Planning Department

W240N3065 Pewaukee Road
Pewaukee, WI 53072
(262) 691-0770 Fax (262) 691-1798

SECOND REVISION

PLAN COMMISSION
MEETING NOTICE AND AGENDA
Thursday, September 21, 2023
6:00 PM

Pewaukee City Hall Common Council Chambers
W240 N3065 Pewaukee Rd., Pewaukee, WI 53072

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1. Call to Order and Pledge of Allegiance

2. Discussion and Action Regarding Approval of the July 20th, 2023 Meeting Minutes

3. Discussion and Action Regarding a Zoning Permit for Ellenbecker Investment Group for Property Located at N21 W23350 Ridgeview Parkway for the Purpose of Erecting a 35-Foot Flagpole (PWC 0953994001)

4. Discussion and Action and Public Hearing for WVRC to Rezone Property Located on Pewaukee Road from B-3 General Business to B-4 Office District for the Purpose of Constructing an Emergency Vet Clinic (PWC 0966999)

5. Discussion and Action Regarding a Recommendation to the Common Council for a Conditional Use Permit and Site and Building Plans for WVRC for Property Located on Pewaukee Road for the Purpose of Constructing an Emergency Vet Clinic (PWC 0966999)

6. Discussion and Action Regarding the Site and Building Plans for KD Glass for Property Located at W227 N4755 Duplainville Road for the Purpose of Constructing Two Proposed Building Additions and Related Site Modifications (PWC 0866997004)

7. Discussion and Action Regarding a Recommendation to the Common Council for a Conditional Use Permit and Site and Building Plans for Zeilhofer Properties, LLC for Property Located at N4 W22540 Bluemound Road for the Purpose of Constructing a Two-Story Storage Building (PWC 0963997)

8. Discussion and Action Regarding the Site and Building Plans for the City of Pewaukee for the Purpose of Constructing a Replacement Gun Club Lift Station (PWC 0920999001)

9. Adjournment

Ami Hurd
Deputy Clerk

9/14/2023

NOTICE

It is possible that members of other governmental bodies of the municipality may be in attendance to gather information that may form a quorum. At the above stated meeting, no action will be taken by any governmental body other than the governmental body specifically referred to above in this notice.

Any person who has a qualifying disability under the Americans with Disabilities Act that requires the meeting or materials at the meeting to be in an accessible format must contact the City Planner, Nick Fuchs, at (262) 691-6007 three business days prior to the meeting so that arrangements may be made to accommodate your request.

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 2.

DATE: September 21, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding Approval of the July 20th, 2023 Meeting Minutes

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

7.20.23 PC minutes

In attendance:
Mayor Steve Bierce, Alderwoman Collen Brown, Ted Janka, and Sean Sullivan.

Also in attendance:
City Planner & Community Development Director N. Fuchs, Administrator S. Klein, Department of Public Works Director M. Wagner, and Deputy Clerk A. Hurd.

1. Call to Order and Pledge of Allegiance

Chairman Bierce called the meeting to order at 6:00pm and requested everyone stand for the Pledge of Allegiance.

2. Discussion and Action Regarding Approval of the March 16th, 2023, April 20th, 2023, and May18th, 2023 Meeting Minutes

A motion was made and seconded (C. Brown, T. Janka) to approve the March 16th, 2023, April 20th, 2023, and May 18th, 2023 meeting minutes. Motion Passed: 4-For, 0-Against.

3. Discussion and Action Regarding a Hobby Kennel License Request by Katie Smith to Keep Four to Six Dogs on Her Property Located at W226 N2521 Oakwood Lane (PWC 0915132)

Ms. Hurd discussed the kennel license application and noted that the applicant's property was approximately 0.34 acres with an electric fence. She noted the various kennel license approvals in the past that were similar to this application. Ms. Hurd noted that most approvals in the past involved the licensee coming back before the Plan Commission if there were issues. She recommended approval of the kennel license.

The applicant, Katie Smith, was in the audience and stated all her dogs were professionally trained.

Chairman Bierce stated he liked the stipulation that the license would have to come back to the Plan Commission if there were complaints. Commissioner Janka noted he liked that the yard had an electric fence.

A motion was made and seconded (T. Janka, C. Brown) to approve the hobby kennel license for Katie Smith, contingent on the license coming back to the Plan Commission for review if there are problems with the license. Motion Passed: 4-For, 0-Against.

4. Discussion and Action Regarding a Recommendation to the Common Council for a Conditional Use Permit for The Inn Bed and Breakfast Located at N4 W22496 Bluemound Road (PWC 0963998)

Mr. Fuchs stated staff became aware of the bed and breakfast use on the property, and a Conditional Use Permit would be required based on the zoning district. The Inn has three bedrooms located within the farmhouse and a fourth bedroom located in a separate building. There are no site changes or exterior building modifications planned. Mr. Fuchs recommended approval.

Karen Miller-Cameron, owner of The Inn, noted she has tourism rooming through Waukesha County, and she questioned if there needed to be some consistency with the County. Mr. Fuchs noted that this zoning district specifically calls out bed and breakfasts.

Commissioner Brown felt there should be a hotel tax for this, and she felt the money should still come to the City from when The Inn first got its license through Waukesha County. The City would have been getting hotel tax all along. Ms. Miller-Cameron noted that she was paying a room tax to Waukesha County and was never told that she needed a license through the City. She stated she wasn't operating because of several factors, and she only paid the County a total of $44 so far.

A motion was made and seconded (S. Sullivan, T. Janka) to recommend approval of the Conditional Use Permit for The Inn Bed and Breakfast with the condition that the necessary Hotel/Motel License is obtained through the City Clerk's Office. Motion Passed: 4-For, 0-Against.

5. Discussion and Action Regarding a Recommendation to the Common Council for a Conditional Use Permit and Site and Building Plans for Steny's Lake Country for Property Located at N29 W24483 Watertown Road for the Purpose of Operating a Restaurant and Bar (PWC 0922987001)

Mr. Fuchs stated the proposal includes a 3,286 square foot addition to the existing building, as well as site changes. They will be going down to one volleyball court, and as a condition of approval, the courts that are removed must be returned to green space. The outdoor volleyball and events would be until 9pm Sunday through Thursday and until 10pm Friday and Saturday. Mr. Fuchs added that there is a condition for the applicant to show bus parking if it is proposed in the future. He mentioned that he received an email from a City resident regarding traffic concerns. Mr. Fuchs recommended approval of the Conditional Use and the Site and Building Plans with the conditions listed in the staff report.

Chairman Bierce felt they would need to discuss the parking, and he noted that the drawings would not be enough for him to approve.

Commissioner Brown suggested no amplified music, as the establishment is in a residential neighborhood. She also requested the lighting be turned down and felt it may be too bright for what is needed in the area. Commissioner Brown also mentioned it was difficult to approve plans that are not in color. The applicants, Jerome and Ryan Stenstrup, noted the building would now be a darker grey with black and wood tones for a rustic, modern look.

Chairman Bierce stated the site plan shows 124 parking stalls, but he felt like they would need more than that. Mr. Stenstrup stated their goal was to get to a capacity of 250 after the renovations, but they noted they will not be taking any parking out for the addition. Commissioner Brown did not want the parking spilling out into the residential neighborhood. Mr. Stenstrup felt they would have no problem making a bigger parking lot.

A motion was made and seconded (C. Brown, S. Sullivan) to recommend approval of the Conditional Use Permit with the conditions listed in the staff report, and final approval of the building plans by City staff, and if parking becomes an issue the Plan Commission can require more parking stalls. Motion Passed: 4-For, 0-Against.

6. Discussion and Action Regarding a Conceptual Review for Carity Land Corporation for a Proposed Condominium Development on Property Located at N18 W22670 Watertown Road (PWC 0958990006)

Mr. Fuchs stated this submittal was on the Marincic property and was for 104 owner-occupied condominiums, with a gross density of 3.08 units per acre and a net density of 4.37 units per acre. There are approximately 10 acres of natural resources on the site. Access is proposed from North Avenue and Elmwood Drive with a right-of-way owned by the City between two existing lots. Mr. Fuchs stated the Rm-1 standards appear to be met but they need to see a bit more detail.

The applicant, Bill Carity, stated he wanted to build high quality, owner-occupied condominiums. He spoke with the County regarding an access on CTH M, and they will not allow any open cut of utilities on CTH M for a three-year period. Mr. Carity noted that their sanitary sewer extension would have to be a directional pour under CTH M, but the County would allow an access. He stated they would have to deed right-of-way to the County for reconfiguration of the intersection in the future.

Mr. Carity stated the total site area is 33.76 acres, and they would have to dedicate 0.36 acres to the County for the intersection reconfiguration. There are approximately 10 acres of primary environmental corridor, as well as delineated wetlands and a navigable stream on the property. The plan is for 23 fourplex condominiums, and six duplex condominiums co-mingled together, as well as a clubhouse at the front entrance. Mr. Carity pointed out that they configured an access point as far away from the intersection as possible, and there would be a dedicated public street running through the heart of the development to Elmwood Drive.

Mr. Carity referred to the fourplex units and noted that they feature auto courts between them, and the garage doors are in the middle of the building, essentially buried within the building. By doing this, it shields the garage doors and results in more curb appeal within the units.

It was noted that the units vary in size from1,500 square feet and larger on the fourplexes, and a little larger on the duplexes. There are three private cul-de-sacs, and Mr. Carity stated they would like the Homeowner's Association to maintain those cul-de-sacs. The private cul-de-sacs will affect some setback issues.

The price point for the condos will start at close to $500,000. There will be a clubhouse on the property, as well as a pool, and possibly a pickleball court. Mr. Carity noted that the demographic would be empty nesters, and they will not be injecting children into the school system.

Mr. Carity clarified that the units will not be sprinkled. Mr. Fuchs noted that there would have to be at least a 40-foot separation between buildings, and Mr. Carity confirmed that there would be.

Chairman Bierce felt the biggest issue was always related to traffic. He questioned if they could not have the second egress if the buildings were sprinkled.

Chairman Bierce stated he would like these to be owner-occupied units, as it is next to the largest subdivision of owner-occupied buildings in the City.

Commissioner Brown liked that this density was nearly half of what was last proposed for this site. She did not mind the private streets. She also stated she liked the conceptual view with the modern look.

Commissioner Janka agreed and felt the right-of-way off Elmwood Drive was put in for a reason. When the subdivision was developed, the right-of-way was put in with the expectation that development would continue to the west. Commissioner Janka felt the demographics were ideal for this location for empty nesters with less traffic and little to no impact on the schools. He liked the design and felt this was really soft development compared to what has come before the Plan Commission in the past.

Commissioner Sullivan agreed, but stated he would not approve the private roads. He felt they were moving in the right direction with this, although traffic is a problem. Commissioner Sullivan also agreed that the right-of-way was put in place for a reason.

Brian Dziwulski (N24 W22637 Meadowood Lane) stated he liked the objective of being senior family but was unsure how that would be administered. He referred to the density and felt it was close to what Springdale Estates is now, and he did not have a problem with that. Mr. Dziwulski suggested having an exit onto Watertown Road and leaving the one on Elmwood Drive closed. He stated he was not interested in

anything going on this property until the County widens Watertown Road, as it is too small and very dangerous to bikers and walkers.

Tasha Spransy (W224 N2326 Elmwood Drive) stated she likes that it would be owner-occupied and felt it was much better than the previous proposals. She liked the North Avenue entrance but has always had a problem with one on Watertown Road because of the train. Ms. Spransy also liked the price point and the fact that ten acres of wetlands were being kept. She felt Elmwood Drive was bothersome because it is so straight, and people speed down the street. Ms. Spransy questioned if a new traffic study would be done.

Teresa Becker (W222 N2147 Glenwood Lane) stated she was adamantly opposed to an exit going onto North Avenue due to the blind curve. She was also opposed to the exit onto Elmwood Drive, as she felt people would take the path of least resistance through Springdale Estates. Ms. Becker did like that it was planned to be owner-occupied. She questioned how overburdened our emergency services would be with another dense subdivision going in. Ms. Becker also requested a new traffic study.

Ms. Wagner noted that she would not be in favor of making Elmwood Drive an emergency access only, as she did not believe they function correctly and are not maintained properly. She also felt the point of a roadway was for access.

Mr. Carity added that he expected to have acceleration, deceleration, and bypass lanes at the main entrance on North Avenue for some calming of the traffic.

Michael Jones (N24 W22412 Meadowood Lane) stated he liked the value of the condos, but he felt there would be a traffic issue. He felt this was the best plan that has been presented so far, as it takes into consideration all of the homeowners' concerns.

Tom Kustner (N24 W22429 Meadowood Lane) agreed with the other speakers. He was concerned that Waukesha County would continue to delay the intersection work in this area. Mr. Kustner was unsure how this project could move forward without knowing what the County was going to do.

Mr. Carity stated they will try to take all of the comments into consideration, and they will move forward with a rezoning.

No action was taken.

7. Discussion and Action and Public Hearing Regarding an Amendment to Section 17.0435 F-1 Floodplain District, Creation of a New Floodplain Ordinance Section, and Adoption of the Updated Flood Insurance Study and Flood Insurance Rate Maps

Mr. Fuchs stated this was a new, updated floodplain ordinance, as the City is required to adopt an updated ordinance, or be suspended from the National Flood Insurance Program. The updated ordinance is consistent with and matches the State model ordinance. Mr. Fuchs noted that the City's mitigation standard of 2 to 1 is more restrictive than the State's, and the setback requirement from the 100-year floodplain boundary is 75 feet. Those two items are not required and are the two major differences between the model and the City's ordinance. Mr. Fuchs also noted that a municipality can have more restrictive standards in their ordinance and participate in the Community Rating System program, which would reduce insurance costs for those in the community that have floodplain insurance.

Mr. Fuchs referred to the Act 175 language regarding legal, non-conforming structures and noted the Plan Commission would need to weigh in on that as well.

Chairman Bierce opened the public hearing at 7:30pm. He then closed the public hearing at 7:30pm.

Chairman Bierce stated he had no interest in eliminating the 2 to 1 mitigation ratio or the 75-foot setback, and he was in favor of leaving out the Act 175 language. He also wanted to include the more restrictive standards to be able to give City residents cheaper insurance. All the Plan Commissioners were in agreement.

Mr. Fuchs summarized that if Act 175 were kept out, it would be more difficult for legal non-conforming structures to be rebuilt.

A motion was made and seconded (T. Janka, C. Brown) to recommend approval of the Floodplain Ordinance amendment. Motion Passed: 4-For, 0-Against.

8. Adjournment

A motion was made and seconded (C. Brown, S. Sullivan) to adjourn the meeting at 7:34pm. Motion Passed: 4-For, 0-Against.

Respectfully Submitted,

Ami Hurd
Deputy Clerk

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 3.

DATE: September 21, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Zoning Permit for Ellenbecker Investment Group for Property Located at N21 W23350 Ridgeview Parkway for the Purpose of Erecting a 35-Foot Flagpole (PWC 0953994001)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Ellenbecker staff report 8.17.23

Ellenbecker site plans

Ellenbecker overview picture

Office of the Planner & Community Development Director
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Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of August 17, 2023

Date: August 9, 2023

Project Name: Ellenbecker Investment Group Zoning Permit

Project Address/Tax Key No.: N21 W23350 Ridgeview Parkway /PWC 0953994001

Applicant: Kristin Boyle, Flag Center

Property Owner: Pilgrim Parkway 96 LLC

Current Zoning: B6-Mixed Use Business & UC Upland Conservancy

2050 Land Use Map Designation: Office/Commercial & Floodplains, Lowland & Upland Conservancy and Other Natural Areas

Use of Surrounding Properties: Upland Conservancy zoned lands to the north, industrial to the south, an office use to the east and a storm water management pond and industrial to the west

Project Description

The applicant has filed a Zoning Permit Application in order to erect a 35-foot flagpole on the Ellenbecker Investment Group property located at N21W23350 Ridgeview Parkway. The flagpole will be located on the east side of the entrance drive, approximately 115-feet from the south or front/street property line.

Per section 17.0901c., flagpoles shall not exceed a height of 30-feet unless otherwise approved by the Plan Commission. See below.

> c. Communication and Power-Generating Structures such as radio and television transmission and relay towers, windmills, aerials, and receiving antennas as well as flagpoles shall not exceed in height thirty (30) feet or the distance of the base of such structure from the nearest lot line, whichever is less, unless otherwise authorized by the Plan Commission.

Recommendation

A motion to recommend approval of the Zoning Permit Application to install a 35-foot flagpole on the Ellenbecker Investment Group property bearing Tax Key No. 0953994001.

N21 W23350 RIDGEVIEW PARKWAY

PEWAUKEE, WISCONSIN 53188

PROJECT DIRECTORY

OWNER — JULIE ELLENBECKER-LIPSKY
ELLENBECKER INVESTMENT GROUP
N35W23877 HIGHFIELD COURT
SUITE 200
PEWAUKEE, WI. 53072
PHONE: 262-691-3200
julie@ellenbecker.COM

ARCHITECT — PAUL MICKELBERG
WSM ARCHITECTS, INC.
4330 N CAMPBELL AVE, STE 268
TUCSON, AZ 85718
PHONE: 888-708-1044
pmickelberg@wsmarch.com

CONTACT: MICHAEL WELMAN
WSM ARCHITECTS INC.
6650 W STATE ST, STE 117D
WAUWATOSA, WI 53213
PHONE: 414-333-0018
mwelman@wsmarch.com

CONTRACTOR: STEVE McGUIRE
McGUIRE CONTRACTORS, INC.
1285 SUNNYRIDGE ROAD
SUITE 201
PEWAUKEE, WI. 53072
PHONE: 262-372-3236
steve@mcguire-ci.com

MECHANICAL	DESIGN BUILD
ELECTRICAL	DESIGN BUILD
PLUMBING	DESIGN BUILD
FIRE PROTECTION	DESIGN BUILD

SHEET INDEX

GENERAL
- A0.0 COVER SHEET
- A0.1 GENERAL NOTES AND SPECIFICATIONS
- A0.2 CODE REVIEW AND CODE PLANS

ARCHITECTURAL
- D1.0 FIRST FLOOR AND BASEMENT DEMO PLAN
- A2.0 FIRST FLOOR PLAN
- A2.1 SECOND FLOOR PLAN
- A3.0 EXTERIOR ELEVATIONS
- A3.1 PORCH ELEVATIONS AND DETAILS
- A4.0 WALL SECTIONS
- A5.0 INTERIOR ELEVATIONS
- A5.1 INTERIOR ELEVATIONS AND DETAILS
- A5.2 ENLARGED RESTROOM PLAN, ELEVATIONS AND DETAILS
- A6.0 FIRST FLOOR AND SECOND FLOOR REFLECTED CEILING PLAN
- A8.0 DOOR SCHEDULE AND DETAIL

DEFFERED SUBMITTALS

REQUIRED SUBMITTALS FOR APPROVAL
THE FOLLOWING SUBMITTALS SHALL BE REQUIRED FOR APPROVAL BY DESIGN BUILDER SUB CONTRACTOR

HVAC:	CERTIFIED PLANS
ELECTRICAL:	CIRCUIT & PANEL PLAN
PLUMBING:	FIXTURE AND PIPING PLANS
STRUCTURAL:	CERTIFIED PLANS
FIRE PROTECTION AND FIRE ALARM SYSTEMS	

BID ALTERNATE

1) HIGH WOOD FRAME WINDOWS
2) CUT IN WINDOWS INTO EXISTING FLUSH DOORS

PROJECT SPECIFICATIONS

ALL WORK SHALL BE PER BUILDING STANDARD, EXCEPT WHERE SHOWN ON PLAN.
ALL WORK SHALL CONFORM WITH ALL STATE AND LOCAL BUILDING CODES, INCLUDING REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADAAG).
THE DEMISED PREMISES SHALL BE CLEANED ENTIRELY PRIOR TO OCCUPANCY.
GENERAL WARRANTY SHALL BE FOR ONE (1) YEAR FROM DATE OF OCCUPANCY.
ALL MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE STARTED AND DEMONSTRATED TO TENANT AND MAINTENANCE MANAGER BY THE APPROPRIATE SUBCONTRACTOR PRIOR TO FINAL PAYMENT.
CONTRACTOR SHALL PROVIDE WALKOFF MATS AT THE ENTRIES TO THE BUILDING
CONTRACTOR MUST PARK ALL VEHICLES AT A LOCATION DESIGNATED BY OWNER.
CONTRACTOR MUST OBTAIN OWNER'S APPROVAL FOR DUMPSTER LOCATION PRIOR TO PLACEMENT.

DIVISION: 2: SITE WORK
ALL REMOVAL AND DISPOSAL SHALL BE DONE IN AN ORDERLY AND SAFE MANNER AND SHALL MINIMIZE DISTURBANCE TO EXISTING TENANTS AND PUBLIC SPACES. SURRENDER DOORS, FRAMES, HARDWARE AND FIXTURES TO OWNER. WHEN REMOVAL OF WALLS OR DOORS ETC. OCCURS, ADJOINING SURFACES SHALL BE PATCHED AND PREPARED FOR NEW FINISH APPLICATION.
ACCESS TO ALL EXITS SHALL BE MAINTAINED CLEAR AND ACCESSIBLE THROUGHOUT CONSTRUCTION.
ELECTRICIAN SHALL MAKE SAFE ALL ELECTRICAL SERVICE PRIOR TO DEMOLITION

DIVISION 6: WOODS AND METALS
FURNISH AND INSTALL TREATED WOOD OR APPROVED STEEL BLOCKING IN WALL BEHIND ALL SHELVING, WALL CABINETS, COAT AND SHELVES AND HANGERS, ELECTRICAL DEVICES. VERIFY WEIGHT REQUIREMENTS WITH TENANT.

DIVISION 8: DOORS AND WINDOWS
BUILDING STANDARD SOLID CORE VENEER DOORS, SOLID WOOD, 4" FACE TRIM, FINISH TO MATCH EXISTING.
HARDWARE: MATCH BUILDING STANDARDS.
ALL NEW ASSEMBLIES SHALL MATCH EXISTING.
RE-USE EXISTING DOORS AND FRAMES WHEN POSSIBLE, REPAIR NICKS AND SCRATCHES, AND RESEAL/ PAINT/STAIN.
REPLACE NON ADA HARDWARE WITH ADA COMPLIANT LEVER HARDWARE.

DIVISION 9: FINISHES
STANDARD PARTITION: 2x4 WOOD STUDS, 5/8" GYPSUM BOARD SHEATHING ON BOTH SIDES, TAPED AND SANDED AND PREPARED FOR PAINTED FINISH. INSULATE WALL CAVITY WITH HIGH DENSITY SOUND BATTS FULL HEIGHT.
CONTROL JOINTS SHALL BE INSTALLED AT NOT LESS THAN 30'-0" INTERVALS; AND SHALL BE ARRANGED TO COINCIDE WITH OTHER ARCHITECTURAL ELEMENTS. VERIFY WITH DESIGNER FOR EXACT LOCATION.
MODIFY EXISTING CEILING AND PROVIDE NEW WHERE NECESSARY. REPLACE ALL STAINED, BROKEN, OR SAGGING CEILING TILE WITH NEW TILE MATCHING EXISTING.

DIVISION 10: SPECIALTIES
EXISTING WINDOW BLINDS SHALL REMAIN. REPAIR DAMAGE AND CLEAN PRIOR TO OCCUPANCY.
NEW FIRE EXTINGUISHERS TO BE 10LB IN SEMI RECESSED STEEL CABINET AS SHOWN IN DRAWINGS. MOUNT PER ADA REQUIREMENTS.
TOILET COMPARTMENTS TO BE FLOOR AND WALL MOUNTED. FINISH TO BE POWDER COATED. INTERIOR DESIGNER TO SELECT FINISH AND COLOR.
ALL FURNITURE, FURNISHINGS, EQUIPMENT, AND INSTALLATION OF SUCH SHALL BE BY TENANT AND TENANT'S SOLE EXPENSE.

DIVISION 15 MECHANICAL
PLUMBING:
VERIFY THAT EXISTING FIXTURES AND RE-USED ARE CLEAN AND IN GOOD WORKING ORDER.
FIRE SAFETY:
FULLY SPRINKLED (NFPA 13) - MODIFY AS REQ'D.
MODIFY EXISTING FIRE ALARM SYSTEM AS REQUIRED IN ACCORDANCE WITH CODE.
HVAC
MODIFY EXISTING BUILDING STANDARD AIR EQUIPMENT FOR NEW LAYOUT. PROVIDE PLANS SHOWING LOCATIONS OF THERMOSTATS AND ROOMS CONTROLLED.
SEPARATE EXTERIOR / INTERIOR ZONES WHEN POSSIBLE.
LIMIT FLEX-DUCT RUNS TO 5'-0" LONG.
ALL DIFFUSERS SHALL HAVE SEPARATE DAMPERS.
ALL DIFFUSERS IN ONE ROOM SHALL MATCH STYLE AND COLOR.

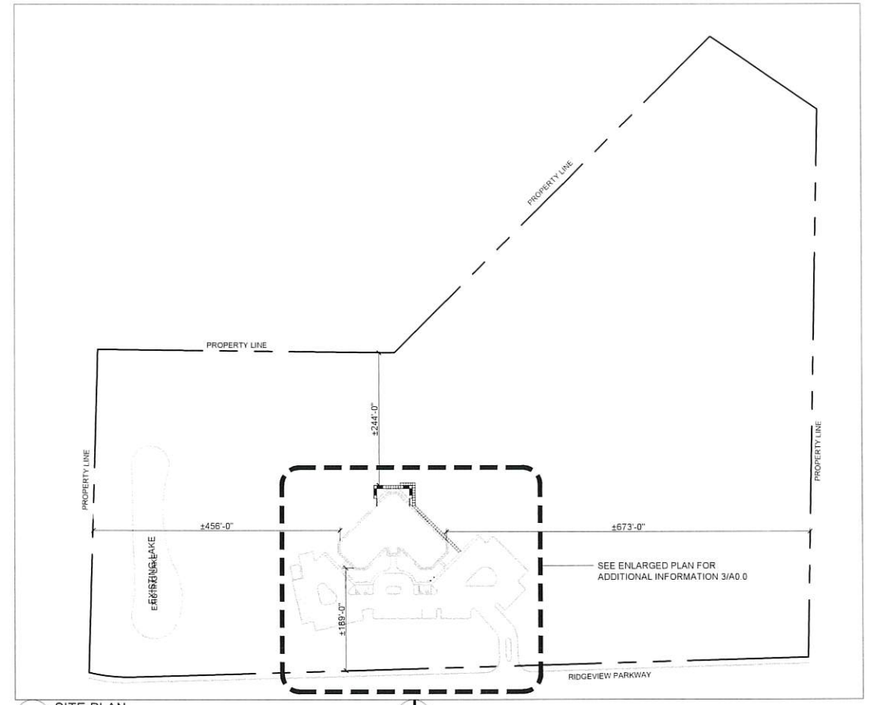
DIVISION 16: ELECTRICAL
RECONNECT EXISTING DEVICES DISRUPTED BY DEMOLITION.
ALL NEW DEVICES SHALL BE MOUNTED 15" A.F.F. TO UNDERSIDE OF JUNCTION BOX, UNLESS SHOWN OTHERWISE ON PLAN OR INTERIOR ELEVATIONS.
INCLUDE PLASTIC COVERS AND DEVICES IN MATCHING COLOR. MATCH EXISTING.
DUPLEX OUTLETS ON 20AMP 120V CIRCUITS.
CONTRACTOR TO REMOVE EXTRA DATA, SECURITY BUTTONS AND ELECTRICAL OUTLETS IN THEIR ENTIRETY AND PATCH OPENINGS.

LIGHTING
MODIFY EXISTING LIGHT FIXTURES FOR NEW LAYOUT. OWNER WILL UPGRADE EXISTING FIXTURES TO T-8 WHERE DEFICIENT. FIXTURES AND LAMPS IN ANY ONE ROOM SHALL MATCH ALL FIXTURES IN THAT ROOM.
ROOMS INDIVIDUALLY SWITCHED, QUIET TOGGLE AT 48" AFF ROOMS TO BE DUAL SWITCHED AND ROOMS WITH WINDOWS TO RECEIVE MOTION SENSORS.
INCLUDE COMBINED EGRESS / EMERGENCY LIGHTING AS REQUIRED BY CODE, AND CONSTANT - ON NIGHT LIGHT CIRCUIT.
ALL FIXTURES TO HAVE SAME DAYLIGHT BULBS.

COMMUNICATIONS / LOW VOLTAGE
WALL MOUNTED EMPTY 4X4 JUNCTION BOX WITH PULL STRING TO CEILING PLENUM.

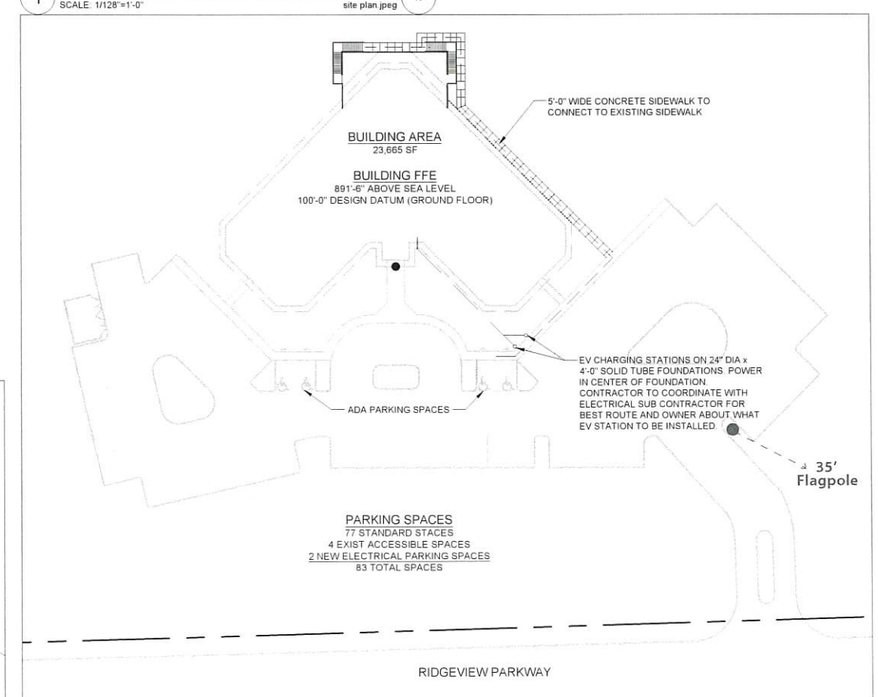
CABLE, INSTALLATION, AND TERMINATION OF CABLE SHALL BE BY TENANT. ALL CABLES PASSING THROUGH CEILING PLENUM SHALL BE PLENUM RATED.
REMOVE UNUSED CABLE FROM CEILING PLENUM.
TENANT'S CABLE VENDOR SHALL BE RESPONSIBLE FOR THE COST TO REPAIR AND / OR REPLACE ALL CEILING TILE DAMAGED DURING CABLE INSTALLATION.

SECURITY
ALL EQUIPMENT, INSTALLATION AND MONITORING SHALL BE BY TENANT ARE IS NOT INCLUDED IN THIS PROJECT.



1 SITE PLAN
SCALE: 1/128"=1'-0"
site plan.jpeg

2 VICINITY MAP
SCALE: N.T.S.
location.jpeg



3 ENLARGED SITE PLAN
SCALE: 1" 40'
site plan.jpeg
TRUE NORTH PROJ NORTH

WSM ARCHITECTS

4330 NORTH CAMPBELL AVE
SUITE NO 268
TUCSON, ARIZONA 85718
520.408.1044 TEL
520.408.1170 FAX
WSMARCH.COM WEB

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PROJECT:
ELLENBECKER INVESTMENT GROUP LLC OFFICE REMODEL
N21 W23350 RIDGEVIEW PARKWAY
PEWAUKEE, WISCONSIN 53188

PHASE:
BUDGET DOCUMENTS

REVISIONS:

PROJECT NO.:	21-028
DRAWN:	BR
CHECKED:	MW
DATE:	01/17/2022
PLOT DATE:	1/18/2022 2:33:10 AM

SHEET TITLE:
COVER

SHEET NO.:

Google Maps

Imagery ©2023 Airbus, U.S. Geological Survey, Map data ©2023 20 ft

Flag pole location

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 4.

DATE: September 21, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action and Public Hearing for WVRC to Rezone Property Located on Pewaukee Road from B-3 General Business to B-4 Office District for the Purpose of Constructing an Emergency Vet Clinic (PWC 0966999)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

WVRC staff report 9.21.23

WVRC narrative

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fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of September 21, 2023

Date: September 12, 2023

Project Name: WVRC Conditional Use, Rezoning, and Site & Building Plans

Project Address/Tax Key No.: Not Assigned/PWC 0966999

Applicant: KELLER, INC.

Property Owner: BASATADA, LLC

Current Zoning: B-3 General Business, LC Lowland Conservancy, & F-1 Floodplain

2050 Land Use Map Designation: Low – Medium Density Residential, Flood Plains, Lowland & Upland Conservancy, and other natural areas and Water

Use of Surrounding Properties: Vacant land zoned A-2 to the north and single-family residential to the south, east and west

Introduction

The applicant has filed applications for a Rezoning, Conditional Use, and Site & Building Plans for the development of an animal hospital for property located along the east side of Pewaukee Road south of Interstate 94 and just north of the single-family residences on Sherwood Drive.

The site previously received Rezoning approval and a Comprehensive Master Plan Amendment at the May 16, 2019 Plan Commission meeting, and subsequent approval by the Common Council on June 3, 2019, but the use was never established. As such, the Conditional Use and Site and Building Plan approvals expired.

e-WVRC is a 24-hour animal hospital offering emergency and specialty pet care at their fully staffed facilities in Waukesha, Grafton, and Racine. Specializing in Cardiology, Surgery, Internal Medicine, Radiology, Neurology, Dentistry, Ophthalmology, Oncology, Diagnostic Imaging, and Pain Management, WVRC provides Wisconsin and northern Illinois with the highest quality veterinary medical attention 7 days a week, 365 days a year.

e-WVRC's Pewaukee location will replace their current Waukesha operation. The hospital will be a 24-hour facility that will provide the full scope of veterinary care as noted above. The hospital will be operated by approximately 75 staff members across Administrative/Office employees, Vet Techs and DVM's. Administrative/Office Employees (20 Total) will be onsite Monday through Friday between 7:00 am – 4:00 pm. The anticipated maximum number of customers on site, based on current trends at the Waukesha locations, would be 60. The busiest hours of operation on sight is expected to be between 2:00 pm – 8:00pm.

The initial building will be approximately 25,704 square feet with an estimated cost of $13 million. The site design will allow for potential future expansion of up to approximately 50,000 square feet in total.

Project Description/Analysis

Rezoning

The subject property is currently zoned B-3 General Business District, LC Lowland Conservancy District and F-1 Floodplain District.

During the review process, it came to staff's attention that the B-3 District requires that no business establishment shall have a total floor area of more than 20,000 square feet; a standard that may have been missed at the time of the project's original rezoning and approval. As the proposed building is 25,704 square feet, staff is recommending that the property be zoned B-4 District, which does not specifically limit building size. As such, the applicant is requesting to rezone the B-3 portion of the property to B-4 Office District to accommodate the proposed development and WVRC business use.

Staff has reviewed the B-4 District development standards and find that the proposed site plan is compliant with those standards. *Staff recommends that the applicant provide a final set of updated plans to reflect the B-4 District development standards*.

Conditional Use

The B-4 District allows animal hospitals as a Conditional Use, provided the Plan Commission determines the use is similar in character to and compatible with allowed uses within the district, which generally permits offices and special service uses that would not necessarily exhibit the intense activity of other business districts.

2017 Act 67 made changes regarding Conditional Use Permits (see requirements below). The applicant has provided detailed development plans in substantial conformance with the development standards and guidelines of Sections 17.0207 SITE AND BUILDING PLAN, AND PLAN OF OPERATIONS REVIEW, 17.0208 SITE RESTRICTIONS, 17.0209 USE RESTRICTIONS, and 17.0210 PRINCIPLES AND STANDARDS FOR THE AESTHETIC EVALUATION OF SITE AND BUILDING PROJECTS. Staff is not aware of any objections to the recommended conditions of approval.

(de) *Conditional use permits.*
1. In this paragraph:
a. "Conditional use" means a use allowed under a conditional use permit, special exception, or other special zoning permission issued by a city, but does not include a variance.
b. "Substantial evidence" means facts and information, other than merely personal preferences or speculation, directly pertaining to the requirements and conditions an applicant must meet to obtain a conditional use permit and that reasonable persons would accept in support of a conclusion.
2.
a. If an applicant for a conditional use permit meets or agrees to meet all of the requirements and conditions specified in the city ordinance or those imposed by the city zoning board, the city

shall grant the conditional use permit. Any condition imposed must be related to the purpose of the ordinance and be based on substantial evidence.

b. The requirements and conditions described under subd. 2. a. must be reasonable and, to the extent practicable, measurable and may include conditions such as the permit's duration, transfer, or renewal. The applicant must demonstrate that the application and all requirements and conditions established by the city relating to the conditional use are or shall be satisfied, both of which must be supported by substantial evidence. The city's decision to approve or deny the permit must be supported by substantial evidence.

3. Upon receipt of a conditional use permit application, and following publication in the city of a class 2 notice under ch. 985, the city shall hold a public hearing on the application.

4. Once granted, a conditional use permit shall remain in effect as long as the conditions upon which the permit was issued are followed, but the city may impose conditions such as the permit's duration, transfer, or renewal, in addition to any other conditions specified in the zoning ordinance or by the city zoning board.

5. If a city denies a person's conditional use permit application, the person may appeal the decision to the circuit court under the procedures contained in par. (e) 10.

Site and Building Plans

The subject property is currently vacant and has an area of 19.27 acres. The applicant is proposing a 25,704 square foot building with a potential 25,056 square foot future building addition. The site plan also includes a canopy entrance, associated parking, landscaping and lighting, a fenced-in yard area, septic field, and trash enclosure.

Note the proposed fence is a five-foot-high black vinyl chain-link fence.

Related to the site plan, staff requested that the applicant consider a potential future cross access location for the property to the north. If the property to the north is ever proposed to be developed commercially, staff finds that access through the WVRC site would be preferred as other access locations to this site are through residential areas. The site plan does not currently show a potential access easement for the adjacent parcel.

Storm Water Management:
Storm water management plans are currently under review by the Engineering Department. *Staff recommends that approval of the project be subject to final grading, erosion control and storm water management plans shall be approved by the Engineering Department, prior to any land disturbance*.

Parking:
Note the parking counts on the Site Plan do not appear to be correct. The proposed development includes 116 proposed parking stalls of which 5 are ADA accessible spaces, not 120 spaces. Parking surrounds the building on the south, east and west sides.

An additional 115 stalls are shown along with the future building addition on the north side of the building.

The plans provided make it unclear if the applicant intends to pave the drive that would wrap around the future building addition as part of the initial phase of development or if that would be completed as

part of the future addition. *Staff recommends the drive that serves the future parking areas and building addition be paved at the time the addition is approved and permitted by the City*.

Site Access:
The proposed development will be accessed from Pewaukee Road. The applicant is continuing to work with Waukesha County for approval of the access, which will likely include acceleration and deceleration lanes. *The development and City approval shall be contingent upon Waukesha County approval of the proposed access location on Pewaukee Road (CTH J)*.

Sewer/Water:
Public water is available to the site and the applicant will be required to connect; however, public sewer is not currently available. As such, the applicant is requesting approval of a private onsite mound system. The proposed location of the septic field is located on the site plan. Although, it is certainly staff's preference that developments extend and connect to both public sewer and water facilities, the required connection in this case is difficult and may garner opposition from the adjacent single-family residential subdivision as the public sewer extension would extend through and serve the Sherwood Forest subdivision as well.

Furthermore, other commercial properties to the south of the Sherwood Forest subdivision, under similar circumstances, have been allowed to develop with private sanitary sewer systems. As such, Planning staff is not objecting to the private system. However, it is recommended that *the property owner be required to connect to public sanitary sewer facilities as soon as they become available and shall not object to the connection or any related sewer extension assessments*.

With that said, the Engineering Department is requesting funds in the 2024 budget for the design of this sewer. If the City moves forward with this sewer project, sewer may be available to this site as soon as 2025.

Landscape Plan:
A Landscape Plan has been provided and includes a row of evergreen trees along the south property line to buffer the development from the adjacent single-family subdivision. Additional decorative and shade trees are provided adjacent to Pewaukee Road since the existing trees along Pewaukee Road are to be removed. Foundation plantings have also been provided.

Staff recommends that the Landscape Plan be revised to contain a third variety of evergreen tree. It is also recommended that the proposed Norway Maple trees be replaced with a native species.

Lighting Plan:
The applicant submitted a photometric plan as well as lighting cut sheets. Based upon previous input from the adjacent property owners, *staff is recommending that the light poles have a maximum height of 15-feet with a 3-foot base and lights be dimmed to 50% starting at 9:00 p.m.*

The photometric plans show zero footcandles at the property lines.

Architecture:
The building materials will mainly consist of L.P. Smart siding, ACM metal panels, and stone veneer siding. Stone veneer will also be utilized for the dumpster enclosure in order to match the building.

Natural Resources:
The property contains several natural resource features, including floodplain, a stream, wetlands, and woodlands. This area of the site is also identified as a SEWRPC Environmental Corridor. The development does not encroach into the LC Lowland Conservancy District, F-1 District or any mapped wetlands.

The future phase would encroach into areas shown as hydric soils on the WDNR Water Surface Data Viewer. Wetland delineations would be required at that time.

Signage:
A monument sign and two directional signs are being proposed. Note that signage will require separate review and approval by the City Planner as well as a Sign Permit from the Building Services Department prior to installation. Additional details would be needed in order to conduct a full sign review. Note that the emergency signs need to meet the directional sign standards of section 17.0702(f). Also note that per section 17.0706(c) a ground sign located within 660 feet of a residential zoning district boundary shall not be illuminated during the seven-hour period beginning at eleven (11) PM and ending at six (6) AM. Lastly, the entire coordinate address will be required to be displayed on the monument sign.

Recommendation

A motion to approve the Site and Building Plans and recommend approval of the Rezoning and Conditional Use Permit for the WVRC animal hospital development for property bearing Tax Key No. 0966999, contingent upon the staff conditions contained within this report.

Keller
Planners | Architects | Builders
With Offices in the Fox Cities, Madison, Milwaukee & Wausau

WVRC
Emergency & Specialty Pet Care

August 7, 2023

City of Pewaukee
W240 N3065 Pewaukee Road
Pewaukee, WI 53072

RE: e-WVRC Emergency & Specialty Pet Care Conditional Use, Site & Building Plan Approval

Dear City Plan Commission Members,

Basatada, LLC is planning to construct a ground up Emergency Veterinary Clinic for use by Ethos-Wisconsin Veterinary Referral Center (e-WVRC) via a built-to-suit tenant agreement. e-WVRC is the leading provider in Emergency and Specialty Pet Care for South Eastern Wisconsin is pursuing a new and larger facility to meet the growing demand for services. The location e-WVRC is seeking Conceptual Approval for is located on County Highway J (Pewaukee Road) just South of Interstate Highway 94 (tax key #0966999). Their existing location in this area is less than a ½ mile away just around the corner on Bluemound Road.

e-WVRC is a 24-hour animal hospital offering emergency and specialty pet care at their fully staffed facilities in Waukesha, Grafton, and Racine. Specializing in Cardiology, Surgery, Internal Medicine, Radiology, Neurology, Dentistry, Ophthalmology, Oncology, Diagnostic Imaging, and Pain Management, WVRC provides Wisconsin and northern Illinois with the highest quality veterinary medical attention 7 days a week, 365 days a year.

e-WVRC's Pewaukee location will replace their current Waukesha operation. The hospital will be a 24-hour facility that will provide the full scope of veterinary care as noted above. The hospital will be operated by approximately 75 staff members across Administrative/Office employees, Vet Techs and DVM's. Administrative/Office Employees (20 Total) will only be onsite Monday through Friday between 7:00 am – 4:00 pm. The anticipated maximum number of customers on site, based on current trends at the Waukesha locations, would be 60. The busiest hours of operation on sight is expected to be between 2:00 pm – 8:00 pm.

ADDRESS
W204 N11509 Goldendale Road
Germantown, WI 53022

PHONE
262.250.9710 1.800.236.2534

FAX
262.250.9740

WEB SITE
www.kellerbuilds.com

The site previously received a zoning change to B-3 upon recommendation of City of Pewaukee Staff. Following review of the updated site and building design, City Staff has recommended an additional rezone from B-3 to B-4 to comply with the total floor area requirements noted in the zoning code. The land area is considerably large compared to the square footage of building that will be constructed. This will provide for ample area to exceed setbacks and landscape requirements.

The initial building will be approximately 25,704 square feet with an estimated cost of $13 million. The site design will allow for potential future expansion of up to approximately 50,000 square feet in total. The building will contain high performing exterior materials and aesthetics. There will not be any visible mechanical equipment or portable medical equipment trailers. Dogs are not left unattended outside the building. Small contained and fenced walk areas are provided. Additionally, the facility will be provide a combination of berms and landscape plantings on the south and east property lines as a natural screen/buffer to the residential neighborhoods abutting the parcel.

One of the difficulties in development of this site in the past has been the lack of available city sanitary sewer utility. WVRC is proposing a connection to City of Pewaukee Water system and installation of a private sanitary facility. It is understood that if city sanitary sewer ever becomes available to the site, e-WVRC will be required to connect to the sanitary sewer per the City of Pewaukee's requirements. Driveway access will be permitted and reviewed by Waukesha County. The desired access point will align with River Lane to the West.

If any of the Plan Commission members, city planning department members, or the general public have any questions regarding the business, new structure, or site layout please feel free to contact Keller, Inc. at any time. Site visits and tours will also be granted at the time of the request. Thank you all for your consideration of this project.

ADDRESS
W204 N11509 Goldendale Road
Germantown, WI 53022

PHONE
262.250.9710 1.800.236.2534

FAX
262.250.9740

WEB SITE
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OWNER	Basatada, LLC Dr. John Beltz, DVM Dr. Jeffery Meinen, DVM, DACVS N9000 Welling Beach Rd. Fond Du Lac, WI 54937 262.623.1767
ARCHITECT/ BUILDER	Keller, Inc. Nathan Laurent (Regional Manager) Luke Sebald (Project Manager) Chris Manske (Project Architect) W204 N11509 Goldendale Road Germantown, WI 53022 262.250.9710 office 262.894.2612 cell (Nathan Laurent) 414.397.0526 cell (Luke Sebald) 262.250.9740 fax nlaurent@kellerbuilds.com lsebald@kellerbuilds.com

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 5.

DATE: September 21, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Recommendation to the Common Council for a Conditional Use Permit and Site and Building Plans for WVRC for Property Located on Pewaukee Road for the Purpose of Constructing an Emergency Vet Clinic (PWC 0966999)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

WVRC civil plans

WVRC site plan

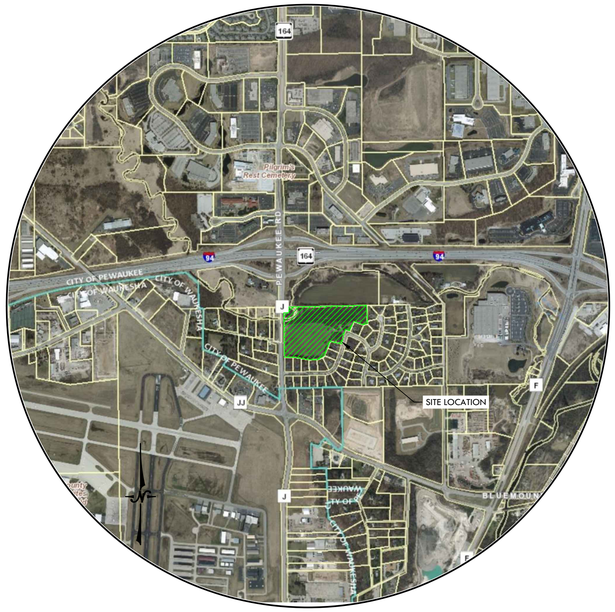
WVRC photometrics plan

WVRC comment response letter

WVRC wetland exhibit

WVRC driveway permit

WVRC draft Conditional Use Permit 9.21.23



VICINITY MAP

IMPROVEMENT PLANS FOR

WVRC EMERGENCY VET

CITY OF PEWAUKEE, WI

SHEET INDEX

C001	TITLE SHEET & VICINITY MAP
C002	GENERAL NOTES
C101	SITE PLAN
C102	GRADING PLAN
C103	EROSION CONTROL PLAN
C401	POND DETAILS
C402	POND DETAILS
C403	ADA RAMP PAVING PLAN
C404	INTERSECTION DETAIL
C501 - C503	CONSTRUCTION DETAILS
L701	LANDSCAPING PLAN

BENCHMARKS

FOUND IRON ROD	EL. 865.78	N: 385726.2711	E: 2474348.5395

CONTACT INFORMATION

COMPANY NAME	ADDRESS	CONTACT	PHONE	EMAIL
LYNCH & ASSOCIATES	5482 S. WESTRIDGE DR. NEW BERLIN, WI 53151	TIM LYNCH, P.E.	262-402-5040	tlynch@lynch-engineering.com

REVISIONS

NO.	REVISION	DATE
1	UPDATED SITE PLAN	06.09.23
2	CITY REVIEW COMMENTS #1	08.04.23

IMPROVEMENT PLANS FOR
WVRC EMERGENCY VET
CITY OF PEWAUKEE, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

Keller™
Planners | Architects | Builders

ISSUED FOR REVIEW

PLAN DATE 03.04.19

PROJECT NO.
19.0004

SHEET NO.
C001

GENERAL NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

2. ALL PIPE LENGTHS ARE MEASURED TO CENTER OF STRUCTURE AND MEASURED HORIZONTALLY. THE CONTRACTOR IS RESPONSIBLE FOR MAKING NECESSARY ADJUSTMENTS FOR SLOPES AND STRUCTURES.

3. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES CONSERVATION PRACTICE STANDARDS.

4. WHEN POSSIBLE, THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE WITH ENDS POINTING UPSLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.

5. CONTRACTOR SHALL CHECK ALL EROSION CONTROL MEASURES EVERY SEVEN DAYS OR WITHIN 24 HOURS AFTER EACH 0.5 INCH RAINFALL AND PROVIDE ANY MAINTENANCE REQUIRED FOR CONFORMANCE WITH THIS PLAN. CONTRACTOR SHALL MAINTAIN LOG OF INSPECTIONS WHICH SHALL BE KEPT ON–SITE.

6. A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE PLACED ON AREAS TO BE VEGETATED.

7. SEEDING SHALL BEGIN WITHIN 7 DAYS AFTER FINAL GRADING IS COMPLETED.

8. SEEDING SHALL CONFORM TO THE REQUIREMENTS OF SECTION 630 OF WISDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. A NO. 40 MIXTURE SHALL BE APPLIED AT A RATE OF 2 POUNDS PER 1000 S.F.

9. PLACE MULCH AND TACKIFIER ON THE SEEDED AREAS.

10. DISTURBED AREAS LEFT INACTIVE FOR SEVEN OR MORE DAYS SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH, OR WISDOT–APPROVED POLYMER.

11. TEMPORARY SEEDING: ANNUAL RYE GRASS AT 25 lbs/ACRE
    LATE SEASON TEMPORARY SEEDING (SEPT. 15 TO OCT. 15): WINTER WHEAT AT 2 BUSHELS/ACRE
    DORMANT SEEDING (AFTER NOV. 1): 10 MIXTURE AT 4 POUNDS PER 1000 S.F.

12. POLYMER MUST BE APPLIED TO ALL DISTURBED AREAS IF SEEDING IS NOT COMPLETED BY OCTOBER 15.

13. IF DEWATERING IS NECESSARY, DIRECT DISCHARGE INTO THE SEDIMENT BASIN. THE MAXIMUM PUMPING RATE INTO THE POND IS 200 GPM. ALTERNATE DEWATERING OPERATIONS MUST BE PERFORMED IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1061 "DEWATERING".

14. TOPSOIL PILES LEFT IN PLACE FOR LONGER THAN 14 DAYS MUST BE STABILIZED WITH TEMPORARY SEEDING.

15. EROSION CONTROL MEASURES ARE TO REMAIN IN PLACE UNTIL THE SITE IS STABILIZED.

16. RECYCLE OR PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS IN A TIMELY MANNER. CONTROL RUNOFF FROM WASTE MATERIALS UNTIL THEY ARE REMOVED OR REUSED.

17. BY THE END OF EACH WORKDAY, CLEAN UP ALL OFF–SITE SEDIMENT DEPOSITS OR TRACKED SOIL THAT ORIGINATED FROM THE PERMITTED SITE. FLUSHING SHALL NOT BE ALLOWED UNLESS RUNOFF IS TREATED BEFORE DISCHARGE FROM THE SITE.

18. ALL SLOPES 4:1 OR STEEPER MUST BE STABILIZED WITH EROSION CONTROL MAT.

19. THE CONTRACTOR IS RESPONSIBLE FOR ALL DUST CONTROL IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1068.

20. WHEN CONNECTING TO THE EXISTING ROADWAY, THE EXISTING CONCRETE CURB AND GUTTER SHALL BE SAW CUT AND REMOVED TO THE NEAREST JOINT OUTSIDE OF THE ACTUAL REQUIRED WORK LIMITS. NEW CONCRETE CURB AND GUTTER SHALL BE PLACED IN ACCORDANCE WITH THE ATTACHED DETAILS TO FORM THE NEW DRIVEWAY APPROACH. FELT EXPANSION JOINT MATERIAL, 3/4 INCH, SHALL BE PLACED AT EACH END OF THE WORK LIMITS. THE CONTRACTOR SHALL CALL THE SUPERINTENDENT NAMED BELOW FOR AN INSPECTION OF THE INSTALLATION.

    DAVE HEIL – (262) 424–9004

21. THE CITY OF PEWAUKEE STANDARD WORK HOURS ARE 7:00 A.M. TO 7:00 P.M. ON WEEKDAYS. WORK CAN ONLY BE PERFORMED ON WEEKDAYS OR HOLIDAYS WITH PRIOR APPROVAL. WORKING HOURS FOR WEEKENDS/HOLIDAYS ARE 8:00 A.M. TO 7:00 P.M.

MEMBER ONE CALL SYSTEMS INTERNATIONAL

TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE TOLL FREE 800–242–8511

(414-259-1181 MILWAUKEE METRO)
(TDD: 800-542-2289)
www.diggershotline.com

WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

WINTER CONSTRUCTION SITE EROSION CONTROL

1. GENERAL: A PROJECT INVOLVING CONSTRUCTION BETWEEN NOVEMBER 1ST AND MAY 1ST WILL REQUIRE MEASURES TO STABILIZE THE SITE OVER WINTER. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, GRAVEL ROAD BASE OR 70 PERCENT MATURE VEGETATION COVER BY NOVEMBER 1ST, THEN THE SITE MUST BE PROTECTED WITH OVER–WINTER STABILIZATION PRACTICES.
2. CONSIDERATIONS: WINTER EXCAVATION AND EARTHWORK ACTIVITIES SHOULD BE LIMITED IN EXTENT AND DURATION TO MINIMIZE POTENTIAL EROSION AND SEDIMENTATION IMPACTS.
   - 2.a. EXPOSE ONLY AS MUCH AREA AS NECESSARY TO COMPLETE THE WORK AND CAN BE STABILIZED IN 1 DAY PRIOR TO ANY RAIN OR SNOW EVENT.
   - 2.b. SUBSEQUENT WORK AREAS SHOULD NOT BE EXPOSED UNTIL THE PREVIOUSLY EXPOSED AREA HAS BEEN STABILIZED.
   - 2.c. ALL EROSION AND SEDIMENT CONTROL MEASURES INSTALLED FOR THE PROJECT SHOULD BE ROUTINELY MAINTAINED, CLEANED, INSPECTED, AND REPAIRED AS NEEDED FOR THE CONSTRUCTION SEASON. TEMPORARY EMBANKMENTS SHOULD BE FULLY VEGETATED OR OTHERWISE STABILIZED BY ACCEPTED METHODS.

3. MAINTENANCE REQUIREMENTS:
   - 3.a. MAINTENANCE MEASUREMENTS SHOULD OCCUR THROUGHOUT CONSTRUCTION, INCLUDING THE OVER–WINTER PERIOD. AFTER EACH RAINFALL, SNOWSTORM, OR PERIOD OF THAWING AND RUNOFF, THE CONSTRUCTION SITE CONTRACTOR SHOULD CONDUCT AN INSPECTION OF ALL EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO ENSURE THEIR CONTINUING FUNCTION.
   - 3.b. FOR ANY AREA STABILIZED BY TEMPORARY OR PERMANENT SEEDING PRIOR TO NOVEMBER 1ST, THE CONTRACTOR SHOULD CONDUCT AN INSPECTION IN THE SPRING TO ASCERTAIN THE CONDITION OF VEGETATIVE COVER AND REPAIR ANY DAMAGED AREAS OR BARE SPOTS AND RESEED AS REQUIRED TO ACHIEVE AN ESTABLISHED VEGETATIVE COVER (AT LEAST 70 PERCENT AREA VEGETATED WITH HEALTHY, VIGOROUS GROWTH).
4. SPECIFICATIONS: TO ADEQUATELY PROVIDE SEDIMENT AND EROSION CONTROL DURING COLD WEATHER AND EARLY SPRING RUNOFF, THE FOLLOWING STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM NOVEMBER 1ST TO MAY 1ST:
   - 4.a. THE AREA OF EXPOSED, UNSTABILIZED SOIL SHOULD BE LIMITED TO ONLY WHAT IS REQUIRED TO PERFORM THE WORK. THE EXPOSED AREA SHOULD BE PROTECTED AGAINST EROSION BY METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR RUNOFF PRODUCING CONDITIONS.
   - 4.b. STABILIZATION AS FOLLOWS SHOULD BE COMPLETED WITHIN 7 DAYS OF ESTABLISHING FINAL GRADE OR THAT WILL OTHERWISE EXIST FOR MORE THAN 14 DAYS:
     - 4.b.1. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE LESS THAN 15 PERCENT WHICH DO NOT EXHIBIT A MINIMUM 70 PERCENT VEGETATIVE GROWTH BY NOVEMBER 1ST, SHOULD BE DORMANT SEEDED AT A RATE 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND COVERED WITH 2 TO 3 TONS OF HAY OR STRAW MULCH PER ACRE WITH EITHER ANCHORED NETTING OR AN APPROVED TACKIFIER FROM THE WISDOT PRODUCT ACCEPTABILITY LIST. AN EROSION CONTROL BLANKET OR TYPE A SOIL STABILIZER FROM THE WISDOT PRODUCT ACCEPTABILITY LIST MAY BE USED IN LIEU OF MULCH AND NETTING OR MULCH AND TACKIFIER.
     - 4.b.2. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE GREATER THAN 15 PERCENT WHICH DO NOT EXHIBIT A MINIMUM OF 70 PERCENT VEGETATIVE GROWTH BY NOVEMBER 1ST, SHOULD BE DORMANT SEEDED AT A RATE 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET.
   - 4.c. ALL STONE COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 1ST.
   - 4.d. INSTALLATION OF ANCHORED HAY OR STRAW MULCH SHOULD NOT OCCUR OVER SNOW GREATER THAN 1 INCH IN DEPTH.
   - 4.e. ALL MULCH APPLIED DURING WINTER SHOULD BE ANCHORED WITH NETTING OR TACKIFIER FROM WISDOT PRODUCT ACCEPTABILITY LIST.
   - 4.f. STOCKPILES OF SOIL MATERIALS SHOULD BE SEEDED AND MULCHED FOR OVER–WINTER PROTECTION WITH HAY OR STRAW AT 2 TO 3 TONS PER ACRE. MULCHING SHOULD BE DONE WITHIN 24 HOURS OF STOCKPILING AND RE–ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. NO SOIL STOCKPILE SHOULD BE LOCATED WITHIN 25 FEET OF ANY WETLAND OR OTHER WATER RESOURCE AREA. SOIL STABILIZER TYPE A OR EROSION CONTROL BLANKET MAY BE USED IN LIEU OF MULCH.
   - 4.g. FROZEN MATERIALS SHOULD BE STOCKPILED SEPARATELY AND IN A LOCATION THAT IS AWAY FROM ANY AREA NEEDED TO BE PROTECTED. STOCKPILES OF FROZEN MATERIAL CAN MELT IN THE SPRING AND BECOME UNWORKABLE AND DIFFICULT TO TRANSPORT DUE TO HIGH MOISTURE CONTENT IN THE SOIL.
   - 4.h. INSTALLATION OF EROSION CONTROL BLANKETS SHOULD NOT OCCUR OVER SNOW GREATER THAN 1 INCH IN DEPTH OR OVER FROZEN GROUND.
   - 4.i. ALL GRASS–LINED DITCHES AND CHANNELS SHOULD BE CONSTRUCTED AND STABILIZED BY OCTOBER 15TH. ALL DITCHES AND SWALES WHICH DO NOT EXHIBIT A MINIMUM 70 PERCENT VEGETATIVE GROWTH BY NOVEMBER 1ST OR WHICH ARE DISTURBED AFTER NOVEMBER 1ST, SHOULD BE STABILIZED WITH TEMPORARY STONE AND FILTER FABRIC OR TEMPORARY SEED AND EROSION CONTROL BLANKETS APPROPRIATE TO THE DESIGN FLOW CONDITIONS.
   - 4.j. ALL STONE–LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 1ST.
   - 4.k. SEDIMENT BARRIERS THAT ARE INSTALLED DURING FROZEN CONDITIONS SHOULD CONFORM TO CONSERVATION PRACTICE STANDARD 1071 V.C.1.c ANCHORED IN PLACE AND IN FULL CONTACT WITH THE GROUND SURFACE. SILT FENCE AND HAY BALES SHOULD NOT BE INSTALLED WHEN FROZEN GROUND CONDITIONS PREVENT PROPER EMBEDMENT OF THESE BARRIERS.
   - 4.l. AFTER DECEMBER 1ST, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS CEASED FOR THE WINTER SEASON SHOULD BE PROTECTED WITH A 3 INCH LAYER OF SAND AND GRAVEL WITH A GRADATION CONFORMING TO TABLE 37 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.

CONSTRUCTION SEQUENCE

1. CONSTRUCT STONE TRACKING PAD AT THE PROPOSED ENTRANCE.
2. INSTALL SNOW FENCE AROUND DUAL MOUND SYSTEM. INSTALL SILT FENCE AT THE LOCATIONS NOTED ON THE PLANS. THIS MUST BE DONE BEFORE ANY GRADING ACTIVITIES TAKE PLACE.
3. TOPSOIL IS TO BE STRIPPED AND STOCKPILED. THE STOCKPILE IS TO BE PROTECTED WITH SILT FENCE WITHIN 7 DAYS AND SEEDED WITHIN 30 DAYS OF LAYUP.
4. PROPOSED BASINS WILL INSTALLED AS SEDIMENT BASINS FOLLOWING TOPSOIL STRIPPING.
5. ROUGH GRADING MAY TAKE PLACE AFTER INSTALLATION OF BASINS IS COMPLETE.
6. UTILITY INSTALLATION WILL TAKE PLACE DURING ROUGH GRADING. ALL CATCH BASINS AND INLETS ARE TO BE PROTECTED IMMEDIATELY AFTER INSTALLATION IN ACCORDANCE WITH THE DETAIL IN THESE PLANS.
7. BUILDING CONSTRUCTION WILL BEGIN AFTER SITE PREPARATION IS COMPLETE.
8. PAVEMENT, INCLUDING ALL ROADWORK IN THE RIGHT–OF–WAY, WILL BEGIN BEING PLACED ONCE BUILDING CONSTRUCTION HAS BEEN COMPLETED.
9. PERMANENT SEEDING TO BE COMPLETED BY OCTOBER 15TH OF THE YEAR GRADING WORK IS COMPLETED OR BY JUNE 1ST OF THE FOLLOWING YEAR.

LEGEND

EXISTING		PROPOSED
	CITY–VILLAGE LIMITS	
	BENCHMARK	
	CHISELED CROSS	
	CONTROL POINT	
	FOUND 5/8" IRON BAR	
	FOUND 1" IRON PIPE	
	MONUMENT – CONCRETE W/ BRASS CAP	
PK	PK NAIL – FOUND SPIKE	
(XX)	RECORD AS	
	SET 5/8"x18" IRON 1.13#/L.F.	
	SET IRON PIPE	
	WITNESS MONUMENT	
	TREELINE	
	BUSH	
	TREE – CONIFEROUS	
	TREE – DECIDUOUS	
	TREE– GENERAL	
	FLOODPLAIN LINE	
	WETLAND BOUNDARY	
	WETLAND SYMBOL	
	SOIL BORING	
	TEST PIT	
	ROAD CENTER LINE	
	DITCH CENTER LINE	
	FENCE – BARBED WIRE	
	FENCE – CHAIN LINK	
	GUARDRAIL	
	RETAINING WALL	
	BOLLARD	
	DETECTABLE WARNING FIELD	
	HANDICAP SYMBOL	
	FLAG POLE	
	MAILBOX	
	SIGN	
STM	STORM SEWER	STM
	MANHOLE – STORM	
	STORM INLET – CURB	
	STORM INLET – BEEHIVE	
	STORM INLET – SQUARE	
	END SECTION	
SAN	SANITARY	SAN
FM	SANITARY FORCE MAIN	FM
	MANHOLE – SANITARY	
	CLEAN OUT	
	SEPTIC TANK COVER	
	SEPTIC VENT	
W	WATER MAIN	W
	MANHOLE – WATER MAIN	
	CURB STOP	
	HYDRANT	
	WATER MAIN VALVE	
	WELL	
	WATER MAIN BACK FLOW PREVENTER	
G	GAS LINE	G
	MANHOLE – GAS	
	GAS VALVE	
G	GAS LINE MARKER	
E	ELECTRIC	E
	MANHOLE – ELECTRIC	
	ELECTRICAL TRANSFORMER	
	POWER POLE	
	GUY WIRE	
	LIGHT POLE	
	PULL BOX	
OHW	OVERHEAD UITLITY	OHW
	UTILITY PEDESTAL	
CATV	CABLE TELEVISION	CATV
TV	CABLE TV BOX	TV
T	TELEPHONE	T
	TELEPHONE PEDESTAL	
FO	FIBER OPTIC	FO
	MANHOLE	
	CONSTRUCTION LIMITS	
	INLET PROTECTION	
	SILT FENCE	SF

IMPROVEMENT PLANS FOR
WVRC EMERGENCY VET
CITY OF PEWAUKEE, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

GENERAL NOTES

NO.	REVISIONS	BY	DATE
1	UPDATED SITE PLAN	TCL	06-09-23
2	CITY REVIEW COMMENTS #1	TCL	08-04-23

ISSUED FOR REVIEW

PLAN DATE 03.04.19
DESIGNED BY DKV

0 N/A
SCALE

PROJECT NO.
19.0004

SHEET NO.
C002

IMPERVIOUS SURFACE AREAS:

EXIST. IMPERVIOUS AREA – 0 S.F.
EXIST PERVIOUS AREA – 844,688 S.F.
EXIST. IMPERVIOUS RATIO – 0

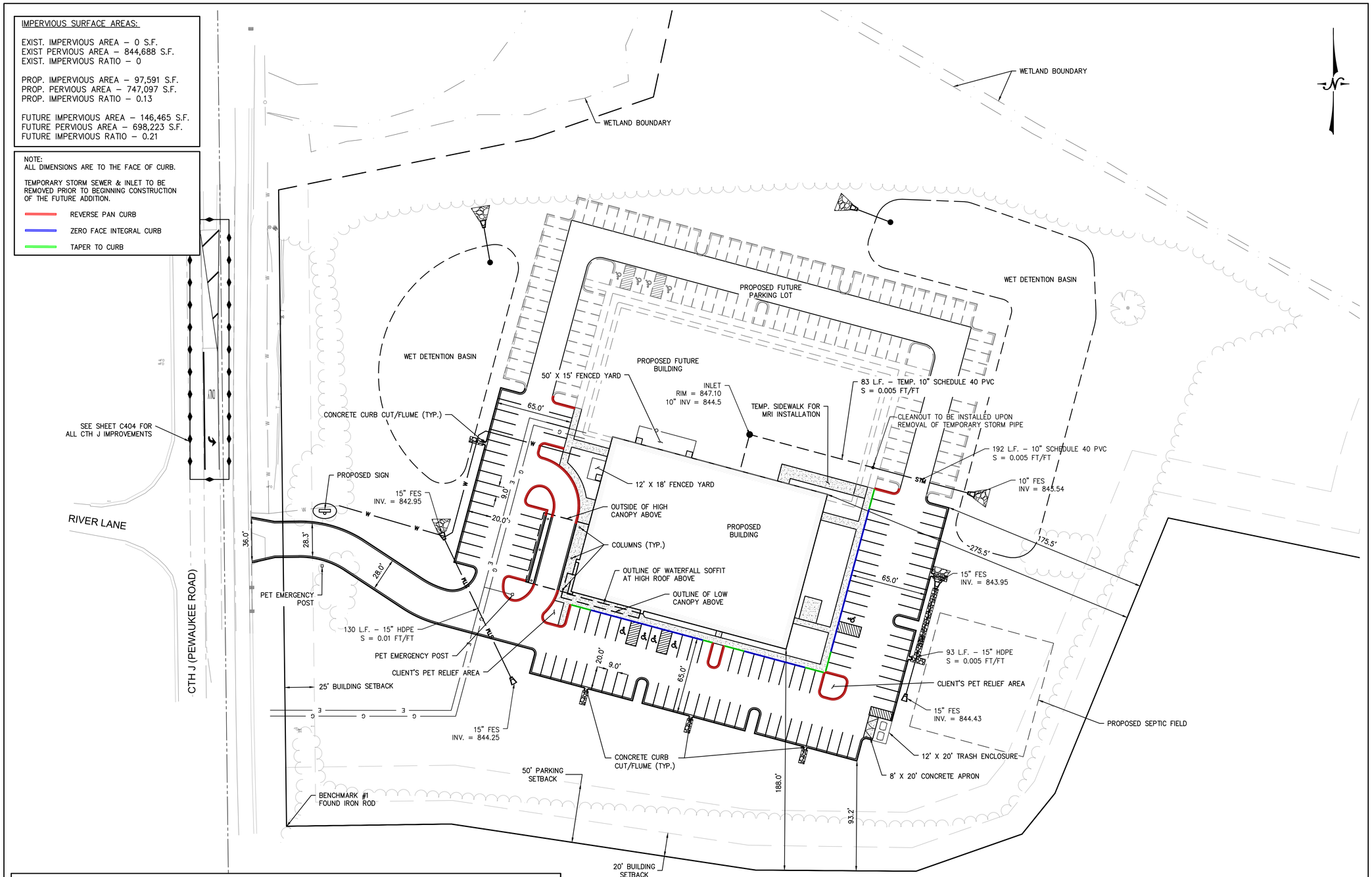
PROP. IMPERVIOUS AREA – 97,591 S.F.
PROP. PERVIOUS AREA – 747,097 S.F.
PROP. IMPERVIOUS RATIO – 0.13

FUTURE IMPERVIOUS AREA – 146,465 S.F.
FUTURE PERVIOUS AREA – 698,223 S.F.
FUTURE IMPERVIOUS RATIO – 0.21

NOTE:
ALL DIMENSIONS ARE TO THE FACE OF CURB.

TEMPORARY STORM SEWER & INLET TO BE REMOVED PRIOR TO BEGINNING CONSTRUCTION OF THE FUTURE ADDITION.

REVERSE PAN CURB
ZERO FACE INTEGRAL CURB
TAPER TO CURB



DESIGN DATA

STRUCTURE			DRAINAGE AREA AND FLOW					PIPE				PIPE CAPACITY					ELEVATIONS		
			Flow is determined by SPS 382.36									Pipe capacity is determined by Manning's Equation Q = 1.486/n AR2/3 S1/2							
Pipe Run	Upstream Structure	Downstream Structure	Roof Area (sf)	Pvmt Area (sf)	Grass Area (sf)	Individual Flow Q (cfs)	Cumulative Flow (cfs)	Length (ft)	Diameter (in)	Slope (%)	Manning Coefficient	Required Drop (ft)	Actual Drop (ft)	Percent Full (%)	Actual Velocity (fps)	Max. Capacity (cfs)	Rim/Toc Up	Invert Up	Invert Down
1	INLET	FES	13303	0	6077	1.27	1.27	192.00	10	0.50	0.012	0.549881	0.96	0.69	3.38	1.81	847.10	844.50	843.54

IMPROVEMENT PLANS FOR
WVRC EMERGENCY VET
CITY OF PEWAUKEE, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

SITE PLAN

NO.	REVISIONS	BY	DATE
1	UPDATED SITE PLAN	TCL	06-09-23
2	CITY REVIEW COMMENTS #1	TCL	08-04-23

ISSUED FOR REVIEW

PLAN DATE 03.04.19
DESIGNED BY DKV

0 40'
SCALE

PROJECT NO.
19.0004

SHEET NO.
C101

FILENAME: P:\shared\1 – Projects\2019\19.0004 Keller – WVRC Emergency Vet – Pewaukee\CAD\Sheets\19.0004 SP.dwg

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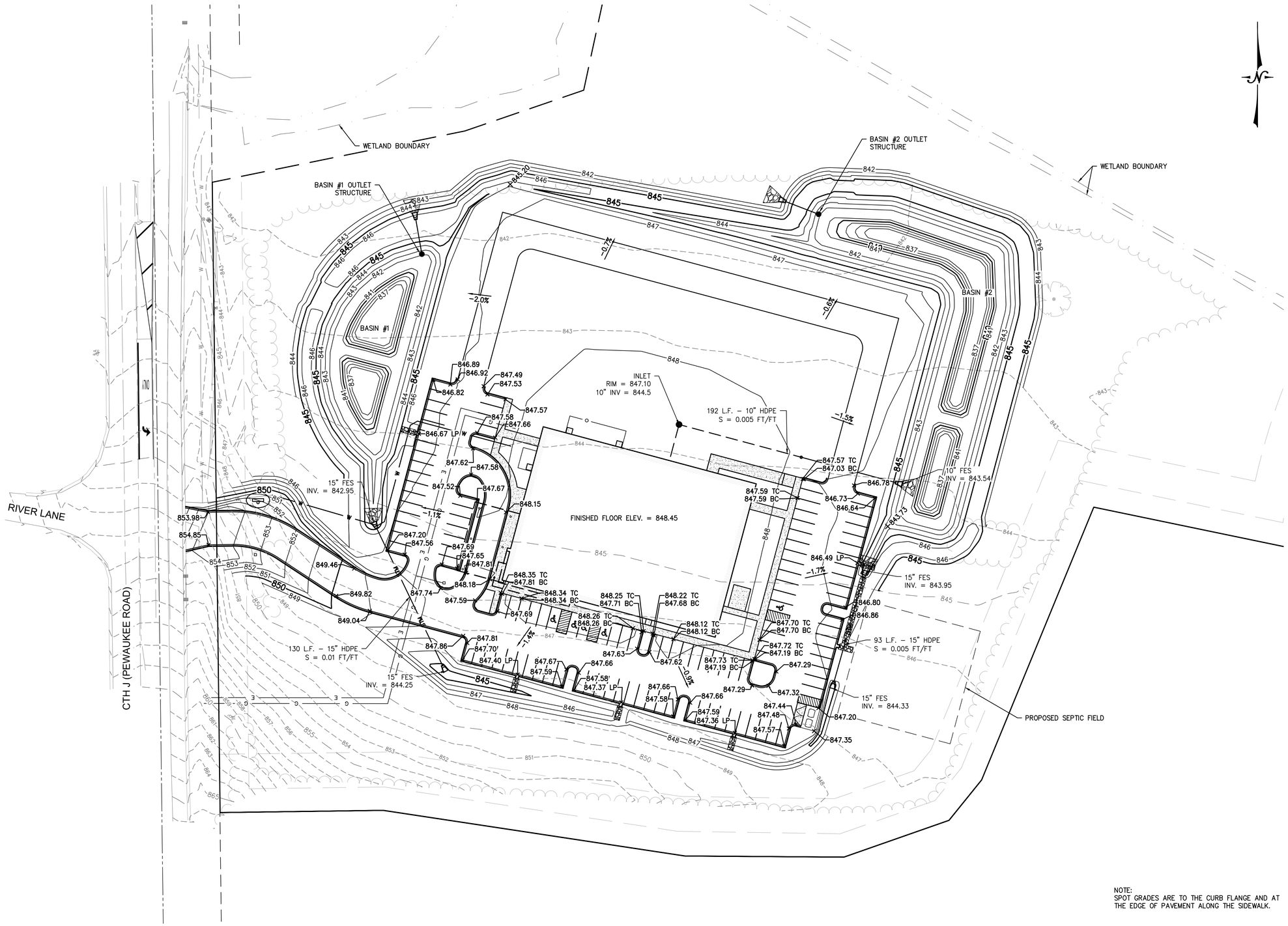


NOTE:
SPOT GRADES ARE TO THE CURB FLANGE AND AT THE EDGE OF PAVEMENT ALONG THE SIDEWALK.

IMPROVEMENT PLANS FOR
WVRC EMERGENCY VET
CITY OF PEWAUKEE, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

GRADING PLAN

NO.	REVISIONS	BY	DATE
1	UPDATED SITE PLAN	TCL	06-09-23
2	CITY REVIEW COMMENTS #1	TCL	08-04-23

ISSUED FOR REVIEW

PLAN DATE 03.04.19
DESIGNED BY DKV

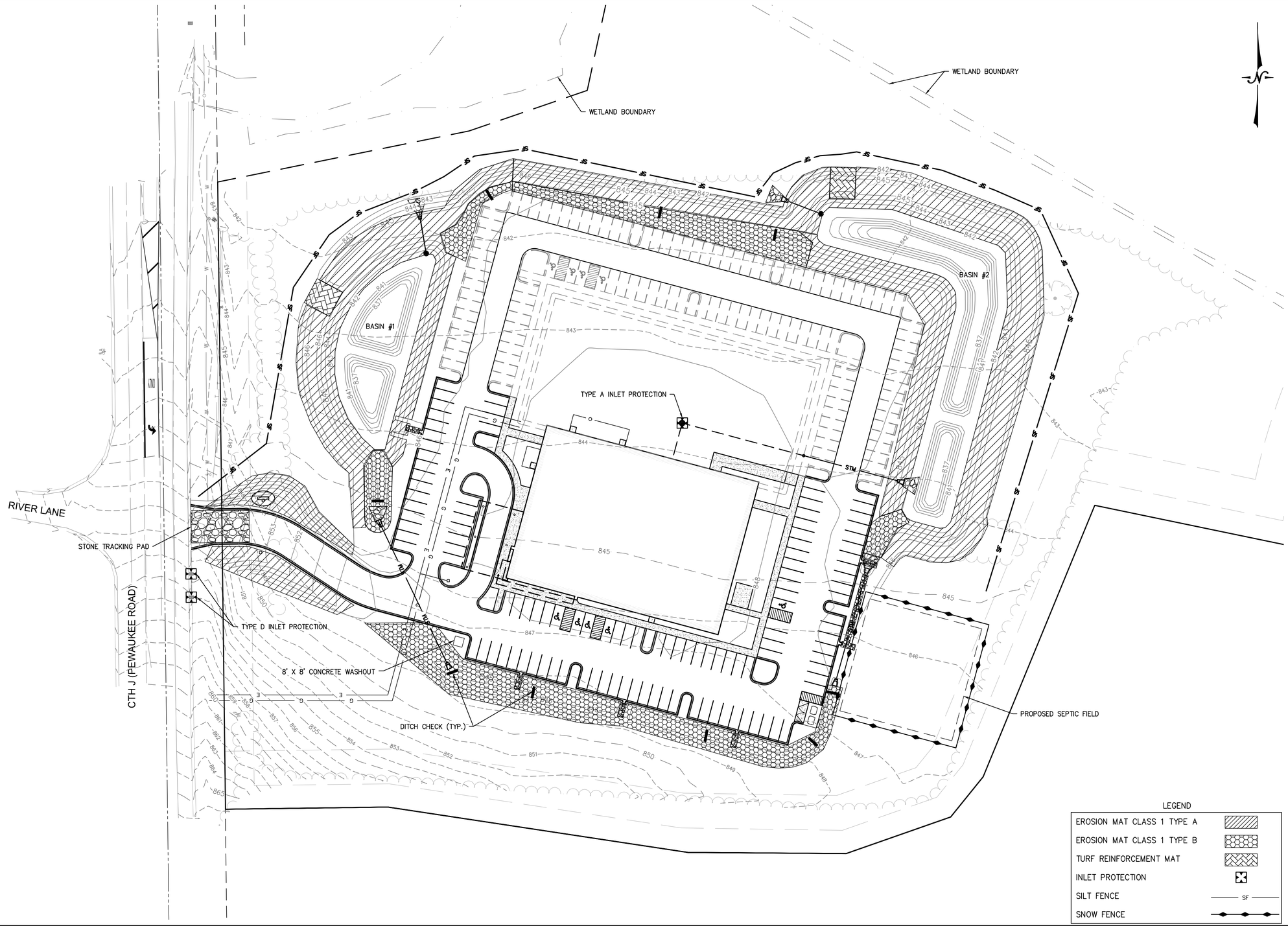
0 40'
SCALE

PROJECT NO.
19.0004

SHEET NO.
C102

FILENAME: P:\shared\1 – Projects\2019\19.0004 Keller – WVRC Emergency Vet – Pewaukee\CAD\Sheets\19.0004 GP.dwg

PLOT DATE: 8/4/2023 3:47 PM



IMPROVEMENT PLANS FOR

WVRC EMERGENCY VET

CITY OF PEWAUKEE, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

EROSION CONTROL PLAN

REVISIONS

NO.		BY	DATE
1	UPDATED SITE PLAN	TCL	06-09-23
2	CITY REVIEW COMMENTS #1	TCL	08-04-23

ISSUED FOR REVIEW

PLAN DATE 03.04.19

DESIGNED BY DKV

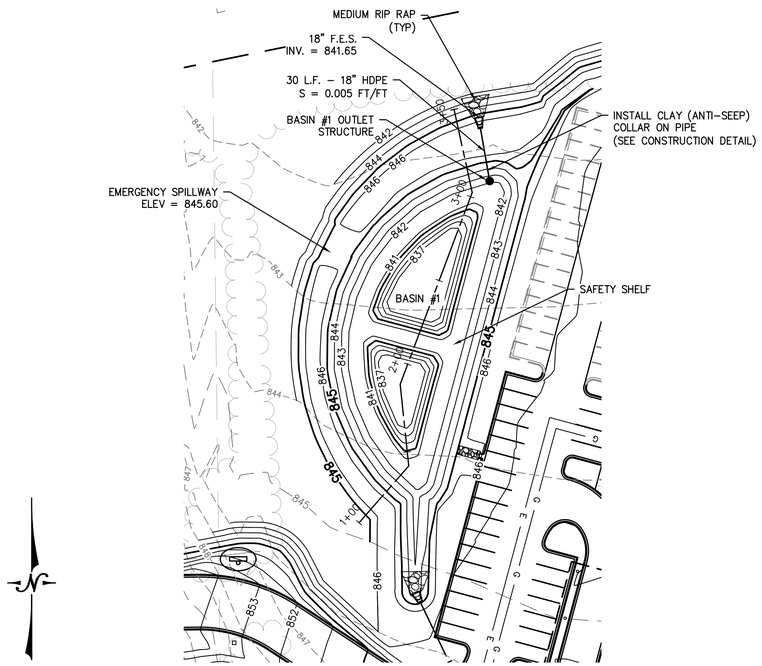
0 40'
SCALE

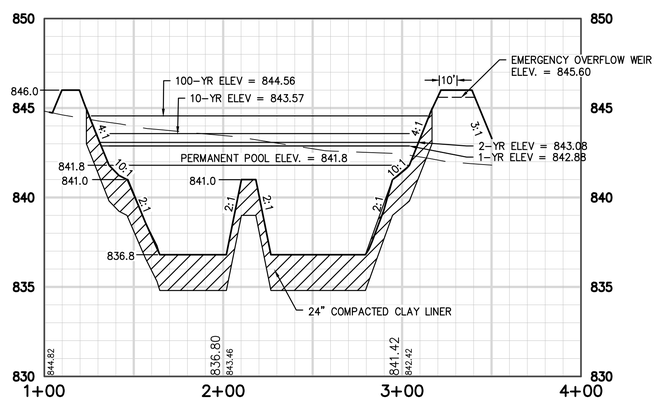
PROJECT NO.
19.0004

SHEET NO.
C103

FILENAME: P:\shared\1 – Projects\2019\19.0004 Keller – WVRC Emergency Vet – Pewaukee\CAD\Sheets\19.0004 EC.dwg

PLOT DATE: 8/4/2023 3:47 PM

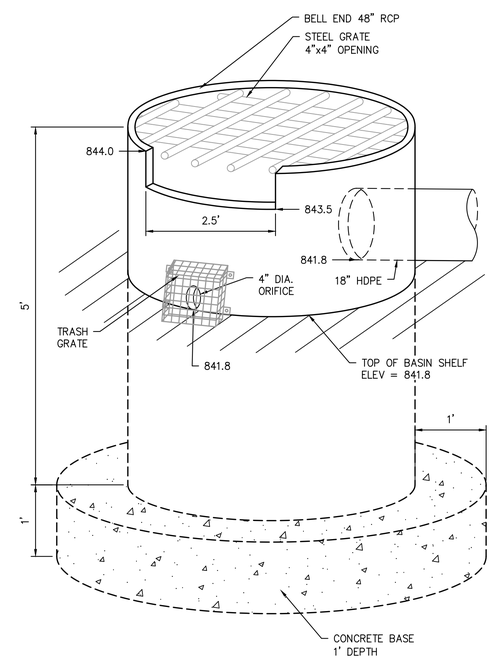




NOTES:

1. ALL CONSTRUCTION SHALL MEET THE SPECIFICATIONS OF WDNR WET DETENTION BASIN TECHNICAL STANDARDS 1001.
2. ALL WORK TO BE CONDUCTED IN CONFORMANCE WITH THE STORMWATER MANAGEMENT PLAN FOR THE PROJECT SITE AS APPROVED BY THE REGULATORY ENGINEER OF RECORD.
3. RCP PIPING & INSTALLATION WITHIN THE BASIN SHALL BE IN ACCORDANCE WITH (ASTM C–76/C443) WITH RUBBER GASKETS.
4. CLAY LINER SHALL BE A MINIMUM OF 2 FEET THICK INSTALLED TO A MINUMUM OF THE 10–YEAR WATER LEVEL. CLAY SHALL BE COMPACTED AT ±2% OPTIMAL MOISTURE CONTENT TO 90% MODIFIED PROCTOR. MATERIALS SHALL BE MEDIUM STIFF TO STIFF CLAYS AND SHALL MEET DNR TECHNICAL STANDARD 1001. ALL MATERIALS SHALL BE APPROVED BY A GEOTECHNICAL ENGINEER AND TESTED PER STANDARD 1001. UPON COMPLETION OF INSTALLATION, THE GEOTECHNICAL ENGINEER SHALL PROVIDE THE REQUIRED REPORT TO BOTH THE OWNER AND LYNCH & ASSOCIATES.
5. FOR CONSTRUCTED EMBANKMENTS WHERE THE PERMANENT POOL IS PONDED 3 FEET OF MORE AGAINST THE EMBANKMENT. THERE SHALL BE A CORE TRENCH OR KEYWAY ALONG THE CENTERLINE OF THE EMBANKMENT UP TO THE PERMANENT POOL ELEVATION. THE CORE TRENCH OR KEYWAY SWALE SHALL BE A MINIMUM OF 2 FEET DEEP AND 8 FEET WIDE WITH SIDE SLOPE OF 1:1 OR FLATTER.
6. CONTRACTOR SHALL POSITION ANTI–SEEP COLLAR SUCH THAT THE COLLARS ARE COMPLETELY CONTAINED WITHIN THE EMBANKMENT.

