be installed using local funds or under a grant application sometime between 2024-2026.

Staff has prepared two different planting options for the berm (attached). Option 1 is a more "landscaped" look that includes grouping of plants to provide pockets of color and an overall tidier appearance. Option 2 is a more "natural" look that has the different species intermingled. Some pricing and plant sizing options have been prepared as a starting point:

Planting Sizes with Approximate Cost Increase Per Year

Planting Size	**2021**	**2022**	**2023**	**2024**	**2025**
Smaller Containers (#10 trees, #2 shrubs)	$10,750.00	$11,072.50	$11,404.68	$11,746.82	$12,099.22
Larger Containers (#20 trees, #5 shrubs)	$17,250.00	$17,767.50	$18,300.53	$18,849.54	$19,415.03

*Estimated price increase of 3% per year

Mulching should require approximately 35-40 yards to mulch around each plant or approximately 900 yards to mulch the entire berm. A 45 yard load may run approximately $1,000 delivered in 2023. 900 yards may run approximately $18,675 delivered in 2023.

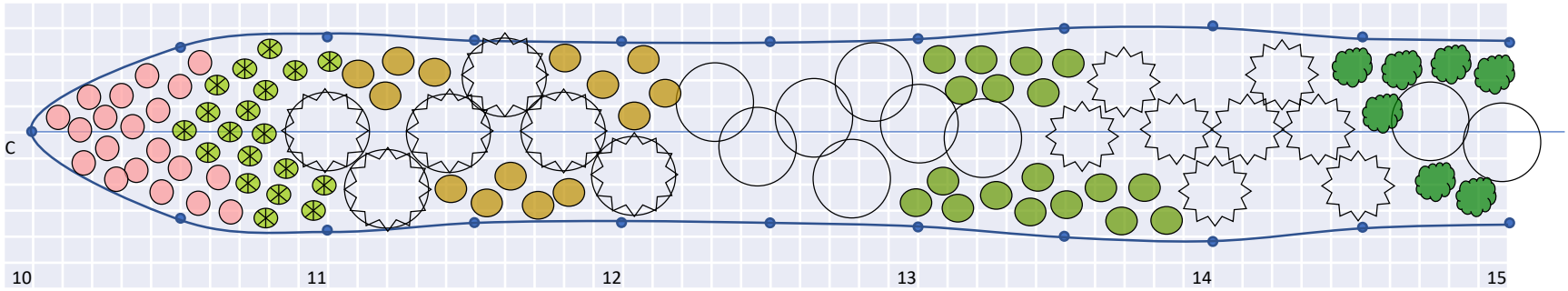
Recommendations

It is recommended that the Park Board:

- Choose a planting concept
- Identify any plant species they would like to add or change
- Identify desired sizes of plant material to install
- Set project budget goals and identify if this project should be submitted for a grant funding request.

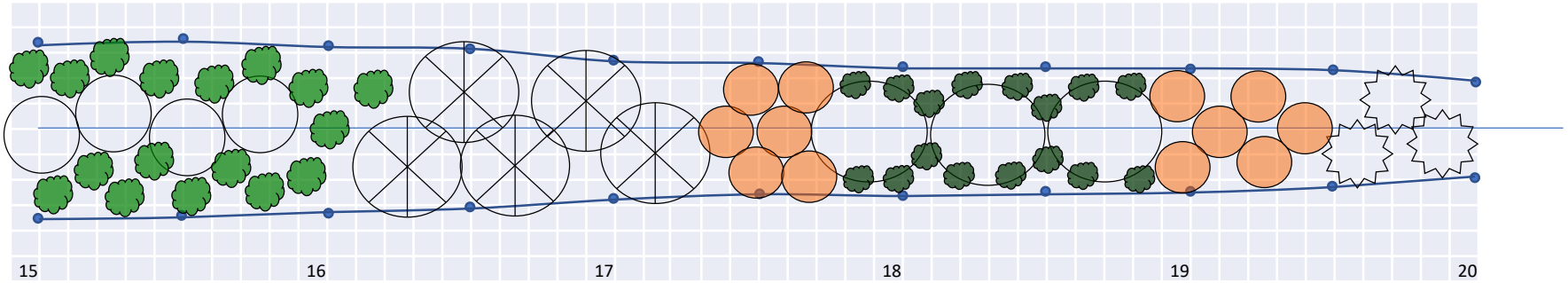
OPTION 1 - LANDSCAPED BERM PLANTINGS

CHOKEBERRY (19) SCOTCH PINE (6) IRONWOOD (7) BLACK HILLS SPRUCE (8)



