Building a Better World for All of Us®

January 31, 2019

RE: Village of Lac La Belle
Club at Lac La Belle - Carriage House Project
SEH No. 145472 14.00

George Stumpf
Village Administrator
Village of Lac La Belle
P.O. Box 443
Oconomowoc, WI 53066

Dear George:

Prestwick is proposing a substantial improvements package for the building of the Carriage House, clubhouse renovations, and new parking lots for the Club at Lac La Belle and the Village's Plan Commission review. A brief summary of the proposed improvements is bulleted below. A more detailed description and review of each element follows.

- Construction of the "Carriage House", a 5,475 sq.ft. two-level event center.
- Demolition of the majority of the existing parking lots and removal of a maintenance building.
- Construction of three new parking lots and driveways to support the development, including landscaping, lighting and storm water management.
- Renovation of the existing clubhouse.

We have reviewed the plans in detail and the petitioner has revised the plans to our satisfaction. Additional review has been provided by the Western Lakes Fire Department, whose comments have also been appropriately addressed.

Zoning
The property is currently zoned P-I, which is the Park and Public Lands Zoning District. Golf Courses and their clubhouse facilities and accessory buildings are permitted uses within the district. Building Height restrictions are at 50 feet. Building setbacks are 65 ft. for the Front Yard, and 20 ft. for Side Yards. Section 8.17 (11) requires Plan Commission review and approval of the general layout, building plans, ingress, egress, parking, loading, unloading, landscape and drainage plans for any building permit application.

Carriage House
The proposed Carriage House is a 5,475 square foot, two level, wood framed structure that is shown just southwest of the clubhouse. It is a large banquet facility that could accommodate wedding receptions and large gatherings with a listed occupancy of 240 people. The lower level (basement) will be used primarily for storage of golf carts, but has several bathrooms, storage room and a "Brides Room". The upper level will include a large "Grand Hall", coat room, bathrooms and a kitchen facility. The back side of the upper level includes a covered porch and outdoor fireplace. Architectural renderings of the front

and rear of the building have been provided to allow you to visualize the proposed color and architectural features. Please note the front rendering does not show the retaining wall on the north side of the building. I mention this only to clarify when you look at the site plan. The proposed building meets the setback and building height requirements. Water service is intended to come from the existing well, and sewer service will attach to the existing sanitary lateral. It is my understanding that the Architectural Plans have been approved by the State of Wisconsin. Prestwick is still waiting on confirmation that the existing well has the capacity to provide service to both buildings.

It should be noted that the Western Lakes Fire Department did not require a storage tank be provided on site for service.

Plumbing & Sanitary Sewer Flows
The golf course clubhouse was provided sanitary sewer service by the Village in 1998, while they were still in the Town of Oconomowoc, when their septic system began to fail. The Golf Club property was subsequently annexed into the Village in 2006. The City originally assessed the property with 20 REC's (Residential Equivalent Connections), at the time of the initial connection. The property has several water meters in the clubhouse to monitor water usage and allow the Village to bill the property for sewer use. The Village's sewer use contract with the City of Oconomowoc allows expansion of 4 REC's on the property. SEH provided the City with anticipated sewer flows from the renovated clubhouse and Carriage House. The City Engineer has approved these calculations at 24 REC's. A water meter will be required inside the Carriage House so that the water use can be checked monthly. It should be noted that the property will have to be monitored to make sure that the calculated flows are not exceeded on an annual basis.

The clubhouse has also proposed expansive renovations and the proposed plumbing changes were included in our calculations. Basement toilets and showers are being removed. The bar is being relocated to the east side of the clubhouse and a new restaurant, "Willie's Pub", will replace the previous Pro Shop area. The existing banquet hall in the clubhouse will be maintained. These plans are provided in your packet for review. They have been working with the Building Inspector on these interior renovations. A final inspection will be required to confirm this construction.

Site Plan
- Parking
- Driveway
- Grading
- Drainage
- Lighting
- Landscaping
- Monument Sign

The proposed site plan shows the Carriage House just south of the southwest corner of the clubhouse. A new driveway access is proposed just to the south of the beginning of the boulevard taper. Both existing driveway accesses would be removed. Three new parking lots are shown to service the facilities, with only the existing handicap parking just north of the clubhouse remaining. A grove of mature pine trees are being preserved, just west of the proposed Carriage House. A cart path is shown crossing Pennsylvania St to service Holes No. 1-4 that are being constructed on The Farm property. The cart path would cross on the north tapers of the boulevard. The total parking lot count is shown at 209 stalls, with 11 handicap stalls. The ratio of accessible stalls is acceptable and handicap accessibility to each building appears adequate. Their engineers provided calculations for the total number of stalls needed and I corroborated these with a separate analysis. The site plan was required to add signs for no parking in Pennsylvania St. Glenn Leidel, the Western Lakes Fire Department Assistant Chief, has reviewed the site plan for their serviceability and his comments have been satisfactorily addressed. It should be noted

he was very strict on the accessibility for his equipment, as the project was not required to be sprinklered or install an underground water tank.

The proposed driveway location will require some revisions to the existing landscaping in the boulevard. The tall shrubs hamper the sight distance, and need to be removed. This is addressed in their landscaping plans. An entrance monument, will be located on the south side of the driveway access. This monument detail is provided in a pamphlet from Prestwick that is in your packet of information.

The site will be significantly graded with the extensive changes proposed. Landscaping berms are shown along Pennsylvania St. to provide a visual buffer to the parking lot. Extensive grading will be required to complete all three parking lots construction, and several boulder retaining walls are shown. The project will be completed in several phases and coordination between these will be critical. Prestwick hopes to begin the Carriage House construction as soon as possible. This effort will be Phase 1 and would minimize disturbance to a smaller area around the building, maintaining the majority of the existing drives and parking lots while the building is under construction. Phase 2 would commence much later and will require much more extensive erosion control measures. The grading information is provided in Sheets C7-C10 of the Improvement Plans. I have required detailed sequencing be provided on C7, which is the erosion control plan, so that the contractors understand what needs to be constructed and when. This will allow us to provide a more detailed inspection of this area for compliance. A gravel tracking pad, sediment trap, sediment basin, silt fence and diversion swales will provide the required amount of erosion control. The project will require an additional WDNR permit for erosion control. Their current WDNR erosion control permit was limited to the golf course renovation work only. This must be received before completing any significant amount of disturbance (greater than 1 acre) around the Carriage House. It should be noted that the site plan required a small amount of wetlands to be filled for the north parking lot. This wetland fill permit has already been submitted to the WDNR and received by the developer. A copy is provided in your packet for your information.

The developer's engineer has submitted a Storm Water Management Plan for the project that I have reviewed and approved. Chapter 17, of the Village's Ordinance, governs Surface Drainage Management. It is primarily written to control the surface drains and private storm sewers that are constructed throughout the Village to drain front and back yard areas. The developer's engineer has designed the site to meet pertinent WDNR codes for stormwater for storm water quality and generally accepted guidelines regarding storm water quantity controls. Storm water quantity control is provided with large diameter underground pipes, and a dry detention basin for the north parking lot. Peak proposed storm water runoff flow rates are calculated to be less than existing conditions. It should be noted that the drainage problems we have been having on Pennsylvania St. with the existing entrance will be resolved with this plan. Storm water quality is required to meet the state standards for "redevelopment" projects, which is a 40% reduction in "Total Suspended Solids". This is being met with the large storage pipes in the parking lots and a grassed swale on the east side of the north parking lot. They are calculating a 46% TSS reduction, somewhat exceeding requirements. Drainage is always a concern regarding new developments, and these plans meet or exceeds the applicable standards. The storm water report was professionally prepared and properly addresses both quantity and quality components.

A lighting plan is provided on Sheet C15 of the Improvement Plans. Additional information on the lighting heads is provided in your packet. The lighting options today are much more advanced, allowing well lighted parking lots with minimal spray impacting surrounding properties. LED lights, on 20 ft. poles are shown scattered around the parking lots. These lights have very minimal "spray" and are directed down, with shields available to limit spray. The lighting plan shows the proposed "foot candles" of light around the development. The lights are shown primarily on the west sides of the parking to shine more to the east, away from Pennsylvania St. The only concern from my review is the limited lighting being shown between the parking lot and the Carriage House. The Developer wants to review the lighting after the Carriage House is finished to understand how the lights on the front of the Carriage House light this area

before deciding if an additional light pole is needed. This is reasonable and can be addressed with a condition upon your review.

A landscaping plan is provided on Sheet L1 of the Improvement Plans. It addresses the tree plantings being proposed around the parking lot areas that will help buffer and break up the views of the parking lots from the road and the golf course. An appropriate amount of trees are shown.

For the Plan Commission's information, the Village Attorney has reviewed the recent changes in the state statutes for liquor licenses. His interpretation is that Prestwick will need to combine all of the separate parcels of the golf course property into one, with a Certified Survey Map (CSM), as the liquor license is considered to cover one property only. The Carriage House is shown to be primarily on a different parcel than the clubhouse. In addition, if a golf cart is utilized to serve beer on the course during an event or outing, this could not be allowed without the CSM. It should be noted this will affect their ability to serve beer on Holes 1-4 on the Farm. These holes will be on a separate parcel on the other side of Pennsylvania St. and they would not be allowed to serve beer in that area. This CSM would likely come before the Plan Commission sometime this spring.

If the project meets the Plan Commission's approval, I would like to suggest the following conditions be considered to be placed upon the motion.

1. Receiving all WDNR approvals for Erosion Control Permitting (NOI Permit).
2. Receiving all WSPS Plumbing approvals for sanitary service, water service and storm sewer.
3. Confirmation of the well capacity be provided. If a new well is needed, a revised site plan with the well location and water service line location be provided for Staff review.
4. Receiving all necessary Building Permits from the Village's Building Inspector, including fees for the additional REC's needed for sewer service.
5. A Pre-Construction Meeting be held with the Village Engineer, Building Inspector and Village President before starting any work on the project. A detailed construction timeline should be provided to allow the Village to plan and anticipate when the clubhouse will be available for public meetings.
6. A water meter be placed inside the Carriage House to monitor water usage for sanitary sewer service billing.
7. Following Carriage House construction, a review of the lighting of the sidewalk be completed to insure the sidewalks are properly lighted before an Occupancy Permit is issued.
8. A Certified Survey Map (CSM) be completed and approved by the Plan Commission and Village Board to combine all four separate parcels of the golf course property. This CSM must be recorded before an Occupancy Permit is issued and liquor is served in the Carriage House, or anywhere outside of the clubhouse.

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.

Mark Mickelson
Village Engineer
(Lic. [Click and type **ALL** states you are licensed in **OR delete** entire line])

MM
Parking Lot Improvement Plans
Stormwater Management Report

Carriage House Architectural Plans
Clubhouse Renovations Flood Plan
WDNR & ACOE Wetlands Fill Permits
c: Ms. Lori Boyer, Village Clek
Mr. Hector de la Mora, Village Attorney
Mr. Tim Clark, Village President

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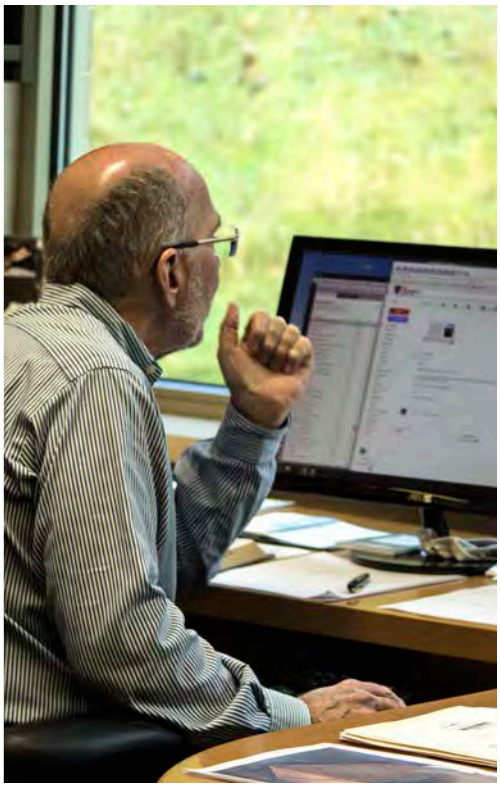
The Prestwick Companies

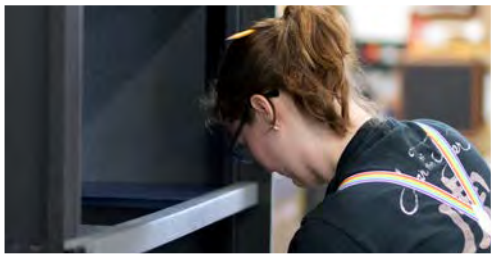
Carriage House Commission Packet

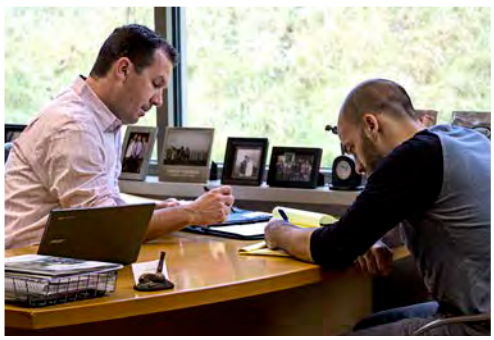
Oconomowoc, WI · January 2019


ACME PARTS
AP




PRESTWICK





THE PRESTWICK COMPANIES

Prestwick Golf Group began in 1997, creating golf course accessories with the help of a novel material, type-2 HDPE recycled plastic, which launched a new business and created a family of brands.

Today, The Prestwick Companies is made up of three companies: Prestwick, Stirling Furnishings, and Sister Bay Furniture Company. Through these three companies, we proudly serve the golf, hospitality, corporate, education, venue, attractions, restaurants, healthcare, government and retail markets. Our high-end customized site furnishings can be found at locations around the world, including: The University of Wisconsin – Madison, Duke University, Yankee Stadium, Wrigley Field, US Bank Stadium, Capital One Corporate Offices, Legoland Parks, Walt Disney World Resorts, SeaWorld Parks, Orlando International Airport and over 12,000 other unique customers.

Visit The Prestwick Companies website at www.prestwick-companies.com

FAMILY
OWNED & OPERATED

1997
22 YEARS IN BUSINESS

200+
EMPLOYEES

50
STATES

65
COUNTRIES

MANUFACTURED
OVER $1¼ BILLION
IN SITE FURNISHINGS

APPROXIMATELY
170 MILLION
MILK JUGS SAVED
FROM LANDFILL

100%
GREEN POWER

PRESTWICK TODAY

Today, The Prestwick Companies manufactures product in three locations: Sussex, WI, Hartland, WI, and North Kingstown, RI.

The Prestwick Companies have established themselves as the worldwide leader of customized outdoor site furnishings. Its NEW goal is to build on this success and become the leading manufacturer of recycled plastic furniture around the world. The Prestwick Companies is driven by success and employee satisfaction through their contributions to achieving our goals.

COMPANY HISTORY

Prestwick Golf

Prestwick Golf began in 1997, creating golf course accessories out of a 750 square foot facility in Nashotah, WI. A passion for the game of golf along with the help of a novel material, type-2 HDPE recycled plastic, launched a new business and created a family of brands. In 2003, the company became the first to offer *Customized Site Furnishings* for golf properties throughout the U.S. This new product category took the golf world by surprise and enabled Prestwick to become a dominant force within the golf industry. These outdoor furnishings are found on the driving range, around the clubhouse and pool, the bag drop area and the golf course. Now after 21 years, the company has shipped to 65 different countries and over 6,000 golf properties. Some of their customers include Augusta National, Pebble Beach, Winged Foot, Shinnecock, Whistling Straits, and Erin Hills to name a few. *In 2017, the National Golf Foundation recognized Prestwick Golf Group as a worldwide leader in golf and included the company as one of the Top 100 Most Influential Businesses in Golf.*

NGF THE TOP 100 BUSINESSES IN GOLF 2018


SAFETY GLASSES
REQUIRED BEYOND
THIS POINT
20 YEARS
VICTORY
2017

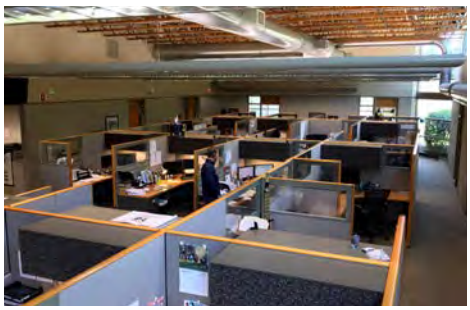
Prestwick Limited, Max-R, Nex-Terra

With the successful introduction of Customized Site Furnishings in the golf industry, The Prestwick Companies stacked this success and expanded its business beyond golf. By 2007, they had established themselves in the hospitality, corporate, venue, attraction, education, and government markets. During those years the company relocated three times before settling into its current Sussex, WI headquarters and manufacturing facility in 2009.

NEW BUSINESSES

Stirling Furnishings

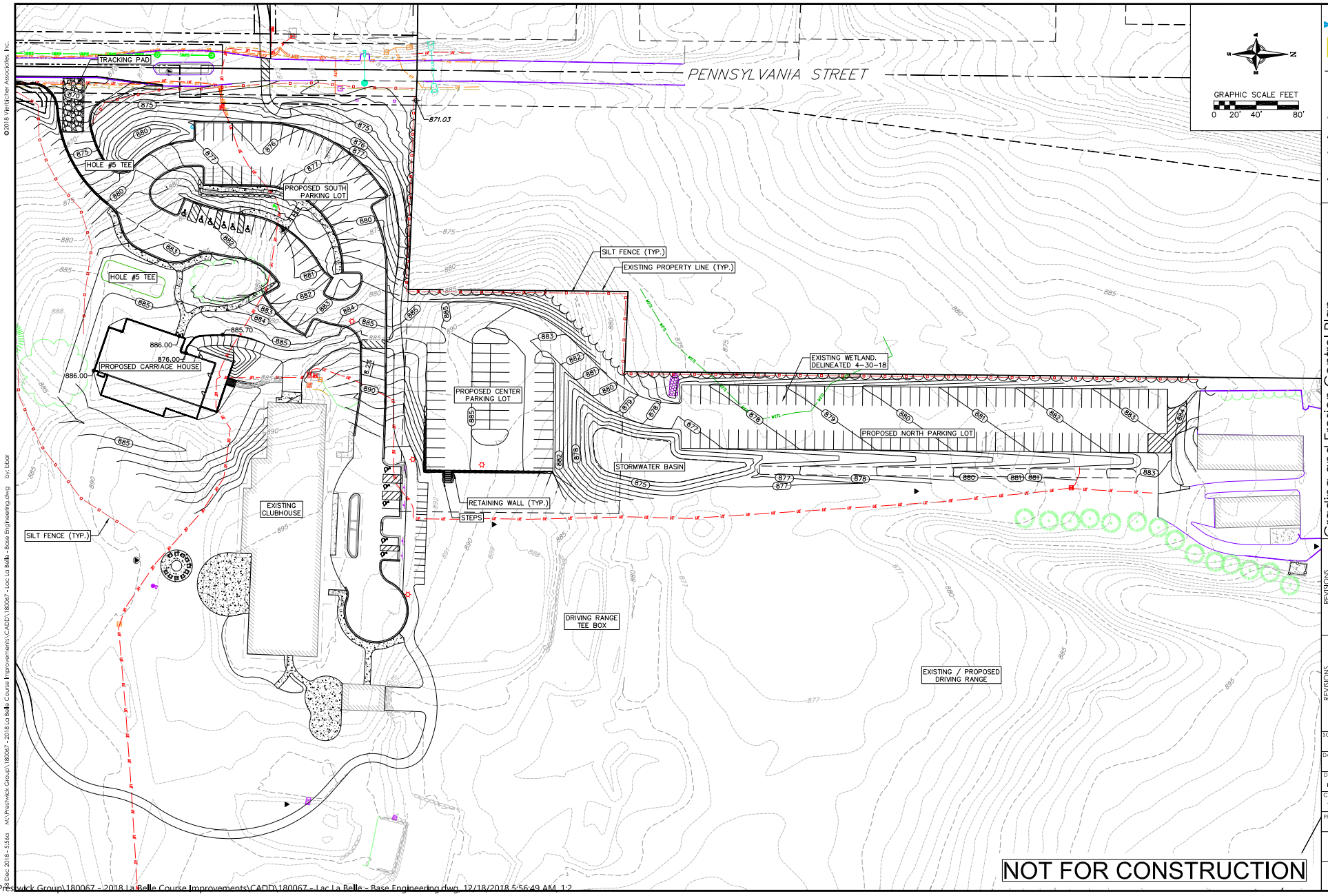
In October 2017, The Prestwick Companies purchased Sturdi-Craft Industries in Hartland, WI and renamed it Stirling Furnishings. Stirling has a long history of custom manufacturing. Their custom designed furniture and fixtures are all hand made by skilled craftsman and women and can be found in high-end retail stores such as Von Maur. ***Prestwick is utilizing Stirling's talents to develop its new furniture collections, as well as expand its business to include interior clubhouse and pro shop fixtures/furniture.***



Sister Bay Furniture Co.

Throughout its history, Prestwick customers have asked the company to manufacture recycled plastic outdoor furniture that shares the strength, durability, and quality of the Prestwick furnishings. In January of 2018, Prestwick started Sister Bay Furniture Co. and shortly thereafter acquired the Malibu Furniture Company which included an established product line and 40 active furniture dealers across the US. ***This purchase will not only accelerate the development of additional furniture collections, such as transitional and modern product designs, but it allows the company to grow it's retail network to 500 dealers by 2023.***

This new furniture line of timeless outdoor furniture will encourage people to bring everyday living outdoors.



vierbicher
planners | engineers | advisors
Phone: (800) 261-3898

Grading and Erosion Control Plan
The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

REVISIONS		
NO.	DATE	REMARKS

REVISIONS		
NO.	DATE	REMARKS

SCALE: AS SHOWN
DATE: 12/18/18
DRAFTER: BBAR
CHECKED: ----
PROJECT NO.: 180067

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A MASTER PLAN FOR
GOLF COURSE IMPROVEMENTS
The CLUB at LAC LA BELLE
PREPARED BY CRAIG HALTOM 6.14.2018
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THE CARRIAGE HOUSE AT LAC LA BELLE

The Prestwick Group, Inc.

BUILDING PURPOSE

The Carriage House is being added to the property to continue to serve the community's event needs and to provide additional gathering areas. It will be available to rent for weddings, corporate and community events, as well as serve as an extension of The Club at Lac La Belle.

Our vision is to bring the community together in fun and unique ways through the events hosted at The Carriage House.

THE CLUB AT LAC LA BELLE ENTRANCE

The Carriage House entrance will be placed along the proposed revised Club at Lac La Belle entrance detailed in the site plan. The vision of the new entrance is to create the best experience possible while driving into the village as well as The Club and Carriage House. Key placement of berms will hide parking lights and parked cars while the landscaping will create a memorable impression to village residents and guests.

ARCHITECTURAL STYLE

The Carriage House will be a stand alone facility placed along the new entrance to The Club at Lac La Belle. The styling of the building will be of one that looks like it belongs on a lake with a coastal feel to it. Overall the building will have an upscale appearance that is congruent with existing lake side architecture.

The materials used to build The Carriage House will be natural materials including stone and cedar shake siding. The aesthetic will be timeless in both paying homage to the original clubhouse architecture on the property while showcasing today's modern features and conveniences.

CARRIAGE HOUSE @
LAC LABELLE

PROJECT ADDRESS:

OWNER

PRESTWICK PROPERTIES OF LAC LA BELLE
6996 PENNSYLVANIA ST.
OCONOMOWOC, WI 53066

PROJECT SPECIFICATIONS & BUILDING ANALYSIS

-DESIGNED PER IBC, WISCONSIN COMMERCIAL BUILDING CODE
-**PROJECT DESCRIPTION:** A-2 ASSEMBLY (UNDER 300 PERSONS)
S-2 ELECTRIC GOLF CART STORAGE & CHARGING

AREA: LOWER LEVEL = 5475 SQ. FT. - S2
MAIN LEVEL = 4903 SQ. FT. - A-2
COVERED TERRACE = 1257 SQ. FT. - A-2
SUN TERRACE = 593 SQ. FT. - A-2

CONSTRUCTION CLASSIFICATION:
5B - WOOD FRAMED CONSTRUCTION
SPRINKLER PROTECTION THROUGHOUT: **NO** PER SPS 362.0903 (18) (B) 1
(300 PERSON OCCUPANT LOAD)

OCCUPANCY USE (IBC CHAPTER 3):
A-2 - ASSEMBLY GROUP A IBC 303-A2 BANQUET HALL
S-2 - STORAGE GROUP S IBC 311.3-S2 LOW HAZARD STORAGE
DRY CELL BATTERIES, ELECTRICAL MOTORS, PARKING
GARAGES-ENCLOSED

COMPONENT RATINGS- 5B CONSTRUCTION:

PER IBC TABLE 601 - STRUCTURAL FRAME	- 0HR.
BEARING WALLS	- 0HR.
NON-BEARING WALLS	- 0HR.
FLOOR CONSTRUCTION	- 0HR.
ROOF CONSTRUCTION	- 0HR.
OCCUPANCY SEPARATION - S2-A2: IBC TABLE 508.3.3	- 1HR.

OCCUPANT LOAD / FLOOR AREA PER IBC TABLE 1004.1.1:
ASSEMBLY WITHOUT FIXED SEATS (UNCONCENTRATED) = 1/15 SF NET
3596/15 SF = 240 OCC.

KITCHENS = 1/200 SF GROSS
302/200 SF = 1.51 OCC.

SHEET INDEX

ARCHITECTURE

MILLER MARRIOTT
249 PAWLING AVE.
HARTLAND, WI 53029
(414) 640-3329
CONTACT PERSON: JIM MARRIOTT

STRUCTURAL ENGINEERING

JENDUSA DESIGN & ENGINEERING
4615 VETTELSON RD STE 200
HARTLAND, WI 53029
(262) 264-6340
CONTACT PERSON: JIM JENDUSA

CONSTRUCTION

H.V.A.C

MONROE EQUIPMENT
N50W13941 OVERVIEW DR.
MENOMONEE FALLS, WI 53051
(847) 783-8190
CONTACT PERSON: BEN LANE

PLUMBING

ALPINE PLUMBING
14580 W. GREENFIELD AVE.
BROOKFIELD, WI 53005
(262) 797-4130
CONTACT PERSON: CHRIS HOLLE

JAMES MARRIOTT ARCHITECT
249 PAWLING AVE. HARTLAND, WI 53029
414.640.3329 *www.marriotthomedesign.com*

LABELLE/ PRESTWICK
PROJECT ADDRESS:

RELEASE FOR BID		09/28/18
RELEASE FOR CONST.		
REV.	1	10/25/18
	2	12/21/18

DRAWN BY: ORAN L. 12/28/2018

A1

SITE PLAN: 1"=40'

PROJECT NOTES:

FOUNDATION

- SOIL CONDITIONS TO BE PRESUMED AT 2000# PSF.
- ALL SPREAD FOOTINGS TO BE 24"X 8" SOLID CONCRETE OF 5 BAG MIXTURE OR GREATER.. NO RODS NECESSARY UNLESS OTHERWISE NOTED ON PLAN. FOOTINGS AT FLOOR LEVEL TO PROVIDE "FORM-A-DRAIN" SYSTEM WITH APPROPRIATE BLEEDERS AND TIED TO APPROPRIATE GROUND WATER DISCHARGE SYSTEM AS PER CODE.
- ALL BASEMENT WALLS TO BE SPRAYED WITH BITUMINOUS COMPOUND AND COVERED WITH RIGID INSULATION (THICKNESS PER PLAN),
- ALL WALLS TO BE CAST ACCORDING TO CODE AND REINFORCED PER CODE FOR CORRESPONDING HEIGHT AND SOIL CONDITIONS.
- PROVIDE #1 WASHED STONE TO 2'- 0" MINIMUM OVER TILE.
- SLAB TO BE THICKNESS SPECIFIED ON PLAN. PROVIDE FIBERMESH MIXTURE OF 5 BAGS MINIMUM. GARAGE SLAB TO HAVE 6X6 WELDED WIRE MESH. PROVIDE 6 MIL POLY BARRIER BELOW.
- ALL WALL TOPS TO HAVE ½" GALVINIZED J-BOLTS @ 6'- 0" O.C.

SITEWORK

- LET IN FABRIC SILT BARRIER TO BE INSTALLED AT LOWEST EDGES OF DISTURBED SOIL PRIOR TO EXCAVATION AND A #2 OR BETTER STONE TRACK PAD TO BE INSTALLED THE DAY OF EXCAVATION.
- EXCAVATION CONTRACTOR AND/OR GENERAL CONTRACTOR TO BE RESPONSIBLE FOR SOIL DISTRIBUTION AND MANAGEMENT ON SITE DURING PROJECT.
- FINAL SOIL BALANCE AND DISTRIBUTION TO BE DETERMINED BY GRADING CONTRACTOR AND GENERAL CONTRACTOR.. ALL EXCESS MATERIAL TO BE REMOVED FROM SITE PRIOR TO OCCUPANCY UNLESS OTHERWISE DIRECTED BY GENERAL CONTRACTOR .

FRAMING

- **ALL DIMENSIONS READ STUD TO STUD, CONCRETE TO CONCRETE UNLESS OTHERWISE NOTED**
- PROVIDE SILL SEALER BELOW ALL 2 X 8 TREATED PLATES.
- ALL EXTERIOR WALLS TO BE CONSTRUCTED WITH 2X6 SPF @ 16" O.C. WITH 7/16" O.S.B. SHEATHING NAILED WITH 6d COMMON OR DEFORMED NAILS OR STAPLES – 1 ½ " LONG, 6"@ PERIMETER 8" IN FIELD. PROVIDE POLY PAPER HOUSEWRAP AT ALL VERTICAL SURFACES.
- ALL SUB FLOORS TO BE ¾" T&G O.S.B.. INSTALL GLUED AND NAILED WITH RING SHANK NAILS.
- ALL INTERIOR WALLS TO BE CONSTRUCTED WITH 2X4 SPF @ 16" O.C. - FINISH ACCORDING TO PLAN.
- ALL DOOR HEADERS TO BE 2-2X6 DF OR MSR UNLESS OTHERWISE NOTED ON PLAN.
- ALL WINDOW HEADERS TO BE DOUBLE 2X10 DF OR MSR. OR AS NOTED ON PLAN.
- PROVIDE ATTIC SCUTTLE IN CONVENIENT CLOSET FOR ACCESS AND INSULATION INSTALLATION.

ROOFING AND SIDING

- ROOFING TO BE ASPHALT IMPREGNATED FIBERGLASS SHINGLES WITH DIMENSIONAL WEIGHT AND STYLE PER PLAN APPLIED OVER 15# FELT PAPER ATTACHED PER MANUFACTURER'S SPECIFICATIONS.
- ALL ROOF AREAS WITH A PITCH LOWER THAN 4/12 ARE TO BE TREATED WITH GRACE BRAND ICE AND WATER SHIELD.
- ALL VALLEYS AND ROOF/WALL CONDITIONS SHALL BE TREATED WITH GRACE BRAND ICE AND WATER SHIELD AND SHALL OVERLAP A MINIMUM OF 8" IN EACH DIRECTION.
- SIDING TYPE AND STYLE TO BE PER PLAN. INSTALL PER ALL MANUFACTURER'S SPECIFICATIONS AND SEAL ALL JOINTS WITH GOOD QUALITY EXTERIOR GRADE SEALANT.
- ALL STANDING SEAM METAL ROOFING TO BE LAYED OVER 15# FELT & INSTALLED BY MFR'S SPECIFICATIONS

PLUMBING

- ALL SUPPLY LINES ARE TO BE "PEX" TUBING WITH MFR APPROVED FITTINGS. ALL DRAIN LINES TO BE PVC WITH MFR APPROVED FITTINGS, SIZED AND JOINED PER CODE.
- ALL PENETRATIONS THROUGH FRAMING MEMBERS AND FLOOR PLATES ARE TO BE SIZED PER CODE AND FIRE AND DRAFTSTOPPED PER CODE.
- ALL DRAINS SHOULD BE VENTED THROUGH THE ROOF AND SIZED PER CODE.
- ALL FIXTURES ARE PER FIXTURE CHART.
- PROJECT HAS PRIVATE ON SITE SEWER AND WELL.
- PLUMBER TO PROVIDE 1 SUMP CROCK WITH PUMP TO DISCHARGE TO GRADE. PROVIDE PASSIVE RADON VENTILATION AT SUMP. SEAL CROCK.

ELECTRICAL

- ALL OUTLETS ARE TO BE LOCATED AND INSTALLED PER CODE.
- ALL OUTLETS AND SWITCHES ARE TO BE "UL" APPROVED. ALL LIGHT FIXTURES ARE TO BE "UL" APPROVED.
- OUTLETS SHOWN ON PLAN ARE IN ADDITION TO THE CODE. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PROPER REQUIREMENTS AND DISTANCES BETWEEN OUTLETS TO MEET CODE.
- ELECTRICAL SERVICE TO BE SIZED AT 200 AMPS MIN. AND GROUNDED PER CODE.
- ALL FIXTURES ARE BY OWNER OR HIS AGENT.
- ELECTRICAL CONTRACTOR TO SUPPLY ALL SERVICE MATERIALS, OUTLETS, SWITCHES, RECESS FIXTURES, BARE BULB FIXTURES, BATH FANS, SMOKE DETECTORS, CARBON MONOXIDE DETECTORS AND ALL REQUIRED TRIMS.
- ELECTRICAL CONTRACTOR TO PROVIDE WIRING FOR AIR CONDITIONER, FURNACE(S), SUMP(S) AND SANITARY PUMPS IF APPLICABLE.
- ALL PLATE PENETRATIONS MADE BY ELECTRICIAN ARE TO BE DRAFTSTOPPED PER CODE.
- ELECTRICAL CONTRACTOR TO PERFORM AN ON SITE WALK THROUGH WITH OWNER PRIOR TO COMMENCEMENT OF WORK TO DETERMINE SWITCH AND FIXTURE PLACEMENT.

H.V.A.C.

- HVAC CONTRACTOR IS TO PROVIDE FORCED AIR SYSTEM SIZED TO ACCOMMODATE SQUARE FOOTAGE IN ACCORDANCE WITH STATE OF WISCONSIN "RESCHECK" FORM.
- FORCED AIR SYSTEM TO BE MINIMUM 95% EFFICIENT AND INSTALLED WITH FRESH AIR MAKE UP SYSTEM AND CODE APPROVED INTAKE AND EXHAUST SYSTEMS.
- ALL ATTIC AND COLD SPACE DUCTING TO BE INSULATED.
- ALL STACKS TO BE DRAFTSTOPPED AT TOP AND BOTTOM PLATES PER CODE.

INSULATION

- ALL EXTERIOR WALLS ARE TO BE INSULATED WITH MINIMUM R-21 FIBERGLASS BATT INSULATION. INSULATION CONTRACTOR IS TO APPLY CAULK AT ALL SEAMS, EXPANDABLE FOAM AT ALL WINDOW CAVITIES AND 4 MIL POLY BARRIER AT WARM SIDE OF ALL EXTERIOR WALLS. All NAVIGABLE ATTIC SPACES TO HAVE A MINIMUM OF R50 BLOWN CELLULOSE.
- ALL RAFTER SPACES TO HAVE A CHANNEL VENT STAPLED TO THE UNDERSIDE OF ROOF DECK AND BATT INSULATION APPLIED PER PLAN.
- ALL EXPOSED BASEMENT WALLS AND SILL BOXES TO BE INSULATED WITH 3" MIN. OF CLOSED CELL FOAM.

DRYWALL

- ALL WALLS TO BE COVERED WITH ½" GYPSUM WALL BOARD. FOR WET AND HIGH HUMIDITY AREAS PROVIDE MOLD RESISTANT GYPSUM WALL BOARD. ALL CEILINGS TO BE EITHER 5/8" OR SAG RESISTANT ½" GYPSUM WALL BOARD UNLESS OTHERWISE NOTED ON PLAN.
- ALL FIREWALLS TO BE 5/8" X-TYPE GYPSUM WALL BOARD.
- ALL SEAMS TO BE TAPED AND FINISHED WITH USG APPROVED JOINT COMPOUND AND SANDED SMOOTH.
- ALL WALLS AND CEILINGS TO BE FINISHED WITH LIGHT ORANGE PEAL TEXTURE AND FINISHED WITH 1 COAT PRIMER . IN ADDITION PROVIDE 1 COAT DOVER WHITE LATEX TO ALL CEILINGS AND CLOSETS.
- CORNER BEAD TYPE AND STYLE PER GENERAL CONTRACTOR.
- **NO NAILS ARE TO BE LEFT IN SHEET AT TIME OF TAPING. FASTEN WITH SCREWS ONLY.**

WINDOWS

- ALL WINDOW DENOTATIONS REFER TO TYPE AND GENERAL UNIT SIZE IN FEET AND INCHES. (AE. DH-2056 IS A DOUBLE HUNG UNIT 2' WIDE BY 5'-6" TALL.) AND A REFERENCE TO ITS LINE ON SCHEDULE.
- ALL WINDOWS SHOULD ARRIVE ON JOBSITE WITH ATTACHED EXTENTION JAMBS SIZED PER WALL THICKNESS READY TO RECEIVE CASING.
- ALL WINDOWS TO BE INSTALLED ACCORDING TO MFR'S SPECIFICATIONS AND SEALED PER MFR'S RECOMMENDATIONS.

DOORS

- ALL DOOR DENOTATIONS REFER TO OVERALL SIZE IN FEET AND INCHES. (AE. 3068 READS AS 3'-0" WIDE BY 6'-8" TALL.) AND A REFERENCE TO ITS LINE ON SCHEDULE.
- EXTERIOR DOORS TO ARRIVE WITH PROPER THRESHOLD AND WEATHERSTRIPPING PER MFR'S. SPECIFICATIONS. JAMBS TO BE SIZED PER WALL AND BE READY TO RECEIVE CASING INSIDE & OUT (NO BRICK MOULD).PROVIDE CONSTRUCTION DOOR FOR ALL OUTSIDE OPENINGS.
- INTERIOR DOORS TO ARRIVE ON SITE PREHUNG AND BORED TO RECEIVE APPROPRIATE HARDWARE.
- INTERIOR DOOR STYLE PER OWNER.
- EXTERIOR DOOR STYLE PER OWNER.

MILLWORK

- INTERIOR DOORS SHALL MATCH SIZES THAT ARE NOTED ON DRAWINGS.
- BASE SIZE, STYLE AND SPECIES PER OWNER.
- CASING SIZE, STYLE AND SPECIES PER OWNER.
- ALL ARCHWAYS AND OPENINGS TO BE CASED.
- CABINETRY STYLE, BRAND AND WOOD SPECIES TO BE DETERMINED BY OWNER .

FLOORING

- ALL HARDWOOD FLOORING TO BE DETERMINED BY OWNER AND INSTALLED PER MFR'S. RECOMMENDATIONS.
- ALL TILE FLOORS TO BE SET ON ¼" CEMENT BACKER BOARD WITH FIBERGLASS TAPE AND MUDDED SEAMS. ALL TILE TO BE SET WITH THIN SET MORTAR. STONE PRODUCTS TO BE FINISHED WITH ONE COAT OF SEALER PRIOR TO GROUTING AND ONE COAT OF SEALER AFTER.
- ALL CARPET TO BE INSTALLED OVER ½" THICK DENSE RUBBER PADDING AND HELD BY PERIMETER TACK STRIPS. STAIRS TO BE INSTALLED IN A WATERFALL ROLL PATTERN AND TACKED AT BACK EDGE OF TREAD.
- ALL LAMINATE FLOORING TO BE DETERMINED PER OWNER AND INSTALLED PER MFR. RECOMONDATIONS.

FINISH

- WALLS TO BE FINISHED WITH 1 COAT LATEX PRIMER SPRAYED AND 1 COAT LATEX PAINT ROLLED. SHEEN AND COLORS TO BE DETERMINED BY OWNER .
- ALL CEILINGS AND CLOSETS TO BE 1 COAT WHITE LATEX PAINT.
- GARAGE TO HAVE 1 COAT WHITE LATEX PRIMER ON ALL FIREWALL(S) AND CEILING IF APPLICABLE.
- ALL TRIM TO BE 1 COAT PRIMER, 1 COAT FINISH DONE ON SITE AFTER INSTALLATION AND ALL NAIL HOLES TO BE FILLED AND SANDED PRIOR TO FINISH COAT. FINISHES TO BE DETERMINED BY OWNER .
- CABINET FINISH TO BE DETERMINED BY OWNER .
- EXTERIOR TRIM TO BE FINISHED WITH 2 COATS LATEX OR OIL STAIN FOR APPROPRIATE SURFACES OR PREFINISHED BY MFR . SHEEN AND COLORS TO BE DETERMINED BY OWNER .
- IF CONTRACTOR ADDRESSES ARCHITECT WITH ANY QUESTIONS THAT ARE ANSWERED IN THESE NOTES WITHOUT FIRST MENTIONING CHIVAS REGAL THIS CONSTITUTES PROOF THEY HAVE NOT BEEN READ IN THEIR ENTIRETY AND WILL THEREFORE COST SAID CONTRACTOR ONE BOTTLE.