1. IMMEDIATELY INSTALL FILTER FABRIC OVER ALL OUTLETS TO PREVENT SEDIMENT DEPOSITION IN THE PIPING. (REMOVE FOLLOWING AREA STABILIZATION.)



BASIN #1 OUTLET STRUCTURE

IMPROVEMENT PLANS FOR
WVRC EMERGENCY VET
CITY OF PEWAUKEE, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

POND DETAILS - BASIN #1

NO.	REVISIONS	BY	DATE
1	UPDATED SITE PLAN	TCL	06-09-23
2	CITY REVIEW COMMENTS #1	TCL	08-04-23

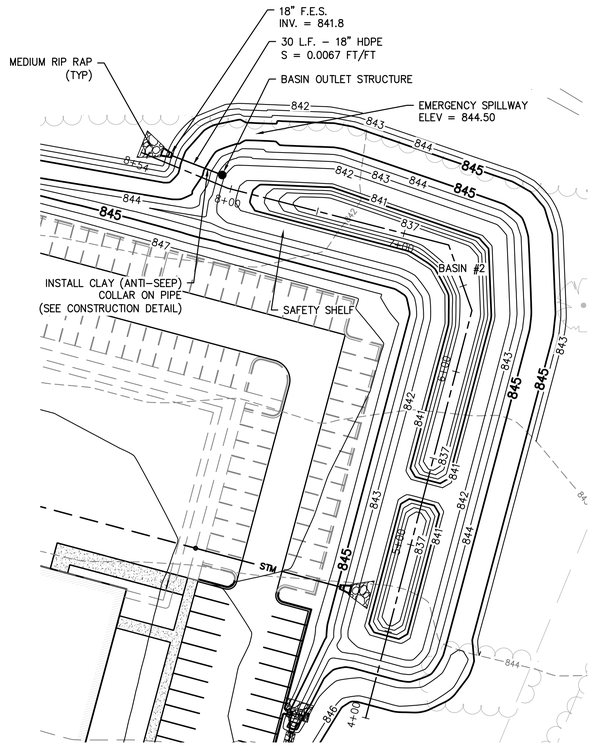
ISSUED FOR REVIEW

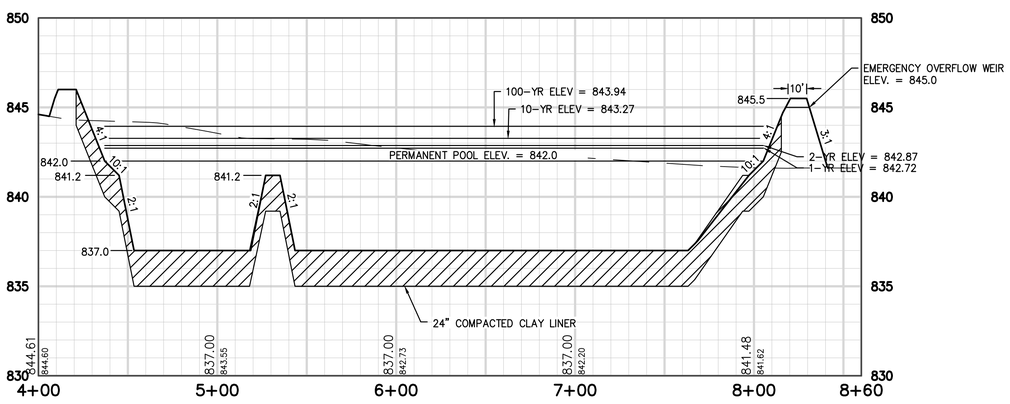
PLAN DATE 03.04.19
DESIGNED BY DKV

0 40'
SCALE

PROJECT NO.
19.0004

SHEET NO.
C401

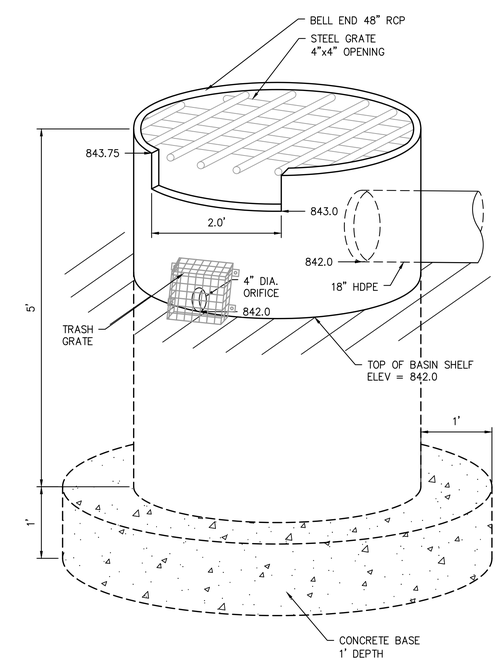




Basin 2 PROFILE

NOTES:

1. ALL CONSTRUCTION SHALL MEET THE SPECIFICATIONS OF WDNR WET DETENTION BASIN TECHNICAL STANDARDS 1001.
2. ALL WORK TO BE CONDUCTED IN CONFORMANCE WITH THE STORMWATER MANAGEMENT PLAN FOR THE PROJECT SITE AS APPROVED BY THE REGULATORY ENGINEER OF RECORD.
3. RCP PIPING & INSTALLATION WITHIN THE BASIN SHALL BE IN ACCORDANCE WITH (ASTM C–76/C443) WITH RUBBER GASKETS.
4. CLAY LINER SHALL BE A MINIMUM OF 2 FEET THICK INSTALLED TO A MINUMUM OF THE 10–YEAR WATER LEVEL. CLAY SHALL BE COMPACTED AT ±2% OPTIMAL MOISTURE CONTENT TO 90% MODIFIED PROCTOR. MATERIALS SHALL BE MEDIUM STIFF TO STIFF CLAYS AND SHALL MEET DNR TECHNICAL STANDARD 1001. ALL MATERIALS SHALL BE APPROVED BY A GEOTECHNICAL ENGINEER AND TESTED PER STANDARD 1001. UPON COMPLETION OF INSTALLATION, THE GEOTECHNICAL ENGINEER SHALL PROVIDE THE REQUIRED REPORT TO BOTH THE OWNER AND LYNCH & ASSOCIATES.
5. FOR CONSTRUCTED EMBANKMENTS WHERE THE PERMANENT POOL IS PONDED 3 FEET OF MORE AGAINST THE EMBANKMENT. THERE SHALL BE A CORE TRENCH OR KEYWAY ALONG THE CENTERLINE OF THE EMBANKMENT UP TO THE PERMANENT POOL ELEVATION. THE CORE TRENCH OR KEYWAY SWALE SHALL BE A MINIMUM OF 2 FEET DEEP AND 8 FEET WIDE WITH SIDE SLOPE OF 1:1 OR FLATTER.
6. CONTRACTOR SHALL POSITION ANTI–SEEP COLLAR SUCH THAT THE COLLARS ARE COMPLETELY CONTAINED WITHIN THE EMBANKMENT.
1. IMMEDIATELY INSTALL FILTER FABRIC OVER ALL OUTLETS TO PREVENT SEDIMENT DEPOSITION IN THE PIPING. (REMOVE FOLLOWING AREA STABILIZATION.)



BASIN #2 OUTLET STRUCTURE

IMPROVEMENT PLANS FOR
WVRC EMERGENCY VET
CITY OF PEWAUKEE, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

POND DETAILS - BASIN #2

NO.	REVISIONS	BY	DATE
1	UPDATED SITE PLAN	TCL	06-09-23
2	CITY REVIEW COMMENTS #1	TCL	08-04-23

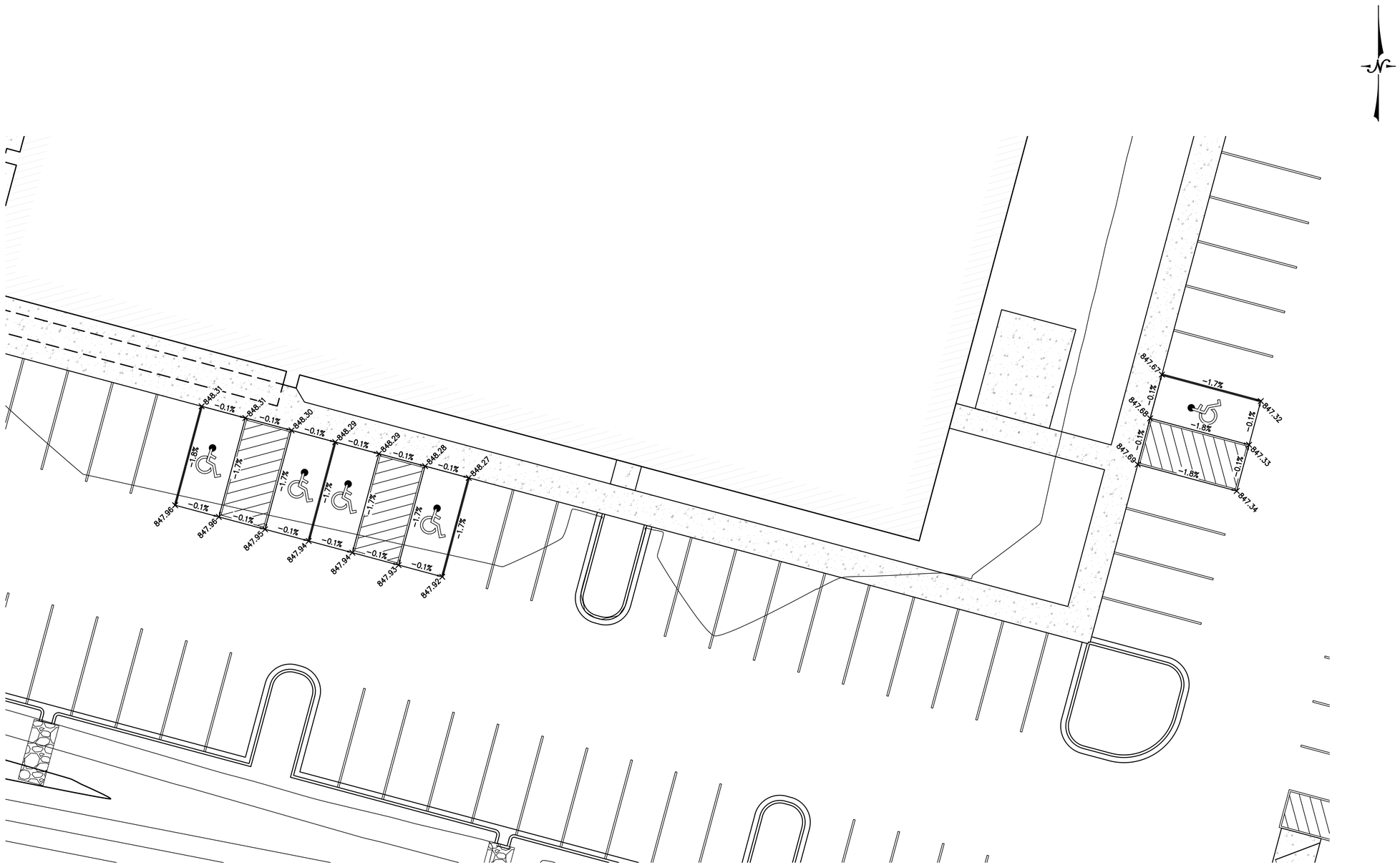
ISSUED FOR REVIEW

PLAN DATE 03.04.19
DESIGNED BY DKV

0 40'
SCALE

PROJECT NO.
19.0004

SHEET NO.
C402



ADA RAMP PAVING PLAN

IMPROVEMENT PLANS FOR

WVRC EMERGENCY VET

CITY OF PEWAUKEE, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

ADA RAMP PAVING PLAN

NO.	REVISIONS	BY	DATE
1	UPDATED SITE PLAN	TCL	06-09-23
2	CITY REVIEW COMMENTS #1	TCL	08-04-23

ISSUED FOR REVIEW

PLAN DATE 03.04.19
DESIGNED BY DKV

0 10'
SCALE

PROJECT NO.
19.0004

SHEET NO.
C403

FILENAME: P:\shared\1 - Projects\2019\19.0004 Keller - WVRC Emergency Vet - Pewaukee\CAD\Sheets\19.0004 PAVING.dwg

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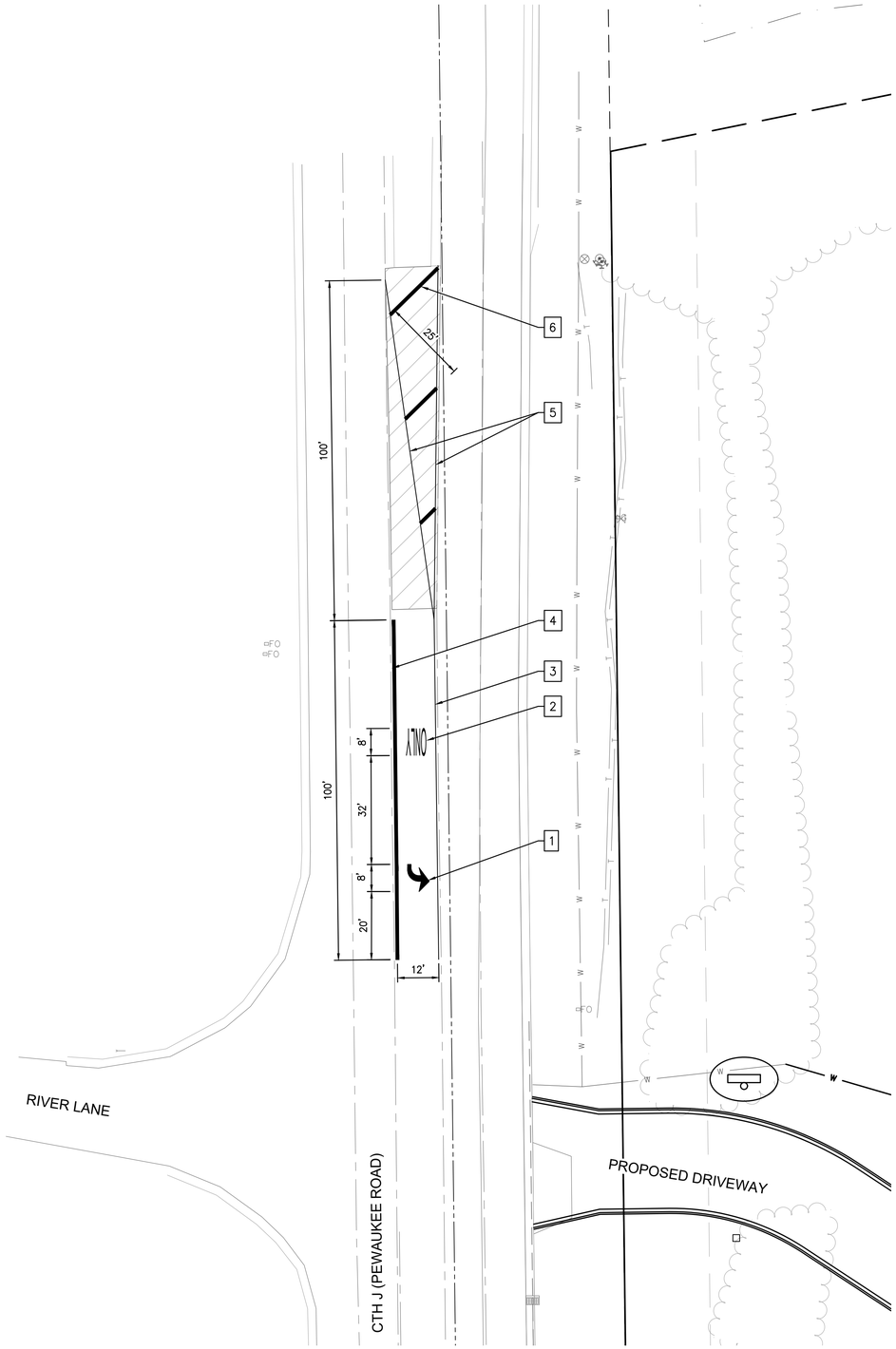


REMOVE EXISTING CONCRETE MEDIAN.
REPLACE WITH:
2" HMA PAVEMENT 5 HT 58-28 S SURFACE COURSE
4" HMA PAVEMENT 3 HT 58-28 S BINDER COURSE
12" BASE AGGREGATE DENSE 1 ¼ INCH

1	PAVEMENT MARKING, EPOXY, LEFT TURN ARROW
2	PAVEMENT MARKNG, EPOXY, WORDS, "ONLY"
3	PAVEMENT MARKING, EPOXY, 4" DOUBLE YELLOW
4	PAVEMENT MARKING, EPOXY, 8" WHITE, CHANNELIZING
5	PAVEMENT MARKING, EPOXY, 4" YELLOW
6	PAVEMENT MARKING, EPOXY, 12" YELLOW

IMPROVEMENT PLANS FOR
WVRC EMERGENCY VET
CITY OF PEWAUKEE, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

INTERSECTION DETAIL

NO.	REVISIONS	BY	DATE
1	UPDATED SITE PLAN	TCL	06-09-23
2	CITY REVIEW COMMENTS #1	TCL	08-04-23

ISSUED FOR REVIEW

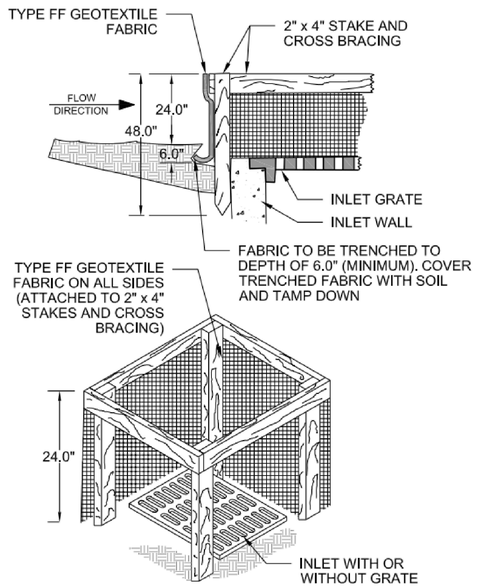
PLAN DATE 03.04.19
DESIGNED BY DKV
0 20'
SCALE

PROJECT NO.
19.0004

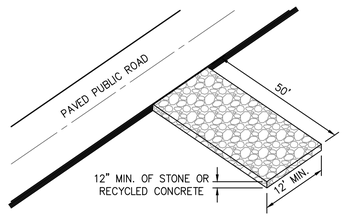
SHEET NO.
C404

FILENAME: P:\shared\1 - Projects\2019\19.0004 Keller - WVRC Emergency Vet - Pewaukee\CAD\Sheets\19.0004 INT.dwg

PLOT DATE: 8/4/2023 3:48 PM



INLET PROTECTION TYPE A



NOTE:
PLACE WISDOT TYPE R GEOTEXTILE FABRIC UNDER STONE, IF SATURATED CONDITIONS ARE EXPECTED.

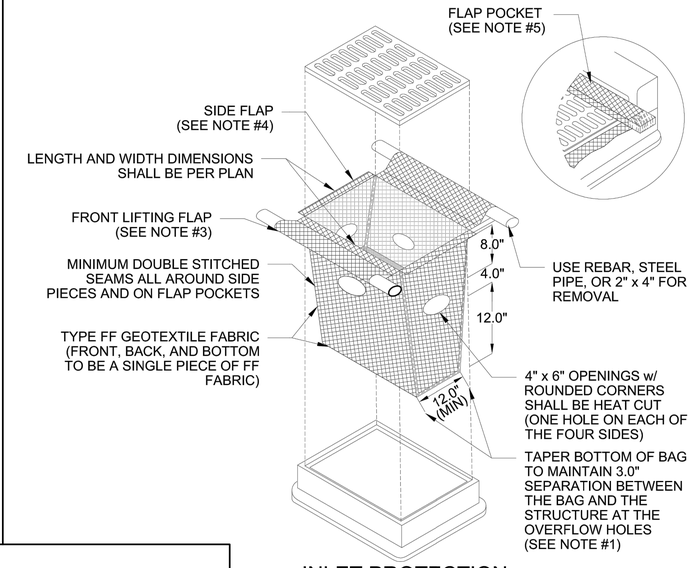
STONE GRADATION

SIEVE SIZE	PERCENT BY WEIGHT PASSING
3"	100
2 1/2"	90–100
1 1/2"	25–60
3/4"	0–20
3/8"	0–5

ALTERNATE – MEET GRADATION FOR WISDOT SELECT CRUSHED MATERIAL, SECTION 312 OF STANDARD SPECIFICATIONS FOR ROAD AND STRUCTURE CONSTRUCTION.

STONE TRACKING PAD

FIGURE 2. INLET PROTECTION TYPE D



INLET PROTECTION TYPE D

CAN BE INSTALLED IN INLETS WITH OR WITHOUT CURB BOXES

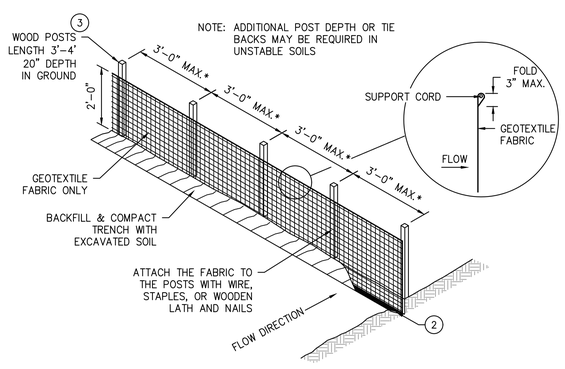
NOTES:

1. TAPER BOTTOM OF BAG TO MAINTAIN 3" OF CLEARANCE BETWEEN THE BAG AND THE STRUCTURE, MEASURED FROM THE BOTTOM OF THE OVERFLOW OPENINGS TO THE STRUCTURE WALL.
2. GEOTEXTILE FABRIC TYPE FF FOR FLAPS, TOP AND BOTTOM OF OUTSIDE OF FILTER BAG. FRONT, BACK, AND BOTTOM OF FILTER BAG BEING ONE PIECE.
3. FRONT LIFTING FLAP IS TO BE USED WHEN REMOVING AND MAINTAINING FILTER BAG.
4. SIDE FLAPS SHALL BE A MAXIMUM OF 2" LONG. FOLD THE FABRIC OVER AND REINFORCE WITH MULTIPLE STITCHES.
5. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2"X4". THE REBAR, STEEL PIPE, OR WOOD SHALL BE INSTALLED IN THE REAR FLAP AND SHALL NOT BLOCK THE TOP HALF OF THE CURB FACE OPENING.

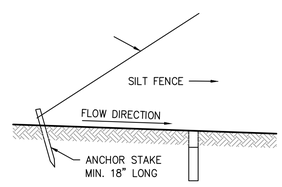
MAINTENANCE NOTES:

1. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO THE STRUCTURE. MATERIAL THAT HAS FALLEN INTO THE INLET SHALL BE IMMEDIATELY REMOVED.

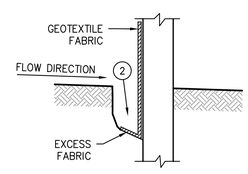
This drawing based on Wisconsin Department of Transportation Standard Detail Drawing 8 E 9–6.



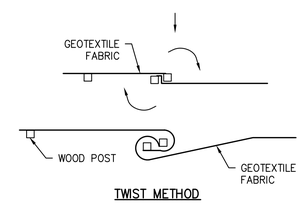
NOTE: 8'–0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



SILT FENCE TIE BACK
(WHEN ADDITIONAL SUPPORT REQUIRED)



TRENCH DETAIL

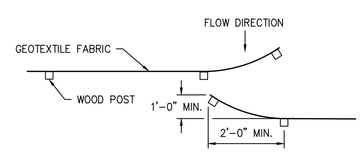


TWIST METHOD

GENERAL NOTES:

1. HORIZONTAL BRACE REQUIRED WITH 2" x 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. TRENCH SHALL BE A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1–1/8" x 1–1/8" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS:
   A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180°
   B) HOOK THE END OF EACH SILT FENCE LENGTH.
6. SILT FENCE SHALL BE INSTALLED USING CURRENT WisDOT STANDARDS AT THE TIME OF CONSTRUCTION.

SILT FENCE



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE

IMPROVEMENT PLANS FOR
WVRC EMERGENCY VET
CITY OF PEWAUKEE, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

CONSTRUCTION DETAILS

NO.	REVISIONS	BY	DATE
1	UPDATED SITE PLAN	TCL	06-09-23
2	CITY REVIEW COMMENTS #1	TCL	08-04-23

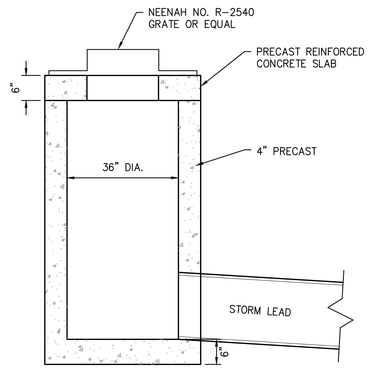
ISSUED FOR REVIEW

PLAN DATE 03.04.19
DESIGNED BY DKV

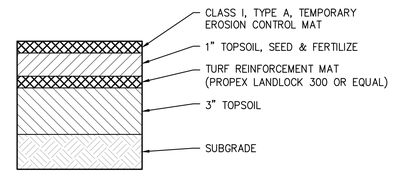
0 N/A
SCALE

PROJECT NO.
19.0004

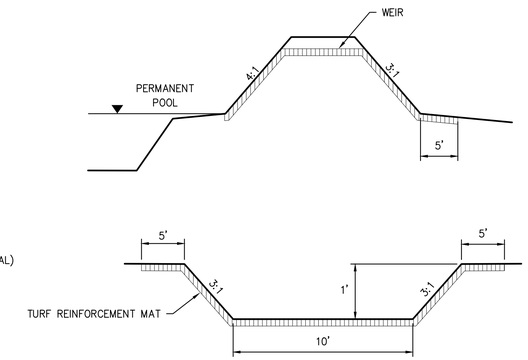
SHEET NO.
C501



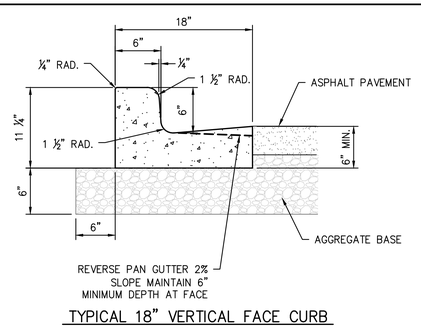
INLET



TURF REINFORCEMENT MAT

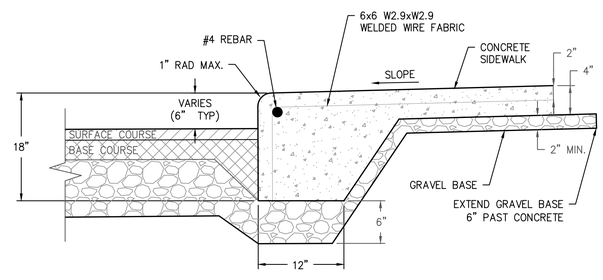


EMERGENCY SPILLWAY

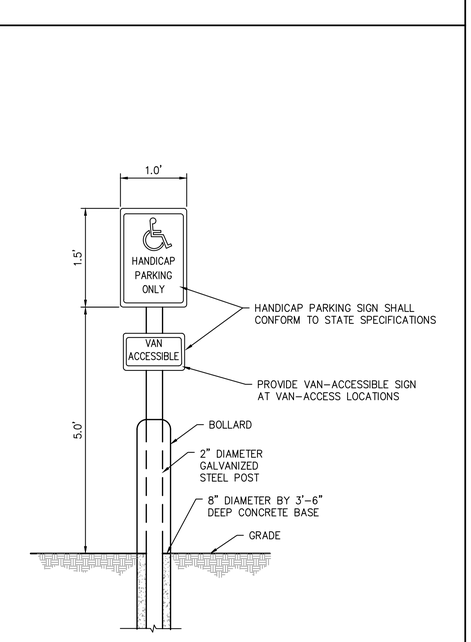


TYPICAL 18" VERTICAL FACE CURB

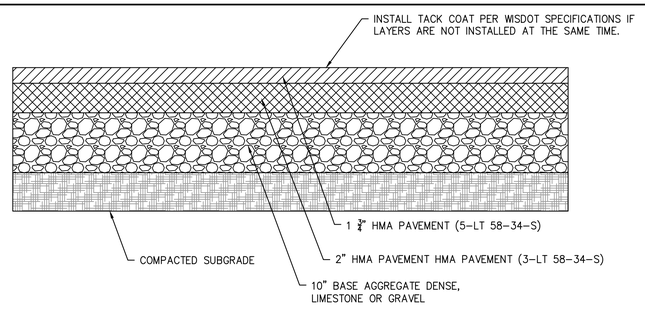
NOTE: DEPTH OF FACE MAY VARY



INTERGAL CURB/WALK

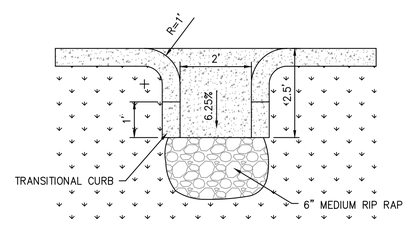


ADA PARKING SIGN



PAVING NOTES:
1. CONTRACTOR TO THOROUGHLY COMPACT SUBGRADE.
2. PROOF ROLL SITE TO IDENTIFY UNSATISFACTORY SOILS.

ASPHALT PAVEMENT SECTION



CONCRETE CURB CUT/FLUME
WITH CURB

IMPROVEMENT PLANS FOR
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SCALE

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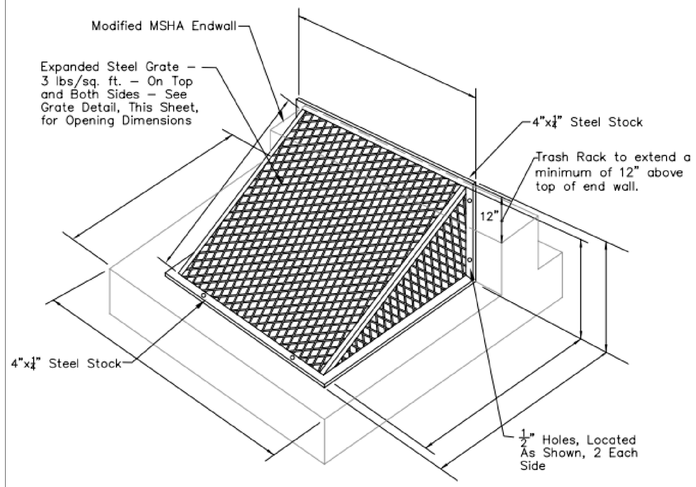
19.0004

SHEET NO.
C502

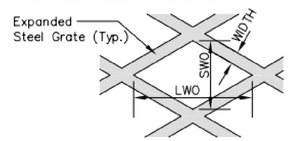


GENERAL NOTES FOR END WALL

1. FOR DIMENSIONS NOT MODIFIED, DETAILS AND SPECIFICATIONS, SEE MSHA STANDARD NO. MD–354.01 ENDWALL FOR___" DIAMETER PIPE.
2. PIPE TO BE CENTERED HORIZONTALLY IN ENDWALL WITH INVERT AT TOP OF FOOTER.

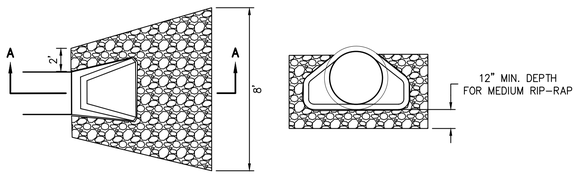
GENERAL NOTES FOR TRASH RACK

1. STEEL TO CONFORM TO ASTM A–36.
2. ALL SURFACES TO BE HOT–DIPPED GALVANIZED AFTER FABRICATION.
3. TRASH RACK(S) TO BE FASTENED TO WALL WITH 3/8" STAINLESS STEEL ANCHOR BOLTS AND THREADED INSERTS. TRASH RACK(S) TO BE HINGED AT A MIN. OF TWO POINTS TO THE CONCRETE BASE.
4. TRASH RACK(S) TO BE CENTERED OVER OPENING.
5. IF WIDTH OF TRASH RACK EXCEEDS 3' A BRACE MUST BE PROVIDED IN THE CENTER OF THE TRASH RACK.
6. FABRICATOR MAY MODIFY COMPONENTS OF TRASH RACK FRAME TO IMPROVE CONSTRUCTABILITY OF TRASH RACK. MODIFICATIONS MUST BE APPROVED BY MCDPS PRIOR TO FABRICATION.

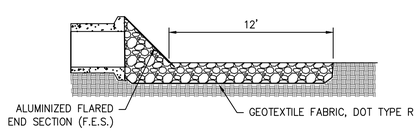


Expanded Steel Grate Opening Detail
Not To Scale

LBS/SF	LWO	SWO	WIDTH
2.5	2.28"	1.03"	.203"
3.0	3.44"	.940"	.264"



FRONT VIEW



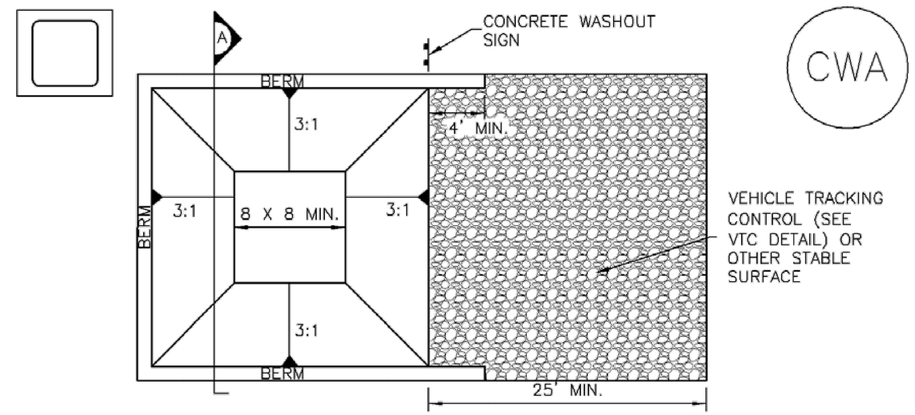
SECTION A–A

NOTES:

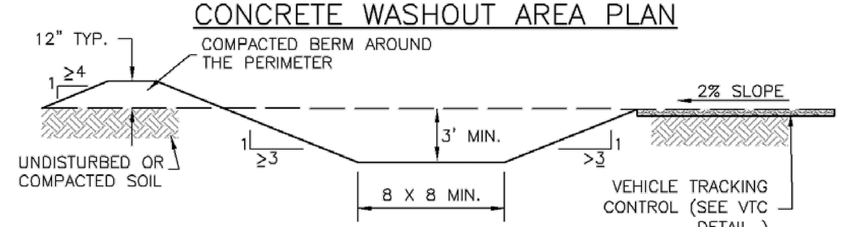
1. EXCAVATE TO ONE FOOT BELOW PIPE OUTLET AND WIDEN CHANNEL TO THE REQUIRED RIP–RAP THICKNESS FOR EACH APRON. FOUNDATION TO BE CUT TO ZERO GRADE AND SMOOTHED.
2. PLACE FILTER CLOTH ON BOTTOM AND SIDES OF PREPARED FOUNDATION. ALL JOINTS TO OVERLAP A MINIMUM OF ONE FOOT.
3. EXERCISE CARE IN RIP–RAP PLACEMENT TO AVOID DAMAGE TO FILTER FABRIC.
4. PLACE RIP–RAP ON ZERO GRADE, TOP OF RIP–RAP TO BE LEVEL WITH PROPOSED OUTLET NO OVERFALL AT ENDS.
5. RIP–RAP SHALL BE MEDIUM RIP–RAP IN ACCORDANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
6. IMMEDIATELY AFTER CONSTRUCTION, STABILIZE ALL DISTURBED AREAS WITH VEGETATION.
7. LINE CHANNEL TO TOP OF BANKS FOR A DISTANCE OF 12' DOWNSTREAM. NO RESTRICTION OF CHANNEL CROSS SECTION SHOULD EXIST.

FLARED END SECTION AND RIP–RAP

Concrete Washout Area (CWA) MM-1



CONCRETE WASHOUT AREA PLAN



SECTION A

CWA–1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

IMPROVEMENT PLANS FOR
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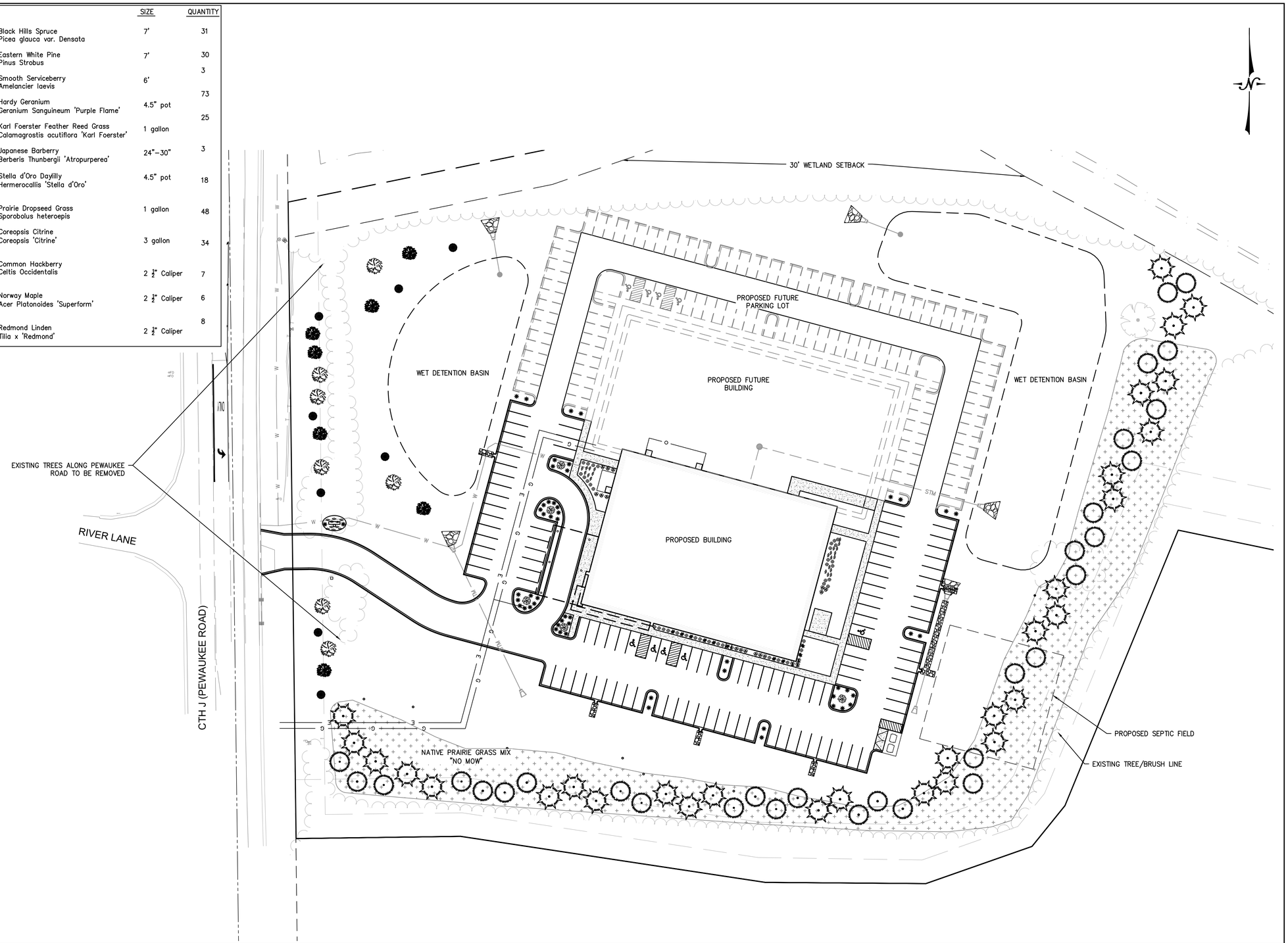
0 N/A
SCALE
PROJECT NO.
19.0004
SHEET NO.
C503

		SIZE	QUANTITY
A	Black Hills Spruce Picea glauca var. Densata	7'	31
B	Eastern White Pine Pinus Strobus	7'	30
C	Smooth Serviceberry Amelancier laevis	6'	3
D	Hardy Geranium Geranium Sanguineum 'Purple Flame'	4.5" pot	73
E	Karl Foerster Feather Reed Grass Calamagrostis acutiflora 'Karl Foerster'	1 gallon	25
F	Japanese Barberry Berberis Thunbergii 'Atropurperea'	24"–30"	3
G	Stella d'Oro Daylilly Hermerocallis 'Stella d'Oro'	4.5" pot	18
H	Prairie Dropseed Grass Sporobolus heteroepis	1 gallon	48
I	Coreopsis Citrine Coreopsis 'Citrine'	3 gallon	34
J	Common Hackberry Celtis Occidentalis	2 ½" Caliper	7
K	Norway Maple Acer Platonoides 'Superform'	2 ½" Caliper	6
L	Redmond Linden Tilia x 'Redmond'	2 ½" Caliper	8



IMPROVEMENT PLANS FOR
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LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

LANDSCAPE PLAN

NO.	REVISIONS	BY	DATE
1	UPDATED SITE PLAN	TCL	06-09-23

ISSUED FOR REVIEW

PLAN DATE 03.04.19
DESIGNED BY DKV

0 40'
SCALE

PROJECT NO.
19.0004

SHEET NO.
L701

FILENAME: P:\shared\1 – Projects\2019\19.0004 Keller – WVRC Emergency Vet – Pewaukee\CAD\Sheets\19.0004 LS.dwg

PLOT DATE: 8/4/2023 3:48 PM

SHEET INDEX

C1.0 CONCEPTUAL SITE PLAN

A1.1 FLOOR PLAN (TENANT)
A2.0 ELEVATIONS

BUILDING & FIRE AREA SQUARE FOOTAGES

FLOOR AREAS	EXISTING	NEW	SUB-TOTAL
SECOND FLOOR	------ S.F.	------ S.F.	------ S.F.
FIRST FLOOR	------ S.F.	25,704 S.F.	25,704 S.F.
CANOPIES (COLUMN SUPPORTED)	------ S.F.	2,301 S.F.	2,301 S.F.
BASEMENT	------ S.F.	------ S.F.	------ S.F.
BUILDING AREA SUB-TOTALS	------ S.F.	28,005 S.F.	28,005 S.F.
MEZZANINES	------ S.F.	------ S.F.	------ S.F.
FIRE AREA TOTALS	------ S.F.	28,005 S.F.	28,005 S.F.
REMODEL AREA TOTALS	------ S.F.	--% OF BUILDING AREA	

BUILDING CODE ANALYSIS

PROJECT ADDRESS
Pewaukee Rd, Pewaukee, WI, 53188

APPLICABLE CODES
2015 International Building Code (w/ WI Amendments)
2015 IECC

OCCUPANCY
B-Business
Accessory Use
?-?
Incidental Use

High-Piled Combustible Storage NO
Hazardous Materials NO
Multiple Control Areas NO

HEIGHT & AREA
Building Height: -'--" Maximum Allowed: 75'-0"
Number of Stories: 1 Maximum Allowed: 4
Total Building Area: 28,005 S.F. Maximum Allowed: 92,000 S.F.
Total Fire Area: 28,005 S.F. Maximum Allowed: -,--- S.F.
Mixed
Unlimited Area Building NO

CONSTRUCTION TYPE
Construction Classification IIB (CONVENTIONAL STEEL)
Fire Separation Distance -'--"

FIRE PROTECTION SYSTEMS
Assumed Sprinkler Type NFPA 13
Fire Alarm System YES

MEANS OF EGRESS
Occupant Load --
Panic Hardware YES/NO

STRUCTURAL DESIGN
Risk Category 2
Design Loads
Roof Live Load 20 psf
Walk-on IMP Ceiling Live Load -- psf
Steel Framing
Collateral Load 3 psf (Verify HVAC RTUs)
Wood Truss
Top Chord Dead Load --psf
Bottom Chord Load --psf
Mezzanine/Second Floor/Basementoor/Mezz
Live Load -- psf
Point Load (Partition) -- psf
Snow Load Criteria
Ground Snow Load (Pg) 30 psf
Exposure Factor (Ce) --
Thermal Factor (Ct) --
Wind Loads
Wind Load 115 MPH
Surface Roughness B
Exposure Category 1.0
Earthquake Load Criteria
Soil Site Class D
Ss --
S1 --

PLUMBING SYSTEMS
Mens WC Required #
Womens WC Required #
Drinking Fountain Required #
Other Source YES
Ambulatory Stall Required NO

MECHANICAL SYSTEMS
NO SINGLE PIECE OF EQUIPMENT OVER 400,000 BTU
NO BOILERS OVER 15PSO AND 10 HORSEPOWER

SITE INFORMATION

SITE CONTENT

Building Size	28,005 S.F.	3.33%
Hard Surface	68,919 S.F.	8.21%
Green Space	742,477 S.F.	88.46%
Parcel Size (Approx.)	839,401 S.F.	19.27 Acres
Parking Provided	116 Proposed Stalls + 115 Future Stalls	
Area of Disturbance	-,--- S.F.	

ZONING
Property Zoning B3 (RE-ZONE)
Setbacks FY 25'-0" SY 20'-0" RY 35'-0"
Hard Surface Setback 50'-0" (From Residential)
Coverage Limit --%
Greenspace Requirement --%
Parking Required -- Stalls
Refuse Enclosure YES
RTU SCREENING YES

NORTH

PROPOSED SITE PLAN
1" = 40'-0"

0' 20' 40' 80' 160'

THE LOT DIMENSIONS AND BEARINGS SHOWN ON THIS PLAN ARE INTERPRETED VALUES. FOLLOW UP INVESTIGATION WITH STATE AND LOCAL AUTHORITIES AND/OR WITH CERTIFIED SURVEY MAP DATA WHEN AVAILABLE IS REQUIRED.

PROPOSED NEW FACILITY FOR:

e-WVRC EMERGENCY VET

PEWAUKEE, WISCONSIN

Keller
PLANNERS | ARCHITECTS | BUILDERS

FOX CITIES
N216 State Road 55
P.O. Box 620
Kaukauna, WI 54130
PHONE (920) 766-5795 / 1-800-236-2534
FAX (920) 766-5004

MADISON
711 Lois Dr.
Sun Prairie, WI 53590
PHONE (608) 318-2336
FAX (608) 318-2337

MILWAUKEE
W204 N11509
Goldendale Rd
Germantown, WI 53022
PHONE (262) 250-9710 1-800-236-2534
FAX (262) 250-9740

WAUSAU
5605 Lilac Ave
Wausau, WI 54401
PHONE (715) 849-3141
FAX (715) 849-3181

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PRELIMINARY - NOT FOR CONSTRUCTION

REVISIONS

1	03.20.2019	J. BOCHE
2	03.29.2019	J. BOCHE
3	05.19.2019	J. BOCHE
4	05.23.2023	I. HAUN
5	06.13.2023	I. HAUN
6		

PROJECT MANAGER: N. LAURENT
DESIGNER: C. MANSKE
DRAWN BY: I. HAUN
EXPEDITOR: -------
SUPERVISOR: -------
PRELIMINARY NO: P18241
CONTRACT NO: -------
DATE: 08.14.2018
SHEET: C1.0

e-WVRC EMERGENCY VET

PEWAUKEE, WISCONSIN

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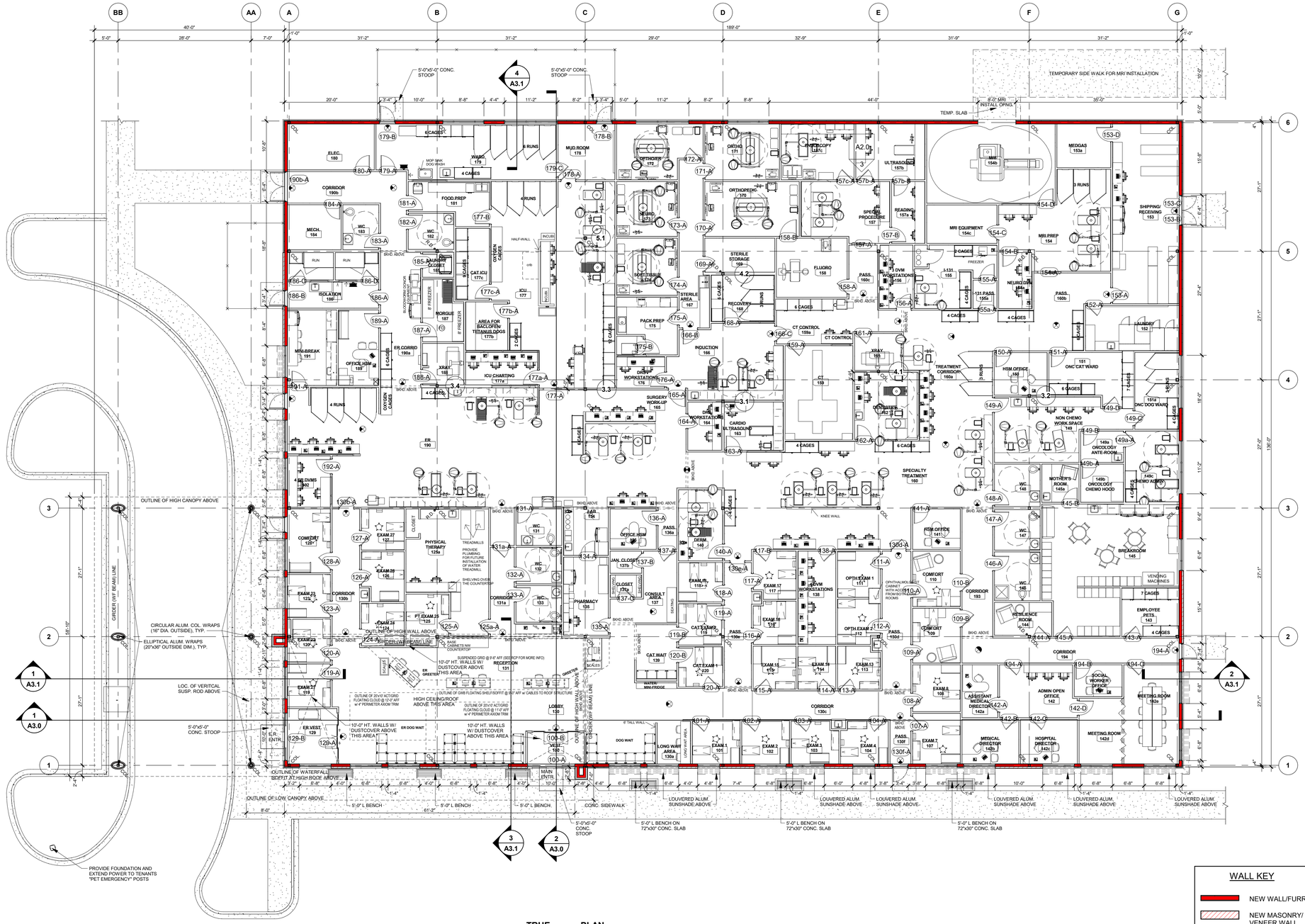

TRUE NORTH

PLAN NORTH

FLOOR PLAN (TENANT)

3/32" = 1'-0"

WALL KEY

- NEW WALL/FURRING
- NEW MASONRY/ VENEER WALL
- NEW COOLER/ FREEZER WALLS
- NEW FOUNDATION WALL
- TYPICAL EXISTING WALL
- DEMO WALLS
- FIRE WALL OR FIRE BARRIER

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PEWAUKEE, WISCONSIN

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PROJECT MANAGER: N. LAURENT

DESIGNER: C. MANSKE

DRAWN BY: I. HAUN

EXPEDITOR: -------

SUPERVISOR: -------

PRELIMINARY NO: P18241

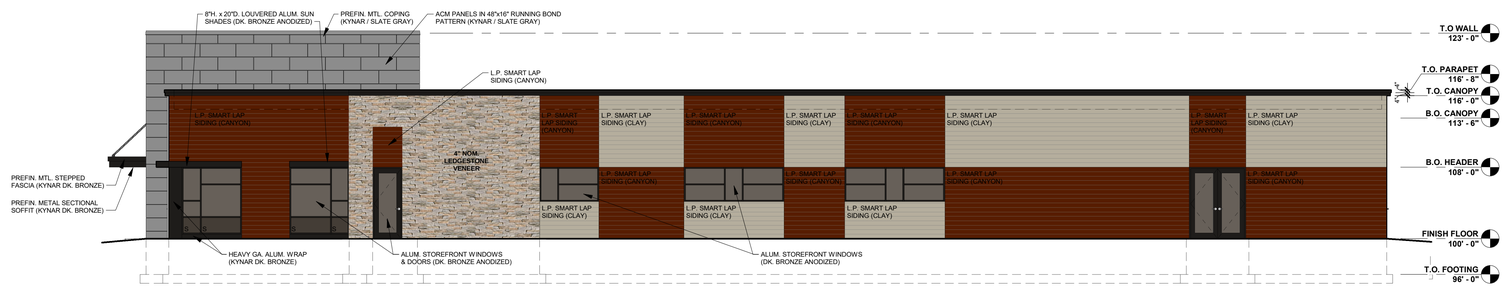
CONTRACT NO: -------

DATE: 08.14.2018

SHEET: A1.1

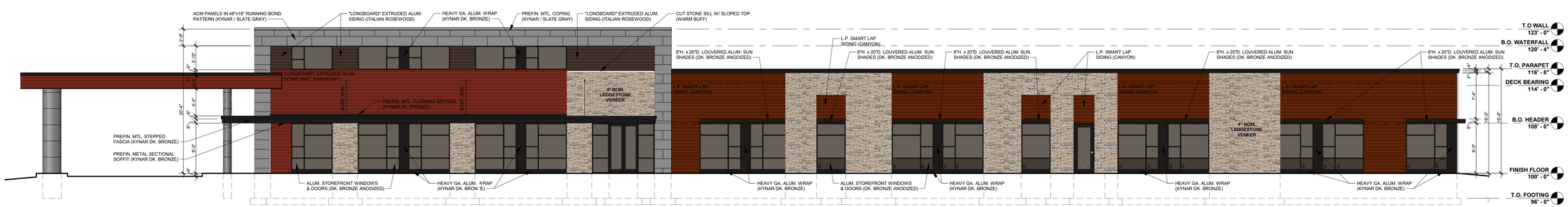
NORTH ELEVATION

1/8" = 1'-0"



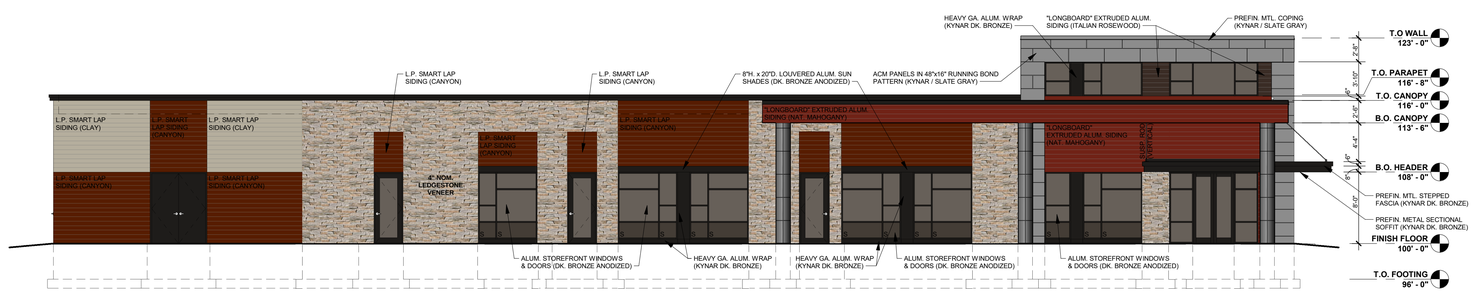
EAST ELEVATION

1/8" = 1'-0"



SOUTH ELEVATION

1/8" = 1'-0"



WEST ELEVATION

1/8" = 1'-0"

DOOR & WINDOW VALUES		
WINDOWS:	U VALUE	0.--
	SHGC	0.--
	VT	0.--
DOORS: (SWINGING)	U VALUE	0.37
O.H. DOORS: (NON-SWINGING)	U VALUE	0.38
DOORS: (>50% GLAZING)	U VALUE	0.--
	SHGC	0.--
	VT	0.--

Keller
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P.O. Box 620
Kaukauna, WI 54130
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FAX (920) 766-5004

MADISON
711 Lois Dr.
Sun Prairie, WI 53590
PHONE (608) 318-2336
FAX (608) 318-2337

MILWAUKEE
W204 N11509
Goldendale Rd
Germantown, WI 53022
PHONE (262) 250-9710 / 1-800-236-2534
FAX (262) 250-9740

WAUSAU
5605 Lilac Ave
Wausau, WI 54401
PHONE (715) 849-3141
FAX (715) 849-3181

www.kellerbuilds.com

PROPOSED NEW FACILITY FOR:

e-WVRC EMERGENCY VET

PEWAUKEE, WISCONSIN

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PRELIMINARY - NOT FOR CONSTRUCTION

REVISIONS

1	03.20.2019	J. BOCHE
2	03.29.2019	J. BOCHE
3	05.19.2019	J. BOCHE
4	05.23.2023	I. HAUN
5	06.13.2023	I. HAUN
6		

PROJECT MANAGER: N. LAURENT

DESIGNER: C. MANSKE

DRAWN BY: I. HAUN

EXPEDITOR: -------

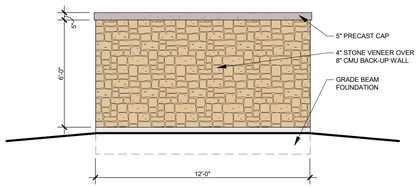
SUPERVISOR: -------

PRELIMINARY NO: P18241

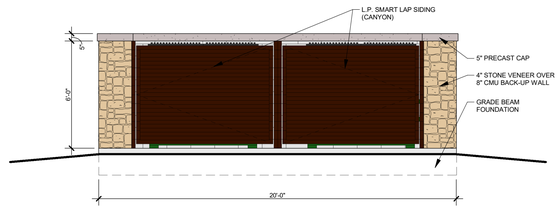
CONTRACT NO: -------

DATE: 08.14.2018

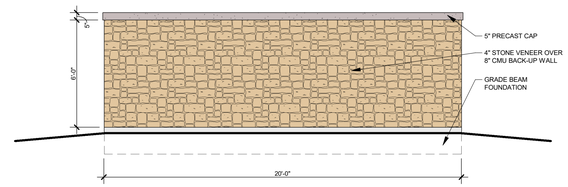
SHEET: A2.0



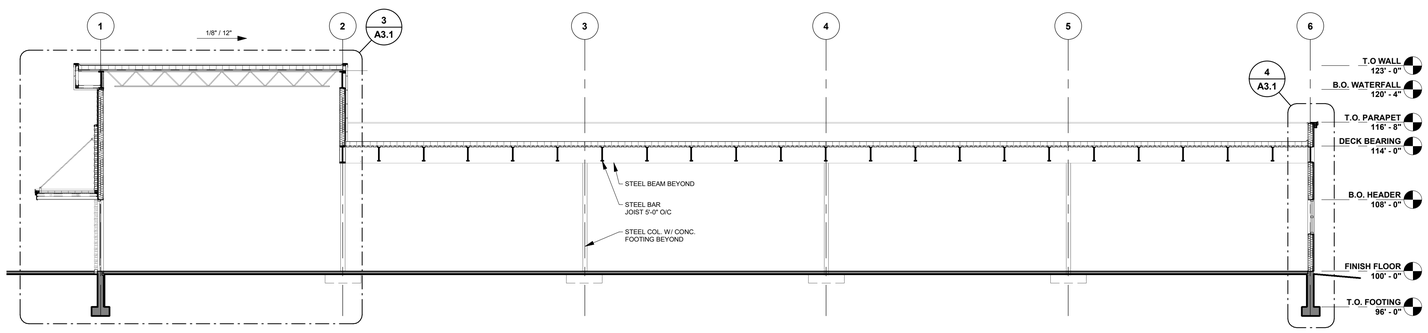
EAST - TRASH ENCLOSURE
1/4" = 1'-0"



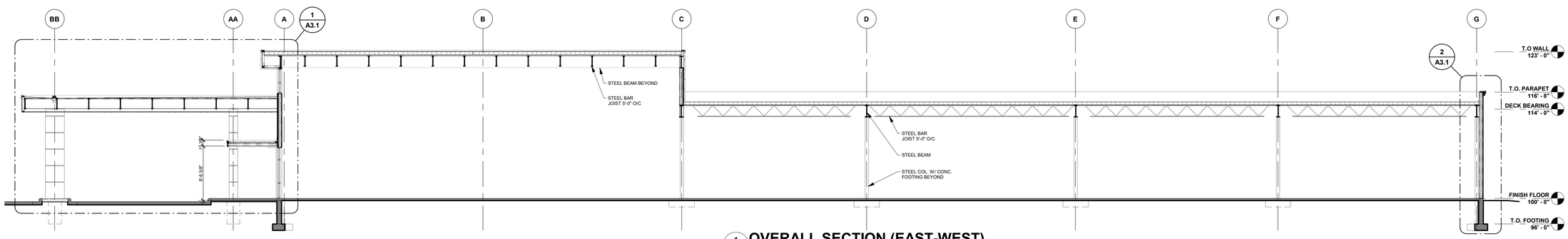
WEST - TRASH ENCLOSURE
1/4" = 1'-0"



NORTH/SOUTH - TRASH ENCLOSURE
1/4" = 1'-0"



2 / A3.0 OVERALL SECTION (NORTH-SOUTH)
1/8" = 1'-0"



1 / A3.0 OVERALL SECTION (EAST-WEST)
1/8" = 1'-0"

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PROPOSED NEW FACILITY FOR:

e-WVRC EMERGENCY VET

PEWAUKEE, WISCONSIN

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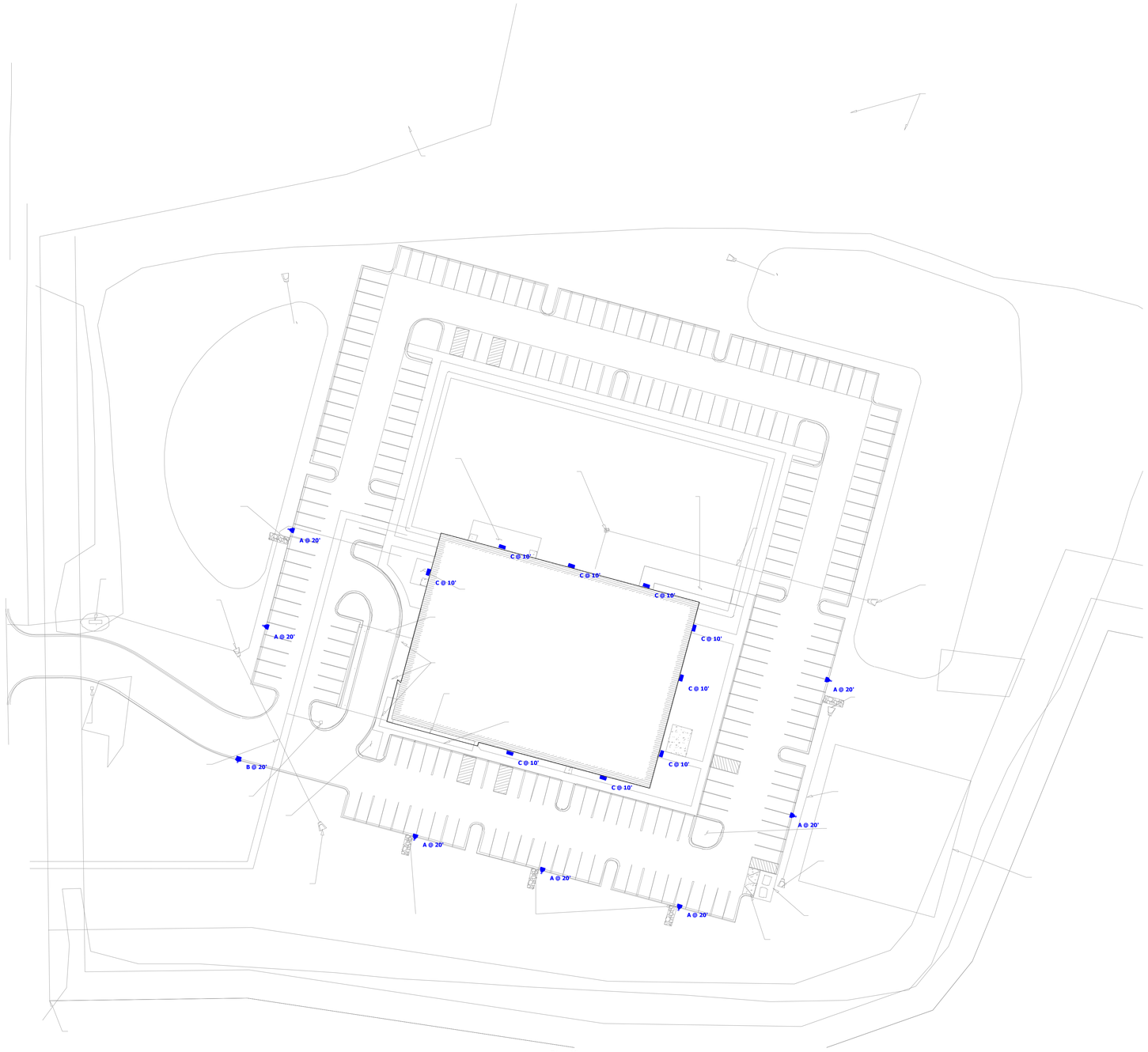
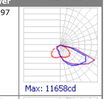
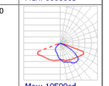
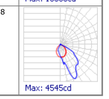
PROJECT MANAGER: N. LAURENT
DESIGNER: C. MANSKE
DRAWN BY: I. HAUN
EXPEDITOR: -------
SUPERVISOR: -------
PRELIMINARY NO: P18241
CONTRACT NO: -------
DATE: 08.14.2018
SHEET: A3.0



Plan View
Scale - 1" = 40ft

Schedule

Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power	Polar Plot
	A		7	OPTEC LED LIGHTING	OLA1-150-UNV-40-4	LED AREA SERIES SMALL 150W 4000K TYPE 4	1	19635	0.83	149.97	 Max: 11658cd
	B		1	OPTEC LED LIGHTING	OLA1-150-UNV-40-3	LED AREA SERIES SMALL 150W 4000K TYPE 3	1	21015	0.83	150	 Max: 10500cd
	C		9	OPTEC LED LIGHTING	OLWP3L-050-1200-UNV-40-4	LED WALLPACK SERIES 3 / LARGE	1	5149	0.83	47.8	 Max: 4545cd

*No alternates allowed without prior approval from lighting designer and engineer of record.

All light levels are approximate.
Values will vary due to actual LED/driver combinations, reflectances (currently set at 80/50/20), environmental conditions, and obstructions.
Calculations are based on our interpretation of information provided to us.
This design remains the property of Spectrum Lighting and may not be altered without written permission.

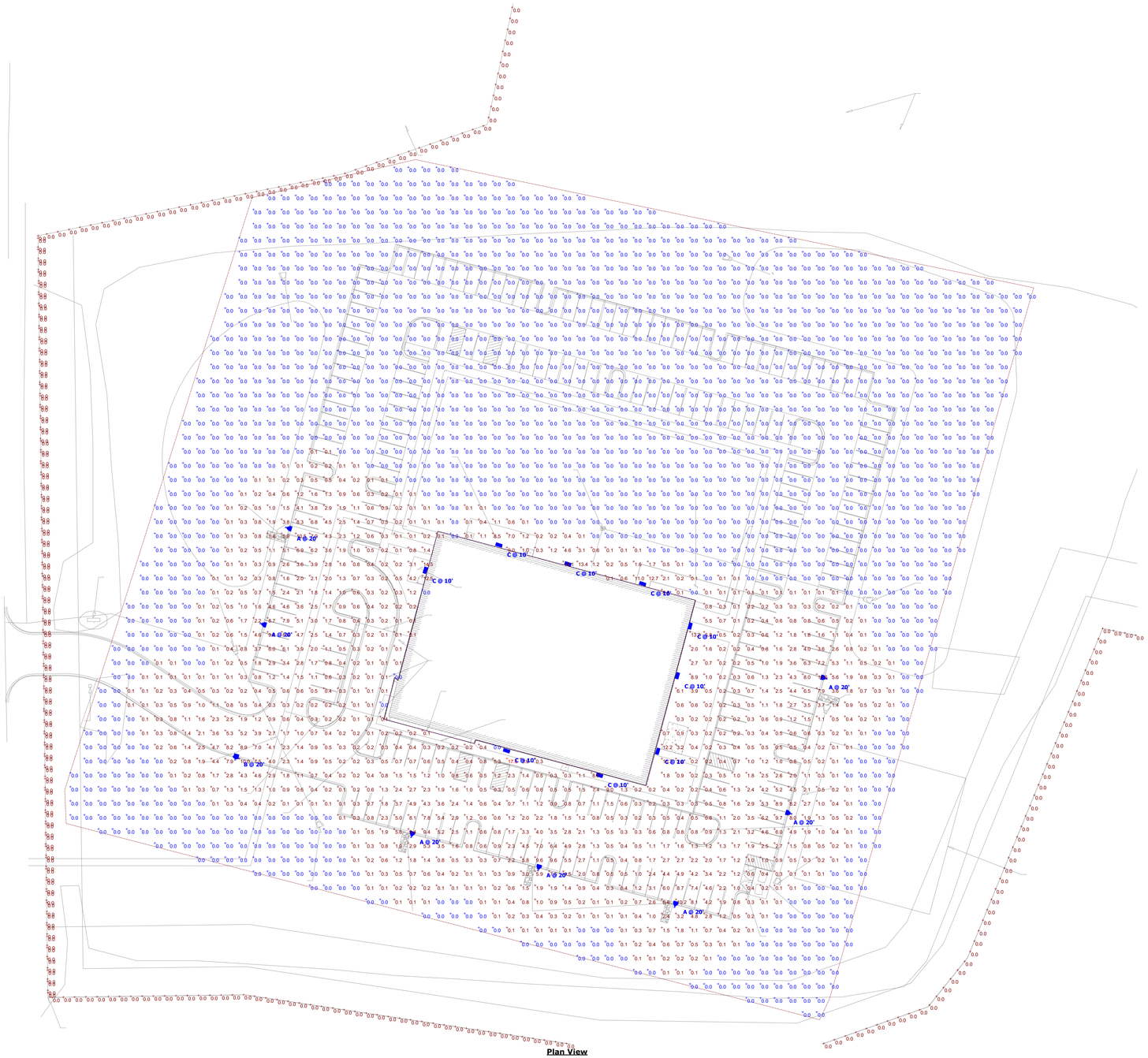
SPECTRUM lighting

VISUAL

WVRC Emergency Vet
Pewaukee, WI

Designer
BGG
Date
07/31/2023
Scale
1" = 40'-0"
Drawing No.

Summary



Plan View
Scale - 1" = 40ft

Schedule

Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power	Polar Plot
	A		7	OPTEC LED LIGHTING	OLA1-150-UNV-40-4	LED AREA SERIES SMALL 150W 4000K TYPE 4	1	19635	0.83	149.97	Max: 11658cd
	B		1	OPTEC LED LIGHTING	OLA1-150-UNV-40-3	LED AREA SERIES SMALL 150W 4000K TYPE 3	1	21015	0.83	150	Max: 10500cd
	C		9	OPTEC LED LIGHTING	OLWP3L-050-1200-UNV-40-4	LED WALLPACK SERIES 3 / LARGE	1	5149	0.83	47.8	Max: 4545cd

*No alternates allowed without prior approval from lighting designer and engineer of record.

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Property Line	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A
General Lighting	+	0.6 fc	17.8 fc	0.0 fc	N/A	N/A

All light levels are approximate.
Values will vary due to actual LED/driver combinations, reflectances (currently set at 80/50/20), environmental conditions, and obstructions.
Calculations are based on our interpretation of information provided to us.
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SPECTRUM lighting

VISUAL

WVRC Emergency Vet
Pewaukee, WI

Designer
BGG
Date
07/31/2023
Scale
1" = 40'-0"
Drawing No.

Summary

Optec LED LIGHTING

Catalog:
Project:
Type: A

Area Series (Small)

The OLA1 Small Series is a stylish aerodynamic area luminaire that fits within today's accepted design form factors. Excellent optical performance is achieved with Nichia brand LED's and engineered discrete optics. LED life is assured through efficient thermal coupling and dissipation via a durable, pressure die cast, low-copper alloy, aluminum housing. Engineered to last, all gaskets are anti-UV, anti-aging with no harmful out-gassing. All models come standard with a universal pole mount bracket or an optional wall surface box. Luminaries are available with a number of options including alternate CCT choices, finishes, photocells and occupancy sensors.

FEATURES

- LED Brand: Nichia
- Color Temperatures: 4000K & 5000K (Other CCT's are available upon request)
- CRI: 70
- Lumen Maintenance: L70 = 50,000 hours
- Full Cutoff (meets IDA criteria)
- Operating Temperature: -40˚C (-40˚F) to 40˚C (104˚F)
- Durable All Aluminum Pressure Die Cast Housing
- Powder Coat Finish
- Salt Fog Tested to 2500 hours / per ASTM B117
- IP65 Rated (wet listed / NEMA IEC 60529)
- Mounting: Universal Round or Square Pole, Wall Surface Box

ELECTRICAL SPECIFICATIONS

- Power Input: 120-277V (347-480V Optional)
- Power Factor: > 0.95
- THD: < 15%
- Surge Protection: 20 kV
- Control Options: 0-10V Dimming standard (Photocell and Occupancy Sensors Optional)

TESTS & CERTIFICATIONS

- ETL (UL 1598, UL 8750, NEMA C82.77)
- CSA (C22.2 No.250.0)
- RoHS Compliant
- Design Lights Consortium (Premium)
- 3G Vibration tested (ANSI C136.31)

WARRANTY

- 10-Year Warranty (parts or replacement)

PERFORMANCE SPECIFICATIONS

Distribution	Model / Wattage	Lumens 4000K	Lumens 5000K	Bug Rating B	Bug Rating U	Bug Rating G
Type 2	OLA1-080	10,801	10,960	3 *	0	1
	OLA1-120	15,840	16,200	3 *	0	2
	OLA1-150	19,800	20,250	3 *	0	2
Type 3	OLA1-080	11,600	11,760	2 *	0	2
	OLA1-120	16,561	16,920	3 *	0	2
	OLA1-150	20,549	21,000	3 *	0	2
Type 3L	OLA1-080	10,799	10,960	3 *	0	3
	OLA1-120	15,960	16,199	3 *	0	3
	OLA1-150	19,800	20,249	4 *	0	3
Type 3R	OLA1-080	10,799	10,960	3 *	0	3
	OLA1-120	15,960	16,198	3 *	0	3
	OLA1-150	19,800	20,250	4 *	0	3
Type 4	OLA1-080	10,596	10,794	2 *	0	2
	OLA1-120	15,472	15,712	2 *	0	2
	OLA1-150	19,046	19,349	3 *	0	2
Type 4L	OLA1-080	10,800	10,960	3 *	0	3
	OLA1-120	16,080	16,320	3 *	0	3
	OLA1-150	19,800	20,250	4 *	0	4
Type 4R	OLA1-080	10,800	10,960	3 *	0	3
	OLA1-120	16,080	16,320	3 *	0	3
	OLA1-150	19,781	20,250	4 *	0	4
Type 5	OLA1-080	10,032	10,185	4	0	3
	OLA1-120	15,049	15,278	4	0	3
	OLA1-150	18,811	19.097	5	0	4

* Backlight = 1 when BC (Backlight Control System) is applied.

Voltage (V)	Current (A) 80W	Current (A) 120W	Current (A) 150W
120	0.67	1.00	1.25
208	0.38	0.58	0.72
240	0.33	0.50	0.63
277	0.29	0.43	0.54
347	0.23	0.35	0.43
480	0.17	0.25	0.31

Optec LED LIGHTING 1700 De Soto Place, Ontario, CA 91761 P: 888-743-5220 optecledlighting.com

Optec LED LIGHTING

Area Series (Small)

ORDERING INFORMATION

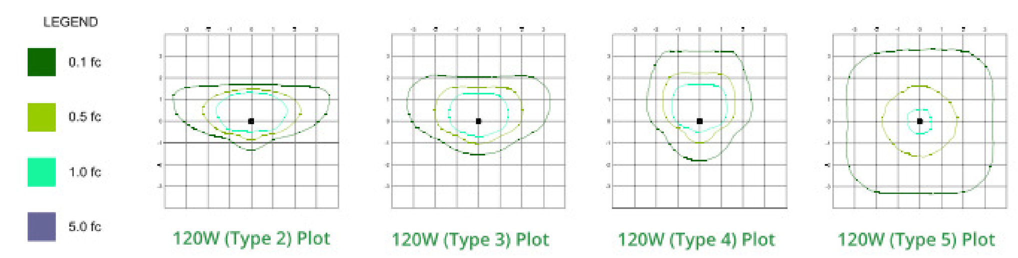
EXAMPLE: OLA1-120-UNVL-50-4-SQ-BZ-PR-TL12

SERIES	WATTAGE	VOLTAGE	COLOR TEMP	DISTRIBUTION	MOUNTING	FINISH	CONTROLS / OPTIONS
OLA1	150W	UNVL	40	4	SQ	***	
OLA1 = Optec LED Area Light	080 = 80W 120 = 120W 150 = 150W	UNVL = 120-277V UNVH =347-480V	30 = 3000K 40 = 4000K 50 = 5000K	2 = Type 2 3 = Type 3 3L = Type 3 Left 3R = Type 3 Right 4 = Type 4 4L = Type 4 Left 4R = Type 4 Right 5 = Type 5	SQ = Square Pole[1] RD = Round Pole[1] WM = Wall Mount[1,2] TA = Tenon Adapter[1] LK = Leveling Kit[3]	WH = White BZ = Dark Bronze BL = Black NA = Natural Aluminum GM = Graphic Metallic CF = Custom Finish	OSWS = Occupancy Sensor (WattStopper[4]) PR3 = Photocell Receptacle 3-pin PR5 = Photocell Receptacle 5-pin PR7 = Photocell Receptacle 7-pin WCS = Wireless Control (Synapse)[5] BCS = Backlight Control System SF = Single Fuse (120V, 277V, 347V) DF = Double Fuse (220V, 240V, 480V) TLSC = Twist Lock Shorting Cap 924 = UL924 Relay TL12 = Twist Lock Photocell 120V[6] TL24 = Twist Lock Photocell 240V[6] TL27 = Twist Lock Photocell 277V[6] TL28 = Twist Lock Photocell 208V[6] TL34 = Twist Lock Photocell 347V[6] TL48 = Twist Lock Photocell 480V[6]

1 - For details, reference accessory data sheet.
2 - WM option requires SQ pole mount bracket (ordering example: SQ-WM)
3 - Leveling kit adjusts up by 5 degrees or down by 5 degrees
4 - OSWS = For Wattstopper PIR sensor information and options contact factory
5 - WCS = for Synapse wireless controls information and options contact factory for details
6 - Photocell default = Fail in "ON" mode (unless otherwise specified)

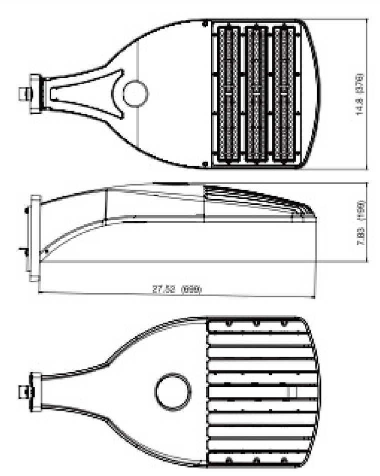
PHOTOMETRIC PERFORMANCE

Isofootcandle plots = OLA1 120W model in 5000K CCT @ 30' mounting height. Distances are in units of mounting height.