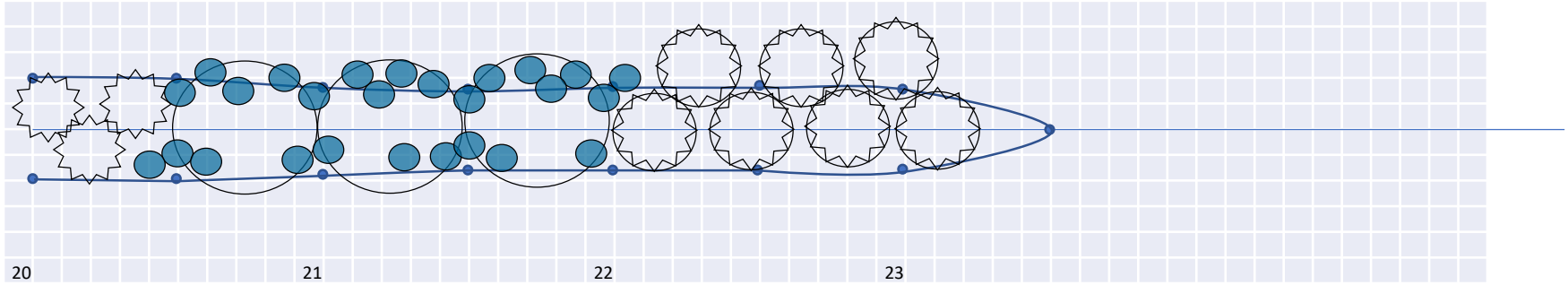
CAROLINA ROSE (20) HAZELNUT (14) BIG BLUESTEM (40) ELDERBERRY (18)

BASSWOOD (5) AUSTRIAN PINE (5) SERVICEBERRY (6) RED MAPLE (3) SERVICEBERRY (6)



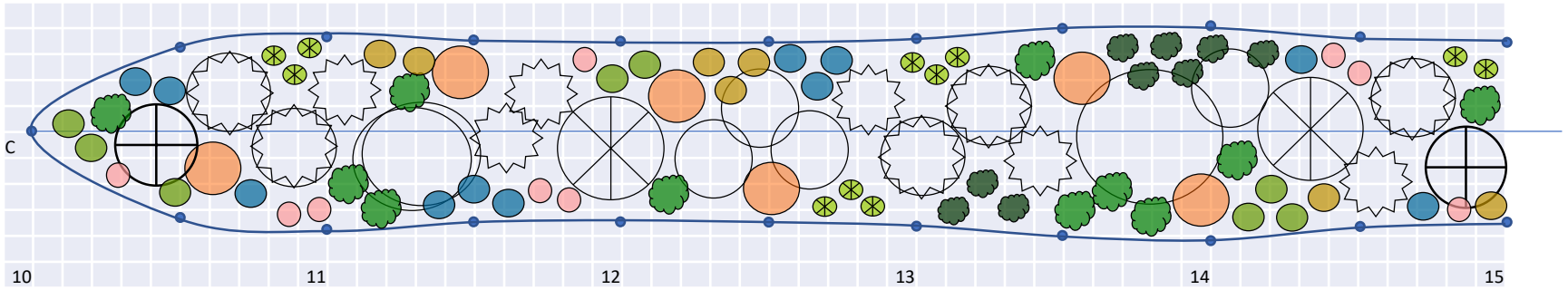
NANNYBERRY VIBURNUM (23) WINTERBERRY (16)

BLACK HILLS SPRUCE (6) N. PIN OAK (3) SCOTCH PINE (7)



CHICAGO LUSTRE&BLUE MUFFIN VIBURNUM (26)