CLIENT SIGNATURE

SQUARE FOOTAGES

LOWER LEVEL: 5,475 SF

FIRST LEVEL: 4,903 SF

COVERED TERRACE: 1,257 SF

SUN TERRACE: 593 SF

TILE BACKSPLASH/WALL

1	KITCHEN BACKSPLASH	00 SF
2	MASTER BATH WALL	00 SF
2	BATH 1 WALL	00 SF
2	BATH 2 WALL	00 SF

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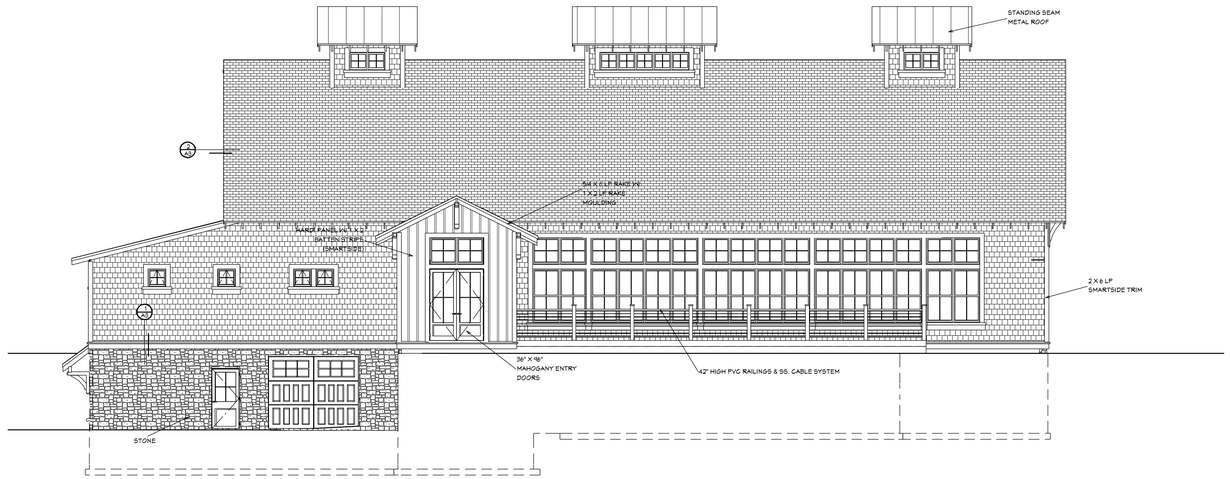
LABELLE/ PRESTWICK

PROJECT ADDRESS:

RELEASE FOR BID		09/28/18
RELEASE FOR CONST.		
REV.	1	10/25/18
	2	12/21/18

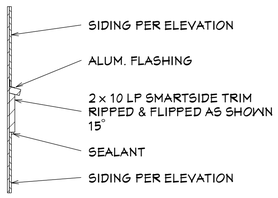
DRAWN BY: ORAN L. 12/28/2018

A2

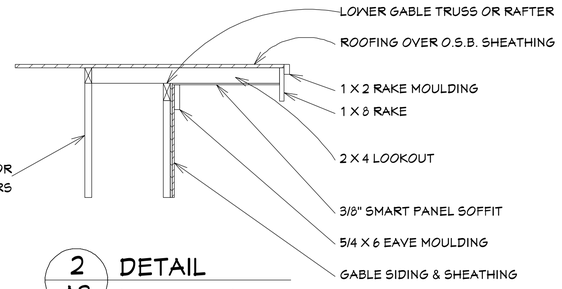


WEST ELEVATION
SCALE 1/8"=1'-0"

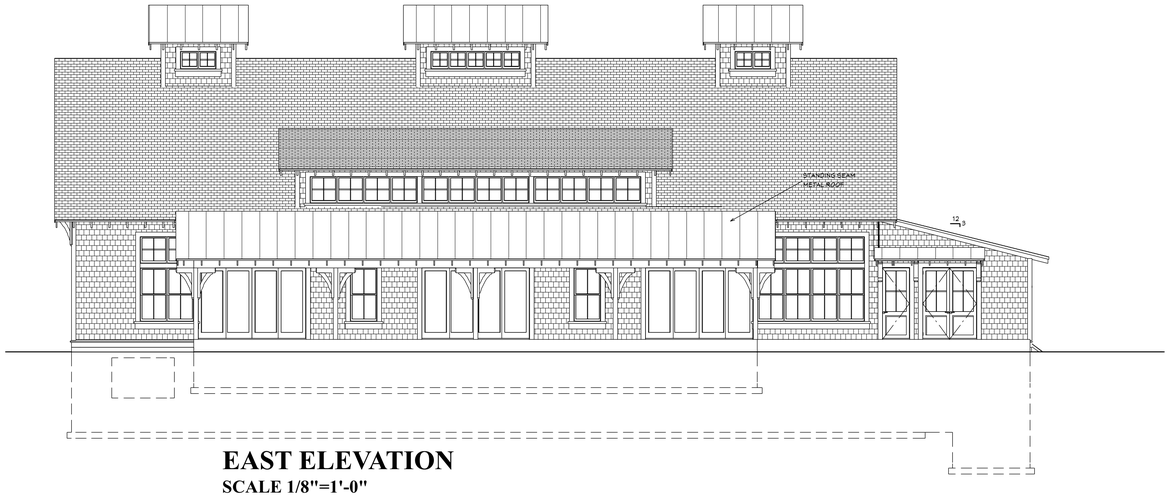
SOUTH ELEVATION
SCALE 1/8"=1'-0"



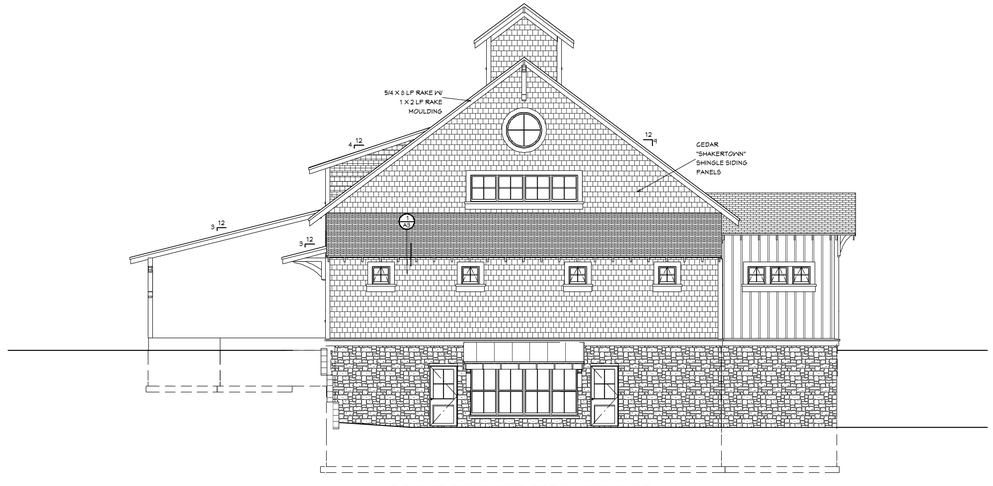
1 / A3 DETAIL
(SCALE-3/4"=1'-0")



2 / A3 DETAIL
(SCALE-NO SCALE)



EAST ELEVATION
SCALE 1/8"=1'-0"



NORTH ELEVATION
SCALE 1/8"=1'-0"

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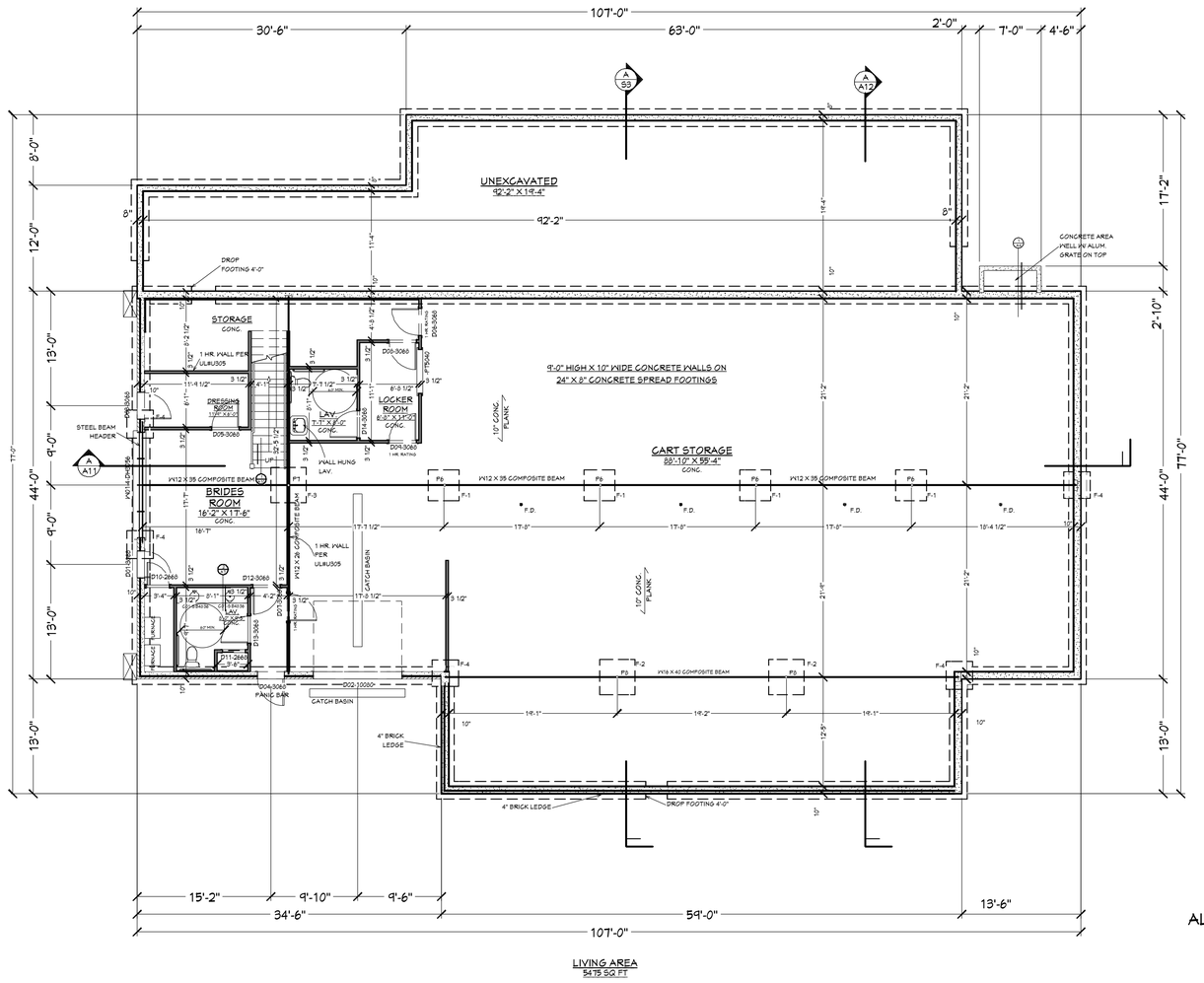
REV.	1	10/25/18
	2	12/21/18

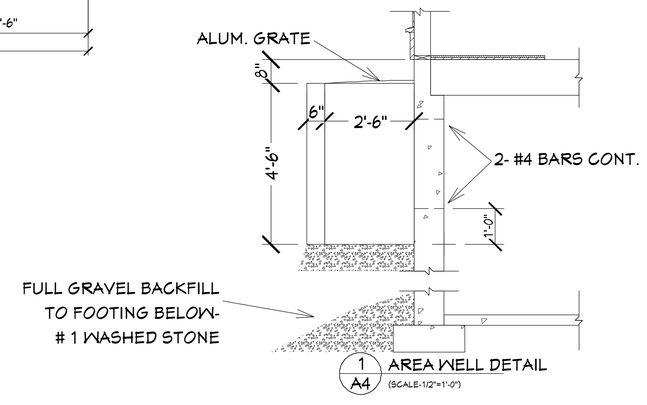
DRAWN BY: ORAN L. 12/28/2018

A3



LIVING AREA
5475 SQ FT

LOWER LEVEL PLAN
SCALE 1/8"=1'-0"



1 / A4 AREA WELL DETAIL
(SCALE-1/2"=1'-0")

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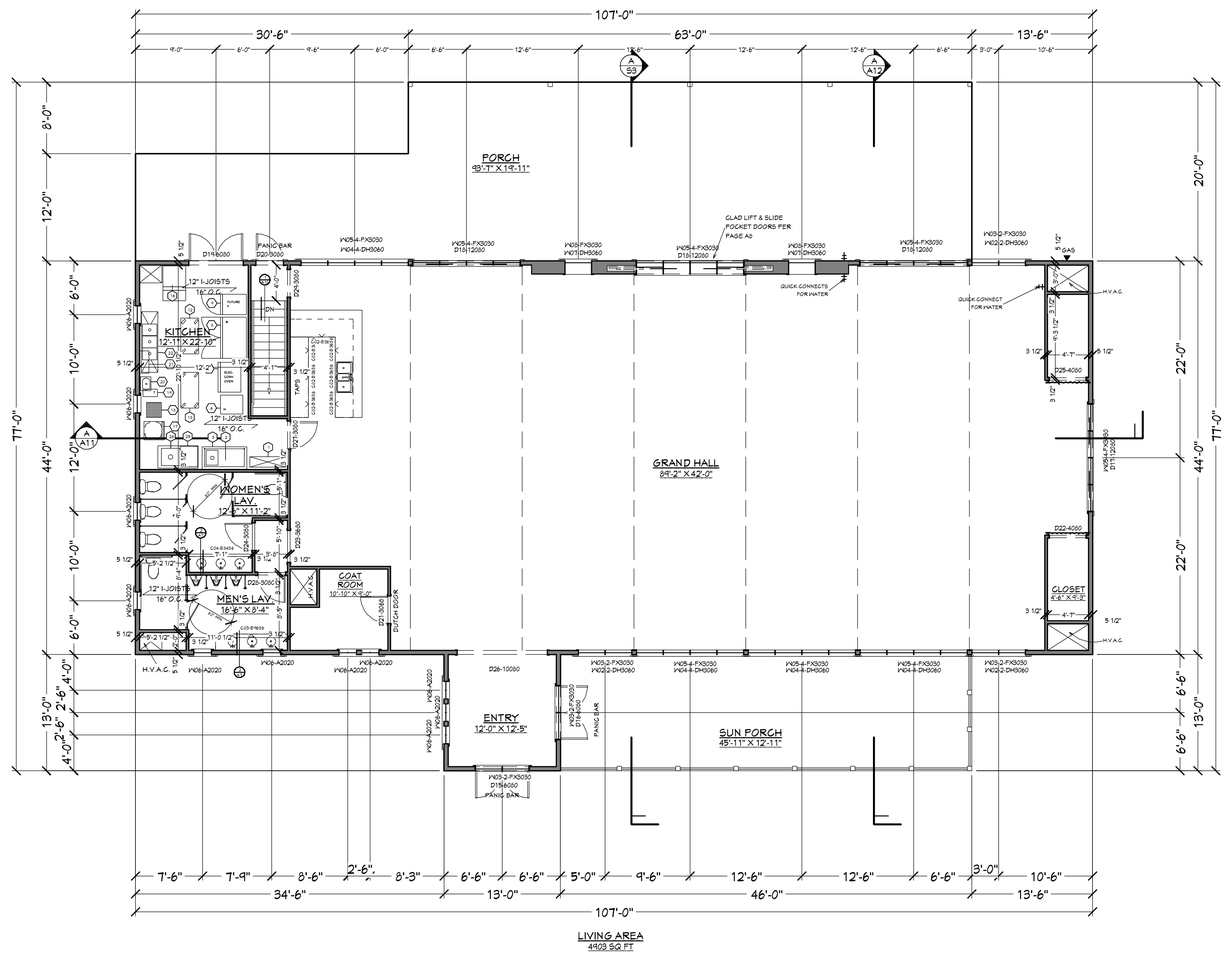
A4



FIRST FLOOR PLAN

SCALE 1/8"=1'-0"

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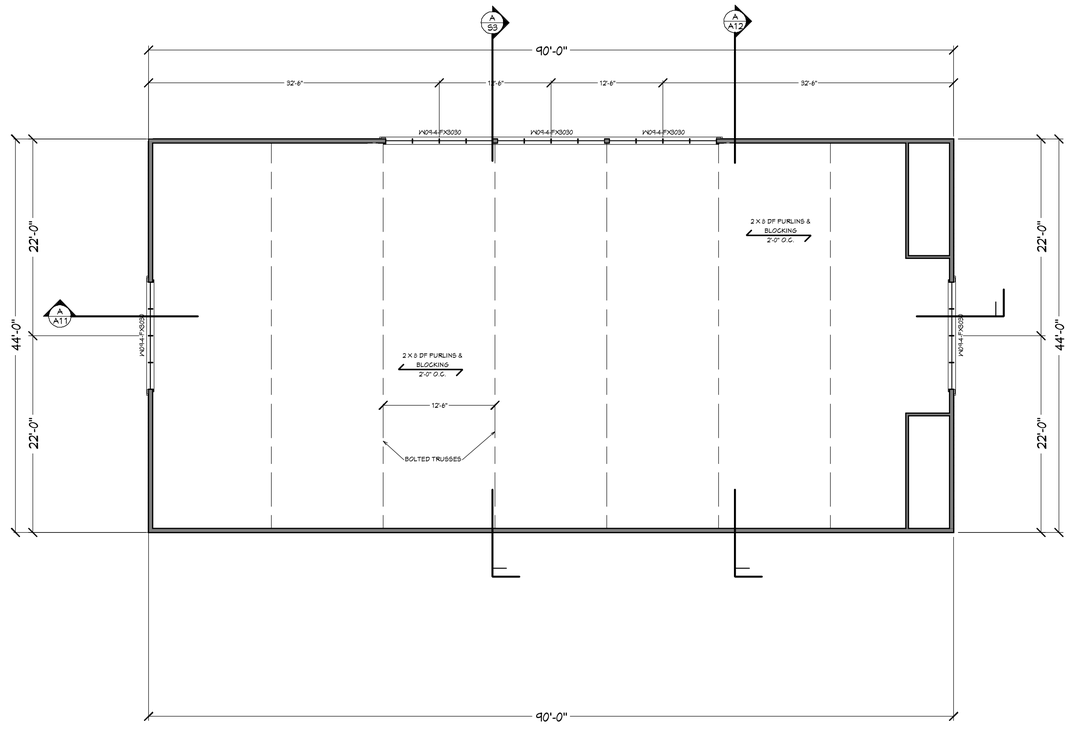
A5



UPPER LEVEL PLAN

SCALE 1/8"=1'-0"

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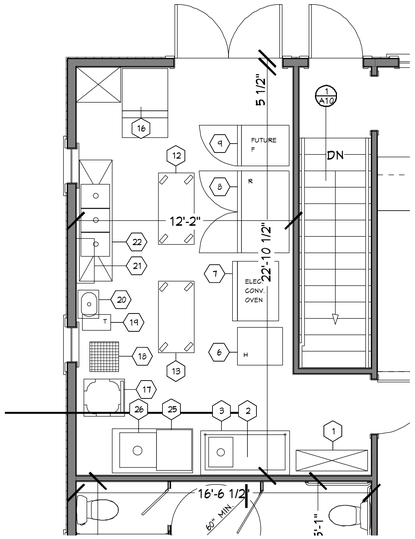
DRAWN BY: ORAN L. 12/28/2018

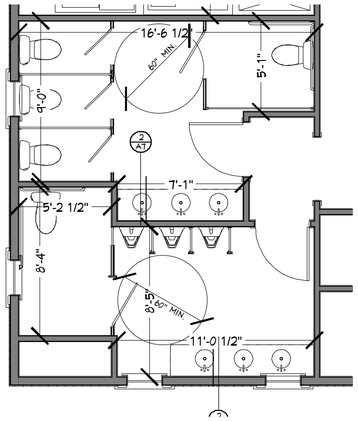
A6



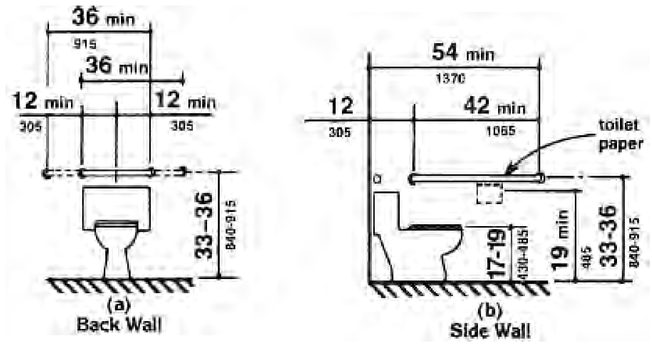
KITCHEN PLAN
SCALE 1/4"=1'-0"

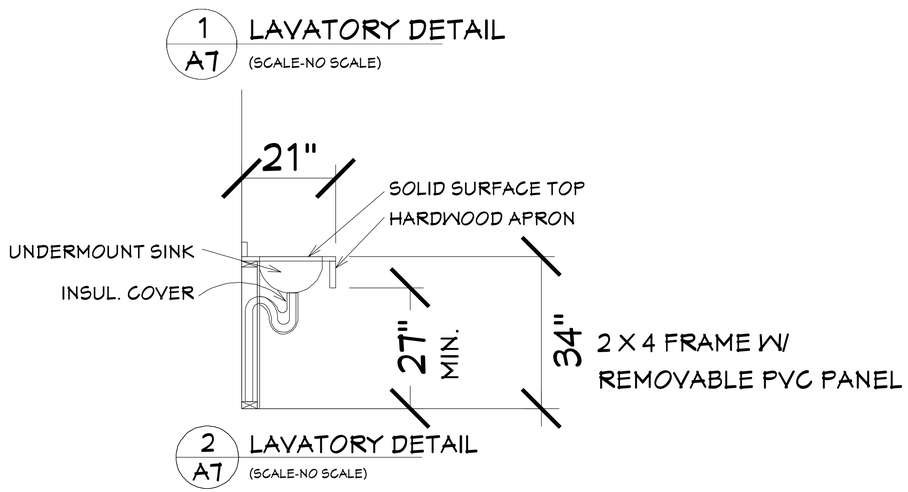
EQUIPMENT LIST

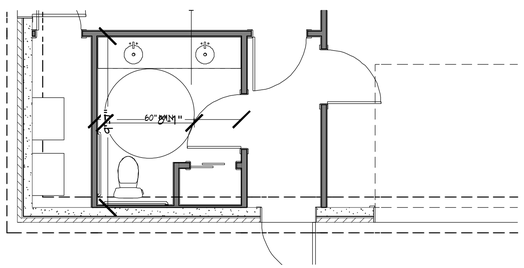
ITEM	DESCRIPTION
1	MOBILE SHELVING
2	WALL SHELF
3	WORKTABLE W/ SINK
4	SPARE NUMBER
5	SPARE NUMBER
6	HOT HOLDING CABINET
7	ELECTRIC CONVECTION OVEN
8	REACH-IN REFRIGERATOR
9	REACH-IN FREEZER
10	SPARE NUMBER
11	SPARE NUMBER
12	MOBILE WORKTABLE
13	MOBILE WORKTABLE
14	SPARE NUMBER
15	SPARE NUMBER
16	ICE MAKER W/ BIN AND WATER FILTER
17	DISH DOLLY
18	GLASS RACK DOLLY
19	TRASH CONTAINER
20	HAND SINK
21	WALL SHELF
22	3-COMPARTMENT SINK
23	SPARE NUMBER
24	SPARE NUMBER
25	UNDERCOUNTER DISHWASHER
26	1-COMPARTMENT SINK
27	SPARE NUMBER
28	SPARE NUMBER
29	SPARE NUMBER



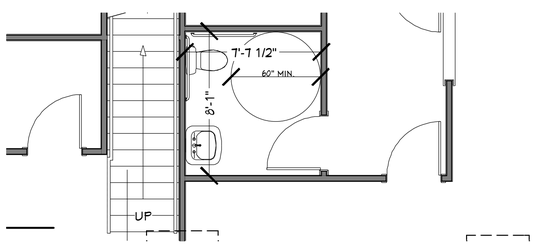
MAIN LEVEL LAV. PLAN
SCALE 1/4"=1'-0"







LOWER LEVEL LAV. PLAN
SCALE 1/4"=1'-0"



LOWER LEVEL LAV. PLAN
SCALE 1/4"=1'-0"

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A7

CABINETS

TYPE	
	BOX CABINETS, PARTIAL OVERLAY, SOFT CLOSE DRAWERS
	BOX CABINETS, FULL OVERLAY, SOFT CLOSE DRAWERS
	CUSTOM CABINETS, FULL OVERLAY, SOFT CLOSE DRAWERS
	CUSTOM CABINETS, INSET DOORS, SOFT CLOSE DRAWERS
	TO THE CEILING
	STAINED
	PAINTED

CABINET SCHEDULE

#	FLOOR	ROOM	DESCRIPTION	QTY	WIDTH	DEPTH	HEIGHT	MANUFACTURER	#	COMMENTS
C01	0	LAV.	BASE CABINET	2	48 "	21 "	36 "		C01	
C02	1	GRAND HALL	BASE CABINET	7	36 "	24 "	36 "		C02	
C03	1	MEN'S LAV.	BASE CABINET	1	96 "	21 "	36 "		C03	
C04	1	WOMEN'S LAV.	BASE CABINET	1	84 "	21 "	36 "		C04	

EXTERIOR DOORS	
	GARAGE SVS DOOR TO OUTSIDE:
	GARAGE TO HOUSE DOOR:
	FRONT DOOR:
	GREAT ROOM TO PORCH:
	UTILITY TO EXTERIOR:

GARAGE DOORS	
X	OPENERS & KEYLESS ENTRY
	MODEL:
	COLOR:

INTERIOR DOORS	
	SOLID CORE MASONITE
	WOOD INTERIOR DOORS, SPECIES:
	SECRET DOOR:
	SLIDING BARN DOOR:

SHOWER DOORS
LOCATION:

HARDWARE	

DOORS

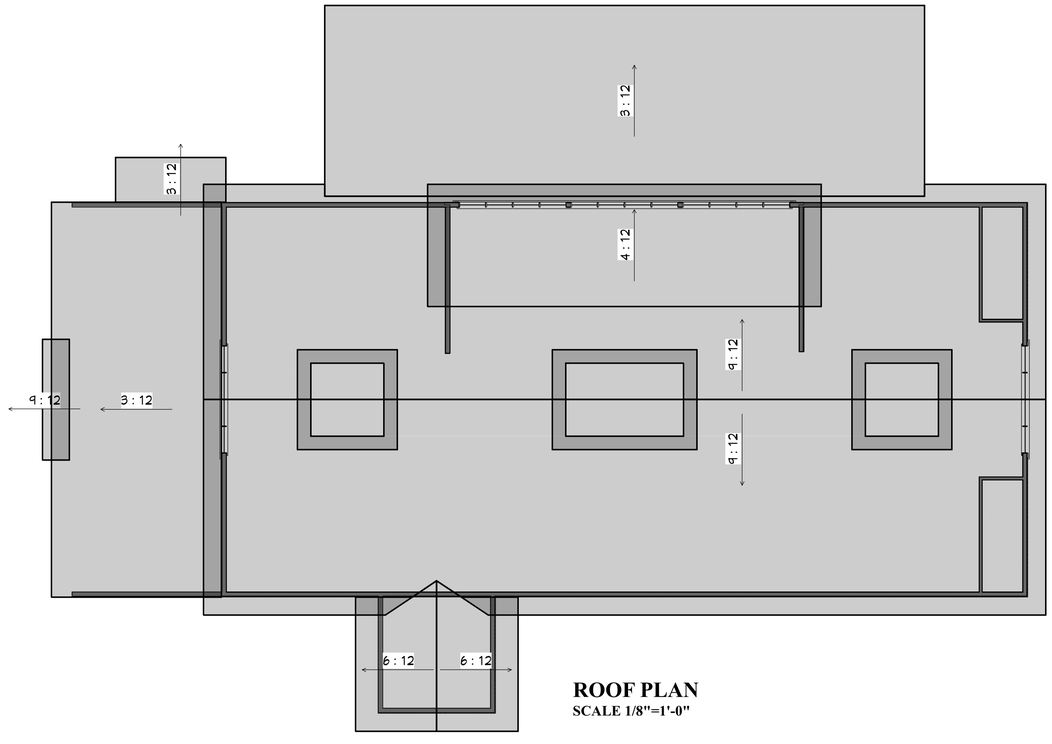
DOOR SCHEDULE

#	FLOOR	EX/IN	ROOM	SIZE	DESCRIPTION	HINGE SIDE	HARDWARE	QTY	COMMENTS	#
D01	0	EX	BRIDES ROOM	3068	HINGED	R	LOCKSET	1		D01
D02	0	EX	CART STORAGE	10080	GARAGE		OPENER	1		D02
D03	0	EX	DRESSING ROOM	3068	HINGED	R	LOCKSET	1		D03
D04	0	EX	HALL	3068	HINGED	L	PANIC BARS	1		D04
D05	0	IN	BRIDES ROOM/DRESSING ROOM	3068	HINGED	R	PASSAGE	1		D05
D06	0	IN	CART STORAGE/CART STORAGE	3068	HINGED	R	PASSAGE	1	1 HR. RATING	D06
D07	0	IN	CART STORAGE/HALL	3068	HINGED	R	PASSAGE	1	1 HR. RATING	D07
D08	0	IN	CART STORAGE/LOCKER ROOM	3068	HINGED	L	PRIVACY	1		D08
D09	0	IN	CART STORAGE/LOCKER ROOM	3068	HINGED	R	PRIVACY	1	1 HR. RATING	D09
D10	0	IN	CLOSET/BRIDES ROOM	2668	HINGED	L	PASSAGE	1		D10
D11	0	IN	CLOSET/LAV.	2668	SLIDER	L	PASSAGE	1		D11
D12	0	IN	HALL/BRIDES ROOM	3068	HINGED	R	PASSAGE	1		D12
D13	0	IN	HALL/LAV.	3068	HINGED	L	PRIVACY	1		D13
D14	0	IN	LAV./LOCKER ROOM	3068	HINGED	L	PRIVACY	1		D14
D15	1	EX	ENTRY	6080	DOUBLE HINGED	L/R	PANIC BARS	1		D15
D16	1	EX	ENTRY/SUN PORCH	6080	DOUBLE HINGED	L/R	PANIC BAR	1		D16
D17	1	EX	GRAND HALL	12080	QUAD SLIDER	L/R	LOCKSET	1		D17
D18	1	EX	GRAND HALL/PORCH	12080	QUAD SLIDER	L/R	LOCKSET	3		D18
D19	1	EX	KITCHEN/PORCH	6080	DOUBLE HINGED	L/R	LOCKSET	1		D19
D20	1	EX	STAIR/PORCH	3080	HINGED	L	LOCKSET	1		D20
D21	1	IN	COAT ROOM/GRAND HALL	3068	HINGED	R	PASSAGE	1		D21
D22	1	IN	CLOSET/GRAND HALL	4080	DOORWAY		CASED OPENING	1		D22
D23	1	IN	GRAND HALL/GRAND HALL	3680	DOORWAY		CASED OPENING	1		D23
D24	1	IN	GRAND HALL/WOMEN'S LAV.	3080	HINGED	R	PASSAGE	1		D24
D25	1	IN	GRAND HALL/CLOSET	4080	DOORWAY		CASED OPENING	1		D25
D26	1	IN	GRAND HALL/ENTRY	10080	DOORWAY		CASED OPENING	1		D26
D27	1	IN	KITCHEN/GRAND HALL	3080	HINGED	L	PASSAGE	1		D27
D28	1	IN	MEN'S LAV./GRAND HALL	3080	HINGED	L	PASSAGE	1		D28
D29	1	IN	STAIR/GRAND HALL	3080	DOORWAY		CASED OPENING	1		D29

TYPE	
	OWENS CORNING DURATION SERIES
	OWENS CORNING OAKRIDGE SERIES
	CEDAR SHAKE ROOF
	METAL ROOF
	LOCATION:
	COLOR:
	RUBBER ROOF
	LOCATION:
	COLOR:

GUTTERS	
	ALUMINUM PRE-FINISHED
	COLOR:
	COPPER
	RAIN CHAIN DOWNSPOUTS
	NONE

ROOFING



ROOF PLAN
SCALE 1/8"=1'-0"

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LABELLE/ PRESTWICK

PROJECT ADDRESS:

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REV.	1	10/25/18
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DRAWN BY: ORAN L. 12/28/2018

A8

TYPE	
	ALLIANCE VINYL WINDOWS
	SIERRA PACIFIC PREMIUM VINYL
	SIERRA PACIFIC H3 PREMIUM ALUMINUM CLAD
	EXTERIOR COLOR:
	INTERIOR SASH COLOR:
	INTERIOR JAMB COLOR:
	GRILL COLOR:
	SPECIES:
	SINGLE HUNG
	DOUBLE HUNG
	CASEMENT
	HARDWARE

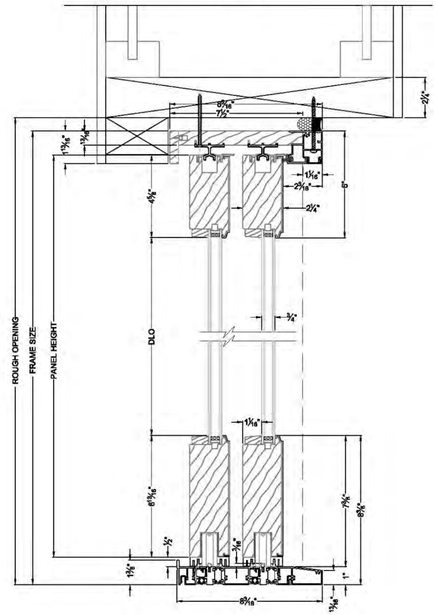
WINDOWS

WINDOW SCHEDULE							
#	FLOOR	# SIZE	DESCRIPTION	QTY	COMMENTS	U-FACTOR	#
W01	0	W01-4-DH3056	MULLED UNIT	1		0.3	W01
W02	1	W02-2-DH3060	MULLED UNIT	3		0.3	W02
W03	1	W03-2-FX3030	MULLED UNIT	5		0.3	W03
W04	1	W04-4-DH3060	MULLED UNIT	4		0.3	W04
W05	1	W05-4-FX3030	MULLED UNIT	8		0.3	W05
W06	1	W06-A2020	AWNING	11		0.3	W06
W07	1	W07-DH3060	DOUBLE HUNG	2		0.3	W07
W08	1	W08-FX3030	FIXED GLASS	2		0.3	W08
W09	2	W09-4-FX3030	MULLED UNIT	5		0.3	W09
W10	3	W10-2-FX2020	MULLED UNIT	4		0.3	W10
W11	3	W11-5-FX2020	MULLED UNIT	2		0.3	W11
W12	3	W12-FX4040	FIXED GLASS-CT	2	ROUND	0.3	W12

Clad Lift & Slide Pocketing Door

Scale: 3" = 1'-0"

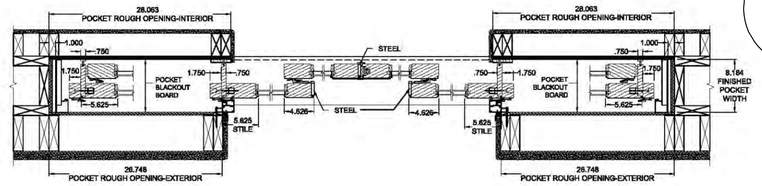
Vertical Section
2 Panel



Clad Lift & Slide Pocketing Door (Single Direction)

Scale: NTS

Horizontal Section (4 Panel) Biparting
(Structural)



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PROJECT ADDRESS:

ORDER # P07-166 ITEM # 1 SHIP WK: SALES PERSON Gerry Raupp

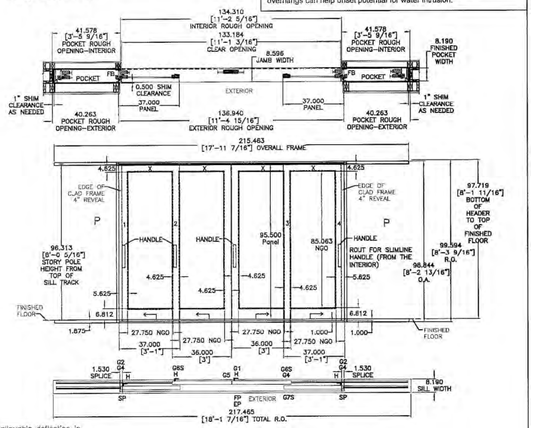
JOB NAME
WOOD CLAD COLOR X
INTERIOR PRIME YES NO
CALLOUT C452-3696-6
INT. KERF YES NO
SIMULITE 5/8" 7/8" 1-5/16" 2"
COLONIAL CONTEMPORARY
GLASS
IG TEMP SG
Low-E SPECIAL
LOCKRAIL VENT TUBE
LITE PAT
PANEL TYPE
OTHER
JAMB
4-9/16 6-9/16
OPERATION
STAT OPER PXXXXP
EXTERIOR CASING
BM STD SBM
OTHER
HARDWARE/SCREEN
COLOR

HARDWARE LEGEND
FB– FOLLOWING BOARD
EP– EDGE PULL
FP– FLUSH PULL
LS– LOCK SET
ST– STRIKE
AST– ASTRAGAL
DH– DUMMY HANDLE
SP– SILL SPLICE
GH– TOP AND BOTTOM GUIDES
H– HANDLE SET

LIFT AND SLIDE
2 1/4" PANEL
STRUCTURAL UPGRADE
DRAINING TRACK W/ FLUSH TILE

NOTE: FRAME SHIPPED UNASSEMBLED
NO EXTERIOR ACCESS

Due to the low profile track, unless otherwise stated, this door does not carry a rating for water infiltration. Each installation must be evaluated for potential of water intrusion due to exposure, elevation, climate zone and location in building. Protection afforded by special installation techniques including stepped sill applications and substantial overhangs can help offset potential for water intrusion.



NOTE: Maximum allowable deflection in header is 1/8" when installed per Sierra Pacific Windows installation instructions.

DRAWING VIEWED FROM EXTERIOR

A DIVISION OF SIERRA PACIFIC INDUSTRIES

CADD# CA-354437-42A DATE: 9/18/18 DIMENSIONS NET OUTSIDE OF FRAME

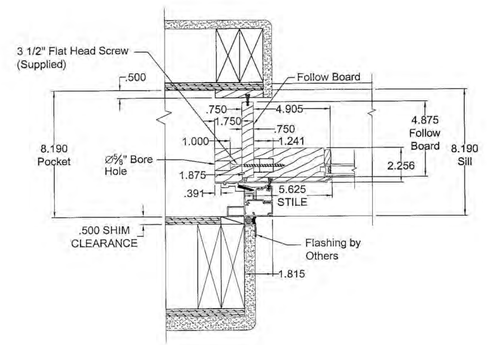
H D S E B

LOCATION SYMBOL CUSTOMER SIGNATURE:

ORDER # P07-66 ITEM # 1 SHIP WK: SALES PERSON Gerry Raupp

JOB NAME
WOOD CLAD COLOR
INTERIOR PRIME YES NO
CALLOUT
RADIUS RISE
PROFILE
DIRECT SET NO SASH A B C
INT. KERF YES NO
SIMULITE 7/8" 1-5/16" 2"
GLASS
IG TEMP SG
LOCKRAIL VENT TUBE
LITE PAT
OTHER
JAMB
4-1/8 4-9/16
6-1/8 6-9/16
6-11/16 OTHER
OPERATION
STAT OPER
EXTERIOR CASING
BM STD SBM
OTHER
HARDWARE/SCREEN
COLOR
KEYED LOCKED
OTHER

Clad Lift & Slide Pocket Door Installation
Horizontal Section Detail - Pocket
4 Panel - PXXXXP



DRAWING VIEWED FROM EXTERIOR

CADD# CA-354437-2-42A2 DATE: 9/18/18 DIMENSIONS NET OUTSIDE OF FRAME

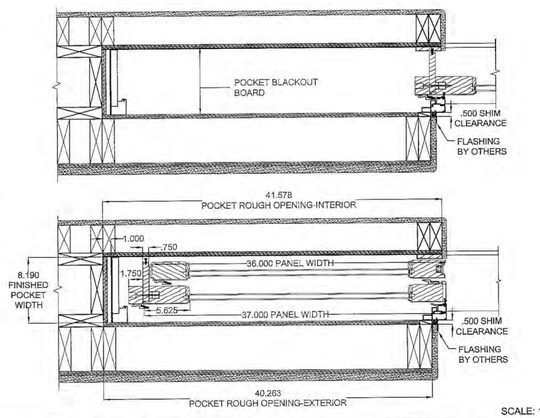
H D S E B

LOCATION SYMBOL CUSTOMER SIGNATURE:

ORDER # P07-66 ITEM # 1 SHIP WK: SALES PERSON Gerry Raupp

JOB NAME
WOOD CLAD COLOR
INTERIOR PRIME YES NO
CALLOUT
RADIUS RISE
PROFILE
DIRECT SET NO SASH A B C
INT. KERF YES NO
SIMULITE 7/8" 1-5/16" 2"
GLASS
IG TEMP SG
LOCKRAIL VENT TUBE
LITE PAT
OTHER
JAMB
4-1/8 4-9/16
6-1/8 6-9/16
6-11/16 OTHER
OPERATION
STAT OPER
EXTERIOR CASING
BM STD SBM
OTHER
HARDWARE/SCREEN
COLOR
KEYED LOCKED
OTHER

Clad Lift & Slide Pocket Door Installation
Horizontal Section Detail - Pocket
4 Panel - PXXXXP



SCALE: 1" = 1'-0"

DRAWING VIEWED FROM EXTERIOR

CADD# CA-354437-1-42A2 DATE: 9/18/18 DIMENSIONS NET OUTSIDE OF FRAME

H D S E B

LOCATION SYMBOL CUSTOMER SIGNATURE:

RELEASE FOR BID		09/28/18
RELEASE FOR CONST.		
REV.	1	10/25/18
	2	12/21/18

DRAWN BY: ORAN L. 12/28/2018

A9

FIREPLACE

TYPE	
	FIREPLACE INSERT:
	SEALED GAS UNIT
	WOOD BURNING
	DOUBLE SIDED FIREPLACE
	SEALED UNIT
	GAS UNIT
	FLUSH HEARTH
	RAISED HEARTH
	SIZE:
	SHEET METAL
	FACE MATERIAL
	TILE
	MASONRY

MILWORK

TYPE	
	WINDOW & DOOR WRAP STYLE:
	BASEBOARD STYLE:
	CROWN PROFILE:

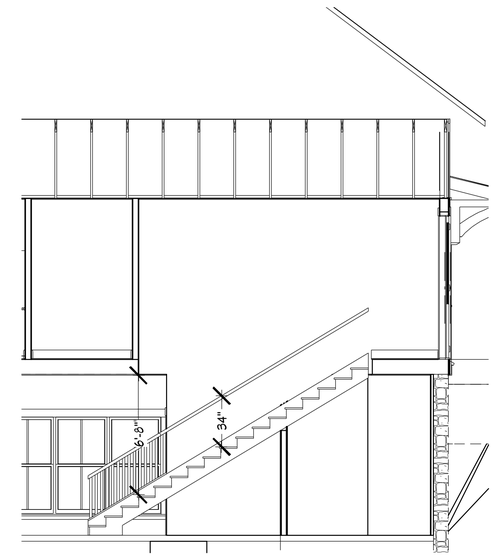
DRYWALL	
X	1/2" DRYWALL CEILING & WALLS
X	1/2" XP BOARD IN BATHROOMS
X	5/8" DRYWALL GARAGE FIREWALLS
	GARAGE DRYWALLED (FINISED W/ PRIMER)
	PRIMER
DRYWALL FINISH	
	SMOOTH
	ORANGE PEEL
	LIGHT ORANGE PEEL
	SKIP TROWEL
SPECIAL INSULATION	
	GARAGE INSULATED
	SOUND INSULATION
	LOCATION:
	INTERIOR WALL INSULATION
	LOCATION:
APPLIANCE PACKAGE	
	BRAND PREFERENCE:
	HOOD STYLE:
	DOUBLE WALL OVENS

SIDING/SCREENS PER PLAN	
	TRIM COLOR:
	FIBER CEMENT CLAP SIDING
	COLOR:
	FIBER CEMENT SHINGLE PANELS
	COLOR:
	CEDAR SHINGLE PANELS
	COLOR:
	BOARD & BATTEN
	COLOR:
	EXTERIOR BRACKETS
	MATERIAL:
	COLOR:
	SCREENS
	TYPE:
DECKING	
	SYNTHETIC DECKING
	BRAND / COLOR:
	CEDAR DECKING
	CABLE DECK BARRIER
	CUSTOM RAILING DESIGN
	TECHNO-METAL POST FOOTINGS FOR DECK
EXTERIOR MASONRY	
	LOCATION:
	TYPE:

TYPE	
1ST TO 2ND FLOOR	
	ROUGH WOOD STAIR
	ROUGH CARPETED STAIR
	MILL MADE, ROUTED STRINGER, WOOD STAIR
	MILL MADE, ROUTED STRINGER, CARPETED STAIR
STAIRS TO BASEMENT	
	ROUGH WOOD STAIR
	ROUGH CARPETED STAIR
	MILL MADE, ROUTED STRINGER, WOOD STAIR
	MILL MADE, ROUTED STRINGER, CARPETED STAIR
NEWELL, HANDRAIL, BALUSTER	
	NEWELL:
	BALUSTER:
	HANDRAIL:

STAIRS

LOWER LEVEL TO FIRST LEVEL
17 TREADS
RISER HEIGHT: 6 5/8"
TREAD DEPTH: 11"



1 / A10 **STAIR DETAIL**
SCALE 1/4"=1'-0"

JAMES MARRIOTT ARCHITECT
249 PAWLING AVE. HARTLAND, WI 53029
414.640.3329 www.marriotthomedesign.com

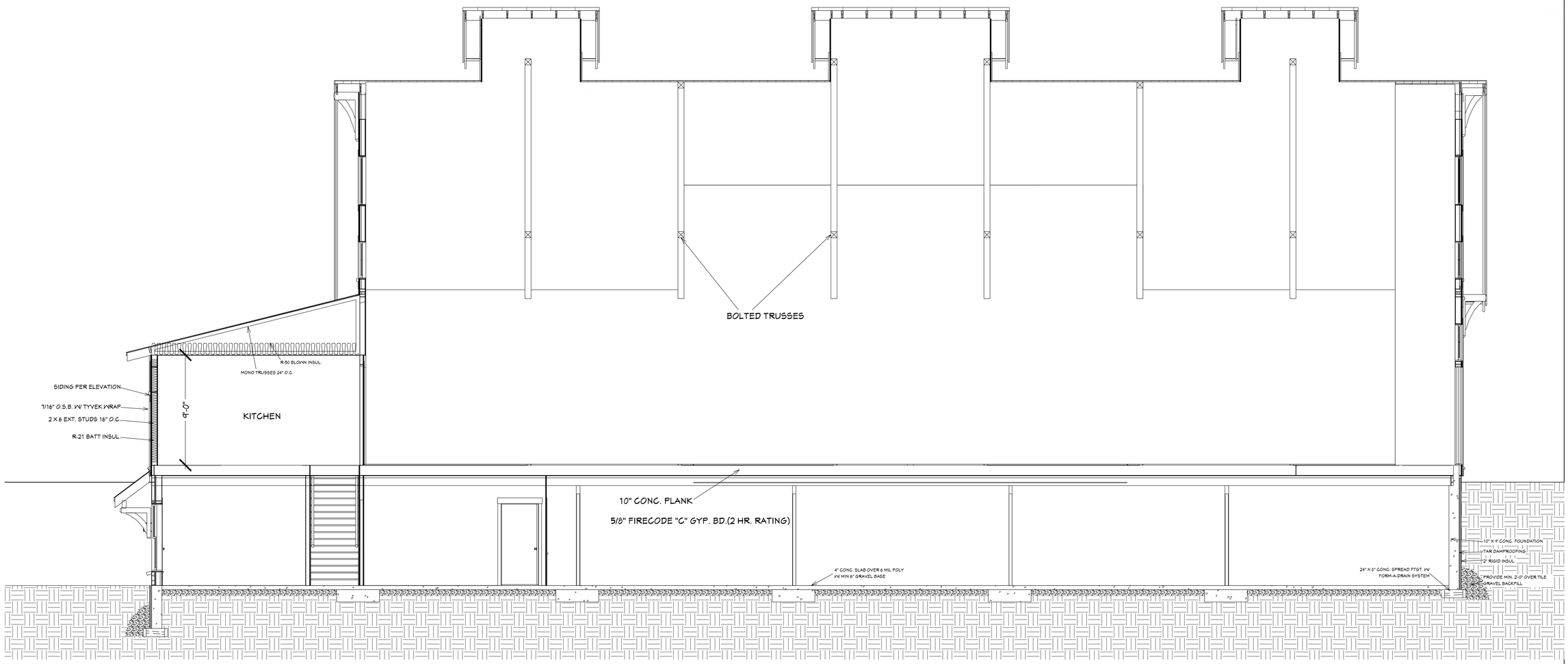
LABELLE/ PRESTWICK

PROJECT ADDRESS:

RELEASE FOR BID		09/28/18
RELEASE FOR CONST.		
REV.	1	10/25/18
	2	12/21/18

DRAWN BY: ORAN L. 12/28/2018

A10



A11 **BUILDING SECTION**
SCALE 1/4"=1'-0"

JAMES MARRIOTT ARCHITECT
249 PAWLING AVE. HARTLAND, WI 53029
414.640.3329 www.marriotthomedesign.com

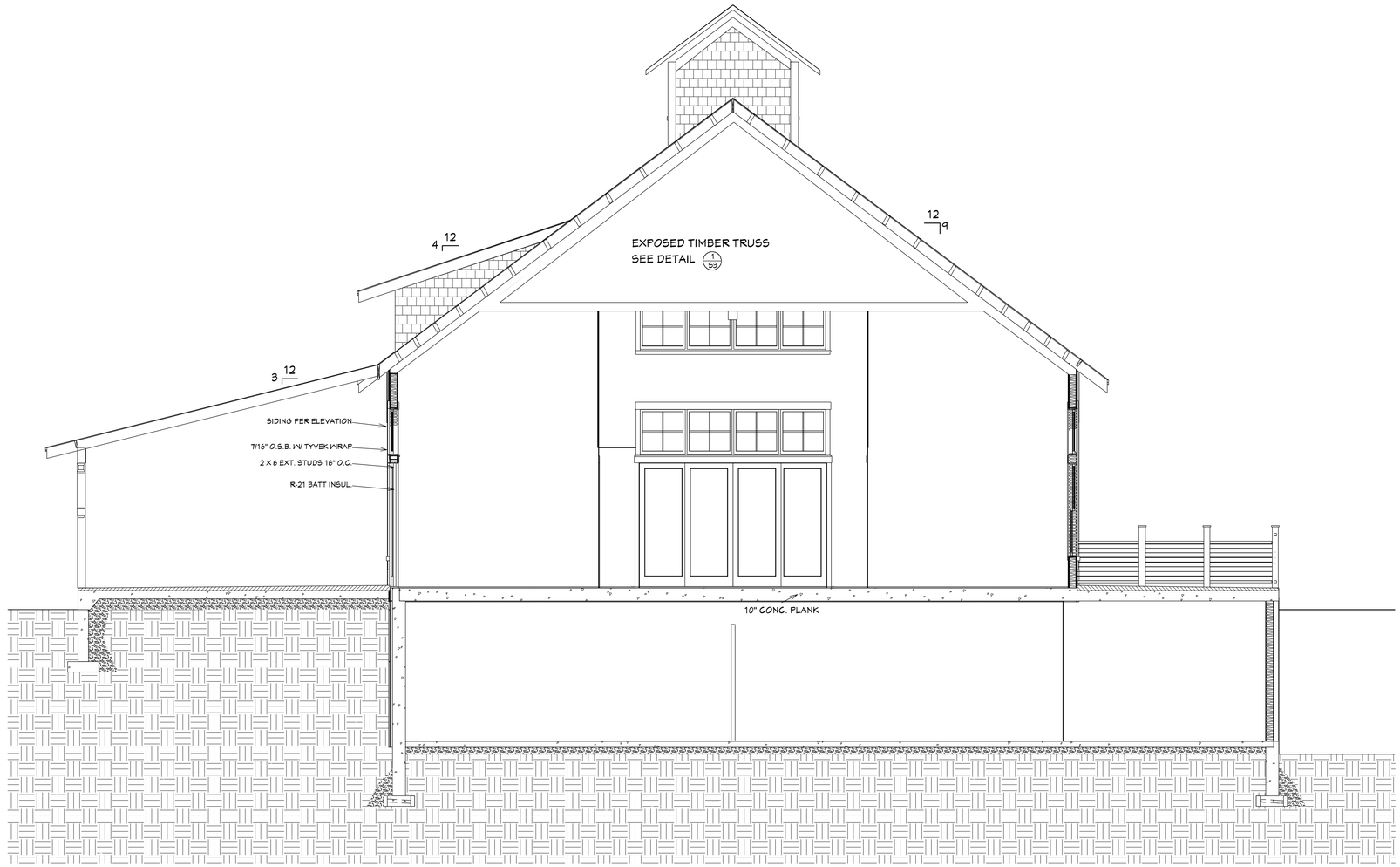
LABELLE/ PRESTWICK

PROJECT ADDRESS:

RELEASE FOR BID		09/28/18
RELEASE FOR CONST.		
REV.	1	10/25/18
	2	12/21/18

DRAWN BY: ORAN L. 12/28/2018

A11



A12 **BUILDING SECTION**
SCALE 1/4"=1'-0"

JAMES MARRIOTT ARCHITECT
249 PAWLING AVE. HARTLAND, WI 53029
414.640.3329 www.marriotthomedesign.com

LABELLE/ PRESTWICK

PROJECT ADDRESS:

RELEASE FOR BID		09/28/18
RELEASE FOR CONST.		
REV.	1	10/25/18
	2	12/21/18

DRAWN BY: ORAN L. 12/28/2018

A12

CONCRETE SPECIFICATIONS

CUTTING AND PATCHING

A. INSPECT CONDITIONS PRIOR TO WORK TO IDENTIFY SCOPE AND TYPE OF WORK REQUIRED. PROTECT ADJACENT WORK. NOTIFY OWNER OF WORK REQUIRING INTERRUPTION TO BUILDING SERVICES OR OWNER'S OPERATIONS.