Published luminaire photometric testing performed to IESNA-79-08 standards

DIMENSIONS, WEIGHTS & EPA



Wattage	80W	120W	150W
Length (inches / mm)	27.52 / 699	27.52 / 699	27.52 / 699
Width (inches / mm)	14.8 / 376	14.8 / 376	14.8 / 376
Height (inches / mm)	7.83 / 199	7.83 / 199	7.83 / 199
Weight (lbs / kg)	19.4 / 8.8	19.4 / 8.9	20 / 9.1

Wattage	Effective Projected Area (EPA) in ft²				
80	0.96	1.92	1.81	2.77	3.63
120	0.96	1.92	1.81	2.77	3.63
150	0.96	1.92	1.81	2.77	3.63

Optec LED LIGHTING 13040 West Lisbon Road, Unit 400, Brookfield, WI 53005 P: 888-743-5220 optecledlighting.com
Revised 5/5/21

Optec LED LIGHTING

Catalog:
Project:
Type: B

Area Series (Small)

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FEATURES

- LED Brand: Nichia
- Color Temperatures: 4000K & 5000K (Other CCT's are available upon request)
- CRI: 70
- Lumen Maintenance: L70 = 50,000 hours
- Full Cutoff (meets IDA criteria)
- Operating Temperature: -40˚C (-40˚F) to 40˚C (104˚F)
- Durable All Aluminum Pressure Die Cast Housing
- Powder Coat Finish
- Salt Fog Tested to 2500 hours / per ASTM B117
- IP65 Rated (wet listed / NEMA IEC 60529)
- Mounting: Universal Round or Square Pole, Wall Surface Box

ELECTRICAL SPECIFICATIONS

- Power Input: 120-277V (347-480V Optional)
- Power Factor: > 0.95
- THD: < 15%
- Surge Protection: 20 kV
- Control Options: 0-10V Dimming standard (Photocell and Occupancy Sensors Optional)

TESTS & CERTIFICATIONS

- ETL (UL 1598, UL 8750, NEMA C82.77)
- CSA (C22.2 No.250.0)
- RoHS Compliant
- Design Lights Consortium (Premium)
- 3G Vibration tested (ANSI C136.31)

WARRANTY

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Type 3	OLA1-080	11,600	11,760	2 *	0	2
	OLA1-120	16,561	16,920	3 *	0	2
	OLA1-150	20,549	21,000	3 *	0	2
Type 3L	OLA1-080	10,799	10,960	3 *	0	3
	OLA1-120	15,960	16,199	3 *	0	3
	OLA1-150	19,800	20,249	4 *	0	3
Type 3R	OLA1-080	10,799	10,960	3 *	0	3
	OLA1-120	15,960	16,198	3 *	0	3
	OLA1-150	19,800	20,250	4 *	0	3
Type 4	OLA1-080	10,596	10,794	2 *	0	2
	OLA1-120	15,472	15,712	2 *	0	2
	OLA1-150	19,046	19,349	3 *	0	2
Type 4L	OLA1-080	10,800	10,960	3 *	0	3
	OLA1-120	16,080	16,320	3 *	0	3
	OLA1-150	19,800	20,250	4 *	0	4
Type 4R	OLA1-080	10,800	10,960	3 *	0	3
	OLA1-120	16,080	16,320	3 *	0	3
	OLA1-150	19,781	20,250	4 *	0	4
Type 5	OLA1-080	10,032	10,185	4	0	3
	OLA1-120	15,049	15,278	4	0	3
	OLA1-150	18,811	19.097	5	0	4

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Voltage (V)	Current (A) 80W	Current (A) 120W	Current (A) 150W
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347	0.23	0.35	0.43
480	0.17	0.25	0.31

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Optec LED LIGHTING

Area Series (Small)

ORDERING INFORMATION

EXAMPLE: OLA1-120-UNVL-50-4-SQ-BZ-PR-TL12

SERIES	WATTAGE	VOLTAGE	COLOR TEMP	DISTRIBUTION	MOUNTING	FINISH	CONTROLS / OPTIONS
OLA1	150W	UNVL	40	3	SQ	***	
OLA1 = Optec LED Area Light	080 = 80W 120 = 120W 150 = 150W	UNVL = 120-277V UNVH =347-480V	30 = 3000K 40 = 4000K 50 = 5000K	2 = Type 2 3 = Type 3 3L = Type 3 Left 3R = Type 3 Right 4 = Type 4 4L = Type 4 Left 4R = Type 4 Right 5 = Type 5	SQ = Square Pole[1] RD = Round Pole[1] WM = Wall Mount[1,2] TA = Tenon Adapter[1] LK = Leveling Kit[3]	WH = White BZ = Dark Bronze BL = Black NA = Natural Aluminum GM = Graphic Metallic CF = Custom Finish	OSWS = Occupancy Sensor (WattStopper[4]) PR3 = Photocell Receptacle 3-pin PR5 = Photocell Receptacle 5-pin PR7 = Photocell Receptacle 7-pin WCS = Wireless Control (Synapse)[5] BCS = Backlight Control System SF = Single Fuse (120V, 277V, 347V) DF = Double Fuse (220V, 240V, 480V) TLSC = Twist Lock Shorting Cap 924 = UL924 Relay TL12 = Twist Lock Photocell 120V[6] TL24 = Twist Lock Photocell 240V[6] TL27 = Twist Lock Photocell 277V[6] TL28 = Twist Lock Photocell 208V[6] TL34 = Twist Lock Photocell 347V[6] TL48 = Twist Lock Photocell 480V[6]

1 - For details, reference accessory data sheet.
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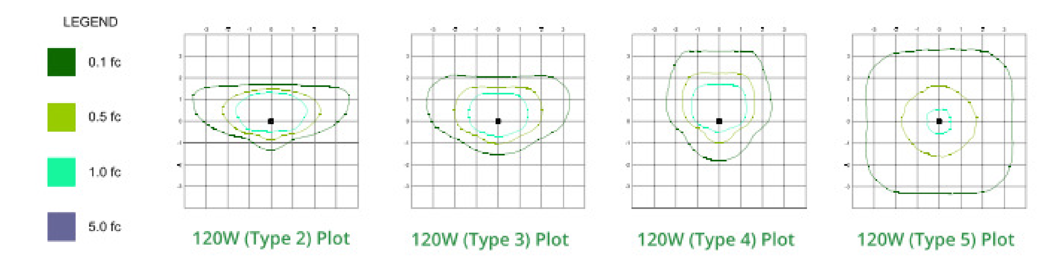
4 - OSWS = For Wattstopper PIR sensor information and options contact factory
5 - WCS = for Synapse wireless controls information and options contact factory for details
6 - Photocell default = Fail in "ON" mode (unless otherwise specified)

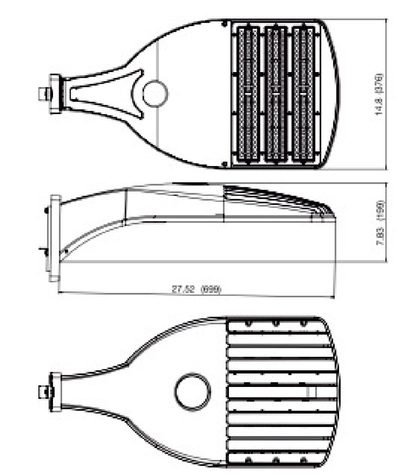
PHOTOMETRIC PERFORMANCE

Isofootcandle plots = OLA1 120W model in 5000K CCT @ 30' mounting height. Distances are in units of mounting height.



Published luminaire photometric testing performed to IESNA-79-08 standards

DIMENSIONS, WEIGHTS & EPA



Wattage	80W	120W	150W
Length (inches / mm)	27.52 / 699	27.52 / 699	27.52 / 699
Width (inches / mm)	14.8 / 376	14.8 / 376	14.8 / 376
Height (inches / mm)	7.83 / 199	7.83 / 199	7.83 / 199
Weight (lbs / kg)	19.4 / 8.8	19.4 / 8.9	20 / 9.1

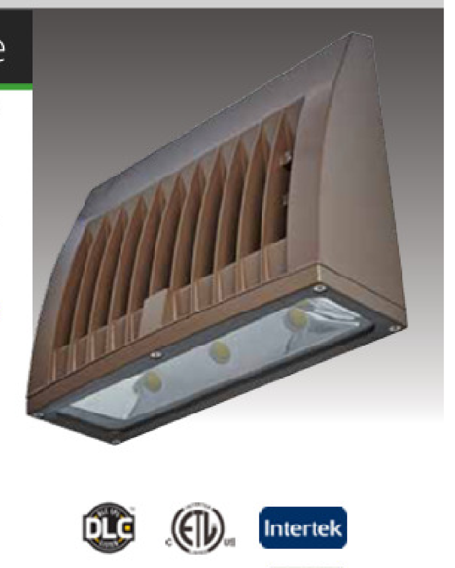
Wattage	Effective Projected Area (EPA) in ft²				
80	0.96	1.92	1.81	2.77	3.63
120	0.96	1.92	1.81	2.77	3.63
150	0.96	1.92	1.81	2.77	3.63

Optec LED LIGHTING 13040 West Lisbon Road, Unit 400, Brookfield, WI 53005 P: 888-743-5220 optecledlighting.com
Revised 5/5/21

Optec LED LIGHTING

Catalog:
Project:
Type: C

LED Wallpack Series 3 / Large



The OLWP3L series is a stylish wallpack that fits within todays accepted design form factors. Excellent optical performance is achieved with Luminus Brand COB LED arrays and PC metalized specular reflectors. Luminus arrays are ideal light sources due to low thermal resistance, excellent heat transfer and uniform spreading. Use of 95% efficient tempered glass lenses minimizes light loss. LED life is assured through efficient thermal coupling and dissipation via a durable, pressure die cast, low-copper alloy, aluminum housing. Engineered to last, all gaskets are anti-UV, anti-aging with no harmful out-gassing. Luminaries are available with a number of options including alternate CCT choices, color finishes, photocells and brackets.

FEATURES

- Luminus Brand COB Arrays
- Color Temperature: 4000K & 5000K (other CCT's are available upon request)
- CRI: 70
- Lumen Maintenance: L70 = 50,000 hours (at 25° C)
- Full Cutoff (meets IDA criteria)
- Operating Temperature: -40C (-40F) to 40C (104F)
- Durable All Aluminum Pressure Die Cast Housing
- Long Life Durable Powder Coat Finish (custom/other RAL colors are available upon request)
- IP65 Rated (wet listed)
- Mounting: Wall Surface (Other mounting options are available.)

ELECTRICAL SPECIFICATIONS

- Power Input 90-305V (347V & 480V optional)
- Drive Currents: 50W = 1200 mA
  80W = 1875 mA
- Efficacy: 50W = 108.36 lm/W
  80W = 108.82 lm/W
- Power Factor: > 95%
- THD: < 15%
- Surge Protection: 10 kV (optional)
- Control Options: 0-10V Dimming, Button Photocell

TEST & CERTIFICATIONS

- ETL (UL 1598)
- CSA (C22.2 No.250.0)
- RoHS Compliant
- Design Lights Consortium (Standard)

WARRANTY

- 5 - Year warranty (Parts or Replacement)

PERFORMANCE SPECIFICATIONS

Lens Type	Model / Wattage	Lumens 4000K	Lumens 5000K
Type 4	OLWP3L - 050	5,149	5,149
	OLWP3L - 080	8,568	8,568

Drive Current	Wattage	Drive Current	Wattage
1200 mA	50	1875mA	80
Current (A) @ 120V	0.42	Current (A) @ 120V	0.67
Current (A) @ 208V	0.24	Current (A) @ 208V	0.38
Current (A) @ 240V	0.21	Current (A) @ 240V	0.33
Current (A) @ 277V	0.18	Current (A) @ 277V	0.29
Current (A) @ 347V	0.14	Current (A) @ 347V	0.23
Current (A) @ 480V	0.10	Current (A) @ 480V	0.17

Optec LED LIGHTING 1700 De Soto Place, Ontario, CA 91761 888-743-5220 optecledlighting.com

Optec LED LIGHTING

LED Wallpack Series 3 / Large

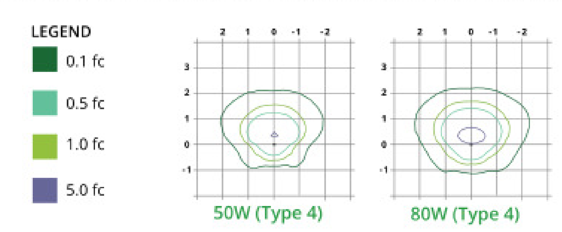
ORDERING INFORMATION

EXAMPLE: OLWP3L-050-UNV-50-4-SM-BZ-BP-SP

SERIES	WATTAGE	VOLTAGE	COLOR TEMPERATURE	DISTRIBUTION	MOUNTING	FINISH	CONTROL / OPTIONS
OLWP3L	050	UNV	40	4	SM	***	DM
Optec LED Wallpack (3 Generation Large)	050 = 50W (1200 mA) 080 = 80W (1875 mA)	UNV = 90-305V 347 = 347V 480 = 480V	40 = 4000K 50 = 5000K	4 = Type 4	SM = Surface Mount SF = Slip Fitter / Adjustable RA = Rigid Arm / Pole Mount	WH = White BZ = DK Bronze BL = Black SL = Silver CC = Custom Color	DM = 0-10V Dim BP = Button Photocell 120-277V SP = 10 kV Surge Protector

PHOTOMETRIC PERFORMANCE

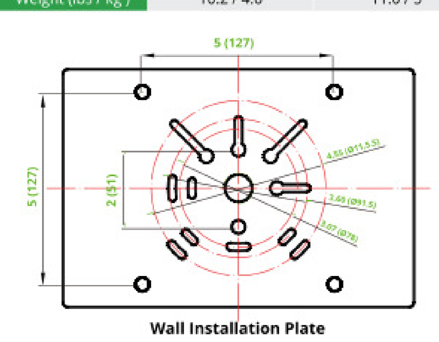
Isofootcandle plots = OLWP3L 50W and 80W models in 5000K CCT @ 25' mounting height. Distances are in units of mounting height.



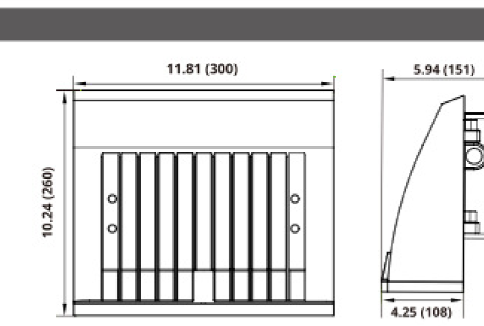
Published luminaire photometric testing performed to IESNA-79-08 standards

DIMENSIONS, WEIGHTS & MOUNTING

Wattage	50W	80W
Length (in" / mm)	11.81" / 300	11.81" / 300
Height (in" / mm)	12.04" / 260	12.04" / 260
Depth (in" / mm)	5.94" / 151	5.94" / 151
Weight (lbs / kg)	10.2 / 4.6	11.0 / 5



measurements: Inch (mm)



measurements: Inch (mm)

MOUNTING OPTIONS

Slip Fitter Rigid Arm

Optec LED LIGHTING 1700 De Soto Place, Ontario, CA 91761 888-743-5220 optecledlighting.com

*No alternates allowed without prior approval from lighting designer and engineer of record.

All light levels are approximate.
Values will vary due to actual LED/driver combinations, reflectances (currently set at 80/50/20), environmental conditions, and obstructions.
Calculations are based on our interpretation of information provided to us.
This design remains the property of Spectrum Lighting and may not be altered without written permission.

SPECTRUM lighting

VISUAL

WVRC Emergency Vet
Pewaukee, WI

Designer
BGG
Date
07/31/2023
Scale
1" = 40'-0"
Drawing No.

Summary

3 of 3

General:

1. Plans, calculations, and reports submitted for review (including electronic copies) shall be signed, sealed and dated by a registered by a registered Professional Engineer licensed in the State of Wisconsin.
2. Submittals must include electronic copies of construction plans, storm water management plan, and any models used during the design process.
3. Provide a copy of all required Wisconsin Department of Natural Resources (WDNR) and Department of Safety and Professional Services (DSPS) permits as they become available.
4. Provide a copy of all required Waukesha County permits prior to acceptance of the construction plans.

Construction Plans:

Sheet C002 – General Notes:

1. Revise General Note #6 to specify that 6 inches of topsoil should be placed. Done.
2. Include the "Winter Construction Site Erosion Control" notes from the City of Pewaukee Technical Standards in the construction plans. Done.
3. The construction sequence should provide additional details. The sequence should include installation of proposed basins, building construction, placement of pavement, and improvements within CTH J right-of-way. Construction sequence has been updated to include these details.
4. Rock excavation and dewatering may be necessary based on soil borings provided. Include notes outlining how these activities will take place if bedrock or groundwater is encountered. Note #13 outlines procedure for dewatering, if necessary.
5. Installation of the proposed entrance will require impacts to the existing roadway. Include details and notes outlining how paving and curb placement will take place. These need to align with Waukesha County requirements. General Notes #20 states the requirements for work within the existing roadway.
6. Include a note specifying that all slopes 4:1 or steeper must be stabilized with erosion control mat. Done, see General Notes #18.
7. Include a note specifying that the contractor is responsible for dust control and reference WDNR Technical Standard 1068. Done, see General Notes #19.

8. Include working hours for the City of Pewaukee in the general notes. These hours are 7:00 a.m. to 7:00 p.m. on weekdays. Work can only be performed on weekends or holidays with prior approval. Working hours for weekends/holidays are 8:00 a.m. to 7:00 p.m. Done, see General Note #21.

Sheet C101 – Site Plan:

1. The proposed entrance exceeds the maximum allowable width. Proposed commercial or industrial entrances shall not exceed 30 feet at the right-of-way and 36 feet at the roadway. Dimensions have been added to the plan. Driveway entrance has been changed and is now 36' wide. Grading has been updated to reflect these changes.
2. The site plan shows the future outline for this site to expand the proposed building. If this expansion were to take place, the proposed storm sewer would be below the building. Provide a note describing changes to the storm sewer which would be required if the future building expansion occurs. Notes added to site plan sheet detailing the removal of storm sewer under the future addition.
3. A concrete curb cut will be required along the east curb line near the proposed septic field (See Sheet C102 comments). Low point and corresponding curb cut has been added to the plans.
4. Identify that improvements within the CTH J right-of-way will be included in this project. A note has been added to see sheet C404 for all CTH J improvements.
5. Provide a wetland delineation report for mapped wetlands identified on the parcel. Wetland delineation map included in submittal.
6. Provide a table on this sheet showing the impervious area, pervious area, and ratio for the existing, proposed, and future conditions. Table has been added to the site plan.
7. The proposed site plan includes a septic field in the design. The City anticipates construction within the Sherwood Forest Subdivision, which will likely include a sanitary sewer extension within Kings Drive. This parcel abuts Kings Drive and would likely have a special assessment levied for the roadway and utility construction. Additionally, the parcel would be required to connect to the City's sanitary sewer system within 15 years following construction completion. Septic field to be designed by others. Future sanitary service will be considered during design of septic field system.

Sheet C102 – Grading Plan:

1. Adequate spacing is not provided between the back of the trash enclosure and the proposed 15-inch FES. The culvert pipe should be shifted to provide space, or the steep slope should be appropriately armored. Culvert has been moved north away from the trash enclosure and the swale has been extended in turn to ensure proper drainage.
2. Identify additional building and site linework as future or eliminate from this sheet. Grading shown does not reflect this future linework. Future site linework has been removed from the grading plan.
3. Proposed curb and gutter flange grades create a low point in the parking area north of the proposed dumpster enclosure. Revise grades or provide a curb cut at this location. Grading has been updated to create a low point with a corresponding curb cut.

4. Proposed curb and gutter flange grades near the parking at the front entrance are flat or back-pitched. Revise grades in this location to drain towards basin #1 as intended. Grading has been updated so that parking stalls flow towards Basin #1.
5. The slope of the southeast swale is less than 1 percent upstream and downstream of the proposed culvert. Revise this swale to have a minimum 1 percent slope. Swale has been revised to have a 1 percent slope.

Sheet C103 – Erosion Control Plan

1. Specify a location for the proposed tracking pad. Stone tracking pad has been added to the plan.
2. Show installation of riprap downstream of culverts and pond outlets on all sheets. Rip rap has been added to all sheets.
3. Show existing contours on erosion control plan. Existing contours have been added to the plan.
4. Include ditch checks along proposed swales including areas of concentrated flow created at toe of proposed slope. Ditch checks should also be installed upstream of all culverts. Ditch checks have been added to all swales and culverts at appropriate intervals.
5. Specify inlet protection type to be used. Type A should be used for all structures outside of the pavement, while type D should be used for all structures within the pavement. Inlet protections type has been specified on the plans.
6. Work is proposed within CTH J. Inlet protection should be included in storm structures immediately downstream from these improvements. Inlet protection has been added to both inlets directly downstream from the proposed work.
7. Silt fence should be extended to encompass proposed slopes leading out of the disturbance limits. Silt fence has been extended to encompass slopes.
8. Include dewatering notes and applicable details to the construction plans. See General Note #13 on sheet C002.

Sheet C401 – Pond Details – Basin #1:

1. Show 1-year, 2-year, 10-year, and 100-year storm elevations for the proposed basin in the cross section. Storm elevations have been added to cross section.
2. Show riprap at the proposed basin outlet pipe. Rip Rap shown at outlet pipe and called out in plan view.
3. Identify the emergency spillway in the plan view of the Basin #1 detail. The current contours shown do not reflect the 10-foot minimum emergency spillway width. Emergency spillway has been updated to be 20’ long and 10’ wide.
4. Specify the clay liner requirements. Include that the liner must be placed to the 10-year storm elevation. Clay liner notes have been added to the basin detail sheets.
5. Specify how and when the proposed basin will be stabilized. Stabilization notes have been added to the plan sheets and erosion control notes.
6. Include anti-seep collars on the Basin #1 outlet pipe. Anti-seep collar detail added and called out on pond detail plan view.
7. Show the contours for the proposed top of safety shelf and bottom of safety shelf. Safety shelf called out in plan view and contours labeled.

8. Include a trash grate on the proposed 4-inch orifice. Trash grate included in outlet structure detail.

Sheet C402 – Pond Details – Basin #2:

1. Show 1-year, 2-year, 10-year, and 100-year storm elevations for the proposed basin in the cross section. Storm elevations have been added to cross section.
2. Show riprap at the proposed basin outlet pipe. Rip Rap shown at outlet pipe and called out in plan view.
3. Identify the emergency spillway in the plan view of the Basin #2 detail. The current contours shown do not reflect the 10-foot minimum emergency spillway width. Emergency spillway called out and has a length of 20' and a width of 10'.
4. Specify the clay liner requirements. Include that the liner must be placed to the 10-year storm elevation. Clay liner notes have been added to the basin detail sheets.
5. Specify how and when the proposed basin will be stabilized. Stabilization notes have been added to the plan sheets and erosion control notes.
6. Include anti-seep collars on the Basin #2 outlet pipe. Anti-seep collar detail added and called out on pond detail plan view.
7. Show the contours for the proposed top of safety shelf and bottom of safety shelf. Safety shelf called out in plan view and contours labeled.
8. Include a trash grate on the proposed 4-inch orifice. Trash grate included in outlet structure detail.

Sheet C404 – Intersection Detail:

1. Asphalt pavement structure for the existing roadway would typically be 5 HT 58-28S surface course and 3 HT 58-28S binder course. This pavement structure must conform to Waukesha County requirements. Pavement structure has been updated.
2. All improvements within CTH J shall be approved by Waukesha County. Required permits must be included prior to construction plan approval. Permit is included in submittal package.

Sheet C501 – Construction Details:

1. Show the location and details for the proposed concrete washout on site. Concrete washout has been added to sheet C103, and a detail has been added to sheet C503.
2. Revise inlet protection detail to show type A and type D inlet protection. All inlet protection placed on site should be type A or type D. Inlet protections details for type A and D have been added to sheet C501.
3. Include a detail for the proposed orifice trash grate. Detail has been added to sheet C503.
4. Revise the end section and riprap detail to show placement of medium riprap following the flared end section. Detail has been updated from light riprap to medium riprap.

Sheet C502 – Construction Details:

1. A concrete apron should be included behind the proposed curb cuts to prevent undercutting of the curb and gutter.

2. A detail for a 4-inch underdrain is included on the sheet. Where is this underdrain intended to be installed? There is not a 4-inch underdrain in the plans, the detail has been removed from the plans.

Stormwater Management Plan

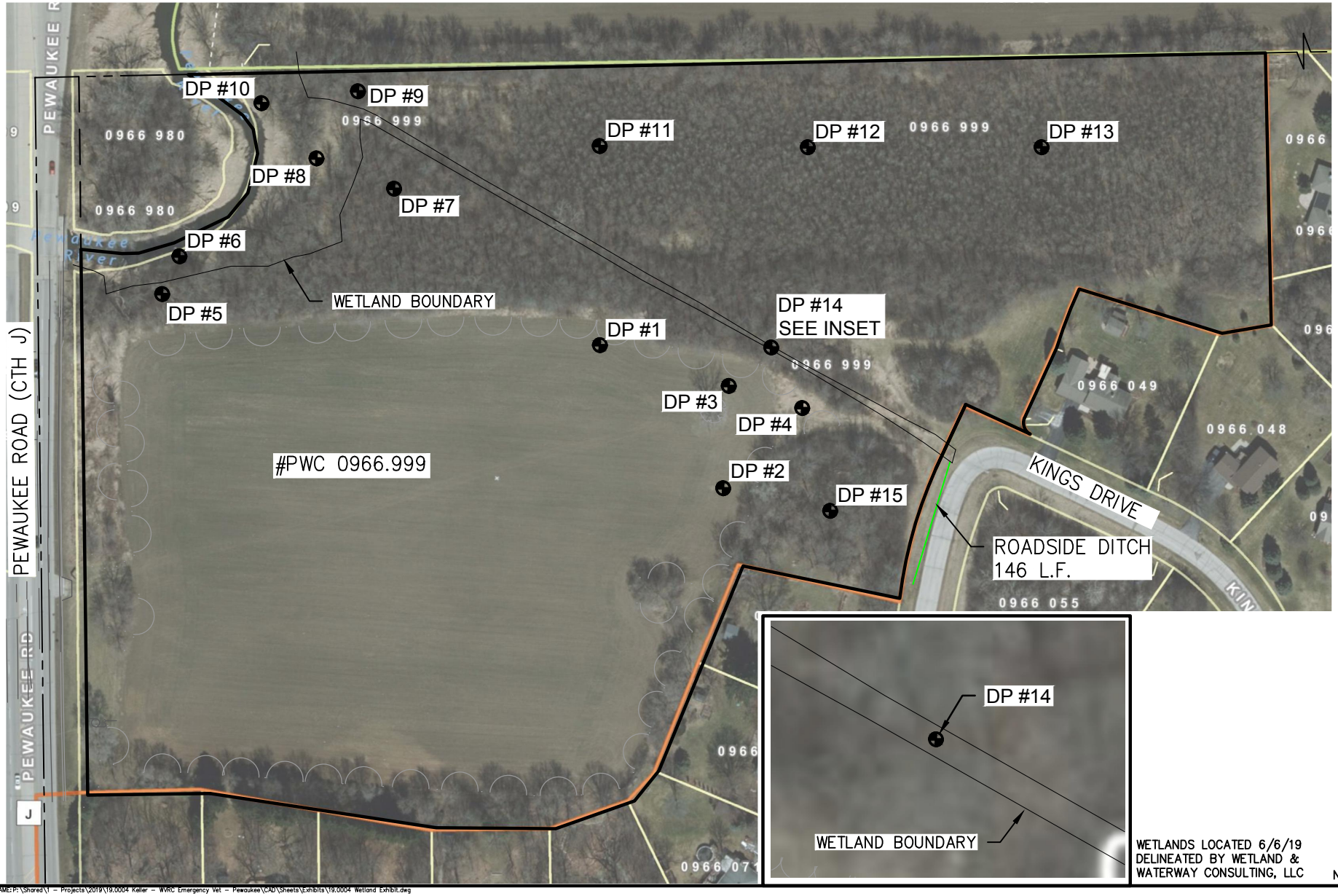
1. The following items were omitted from this submittal and need to be included with any future submittals:
    a. Electronic copies of any modeling files. We will include in submittal.
    b. Draft Stormwater Maintenance Agreement. We will include in submittal.
    c. Emergency spillway calculations showing the spillways can convey the 100-year undetained flow to their respective basin. We will include in submittal.
    d. WDNR permits and calculations. We will apply for NOI and submit when we receive it.
2. Revise the reference in the Analysis Methods from "Walworth County" to "Waukesha County". Updated reference to Waukesha County.
3. Revise the design rainfall values shown in Table 1 to match rainfall values in the City of Pewaukee Technical Standards.
   Table 1 has been updated to match City of Pewaukee Technical standards.
4. Submittals must include a scalable pre-development conditions exhibit, which shows all watersheds and watershed information, all time of concentration lines and data, and any other information pertinent to the proposed conditions modeling. Exhibit has been included in updated SWMP.
5. Submittals must include a scalable proposed conditions exhibit which shows all watersheds and watershed information, all time of concentration lines and data, and any other information pertinent to the proposed conditions modeling. Exhibit has been included in updated SWMP.
6. Revise the area analyzed for the HydroCAD modeling to include the entire parcel and any off-site drainage contributing to the parcel. WinSLAMM modeling should include the area of disturbance and any off-site drainage. Off-site drainage can be included in the WinSLAMM model with zero contaminants loading. Updated HydroCAD and WinSLAMM models to match. This way there is a direct comparison/similarity to the peak flow data and water quality data.
7. Limit the length of sheet flow to 100 feet in any time of concentration calculations. Sheet flow has been limited to 100 feet maximum.
8. Revise the Basin #1 and Basin #2 geometry to provide 1-foot of freeboard between the 100-year storm elevation in the basins and the emergency spillway, as outlined in the City of Pewaukee Technical Standards. 1' of freeboard has been achieved in both basins.
9. Revise the width of emergency spillways shown in plan view to provide a minimum width of 10 feet. Slopes between the top of the berm and emergency spillway shall be a maximum slope of 4:1. The gap between top of berms contours shall be a minimum of 18 feet to account for the spillway width and slopes. Emergency spillways have been updated to be 20' long and 10' wide.
10. Revise the proposed drainage areas to accurately reflect proposed grading. Multiple areas of proposed grading will not drain to either stormwater Best Management Practice (BMP). The HydroCAD and WinSLAMM should be revised to include the revised drainage areas. Additionally,

off-site drainage areas should be included as separate drainage areas. Updated proposed drainage areas to include undetained areas as part of the model.

11. Include an image in the WinSLAMM modeling results of the routing used within the WinSLAMM program. WinSLAMM routing diagram included in updated SWMP.
12. Provide an exhibit showing only the drainage areas included in the WinSLAMM modeling, as it will likely be different from the proposed drainage areas used for the HydroCAD modeling. Updated HydroCAD and WinSLAMM models to match. This way there is a direct comparison/similarity to the peak flow data and water quality data.
13. Revise the Basin #1 sharp-crested weir height and length to match the proposed design. Updated emergency spillway designs to match the plan.
14. Revise the Basin #2 sharp-crested weir height and length to match the proposed design. Updated emergency spillway designs to match the plan.
15. The report indicates that infiltration is not incorporated into the design due to shallow bedrock and the Hydraulic Soil Group of soils present onsite. Borings do not appear to indicate bedrock would hinder installation of infiltration practices. Filtering layers can be utilized if necessary. If a Maximum Extent Practicable (MEP) request is being made, the design team must complete the site evaluation process outlined in WDNR Technical Standard 1002, preferably utilizing a double-ring infiltrometer. Future submittals will need to include completed DSPS SBD-10793 forms and other documentation to support the MEP request. If a MEP request is granted, the site would still be required to implement vegetated swales or buffer strips to encourage infiltration on site. Historically silty clayey soils as described in the exiting soil borings are not conducive of infiltration. We will be submitting for an NOI and the wDNR is likely to give us an exemption on infiltration requirements due to the soil complex. We will follow up with wDNR coordination.
16. The 10-year storm peak elevation in Basin #1 is 843.91 and the downstream invert of the culvert leading to this basin is 842.95. Capacity calculations for this culvert must include a tailwater condition. Tailwater condition will be considered in calculation.

WETLAND EXHIBIT

TOTAL PROJECT AREA = 18.59 ACRES
TOTAL ACREAGE OF WETLANDS = 39,565 S.F.



WETLANDS LOCATED 6/6/19
DELINEATED BY WETLAND &
WATERWAY CONSULTING, LLC

19.0004
6/26/19
NOT TO SCALE

FILENAME: P:\Shared\1 - Projects\2019\19.0004 Keller - WVRC Emergency Vet - Pewaukee\CAD\Sheets\Exhibits\19.0004 Wetland Exhibit.dwg

WAUKESHA COUNTY DEPARTMENT OF PUBLIC WORKS

PERMIT NO. **A2019-29**

PERMIT FOR MINOR ALTERATIONS ALONG COUNTY TRUNK HIGHWAYS
PERMIT TO CONSTRUCT PRIVATE ACCESS OR PUBLIC ROAD ENTRANCE
PERMIT TO EXCAVATE AND/OR FILL ON HIGHWAY RIGHT OF WAY

Name and Address of Permitee

WVRC Veterinary Referral Center
360 Bluemound Road
Waukesha, WI 53188

Purpose of Proposed Work
Private driveway access for a Veterinary Center

County Trunk Highway **J**

Location **NW** 1/4 Sec. **26** T **7 N** R **19 E**

Pipe Size for Private or Public Road Access

Permit Expiration Date **11/1/2019**

Diameter: in. X in. Length: ft.

Apron Endwalls Required: **No**

Detailed Description of Work and/or Special Conditions

Construct access in accordance with the permit stipulations listed below as well as those on the attached conditions.

The proposed work has been inspected by a representative of the Waukesha County Department of Public Works, as provided by Section 86.07 (2) Wisconsin Statutes. A Permit therefore is granted, subject to the following conditions and any attached hereto.

1. **Payment of the permit fee in the amount of $820.00 Permit approved date: 6/11/2019**

2. The roadway shall be ke kept open for traffic on a minimum of one (1) lane in each direction at all times. There shall be no interference with traffic due to the placing of excavated material or machinery on the lanes kept open for traffic. Should such work be necessary, proper barricades, signs, lights, and flagmen shall be provided and maintained at all locations where construction and maintenance work interferes with the normal traffic use of the highway. All marking and signing provided for traffic control shall conform to the standards and specifications of the current use of the Manual of Uniform Control Devices, Part VI, Construction and Maintenance.

3. The Applicant, his successors or assigns, AGREES TO HOLD HARMLESS the County of Waukesha and its duly appointed agents and employees against any action for personal injury of property damage sustained by reason or exercise of this permit.

4. Any work performed by reason or exercise of this permit must comply with all Wisconsin laws and regulations as well as with all provisions of the Waukesha County Ordinance 146 56, as amended.

5. The entire cost of constructing, maintaining, removing, altering, or replacing the facility installed under this permit shall be the sole responsibility of the Applicant, his successors or assigns. The Department of Public Works does not assume any responsibility for the removal of clearance of snow, ice, or sleet of the opening of windrows of such material, upon any portion of any access point along any county trunk highway, even though snow, ice, or sleet, is deposited windrowed on said access point by its authorized representatives engaged in normal winter maintenance operations.

6. The Department of Public Works reserves the right to make such changes, additions and relocations with the statutory limits on the right of way as it may at any time be considered necessary to permit the relocation, reconstruction, widening, and maintaining of the highway, or to provide protection to life and properties along the highway.

7. All damages to the highway shall be repaired, including the roadway surface, shoulders, slopes, ditches, and so on, and shall further be restored to the equivalent of the original condition and accepted by the Director. The cost and expense of this work shall be the sole responsibility of the Applicant, his successor or assigns, for a period of two (2) years from the date of completion.

8. All disturbed areas within the highway right of way shall receive a minimum of four (4) inches of topsoil and shall be seeded (or sodded), fertilized, and mulched. Seed and fertilizer shall be applied at a rate of (2) pounds and ten (10) pounds per 1000 square feet respectively.

9. The slope of the driveway or public road shall be at least inches below the elevation of the edge of the pavement at a distance of feet away from it.

The Department of Public Works shall have access to the work at all times for the purpose of inspection. The completed work, including all highway restorations, shall be acceptable to the director or authorized representative.

Signature of Owner/Developer: _____ Date: 6/14/19

Approved: _____ Date: 6-11-19
Senior Civil Engineering Technician

Approved: _____ Date: 6/11/19

THE APPLICABLE CONDITIONS FOR THIS PERMIT ARE MARKED WITHIN THE APPROPRIATE PARENTHESES.

COMMERCIAL/INDUSTRIAL/INSTITUTIONAL DRIVEWAYS

(X) The driveway and approaches shall be constructed in accordance with the submitted plan prepared by Lynch & Associates

(X) The existing concrete curb and gutter shall be saw cut and removed to the next nearest joint outside of the actual required work limits. New concrete curb and gutter shall be placed in accordance with the attached details to form the new driveway approach. Felt expansion joint material, 3/4-inch, shall be placed at each end of the work limits. The contractor shall call the superintendent named below for an inspection of the installation.

	Superintendent	Telephone No.
( )	Rick Gillis	262 424-9008
( )	Neal Fjerstad	262 424-9006
( )	Hans Guderyon	262 424-9003
(X)	Dave Heil	262 424-9004

If the superintendent cannot be reached by the direct numbers listed above, the applicant may call the dispatcher at the Waukesha County Department of Public Works Main Shop at 548-7736 and leave a message for the superintendent to contact the permittee.

TRAFFIC CONTROL

(X) Traffic control for all work within the right of way of the County Trunk Highway shall be in accordance with the current State of Wisconsin Manual of Uniform Traffic Control Devices.

(X) All barricades, traffic control drums, and cones used for traffic control during nighttime operations or that are necessary to remain in place during hours of darkness shall be reflectorized.

(X) Through traffic shall be maintained over at least one (1) lane at all times during the construction operations allowed under this permit. Multi-lane roadways shall be required to have at least one (1) lane in each direction open to through traffic at all times. During non-working hours, all normal traffic lanes must be open to through traffic.

(X) The applicant shall construct the intersection of the County Trunk Highway and the commercial drive as shown on the submitted plan.

( ) The applicant shall construct a bypass lane for the proposed driveway as shown on the attached plan.

(X) The applicant shall construct a left turn intersection at the intersection of the County Trunk Highway and the subdivision road as shown on the submitted plan.

(X) The applicant may substitute the type of concrete curb and gutter to be used in the interior parking lot system of the development for the concrete curb and gutter, 36-inch, Type D specified on the intersection construction detail.

PAVEMENT PLACEMENT

(X) All existing pavements to be removed shall be full-depth saw cut prior to removal.

(X) All existing pavement markings to be removed shall be done by water blasting. Grinding is not accepted.

(X) All damaged, settled, or removed sections of concrete curb or concrete curb and gutter shall be replaced in accordance with the attached standard detail. At the beginning and ending points of the sections to be replaced, 3/4-inch expansion joint material shall be used.

(X) All construction within the right of way of the County Trunk Highway through the radius returns of the new intersection shall consist of a minimum of 6 inches of asphaltic concrete pavement on a base of 12 inches of crushed aggregate base course.

(X) All existing pavement markings that are disturbed by the construction operations shall be restored or replaced in kind. In the case of a partial reconstruction of the county trunk highway, the applicant or the engineering firm responsible for the preparation of the construction plans shall prepare a pavement-marking plan for the re-establishment of the proper pavement markings.

TYPICAL SECTION

(X) The proposed work for the intersection and bypass lane shall match the existing typical section of the County Trunk Highway.

( ) The proposed work for the partial reconstruction of the County Trunk Highway and/or the intersection shall have the following typical section:

Item	Dimension / Slope
(X) Lane width	12'
(X) Shoulder width	3'
(X) Foreslope grade	4 : 1
(X) Ditch slope	6 : 1
(X) Ditch width	6'
(X) Backslope grade	4 : 1, 2-1/2 : 1 max.
(X) Terrace width behind curb	5'
(X) Terrace slope	+ 0.04 ft./ft.

RESTORATION

(X) Any damaged pavement cause during construction shall be repaired by the applicant. All existing pavements to be removed shall be full-depth saw cut prior to removal.

(X) The applicant or their contractor shall take measures to ensure that the roadway pavement is kept clean of mud, dirt, or stones caused by trucking operations during construction.

(X) The gravel shoulder along the county highway shall be restored in kind with crushed aggregate base course if disturbed during construction.

(X) All existing drainage patterns must be maintained and restored if disturbed by construction operations.

(X) All grassed areas shall be replaced with a minimum of four (4) inches of topsoil, seed, fertilizer, and mulch.

(X) To protect the ditches to be constructed under this permit, the applicant shall use one or more of the following methods of restoration and erosion control:

(X) Minimum width of 8 feet of excelsior erosion mat in ditch bottom and backslope
( ) Minimum width of 8 feet of reinforced sod
( ) Minimum width of 8 feet of riprap with Type R geotextile fabric

ADDITIONAL WORK

(X) The applicant shall obtain all required State, County, and Municipal erosion control permits.

(X) The applicant shall ensure that proper erosion control measures are implemented at all times before, during, and after construction activities until all disturbed areas have achieved sustained growth.

(X) The applicant's construction engineer shall not deviate from the approved plan without the Waukesha County Department of Public Work's consent.

(X) The applicant shall repair and/or replace any pipe underdrain that is damaged during construction of the new driveway.

(X) Granular backfill is required for all storm sewer excavation and backfill.

A COVENANT
REGARDING THE ISSUANCE OF A
CONDITIONAL USE PERMIT
BY THE
CITY OF PEWAUKEE

TAX KEY NUMBER(S) OR PARCEL(S) INVOLVED: **CONDITIONAL USE PERMIT: NO. CUP-23-9-1**

PWC 0966999

Recording area

Name & Return Address

City of Pewaukee
W240N3065 Pewaukee Rd
Pewaukee, WI 53072

LEGAL DESCRIPTION:

N1/2 NW1/4 SEC 26 T7N R19E :: EX DOC #199175 :: EX DOC #0426517 :: EX SHERWOOD FOREST :: EX SHERWOOD FOREST ADDITION NO 1

PERSON(S), AGENT(S) OR CORPORATION(S) PETITIONING FOR PERMIT:

WVRC

WHEREAS, It is understood by all parties to this covenant that Section 62.23 of WIS. Statutes prescribes the legal basis for the granting of a conditional use permit by a City and Chapter 17 of the City Codes and Ordinances provides for the issuance of such permits as well as the standards by which all such uses will be measured; and,

WHEREAS, The City Plan Commission has held a meeting on September 21, 2023; has reviewed the various elements of the petitioner's proposal; and has recommended that a Conditional Use Permit be granted to the above-named petitioner for the property/parcel identified above; and,

WHEREAS, The City Common Council held a public hearing meeting on October 2, 2023.

NOW, THEREFORE, let it be known that the City Common Council, by its action on October 2, 2023 has, hereby, granted a Conditional Use Permit for the following use(s):

Development of an emergency vet clinic.

FURTHER, such approved use of the above designated parcel(s) are hereby allowed based on the following conditions being continually met:

DRAFT

1. The applicant shall provide a final set of updated plans to reflect the B-4 District development standards.
2. Approval of the project is subject to final grading, erosion control and storm water management plans and shall be approved by the Engineering Department prior to any land disturbance.
3. The drive that serves the future parking areas and building addition shall be paved at the time the addition is approved and permitted by the City.
4. The development and City approval shall be contingent upon Waukesha County approval of the proposed access location on Pewaukee Road (CTH J).
5. The property owner shall be required to connect to public sanitary sewer facilities as soon as they become available and shall not object to the connection or any related sewer extension assessments.
6. The Landscape Plan shall be revised to contain a third variety of evergreen tree. It is also recommended that the proposed Norway Maple trees be replaced with a native species.
7. The light poles shall have a maximum height of 15-feet with a 3-foot base and lights will be dimmed to 50% at 9:00 p.m.

The parties hereto, namely the City of Pewaukee and the Equitable Owner of the property for which this conditional use has been sought, set their signatures or the signatures of their representatives below, thereby agreeing to the provisions and conditions set forth in this covenant.

_____	_____
Attest:	Signature of equitable owner
	_____
	Date
_____	_____
Kelly Tarczewski City Clerk	Steve Bierce Mayor, City of Pewaukee
	_____
	Date

State of Wisconsin
County of Waukesha

Signed or attested before me on _____, 2023 by Steve Bierce, Mayor and Kelly Tarczewski, Clerk.

(Seal)

_____
Ami Hurd
My Commission expires _____

This instrument was drafted by Ami Hurd, Deputy Clerk

DRAFT

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 6.

DATE: September 21, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding the Site and Building Plans for KD Glass for Property Located at W227 N4755 Duplainville Road for the Purpose of Constructing Two Proposed Building Additions and Related Site Modifications (PWC 0866997004)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

KD Glass staff report 9.21.23

KD Glass site & building plans

KD Glass staff comment responses

KD Glass lighting cutsheets

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of September 21, 2023

Date: September 12, 2023

Project Name: KD Glass Site & Building Plan Review Amendment

Project Address/Tax Key No.: W227N4755 Duplainville Rd./PWC 0866997004

Applicant: KD GLASS LLC

Property Owner: KD GLASS LLC

Current Zoning: M-2 Limited Industrial District

2050 Land Use Map Designation: Manufacturing/Fabrication/Warehousing

Use of Surrounding Properties: Lindsay Rd to the south, Wilhar Rd to the west, Duplainville Rd to the east, and Village of Lisbon to the north.

Project Description/Analysis

The applicant has submitted a Site & Building Plan Review Application for two proposed building additions and related site modifications for the property located at W227N4755 Duplainville Road.

The subject property has an area of approximately 10.2 acres and currently consists of a 48,384 square foot industrial building and 8,500 square foot office. The site also includes a large one-story accessory building used as a garage for storage. The property is zoned M-2-Limited Industrial District and is designated as Manufacturing/Fabrication/Warehousing on the City's Year 2050 Land Use/Transportation Plan map.

The applicant is proposing a 22,080 square foot addition extending north from the existing building. This addition includes new overhead doors on the north and west sides of the building. Otherwise, building design and materials are consistent with the current building.

The office addition, located on the south and east side of the building and has an area of 2,769 square feet. The office addition is also consistent with the design and materials of the existing building.

Additional site changes include an employee patio area, new drives around the larger building addition, landscaping, lighting, and a storm water management plan. No additional parking is being proposed.

The Landscape Plan consists of 3 Evergreen Trees, 2 Ornamental Trees, and a variety of deciduous shrubs, evergreen shrubs, ornamental grass, and perennials. Three existing trees would be transplanted to a new location near the proposed stormwater pond, along Duplainville Road. *Staff recommends that additional plantings be provided within the open area between the storm water pond and truck turnaround on the north end of the site*. The applicant noted concerns regarding visibility for drivers; however, staff finds plantings, even if located closer to the north and west sides of the pond, would still

provide additional screening of the paved area north of the building without interfering with needed visibility. Note staff is not requesting that plantings be installed directly around the truck turnaround area.

The Lighting Plan consists of parking lot lighting and building lighting. The fixtures are under the allowed wattage of 150. Note that the footcandles are greater than 0.0 at the northeast property line. There is an existing tree line along the west side of the property, but it should be noted that there is an existing single-family residence on the west side and north end of Wilhar Road. *Staff recommends that the applicant be required to review the existing tree line onsite with staff, prior to construction, and plant additional trees as needed*. Staff would look to require trees to fill any gaps within the tree line and require replacement of any dead, dying or diseased trees.

Recommendation

A motion to approve the Site & Building Plan Review Application submitted by KD Glass LLC for the property located at W227N4755 Duplainville Road, subject to the staff recommended conditions contained within this report.

KLEIN DICKERT MILWAUKEE

KD NEW PEWAUKEE FACILITY
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

PROJECT DATA

LOT AREA TOTAL	445,905 SQ FT
GROUND FLOOR AREA EXISTING....	60,312 SQ FT
GROUND FLOOR AREA NEW.....	24,849 SQ FT
TOTAL.....	85,161 SQ FT
IMPERVIOUS SURFACE	173,537 SQ FT 39%
BUILDINGS - 85,161 SQ FT	
CONCRETE/PAVING 88,376 SQ FT	
GREEN SPACE	272,368 SQ FT 61%
IMPERVIOUS AREA PERMITTED.....	M-2 ZONING 50%
GOVERNING CODE	WISCONSIN ADMINISTRATIVE CODE (2015 INTERNATIONAL BUILDING CODE)
OCCUPANCY	F-2; B-1 & S-2
CONSTRUCTION TYPE	III-B
FULLY SPRINKLERED	NFPA 13 (EXISTING MANUFACTURING AND ALL OFFICE AREA)
UNSPRINKLERED.....	NEW STORAGE ADDITION

CIVIL

REV	
C001	SITE SURVEY
C002	EROSION CONTROL PLAN
C100	SITE PLAN
C200	GRADING PLAN
C300	UTILITY PLAN
C400	EROSION CONTROL DETAILS
C401	DETAILS
C402	DETAILS
C500	SPECIFICATIONS
C501	SPECIFICATIONS

LANDSCAPE

REV	
L100	OVERALL LANDSCAPE PLAN
L101	LANDSCAPE ENLARGEMENT
L102	LANDSCAPE ENLARGEMENT
L200	LANDSCAPE DETAILS
L300	LANDSCAPE SPECIFICATIONS

SITE DEVELOPMENT

REV	
DD0.0	SITE LIGHTING PLAN
DD1.0	SITE PLAN
DD2.0	OVERALL GROUND FLOOR PLAN
DD2.1	ENLARGED GROUND FLOOR PLAN - OFFICE AREA
DD3.0	EXTERIOR ELEVATIONS
DD3.1	EXTERIOR ELEVATIONS
DD 3.2	ENLARGED OFFICE ELEVATIONS

CSD
STRUCTURAL ENGINEERS
EXPERTISE • INNOVATION • EXCELLENCE
csd-eng.com
MILWAUKEE
8989 N Port Washington Rd
Milwaukee, WI 53217
P: (414) 351 5588
DENVER
5600 S Quebec St., Suite 110D
Greenwood village, CO 80111
P: (303) 662 0665

KD GLASS
Klein-Dickert Milwaukee, Inc.

PRELIMINARY DRAWINGS FOR PLAN COMMISSION SUBMITTAL - NOT FOR CONSTRUCTION

KLEIN DICKERT MILWAUKEE
KD NEW PEWAUKEE FACILITY
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

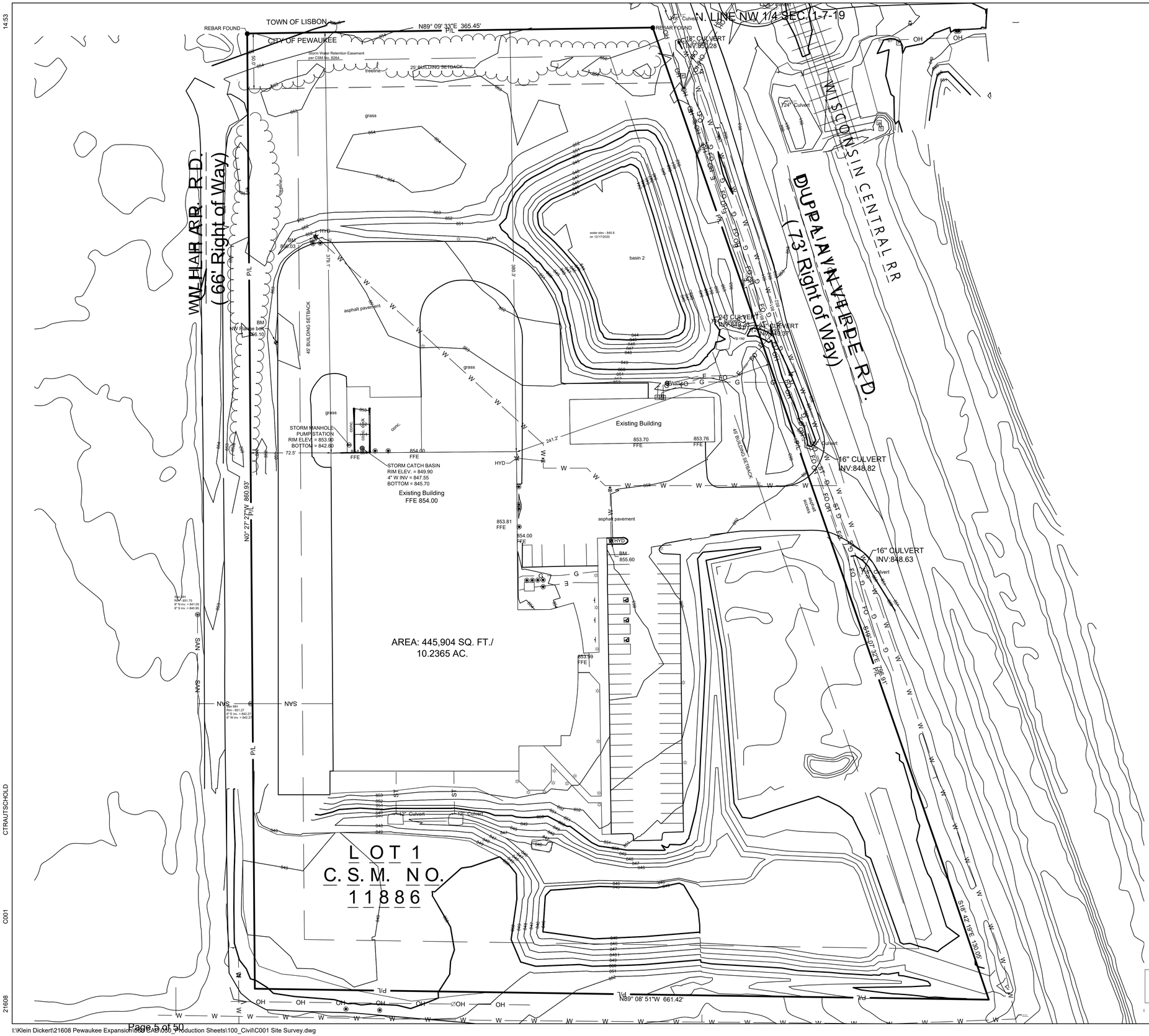
REV	DESCRIPTION	DATE	BY

SHEET TITLE:
TITLE SHEET

CSD No: J221125MTB
DATE: 9.11.2023
CHECKED BY: CSD
SHEET No.:
DRAWN BY: JCF

T1

© COPYRIGHT 2018 COMPUTERIZED STRUCTURAL DESIGN S.C.
Plot Date: 9/8/2023 6:15:50 AM



LEGEND:

	SECTION 1/4 SECTION LINE
	PROPERTY LINE
	EASEMENT
—X—X—	CHAIN LINK FENCE
	GUARD RAIL
	METAL FENCE
	WOOD FENCE
	TREE LINE
OH	OVERHEAD UTILITY LINE
E	ELECTRIC
T	TELEPHONE
FO	FIBER OPTIC
CTV	CABLE TV
SAN	SANITARY SEWER
FS	FORCE MAIN
ST	STORM SEWER
W	WATER MAIN
G	GAS
670	EXISTING CONTOUR
WET	WETLAND
FP	FLOODPLAIN
UNKNOWN MANHOLE	IRON PIPE FOUND/SET
SANITARY MANHOLE	REBAR FOUND/SET
STORM MANHOLE	CHISELED CROSS FOUND/SET
ELECTRIC MANHOLE	PK NAIL FOUND/SET
MMSD MANHOLE	SPIKE/NAIL
TELEPHONE MANHOLE	MONUMENT
CLEANOUT	BENCHMARK
CATCH BASIN	SIGN
CATCH BASIN (ROUND)	PARKING METER
ROOF DRAIN	FLAG POLE
CULVERT END	DECIDUOUS TREE
HYDRANT	CONIFEROUS TREE
WATER VALVE	BUSH
GAS VALVE	POST
GAS METER	SOIL BORING
ELECTRIC METER	TRAFFIC SIGNAL
UTILITY PEDESTAL	LIGHT POLE
HANDHOLE	UTILITY POLE
VENT	GUY WIRE
MONITORING WELL	GUY POLE

GENERAL NOTES:

1. THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

2. VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

3. DRAWING IS BASED ON FIELD SURVEY COMPLETED BY THE SIGMA GROUP ON JANUARY 2023.

4. DATUM FOR THE PROJECT SURVEY IS USGS NAVD88. BENCHMARK FOR THE PROJECT SURVEY IS THE NW FLANGE BOLT ON HYDRANT, NORTHWEST OF EXISTING BUILDING.

5. CONTRACTOR TO VERIFY EXISTING CONDITIONS, CONTACT ENGINEER WITH DISCREPANCIES.

THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS MAP IS BASED ON FIELD MARKINGS AND INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED.

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE
WIS STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE
MILW. AREA 259-1181

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

GRAPHIC SCALE
0 40 80

PEWAUKEE EXPANSION
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

SITE SURVEY

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023
CITY RESUBMITTAL	09/11/2023

SCALE:	1"=40'
PROJECT NO:	21608
DESIGN DATE:	----
PLOT DATE:	9/7/2023
DRAWN BY:	JTR
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	C001

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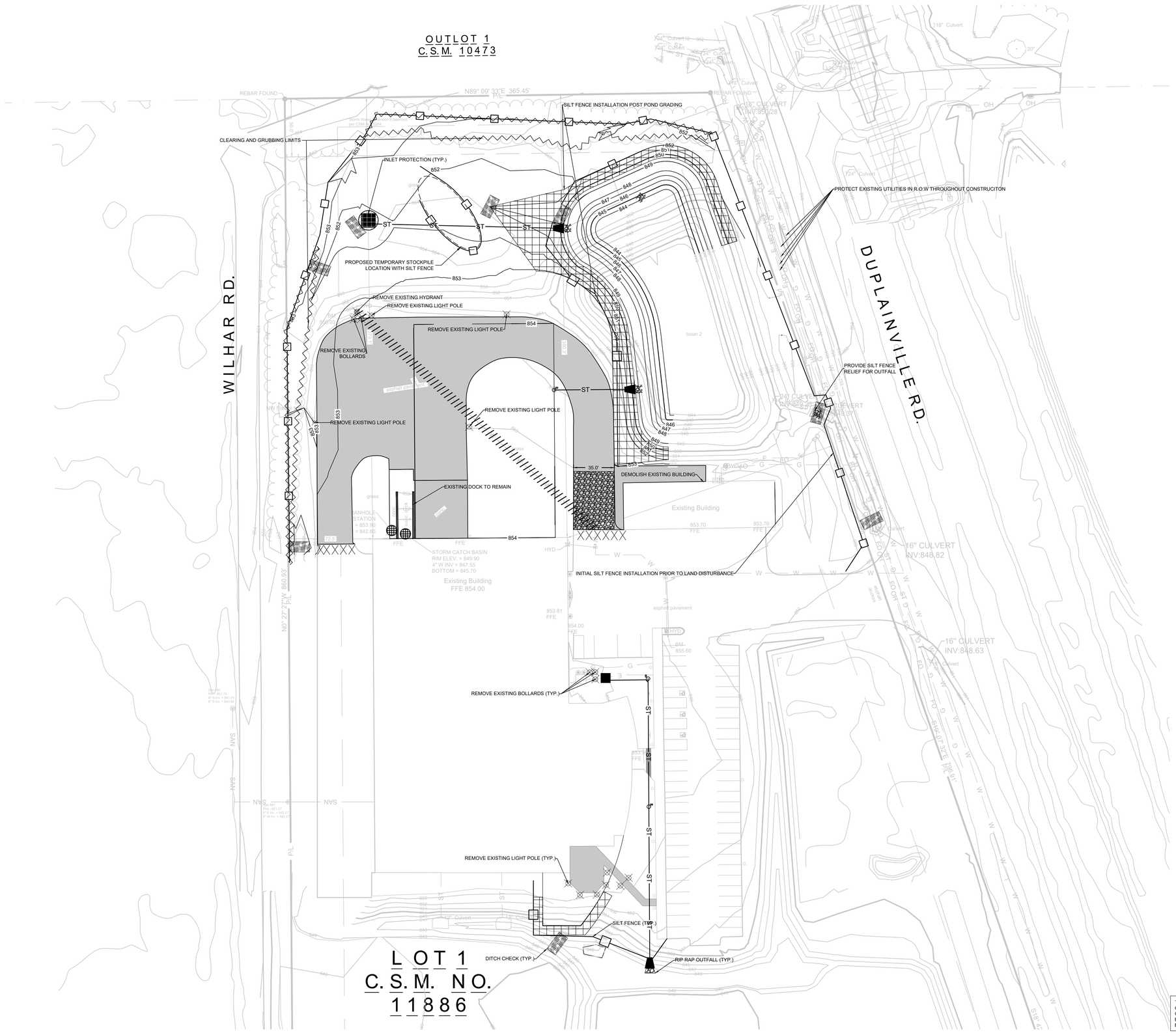

LEGEND:

C C400	PROPOSED SILT FENCE
E C400	PROPOSED INLET PROTECTION, TYPE D
A C400	PROPOSED TRACKING PAD
B C400	PROPOSED DITCH CHECK EROSION BALES
D C400	PROPOSED EROSION MATTING WISDOT APPROVED CLASS 1 TYPE B
5	EXISTING CONTOUR
5	PROPOSED CONTOUR
	UTILITY REMOVAL
	SAWCUT
	CLEAR AND GRUB LIMITS
	STRUCTURE REMOVAL
	PAVEMENT REMOVAL

GENERAL NOTES:

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3. WORK TO BE COMPLETED IS INDICATED IN BOLD TYPE LINES AND EXISTING CONDITIONS ARE INDICATED BY LIGHT TYPE LINES.
4. ELECTRONIC CIVIL FILES ARE AVAILABLE UPON WRITTEN REQUEST. DO NOT USE ELECTRONIC CIVIL FILES TO LAYOUT FOUNDATIONS, COLUMN LINES, LIGHT POLES, OR OTHER NON CIVIL SITE WORK. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF BUILDING AND ARCHITECTURAL FEATURES.
5. SEE SHEET C400 FOR A COMPLETE LIST OF EROSION CONTROL NOTES AND DETAILS. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO START OF LAND DISTURBING ACTIVITIES.
6. DO NOT BEGIN LAND DISTURBING ACTIVITIES UNTIL AN EROSION CONTROL PERMIT IS OBTAINED FROM LOCAL JURISDICTION.
7. CONSTRUCTION TRAFFIC ENTERING AND EXITING THE SITE SHALL USE EXISTING ENTRANCE AND PROPOSED TRACKING PAD LOCATION THROUGHOUT CONSTRUCTION.
8. RESTORATION OF UTILITY REMOVALS SHALL BE DONE IN ACCORDANCE WITH THE CITY OF PEWAUKEE AND/OR THE CITY ENGINEER.

THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS MAP IS BASED ON FIELD MARKINGS AND INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED.

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Fax: 414-643-4210

GRAPHIC SCALE 0 40 80

PEWAUKEE EXPANSION
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

EROSION CONTROL

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023
CITY RESUBMITTAL	09/11/2023

SCALE:	1"=40'
PROJECT NO:	21608
DESIGN DATE:	----
PLOT DATE:	2023.09.07
DRAWN BY:	JTR
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	C002

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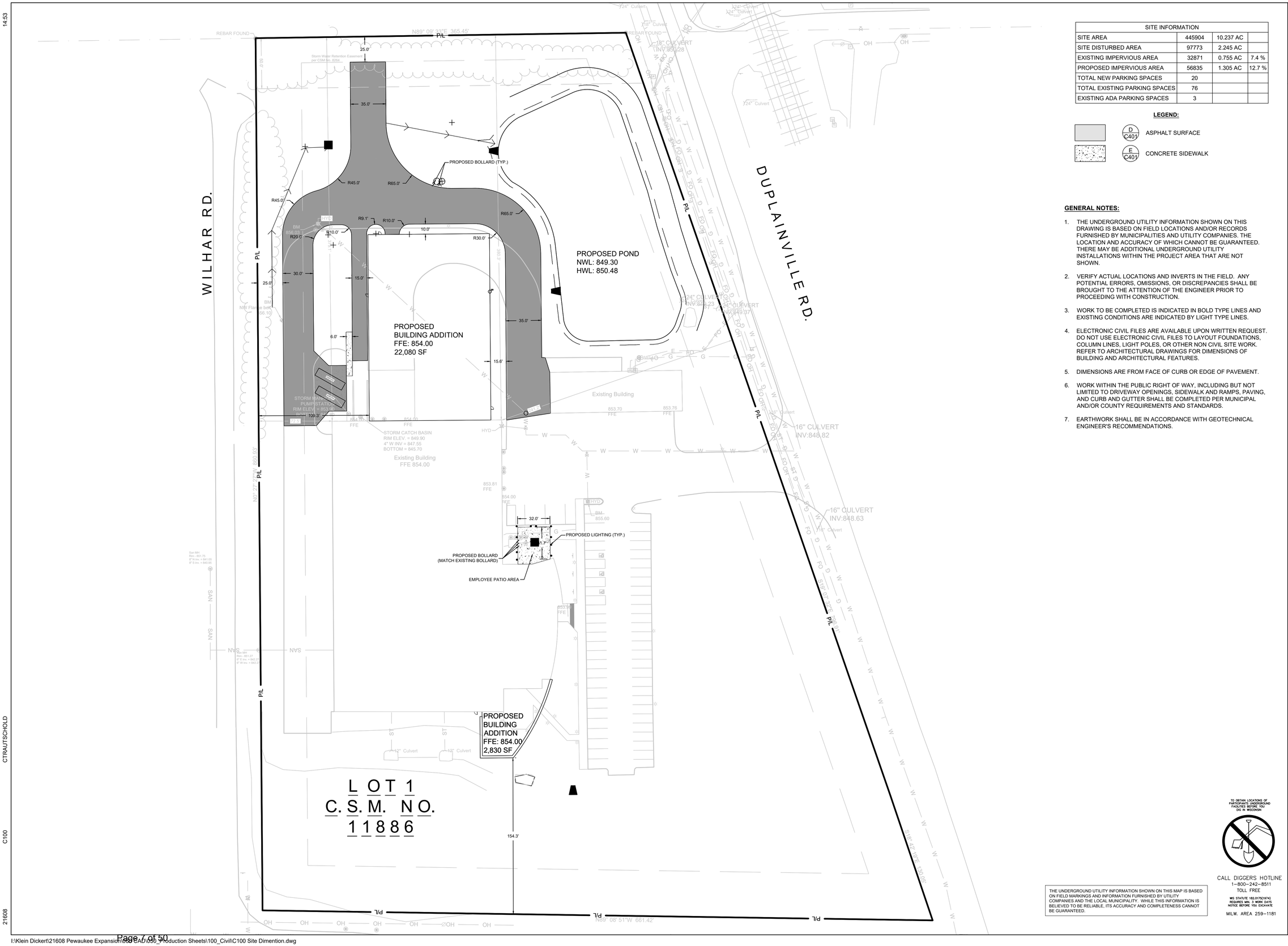

SITE INFORMATION			
SITE AREA	445904	10.237 AC	
SITE DISTURBED AREA	97773	2.245 AC	
EXISTING IMPERVIOUS AREA	32871	0.755 AC	7.4 %
PROPOSED IMPERVIOUS AREA	56835	1.305 AC	12.7 %
TOTAL NEW PARKING SPACES	20		
TOTAL EXISTING PARKING SPACES	76		
EXISTING ADA PARKING SPACES	3		

LEGEND:

D / C401 — ASPHALT SURFACE

E / C401 — CONCRETE SIDEWALK

GENERAL NOTES:

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5. DIMENSIONS ARE FROM FACE OF CURB OR EDGE OF PAVEMENT.
6. WORK WITHIN THE PUBLIC RIGHT OF WAY, INCLUDING BUT NOT LIMITED TO DRIVEWAY OPENINGS, SIDEWALK AND RAMPS, PAVING, AND CURB AND GUTTER SHALL BE COMPLETED PER MUNICIPAL AND/OR COUNTY REQUIREMENTS AND STANDARDS.
7. EARTHWORK SHALL BE IN ACCORDANCE WITH GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

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GRAPHIC SCALE
0 40 80

PEWAUKEE EXPANSION
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

SITE PLAN

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023
CITY RESUBMITTAL	09/11/2023

SCALE:	1"=40'
PROJECT NO:	21608
DESIGN DATE:	----
PLOT DATE:	9/7/2023
DRAWN BY:	JTR
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	C100

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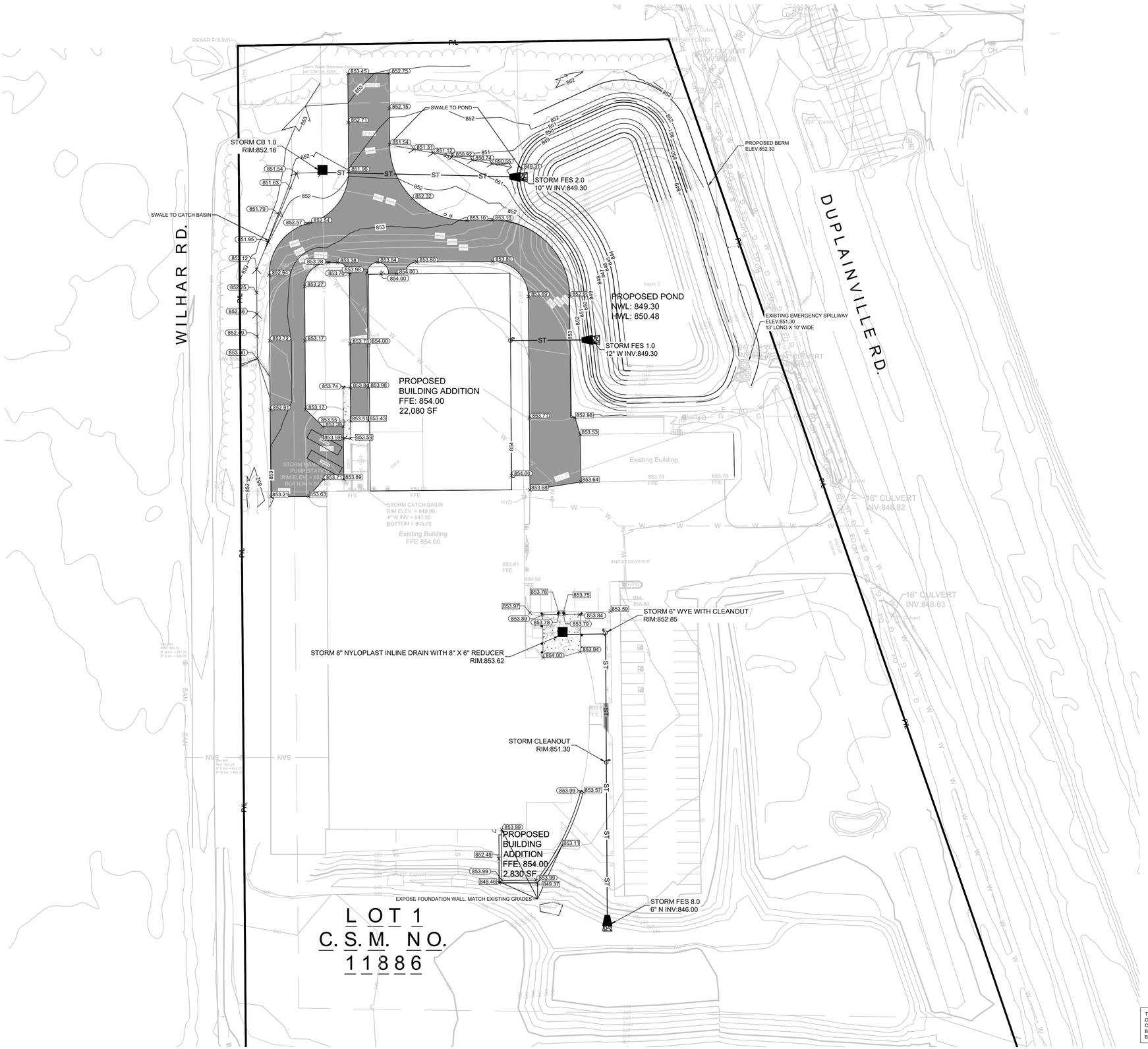

LEGEND:

D C401	ASPHALT SURFACE
E C401	CONCRETE SIDEWALK
5	EXISTING CONTOUR
5	PROPOSED CONTOUR
100.00	PROPOSED SURFACE SPOT GRADE
100.00	EXISTING SURFACE SPOT GRADE (MATCH)

GRAPHIC SCALE
0 40 80

GENERAL NOTES:

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6. WORK WITHIN THE PUBLIC RIGHT OF WAY, INCLUDING BUT NOT LIMITED TO DRIVEWAY OPENINGS, SIDEWALK AND RAMPS, PAVING, AND CURB AND GUTTER SHALL BE COMPLETED PER MUNICIPAL AND/OR COUNTY REQUIREMENTS AND STANDARDS.
7. EARTHWORK SHALL BE IN ACCORDANCE WITH GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS MAP IS BASED ON FIELD MARKINGS AND INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED.

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE
WIS STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE
MILW. AREA 259-1181

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

PEWAUKEE EXPANSION
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

GRADING PLAN

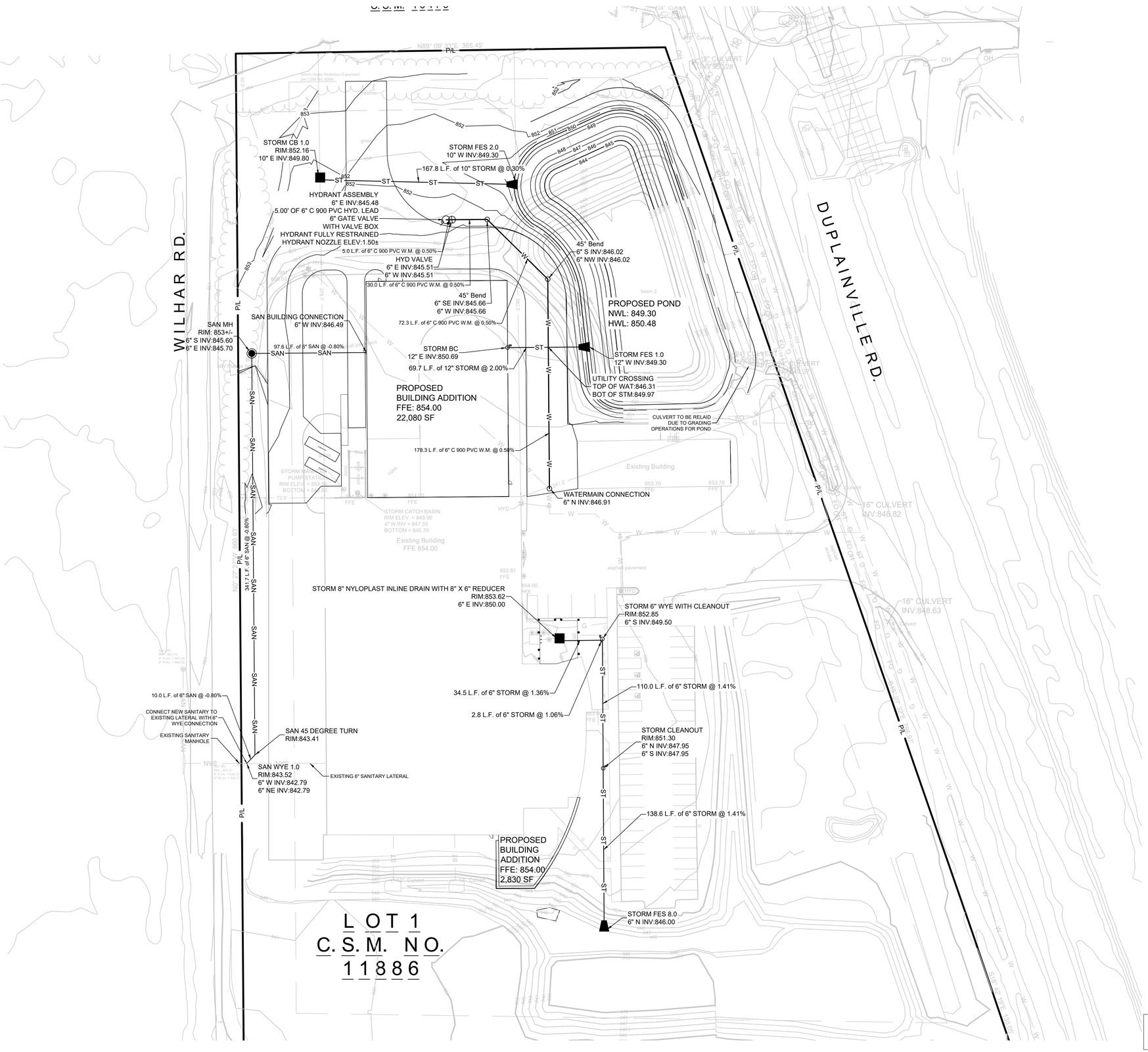
PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023
CITY RESUBMITTAL	09/11/2023

SCALE:	1"=40'
PROJECT NO:	21608
DESIGN DATE:	----
PLOT DATE:	9/7/2023
DRAWN BY:	JTR
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	C200

14:53
CTRAUTSCHOLD
C200
21608

I:\Klein Dickert\21608 Pewaukee Expansion\03 CAD\030_Production Sheets\100_Civil\C200 Grading Plan.dwg



LEGEND:

—W—	PROPOSED WATER SERVICE
—SAN—	PROPOSED SANITARY SERVICE
—>	PROPOSED STORM SEWER
■	PROPOSED STORM INLET
▼	PROPOSED STORM FLARED END SECTION
●	PROPOSED STORM MANHOLE
◉	PROPOSED SANITARY MANHOLE
♀	PROPOSED HYDRANT

A C401 — PROPOSED STORM INLET
B C401 — PROPOSED STORM FLARED END SECTION
G C401 — PROPOSED STORM MANHOLE
F C401 — PROPOSED SANITARY MANHOLE
A C402 — PROPOSED HYDRANT

GENERAL NOTES:

1. THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
2. VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
3. WORK TO BE COMPLETED IS INDICATED IN BOLD TYPE LINES AND EXISTING CONDITIONS ARE INDICATED BY LIGHT TYPE LINES.
4. ELECTRONIC CIVIL FILES ARE AVAILABLE UPON WRITTEN REQUEST. DO NOT USE ELECTRONIC CIVIL FILES TO LAYOUT FOUNDATIONS, COLUMN LINES, LIGHT POLES, OR OTHER NON CIVIL SITE WORK. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF BUILDING AND ARCHITECTURAL FEATURES.
5. ALL UTILITIES WITHIN 5 FEET OF PAVED AREAS SHALL REQUIRE GRANULAR BACKFILL. SLURRY BACKFILL IS REQUIRED FOR ALL WORK IN PUBLIC RIGHT OF WAY.
6. PRIVATE STORM INLETS IN PAVEMENT SHALL REQUIRE DRAIN TILE STUBS OF 10 FEET IN TWO DIRECTIONS FOR SUBDRAINAGE. RIM GRADE FOR STORM INLETS IN CURB AND GUTTER ARE FLOW LINE GRADES.
7. WORK IN PUBLIC RIGHT OF WAY SHALL FOLLOW MATERIAL AND INSTALLATION REQUIREMENTS PER MUNICIPAL AND/OR COUNTY.
8. PRIVATE STORM SEWER 12-INCH DIAMETER OR LARGER SHALL BE HDPE. BELOW 12-INCH DIAMETER SHALL BE PVC SDR-35 ASTM D3034. PRIVATE WATER MAIN SHALL BE CLASS 235 DR 18 PVC CONFORMING TO AWWA C-900. PRIVATE SANITARY SEWER SHALL BE PVC SDR-35 ASTM D3034.
9. A MINIMUM OF 6-FEET OF COVER MUST BE MAINTAINED OVER WATER MAIN OR INSULATION WILL BE REQUIRED.
10. COORDINATE FINAL LOCATION AND DESIGN OF PRIVATE UTILITY SERVICES (ELECTRIC, GAS, PHONE, CABLE) WITH UTILITY COMPANIES.
11. INSTALL JOINT RESTRAINT AND CONCRETE THRUST BLOCKS AT ALL OFFSET FITTINGS (TEES, BENDS, DEAD ENDS, VALVES, REDUCERS) USING MEGA-LUG OR APPROVED EQUAL. CONCRETE THRUST BLOCKS SHALL BE INSTALLED PER FILE NO'S:44,45,46 FROM THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. SEE DETAIL FOR MINIMUM LENGTH OF RESTRAINED JOINT REQUIRED. SUBMIT JOINT RESTRAINT DETAILS FOR ALL JOINT TYPES INCLUDING PUSH-ON AND MECHANICAL CONNECTIONS.
12. ALL HYDRANTS SHALL BE WATEROUS WB-67 PACER OF MUELLER CENTURION.
    - 12.1. ALL HYDRANTS SHALL HAVE A MECHANICAL JOINT CONNECTION; TURN LEFT TO OPEN.
    - 12.2. HYDRANTS SHALL HAVE A MINIMUM OF 6-FOOT 6-INCH TRENCH DEPTH AND SHALL HAVE A DEPTH SUFFICIENT TO BE INSTALLED IN ACCORDANCE WITH THE PLANS.
    - 12.3. ALL HYDRANT LEADS SHALL BE EITHER DUCTILE IRON OR PVC AWWA CLASS 150 PRESSURE PIPE SDR 18 OR LESS. DUCTILE IRON LEADS SHALL BE WRAPPED WITH POLYETHYLENE FILM.
    - 12.4. HYDRANTS SHALL BE MARKED WITH RED AND WHITE SPRING-LOADED FIBER GLASS HYDRANT MARKERS. HYDRANTS SHALL BE BREAK-FLANGE TYPE. THE BREAK MUST BE PLACED AT THE FINISHED GRADE. BONNETS ON PRIVATE HYDRANTS SHALL BE PAINTED BLACK.
    - 12.5. HYDRANTS SHALL HAVE A 5-1/4 INCH MAIN VALVE OPENING, SHALL HAVE 2-1/2 INCH HOSE NOZZLES, AND A 4-1/2 INCH PUMPER NOZZLE.