OPTION 2 - NATURALIZED BERM PLANTINGS

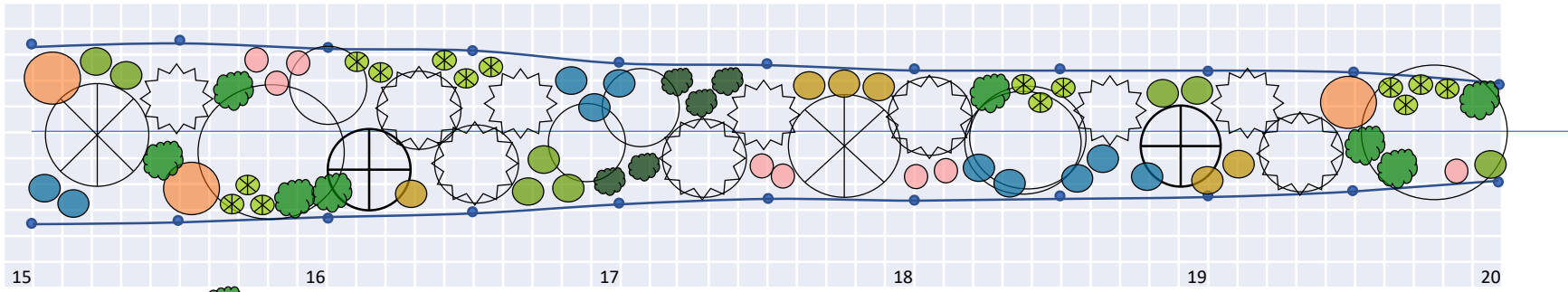


CAROLINA ROSE (21)

HAZELNUT (16)

CHOKEBERRY (29)

ELDERBERRY (19)

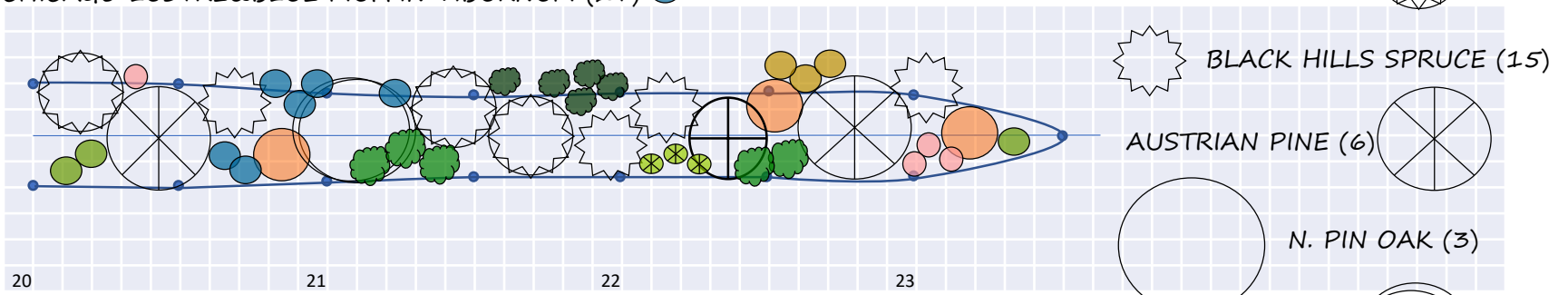


NANNYBERRY VIBURNUM (24)

WINTERBERRY (19)

CHICAGO LUSTRE&BLUE MUFFIN VIBURNUM (27)

SCOTCH PINE (13)



BLACK HILLS SPRUCE (15)

AUSTRIAN PINE (6)

N. PIN OAK (3)

IRONWOOD (7)

BASSWOOD (5)

SERVICEBERRY (12)

RED MAPLE (3)

Greg Isakson, P.E.
Public Works Director/County Engineer
Goodhue County Public Works Department

2140 Pioneer Road
Red Wing, MN 55066
Office (651) 385.3025

TO: Goodhue County Parks, Trails, and Recreation Advisory Board

FROM: Greg Isakson, Public Works Director

RE: 07 Oct 21 Park Board Meeting
Fishing at Lake Byllesby

Date: 01 Oct 21

Summary
It is requested that the Park Board discuss fishing at Lake Byllesby.

Background
Public Works staff has received input that quality fishing experiences on the lake are decreasing. As the park is primarily water activity based, staff is looking for input and direction on whether discussions with the DNR should be initiated regarding fish in Lake Byllesby.