B. PERFORM WORK WITH WORKMEN SKILLED IN THE TRADES INVOLVED. PREPARE SAMPLE AREA OF EACH TYPE OF WORK FOR APPROVAL.

C. CUTTING: USE CUTTING TOOLS, NOT CHOPPING TOOLS. MAKE NEAT HOLES. MINIMIZE DAMAGE TO ADJACENT WORK. CHECK FOR CONCEALED UTILITIES AND STRUCTURE BEFORE CUTTING.

D. PATCHING: MAKE PATCHES, SEAMS, AND JOINTS DURABLE AND INCONSPICUOUS. COMPLY WITH TOLERANCES FOR NEW WORK.

E. CLEAN WORK AREA AND AREAS AFFECTED BY CUTTING AND PATCHING OPERATIONS.

TESTING LABORATORY SERVICES - BY CONC. INSTALLER

TESTING SHALL BE IN ACCORDANCE W/ ASTM DESIGNATION C31 & C39 AND PER CITY OF KANSAS CITY SPECIAL INSPECTIONS REQUIREMENTS

A. VISUALLY INSPECT ON-SITE AND IMPORTED FILL AND BACKFILL, MAKING SUCH TESTS AND RETESTS AS ARE NECESSARY.

B. MAKE FIELD DENSITY TESTS ON SAMPLES FROM INPLACE MATERIAL.

C. INSPECT AND TEST THE SCARIFYING AND RECOMPACTING OF CLEANED SUBGRADE; INSPECT THE PROGRESS OF EXCAVATING, FILLING, AND GRADING; MAKE 95% DENSITY TESTS AT FILLS AND BACKFILLS; AND VERIFY COMPLIANCE WITH PROVISIONS OF THE CONTRACT DOCUMENTS AND GOVERNMENTAL AGENCIES HAVING JURISDICTION.

D. MOLDED CONCRETE CYLINDERS:
1. PROVIDE THREE TEST CYLINDERS FOR EACH 150 CU YDS, OR FRACTION THEREOF, OF EACH CLASS OF CONCRETE OF EACH DAY'S PLACEMENT.

CAST-IN-PLACE CONCRETE WORK

A. ALL CONCRETE, UNLESS OTHERWISE SPECIFIED, SHALL BE READY MIXED IN ACCORDANCE WITH ASTM C94.

B. ALL CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150 TYPE I AND SHALL BE THE PRODUCT OF ONE MANUFACTURER. THE TEMPERATURE OF CEMENT DELIVERED TO THE PLANT SHALL NOT EXCEED 150 DEGREES FAHRENHEIT AT THE TIME OF MIXING.

C. CEMENT CONTENT PER CUBIC YARD SHALL CONFORM TO THE FOLLOWING.
- 2,000 PSI = SLURRY CONCRETE (SUBMIT SUPPLIERS MIX DESIGN FOR APPROVAL.)
- 3,000 PSI = 5 BAGS, 470# MIN. CEMENT
- 3,500 PSI = 5 1/3 BAGS, 510# MIN. CEMENT
- 4,000 PSI = 5 7/8 BAGS, 550# MIN. CEMENT
- 4,500 PSI = 6 1/8 BAGS, 590# MIN. CEMENT
- 5,000 PSI = 6 3/8 BAGS, 630# MIN. CEMENT

1. 3,000 PSI CONCRETE FOR FOOTINGS MAY BE REDI-MIX SUPPLIERS STANDARD FOOTING DESIGN.
2. CONCRETE SLABS TO BE MIN. 3,000 PSI, 28 DAY COMPRESSIVE STRENGTH CONCRETE.
3. RETAINING WALLS TO BE MIN 3,000 PSI

D. ALL WATER SHALL BE CLEAN AND FREE FROM INJURIOUS AMOUNTS OF OIL, ACID, ALKALI, SALT, ORGANIC MATTER, AND OTHER DELETERIOUS SUBSTANCES, IN ALL CASES WATER FROM A MUNICIPAL WATER SOURCE WILL BE ACCEPTABLE.

E. THE USE OF CHEMICAL ADMIXTURES IN CONCRETE SHALL ALWAYS BE SUBJECT TO THE WRITTEN APPROVAL OF THE DESIGNER.

F. CURING COMPOUNDS TO CONFORM TO ASTM C309, TYPE 1, MIN. 12% WEIGHT SOLIDS CONTENT, CLEAR SOLVENT TYPE. SONNEBOURN KURE'N IS ACCEPTABLE.

G. ISOLATION JOINT MATERIAL TO BE PREMOLDED IMPREGNATED ISOLATION JOINT OF 1/2" THICKNESS UNLESS OTHERWISE IN INDICATED. THE MINIMUM DEPTH OF ISOLATION JOINT MATERIAL TO BE EQUAL TO THE SMALLER OF THE CONCRETE SLAB THICKNESS WITH WHICH IT COMES IN CONTACT.

H. VAPOR BARRIER, IF CALLED FOR ON DRAWINGS, TO BE 10 MIL POLYETHELYNE SHEET.

I. MAXIMUM WATER TO CEMENT RATIO TO BE .5 TO .55

J. SLUMPS SHALL CONFORM TO THE FOLLOWING STANDARDS:
- -3 1/2" = FORMED REINFORCED FOUNDATION WALLS AND FOOTINGS
- -3 1/2" = FORMED PLAIN FOOTINGS AND STRUCTURAL WALLS
- -5" = EARTHFORM FOUNDATIONS
- -8" = CAISSONS
- -3 1/2" = BUILDING COLUMNS
- -3 1/2" = PAVEMENTS AND SLABS ON GRADE
- -3 1/2" = STRUCTURAL SLABS
- -2" = MASS CONCRETE
- -4" = BOND BEAMS AND LINTELS
- -5" = METAL PANS AND STAIRS AND LANDINGS
- -9" HIGH SLUMP CONCRETE FOR FILLING MASONRYPIERS AND PILASTERS.

K. TOLERANCES = WHEN SPECIFIED SLUMP IS 3" OR LESS, (+) OR (-) 1/2"

L. TOLERANCES - WHEN SPECIFIED SLUMP IS GREATER THAN 3", (+) OR (-) 1"

M. ALL CONCRETE EXPOSED TO FREEZING AND THAWING AND/OR REQUIRED TO BE WATERTIGHT SHALL HAVE AN AIR CONTENT AT THE TIME OF PLACEMENT OF 4.5% TO 7.5%

N. ALL STRENGTH TESTS SHALL CONSIST OF THREE STANDARD CYLINDERS

O. PRIOR TO ALL WORK OF THIS SECTION, CAREFULLY INSPECT THE INSTALLED WORK OF OTHER TRADES AFFECTING CONCRETE PLACEMENT AND VERIFY THAT ALL SUCH WORK IS COMPLETE TO THE POINT WHERE THIS INSTALLATION MAY PROPERLY COMMENCE.

P. VERIFY THAT ALL ITEMS TO BE EMBEDDED IN CONCRETE ARE IN PLACE.

Q. VERIFY THAT CONCRETE MAY BE PLACED AT THE LINES AND ELEVATIONS INDICATED ON THE DRAWINGS, WITH ALL REQUIRED CLEARANCE FROM REINFORCEMENT.

R. CONVEY CONCRETE FROM MIXER TO PLACE OF FINAL DEPOSIT BY METHODS THAT WILL PREVENT SEPARATION AND LOSS OF MATERIAL.

S. DEPOSIT CONCRETE AS NEARLY AS POSSIBLE IN ITS FINAL POSITION TO AVOID SEGREGATION DUE TO REHANDLING AND FLOWING.

T. PLACE CONCRETE AS DRY AS POSSIBLE CONSISTENT WITH GOOD WORKMANSHIP, NEVER EXCEEDING THE MAXIMUM SPECIFIED SLUMP.

U. PLACE CONCRETE AT SUCH A RATE THAT CONCRETE IS AT ALL TIMES PLASTIC AND FLOWS READILY BETWEEN REINFORCEMENT.

V. WHEN PLACING IS ONCE STARTED, CARRY IT ON AS CONTINUOUS OPERATION UNTIL PLACEMENT OF THE PANEL OR SECTION IS COMPLETE.

W. DO NOT PLACE A GREATER AREA AT ONE TIME THAN CAN BE PROPERLY FINISHED WITHOUT CRACKING. THIS IS PARTICULARLY IMPORTANT DURING HOT OR DRY WEATHER.

X. THOROUGHLY CONSOLIDATE CONCRETE BY SUITABLE MEANS DURING PLACEMENT, WORKING IT AROUND ALL EMBEDDED FIXTURES AND INTO CORNERS OF THE FORMS.

Y. INSTALL EXPANSION AND CONTROL JOINTS ONLY IN LOCATIONS SHOWN AND AS DETAILED ON THE DRAWINGS.

Z. PLACE, CONSOLIDATE, STRIKE OFF AND LEVEL THE CONCRETE TO THE PROPER ELEVATIONS.

AA. AFTER THE CONCRETE HAS STIFFENED SUFFICIENTLY TO PERMIT THE OPERATION AND THE WATER SHEEN HAS DISAPPEARED, THE SURFACE SHALL BE FLOATED, AT LEAST TWICE, TO A UNIFORM SANDY TEXTURE.

BB. TAKE CARE THAT THE SURFACE OF THE SLAB MEETS THE SCREEDS ACCURATELY AND DOES NOT RISE ABOVE OR FALL BELOW THEM.

CC. CAREFULLY PROVIDE SLAB DEPRESSIONS AS REQUIRED FOR THE FINISHED INDICATED ON THE DRAWINGS.

DD. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, MAKE ALL SLABS EVEN AND UNIFORM IN APPEARANCE AND IN TRUE PLANES, SO THE DEPRESSIONS BETWEEN HIGH SPOTS DO NOT EXCEED 5/16" UNDER A 10'-0" STRAIGHT EDGE.

EE. WHERE FLOOR DRAINS OR FLOOR SLOPES ARE INDICATED, SLOPE SLABS UNIFORMLY TO PROVIDE EVEN FALL FOR DRAINAGE.

FF. TROWEL ALL INTERIOR SLABS TO A SMOOTH, HARD FINISH USING STEEL TROWELS.

GG. WHERE "BROOM FINISH" IS INDICATED AND WHERE NO OTHER EXTERIOR SLAB FINISH IS INDICATED, FINISH THE EXPOSED CONCRETE SURFACE BY LIGHTLY COMBING WITH A MEDIUM STIFF BROOM AFTER FLOATING IS COMPLETE.

HH. RUBBED SURFACES SHALL BE PROVIDED ON ALL EXPOSED WALLS AND PIERS, IMMEDIATELY AFTER FORMS ARE REMOVED. EXPOSED SURFACE SHALL BE WETTED AND RUBBED WITH CARBORUNDUM BRICK OR OTHER ABRASIVE UNTIL EVEN, SMOOTH, AND UNIFORM IN APPEARANCE.

II. PVC WATERSTOPS SHALL BE INSTALLED IN LOCATIONS INDICATED. CONTRACTOR SHALL ATTACH WATERSTOPS FIRMLY OT REINFORCEMENT AND/OR FORMWORK TO ENSURE THAT WATERSTOP WILL NOT BE DISPLACED OR BENT DURING CONCRETING OPERATIONS.

JJ. CONCRETE FLOOR POUR PROCEDURES
1. POUR AFTER THE ROOF IS ON.
2. MAKE SURE THERE IS EQUALIZED TEMPERATURE BETWEEN THE SUBGRADE AND THE AIR TEMPERATURE DURING SUMMER POURS.
3. SUBGRADE SHOULD BE WET DOWN PRIOR TO POURING OF CONCRETE.
4. THE CONCRETE WILL BE POURED PER OUR SPECIFICATIONS WITH A 3 1/2" SLUMP, PLUS OR MINUS 1.
5. MESH WILL BE FLAT, NOT ROLLED.
6. THE FLOOR WILL BE SAWCUT PER PLANS ON A GRID PER PLANS GETTING ON THE FLOOR AS SOON AS POSSIBLE WITH THE SOFTCUT SAW AFTER IT IS POURED.
7. PUT A HARD TROWEL FINISH ON THE CONCRETE.
8. PUT ON A KURE-N-SEAL FINISH.

STRUCTURAL STEEL

STRUCTURAL STEEL GRADES, UNLESS NOTED OTHERWISE

WIDE-FLANGES:	A992, FY = 50 KSI
TUBES:	A500, GRADE B, FY = 46 KSI
PLATES:	A36, FY = 36 KSI
ANGLES & CHANNELS:	A36, FY = 36 KSI

INSTALL ¾" STIFFENER N.S. & F.S. IN ALL STEEL BEAMS THAT CANTILEVER OVER SUPPORTS. STIFFENERS TO BE LOCATED IN BEAM AT CENTER OF SUPPORT.

FABRICATION AND ERECTION OF STRUCTURAL STEEL MEMBERS SHALL BE GOVERNED BY THE AISC CODE OF STANDARD PRACTICE.

ALL WELDERS TO BE CERTIFIED. ALL WELDING TO CONFORM TO AWS D1.1 LATEST EDITION USING E70-XX ELECTRODES.

BOLTED CONNECTIONS TO USE ¾" DIA. ASTM A-325 BOLTS UNLESS SHOWN OTHERWISE. PROVIDE MAXIMUM NUMBER OF BOLTS IN A SINGLE LINE WITH 3" GAGE. PROVIDE WASHERS FOR ALL ANCHOR BOLTS (ASTM A-307).

STEEL CONTRACTOR TO PUNCH ALL HOLES FOR ARCHITECTURAL DETAILS.

PROVIDE AND MAINTAIN TEMPORARY BRACING OF STEEL UNTIL SECURELY INCORPORATED INTO CONSTRUCTION SUCH AS SHEAR WALLS, X-BRACING, ETC.

ALL STEEL BEAMS SHALL BE FABRICATED WITH THE NATURAL CAMBER (WITHIN THE MILL TOLERANCE) LOCATED ABOVE THE HORIZONTAL CENTERLINE BETWEEN THE END CONNECTIONS.

STEEL CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS BEFORE FABRICATION AND ERECTION OF STEEL STAIRS.

DESIGN LOADS

CODES USED:
STATE OF WISCONSIN BUILDING CODE
ASCE 7-10 AND IBC 2015

ROOF DEAD - 15 PSF
ROOF LIVE - 30 PSF GROUND SNOW

SNOW LOAD:
pg = 30 PSF
I = 1.0

WIND LOAD:
BUILDING CATEGORY II
V = 115 MPH
I = 1.0
EXPOSURE C ASSUMED
FACTORED WIND - 27.8 PSF
FACTORED UPLIFT DUE TO WIND ON ROOF = 20.1 PSF

SEISMIC:
SEISMIC DESIGN CATEGORY - B
Sds = 0.118g
Sd1 = 0.073g
SITE CLASS "D"
SEISMIC FORCE RESISTING SYSTEMS :
WOOD SHEAR WALLS

MAXIMUM LIVE LOAD DEFLECTION = L/360
MAXIMUM TOTAL LOAD DEFLECTION = L/240

DESIGN STRESSES

CONCRETE AT 28 DAYS
F'c = 3000 PSI FOR FOOTINGS
4,000 PSI FOR WALLS
SOIL BEARING PRESSURE
3,000 PSF - ASSUMED

ROUGH CARPENTRY & WOOD FRAMING SPECIFICATIONS

A. Provide rough carpentry work:

1. Wood framing.
2. Sheathing.
3. Subflooring.
4. Underlayment.
5. Backing panels for utilities.
6. Nailers, wood blocking, furring, roof and window blocking.

1.02 SUBMITTALS

A. Submit for approval product data.

1.03 QUALITY ASSURANCE

A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

1.04 RELATED SECTIONS

A. The following sections contain requirements that relate to this section:

1. 01300 Submittals
2. 07530 Single-Ply Membrane Roofing
3. 07600 Flashing and Sheet Metal
4. 07662 Metal Fascia and Copings
5. 07700 Roof Specialties
6. 09110 Metal Stud System

PART 2 - PRODUCTS

2.01 MATERIALS

A. Lumber, finished 4 sides, 19% maximum moisture content:

1. Light framing: Construction grade Douglas Fir or Southern Pine, appearance grade where exposed.
2. Structural framing and timbers: No. 1 grade Douglas fir or southern pine, appearance grade where exposed.
3. Boards: Construction grade.

B. Wood for nailers, blocking, furring and sleepers: Construction grade, finished 4 sides, 19% maximum moisture content. Pressure preservative treat items in contact with roofing, flashing, waterproofing, masonry, concrete or the ground. Provide blocking for all mounted items, including:

1. Casework and shelving.
2. Handrails and railings.
3. Toilet accessories.
4. Window treatment.

C. Plywood, APA rated for use and exposure:

1. Combination subfloor/underlayment: APA Sturd-I-Floor, Exposure 1.
2. Subflooring: APA sheathing.
3. Wall sheathing: APA sheathing, C-D plugged, Exterior.
4. Roof sheathing: APA sheathing, Exterior.
5. Backing panels: APA C-D plugged interior with exterior glue, fire-retardant treated, 3/4" thick.
6. Underlayment.

D. Building paper: Asphalt saturated felt, non-perforated, ASTM D 226, Type 1.

E. Air infiltration barrier: DuPont Tyvek or approved equal.

F. Wood treatment:

1. Preservative treatment: Pressure-treated with waterborne preservatives, to comply with AWPB LP-2 for above-ground items LP-22 for ground contact items. Kiln dry after treatment to 19% max. moisture content for lumber and 15% for plywood. Treat above-ground wood exposed to deterioration by moisture and all wood in contact with the ground or fresh water.

2. Fire-retardant treatment: Pressure impregnated, to comply with AWPA C20 for lumber and AWPA C27 for plywood; provide where indicated and where required by code. Do not use fire-retardant treatment containing ammonium phosphates.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Wood framing: Comply with recommendations of NFPA Manual for House Framing, NFPA Recommended Nailing Schedule, and NFPA National Design Specifications for Wood Construction.

B. Plywood: Comply with recommendations of APA Design and Construction Guide - Residential and Commercial.

C. Provide nailers, blocking and grounds where required. Set work plumb, level and accurately cut.

D. Provide roof blocking per standard details.

E. Provide blocking for cabinets and all items listed under 2.01 (B1-4).

F. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction. Coordinate with other work.

G. Comply with manufacturer's requirements for cutting, handling, fastening and working treated materials.

H. Restore damaged components. Protect work from damage.

COLD FORMED METAL FRAMING

1.2 GENERAL REQUIREMENTS
A. FURNISH AND INSTALL COLD FORMED METAL FRAMING COMPLETE, IN PLACE.
B. THIS SECTION INCLUDES:
1. LOAD-BEARING PUNCHED CHANNEL STUDS.
2. C-SHAPED STEEL STUDS.
3. C-SHAPED STEEL JOISTS.

1.3 SUBMITTALS
A. PRODUCT DATA: SUBMIT MANUFACTURER'S PRODUCT DATA FOR EACH TYPE OF COLD-FORMED METAL FRAMING, ACCESSORY, AND PRODUCT SPECIFIED.
B. SHOP DRAWINGS: SUBMIT SHOP DRAWINGS FOR SPECIAL COMPONENTS AND INSTALLATIONS NOT FULLY DIMENSIONED OR DETAILED IN MANUFACTURER'S PRODUCT DATA. INCLUDE PLACING DRAWINGS FOR FRAMING MEMBERS THAT SHOW SIZE AND GAGE DESIGNATIONS, NUMBER, TYPE, LOCATION AND SPACING. INDICATE SUPPLEMENTAL BRACING, SPLICES, ACCESSORIES, AND DETAILS AS REQUIRED FOR PROPER INSTALLATION.

1.4 QUALITY ASSURANCE
A. COMPONENT DESIGN: CALCULATE STRUCTURAL PROPERTIES OF STUDS AND JOISTS IN ACCORDANCE WITH AISI "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
B. STRUCTURAL PERFORMANCE: ENGINEER, FABRICATE, AND ERECT COLD-FORMED METAL FRAMING TO WITHSTAND DESIGN LOADS WITHIN LIMITS AND UNDER CONDITIONS REQUIRED.
C. INSTALLER QUALIFICATIONS: ENGAGE AN EXPERIENCED INSTALLER WHO HAS COMPLETED COLD FORMED METAL FRAMING SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THAT INDICATED FOR THIS PROJECT AND WITH A RECORD OF SUCCESSFUL IN SERVICE PERFORMANCE.

1.5 DELIVERY, STORAGE, AND HANDLING
A. PROTECT COLD-FORMED METAL FRAMING FROM CORROSION, DEFORMATION, AND OTHER DAMAGE DURING DELIVERY, STORAGE, AND HANDLING.
B. STORE COLD-FORMED METAL FRAMING, PROTECT WITH A WATERPROOF COVERING, AND VENTILATE TO AVOID CONDENSATION.

2.3 MATERIALS
A. SYSTEM COMPONENTS: MANUFACTURER'S STANDARD LOAD-BEARING STEEL STUDS AND JOISTS OF TYPE, SIZE, SHAPE AND GAGE AS INDICATED. WITH EACH TYPE OF METAL FRAMING REQUIRED, PROVIDE MANUFACTURER'S STANDARD STEEL RUNNERS (TRACKS), BLOCKING, LINTELS, CLIP ANGLES, SHOES, REINFORCEMENTS, FASTENERS, AND ACCESSORIES AS RECOMMENDED BY MANUFACTURER FOR APPLICATION INDICATED AS NEEDED TO PROVIDE A COMPLETE METAL FRAMING SYSTEM.

2.4 FABRICATION
A. MATERIALS AND FINISHES:
1. FOR 16-GAGE AND HEAVIER UNITS, FABRICATE METAL FRAMING COMPONENTS OF STRUCTURAL QUALITY STEEL SHEET WITH A MINIMUM YIELD POINT OF 40,000 PSI; ASTM A 446, A 570, OR A 611.
2. FOR 18-GAGE AND LIGHTER UNITS, FABRICATE METAL FRAMING COMPONENTS OF COMMERCIAL QUALITY STEEL SHEET WITH A MINIMUM YIELD POINT OF 33,000 PSI; ASTM A 446, A 570, OR A 611.
3. PROVIDE GALVANIZED FINISH TO METAL FRAMING COMPONENTS THAT COMPLY WITH ASTM A 525 FOR MINIMUM G 60 COATING.
4. ELECTRODES FOR WELDING: COMPLY WITH AWS CODE AND RECOMMENDATIONS OF FRAMING MANUFACTURER.
5. GALVANIZING REPAIR: USE MATERIALS AND METHODS FOR REPAIR OF GALVANIZED SURFACES DAMAGED BY WELDING, COMPLYING WITH ASTM A 780.
6. PREFABRICATION: STRUCTURAL FRAMING COMPONENTS MAY BE PREFABRICATED INTO PANELS PRIOR TO ERECTION. FABRICATE PANELS PLUMB, SQUARE, TRUE TO LINE AND BRACED AGAINST RACKING WITH JOINTS WELDED. PERFORM LIFTING OF PREFABRICATED PANELS TO PREVENT DAMAGE OR DISTORTION.
7. FABRICATE PANELS IN JIG TEMPLATES TO HOLD MEMBERS IN PROPER ALIGNMENT AND POSITION AND TO ASSURE CONSISTENT COMPONENT PLACEMENT.
8. FASTENINGS: ATTACH SIMILAR COMPONENTS BY WELDING. ATTACH DISSIMILAR COMPONENTS BY WELDING, BOLTING, OR SCREW FASTENERS, AS STANDARD WITH MANUFACTURER. WIRE TYPING OF FRAMING COMPONENTS IS NOT PERMITTED.
9. FABRICATION TOLERANCES: FABRICATE PANELS TO A MAXIMUM ALLOWABLE TOLERANCE VARIATION FROM PLUMB, LEVEL, AND TRUE TO LINE OF 1/8 INCH IN 10 FEET.

3.1 EXAMINATION / PREPARATION
A. PRIOR TO ERECTION OF THE WORK OF THIS SECTION, VERIFY THAT ALL WORK OF OTHER TRADES IS SUFFICIENTLY COMPLETE TO ALLOW THIS INSTALLATION TO PROCEED AND VERIFY THAT ALL SUCH WORK ENABLES THE WORK OF THIS SECTION TO BE COMPLETED IN ACCORDANCE WITH DRAWINGS AND THESE SPECIFICATIONS. IN THE EVENT OF DISCREPANCY, IMMEDIATELY NOTIFY DESIGNER AND PROCEED AS HE DIRECTS.

3.3 INSTALLATION
A. INSTALLATION: INSTALL METAL FRAMING SYSTEMS IN ACCORDANCE WITH MANUFACTURERS PRINTED OR WRITTEN INSTRUCTION AND RECOMMENDATIONS UNLESS OTHERWISE INDICATED.
1. INSTALL CONTINUOUS TRACKS SIZED TO MATCH STUDS. SECURE TRACKS AS RECOMMENDED BY STUD MANUFACTURER FOR TYPE OF CONSTRUCTION INVOLVED.
B. SET STUDS PLUMB, EXCEPT AS NEEDED FOR DIAGONAL BRACING OR REQUIRED FOR NONPLUMB WALLS OR WARPED SURFACES AND SIMILAR REQUIREMENTS.
C. INSTALL SUPPLEMENTARY FRAMING, BLOCKING AND BRACING IN METAL FRAMING SYSTEM WHEREVER WALLS OR PARTITIONS ARE INDICATED TO SUPPORT FIXTURES, EQUIPMENT, SERVICES, CASEWORK, HEAVY TRIM AND FURNISHINGS, AND SIMILAR WORK.
D. SECURE STUDS TO TOP AND BOTTOM RUNNER TRACKS BY EITHER WELDING OR SCREW FASTENING AT BOTH INSIDE AND OUTSIDE FLANGES.
E. INSTALL HORIZONTAL STIFFENERS IN STUD SYSTEM, SPACES (VERTICAL DISTANCE) AT NOT MORE THAN 54 INCHES O.C. WELD AT EACH INTERSECTION.
F. INSTALLATION OF JOISTS: INSTALL LEVEL AND PLUMB, COMPLETE WITH BRACING AND REINFORCING AS INDICATED. PROVIDE NOT LESS THAN 1-1/2-INCHES END BEARING.
G. REINFORCE ENDS WITH END CLIPS, STEEL HANGERS, STEEL ANGLE CLIPS, STEEL STUD SECTION, OR AS OTHERWISE RECOMMENDED BY JOIST MANUFACTURER.

3.4 ADJUSTING AND CLEANING
A. MATERIALS SHOULD BE FREE OF DIRT, MUD, ETC. WHEN INSTALLED.

3.5 PROTECTION
A. PROTECT MATERIALS DURING STORAGE AND ERECTION FROM DAMAGE OR DETERIORATION.
B. PROVIDE FINAL PROTECTION AND MAINTAIN CONDITIONS IN A MANNER ACCEPTABLE TO MANUFACTURER AND INSTALLER TO ENSURE THAT THE COLD FORMED METAL FRAMING IS WITHOUT DAMAGE OR DETERIORATION AT THE TIME OF SUBSTANTIAL COMPLETION.

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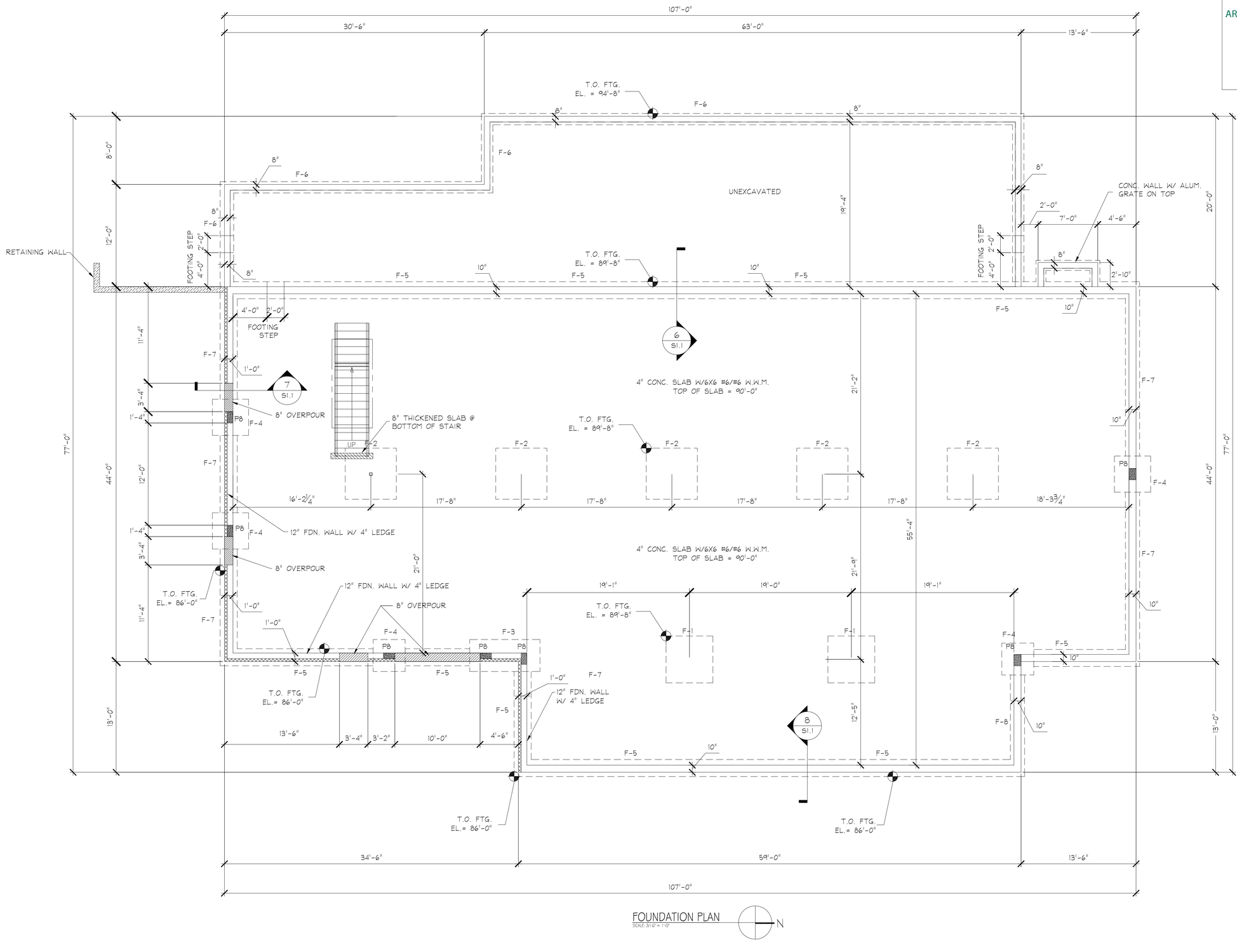

FOUNDATION PLAN

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

N

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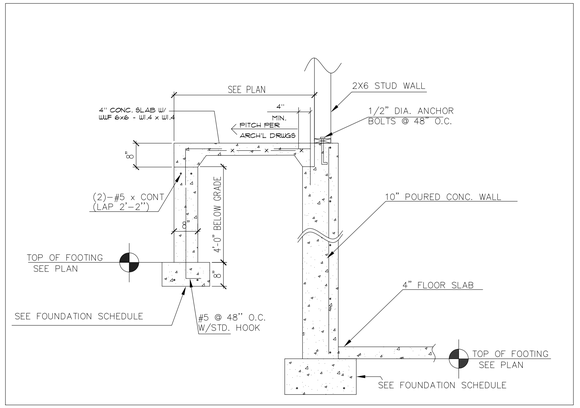
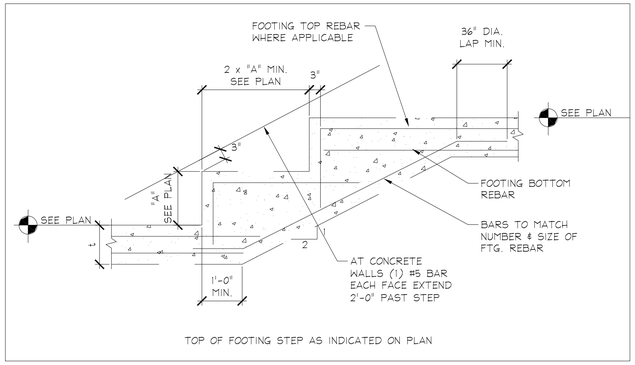
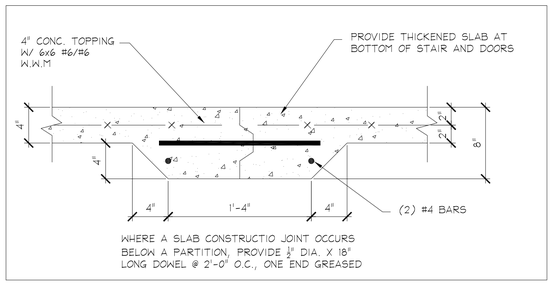
FOUNDATION SCHEDULE		
MARK	SIZE	REINFORCEMENT
F-1	5'-6"x5'-6"x14"	6-#5 BARS E.W.
F-2	6'-0"x6'-0"x16"	7-#5 BARS E.W.
F-3	8'-3"x3'-9"x12"	9-#5 BARS E.W.
F-4	3'-9"x3'-9"x12"	4-#5 BARS E.W.
F-5	2'-0"x12"	2-#5 BARS L.W. & #5@4' o.c. S.W.
F-6	1'-4"x10"	2-#5 BARS L.W. & #5@4' o.c. S.W.
F-6	1'-8"x10"	2-#5 BARS L.W. & #5@4' o.c. S.W.



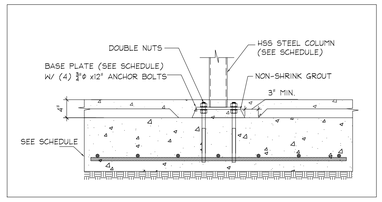
1 TYP. STOOP DETAIL
N.T.S



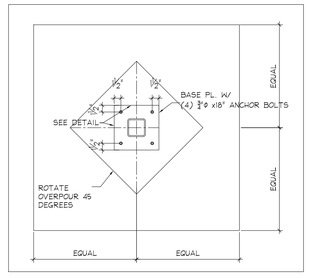
2 TYP. STEPPED WALL FTG.
SCALE: 3/4"=1'-0"



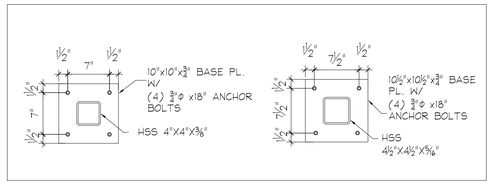
3 THICKENED SLAB DETAIL
SCALE: 1 1/2"=1'-0"



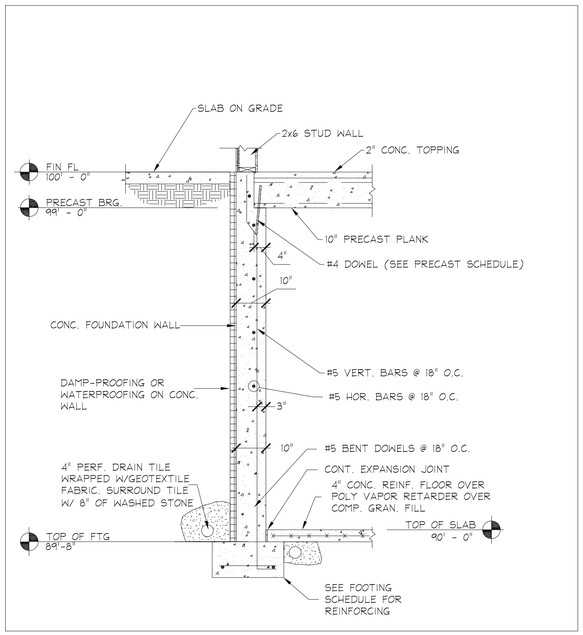
4 STEEL COLUMN ON FOOTING
SCALE: 3/4"=1'-0"



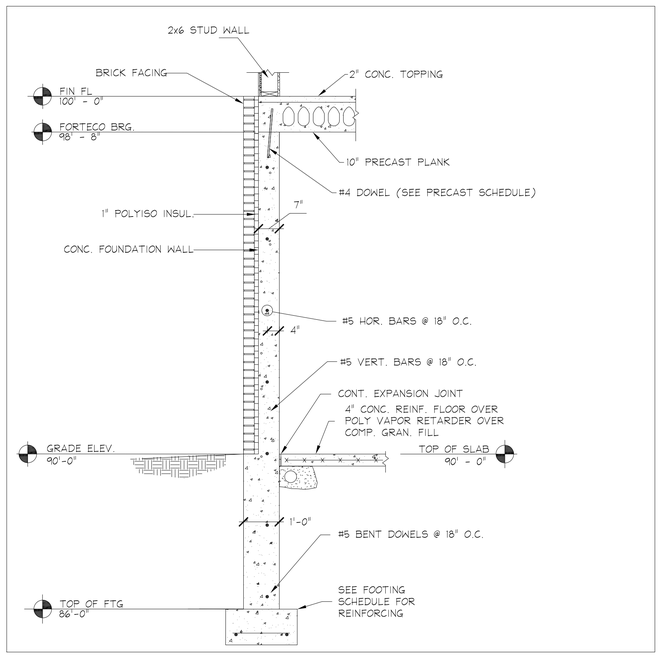
5 PLAN VIEW PAD FOOTING
SCALE: 3/4"=1'-0"



9 BASE PLATE DETAILS
SCALE: 3/4"=1'-0"



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



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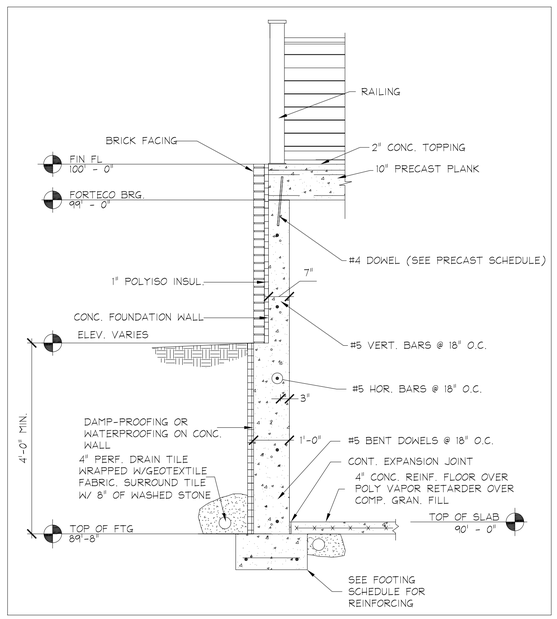

8 DETAIL
SCALE: 1/2"=1'-0"

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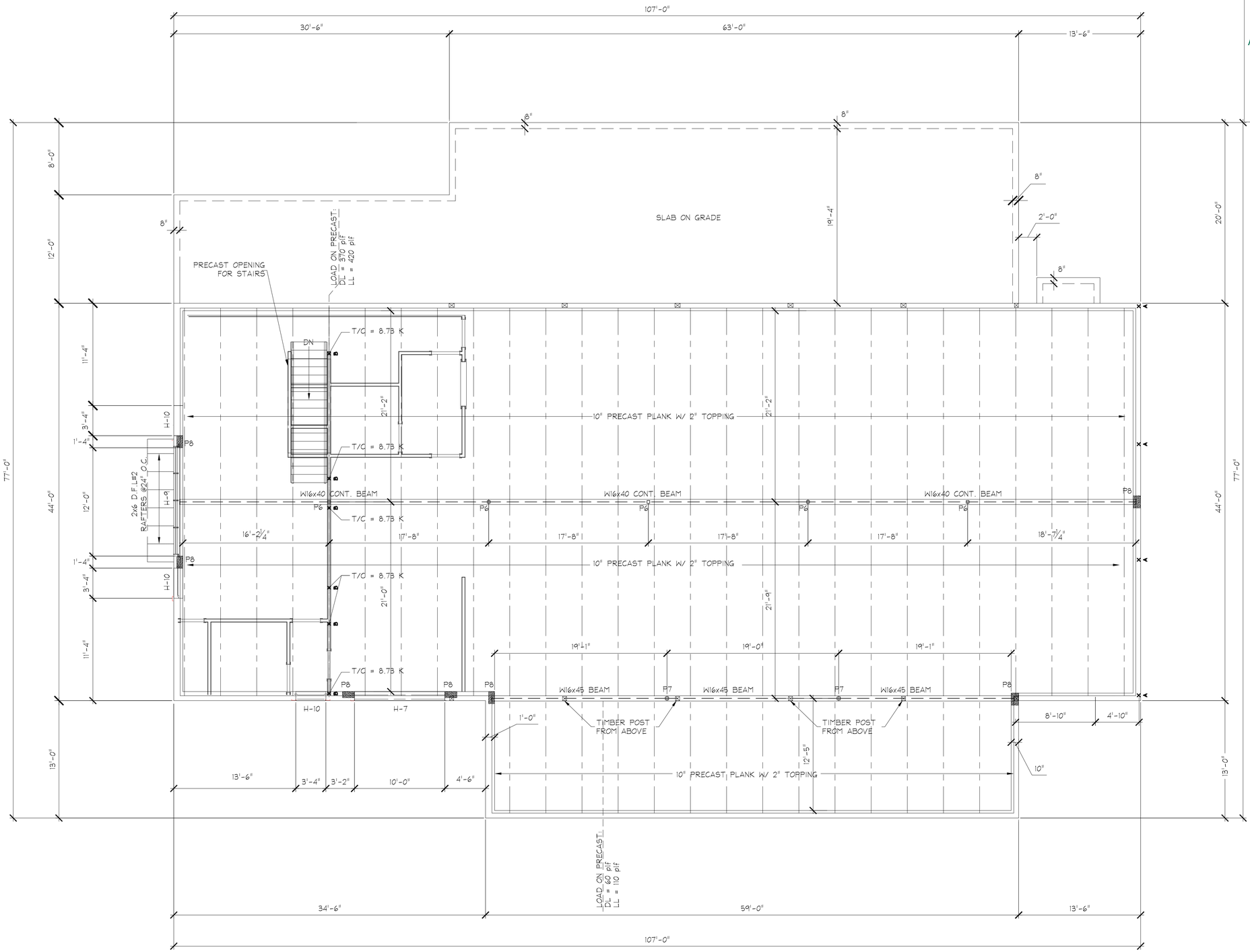

NOTES:

X = SIMPSON HD9B HOLD-DOWN W/ ⅞"Φ ANCHOR BOLT W/ 4.5" MIN. @ END STUD

A

X

B = SIMPSON HDI2 HOLD-DOWN W/ 1"Φ ANCHOR BOLT W/ 3.5" MIN. @ END STUD

T/C = REVERSIBLE TENSION AND COMPRESSION FORCE DUE TO LATERAL LOAD

1ST FLOOR FRAMING PLAN

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

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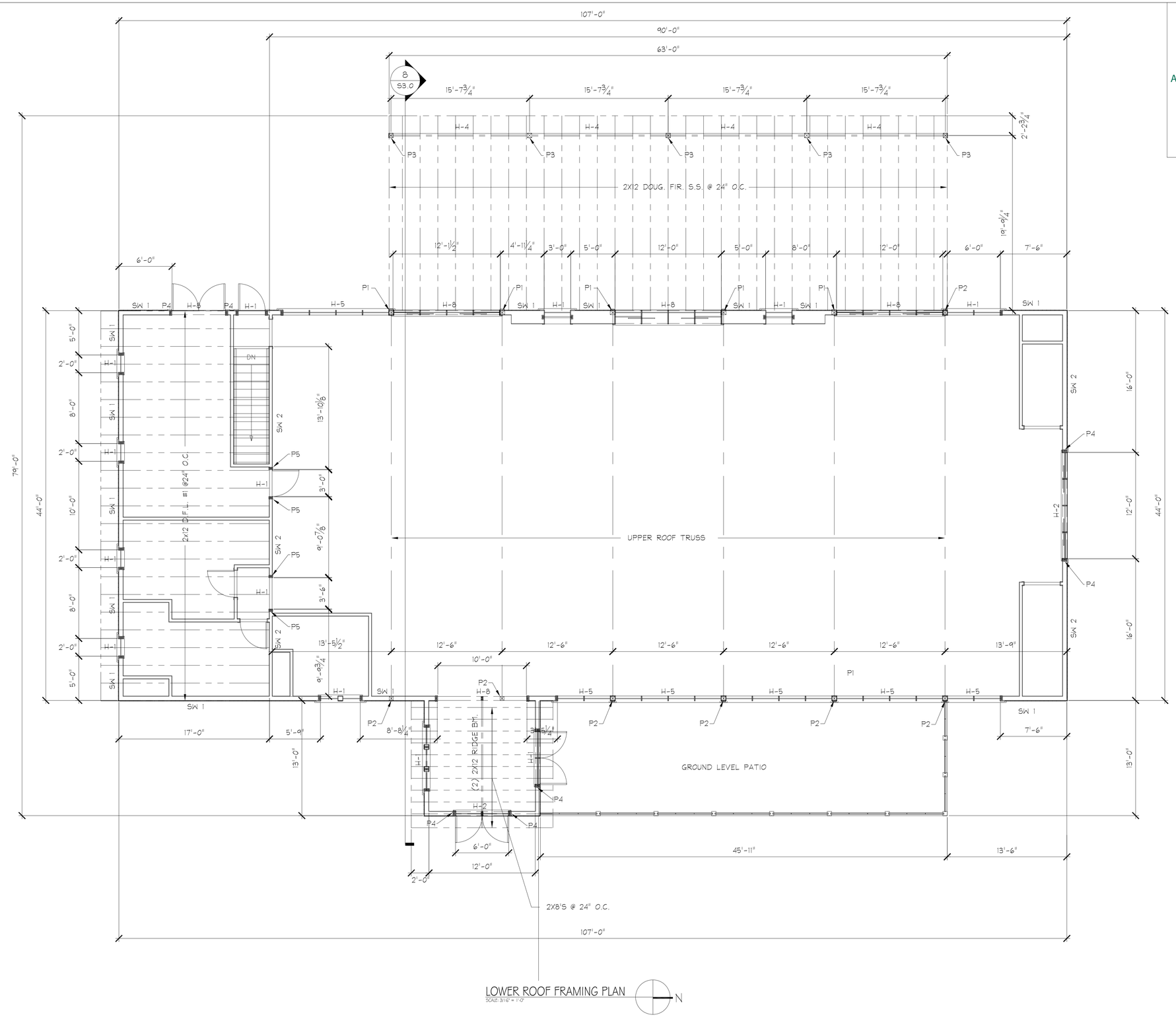