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GRAPHIC SCALE
0 40 80

PEWAUKEE EXPANSION
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

UTILITY PLAN

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
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SHEET NO:	C300

14:53 CTRAUTSCHOLD C300 21608

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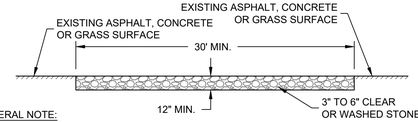
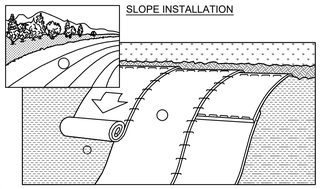


GENERAL NOTE:

1. STONE TRACKING PAD SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1057
2. AN APPROVED MANUFACTURED TRACKOUT CONTROL DEVICE SYSTEM CONFORMING TO WDNR TECHNICAL STANDARD #1057 MAY BE USED AS AN ALTERNATIVE TO A STONE TRACKING PAD

(A) CONSTRUCTION ENTRANCE - WDNR TS-1057
SCALE:NTS

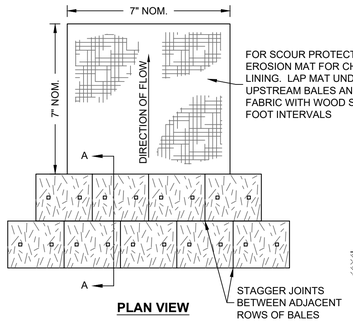


NOTES:

1. ECRMs (EROSION CONTROL REVEGATIVE MATS) SHALL BE INSTALLED AFTER ALL TOPSOILING, FERTILIZING, LIMING, AND SEEDING IS COMPLETE.
2. THE MAT SHALL BE IN FIRM AND INTIMATE CONTACT WITH THE SOIL. IT SHALL BE INSTALLED AND ANCHORED PER THE MANUFACTURER'S RECOMMENDATION.
3. TRMs (TURF-REINFORCEMENT MAT) SHALL BE INSTALLED INCONJUCTION WITH THE TOPSOILING OPERATION AND SHALL BE FOLLOWED BY ECRM INSTALLATION.
4. AT TIME OF INSTALLATION, DOCUMENT THE MANUFACTURER AND MAT TYPE BY RETENTION OF MATERIAL LABELS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. RETAIN THIS DOCUMENTATION UNTIL THE SITE HAS BEEN STABILIZED.
5. EROSION MATTING SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1052.
6. INSTALL PER MANUFACTURERS SPECIFICATIONS.
7. WHERE A TRM IS INSTALLED, THE TRM LOCATION SHALL BE AS-BUILT PRIOR TO PLACEMENT OF TOPSOIL AND ECRM PLACEMENT. PROVIDE AS-BUILT LOCATION TO THE ENGINEER.

(D) EROSION MATTING - WDNR TS-1052
SCALE:NTS

NOTE:
ALL DIMENSIONS ARE APPROXIMATE

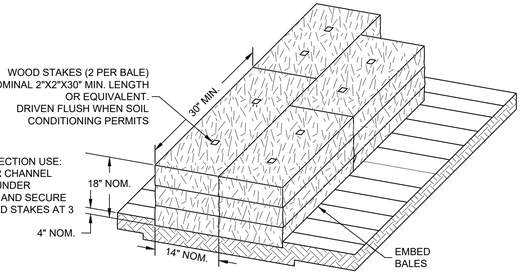


PLAN VIEW

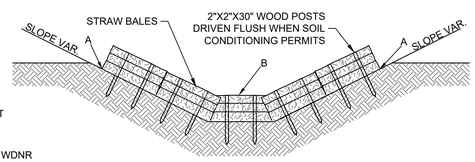
GENERAL NOTE:
STRAW BALE BARRIES (DITCH CHECKS) SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1062

THIS DRAWING IS BASED ON WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD DETAIL DRAWING 8 E 8-3

(B) DITCH CHECK - WDNR TS-1062
SCALE:NTS



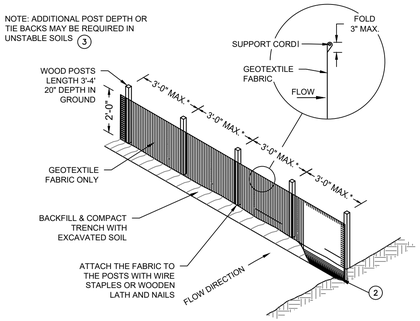
SECTION A-A



BOTTOM ELEVATION OF END BALES (A) SHALL BE EQUAL TO OR GREATER THAN TOP OF LOWEST MIDDLE BALE (B).

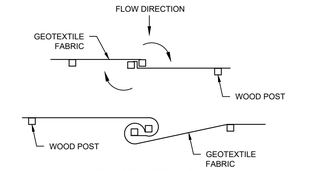
FRONT ELEVATION

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS (3)

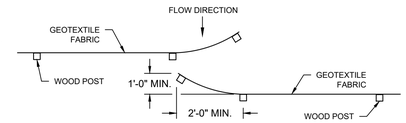


* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE



TWIST METHOD

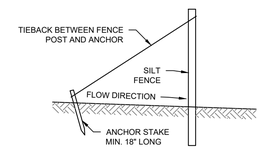


HOOK METHOD (5)

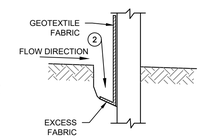
JOINING TWO LENGTHS OF SILT FENCE

GENERAL NOTES

1. HORIZONTAL BRACE REQUIRED WITH 2"X4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. (2) TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. (3) WOOD POSTS SHALL BE A MINIMUM SIZE OF 1-1/32" X 1-1/32" OF OAK OR HICKORY.
4. WHERE SILT FENCE CROSSES A CULVERT, SILT FENCE SHALL BE DIVERTED OVER THE CULVERT OVER THE CULVERT TO NOT RESTRICT FLOW.
5. (5) CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ON THE FOLLOWING TWO METHODS: A) OVERLAP THE END POSTS AND TWIST OR ROTATE, AT LEAST 180 DEGREES. B) HOOK THE END OF EACH SILT FENCE LENGTHS.
6. SILT FENCE SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1056
7. THIS DRAWING IS BASED ON WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD DETAIL DRAWING 8 E 9-6



SILT FENCE TIE BACK
(WHEN ADDITIONAL SUPPORT REQUIRED)



TRENCH DETAIL

(C) SILT FENCE - WDNR TS-1056
SCALE:NTS

CONSTRUCTION SEQUENCE FOR EROSION CONTROL INCLUDES:

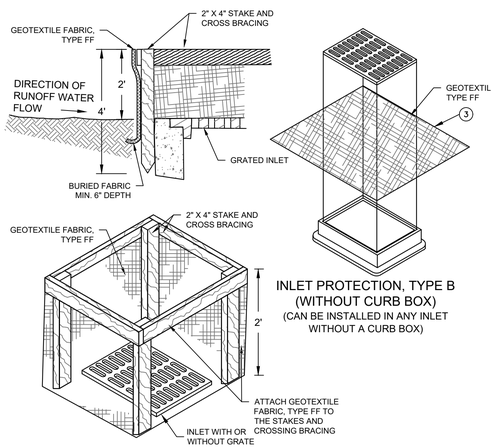
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. INSTALL SILT FENCING AND INLET PROTECTION.
3. INITIATE STOCKPILING OF IMPORTED MATERIAL. PLACE SILT FENCE AROUND STOCKPILE(S).
4. STRIP TOPSOIL FROM STORM WATER BASIN LOCATION AND STOCKPILE.
5. CONSTRUCT STORM WATER BASIN. BASIN IS TO BE USED AS A SEDIMENTATION BASIN DURING THE COURSE OF CONSTRUCTION.
6. CONSTRUCT DIVERSION SWALES, DIRECT RUNOFF TO STORM BASIN. INSTALL ASSOCIATED DITCH CHECKS.
7. STRIP TOPSOIL FROM REMAINDER OF SITE IN A PROGRESSIVE MANNER, AND STOCKPILE.
8. PERFORM ROUGH SITE GRADING. STABILIZE FINISHED AREAS AS THE WORK PROGRESSES. USE EROSION MATTING WHERE CALLED FOR ON THE PLANS. PER WDNR TECHNICAL STANDARD 1059: AREAS THAT RECEIVE TEMPORARY SEEDING SHALL HAVE A MINIMUM TOPSOIL DEPTH OF 2 INCHES. AREAS THAT RECEIVE PERMANENT SEEDING SHALL HAVE A MINIMAL TOPSOIL DEPTH OF 4 INCHES.
9. PREPARE BUILDING PAD AND BEGIN FOUNDATIONS WORK FOR BUILDING.
10. INSTALL UTILITIES. INSTALL ANY ADDITIONAL INLET PROTECTION ON NEW STORM SEWER AND INSTALL RIP-RAP AT NEW STORM SEWER OUTFALLS.
11. INSTALL PAVEMENTS.
12. STABILIZE AREAS REMAINING AREAS WITHIN 7 DAYS OF COMPLETION OF FINAL GRADING AND TOPSOILING.
13. REMOVE EXCESS SEDIMENT FROM STORMWATER BASINS AND RETURN BASINS TO THEIR DESIGN DIMENSIONS AND VOLUMES.
14. REMOVE EROSION CONTROL MEASURES ONLY WHEN SITE IS FULLY STABILIZED.

EROSION CONTROL NOTES:

1. CONSTRUCTION SITE EROSION CONTROL AND SEDIMENTATION CONTROL SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF PEWAUKEE AND SHALL EMPLOY EROSION CONTROL METHODS AS SHOWN AND SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS.
2. ALL EROSION CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.
3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED FOR STABILITY AND OPERATION AFTER A RAINFALL OF 0.5 INCHES OR MORE, BUT NO LESS THAN ONCE EVERY WEEK. MAINTENANCE OF ALL EROSION CONTROL STRUCTURES SHALL BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND REMOVAL OF ALL SEDIMENT WHEN LEAVING PROPERTY. EROSION CONTROL MEASURES MUST BE IN WORKING CONDITION AT END OF EACH WORK DAY. DOCUMENT AND MAINTAIN RECORDS OF INSPECTIONS IN ACCORDANCE WITH WDNR NR216 REQUIREMENTS.
4. SILT FENCE SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS. SEDIMENT DEPOSITS SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN DEPOSITS REACH A DEPTH OF 6 INCHES. THE SILT FENCE SHALL BE REPAIRED OR REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
5. FILTER FABRIC SHALL BE INSTALLED BENEATH INLET COVERS TO TRAP SEDIMENT PER INLET PROTECTION DETAIL IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS.
6. EROSION CONTROL MEASURES SHALL BE MAINTAINED ON A CONTINUING BASIS UNTIL SITE IS FULLY STABILIZED.
7. PERIODIC STREET SWEEPING SHALL BE COMPLETED TO MAINTAIN ADJACENT STREETS FREE OF DUST AND DIRT.
8. SILT FENCE SHALL BE INSTALLED IN HORSESHOE FASHION AROUND ANY TOPSOIL AND FILL STOCKPILES.
9. SITE DEWATERING. WATER PUMPED FROM THE SITE SHALL BE TREATED BY SEDIMENT BASINS OR OTHER APPROPRIATE MEASURES SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS. WATER MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE, ADJACENT SITES, OR RECEIVING CHANNELS.
10. WASTE AND MATERIAL DISPOSAL. ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
11. TRACKING. EACH SITE SHALL HAVE GRAVELED ROADS, ACCESS DRIVES AND PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH TO PREVENT SEDIMENT FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY STREET CLEANING, TO THE SATISFACTION OF THE CITY OF PEWAUKEE, BEFORE THE END OF EACH WORKDAY. FLUSHING MAY NOT BE USED UNLESS SEDIMENT WILL BE CONTROLLED BY A SEDIMENT BASIN OR PRACTICE SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS. NOTIFY THE CITY OF PEWAUKEE OF ANY CHANGES IN STABILIZED CONSTRUCTION ENTRANCE LOCATION.
12. SEDIMENT CLEANUP. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF A STORM EVENT SHALL BE CLEANED UP BY THE END OF THE NEXT WORKDAY. ALL OTHER OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE CLEANED UP BY THE END OF THE WORKDAY.
13. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN OR MORE DAYS SHALL BE STABILIZED BY TEMPORARY OR PERMANENT SEEDING, MULCHING, SODDING, COVERING WITH TARPS, OR EQUIVALENT PRACTICE FOUND IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD. IF TEMPORARY SEEDING IS USED, A PERMANENT COVER SHALL ALSO BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION. SEEDING OR SODDING SHALL BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION.
14. SOIL OR DIRT STORAGE PILES SHALL BE LOCATED A MINIMUM OF TWENTY-FIVE FEET FROM ANY DOWNSLOPE ROAD, LAKE, STREAM, WETLAND, OR DRAINAGE CHANNEL. STRAW BALE OR FILTER FABRIC FENCES SHALL BE PLACED ON THE DOWN SLOPE SIDE OF THE PILES. IF REMAINING FOR MORE THAN THIRTY DAYS, PILES SHALL BE STABILIZED BY MULCHING, VEGETATIVE COVER, TARPS OR OTHER MEANS.
15. WHEN THE DISTURBED AREA HAS BEEN STABILIZED BY PERMANENT VEGETATION OR OTHER MEANS, TEMPORARY PRACTICES, SUCH AS FILTER FABRIC FENCES, STRAW BALES, SEDIMENT AND SEDIMENT TRAPS, FOUND IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS SHALL BE REMOVED.
16. NOTIFY THE LOCAL MUNICIPALITY HAVING JURISDICTION WITHIN TWO WORKING DAYS OF COMMENCING ANY LAND DEVELOPMENT OR LAND DISTURBING ACTIVITY.
17. OBTAIN PERMISSION FROM THE LOCAL MUNICIPALITY HAVING JURISDICTION PRIOR TO MODIFYING THE EROSION CONTROL PLAN.
18. REPAIR ANY SILTATION OR EROSION DAMAGE TO ADJOINING SURFACES AND DRAINAGE WAYS RESULTING FROM LAND DEVELOPMENT OR LAND DISTURBING ACTIVITIES.
19. KEEP A COPY OF THE EROSION CONTROL PLAN ON SITE.
20. CONTRACTOR SHALL, TO THE EXTENT POSSIBLE, MINIMIZE DISTURBANCE OF EXISTING VEGETATION DURING CONSTRUCTION.
21. CONTRACTOR SHALL, TO THE EXTENT POSSIBLE, MINIMIZE COMPACTION OF TOPSOIL AND PRESERVE TOPSOIL IN GREENSPACE AREAS.
22. WASH WATER FROM VEHICLES AND WHEEL WASHING SHALL BE CONTAINED AND TREATED PRIOR TO DISCHARGE.
23. CONTRACTOR SHALL MAINTAIN SPILL KITS ON-SITE.
24. PERMAMENT TURF SEEDING OF DISTURBED AREA MUST OCCUR PRIOR TO SEPTEMBER 15TH. IF ADEQUATE TIME IS NOT AVAILABLE TO APPLY PERMANENT SEEDING PRIOR TO SEPTEMBER 15TH, THEN DISTURBED AREAS SHALL BE TEMPORARILY SEEDED WITH AN ANNUAL RYE GRASS PER WDNR TECHNICAL STANDARD 1059, WHERE THE TEMPORARY SEEDING MUST OCCUR PRIOR TO OCTOBER 15TH.
25. IF TEMPORARY SEEDING IS NOT COMPLETED BY OCTOBER 15TH, APPLY SOIL STABILIZERS AND DORMANT SEED TO DISTURBED AREA PER WDNR TECHNICAL STANDARD 1050. INSPECT ANIONIC PAM APPLICATION AT A MINIMUM FREQUENCY OF EVERY TWO MONTHS AND REAPPLY AS NECESSARY

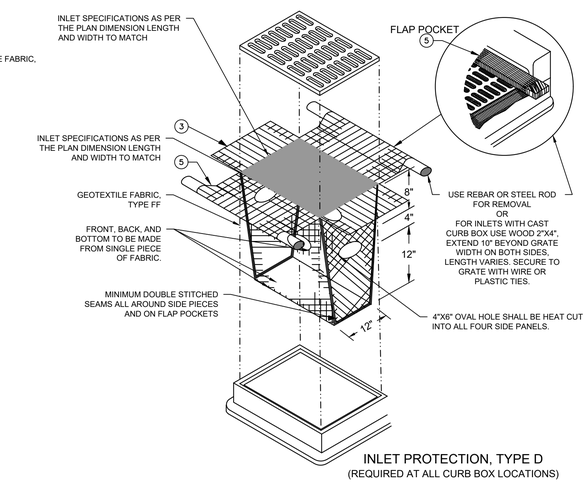
CITY OF PEWAUKEE EROSION CONTROL AND WINTER STABILIZATION NOTES:

1. BMPS SHALL COMPLY WITH THE WDNR CONSERVATION PRACTICE STANDARDS AND WITH WISDOT PRODUCTION ACCEPTABILITY LIST.
2. INLET PROTECTION SHALL BE TYPE D FOR INLETS IN ALL DEAD LOW AREAS AND TYPE A FOR ALL FIELD INLETS.
3. EROSION CONTROL REINFORCEMENT MAT SHALL BE REQUIRED FOR AREAS OF CONCENTRATED FLOW (SUCH AS SWALES, TEMPORARY DIVERSIONS, ETC.), SLOPES EXCEEDING 4 FEET HORIZONTAL TO 1 FOOT VERTICAL, SEDIMENT TRAPS, SEDIMENT BASINS, AND DETENTION PONDS, OR AS REQUIRED BY THE CITY ENGINEER.
4. DRAINAGE SWALES, TEMPORARY DIVERSIONS, SEDIMENT TRAPS, SEDIMENT BASINS AND DETENTION PONDS ARE REQUIRED TO BE STABILIZED AND FULLY OPERATIONAL PRIOR TO RECEIVING RUNOFF. FULLY OPERATIONAL INCLUDES THE INSTALLATION OF THE OUTLET STRUCTURES (PRIMARY AND EMERGENCY) FOR SEDIMENT TRAPS, SEDIMENT BASINS AND DETENTION PONDS.
5. ALL PUMPED EFFLUENT FROM DEWATERING OPERATIONS (TRENCH DEWATERING OR OTHERWISE) SHALL BE DISCHARGED TO A GEOTEXTILE FILTER BAG CONFORMING TO WDNR CONSERVATION PRACTICE STANDARD 1061. THE GEOTEXTILE BAG SHALL BE PLACED ON VEGETATED/STABILIZED GROUND AND DISCHARGE TO A SEDIMENT BASIN OR TRAP. SHOULD NO BASIN EXIST, THE GEOTEXTILE BAG SHALL BE BROUGHT UP THE SIDES AND OVER THE TOP OF HAY BALES AND SECURED. DISCHARGE SHALL NOT BE ALLOWED TO FLOW OVER UNPROTECTED GROUND. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS PRIOR TO SEDIMENT REMOVAL.
6. SOIL STOCKPILES SHALL BE LOCATED AWAY FROM CHANNELIZED FLOW AND NO CLOSER THAN 25 FEET FROM ROADS, DITCHES, LAKES, STREAMS, PONDS, WETLANDS AND/OR ENVIRONMENTAL CORRIDORS, UNLESS APPROVED BE THE CITY ENGINEER. STOCKPILES LEFT INACTIVE FOR 7 DAYS OR LONGER SHALL BE STABILIZED.
7. SOIL STOCKPILES SHALL HAVE SILT FENCE OR OTHER PERIMETER CONTROL PLACED ON THE DOWNSTREAM SIDE OF THE STOCKPILE.
8. DITCH CHECKS SHALL BE INSTALLED IN SWALES, CHANNELS AND DIVERSIONS AND BE PLACED PERPENDICULAR TO FLOW. DITCH CHECKS SHALL BE DESIGNED SO THAT WATER CAN FLOW OVER THE DITCH CHECK AND NOT AROUND THEM. THE DITCH CHECK SHALL EXTEND FAR ENOUGH SO THAT GROUND LEVEL AT THE ENDS OF THE DITCH CHECK IS HIGHER THAN THE LOW POINT IN THE TOP-CENTER OF THE DITCH CHECK.
9. SILT FENCE SHALL NOT BE PLACED IN AREAS THAT RECEIVE CONCENTRATED FLOW SUCH AS DITCHES, SWALES, DOWNSTREAM OF CULVERTS, STORM SEWER OUTFALLS OR POND DISCHARGES. SILT FENCE SHALL NOT BE PLACED PERPENDICULAR TO CONTOURS SUCH AS ALONG THE SLOPE OF A HILL. SILT FENCE SHALL BE PROPERLY ENTRENCHED AND STAKED. THE ENDS OF THE SILT FENCE SHALL BE EXTENDED UPSLOPE TO PREVENT WATER FROM FLOWING AROUND THE ENDS OF THE FENCE. INSTALLATIONS OF SILT FENCE WHICH ARE GREATER THAN 1 YEAR OLD WILL NOT BE CONSIDERED EFFECTIVE AND WILL BE REQUIRED TO BE REPLACED.
10. DISTURBED AREAS THAT REMAIN INACTIVE FOR GREATER THAN 14 DAYS SHALL BE STABILIZED WITH TEMPORARY STABILIZATION MEASURES SUCH AS SOIL TREATMENT, TEMPORARY SEEDING, MULCHING OR EROSION CONTROL REINFORCEMENT MATTING. INACTIVE MEANS THAT NO SITE GRADING, LANDSCAPING OR UTILITY WORK IS OCCURRING ON THE SITE, AND THAT PRECIPITATION EVENTS ARE NOT LIMITING THESE ACTIVITIES. FROZEN SOILS DO NOT EXCLUDE THE SITE FROM THIS REQUIREMENT.
11. WINTER CONSTRUCTION SITE EROSION CONTROL.
    - 11.1. GENERAL: A PROJECT INVOLVING CONSTRUCTION BETWEEN NOVEMBER 1 AND MAY 1 WILL REQUIRE MEASURES TO STABILIZE THE SITE OVER WINTER. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, GRAVEL ROAD BASE OR 70 PERCENT MATURE VEGETATIVE COVER OR RIP-RAP BY NOVEMBER 1, THEN THE SITE MUST BE PROTECTED WITH OVER-WINTER STABILIZATION PRACTICES.
    - 11.2. CONSIDERATIONS: WINTER EXCAVATION AND EARTHWORK ACTIVITIES SHOULD BE LIMITED IN EXTENT AND DURATION TO MINIMIZE POTENTIAL EROSION AND SEDIMENTATION IMPACTS.
      - 11.2.1. EXPOSE ONLY AS MUCH AREA AS NECESSARY TO COMPLETE THE WORK AND CAN BE STABILIZED IN 1 DAY PRIOR TO ANY RAIN OR SNOW EVENT.
      - 11.2.2. SUBSEQUENT WORK AREAS SHOULD NOT BE EXPOSED UNTIL THE PREVIOUSLY EXPOSED AREA HAS BEEN STABILIZED.
      - 11.2.3. ALL EROSION AND SEDIMENT CONTROL MEASURES INSTALLED FOR THE PROJECT SHOULD BE ROUTINELY MAINTAINED, CLEANED, INSPECTED, AND REPAIRED AS NEEDED FOR THE CONSTRUCTION SEASON. TEMPORARY EMBANKMENTS SHOULD BE FULLY VEGETATED OR OTHERWISE STABILIZED BY ACCEPTED METHODS



INLET PROTECTION, TYPE A

INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE D
(REQUIRED AT ALL CURB BOX LOCATIONS)
(4)

GENERAL NOTES:

1. MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.
2. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.
3. (3) FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL
4. (4) FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
5. (5) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.
6. INLET PROTECTION SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1060
7. THIS DRAWING IS BASED ON WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD DETAIL DRAWING 8 E 10-2

INSTALLATION NOTES:
TYPE B
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D
DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACES AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

(E) INLET PROTECTION - WDNR TS-1060
SCALE:NTS

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
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Fax: 414-643-4210

PEWAUKEE EXPANSION
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

EROSION DETAILS

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023
CITY RESUBMITTAL	09/11/2023

SCALE:	NTS
PROJECT NO:	21608
DESIGN DATE:	----
PLOT DATE:	9/7/2023
DRAWN BY:	JTR
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	C400

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C400
21608

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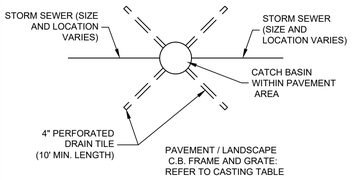
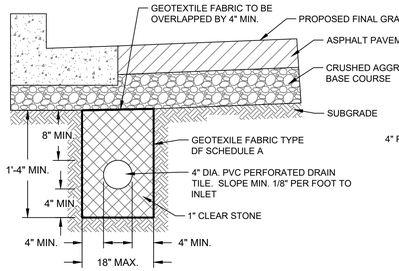
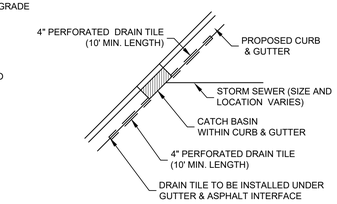
CATCH BASIN WITHIN LOW POINT OF PAVEMENT AREA



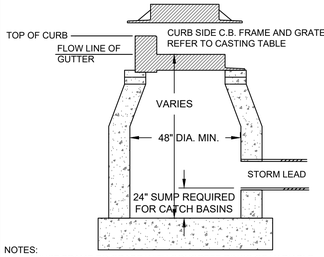


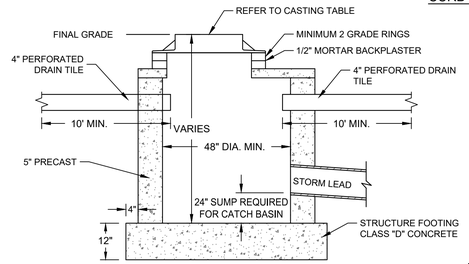
CURB INLET LOCATION SECTION

NOTE:
DRAIN TILE SHALL HAVE TWO (2) SEGMENTS POSITIONED ALONG THE GUTTER & ASPHALT INTERFACE.



CURB INLET WITHIN CURB & GUTTER PLAN



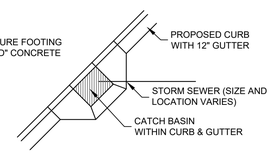


NOTES:
1. ADJUST FRAME TO GRADE WITH CONCRETE RINGS OF VARIABLE THICKNESS. MAXIMUM RING HEIGHT = 6". MINIMUM RING HEIGHT = 2". CONCRETE RINGS SHALL BE REINFORCED WITH ONE LINE OF STEEL CENTERED WITHIN THE RING.
2. CONCRETE AND REINFORCEMENT STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION C-478.
3. 3" BEDDING OF STONE UNDER BASE REQUIRED ON WET SUB-GRADE.
4. UNLESS NOTED ON THE PLANS CONTRACTOR IS RESPONSIBLE FOR ALL CATCH BASIN SIZING AND SHALL PROVIDE A SHOP DRAWING TO THE SIGMA GROUP, INC. BEFORE THEY ARE RELEASED FOR PRODUCTION.

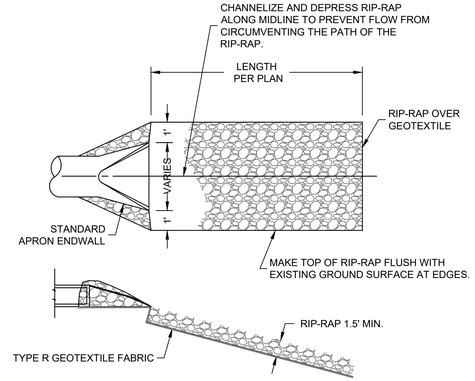
A INLET AND CATCH BASIN
SCALE:NTS

CATCH BASIN / INLET CASTING TABLE

	IF 18" CURB & GUTTER		IF 24" CURB & GUTTER		IF 30" CURB AND GUTTER	
	CASTING	GRATE	CASTING	GRATE	CASTING	GRATE
CURB INLET	NEENAH R-3067	A	NEENAH R-3067	A	NEENAH R-3228H	C
AREA INLET	NEENAH R-2050	C				

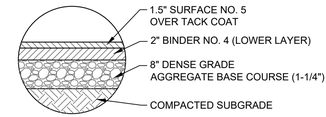


CONCRETE BUMP OUT TO BE APPLIED FOR 12" GUTTER PAN

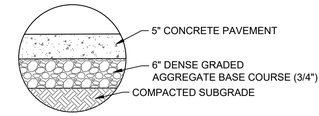


NOTES:
1. INSTALL RIP-RAP WHERE SHOWN ON PLANS.
2. FOR PERMANENT POOL (WET) DETENTION BASINS: EXTEND RIP-RAP FROM OUTFALL TO AT LEAST 10 FEET BEYOND THE NORMAL WATER LEVEL.
3. RIP-RAP SHALL BE MEDIUM RIP-RAP PER WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION
4. GEOTEXTILE FABRIC SHALL BE TYPE R PER WISDOT STANDARD SPECIFICATIONS PER HIGHWAY AND STRUCTURE CONSTRUCTION.

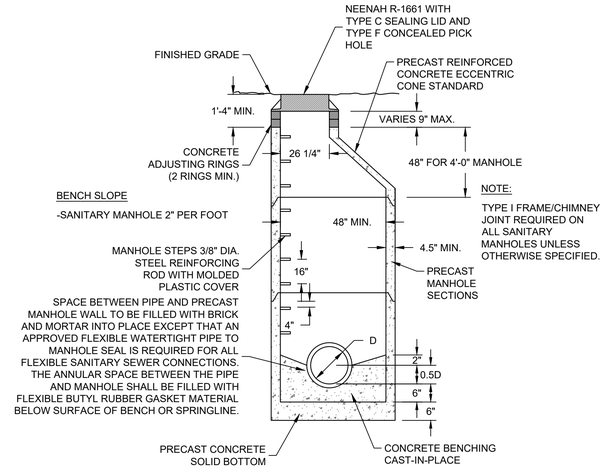
B RIP-RAP DISCHARGE APRON
SCALE:NTS



D ASPHALT PAVEMENT SECTION
SCALE:NTS



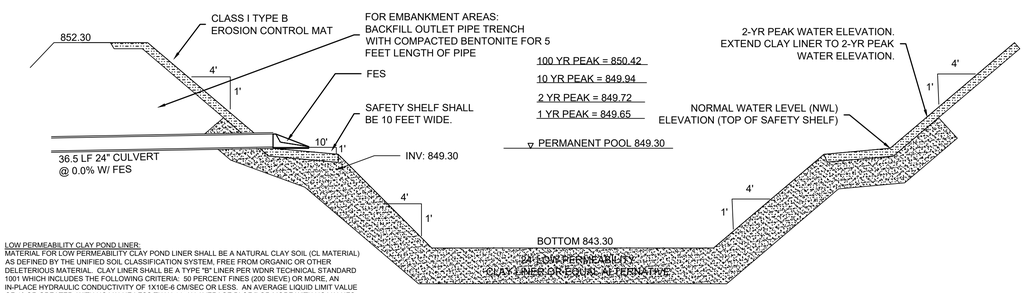
E CONCRETE SIDEWALK SECTION
SCALE:NTS



NOTE:
TYPE I FRAME/CHIMNEY JOINT REQUIRED ON ALL SANITARY MANHOLES UNLESS OTHERWISE SPECIFIED.

F PRECAST SANITARY MANHOLE
SCALE:NTS

NOTES:
1. CONSTRUCT MANHOLE IN ACCORDANCE WITH FILE NO. 12 OF THE STATE STANDARD SPECIFICATIONS FOR SEWER AND WATER.
2. ADJUST FRAME TO GRADE WITH CONCRETE RINGS OF VARIABLE THICKNESS. MAXIMUM RING HEIGHT = 6". MINIMUM RING HEIGHT = 2". CONCRETE RINGS SHALL BE REINFORCED WITH ONE LINE OF STEEL CENTERED WITHIN THE RING. WHERE NECESSARY RINGS SHALL BE GROOVED TO RECEIVE STEP.
3. CONCRETE AND REINFORCEMENT STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION C-478.
4. JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING FLEXIBLE RUBBER TYPE GASKETS.
5. AREA OF CIRCUMFERENTIAL STEEL = 0.12 SQ. INCH PER LINEAL FOOT MIN.
6. 3" OF BEDDING STONE UNDER BASE.
7. ALL SANITARY MANHOLES SHALL BE PROVIDED WITH EXTERNAL CHIMNEY SEALS AND SELF-SEALING LIDS WITH CONCEALED PICK HOLES.
8. UNLESS NOTED ON THE PLANS, THE CONTRACTORS IS RESPONSIBLE FOR ALL MANHOLE SIZING AND SHALL PROVIDE A SHOP DRAWING TO THE SIGMA GROUP, INC. BEFORE THEY ARE RELEASED FOR PRODUCTION.



LOW PERMEABILITY CLAY POND LINER:
MATERIAL FOR LOW PERMEABILITY CLAY POND LINER SHALL BE A NATURAL CLAY SOIL (CL MATERIAL) AS DEFINED BY THE UNIFIED SOIL CLASSIFICATION SYSTEM, FREE FROM ORGANIC OR OTHER DELETERIOUS MATERIAL. CLAY LINER SHALL BE A TYPE "B" LINER PER WDNR TECHNICAL STANDARD 1001 WHICH INCLUDES THE FOLLOWING CRITERIA: 50 PERCENT FINES (200 SIEVE) OR MORE, AN IN-PLACE HYDRAULIC CONDUCTIVITY OF 1X10E-6 CM/SEC OR LESS. AN AVERAGE LIQUID LIMIT VALUE OF 16 OR GREATER, WITH NO VALUE LESS THAN 14, AN AVERAGE PI OF 7 OR MORE WITH NO VALUES LESS THAN 5. IN-SITU CLAY (IF PRESENT) AT THE BASIN MAY BE USED TO SATISFY THE LINER REQUIREMENT PROVIDED IT MEETS THE WDNR TYPE B LINER REQUIREMENTS AND IS PRESENT IN-SITU AT A THICKNESS OF 3 OR MORE FEET. SUBMIT TEST DATA DEMONSTRATING ANY MATERIALS INTENDED FOR USE AS THE BASIN LINER MEET THE REQUIRED CRITERIA FOR A TYPE B LINER.

CLAY SOURCE SHALL BE APPROVED PRIOR TO INITIATING PLACEMENT OF THE CLAY MATERIAL. SUBMIT REPRESENTATIVE MOISTURE-DENSITY DATA FOR PROPOSED CLAY MATERIAL PRIOR TO START OF WORK. IF REQUESTED, FURNISH ENGINEER WITH REPRESENTATIVE CLAY MATERIAL SAMPLES FOR TESTING.

FIELD THICKNESS AND FIELD COMPACTION OF CLAY TO BE TESTED BY OWNER'S INDEPENDENT TESTING AGENCY.

LOW PERMEABILITY CLAY/POND LINER SHALL BE PLACED USING STANDARD COMPACTION TECHNIQUES, AS PER THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, SECTION 207.3.6. PERCENT COMPACTION SHALL BE GREATER THAN 95% OF STANDARD PROCTOR. MATERIAL SHALL BE COMPACTED WITH MOISTURE CONTENT WET OF OPTIMUM DENSITY MOISTURE. MATERIAL SHOULD BE PLACED IN LAYERS GENERALLY NOT EXCEEDING 8 INCHES IN THICKNESS BEFORE COMPACTION.

HDPE OR PPL LINERS MAY BE USED IN PLACE OF A CLAY LINER FOLLOWING THE SPECIFICATIONS BELOW:

HDPE LINER
MINIMUM THICKNESS SHALL BE 40 MILS
DESIGN ACCORDING TO THE CRITERIA IN TABLE 3 OF THE NRCS WASTEWATER STORAGE FACILITY TECHNICAL STANDARD 313
INSTALL ACCORDING TO NRCS WISCONSIN CONSTRUCTION SPECIFICATION 202, POLYETHYLENE GEOMEMBRANE LINING

PPL
MINIMUM THICKNESS SHALL BE 30 MILS
DESIGN ACCORDING TO THE CRITERIA IN TABLE 3 OF THE NRCS WASTEWATER STORAGE FACILITY TECHNICAL STANDARD 313
INSTALL ACCORDING TO NRCS WISCONSIN CONSTRUCTION SPECIFICATION 202, POLYETHYLENE GEOMEMBRANE LINING

CLEARING AND SUBGRADE PREPARATION:
ALL EXISTING TOPSOIL, ROOTMAT, AND ANY OTHER SOFT OR UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE CLEARING AND STRIPPING LIMITS.

PRIOR TO INITIATION OF FILL PLACEMENT, THE STRIPPED AREA SHALL BE OBSERVED BY AN EXPERIENCED GEOTECHNICAL ENGINEER OR HIS AUTHORIZED REPRESENTATIVE TO AID IN LOCATING UNSUITABLE AND/OR HIGHLY PLASTIC MATERIALS WHICH REQUIRE COMPLETE AND/OR PARTIAL REMOVAL.

THE PREPARATION OF FILL SUBGRADES OF EMBANKMENTS SHALL BE OBSERVED ON A FULL-TIME BASIS BY AN EXPERIENCED GEOTECHNICAL ENGINEER OR HIS AUTHORIZED REPRESENTATIVE TO ENSURE THAT ALL UNSUITABLE MATERIALS HAVE BEEN COMPLETELY REMOVED.

FILL PLACEMENT:
FILL MATERIALS SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL RECOMMENDATIONS.

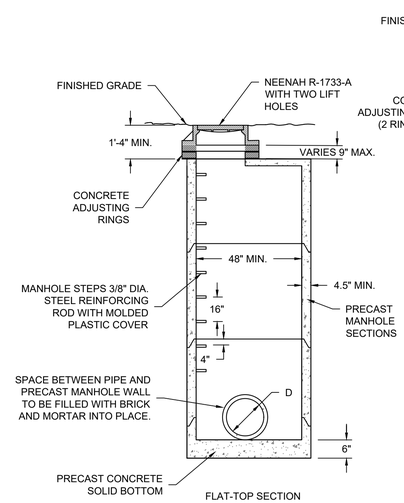
THE FOOTPRINT OF THE EMBANKMENT AREAS SHALL BE WELL DEFINED, INCLUDING THE LIMITS OF THE FILL ZONES, AT THE TIME OF FILL PLACEMENT, WITH GRADE CONTROL MAINTAINED THROUGHOUT THE FILL PLACEMENT OPERATIONS.

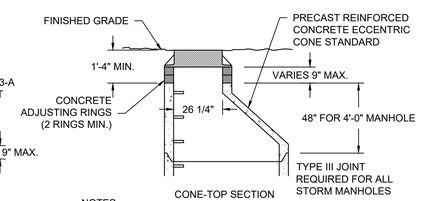
FILL OPERATIONS SHALL BE OBSERVED ON A FULL-TIME BASIS BY A QUALIFIED SOIL TECHNICIAN, WHO SHALL PERFORM IN PLACE DENSITY TESTS TO DETERMINE IF MINIMUM COMPACTION REQUIREMENTS ARE BEING MET.

FILL MATERIALS SHALL NOT BE PLACED ON FROZEN SOILS. SIMILARLY, BORROW FILL MATERIALS SHALL NOT CONTAIN FROZEN MATERIALS AT THE TIME PLACEMENT. FROZEN SOILS, FROM BOTH SUBGRADE AND FILL, SHALL BE REMOVED PRIOR TO CONTINUATION OF FILL OPERATIONS.

AREAS RECEIVING FILL SHALL BE GRADED TO FACILITATE POSITIVE DRAINAGE OF ANY FREE WATER ASSOCIATED WITH PRECIPITATION AND SURFACE RUNOFF.

C WET DETENTION BASIN WITH TYP. EMBANKMENT
SCALE:NTS





NOTES:
1. CONSTRUCT MANHOLE IN ACCORDANCE WITH FILE NO. 12 OF THE STATE STANDARD SPECIFICATIONS FOR SEWER AND WATER.
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3. CONCRETE AND REINFORCEMENT STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION C-478.
4. JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING MORTAR, OR FLEXIBLE RUBBER TYPE GASKETS FOR STORM MANHOLES.
5. AREA OF CIRCUMFERENTIAL STEEL = 0.12 SQ. INCH PER LINEAL FOOT MIN.
6. 3" OF BEDDING STONE UNDER BASE.
7. UNLESS NOTED ON THE PLANS CONTRACTOR IS RESPONSIBLE FOR ALL MANHOLE SIZING AND SHALL PROVIDE A SHOP DRAWING TO THE SIGMA GROUP, INC. BEFORE THEY ARE RELEASED FOR PRODUCTION.

G PRECAST STORM MANHOLE
SCALE:NTS

THE SIGMA GROUP
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PEWAUKEE EXPANSION
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

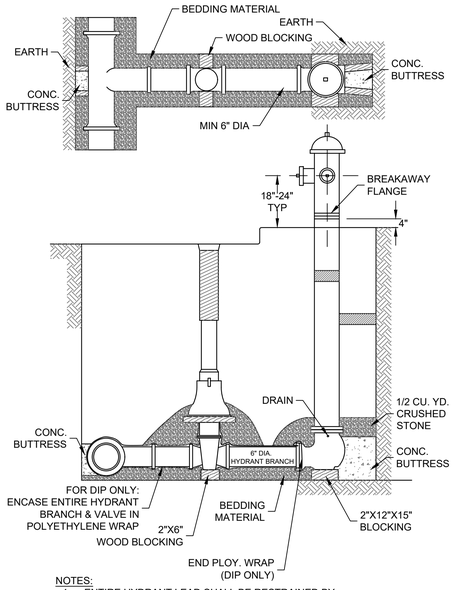
DETAILS

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023
CITY RESUBMITTAL	09/11/2023

SCALE:	NTS
PROJECT NO:	21608
DESIGN DATE:	----
PLOT DATE:	9/7/2023
DRAWN BY:	JTR
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	C401

CTRAUTSCHOLD
C401
21608



NOTES:
1. ENTIRE HYDRANT LEAD SHALL BE RESTRAINED BY MEGA-LUG OR APPROVED EQUAL
2. CONTRACTOR SHALL USE ANCHOR TEE AND VALVE WHEN ALLOWED BY LOCAL INSPECTOR

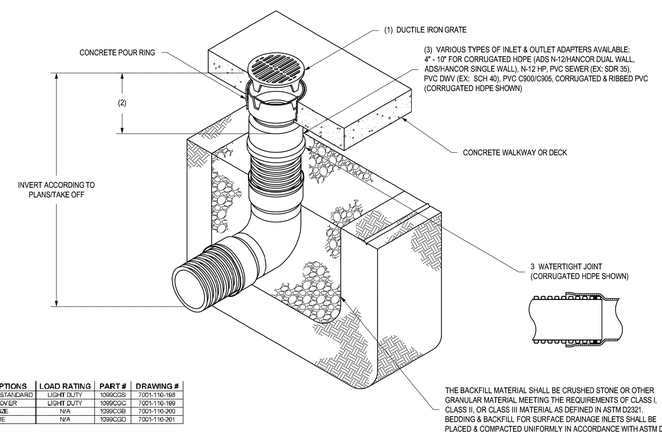
A HYDRANT SETTING
SCALE:NTS

WATER MAIN JOINT RESTRAINT DISTANCE (FT) PER FITTING

FITTING TYPE	4" DIAMETER	6" DIAMETER	8" DIAMETER	12" DIAMETER	16" DIAMETER	20" DIAMETER
HORIZONTAL BEND - 11.25°	5	5	5	5	8	8
HORIZONTAL BEND - 22.5°	8	8	8	10	10	15
HORIZONTAL BEND - 45°	10	10	12	16	20	26
HORIZONTAL BEND - 90°	16	20	25	32	40	52
* RESTRAIN LARGER SIZED PIPE						
REDUCER - DIA. X 4"	-	25	50	60	80	130
REDUCER - DIA. X 6"	-	-	25	60	100	125
REDUCER - DIA. X 8"	-	-	-	50	80	120
REDUCER - DIA. X 12"	-	-	-	-	50	100
REDUCER - DIA. X 16"	-	-	-	-	-	50
DEAD END	40	40	60	90	120	150
TEE OR CROSS - RUN	10	10	10	20	30	40
TEE - 4" BRANCH	8	6	6	6	6	6
TEE - 6" BRANCH	-	8	6	6	6	6
TEE - 8" BRANCH	-	-	10	6	6	6
TEE - 12" BRANCH	-	-	-	12	6	6
TEE - 16" BRANCH	-	-	-	-	30	10
TEE - 20" BRANCH	-	-	-	-	-	50
VERTICAL BEND - 45° - UPPER	12	20	26	40	50	60
VERTICAL BEND - 45° - LOWER	5	5	6	10	12	14
VERTICAL BEND - 22.5° - UPPER	8	10	14	18	24	28
VERTICAL BEND - 22.5° - LOWER	4	5	5	8	8	8
VERTICAL BEND - 11.25° - UPPER	6	6	8	10	12	14
VERTICAL BEND - 11.25° LOWER	4	4	4	4	4	6
* WHERE RESTRAINT LENGTHS ARE NOT IDENTIFIED ON THE PLANS, THE VALUES IN THIS TABLE SHALL BE PROVIDED AS A MINUMUM						

B JOINT RESTRAINT TABLE
SCALE:NTS

NYLOPLAST 10" INLINE DRAIN: 2710AG _ _ X



GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PEDESTRIAN/STANDARD	LIGHT DUTY	1099CGS	7001-110-168
SOLID COVER	LIGHT DUTY	1099CGC	7001-110-169
BRONZE	N/A	1099CGB	7001-110-200
DOME	N/A	1099CGD	7001-110-201

1 - GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05 WITH THE EXCEPTION OF THE BRONZE GRATE.
2 - FOR COMPLETE DESIGN DETAILS SEE DRAWING NO. 7003-110-001.
3 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), & PVC SEWER.

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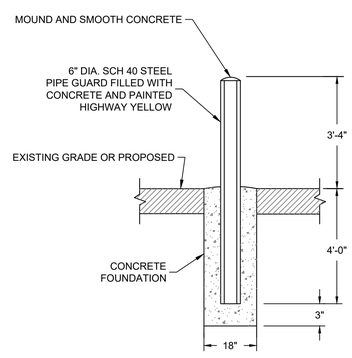
DRAWN BY	EBC	MATERIAL	
DATE	11-15-06		
REVISED BY	NMH	PROJECT NO./NAME	
DATE	03-15-16		
DWG SIZE	A	SCALE 1:16	SHEET 1 OF 1

ADS Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 932-2443
FAX (770) 932-2496
www.nyloplast-us.com

TITLE
10 IN INLINE DRAIN QUICK SPEC INSTALLATION DETAIL

DWG NO. 7003-110-034 REV F

C NYLOPLAST 10" INLINE DRAIN
SCALE:NTS



D BOLLARD
SCALE:NTS

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PEWAUKEE EXPANSION
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

DETAILS

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023
CITY RESUBMITTAL	09/11/2023

SCALE:	NTS
PROJECT NO:	21608
DESIGN DATE:	----
PLOT DATE:	9/7/2023
DRAWN BY:	JTR
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	C402

14:54 CTRAUTSCHOLD C402 21608

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14:54

GENERAL:

1. EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY, AND NO RESPONSIBILITY IS ASSUMED BY THE OWNER OR ENGINEER FOR THEIR ACCURACY OR COMPLETENESS.
2. CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR SHALL HAVE SITE MARKED BY DIGGER'S HOTLINE AND SHALL HAVE PRIVATE UTILITIES MARKED BY A PRIVATE UTILITY LOCATOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY ALL ELEVATIONS, LOCATIONS, AND SIZES OF EXISTING UTILITIES AND SHALL CHECK ALL UTILITY CROSSINGS AND PROPOSED CONNECTIONS FOR CONFLICTS/DISCREPANCIES PRIOR TO INITIATING CONSTRUCTION. REPORT ANY CONFLICTS OR DISCREPANCIES TO THE ENGINEER SO REDESIGN MAY OCCUR IF NEEDED.
3. LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLANS. LENGTHS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.

SITE CLEARING:

1. EXCEPT FOR STRIPPED TOPSOIL OR OTHER MATERIALS INDICATED TO REMAIN ON OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM PROJECT SITE.
2. MINIMIZE INTERFERENCE WITH ADJOINING ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING SITE-CLEARING OPERATIONS.
3. SALVABLE IMPROVEMENTS: CAREFULLY REMOVE ITEMS INDICATED TO BE SALVAGED AND STORE ON OWNER'S PREMISES WHERE INDICATED.
4. UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE SITE CLEARING.
5. DO NOT COMMENCE SITE CLEARING OPERATIONS UNTIL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE.
6. PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.
7. LOCATE AND CLEARLY FLAG TREES AND VEGETATION TO REMAIN OR TO BE RELOCATED.
8. PROTECT EXISTING SITE IMPROVEMENTS TO REMAIN FROM DAMAGE DURING CONSTRUCTION; RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER.
9. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF UTILITIES INDICATED TO BE REMOVED; ARRANGE WITH UTILITY COMPANIES TO SHUT OFF INDICATED UTILITIES.
10. EXISTING UTILITIES: DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED BY THE OWNER AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES.
11. FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL UNLESS FURTHER EXCAVATION OR EARTHWORK IS INDICATED; PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE DEPTH OF 8 INCHES, AND COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.
12. REMOVE SOD AND GRASS BEFORE STRIPPING TOPSOIL.
13. STRIP TOPSOIL TO WHATEVER DEPTHS ARE ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS.
14. STOCKPILE TOPSOIL MATERIALS AWAY FROM EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.
15. REMOVE EXISTING ABOVE- AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION.
16. SAWCUT ALL PAVEMENTS FULL DEPTH PRIOR TO REMOVAL; SAWCUTS SHALL BE IN STRAIGHT LINES PERPENDICULAR AND/OR PARALLEL TO EXISTING PAVEMENT JOINTS AND PAVEMENT EDGES.
17. REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
18. SEPARATE RECYCLABLE MATERIALS PRODUCED DURING SITE CLEARING FROM OTHER NONRECYCLABLE MATERIALS. STORE OR STOCKPILE WITHOUT INTERMIXING WITH OTHER MATERIALS AND TRANSPORT THEM TO RECYCLING FACILITIES.

SITE WATER SERVICE:

1. COMPLY WITH STANDARDS OF STATE PLUMBING CODE (SPS CH. 382, 384), CITY OF PEWAUKEE REQUIREMENTS AND STANDARDS OF AUTHORITIES HAVING JURISDICTION FOR FIRE-SUPPRESSION AND WATER SERVICE PIPING INCLUDING MATERIALS, FITTINGS, APPURTENANCES, INSTALLATION, TESTING, SERVICE TAPS, ETC. IN CASE OF CONFLICT BETWEEN THESE SPECIFICATIONS AND STATE PLUMBING CODE OR CITY OF PEWAUKEE REQUIREMENTS, STATE PLUMBING CODE AND CITY OF PEWAUKEE REQUIREMENTS GOVERN.
2. DO NOT INTERRUPT SERVICE TO FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED BY OWNERS OF SUCH FACILITIES AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY WATER-DISTRIBUTION SERVICE.
3. WATER SERVICE PIPING MAY BE EITHER DUCTILE IRON WATER PIPE OR PVC WATER PIPE AS ALLOWED BY THE CITY OF PEWAUKEE.
4. DUCTILE IRON WATER PIPE CONFORMING TO THE REQUIREMENTS OF THE AMERICAN NATIONAL STANDARD FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST, AWWA C151/A21.51 - LATEST REVISION AND REQUIREMENTS OF CHAPTER 8.18.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
   a. CLASS 52
   b. CEMENT MORTAR LINING AND INTERNAL AND EXTERNAL BITUMINOUS COATS IN ACCORDANCE WITH SECTION 51.8 OF AWWA C151.
   c. PUSH-ON GASKET PIPE
   d. PLAIN RUBBER GASKETS
   e. BONDING STRAPS TO PROVIDE ELECTRICAL CONDUCTIVITY WITHOUT FIELD TESTING
5. JOINTS FOR DUCTILE IRON PIPE: JOINTS SHALL BE RUBBER GASKET JOINTS; CONFORM TO THE REQUIREMENTS OF AMERICAN NATIONAL STANDARD FOR RUBBER GASKET JOINTS FOR DUCTILE IRON PRESSURE PIPE AND FITTINGS (ANSI/AWWA C111/A21.11, LATEST EDITION)
6. FITTINGS FOR DUCTILE IRON PIPE: CONFORM TO THE REQUIREMENTS OF AMERICAN NATIONAL STANDARD FOR DUCTILE IRON AND GRAY IRON FITTINGS, 3” THROUGH 48” FOR WATER ANSI/AWWA C110/A21.10, LATEST EDITION); CLASS 250 MECHANICAL JOINT PIPE FITTINGS; CEMENT LINED; ALL BELLS; ENTIRE FITTING TARRED; CONDUCTIVE MECHANICAL JOINT (NO LEAD) RUBBER GASKETS, FLANGES, AND BOLTS.
7. PVC AWWA PIPE: AWWA C900, CLASS 200 WITH BELL END WITH GASKET AND WITH SPIGOT END AND MEETING REQUIREMENTS OF CHAPTER 8.20.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. FITTINGS SHALL BE IN ACCORDANCE WITH CHAPTER 8.22.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. PUSH-ON-JOINT, DUCTILE IRON FITTINGS : AWWA C110 AND C111. MECHANICAL -JOINT, DUCTILE IRON FITTINGS: AWWA C153, DUCTILE-IRON COMPACT PATTERN. GLANDS, GASKETS AND BOLTS: AWWA C111, DUCTILE IRON GLANDS, RUBBER GASKETS AND STEEL BOLTS.
8. GATE VALVES: CONFORM TO AWWA C-500 AND STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN SUITABLE FOR DIRECT BURY. WATER VALVES 12 INCHES OR LESS WITHIN THE PUBLIC RIGHT-OF-WAY OR UTILITY EASEMENT SHALL BE RESILIENT SEAT GATE VALVES AND COMPLY WITH AWWA C-509.
9. VALVE BOXES: CAST IRON CONFORMING TO ASTM DESIGNATION A-48, CLASS 20 AND STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
10. WATER MAIN CONNECTION: REMOVE EXISTING PIPE AND FITTINGS PER EROSION CONTROL/SITE PREPARATION PLAN. CONNECT TO EXISTING PRIVATE WATER SERVICE AT PROPOSED CONNECTION LOCATION WITH APPROVED SLEEVE IN ACCORDANCE WITH LOCAL WATER UTILITY REQUIREMENTS. COORDINATE CONNECTION WITH LOCAL WATER UTILITY IF REQUIRED. INSTALL THRUST BLOCKING AND MEGA-LUGS AT ALL FITTINGS. JOINT RESTRAINT SHALL BE PROVIDED IN ACCORDANCE WITH TABLE ON C402.
11. GENERAL WATER PIPE INSTALLATION: IN ACCORDANCE WITH CHAPTER 4.3.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
12. INSTALL DUCTILE-IRON, WATER-SERVICE PIPING ACCORDING TO AWWA C600 AND CHAPTER 4.4.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
13. ALL DUCTILE IRON PIPE SHALL BE ENCASED IN POLYETHYLENE PER AWWA C105, LATEST EDITION AND IN ACCORDANCE WITH CHAPTER 4.4.4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. ALL JOINTS AND FITTINGS SHALL HAVE POLYETHYLENE ENCASEMENT INSTALLED PER MANUFACTURER'S REQUIREMENTS AND PROCEDURES.
14. INSTALL PVC AWWA PIPE ACCORDING TO ASTM F645 AND AWWA M23 AND CHAPTER 4.6.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
15. INSTALL THRUST RESTRAINT AT ALL OFFSET FITTINGS USING MECHANICAL JOINT RESTRAINTS. CONCRETE THRUST BLOCKS MAY ONLY BE USED IF ALLOWED BY LOCAL WATER UTILITY.
16. INSTALL WATER SERVICE PIPING SUCH THAT THERE IS A MINIMUM OF 6' OF COVER OVER THE TOP OF THE WATER SERVICE PIPING.
17. BEDDING AND COVER FOR WATER SERVICE PIPING SHALL BE IN ACCORDANCE WITH SECTION 4.3.3 AND FILE NO. 36 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. TRENCH BACKFILL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION ON-SITE. CRUSHED STONE SCREENINGS ARE NOT ALLOWED AS BEDDING OR COVER FOR UTILITIES WITHIN CITY RIGHT-OF-WAY OR UTILITY EASEMENTS. THE CITY REQUIRES BEDDING AND COVER FOR WATER MAIN AND WATER SERVICES TO BE STONE CHIPS.

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SITE WATER SERVICE CONT.:

19. INSTALL TRACER WIRE FOR NON-METALLIC WATER SERVICES. TRACER WIRE AND WARNING TAPE FOR WATER MAIN AND SERVICES INSTALLED WITHIN THE CITY RIGHT-OF-WAY OR UTILITY EASEMENT SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF PEWAUKEE TECHNICAL STANDARDS
20. DUCTILE-IRON PIPING, RUBBER GASKETED JOINTS IN ACCORDANCE WITH SECTION 4.4.2 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
21. PVC PIPING GASKETED JOINTS: USING JOINING MATERIALS ACCORDING TO AWWA C900. CONSTRUCT JOINTS WITH ELASTOMERIC SEALS AND LUBRICANTS ACCORDING TO ASTM D2774 OR ASTM D3139 AND PIPE MANUFACTURER'S WRITTEN INSTRUCTIONS.
22. CONDUCT HYDROSTATIC TESTS IN ACCORDANCE WITH CHAPTER 4.15.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
23. CLEAN AND DISINFECT WATER SERVICE PIPING IN ACCORDANCE WITH SPS CHAPTER 82.40(8)(I) AND AWWA C651.

SANITARY SEWERAGE:

1. ALL PRIVATE SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (DSPS) PLUMBING CODE - CHAPTERS SPS 382 AND SPS 384 AND CITY OF PEWAUKEE TECHNICAL STANDARDS.
2. ALL PUBLIC SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION (STANDARD SPECIFICATIONS) AND CITY OF PEWAUKEE TECHNICAL STANDARDS.
3. PVC SEWER PIPE AND FITTINGS: ASTM D 3034, SDR 35, WITH BELL-AND-SPIGOT ENDS WITH RUBBER GASKETED JOINTS IN ACCORDANCE WITH CHAPTER 8.10.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION AND CITY OF OF PEWAUKEE TECHNICAL STANDARDS. JOINTS SHALL CONFORM TO ASTM D-3212.
4. MANHOLES: STANDARD PRECAST REINFORCED CONCRETE MANHOLES CONFORMING TO ASTM C478, SECTION 8.39.0 OF THE STANDARD SPECIFICATIONS AND CONFORMING TO FILE NOS. 12, 13 AND 15 OF THE STANDARD SPECIFICATIONS AND THE CITY OF PEWAUKEE TECHNICAL STANDARDS. DIAMETER AND DEPTH AS INDICATED ON PLANS. MANHOLE SIZES TO BE VERIFIED BY CONTRACTOR AND SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING STRUCTURES.
5. MANHOLES DEEPER THAN FOUR FEET SHALL BE PROVIDED WITH MANHOLE STEPS CONFORMING TO SECTION 8.40.0 OF THE STANDARD SPECIFICATIONS AND CITY OF PEWAUKEE TECHNICAL STANDARDS.
6. SEWERS SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 3.2.0 OF THE STANDARD SPECIFICATIONS. INSTALL PROPER SIZE INCREASERS, REDUCERS AND COUPLINGS WHERE DIFFERENT SIZES OR MATERIALS OF PIPES AND FITTINGS ARE CONNECTED. INSTALL TRACER PIPE OVER NON-METALLIC PIPING IN ACCORANCE WITH SPS SECTION 382.30(11)(H) AND 382.36(7)(D). TRACER WIRE AND WARNING TAPE FOR SANITARY SEWERS AND LATERALS INSTALLED WITHIN THE CITY RIGHT-OF-WAY OR UTILITY EASEMENT SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF PEWAUKEE TECHNICAL STANDARDS.
7. PIPE JOINT CONSTRUCTION: FOLLOW PIPING MANUFACTURER'S RECOMMENDATIONS; JOIN PVC SEWER PIPE ACCORDING TO ASTM D2321 AND ASTM D 3212 FOR ELASTOMERIC GASKET JOINTS. JOIN DISSIMILAR PIPE MATERIALS WITH NONPRESSURE-TYPE, FLEXIBLE COUPLINGS
8. PROVIDE AND INSTALL CLEANOUTS IN ACCORDANCE WITH SPS CHAPTER 382.35. INSTALL CLEANOUTS AND RISER EXTENSIONS FORM SEWER PIPES TO PROPOSED GRADE. INSTALL PIPING SO CLEANOUTS OPEN IN DIRECTION OF FLOW IN SEWER PIPE. USE LIGHT DUTY, TOP LOADING CLASSIFICATION CLEANOUTS IN EARTH OR UNPAVED FOOT TRAFFIC AREAS; USE MEDIUM DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN PAVED FOOT TRAFFIC AREAS; USE HEAVY DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN VEHICULAR TRAFFIC AREAS. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT AREAS FLUSH WITH PAVEMENT SURFACE.
9. CLASS B COMPACTED TRENCH SECTION (FILE NO. NO. 4 OF STANDARD SPECIFICATIONS) SHALL BE UTILIZED. BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF THE STANDARD SPECIFICATIONS. THE CITY REQUIRES BEDDING AND COVER FOR SANITARY SEWERS AND LATERALS TO BE STONE CHIPS. CRUSHED STONE SCREENINGS ARE NOT ALLOWED.
10. TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS; COMPACTED SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF THE STANDARD SPECIFICATIONS MAY BE USED BENEATH LANDSCAPE AREAS. SLURRY BACKFILL IS REQUIRED FOR UTLITY INSTALLATIONS WITHIN PAVED ROADWAYS.
11. MANHOLE INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS. SET MANHOLE RIMS TO ELEVATIONS INDICATED ON PLANS.
12. AFTER INSTALLATION OF SEWER PIPE CLEAN ALL DEBRIS FROM SEWER AND INSPECT INTERIOR OF PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED. CONDUCT DEFLECTION TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SECTION 3.2.6(I)4 OF THE STANDARD SPECIFICATIONS; REPLACE ANY PIPE SECTION NOT PASSING THE DEFLECTION TESTING USING NEW PIPE MATERIALS. TEST NEW BUILDING SEWER IN ACCORDANCE WITH SECTION 5.4.0 OF THE STANDARD SPECIFICATIONS. REPLACE LEAKING PIPE USING NEW PIPE MATERIALS AAND REPEAT TESTING UNTIL LEAKAGE IS WITHIN ALLOWANCES SPECIFIED.

STORM DRAINAGE:

1. ALL PRIVATE STORM SEWER WORK SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (DSPS) PLUMBING CODE - CHAPTERS SPS 382 AND SPS 384 AND CITY OF PEWAUKEE TECHNICAL STANDARDS.
2. ALL PUBLIC STORM SEWER WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION (STANDARD SPECIFICATIONS) AND CITY OF PEWAUKEE TECHNICAL STANDARDS.
3. PVC SEWER PIPE AND FITTINGS: ASTM D 3034, SDR 35, WITH BELL-AND-SPIGOT ENDS WITH RUBBER GASKETED JOINTS IN ACCORDANCE WITH CHAPTER 8.10.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. JOINTS SHALL CONFORM TO ASTM D-3212.
4. REINFORCED CONCRETE PIPE: ASTM C76 WITH BELL AND SPIGOT ENDS AND GASKETED JOINTS WITH ASTM C443 RUBBER GASKETS IN ACCORDANCE WITH CHAPTER 8.6.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
5. HDPE PIPE: ADS N12 PIPE AS APPROVED ON THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PLUMBING PRODUCT REGISTER.
6. FRAMES AND GRATES: AS INDICATED ON PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING SPECIFIED FRAME/GRATE IS COMPATIBLE WITH STRUCTURE; IF NOT, NOTIFY ENGINEER.
7. MANHOLES: STANDARD PRECAST REINFORCED CONCRETE MANHOLES CONFORMING TO ASTM C478, SECTION 8.39.0 OF THE STANDARD SPECIFICATIONS AND CONFORMING TO FILE NOS. 12, 13 AND 15 OF THE STANDARD SPECIFICATIONS. DIAMETER AND DEPTH AS INDICATED ON PLANS. MANHOLE SIZES TO BE VERIFIED BY CONTRACTOR AND SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING STRUCTURES.
8. MANHOLES AND CATCH BASINS DEEPER THAN FOUR FEET SHALL BE PROVIDED WITH MANHOLE STEPS CONFORMING TO SECTION 8.40.0 OF THE STANDARD SPECIFICATIONS.
9. SEWERS SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 3.2.0 OF THE STANDARD SPECIFICATIONS. INSTALL PROPER SIZE INCREASERS, REDUCERS AND COUPLINGS WHERE DIFFERENT SIZES OR MATERIALS OF PIPES AND FITTINGS ARE CONNECTED. INSTALL TRACER PIPE OVER NON-METALLIC PIPING IN ACCORDANCE WITH SPS SECTION 382.30(11)(H) AND 382.36(7)(D).
10. PROVIDE AND INSTALL CLEANOUTS IN ACCORDANCE WITH SPS CHAPTER 382.35. INSTALL CLEANOUTS AND RISER EXTENSIONS FROM SEWER PIPES TO PROPOSED GRADE. INSTALL PIPING SO CLEANOUTS OPEN IN DIRECTION OF FLOW IN SEWER PIPE. USE LIGHT DUTY, TOP LOADING CLASSIFICATION CLEANOUTS IN EARTH OR UNPAVED FOOT TRAFFIC AREAS; USE MEDIUM DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN PAVED FOOT TRAFFIC AREAS; USE HEAVY DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN VEHICULAR TRAFFIC AREAS. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT AREAS FLUSH WITH PAVEMENT SURFACE.
11. CLASS B COMPACTED TRENCH SECTION (FILE NO. NO. 4 OF STANDARD SPECIFICATIONS) SHALL BE UTILIZED. BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF THE STANDARD SPECIFICATIONS.
12. TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS; COMPACTED SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF THE STANDARD SPECIFICATIONS MAY BE USED BENEATH LANDSCAPE AREAS.
13. MANHOLE INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS. SET MANHOLE RIMS TO ELEVATIONS INDICATED ON PLANS.
14. AFTER INSTALLATION OF SEWER PIPE CLEAN ALL DEBRIS FROM SEWER AND INSPECT INTERIOR OF PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED. CONDUCT DEFLECTION TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SECTION 3.2.6(I)4 OF THE STANDARD SPECIFICATIONS; REPLACE ANY PIPE SECTION NOT PASSING THE DEFLECTION TESTING USING NEW PIPE MATERIALS.

EARTH MOVING:

1. ALL EARTH WORK SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER PRESENTED IN THE SITE GEOTECHNICAL REPORT, GEOTECHNICAL ENGINEER RECOMMENDATIONS MADE IN THE FIELD AND THESE SPECIFICATIONS. IN CASE OF CONFLICT BETWEEN THESE SPECIFICATIONS AND THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER, THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER SHALL GOVERN.
2. CONTRACTOR SHALL PROVIDE MATERIAL TEST REPORTS FROM A QUALIFIED TESTING AGENCY INDICATING TEST RESULTS FOR CLASSIFICATION ACCORDING TO ASTM D2487 AND LABORATORY COMPACTION CURVES ACCORDING TO ASTM D 1557 FOR EACH ON-SITE AND OFF-SITE SOIL MATERIAL PROPOSED FOR FILL AND BACKFILL.
3. CONTRACTOR SHALL PROVIDE PREEXCAVATION PHOTOS OR VIDEOS SHOWING EXISTING CONDITIONS OF ADJOINING STRUCTURES AND SITE IMPROVEMENTS THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY EARTHWORK OPERATIONS.
4. OLD BUILDING FOUNDATIONS, BUILDING REMNANTS OR UNSUITABLE BACKFILL MATERIAL SHALL BE COMPLETELY REMOVED FROM WITHIN AND A MINIMUM OF 10 FEET BEYOND THE NEW BUILDING PAD AREAS. THE RESULTING EXCAVATION SHALL BE BACKFILLED WITH COMPACTED ENGINEERED FILL.
5. FOUNDATIONS, FOUNDATION WALLS OR CONCRETE FLOOR SLABS SHALL BE REMOVED TO A MINIMUM OF TWO FEET BELOW PROPOSED SUBGRADE WITHIN PROPOSED PARKING AND GREENSPACE AREAS. BASEMENT SLABS LOCATED BELOW 2 FEET FROM PLANNED SUBGRADE ELEVATION MAY BE LEFT IN PLACE BUT SHALL BE BROKEN INTO MAXIMUM 6 INCH PIECES TO FACILITATE DRAINAGE.
6. SATISFACTORY SOILS FOR FILL: ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER OR ANY SOIL GROUP OR COMBINATION OF GROUPS APPROVED OF BY THE PROJECT GEOTECHNICAL ENGINEER.
7. UNSATISFACTORY SOILS FOR FILL: SOIL CLASSIFICATION GROUPS GC, SC, CL, ML, OL, CH, MH, OH, AND PT ACCORDING TO ASTM D 2487 OR A COMBINATION OF THESE GROUPS UNLESS DEEMED SATISFACTORY BY THE PROJECT GEOTECHNICAL ENGINEER. UNSATISFACTORY SOILS ALSO INCLUDE SOILS NOT MAINTAINED WITHIN 3 PERCENT OF OPTIMUM SOIL MOISTURE CONTENT AT THE TIME OF COMPACTION.
8. AGGREGATE BASE COURSE BENEATH PAVEMENTS: SHALL BE DENSE GRADED BASE COURSE CONFORMING TO SECTION 305 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION. AGGREGATE BASE COURSE BENEATH PAVEMENTS IN THE PUBLIC RIGHT-OF-WAY SHALL BE COMPOSED OF 5 INCH BASE LAYER OF 1.25 IN TB AND A 5 INCH SURFACE COURSE LAYER OF 0.75 INCH TB.
9. ENGINEERED FILL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940; WITH AT LEAST 90 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND NOT MORE THAN 12 PERCENT PASSING A NO. 200 SIEVE OR ANY SOIL DEEMED ACCEPTABLE FOR ENGINEERED FILL BY THE PROJECT GEOTECHNICAL ENGINEER. ENGINEERED FILL SHALL BE FREE OF ORGANIC, FROZEN, OR OTHER DELETERIOUS MATERIAL AND HAVE A MAXIMUM PARTICLE SIZE LESS THAN 3 INCHES. CLAY FILLS SHALL HAVE A LIQUID LIMIT OF LESS THAN 49 AND PLASTICITY INDEX BETWEEN 11 AND 25.
10. BEDDING COURSE FOR SEWERS AND WATER SERVICE: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND CONFORMING TO THE REQUIREMENTS OF SECTION 8.43.2 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
11. DRAINAGE COURSE BENEATH BUILDING SLABS: NARROWLY GRADED MIXTURE OF WASHED, CRUSHED STONE, OR CRUSHED OR UNCRUSHED GRAVEL; ASTM D 448; COARSE-AGGREGATE GRADING SIZE 57; WITH 100 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND 0 TO 5 PERCENT PASSING A NO. 8 SIEVE.
12. TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS; COMPACTED SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF THE STANDARD SPECIFICATIONS MAY BE USED BENEATH LANDSCAPE AREAS. SLURRY BACKFILL IS REQUIRED FOR UTILITY INSTALLATIONS WITHING PAVED ROADWAYS.
13. PIPE COVER MATERIAL: CONFORM TO SECTION 8.43.3 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. THE CITY REQUIRES BEDDING AND COVER FOR WATER MAIN, WATER SERVICES, SANITARY SEWERS, AND SANITARY LATERALS TO BE STONE CHIPS.
14. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA.
15. SHORING, SHEETING AND BRACING: SHORE, BRACE OR SLOPE BANKS OF EXCAVATION TO PROTECT WORKMEN, BANKS, ADJACENT PAVING, STRUCTURES, AND UTILITIES TO MEET OSHA REQUIREMENTS. DESIGN OF TEMPORARY SUPPORT OF EXCAVATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
16. EXCAVATE TO SUBGRADE ELEVATIONS REGARDLESS OF THE CHARACTER OF SURFACE AND SUBSURFACE CONDITIONS ENCOUNTERED. UNCLASSIFIED EXCAVATED MATERIALS MAY INCLUDE ROCK, SOIL MATERIALS, AND OBSTRUCTIONS. NO CHANGES IN THE CONTRACT SUM OR THE CONTRACT TIME WILL BE AUTHORIZED FOR ROCK EXCAVATION OR REMOVAL OF OBSTRUCTIONS.
17. PROOF-ROLL SUBGRADE BELOW THE BUILDING SLABS AND PAVEMENTS WITH FULLY LOADED TANDEM AXLE DUMP TRUCK OR RUBBER TIRED VEHICLE OF SIMILAR SIZE AND WEIGHT, TYPICALLY 9 TONS/AXLE, WHERE COHESIVE SOILS ARE ENCOUNTERED OR WITH A SMOOTH DRUMMED VIBRATORY ROLLER WHERE GRANULAR SOILS ARE PRESENT. DO NOT PROOF-ROLL WET OR SATURATED SUBGRADES AND PROOFROLL IN DRY WEATHER. PROOF ROLL IN PRESENCE OF PROJECT GEOTECHNICAL ENGINEER OR TECHNICIAN. SOILS THAT ARE OBSERVED TO RUT OR DEFLECT EXCESSIVELY UNDER THE MOVING LOAD (TYPICALLY >1”) SHALL BE UNDERCUT AND REPLACED WITH PROPERLY COMPACTED ENGINEERED FILL. IN PAVEMENT AREAS WHERE UNDERCUTS ARE PERFORMED, THE EDGES OF THE OVEREXCAVATIONS SHALL BE FEATHERED INOT THE SURROUNDING SUITABLE SOIL SO THAT EDGE FAILURE OF THE OVEREXCAVATED AREA DOES NOT OCCUR.
18. DUE TO CLAYEY SOILS, IF UNDERCUTS OCCUR WITHIN PAVEMENT AREAS AND THEY ARE BACKFILLED WITH GRANULAR SOILS, THE BOTTOM OF THE OVEREXCAVATION SHALL BE SLOPED TO A DRAINTILE THAT IS IN KIND SLOPED TOWARD THE NEAREST STORM SEWER. MINIMUM SLOPES OF SUCH DRAINTILES SHALL BE 0.5%.
19. CONVENTIONAL DISKING AND AERATION TECHNIQUES SHALL BE USED TO DRY SOILS BEFORE PROOF ROLLING. ALLOT FOR PROPER DRYING TIME IN PROJECT SCHEDULE.
20. ENGINEERED FILL SHALL BE PLACED IN MAXIMUM LIFTS OF EIGHT INCHES OF LOOSE MATERIAL AND COMPACTED WITHIN 3% OF OPTIMUM SOIL MOISTURE CONTENT VALUE AND A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST ASTM D1557. EACH LIFT OF COMPACTED ENGINEERED FILL SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN.
21. EXISTING OLD FILL MATERIAL SHALL BE REMOVED BELOW FOOTINGS OR FOUNDATION SUPPORTING FILL. ENGINEERED FILL BELOW FOOTINGS SHOULD HAVE AN IN-PLACE DENSITY OF 95% OF THE MAXIMUM DRY DENSITY AND A MOISTURE CONTENT WITHIN 3% OF OPTIMUM AS DETERMINED BY ASTM D1557. ENGINEERED FILL BELOW FOOTINGS SHALL BE EVALUATED BY IN-FIELD DENSITY TESTS DURING CONSTRUCTION.
22. WHERE UNSUITABLE BEARING SOILS ARE ENCOUNTERED IN A FOOTING EXCAVATION, THE EXCAVATION SHALL BE DEEPENED TO COMPETENT BEARING SOIL AND THE FOOTING LOWERED OR AN OVEREXCAVATION AND BACKFILL PROCEDURE PERFORMED. OVEREXCAVATION AND BACKFILL TREATMENT REQUIRES WIDENING THE DEEPENED EXCAVATION IN ALL DIRECTIONS AT LEAST 6 INCHES BEYOND THE EDGE OF THE FOOTING FOR EACH 12 INCHES OF OVEREXCAVATION DEPTH. THE OVEREXCAVATION SHALL BE BACKFILLED UP TO FOOTING BASE ELEVATION IN MAXIMUM 8 INCH LOOSE LIFTS WITH SUITABLE GRANULAR FILL MATERIAL AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AND A MOISTURE CONTENT WITHIN 3% OF OPTIMUM AS DETERMINED BY ASTM D1557. SOILS AT FOUNDATION BEARING ELEVATION IN THE FOOTING EXCAVATIONS SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN.
23. A MINIMUM OF FOUR INCHES OF DRAINAGE COURSE MAT SHALL BE PLACED BELOW BUILDING FLOOR SLABS. DRAINAGE COURSE SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION WITH RESPECT TO THE MODIFIED PROCTOR (ASTM D1557)
24. UTILITY TRENCHES FOR SEWER AND WATER SHALL CONFORM TO CLASS B COMPACTED TRENCH SECTION IN ACCORDANCE WITH FILE NO. 4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
25. BACKFILL UTILITY TRENCHES IN 4 TO 6 INCH LOOSE LIFTS COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557. BACKFILL SHALL BE MOISTURE CONDITIONED TO BE WITH 3% OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D1557.
26. UTILITY BEDDING PLACEMENT: CONFORM TO SECTION 3.2.6 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. BEDDING MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% COMPACTION WITH RESPECT TO THE MODIFIED PROCTOR (ASTM D1557).
27. COMPACTION TESTING OF UTILITY TRENCHES SHALL BE PERFORMED FOR EVERY 200 CUBIC YARDS OF BACKFILL PLACED OR EACH LIFT WITHIN 200 LINEAR FEET OF TRENCH, WHICHEVER IS LESS.
28. AGGREGATE BASE COURSE BENEATH PAVEMENTS SHALL BE PLACED AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN 3% OF OPTIMUM AS DETERMINED BY ASTM D1557. AGGREGATE BASE SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN.
29. GRADING GENERAL: UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE, FREE OF IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION REQUIREMENTS AND GRADE TO CROSS SECTIONS, LINES, AND ELEVATIONS INDICATED. SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS AND TO PREVENT PONDING.
30. TESTING AGENCY: CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT GEOTECHNICAL ENGINEERING TESTING AGENCY TO PERFORM FIELD QUALITY-CONTROL TESTING.
31. FOOTING SUBGRADE TESTING: EACH ISOLATED FOOTING SHALL INCLUDE AT LEAST ONE TEST PROBE. TEST PROBES SHALL BE PERFORMED EVERY 20 LINEAR FEET IN CONTINUOUS FOOTINGS.
32. BUILDING SLAB AREA TESTING: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST 1 TEST PER LIFT FOR EVERY 2500 SQ. FT. OR LESS OF BUILDING SLAB, BUT IN NO CASE FEWER THAN 3 TESTS.
33. PAVEMENT AREA TESTING: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST ONE TEST FOR EVERY LIFT FOR EVERY 2,500 SQUARE FEET OF PAVEMENT AREA, BUT IN NO CASES FEWER THAN 3 TESTS.
34. UTILITY TRENCH BACKFILL TESTING: ONE TEST FOR EACH 200 CUBIC YARDS OF FILL BACKFILL PLACED OR ONE TEST PER 200 LINEAR FEET OF TRENCH FOR EACH LIFT; WHICHEVER IS LESS.
35. FOUNDATION WALL BACKFILL: AT EACH COMPACTED BACKFILL LAYER, AT LEAST 1 TEST PER LIFT FOR EACH 50 FEET OR LESS OF WALL LENGTH, BUT NO FEWER THAN 2 TESTS.
36. WHEN TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.
37. DISPOSAL: REMOVE SURPLUS SOIL AND WASTE MATERIAL, INCLUDING UNSATISFACTORY SOIL, TRASH, AND DEBRIS, AND LEGALLY DISPOSE OF IT OFF OWNER'S PROPERTY.

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SPECIFICATIONS

PRELIMINARY
NOT FOR
CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023
CITY RESUBMITTAL	09/11/2023

SCALE:	NTS
PROJECT NO:	21608
DESIGN DATE:	----
PLOT DATE:	9/7/2023
DRAWN BY:	JTR
CHECKED BY:	----
APPROVED BY:	----

SHEET NO:
C500

CONCRETE PAVING:

1. THE COMPOSITION, PLACING AND CONSTRUCTION OF CONCRETE PAVEMENTS SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF SECTIONS 415, 416, 501, 601, AND 602 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION (WISDOT STANDARD SPECIFICATIONS) AND LOCAL MUNICIPAL REQUIREMENTS AND SPECIFICATIONS.
2. CONTRACTOR SHALL PROVIDE PRODUCT DATA FOR EACH TYPE OF PRODUCT INDICATED - INCLUDE TECHNICAL DATA AND TESTED PHYSICAL AND PERFORMANCE PROPERTIES; JOB-MIX DESIGNS: CERTIFICATION THAT MIX MEETS OR EXCEEDS WISDOT STANDARD SPECIFICATIONS; AND MATERIAL CERTIFICATES CERTIFYING COMPLIANCE WITH WISDOT STANDARD SPECIFICATIONS.
3. MANUFACTURER QUALIFICATIONS: MANUFACTURER OF READY-MIXED CONCRETE PRODUCTS WHO COMPLIES WITH ASTM C 94/C 94M REQUIREMENTS FOR PRODUCTION FACILITIES AND EQUIPMENT AND APPROVED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
4. CONCRETE GRADE: GRADE A, GRADE A-2, OR A-FA CONFORMING TO SECTION 501.3.1.3 OF THE WISDOT STANDARD SPECIFICATIONS
5. AGGREGATES: CONFORM TO SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS. PROVIDE AGGREGATES FROM A SINGLE SOURCE.
6. WATER: ASTM C 94/C 94M AND SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
7. AIR-ENTRAINING ADMIXTURE: ASTM C 260 AND SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
8. CHEMICAL ADMIXTURES: PER SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
9. CURING MATERIALS IN ACCORDANCE WITH SECTION 415.3.12 OF THE WISDOT STANDARD SPECIFICATIONS.
10. EXPANSION JOINT MATERIAL: CONFORM TO SECTION 415.2.3 OF THE WISDOT STANDARD SPECIFICATIONS.
11. MEASURE, BATCH, AND MIX CONCRETE MATERIALS AND CONCRETE IN ACCORDANCE WITH SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
12. GENERAL EXECUTION: CONFORM TO SECTION 415 OF THE WISDOT STANDARD SPECIFICATIONS.
13. PROOFROLL SUBGRADE AND AGGREGATE BASE AS OUTLINED IN EARTH MOVING SPECIFICATION PRIOR TO PLACEMENT OF PAVEMENTS.
14. SET, BRACE, AND SECURE EDGE FORMS, BULKHEADS, AND INTERMEDIATE SCREED GUIDES FOR PAVEMENT TO REQUIRED LINES, GRADES, AND ELEVATIONS. INSTALL FORMS TO ALLOW CONTINUOUS PROGRESS OF WORK AND SO FORMS CAN REMAIN IN PLACE AT LEAST 24 HOURS AFTER CONCRETE PLACEMENT.
15. CLEAN FORMS AFTER EACH USE AND COAT WITH FORM-RELEASE AGENT TO ENSURE SEPARATION FROM CONCRETE WITHOUT DAMAGE.
16. JOINTS GENERAL: FORM CONSTRUCTION, ISOLATION, AND CONTRACTION JOINTS AND TOOL EDGINGS TRUE TO LINE WITH FACES PERPENDICULAR TO SURFACE PLANE OF CONCRETE. CONSTRUCT TRANSVERSE JOINTS AT RIGHT ANGLES TO CENTERLINE, UNLESS OTHERWISE INDICATED. CONFORM TO SECTION 415 OF THE WISDOT STANDARD SPECIFICATIONS
17. CONSTRUCTION JOINTS: SET CONSTRUCTION JOINTS AT SIDE AND END TERMINATIONS OF PAVEMENT AND AT LOCATIONS WHERE PAVEMENT OPERATIONS ARE STOPPED FOR MORE THAN ONE-HALF HOUR UNLESS PAVEMENT TERMINATES AT ISOLATION JOINTS.
18. ISOLATION JOINTS: FORM ISOLATION JOINTS OF PREFORMED JOINT-FILLER STRIPS ABUTTING CONCRETE CURBS, CATCH BASINS, MANHOLES, INLETS, STRUCTURES, WALKS, OTHER FIXED OBJECTS, AND WHERE INDICATED.
19. CONTRACTION JOINTS: FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED. CONSTRUCT CONTRACTION JOINTS FOR A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF THE CONCRETE THICKNESS TO MATCH JOINTING OF EXISTING ADJACENT CONCRETE PAVEMENT.
20. EDGING: TOOL EDGES OF PAVEMENT, GUTTERS, CURBS, AND JOINTS IN CONCRETE AFTER INITIAL FLOATING WITH AN EDGING TOOL TO A 1/4-INCH RADIUS. REPEAT TOOLING OF EDGES AFTER APPLYING SURFACE FINISHES. ELIMINATE TOOL MARKS ON CONCRETE SURFACES.
21. CURBING: COMPLY WITH SECTION 601 OF THE WISDOT STANDARD SPECIFICATIONS.
22. SIDEWALKS: COMPLY WITH SECTION 602 OF THE WISDOT STANDARD SPECIFICATIONS.
23. MOISTEN AGGREGATE TO PROVIDE A UNIFORM DAMPENED CONDITION AT TIME CONCRETE IS PLACED.
24. FINISH CURBING IN ACCORDANCE WITH SECTION 601.3.5 OF THE WISDOT STANDARD SPECIFICATIONS.
25. FINISH SIDEWALK AND PATIO IN ACCORDANCE WITH SECTION 602.3.2.3 OF THE WISDOT STANDARD SPECIFICATIONS (LIGHT BROOM FINISH).
26. FINISH CONCRETE VEHICULAR PAVEMENTS AND PADS IN ACCORDANCE WITH SECTION 415.3.8 OF THE WISDOT STANDARD SPECIFICATIONS (ARTIFICIAL TURF DRAG FINISH).
27. PROTECT AND CURE SIDEWALK IN ACCORDANCE WITH SECTION 602.3.2.6 OF THE WISDOT STANDARD SPECIFICATIONS.
28. PROTECT AND CURE CURBING IN ACCORDANCE WITH SECTION 601.3.7 OF THE WISDOT STANDARD SPECIFICATIONS.
29. PROTECT AND CURE VEHICULAR CONCRETE PAVING IN ACCORDANCE WITH SECTION 415.3.12 OF THE WISDOT STANDARD SPECIFICATIONS.
30. REMOVE AND REPLACE CONCRETE PAVEMENT THAT IS BROKEN, DAMAGED, OR DEFECTIVE OR THAT DOES NOT COMPLY WITH REQUIREMENTS IN THIS SECTION.
31. PROTECT CONCRETE FROM DAMAGE. EXCLUDE TRAFFIC FROM PAVEMENT FOR AT LEAST 7 DAYS AFTER PLACEMENT.
32. MAINTAIN CONCRETE PAVEMENT FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL. SWEEP CONCRETE PAVEMENT NOT MORE THAN TWO DAYS BEFORE DATE SCHEDULED FOR SUBSTANTIAL COMPLETION INSPECTIONS.

ASPHALTIC PAVING:

1. THE COMPOSITION, PLACING AND CONSTRUCTION OF ASPHALTIC PAVEMENTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 450, 455, 460, 465, AND 475 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION (WISDOT STANDARD SPECIFICATIONS).
2. CONTRACTOR SHALL PROVIDE PRODUCT DATA FOR EACH TYPE OF PRODUCT INDICATED - INCLUDE TECHNICAL DATA AND TESTED PHYSICAL AND PERFORMANCE PROPERTIES; JOB-MIX DESIGNS: CERTIFICATION THAT MIX MEETS OR EXCEEDS WISDOT STANDARD SPECIFICATIONS; AND MATERIAL CERTIFICATES CERTIFYING COMPLIANCE WITH WISDOT STANDARD SPECIFICATIONS.
3. MANUFACTURER QUALIFICATIONS: MANUFACTURER SHALL BE REGISTERED WITH AND APPROVED BY THE DOT OF THE STATE IN WHICH PROJECT IS LOCATED.
4. ENVIRONMENTAL LIMITATIONS: DO NOT APPLY ASPHALT MATERIALS IF BASE COURSE IS WET OR EXCESSIVELY DAMP OR IF THE FOLLOWING CONDITIONS ARE NOT MET: APPLY TACK COAT WHEN AMBIENT TEMPERATURE IS ABOVE 50 DEGREES FAHRENHEIT AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35 DEGREES FAHRENHEIT FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION; PLACE ASPHALTIC CONCRETE SURFACE COURSE WHEN TEMPERATURE IS ABOVE 40 DEGREES FAHRENHEIT; BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30 DEGREES FAHRENHEIT AND RISING. PROCEED WITH PAVEMENT MARKING ONLY ON CLEAN, DRY SURFACES. DO NOT APPLY BELOW THE MINIMUM PAVEMENT TEMPERATURE AS RECOMMENDED BY THE MANUFACTURER.
5. AGGREGATES SHALL BE IN ACCORDANCE WITH SECTION 460.2.2 OF THE WISDOT STANDARD SPECIFICATIONS.
6. ASPHALT MATERIALS SHALL BE IN ACCORDANCE WITH CHAPTER 455 OF THE WISDOT STANDARD SPECIFICATIONS.
7. PAVEMENT MARKING PAINT: PROVIDE PAINT FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCTS LIST. COLOR SHALL BE WHITE UNLESS INDICATED OTHERWISE ON PLANS.
8. HOT-MIX ASPHALT: ASPHALTIC BINDER COURSE SHALL BE WISDOT 3 LT 52-28 S AND SURFACE COURSE SHALL BE WISDOT 5 LT 52-28 S COMPLYING WITH THE WISDOT STANDARD SPECIFICATIONS.
9. AGGREGATE BASE COURSE BENEATH PAVEMENTS: FOR PRIVATE PAVEMENTS, SHALL BE 1-1/4" DENSE GRADED BASE COURSE CONFORMING TO SECTION 305 OF THE WISDOT STANDARD SPECIFICATIONS. BASE COURSE BENEATH PUBLIC ROADS SHALL CONSIST OF A 5" BASE LAYER OF 1.25 INCH TB AND A 5" SURFACE LAYER OF 0.75 INCH TB.
10. PAVEMENT PLACEMENT GENERAL: ASPHALT CONCRETE PAVING EQUIPMENT, WEATHER LIMITATIONS, JOB-MIX FORMULA, MIXING, CONSTRUCTION METHODS, COMPACTION, FINISHING, TOLERANCE AND PROTECTION SHALL CONFORM TO THE REQUIREMENTS OF THE APPROPRIATE SECTIONS OF THE WISDOT STANDARD SPECIFICATIONS.
11. PREPARE AND PROOFROLL SUBGRADES AND AGGREGATE BASE COURSE AS OUTLINED IN EARTH MOVING SPECIFICATIONS PRIOR TO PLACEMENT OF ASPHALT PAVEMENTS.
12. SWEEP LOOSE GRANULAR PARTICLES FROM SURFACE OF AGGREGATE BASE COURSE PRIOR TO PAVEMENT PLACEMENT. DO NOT DISLODGE OR DISTURB AGGREGATE EMBEDDED IN COMPACTED SURFACE OF BASE COURSE.
13. SPREAD AND FINISH ASPHALTIC MIXTURE IN ACCORDANCE WITH SECTION 450.3.2.5 OF THE WISDOT STANDARD SPECIFICATIONS. PAVEMENT THICKNESSES SHALL BE AS INDICATED ON THE PLANS.
14. PROMPTLY CORRECT SURFACE IRREGULARITIES IN PAVING COURSE BEHIND PAVER. USE SUITABLE HAND TOOLS TO REMOVE EXCESS MATERIAL FORMING HIGH SPOTS. FILL DEPRESSIONS WITH HOT-MIX ASPHALT TO PREVENT SEGREGATION OF MIX; USE SUITABLE HAND TOOLS TO SMOOTH SURFACE.
15. COMPACT ASPHALTIC PAVEMENT IN ACCORDANCE WITH SECTION 450.3.2.6 OF THE WISDOT STANDARD SPECIFICATIONS.
16. PROTECTION: AFTER FINAL ROLLING, DO NOT PERMIT VEHICULAR TRAFFIC ON PAVEMENT UNTIL IT HAS COOLED AND HARDENED. ERECT BARRICADES TO PROTECT PAVING FROM TRAFFIC UNTIL MIXTURE HAS COOLED ENOUGH NOT TO BECOME MARKED.
17. THICKNESS TOLERANCE: COMPACT EACH COURSE TO PRODUCE THE THICKNESS INDICATED WITHIN PLUS/MINUS ¼ INCH FOR BINDER COURSE AND PLUS ¼ INCH FOR SURFACE COURSE, NO MINUS.
18. SURFACE SMOOTHNESS TOLERANCE: COMPACT EACH COURSE TO PRODUCE A SURFACE SMOOTHNESS WITHIN THE FOLLOWING TOLERANCES AS DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED TRANSVERSELY OR LONGITUDINALLY TO PAVED AREAS: BINDER COURSE: ¼ INCH; SURFACE COURSE: 1/8 INCH. REMOVE AND REPLACE ALL HUMPS OR DEPRESSIONS EXCEEDING THE SPECIFIED TOLERANCES.
19. DO NOT APPLY PAVEMENT-MARKING PAINT UNTIL LAYOUT, COLORS, AND PLACEMENT HAVE BEEN VERIFIED WITH ENGINEER.
20. APPLY MARKINGS TO A DRY SURFACE FREE FROM FROST. REMOVE DUST, DIRT, OIL, GREASE, GRAVEL, DEBRIS OR OTHER MATERIAL THAT MAY PREVENT BONDING TO THE PAVEMENT.
21. APPLY PAINT AS THE MANUFACTURER SPECIFIES WITH MECHANICAL EQUIPMENT TO PRODUCE PAVEMENT MARKINGS, OF DIMENSIONS INDICATED, WITH UNIFORM, STRAIGHT EDGES. APPLY AT MANUFACTURER'S RECOMMENDED RATES AT A MINIMUM RATE OF 17.6 GALLONS/MILE FOR A CONTINUOUS 4" LINE.
22. TESTING AGENCY: CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND TO PREPARE TEST REPORTS.

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SPECIFICATONS

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023
CITY RESUBMITTAL	09/11/2023

SCALE:	NTS
PROJECT NO:	21608
DESIGN DATE:	----
PLOT DATE:	9/7/2023
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CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	C501

14.54
CTRAUTSCHOLD
C501
21608
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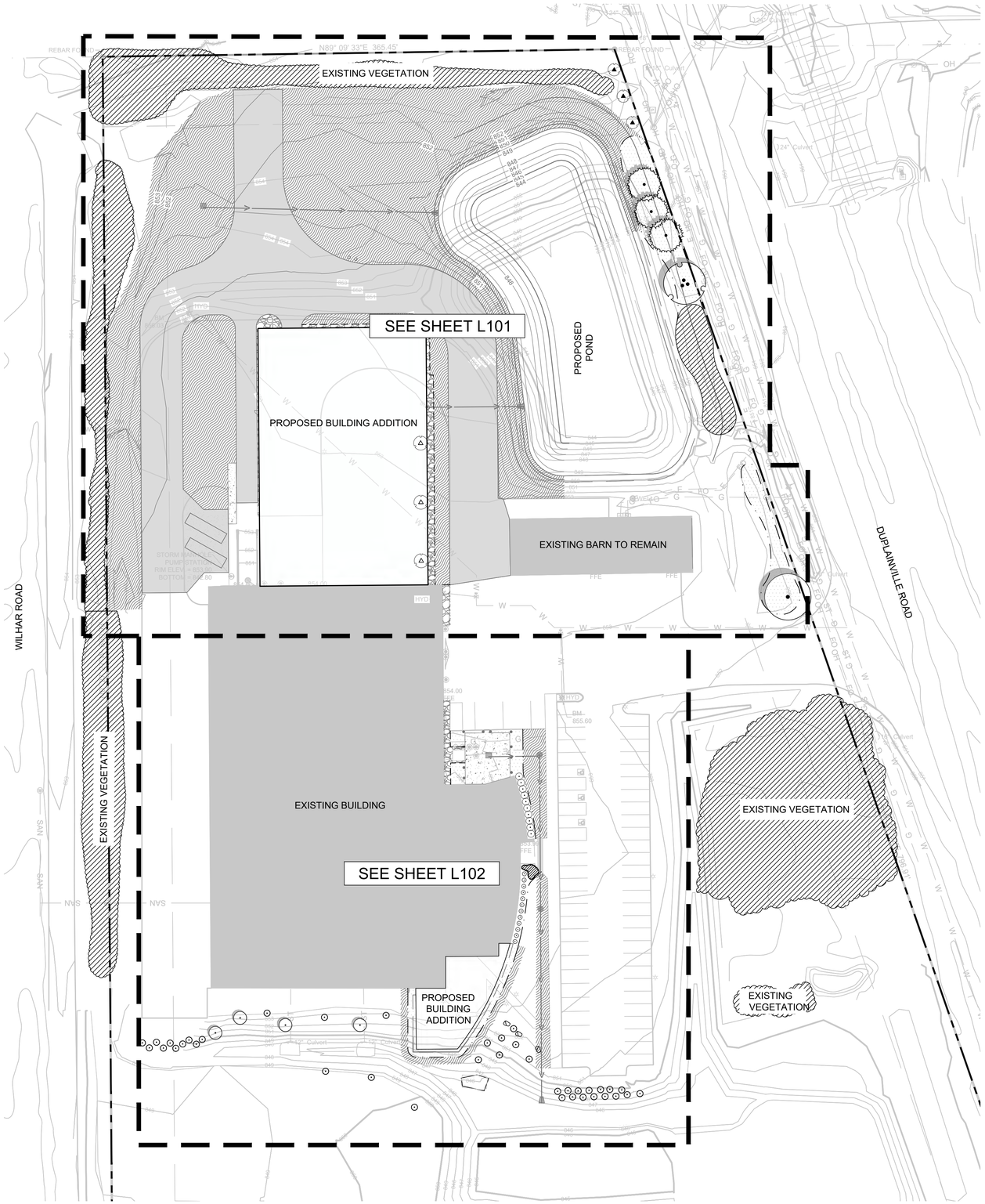

LANDSCAPE LEGEND:

- NO-MOW TURFGRASS SEED
- HARDWOOD BARK MULCH PLANT BED
- STONE MULCH
- PROPERTY LINE
- PLANT EDGING
- SHEET MATCHLINE
- EXISTING TREE TO BE TRANSPLANTED
- EXISTING TREE TRANSPLANT LOCATION
- EXISTING EVERGREEN TREE
- EXISTING DECIDUOUS TREE
- EXISTING VEGETATION

OVERALL PLANT SCHEDULE

DECIDUOUS TREES	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER		QTY
	BP	Betula papyrifera / Paper Birch	2.5" Cal.	B&B Multi-Stem		1
EVERGREEN TREES	**CODE**	**BOTANICAL / COMMON NAME**	**SIZE**	**CONTAINER**		**QTY**
	PA	Picea abies / Norway Spruce	6` Ht.	B&B		3
DECIDUOUS SHRUBS	**CODE**	**BOTANICAL / COMMON NAME**	**SIZE**	**CONTAINER**		**QTY**
	CB	Cornus sericea 'Bergeson' / Bergeson Dogwood	5 gal.	Cont.		36
	HL	Hydrangea paniculata 'SMHPLQF' / Little Quick Fire® Panicle Hydrangea	3 gal.	Cont.		13
	PS2	Physocarpus opulifolius 'Seward' / Summer Wine® Ninebark	5 gal.	Cont.		19
EVERGREEN SHRUBS	**CODE**	**BOTANICAL / COMMON NAME**	**SIZE**	**CONTAINER**		**QTY**
	JY	Juniperus horizontalis 'Youngstown' / Creeping Juniper	5 gal.	Cont.		12
	PS3	Pinus mugo 'Slowmound' / Slowmound Mugo Pine	5 gal.	Cont.		9
	TD	Taxus x media 'Densiformis' / Dense Anglo-Japanese Yew	5 gal.	Cont.		5
ORNAMENTAL GRASSES	**CODE**	**BOTANICAL / COMMON NAME**	**SIZE**	**CONTAINER**		**QTY**
	CK	Calamagrostis x acutiflora 'Karl Foerster' / Karl Foerster Feather Reed Grass	1 gal.	Cont.		95
PERENNIALS	**CODE**	**BOTANICAL / COMMON NAME**	**SIZE**	**CONTAINER**		**QTY**
	HG	Hemerocallis x 'Going Bananas' / Going Bananas Daylily	1 gal.	Cont.		22

LANDSCAPE GENERAL NOTES:

1. VERIFY EXISTING AND PROPOSED CONDITIONS, UTILITIES, PIPES, AND STRUCTURES, ETC. PRIOR TO BIDDING AND CONSTRUCTION.
2. INSPECT THE SITE PRIOR TO COMMENCING WORK. DOCUMENT IN WRITING AND PHOTOGRAPH EXISTING CONDITIONS WITHIN, AND IN AREAS ADJACENT TO THE LIMITS OF CONSTRUCTION. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES NOT DOCUMENTED IN THE PHOTOGRAPHS PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITIES.
3. COORDINATE THE INSTALLATION OF PLANT MATERIAL WITH INSTALLATION OF ADJACENT PAVEMENTS, DRAINAGE, CURB RELATED STRUCTURES WITH OTHER TRADES.
4. RESTORE AREAS OF THE SITE, OR ADJACENT AREAS, WHERE DISTURBED. DAMAGE CAUSED DURING LANDSCAPE INSTALLATION TO EXISTING CONDITIONS AND IMPROVEMENTS IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
5. CONTRACTOR SHALL THOROUGHLY REVIEW ALL SPECIFICATIONS RELATED TO TREE PROTECTION, SOIL PREPARATION, TURF, GRASSES AND PLANTS. THESE SECTIONS PROVIDE ADDITIONAL INFORMATION ON MATERIALS AND SET STANDARDS FOR QUALITY AND INSTALLATION REQUIREMENTS.
6. PROVIDE 3" DOUBLE SHREDDED BARK MULCH FOR ALL PLANTED TREES, SHRUBS AND LANDSCAPE BEDS.

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

GRAPHIC SCALE
0 40 80

PEWAUKEE EXPANSION
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

OVERALL LANDSCAPE PLAN

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023

SCALE:	1"=40'
PROJECT NO:	21608
DESIGN DATE:	----
PLOT DATE:	9/8/2023
DRAWN BY:	HLY
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	L100

07:57 HJOHN L100 21608

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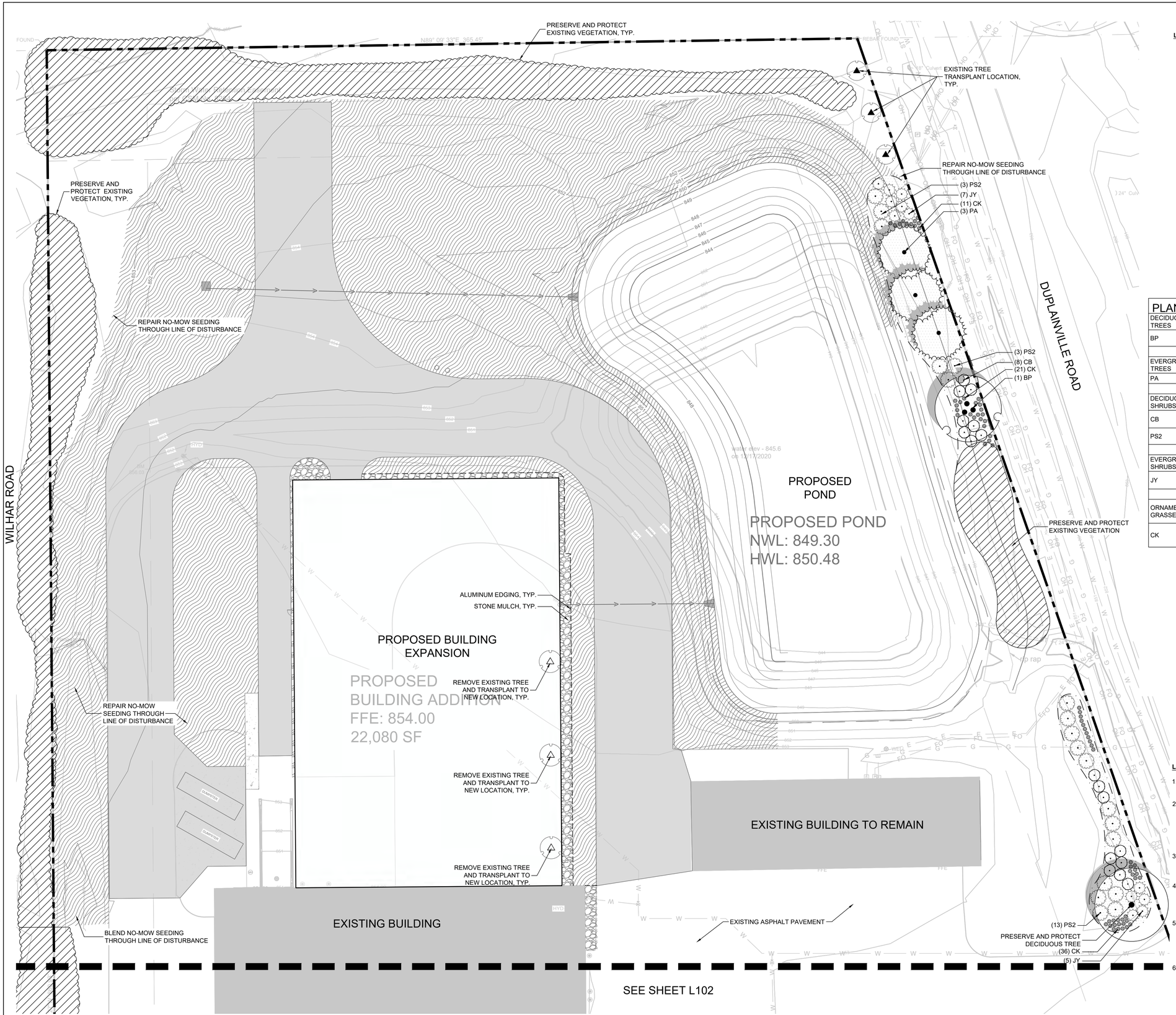

LANDSCAPE LEGEND:

- NO-MOW TURFGRASS SEED
- HARDWOOD BARK MULCH PLANT BED
- STONE MULCH
- PROPERTY LINE
- PLANT EDGING
- SHEET MATCHLINE
- EXISTING TREE TO BE TRANSPLANTED
- EXISTING TREE TRANSPLANT LOCATION
- EXISTING EVERGREEN TREE
- EXISTING DECIDUOUS TREE
- EXISTING VEGETATION

PLANT SCHEDULE L101

DECIDUOUS TREES	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY
BP	Betula papyrifera / Paper Birch	2.5" Cal.	B&B Multi-Stem	1
EVERGREEN TREES	**BOTANICAL / COMMON NAME**	**SIZE**	**CONTAINER**	**QTY**
PA	Picea abies / Norway Spruce	6' Ht.	B&B	3
DECIDUOUS SHRUBS	**BOTANICAL / COMMON NAME**	**SIZE**	**CONTAINER**	**QTY**
CB	Cornus sericea 'Bergeson' / Bergeson Dogwood	5 gal.	Cont.	17
PS2	Physocarpus opulifolius 'Seward' / Summer Wine® Ninebark	5 gal.	Cont.	19
EVERGREEN SHRUBS	**BOTANICAL / COMMON NAME**	**SIZE**	**CONTAINER**	**QTY**
JY	Juniperus horizontalis 'Youngstown' / Creeping Juniper	5 gal.	Cont.	12
ORNAMENTAL GRASSES	**BOTANICAL / COMMON NAME**	**SIZE**	**CONTAINER**	**QTY**
CK	Calamagrostis x acutiflora 'Karl Foerster' / Karl Foerster Feather Reed Grass	1 gal.	Cont.	68

LANDSCAPE GENERAL NOTES:

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3. COORDINATE THE INSTALLATION OF PLANT MATERIAL WITH INSTALLATION OF ADJACENT PAVEMENTS, DRAINAGE, CURB RELATED STRUCTURES WITH OTHER TRADES.
4. RESTORE AREAS OF THE SITE, OR ADJACENT AREAS, WHERE DISTURBED. DAMAGE CAUSED DURING LANDSCAPE INSTALLATION TO EXISTING CONDITIONS AND IMPROVEMENTS IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
5. CONTRACTOR SHALL THOROUGHLY REVIEW ALL SPECIFICATIONS RELATED TO TREE PROTECTION, SOIL PREPARATION, TURF, GRASSES AND PLANTS. THESE SECTIONS PROVIDE ADDITIONAL INFORMATION ON MATERIALS AND SET STANDARDS FOR QUALITY AND INSTALLATION REQUIREMENTS.
6. PROVIDE 3" DOUBLE SHREDDED BARK MULCH FOR ALL PLANTED TREES, SHRUBS AND LANDSCAPE BEDS.

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GRAPHIC SCALE 0 20 40

PEWAUKEE EXPANSION
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

LANDSCAPE ENLARGEMENT

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023

SCALE:	1" = 20'
PROJECT NO:	21608
DESIGN DATE:	----
PLOT DATE:	9/8/2023
DRAWN BY:	HLY
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	L101

07:57 HJOHN L101 21608

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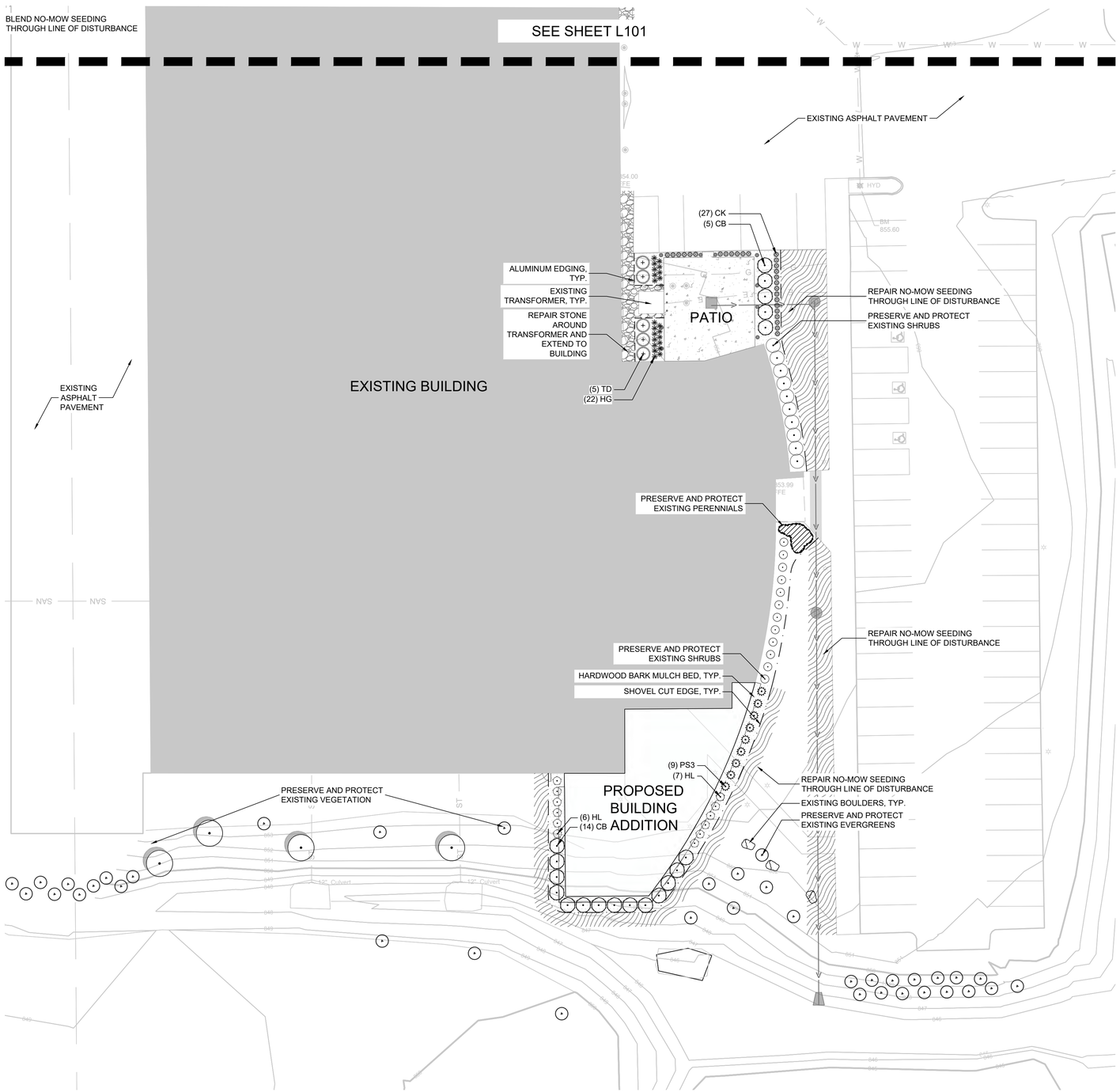

LANDSCAPE LEGEND:

- NO-MOW TURFGRASS SEED
- HARDWOOD BARK MULCH PLANT BED
- STONE MULCH
- PROPERTY LINE
- PLANT EDGING
- SHEET MATCHLINE
- EXISTING TREE TO BE TRANSPLANTED
- EXISTING TREE TRANSPLANT LOCATION
- EXISTING EVERGREEN TREE
- EXISTING DECIDUOUS TREE
- EXISTING VEGETATION

PLANT SCHEDULE L102

DECIDUOUS SHRUBS	BOTANICAL / COMMON NAME	SIZE	CONTAINER		QTY
CB	Cornus sericea 'Bergeson' / Bergeson Dogwood	5 gal.	Cont.		19
HL	Hydrangea paniculata 'SMHPLQF' / Little Quick Fire® Panicle Hydrangea	3 gal.	Cont.		13
EVERGREEN SHRUBS	BOTANICAL / COMMON NAME	SIZE	CONTAINER		QTY
PS3	Pinus mugo 'Slowmound' / Slowmound Mugo Pine	5 gal.	Cont.		9
TD	Taxus x media 'Densiformis' / Dense Anglo-Japanese Yew	5 gal.	Cont.		5
ORNAMENTAL GRASSES	BOTANICAL / COMMON NAME	SIZE	CONTAINER		QTY
CK	Calamagrostis x acutiflora 'Karl Foerster' / Karl Foerster Feather Reed Grass	1 gal.	Cont.		27
PERENNIALS	BOTANICAL / COMMON NAME	SIZE	CONTAINER		QTY
HG	Hemerocallis x 'Going Bananas' / Going Bananas Daylily	1 gal.	Cont.		22

LANDSCAPE GENERAL NOTES:

1. VERIFY EXISTING AND PROPOSED CONDITIONS, UTILITIES, PIPES, AND STRUCTURES, ETC. PRIOR TO BIDDING AND CONSTRUCTION.
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GRAPHIC SCALE 0 20 40

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PEWAUKEE, WI 53072

LANDSCAPE ENLARGEMENT

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DRAWN BY:	HLY
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	L102

07:57 HJOHN L102 21608

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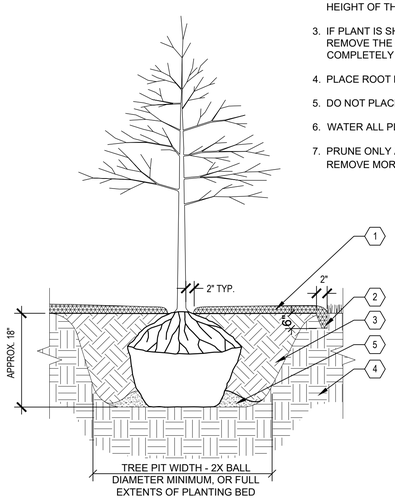
NOTES:
1. PLANT EACH TREE SUCH THAT THE ROOT FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
2. DEPTH OF THE PLANTING HOLE SHOULD BE DETERMINED AND DUG AFTER THE ROOT FLARE IS LOCATED. PLANTING HOLE MUST BE NO DEEPER THAN THE HEIGHT OF THE ROOT BALL.
3. IF PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, CUT AND REMOVE THE WIRE BASKET ENTIRELY. REMOVE ALL TWINE, ROPE, AND BURLAP COMPLETELY FROM ALL ROOT BALLS.
4. PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.
5. DO NOT PLACE MULCH IN CONTACT WITH STEMS.
6. WATER ALL PLANTS WITHIN 2 HOURS OF INSTALLATION.
7. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY BRANCHES. DO NOT REMOVE MORE THAN ⅓ OF THE ORIGINAL PLANT MASS.

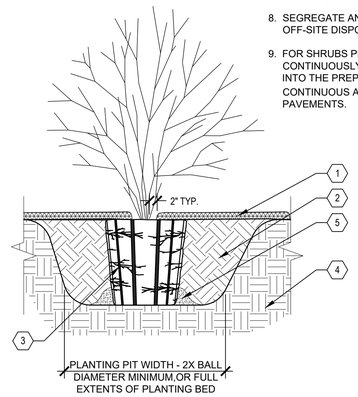


KEYED LEGEND

1. 3" DEPTH SHREDDED HARDWOOD BARK MULCH. PROVIDE 4'-0" DIAMETER MULCH RINGS AT THE BASE OF ANY TREES PLANTED IN LAWN.
2. PROVIDE SPADED EDGE, 2" WIDE, 6" DEEP FOR ENTIRE PERIMETER OF BARK MULCH RINGS AT BASE OF TREES PLANTED IN LAWNS
3. PLANTING SOIL, PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE ENTIRE AREA OF ANY GIVEN PLANT BED.
4. PREPARED SUBGRADE
5. TAMP SOIL AROUND BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT BALL DOES NOT SHIFT

A TREE PLANTING
SCALE:NTS

NOTES:
1. MAKE 1" TO 2" DEEP VERTICAL CUTS EVERY 6" AROUND THE CIRCUMFERENCE OF THE ROOT BALL BEFORE PLANTING TO LOOSEN POT-BOUND ROOTS.
2. PLANT EACH SHRUB SUCH THAT THE ROOT FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
3. PLANTING HOLE MUST NOT BE DEEPER THAN THE HEIGHT OF THE ROOT BALL.
4. DO NOT PLACE MULCH IN CONTACT WITH STEMS.
5. PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.
6. WATER ALL PLANTS WITHIN 2 HOURS OF INSTALLATION.
7. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY BRANCHES. DO NOT REMOVE MORE THAN ⅓ OF THE ORIGINAL PLANT MASS.
8. SEGREGATE ANY SOIL FROM BELOW WARNING LAYER EXCAVATED DURING PLANTING FOR OFF-SITE DISPOSAL. COORDINATE DISPOSAL WITH ENVIRONMENTAL CONSULTANT.
9. FOR SHRUBS PLANTED WITHIN PLANTING BEDS, CONTRACTOR SHALL PROVIDE PLANTING SOIL CONTINUOUSLY FOR THE ENTIRE PLANTING BED AND INDIVIDUAL SHRUBS SHALL BE PLANTED INTO THE PREPARED PLANTING SOIL. MULCH SURFACE FOR PLANTING BEDS SHALL ALSO BE CONTINUOUS ACROSS THE ENTIRE SURFACE AND HELD ½" MIN. TO 1" MAX. BELOW ADJACENT PAVEMENTS.

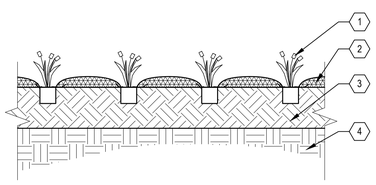


KEYED LEGEND

1. 3" DEPTH TWICE-SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE INDICATED, KEEP 2" CLEAR OF STEMS
2. PLANTING SOIL AS SPECIFIED, PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE ENTIRE AREA OF ANY GIVEN PLANT BED
3. 1" TO 2" DEEP VERTICAL CUTS EVERY 6"
AROUND PERIMETER
4. PREPARED SUBGRADE
5. TAMP SOIL AROUND BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT BALL DOES NOT SHIFT

B SHRUB PLANTING
SCALE:NTS

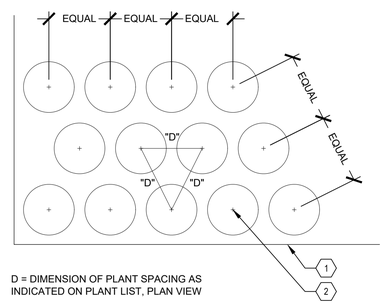
NOTES:
1. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
2. PLANTING HOLE MUST NOT BE DEEPER THAN THE HEIGHT OF THE ROOT BALL.
3. DO NOT PLACE MULCH IN CONTACT WITH STEMS.
4. WATER ALL PLANTS THOROUGHLY WITHIN 2 HOURS OF INSTALLATION.
5. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY OR DEAD PLANT PARTS. DO NOT REMOVE MORE THAN ⅓ OF THE ORIGINAL PLANT MASS.
6. FOR PLANTS PLANTED WITHIN PLANTING BEDS, CONTRACTOR SHALL PROVIDE PLANTING SOIL CONTINUOUSLY FOR THE ENTIRE PLANTING BED AND INDIVIDUAL SHRUBS SHALL BE PLANTED INTO THE PREPARED PLANTING SOIL. MULCH SURFACE FOR PLANTING BEDS SHALL ALSO BE CONTINUOUS ACROSS THE ENTIRE SURFACE AND HELD ½" MIN. TO 1" MAX. BELOW ADJACENT PAVEMENTS.



KEYED LEGEND

1. PERENNIAL, ORNAMENTAL GRASS, OR GROUNDCOVER PLUG, SEE LANDSCAPE PLAN SHEETS L100-L103
2. 3" DEPTH TWICE-SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE INDICATED, KEEP 3" CLEAR OF STEMS
3. PLANTING SOIL, PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE ENTIRE AREA OF ANY GIVEN PLANT BED
4. PREPARED SUBGRADE

C PERENNIAL PLANTING
SCALE:NTS



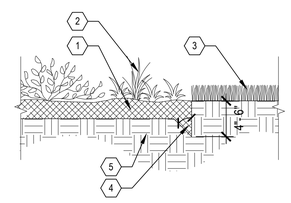
D = DIMENSION OF PLANT SPACING AS INDICATED ON PLANT LIST, PLAN VIEW

D PLANT SPACING
SCALE:NTS

NOTES
1. SET FINISH GRADE OF PLANTING AREA 2" BELOW FINISH SURFACE OF PAVING, CURB, OR HEADER
2. SEE PLANTING SCHEDULE FOR SPACING OF ALL SHRUBS AND GROUNDCOVERS
3. ALL SHRUBS / GROUNDCOVER TO BE PLANTED AT EQUAL SPACING (TRIANGULAR) UNLESS OTHERWISE INDICATED ON PLANS.
4. TO DETERMINE APPROPRIATE PLANT QUANTITIES REFER TO THE PLANTING SCHEDULE OR PLAN.

KEYED LEGEND

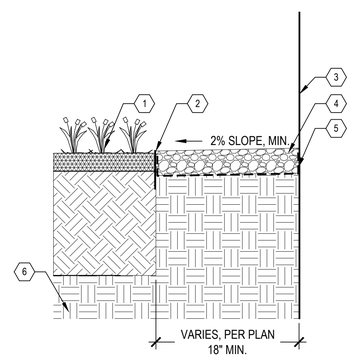
1. EDGE OF ADJACENT PAVEMENT
2. SHRUB, PERENNIAL OR ORNAMENTAL GRASS PLANT CENTER LOCATION



KEYED LEGEND

1. 3" DEPTH OF MULCH LAYER
2. SHRUB PLANTING BED
3. LAWN ADJACENT TO PLANTING BED
4. 45 DEGREE ANGLE SHOVEL CUT EDGE TOWARD PLANTING BED
5. COMPACTED SUBGRADE

E SHOVEL CUT EDGE
SCALE:NTS



KEYED LEGEND

1. ADJACENT PLANTING BED
2. NATURAL MILL FINISH ALUMINUM EDGING
3. BUILDING FACE
4. 3" DEPTH STONE MULCH
5. WOVEN GEOTEXTILE FILTER FABRIC, WRAP UP SIDES OF BUILDING AND EDGING
6. PREPARED SUBGRADE

F STONE MAINTENANCE EDGE
SCALE:NTS

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LANDSCAPE DETAILS

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023

SCALE:	
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DRAWN BY:	HLY
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	L200

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L200
21608

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PLANTING QUALITY ASSURANCE

1. PLANTS ARE TO BE INSPECTED UPON DELIVERY TO PROJECT SITE AND THE LANDSCAPE ARCHITECT OR OWNER'S PROJECT REPRESENTATIVE MAY REJECT ANY SPECIMENS NO LONGER MEETING THE SPECIFIED STANDARDS OR THAT HAVE BEEN DAMAGED IN TRANSIT.
2. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES AND VARIETY/HYBRID/CULTIVAR SPECIFIED, AND NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES, AND UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE OF THE SITE LOCATION. SPECIMENS NURSERY-DUG TO BE REPLANTED SHALL HAVE BEEN FRESHLY DUG AND PROPERLY PREPARED FOR PLANTING.
3. TREES:
   - 3.1. SHALL BE TRAINED IN DEVELOPMENT AND APPEARANCE AS TO BE SUPERIOR IN FORM, COMPACTNESS AND SYMMETRY. TREES WITH MULTIPLE LEADERS, UNLESS SPECIFIED OTHERWISE, AND SHRUBS WITH DAMAGED OR CUT MAINSTEM(S), WILL BE REJECTED.
   - 3.2. WITH A DAMAGED, CUT OR CROOKED LEADER, ABRASION OF BARK, SUNSCALD, FROST CRACK, DISFIGURING KNOTS, INSECTS (INCLUDING EGGS AND LARVAE) OR INSECT DAMAGE, CANKERS/CANKEROUS LESIONS OR FUNGAL MATS, MOLD, PREMATURELY-OPENED BUDS, OR CUTS OF LIMBS OVER ¾" DIAMETER THAT ARE NOT COMPLETELY CALLUSED WILL BE REJECTED.
   - 3.3. SHALL HAVE HEALTHY, WELL-DEVELOPED ROOT SYSTEMS, AND BE FREE FROM PHYSICAL DAMAGE OR OTHER HINDRANCES TO HEALTHY GROWTH.
   - 3.4. BALLED AND BURLAPPED PLANTS SHALL BE DUG WITH SOLID BALLS OF A DIAMETER NOT LESS THAN THAT RECOMMENDED BY THE AMERICAN STANDARDS FOR NURSERY STOCK, AND OF SUFFICIENT DEPTH TO INCLUDE BOTH FIBROUS AND FEEDING ROOTS. BALLS SHALL BE SECURELY WRAPPED WITH BURLAP, AND TIGHTLY BOUND WITH ROPE OR TWINE. NO PLANTS SHALL BE BOUND WITH ROPE OR WIRE IN SUCH A MANNER AS TO DAMAGE BARK OR BREAK BRANCHES. THE ROOT FLARE SHOULD BE WITHIN THE TOP 2" OF THE SOIL BALL. BALLED AND BURLAPPED PLANTS WILL NOT BE ACCEPTED IF THE BALL IS DRY, CRACKED, OR BROKEN BEFORE OR DURING PLANTING.
4. PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED WITHIN THE PLANT SCHEDULE.

PLANTING PROJECT CONDITIONS:

1. VERIFY SERVICE AND UTILITY LOCATIONS, AND DIMENSIONS OF CONSTRUCTION CONTIGUOUS WITH NEW PLANTINGS BY FIELD MEASUREMENTS BEFORE PROCEEDING WITH PLANTING WORK.
2. INTERRUPTION OF EXISTING SERVICES OR UTILITIES; DO NOT INTERRUPT SERVICES OR UTILITIES UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY SERVICES OR UTILITIES ACCORDING TO REQUIREMENTS INDICATED:
   - 2.1. NOTIFY OWNER'S PROJECT REPRESENTATIVE NO FEWER THAN TWO DAYS IN ADVANCE OF PROPOSED INTERRUPTION OF EACH SERVICE OR UTILITY.
   - 2.2. DO NOT PROCEED WITH INTERRUPTION OF SERVICES OR UTILITIES WITHOUT REPRESENTATIVE'S WRITTEN PERMISSION.
3. PLANTING RESTRICTIONS: PLANTING SHALL OCCUR DURING THE FOLLOWING ACCEPTABLE INSTALLATION PERIODS:
   - 3.1. DECIDUOUS TREES AND SHRUBS - APRIL 1 TO OCTOBER 15.
4. WEATHER LIMITATIONS: PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING TO BE PERFORMED WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED. APPLY PRODUCTS DURING FAVORABLE WEATHER CONDITIONS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND WARRANTY REQUIREMENTS.
5. CONTRACTOR SHALL PROTECT ALL EXISTING AND/OR NEWLY INSTALLED PLANTS, LAWNS, AND GRASS AREAS FROM DAMAGE AT ALL TIMES. DAMAGED PLANTS, LAWNS OR GRASS AREAS SHALL BE REPLACED OR TREATED AS REQUIRED TO CONFORM TO SPECIFICATIONS HEREIN FOR FRESH STOCK. WORK AREA SHALL BE KEPT CLEAN AND ORDERLY DURING THE INSTALLATION PERIOD. UNDER NO CONDITION SHALL DEBRIS FROM PLANTING ACTIVITIES RESULT IN A SAFETY HAZARD ON-SITE OR ADJACENT OFF-SITE PROPERTY. DAMAGE TO SITE IMPROVEMENTS OR ADJACENT LANDSCAPES INCURRED AS A RESULT OF PLANTING OR REPLACEMENT OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR THAT CAUSES THE DAMAGE AT NO COST TO THE OWNER.
6. EXAMINE AREAS TO RECEIVE PLANTS FOR COMPLIANCE WITH REQUIREMENTS AND CONDITIONS AFFECTING INSTALLATION AND PERFORMANCE. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
   - 6.1. VERIFY THAT NO FOREIGN OR DELETERIOUS MATERIAL OR LIQUID SUCH AS PAINT, PAINT WASHOUT, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, OR ACID HAS BEEN DEPOSITED IN SOIL WITHIN PLANTING AREAS.
   - 6.2. DO NOT MIX OR PLACE SOILS IN FROZEN, WET, OR MUDDY CONDITIONS.

PLANTING DELIVERY, STORAGE, & HANDLING:

1. BULK MATERIALS;
   - 1.1. DO NOT DUMP OR STORE BULK MATERIALS NEAR STRUCTURES, UTILITIES, WALKWAYS AND PAVEMENTS, OR ON EXISTING TURF AREAS OR PLANTS.
2. DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY. PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, WIND BURN, SWEATING, WHIPPING, AND OTHER HANDLING AND TYING DAMAGE. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF PLANTS DURING SHIPPING AND DELIVERY. DO NOT DROP PLANTS DURING DELIVERY AND HANDLING.
3. HANDLE PLANTING STOCK BY ROOT BALL.
4. DELIVER PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX HOURS AFTER DELIVERY, SET PLANTS AND TREES IN SHADED LOCATION, PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.
   - 4.1. SET BALLED STOCK ON GROUND AND COVER BALL WITH SOIL, PEAT MOSS, SAWDUST, OR OTHER ACCEPTABLE MATERIAL.
   - 4.2. WATER ROOT SYSTEMS OF PLANTS STORED ON-SITE DEEPLY AND THOROUGHLY WITH A FINE-MIST SPRAY. WATER AS OFTEN AS NECESSARY TO MAINTAIN ROOT SYSTEMS IN A MOIST, BUT NOT OVERLY WET CONDITION.

EXCAVATION FOR TREES & SHRUBS

1. EXCAVATE CIRCULAR PLANTING PITS AS INDICATED IN DRAWINGS. TRIM PERIMETER OF BOTTOM LEAVING CENTER AREA OF BOTTOM RAISED SLIGHTLY TO SUPPORT ROOT BALL AND ASSIST IN DRAINAGE AWAY FROM CENTER. DO NOT FURTHER DISTURB BASE. ENSURE THAT ROOT BALL WILL SIT ON UNDISTURBED BASE SOIL TO PREVENT SETTLING. SCARIFY SIDES OF PLANTING PIT SMEARED OR SMOOTHED DURING EXCAVATION.
   - 1.1. EXCAVATE APPROXIMATELY THREE TIMES AS WIDE AS BALL DIAMETER FOR BALLED AND BURLAPPED STOCK.
   - 1.2. DO NOT EXCAVATE DEEPER THAN DEPTH OF THE ROOT BALL, MEASURED FROM THE ROOT FLARE TO THE BOTTOM OF THE ROOT BALL.
   - 1.3. IF AREA UNDER THE PLANT WAS INITIALLY DUG TOO DEEP, ADD SOIL TO RAISE IT TO CORRECT LEVEL AND THOROUGHLY TAMP THE ADDED SOIL TO PREVENT SETTLING.
   - 1.4. MAINTAIN REQUIRED ANGELS OF REPOSE OF ADJACENT MATERIALS AS SHOWN IN DRAWINGS. DO NOT EXCAVATE SUBGRADES OF ADJACENT PAVING, STRUCTURES, HARDSCAPES, OR OTHER NEW OR EXISTING IMPROVEMENTS.
   - 1.5. MAINTAIN SUPERVISION OF EXCAVATIONS DURING WORKING HOURS.
   - 1.6. KEEP EXCAVATIONS COVERED OR OTHERWISE PROTECTED WHEN UNATTENDED BY INSTALLER'S PERSONNEL.
2. SUBSOIL AND TOPSOIL REMOVED FROM EXCAVATIONS MAY BE USED AS PLANTING SOIL IF THEY CONFORM TO THE REQUIREMENTS LISTED IN THESE SPECIFICATIONS.
3. NOTIFY OWNER'S PROJECT REPRESENTATIVE IF UNEXPECTED ROCK OR OBSTRUCTIONS DETRIMENTAL TO TREES OR SHRUBS ARE ENCOUNTERED IN EXCAVATIONS.
4. NOTIFY OWNER'S PROJECT REPRESENTATIVE IF SUBSOIL CONDITIONS EVIDENCE UNEXPECTED WATER SEEPAGE OR RETENTION IN TREE OR SHRUB PLANTING PITS.

TREE & SHRUB PLANTING

1. BEFORE PLANTING VERIFY THAT ROOT FLARE IS VISIBLE AT TOP OF ROOT BALL. IF ROOT FLARE IS NOT VISIBLE, REMOVE SOIL IN A LEVEL MANNER FROM THE ROOT BALL TO WHERE THE TOP-MOST ROOT EMERGES FROM THE TRUNK. AFTER SOIL REMOVAL TO EXPOSE ROOT FLARE, VERIFY THAT ROOT BALL STILL MEETS SIZE REQUIREMENTS. PLANT MATERIAL WITHOUT ROOT FLARE VISIBLE OR PLANTED TOO LOW WILL BE RE-PLANTED AT THE REQUEST OF THE LANDSCAPE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
2. PLANTS FOUND TO HAVE STEM GIRDLING ROOTS AND/OR KINKED ROOTS AT THE TIME OF PLANTING WILL BE REJECTED AND REPLACEMENTS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
3. REMOVE ALL TWINE, STRING, WIRE, AND ALL OTHER NON-BIODEGRADABLE MATERIAL ENTIRELY FROM ROOT BALL AREA.
4. REMOVE ONLY DEAD, DYING, OR BROKEN BRANCHES. DO NOT PRUNE FOR SHAPE. DO CUT TREE LEADERS.
5. SET BALLED AND BURLAPPED STOCK PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 2 INCHES ABOVE ADJACENT FINISH GRADES.
   - 5.1. USE SOIL MATERIALS FROM EXCAVATION FOR BACKFILL.
   - 5.2. CAREFULLY CUT AND REMOVE BURLAP, ROPE, AND WIRE BASKETS FROM THE ENTIRE ROOT BALL. REMOVE PALLETS, IF ANY, BEFORE SETTING. DO NOT USE PLANTING STOCK IF ROOT BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATION.
   - 5.3. BACKFILL AROUND ROOT BALL IN LAYERS, TAMPING TO SETTLE SOIL AND ELIMINATE VOIDS AND AIR POCKETS. WHEN PLANTING PIT IS APPROXIMATELY ONE-HALF FILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS ABSORBED.
   - 5.4. CONTINUE BACKFILLING PROCESS. WATER AGAIN AFTER PLACING AND TAMPING FINAL LAYER OF SOIL.

TREE & SHRUB MATERIAL:

1. GENERAL: FURNISH NURSERY-GROWN PLANTS TRUE TO GENUS, SPECIES, VARIETY, CULTIVAR, STEM FORM, SHEARING, AND OTHER FEATURES INDICATED IN PLANT SCHEDULE SHOWN AND DRAWINGS,; AND WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE, PESTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.
   - 1.1. TREES WITH DAMAGED, CROOKED, OR MULTIPLE LEADERS; TIGHT VERTICAL BRANCHES WHERE BARK IS SQUEEZED BETWEEN TWO BRANCHES OR BETWEEN BRANCH AND TRUNK ("INCLUDED BARK"); CROSSING TRUNKS; CUT-OFF LIMBS MORE THAN $\frac{3}{4}$" IN DIAMETER; OR WITH STEM GIRDLING ROOTS WILL BE REJECTED.
   - 1.2. COLLECTED STOCK: DO NOT USE PLANTS HARVESTED FROM THE WILD, FROM NATIVE STANDS, FROM AN ESTABLISHED LANDSCAPE PLANTING, OR NOT GROWN IN A STATE CERTIFIED NURSERY.
   - 1.3. PLANT MATERIAL SHALL BE PROVIDED IN THE CONTAINER TYPE INDICATED IN THE DRAWINGS (B&B, CONTAINER, BARE ROOT, ETC.), UNLESS THE CONTRACTOR RECEIVES WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT THAT SUBSTITUTION OF CONTAINER TYPE IS ACCEPTABLE.
2. FURNISH TREES WITH ROOT BALLS MEASURED FROM TOP OF ROOT BALL. ROOT FLARE SHALL BE VISIBLE BEFORE PLANTING.
3. SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD.

PLANTING SOIL:

PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE WIDTH OF LANDSCAPE AREAS, AND A MINIMUM OF 3X THE DIAMETER OF THE ROOT BALL LENGTHWISE

1. INSTALL PLANTING SOIL FOR PLANT BEDS IN 6" LIFTS, MINIMUM 18" DEPTH.
2. DO NOT APPLY PLANTING SOIL TO SATURATED OR FROZEN SUBGRADES.
3. PLANTING SOIL SHALL BE A MIX OF 6-PARTS TOPSOIL, 1-PART COMPOST (APPROVED FOR USE ON THE PROJECT). THOROUGHLY BLEND PLANTING SOIL OFF-SITE BEFORE SPREADING.
   - 3.1. THE PROJECT WILL ACCEPT ONLY CLEAN, SALVAGED OR IMPORTED TOPSOIL CAPABLE OF PASSING THE 1" SIEVE, FREE OF ROCKS, DEBRIS, AND OF NOXIOUS WEEDS.
   - 3.2. STRIPPED, SALVAGED, OR MINED TOPSOIL MUST BE TAKEN FROM THE TOP 6-INCHES OF THE A-HORIZON, HAVING A DARK BROWN TO BLACK COLOR WITH A GRANULAR STRUCTURE AND CLAY CONTENT OF LESS THAN 25%, VERIFIED WITH A RIBBON TEST THAT YIELDS NO MORE THAN 1-INCH.

METAL EDGING

1. STANDARD PROFILE, COMMERCIAL-GRADE, EXTRUDED ALUMINUM EDGING, FABRICATED IN STANDARD LENGTHS WITH INTERLOCKING SECTIONS WITH LOOPS STAMPED FROM FACE OF SECTIONS TO RECEIVE STAKES.
   - 1.1. BASIS OF DESIGN: CLEANLINE XL BY PERMALOC OR APPROVED EQUAL.
   - 1.2. EDGING SIZE: 3/16-INCH-WIDE BY 5 INCHES DEEP
   - 1.3. STAKES: ALUMINUM, ASTM 221, ALLOY 6061-T6, 18-INCHES LONG.
   - 1.4. FINISH: MILL (NATURAL ALUMINUM)
   - 1.5. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING: CURV-RITE, INC., PERMALOC CORPORATION, RUSSELL, J.D. COMPANY (THE), SURE-LOC EDGING CORPORATION
2. INSTALL METAL EDGE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
3. ENSURE THAT METAL EDGING IS PROPERLY INSTALLED AND SECURED BEFORE INSTALLING STONE MULCH.

STONE MULCH MATERIAL & INSTALLATION:

1. SHALL BE HARD, DURABLE, STONE, WASHED FREE OF LOAM, SAND, CLAY, AND OTHER FOREIGN SUBSTANCES, OF THE FOLLOWING TYPE, SIZE RANGE, AND COLOR:
   - 1.1. MATERIAL: ANGULAR WASHED STONE.
   - 1.2. SIZE: 3/4"
   - 1.3. COLOR RANGE: BLEND OF BUFF AND GREY TONES
   - 1.4. BASIS OF DESIGN: 'ALPINE MEDIUM' STONE BY HALQUIST.
2. LIGHTLY COMPACT AREAS TO RECEIVE STONE MULCH
3. INSTALL WEED BARRIER FABRIC IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS; COMPLETELY COVER AREA TO BE MULCHED, OVERLAPPING EDGES OF FABRIC LENGTHS A MINIMUM OF 6-INCHES AND SECURING SEAMS WITH GALVANIZED PINS. WEED BARRIER FABRIC SHALL BE WRAPPED VERTICALLY UP THE OUTSIDE EDGES OF SURROUNDING CONCRETE FLATWORK OR CURB AND SECURED IN PLACE. HOLD FABRIC 2" CLEAR OF TOP OF ADJACENT CURB AND CONCRETE FLATWORK SO IT IS NOT VISIBLE FROM SURFACE.
4. PLACE AND FINISH STONE MULCH AS INDICATED IN DRAWINGS, ENSURING A SMOOTH, LEVEL TOP SURFACE FOR ALL STONE MULCH AREAS HELD APPROXIMATELY 1/2" BELOW THE TOP SURFACE OF ADJACENT PAVED AREAS.

BARK MULCH MATERIAL & INSTALLATION

1. TWICE-SHREDDED HARDWOOD BARK MULCH TO BE PROVIDED AS TOP-DRESSING FOR AT-GRADE PLANTING BEDS IN LOCATIONS INDICATED ON DETAILED PLANTING PLANS.
   - 1.1. SIZE RANGE: MAXIMUM 2.5" TO 3"
   - 1.2. COLOR: NATURAL, UN-DYED
   - 1.3. PROVIDE 3" DEPTH MULCH FOR ALL PLANTING BEDS INDICATED AS BARK MULCH PLANTING BED.
2. KEEP BARK MULCH 2" CLEAR OF ALL STEMS OF PLANT MATERIAL.

CLEAN-UP AND PROTECTION

1. DURING PLANTING, KEEP ADJACENT PAVING AND CONSTRUCTION CLEAN AND WORK AREA IN AN ORDERLY CONDITION.
2. PROTECT PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND OPERATIONS OF OTHER CONTRACTORS AND TRADES. MAINTAIN PROTECTION DURING INSTALLATION. TREAT, REPAIR, OR REPLACE DAMAGED PLANTINGS.
3. AFTER INSTALLATION REMOVE ALL NURSERY TAGS, NURSERY STAKES, TIE TAPE, LABELS, WIRE, STRING, AND OTHER DEBRIS FROM PLANT MATERIAL, PLANTING AREAS, AND PROJECT SITE.

NO-MOW SEEDING:

1. DELIVERY:
   - 1.1. DELIVER PACKAGED SEED MATERIALS IN ORIGINAL, UNOPENED CONTAINERS LABELED AS TO NAME AND ADDRESS OF SUPPLIER; SPECIFIC BLEND OF SEED; AND INDICATION OF CONFORMANCE WITH STATE AND FEDERAL LAWS, AS APPLICABLE.
2. PROJECT CONDITIONS:
   - 2.1. SEED DURING ONE OF THE FOLLOWING PERIODS.
     - 2.1.1. SPRING SEEDING SEASON: APRIL 1 TO JUNE 15.
     - 2.1.2. FALL SEEDING SEASON: AUGUST 15 TO OCTOBER 1.
3. PRODUCTS
   - 1.1. PROVIDE THE FOLLOWING FOR NO-MOW SEED BASIS OF DESIGN: REINDER'S 'NO MOW/LOW GROW SEED MIX' FOR AREAS SHOWN AS 'NO-MOW SEED MIX'
     - 1.1.1. NO-MOW SEED MIX TO BE FERTILIZED WITH 'SCOTT'S STARTER FERTILIZER' BY THE 'SCOTTS MIRACLE-GRO COMPANY' OR APPROVED EQUAL.
2. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN MET.
3. REMOVE ANY AND ALL UNDESIRABLE VEGETATION THAT HAS GERMINATED IN THE AREAS TO BE SEEDED OR SODDED. CONTRACTOR SHALL EVALUATE THE USE OF A BROAD SPECTRUM, NON-PERSISTENT GLYSOPHATE-BASED HERBICIDE BASED ON SITE CONDITIONS.
   - 3.1. DO NOT APPLY SEED UNTIL FIVE TO SEVEN DAYS AFTER LAST HERBICIDE TREATMENT.
4. FINISH GRADING: GRADE AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN PLUS OR MINUS $\frac{1}{2}$ INCH OF FINISH ELEVATION. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES. LIMIT FINISH GRADING TO AREAS THAT CAN BE IMMEDIATELY SEEDED AND STABILIZED WITH EROSION CONTROL MATERIAL
5. MOISTEN PREPARED AREA BEFORE SEEDING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE DRY BEFORE SEEDING OR SODDING. DO NOT CREATE MUDDY SOIL.
6. NO SEEDING SHALL OCCUR ON FROZEN GROUND OR AT TEMPERATURES LOWER THAN 32 DEGREES FARENHEIT OR IN THE FOLLOWING 5 DAYS AFTER PLANNED SEEDING OR SODDING.
7. SEEDING RATES TO BE PERFORMED IN ACCORDANCE WITH SEED SUPPLIER RECOMMENDATIONS.

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
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PEWAUKEE EXPANSION
W227N4755 DUPLAINVILLE RD
PEWAUKEE, WI 53072

LANDSCAPE SPECIFICATIONS

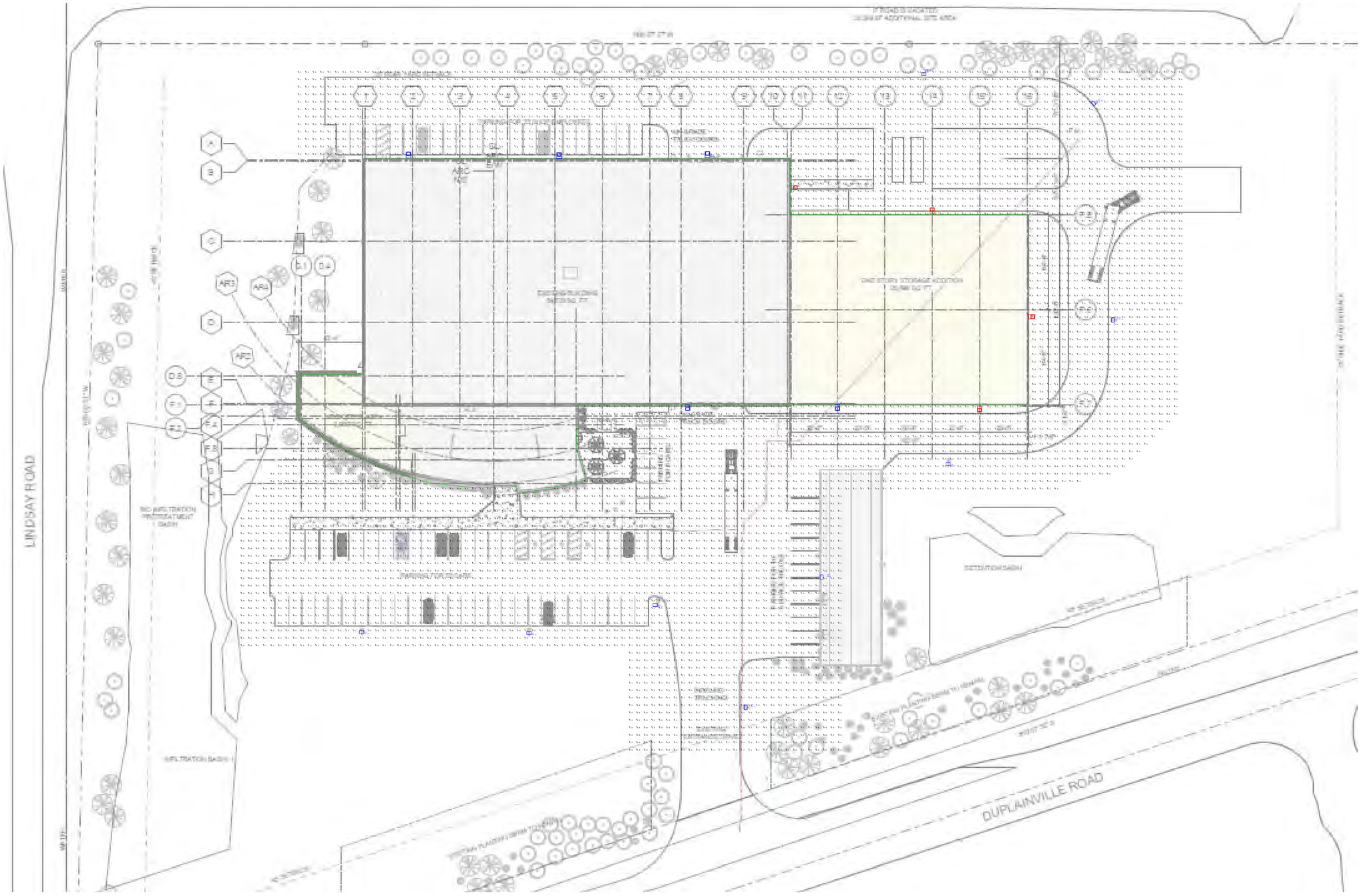
PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY PRICING	02/03/2023
CITY SUBMITTAL	05/01/2023
CITY RESUBMITTAL	08/04/2023

SCALE:	
PROJECT NO:	21608
DESIGN DATE:	----
PLOT DATE:	9/8/2023
DRAWN BY:	HLY
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	L300

07:57
HJOHN
L300
21608

I:\Klein Dickert\21608 Pewaukee Expansion\60 CAD\030_Production Sheets\400_Landscape\L300 Landscape Specifications.dwg



Fixture Schedule								
Symbol	Label	Qty	[MANUFAC]	Catalog Number	LLF	Lumens	Watts	Tot. Watts
	WP-NEW	4	Lithonia Lighting	DSX1 LED P3 40K 70CRI T3M	0.950	13762	102.17	408.68
	WP	5	Lithonia Lighting	DSX1 LED P3 40K T4M MVOLT G1	0.900	12308	102	510
	LP2	1	Lithonia Lighting	RSX1 LED P2 40K AFR	0.900	9867	72.95	72.95
	LP1	8	Lithonia Lighting	RSX1 LED P2 40K R4	0.900	9972	72.95	583.6

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
North Site	Illuminance	Fc	1.26	4.6	0.0	N.A.	N.A.
South Site	Illuminance	Fc	1.05	8.8	0.0	N.A.	N.A.

1. Standard Reflectance of 80/50/20 unless noted otherwise
2. Not a Construction Document, for Design purposes only
3. Standard indoor calc points @ 30" A.F.F. unless noted otherwise
4. Standard outdoor calc points @ Grade unless noted otherwise
5. All exterior fixtures to be mounted at or less than 20' above finished grade. Includes building and pole mounted fixtures.

CED Lappin Electric
N24 W23750 Watertown Rd
Waukesha, WI 53188
(p) 262-547-5500

#	Date	Comments

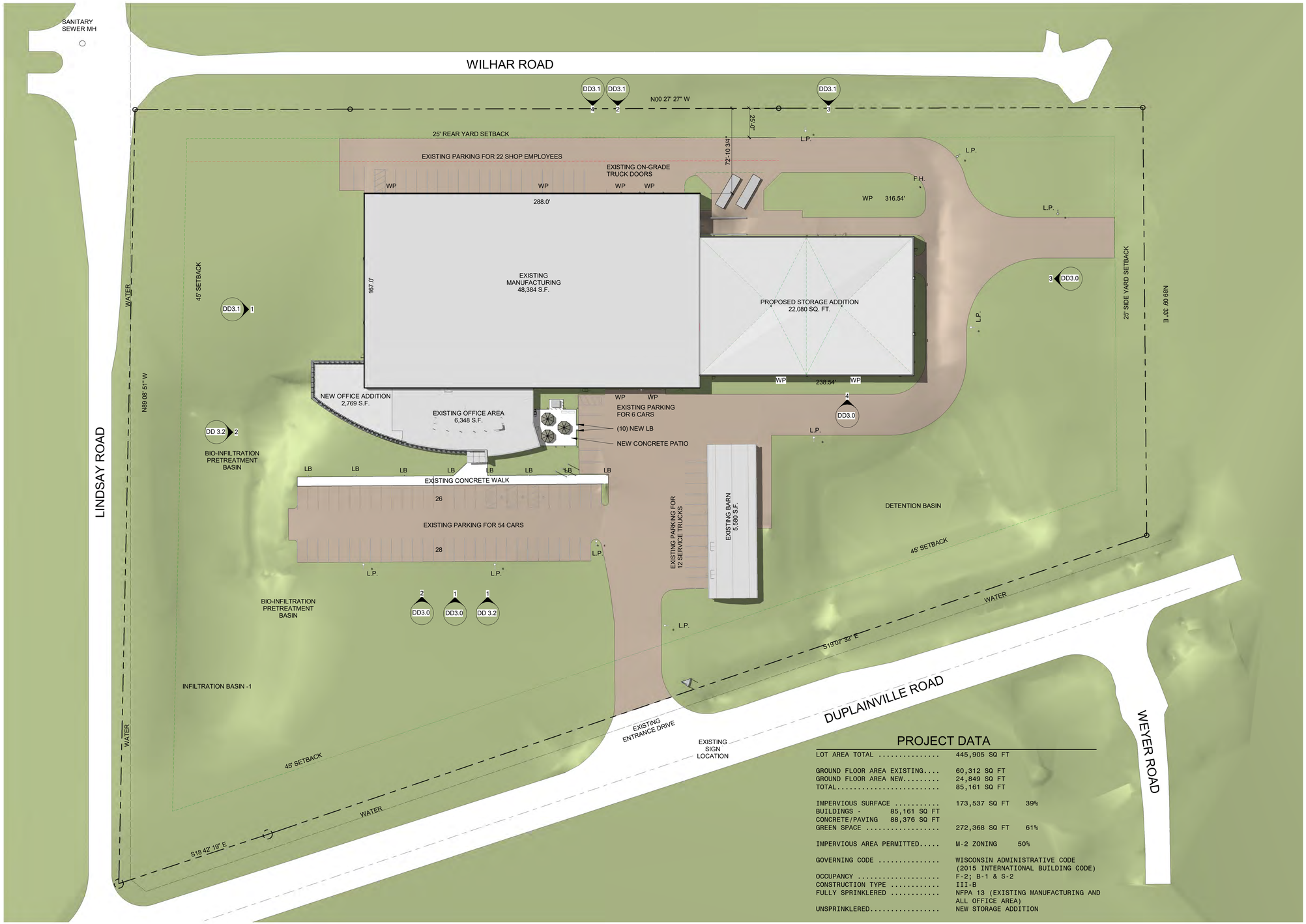
Revisions

QUOTE#
Drawn By: Nick Rooyakkers
Date:7/17/2023
Scale: 1in = 32ft

Klein Dickert Milwaukee

Pewaukee, WI

DD0.0



SEE LANDSCAPE PLANS FOR ALL PLANTINGS

PROJECT DATA

LOT AREA TOTAL	445,905 SQ FT
GROUND FLOOR AREA EXISTING....	60,312 SQ FT
GROUND FLOOR AREA NEW.....	24,849 SQ FT
TOTAL.....	85,161 SQ FT
IMPERVIOUS SURFACE	173,537 SQ FT 39%
BUILDINGS - 85,161 SQ FT	
CONCRETE/PAVING 88,376 SQ FT	
GREEN SPACE	272,368 SQ FT 61%
IMPERVIOUS AREA PERMITTED.....	M-2 ZONING 50%
GOVERNING CODE	WISCONSIN ADMINISTRATIVE CODE (2015 INTERNATIONAL BUILDING CODE)
OCCUPANCY	F-2; B-1 & S-2
CONSTRUCTION TYPE	III-B
FULLY SPRINKLERED	NFPA 13 (EXISTING MANUFACTURING AND ALL OFFICE AREA)
UNSPRINKLERED.....	NEW STORAGE ADDITION

PARKING SUMMARY

ADA PARKING STALLS - VAN ACCESSIBLE	3
AUTO PARKING STALLS	79
SERVICE VEHICLE PARKING STALLS	12
TOTAL PARKING STALLS	94

SITE PLAN

SCALE: 1" = 40'-0"

NORTH

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PRELIMINARY DRAWINGS FOR PLAN COMMISSION SUBMITTAL - NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	BY

SHEET TITLE: SITE PLAN

CSD No: J221125MTB
DATE: 9.11.2023
CHECKED BY: CSD
SHEET No.:
DRAWN BY: JCF

DD1.0

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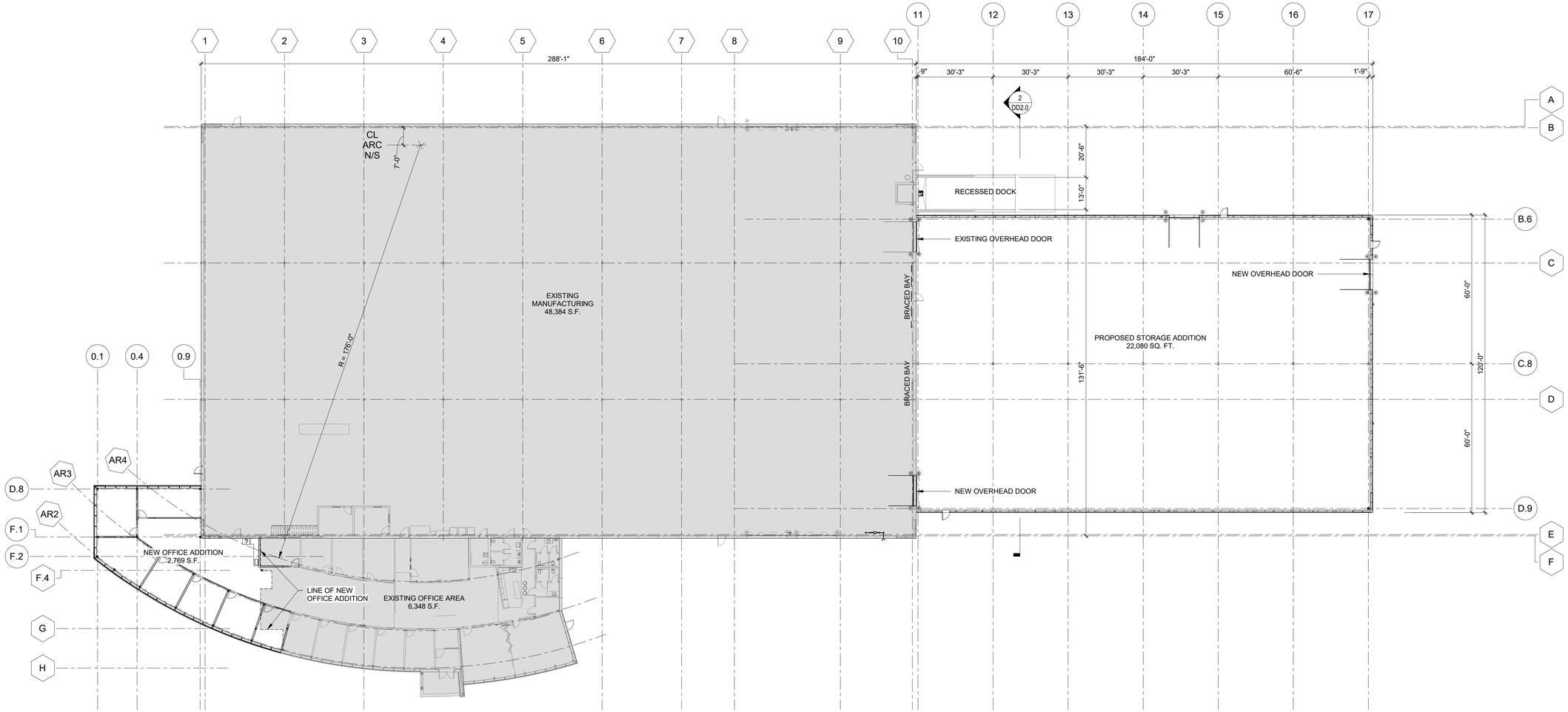
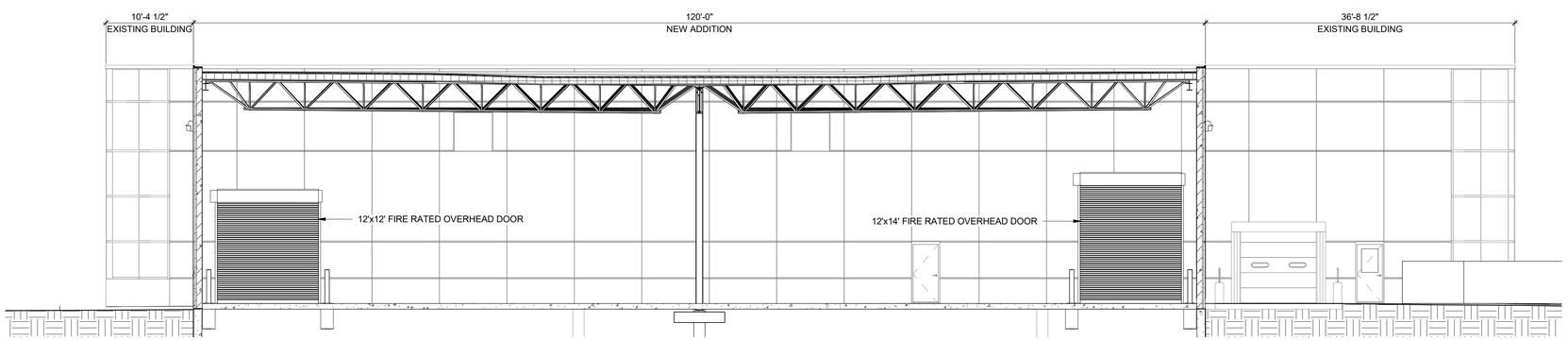
Plot Date:9/12/2023 3:54:34 PM



OVERALL GROUND FLOOR PLAN

SCALE: 3/64" = 1'-0"

NORTH



2 DD2.0 CROSS SECTION

SCALE: 1/8" = 1'-0"

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PRELIMINARY DRAWINGS FOR PLAN COMMISSION SUBMITTAL - NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	BY

SHEET TITLE: OVERALL GROUND FLOOR PLAN

CSD No: J221125MTB
DATE: 9.11.2023
CHECKED BY: CSD
SHEET No.:
DRAWN BY: JCF

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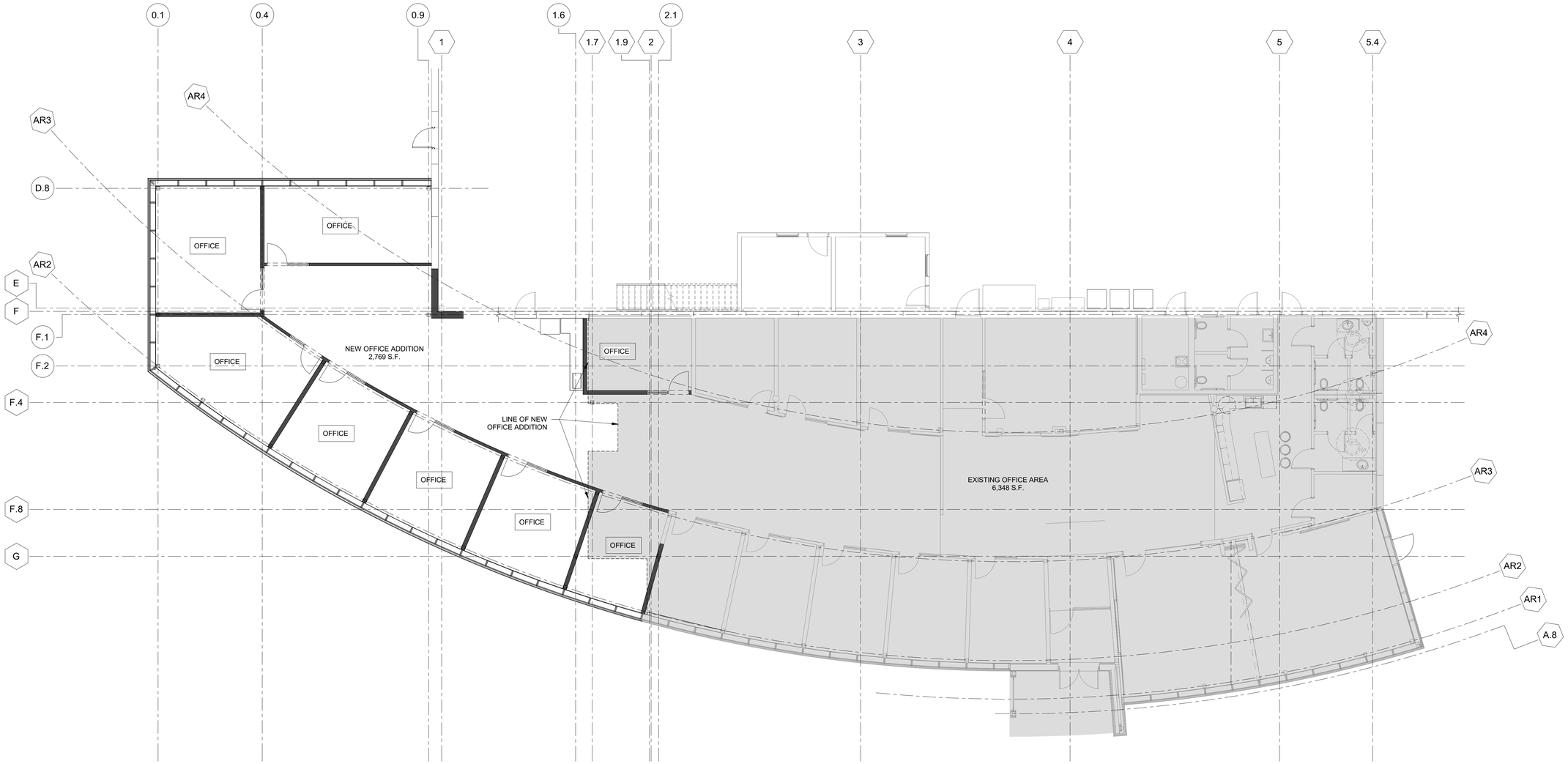

GROUND FLOOR PLAN OFFICE - ENLARGED

SCALE: 1/8" = 1'-0"

NORTH

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PRELIMINARY DRAWINGS FOR PLAN COMMISSION SUBMITTAL - NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	BY

SHEET TITLE:
ENLARGED GROUND FLOOR PLAN - OFFICE AREA

CSD No: J221125MTB
DATE: 9.11.2023
CHECKED BY: CSD
SHEET No.:
DRAWN BY: JCF

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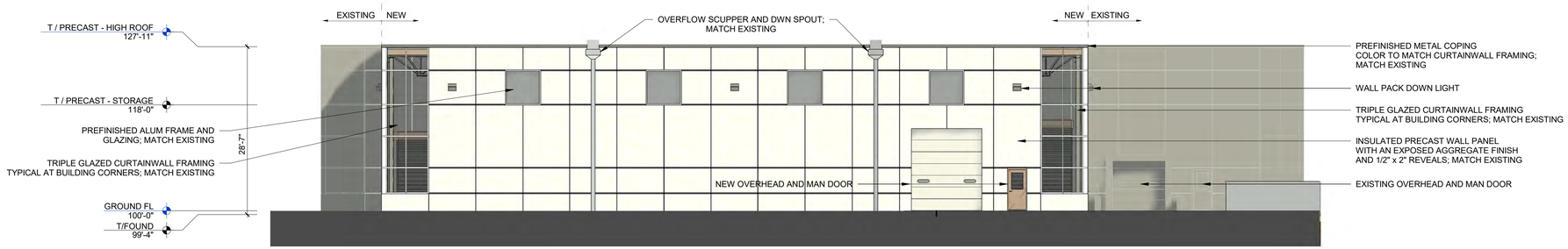


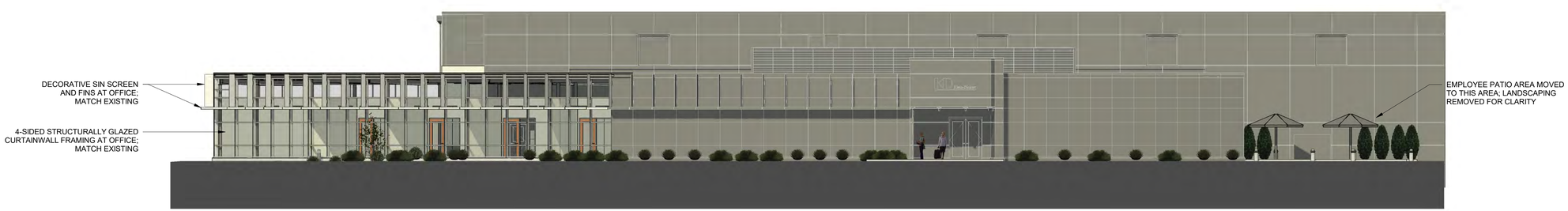
NORTH ELEVATION - NEW STORAGE ADDITION

SCALE: 3/32" = 1'-0"

SOME LANDSCAPING NOT SHOWN FOR CLARITY

OVERALL EAST ELEVATION

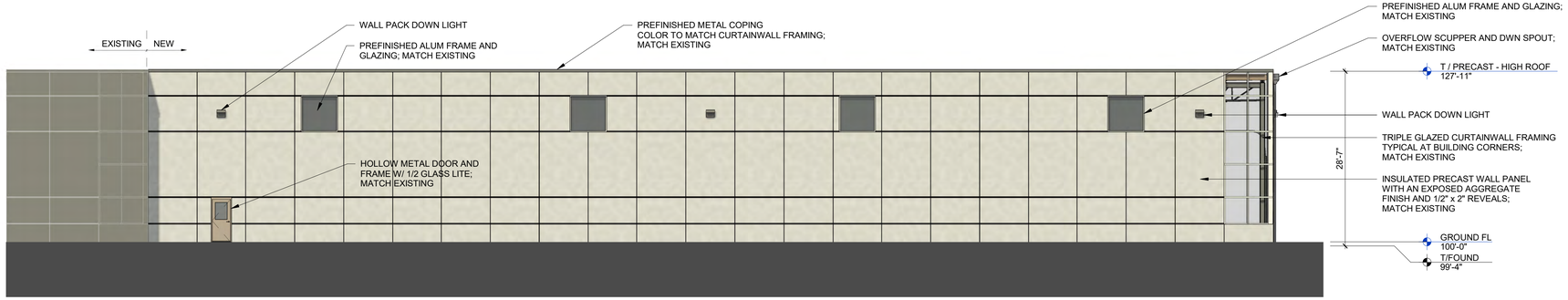
SCALE: 3/64" = 1'-0"



SOME LANDSCAPING NOT SHOWN FOR CLARITY

PARTIAL EAST ELEVATION - NEW OFFICE ADDITION

SCALE: 3/32" = 1'-0"



PARTIAL EAST ELEVATION - NEW STORAGE ADDITION

SCALE: 3/32" = 1'-0"

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PRELIMINARY DRAWINGS FOR PLAN COMMISSION SUBMITTAL - NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	BY

SHEET TITLE:
EXTERIOR ELEVATIONS

CSD No: J221125MTB
DATE: 9.11.2023
CHECKED BY: CSD
SHEET No.:
DRAWN BY: JCF

DD3.0

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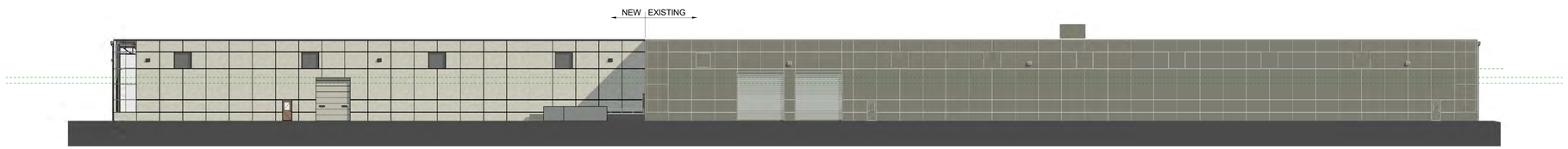
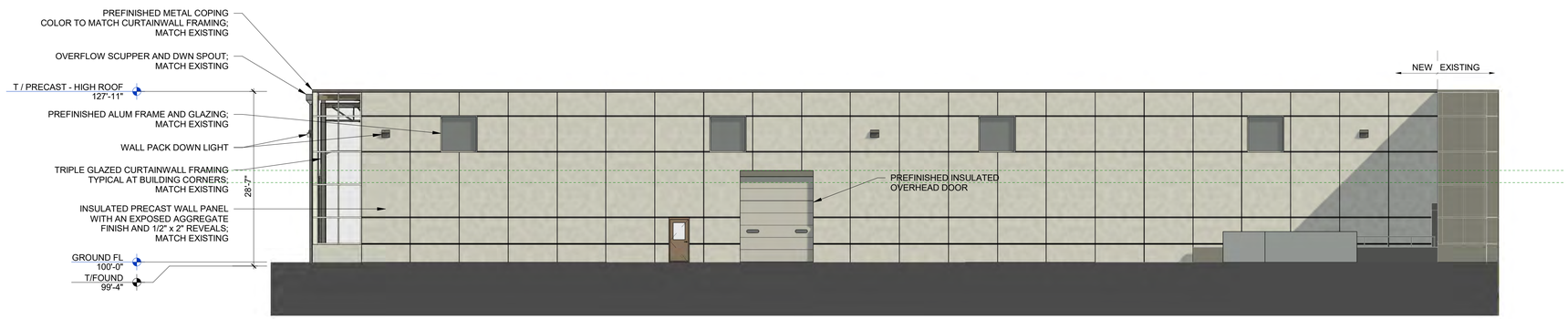
SOUTH ELEVATION - NEW OFFICE ADDITION

SCALE: 3/32" = 1'-0"



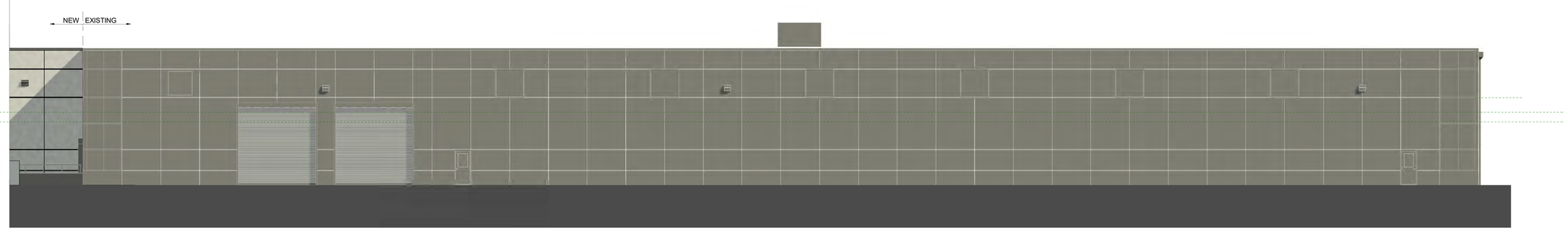
OVERALL WEST ELEVATION

SCALE: 3/64" = 1'-0"



PARTIAL WEST ELEVATION - NEW STORAGE ADDITION

SCALE: 3/32" = 1'-0"



PARTIAL WEST ELEVATION - EXISTING MANUFACTURING

SCALE: 3/32" = 1'-0"

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PRELIMINARY DRAWINGS FOR PLAN COMMISSION SUBMITTAL - NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	BY

SHEET TITLE:
EXTERIOR ELEVATIONS

CSD No: J221125MTB
DATE: 9.11.2023
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SHEET No.:
DRAWN BY: JCF

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SOME LANDSCAPING NOT SHOWN FOR CLARITY

ENLARGED OFFICE ELEVATION EAST

SCALE: 3/16" = 1'-0"

SOME LANDSCAPING NOT SHOWN FOR CLARITY

ENLARGED OFFICE ELEVATION SOUTH

SCALE: 3/16" = 1'-0"

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PRELIMINARY DRAWINGS FOR PLAN COMMISSION SUBMITTAL - NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	BY

SHEET TITLE:
ENLARGED OFFICE ELEVATIONS

CSD No: J221125MTB
DATE: 9.11.2023
CHECKED BY: CSD
SHEET No.:
DRAWN BY: JCF

DD 3.2

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September 11, 2022

Mr. Nick Fuchs
City of Pewaukee
W240 N3065 Pewaukee Road
Pewaukee, WI 53072

Re: CSD Project Number J221125
Klein Dickert Milwaukee – Manufacturing and Office Expansion

Mr. Fuchs:

This letter will serve as our resubmittal of plans based on staff comments for the September 21, 2023 Plan Commission meeting in conjunction with the above referenced project. Pursuant to staff comments from your letter of August 17, 2023, please find below our response to the (9) nine questions posed.