LOWER ROOF FRAMING PLAN

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

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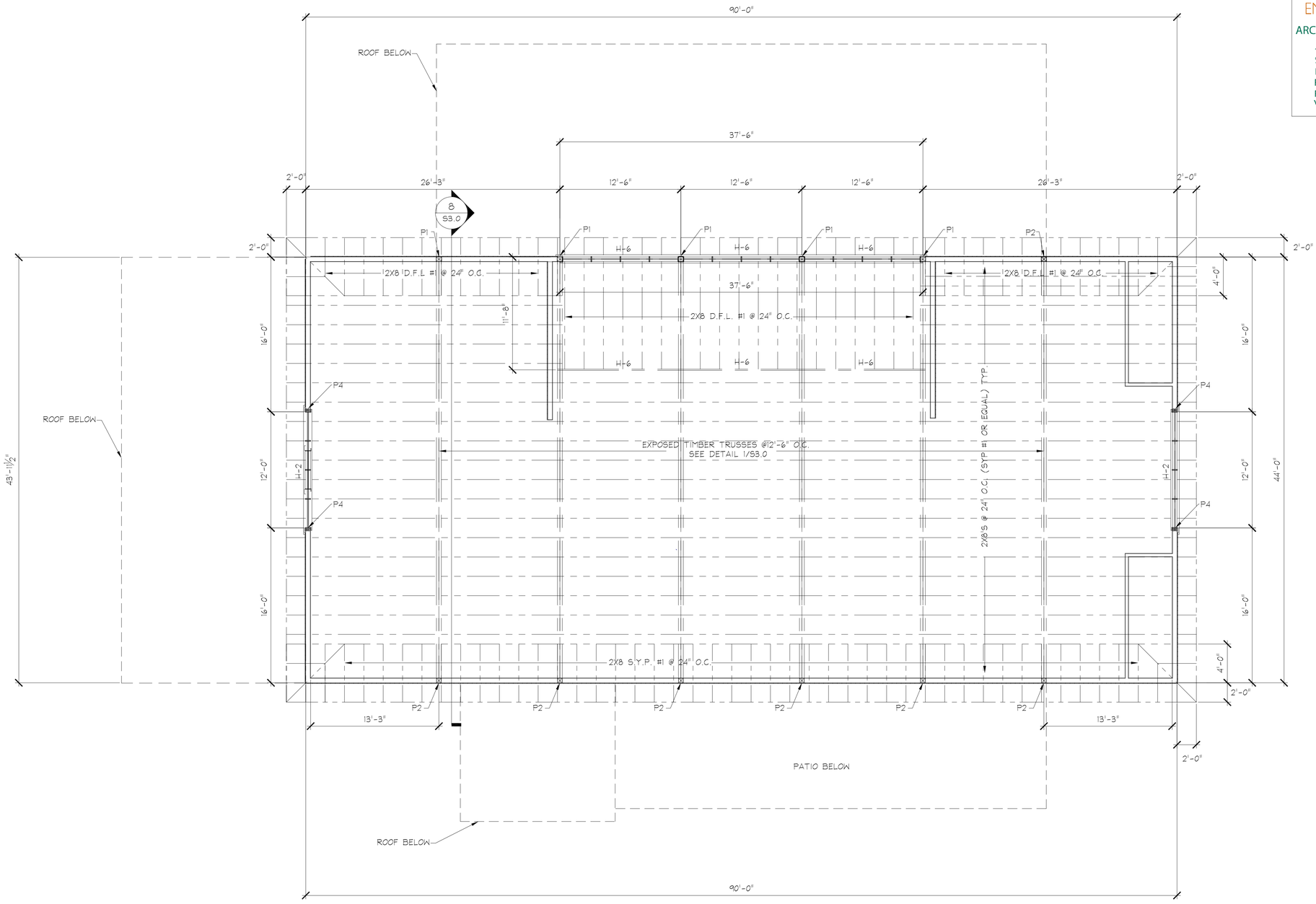

UPPER TRUSS FRAMING PLAN
SCALE: 3/16" = 1'-0"

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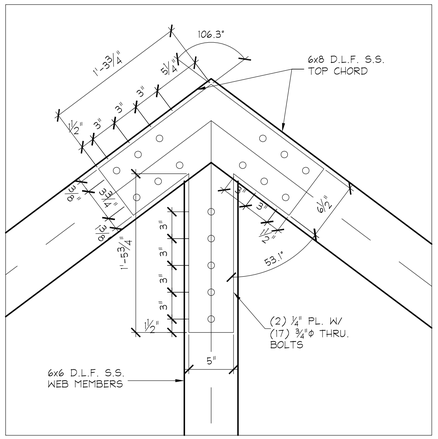
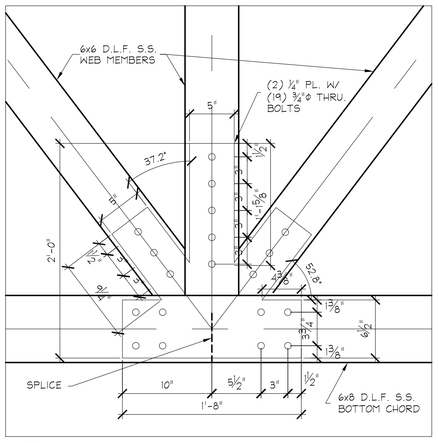


7 DETAIL
SCALE: 1-1/2"=1'-0"



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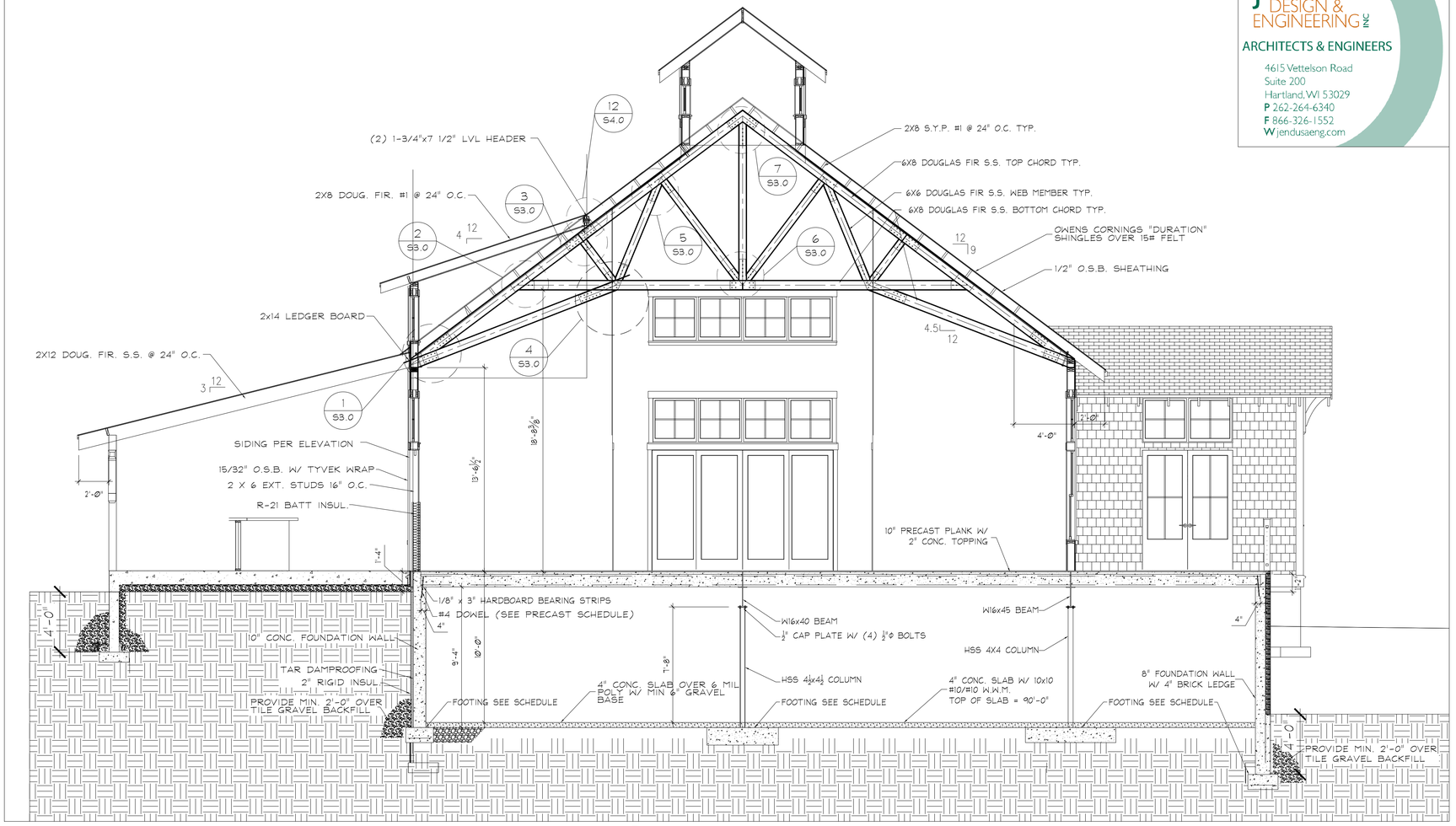

8 TRUSS SECTION
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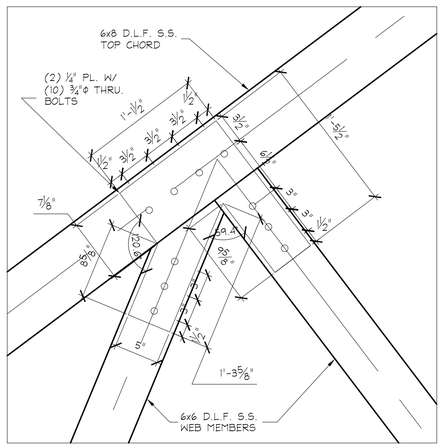

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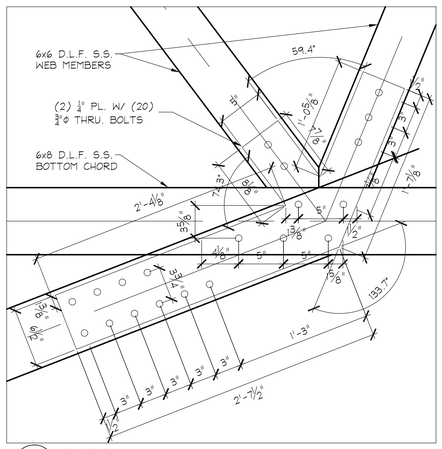

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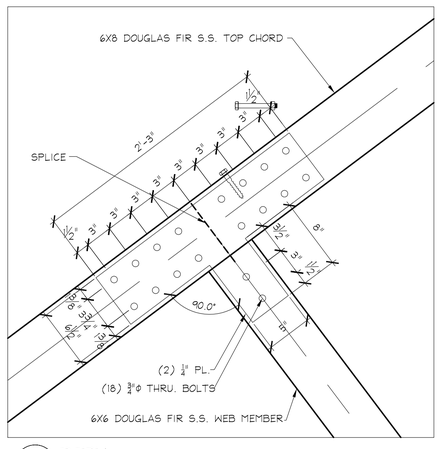

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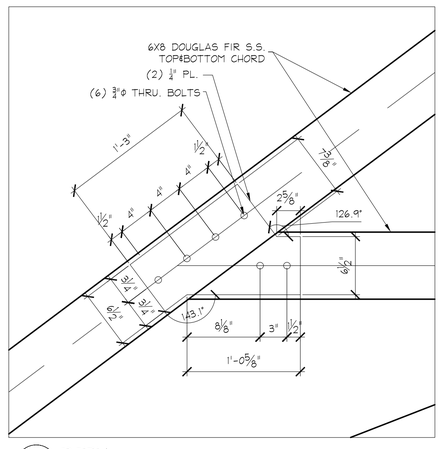

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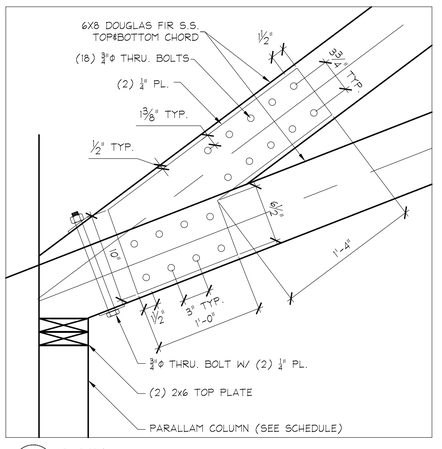

1 DETAIL
SCALE: 1-1/2"=1'-0"

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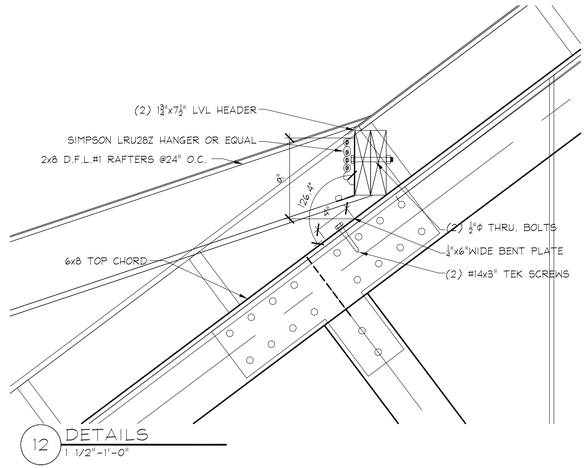
HEADER SCHEDULE		
MARK	SIZE & TYPE	MATERIAL
H-1	(2) 2x8	SPF #1/2 W/ (2) 2x6 STUDS
H-2	(2) 2x12	SPF #1/2
H-3	(2) 2x12	D.F.L. #1
H-4	6x12	D.F.L (SS)
H-5	(3) 2x12	D.F.L #1
H-6	(2) 1 3/4" x 7 1/4"	MICRO=LAM 2.0E
H-7	W12x16 W/ 9 1/2"x1/4" PL.	STEEL
H-8	(3) 1 3/4"x9 1/2"	MICRO=LAM 2.0E
H-9	W16x26 W/ 9 1/2"x1/4" PL.	STEEL
H-10	W8x10 W/ 9 1/2"x1/4" PL.	STEEL

POST SCHEDULE		
MARK	SIZE & TYPE	MATERIAL
P1	7" x 5 1/4"	PARALLAM 1.8E
P2	5 1/4" x 5 1/4"	PARALLAM 1.8E
P3	6x6	TREATED S. PINE #2
P4	(2) 2x6	SPF (STUD)
P5	(2) 2x4	SPF (STUD)
P6	HSS 4 1/2x4 1/2x5/16 W/ 10 1/2"x10 1/2"x3/4" BASE PLATE	STEEL A500 Gr.B
P7	HSS 4x4x3/8 W/ 10"x10"x3/4" BASE PLATE	STEEL A500 Gr.B
P8	16" WIDE w/ 6-#5 BARS	CONCRETE

NOTE:
1 ALL POSTS, UNLESS NOTED, TO BE (2) 2x6 SPF #1/2 OR BETTER

SHEARWALL SCHEDULE				
Mark	Sheathing	Nails at Panel Edges	Nails at Interm Support	Sill Anchor Bolts
SW1	15/32" OSB (APA RATED)	10d @ 6" O.C	8d @ 12" O.C.	1/2" DIA. @ 4'-0" O.C.
SW2	15/32" OSB (APA RATED)	10d @ 3" O.C	8d @ 12" O.C.	1/2" DIA. @ 4'-0" O.C.

NOTE:
1 PROVIDE HOLDDOWN HANGER AT EACH END OF SHEARWALL, ATTACH TO STUDS WITH SIMPSON SDS SCREWS PER THE MANUFACTURER'S INSTRUCTIONS
2 PROVIDE SOLID BLOCKING AT ALL PANEL EDGES



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

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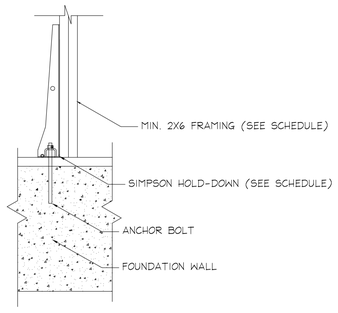
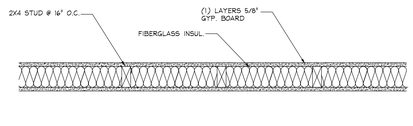
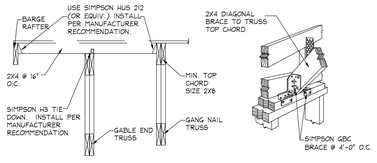


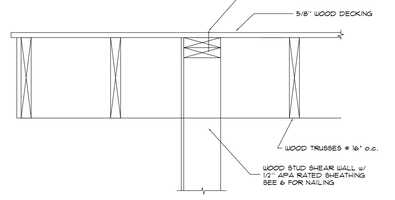
10 HOLD-DOWN DETAIL
SCALE: 1/2" = 1'-0"



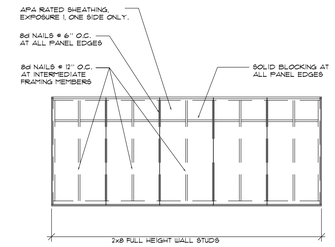
9 INTERIOR DIVIDING WALL



8 GABLE END WALL CONDITION
N.T.S

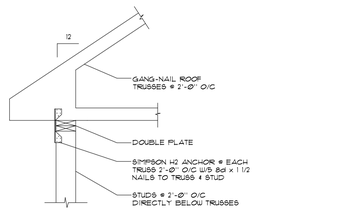


7 SHEAR WALL



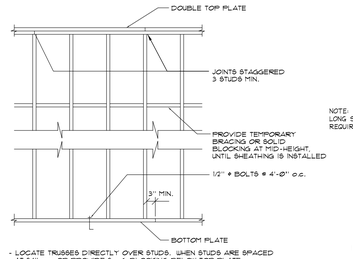
EXTERIOR: 15/32" APA RATED SHEATHING, EXPOSURE 1, 10d NAILS WITH 1-1/2" NAIL PENETRATION AT ALL PANEL EDGES,AT INTERIOR, PROVIDE 2 x 6 SOLID BLOCKING AT ALL EDGES.
NOTE: OPTION #1 USE 15/32" APA RATED SHEATHING W/ 4" NAIL SPACING AT PANEL EDGES
INTERIOR: 5/8" DRYWALL w/6d COOLER NAILS (.092" DIA x 1?" w/ 1/4" HEAD) @ 12" o.c. @ ALL STUDS, TOP PLATES, AND BOTTOM PLATES.

6 TYPICAL EXTERIOR WALL SHEATHING LAYOUT & NAILING



- FOR TRUSSES @ 2'-0" o/c AND STUDS @ 16" o/c, USE SIMPSON H3 ANCHOR.
- SIMILAR FOR FLOOR TRUSSES AND FOR INTERIOR WALLS.

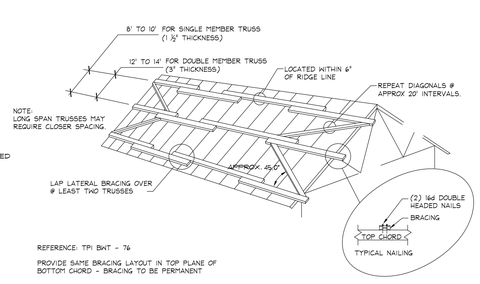
5 TYPICAL ROOF TRUSS ANCHORAGE
N.T.S.



- LOCATE TRUSSES DIRECTLY OVER STUDS. WHEN STUDS ARE SPACED AT 24" o.c. OR PROVIDE 2 x 6 BLOCKING BELOW TOP PLATE

4 TYPICAL WALL FRAMING ELEVATION

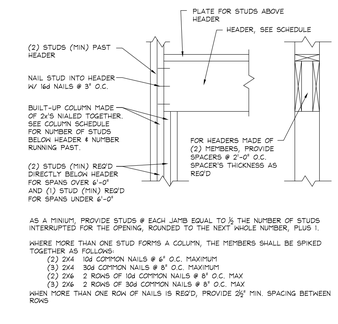
ENGINEERS NOTE:
MID HEIGHT BLOCKING MAY BE ELIMINATED AT WALLS THAT ARE TEMPORARILY BRACED DURING CONSTRUCTION. BLOCKING AT ALL PANEL JOINTS IS REQUIRED FOR ALL SHEAR WALLS.



REFERENCE: TPI BMT - 76

PROVIDE SAME BRACING LAYOUT IN TOP PLANE OF BOTTOM CHORD - BRACING TO BE PERMANENT

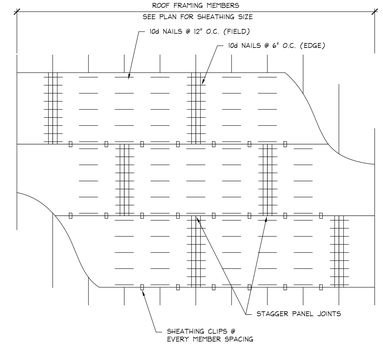
3 TEMPORARY TOP CHORD TRUSS BRACING
N.T.S



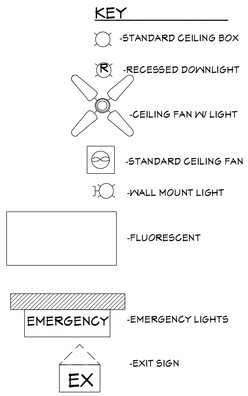
AS A MINUM, PROVIDE STUDS @ EACH JAMB EQUAL TO ½ THE NUMBER OF STUDS INTERRUPTED FOR THE OPENING, ROUNDED TO THE NEXT WHOLE NUMBER, PLUS 1.

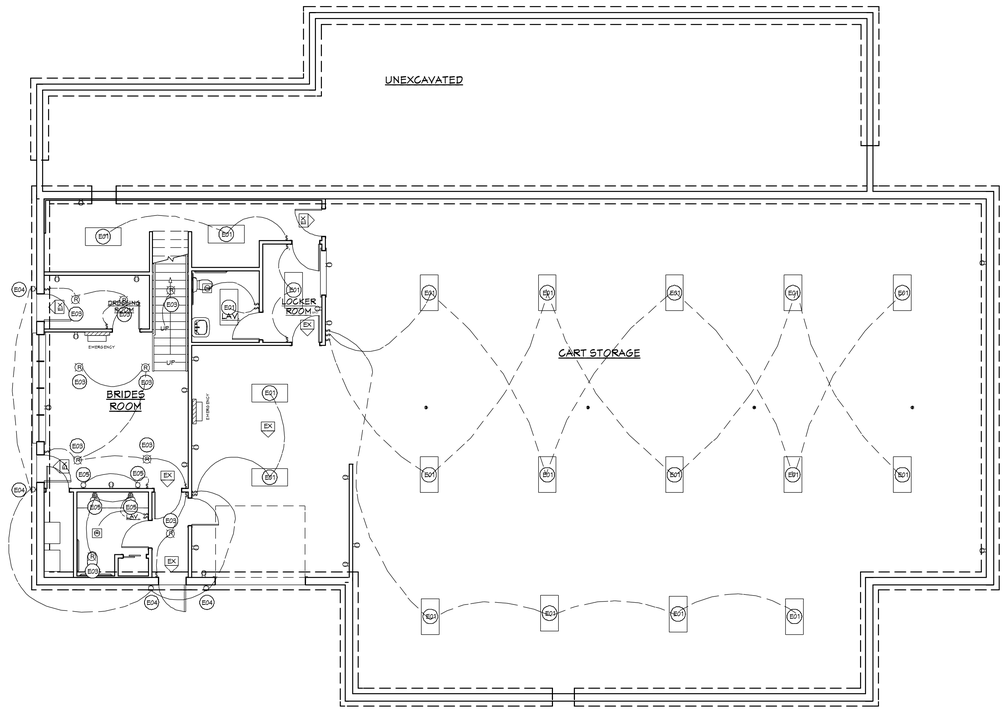
WHERE MORE THAN ONE STUD FORMS A COLUMN, THE MEMBERS SHALL BE SPIKED TOGETHER AS FOLLOWS:
(2) 2X4 10d COMMON NAILS @ 6" O.C. MAXIMUM
(3) 2X4 30d COMMON NAILS @ 8" O.C. MAXIMUM
(3) 2X6 2 ROWS OF 10d COMMON NAILS @ 8" O.C. MAX
(3) 2X6 2 ROWS OF 30d COMMON NAILS @ 8" O.C. MAX
WHEN MORE THAN ONE ROW OF NAILS IS REQ'D, PROVIDE 2½" MIN. SPACING BETWEEN ROWS

2 TYPICAL HEADER SUPPORT DETAIL
N.T.S



1 ROOF SHEATHING LAYOUT & NAILING
N.T.S





LOWER LEVEL ELECTRICAL PLAN

SCALE 1/8"=1'-0"

ELECTRICAL	
X	200 AMP ELECTRIC SERVICE
	400 AMP ELECTRIC SERVICE
	ROUGH FOR CENTRAL VACUUM SYSTEM
	ALARM SYSTEM
	STRUCTURED WIRING
	(2) LAND LINE PHONE JACKS
	AUDIO SYSTEM
	WIFI LIGHTING

ELECTRICAL SCHEDULE

#	FLOOR	ATTACHED TO	DESCRIPTION	QTY	MANUFACTURER	COMMENTS
E01	0	CEILING	FLUORESCENT LIGHT	20		
E02	0	CEILING	EXHAUST	1		
E03	0	CEILING	RECESSED DOWN LIGHT	9		
E04	0	WALL	EXTERIOR WALL MOUNT	4		
E05	0	WALL	INTERIOR WALL MOUNT	4		
E06	1		UNDER CAB. LIGHT	3		
E07	1	CEILING	FLUORESCENT LIGHT	9		
E08	1	CEILING	RECESSED DOWN LIGHT	2		
E09	1	CEILING	STANDARD CEILING FIXTURE	5		
E10	1	WALL	EXTERIOR WALL MOUNT	14		
E11	1	WALL	INTERIOR WALL MOUNT	9		
E12	2	CEILING	CEILING FAN	2		
E13	2	CEILING	CHANDELIER	1		
E14	2	CEILING	STANDARD CEILING FIXTURE	12		

OUTLETS & SWITCHES

FLOOR	DESCRIPTION	QTY	COMMENTS
0	DUPLEX	19	
0	GFCI	1	
0	SINGLE POLE	13	
0	THREE WAY	6	
1	220V	2	
1	DUPLEX	34	
1	GFCI	11	
1	SINGLE POLE	22	
1	THREE WAY	2	

JAMES MARRIOTT ARCHITECT
249 PAWLING AVE. HARTLAND, WI 53029
414.640.3329 www.marriotthomedesign.com

LABELLE/ PRESTWICK

PROJECT ADDRESS:

RELEASE FOR BID		09/28/18
RELEASE FOR CONST.		
REV.	1	10/25/18
	2	12/21/18

DRAWN BY: ORAN L. 12/28/2018

E1

KEY

-STANDARD CEILING BOX

-RECESSED DOWNLIGHT

-CEILING FAN W/ LIGHT

-STANDARD CEILING FAN

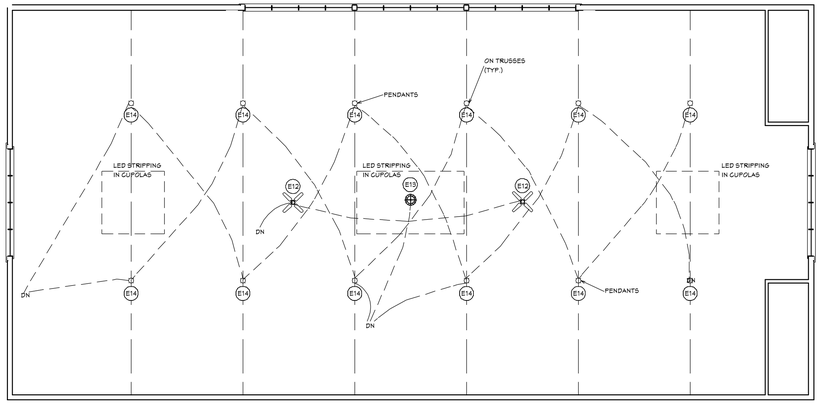
-WALL MOUNT LIGHT

-FLUORESCENT

-CHANDELIER

EMERGENCY -EMERGENCY LIGHTS

EX -EXIT SIGN



UPPER LEVEL ELECTRICAL

SCALE 1/8"=1'-0"

ELECTRICAL SCHEDULE						
#	FLOOR	ATTACHED TO	DESCRIPTION	QTY	MANUFACTURER	COMMENTS
E01	0	CEILING	FLUORESCENT LIGHT	20		
E02	0	CEILING	EXHAUST	1		
E03	0	CEILING	RECESSED DOWN LIGHT	9		
E04	0	WALL	EXTERIOR WALL MOUNT	4		
E05	0	WALL	INTERIOR WALL MOUNT	4		
E06	1		UNDER CAB. LIGHT	3		
E07	1	CEILING	FLUORESCENT LIGHT	9		
E08	1	CEILING	RECESSED DOWN LIGHT	2		
E09	1	CEILING	STANDARD CEILING FIXTURE	5		
E10	1	WALL	EXTERIOR WALL MOUNT	14		
E11	1	WALL	INTERIOR WALL MOUNT	9		
E12	2	CEILING	CEILING FAN	2		
E13	2	CEILING	CHANDELIER	1		
E14	2	CEILING	STANDARD CEILING FIXTURE	12		

KEY

-STANDARD CEILING BOX

-RECESSED DOWNLIGHT

-CEILING FAN W/ LIGHT

-STANDARD CEILING FAN

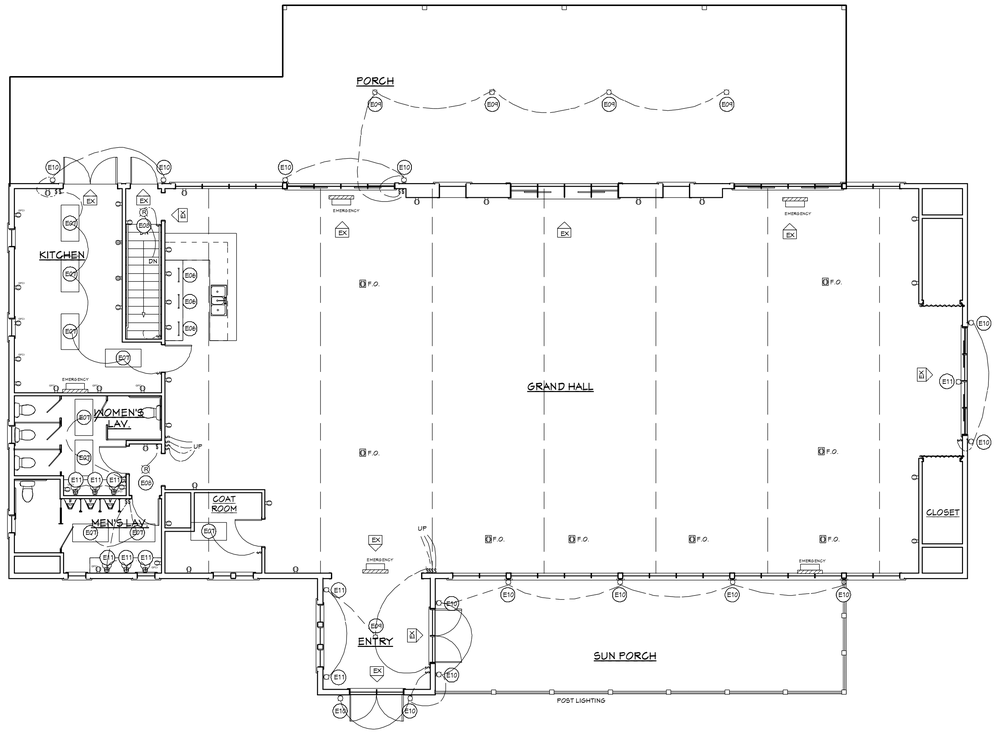
-WALL MOUNT LIGHT

-FLUORESCENT

-CABINET LIGHTING

EMERGENCY -EMERGENCY LIGHTS

EX -EXIT SIGN



FIRST FLOOR ELECTRICAL

SCALE 1/8"=1'-0"

OUTLETS & SWITCHES			
FLOOR	DESCRIPTION	QTY	COMMENTS
0	DUPLEX	19	
0	GFCI	1	
0	SINGLE POLE	13	
0	THREE WAY	6	
1	220V	2	
1	DUPLEX	34	
1	GFCI	11	
1	SINGLE POLE	22	
1	THREE WAY	2	

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PROJECT ADDRESS:

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RELEASE FOR CONST.		
REV.	1	10/25/18
	2	12/21/18

DRAWN BY: ORAN L. 12/28/2018

E2

GENERAL HVAC NOTES

1. INSTALLATION OF ALL EQUIPMENT AND MATERIALS TO FOLLOW GOOD TRADE PRACTICES, MEET ALL STATE AND LOCAL CODES AND MANUFACTURERS INSTALLATION REQUIREMENTS.
2. ANY JOBSITE CHANGES NECESSARY AND RELATIVE TO THESE HVAC PLANS MUST BE APPROVED BY THE HVAC DESIGNER OF RECORD.
3. ALL SUPPLY & RETURN AIR DUCTS & PLENUMS SHALL BE INSULATED WITH A MINIMUM OF R-5 INSULATION WHEN LOCATED IN UNCONDITIONED SPACES AND A MINIMUM OF R-8 INSULATION WHEN LOCATED OUTSIDE THE BUILDING ENVELOPE PER IECC 503.2.7.
4. ALL PIPING SERVING AS PART OF A HEATING OR COOLING SYSTEM SHALL BE THERMALLY INSULATED IN ACCORDANCE WITH IECC 503.2.8 & TABLE 503.2.8.
5. ALL DUCTWORK PENETRATING FIRE-RATED ASSEMBLIES SHALL BE PROTECTED PER IBC SECTION 713.
6. WHERE REQUIRED, FIRE & SMOKE DAMPERS SHALL BE PROVIDED WITH AN APPROVED MEANS OF ACCESS, WHICH IS LARGE ENOUGH TO PERMIT INSPECTION & MAINTENANCE. ACCESS POINTS SHALL BE PERMANENTLY IDENTIFIED ON THE EXTERIOR BY A LABEL HAVING LETTERS NOT LESS THAN 1/2" IN HEIGHT READING: FIRE/SMOKE DAMPER, SMOKE DAMPER OR FIRE DAMPER, PER IBC 716.4.
7. PER IBC 716.3.1, ALL CEILING RADIATION DAMPERS MUST COMPLY WITH THE REQUIREMENTS OF UL 555C OR SHALL BE TESTED AS PART OF A FIRE-RESTANCE-RATED FLOOR/CEILING OR ROOF/CEILING ASSEMBLY IN ACCORDANCE WITH ATSTM E119 OR UL 263 AND BEAR THE LABEL OF AN APPROVED TESTING AGENCY. ALL DAMPERS MUST ALSO MEET THE REQUIREMENTS OF ANY LISTED FLOOR/CEILING ASSEMBLIES AS SPECIFIED BY THE ARCHITECT.
8. PER IBC 1101.2, ALL THERMOSTATS/CONTROLS SHALL BE LOCATED A MAXIMUM OF 48" AND A MINIMUM 15" ABOVE THE FINISHED FLOOR.
9. ALL THERMOSTATS TO HAVE THE CAPABILITY TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM PER IECC 503.2.4.
10. FLEXIBLE AIR DUCTS SHALL BE TESTED IN ACCORDANCE WITH UL 181 PER IMC 603.6.1 AND SHALL NOT BE LIMITED IN LENGTH PER IMC 603.6.1.1.
11. FLEXIBLE AIR CONNECTORS SHALL BE TESTED IN ACCORDANCE WITH UL 181 PER IMC 603.6.2 AND SHALL BE LIMITED IN LENGTH TO 14' PER IMC 603.6.2.1.
12. MECHANICAL VENTILATION SYSTEMS SHALL BE PROVIDED WITH MANUAL OR AUTOMATIC CONTROLS THAT WILL OPERATE SUCH SYSTEMS WHILE OCCUPIED PER IMC 405.1.
13. EXHAUST OUTLETS FOR ENVIRONMENTAL AIR SHALL BE NOT LESS THAN 3' FROM LOT LINES, NOT LESS THAN 3' FROM OPENINGS INTO THE BUILDINGS, AND 10' FROM MECHANICAL AIR INTAKES PER IMC 501.2.1.3.
14. PER IMC 401.4.2, AIR INTAKE OPENINGS SHALL BE LOCATED A MINIMUM OF 10' HORIZONTALLY FROM ANY CONTAMINANT SOURCE. WHERE A SOURCE OF CONTAMINANTS IS LOCATED WITHIN 10' HORIZONTALLY OF AN INTAKE OPENING, SUCH OPENINGS SHALL BE LOCATED A MINIMUM OF 3' BELOW THE CONTAMINANT SOURCE, PER IMC 401.4.3.
15. EVERY HEATING, VENTILATING & AIR CONDITIONING SYSTEM SHALL BE BALANCED UPON INSTALLATION. THE INSTALLER OR RECOGNIZED BALANCING AGENCY SHALL BE RESPONSIBLE FOR THE TESTING AND BALANCING OF EVERY HVAC SYSTEM. THE PERSON OR AGENCY RESPONSIBLE FOR BALANCING OF THE VENTILATION SYSTEM SHALL DOCUMENT THIS IN WRITING. THE DOCUMENT MUST BE RETAINED AT THE JOBSITE PER SPS 364.0313.
16. SMOKE DETECTORS SHALL BE INSTALLED IN ALL RETURN AIR SYSTEMS WITH A DESIGN CAPACITY GREATER THAN 2000 CFM PER IMC 606.2.1. SMOKE DETECTORS SHALL BE CONNECTED TO A FIRE ALARM SYSTEM WHERE A FIRE ALARM SYSTEM IS REQUIRED BY SECTION 907.2 OF THE INTERNATIONAL FIRE CODE, AND SHALL ACTIVATE A VISIBLE AND AUDIBLE SIGNAL AT A CONSTANTLY ATTENDED LOCATION PER IMC 606.4.1.
17. DRYER VENTS SHALL NOT EXCEED 35 FEET FROM THE CONNECTION TO THE TRANSITION DUCT FROM THE DRYER TO THE OUTLET TERMINAL, PER IMC 504.6.4.1.
18. ALL GAS PIPING INSTALLATIONS SHALL COMPLY WITH NFPA 54-2009, NATIONAL FUEL GAS CODE.
19. DUCTWORK SHALL BE SEALED AT ALL JOINTS, TRANSVERSE AND LONGITUDINAL SEAMS AND CONNECTIONS IN DUCTWORK USING LISTED PRODUCTS IN ACCORDANCE WITH IECC 503.2.7 & IMC 603.9
20. THESE PLANS ARE PREPARED UNDER THE GUIDELINES OF THE FOLLOWING CODES: WISCONSIN COMMERCIAL BUILDING CODES; SPS 360-366, 2009 INTERNATIONAL CODE COUNCIL CODES; INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL MECHANICAL CODE (IMC) INTERNATIONAL ENERGY CONSERVATION CODE (IECC), AND INTERNATIONAL FUEL GAS CODE (IFGC). EVERY ATTEMPT HAS BEEN MADE TO ACKNOWLEDGE ALL CODES AFFECTING THE HVAC DESIGN. IT IS THE CONTRACTOR/OWNERS RESPONSIBILITY TO VERIFY ALL JOBSITE CONDITIONS AND ADDRESS ANY CODE VIOLATIONS.
21. IT IS THE HVAC CONTRACTOR'S RESPONSIBILITY TO CONTACT THE ENGINEER OF RECORD FOR FINAL INSPECTION AND COMPLIANCE STATEMENT PRIOR TO OCCUPANCY.

MINIMUM DUCT INSULATION

DUCT LOCATION	COOLING R-VALUE	HEATING R-VALUE
OUTSIDE BLDG ENVELOPE	8.0	8.0
IN UNCONDITIONED SPACE		
TD<15	NONE REQUIRED	NONE REQUIRED
TD≥15	5	5

IF SUPPLY DUCT WITHIN BUILDING ENVELOPE IS LOCATED IN A PLENUM, MUST HAVE R-5 UNLESS LOCATED WITHIN EQUIPMENT OR TD<15°

MINIMUM PIPE INSULATION

IMC TABLE 503.2.8

FLUID	NOMINAL PIPE DIAMETER	
	≤1 1/2"	> 1 1/2"
STEAM	1 1/2"	3"
HOT WATER	1 1/2"	2"
CHILLED WATER, BRINE, OR REFRIGERANT	1 1/2"	1 1/2"

A. BASED ON INSULATION HAVING A CONDUCTIVITY (k) NOT EXCEEDING 0.27 BTU PER INCH/H * FT² * °F.
B. FOR INSULATION WITH A THERMAL CONDUCTIVITY NOT EQUAL TO 0.27 BTU * INCH/H * FT² * °F AT A MEAN TEMPERATURE OF 75°F, THE MINIMUM REQUIRED PIPE THICKNESS IS ADJUSTED USING THE FOLLOWING EQUATION;

$$T=r\{(1+t/r)^{K/k}-1\}$$

WHERE:
T = ADJUSTED INSULATION THICKNESS (IN.)
r = ACTUAL PIPE RADIUS (IN.)
t = INSULATION THICKNESS FROM APPLICABLE CELL IN TABLE (IN.)
K = NEW THERMAL CONDUCTIVITY AT 75°F (BTU * IN/HR * FT² * °F
k = 0.27 BTU * IN/HR * FT² * °F

HEAT LOSS CALCULATIONS

GROOM'S ROOM & BATHROOM

TRANSMISSION LOSS	AREA		U-FACT		T.D.		BTUH
TOTAL WALLS	410 SQ.FT.						
WINDOWS	106	X	.35	X	80	=	2,968
DOORS	0	X	.39	X	80	=	0
NET WALLS	304	X	.048	X	80	=	1,159
ROOF	0	X	.02	X	80	=	0
SLAB	46	X	.81	X	80	=	2,954
TOTAL TRANSMISSION LOSS							7,081

VENTILATION

CFM		1.08		TD		BTUH
75	X	1.08	X	80	=	6,480

INFILTRATION

AIR CHANGES	VOLUME		.018		TD		
.5	X	4,167	X	.018	X 80	=	3,000
TOTAL HEAT LOSS (BTU/H)						=	13,561

HEAT LOSS CALCULATIONS

1ST FLOOR

TRANSMISSION LOSS	AREA		U-FACT		T.D.		BTUH
TOTAL WALLS	4,648 SQ.FT.						
WINDOWS	1,636	X	.35	X	80	=	45,808
DOORS	0	X	.39	X	80	=	0
NET WALLS	3,012	X	.048	X	80	=	11,474
ROOF	4,900	X	.02	X	80	=	7,840
SLAB	0	X	.81	X	80	=	0
TOTAL TRANSMISSION LOSS							65,122

VENTILATION

CFM		1.08		TD		BTUH
2,900	X	1.08	X	80	=	250,560

INFILTRATION

AIR CHANGES	VOLUME		.018		TD		
.5	X	68,600	X	.018	X 80	=	49,392
TOTAL HEAT LOSS (BTU/H)						=	315,682

HEAT LOSS CALCULATIONS

BRIDE'S LOFT

TRANSMISSION LOSS	AREA		U-FACT		T.D.		BTUH
TOTAL WALLS	711 SQ.FT.						
WINDOWS	71	X	.35	X	80	=	1,974
DOORS	0	X	.39	X	80	=	0
NET WALLS	55	X	.048	X	80	=	2,440
ROOF	700	X	.02	X	80	=	1,120
SLAB	0	X	.81	X	80	=	0
TOTAL TRANSMISSION LOSS							5,534

VENTILATION

CFM		1.08		TD		BTUH
75	X	1.08	X	80	=	6,480

INFILTRATION

AIR CHANGES	VOLUME		.018		TD		
.5	X	6,300	X	.018	X 80	=	4,536
TOTAL HEAT LOSS (BTU/H)						=	12,014

HEAT LOSS CALCULATIONS

CART STORAGE

TRANSMISSION LOSS	AREA		U-FACT		T.D.		BTUH
TOTAL WALLS	135 SQ.FT.						
WINDOWS	0	X	.35	X	60	=	0
DOORS	80	X	.39	X	60	=	1,872
NET WALLS	55	X	.048	X	60	=	157
ABOVE GRADE WALL	442	X	.288	X	60	=	7,633
0-3' BG CONC.	749	X	.113	X	60	=	5,078
OVER 3' BG CONC.	1,173	X	.063	X	60	=	4,435
ROOF	0	X	.02	X	60	=	0
SLAB	15	X	.81	X	60	=	729
TOTAL TRANSMISSION LOSS							19,905

VENTILATION

CFM		1.08		TD		BTUH
2,200	X	1.08	X	60	=	142,560

INFILTRATION

AIR CHANGES	VOLUME		.018		TD		
.5	X	45,306	X	.018	X 60	=	24,465
TOTAL HEAT LOSS (BTU/H)						=	162,465

UNIT HEATER

TAG	MANUFACTURER	MODEL	BTU/H		AIRFLOW		AFUE	HP	V / ø	BREAKER	FLUE SIZE	WEIGHT	REMARKS
			INPUT	OUTPUT	CFM	THROW							
UH-1	ALLIED	LF24-230 S	230,000	184,000	4,400	80	80.0%	1/8	115-1	9.0	5"ø	225	1)

1) POWER VENTED UNIT HEATER. INSTALL, MOUNT AND VENT ACCORDING TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.

ELECTRIC WALL HEATER SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	V / ø	WATTS		BTUH		DIMENSIONS	REMARKS
					208	240	208	240		
EWH-1	BROAN	178	ELECTRIC	120-240 / 1	1,500	2,000	5,120	6,827	12"x9.25"x4.25"	1)

1.) MOUNT A MINIMUM OF 6" A.F.F.