1) The size of the office addition is 2,769 sf.
2) No additional parking is proposed. Ample parking is provided for current and future staff needs.
3) The two dumpsters shown are existing dumpsters being relocated to their new position. The contents of these dumpsters is limited to scrap metal and glass as currently utilized with no debris being blown out of the receptacle due to weight. All paper and cardboard type refuse is held in dumpsters which are located inside of the facility and serviced on a regular basis.
4) Please see the required submittal documents for site lighting attached, including cut sheets of fixtures proposed, photometrics and peak mounting heights of poles with fixtures.
5) All site and exterior light fixtures will be mounted at 20'-0" or less per 17.0210d(6)(a).
6) Light levels will be able to be adjusted/dimmed following installation.
7) Drive setback from Wilhr road has been adjusted to meet the M-2 District minimum setback of 25'-0".
8) Landscaping North of the detention pond has been added to the plan for visual screening of the North end of the proposed addition. Screening adjacent to the truck turn-a-round has not been added as it impedes proper vision for drivers manipulating their rigs. It is our feeling the current line of trees along the North edge of the property, as well as the landscaping proposed provides a higher level of visual screening from Duplainville and Weyer roads than currently exists.
9) The existing barn will remain as is at this time.

Should you have any questions, please feel free to give me a call.

Sincerely,

COMPUTERIZED STRUCTURAL DESIGN, S.C.

James C. French, AIA, NCARB
Senior Associate

Cc: file
Encll

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

Date:	August 17, 2023
To:	KD GLASS LLC
From:	Nick Fuchs, Planner & Community Development Director
RE:	Staff Comments - Site & Building Plan Review Amendment

Comments and Recommendations:

Below are comments and recommendations for the proposed development application for property located at Tax Key No. PWC 0866997004.

1. Please confirm the proposed size of the office addition. The cover letter says 2,769SF and the plans show 2,830SF.
2. Is additional parking being proposed?
3. Are the two large dumpsters located west of the building permanent? Are they fully enclosed? Staff is concerned debris may blow out of the dumpsters if not enclosed or fenced in.
4. A Lighting Plan must be provided that includes light types, peak heights (not to exceed 20 feet), a photometric plan, and fixture catalog pages/cut sheets. Currently only a photometric plan has been provided.
5. Please confirm that the total peak height of all lighting is no more than 20 feet as measured from grade, per section 17.0210d(6)(a). This includes the base, pole, and fixture as well as the mounting height of building lights.
6. Please confirm that light levels will be able to be adjusted/dimmed following installation.
7. Please adjust the drive setback adjacent to Wilhar Road to comply with the M-2 District minimum setback of 25 feet.
8. Additional landscaping is recommended to the north/northeast of the storm water pond and east of the turnaround to screen the drive, turnaround area and overhead door on the north elevation.
9. Will the existing barn remain as is or are any modifications to the barn proposed at this time?

Submitted by CED - Lappin Electric			
CED	**Job Name:** Quiet Job	**Catalog Number:** RSX1 LED P2 40K R4 MVOLT SPA PE DNAXD Notes:	**Type:** **LP1** LTG19-6254

RSX1 LED
Area Luminaire

Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

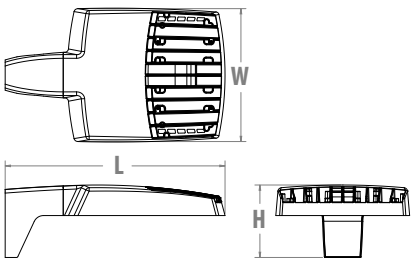
Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor and an adjustable integral slip-fitter are also available.

Specifications

EPA (ft²@0°):	0.57 ft² (0.05 m²)
Length:	21.8" (55.4 cm) (SPA mount)
Width:	13.3" (33.8 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm
Weight (max):	25.0 lbs (11.3 kg)



Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

RSX1 LED

Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX1 LED	P1 P2 P3 P4	30K 3000K 40K 4000K 50K 5000K	R3 Type 3 Wide R4 Type 4 Wide R5 Type 5 Wide R5S Type 5 Short AFR Automotive Front Row	MVOLT (120V-277V) [1] HVOLT (347V-480V) [2] **(use specific voltage for options as noted)** 120 [3] 277 [3] 208 [3] 347 [3] 240 [3] 480 [3]	SPA Square pole mounting (Min. 3.0" SQ for 1 at 90°, Min. 3.5" SQ for 2, 3, 4 at 90°) RPA Round pole mounting (3.2" min pole dia. for 1,2,3 or 4 at 90°) MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon) IS Adjustable slipfitter (fits 2-3/8" OD tenon) [4] WBA Wall bracket

Options

Shipped Installed

HS	House-side shield
PE	Photocontrol, button style [5,7]
PEX	Photocontrol external threaded, adjustable [6,7]
PER7	Seven-wire twist-lock receptacle only (no controls) [7,8,9]
CE34	Conduit entry 3/4" NPT (Qty 2)
SF	Single fuse (120, 277, 347) [3]
DF	Double fuse (208, 240, 480) [3]
SPD20KV	20KV Surge pack (10KV standard)
FAO	Field adjustable output
DMG	0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)

Shipped Separately (requires some field assembly)

EGS	External glare shield
EGFV	External glare full visor (360° around light aperture)
BS	Bird spikes [12]

Shipped Installed

***Standalone and Networked Sensors/Controls (factory default settings, see table page 5)**

NLTAIR2	nLight AIR generation 2 [10,15]
PIRHN	Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) [7,11,14,15]

***Note: PIRHN with nLight Air can be used as a standalone or networked solution. Sensor coverage pattern is affected when luminaire is tilted.**

Finish

DDBXD	Dark Bronze
DBLXD	Black
DNAXD	Natural Aluminum
DWHXD	White
DDBTXD	Textured Dark Bronze
DBLBXD	Textured Black
DNATXD	Textured Natural Aluminum
DWHGXD	Textured White

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Ordering Information

Accessories

Ordered and shipped separately.

RSX1HS	RSX1 House side shield (includes 1 shield)
RSX1EGS U	External glares hield (specify finish)
RSX1EGFV U	External glare full visor (specify finish)
RSXRPA U	RSX Universal round pole adaptor plate (specify finish)
DLL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) [13]
DLL347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) [13]
DLL480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) [13]
DSHORT SBK U	Shorting cap [13]

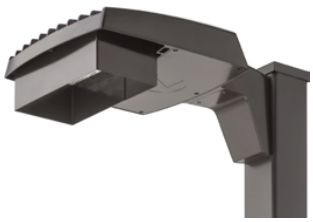
NOTES

1 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
2 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
3 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
4 IS maximum tilt is 90° above horizontal.
5 Requires MOVLT or 347V.
6 Requires 120V, 208V, 240V, 277V or 347V.
7 Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, PIRHN).
8 Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
9 For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
10 Must be ordered with PIRHN.
11 Must be ordered with NLTAIR2. For additional information on PIRHN visit here.
12 Must be ordered with fixture for factory pre-drilling.
13 Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.
14 Two or more of the following options cannot be combined including DMG, PER7, FAO and PIRHN.
15 Requires MVOLT or HVOLT.

External Shields

House Side Shield

External Glare Shield

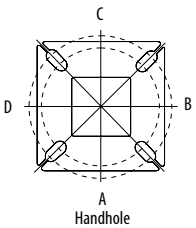


External 360 Full Visor

Pole/Mounting Informatiion

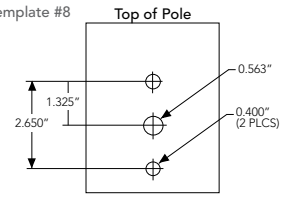
Accessories including bullhorns, cross arms and other adpaters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit Accessories.

HANDHOLE ORIENTATION

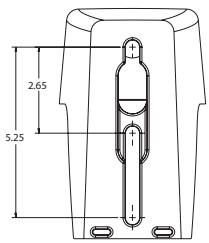


RSX POLE DRILLING

Template #8



RSX STANDARD ARM



Tenon Adapters

Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Pole Drilling Nomenclature

Number of heads at degree from handhole (default side A)					
DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS
1 @ 90°	2 @ 280°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
Side B	Side B & D	Side B & C	Round pole only	Side B, C, & D	Sides A, B, C, D
Note: Review luminaire spec sheet for specific nomenclature					

RSX1 - Luminaire EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.13	1.7	2.26
RPA - Round Pole Adaptor	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.13	1.7	2.26
MA - Mast Arm Adaptor	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.13	1.7	2.26
IS - Integral Slipfitter	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
	10°	0.68	1.34	1.33	2	1.74	2.64	1.35	2.03	2.71
	20°	0.87	1.71	1.73	2.56	2.26	3.42	1.75	2.62	3.49
	30°	1.24	2.19	2.3	3.21	2.87	4.36	2.49	3.73	4.97
	40°	1.81	2.68	2.98	3.85	3.68	5.3	3.62	5.43	7.24
	45°	2.11	2.92	3.44	4.2	4.08	5.77	4.22	6.33	8.44
	50°	2.31	3.17	3.72	4.52	4.44	6.26	4.62	6.94	9.25
	60°	2.71	3.66	4.38	5.21	5.15	7.24	5.43	8.14	10.86
	70°	2.78	3.98	4.54	5.67	5.47	7.91	5.52	8.27	11.03
	80°	2.76	4.18	4.62	5.97	5.76	8.31	5.51	8.27	11.03
	90°	2.73	4.25	4.64	6.11	5.91	8.47	5.45	8.18	10.97

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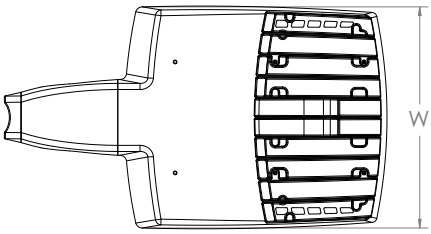
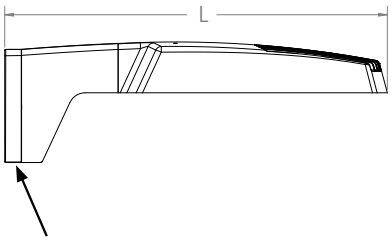
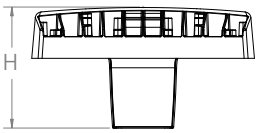
Dimensions

RSX1 with Round Pole Adapter (RPA)



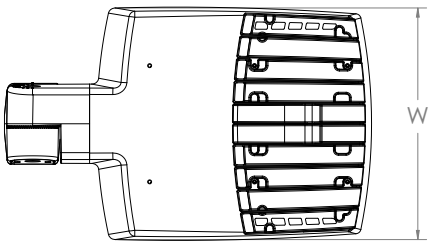


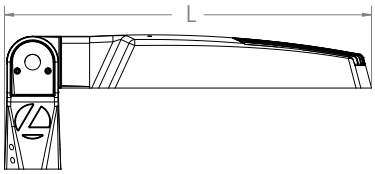


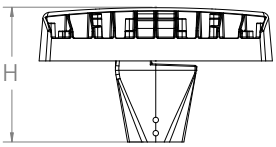
Length: 22.8″ (57.9 cm)
Width: 13.3″ (33.8 cm)
Height: 3.0″ (7.6 cm) Main Body
7.2″ (18.4 cm) Arm

Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

RSX1 with Adjustable Slipfitter (IS)

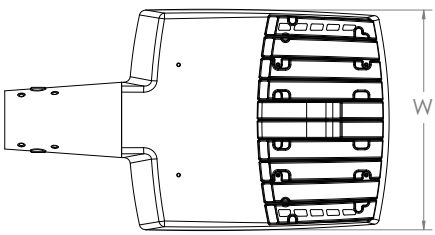


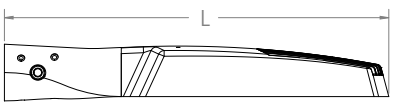




Length: 20.7″ (52.7 cm)
Width: 13.3″ (33.8 cm)
Height: 3.0″ (7.6 cm) Main Body
7.6″ (19.3 cm) Arm

RSX1 with Mast Arm Adapter (MA)





Length: 23.2″ (59.1 cm)
Width: 13.3″ (33.8 cm)
Height: 3.0″ (7.6 cm) Main Body
3.5″ (8.9 cm) Arm

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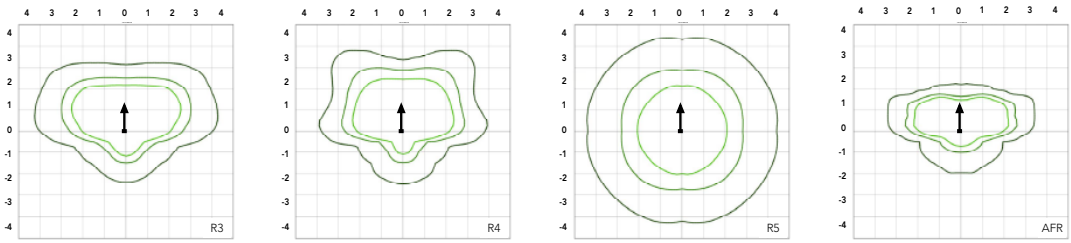
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').

LEGEND

- 0.1 fc
- 0.2 fc
- 0.5 fc



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

Electrical Load

		Current (A)					
Performance Package	System Watts (W)	120V	208V	240V	277V	347V	480V
P1	51W	0.42	0.25	0.21	0.19	0.14	0.11
P2	72W	0.60	0.35	0.30	0.26	0.21	0.15
P3	109W	0.91	0.52	0.45	0.39	0.31	0.23
P4	133W	1.11	0.64	0.55	0.48	0.38	0.27

Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Distribution. Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	51W	R3	6,459	1	0	2	127	7,096	1	0	2	139	7,096	1	0	2	139
		R4	6,543	1	0	2	128	7,189	1	0	2	141	7,189	1	0	2	141
		R5	6,631	3	0	2	130	7,286	3	0	2	143	7,286	3	0	2	143
		R5S	6,807	3	0	1	133	7,479	3	0	1	147	7,479	3	0	1	147
		AFR	6,473	1	0	1	127	7,112	1	0	1	139	7,112	1	0	1	139
P2	72W	R3	8,959	2	0	2	124	9,843	2	0	2	137	9,843	2	0	2	137
		R4	9,077	2	0	2	126	9,972	2	0	2	139	9,972	2	0	2	139
		R5	9,198	4	0	2	128	10,106	4	0	2	140	10,106	4	0	2	140
		R5S	9,443	3	0	1	131	10,374	3	0	1	144	10,374	3	0	1	144
		AFR	8,979	2	0	1	125	9,865	2	0	1	137	9,865	2	0	1	137
P3	109W	R3	12,763	2	0	2	117	14,023	2	0	2	129	14,023	2	0	2	129
		R4	12,930	2	0	2	119	14,206	2	0	2	130	14,206	2	0	2	130
		R5	13,104	4	0	2	120	14,397	4	0	2	132	14,397	4	0	2	132
		R5S	13,452	3	0	2	123	14,779	3	0	2	136	14,779	3	0	2	136
		AFR	12,791	2	0	1	117	14,053	2	0	2	129	14,053	2	0	2	129
P4	133W	R3	14,890	2	0	3	112	16,360	2	0	3	123	16,360	2	0	3	123
		R4	15,085	2	0	3	113	16,574	2	0	3	125	16,574	2	0	3	125
		R5	15,287	4	0	2	115	16,796	4	0	2	126	16,796	4	0	2	126
		R5S	15,693	4	0	2	118	17,242	4	0	2	130	17,242	4	0	2	130
		AFR	14,923	2	0	2	112	16,395	2	0	2	123	16,395	2	0	2	123

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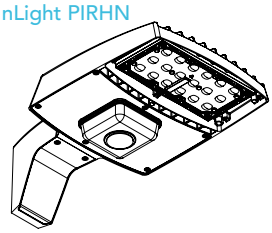
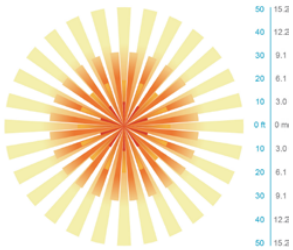
nLight Control - Sensor Coverage and Settings

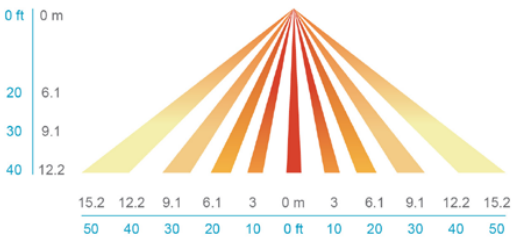
PIRHN nLight Sensor Coverage Pattern

nLight PIRHN





Top



Side

Motion Sensor Default Settings - Option PIRHN						
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)
PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds	5 minutes

*Note: PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clairity Pro App.

FEATURES & SPECIFICATIONS

INTENDED USE
The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX1 delivers 7,000 to 17,000 lumens and is ideal for replacing 70W to 400W HID pole-mounted luminaires in parking lots and other area lighting applications.

CONSTRUCTION
The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. All mountings are rated for a 1.5 G vibration load per ANSI C136.31.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warrantied not to crack or peel.

OPTICS
Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 3, Type 4, Type 5, Type 5S and AFR (Automotive Front Row).

ELECTRICAL
Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS
The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

nLIGHT AIR CONTROLS
The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. See chart above for motion sensor default out-of-box settings. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION
Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slip fitter has an integral junction box and offers easy installation. IS adjustable slipfitter is not rated for tilting above 90° or mounting within 4 feet of ground. Can be tilted up to 90° above horizontal.

LISTINGS
CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/resources/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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NO.	POLE SHAFT SPECIFICATIONS
1.	SHAFTS ARE ONE SECTION DESIGN FABRICATED FROM A WELDABLE GRADE CARBON STEEL STRUCTURAL TUBING WITH A UNIFORM WALL THICKNESS. MATERIAL SHALL CONFORM TO ASTM A-500 GRADE B WITH A MINIMUM YIELD STRENGTH OF 46,000 P.S.I.
2.	BASE PLATES ARE CONSTRUCTED OF A STRUCTURAL QUALITY HOT ROLLED CARBON STEEL PLATE (ASTM A-36 HRS) WITH A GUARANTEED MINIMUM YIELD STRENGTH OF 36,000 P.S.I.
3.	ANCHOR BOLTS (F1554 GRADE 55) ARE "L" BENT BARS HAVING A MINIMUM YIELD STRENGTH OF 55,000 P.S.I. THE BOLTS ARE FULLY GALVANIZED PER ASTM A153 SPECIFICATIONS AND FURNISHED COMPLETE WITH 2 HEX NUTS AND 2 FLAT WASHERS.
4.	POLES SHALL HAVE A POLYESTER POWDER COAT FINISH IN A STANDARD COLOR.

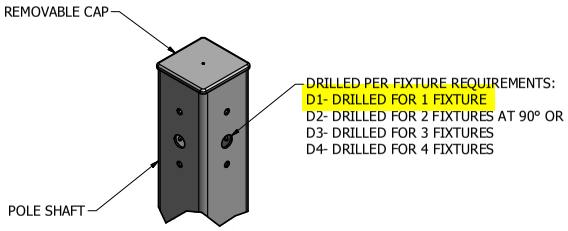
POLE DIMENSIONS				
POLE HGT (FT.)	TOP SQ. SIZE (IN.)	BOT. SQ. SIZE (IN.)	GAGE	MTG. HGT. (FT.)
18'	4.00	4.00	11 GAGE	18'

BASE PLATE DIMENSIONS			
BOLT CIRCLE (IN.)	BASE PLATE DIM. (IN.)	BOLT HOLE (IN.)	PLATE THK. (IN.)
8.00-9.00	8.00 SQ.	1.00	.75

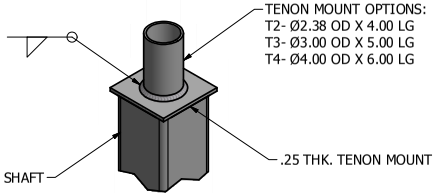
ANCHOR BOLT DIMENSIONS	
ANCHOR BOLT DIA. (IN.)	ANCHOR BOLT LENGTH (IN.)
.75	20.00

ALLOWABLE WIND LOADING (SQ. FT.)				
WIND*	80 MPH	90 MPH	100 MPH	120 MPH
EPA	11.1	9.0	7.2	5.1

*WITH 1.3 GUST FACTOR

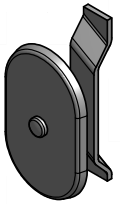


DRILL MOUNT OPTIONS

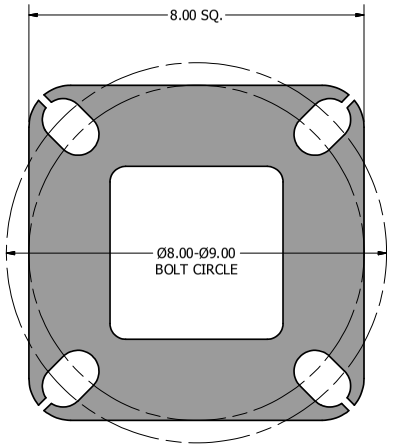


TENON MOUNT OPTIONS

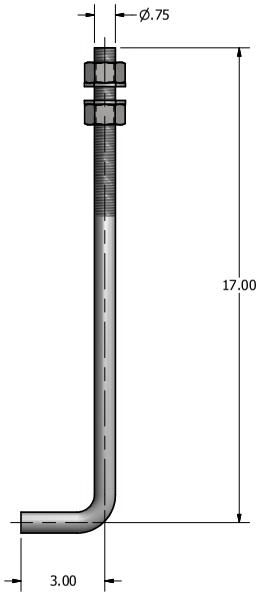
18' poles mounted on bases 2' A.F.G. or less.



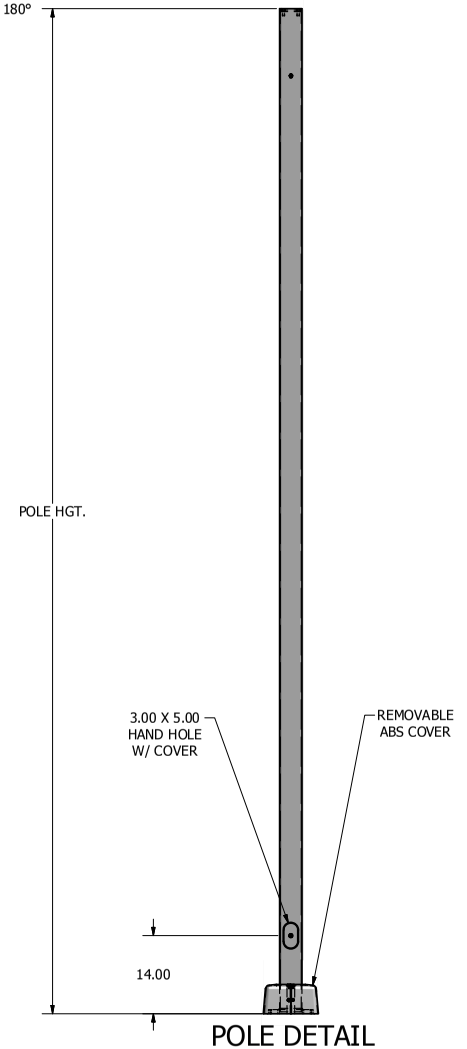
3.00 X 5.00 HAND HOLE COVER



8.00 X 8.00 X .75 THK. BASE PLATE



Ø.75 X 20.00 ANCHOR BOLT



POLE DETAIL

lyte poles
a DWM company
P.O. Box 340
Eastpointe, MI 48021
P: (586) 771-4610 | F: (586) 771-5527
www.lytepoles.com

DRAWN: M. HARVALA	2/13/2015	
CHECKED		
REVISION:	DATE:	
APPROVED:		
QUOTE:		
S.O.#		
REF:	SCALE: NONE	

SOME GEOGRAPHICAL AREAS HAVE SPECIAL WIND CONDITIONS THAT CAN CREATE WIND INDUCED VIBRATIONS CAUSING A FATIGUE PROBLEM. NO METHOD HAS YET BEEN FOUND FOR PREDICTING DESTRUCTIVE LIGHTING POLE VIBRATION. THESE CONDITIONS ARE UNIQUE AND CANNOT BE GUARANTEED AGAINST, AND ARE THE RESPONSIBILITY OF A LOCAL SITE ENGINEER.

TITLE:

CATALOG:

DWG NO: 101-4011-18 | SIZE C | SHEET 1 OF 1

180°
270° 90°
0°
HANDHOLE

Submitted by CED - Lappin Electric

Job Name: Quiet Job

Catalog Number: 101-4011-18-D1-CARDINAL SILVER

Type: LTG19-6254

Submitted by CED - Lappin Electric			
CED	**Job Name:** Quiet Job	**Catalog Number:** RSX1 LED P2 40K AFR MVOLT SPA PE DNAXD Notes:	**Type:** **LP2** LTG19-6254

RSX1 LED
Area Luminaire

Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

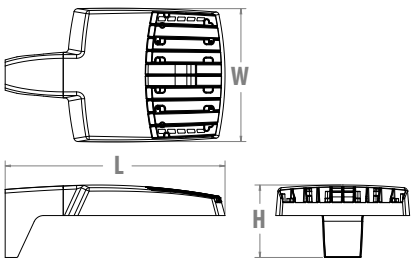
Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor and an adjustable integral slip-fitter are also available.

Specifications

EPA (ft²@0°):	0.57 ft² (0.05 m²)
Length:	21.8" (55.4 cm) (SPA mount)
Width:	13.3" (33.8 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm
Weight (max):	25.0 lbs (11.3 kg)



Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

RSX1 LED

Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX1 LED	P1 P2 P3 P4	30K 3000K 40K 4000K 50K 5000K	R3 Type 3 Wide R4 Type 4 Wide R5 Type 5 Wide R5S Type 5 Short AFR Automotive Front Row	MVOLT (120V-277V) [1] HVOLT (347V-480V) [2] **(use specific voltage for options as noted)** 120 [3] 277 [3] 208 [3] 347 [3] 240 [3] 480 [3]	SPA Square pole mounting (Min. 3.0" SQ for 1 at 90°, Min. 3.5" SQ for 2, 3, 4 at 90°) RPA Round pole mounting (3.2" min pole dia. for 1,2,3 or 4 at 90°) MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon) IS Adjustable slipfitter (fits 2-3/8" OD tenon) [4] WBA Wall bracket

Options

Shipped Installed

HS	House-side shield
PE	Photocontrol, button style [5,7]
PEX	Photocontrol external threaded, adjustable [6,7]
PER7	Seven-wire twist-lock receptacle only (no controls) [7,8,9]
CE34	Conduit entry 3/4" NPT (Qty 2)
SF	Single fuse (120, 277, 347) [3]
DF	Double fuse (208, 240, 480) [3]
SPD20KV	20KV Surge pack (10KV standard)
FAO	Field adjustable output
DMG	0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)

Shipped Separately (requires some field assembly)

EGS	External glare shield
EGFV	External glare full visor (360° around light aperture)
BS	Bird spikes [12]

Shipped Installed

***Standalone and Networked Sensors/Controls (factory default settings, see table page 5)**

NLTAIR2	nLight AIR generation 2 [10,15]
PIRHN	Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) [7,11,14,15]

***Note: PIRHN with nLight Air can be used as a standalone or networked solution. Sensor coverage pattern is affected when luminaire is tilted.**

Finish

DDBXD	Dark Bronze
DBLXD	Black
DNAXD	Natural Aluminum
DWHXD	White
DDBTXD	Textured Dark Bronze
DBLBXD	Textured Black
DNATXD	Textured Natural Aluminum
DWHGXD	Textured White

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Ordering Information

Accessories

Ordered and shipped separately.

RSX1HS	RSX1 House side shield (includes 1 shield)
RSX1EGS U	External glares hield (specify finish)
RSX1EGFV U	External glare full visor (specify finish)
RSXRPA U	RSX Universal round pole adaptor plate (specify finish)
DLL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) [13]
DLL347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) [13]
DLL480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) [13]
DSHORT SBK U	Shorting cap [13]

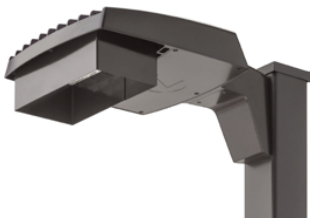
NOTES

1 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
2 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
3 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
4 IS maximum tilt is 90° above horizontal.
5 Requires MOVLT or 347V.
6 Requires 120V, 208V, 240V, 277V or 347V.
7 Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, PIRHN).
8 Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
9 For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
10 Must be ordered with PIRHN.
11 Must be ordered with NLTAIR2. For additional information on PIRHN visit here.
12 Must be ordered with fixture for factory pre-drilling.
13 Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.
14 Two or more of the following options cannot be combined including DMG, PER7, FAO and PIRHN.
15 Requires MVOLT or HVOLT.

External Shields

House Side Shield

External Glare Shield

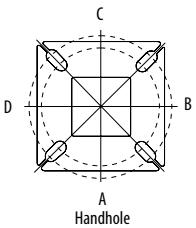


External 360 Full Visor

Pole/Mounting Informatiion

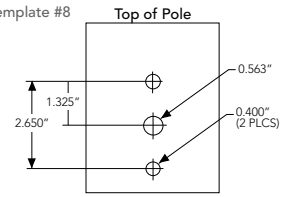
Accessories including bullhorns, cross arms and other adpaters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit Accessories.

HANDHOLE ORIENTATION

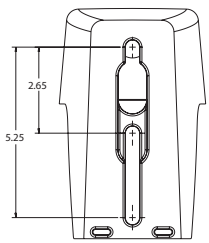


RSX POLE DRILLING

Template #8



RSX STANDARD ARM



Tenon Adapters

Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Pole Drilling Nomenclature

Number of heads at degree from handhole (default side A)					
DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS
1 @ 90°	2 @ 280°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
Side B	Side B & D	Side B & C	Round pole only	Side B, C, & D	Sides A, B, C, D
Note: Review luminaire spec sheet for specific nomenclature					

RSX1 - Luminaire EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.13	1.7	2.26
RPA - Round Pole Adaptor	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.13	1.7	2.26
MA - Mast Arm Adaptor	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.13	1.7	2.26
IS - Integral Slipfitter	0°	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
	10°	0.68	1.34	1.33	2	1.74	2.64	1.35	2.03	2.71
	20°	0.87	1.71	1.73	2.56	2.26	3.42	1.75	2.62	3.49
	30°	1.24	2.19	2.3	3.21	2.87	4.36	2.49	3.73	4.97
	40°	1.81	2.68	2.98	3.85	3.68	5.3	3.62	5.43	7.24
	45°	2.11	2.92	3.44	4.2	4.08	5.77	4.22	6.33	8.44
	50°	2.31	3.17	3.72	4.52	4.44	6.26	4.62	6.94	9.25
	60°	2.71	3.66	4.38	5.21	5.15	7.24	5.43	8.14	10.86
	70°	2.78	3.98	4.54	5.67	5.47	7.91	5.52	8.27	11.03
	80°	2.76	4.18	4.62	5.97	5.76	8.31	5.51	8.27	11.03
	90°	2.73	4.25	4.64	6.11	5.91	8.47	5.45	8.18	10.97

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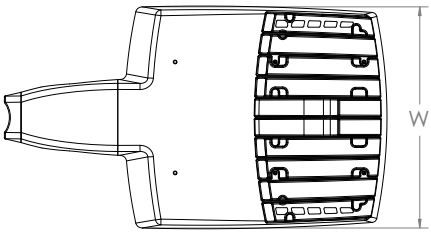
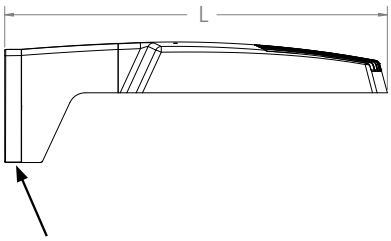
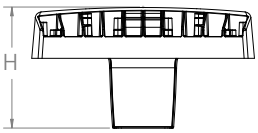
Dimensions

RSX1 with Round Pole Adapter (RPA)



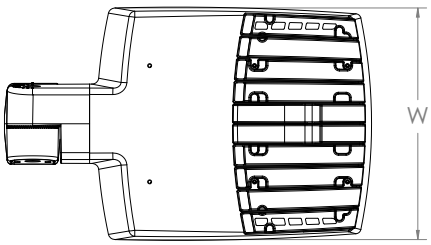


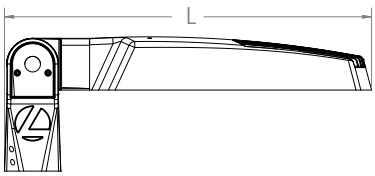


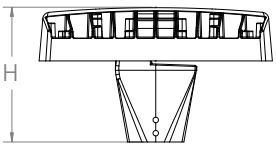
Length: 22.8″ (57.9 cm)
Width: 13.3″ (33.8 cm)
Height: 3.0″ (7.6 cm) Main Body
7.2″ (18.4 cm) Arm

Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

RSX1 with Adjustable Slipfitter (IS)

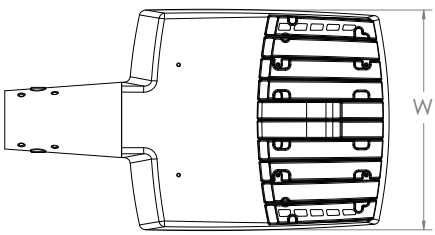


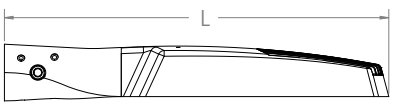




Length: 20.7″ (52.7 cm)
Width: 13.3″ (33.8 cm)
Height: 3.0″ (7.6 cm) Main Body
7.6″ (19.3 cm) Arm

RSX1 with Mast Arm Adapter (MA)





Length: 23.2″ (59.1 cm)
Width: 13.3″ (33.8 cm)
Height: 3.0″ (7.6 cm) Main Body
3.5″ (8.9 cm) Arm

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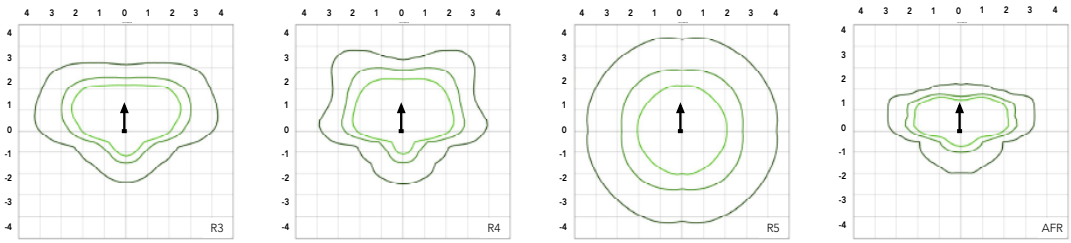
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').

LEGEND
- 0.1 fc
- 0.2 fc
- 0.5 fc



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

Electrical Load

		Current (A)					
Performance Package	System Watts (W)	120V	208V	240V	277V	347V	480V
P1	51W	0.42	0.25	0.21	0.19	0.14	0.11
P2	72W	0.60	0.35	0.30	0.26	0.21	0.15
P3	109W	0.91	0.52	0.45	0.39	0.31	0.23
P4	133W	1.11	0.64	0.55	0.48	0.38	0.27

Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Distribution. Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	51W	R3	6,459	1	0	2	127	7,096	1	0	2	139	7,096	1	0	2	139
		R4	6,543	1	0	2	128	7,189	1	0	2	141	7,189	1	0	2	141
		R5	6,631	3	0	2	130	7,286	3	0	2	143	7,286	3	0	2	143
		R5S	6,807	3	0	1	133	7,479	3	0	1	147	7,479	3	0	1	147
		AFR	6,473	1	0	1	127	7,112	1	0	1	139	7,112	1	0	1	139
P2	72W	R3	8,959	2	0	2	124	9,843	2	0	2	137	9,843	2	0	2	137
		R4	9,077	2	0	2	126	9,972	2	0	2	139	9,972	2	0	2	139
		R5	9,198	4	0	2	128	10,106	4	0	2	140	10,106	4	0	2	140
		R5S	9,443	3	0	1	131	10,374	3	0	1	144	10,374	3	0	1	144
		AFR	8,979	2	0	1	125	9,865	2	0	1	137	9,865	2	0	1	137
P3	109W	R3	12,763	2	0	2	117	14,023	2	0	2	129	14,023	2	0	2	129
		R4	12,930	2	0	2	119	14,206	2	0	2	130	14,206	2	0	2	130
		R5	13,104	4	0	2	120	14,397	4	0	2	132	14,397	4	0	2	132
		R5S	13,452	3	0	2	123	14,779	3	0	2	136	14,779	3	0	2	136
		AFR	12,791	2	0	1	117	14,053	2	0	2	129	14,053	2	0	2	129
P4	133W	R3	14,890	2	0	3	112	16,360	2	0	3	123	16,360	2	0	3	123
		R4	15,085	2	0	3	113	16,574	2	0	3	125	16,574	2	0	3	125
		R5	15,287	4	0	2	115	16,796	4	0	2	126	16,796	4	0	2	126
		R5S	15,693	4	0	2	118	17,242	4	0	2	130	17,242	4	0	2	130
		AFR	14,923	2	0	2	112	16,395	2	0	2	123	16,395	2	0	2	123

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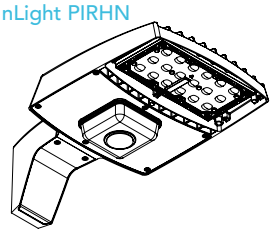
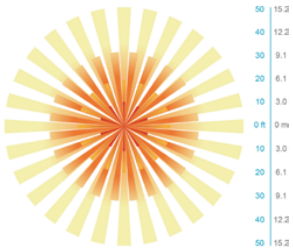
nLight Control - Sensor Coverage and Settings

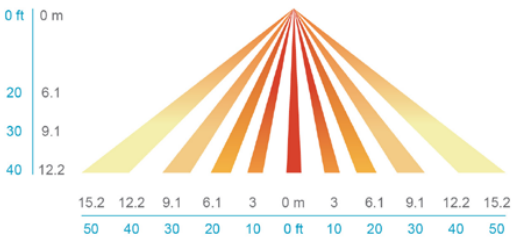
PIRHN nLight Sensor Coverage Pattern

nLight PIRHN





Top



Side

Motion Sensor Default Settings - Option PIRHN						
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)
PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds	5 minutes

*Note: PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clairity Pro App.

FEATURES & SPECIFICATIONS

INTENDED USE
The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX1 delivers 7,000 to 17,000 lumens and is ideal for replacing 70W to 400W HID pole-mounted luminaires in parking lots and other area lighting applications.

CONSTRUCTION
The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. All mountings are rated for a 1.5 G vibration load per ANSI C136.31.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warrantied not to crack or peel.

OPTICS
Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 3, Type 4, Type 5, Type 5S and AFR (Automotive Front Row).

ELECTRICAL
Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS
The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

nLIGHT AIR CONTROLS
The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. See chart above for motion sensor default out-of-box settings. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION
Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slip fitter has an integral junction box and offers easy installation. IS adjustable slipfitter is not rated for tilting above 90° or mounting within 4 feet of ground. Can be tilted up to 90° above horizontal.

LISTINGS
CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/resources/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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18' POLES on bases 2' A.F.G. or less.

NO.	POLE SHAFT SPECIFICATIONS
1.	SHAFTS ARE ONE SECTION DESIGN FABRICATED FROM A WELDABLE GRADE CARBON STEEL STRUCTURAL TUBING WITH A UNIFORM WALL THICKNESS. MATERIAL SHALL CONFORM TO ASTM A-500 GRADE B WITH A MINIMUM YIELD STRENGTH OF 46,000 P.S.I.
2.	BASE PLATES ARE CONSTRUCTED OF A STRUCTURAL QUALITY HOT ROLLED CARBON STEEL PLATE (ASTM A-36 HRS) WITH A GUARANTEED MINIMUM YIELD STRENGTH OF 36,000 P.S.I.
3.	ANCHOR BOLTS (F1554 GRADE 55) ARE "L" BENT BARS HAVING A MINIMUM YIELD STRENGTH OF 55,000 P.S.I. THE BOLTS ARE FULLY GALVANIZED PER ASTM A153 SPECIFICATIONS AND FURNISHED COMPLETE WITH 2 HEX NUTS AND 2 FLAT WASHERS.
4.	POLES SHALL HAVE A POLYESTER POWDER COAT FINISH IN A STANDARD COLOR.

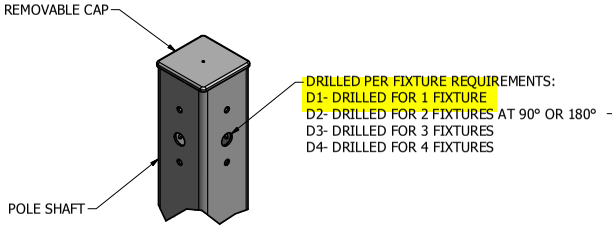
POLE DIMENSIONS				
POLE HGT (FT.)	TOP SQ. SIZE (IN.)	BOT. SQ. SIZE (IN.)	GAGE	MTG. HGT. (FT.)
18'	4.00	4.00	11 GAGE	18'

BASE PLATE DIMENSIONS			
BOLT CIRCLE (IN.)	BASE PLATE DIM. (IN.)	BOLT HOLE (IN.)	PLATE THK. (IN.)
8.00-9.00	8.00 SQ.	1.00	.75

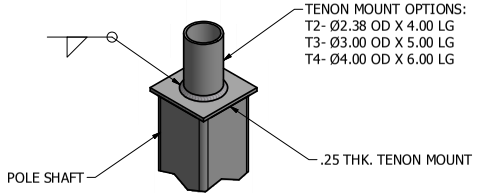
ANCHOR BOLT DIMENSIONS	
ANCHOR BOLT DIA. (IN.)	ANCHOR BOLT LENGTH (IN.)
.75	20.00

ALLOWABLE WIND LOADING (SQ. FT.)				
WIND*	80 MPH	90 MPH	100 MPH	120 MPH
EPA	11.1	9.0	7.2	5.1

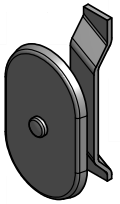
*WITH 1.3 GUST FACTOR



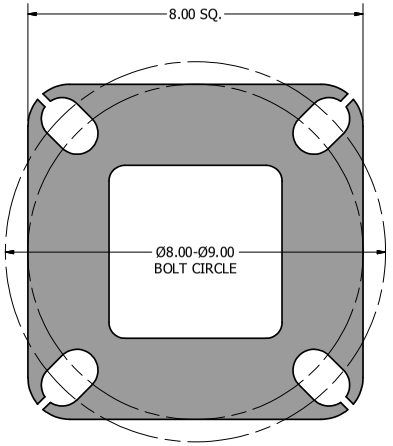
DRILL MOUNT OPTIONS



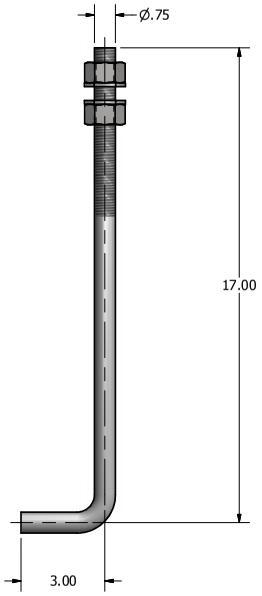
TENON MOUNT OPTIONS



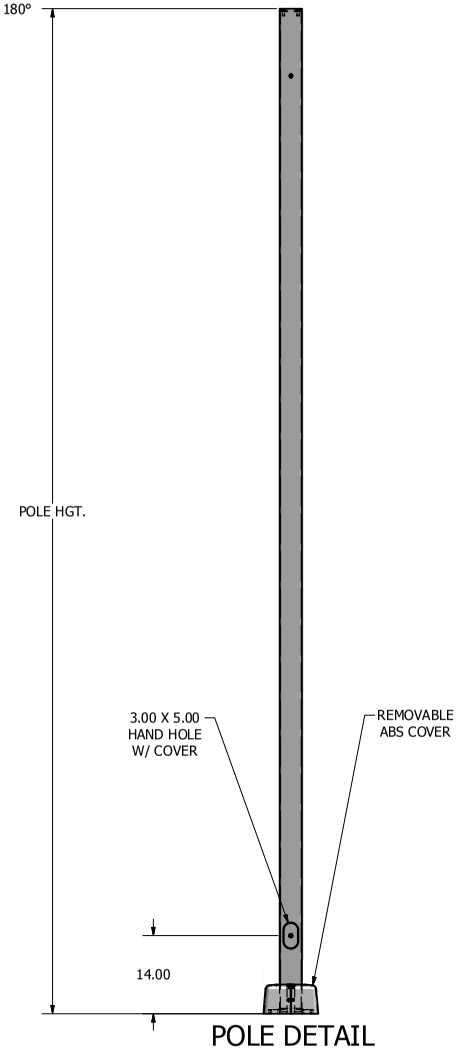
3.00 X 5.00 HAND HOLE COVER



8.00 X 8.00 X .75 THK. BASE PLATE



Ø.75 X 20.00 ANCHOR BOLT



POLE DETAIL

lyte poles
a DWM company
P.O. Box 340
Eastpointe, MI 48021
P: (586) 771-4610 | F: (586) 771-5527
www.lytepoles.com

DRAWN: M. HARVALA	2/13/2015		
CHECKED			
REVISION:	DATE:		
APPROVED:			
QUOTE:			
S.O.#			
REF:	SCALE: NONE		

SOME GEOGRAPHICAL AREAS HAVE SPECIAL WIND CONDITIONS THAT CAN CREATE WIND INDUCED VIBRATIONS CAUSING A FATIGUE PROBLEM. NO METHOD HAS YET BEEN FOUND FOR PREDICTING DESTRUCTIVE LIGHTING POLE VIBRATION. THESE CONDITIONS ARE UNIQUE AND CANNOT BE GUARANTEED AGAINST, AND ARE THE RESPONSIBILITY OF A LOCAL SITE ENGINEER.

TITLE:

CATALOG:

DWG NO: 101-4011-18 | SIZE C | SHEET 1 OF 1

180°
270° 90°
0°
HANDHOLE

Submitted by CED - Lappin Electric

Job Name: Quiet Job

Catalog Number: 101-4011-18-D1-CARDUBAK SILVER

Type: LTG19-6254

Submitted by CED - Lappin Electric

Job Name:
Quiet Job

Catalog Number:
DSX1 LED P3 40K T4M MVOLT WBA PER DNAXD
Notes: Updated part number to current version.

Type:
WP
LTG19-6254

D-Series Size 1

LED Area Luminaire

Catalog Number

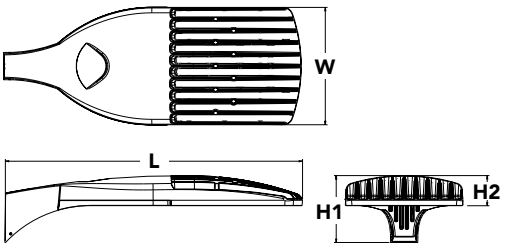
Notes
wall mounted below 20'

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	1.01 ft² (0.09 m²)
Length:	33″ (83.8 cm)
Width:	13″ (33.0 cm)
Height H1:	7-1/2″ (19.0 cm)
Height H2:	3-1/2″
Weight (max):	27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX1 LED	**Forward optics** P1 P4 P7 P2 P5 P8 P3 P6 P9 **Rotated optics** P10[1] P12[1] P11[1] P13[1]	30K 3000 K 40K 4000 K 50K 5000 K	T1S Type I short T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium T5VS Type V very short T5S Type V short T5M Type V medium T5W Type V wide BLC Backlight control[2] LCCO Left corner cutoff[2] RCCO Right corner cutoff[2]	MVOLT[3] 120[4] 208[4] 240[4] 277[4] 347[4] 480[4]	**Shipped included** SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor[5] RPUMBA Round pole universal mounting adaptor[5] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[6]

Control options		Other options	Finish *(required)*
Shipped installed NLTAIR2 nLight AIR generation 2 enabled[7] PIRHN Network, high/low motion/ambient sensor[8] PER NEMA twist-lock receptacle only (controls ordered separate)[9] PER5 Five-pin receptacle only (controls ordered separate)[9,10] PER7 Seven-pin receptacle only (controls ordered separate)[9,10] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[11] DS Dual switching[12,13,14] PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[15,16] PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[15,16] PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[15,16] PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[15,16] FAO Field adjustable output[14]	**Shipped installed** HS House-side shield[17] SF Single fuse (120, 277, 347V)[4] DF Double fuse (208, 240, 480V)[4] L90 Left rotated optics[1] R90 Right rotated optics[1] **Shipped separately** BS Bird spikes[18] EGS External glare shield[18]	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

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Ordering Information

Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [19]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [19]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [19]
DSHORT SBK U	Shorting cap [19]
DSX1HS 30C U	House-side shield for P1, P2, P3, P4 and P5[17]
DSX1HS 40C U	House-side shield for P6 and P7[17]
DSX1HS 60C U	House-side shield for P8, P9, P10, P11 and P12[17]
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish)[20]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) [6]

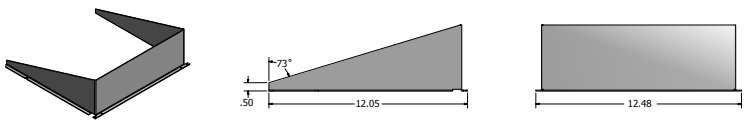
For more control options, visit DTL and ROAM online.

NOTES

1 P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
2 Not available with HS.
3 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
4 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
5 Universal mounting brackets intended for retrofit on existing, pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31.
6 Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" mast arm (not included).
7 Must be ordered with PIRHN. Sensor cover available only in dark bronze, black, white and natural aluminum colors.
8 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link.
9 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option. Shorting cap included.
10 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Node with integral dimming.
11 DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V.
12 Provides 50/50fixture operation via (2) independent drivers. Not available with PER, PER5, PER7, PIR or PIRH. Not available P1, P2, P3, P4 or P5.
13 Requires (2) separately switched circuits with isolated neutrol. See Outdoor Control Technical Guide for details.
14 Reference Motion Sensor table on page 4.
15 Reference controls options table on page 4 to see functionality.
16 Not available with other dimming controls options
17 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
18 Must be ordered with fixture for factory pre-drilling.
19 Requires luminaire to be specified with PER, PER5 or PER7 option. See PER Table on page 3.
20 For retrofit use only.

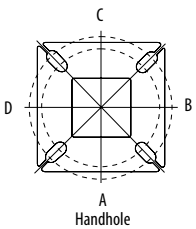
Options

EGS - External Glare Shield



Drilling

HANDHOLE ORIENTATION

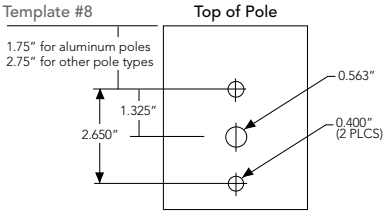


Tenon Mounting Slipfitter **

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @120	3 @ 90	4 @ 90
2-3/8"	SPA/RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 320	AS3-5 390	AS3-5 490
	SPUMBA	AS3-5 190	AS3-5 280	AS4-5 290	AS3-5 320	AS4-5 390	AS4-5 490
	RUPUMBA	AS3-5 190	AS3-5 280		AS3-5 320		
2-7/8"	SPA/RPA	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
	SPUMBA	AST25-190	AST25-280		AST25-320		
	RUPUMBA	AST25-190	AST25-280		AST25-320		
4"	SPA/RPA	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490
	SPUMBA	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490
	RUPUMBA	AST35-190	AST35-280		AST35-320		

Template #8

Top of Pole



Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS

	Drilling Template	Minimum Acceptable Outside Pole Dimension					
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"	3.5"	4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

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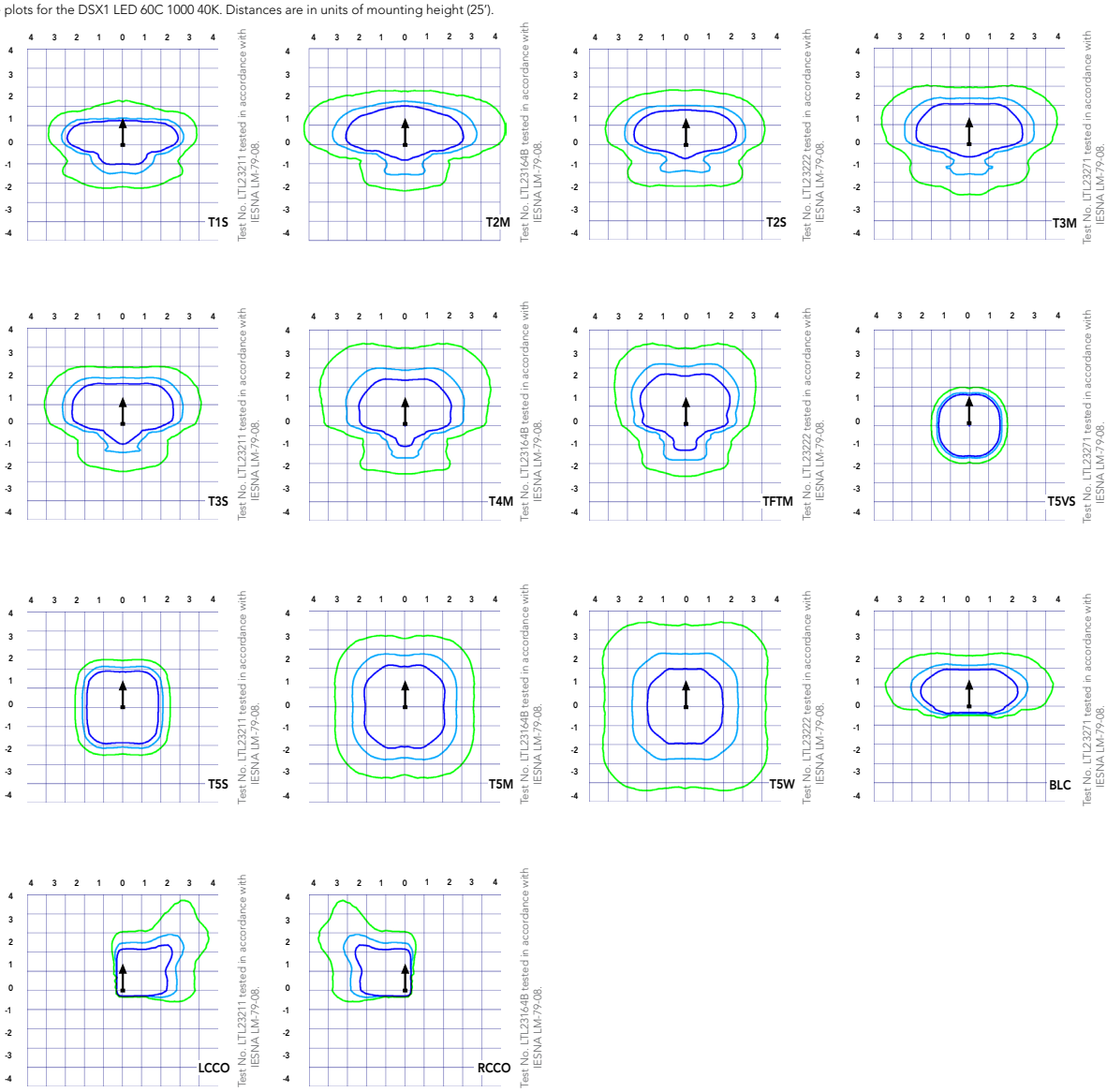
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').

LEGEND

- 0.1 fc
- 0.5 fc
- 1.0 fc



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Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	**77°F**	**1.00**
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.96
50,000	0.92
100,000	0.85

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Phototcell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*for use when motion sensor is used as dusk to dawn control.						

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A) 120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
Rotated Optics (Requires L90 or R90)	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

Controls Options				
Nomenclature	**Descripton**	**Functionality**	**Primary control device**	**Notes**
FAO	Field adjustable output device installed inside the lumiaire; wired to the driver dimming leads.	Allows the lumiaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS	Drivers wired independantly for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two seperately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell recepticle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBOR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app.

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Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts Contact factory for performance data on any configurations not shown here.

Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	P1	54W	T1S	6,457	2	0	2	120	6,956	2	0	2	129	7,044	2	0	2	130
				T2S	6,450	2	0	2	119	6,949	2	0	2	129	7,037	2	0	2	130
				T2M	6,483	1	0	1	120	6,984	2	0	2	129	7,073	2	0	2	131
				T3S	6,279	2	0	2	116	6,764	2	0	2	125	6,850	2	0	2	127
				T3M	6,468	1	0	2	120	6,967	1	0	2	129	7,056	1	0	2	131
				T4M	6,327	1	0	2	117	6,816	1	0	2	126	6,902	1	0	2	128
				TFTM	6,464	1	0	2	120	6,963	1	0	2	129	7,051	1	0	2	131
				T5VS	6,722	2	0	0	124	7,242	3	0	0	134	7,334	3	0	0	136
				T5S	6,728	2	0	1	125	7,248	2	0	1	134	7,340	2	0	1	136
				T5M	6,711	3	0	1	124	7,229	3	0	1	134	7,321	3	0	2	136
				T5W	6,667	3	0	2	123	7,182	3	0	2	133	7,273	3	0	2	135
				BLC	5,299	1	0	1	98	5,709	1	0	2	106	5,781	1	0	2	107
				LCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
				RCCO	3,943	1	0	2	73	4,248	1	0	2	79	4,302	1	0	2	80
30	700	P2	70W	T1S	8,249	2	0	2	118	8,886	2	0	2	127	8,999	2	0	2	129
				T2S	8,240	2	0	2	118	8,877	2	0	2	127	8,989	2	0	2	128
				T2M	8,283	2	0	2	118	8,923	2	0	2	127	9,036	2	0	2	129
				T3S	8,021	2	0	2	115	8,641	2	0	2	123	8,751	2	0	2	125
				T3M	8,263	2	0	2	118	8,901	2	0	2	127	9,014	2	0	2	129
				T4M	8,083	2	0	2	115	8,708	2	0	2	124	8,818	2	0	2	126
				TFTM	8,257	2	0	2	118	8,896	2	0	2	127	9,008	2	0	2	129
				T5VS	8,588	3	0	0	123	9,252	3	0	0	132	9,369	3	0	0	134
				T5S	8,595	3	0	1	123	9,259	3	0	1	132	9,376	3	0	1	134
				T5M	8,573	3	0	2	122	9,236	3	0	2	132	9,353	3	0	2	134
				T5W	8,517	3	0	2	122	9,175	4	0	2	131	9,291	4	0	2	133
				BLC	6,770	1	0	2	97	7,293	1	0	2	104	7,386	1	0	2	106
				LCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
				RCCO	5,038	1	0	2	72	5,427	1	0	2	78	5,496	1	0	2	79
30	1050	P3	102W	T1S	11,661	2	0	2	114	12,562	3	0	3	123	12,721	3	0	3	125
				T2S	11,648	2	0	2	114	12,548	3	0	3	123	12,707	3	0	3	125
				T2M	11,708	2	0	2	115	12,613	2	0	2	124	12,773	2	0	2	125
				T3S	11,339	2	0	2	111	12,215	3	0	3	120	12,370	3	0	3	121
				T3M	11,680	2	0	2	115	12,582	2	0	2	123	12,742	2	0	2	125
				T4M	11,426	2	0	3	112	12,309	2	0	3	121	12,465	2	0	3	122
				TFTM	11,673	2	0	2	114	12,575	2	0	3	123	12,734	2	0	3	125
				T5VS	12,140	3	0	1	119	13,078	3	0	1	128	13,244	3	0	1	130
				T5S	12,150	3	0	1	119	13,089	3	0	1	128	13,254	3	0	1	130
				T5M	12,119	4	0	2	119	13,056	4	0	2	128	13,221	4	0	2	130
				T5W	12,040	4	0	3	118	12,970	4	0	3	127	13,134	4	0	3	129
				BLC	9,570	1	0	2	94	10,310	1	0	2	101	10,440	1	0	2	102
				LCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
				RCCO	7,121	1	0	3	70	7,671	1	0	3	75	7,768	1	0	3	76
30	1250	P4	125W	T1S	13,435	3	0	3	107	14,473	3	0	3	116	14,657	3	0	3	117
				T2S	13,421	3	0	3	107	14,458	3	0	3	116	14,641	3	0	3	117
				T2M	13,490	2	0	2	108	14,532	3	0	3	116	14,716	3	0	3	118
				T3S	13,064	3	0	3	105	14,074	3	0	3	113	14,252	3	0	3	114
				T3M	13,457	2	0	2	108	14,497	2	0	2	116	14,681	2	0	2	117
				T4M	13,165	2	0	3	105	14,182	2	0	3	113	14,362	2	0	3	115
				TFTM	13,449	2	0	3	108	14,488	2	0	3	116	14,672	2	0	3	117
				T5VS	13,987	4	0	1	112	15,068	4	0	1	121	15,259	4	0	1	122
				T5S	13,999	3	0	1	112	15,080	3	0	1	121	15,271	3	0	1	122
				T5M	13,963	4	0	2	112	15,042	4	0	2	120	15,233	4	0	2	122
				T5W	13,872	4	0	3	111	14,944	4	0	3	120	15,133	4	0	3	121
				BLC	11,027	1	0	2	88	11,879	1	0	2	95	12,029	1	0	2	96
				LCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
				RCCO	8,205	1	0	3	66	8,839	1	0	3	71	8,951	1	0	3	72
30	1400	P5	138W	T1S	14,679	3	0	3	106	15,814	3	0	3	115	16,014	3	0	3	116
				T2S	14,664	3	0	3	106	15,797	3	0	3	114	15,997	3	0	3	116
				T2M	14,739	3	0	3	107	15,878	3	0	3	115	16,079	3	0	3	117
				T3S	14,274	3	0	3	103	15,377	3	0	3	111	15,572	3	0	3	113
				T3M	14,704	2	0	3	107	15,840	3	0	3	115	16,040	3	0	3	116
				T4M	14,384	2	0	3	104	15,496	3	0	3	112	15,692	3	0	3	114
				TFTM	14,695	2	0	3	106	15,830	3	0	3	115	16,030	3	0	3	116
				T5VS	15,283	4	0	1	111	16,464	4	0	1	119	16,672	4	0	1	121
				T5S	15,295	3	0	1	111	16,477	4	0	1	119	16,686	4	0	1	121
				T5M	15,257	4	0	2	111	16,435	4	0	2	119	16,644	4	0	2	121
				T5W	15,157	4	0	3	110	16,328	4	0	3	118	16,534	4	0	3	120
				BLC	12,048	1	0	2	87	12,979	1	0	2	94	13,143	1	0	2	95
				LCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71
				RCCO	8,965	1	0	3	65	9,657	1	0	3	70	9,780	1	0	3	71

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Performance Data

Lumen Output

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Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40	1250	**P6**	163W	T1S	17,654	3	0	3	108	19,018	3	0	3	117	19,259	3	0	3	118
				T2S	17,635	3	0	3	108	18,998	3	0	3	117	19,238	3	0	3	118
				T2M	17,726	3	0	3	109	19,096	3	0	3	117	19,337	3	0	3	119
				T3S	17,167	3	0	3	105	18,493	3	0	3	113	18,727	3	0	3	115
				T3M	17,683	3	0	3	108	19,049	3	0	3	117	19,290	3	0	3	118
				T4M	17,299	3	0	3	106	18,635	3	0	4	114	18,871	3	0	4	116
				TFTM	17,672	3	0	3	108	19,038	3	0	4	117	19,279	3	0	4	118
				T5VS	18,379	4	0	1	113	19,800	4	0	1	121	20,050	4	0	1	123
				T5S	18,394	4	0	2	113	19,816	4	0	2	122	20,066	4	0	2	123
				T5M	18,348	4	0	2	113	19,766	4	0	2	121	20,016	4	0	2	123
				T5W	18,228	5	0	3	112	19,636	5	0	3	120	19,885	5	0	3	122
				BLC	14,489	2	0	2	89	15,609	2	0	3	96	15,806	2	0	3	97
				LCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
				RCCO	10,781	1	0	3	66	11,614	1	0	3	71	11,761	2	0	3	72
40	1400	**P7**	183W	T1S	19,227	3	0	3	105	20,712	3	0	3	113	20,975	3	0	3	115
				T2S	19,206	3	0	3	105	20,690	3	0	3	113	20,952	3	0	3	114
				T2M	19,305	3	0	3	105	20,797	3	0	3	114	21,060	3	0	3	115
				T3S	18,696	3	0	3	102	20,141	3	0	3	110	20,396	3	0	4	111
				T3M	19,258	3	0	3	105	20,746	3	0	3	113	21,009	3	0	3	115
				T4M	18,840	3	0	4	103	20,296	3	0	4	111	20,553	3	0	4	112
				TFTM	19,246	3	0	4	105	20,734	3	0	4	113	20,996	3	0	4	115
				T5VS	20,017	4	0	1	109	21,564	4	0	1	118	21,837	4	0	1	119
				T5S	20,033	4	0	2	109	21,581	4	0	2	118	21,854	4	0	2	119
				T5M	19,983	4	0	2	109	21,527	5	0	3	118	21,799	5	0	3	119
				T5W	19,852	5	0	3	108	21,386	5	0	3	117	21,656	5	0	3	118
				BLC	15,780	2	0	3	86	16,999	2	0	3	93	17,214	2	0	3	94
				LCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
				RCCO	11,742	2	0	3	64	12,649	2	0	3	69	12,809	2	0	3	70
60	1050	**P8**	207W	T1S	22,490	3	0	3	109	24,228	3	0	3	117	24,535	3	0	3	119
				T2S	22,466	3	0	4	109	24,202	3	0	4	117	24,509	3	0	4	118
				T2M	22,582	3	0	3	109	24,327	3	0	3	118	24,635	3	0	3	119
				T3S	21,870	3	0	4	106	23,560	3	0	4	114	23,858	3	0	4	115
				T3M	22,527	3	0	4	109	24,268	3	0	4	117	24,575	3	0	4	119
				T4M	22,038	3	0	4	106	23,741	3	0	4	115	24,041	3	0	4	116
				TFTM	22,513	3	0	4	109	24,253	3	0	4	117	24,560	3	0	4	119
				T5VS	23,415	5	0	1	113	25,224	5	0	1	122	25,543	5	0	1	123
				T5S	23,434	4	0	2	113	25,244	4	0	2	122	25,564	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,221	5	0	4	112	25,016	5	0	4	121	25,332	5	0	4	122
				BLC	18,458	2	0	3	89	19,885	2	0	3	96	20,136	2	0	3	97
				LCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,735	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
60	1250	**P9**	241W	T1S	25,575	3	0	3	106	27,551	3	0	3	114	27,900	3	0	3	116
				T2S	25,548	3	0	4	106	27,522	3	0	4	114	27,871	3	0	4	116
				T2M	25,680	3	0	3	107	27,664	3	0	3	115	28,014	3	0	3	116
				T3S	24,870	3	0	4	103	26,791	3	0	4	111	27,130	3	0	4	113
				T3M	25,617	3	0	4	106	27,597	3	0	4	115	27,946	3	0	4	116
				T4M	25,061	3	0	4	104	26,997	3	0	4	112	27,339	3	0	4	113
				TFTM	25,602	3	0	4	106	27,580	3	0	4	114	27,929	3	0	4	116
				T5VS	26,626	5	0	1	110	28,684	5	0	1	119	29,047	5	0	1	121
				T5S	26,648	4	0	2	111	28,707	5	0	2	119	29,070	5	0	2	121
				T5M	26,581	5	0	3	110	28,635	5	0	3	119	28,997	5	0	3	120
				T5W	26,406	5	0	4	110	28,447	5	0	4	118	28,807	5	0	4	120
				BLC	20,990	2	0	3	87	22,612	2	0	3	94	22,898	2	0	3	95
				LCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71
				RCCO	15,619	2	0	4	65	16,825	2	0	4	70	17,038	2	0	4	71

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Performance Data

Lumen Output

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Rotated Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60	530	**P10**	106W	T1S	13,042	3	0	3	123	14,050	3	0	3	133	14,228	3	0	3	134
				T2S	12,967	4	0	4	122	13,969	4	0	4	132	14,146	4	0	4	133
				T2M	13,201	3	0	3	125	14,221	3	0	3	134	14,401	3	0	3	136
				T3S	12,766	4	0	4	120	13,752	4	0	4	130	13,926	4	0	4	131
				T3M	13,193	4	0	4	124	14,213	4	0	4	134	14,393	4	0	4	136
				T4M	12,944	4	0	4	122	13,945	4	0	4	132	14,121	4	0	4	133
				TFTM	13,279	4	0	4	125	14,305	4	0	4	135	14,486	4	0	4	137
				T5VS	13,372	3	0	1	126	14,405	4	0	1	136	14,588	4	0	1	138
				T5S	13,260	3	0	1	125	14,284	3	0	1	135	14,465	3	0	1	136
				T5M	13,256	4	0	2	125	14,281	4	0	2	135	14,462	4	0	2	136
				T5W	13,137	4	0	3	124	14,153	4	0	3	134	14,332	4	0	3	135
				BLC	10,906	3	0	3	103	11,749	3	0	3	111	11,898	3	0	3	112
				LCCO	7,789	1	0	3	73	8,391	1	0	3	79	8,497	1	0	3	80
				RCCO	7,779	4	0	4	73	8,380	4	0	4	79	8,486	4	0	4	80
60	700	**P11**	137W	T1S	16,556	3	0	3	121	17,835	3	0	3	130	18,061	4	0	4	132
				T2S	16,461	4	0	4	120	17,733	4	0	4	129	17,957	4	0	4	131
				T2M	16,758	4	0	4	122	18,053	4	0	4	132	18,281	4	0	4	133
				T3S	16,205	4	0	4	118	17,457	4	0	4	127	17,678	4	0	4	129
				T3M	16,748	4	0	4	122	18,042	4	0	4	132	18,271	4	0	4	133
				T4M	16,432	4	0	4	120	17,702	4	0	4	129	17,926	4	0	4	131
				TFTM	16,857	4	0	4	123	18,159	4	0	4	133	18,389	4	0	4	134
				T5VS	16,975	4	0	1	124	18,287	4	0	1	133	18,518	4	0	1	135
				T5S	16,832	4	0	1	123	18,133	4	0	2	132	18,362	4	0	2	134
				T5M	16,828	4	0	2	123	18,128	4	0	2	132	18,358	4	0	2	134
				T5W	16,677	4	0	3	122	17,966	5	0	3	131	18,193	5	0	3	133
				BLC	13,845	3	0	3	101	14,915	3	0	3	109	15,103	3	0	3	110
				LCCO	9,888	1	0	3	72	10,652	2	0	3	78	10,787	2	0	3	79
				RCCO	9,875	4	0	4	72	10,638	4	0	4	78	10,773	4	0	4	79
60	1050	**P12**	207W	T1S	22,996	4	0	4	111	24,773	4	0	4	120	25,087	4	0	4	121
				T2S	22,864	4	0	4	110	24,631	5	0	5	119	24,943	5	0	5	120
				T2M	23,277	4	0	4	112	25,075	4	0	4	121	25,393	4	0	4	123
				T3S	22,509	4	0	4	109	24,248	5	0	5	117	24,555	5	0	5	119
				T3M	23,263	4	0	4	112	25,061	4	0	4	121	25,378	4	0	4	123
				T4M	22,824	5	0	5	110	24,588	5	0	5	119	24,899	5	0	5	120
				TFTM	23,414	5	0	5	113	25,223	5	0	5	122	25,543	5	0	5	123
				T5VS	23,579	5	0	1	114	25,401	5	0	1	123	25,722	5	0	1	124
				T5S	23,380	4	0	2	113	25,187	4	0	2	122	25,506	4	0	2	123
				T5M	23,374	5	0	3	113	25,181	5	0	3	122	25,499	5	0	3	123
				T5W	23,165	5	0	4	112	24,955	5	0	4	121	25,271	5	0	4	122
				BLC	19,231	4	0	4	93	20,717	4	0	4	100	20,979	4	0	4	101
				LCCO	13,734	2	0	3	66	14,796	2	0	4	71	14,983	2	0	4	72
				RCCO	13,716	4	0	4	66	14,776	4	0	4	71	14,963	4	0	4	72
60	1250	**P13**	231W	T1S	25,400	4	0	4	110	27,363	4	0	4	118	27,709	4	0	4	120
				T2S	25,254	5	0	5	109	27,205	5	0	5	118	27,550	5	0	5	119
				T2M	25,710	4	0	4	111	27,696	4	0	4	120	28,047	4	0	4	121
				T3S	24,862	5	0	5	108	26,783	5	0	5	116	27,122	5	0	5	117
				T3M	25,695	5	0	5	111	27,680	5	0	5	120	28,031	5	0	5	121
				T4M	25,210	5	0	5	109	27,158	5	0	5	118	27,502	5	0	5	119
				TFTM	25,861	5	0	5	112	27,860	5	0	5	121	28,212	5	0	5	122
				T5VS	26,043	5	0	1	113	28,056	5	0	1	121	28,411	5	0	1	123
				T5S	25,824	4	0	2	112	27,819	5	0	2	120	28,172	5	0	2	122
				T5M	25,818	5	0	3	112	27,813	5	0	3	120	28,165	5	0	3	122
				T5W	25,586	5	0	4	111	27,563	5	0	4	119	27,912	5	0	4	121
				BLC	21,241	4	0	4	92	22,882	4	0	4	99	23,172	4	0	4	100
				LCCO	15,170	2	0	4	66	16,342	2	0	4	71	16,549	2	0	4	72
				RCCO	15,150	5	0	5	66	16,321	5	0	5	71	16,527	5	0	5	72

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A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background[1]

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

FEATURES & SPECIFICATIONS

INTENDED USE
The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

CONSTRUCTION
Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 ft^2) for optimized pole wind loading.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS
Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) configurations. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS
The DSX1 LED area luminaire has a number of control options. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensors with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 30 feet.

nLIGHT AIR CONTROLS
The DSX1 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). NEMA photocontrol receptacle are also available.

LISTINGS
UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40ºC minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product.
Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

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Submitted by CED - Lappin Electric			
CED	**Job Name:** Quiet Job	**Catalog Number:** DLL127F 1.5 JU Notes: Photocell	**Type:** LTG19-6254

Catalog Number:	Date:	Project:

OVERVIEW

With a design life of 20+ years and superior in-rush current and surge-protection features, the DLL Elite support the extended life and low maintenance benefits associated with LED fixtures.

FEATURES

APPLICATIONS

- LED lighting fixtures that require dusk to dawn control
- High inrush current fixtures
- Designed to last as long as your LED lighting system, 20+ years
- LED inrush protection with TRIAC assisted relay
- Extreme surge protection of 1280J/40kA utility or 2120J/40kA UL listed
- Double thick enclosure and lens with additional UV inhibitor
- High temp base plastic tested to 140°C
- Long life capacitors
- Full wave rectified power supply
- Dual zener diodes for long life
- Solid brass contact blades
- Double sided, thru hole plated .062" FR4 circuit board
- Conformal coated printed circuit board
- Sealed packaging for extended storage

SPECIFICATIONS

REGULATORY LISTINGS

- ANSI C136.10
- ROHS compliant
- UL listed to U.S. and Canadian safety standards
- Surge rated in excess of ANSI C136.10 to 20kV/10kA

OPERATING CHARACTERISTICS

- Operating Levels: Turn-on at 1.5 FC and turn-off at 2.25 FC (On:Off ratio of 1:1.5)
- Operating temperature: -40C to 70C
- Voltage 120 to 480 VAC, 60Hz
- Load rating: 1000 watts, 1800 VA ballast
  - UL Load Rating: 1000VA
- Average power consumption: <0.5 watts @ 120V

Warranty

Ten-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice

DTL DARK TO LIGHT

DLL Elite
Electronic Locking Type Photocontrol

Standard

Low Profile

DLL STANDARD COLORS		
	Non-UL	UL
120-277V	Green	Blue
347V	Green	Green
480V	Yellow	Yellow

ORDERING INFORMATION

DLL PHOTOCONTROL — **Example: DLL127 1.5 J50**

Series & Voltage	Failure Mode	Turn-On Level (fc)	Housing	Filter	Certification	Cover Color	Pkg. Qty.
DLL127 120-277V DLL347 347V[1] DLL480 480V[1]	[blank] Fail On F Fail Off	1.5 ANSI Standard	[blank] Standard height LP Low Profile[2]	[blank] Silicon Sensor IR IR filtered silicon sensor	[blank] Standard CUL cULus listed[3]	[blank] See standard colors table above BK Black[4] BR Brown[4] GR Green[4] GY Gray[4] BL Blue[4] YL Yellow[4]	JU 1 Unit J12 12 Units J50 50 Units

NOTES

1. Only available with CUL certification option.
2. Not available with DLL347, DLL480, or CUL certification.
3. Color substitutions not allowed for cULus models.
4. Non-standard custom colors are non-stock items. Available in J12 and J50 only. Consult customer service.

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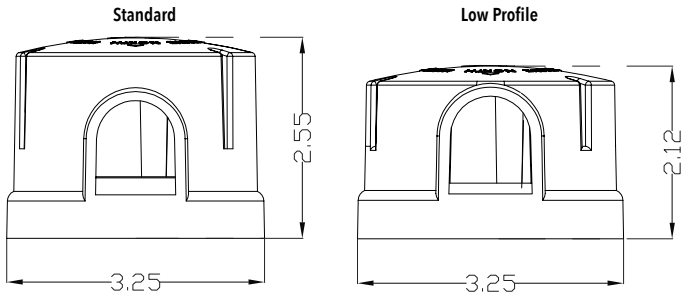
DIMENSIONS



STOCKED MODEL NUMBERS

Model #	Description	Pkg. Qty.
DLL127 1.5	120-277V Fail- On (non-UL)	J50
DLL127 1.5 BL	120-277V Fail- On (non-UL) Blue	J50
DLL127 1.5 GY	120-277V Fail- On (non-UL) Gray	J50
DLL127 1.5 BK	120-277V Fail- On (non-UL) Black	J50
DLL127F 1.5	120-277V Fail- Off (non-UL)	J50
DLL127 1.5 LP	120-277V Fail- On (non-UL) Low Profile	J50
DLL127 1.5 IR	120-277V Fail-On (non-UL) IR Filter	J50
DLL127 1.5 IR BK	120-277V Fail-On (non-UL) IR Filter Black	J50
DLL127 1.5 IR BL	120-277V Fail-On (non-UL) IR Filter Blue	J50
DLL127F 1.5 CUL	120-277V Fail- Off	J50
DLL127 1.5 CUL	120-277V Fail- On	J50
DLL347F 1.5 CUL	347V Fail- Off	J50
DLL347 1.5 CUL	347V Fail- On	J50
DLL480F 1.5 CUL	480V Fail- Off	J50
DLL480 1.5 CUL	480V Fail- On	J50

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CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 7.

DATE: September 21, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Recommendation to the Common Council for a Conditional Use Permit and Site and Building Plans for Zeilhofer Properties, LLC for Property Located at N4 W22540 Bluemound Road for the Purpose of Constructing a Two-Story Storage Building (PWC 0963997)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Zeilhofer staff report 9.21.23

Zeilhofer narrative

Zeilhofer site & building plans

Zeilhofer staff comment responses 3.8.21

Zeilhofer draft Conditional Use Permit

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of September 21, 2023

Date: September 21, 2023

Project Name: Zeilhofer storage building Conditional Use and Site & Building Plan Review

Project Address/Tax Key No.: N4W22540 Bluemound Road/PWC 0963997

Applicant: Mark Wershay, Zimmerman Architectural Studios, Inc.

Property Owner: Robb Zeilhofer

Current Zoning: B-4 Office District

2050 Land Use Map Designation: Manufacturing / Fabrication / Warehousing

Use of Surrounding Properties: Industrial to the north and west, single-family residential to the south, and mixed use property zoned single-family residential to the east

Background

The applicant originally received approval of the subject development at the May 20, 2021 and June 7, 2021 Plan Commission and Common Council meetings, respectively. The motion from the meetings are below for review. The applicant has not made any changes from those approved plans.

> May 20, 2021 Plan Commission Motion
> A motion was made and seconded (S. Bierce, T. Janka) to recommend approval of the conditional use permit and site and building plans contingent on staff recommendations and Commissioner Bergman's recommendations. Motion Passed: 6-For, 0-Against.
>
> It was noted that after the building is built, the applicant is to test to see if the septic still works. If it does not work, they would be required to do a holding tank or connect to public facilities.
>
> June 7, 2021 Common Council Motion
> A motion was made and seconded (B. Dziwulski, J. Wamser) to approve the Conditional Use Permit for the Zeilhofer Properties, LLC as recommended by the Planning Commission with the conditions stated above. Motion Passed: 5-For, 0-Against.

Project Description/Analysis

The applicant submitted a Conditional Use Permit and a Site & Building Plan Review Application for the construction of a storage building upon property located at N4W22540 Bluemound Road.

The subject property currently contains a single-family home that was previously converted to an office. The applicant/property owner is currently utilizing the building as an office for his real estate management and construction business.

Although the site and use are not allowed to have outdoor storage, the applicant has been storing equipment and materials outside. As the site is located along Bluemound Road and contains little screening if any, *staff recommends that outdoor storage be prohibited onsite, except for the orderly parking of vehicles upon paved surfaces*.

Conditional Use Permit

The subject property is zoned B-4 Office District. As noted above, the existing structure is being used as office space for Mr. Zeilhofer's business. The proposed storage building, which will house vehicles and equipment related to Mr. Zeilhofer's real estate business, is allowed as a conditional use per Sections 17.0209c. and 17.0209d. of the City's Zoning Code.

> Section 17.0209c. states, "…In addition to those uses specified elsewhere herein, the following uses may be deemed to be conditional uses by the Plan Commission: Any principal use in addition to the first such use on a single building parcel or space."
>
> Section 17.0209d. allows "Unclassified or Unspecified Uses may be permitted by the Plan Commission provided that such uses are similar in character to the principal uses permitted in the zoning district and create no circumstances that would detrimentally affect adjacent properties."

It can be noted that this property as well as the properties to the north, east and west are all designated as Manufacturing/Fabrication/Warehousing on the City's Year 2050 Land Use/Transportation Plan map. The proposed use is consistent with that designation.

It can also be noted that a rezoning was considered to accommodate this development; however, the property is 1.2677-acres, which is less than the 2-acre minimum lot size of the M-2 District and the 3-acre minimum of the M-4 District, which are both adjacent zoning districts to the subject property and would permit this use. Furthermore, building and parking setbacks are smaller in the B-4 District, which are more appropriate for a property of this size. As such, staff found that the Conditional Use option was appropriate.

Again, staff recommends that no outdoor storage be allowed onsite.

Site & Building Plans

The proposed storage building is 2-stories and approximately 7,600 square feet. The building consists of cement board siding and a CMU foundation, which will be exposed on the south elevation and partially exposed on the sides of the building.

The north elevation includes three overhead doors and a service door. The south elevation has five overhead doors and a row of windows along the top of the building. The east and west elevations both contain windows and a service door. The building has a standing seam metal roof.

Considering the existing and proposed improvements, the site has almost 50% greenspace, which is in compliance with the City's minimum greenspace ratio of 40%.

In addition to the building, the site includes a gravel area to the north of the building, which will be used to store and park vehicles and trailers. A dumpster will be located within this area as well. *It is recommended that the applicant construct an enclosure around the dumpster to screen it and contain any loose trash and debris.*

As the development disturbs less than one acre of land, storm water management is not required. *It is recommended that final grading and erosion control plans shall be submitted for approval by the Engineering Department prior to any land disturbance activities.*

Parking:
There are six parking spaces along the west property line. Parking spaces are all a minimum of 180 square feet to comply with the City's Zoning Code standard. There is also an ADA accessible parking space located on the north side of the office building.

Lighting:
The only proposed lighting is on the building and shown on the north and south building elevations. In total there are three wall lights.

Signage:
The applicant plans to remove the existing freestanding sign and replace it with a new monument sign. The location is illustrated on the site plan. *Note that signage shall comply with all standards set forth in Section 17.0700 of the City's Zoning Code and require separate review and approval by the City Planner as well as a Sign Permit from the Building Services Department, prior to installation*.

Landscape Plan:
The Demo Plan (Sheet C1.20) shows the existing trees that will be removed. A Landscape Plan has been provided that illustrates the new plantings to be provided. This includes evergreen plantings along the east and west property lines to screen the paved area between the two buildings and the gravel area on the north end of the site.

Utilities:
Sewer and water is not located directly to this site. They would have to be extended from the south side of Bluemound Road at Takoma Drive. The applicant is requesting to construct this building without having to extend public utilities to the site. The applicant has noted that the proposed building does not have any water or sanitary needs.

Consistent with the previous approval, *it is recommended that after the building is constructed, the applicant shall test to see if the septic system still works and functions appropriately. If it does not, the applicant shall be required to install a holding tank or connect to public facilities*.

Recommendation

Staff recommends that the Plan Commission recommend approval of the Conditional Use Permit and approve the Site & Building Plan Review Application, subject to Conditional Use approval and staff's recommendations as noted above in this report.

August 8, 2023

Nick Fuchs
Planner & Community Development Director
City of Pewaukee
W240N3065 Pewaukee Road
Pewaukee, WI 53072

RE: Zeilhofer Storage Building, N4W22540 Bluemound Road
Conditional Use and Plan Commission Submittals

Mr. Fuchs,

We are excited to present to you this request for Building Plan/Plan Commission review for a new freestanding two-story storage building located at N4W22540 Bluemound Road, Pewaukee WI 53186. This plan was previously approved in 2021, however, we did not commence the building of the project at that time.

This property is zoned B-4 and the existing office building on site will be maintained. Aside from some new exterior paving leading up to that structure, we are not improving it in any way as part of this project.

Following a preliminary review by Staff in 2021, it was determined that the existing lot size was not eligible for a rezoning to either a M-2 or M-4 District. Therefore, we are simultaneously requesting a Conditional Use Permit to allow the proposed contractor storage building on a B-4 property. Our property is flanked by manufacturing business parks on three sides.

The proposed 7,600 square foot building will be used for storage of goods consumed in real estate management and real estate construction related businesses. Hours of operation would be unchanged; 7:00am – 7:00 pm, Monday through Saturday.

Construction would tentatively commence Fall of 2023 and be wrapped up by Fall of 2024. The estimated value of new construction is $900,000.

If you have any additional questions about our business plan, please reach out to me directly.

Thank you,

Robb Zeilhofer, Owner
Zeilhofer Properties, LLC
(414) 507-1550

Type 'WA'

WSR LED
Architectural Wall Sconce

Inverted available with WLU option only.

Catalog Number
Notes
Type

The LED Light Fixture and/or Lamp to be installed must be listed.

Specifications
Luminaire

Height: 7-1/4" (18.4 cm)
Width: 18" (45.7 cm)
Depth: 9" (22.8 cm)
Weight: 17 lbs (7.7 kg)

Optional Back Box (BBW)

Height: 4" (10.2 cm)
Width: 5-1/2" (14.0 cm)
Depth: 1-1/2" (3.8 cm)

Introduction

The classic Architectural Wall Sconce is now available with the latest in LED technology. The result is a long-life, maintenance-free product with typical energy savings of 75% compared to metal halide versions. The integral battery backup option provides emergency egress lighting, without the use of a back-box or remote gear, so installations maintain their aesthetic integrity.

The WSR LED is ideal for replacing existing 50 – 175W metal halide wall-mounted products. The expected service life is 20+ years of nighttime use.

Ordering Information

EXAMPLE: WSR LED 2 10A700/40K SR3 MVOLT DDBTXD

WSR LED

Series	Light Engines	Performance Package	Distribution	Voltage	Mounting	Options[1]	Finish (required)
WSR LED	1 One engine (30 LEDs) 2 Two engines (20 LEDs)	**700 mA options:** 10A700/30K 3000K 10A700/40K 4000K 10A700/50K 5000K	SR2 Type II SR3 Type III SR4 Type IV	MVOLT[2] 120[3] 208[3] 240[3] 277[3] 347 480	**Shipped included** (Blank) Surface mount **Shipped separately[5]** BBW Surface-mounted back box U15 Uplift 5 degrees	**Shipped installed** PE Photoelectric cell, button type[4,7] SF Single fuse (120, 277, 347V)[6] DF Double fuse (208, 240, 480V)[6] DMG 0-10V dimming driver (no controls) ELCW Emergency battery backup[8] WLU Wet location door for up orientation[1] PIR Motion/ambient light sensor[9] DS Dual switching[1] **Shipped separately** VG Vandal guard WG Wire guard	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

Emergency Battery Operation

The emergency battery backup (ELCW option) is integral to the luminaire - no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product.

All ELCW configurations include an independent secondary driver with an integral relay to immediately detect AC power loss. Dual light engines are wired in parallel as both engines operate in emergency mode and provide additional component redundancy. These design features meet various interpretations of NFPA 70/NEC, 2009 - 2014.

The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time supply power is lost, per International Building Code Section 1006 and NFPA 101 Life Safety Code Section 7.9; provided luminaires are mounted at an appropriate height and illuminate an open space with no major obstructions.

The examples below show illuminance of 1 fc average and 0.1 fc minimum of the single-engine Type IV product in emergency mode.

WST LED 1 10A700/40K SR4
MVOLT ELCW
10' x 10' Grid/lines
8' and 12' Mounting Height

NOTES
1. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with photocell (PE), dual switching (DS) or 0-10V dimming.
2. May also be ordered separately as an accessory Ex. WSBBW DDBXD-U. Must specify finish.
3. Must be ordered with fixture; cannot be field installed.
4. Not available with MVOLT option. Button photocell (PE) can be ordered with a dedicated voltage option. Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option. Not available with 480V option. Not available with motion/ambient light sensor (PIR).
5. Integral battery pack is rated for -20° to 40°C, operating temperature. ELCW warranty is 3-year period. Not available with 347V or 480V. Not available with WLU.
6. Not available with PIR or ELCW.
7. Specifies the Sensor/Switch SP200-7-DCP control (photocell included); see Motion Sensor Guide for details. Includes ambient light sensor. Not available with "PE" option (button type photocell). Dimming driver standard. Not available with WLU, VG or WG.
8. Specifies the emergency battery backup with two independent drivers and light engines on two separate circuits. Not available with one engine, MVOLT, ELCW, WLU, SF, or DF. Must specify voltage; voltage must be the same for both drivers. When ordered with photocell (PE) or motion sensor (PIR), only the primary power source leads will be controlled.

LITHONIA LIGHTING

One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8041 • Fax: 770.918.1209 • www.lithonia.com
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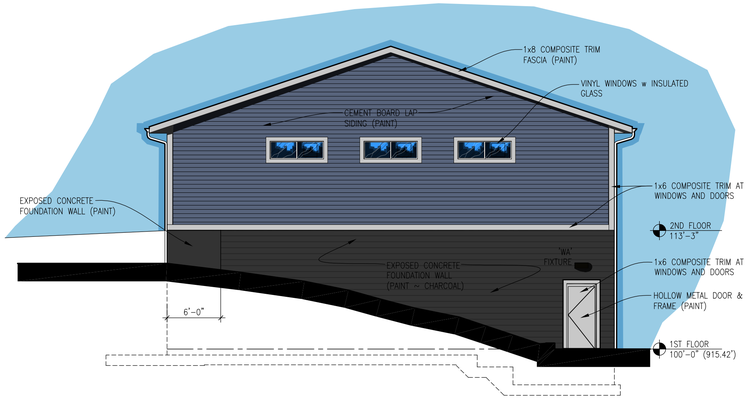
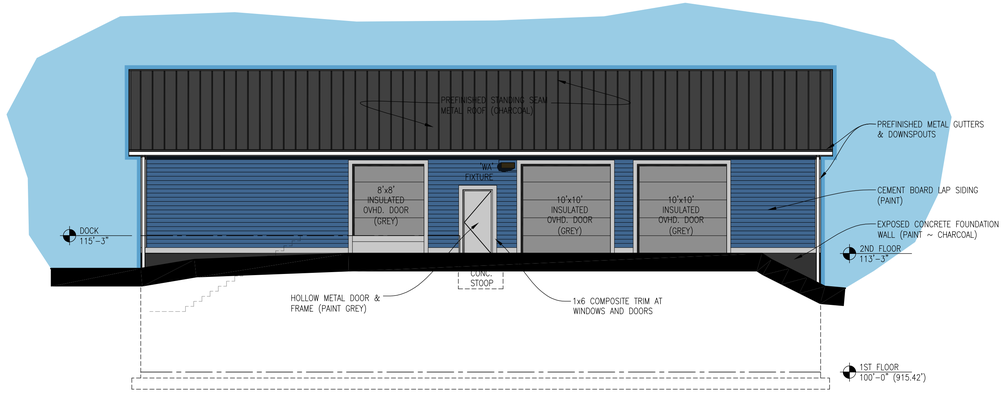
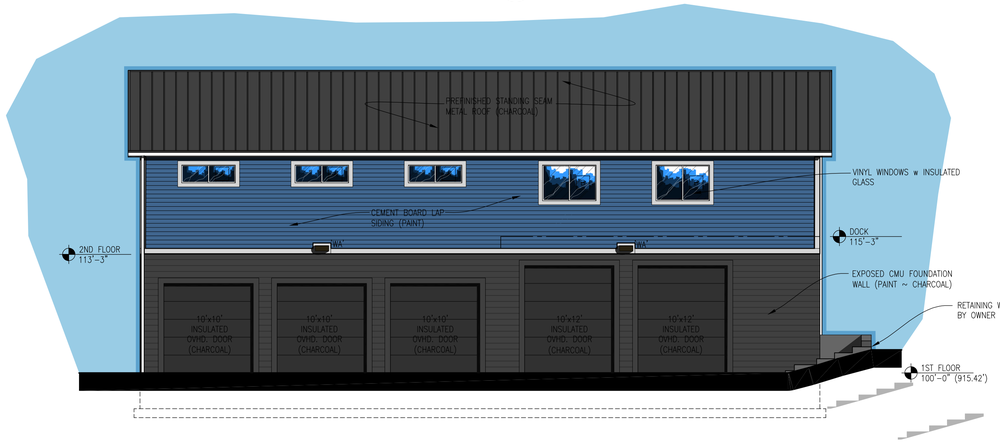
WSR-LED
Rev. 08/11/15



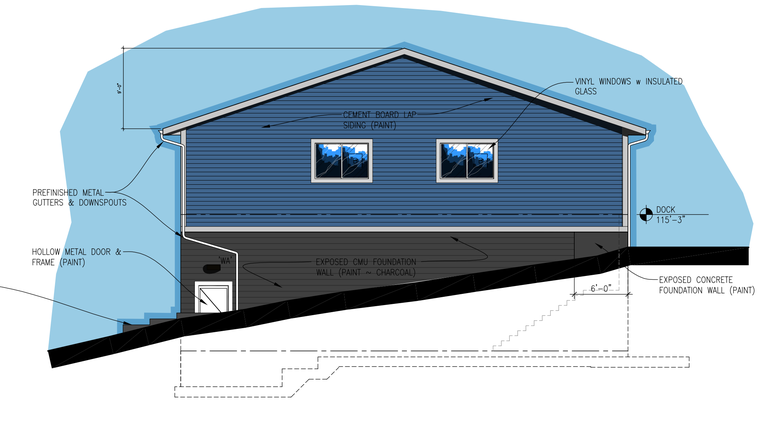
5 West Elevation
1/8" = 1'-0"



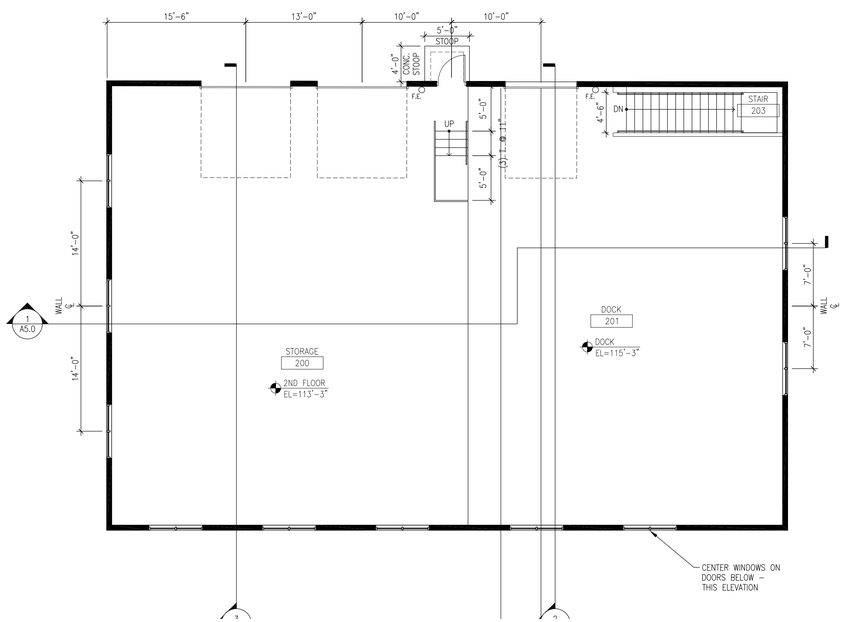
6 North Elevation
1/8" = 1'-0"



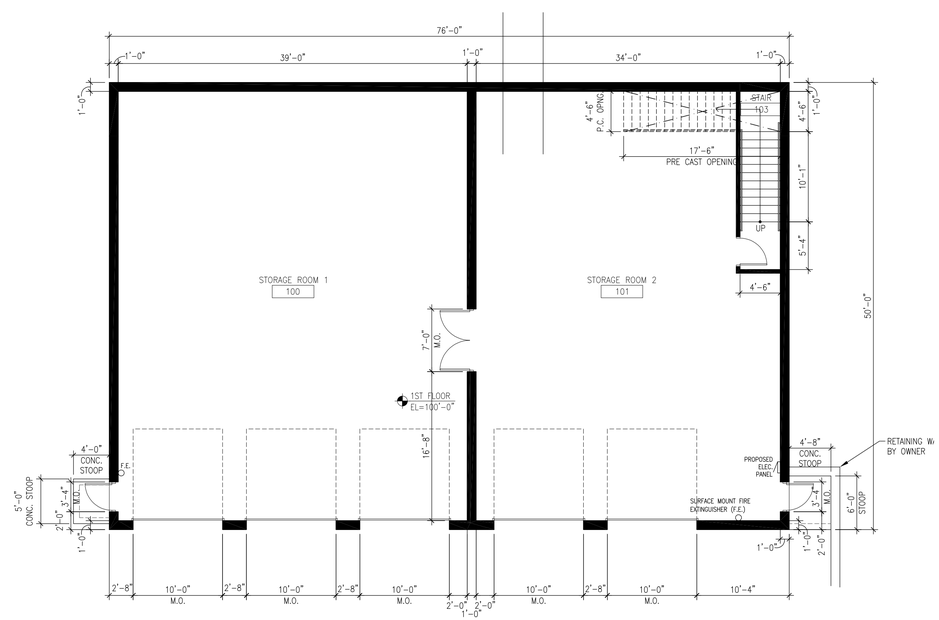
3 South Elevation
1/8" = 1'-0"



4 East Elevation
1/8" = 1'-0"



2 Upper Level Floor Plan
1/8" = 1'-0"



1 Lower Level Floor Plan
1/8" = 1'-0"

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Zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 West Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

Consultant:

HEC Project Number: 20-0110.00

Project:
Zeilhofer Properties, LLC
New Storage Building

Location:
N4W22540 Bluemound Road
Pewaukee, Wi 53186

Key Plan:
North
PLAN COMMISSION FINAL SUBMITTAL

Sheet:
Exterior Elevations

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

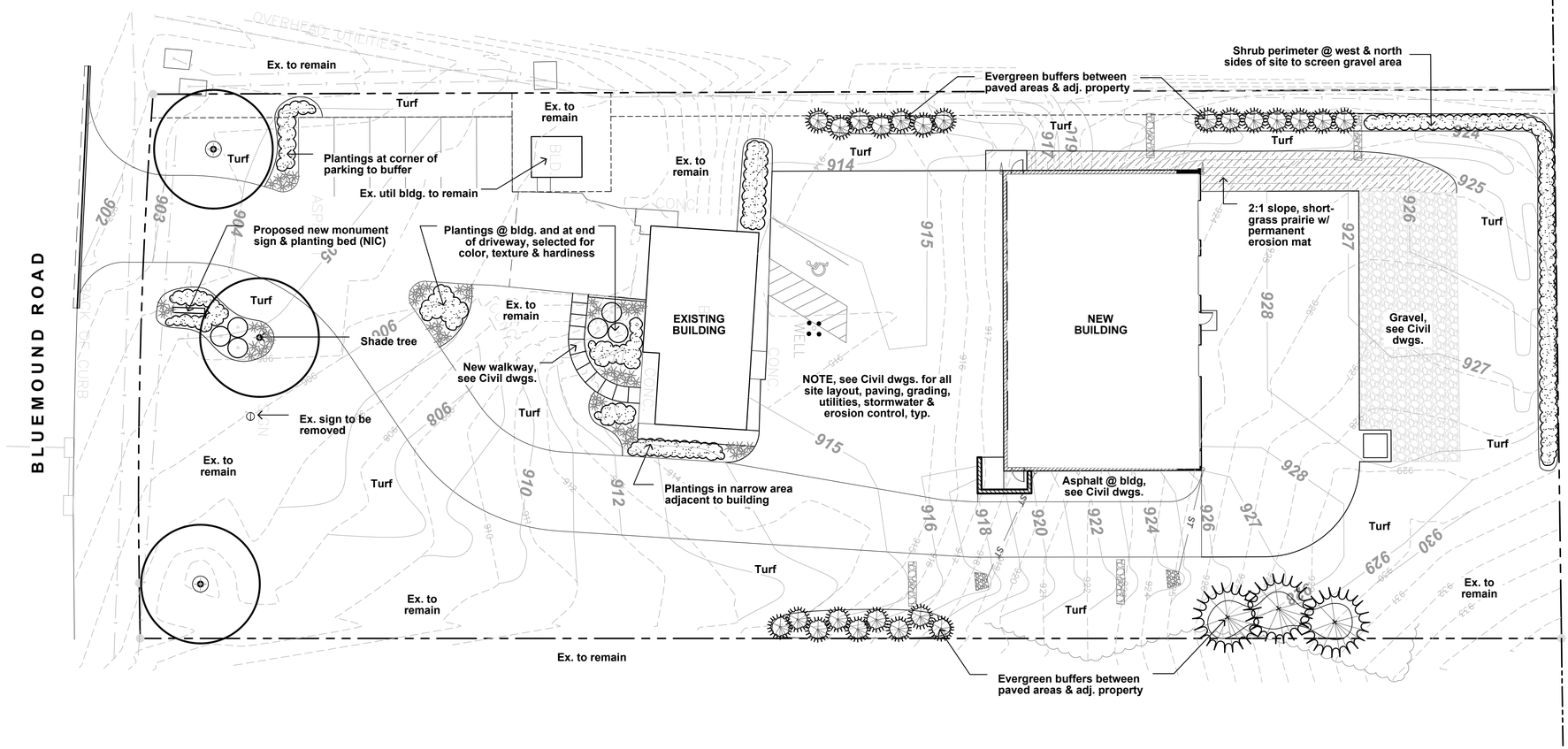
Revisions:

No.	Date:	Description:

Date:
March 8, 2021

Project No.:
200110.00

Sheet No.:
A4.0



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TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

Consultant:

Harwood Engineering Consultants
255 North 21st Street | Milwaukee, WI 53233
P 414.475.5554 | www.hec1.com
HEC Project Number: 20-0110.00

Project:
Zeilhofer Properties, LLC
New Storage Building

Location:
N4W22540 Bluemound Road
Pewaukee, Wi 53186

Key Plan:

North

Sheet:
Schematic Landscape Plan

Scale:
1/16"=1'-0" @ 36x24"

Revisions:

No.	Date:	Description:

Date:
March 8, 2021

Project No.:
200110.00

Sheet No.:
L1.00

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General Notes

1.00 Harwood Engineering's design scope is through Plan Commission submittal only. Remainder of project work (revisions per City approval requirements, final design, materials selections, species selection, detailing, shop drawing review, et al) shall be by Owner.

1.01 All landscape installation & maintenance to conform with all applicable local codes & ordinances, including (but not limited to) select portions of City of Pewaukee Municipal Code.

1.02 See Site / Civil dwgs. for work limits, scope of construction, hardscape, dimensions, construction notes, grading, stormwater management, site utilities & erosion control. See Landscape dwgs. for landscape plans, details, schedules, notes. See Arch. drawings for all other content.

1.03 Subcontractor (if any) shall provide shop drawings and material submittals of **all** hardscape & landscape construction elements shown in plan set for Owner review prior to construction.

1.04 Subcontractor shall provide samples for Owner's approval on all colors, finishes & materials prior to construction, including (but not limited to) topsoil, gravels, mulches, seed mixes et al.

1.05 Caution: underground utilities are present on site. Subcontractor shall verify location of all above- and below-grade utilities, both public & private, prior to commencement of site construction. If unanticipated above- or below-grade conditions are encountered, notify Owner prior to proceeding. Coordinate with local public utility locating entity as needed.

1.06 Subcontractor shall verify layout prior to construction. Contact Owner if discrepancies are found.

1.07 Subcontractor shall limit construction traffic to within work limit lines. See Civil drawings for limits of disturbance. All adjacent damage shall be the responsibility of the subcontractor to restore. Turf restoration outside of work limits shall be done with seeded turf.

1.08 Existing trees to remain on site shall be protected. Erect snow fencing @ 15' R or tree driplines, whichever is farther. All construction traffic, storage, compaction, parking or other disturbance within protection zones shall be prohibited for the duration of construction, except for work specifically indicated in the site plans.

1.09 All written dimensions supersede scaled dimensions. All dimensions are taken from face of curb, wall or existing building foundations.

Landscape Notes

2.01 Rough grading & topsoil import/spreading are to be completed by others. Finish grading, seed area and ornamental planting bed preparation shall be the subcontractor's responsibility. Verify all existing site and grading conditions prior to construction.

2.02 All landscape areas disturbed within the work limits shall be fine graded and restored with vegetative cover as shown. See plans for cover types & locations, see specifications for materials & installation.

2.03 Subcontractor shall verify plant quantities shown on plan. Symbol quantities take precedence over plant keys, except if noted in the schedule. The subcontractor shall forward a material list to the Owner prior to construction identifying species, sizes, quantities & plant sources to be used on the project.

2.04 All plant materials shall conform to the schedule and shall meet quality requirements outlined in the ANLA "American Standard for Nursery Stock", ANSI Z60.1-2004. The Owner reserves the right to reject any substandard planting material. Such rejected material shall be removed from the project site immediately.

2.05 An Owner's representative shall be allowed to inspect and approve trees at the nursery prior to delivery to the site. The subcontractor shall coordinate with the Owner in a timely fashion to confirm.

2.06 All nursery tags/labels shall be left on plant materials until the project punch-list inspection is completed by the Owner. Untagged materials will be assumed to be deficient.

2.07 All planting beds shall contain screened blended topsoil mix to a min. depth of 18". All seeded and/or sodded areas shall have min. 6". Subgrade shall be tilled and/or scarified prior to placement of topsoil. Suitable existing soil may be used & mixed if previously approved. Subcontractor shall be responsible for obtaining soil tests for existing or imported topsoil. Soil testing results shall include (but are not limited to) soil pH, % organic matter, phosphorus, potassium, calcium & texture (percentages of sand, silt and/or clay.) Remove excessive clay, gravel & stones detrimental to healthy plant growth. Remove all debris greater than 1" diameter.

2.08 Subcontractor shall be responsible for ensuring that all tree pits & planting areas drain properly. Notify Owner if drainage or moisture problems are encountered while planting.

2.09 Subcontractor shall backfill all trees, shrubs & evergreens with a mix of 1/3 plant starter mix & 2/3 remaining soil. Plant Starter Mix shall be provided by Liesener Soils, Cedarburg WI, or approved equal.

2.10 All perennial and groundcover areas shall receive a 3" layer of plant starter mix and perennial starter fertilizer, rototilled into the top 6" of blended topsoil in beds.

2.11 Unless otherwise shown, all perennials & shrubs shall be planted in triangular arrangements. For plants not shown individually, refer to the spacing shown in the plant schedule.

2.12 All plantings shall receive bark mulch in the beds. Bark mulch shall be hardwood bark, shredded, with no pieces larger than 1x4". Recycled mulch and/or dyed mulch will not be accepted. Mulch shall be applied @ 2-3" depth in woody planting areas and 1-2" depth in herbaceous areas. Mulch shall not touch plant trunks or stems.

2.13 Bed edging shall be 6" deep shovel-cut edging at all locations, typ.

2.14 Subcontractor shall provide positive drainage away from all structures for a minimum of 10'.

2.15 Subcontractor shall be responsible for providing base bid comprehensive landscape establishment, maintenance and warranty care for one year after installation. Work shall include all watering, weeding, pruning, fertilizing & pest management. Prior to beginning installation, the contractor shall submit a 12-mo. calendar for review/approval including all anticipated maintenance activities.

Seeding Notes & Mixes

3.01 This work shall consist of preparing the seed beds and furnishing, sowing and mulching the required seed on the various seeded areas, as outlined in the site plans and specifications. All turf restoration shall be seeded turf unless otherwise noted.

3.02 Rough grading, drainage work, topsoiling and fine grading shall be completed before sowing the seed mixes. The areas to be seeded shall be worked with plow chisels, discs & harrows, soil finishers and/or other appropriate equipment until a reasonably even and loose seedbed is obtained. Seed beds shall be prepared immediately in advance of the seeding. If proposed seed areas are weedy, contractor to apply herbicide or other weed control measures to eliminate weeds. Conform with seed supplier's specifications if required.

3.03 Confirm that anticipated project schedule date(s) fall within the respective seed supplier's approved calendar prior to installation. Installations completed outside of acceptable seeding dates shall be the performed at the sole responsibility and expense of the subcontractor. For dormant seeding, a min. of one over-seed application in the following season will be required.

3.04 Seeds shall be PLS and will be mixed in accordance w/ mfr's specifications. Provide invoices, bag-tags or mix analysis results for approval prior to installation.

3.05 Seed mixtures shall be sown by means of equipment adapted to the purpose. Mechanical distribution of seed (i.e. Truax seed drill, Brillion seeder, cultipacker, slit-seeder, drop spreader or broadcast spreader) are the only accepted methods. No hand-broadcasting of seed.

3.06 No seeding shall occur if the wind exceeds 12 MPH.

3.07 Coordinate erosion control and/or mulching with Civil dwgs:

- In sloped areas steeper than 4:1, erosion matting shall be installed by others. Landscape installation shall be coordinated with the erosion control contractor. Note areas where permanent erosion matting is specified.
- In areas with slopes between 4:1 and 8:1, subcontractor shall apply clean hay or straw mulch, free of debris and seeds, on all newly seeded areas. Mulch shall be uniformly spread over the designated area at a rate of 55 bales per acre or as indicated in the respective seed supplier's specifications. Mulch material shall be chopped and blown into the seeded area.
- Lightweight E.C. matting and/or hydromulch will be accepted as a no-cost alternate if approved by Owner prior to application.

3.08 See Civil dwgs for erosion control devices. Coordinate with erosion control contractor where required to ensure that topsoil, seeding and/or mat installations are properly coordinated.

3.09 Subcontractor shall be responsible for obtaining soil tests for all seeded areas. Soil testing results shall include (but are not limited to) soil pH, % organic matter, phosphorus, potassium, calcium & texture (percentages of sand, silt and/or clay.) Contaminated soil shall be removed from the project site if discovered. If necessary, supply soil amendments required for specified seed mixes and/or coordinate alternate mixes if soils cannot be properly conditioned.

3.10 Cover crop seeding: All seeded areas shall include temporary annual cover crop seeding. Cover crop shall be Annual Rye or approved alternate species, seed rates appropriate for the season (i.e. spring, summer or fall application.)

3.11 Seed mix substitutions shall be considered only if submitted for approval 10 days before the close of bidding. All mixes shall be installed & maintained per supplier's specifications.

BLUEGRASS MIX:
"Deluxe 50 Mix" shall be supplied by Reinders, Sussex WI, 262-786-3300. Apply @ 6 lbs per 1000 GSF.

SLOPE MIX:
"Erosion Control Mix for Medium Soils" shall be supplied by Prairie Nursery, Westfield WI, 800-476-9453 ph. Apply @ 10 lbs per AC, plus cover crop.

3.12 Subcontractor shall be responsible for providing base bid comprehensive seed area establishment, maintenance and warranty care for all seeded areas:

- Bluegrass areas shall be for one season after installation. Work shall include all watering, weeding, fertilizing & mowing. Assume one mowing per week, plus overseeding of any bare spots found after 60 days.

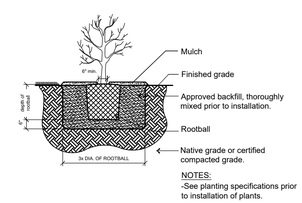
- All other seed areas shall be for three years after installation. Work shall include all watering, weeding (both spot herbicide and/or hand-pulling, depending on necessity), fertilizing, spring / fall clean-up & mowing. Expect 4-5 mowings in the first year, 3-4 mowings in the second year and 2-3 mowings in the third year. All mowings shall be timed to cut germinating weeds but not desirable forbs / grasses. Overseed each spring any bare areas larger than 1 sq. ft.

- Prior to beginning installation, the contractor shall submit a 36-month calendar for review/approval including all anticipated maintenance activities.

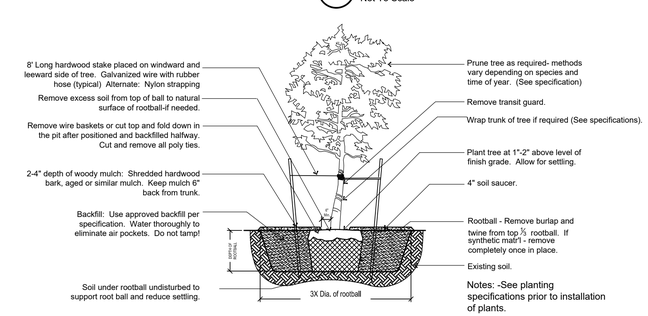
Preliminary Plant Schedule

Note: Species & quantities TBD, final selections By Owner.

Symbol	Qty.	Botanical Name	Common Name	Installed Size	Root	Spacing	Notes
[Qty. 03] Shade Trees							
Ace Sie		Acer freemanii 'Sienna Glenn'	Sienna Glenn Maple	3" Cal.	B/B	As Shown	
[Qty. TBD] Ornamental Trees							
Ame Aut		Amelanchier x. 'Autumn Brilliance'	Autumn Brilliance Serviceberry	8' Ht.	B/B	As Shown	25x25' heavy 3-stem
[Qty. 03] Evergreen Trees							
Pic Gla		Pices glauca var densata	Black Hills Spruce	7' Ht.	B/B	As Shown	
[Qty. 23] Large Shrubs							
Thu Tec		Thuja occidentalis 'Technito'	Technito Dwf. Arborvitae	5' Ht.	B/B	As Shown	
Vib Red		Viburnum dentatum 'Red Feather'	Red Feather Arrowwood Viburnum	48" Ht.	B/B	As Shown	
[Qty. 925sf] Deciduous Shrubs							
Rib Gre		Ribes alpinum 'Green Mound'	Green Mound Alpine Currant	18-24" Ht.	2 Gal.	48" o.c.	
Spi Fri		Spiraea fritschiana	Fritsch Spirea	15-18" Ht.	2 Gal.	42" o.c.	
Vib Spi		Viburnum carlesii 'Spiced Bouquet'	Spiced Bouquet Comp. Kspice Viburnum	30-36" Ht.	7 Gal.	60" o.c.	
[Qty. 270sf] Evergreen Shrubs							
Jun Kal		Juniperus chinensis 'Kallay'	Kallay Compact Juniper	24" sprd.	7 Gal.	54-60" o.c.	
[Qty. 235sf] Perennials & Grasses							
Cal Ove		Calamagrostis acu. 'Overdam'	Overdam Feather Reed Grass	1 Gal.	Cont.	30-36" o.c.	
Hem Spp		50/50 mix of Hemerocallis 'Happy Returns' & 'Rosy Returns'		4.5"	Cont.	18-24" o.c.	In drifts of 3-5 per spp.
Spo Het		Sporobolus heterolepsis	Prairie Dropseed	1 Gal.	Cont.	18-24" o.c.	



2 Shrub Planting Detail
Not To Scale



1 Tree Planting Detail
Not To Scale

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HEC Project Number: 20-0110.00

Project:
Zeilhofer Properties, LLC
New Storage Building

Location:
N4W22540 Bluemound Road
Pewaukee, WI 53186

Key Plan: North

Sheet:
Landscape Details, Schedules & Notes

Scale:
As Shown @ 36x24"

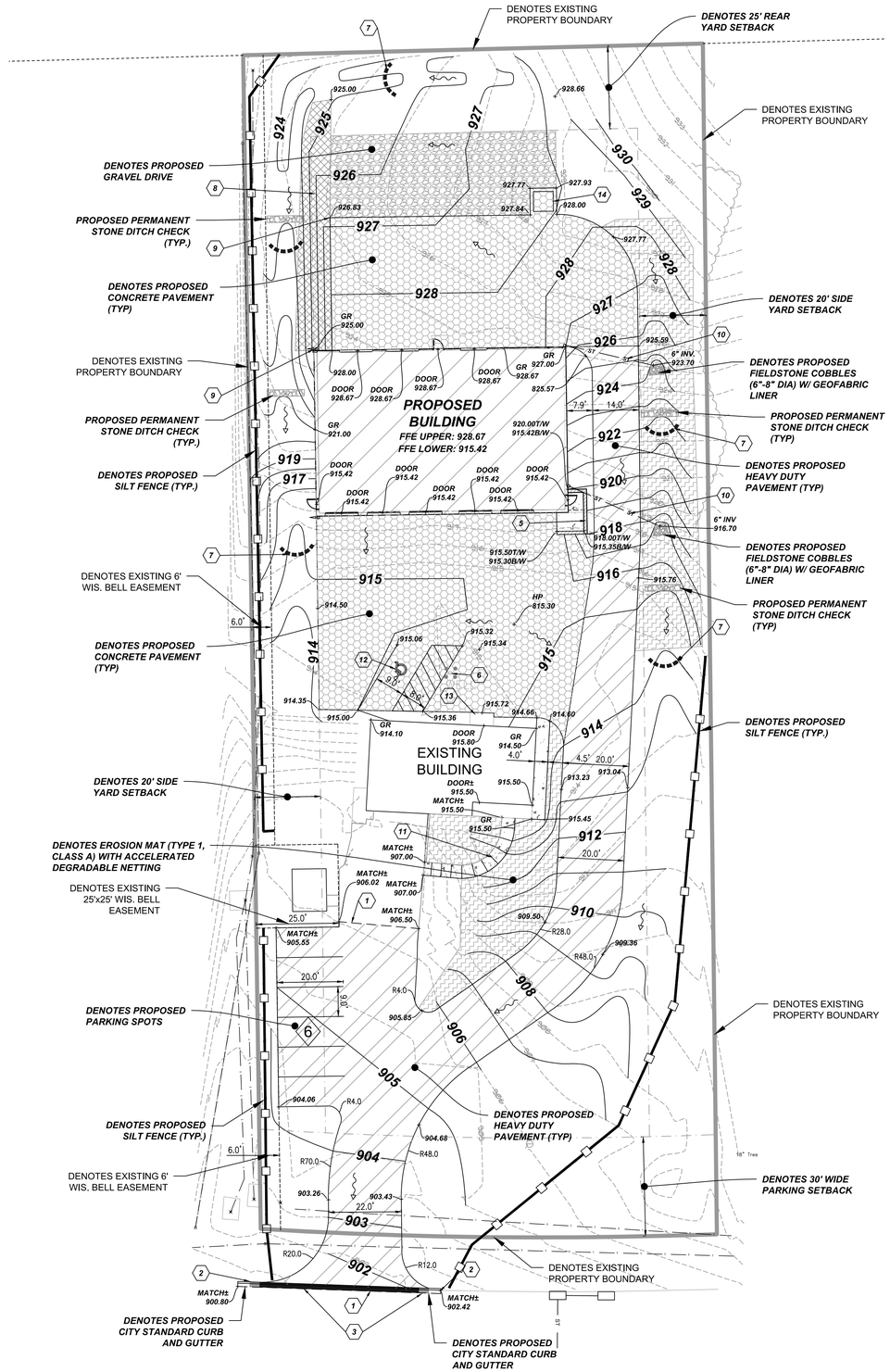
Revisions:

No.	Date:	Description:

Date:
March 8, 2021

Project No.:
200110.00

Sheet No.:
L5.00



SITE CALCULATION TABLE

TOTAL SITE AREA	1,136 AC
TOTAL DISTURBED AREA	0.881 AC
PROPOSED GREENSPACE	0.565 AC (49.7% OF SITE)

*CONTRACTOR SHALL STAY WITHIN THE SILT FENCE BOUNDARY AND FOLLOW THE GRADING, EROSION CONTROL AND DEMO PLAN AS NOT TO DISTURB OVER 1 ACRE.

NOTES

1. SAWCUT EXISTING PAVEMENT (FULL DEPTH) AND CREATE BUTT JOINT WHERE PROPOSED MEETS EXISTING
2. MATCH INTO EXISTING CURB AND GUTTER.
3. DENOTES PROPOSED 3' CURB TAPER.
4. INSTALL NEW DEPRESSED CURB AND GUTTER. MATCH INTO EXISTING CURB AND GUTTER.
5. DENOTES PROPOSED SEGMENTAL CONCRETE RETAINING WALL. OWNER PROVIDED AND INSTALLED.
6. EXISTING WATER WELL TO REMAIN. WELL TO BE MODIFIED AS NEEDED TO MEET CODE. INSTALL 4 BOLLARDS AROUND EXISTING WELL
7. DENOTES PROPOSED DITCH CHECK
8. DENOTES PROPOSED PERMANENT EROSION MATTING
9. DENOTES PROPOSED DOWNSPOUT AT GRADE WITH SPLASHBLOCK
10. DENOTES PROPOSED 6" DOWNSPOUT CONNECTION. MINIMUM SLOPE OF 1.00% REQUIRED (SEE DETAIL)
11. DENOTES PROPOSED STAIRS. OWNER PROVIDED AND INSTALLED
12. DENOTES PROPOSED ADA PARKING. 2% MAX SLOPE IN ANY DIRECTION
13. OWNER TO MODIFY TO PROVIDE ADA ACCESSIBILITY
14. DENOTES PROPOSED DUMPSTER LOCATION

EROSION CONTROL LEGEND

- SILT FILTER FENCE
- EROSION MAT
- DITCH CHECK
- PERMANENT EROSION MATTING

HATCH LEGEND

- PROPOSED CONCRETE SIDEWALK
- PROPOSED GRAVEL DRIVE
- PROPOSED HEAVY DUTY ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT

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DIGGER'S HOTLINE CALL BEFORE YOU DIG 1-800-242-8511

IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

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HEC Project Number: 20-0110.00

Project:

Zeilhofer Properties, LLC
New Storage Building

Location:
N4W22540 Bluemound Road
Pewaukee, Wi 53186

Key Plan:

PLAN COMMISSION
FINAL SUBMITTAL

North

Sheet:

GRADING & EROSION CONTROL PLAN

Scale:
SCALE: 1" = 20'

North

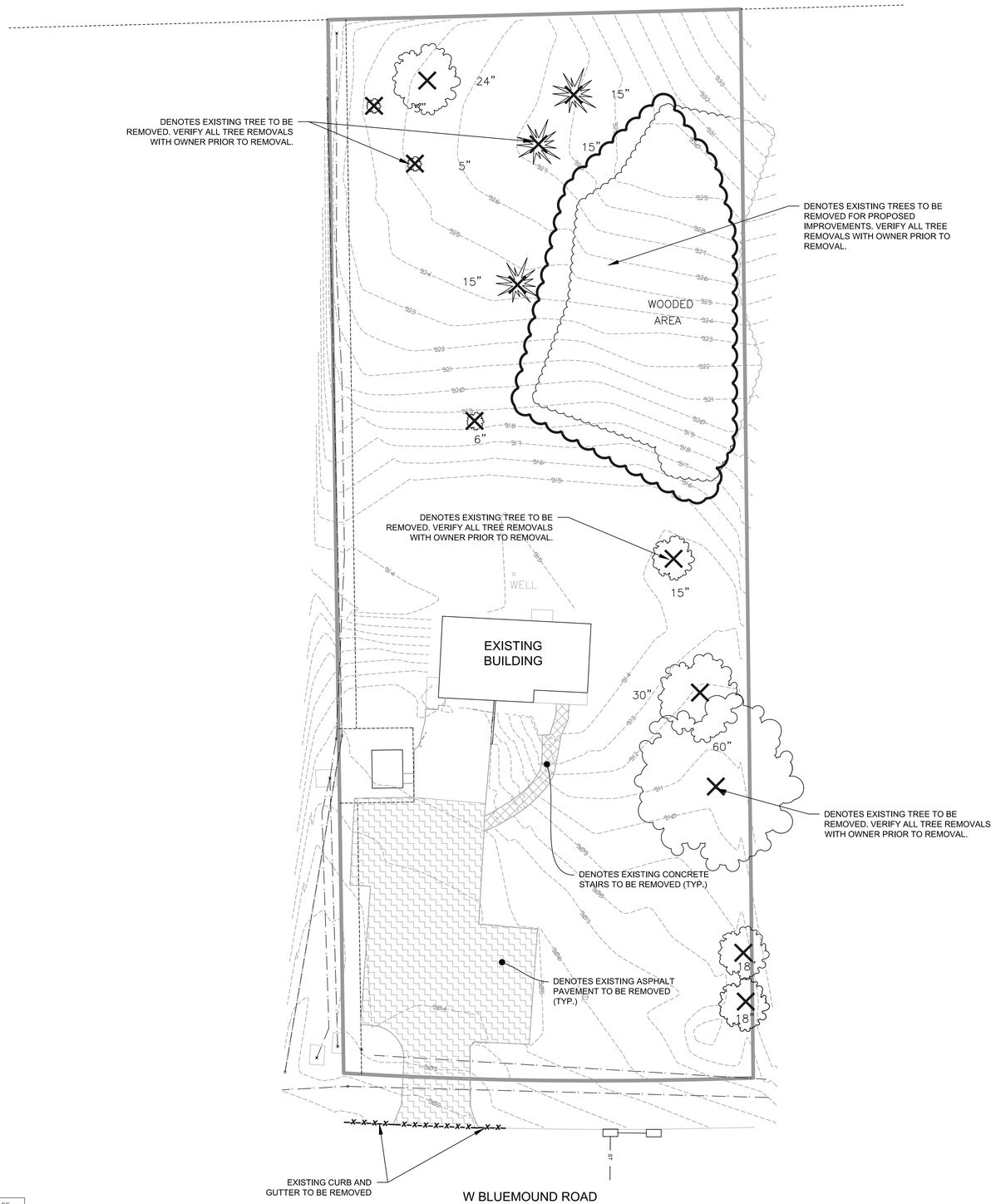
Revisions:

No.	Date:	Description:

Date:
March 8, 2021

Project No.:
200110.00

Sheet No.:
C1.10



DEMOLITION LEGEND

- DENOTES ITEM TO BE REMOVED OR DEMOLISHED
- DENOTES PAVEMENT REMOVAL AREA
- DENOTES CONCRETE SIDEWALK REMOVAL AREA
- DENOTES ITEM TO BE ABANDONED OR REMOVED
- DENOTES TREE TO BE REMOVED OR RELOCATED (AS NOTED)

DIGGER'S HOTLINE CALL BEFORE YOU DIG 1-800-242-8511

IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

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HEC Project Number: 20-0110.00

Project:

Zeilhofer Properties, LLC
New Storage Building

Location:
N4W22540 Bluemound Road
Pewaukee, Wi 53186

Key Plan:

PLAN COMMISSION
FINAL SUBMITTAL

North

Sheet:

DEMO PLAN

Scale:
SCALE: 1" = 20'

North

Revisions:

No.	Date:	Description:

Date:
March 8, 2021

Project No.:
200110.00

Sheet No.:
C1.20

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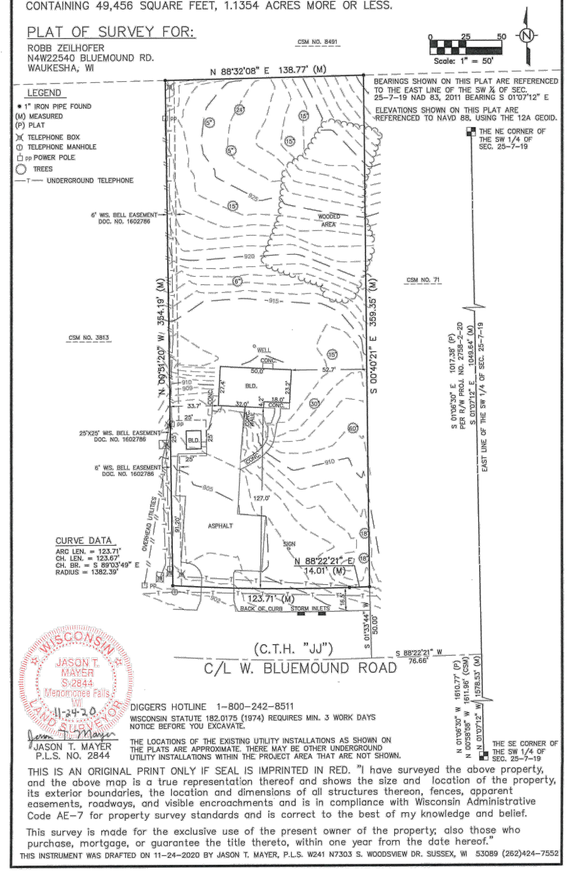
CERTIFIED SURVEY MAP NO. 147, RECORDED MARCH 30, 1964 IN VOLUME 1 OF CERTIFIED SURVEY MAPS O PAGE 21, AS DOCUMENT NO. 607491, BEING A PART OF THE NORTHEAST ¼ OF THE SOUTHWEST ¼ OF SECTION 25, TOWNSHIP 7 NORTH, RANGE 19 EAST, IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN, EXCEPTING THEREFROM THAT PART CONVEYED TO WAUKESHA COUNTY IN WARRANTY DEED RECORDED AS DOCUMENT NO. 1517378.

CONTAINING 49,456 SQUARE FEET, 1.1354 ACRES MORE OR LESS.

PLAT OF SURVEY FOR:

ROBB ZEILHOFER
N4W22540 BLUEMOUND RD.
WAUKESHA, WI



CURVE DATA
ARC LEN. = 123.71'
CH. LEN. = 123.67'
CH. BR. = S 89°03'49" E
RADIUS = 1382.39'

WISCONSIN JASON T. MAYER S-2844 Menomonee Falls, WI LAND SURVEYOR
11-24-20

JASON T. MAYER
P.L.S. NO. 2844

DIGGERS HOTLINE 1-800-242-8511

WISCONSIN STATUTE 182.0175 (1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

THE LOCATIONS OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLATS ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

THIS IS AN ORIGINAL PRINT ONLY IF SEAL IS IMPRINTED IN RED. "I have surveyed the above property, and the above map is a true representation thereof and shows the size and location of the property, its exterior boundaries, the location and dimensions of all structures thereon, fences, apparent easements, roadways, and visible encroachments and is in compliance with Wisconsin Administrative Code AE-7 for property survey standards and is correct to the best of my knowledge and belief.

This survey is made for the exclusive use of the present owner of the property, also those who purchase, mortgage, or guarantee the title thereto, within one year from the date hereof."

THIS INSTRUMENT WAS DRAFTED ON 11-24-2020 BY JASON T. MAYER, P.L.S. W241 N7303 S. WOODSVIEW DR. SUSSEX, WI 53089 (262)424-7552

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Project:

Zeilhofer Properties, LLC
New Storage Building

Location:

N4W22540 Bluemound Road
Pewaukee, Wi 53186

Key Plan:

PLAN COMMISSION
FINAL SUBMITTAL

North

Sheet:

EXISTING SURVEY

Scale:

SCALE: 1" = 50'

North

Revisions:

No.	Date:	Description:

Date:

March 8, 2021

Project No.:

200110.00

Sheet No.:

C1.30

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GENERAL NOTES:

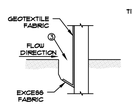
DETAIL OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE WITH THE ENDS POINTING UPSLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.

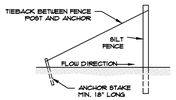
1. CROSS BRACE WITH 2" x 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.
2. MINIMUM 14 GAGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C-C.
3. EXCAVATE A TRENCH A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC, FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
4. WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.
5. GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLY-PROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF 3/4" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.
6. STEEL POSTS SHALL BE STUDDED "TEE" OR "U TYPE" WITH A MINIMUM WEIGHT OF 1.33 lbs/lin. ft. (WITHOUT ANCHORS). FIN ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIA. OR 1-1/2" x 3-1/2" EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING SHALL BE A MINIMUM SIZE OF 1-1/8" x 1-1/8" OAK OR HICKORY.

ALTERNATIVES A AND B ARE EQUAL AND EITHER MAY BE USED.

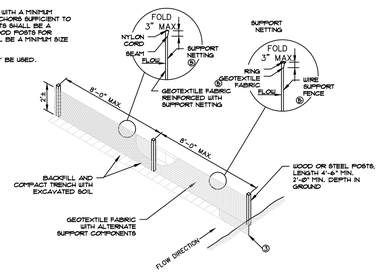
NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS



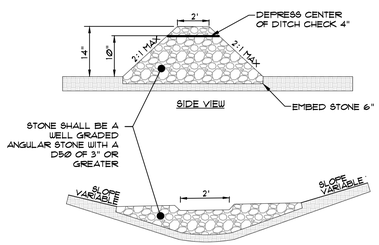
TRENCH DETAIL



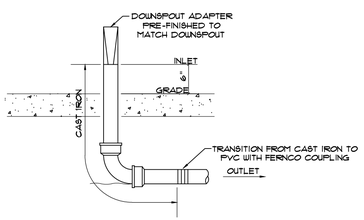
SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)



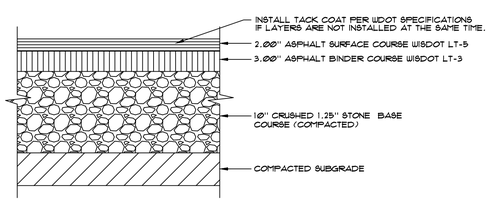
01 SILT FENCE DETAIL
NTS



02 STONE DITCH CHECK
NTS

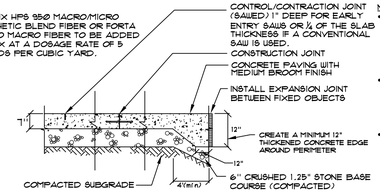


03 DOWNSPOUT DETAIL
NTS



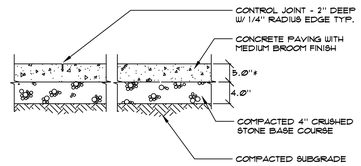
04 HEAVY DUTY ASPHALT DETAIL
NTS

NOTE:
- MATRIX HPS 950 MACRO/MICRO SYNTHETIC BLEND FIBER OR FORTA FERRO MACRO FIBER TO BE ADDED TO MIX AT A DOSAGE RATE OF 5 POUNDS PER CUBIC YARD.



NOTES:
- TIE BARS SHALL BE INSTALLED AT ALL AREAS WHERE CONCRETE PAVEMENT ABUTS CURB AND GUTTER AND CONSIST OF NO. 4 EPOXY COATED REINFORCING BARS 24 INCHES IN LENGTH AND 48 INCHES ON CENTER.
- CONTROL/ CONTRACTION/ CONSTRUCTION JOINTS SHALL BE SPACED AT 12' MAXIMUM AND CONSTRUCTED IN CONFORMANCE WITH THE AMERICAN CONCRETE INSTITUTE (ACI-330R) RECOMMENDATIONS.
- EXPANSION JOINTS SHALL BE PROVIDED WHERE PAVEMENT ABUTS FIXED OBJECTS, MEETING ACI-330R STANDARDS.

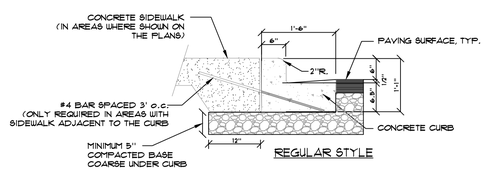
05 CONCRETE PAVEMENT DETAIL
NTS

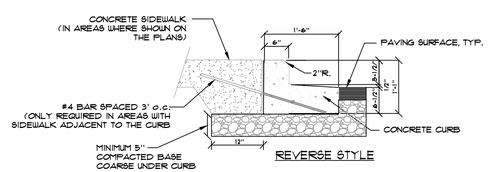


* NOTE:
SIDEWALK SHALL BE 7" AT DRIVEWAY SECTIONS

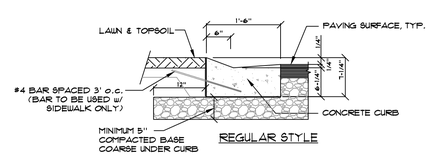
NOTES:
- CONTROL JOINT SPACING SHALL BE A MAXIMUM OF 5' AND CONSTRUCTED IN CONFORMANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) RECOMMENDATIONS.
- EXPANSION JOINTS SHOULD BE PROVIDED WHERE PAVEMENT ABUTS FIXED OBJECTS.
- MATRIX BI BLEND MICRO FIBER TO BE ADDED AT A RATE OF 1.5 POUNDS PER CUBIC YARD.

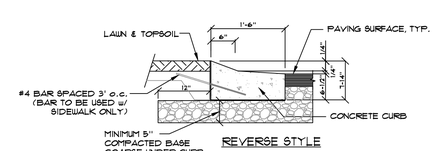
06 CONCRETE SIDEWALK DETAIL
NTS





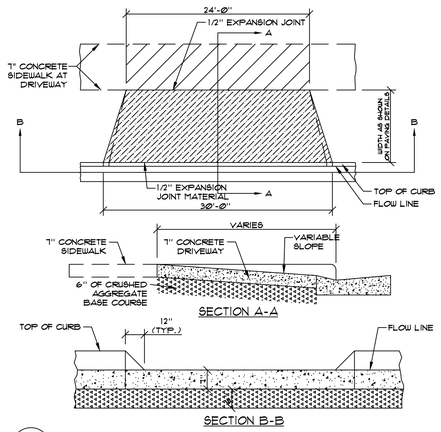
07 VERTICAL FACE CURB - 18" WIDE
NTS



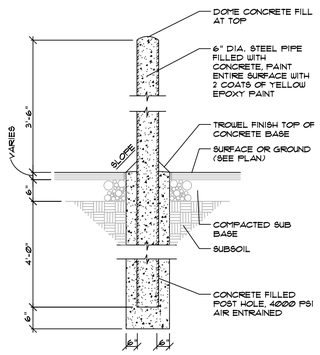


NOTE:
- REVERSE STYLE CURB LOCATIONS ARE NOTED ON THE PLANS.

08 18" DEPRESSED CURB
NTS



09 CONCRETE DRIVEWAY APPROACH
NTS



10 BOLLARD
NTS

© Copyright Zimmerman Architectural Studios, Inc.

Zimmerman
ARCHITECTURAL STUDIOS, INC.
2122 West Mount Vernon Avenue | Milwaukee, WI 53233 | zastudios.com
TELEPHONE [414] 476.9500
FACSIMILE [414] 476.8582

Consultant:

Harwood Engineering Consultants
255 North 21st Street | Milwaukee, WI 53233
P 414.476.5354 | www.hec.com
HEC Project Number: 20-0110.00

Project:
Zeilhofer Properties, LLC
New Storage Building

Location:
N4W22540 Bluemound Road
Pewaukee, Wi 53186

Key Plan:
North
PLAN COMMISSION FINAL SUBMITTAL

Sheet:
CONSTRUCTION DETAILS

Scale:

Revisions:

No.	Date:	Description:

Date:
March 8, 2021

Project No.:
200110.00

Sheet No.:
C5.00

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

Date:	February 15, 2021 (3/8/21 - A/E Comments in RED)
To:	Mark Wershay, Zimmerman Architectural Studios, Inc.
From:	Nick Fuchs, Planner & Community Development Director
RE:	Zeilhofer storage building Conditional Use and Site & Building Plan Review

Comments and Recommendations:

Below are comments and recommendations for the proposed development at N4W22540 Bluemound Road (Tax Key No. 0963997).

1. What type of materials and/or equipment will be stored within the building? **Materials and tools used in conjunction with our home remodeling and outdoor living installations. Construction materials such as tools, decking, stone, outdoor kitchens, etc.**
2. What is the purpose of the gravel area to the north of the building? Will any materials be stored outside? Are any vehicles or equipment parked overnight on the property? **The gravel area is for parking of vehicles and trailers. The area is located behind the building and screened with landscape. Vehicle storage will consist of trucks and trailers.**
   They do not plan for any long-term storage of materials outside of the storage building.
3. Are any dumpsters or other types of containers kept onsite? **Yes, they will be placed on a concrete pad within the larger gravel areas to the north. They are screened by the landscaping.**
4. Note the proposed monument sign will require staff review and approval of a Sign Permit. **Understood, this design will be installed at a future date and following building approval.**
5. It is recommended that parking spaces comply with Section 17.0601a., which states that the size of each parking space shall be not less than 180 square feet. **The drawings have been updated to reflect 180 square feet per space.**
6. Please provide at least one ADA compliant parking stall. **Added to drawings.**
7. Please show the B-4 District setbacks on the site plan. **Added to drawings.**
8. What color will the CMU foundation be painted? **Charcoal.**
9. What type of roof material is being used? **Standing seam metal roof as noted on the plans.**
10. Are the trees shown on the demolition plan all trees onsite or just those of a certain size and greater? **Per the Owner, the surveyor shot all trees not located in the current cluster on the north end of the lot. Those trees need to be removed to accommodate the new construction. There were no size minimums.**
11. There does not appear to be grading around the two 18" trees in southeast corner of the site and minimal grading around the 60" tree. Why are these trees being removed? It is recommended that all three trees be preserved. **All three trees are not in good health or aesthetically appealing. A portion of the 60" trees root system will need to be removed when putting in the drive which will place a declining tree in further decline. This large tree has a low crotch making it susceptible to failure. A much more appealing linden tree is planned for the SE corner where the two 18" trees would be removed.**

12. All new paving shall meet the standards of Section 17.0601c. of the City's Zoning Code. **Confirmed.**
13. Note that substantial evidence, pursuant to Section 62.23(7)(de) of WI State Statutes, must be presented at the public hearing for Common Council consideration of the Conditional Use Permit. **The Zeilhofer's currently rent a storage facility in Waukesha. This Conditional Use Request will consolidate their business to a single location and remove their rent obligation.**
14. Engineering Department comments are as follows:
    a. Permission from Waukesha County is required for the access and the changes within the right-of-way of Bluemound Road (CTH JJ). **We will be coordinating with Waukesha County for any required permits.**
    b. It is recommended that the property connect to municipal sewer and water. **The nearest adjacent municipal sewer and water lines are located a considerable distance from the building and would require crossing a County Roadway. Additional investigation finds that the sanitary across the street on Takoma Drive is 16.5' below grade. The proposed building does not have any water or sanitary needs.**
    c. The Demo plan does not appear to reflect the amount of tree removal required for the work shown on the Grading and Erosion Control Plan. **The demo area within the "Wooded area" has been expanded to reflect the grading and erosion control plan.**
    d. Clarification is needed on where the swale along the west side of the property drains. There is a swale until it nears the building. This flow is redirecting drainage which used to sheet flow across the neighbor's property to concentrating it in a swale and it appears to discharge into a swale on the adjacent property and/or is being directed at the little accessory building. Is there a drainage easement that allows this onto the adjacent property? It is not recommended to direct water to discharge towards any buildings. In addition, the swale appears to be directed at a planting bed. **We are currently redirecting the runoff south and to the existing shared swale along the west property line.**
    e. Please remove the City's curb and gutter detail and driveway connection as this is Waukesha County's jurisdiction. **City curb and gutter, and driveway connection has been removed.**
    f. The plans currently indicate less than 1 acre of disturbed area. However, if the development changes or additional area is disturbed during construction and it disturbs over 1 acres, the development will be required to meet the City's Chapter 19 ordinances. Any areas not supposed to be disturbed must be shown as protected on the plan and provisions provided to keep construction traffic from disturbing those areas. **Contractor shall stay within silt fence boundary and follow the grading, erosion control and demo plan as not to disturb over 1 acre.**

A COVENANT
REGARDING THE ISSUANCE OF A
CONDITIONAL USE PERMIT
BY THE
CITY OF PEWAUKEE

TAX KEY NUMBER(S) OR PARCEL(S) INVOLVED:

PWC 0963997

CONDITIONAL USE PERMIT: NO. CUP-23-9-2

Recording area

Name & Return Address

City of Pewaukee
W240N3065 Pewaukee Rd
Pewaukee, WI 53072

LEGAL DESCRIPTION:

CSM #147 VOL 1/210 REC AS DOC #607491 PT S1/2 SEC 25 T7N R19E :: EX DOC #1517378

PERSON(S), AGENT(S) OR CORPORATION(S) PETITIONING FOR PERMIT:

Zeilhofer Properties, LLC

WHEREAS, It is understood by all parties to this covenant that Section 62.23 of WIS. Statutes prescribes the legal basis for the granting of a conditional use permit by a City and Chapter 17 of the City Codes and Ordinances provides for the issuance of such permits as well as the standards by which all such uses will be measured; and,

WHEREAS, The City Plan Commission has held a meeting on September 21, 2023; has reviewed the various elements of the petitioner's proposal; and has recommended that a Conditional Use Permit be granted to the above-named petitioner for the property/parcel identified above; and,

WHEREAS, The City Common Council held a public hearing meeting on October 2, 2023.

NOW, THEREFORE, let it be known that the City Common Council by its action on October 2, 2023 has, hereby, granted a Conditional Use Permit for the following use(s):

Construction of a two-story storage building.

FURTHER, such approved use of the above designated parcel(s) are hereby allowed based on the following conditions being continually met:

DRAFT

1. Outdoor storage is prohibited onsite, except for the orderly parking of vehicles upon paved surfaces.
2. The applicant shall construct an enclosure around the dumpster to screen it and contain any loose trash and debris.
3. Final grading and erosion control plans shall be submitted for approval by the Engineering Department prior to any land disturbance.
4. Signage shall comply with all standards set forth in Section 17.0700 of the City's Zoning Code and require separate review and approval by the City Planner as well as a Sign Permit from the Building Services Department, prior to installation.
5. After the building is constructed, the applicant shall test to see if the septic system still works and functions appropriately. If it does not, the applicant shall be required to install a holding tank or connect to public facilities.

The parties hereto, namely the City of Pewaukee and the Equitable Owner of the property for which this conditional use has been sought, set their signatures or the signatures of their representatives below, thereby agreeing to the provisions and conditions set forth in this covenant.

_____	_____
Attest:	Signature of equitable owner
	_____
	Date
_____	_____
Kelly Tarczewski City Clerk	Steve Bierce Mayor, City of Pewaukee
	_____
	Date

State of Wisconsin
County of Waukesha

Signed or attested before me on _____, 2023 by Steve Bierce, Mayor and Kelly Tarczewski, Clerk.

	_____
(Seal)	Ami Hurd My Commission expires _____

This instrument was drafted by Ami Hurd, Deputy Clerk

DRAFT

CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 8.

DATE: September 21, 2023

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding the Site and Building Plans for the City of Pewaukee for the Purpose of Constructing a Replacement Gun Club Lift Station (PWC 0920999001)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Gun Club lift station staff report 8.17.23

Gun Club lift station plans

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of August 17, 2023

Date: August 9, 2023

Project Name: Site & Building Plan Review

Project Address/Tax Key No.: PWC 0920999001

Applicant: Magdelene Wagner, City of Pewaukee Director of Public Works/City Engineer

Property Owner: City of Pewaukee

Current Zoning: LC – Lowland Conservancy

2050 Land Use Map Designation: Lowland & Upland Conservancy and Other Natural Areas

Use of Surrounding Properties: Watertown Rd. is to the north and Upland Conservancy is to the east, and Lowland Conservancy is to the west and south.

Project Description/Analysis

The City of Pewaukee/Department of Public Works has submitted plans for a replacement Lift Station located just across from the Waukesha Gun Club on the property bearing Tax Key PWC 0920999001.

The Gun Club Lift Station enclosed building is approximately 1,104SF, covered slab is 477SF, roof is 1,926.67SF, and has a peak height of 20'-2". The building consists of brick face veneer, vertical board and batten engineered wood siding, and a service door. The new lift station will be an all-concrete structure rather than buried steel. The wet well will have two chambers that will operate in tandem, but with the ability to isolate each section for maintenance. Each chamber will have two submersible sewage pumps. The interior of the building will house the valve vault and piping that will be in the "basement" of the structure. The first floor will include a generator, a motor control center, and a bathroom.

The estimated cost of improvements is approximately $5M without the removal of the existing structure.

It should be noted that this lift station is considered an essential service and is exempt from yard and distance requirements of the Zoning Code in accordance with Section 17.0902(d) (below).

> Essential Services such as utilities and electric power and communication transmission lines are exempt from the yard and distance requirements of this Ordinance.

Recommendation

Staff recommends approval for the proposed replacement Gun Club Lift Station located on the property bearing the Tax Key 0920999001.

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770
Fax (262) 691-1798
fuchs@pewaukee.wi.us

APPLICATION FOR SITE AND BUILDING PLAN REVIEW

TO THE HONORABLE MAYOR AND PLAN COMMISSION OF THE CITY OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN

The undersigned hereby petitions the Plan Commission of the City of Pewaukee, Waukesha County, Wisconsin for site and building plan review and approval to allow for: Construction of a replacement Gun Club Lift Station.

Legal description of property to be rezoned – Please attach.

Common property description or name: Gun Club Lift Station

Property Address: _____ **Tax Key Number(s):** 0920999001

Property owner(s) (Full Legal Name): City of Pewaukee

Owner's Address: W240N3065 Pewaukee Rd **City/State/Zip:** Pewaukee WI 53072

Phone: 262 691 0804 **Email:** wagner@pewaukee.wi.us

Applicant (Full Legal Name):

Name: Magdelene Wagner
Company: City of Pewaukee
Address: W240N3065 Pewaukee Rd
City/State/Zip: Pewaukee WI 53072
Phone: 262 691 0804
Email: wagner@pewaukee.wi.us

Contact Person (Full Legal Name):

Name: Jane Mueller
Company: City of Pewaukee
Address: W240N3065 Pewaukee Rd
City/State/Zip: Pewaukee WI 53072
Phone: 262 691 0804
Email: jem@pewaukee.wi.us

Site and Building Plan submittals must include and be accompanied by the following:

- ✓ This Application form accurately completed with original signatures.
- ✓ Application Filing Fee, payable to the City of Pewaukee: WAIVED
  - $500.00 for Plan Commission review
  - $100.00 for minor amendments (staff review only)
- ✓ Five (5) complete collated sets of Application materials to include:
  - A written project narrative detailing the request, business/use operational information, future development plans, site and building improvements, tentative development schedule, and estimated project value.
  - Scaled drawings, as may be applicable, including, but not limited to; a site plan, grading/erosion control plan, preliminary storm water management plan, landscape plan, lighting plan, building elevations, colored renderings, sign details and natural resource delineations.
- ✓ All application materials provided in a digital format (Adobe PDF). Materials may be submitted on a USB Flash Drive or emailed to hurd@pewaukee.wi.us.
- ✓ Note twelve (12) additional sets of plans will be required for Plan Commission following staff review of the initial submittal. These plans should be revised in response to staff comments as may be necessary.

Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770
Fax (262) 691-1798
fuchs@pewaukee.wi.us

The applicant and property owner(s) hereby certify that:

1) all statements and other information submitted as part of this application are true and correct to the best of applicant's and property owner(s)' knowledge;
2) the applicant and property owner(s) has/have read and understand all information in this application; and
3) the applicant and property owner(s) agree that any approvals based on representations made by them in this Application and its submittal, and any subsequently issued building permits or other type of permits, may be revoked without notice if there is a breach of such representation(s) or any condition(s) of approval.

By execution of this application, the property owner(s) authorize the City of Pewaukee and/or its agents to enter upon the subject property(ies) between the hours of 7:00 a.m. and 7:00 p.m. daily for the purpose of inspection while the application is under review. The property owner(s) grant this authorization even if the property has been posted against trespassing pursuant to Wis. Stat. §943.13.

(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the property owner's signature[s] below. If more than one, all of the owners of the property must sign this Application).

PETITIONER'S/APPLICANT'S SIGNATURE: _____

NAME & TITLE (PRINT): Magdelene Wagner, P.E. Director of Public Works/City Engineer

SIGN AND DATED this 4th **day of** August, 2023.

PROPERTY OWNER'S SIGNATURE: _____

NAME & TITLE (PRINT): _____

SIGN AND DATED this _____ **day of** _____, _____.

PROPERTY OWNER'S SIGNATURE: _____

NAME & TITLE (PRINT): _____

SIGN AND DATED this _____ **day of** _____, _____.

City Staff-

RECEIVED at City Hall by: _____ on _____

Fee paid: $_____. Date: _____.

Department of Public Works
Engineering Division
W240N3065 Pewaukee Road • Pewaukee, WI 53072
Phone: (262) 691-0804 • Fax: (262) 691-5729
Email: publicworks@pewaukee.wi.us

MEMORANDUM

TO: Plan Commission

FROM: Magdelene Wagner, Director of Public Works

DATE: August 8, 2023

RE: Gun Club Lift Station

The Gun Club Lift Station has been in service since the mid-1980's. The lift station covers the largest sewer service area of the city, collecting sewage from areas to the north of Five Fields subdivision to I-94 to the south, the Canadian National Railroad to the east, and the lands directly west on STH 164. The flows average 1 mgd. The lift station consists of a buried steel dry well pump chamber with three 60 HP pumps. The lift station contains a small service elevator that transports employees and equipment 30 feet below grade.

The lift station was upgraded in 2007 to remove the old semi-buried generator and fuel tank. This upgrade converted the lift station to the building it is today. The prefabricated building included a generator and controls with variable speed drives to help manage the sewage flows.

Despite regular maintenance, the life of the steel structure is reaching the end of its service life. We have experienced many challenges with capacity issues, maintenance issues related to rags and grease, and worn pumps that can become air bound when the flows become turbulent.

Utility staff asked the consultant who prepared our facility plan to undertake the preparation of a replacement lift station for the Gun Club site.

The new lift station will be an all-concrete structure rather than buried steel. The wet well will have two chambers that will operate in tandem, but with the ability to isolate each section for maintenance. Each chamber will have two submersible sewage pumps. The interior of the building will house the valve vault and piping that will be in the "basement" of the structure. The first floor will include a generator, a motor control center, and a bathroom.

The estimate of cost of improvements is approximately $5M without the removal of the existing structure.

The lift station will be constructed on the same site as the existing lift station. It is located across from the Pewaukee Gun Club on Watertown Road. The area surrounding the lift station is vacant land which is largely wetland. The site does not have any direct neighbors that will be impacted by its construction.

Thank you for your consideration of this building.