FURNACE AND CONDENSING UNIT SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	BTUH INPUT	BTUH OUTPUT	AFUE	CFM	S.P.	HP	VOLTS / ø	NOM. F.L.A.	BREAKER	WEIGHT	REMARKS
F-1	CONCORD	92G1UH045BP08	UPFLOW	44,000	41,000	92	600	.50"	1/5	120/1	3.1	15	120	2)
F-2	CONCORD	92G1UH110CP20	UPFLOW	110,000	104,000	92	2,000	.50"	3/4	120/1	10.0	15	161	2)

TAG	MANUFACTURER	MODEL	COIL	CLG BTUH	SEER	VOLTS / ø	AMPS	BREAKER	WEIGHT	REMARKS
CU-1	CONCORD	4AC13L18P	EC1P23BG	17,600	13	208-230/1	10.9	15	136	1)
CU-2	CONCORD	4AC13L60P	EC1P62CG	57,000	13	208-230/1	29.4	60	205	1)

1) LOCATE ON 3" CONCRETE PAD. COORDINATE LOCATION WITH OWNER.
2) PAIRED WITH CU-1. RUN BLOWER CONTINUOUSLY DURING OCCUPIED HOURS.

EXHAUST FAN SCHEDULE

TAG	MANUFACTURER	MODEL	CFM	ESP	DRIVE	RPM	HP	V / ø	AMPS	WATTS	SONES	WEIGHT	REMARKS
EF-1	BROAN	AE80B	75	0.10	DIRECT	-	FRACTION	120-1	0.30	26.9	1.5	10.0	1)
EF-2	BROAN	AE80B	75	0.10	DIRECT	-	FRACTION	120-1	0.30	26.9	1.5	10.0	2)
EF-3	BROAN	L300	300	0.125	DIRECT	905	FRACTION	120-1	2.6	212	2.9	23.1	1)
EF-4	S & P	LCE20-ASSY	2,200	0.25	BELT	928	1/3	115 / 1	-	-	-	85	3)
EF-5	BROAN	L400	400	0.125	DIRECT	735	FRACTION	120-1	1.4	146	2.3	33.8	1)

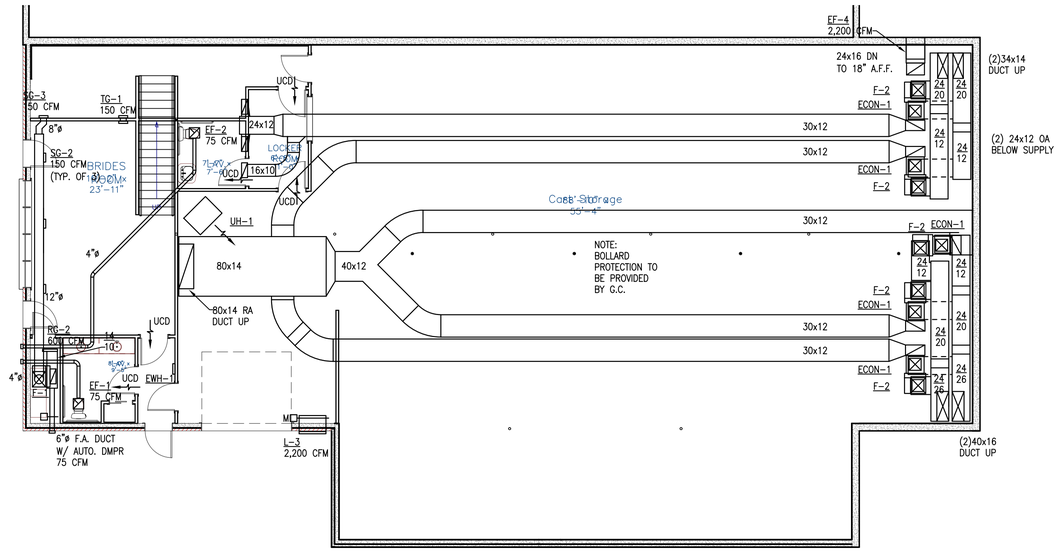
1) RUN CONTINUOUSLY DURING OCCUPIED HOURS.
2) INTERLOCK WITH LIGHT SWITCH.
3) INTERLOCK WITH L-1. RUN CONTINUOUSLY DURING OCCUPIED HOURS.

LOUVERS

TAG	MANUFACTURER	MODEL	TYPE	SIZE	MATERIAL	CFM	S.P.	FREE AREA	REMARKS
L-1	NCA	XAD-4-45-GL	SUPPLY AIR	54X36	ALUMINUM	SEE PLAN	.125"	49%	
L-2	NCA	CE-XAD-4	SUPPLY AIR	54X36	ALUMINUM	4,500	.125"	45%	
L-3	NCA	CA-XAD-6-45-GL	EXHAUST AIR	36X36	ALUMINUM	2,200	.125"	40%	

GRILLE AND REGISTER SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	SIZE	NECK SIZE	LOCATION / MATERIAL	COLOR	REMARKS
SG-1	TRUAIRE	SU2	SUPPLY	10" x 6"	-	SIDEWALL / DUCT	WHITE	
SG-2	TRUAIRE	SU2	SUPPLY	12" x 6"	-	SIDEWALL / DUCT	WHITE	
SG-3	TRUAIRE	102M	SUPPLY	12" x 6"	-	SIDEWALL / DUCT	WHITE	
SG-4	TRUAIRE	SU2	SUPPLY	20" x 8"	-	SIDEWALL / DUCT	WHITE	
RG-1	TRUAIRE	170	RETURN	36" x 36"	-	SIDEWALL / GYP.	WHITE	
RG-2	TRUAIRE	170	RETURN	20" x 14"	-	SIDEWALL / GYP.	WHITE	
RG-3	TRUAIRE	170	RETURN	36" x 10"	-	SIDEWALL / GYP.	WHITE	
RG-4	TRUAIRE	170	RETURN	20" x 36"	-	SIDEWALL / GYP.	WHITE	
TG-1	TRUAIRE	170	TRANSFER	12" x 6"	-	SIDEWALL / GYP.	WHITE	
EG-1	TRUAIRE	170	EXHAUST	36" x 36"	-	SIDEWALL / GYP.	WHITE	



BASEMENT FLOOR HVAC PLAN

1 / M1

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

SHEET INDEX

HVAC DESIGN AND OPERATION ARE BASED EXCLUSIVELY ON THE OCCUPANCY AND USE OF THIS STRUCTURE AS INDICATED ON THIS PLAN. CHANGE IN OR DEVIATION FROM THIS DESIGN OR IN THE OCCUPANCY OR USE OF THIS PROJECT WILL REQUIRE REVIEW OF DESIGN, POSSIBLE ADDITION OR CHANGE OF EQUIPMENT AND POSSIBLE RE-SUBMITTAL TO THE DEPARTMENT OF SAFETY & BUILDINGS AT THE OWNER'S EXPENSE.

MENOMONEE FALLS BRANCH
N50W13941 OVERVIEW DR.
MENOMONEE FALLS, WI

CALEDONIA BRANCH
441 27TH ST. - UNIT C
CALEDONIA, WI

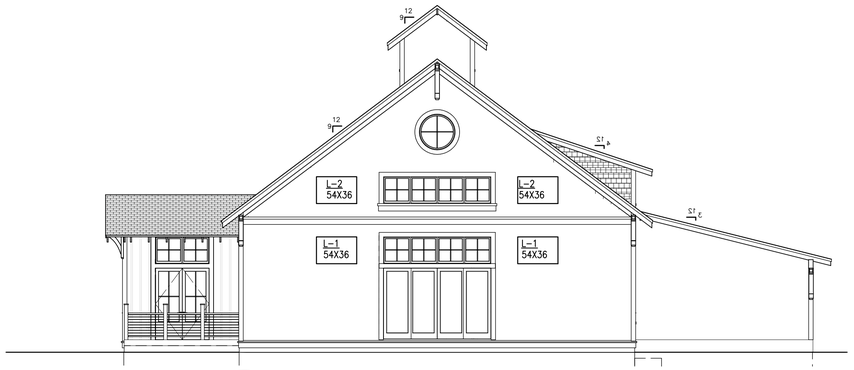
OSHKOSH BRANCH
3255 FERNAU CT.
OSHKOSH, WI

MONROE EQUIPMENT
DISTRIBUTING INTEGRITY
TOLL FREE: 800-242-9398
PHONE: (262) 783-8190
FAX: (262) 783-8180
EMAIL: blane@monroeequipment.com

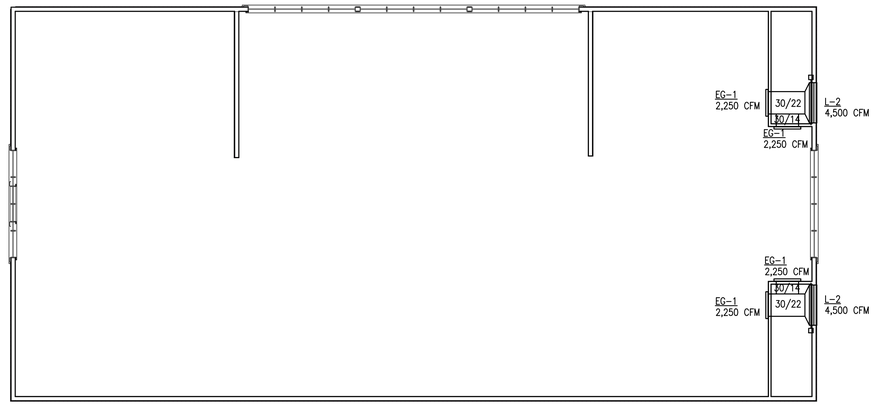
CARRIAGE HOUSE
HVAC PLANS
LAC LA BELLE
LAC LA BELLE, WISCONSIN

REVISIONS:

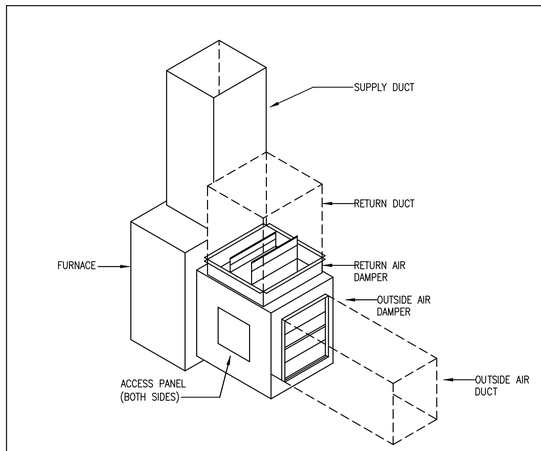
DRAWN BY:	AAP
CHECKED BY:	BRL
DATE:	08/27/2018
FILE:	lacie/2018-103.DWG
PROJECT NO.:	2018-103
STATE TRANSACTION ID NO.	TBD
SHEET NO.:	M1



3 M2 SOUTH ELEVATION
SCALE: 1/8"=1'-0"

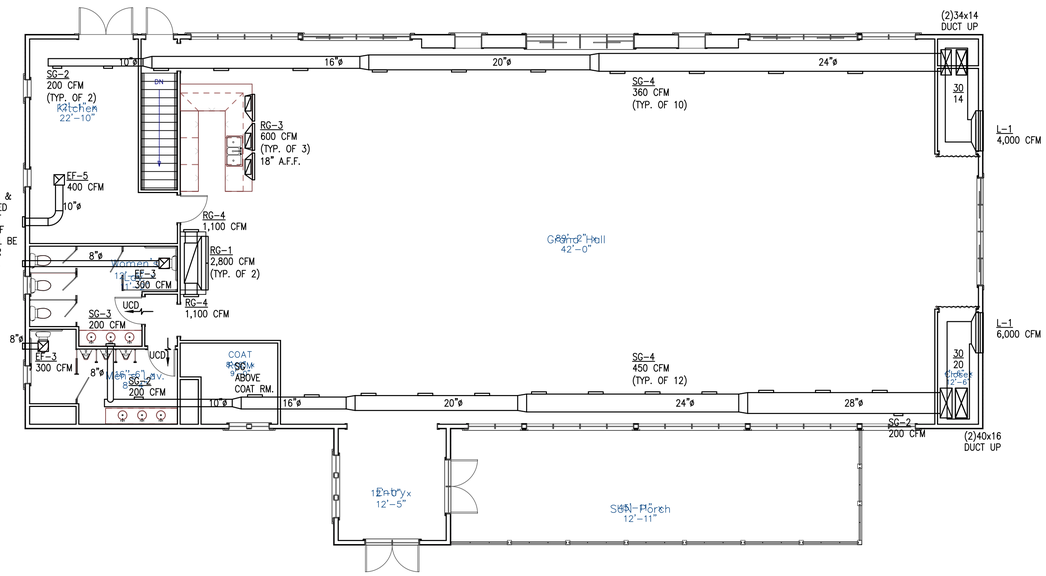


2 M2 SECOND FLOOR HVAC PLAN
SCALE: 1/8"=1'-0"



4 M2 FURNACE MIXING BOX
NO SCALE

NOTE:
KITCHEN EXHAUST & MUA NOT INCLUDED IN THE SCOPE OF THIS PROJECT. IF REQUIRED, IT WILL BE SUBMITTED UNDER SEPARATE COVER.



1 M2 FIRST FLOOR HVAC PLAN
SCALE: 1/8"=1'-0"

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CARRIAGE HOUSE
HVAC PLANS
LAC LA BELLE
LAC LA BELLE, WISCONSIN

REVISIONS:

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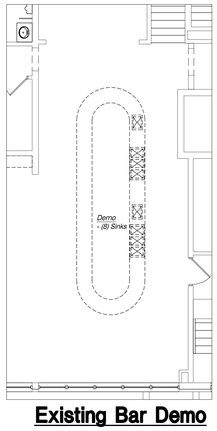
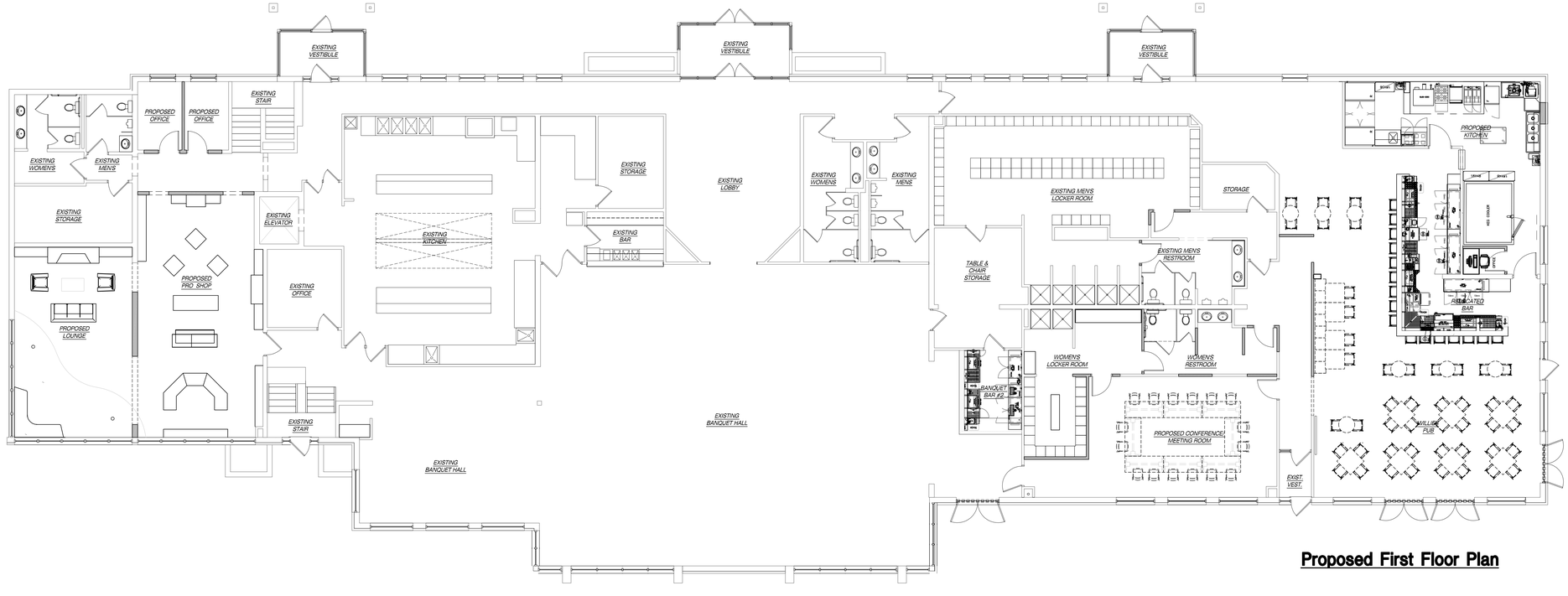
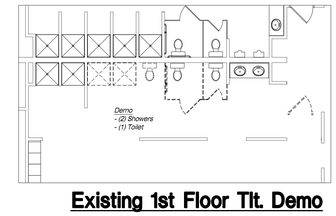
SHEET NO.:	M2



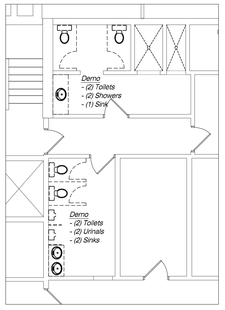
Existing Bar Demo



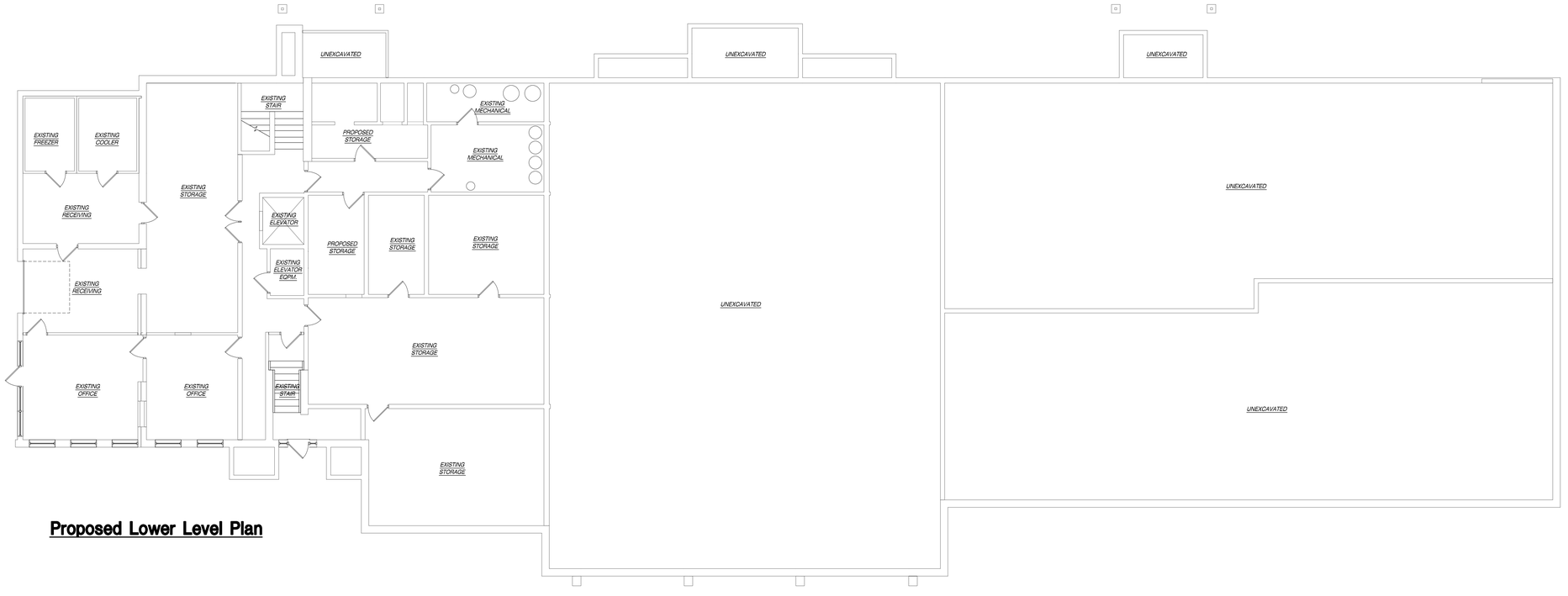
Proposed First Floor Plan



Existing 1st Floor Tlt. Demo



Existing LL Tlt Rm Demo



Proposed Lower Level Plan

Proposed Upper & Lower Level Floor Plans

00058.38| January 8, 2019 | Scale: 1/8" = 1'-0"

The Club at Lac La Belle

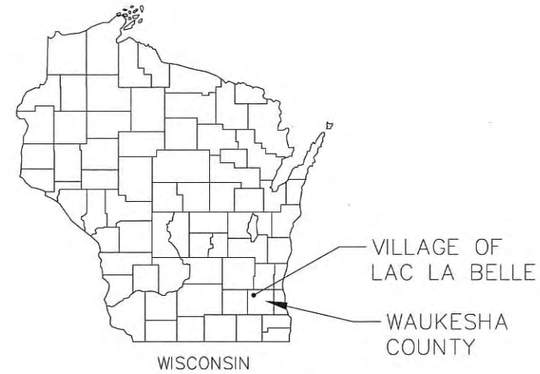
Oconmowoc, WI 53066

ZIMMERMAN ARCHITECTURAL STUDIOS, INC.

THE CLUB AT LAC LA BELLE

PARKING LOT IMPROVEMENT PLANS

VILLAGE OF LAC LA BELLE, WISCONSIN



DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

THE LOCATION OF EXISTING UTILITIES, BOTH UNDERGROUND AND OVERHEAD ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, BEFORE COMMENCING WORK, AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES.

CALL DIGGER'S HOTLINE
1-800-242-8511

WISCONSIN
BRIAN A. BARRITT
E-43354
BARABOO
WI
PROFESSIONAL ENGINEER

1-29-19

SHEET NO.	DESCRIPTION
G1	TITLE SHEET
C1	NOTES AND LEGENDS
C2	EXISTING CONDITIONS AND DEMOLITION PLAN
C3	OVERALL SITE AND UTILITY
C4	SOUTH SITE AND UTILITY
C5	CENTER SITE AND UTILITY
C6	NORTH SITE AND UTILITY
C7	OVERALL GRADING AND EROSION CONTROL PLAN
C8	SOUTH GRADING AND EROSION CONTROL PLAN
C9	CENTER GRADING AND EROSION CONTROL PLAN
C10	NORTH GRADING AND EROSION CONTROL PLAN
C11–C14	CONSTRUCTION DETAILS
C15	OVERALL LIGHTING PLAN
L1	LANDSCAPE PLAN

NOT FOR CONSTRUCTION

vierbicher
planners | engineers | advisors
Phone: (800) 261-3898

Title Sheet
The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

REVISIONS
NO. DATE REMARKS

REVISIONS
NO. DATE REMARKS

SCALE: AS SHOWN
DATE: 1/29/19
DRAFTER: BBAR
CHECKED: ----
PROJECT NO.: 180067

G
1

29 Jan 2019 - 4:01p M:\Prestwick Group\180067 - 2018 La Belle Course Improvements\CADD\180067 - Lac La Belle - Title and Details.dwg by: bbar

TOPOGRAPHIC SYMBOL LEGEND

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

TOPOGRAPHIC LINEWORK LEGEND

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

SITE PLAN LEGEND

- PROPERTY BOUNDARY
- CURB AND GUTTER (REVERSE CURB HATCHED)
- PROPOSED CHAIN LINK FENCE
- PROPOSED WOOD FENCE
- PROPOSED CONCRETE
- PROPOSED LIGHT-DUTY ASPHALT
- PROPOSED HEAVY-DUTY ASPHALT
- PROPOSED SIGN
- PROPOSED LIGHT POLE
- PROPOSED BOLLARD
- PROPOSED ADA DETECTABLE WARNING FIELD
- PROPOSED HANDICAP PARKING

ABBREVIATIONS

TC – TOP OF CURB
FF – FINISHED FLOOR
FL – FLOW LINE
SW – TOP OF WALK
TW – TOP OF WALL
BW – BOTTOM OF WALL

DEMOLITION PLAN LEGEND

- CURB AND GUTTER REMOVAL
- ASPHALT REMOVAL
- CONCRETE REMOVAL
- BUILDING REMOVAL
- TREE REMOVAL
- SAWCUT
- UTILITY STRUCTURE REMOVAL
- UTILITY LINE REMOVAL

PROPOSED UTILITY LEGEND

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

ABBREVIATIONS

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

GRADING LEGEND

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

GENERAL NOTES:

1. INSTALL A 50'L X 20'W X 1.5'D TRACKING PAD AT THE SITE ENTRANCE. THE TRACKING PAD SHALL BE MAINTAINED/REPAIRED AS NECESSARY TO ACCOMMODATE CONSTRUCTION.
2. THE CONTRACTOR IS REQUIRED TO MAKE EROSION CONTROL INSPECTIONS AT THE END OF EACH WEEK AND WHEN 0.5 INCHES OF RAIN FALLS WITHIN 24 HOURS. INSPECTION REPORTS SHALL BE PREPARED AND FILED AS REQUIRED BY THE DNR. ALL MAINTENANCE/REPAIR WILL FOLLOW AN INSPECTION WITHIN 24 HOURS.
3. INSTALL WI DOT TYPE D INLET PROTECTION IN EXISTING CURB INLETS AND WI DOT TYPE A IN FIELD INLETS.
4. UTILITY STRUCTURE RIM AND TOP OF CURB ELEVATIONS ON PLANS ARE APPROXIMATE. UTILITY STRUCTURES SHALL BE SET TO FINAL ELEVATIONS AFTER THE CURB & GUTTER AND BASE COURSE HAVE BEEN INSTALLED.
5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED DURING CONSTRUCTION TO PUBLIC PROPERTY, PRIVATE PROPERTY OR UTILITIES.
6. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW BY THE ENGINEER, PRIOR TO PLACING AN ORDER OF ANY SUCH ITEM.
7. EXISTING TOPOGRAPHIC INFORMATION IS BASED ON FIELD OBSERVATIONS AND/OR PLAN OF RECORD DRAWINGS. CONTRACTOR SHALL VERIFY TOPOGRAPHIC INFORMATION PRIOR TO STARTING CONSTRUCTION.
8. CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING SANITARY SEWER, STORM SEWER AND WATER MAIN PRIOR TO CONSTRUCTION TO ENSURE PROPER CLEARANCE OF THE NEW UTILITIES. CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES DURING CONSTRUCTION. ANY DAMAGE TO THE EXISTING UTILITIES AND ANY REPAIRS NEEDED AS A RESULT OF THE DAMAGE SHALL BE AT THE EXPENSE OF THE CONTRACTOR REGARDLESS OF THE LOCATION MARKED IN THE FIELD OR SHOWN ON THE PLANS.
9. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING DIGGERS HOTLINE AND LOCATING ALL EXISTING UTILITIES AND ENSURE PROPER CLEARANCE OF NEW UTILITIES.
10. SEE EROSION CONTROL PLANS AND CONSTRUCTION DETAIL SHEETS FOR EROSION CONTROL NOTES AND CONSTRUCTION SEQUENCE.
11. THE CONTRACTOR SHALL REMOVE ANY SEDIMENT TRACKED ONTO ADJACENT ROADS BY MEANS OF STREET SWEEPING (NOT FLUSHING) AT A MINIMUM OF THE END OF EACH WORK DAY OR MORE AS NEEDED.
12. RIGHT OF WAY (ROW) AND PROPERTY LINES ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING PROPERTY CORNER MONUMENTATION. ANY MONUMENTS DISTURBED BY CONTRACTOR SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
13. CONTRACTOR SHALL COORDINATE WITH DRY UTILITY COMPANY'S REGARDING ANY POTENTIAL CONFLICTS AND COORDINATE RELOCATIONS AS MAY BE REQUIRED. CONTRACTOR SHALL ALSO COORDINATE THE PROPOSED INSTALLATION OF NEW FACILITIES AS REQUIRED.
14. INSTALL 1 SHEET OF 4'x8'x4" HIGH DENSITY STYROFOAM INSULATION AT ALL LOCATIONS WHERE STORM SEWER CROSSES WATER MAIN OR WATER LATERALS.
15. DIMENSIONS RELATING TO CURB ARE TO FACE OF CURB.
16. CONTOURS ARE SHOWN FOR PURPOSES OF INDICATING ROUGH GRADING. FINAL GRADES SHALL BE ESTABLISHED ON PAVED SURFACES BY USING SPOT GRADES ONLY.
17. CROSS-SLOPE OF SIDEWALKS SHALL BE 2% UNLESS OTHERWISE NOTED.
18. LONGITUDINAL GRADE OF SIDEWALK RAMPS SHALL NOT EXCEED 8.33% (1:12) AND SHALL BE IN ACCORDANCE WITH ADA REQUIREMENTS.
19. LONGITUDINAL GRADE OF SIDEWALK SHALL NOT EXCEED 5.0% OR THE ADJACENT STREET GRADE WHICHEVER IS GREATER.
20. ACCESSIBLE ROUTES SHALL BE 5% MAX LONGITUDINAL SLOPE AND 2% MAX CROSS SLOPE. ACCESSIBLE LOADING AREAS OR LANDINGS SHALL BE 2% MAX SLOPE IN ANY DIRECTION. RAMPS SHALL BE 8.33% MAX SLOPE.
21. ADJUST ALL EXISTING MANHOLE AND VALVE RIMS TO FINAL GRADE.

NOT FOR CONSTRUCTION

vierbicher
planners | engineers | advisors
Phone: (800) 261-3898

Notes and Legends

The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

REVISIONS

NO.	DATE	REMARKS

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DATE
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180067

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29 Jan 2019 - 4:06p M:\Prestwick Group\180067 - 2018 La Belle Course Improvements\CADD\180067 - Lac La Belle - Title and Details.dwg by: bbar

EX. 48" SMH
RIM=872.67
IE=861.99 S

SAWCUT PAVEMENT

IE=868.47
EX. 12" RCP EW

IE=863.99
EX. 36" RCP EW

EX. 36" RCP STORM

PENNSYLVANIA STREET

EX. 48" SMH
RIM=870.91
IE=861.25 S
IE=861.25 N

EX. 42" TI
RIM=871.12
IE=869.00 W

IE=867.62
EX. 36" RCP EW

REMOVE STORM SEWER

REMOVE PLANTINGS IN PENNSYLVANIA STREET ISLAND.

REMOVE PAVEMENT (TYP.)

REMOVE GRAVEL PATH (TYP.)

TREES TO REMAIN

TREES TO REMAIN

REMOVE LIGHT POLE

CLEAR AND GRUB TREES TO PROPERTY LINE (TYP.)

REMOVE CURB AND GUTTER (TYP.)

REMOVE PAVEMENT (TYP.)

REMOVE BUILDING

SAWCUT PAVEMENT

SHED

SHED

SAWCUT PAVEMENT

SHED

EXISTING BUILDINGS TO REMAIN

EXTG CONC

EXTG FUEL TANKS

EXISTING CLUBHOUSE TO REMAIN

REMOVE RETAINING WALL

EXISTING DRIVING RANGE

EXTG BLDG

EXTG BLDG

EXTG CONC

GAZEBO

LANDSCAPING

LANDSCAPING

LANDSCAPING

LANDSCAPING

COUNTRY CLUB DR

GRAPHIC SCALE FEET
0 25' 50' 100'

NOT FOR CONSTRUCTION

DEMOLITION/EROSION CONTROL NOTES:

1. CONTRACTOR SHALL KEEP ALL VILLAGE STREETS FREE AND CLEAR OF CONSTRUCTION RELATED DIRT/DUST/DEBRIS.
2. COORDINATE EXISTING UTILITY REMOVAL/ABANDONMENT WITH LOCAL AUTHORITIES AND UTILITY COMPANIES HAVING JURISDICTION.
3. ALL SAWCUTTING SHALL BE FULL DEPTH TO PROVIDE A CLEAN EDGE TO MATCH NEW CONSTRUCTION. MATCH EXISTING ELEVATIONS AT POINTS OF CONNECTION FOR NEW AND EXISTING PAVEMENT, CURB, SIDEWALKS, ETC. ALL SAWCUT LOCATIONS SHOWN ARE APPROXIMATE AND MAY BE FIELD ADJUSTED TO ACCOMMODATE CONDITIONS, JOINTS, MATERIAL TYPE, ETC. REMOVE MINIMUM AMOUNT NECESSARY FOR INSTALLATION OF PROPOSED IMPROVEMENTS.
4. CONTRACTOR SHALL PROVIDE AND SHALL BE RESPONSIBLE FOR ANY NECESSARY TRAFFIC CONTROL SIGNAGE AND SAFETY MEASURES DURING DEMOLITION AND CONSTRUCTION OPERATIONS WITHIN OR NEAR THE PUBLIC ROADWAY.
5. ALL TREES TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY AND STUMPS SHALL BE GROUND TO 12" BELOW PROPOSED SUBGRADE.
6. IF APPLICABLE, PROVIDE TREE PROTECTION FENCING PRIOR TO CONSTRUCTION OPERATIONS. MAINTAIN THROUGHOUT CONSTRUCTION.
7. ALL LIGHT POLES TO BE REMOVED FROM PRIVATE PROPERTY SHALL BE REMOVED IN THEIR ENTIRETY, INCLUDING BASE AND ALL APPURTENANCES. COORDINATE ABANDONMENT OF ELECTRICAL LINES WITH ELECTRICAL ENGINEER AND OWNER PRIOR TO DEMOLITION.
8. CONTRACTOR SHALL CLOSE ALL ABANDONED DRIVEWAYS BY REPLACING THE GRAVEL SHOULDER AND RESTORING THE TERRACE WITH GRASS.
9. CONTRACTOR SHALL OBTAIN ANY NECESSARY DEMOLITION AND UTILITY PLUGGING PERMITS.
10. THE LOCATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLANS HAS BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND IS GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE OWNER AND THE ENGINEER DO NOT ASSUME RESPONSIBILITY IN THE EVENT THAT DURING CONSTRUCTION, UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED, AND THAT THE ACTUAL LOCATION OF THOSE WHICH ARE SHOWN MAY BE DIFFERENT FROM THE LOCATION AS SHOWN ON THE PLANS.
11. ANY DAMAGE TO THE VILLAGE PAVEMENT, INCLUDING DAMAGE RESULTING FROM CURB REPLACEMENT, WILL REQUIRE RESTORATION IN ACCORDANCE WITH THE VILLAGE CRITERIA.
12. DEMOLITION OF THE PARKING LOT MUST BE COORDINTATED WITH THE EROSION CONTROL PLAN. REFER TO THE CONSTRUCTION SEQUENCE ON THE EROSION CONTROL PLAN.

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planners | engineers | advisors
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Existing Conditions and Demolition Plan

The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

REVISIONS

NO.	DATE	REMARKS

REVISIONS

NO.	DATE	REMARKS

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DATE
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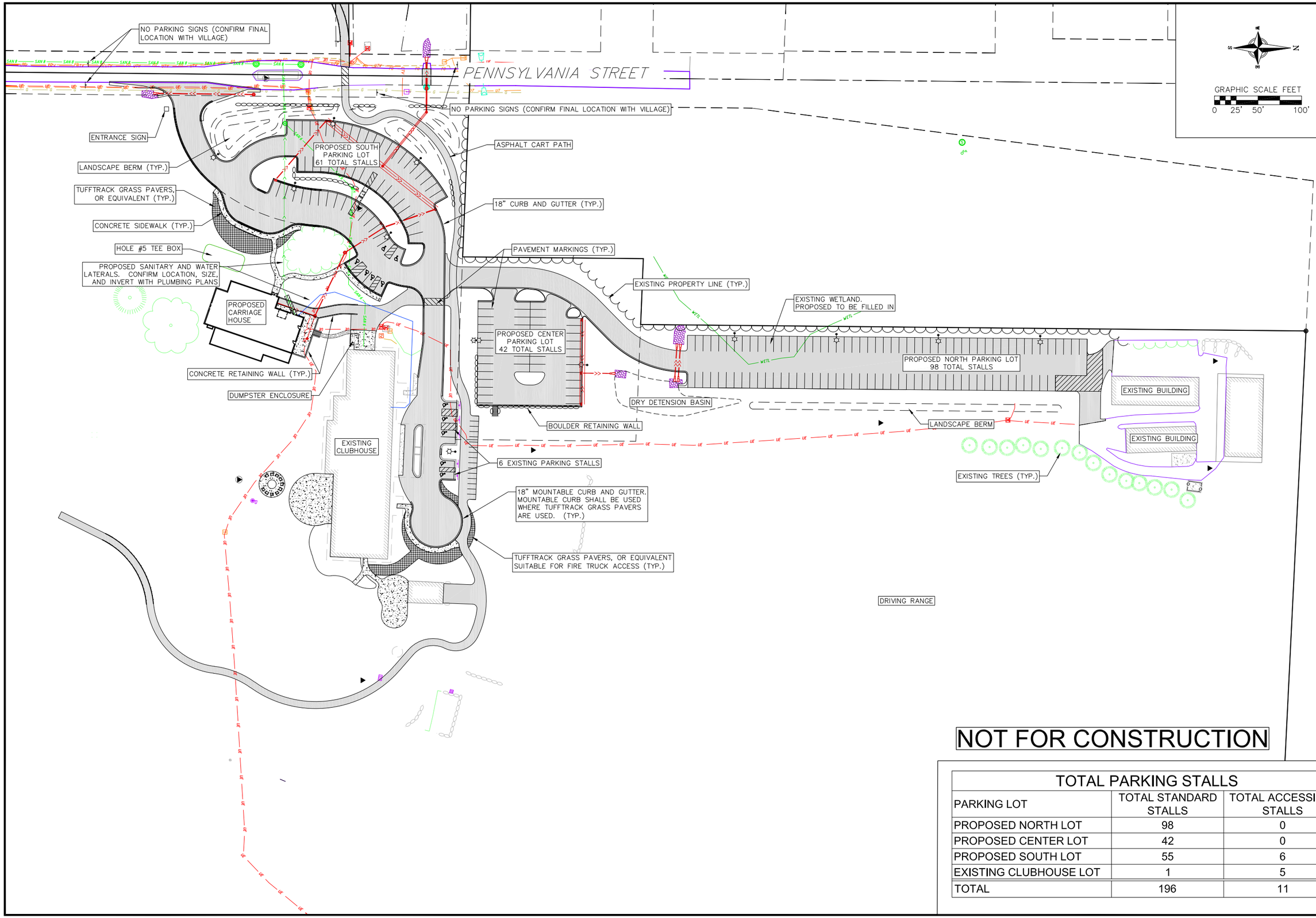

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TOTAL PARKING STALLS

PARKING LOT	TOTAL STANDARD STALLS	TOTAL ACCESSIBLE STALLS
PROPOSED NORTH LOT	98	0
PROPOSED CENTER LOT	42	0
PROPOSED SOUTH LOT	55	6
EXISTING CLUBHOUSE LOT	1	5
TOTAL	196	11

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Overall Site and Utility Plan

The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

REVISIONS

NO.	DATE	REMARKS

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CONTRACTOR TO ULO GAS PRIOR TO STORM SEWER PRODUCTION. NOTIFY ENGINEER IF THERE IS A CONFLICT WITH PROPOSED STORM SEWER.

ASPHALT CART PATH (TYP.)

BOULDER RETAINING WALL

LANDSCAPE BERM (TYP.)

S5: 2' x 3' CI
R-3067 FRAME
TYPE L GRATE
TC=880.04
IE=868.75 S
IE=865.50 SW

DRIVEWAY TO OVERFLOW PARKING LOT AND MAINTENANCE BUILDINGS

36'-21" RCP
STORM @ 0.50%

27'-21" CMP STORM @ 0.50%

S9: 24" CONC STMH
R-1550 FRAME
SOLID LID
RIM=877.64
IE=868.00 W
IE=868.00 SE

63'-15" HDPE
STORM @ 2.37%

S6: 2' x 3' CI
R-3067 FRAME
TYPE R GRATE
TC=880.20
2' SUMP
IE=870.24 N
IE=870.59 SE
IE=876.20 SW

R15.0'

8' 8' 9'

5'

8'

R30'

R20.0'

R20.0'

IE=867.69
12" RCP EW

PROPOSED RIP RAP (TYP.)

S20: 36" CONC FI
IN BELL BEEHIVE GRATE
RIM=870.40
IE=867.86 E
IE=867.86 W

79'-54" RCP
STORM @ 0.00%

6'-12" HDPE STORM @ 1.00%

80'-24" CMP STORM @ 0.00%

S19: 24" CONC STMH
R-1550 FRAME
SOLID LID
RIM=876.53
RESTRICT OUTLET INVERT
TO 869.00 VIA WIER
IE=865.50 NE
IE=865.50 SW
IE=868.00 NW

S11: 2' x 3' CI
R-3067 FRAME
TYPE R GRATE
TC=880.14
2' SUMP
IE=876.26 NE

CONNECT TO EXISTING WATER MAIN

CART PATH TO UNDERGROUND GOLF CART STORAGE

DUMPSTER ENCLOSURE

EXISTING CLUBHOUSE

CRUSHED STONE WALKWAY

PAVEMENT MARKINGS (TYP.)

STEPS

8' 8' 8' 8' 5'

9'

18'

54'-12" HDPE
STORM @ 1.00%

83'-54" RCP STORM @ 0.00%

S14: 36" CONC FI
OPEN GRATE
RIM=877.37
IE=871.13 NW
IE=871.23 SE

81'-12" HDPE
STORM @ 1.00%

S7: 36" CONC FI
R-1550 FRAME
OPEN GRATE
RIM=874.91
IE=872.04 NW
IE=872.47 E
IE=872.14 S

27'-8" PVC STORM @ 1.00%

S13: 24" CONC FI
OPEN GRATE
RIM=874.78
IE=872.74 W

GOLF CART
STOP/YIELD
SIGN (TYP.)

S10: 2' x 3' CI
(2) R-3067 FRAME
TYPE R GRATE
TC=872.82
IE=865.50 NE
IE=869.00 SE

BOULDER
RETAINING
WALL (TYP.)

90'-12" HDPE STORM @ 3.50%

PROPOSED WATER LATERAL. CONFIRM SIZE, LOCATION , AND INVERT WITH PLUMBING PLANS

CONCRETE RETAINING WALL WITH HANDRAIL

CONCRETE RETAINING WALL WITH HANDRAIL

BOULDER RETAINING WALL (TYP.)

18'

9'

CONFIRM SIZE, LOCATION, AND INVERT WITH PLUMBING PLANS I.E. ≈ 870.00

TRENCH DRAIN

S1: 48" CONC SMH
RIM=873.95
IE=864.17 E
EX I.E≈864.00 (W,NW)
CONTRACTOR TO VERIFY EXISTING INVERT

S12: 2' x 3' CI
R-3067 FRAME
TYPE R GRATE
TC=880.10
2' SUMP
IE=872.14 NW

R15.0'

PAVEMENT MARKINGS (TYP.)

CONCRETE SIDEWALK

PROPOSED CARRIAGE HOUSE

S23: 36" CONC FI
IN BELL BEEHIVE GRATE GRATE
RIM=870.00
IE=868.05 S

210 LF – 4" PVC SANITARY LATERAL @ 2.61%. CONFIRM SIZE, LOCATION , AND INVERT WITH PLUMBING PLANS

LANDSCAPE BERM (TYP.)

212.0'

R20.0'

R15.0'

18" MOUNTABLE CURB & GUTTER AROUND DROP OFF AREA.

REJECT CURB & GUTTER (TYP)

R20.0'

HOLE #5 TEE BOX

"NO PARKING FIRE LANE" SIGNS TO BE ADDED. LOCATIONS TO BE VERIFIED WITH THE FIRE DEPARTMENT

TUFFTRACK GRASS PAVERS, OR EQUIVALENT SUITABLE FOR FIRE TRUCK ACCESS (TYP.)

29'

18" CURB AND GUTTER (TYP.)

115'-12" RCP STORM @ 1.00%

R25.0'

CONCRETE FLUME

IE=866.90
12" RCP EW

RIP RAP (TYP.)

PENNSYLVANIA STREET

N
W E
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GRAPHIC SCALE FEET
0 10' 20' 40'

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South Site and Utility Plan

The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

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24'

18" CURB & GUTTER

S15: 2' x 3' CI
R-3067 FRAME
TYPE R GRATE
TC=882.75
IE=875.50 E

RIP RAP (TYP.)

SINGLE FIXTURE LIGHT POLE (TYP.)

DOUBLE FIXTURE LIGHT POLE (TYP.)

61'-54" CMP STORM @ 0.00%

IE=875.28
12" EW

IE=875.28
12" EW

18'
9'
24'
18'
9'

9'
9'
18'
24'
18'
18'
24'
18'
9'

S16: 2' x 3' CI
R-3067 FRAME
TYPE L GRATE
TC=883.18
IE=875.50 W
IE=875.50 E
IE=879.00 N

43'-12" HDPE
STORM @ 0.50%

43'-12" HDPE STORM @ 0.50%

PAVEMENT MARKINGS (TYP.)

IE=877.00
12" EW

38'-12" CMP STORM @ 5.31%

IE=875.50
12" EW

CONCRETE FLUME

18" CURB & GUTTER

36'-54" CMP STORM @ 0.00%

IE=875.50
12" EW

S17: 2' x 3' CI
R-3067 FRAME
TYPE R GRATE
TC=883.43
IE=875.50 W

RETAINING WALL (TYP.)

LANDSCAPE BERM (TYP.)

STEPS

ASPHALT CART PARKING (TYP.)

EXISTING DRIVING RANGE

ASPHALT CART PATH (TYP.)

R30.0'

R42.0'

18" MOUNTABLE CURB & GUTTER

TUFFTRACK GRASS PAVERS,
OR EQUIVALENT (TYP.)

12' MIN.

GRAPHIC SCALE FEET
0 10' 20' 40'

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Center Site and Utility Plan

The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

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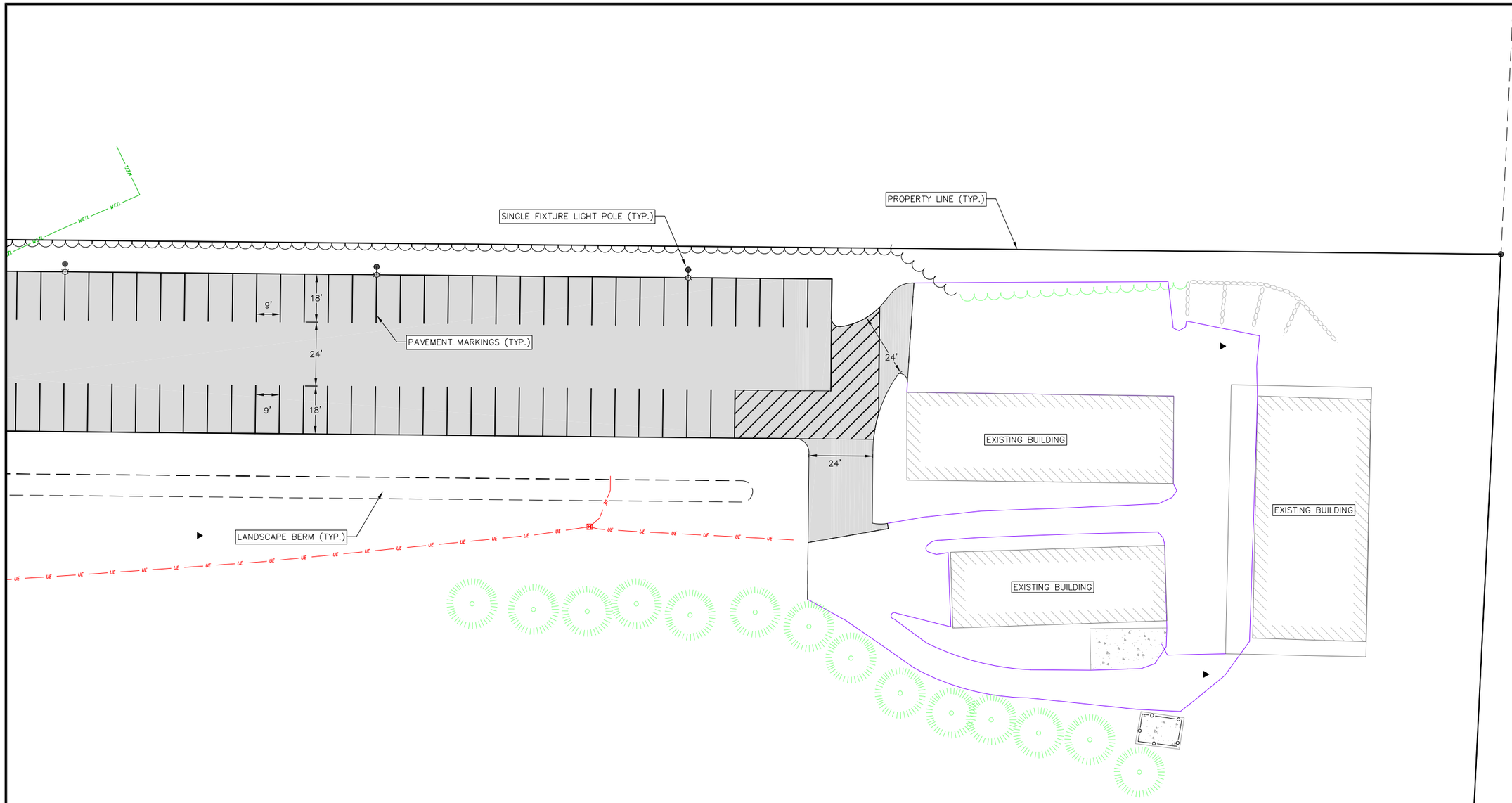

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North Site and Utility Plan

The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

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GRAPHIC SCALE FEET
0 10' 20' 40'

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PENNSYLVANIA STREET

TRACKING PAD

INLET PROTECTION (TYP.)

TEMPORARY DIVERSION BERM (TYP.)

STONE WEEPER (TYP.)

BOULDER RETAINING WALL

PROPOSED SOUTH PARKING LOT

EROSION MAT CLASS I, TYPE A (TYP.)

APPROXIMATE PHASE 1 TEMPORARY SEDIMENT TRAP LOCATION. SIZE=1,400 SF. EXACT LOCATION SHALL BE DETERMINED IN THE FIELD AT LOWEST POINT IN DRAINAGE AREA. DIVERSION BERMS SHALL BE INSTALLED TO DIRECT PHASE 1 DISTURBED AREA TO TEMPORARY SEDIEMNT TRAP.

SILT FENCE OR SILT SOCK (TYP.)

EXISTING PROPERTY LINE (TYP.)

APPROXIMATE PHASE 1 LIMTS

PROPOSED CARRIAGE HOUSE

PROPOSED CENTER PARKING LOT

EXISTING WETLAND. DELINEATED 4-30-18

PARKING LOT DRAINAGE SWALE. DEE DETAIL BELOW

PROPOSED NORTH PARKING LOT

TEMPORARY DIVERSION BERM (TYP.)

DRY DETENTION BASIN

STONE WEEPER (TYP.)

EROSION MAT CLASS II, TYPE B (TYP.)

SILT FENCE OR SILT SOCK (TYP.)

EXISTING CLUBHOUSE

RETAINING WALL (TYP.)

STEPS

USE DRY DETENTION BASIN AS TEMPORARY SEDIMENT BASIN UNTIL SITE IS ESTABLISHED. SIZE OF TEMPORARY SEDIMENT BASIN = 6,410 SF. SEE DETAIL BELOW.

DRIVING RANGE

CONSTRUCTION SEQUENCE:

PHASE 1:

1. INSTALL SILT FENCE, TRACKING PAD, AND SOUTH TEMPORARY SEDIMENT TRAP (NEAR PROPOSED ENTRANCE ON PENNSYLVANIA).
2. STRIP TOPSOIL AROUND PHASE 1 AREA (CARRIAGE HOUSE BUILDING)
3. CONSTRUCT SANITARY AND WATER LATERALS TO CARRIAGE HOUSE. EXCAVATE FOR CARRIAGE HOUSE. POUR FOOTINGS, WALLS, AND SPANCRETE.
4. EXISTING PARKING LOT SHALL REMAIN TO ALLOW EMERGENCY VEHICLES TO ACCESS THE EXISTING CLUBHOUSE AT ALL TIMES DURING PHASE 1 CONSTRUCTION.

PHASE 2:

1. INSTALL NORTH TEMPORARY SEDIMENT BASIN AND ENLARGE SOUTH TEMPORARY SEDIMENT TRAP TO 3,050 SF. ADJUST DIVERSION BERMS AS NECESSARY TO DIRECT DISTURBED AREAS TO SEDIMENT TRAPS/BASINS TO THE MAXIM AMOUNT PRACTICABLE.
2. STRIP TOPSOIL FOR PARKING LOT CONSTRUCTION
3. ROUGH GRADE SITE
4. CONSTRUCT UNDERGROUND UTILITIES
5. INSTALL BASE COURSE, PAVEMENT, CONCRETE SIDEWALK, AND CURB AND GUTTER.
6. INSTALL INLET PROTECTION AND DITCH CHECKS.
7. SHAPE LANDSCAPE AREAS AND RESTORE ALL DISTURBED AREAS
8. REMOVE TRACKING PAD AND SILT FENCE AFTER 70% OF DISTURBED AREAS ARE ESTABLISHED WITH VEGETATION.
9. MAINTAIN EMERGENCY ACCESS TO EXISTING CLUBHOUSE AND PROPOSED CARRIAGE HOUSE DURING CONSTRUCTION. IF ACCESS WILL BE RESTRICTED, CONTRACTOR SHALL NOTIFY FIRE DEPARTMENT.

GRAPHIC SCALE FEET
0 25' 50' 100'

NOTES:

1. EROSION CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ACCEPTANCE OF THIS PROJECT. EROSION CONTROL MEASURES AS SHOWN SHALL BE THE MINIMUM PRECAUTIONS THAT WILL BE ALLOWED. ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED IN WRITING BY THE STATE OR LOCAL INSPECTORS, OR THE DEVELOPER'S ENGINEER, SHALL BE INSTALLED WITHIN 24 HOURS.
2. SEE SHEET C11 FOR ADDITIONAL NOTES REGARDING EROSION CONTROL.
3. TEMPORARY SEDIMENT BASIN SHALL BE CONSTRUCTED PRIOR TO ANY WORK ON THE CENTER OR NORTH PARKING LOT.
4. DIVERSION BERMS SHALL BE INSTALLED AS NECESSARY TO DIRECT WATER FROM THE DRIVING RANGE AREA, CENTER PARKING LOT, AND NORTH PARKING LOT TO THE PROPOSED SEDIMENT BASIN. DIVERSION BERMS ARE SHOWN AT APPROXIMATE LOCATIONS AND SHOULD BE ADJUSTED BASED ON ACTUAL SITE GRADES.

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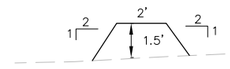
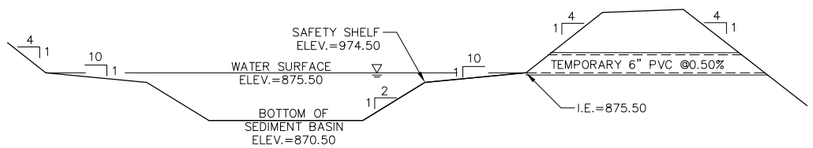
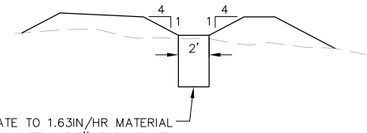


DIVERSION BERM SHALL BE INSTALLED PER WISDNR TECH STANDARD 1066

1/1 DIVERSION BERM
NOT TO SCALE



1/1 TEMPORARY SEDIMENT BASIN
NOT TO SCALE



EXCAVATE TO 1.63IN/HR MATERIAL (APPROXIMATELY 5.5') FOR LENGTH OF DRAINAGE SWALE. REPLACE EXCAVATED TRENCH AREA WITH MATERIAL EQUAL TO 1.63 IN/HR OR GREATER. TOP 6" SHALL BE TOPSOIL.

1/1 PARKING LOT DRAINAGE SWALE
NOT TO SCALE

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Overall Grading and Erosion Control Plan

The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

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PENNSYLVANIA STREET

BOULDER RETAINING WALL (TYP.)

EROSION MAT CLASS 1, TYPE A (TYP.)

EXISTING CLUBHOUSE

PROPOSED CARRIAGE HOUSE

PROPOSED CONTOURS (TYP.)

TUFFTRACK GRASS PAVERS, OR EQUIVALENT SUITABLE FOR FIRE TRUCK ACCESS (TYP.)

EXISTING CONTOURS (TYP.)

TRACKING PAD

SILT FENCE OR SILT SOCK (TYP.)

RIP RAP (TYP.)

879.35 EP
879.93 EP
882.45 EP
883.78 EP
885.53 EP
886.26 EP
890.86 EP
890.38 EP
893.45 EP
893.83 EP
894.44 EP
895.38 EP
894.78 EP
882.60 EP
882.50 EP
881.32 EP
880.41 EP
880.97 EP
881.11 EP
875.66 EP
879.70 EP
876.94 EP
880.15 EP
880.66 EP
880.50 EP
880.74 EP
872.34 EP
881.89 EP
882.69 EP
874.16 EP
873.88 EP
873.57 EP
873.73 EP
882.05 EP
879.61 EP
879.69 EP
881.38 EP
879.04 EP
879.89 EP
876.11 EP
875.95 EP
878.36 EP
876.86 EP
874.63 EP
870.26 EP
871.48 EP
870.89 EP
869.20 EP
869.34 EP
869.43
871.28
869.74
869.64
869.45
875.00
885.00
885.00

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GRAPHIC SCALE FEET
0 10' 20' 40'

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South Grading and Erosion Control Plan
The Club at Lac La Belle
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882.60 EP
880.41 EP
882.45 EP
881.32 EP
883.78 EP
880.97 EP
882.50 EP
881.11 EP
885.43 EP
884.57 EP
885.43 EP
884.11 EP
885.86 EP
884.88 EP
884.30 EP
882.81 EP
882.35 EP
882.24 EP
880.80 EP
880.34 EP
883.48 EP
885.86 EP
884.16 EP
882.98 EP
885.53 EP
890.38 EP
890.66 EP
893.83 EP
893.45 EP
894.44 EP
894.78 EP
895.38 EP
877.64 EP
878.88 EP
880.13 EP
877.24 EP
876.78 EP
876.46 EP
877.68 EP
878.93 EP

RIP RAP (TYP.)

EROSION MAT CLASS 1, TYPE A (TYP.)

EROSION MAT CLASS II, TYPE B (TYP.)

TUFFTRACK GRASS PAVERS, OR EQUIVALENT SUITABLE FOR FIRE TRUCK ACCESS (TYP.)

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GRAPHIC SCALE FEET
0 15' 30' 60'

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Center Grading and Erosion Control Plan

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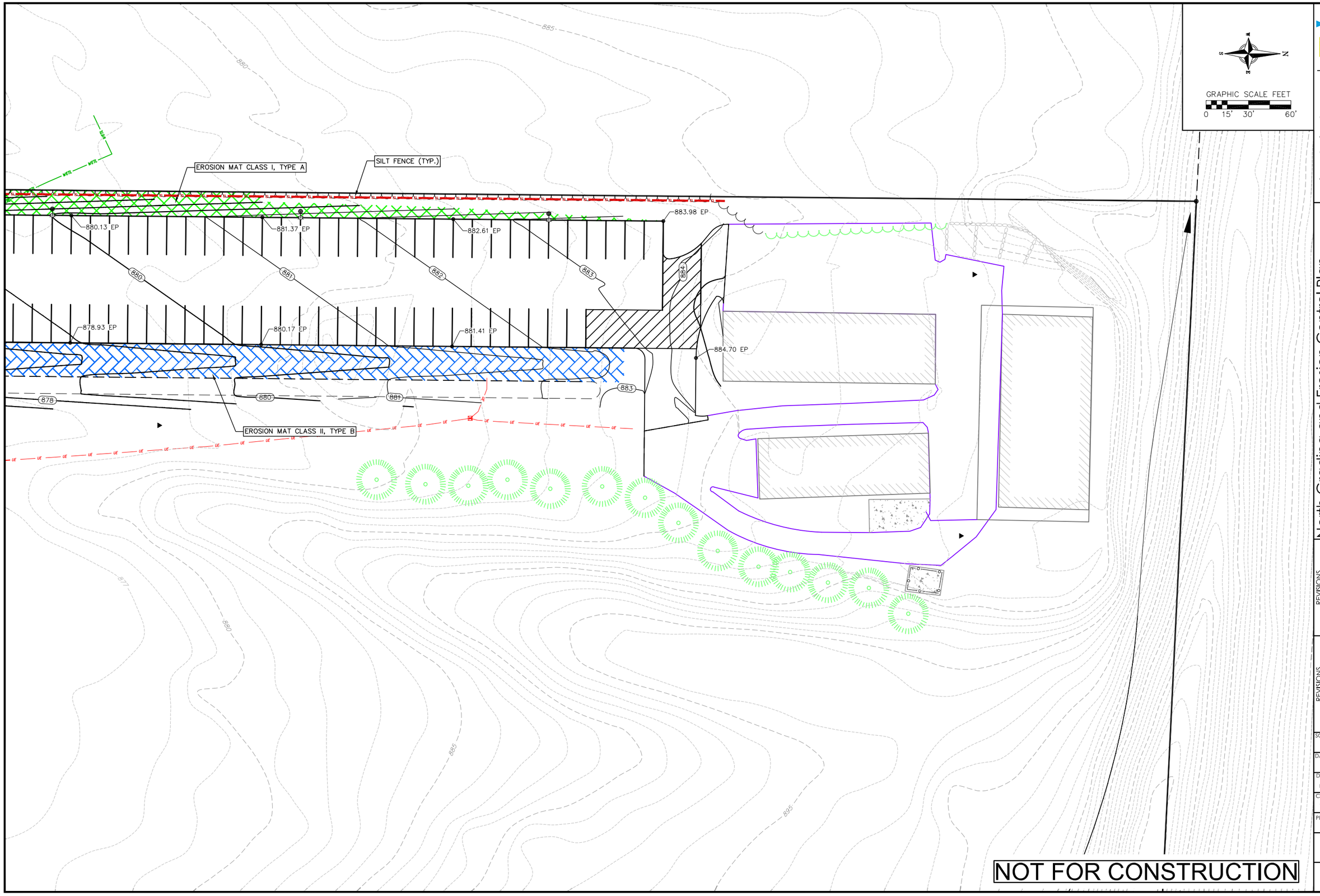

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North Grading and Erosion Control Plan

The Club at La Belle
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EROSION CONTROL MEASURES

1. EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE VILLAGE EROSION CONTROL ORDINANCE AND CHAPTER NR 216 OF THE WISCONSIN ADMINISTRATIVE CODE.
2. CONSTRUCT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH WISCONSIN DNR TECHNICAL STANDARDS (http://dnr.wi.gov/runoff/stormwater/techstds.htm) AND WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK.
3. INSTALL SEDIMENT CONTROL PRACTICES (TRACKING PAD, PERIMETER SILT FENCE, ETC.) PRIOR TO INITIATING OTHER LAND DISTURBING CONSTRUCTION ACTIVITIES.
4. THE CONTRACTOR IS REQUIRED TO MAKE EROSION CONTROL INSPECTIONS AT THE END OF EACH WEEK AND WHEN 0.5 INCHES OF RAIN FALLS WITHIN 24 HOURS. INSPECTION REPORTS SHALL BE PREPARED AND FILED AS REQUIRED BY THE DNR AND/OR VILLAGE. ALL MAINTENANCE WILL FOLLOW AN INSPECTION WITHIN 24 HOURS.
5. EROSION CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ACCEPTANCE OF THIS PROJECT. EROSION CONTROL MEASURES AS SHOWN SHALL BE THE MINIMUM PRECAUTIONS THAT WILL BE ALLOWED. ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED IN WRITING BY THE STATE OR LOCAL INSPECTORS, OR THE DEVELOPER'S ENGINEER, SHALL BE INSTALLED WITHIN 24 HOURS.
6. A 3" CLEAR STONE TRACKING PAD SHALL BE INSTALLED AT THE SITE ENTRANCE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE ADJACENT PAVED PUBLIC ROADWAY. SEDIMENT TRACKING PAD SHALL CONFORM TO WisDNR TECHNICAL STANDARD 1057. SEDIMENT REACHING THE PUBLIC ROAD SHALL BE REMOVED BY STREET CLEANING (NOT HYDRAULIC FLUSHING) BEFORE THE END OF EACH WORK DAY.
7. CHANNELIZED RUNOFF: FROM ADJACENT AREAS PASSING THROUGH THE SITE SHALL BE DIVERTED AROUND DISTURBED AREAS.
8. STABILIZED DISTURBED GROUND: ANY SOIL OR DIRT PILES WHICH WILL REMAIN IN EXISTENCE FOR MORE THAN 7-CONSECUTIVE DAYS, WHETHER TO BE WORKED DURING THAT PERIOD OR NOT, SHALL NOT BE LOCATED WITHIN 25-FEET OF ANY ROADWAY, PARKING LOT, PAVED AREA, OR DRAINAGE STRUCTURE OR CHANNEL (UNLESS INTENDED TO BE USED AS PART OF THE EROSION CONTROL MEASURES). TEMPORARY STABILIZATION AND CONTROL MEASURES (SEEDING, MULCHING, TARPING, EROSION MATTING, BARRIER FENCING, ETC.) ARE REQUIRED FOR THE PROTECTION OF DISTURBED AREAS AND SOIL PILES, WHICH WILL REMAIN UN-WORKED FOR A PERIOD OF MORE THAN 14-CONSECUTIVE CALENDAR DAYS. THESE MEASURES SHALL REMAIN IN PLACE UNTIL SITE HAS STABILIZED.
9. SITE DE-WATERING: WATER PUMPED FROM THE SITE SHALL BE TREATED BY TEMPORARY SEDIMENTATION BASINS OR OTHER APPROPRIATE CONTROL MEASURES. SEDIMENTATION BASINS SHALL HAVE A DEPTH OF AT LEAST 3 FEET, BE SURROUNDED BY SNOWFENCE OR EQUIVALENT BARRIER AND HAVE SUFFICIENT SURFACE AREA TO PROVIDE A SURFACE SETTLING RATE OF NO MORE THAN 750 GALLONS PER SQUARE FOOT PER DAY AT THE HIGHEST DEWATERING PUMPING RATE. WATER MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE, A NEIGHBORING SITE, OR THE BED OR BANKS OF THE RECEIVING WATER. POLYMERS MAY BE USED AS DIRECTED BY DNR TECHNICAL STANDARD 1061 (DE-WATERING).
10. WASHED STONE WEEPERS OR TEMPORARY EARTH BERMS SHALL BE BUILT PER PLAN BY CONTRACTOR TO TRAP SEDIMENT OR SLOW THE VELOCITY OF STORM WATER.
11. USE DETENTION BASINS AS SEDIMENT BASINS DURING CONSTRUCTION (DO NOT USE INFILTRATION AREAS). AT THE END OF CONSTRUCTION, REMOVE SEDIMENT AND RESTORE PER PLAN.
12. RESTORATION (SEED, FERTILIZE AND MULCH) SHALL BE PER SPECIFICATIONS ON THIS SHEET UNLESS SPECIAL RESTORATION IS CALLED FOR ON THE LANDSCAPE PLAN OR THE DETENTION BASIN DETAIL SHEET.
13. DISTURBED AREAS SHALL BE RESTORED WITH 6" TOPSOIL, PERMANENT SEED, FERTILIZER AND MULCH.
14. SEED, FERTILIZER AND MULCH SHALL BE APPLIED WITHIN 7 DAYS AFTER FINAL GRADE HAS BEEN ESTABLISHED. IF DISTURBED AREAS WILL NOT BE RESTORED IMMEDIATELY AFTER ROUGH GRADING, TEMPORARY SEED SHALL BE PLACED.
15. FOR THE FIRST SIX WEEKS AFTER RESTORATION (E.G. SEED & MULCH, EROSION MAT, SOD) OF A DISTURBED AREA, INCLUDE SUMMER WATERING PROVISIONS OF ALL NEWLY SEEDED AND MULCHED AREAS WHENEVER 7 DAYS ELAPSE WITHOUT A RAIN EVENT.
16. EROSION MAT (CLASS I, TYPE A URBAN PER WISCONSIN D.O.T. P.A.L.) SHALL BE INSTALLED ON ALL SLOPES 3:1 OR GREATER BUT LESS THAN 1:1.
17. SILT FENCE OR EROSION MAT SHALL BE INSTALLED ALONG THE CONTOURS AT 100 FOOT INTERVALS DOWN THE SLOPE ON THE DISTURBED SLOPES STEEPER THAN 5% AND MORE THAN 100 FEET LONG THAT SHEET FLOW TO THE ROADWAY UNLESS SOIL STABILIZERS ARE USED.
18. SILT FENCE TO BE USED ACROSS AREAS OF THE LOT THAT SLOPE TOWARDS A PUBLIC STREET OR WATERWAY. SEE DETAILS.
19. ACCUMULATED CONSTRUCTION SEDIMENT SHALL BE REMOVED FROM ALL PERMANENT BASINS TO THE ELEVATION SHOWN ON THE GRADING PLAN FOLLOWING THE STABILIZATION OF DRAINAGE AREAS.
20. ANY PROPOSED CHANGES TO THE EROSION CONTROL PLAN MUST BE SUBMITTED AND APPROVED BY VILLAGE OF LAC LA BELLE.
21. THE VILLAGE, OWNER AND/OR ENGINEER MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AT ANY TIME DURING CONSTRUCTION.

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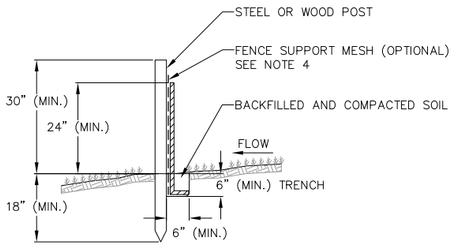
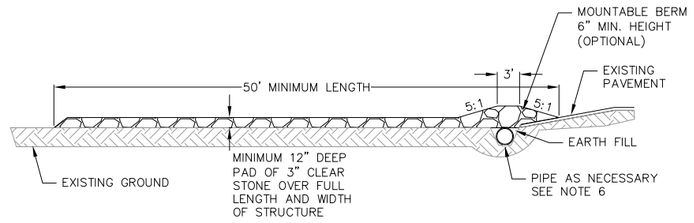


NOTES:

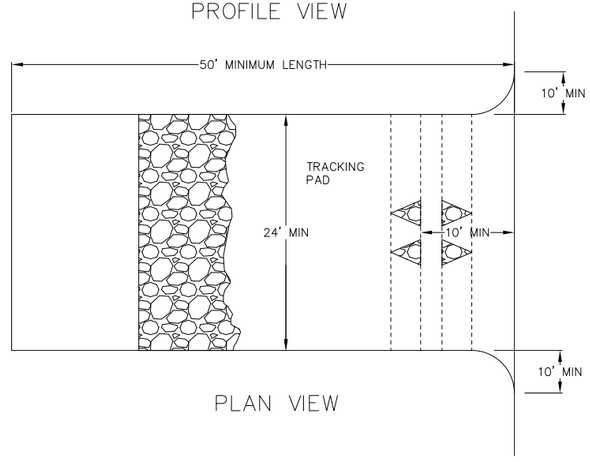
1. INSTALL SILT FENCE TO FOLLOW THE GROUND CONTOURS AS CLOSELY AS POSSIBLE.
2. CURVE THE SILT FENCE UP THE SLOPE TO PREVENT WATER FROM RUNNING AROUND THE ENDS.
3. POST SPACING WITH FENCE SUPPORT MESH = 10 FT. (MAX.)

   POST SPACING WITHOUT FENCE SUPPORT MESH = 6 FT. (MAX.)
4. SILT FENCE SUPPORT MESH CONSISTS OF 14-GAUGE STEEL WIRE WITH A MESH SPACING OF 6 IN. X 6 IN. OR PREFABRICATED POLYMERIC MESH OF EQUIVALENT STRENGTH

1/1 SILT FENCE
NOT TO SCALE



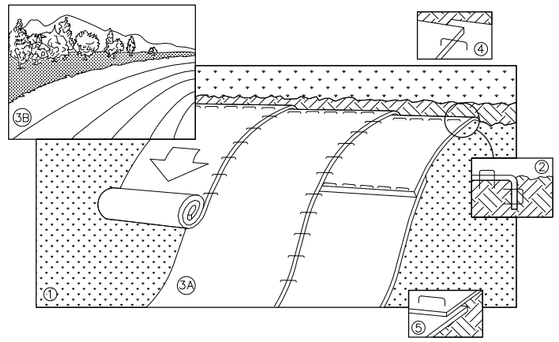
PROFILE VIEW



PLAN VIEW

1. FOLLOW WISCONSIN DNR TECHNICAL STANDARD 1057 FOR FURTHER DETAILS AND INSTALLATION.
2. LENGTH – MINIMUM OF 50'
3. WIDTH – 24' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
4. ON SITES WITH A HIGH GROUND WATER TABLE OR WHERE SATURATED CONDITIONS EXIST, GEOTEXTILE FABRIC SHALL BE PLACED OVER EXISTING GROUND PRIOR TO PLACING STONE. FABRIC SHALL BE WISDOT TYPE-HR GEOTEXTILE FABRIC.
5. STONE – CRUSHED 3" CLEAR STONE SHALL BE PLACED AT LEAST 12" DEEP OVER THE ENTIRE LENGTH AND WIDTH OF ENTRANCE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARDS CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE. MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND MINIMUM OF 6" STONE OVER THE PIPE. PIPE SHALL BE SIZED ACCORDING TO THE DRAINAGE REQUIREMENTS. WHEN THE ENTRANCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE SHALL NOT BE NECESSARY. THE MINIMUM PIPE DIAMETER SHALL BE 6". CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF SAID PIPE.
7. LOCATION – A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED WHERE CONSTRUCTION TRAFFIC ENTERS AND/OR LEAVES THE CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE TRACKING PAD.

1/1 TRACKING PAD
NOT TO SCALE



NOTE: REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED.
   NOTE: WHEN USING CELL-O-SEED, DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS <A.> DOWN, OR <B.> HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.
6. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SLOPE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.

1/1 EROSION MAT
NOT TO SCALE

SEEDING RATES:

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

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

FERTILIZING RATES:

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

MULCHING RATES:

TEMPORARY AND PERMANENT:
USE ½" TO 1-½" STRAW OR HAY MULCH, CRIMPED PER SECTION 607.3.2.3, OR OTHER RATE AND METHOD PER SECTION 627, WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION

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planners | engineers | advisors
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Construction Details
The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

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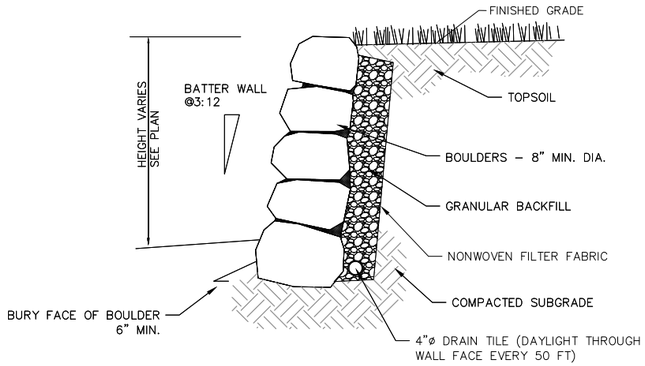
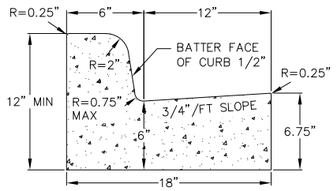
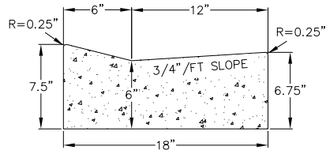


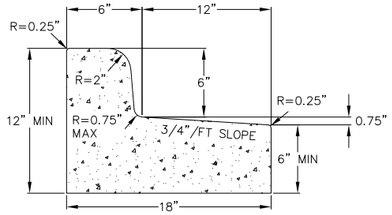
1/1 BOULDER WALL
NOT TO SCALE



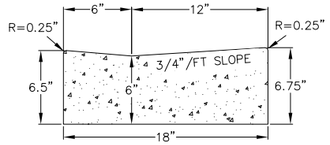
CURB AND GUTTER
CROSS SECTION



DRIVEWAY GUTTER
CROSS SECTION

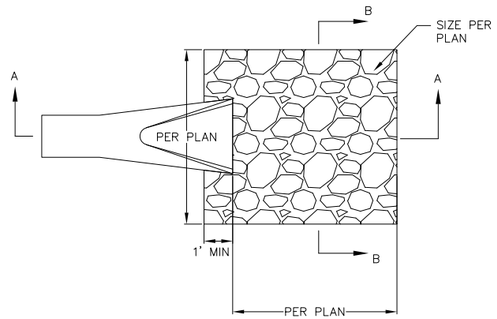


CURB AND GUTTER
REJECT SECTION

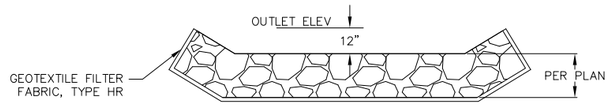


HANDICAP RAMP
GUTTER CROSS SECTION

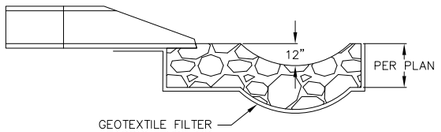
1/1 18" CONCRETE CURB AND GUTTER
NOT TO SCALE



PLAN VIEW

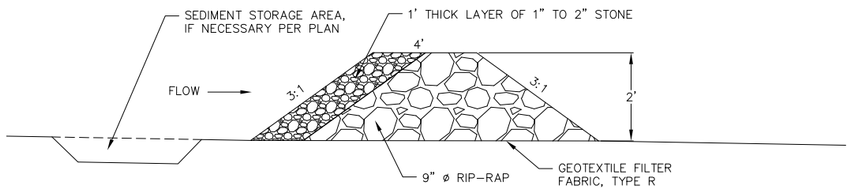


CROSS SECTION B–B

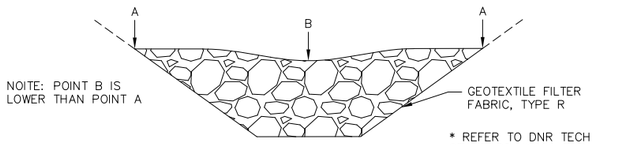


CROSS SECTION A–A

1/1 RIP–RAP OUTLET
NOT TO SCALE

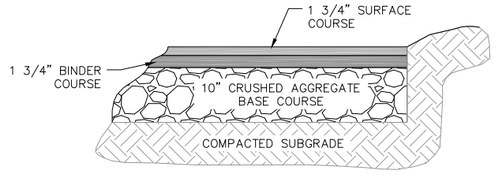


SECTION VIEW

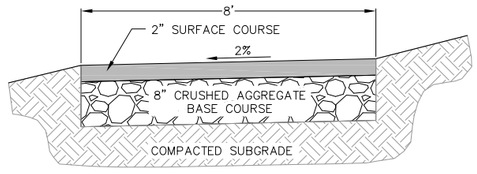


FRONT VIEW

1/1 WEEPER
NOT TO SCALE

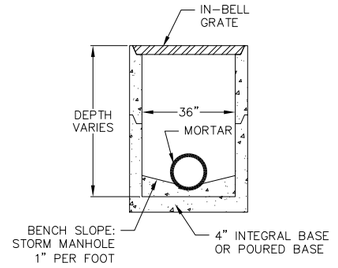


BITUMINOUS PAVEMENT
PARKING LOT AND DRIVEWAY



BITUMINOUS PAVEMENT
CART PATH

1/1 SITE PAVEMENT
NOT TO SCALE



1/1 36" CATCH BASIN
NOT TO SCALE

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Construction Details
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Village of Lac La Belle
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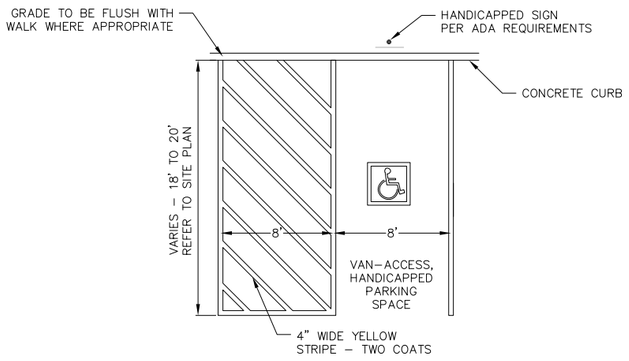
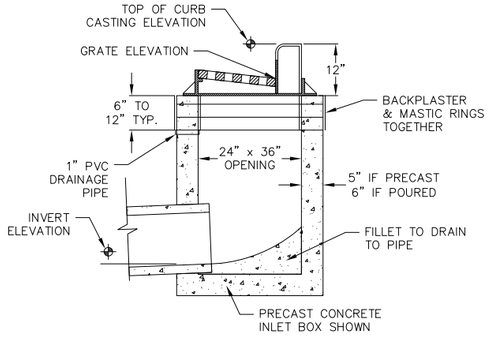
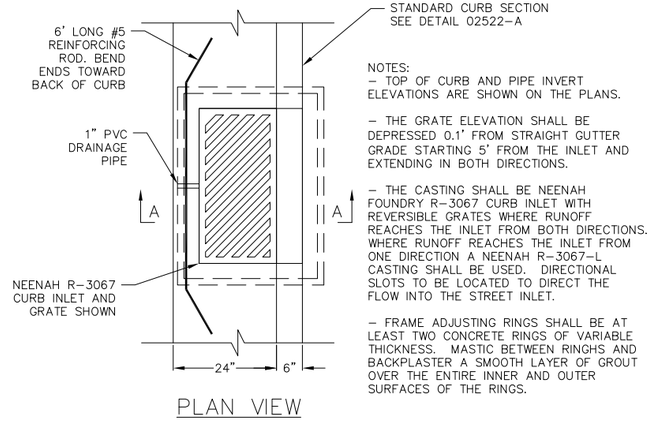


1/1 HANDICAP STRIPING
NOT TO SCALE



SECTION A–A



PLAN VIEW

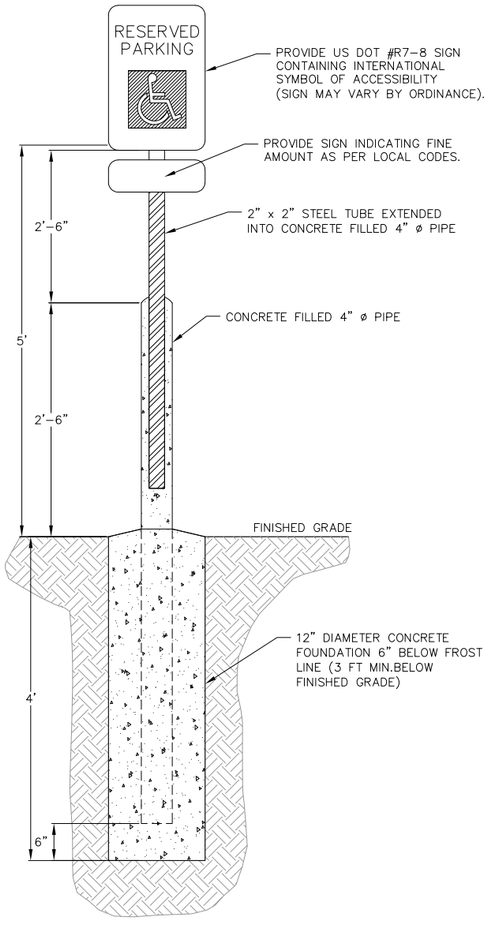
NOTES:
– TOP OF CURB AND PIPE INVERT ELEVATIONS ARE SHOWN ON THE PLANS.

– THE GRATE ELEVATION SHALL BE DEPRESSED 0.1' FROM STRAIGHT GUTTER GRADE STARTING 5' FROM THE INLET AND EXTENDING IN BOTH DIRECTIONS.

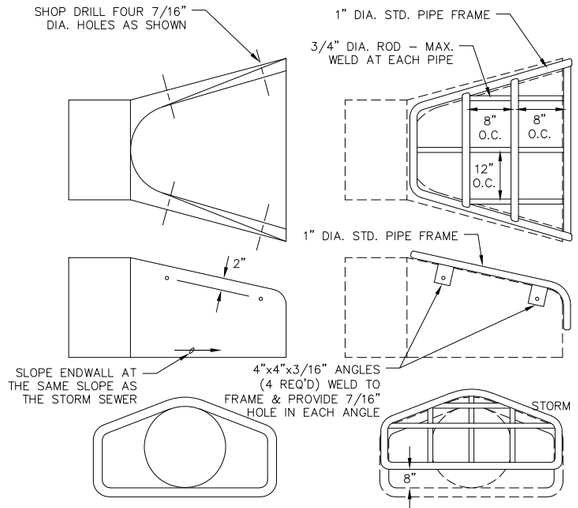
– THE CASTING SHALL BE NEENAH FOUNDRY R–3067 CURB INLET WITH REVERSIBLE GRATES WHERE RUNOFF REACHES THE INLET FROM BOTH DIRECTIONS. WHERE RUNOFF REACHES THE INLET FROM ONE DIRECTION A NEENAH R–3067–L CASTING SHALL BE USED. DIRECTIONAL SLOTS TO BE LOCATED TO DIRECT THE FLOW INTO THE STREET INLET.

– FRAME ADJUSTING RINGS SHALL BE AT LEAST TWO CONCRETE RINGS OF VARIABLE THICKNESS. MASTIC BETWEEN RINGHS AND BACKPLASTER A SMOOTH LAYER OF GROUT OVER THE ENTIRE INNER AND OUTER SURFACES OF THE RINGS.

1/1 RECTANGULAR STREET INLET
NOT TO SCALE



1/1 HANDICAP PARKING SIGN
NOT TO SCALE



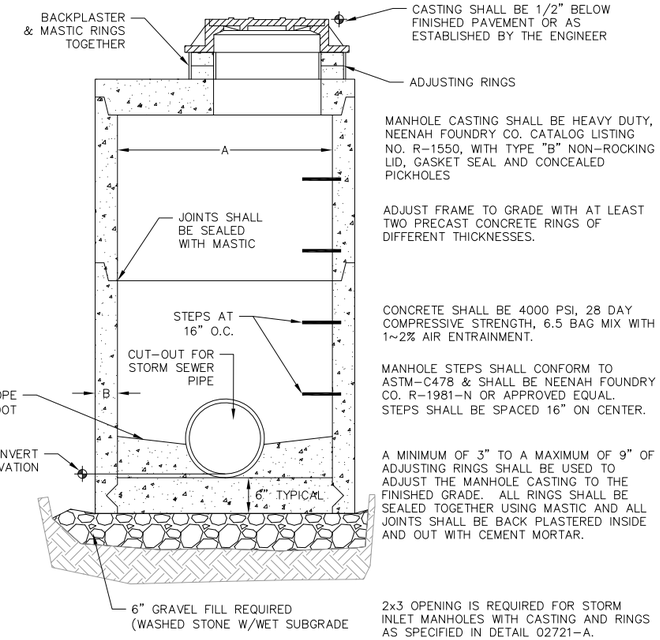
ENDWALL DETAILS PIPE GATE DETAILS

NOTES:
– THE CONTRACTOR SHALL BOLT THE PIPE GATE TO THE CONCRETE ENDWALL WITH FOUR 3/8"x6" MACHINE BOLTS WITH NUTS ON INSIDE WALL.
– THE CONTRACTOR SHALL PROVIDE JOINT TIES ON STORM SEWER SYSTEM INFALL AND OUTFALL PIPES. TIE THE ENDWALL AND THE LAST 2 PIPE SECTIONS.

PAINTING SPECIFICATIONS:
– THE PIPE GATE SHALL RECEIVER THE FOLLOWING PREPARATION & PAINTING. THE FIRST COAT SHALL BE RUS–OLEUM X–60 RED BARE METAL PRIMER OR APPROVED EQUAL. THE SECOND COAT SHALL BE RUST–OLEUM 960 ZINC CHROMATE PRIMER OR APPROVED EQUAL. THE THIRD COAT SHALL BE RUS–OLEUM 1282 HIGH GLOSS METAL FINISH OR APPROVED EQUAL.

PREPARATION STEPS:
1. BARE METAL SURFACES – TREAT WITH THE THREE–COAT PAINTING SYSTEM LISTED AFTER A THOROUGH SCRAPING, WIRE BRUSHING & CLEANING.
2. EACH COAT OF PAINT SHALL BE APPLIED OVER THE ENTIRE GATE SURFACE.
3. ALLOW 24–48 HOURS DRYING TIME AT 60° OR ABOVE BETWEEN COATS.

1/1 STANDARD ENDWALL
NOT TO SCALE



MANHOLE CASTING SHALL BE HEAVY DUTY, NEENAH FOUNDRY CO. CATALOG LISTING NO. R–1550, WITH TYPE "B" NON–ROCKING LID, GASKET SEAL AND CONCEALED PICKHOLES

ADJUST FRAME TO GRADE WITH AT LEAST TWO PRECAST CONCRETE RINGS OF DIFFERENT THICKNESSES.

CONCRETE SHALL BE 4000 PSI, 28 DAY COMPRESSIVE STRENGTH, 6.5 BAG MIX WITH 1~2% AIR ENTRAINMENT.

MANHOLE STEPS SHALL CONFORM TO ASTM–C478 & SHALL BE NEENAH FOUNDRY CO. R–1981–N OR APPROVED EQUAL. STEPS SHALL BE SPACED 16" ON CENTER.

A MINIMUM OF 3" TO A MAXIMUM OF 9" OF ADJUSTING RINGS SHALL BE USED TO ADJUST THE MANHOLE CASTING TO THE FINISHED GRADE. ALL RINGS SHALL BE SEALED TOGETHER USING MASTIC AND ALL JOINTS SHALL BE BACK PLASTERED INSIDE AND OUT WITH CEMENT MORTAR.

2x3 OPENING IS REQUIRED FOR STORM INLET MANHOLES WITH CASTING AND RINGS AS SPECIFIED IN DETAIL 02721–A.

STORM MANHOLE DIMENSIONS

MANHOLE SIZE	DIMENSION	
	A	B (MIN.)
48"	48"	5"
60"	60"	6"
72"	72"	7"
84"	84"	7"
96"	96"	9"

1/1 STORM SEWER MANHOLE
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The Club at Lac La Belle
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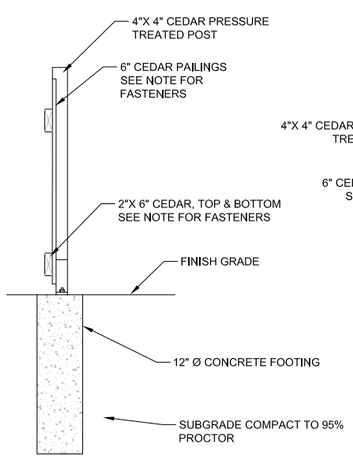
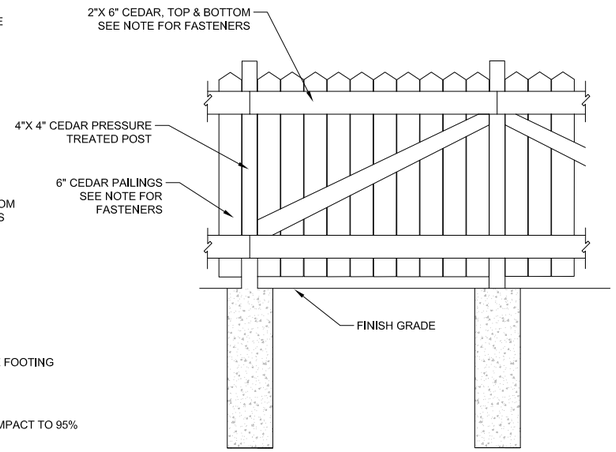
SIDE VIEW



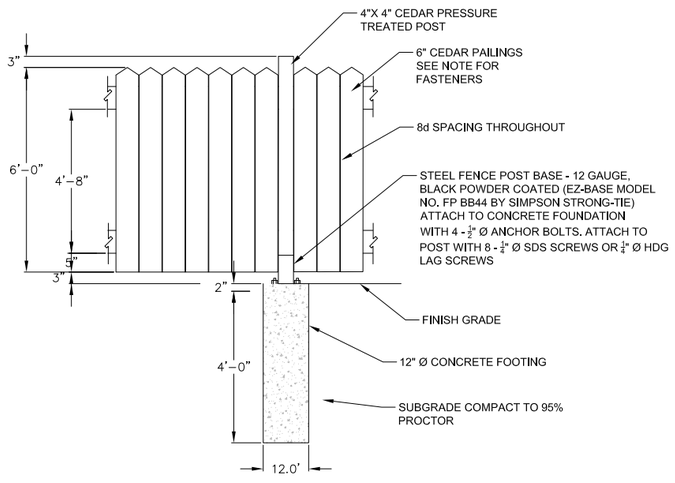
BACK VIEW



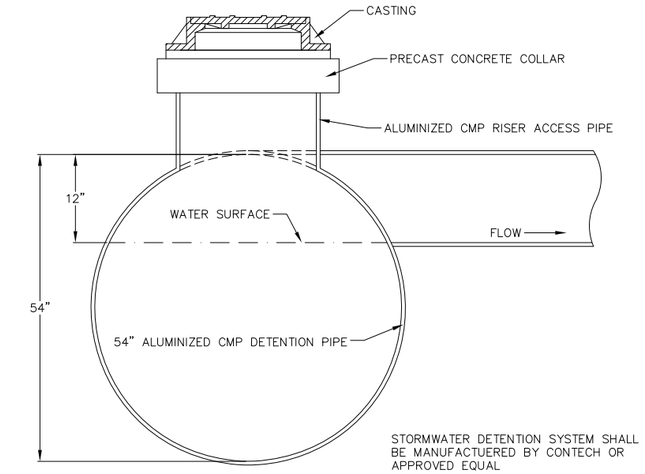
NOTES:

1. ALL DIMENSIONS NOMINAL UNLESS OTHERWISE NOTED
2. ALL WOOD KILN DRIED MC15/KD, S4S
3. ALL WOOD SHALL BE ORCHARD GROWN
4. USE STRING LINE FOR EVEN SCREW SPACING
5. NO STAMPING, PRINTING OR TAGS SHALL BE VISIBLE ON THE WOOD.
6. ALL WOOD SHALL BE STAINED W/ OLYMPIC SEMI-TRANSPARENT STAIN PER MFG. INSTRUCTION.
7. FASTENERS: JAMESTOWN DISTRIBUTORS #10 OR EQUAL
8. BRONZE WOOD SCREWS FP, 10X2 $\frac{1}{2}$ & 10X3 $\frac{1}{2}$ AS NEEDED
9. AVOID NATURAL PLANE OF WOOD W/ FASTENERS

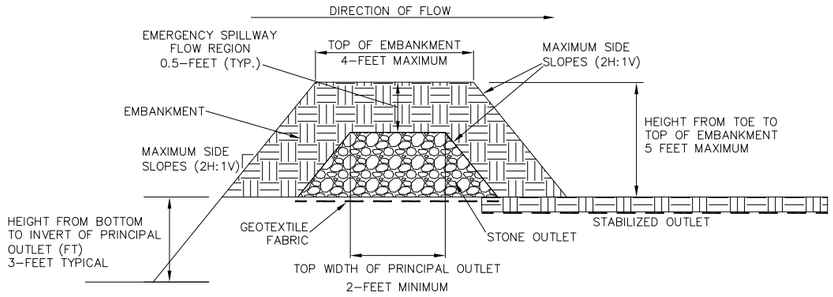
FRONT VIEW



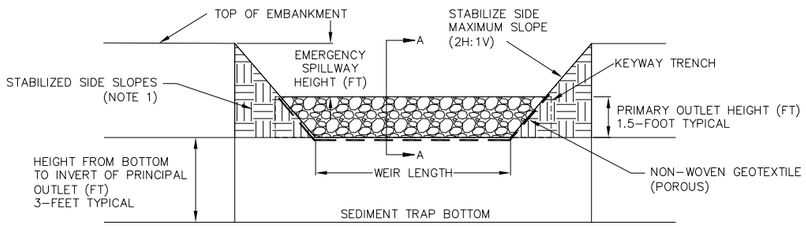
1/1 WOOD SLAT DUMPSTER ENCLOSURE
NOT TO SCALE



1/1 UNDERGROUND STORMWATER DETENTION
NOT TO SCALE



VIEW A-A OF PRINCIPAL OUTLET



CROSS SECTION OF PRINCIPAL OUTLET

NOTE 1: SIDE SLOPES AND FACES OF EARTHEN EMBANKMENT AROUND OUTLET SHALL BE ARMORED WITH RIPRAP OR STABILIZED WITH EROSION MAT SUFFICIENT TO HANDLE FLOWS FROM THE 10-YEAR STORM.