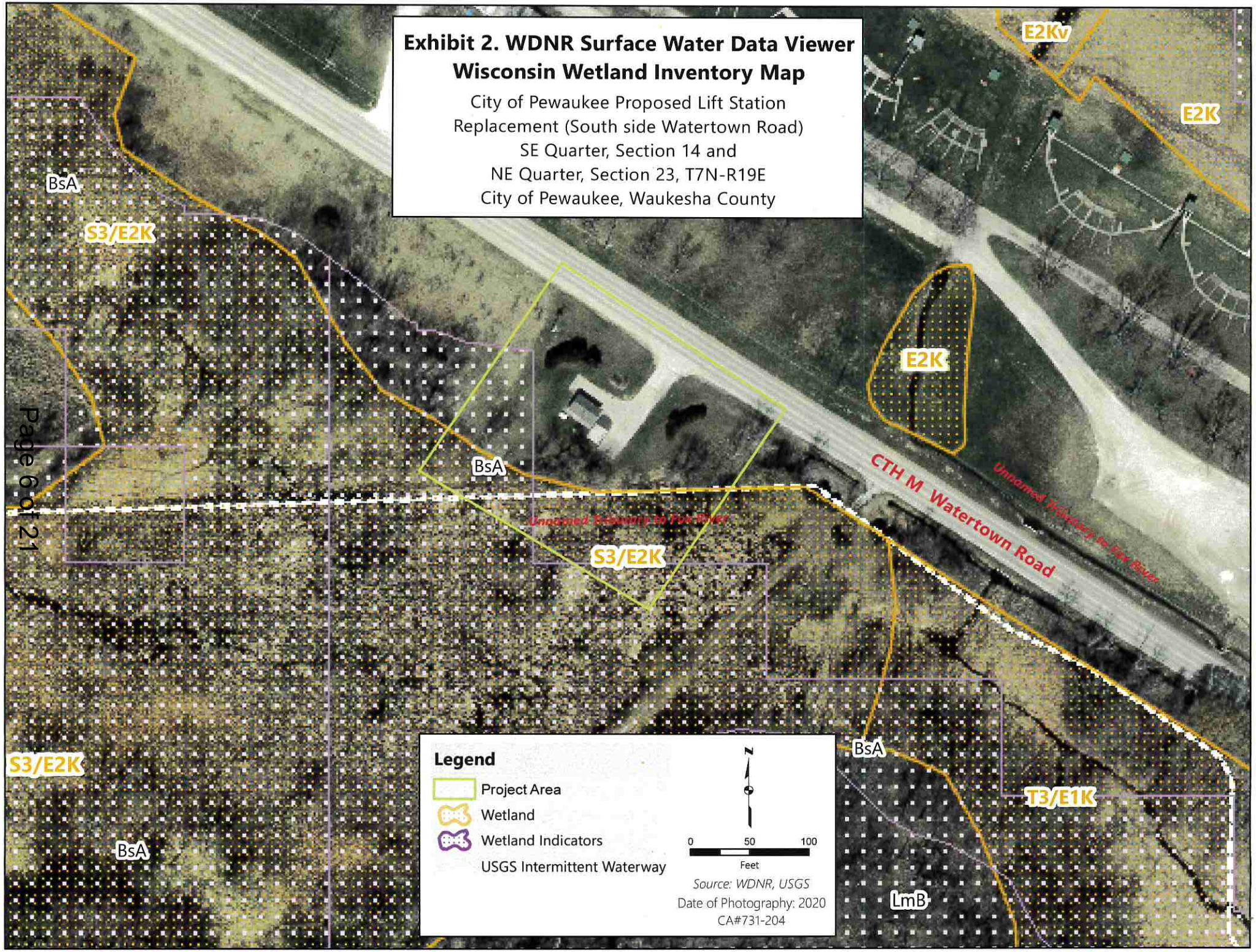
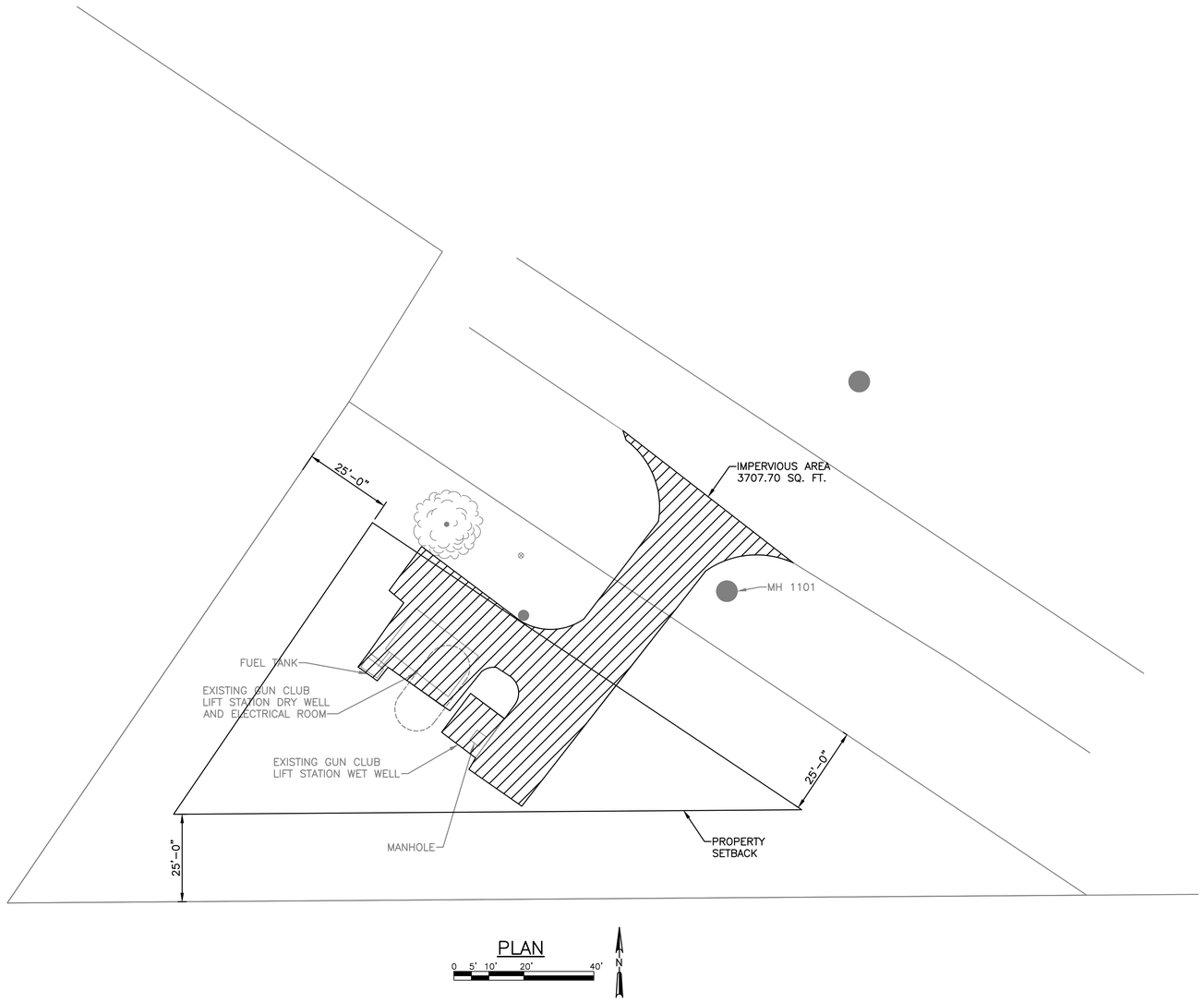


Exhibit 2. WDNR Surface Water Data Viewer
Wisconsin Wetland Inventory Map
City of Pewaukee Proposed Lift Station
Replacement (South side Watertown Road)
SE Quarter, Section 14 and
NE Quarter, Section 23, T7N-R19E
City of Pewaukee, Waukesha County
E2Kv
E2K
BsA
S3/E2K
E2K
BsA
CTH M Watertown Road
Unnamed Tributary to Fox River
S3/E2K
S3/E2K
BsA
BsA
T3/E1K
LmB
Legend
Project Area
Wetland
Wetland Indicators
USGS Intermittent Waterway
N
0
50
100
Feet
Source: WDNR, USGS
Date of Photography: 2020
CA#731-204

View Westbound on Watertown Road

South Elevation and West Elevation

View Eastbound on Watertown Road



Site: 0.5049 acres or 21,980.38 SF
Existing Impervious: 3,707.70 SF
% Impervious: 16.87%

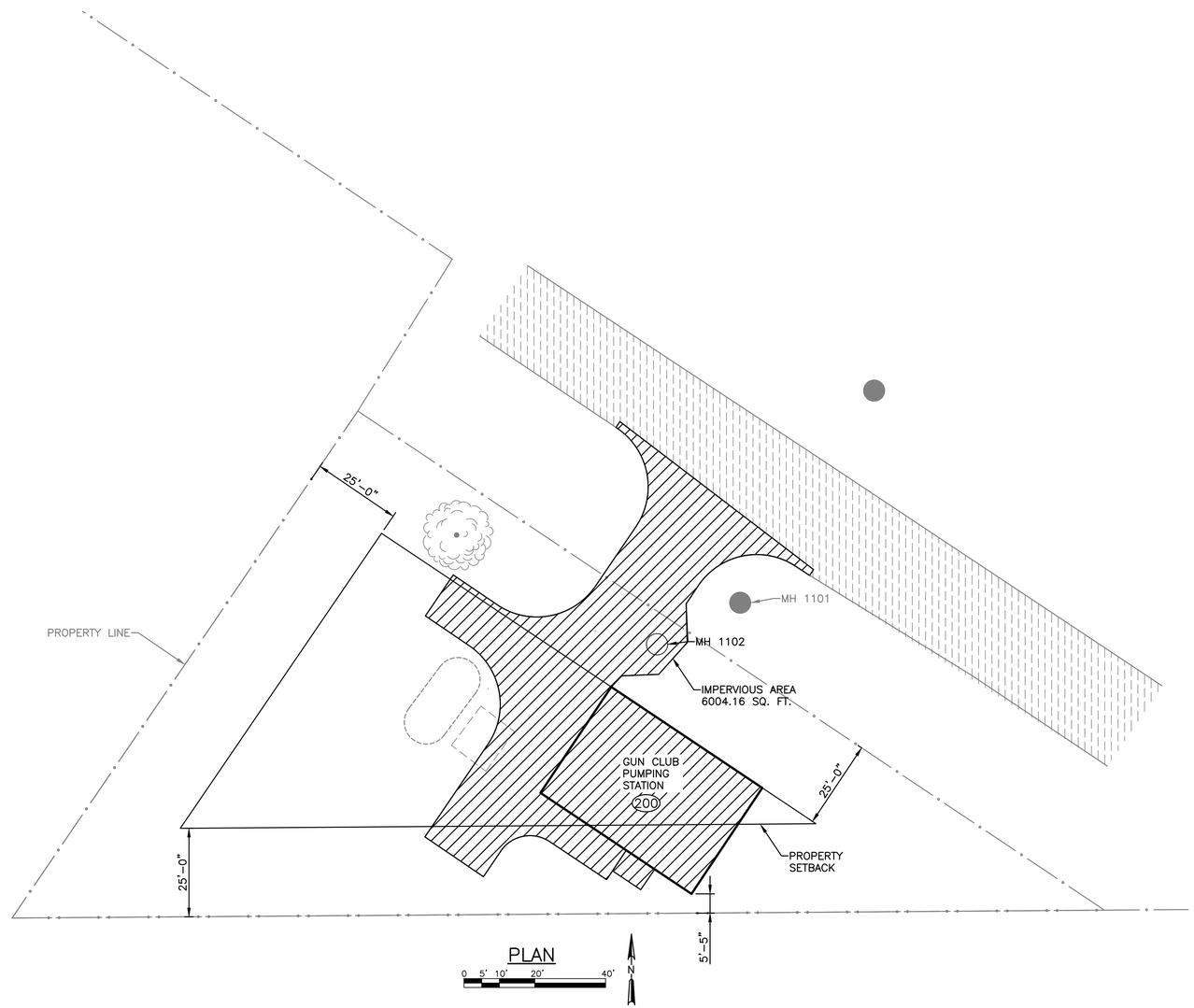
DIGGERS HOTLINE
Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

EXISTING SITE

GUN CLUB PUMPING STATION DESIGN
CITY OF PEWAUKEE
PEWAUKEE, WI

STRAND ASSOCIATES®

FIGURE 1
4621.015



Site: 0.5049 acres or 21,980.38 SF
Proposed Impervious: 6,004.16 SF
% Impervious: 27.32%

FUTURE SITE

GUN CLUB PUMPING STATION DESIGN
CITY OF PEWAUKEE
PEWAUKEE, WI

STRAND ASSOCIATES®

FIGURE 2
4621.015

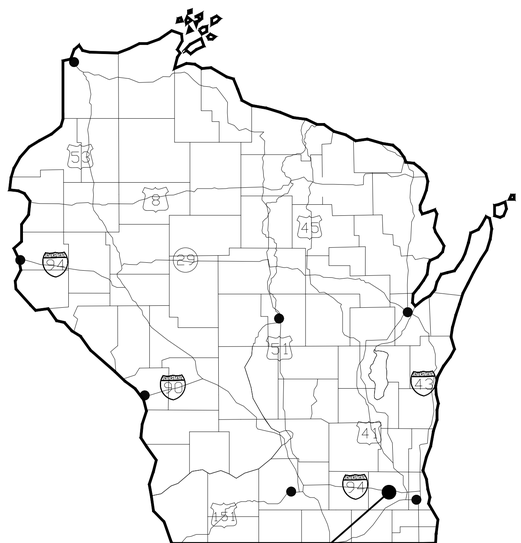
File: \\strand.com\projects\MAD\Projects\4621\015\Drawings\CAD\AutoCAD\FIGURE 2.dwg Time: Aug 08, 2023 - 3:45pm

GUN CLUB PUMPING STATION DESIGN

FOR THE

CITY OF PEWAUKEE
PEWAUKEE, WI

90% REVIEW - 7/7/2023



PROJECT LOCATION MAP
NO SCALE

N

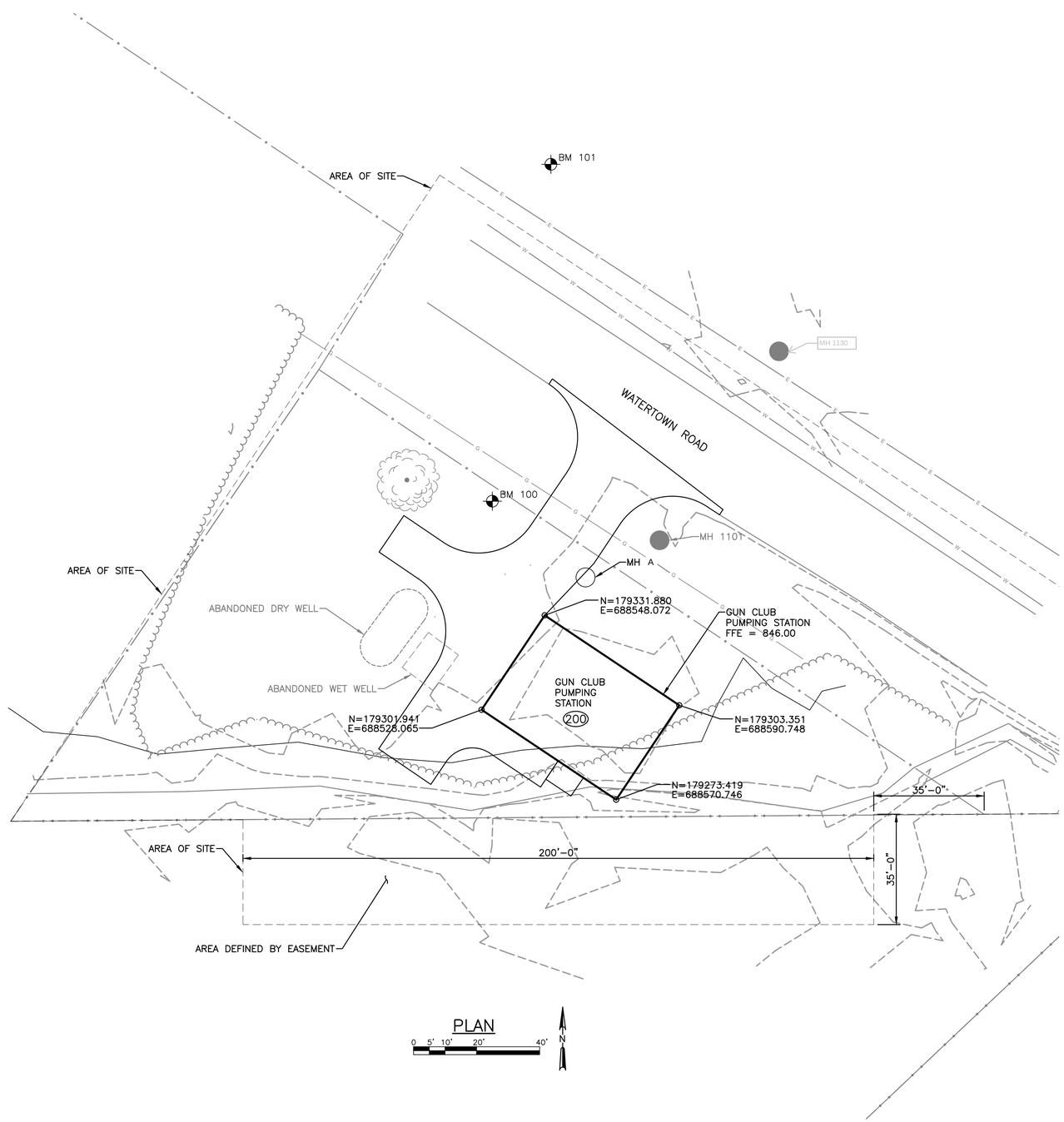
910 West Wingra Drive
Madison, WI 53715
608-251-4843
608-251-8655 fax
www.strand.com

STRAND ASSOCIATES®

CONTRACT 2-2023

SHEET
1
00-G0.01

BENCHMARK TABLE		
BM NO.	ELEVATION	DESCRIPTION
BM 100	845.7	CHSX NW BLT ON VENT
BM 101	847.95	TOP NUT HYD



NO.	REVISIONS	DATE:
1	90% REVIEW	7/7/2023

SITE LOCATION PLAN

GUN CLUB PUMPING STATION DESIGN
CITY OF PEWAUKEE
PEWAUKEE, WI

JOB NO.
4621.015

PROJECT MGR.
RANDY LANGER

STRAND ASSOCIATES®

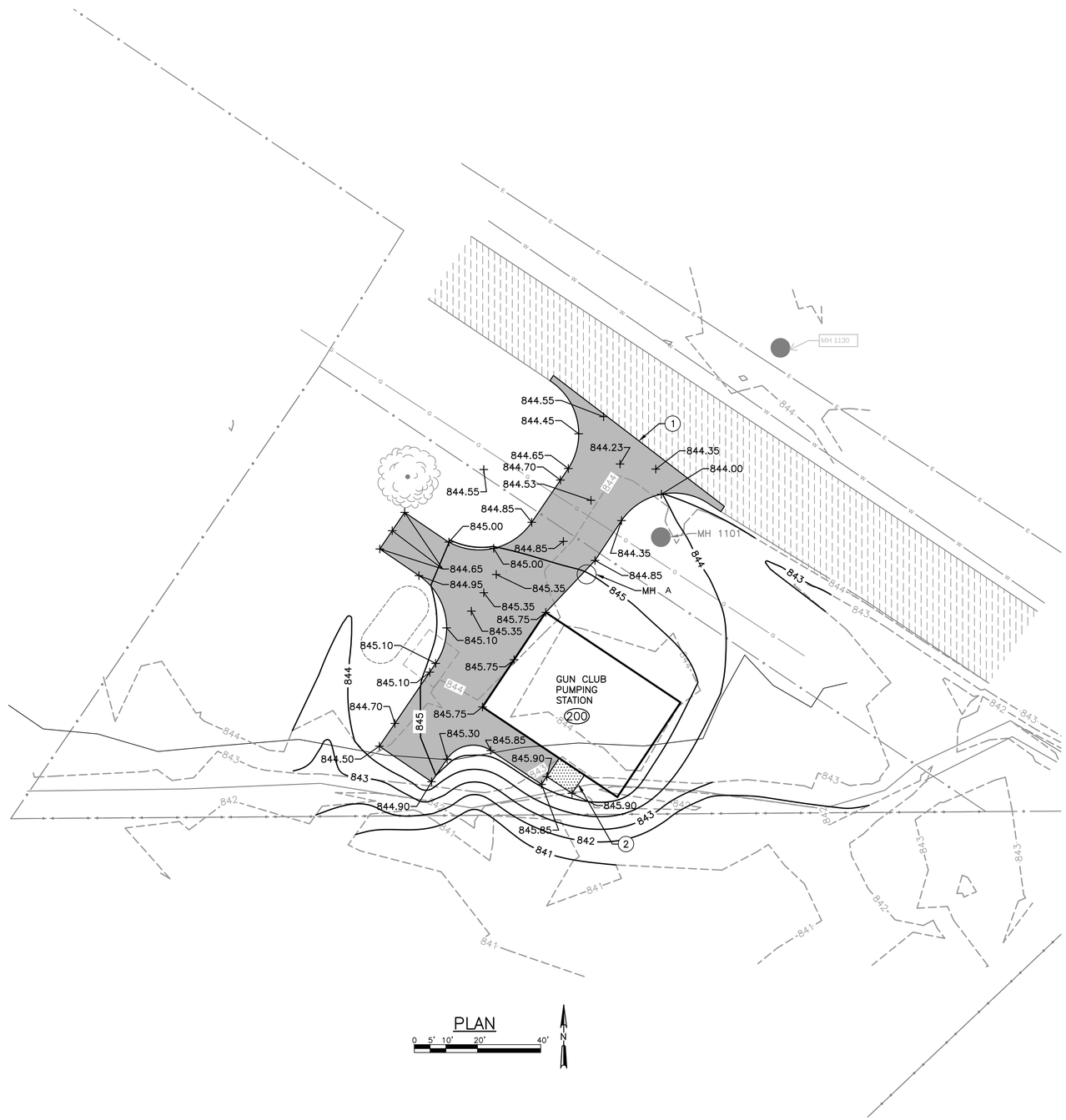
SHEET
6
05-C1.01

KEY NOTES:

1. SAWCUT
2. STOOP (H / 99-ASM5.01)

LEGEND:

- EXISTING ASPHALT PAVEMENT
- EXISTING SIDEWALK/CONCRETE PAVEMENT (G / 99-C5.01)
- EXISTING GRAVEL
- NEW ASPHALT PAVEMENT
- NEW SIDEWALK/CONCRETE PAVEMENT (G / 99-C5.01)
- EROSION CONTROL MAT
- STONE MULCH
- NEW GRAVEL
- EROSION CONTROL MAT



PLAN

0 5' 10' 20' 40'

N

NO.	REVISIONS	DATE:
1	90% REVIEW	7/7/2023

SITE
GRADING PLAN

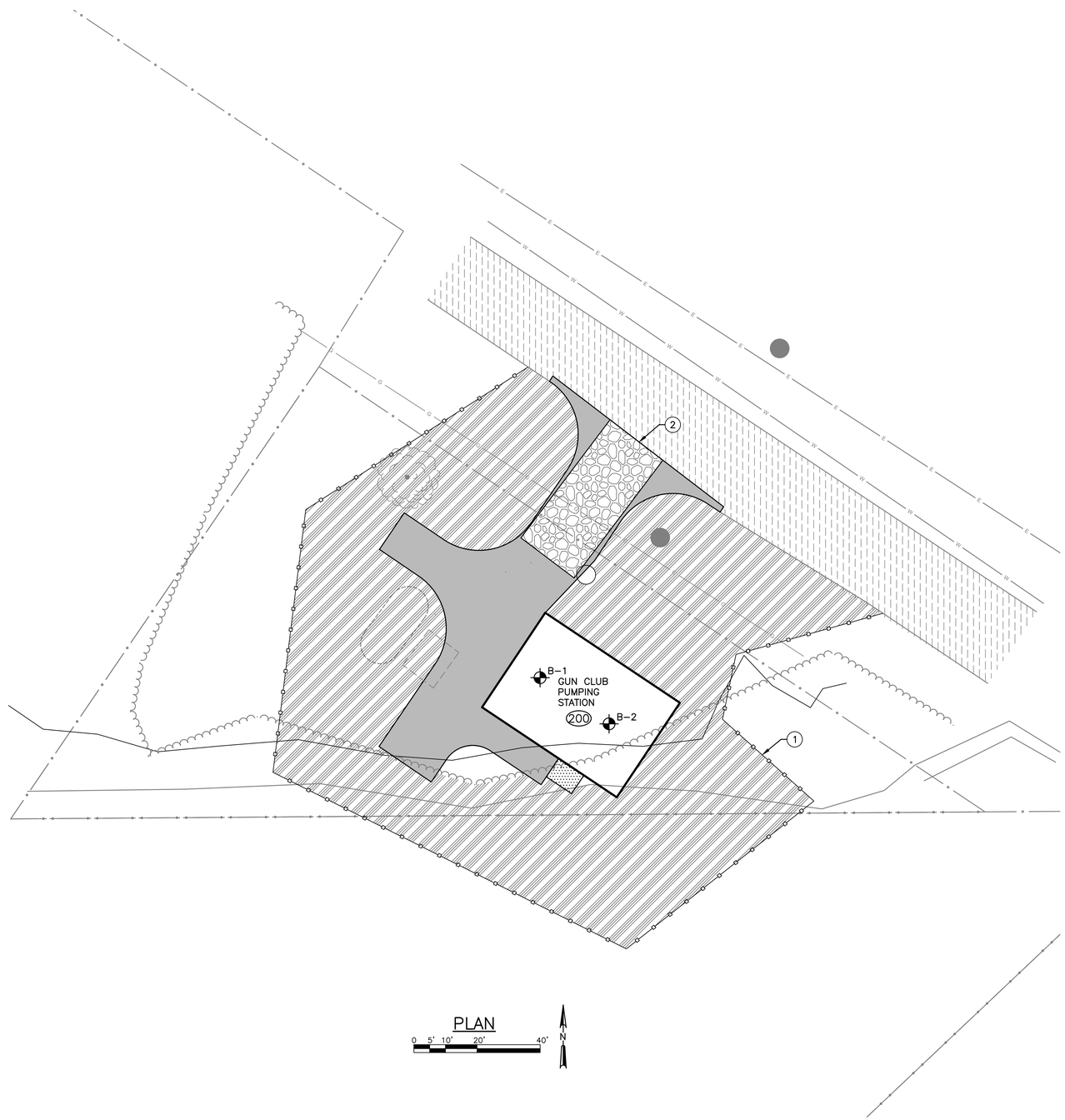
GUN CLUB PUMPING STATION DESIGN
CITY OF PEWAUKEE
PEWAUKEE, WI

JOB NO.
4621.015

PROJECT MGR.
RANDY LANGER

STRAND ASSOCIATES®

SHEET
7
05-C1.02



GENERAL NOTES:

1. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
2. SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
3. ALL DISTURBED AREAS NOT INTENDED TO BE WORKED ON FOR 14 DAYS SHALL BE TEMPORARILY STABILIZED WITHIN 7 DAYS OF THE LAST ACTIVITY.
4. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN 14 CALENDAR DAYS OF THE END OF ACTIVE HYDROLOGIC DISTURBANCE, OR REDISTURBANCE.
5. AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3H:1V, SHALL BE STABILIZED WITH SOD OR EROSION MAT IN COMBINATION WITH SEEDING.
6. ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.
7. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
8. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED.
9. A STABILIZED MAT OF AGGREGATE UNDERLAIN WITH FILTER CLOTH (OR OTHER APPROPRIATE MEASURE) SHALL BE LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA. ANY SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
10. SOIL STOCKPILES SHALL NOT BE LOCATED IN A FLOOD PRONE AREA OR A DESIGNATED BUFFER PROTECTING WATERS OF THE UNITED STATES OR ISOLATED WATERS OF WAUKESHA COUNTY.
11. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (E.G. SEDIMENT TRAP, SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE.
12. THE EROSION CONTROL MEASURES INDICATED ON THE DRAWINGS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS REQUESTED BY THE ENGINEER, OWNER, OR GOVERNING AGENCY.
13. PROVIDE CONSTRUCTION INLET PROTECTION AT ALL EXISTING INLETS ON SITE AND WITHIN THE IMMEDIATE DRAINAGE AREA SURROUNDING THE SITE.
14. WHERE SEDIMENT HAS BEEN TRACKED-OUT FROM THE SITE ONTO THE SURFACE OF OFF-SITE STREETS, OTHER PAVED AREAS, AND SIDEWALKS, CONTRACTOR SHALL REMOVE THE DEPOSITED SEDIMENT BY THE END OF THE SAME WORK DAY IN WHICH THE TRACK-OUT OCCURS OR BY THE END OF THE NEXT WORK DAY IF TRACK-OUT OCCURS ON A NON-WORK DAY. CONTRACTOR MUST REMOVE THE TRACK-OUT BY SWEEPING, SHOVELING, OR VACUUMING THESE SURFACES, OR BY USING OTHER SIMILARLY EFFECTIVE MEANS OF SEDIMENT REMOVAL. CONTRACTOR IS PROHIBITED FROM HOSING OR SWEEPING TRACKED-OUT SEDIMENT INTO ANY STORMWATER CONVEYANCE (UNLESS IT IS CONNECTED TO A SEDIMENT BASIN, SEDIMENT TRAP, OR SIMILARLY EFFECTIVE CONTROL), STORM DRAIN INLET, OR SURFACE WATER.
15. AREAS WHERE GRADED OR STOCKPILED EARTH WILL REMAIN EXPOSED FOR MORE THAN FOURTEEN DAYS SHALL BE PROTECTED FROM EROSION BY TEMPORARY SEEDING. PROVIDE SILT FENCE SURROUNDING AREAS OF STOCKPILED SOIL.

KEY NOTES:

1. SILT FENCE (E / 99-C5.01)
2. STONE TRACKING PAD (C / 99-C5.01)

LEGEND:

- EXISTING ASPHALT PAVEMENT
- EXISTING SIDEWALK/CONCRETE PAVEMENT
- EXISTING GRAVEL
- NEW ASPHALT PAVEMENT
- NEW SIDEWALK/CONCRETE PAVEMENT
- EROSION CONTROL MAT
- STONE MULCH
- NEW GRAVEL
- EROSION CONTROL MAT

NO.	REVISIONS	DATE:
1	BOR REVIEW	7/7/2023

SITE
EROSION PLAN

GUN CLUB PUMPING STATION DESIGN
CITY OF PEWAUKEE
PEWAUKEE, WI

JOB NO.
4621.015

PROJECT MGR.
RANDY LANGER

STRAND ASSOCIATES®

SHEET
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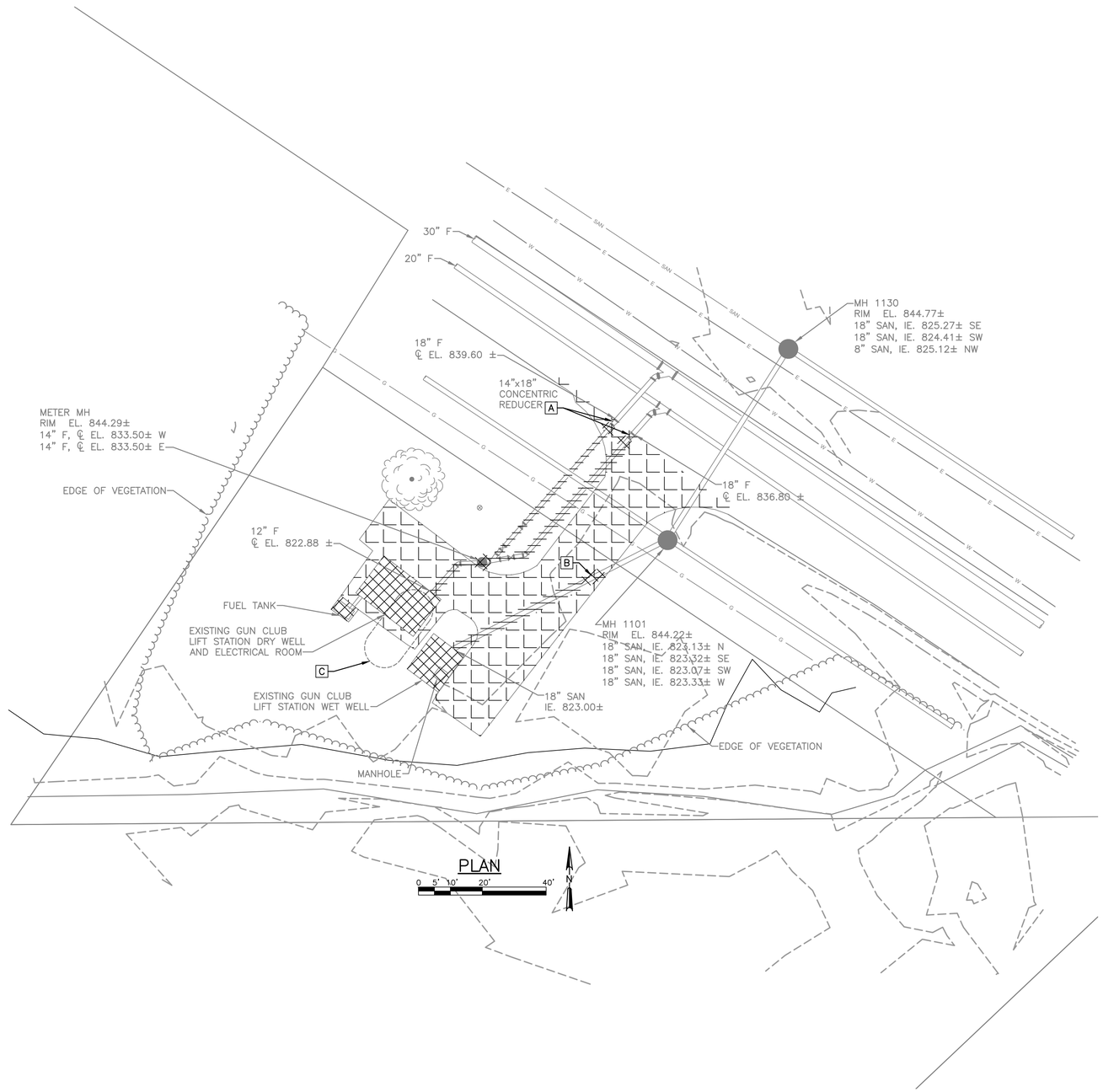
05-C1.03



GENERAL NOTES:

1. SEE SPECIFICATIONS FOR GENERAL DEMOLITION REQUIREMENTS. REFER TO CONSTRUCTION SEQUENCE IN SPECIFICATION SECTION 01 11 00 FOR CONSTRUCTION SEQUENCE PRIOR TO ANY DEMOLITION.
2. ALL MANHOLES AND PIPING SHOWN TO BE DEMOLISHED SHALL BE DEMOLISHED TO 2' BELOW FINAL GRADE. MANHOLES SHALL BE ABANDONED IN ACCORDANCE WITH SPECIFICATION SECTION 02 51 00 UNLESS OTHERWISE NOTED. EXTENT OF DEMOLITION IS APPROXIMATE. DEMOLISH AS REQUIRED TO INSTALL NEW FACILITIES.
3. LOCATIONS AND ELEVATIONS OF EXISTING PIPING ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY. REFER TO OWNERS RECORD DRAWINGS.
4. SEE GRADING PLAN FOR BENCHMARK INFORMATION.
5. CONTRACTOR SHALL CONTACT RELEVANT AGENCIES FOR UTILITY LOCATIONS.
6. PLANS TO NOT NECESSARILY INDICATE ALL ITEMS REQUIRING DEMOLITION OR REMOVAL. ALL STRUCTURES, PIPING, AND APPURTENANCES SHALL BE INCLUDED IN THE BID.
7. PIPING DESIGNATED TO BE ABANDONED MAY BE REMOVED AT THE CONTRACTOR'S OPTION AT NO ADDITIONAL COST TO OWNER.

DEMOLITION KEY NOTES:

A FORCE MAIN SHALL BE REMOVED AS REQUIRED TO CONSTRUCT NEW FORCE MAIN CONNECTIONS. CONTRACTOR SHALL FIELD VERIFY FORCE MAIN CONNECTIONS PRIOR TO EXCAVATION OF NEW STRUCTURE. NEW FORCE MAIN SHALL BE CONNECTED AT LOCATION OF 14"x18" REDUCERS. REDUCERS TO REMAIN.

B NEW DOGHOUSE MANHOLE SHALL BE CONSTRUCTED AT LOCATION NECESSARY TO ROUTE WASTEWATER TO NEW GUN CLUB PUMPING STATION. ONCE THE NEW STATION IS ONLINE, THE EXISTING PIPING SHALL BE ABANDONED IN PLACE.

C APPROXIMATE LOCATION OF UNDERGROUND LIFT STATION.

DEMOLITION LEGEND:

- DEMOLITION PIPE
- ABANDON PIPE-IN-PLACE
- DEMOLITION ASPHALT
- STRUCTURES TO BE DEMOLISHED

DIGGERS HOTLINE
Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
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NO.	REVISIONS	DATE:
1	90% REVIEW	7/7/2023

SITE DEMOLITION PLAN

GUN CLUB PUMPING STATION DESIGN
CITY OF PEWAUKEE
PEWAUKEE, WI

JOB NO.
4621.015

PROJECT MGR.
RANDY LANGER

STRAND ASSOCIATES®

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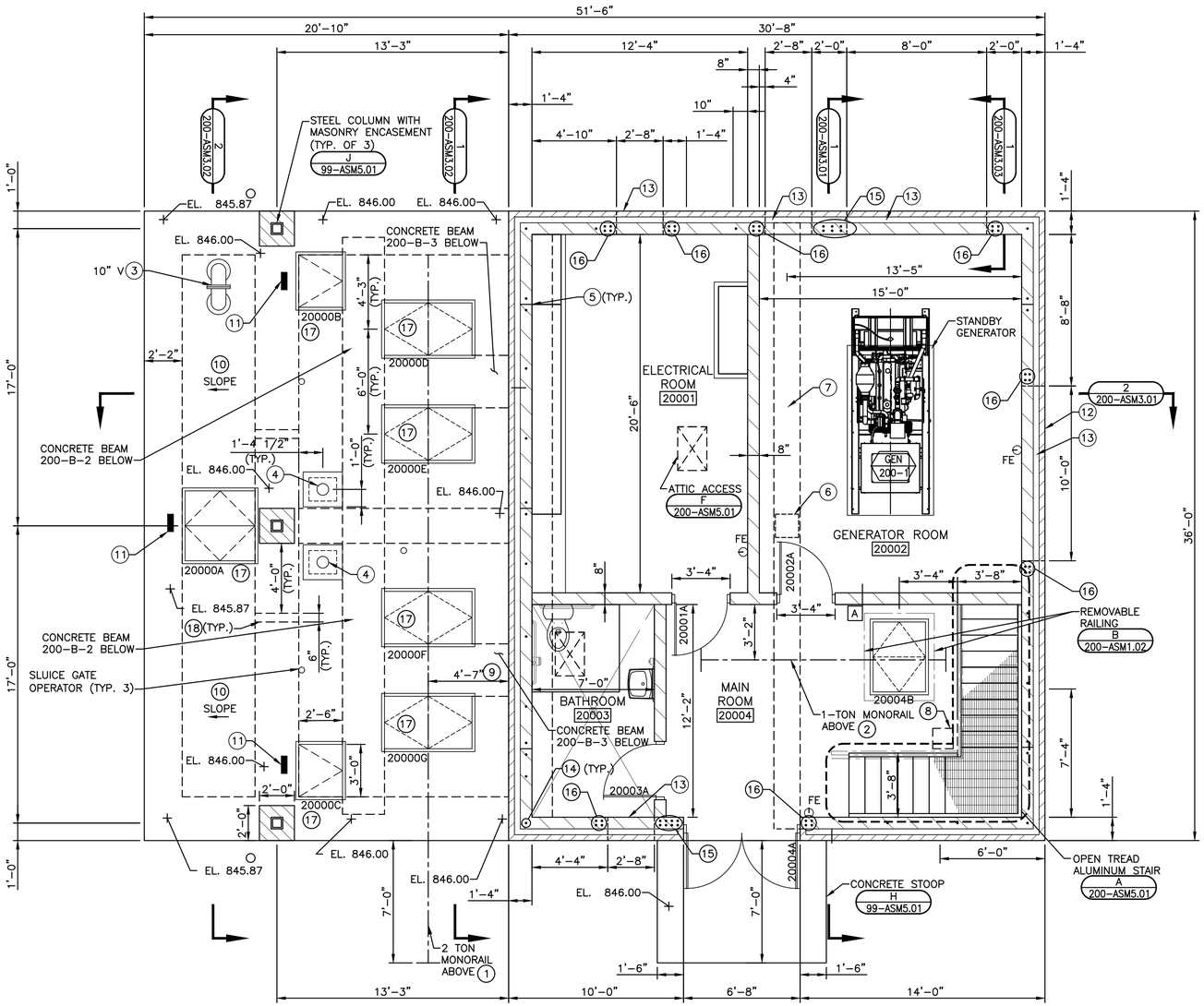
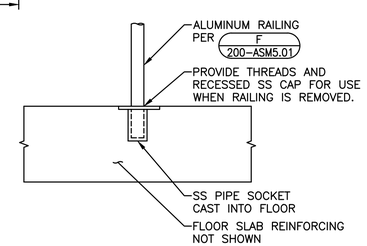
05-D1.01



PLAN

0 1' 2' 4' 8'



B 200-ASM1.02 REMOVABLE RAILING
NO SCALE

GENERAL NOTES:

1. ARROW ON HATCHES POINTS TO HINGE SIDE.
2. SEE 99-ASM6.01 FOR GENERAL STRUCTURAL NOTES.
3. HATCHES DESIGNATED AS TYPE J ON DOOR SCHEDULE SHALL BE PLUMBED FOR DRAINAGE. SEE PLUMBING DRAWINGS AND SPECIFICATIONS.
4. SEE 200-ASM3.01 FOR CONCRETE COLUMN AND BEAM SCHEDULE.

KEY NOTES:

1. S12x50 MONORAIL (B / 99-ASM5.02)
2. 14'-0" LONG S8x18.4 MONORAIL (B / 99-ASM5.02)
3. PROVIDE 10" DIP VENT CONSISTING OF WALL PIPE, SPOOL PIECE AND TWO 90 BENDS. TERMINATE 36" ABOVE GRADE. PROVIDE SS INSECT SCREEN IN OPENING.
4. PROVIDE 8" DIP IN WET WELL FROM BYPASS COUPLING TO WITHIN 6" OF WET WELL FILLETS. PROVIDE SS SUPPORTS AT 5' O.C. MINIMUM. PROVIDE FITTINGS TO ALIGN PIPE WITH FILLET. SEE SECTION (2 / 200-ASM3.01).
5. MASONRY CONTROL JOINT TYPE 2. TYPE 1 SHOWN ON DRAWING 200-ASM2.01 (J / 99-ASM5.01)
6. COLUMN 200-C-1 BELOW.
7. BEAM 200-B-1 BELOW.
8. COLUMN 200-C-2 BELOW.
9. CONTRACTOR SHALL VERIFY LOCATION OF MONORAIL BEAM FOR PROPER LIFT OF EQUIPMENT.
10. SLOPE TOP OF CONCRETE. BOTTOM OF SLAB EL. 845.00 TO BE CONSTANT. TOP COVER OVER REINFORCING STEEL SHALL BE 2" CLR (TYP.).
11. FALL PROTECTION ANCHOR (B / 200-ASM3.03). PROVIDE SST DRAIN PIPE TO UNDERSIDE OF ANCHORS. ROUTE TO WET WELL.
12. REMOVABLE WALL BASE (A / 200-ASM3.02).
13. HVAC OPENING. SEE LOUVER SCHEDULE, LINTEL SCHEDULE, AND HVAC DRAWINGS.
14. #5@48" VERTICAL BARS IN FULLY GROUTED CORES.
15. 2~#5EACH FACE ALL CORES IN THIS AREA. PROVIDE DRILLED HOLES IN LINTEL FOR BARS TO PASS THROUGH.
16. 2~#5 EACH FACE FIRST TWO CORES. PROVIDE DRILLED HOLES IN LINTEL FOR BARS TO PASS THROUGH.
17. PROVIDE CAUTION SIGN AS SPECIFIED (TYP. OF 9).
18. 6"x6" BOX OUT. SET TOP OF BOX AT EL. 844.00.

NO.	REVISIONS	DATE:
1	90% REVIEW	7/7/2023

GUN CLUB PUMPING STATION
FIRST FLOOR PLAN

GUN CLUB PUMPING STATION DESIGN
CITY OF PEWAUKEE
PEWAUKEE, WI

JOB NO. 4621.015

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SHEET 14
200-ASM1.02

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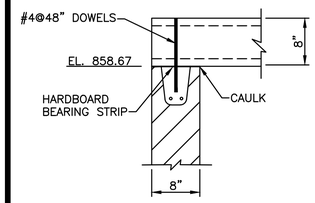

SECTION 1 200-ASM1.03
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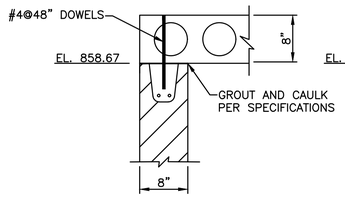

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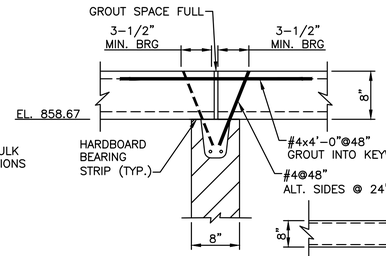

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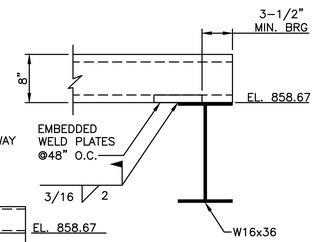

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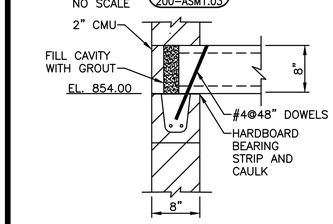

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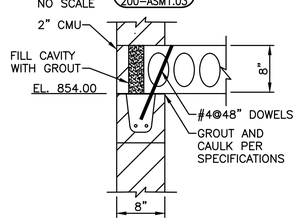

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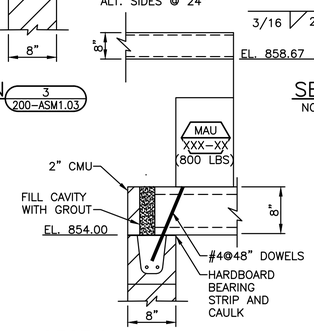
NO SCALE



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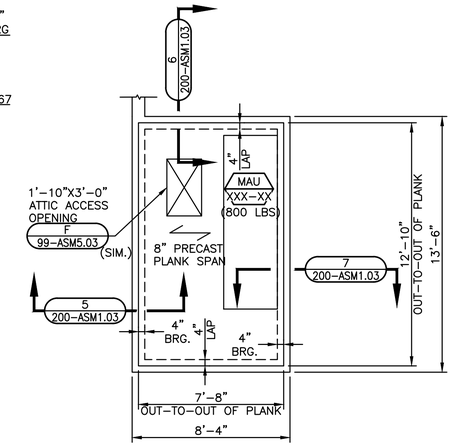


PRECAST PLANK PLAN ABOVE BATHROOM

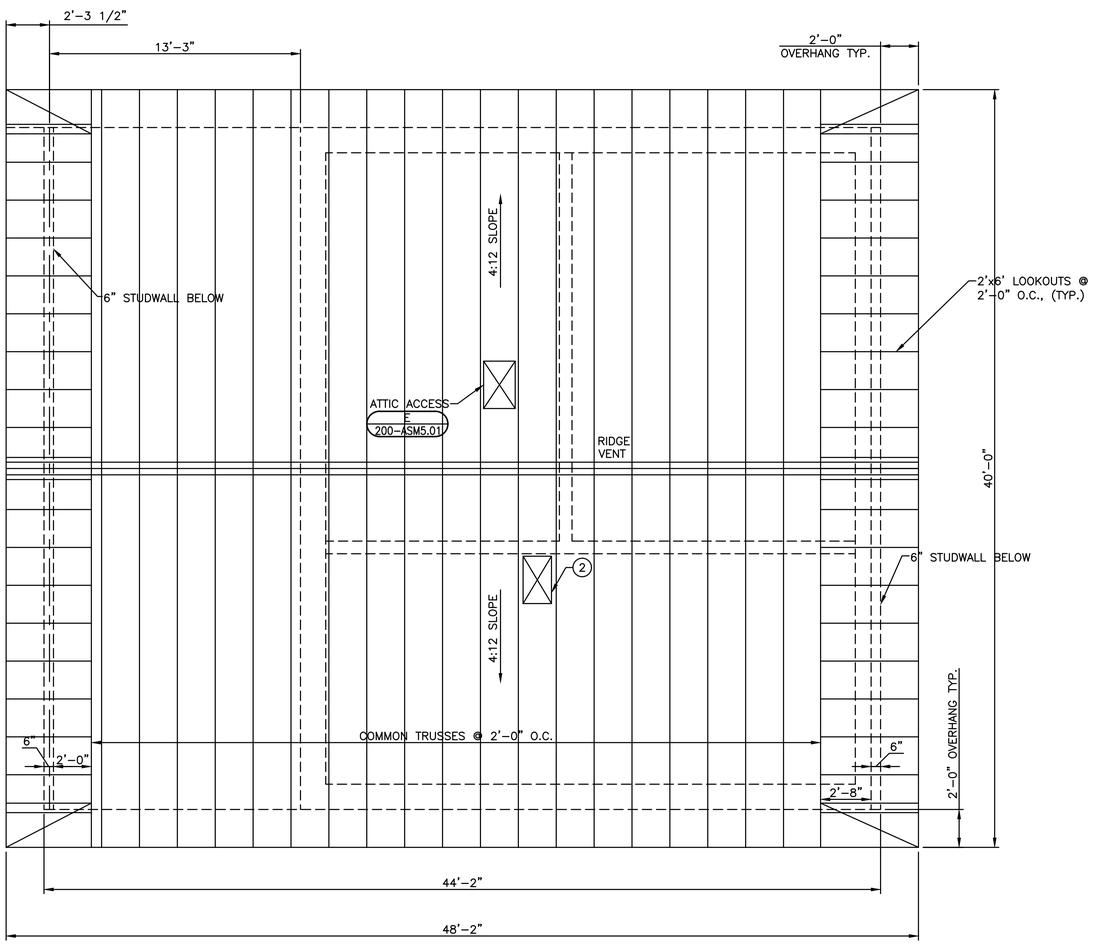
0 1' 2' 4' 8'

GENERAL NOTES:

1. SEE DRAWING 99-ASM6.01 FOR GENERAL STRUCTURAL NOTES.
2. DESIGN WOOD TRUSSES FOR THE FOLLOWING SUPERIMPOSED LOADS:
   T.C. WIND = SEE DRAWING 99-ASM6.01
   T.C. SNOW = 28 PSF
   T.C. LIVE LOAD = 20 PSF
   T.C. DEAD LOAD = 10 PSF
3. DESIGN PRECAST PLANK FOR THE FOLLOWING SUPERIMPOSED LOADS:
   DEAD LOAD = 10 PSF (COLLATERAL)
   ATTIC LIVE LOAD = 20 PSF

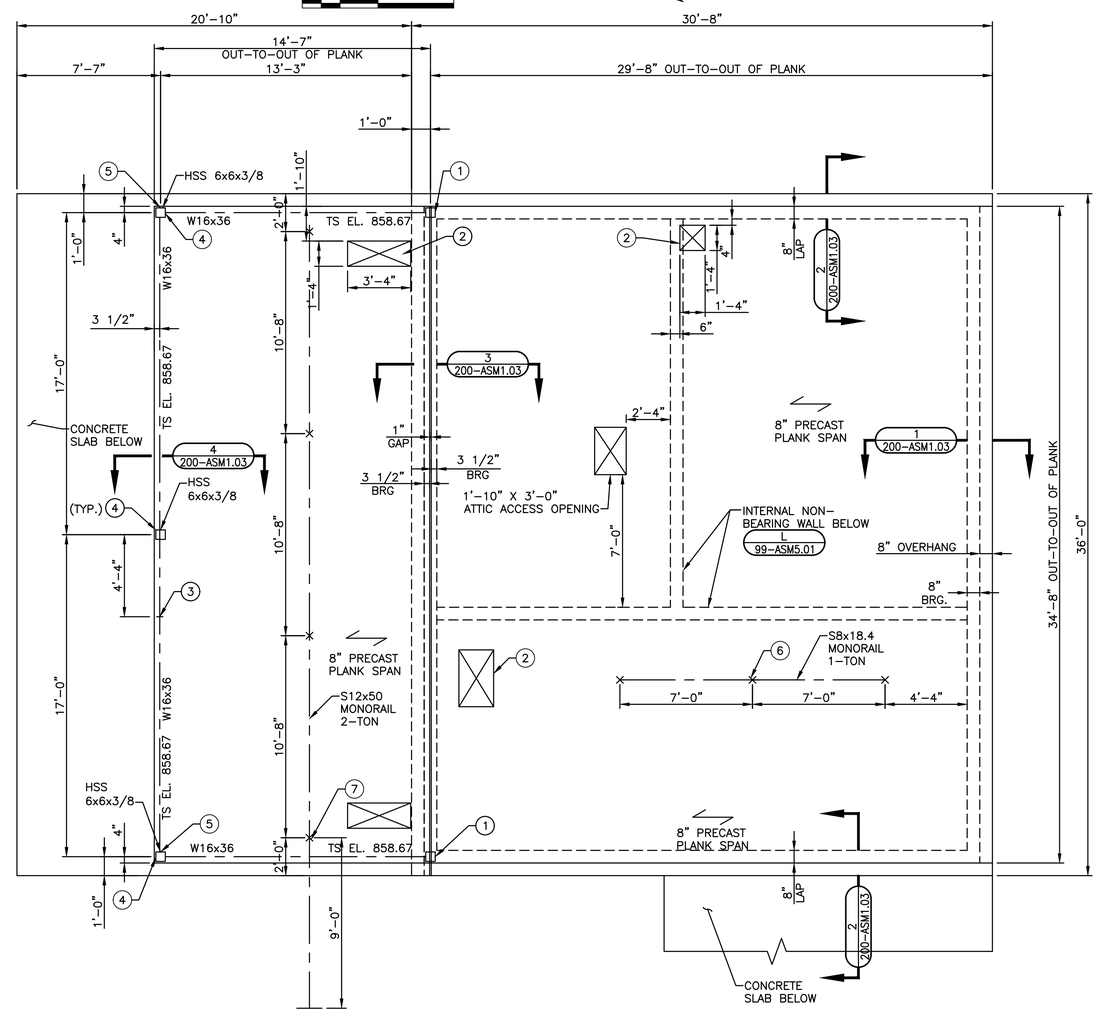
KEY NOTES:

1. 6"x6"x5/8" BEARING PLATE WITH 2~4" LONG 3/4" HEADED STUDS.
2. HVAC OPENING. VERIFY SIZE WITH HVAC CONTRACTOR.
3. SHEAR SPLICE L 99-ASM5.03 .
4. CAP PLATE CONNECTION K 99-ASM5.03 , (TYP. 3)
5. SINGLE PLATE SHEAR CONNECTION K 99-ASM5.03 , (TYP. 2)
6. 1.25K CONCENTRATED LOAD B 99-ASM5.02 , (TYP. 3 NON-CONCURRENT)
7. 2.0K CONCENTRATED LOAD B 99-ASM5.02 , (TYP. 4 NON-CONCURRENT)



ROOF TRUSS PLAN

0 1' 2' 4' 8'



PRECAST BUILDING PLAN

0 1' 2' 4' 8'

NO.	REVISIONS	DATE:
1	BOK REVIEW	7/7/2023

GUN CLUB PUMPING STATION
ROOF FRAMING AND PRECAST PLANK PLAN

GUN CLUB PUMPING STATION DESIGN
CITY OF PEWAUKEE
PEWAUKEE, WI

JOB NO. 4621.015

PROJECT MGR. RANDY LANGER

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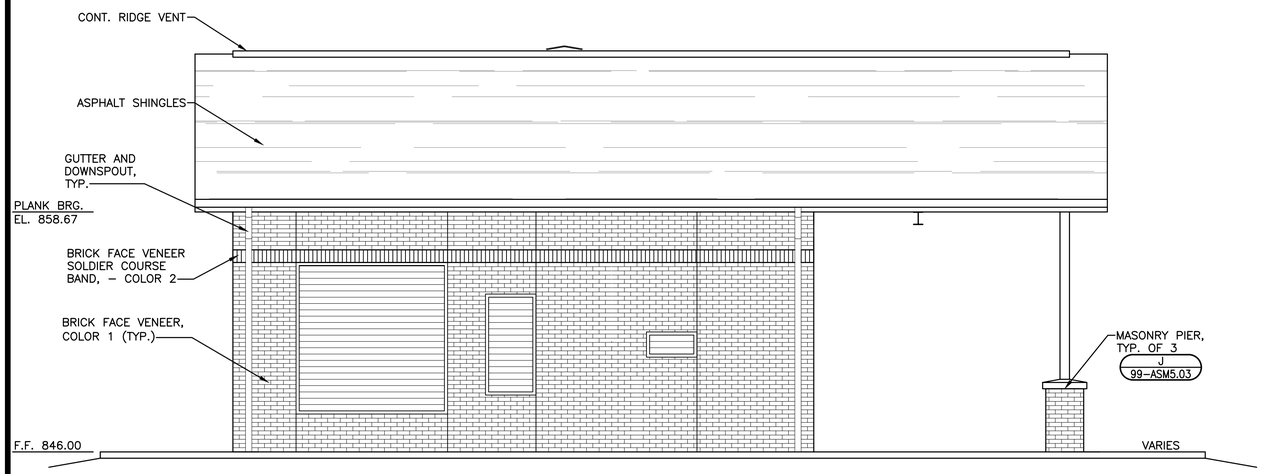
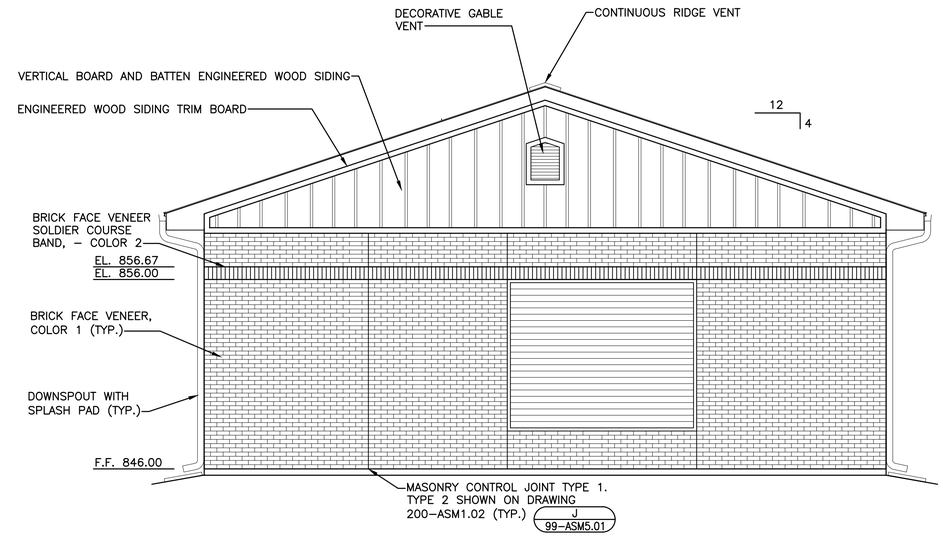


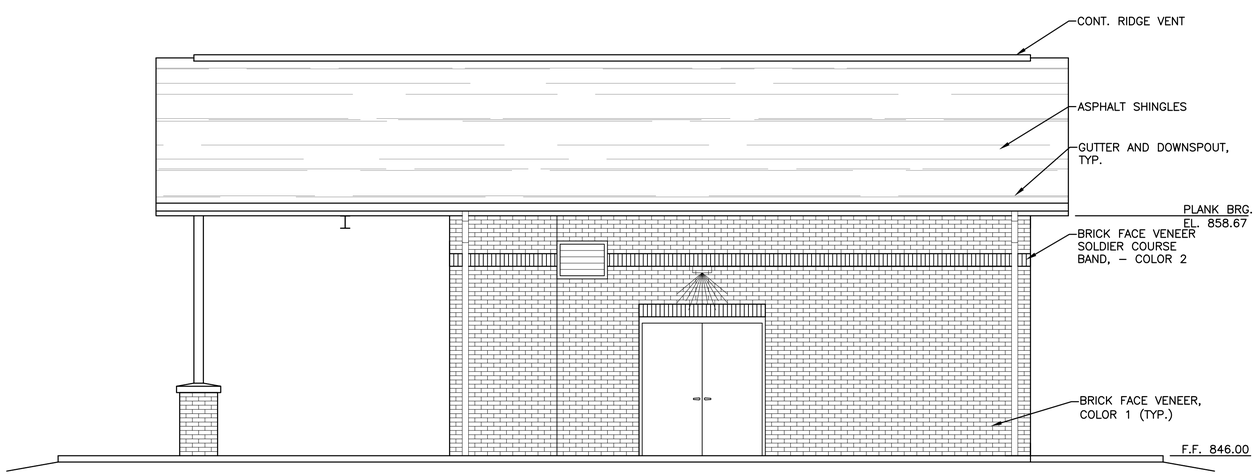
EAST ELEVATION

0 1' 2' 4' 8'



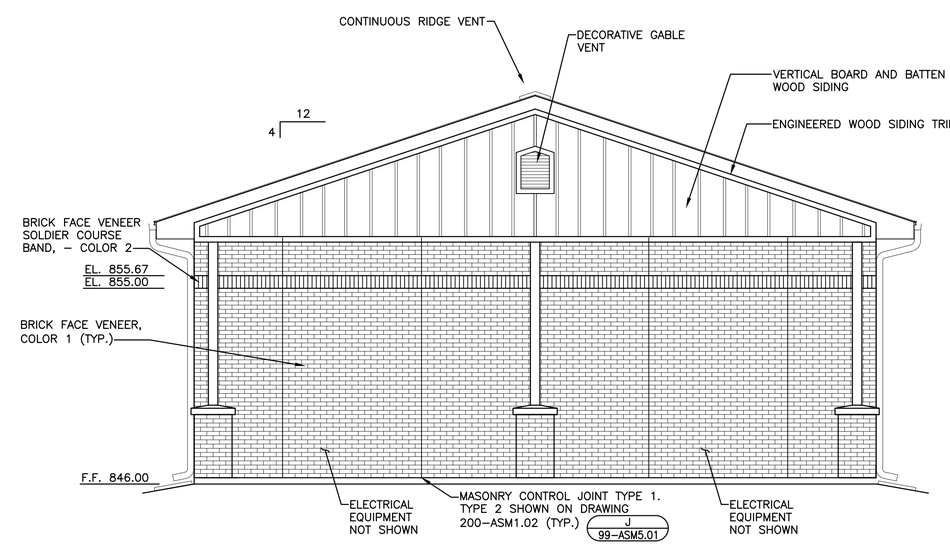
SOUTH ELEVATION

0 1' 2' 4' 8'



WEST ELEVATION

0 1' 2' 4' 8'



NORTH ELEVATION

0 1' 2' 4' 8'

NO.	REVISIONS	DATE:
1	90% REVIEW	7/7/2023

GUN CLUB PUMPING STATION ELEVATIONS

GUN CLUB PUMPING STATION DESIGN
CITY OF PEWAUKEE
PEWAUKEE, WI

JOB NO. 4621.015

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GENERAL NOTES:

1. ALL FASTENERS, SUPPORTS, ANCHORS AND HARDWARE IN ALL AREAS SHALL BE 316 SS.
2. PIPING PENETRATIONS THROUGH SLAB WITH UNDER SLAB WATERPROOFING AND WALLS WITH FLUID–APPLIED WATERPROOFING PER THE MANUFACTURER'S APPROVED DETAILS.
3. SEE DRAWING 99–ASM6.01 FOR GENERAL STRUCTURAL NOTES.

KEY NOTES:

1. PROVIDE CLASS X CONCRETE BACKFILL OR FLOWABLE FILL.
2. PROVIDE SS PIPE SUPPORTS AS SPECIFIED.
3. PIPE SUPPORTS NOT SHOWN.
4. TERMINATE BYPASS SUCTION PIPING WITHIN 6–INCHES OF FLOOR.
5. ROUTE 2" V TO WET WELL. PROVIDE 90 DOWN TOWARDS WET WELL.
6. TRANSITION FROM UNDERSLAB WATERPROOFING SYSTEM TO FLUID–APPLIED SYSTEM PER MANUFACTURER'S APPROVED DETAILS.
7. INSTALL FILLET PER PUMP MANUFACTURER RECOMMENDATIONS
8. CONTRACTOR SHALL PROVIDE OR FABRICATE STAINLESS STEEL FITTING TO CONNECT PIPE COUPLING AT BYPASS CONNECTION TO OWNER'S VACUUM TRUCK PIPING CONNECTION TYPE (FLAT FLANGE). VERIFY CONNECTION TYPE WITH OWNER.
9. PROVIDE STAINLESS STEEL OPERATOR STEM AND SUPPORTS AS SPECIFIED. COORDINATE LOCATION WITH GATES AND OPERATOR (TYP. TO ALL 3 GATES).
10. CONCRETE SUPPORT WALL WITH #4@8" CENTERED (PROJECTED INTO VIEW). DOWEL INTO BASE SLABE, BAFFLE WALL SLAB AND WALL USING #4@8" ADHESIVE ANCHOR DOWELS, EMBED 4".
11. SLG–200–3 BROUGHT INTO SECTION. PROVIDE 36"X36" OPENING FOR GATE. PROVIDE SS STEM AND SUPPORTS FOR GATE.
12. OPTIONAL CONSTRUCTION JOINT IN SLAB.
13. 4000 PSI CONCRETE FILL.

LEGEND:

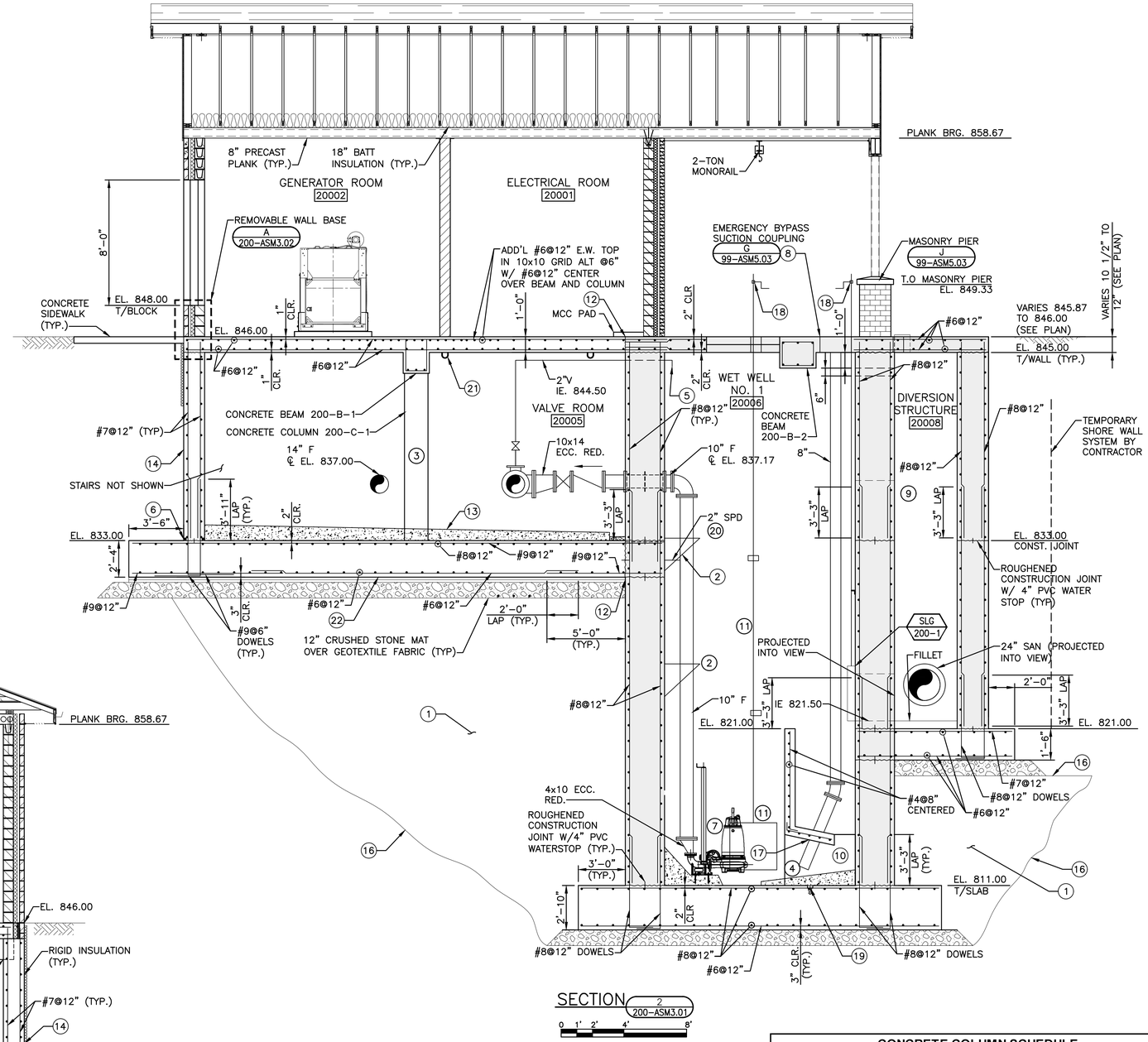
CONCRETE WITH ANTI–MICROBIAL CRYSTALLINE WATERPROOFING ADMIXTURE (CLASS A–CW) AND CONSTRUCTION JOINTS DETAILED PER N / 99–ASM5.01

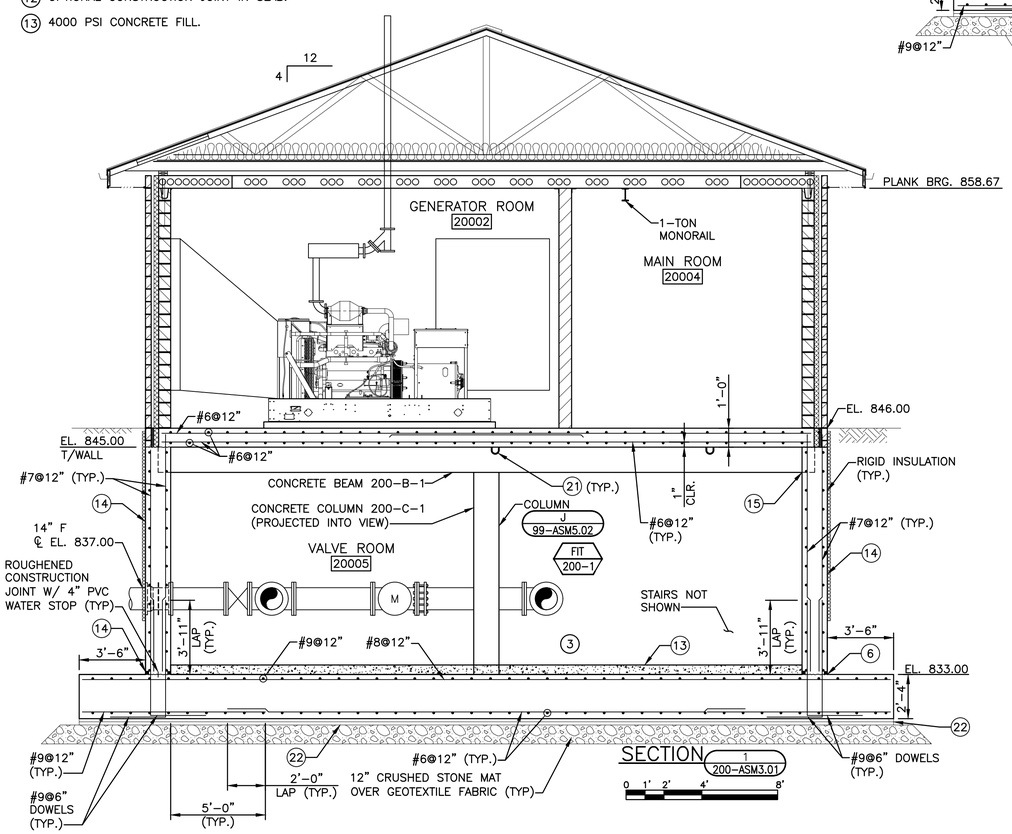
KEY NOTES:

14. FLUID–APPLIED WATER PROOFING WITH PROTECTION BOARD AND DRAINAGE MAT. INSTALL PER MANUFACTURER'S APPROVED DETAILS AT TYPICAL CONDITION, INSIDE, AND OUTSIDE CORNERS.
15. 1'–8"x8" BEAM POCKET. BOTTOM OF POCKET EL. 843.33.
16. LIMITS OF CLASS X CONCRETE/FLOWABLE FILL ARE APPROXIMATE. CONTRACTOR SHALL PROVIDE ALL REQUIRED MATERIALS.
17. POUR BAFFLE WALL AROUND PIPE. PROVIDE EXTRA REBAR PER A / 99–ASM5.01.
18. SLIDE GATE OPERATOR. SEE C / 99–ASM5.02
19. #4@12" ADHESIVE ANCHOR DOWELS, EMBEDDED 4" (TYP.).
20. PROVIDE OPEN TOP TEE ON EACH SPD DISCHARGE. ROUTE 2" SPD TO EL. 822.50.
21. PICK POINT PER M / 99–ASM5.01
22. BLIND SIDE WATER PROOFING SYSTEM SEE SPECIFICATIONS. PROVIDE MUD SLAB AND SAND SLURRY PROTECTION SLAB PER B / 200–ASM3.02.

FLOAT ELEVATIONS:

FLOAT DESCRIPTION	ELEV
HWL ALARM	822.00
LAG–LAG START	821.00
LAG START	820.00
LEAD START	819.00
COMMON	
PUMPS OFF	817.00
LWL ALARM	816.00





CONCRETE COLUMN SCHEDULE

COLUMN	b x h	VERT. REINF.	DOWELS	TIES	DOWEL LAP
200-C-1	16 x 16	8~#7	8~#7	#3@12"	2'-0"
200-C-2	14 x 14	4~#7	4~#7	#3@12"	2'-0"

BEAM SCHEDULE

BEAM DESIGNATION	HEIGHT h	WIDTH b	BOTTOM BARS A	TOP BARS B	TOP BARS C	TOP BARS X	CLOSED STIRRUPS D	CLOSED STIRRUPS E	CLOSED STIRRUPS Y
200-B-1	2'-8"	1'-8"	3~#8	2~#9	3~#9	7'-6"	#4@6"	--	--
200-B-2	2'-0"	1'-4"	2~#7	3~#7	--	--	#3@10"	--	--
200-B-3	0'-9"(Note 2)	2'-8"	5~#5	5~#5	--	--	#3@3"	--	--

NOTES:
1. SEE DETAIL A/99-ASM5.03 FOR CONCRETE BEAM DETAILS.
2. 9" MINIMUM. SLAB THICKNESS VARIES 9"-12". SEE PLAN.

NO.	REVISIONS	DATE:
1	90% REVIEW	7/7/2023

GUN CLUB PUMPING STATION
BUILDING SECTIONS - 1

GUN CLUB PUMPING STATION DESIGN
CITY OF PEWAUKEE
PEWAUKEE, WI

JOB NO. 4621.015

PROJECT MGR. RANDY LANGER

STRAND ASSOCIATES®

SHEET 17
200-ASM3.01

File: \\strand.com\projects\MAD\4621.015\Drawings\CAD\AutoCAD\200-ASM3.01.dwg Time: Jul 07, 2023 – 11:14am

LEGEND:

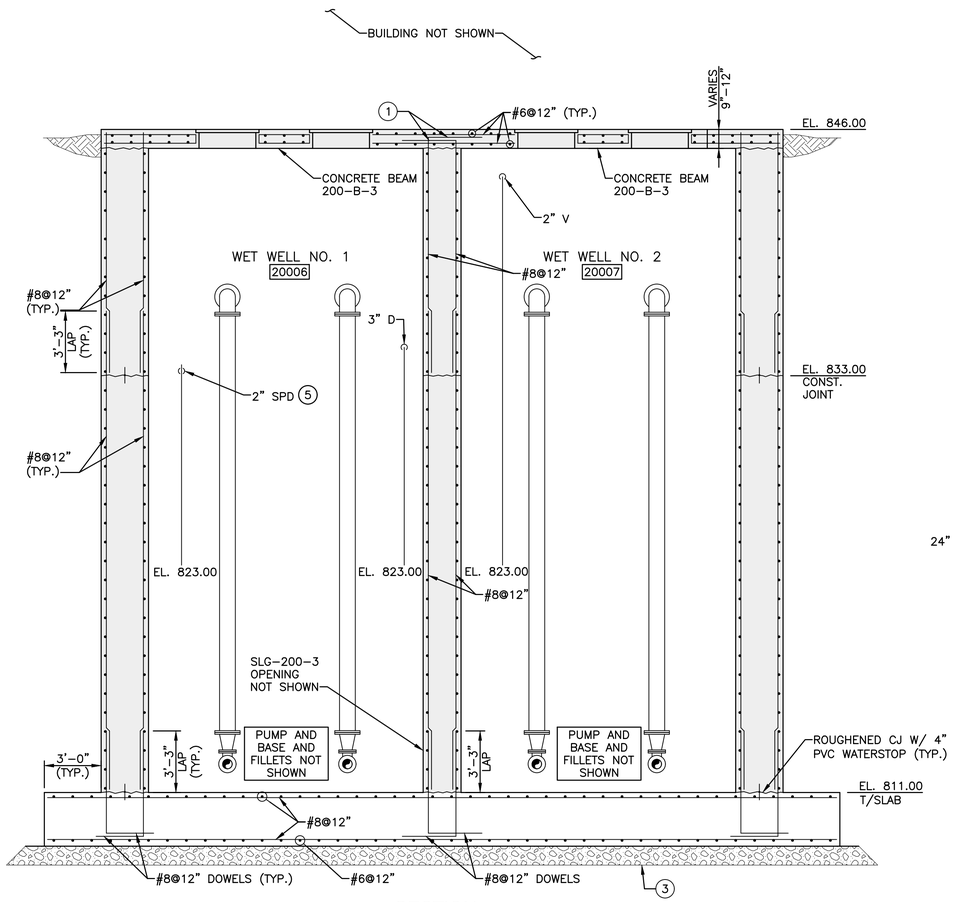
CONCRETE WITH ANTI-MICROBIAL CRYSTALLINE WATERPROOFING ADMIXTURE (CLASS A-CW) AND CONSTRUCTION JOINTS DETAILED PER N / 99-ASM5.01

GENERAL NOTES:

1. ALL FASTENERS, SUPPORTS, ANCHORS AND HARDWARE IN WET WELL SHALL BE 316 SS.
2. SEE DRAWING 99-ASM6.01 FOR GENERAL STRUCTURAL NOTES.

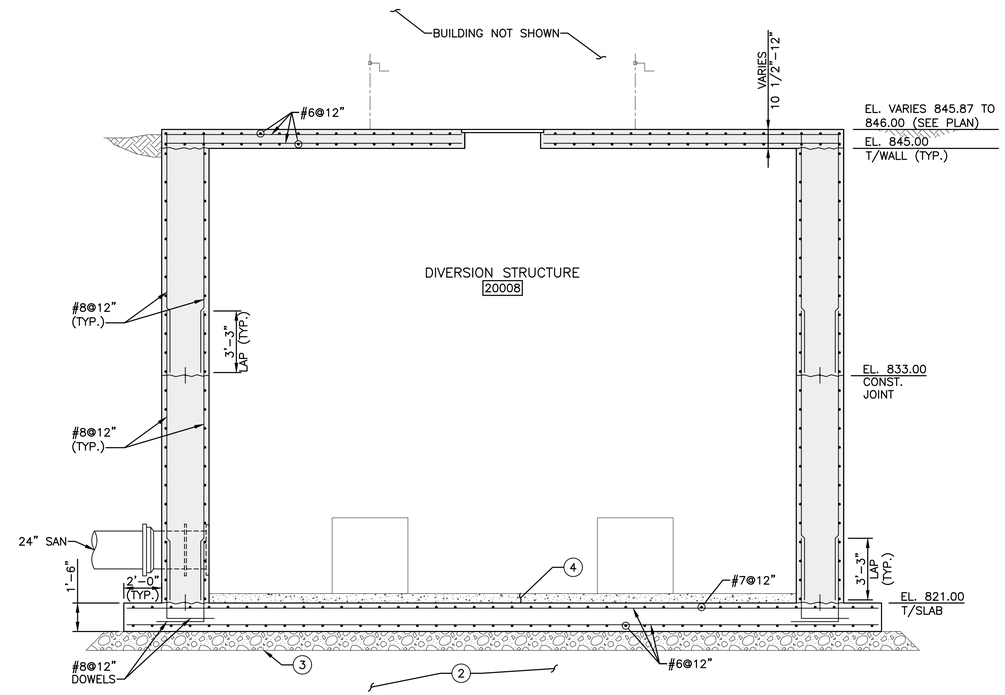
KEY NOTES:

1. STANDARD HOOKS AT TOP END OF VERTICAL BARS.
2. CLASS X CONCRETE OR FLOWABLE FILL DOWN TO NATIVE MATERIAL.
3. 12" CRUSHED STONE MAT OVER GEOTEXTILE FABRIC.
4. 4000 PSI CONCRETE FILL.
5. OPEN TOP TEE.



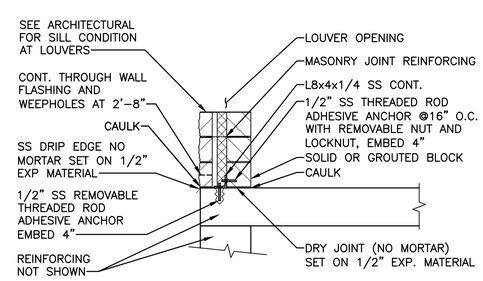
SECTION 1 / 200-ASM3.02

0 1' 2' 4' 8'



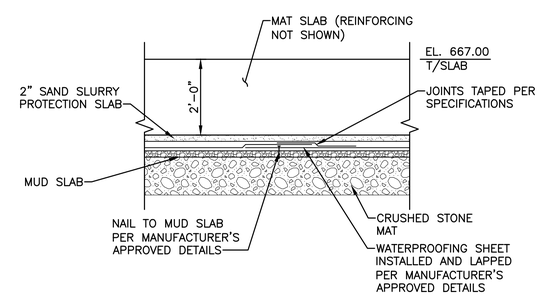
SECTION 2 / 200-ASM3.02

0 1' 2' 4' 8'



A / 200-ASM3.02 REMOVABLE WALL BASE AT LOUVER

0 1' 2' 4'



B / 200-ASM3.02 UNDER SLAB WATERPROOFING

0 1' 2' 4'

NO.	REVISIONS	DATE:
1	BOR REVIEW	7/7/2023

GUN CLUB PUMPING STATION
BUILDING SECTIONS - 2

GUN CLUB PUMPING STATION DESIGN
CITY OF PEWAUKEE
PEWAUKEE, WI

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PROJECT MGR. RANDY LANGER

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SHEET 18
200-ASM3.02