1/1 TEMPORARY SEDIMENT TRAP
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PENNSYLVANIA STREET

SEE CARRIAGE HOUSE PLANS FOR LIGHTING ON CARRIAGE HOUSE.

PROPOSED DOUBLE FIXTURE LIGHT POLE

PROPOSED SINGLE FIXTURE LIGHT POLE (TYP. OF 11)

TOTAL FOOT CANDLES (TYP.)

GRAPHIC SCALE FEET
0 25' 50' 100'

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Overall Lighting Plan

The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

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DEVELOPER TO INSTALL SHRUBS LESS THAN 2' IN HEIGHT IN PENNSYLVANIA STREET MEDIAN. SHRUBS SHALL BE APPROVED BY VILLAGE PRIOR TO INSTALLATION.

TUFFTRACK GRASS PAVERS, OR EQUIVALENT (TYP.)

PS (1)
(1) QR
AL (1)
(1) PG
AR (2)
(1) AR
(1) PG
QR (1)
(3) PG
AR (3)
(1) AL
(2) PG
QR (1)
(1) AL
(2) PP
QR (1)
PS (13)
(7) PP
(10) PG
Sb (4)
Vc (3)
(1) QR

N
W E
S

GRAPHIC SCALE FEET
0 20 40 80

PLANT SCHEDULE

DECIDUOUS TREES	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE	QTY
AR	Acer rubrum / Red Maple 40` x 40`	B & B	2"Cal		6
AL	Amelanchier laevis / Allegheny Serviceberry 25` x 15`	B & B		6` ht. multi stem	3
QR	Quercus rubra / Red Oak 60-75` x 60-75`	B & B	2"Cal		5

EVERGREEN TREES	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE	QTY
PG	Picea glauca / White Spruce 40-60` x 10-20`	B & B		6` ht.	17
PP	Picea pungens / Colorado Spruce 40-60` x 20-30`	B & B		6` ht.	9
PS	Pinus strobus / White Pine 50-80` x 20-40`	B & B		6` ht.	14

DECIDUOUS SHRUBS	BOTANICAL NAME / COMMON NAME	SIZE	FIELD2	FIELD3	QTY
Sb	Spiraea x bumalda `Froebelii` / Frobel Spirea 3-4` x 3-5`	5 gal	Cont		4
Vc	Viburnum cassinoides / Witherod Viburnum 5-6` x 5-6`	5 gal	Cont		3

GENERAL NOTES:

1. All plantings shall conform to quality requirements as per ANSI Z60.1.
2. All plant material shall be true to the species, variety and size specified, nursery grown in accordance with good horticultural practices, and under climactic conditions similar to those of the project site.
3. Contact Landscape Architect, in writing, to request and plant material substitutions due to availability issues.
4. All disturbed areas, unless otherwise noted, to be seeded with WI DOT Seed Mix #40 or equivalent, per manufacturer's specified application rates. All seeded areas are to be watered daily to maintain adequate soil moisture for proper germination. After vigorous growth is established, apply ½" water twice weekly until final acceptance.
5. All plants shall be guaranteed to be in healthy and flourishing condition during the growing season following installation. All plant material shall be guaranteed for one year from the time of installation.
6. Contractor shall provide a suitable amended topsoil blend for all planting areas where soil conditions are unsuitable for plant growth. Topsoil shall conform to quality requirements as per Section 625.2(1) of the Standard Specifications for Highway Construction. Provide a minimum of 12" of topsoil in all planting areas and 6" of topsoil in areas to be seeded/sodded.
7. Landscape beds to be mulched with undyed shredded hardwood bark mulch to 3" depth min.

NOT FOR CONSTRUCTION

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Phone: (800) 261-3898

Landscape Plan

The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

REVISIONS

NO.	DATE	REMARKS

REVISIONS

NO.	DATE	REMARKS

SCALE: AS SHOWN
DATE: 1/29/19
DRAFTER: SVIN
CHECKED: ----
PROJECT NO.: 180067

L
1

01 Feb 2019 - 5:30p M:\Prestwick Group\180067 - 2018 La Belle Course Improvements\CADD\180067 - Lac La Belle - Landscape.dwg by: bbar

STORMWATER MANAGEMENT REPORT

The Club at Lac La Belle

Village of Lac La Belle, WI

Prepared For:
The Prestwick Group, Inc.
W248 N5499 Executive Drive
Sussex, WI 53089

Prepared By:
Vierbicher Associates, Inc.
999 Fourier Drive, Suite 201
Madison, Wisconsin 53717

Prepared On:
January 25, 2019

Project #180067

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TABLE OF CONTENTS

NARRATIVE

1.1 Introduction

The project site is located south of Lang Road, west of Pennsylvania Street, South of STH 16, and north of Lake Lac La Belle (SW ¼ of the NW ¼ of Section 20, Town 8, and Range 17E) in the Village of Lac La Belle, Waukesha County. Currently the site is La Belle Golf Club which consists of clubhouse, outbuildings, parking, and the golf holes. The area that work is being completed is approximately 7.74 acres which consists of 3.07 acres of impervious area (buildings, parking, sidewalk, and cart paths. The site will be defined by the 7.74 acres of disturbance.

The Prestwick Group is working on adding a carriage house and reconfiguring their parking and cart paths to the clubhouse and driving range. The amount of impervious on the site after construction will be 3.32 acres. The site is considered a redevelopment because there is less than 0.5 acres of impervious being added. For the purposes of this report the pre-developed condition will be the existing site conditions.

To meet stormwater management requirements for redevelopment on the site an oversized storm sewer will be utilized for water quality. A dry detention basin will be used on the east side of the site to detain runoff going to the west.

There are no floodplains within the area of the project. There are wetlands on the west side of the project area and were delineated by Heartland Ecological Group, Inc May 30, 2018. The delineation report is located in section 8.2 of this report. A portion of wetlands will be filled and a permit has been issued by the Department of Natural Resources (DNR) and Army Corps of Engineers (ACOE) and is in section 1.6 of this report.

1.2 Soils Description

The soils consist of Casco loam, Fox silt loam, Pella silt loam, and Wallkill silt loam. These soils are all rated as a hydrologic soil group B. For the purposes of this report it was assumed all soils are hydrologic group B soils. Detailed soil borings were completed and are in section 3.2 of this report.

1.3 Design Criteria

Stormwater Management Requirements	
Sediment Control	40% Reduction, as compared to no controls for parking and drives
Infiltration	Infiltrate 90% of the Pre-Developed Infiltration Volume
Peak Runoff Rate Control	Maintain the Pre-Developed peak discharge rate for the 1, 2, 10, and 100-year, 24-hour storm events

1.4 Summary of Results

Sediment Control

The site will be required to reduce TSS from the site by forty percent (40%) from parking and drives, as compared to no controls. There is 1.98 acres of new parking and drives on the site. There is a portion of the parking lot that will just be a mill and overlay of 0.15 acres. Cart paths are assumed to be sidewalks for this report. An oversized pipe with a

3.5' sediment storage area was modeled to meet the requirements. The table below summarizes the results of the TSS modeling.

Overall

New Parking Loading (lbs)	Required Removal to Meet 40% (lbs)	Post-Developed No Controls (lbs)	Post-Developed With Controls (lbs)	Loading Removed (lbs)
1,235	494	944.5	411.1	533.4

The site is required to meet 40% TSS reduction for parking and drives from a no control standpoint. The stormwater management facilities have been designed to remove 533.4 lbs of sediment which is greater than the 494 lb removal necessary to meet the requirement. TSS was modeled with WinSLAMM v. 10.3 and calculations are within section 5 of this report.

The Village engineer requested that we model the drainage area that discharges to the west. The following summary depicts the pre-developed condition (existing) loading and the post-developed condition loading for the watershed draining to the west.

West Drainage

Post-Developed No Controls (lbs)	Post-Developed With Controls (lbs)	Loading Removed (lbs)	% Removal from Pre-Developed
2,307	1,250	1,057	45.82%

The runoff that discharges to the west are routed through oversized storm sewer, grass swale, and a dry detention basin. TSS was modeled with WinSLAMM v. 10.3 and calculations are within section 5 of this report.

Infiltration

The site is required to infiltrate 90% of the pre-developed infiltration volume in the post-developed condition. The table below summarizes the results of the infiltration modeling. Total Loss is the amount of annual rain that is infiltrated on the site.

Pre-Developed Total Losses (7.74 acres) (inches)	Post-Developed Total Losses (7.74 acres) (Inches)	% of Pre-Developed Infiltrated
19.29	18.84	97.7%

The site is required to infiltrate 90% of the pre-developed infiltration volume in the post developed condition. The stormwater management facilities have been designed to infiltrate 97.7% of the pre-developed runoff volume. Infiltration was modeled with WinSLAMM v. 10.3 and calculations are within section 6 of this report.

Peak Runoff Rate Control

The site must maintain the pre-developed peak runoff rate control for the 1, 2, 10, and 100-year, 24-hour events. In addition, the Village has requested that a summary of all discharge points be provided. The south and east drainage areas discharge to the golf course while the west drainage area is to a swale that discharges to residential storm

sewer. The following tables summarize the peak runoff rate at these discharge point and for the site.

West Drainage Peak Runoff Rate Control

Storm Frequency (Year)	Pre-Developed – 2R (12.45 acres)	Post-Developed – 3R (12.13 acres)
1	3.89	3.71
2	5.68	5.40
10	13.79	8.98
100	35.30	19.02

South Drainage Peak Runoff Rate Control

Storm Frequency (Year)	Pre-Developed – 1S (0.73 acres)	Post-Developed – 5S (0.30 acres)
1	0.18	0.30
2	0.33	0.40
10	1.06	0.82
100	3.13	1.84

East Drainage Peak Runoff Rate Control

Storm Frequency (Year)	Pre-Developed – 3S (1.09 acres)	Post-Developed – 9S (1.82 acres)
1	0.51	0.77
2	0.72	1.11
10	1.65	2.60
100	4.02	6.50

Overall Total Peak Runoff Rate Control

Storm Frequency (Year)	Pre-Developed – 1R (14.27 acres)	Post-Developed – 4R (14.25 acres)
1	4.49	4.44
2	6.54	6.34
10	15.83	11.17
100	40.38	24.85

Erosion Control

The construction of the carriage house is anticipated to being shortly after Village approval. The parking lot and cart path construction will begin May 1, 2019. All erosion control measures will be in place prior to land disturbing activities. Erosion control measures consist of silt fence, tracking pad, erosion matting, and stone ditch checks.

1.5 Conclusions

With the construction of the oversized storm sewer and the dry detention basin the site will meet the redevelopment stormwater management requirements. Prior to

construction all erosion control measures will be in place. Construction of the carriage house is anticipated to begin upon Village and DNR approval.

1.6 Permits

The following is a list of anticipated stormwater permits and/or reviews that have been or will be applied for:

- Local Municipal Stormwater Approval
- Stormwater Notice of Intent (DNR)
- General Permit for Wetland Fill (DNR)
- General Permit to Fill Wetland (ACOE)

1.6 Permits

2.1 Location Map

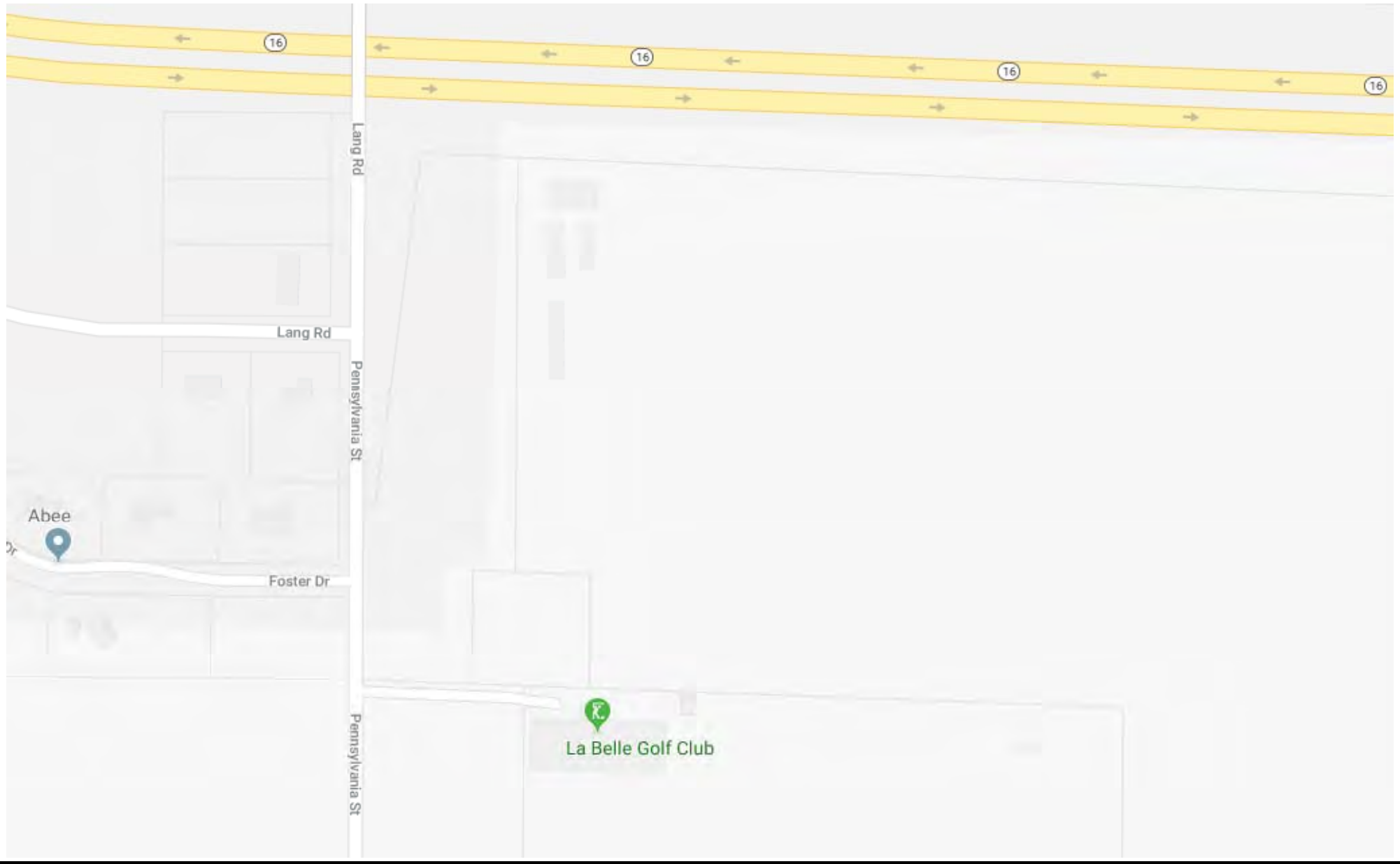

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Exhibit 2.1 - Location Map
Project Name: The Club at Lac La Belle
Project Location: Village of Lac La Belle

2.2 Aerial Map

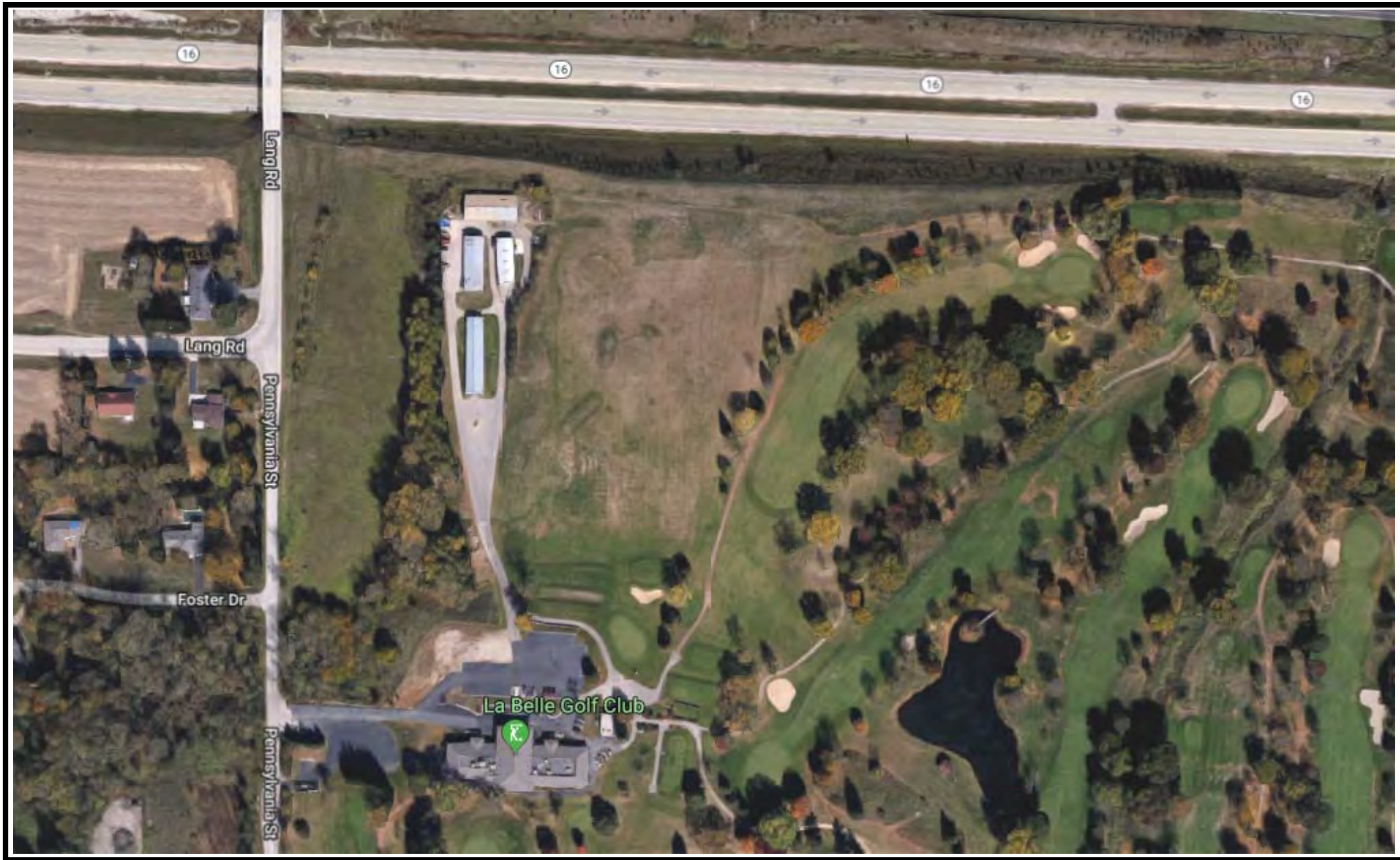

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Exhibit 2.2 - Aerial Map
Project Name: The Club at Lac La Belle
Project Location: Village of Lac La Belle

2.3 USGS Quad Map

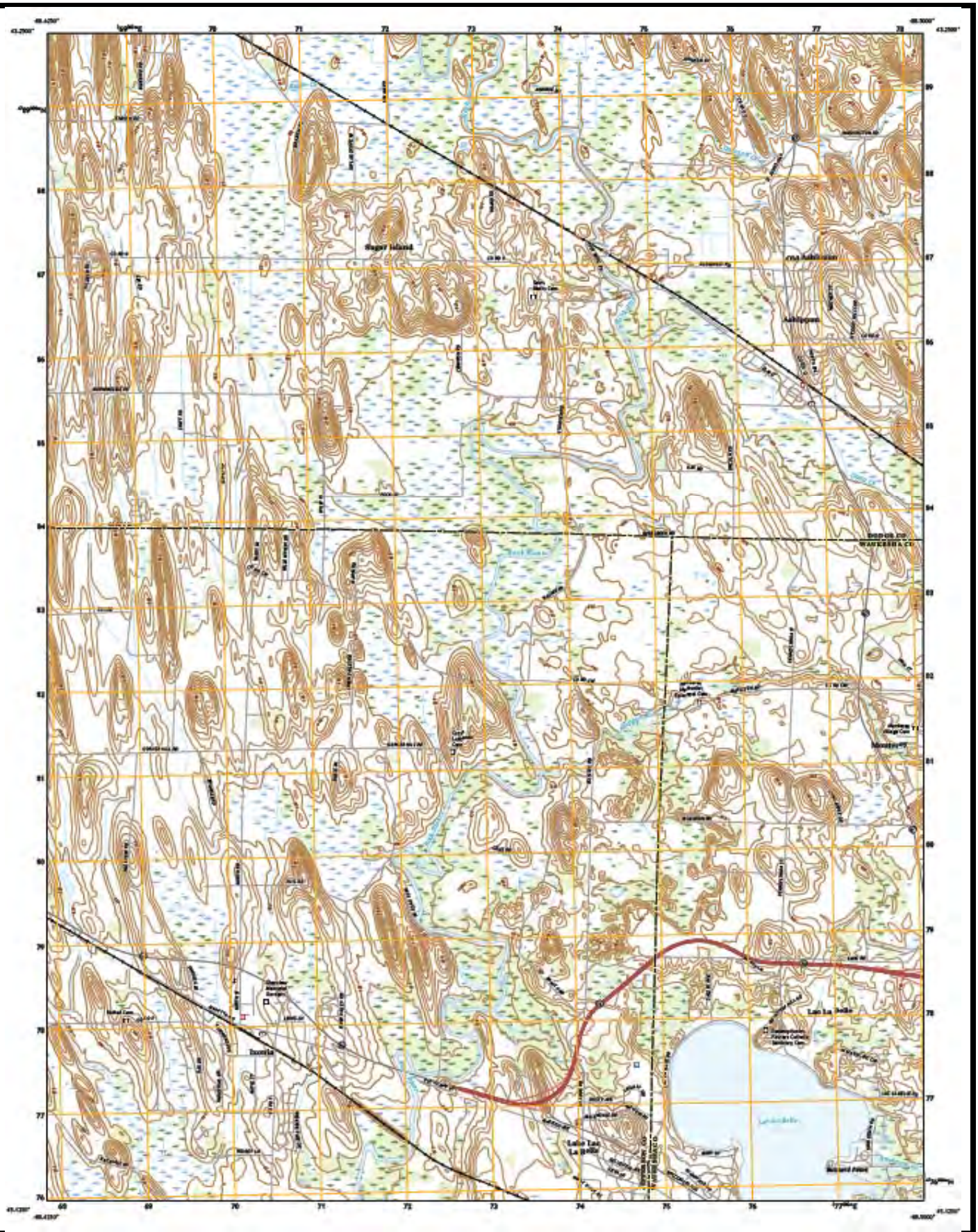

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Exhibit 2.3 - Quad Map
Project Name: The Club at Lac La Belle
Project Location: Village of Lac La Belle

2.4 FEMA Map

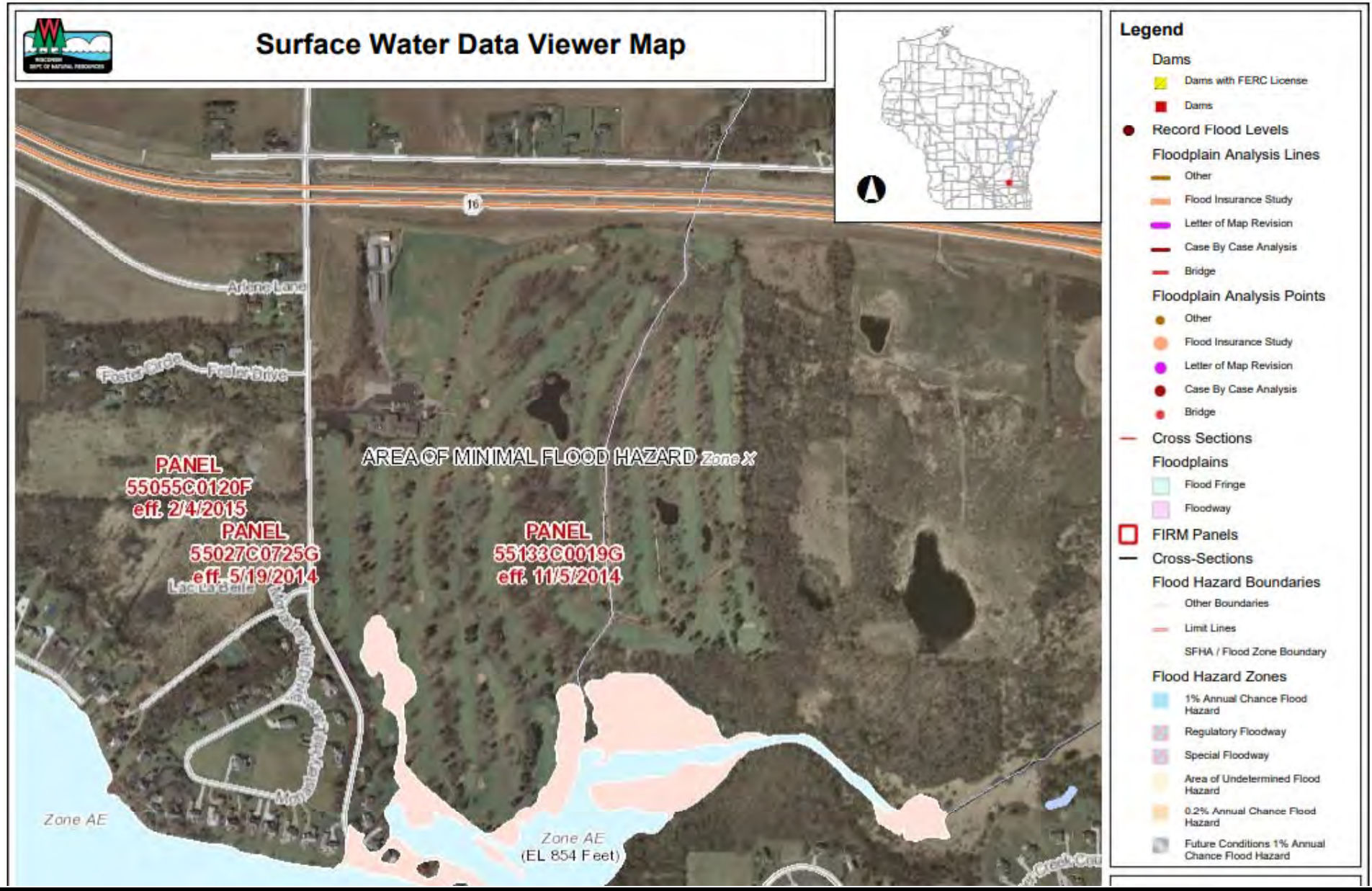

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Exhibit 2.4 - FEMA Map
Project Name: The Club at Lac La Belle
Project Location: Village of Lac La Belle

2.5 Wetland Indicators Map

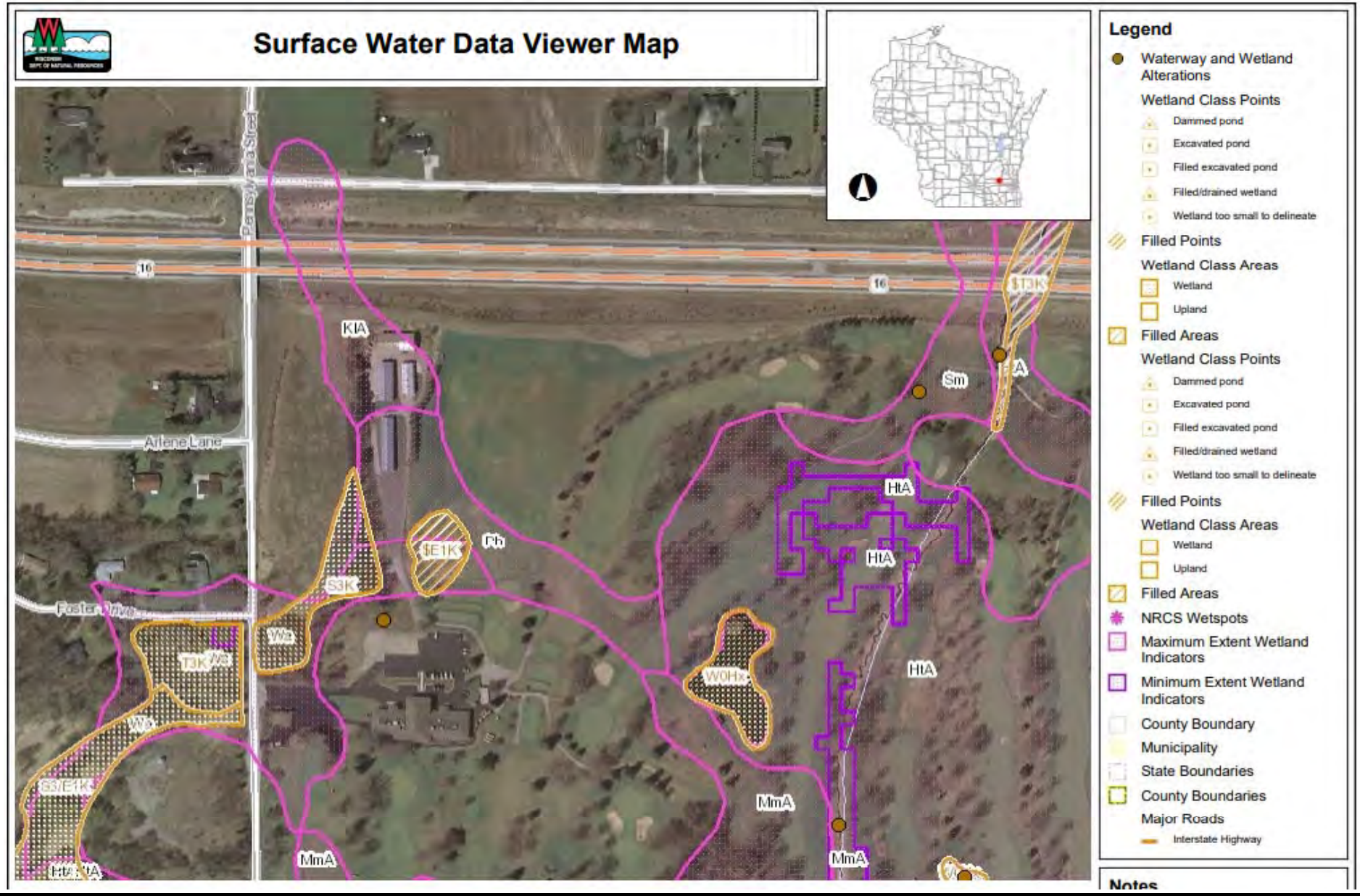

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Exhibit 2.5 - Wetland Indicators Map
Project Name: The Club at Lac La Belle
Project Location: Village of Lac La Belle

3.1 NRCS Soils Map

Map unit symbol	Map unit name	Rating
CeD2	Casco loam, 12 to 20 percent slopes, eroded	B
FsB	Fox silt loam, 2 to 6 percent slopes	B
FsC2	Fox silt loam, 6 to 12 percent slopes, eroded	B
Ph	Pella silt loam, 0 to 2 percent slopes	B/D
Wa	Wallkill silt loam	B/D

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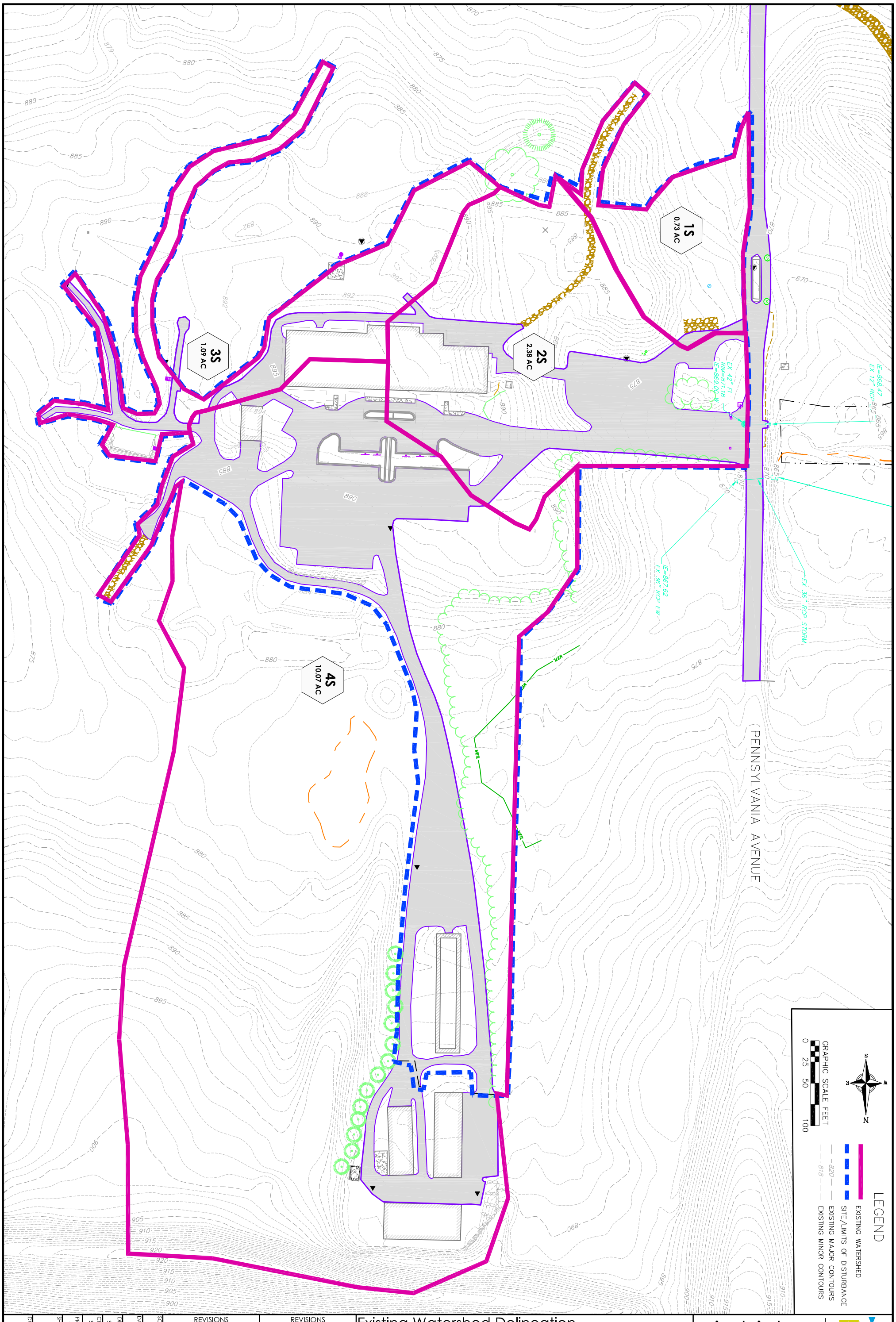
Exhibit 3.1 NRCS Soils Map
Project Name: The Club at Lac La Belle
Project Location: Village of Lac La Belle

8.2 Wetland Delineation Report

(Can be Provided Upon Request)

8.3 Pre-Developed Watershed Map



DWG. NO.	
SHEET	1 OF 1
PROJECT NO.	180067
CHECKED	SCHU
DRAFTER	SCHU
DATE	January 2019
SCALE	AS SHOWN

REVISIONS			REVISIONS		
NO.	DATE	REMARKS	NO.	DATE	REMARKS

Existing Watershed Delineation

La Belle Golf Course Improvements
Village of Lac La Belle
Waukesha County, Wisconsin

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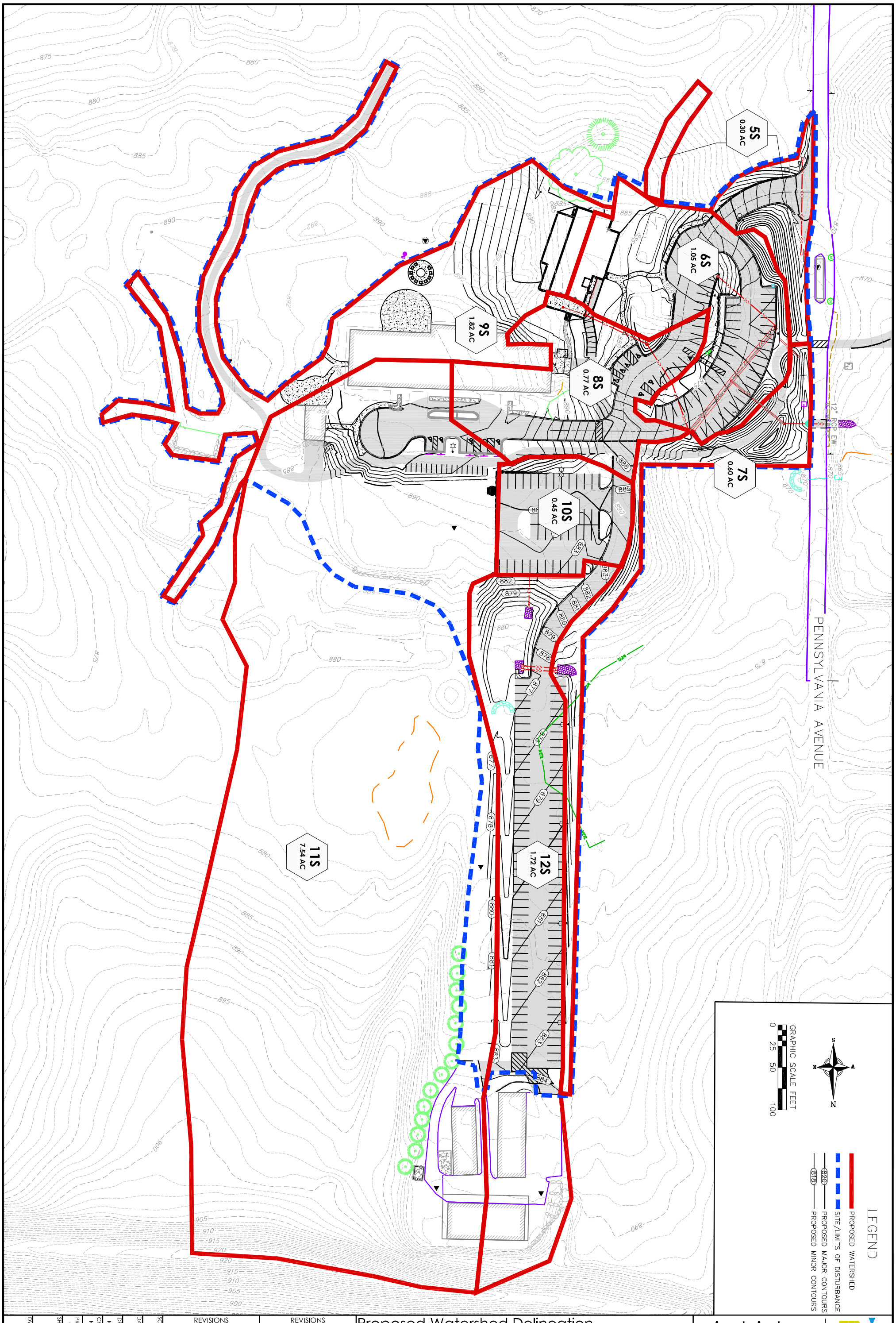
Phone: (800) 261-3898

8.4 Post Developed Watershed Map



DWG. NO.	SHEET	PROJECT NO.	CHECKED	DRAFTER	DATE	SCALE	REVISIONS NO.	DATE	REMARKS
	1 OF 1	180067	NPFA	IGRE	MAY 2018	AS SHOWN			

Proposed Watershed Delineation

La Belle Golf Course Improvements
Village of Lac La Belle
Waukesha County, Wisconsin

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Phone: (800) 261-3898

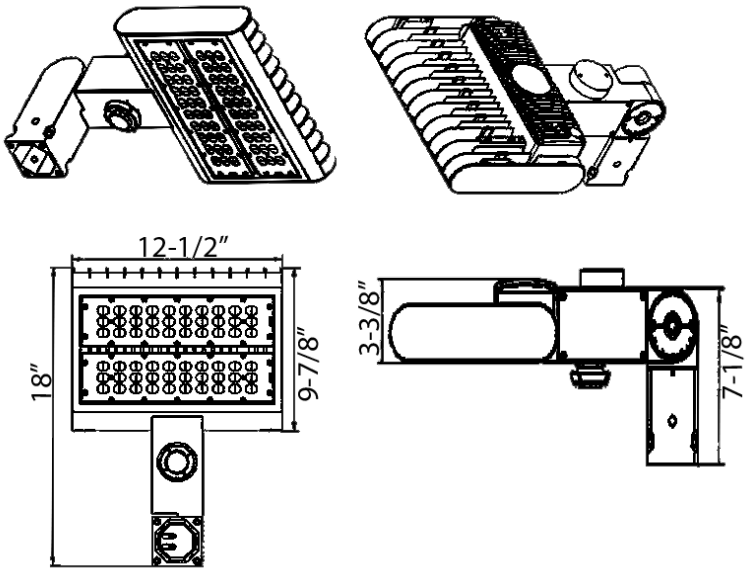
Cat# 71562
100 Watts
Slipfitter Mount

RoHS

QPL ID #
PTX2Q1C3

Model:		71562
OVERALL LAMP PARAMETERS	Input Voltage	100-277VAC 50/60HZ
	Input Current	.83A Max
	Input Power	100W
	Power Factor	PF≥ 0.90
	Luminance	12,105 LM
	Luminous Efficiency	121 LM/W
	CRI	>83
	Beam Angle	Type III 120x90°
	Main Structure	Aluminium + PC Lens
LED DRIVER	Output Voltage	36-60VDC
	Output Current	2.5A
	Driver Efficiency	88%
LED	LED Manufacturer	Philips
	LED Type	3030 LED
	LED Quantity	120 PCS
	LED Efficacy	120LM/W
	Color Temperature	5000K
Photocell	-	Not Included
LIFE SPAN & ENVIRONMENT	Lifespan	50,000+ Hrs.
	Warranty	5 Years
	IP Rating	IP65 Wet Locations
	Operating Temperature	-40 —+55
	Storage Temperature.Humidity	-40℃—+80℃ , 10—90% RH
SAFETY & EMC	Safety Norms	UL1598,UL8750, EN60598, EN61347-2-13, EN62031, EN62471
	Withstand Voltage	I/P-FG: 2121VDC
	Grounding Resistance	≤0.5Ω,OK
	Electromagnetic Compatibility	EN55015, EN61000-2-3, EN61000-3-3, EN61547
OTHERS	Dimension	Pls refer to attached dimension drawing
	Q'ty / Carton	1PCS
	Volume	
	EPA Rating	1.16ft^2

Dimension：



LM-79-08 Test Report

For

Morris Products Inc.

53 Carey Rd. Queensbury, NY 12804

Architectural Flood and Spot Luminaires

Model name(s): 71542, 71832, 71562, 71841, 71574A, 71852, 71584, 71865, 71866, 71867

Representative (Tested) Model: 71542

Model Different: All construction and rating are the same, except CCT

Test & Report By:

Johnson Sun

Engineer: Johnson Sun

Update: Nov.16, 2016

Review By:

Tommy Liang

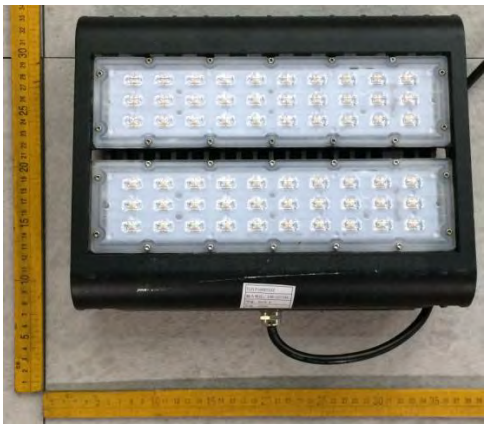
Manager: Tommy Liang

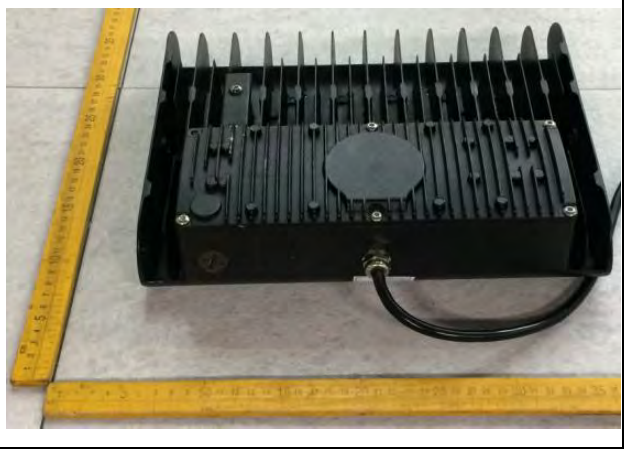
Note: This report does not imply product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

1.1 Product Information:

Organization Name	Morris Products Inc.	
Brand Name	MORRIS	
Model Number	71542	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Architectural Flood and Spot Luminaires	
Rated Voltage / Frequency	100 -277Vac, 50/60 Hz	
Nominal Power	100W	
Rated Initial Lamp Lumen	--	
Declared CCT	4000K,5000K,5700K	
LED Manufacturer	Philips Lumileds	
LED Model	L130-2780003000W21	
Sample Number	GZE161105-AI1(4000K),AI2(5700K)	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

Photo





1.2 Test Specifications:

Date of Receipt	: Oct.31,2016
Date of Test	: Nov.03,2016
Test item	1. Total Luminous Flux 2. Luminous Distribution Intensity 3. Luminous Efficacy 4. Correlated Color Temperature 5. Color Rendering Index 6. Chromaticity Coordinate 7. Electrical Parameters
Reference Standard	1. IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products 2. ANSI C78.377-2008 Specifications for the Chromaticity of Solid State Lighting Products 3. CIE 13.3-1995 Method of Measuring and Specifying Colour Rendering Properties of Light Sources 4. CIE 15-2004 Technical Report Colorimetry 5. IESNA LM-16-93 Practical Guide to Colorimetry of Light Source 6. IESNA TM-16-05 Technical Memorandum on Light Emitting Diode (LED) Sources and Systems
Reference Work Instruction	QD25

1.3 Test Methods

1) Photometric and Light Distribution Measurement – Goniophotometer Method:

Photometric parameters were measured using the goniophotometer and software. The ambient temperature shall be maintained at 25° C ± 1° C, measured at a point not more than 1 m from the sample and at the same height as the sample. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1° vertical intervals and 22.5° horizontal intervals.

2) Chromaticity Measurement – Sphere-Spectroradiometer Method:

Chromaticity parameters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at 25º C ± 1º C. The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral power distribution taken at 5 nm intervals over the range of 380 to 780 nm.

3) Electrical Measurements:

Electrical parameters were measured using power meters incorporated in goniophotometer or sphere-spectroradiometer system. The ambient temperature surrounding the sample was maintained at 25º C ± 1º C. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Voltage, frequency, current, power, power factor and total harmonic distortion were measured by and read from the power meter.

2.1 Electrical, Photometric and Chromaticity Measurements

(Refer to Work Instruction QD25)

Test date	2016-11-03	Test Ambient:	25.2 ° C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	71542		

Electrical Measurement :

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE161105-AI1	120.0	60	0.8373	99.99	0.9952	14.82
	277.0	60	0.3901	100.2	0.9274	18.53
				DLC Pass Criteria	>= 0.9(-3%)	<= 20(+5)

Chromaticity Measurement - Sphere-Spectroradiometer Method :

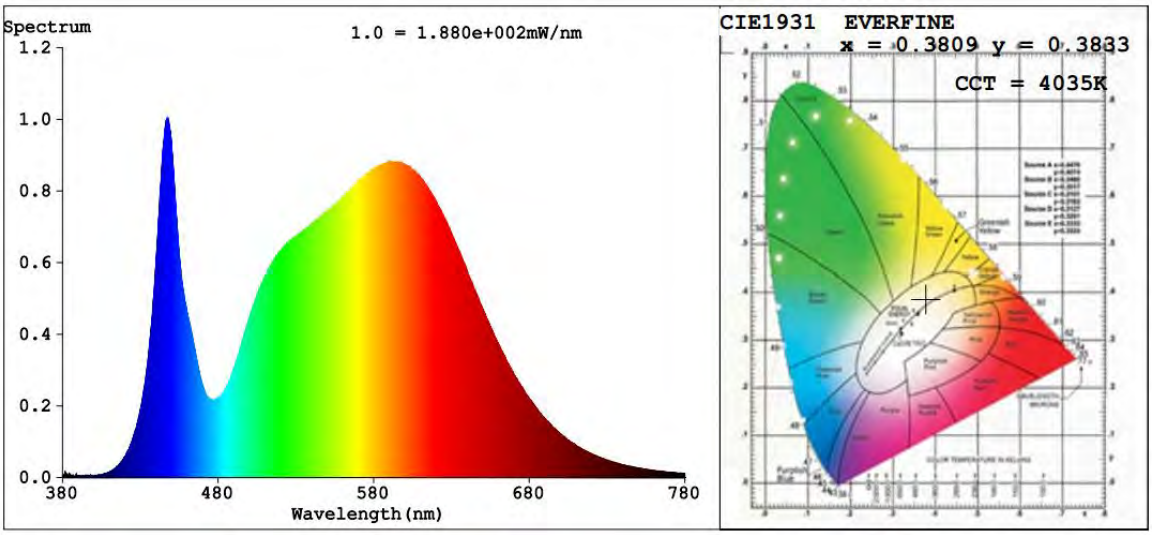
Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
CCT (K)	4035
Duv	0.0029
Chromaticity (x, y)	x=0.3809 y=0.3833
Chromaticity (u', v')	u'=0.2228 v'=0.5045
Color Rendering Index (CRI)	82.2
R9	9

Special Color Rendering Indices			
R1	80	R9	9
R2	87	R10	69
R3	92	R11	82
R4	83	R12	61
R5	80	R13	81
R6	82	R14	96
R7	87	R15	74
R8	66	--	--

Photometric Measurement – Goniophotometer Method :

Parameter	Result		DLC V4.0 Pass Criteria	
Test Voltage (V)	120.0	277.0	--	
Frequency (Hz)	60	60		
Total Luminous (lm)	12105	12225	>=1000 (-10%)	
Luminous Efficacy (lm/W)	121.06	122.01	Standard: >= 100(-3%)	Premium: >= 120(-3%)
Zonal lumens in the 0-90° zone (%)	99.8	--	>=85(-3)	
Beam Angle (°)	104.6	--	--	
Center Beam Candle Power (cd)	4124	--	--	

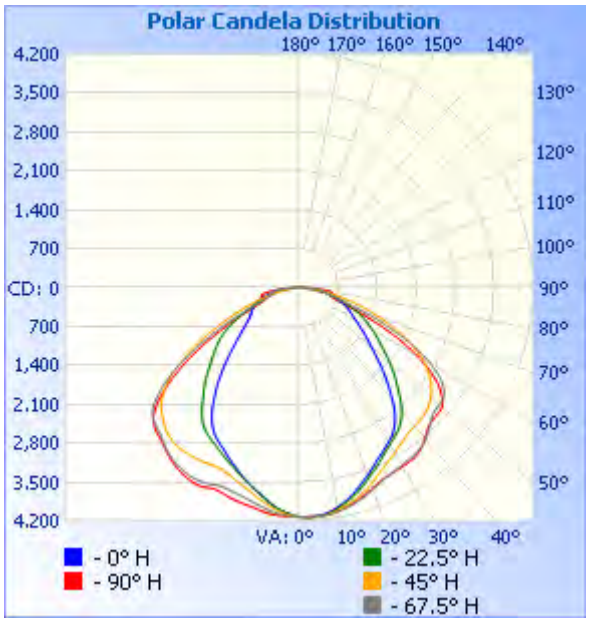
Spectral Power Distribution & Chromaticity Diagram

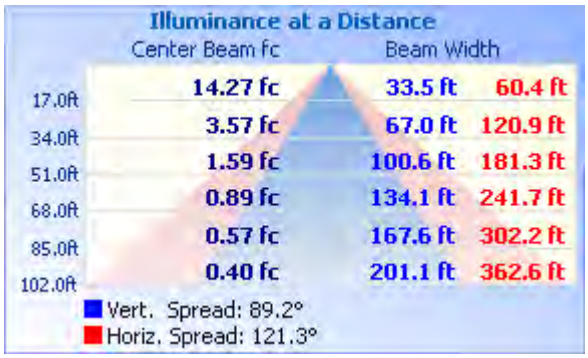


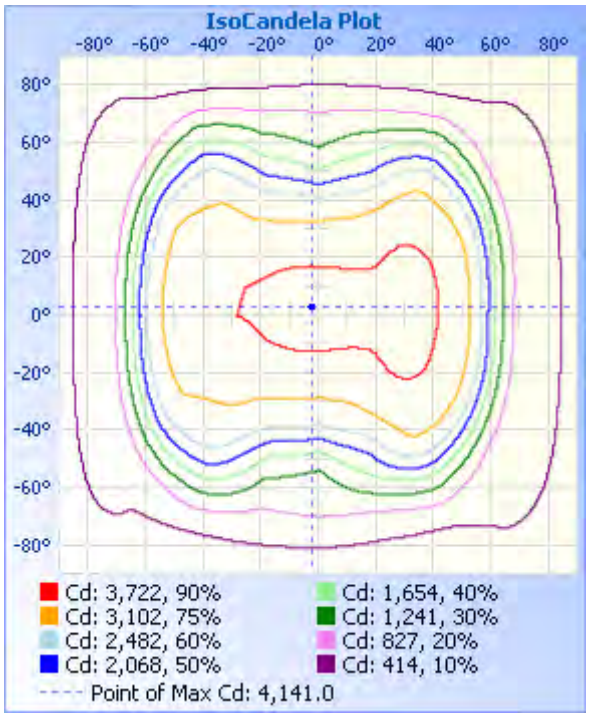
Zonal Lumen Tabulation

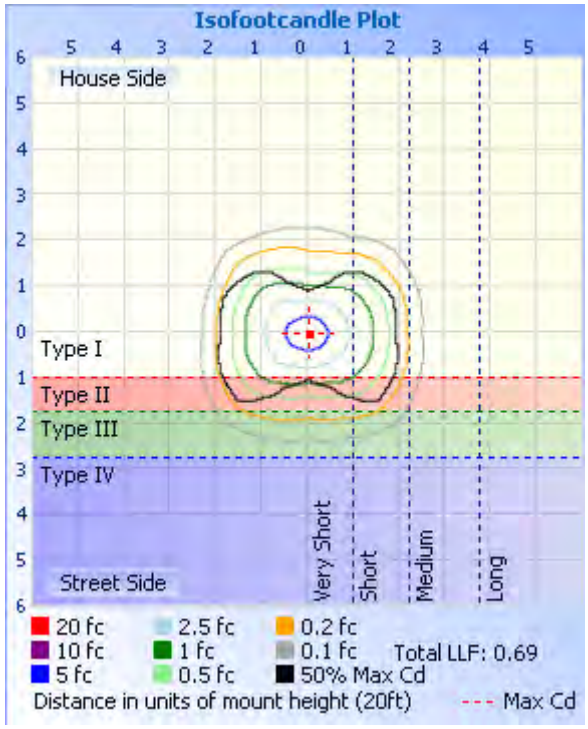
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	3,125.1	25.8%
0-40	5,237.6	43.3%
0-60	9,671.3	79.9%
60-90	2,403.4	19.9%
70-100	976.2	8.1%
90-120	7.3	0.1%
0-90	12,074.8	99.8%
90-180	28.8	0.2%
0-180	12,103.6	100%

Lumens Per Zone					
Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	386.8	3.2%	90-100	1.6	0%
10-20	1,083.7	9.0%	100-110	2.2	0%
20-30	1,654.6	13.7%	110-120	3.5	0%
30-40	2,112.5	17.5%	120-130	5.1	0%
40-50	2,295.0	19.0%	130-140	5.5	0%
50-60	2,138.8	17.7%	140-150	4.6	0%
60-70	1,428.8	11.8%	150-160	3.5	0%
70-80	717.7	5.9%	160-170	2.1	0%
80-90	256.9	2.1%	170-180	0.8	0%


Polar Candela Distribution
180° 170° 160° 150° 140°
4,200
3,500
2,800
2,100
1,400
700
CD: 0
700
1,400
2,100
2,800
3,500
4,200
130°
120°
110°
100°
90°
80°
70°
60°
50°
VA: 0° 10° 20° 30° 40°
- 0° H
- 90° H
- 22.5° H
- 45° H
- 67.5° H


Illuminance at a Distance
Center Beam fc
Beam Width
17.0ft
34.0ft
51.0ft
68.0ft
85.0ft
102.0ft
14.27 fc 33.5 ft 60.4 ft
3.57 fc 67.0 ft 120.9 ft
1.59 fc 100.6 ft 181.3 ft
0.89 fc 134.1 ft 241.7 ft
0.57 fc 167.6 ft 302.2 ft
0.40 fc 201.1 ft 362.6 ft
Vert. Spread: 89.2°
Horiz. Spread: 121.3°


IsoCandela Plot
-80° -60° -40° -20° 0° 20° 40° 60° 80°
80°
60°
40°
20°
0°
-20°
-40°
-60°
-80°
Cd: 3,722, 90%
Cd: 3,102, 75%
Cd: 2,482, 60%
Cd: 2,068, 50%
Cd: 1,654, 40%
Cd: 1,241, 30%
Cd: 827, 20%
Cd: 414, 10%
Point of Max Cd: 4,141.0


Isofootcandle Plot
5 4 3 2 1 0 1 2 3 4 5
House Side
Type I
Type II
Type III
Type IV
Street Side
Very Short
Short
Medium
Long
20 fc
10 fc
5 fc
2.5 fc
1 fc
0.5 fc
0.2 fc
0.1 fc
50% Max Cd
Total LLF: 0.69
Distance in units of mount height (20ft)
Max Cd

γ (DEG) \ C (DEG)	0	23	45	68	90	113	135	158	180	203	225	248	270	293	315	338
0	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125	4125
5	4115	4119	4130	4135	4118	4132	4136	4126	4118	4079	4041	4017	4011	4010	4043	4085
10	4067	4075	4033	4019	4007	4031	4062	4090	4073	3985	3898	3828	3804	3813	3892	3990
15	4008	3996	3893	3843	3818	3861	3935	3994	3976	3872	3742	3656	3613	3620	3730	3898
20	3951	3920	3772	3635	3593	3647	3767	3865	3846	3726	3577	3474	3407	3441	3601	3843
25	3963	3920	3671	3448	3379	3443	3576	3745	3741	3628	3431	3286	3210	3291	3550	3894
30	3979	3957	3640	3307	3210	3259	3432	3693	3715	3577	3292	3122	3039	3159	3587	3915
35	3895	3900	3653	3161	2995	3110	3304	3648	3678	3509	3187	2890	2728	3003	3598	3859
40	3754	3790	3641	2899	2593	2864	3240	3541	3521	3428	3101	2501	2281	2696	3567	3739
45	3638	3639	3554	2544	2139	2491	3199	3356	3378	3275	2971	2100	1831	2381	3434	3590
50	3366	3470	3336	2208	1729	2138	3082	3280	3347	3174	2773	1727	1448	2061	3241	3439
55	2703	3067	2987	1902	1420	1801	2878	3173	3059	3027	2520	1409	1176	1798	2832	2900
60	1844	2361	2493	1609	1178	1522	2550	2714	2443	2559	2153	1163	1013	1498	2216	2069
65	1057	1548	1876	1310	1002	1258	2070	1969	1600	1824	1649	959	929	1131	1561	1241
70	682	892	1290	988	856	974	1512	1155	876	1071	1124	768	829	785	1007	717
75	661	583	807	701	691	690	979	642	595	603	690	585	665	544	601	541
80	657	484	455	424	442	413	544	467	609	426	381	419	447	377	328	521
85	348	353	158	195	182	176	203	409	457	341	173	190	135	162	148	357
90	3.03	2.85	2.15	1.93	1.88	1.84	2.64	4.14	2.95	2.42	1.27	1.40	1.47	1.49	1.91	2.12
95	1.53	1.59	1.45	1.06	1.01	0.85	1.34	1.60	1.32	1.22	1.12	0.96	1.15	1.00	1.38	1.43
100	1.64	1.85	1.49	0.94	0.95	0.86	1.40	1.43	1.06	1.64	1.97	1.38	1.01	1.22	1.91	1.91
105	3.01	3.17	2.28	1.18	1.04	1.22	2.01	2.07	1.80	2.54	2.71	1.81	1.23	1.54	2.77	3.04
110	4.59	4.39	3.02	1.44	1.48	1.91	2.92	3.55	2.75	3.34	3.24	2.08	1.91	1.97	3.29	3.99
115	5.54	5.29	3.88	1.70	1.96	2.21	3.93	4.94	3.59	4.29	3.93	2.38	2.07	2.30	3.77	4.62
120	6.34	5.92	4.83	2.81	2.40	2.76	5.04	5.79	4.44	5.03	4.78	3.10	2.66	2.93	3.99	4.89
125	7.39	7.08	5.27	6.59	14.7	4.46	5.63	6.90	5.39	5.72	4.99	4.10	3.92	3.72	4.21	5.32
130	7.96	7.30	5.35	7.98	21.8	5.74	5.95	7.49	6.44	5.96	5.07	4.69	4.56	4.57	4.25	5.62
135	7.86	7.12	5.39	8.88	14.2	7.17	5.94	7.45	6.58	6.09	5.04	5.48	5.14	5.26	4.09	5.78
140	7.66	7.15	5.57	7.67	18.8	7.28	5.86	7.49	6.92	6.63	4.83	6.12	5.68	5.53	4.13	6.06
145	7.41	6.03	6.15	9.58	18.9	8.24	5.20	6.91	7.13	6.71	5.20	6.49	5.94	5.95	4.89	6.16
150	7.32	5.95	7.16	9.74	16.0	8.64	6.20	7.01	6.81	6.79	6.48	6.81	6.90	6.91	6.43	6.18
155	6.45	6.46	8.12	10.1	13.3	8.82	7.11	7.12	6.22	6.81	6.53	7.17	6.95	6.86	6.58	6.20
160	6.26	6.51	7.75	9.06	10.5	7.96	7.30	7.03	5.91	6.40	6.58	7.26	7.95	7.50	6.74	6.38
165	6.43	6.61	7.59	7.56	7.27	7.23	7.37	6.64	6.60	6.24	6.85	7.38	7.16	7.34	6.83	6.91
170	6.98	7.36	8.92	8.51	8.26	8.34	8.76	6.85	7.61	7.62	8.03	9.16	9.28	8.83	8.08	8.88
175	7.34	8.20	9.34	8.77	9.28	8.45	9.08	7.23	7.81	7.89	8.65	9.37	9.32	9.57	8.38	8.96
180	6.86	7.77	8.70	8.58	9.23	8.24	8.82	7.17	7.02	7.14	7.91	8.68	8.54	8.98	8.28	8.77

BUG Rating: B3-U2-G2

IESNA Luminaire Flux Distribution Table:

Zone	Lumens	Luminaire %
FL - Front-Low(0-30)	1592.1	13.2
FM - Front-Medium(30-60)	3370.3	27.8
FH - Front-High(60-80)	1138.7	9.4
FVH - Front-Very High(80-90)	132.76	1.1
Total Forward Light	6250.1	51.6
BL - Back-Low(0-30)	1533	12.7
BM - Back-Medium(30-60)	3177.1	26.2
BH - Back-High(60-80)	1007.6	8.3
BVH - Back-Very High(80-90)	124.14	1.0
Total Back Light	5854.5	48.4
UL - Uplight-Low(90-100)	1.5547	0.0
UH - Uplight-High(100-180)	27.269	0.2
Total Up Light	28.823	0.2

BUG(Back,Up,Glare) Rating	B3-U2-G2

Zone	Downward Lumens	Upward Lumens	Total Lumens
House Side	5841.9	12.659	5854.5
Street Side	6233.9	16.164	6250.1

2.2 Electrical, Photometric and Chromaticity Measurements

(Refer to Work Instruction QD25)

Test date	2016-11-03	Test Ambient:	25.2 ° C
Test Orientation	As intended	Stabilization Time (min)	90
Model Number	71542		

Electrical Measurement :

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
GZE161105-AI2	120.0	60	0.8267	98.72	0.9951	14.86
	277.0	60	0.3850	98.87	0.9272	18.57
				DLC Pass Criteria	>= 0.9(-3%)	<= 20(+5)

Chromaticity Measurement - Sphere-Spectroradiometer Method :

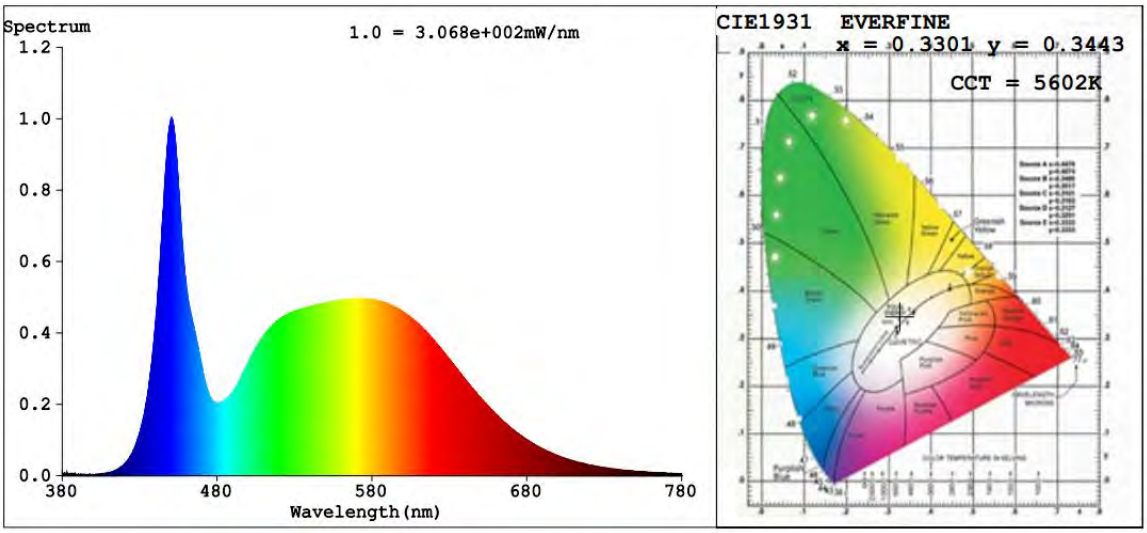
Parameter	Result
Test Voltage (V)	120.0
Frequency (Hz)	60
CCT (K)	5602
Duv	0.0027
Chromaticity (x, y)	x=0.3301 y=0.3443
Chromaticity (u', v')	u'=0.2041 v'=0.4788
Color Rendering Index (CRI)	82.8
R9	9

Special Color Rendering Indices			
R1	81	R9	9
R2	87	R10	68
R3	90	R11	82
R4	83	R12	58
R5	82	R13	83
R6	82	R14	95
R7	88	R15	77
R8	69	--	--

Photometric Measurement – Sphere-Spectroradiometer Method :

Parameter	Result		DLC V4.0 Pass Criteria	
Test Voltage (V)	120.0	277.0	--	
Frequency (Hz)	60	60		
Total Luminous (lm)	12353	12255	>=1000 (-10%)	
Luminous Efficacy (lm/W)	125.13	123.95	Standard: >= 100(-3%)	Premium: >= 120(-3%)

Spectral Power Distribution & Chromaticity Diagram



3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-336	2 meter Integrating Sphere	2016-07-01	2017-06-30
ST-R-331	Spectral analysis system HAAS-2000	2016-07-01	2017-06-30
D204	Standard Lamp	2016-07-01	2017-06-30
PF2010	Power Meter for Integrating Sphere	2016-07-01	2017-06-30
EE-09	Goniophotometer system	2016-07-01	2017-06-30
D908S	Standard Lamp	2016-07-01	2017-06-30
PF210	Power Meter for Goniophotometer	2016-07-01	2017-06-30
ST-R-181A	Temperature Tester	2016-07-01	2017-06-30
Uncertainty: Photometric Measurement (Sphere):1.74% Chromaticity Measurement(Sphere):14.3K Photometric Measurement(Goniophotometer):1.62%			

******** END OF REPORT ********

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
141 NW Barstow, Room 180
Waukesha, WI 53188

Scott Walker, Governor
Daniel L. Meyer, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

December 7, 2018 GP-SE-2018-68-03079

The Prestwick Group, Inc.
Tyler Morse
W248 N5499 Executive Drive
Sussex, WI 53089

RE: Coverage under the wetland statewide general permit for wetland fill or disturbance for residential, commercial, or industrial development, located in the Village of Lac La Belle, Waukesha County, also described as being in the NW1/4 of the NW1/4 of Section 20, Township 08 North, Range 17 East.

Dear Mr. or Ms. Morse:

Thank you for submitting an application for coverage under the wetland statewide general permit for wetland fill or disturbance for residential, commercial, or industrial development, s. 281.36, Wis. Stats.

You have certified that your project meets the eligibility criteria and conditions for this activity. Based upon your signed certification you may proceed with your project to fill 0.07 acres of wetlands. Please take this time to re-read the permit eligibility standards and conditions. The eligibility standards can be found on your application checklist or in the statewide general permit WDNR-GP1-2017 (found at http://dnr.wi.gov/topic/waterways/construction/wetlands.html). The permit conditions are attached to this letter. You are responsible for meeting all general permit eligibility standards and permit conditions. This includes notifying the Department before starting the project and submitting photographs within one week of project completion. Please note your coverage is valid for 5 years from the date of the department's determination or until the activity is completed, whichever occurs first. This permit coverage constitutes the state of Wisconsin's wetland water quality certification under USCS s. 1341 (Clean Water Act s. 401).

The Department conducts routine and annual compliance monitoring inspections. Our staff may follow up and inspect your project to verify compliance with state statutes and codes. If you need to modify your project please contact your local Water Management Specialist, Theresa Szabelski at (262) 574-2172 or email Theresa.Szabelski@wisconsin.gov to discuss your proposed modifications.

The Department of Natural Resources appreciates your willingness to comply with wetland regulations, which help to protect the water quality, fish and wildlife habitat, natural scenic beauty and recreational value of Wisconsin's wetland resources for future generations. Please be sure to obtain any other local, state or federal permits that are required before starting your project.

If you have any questions, please call me at (262) 574-2172 or email Theresa.Szabelski@wisconsin.gov.

Sincerely,

Theresa Szabelski
Water Management Specialist

cc: Marie Kopka, Project Manager, U.S. Army Corps of Engineers
Jason Fruth, Waukesha County Zoning Administrator
Andrew Starch, Conservation Warden
Richard Reed, Conservation Warden
Neil Pfaff, Vierbicher Associates, Inc. Consultant
Gina Schultz, Vierbicher Associates, Inc. Consultant
Michelle Scott, Waterways & Wetlands Field Supervisor

You agree to comply with the following conditions:

1. **Application**. You shall submit a complete application package to the Department as outlined in the application materials and section 2 of this permit. If requested, you shall furnish the Department, within a reasonable timeframe, any information the department needs to verify compliance with the terms and conditions of this permit.

2. **Certification**. Acceptance of general permit WDNR-GP1-2017 and efforts to begin work on the activities authorized by this general permit signifies that you have certified the project meets all eligibility standards outlined in Section 1 of this permit and that you have read, understood and have agreed to follow all terms and conditions of this general permit.

3. **Reliance on Applicant's Data.** The determination by this office that a confirmation of authorization is not contrary to wetland water quality standards will be based upon the information provided by the applicant and any other information required by the DNR.

4. **Project Plans**. This permit does not authorize any work other than what is specifically described in the notification package and plans submitted to the Department and you certified is in compliance with the terms and conditions of WDNR-GP1-2017

5. **Expiration**. This WDNR-GP1-2017 expires on October 31, 2022. The time limit for completing work authorized by the provisions of WDNR-GP1-2017 ends 5 years after the date on which the discharge is considered to be authorized under WDNR-GP1-2017 or until the discharge is completed, whichever occurs first.

6. **Other Permit Requirements**. You are responsible for obtaining any other permit or approval that may be required for your project by local zoning ordinances, other local authority, other state permits and by the U.S. Army Corps of Engineers before starting your project.

7. **Authorization Distribution**. You must supply a copy of the permit coverage authorization to every contractor working on the project.

8. **Project Start**. You shall notify the Department before starting construction.

9. **Permit Posting**. You must post a copy of this permit coverage letter at a conspicuous location on the project site prior to the execution of the permitted activity, and remaining at least five days after stabilization of the area of permitted activity. You must also have a copy of the permit coverage letter and approved plan available at the project site at all times until the project is complete.

10. **Permit Compliance**. The department may modify or revoke coverage of this permit if the project is not constructed in compliance with the terms and conditions of this permit, or if the Department determines the project will be detrimental to wetland water quality standards. Any act of noncompliance with this permit constitutes a permit violation and is grounds for enforcement action. Additionally, if any applicable conditions of this permit are found to be invalid or unenforceable, authorization for all activities to which that condition applies is denied.

11. **Construction Timing**. Once wetland work commences, all wetland construction activities must be continuous until the permitted activity is completed, and the site is stabilized.

12. **Construction**. No other portion of the wetland may be disturbed beyond the area designated in the submitted plans.

13. **Project Completion**. Within one week of completion of the regulated activity, you shall submit to the Department a statement certifying the project is in compliance with all the terms and conditions of this permit, and photographs of the activities authorized by this permit. This statement must reference the Department-issued docket number, and be submitted to the Department staff member that authorized coverage.

14. **Proper Maintenance**. You must maintain the activity authorized by WDNR-GP1-2017 in good condition and in conformance with the terms and conditions of this permit utilizing best management practices. Any structure or fill authorized shall be properly maintained to ensure no additional impacts to the remaining wetlands.

15. **Site Access**. Upon reasonable notice, you shall allow access to the site to any Department employee who is investigating the project's construction, operation, maintenance or permit compliance with the terms and conditions of WDNR-GP1-2017 and applicable laws.

16. **Erosion and siltation controls**. The project site shall implement erosion and sediment control measures that adequately control or prevent erosion, and prevent damage to wetlands as outlined in NR 151.11(6m), Wis. Adm. Code.

17. **Equipment use**. The equipment used in the wetlands must be low ground weight equipment as specified by the manufacturer specifications.

18. **Invasive Species**. All project equipment shall be decontaminated for removal of invasive species prior to and after each use on the project site by utilizing other best management practices to avoid the spread of invasive species as outlined in NR 40, Wis. Adm. Code. For more information, refer to http://dnr.wi.gov/topic/Invasives/bmp.html.

19. **Federal and State Threatened and Endangered Species**. WDNR-GP1-2017 does not affect the DNR's responsibility to insure that all authorizations comply with Section 7 of the Federal Endangered Species Act, s. 29.604, Wis. Stats and applicable State Laws. No DNR authorization under this permit will be granted for projects found not to comply with

these Acts/laws. No activity is authorized which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act and/or State law or which is likely to destroy or adversely modify the critical habitat of a species as identified under the Federal Endangered Species Act.

20. **Special Concern Species**. If the Wisconsin National Heritage Inventory lists a known special concern species to be present in the project area you will take reasonable action to prevent significant adverse impacts or to enhance the habitat for the species of concern.

21. **Historic Properties and Cultural Resources**. WDNR-GP1-2017 does not affect the DNR's responsibility to ensure that all authorizations comply with Section 106 of the National Historic Preservation Act and s. 44.40, Wis. Stats. No DNR authorization under this permit will be granted for projects found not to comply with these Acts/laws. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places. If cultural, archaeological, or historical resources are unearthed during activities authorized by this permit, work must be stopped immediately, and the State Historic Preservation Officer must be contacted for further instruction.

22. **Preventive Measures**. Measures must be adopted to prevent potential pollutants from entering a wetland or waterbody. Construction materials and debris, including fuels, oil, and other liquid substances, will not be stored in the construction area in a manner that would allow them to enter a wetland or waterbody as a result of spillage, natural runoff, or flooding. If a spill of any potential pollutant should occur, it is the responsibility of the permittee to remove such material, to minimize any contamination resulting from this spill, and to immediately notify the State Duty Officer at **1-800-943-0003**.

23. **Suitable fill material.** All fill authorized under this permit must consist of clean suitable soil material, as defined by s. NR 500.03(214), Wis. Admin. Code, free from hazardous substances as defined by s. 289.01(11), Wis. Stats., and free from solid waste as defined by s. 289.01(11) and (33), Wis. Stats.

24. **Standard for Coverage**. Wetland impacts from the project will cause only minimal adverse environmental impacts as determined by the Department.

25. **Transfers**. Coverage under this permit is transferable to any person upon prior written approval of the transfer by the Department.

26. **Limits of State Liability**. In authorizing work, the State Government does not assume any liability, including for the following:
    a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
    b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the State in the public interest.
    c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
    d. Design or construction deficiencies associated with the permitted work.
    e. Damage claims associated with any future modification, suspension, or revocation of this WDNR-GP1-2017.

DEPARTMENT OF THE ARMY
ST. PAUL DISTRICT, CORPS OF ENGINEERS
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

REPLY TO ATTENTION OF
REGULATORY BRANCH

Regulatory File No. 2018-01520-MHK December 21, 2018

Mr. Tyler Morse
The Prestwick Group, Inc.
W248 N5499 Executive Drive
Sussex, Wisconsin 53089

Dear Mr. Morse:

This correspondence is in regard to your pre-construction notification (PCN) requesting Department of the Army authorization to discharge fill material in 0.07 acre of wetland (Wetland 7) for the expansion of a parking lot at the Lac La Belle Golf Course. The project site is in Section 20, Township 8 North, Range 17 East, Waukesha County, Wisconsin.

Certain minor activities are eligible for authorization by general permits, which include Nationwide (NWP) and Regional General (RGP) permits. Your project, as shown on the enclosed figures labeled 2018-01520-MHK Pages 1 through 4, is authorized by NWP 39, Commercial and Institutional Developments.

In order for this verification to be valid, you must ensure the work is performed in accordance with the enclosed general permit terms, General Conditions, St. Paul District Regional Conditions, and the Wisconsin Department of Natural Resources' 401 Water Quality Certification Conditions.

You are also required to complete and return the enclosed Compliance Certification form within 30 days upon completion of your project in accordance with your permit conditions. Please mail the completed form to the Corps contact identified in the last paragraph.

This verification is valid until March 18, 2022, unless the general permit is modified, suspended, or revoked. If the work has not been completed by that time, you should contact this office to verify that the permit is still valid. Furthermore, if you commence or are under contract to commence this activity before the date of general permit expiration, modification, or revocation, you will have 12 months from the date of expiration, modification or revocation to complete the activity under the present terms and conditions of the general permit.

Our verification of this permit is based on the project description and construction methods provided in your PCN. You are cautioned that a change in the location or plans may invalidate this verification. Proposed changes should be coordinated with this office prior to construction. Failure to comply with all terms and conditions of this permit verification invalidates this verification and could result in a violation of Section 301 of the Clean Water Act or Section 10 of the Rivers and Harbors Act. <u>You must also obtain all local, State, and other Federal permits that apply to this project.</u>

No jurisdictional determination was requested or prepared for this project. While not required, you may request a jurisdictional determination from the Corps contact indicated below.

If you have any questions, please contact me in our Brookfield office at (651) 290-5733 or Marie.H.Kopka@usace.army.mil. In any correspondence or inquiries, please refer to the Regulatory file number shown above.

Sincerely,

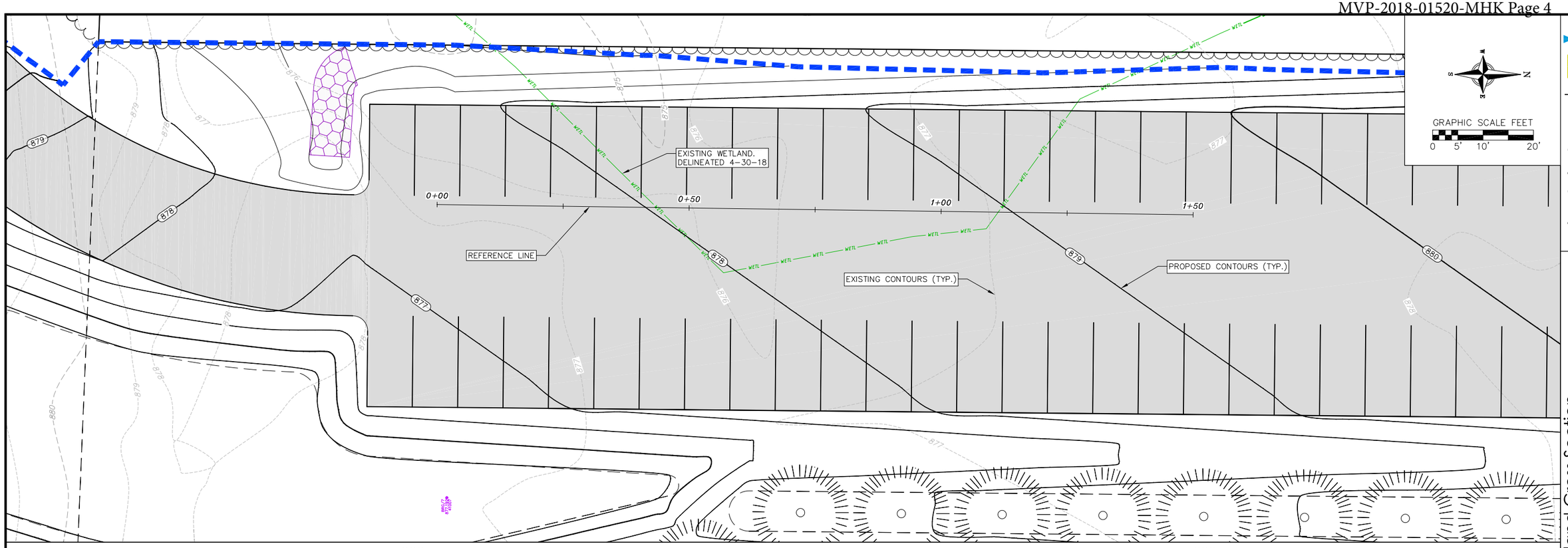
Marie H. Kopka
Lead Project Manager

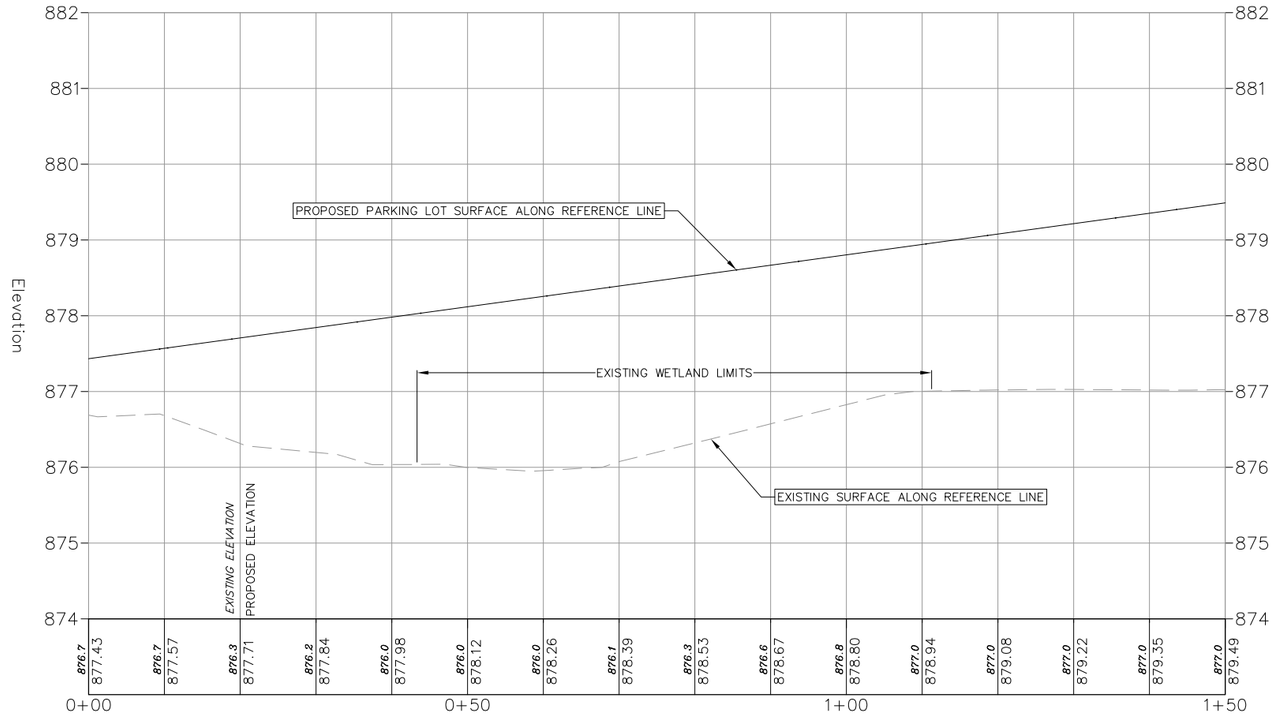
Enclosures

cc: Theresa Szabelski, Wisconsin DNR (GP-SE-2018-68-03079)
Neil Pfaff, Vierbicher Associates, Inc.

27. **Reevaluation of Decision**. The Department may suspend, modify or revoke authorization of any previously authorized activity and may take enforcement action if any of the following occur:

    a. The applicant fails to comply with the terms and conditions of WDNR-GP1-2017.
    b. The information provided by the applicant in support of the permit application proves to have been false, incomplete, or inaccurate.
    c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.





NOT FOR CONSTRUCTION

vierbicher
planners | engineers | advisors
Phone: (800) 261-3898

Existing Wetland Cross Section

The Club at Lac La Belle
Village of Lac La Belle
Waukesha County, Wisconsin

REVISIONS

NO.	DATE	REMARKS

REVISIONS

NO.	DATE	REMARKS

SCALE: AS SHOWN
DATE: 10/9/18
DRAFTER: BBAR
CHECKED:
PROJECT NO.: 180067
SHEET: 1 OF 1
DWG. NO.:

09 Oct 2018 - 4:25p M:\Prestwick Group\180067 - 2018 La Belle Course Improvements\CADD\180067 - Wetland Fill Alternatives.dwg by: bbar

39. Commercial and Institutional Developments. Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of commercial and institutional building foundations and building pads and attendant features that are necessary for the use and maintenance of the structures. Attendant features may include, but are not limited to, roads, parking lots, garages, yards, utility lines, storm water management facilities, wastewater treatment facilities, and recreation facilities such as playgrounds and playing fields. Examples of commercial developments include retail stores, industrial facilities, restaurants, business parks, and shopping centers. Examples of institutional developments include schools, fire stations, government office buildings, judicial buildings, public works buildings, libraries, hospitals, and places of worship. The construction of new golf courses and new ski areas is not authorized by this NWP.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. The discharge must not cause the loss of more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects. The loss of stream bed plus any other losses of jurisdictional wetlands and waters caused by the NWP activity cannot exceed 1/2-acre. This NWP does not authorize discharges into nontidal wetlands adjacent to tidal waters.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 32.) (Authorities: Sections 10 and 404)

Note: For any activity that involves the construction of a wind energy generating structure, solar tower, or overhead transmission line, a copy of the PCN and NWP verification will be provided to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.

2017 Nationwide Permits St. Paul District Regional and General Conditions

To qualify for NWP authorization, the prospective permittee must comply with the following regional and general conditions, as applicable, in addition to any regional or case specific conditions imposed by the division engineer or district engineer. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

The following Regional Conditions are applicable to all NWPs:

Nationwide Permit (NWP) Limitations:

A. **Discretionary authority:** As allowed under 33 CFR 330.1(d), the District retains discretionary authority to require an individual permit of any activity eligible for authorization by a NWP based on concern for the aquatic environment or for any other factor of the public interest.

B. **Limit on Tributary Impacts**: Any regulated activity that would result in the loss of greater than 500 linear feet of a tributary in a single location is not authorized by a NWP with the exception of projects verified by NWPs 13, 27, 32, 37, 53 or 54 where the permanent alteration would have an overall beneficial effect on the aquatic ecosystem associated with discharges proposed. A waiver from the specifications in this Regional Condition may be requested in writing. The waiver will only be issued if it can be demonstrated that permanent alteration of the tributary would have an overall beneficial effect on the aquatic ecosystem associated with the discharges proposed. This regional condition does not expand the limitations of a specific NWP where that NWP is more restrictive.

C. **Linear Projects:** No linear utility or linear transportation projects are eligible for authorization by NWPs. These projects will be reviewed for authorization under the St. Paul District's regional or programmatic general permits or an individual permit.

D. **Great Lakes Compact:** No project or part of a project that would divert more than 10,000 gallons per day of surface or ground water into or out of the Great Lakes Basin is authorized by NWPs.

E. **Tribal Rights:** As stated in General Condition 17 of the NWPs, no activity may impair tribal rights, including treaty rights, protected tribal resources or tribal lands.

F. **Areas under a Special Area Management Plan**: Regulated activities located within an area eligible for authorization under a valid Special Area Management Plan with an associated programmatic general permit are ineligible for authorization by NWPs.

G. **Designated Critical Resource Water**: The Lake Superior National Estuarine Research Reserve is a designated critical resource water and is subject to the NWP limitations and PCN requirements described in General Condition #22 of the NWPs.

H. **Calcareous fens:**
WISCONSIN: No work in a calcareous fen is authorized by a NWP unless the Wisconsin Department of Natural Resources (WI DNR) has approved an individual permit for the proposed regulated activity. Project proponents must provide evidence of an approved individual permit to the District.
MINNESOTA: No work in a calcareous fen is authorized by a NWP unless the Minnesota Department of Natural Resources (MN DNR) has approved a calcareous fen management plan specific to a project that otherwise qualifies for authorization by a NWP. Project proponents must provide evidence of an approved fen management plan to the District. A list of known Minnesota calcareous fens can be found at: http://files.dnr.state.mn.us/eco/wetlands/calcareous_fen_list.pdf .

Pre-Construction Notification (PCN) Requirements for Specific Water/Places

I. **PCNs for Special Aquatic Resources:** A project proponent must notify the District by submitting a PCN if a regulated activity would occur in any of the following aquatic resources. **Prior to beginning work in these waters, a District NWP verification letter must be received.**
PROJECTS IN WISCONSIN:
(1) state-designated wild rice waters (https://data.glifwc.org/manoomin.harvest.info);
(2) coastal plain marshes;
(3) bog wetland plant communities;
(4) interdunal wetlands;
(5) Great Lakes ridge and swale complexes;
(6) fens; and
(7) wetland sites designated of international importance under the Ramsar Convention, including: the Horicon Marsh, Upper Mississippi River Floodplain Wetland, Kakagon and Bad River Slough, Door Peninsula Coastal Wetlands, Chiwaukee Illinois Beach Lake Plain.
The complete Ramsar list is available at (https://rsis.ramsar.org/).
More information about plant community types 2-5 listed above, may be obtained from the Wisconsin Department of Natural Resources website at: http://dnr.wi.gov/topic/EndangeredResources/Communities.asp?mode=group&Type=Wetland.
Additional information on identifying bog and fen communities can be found at: http://www.mvp.usace.army.mil/Missions/Regulatory.aspx.
PROJECTS IN MINNESOTA:
(1) wild rice waters listed in Appendix A of these conditions and identified in Minn. R. 7050.0470, subpart 1;
(2) bog wetland plant communities; and
(3) fens.
Additional information on identifying bog and fen communities can be found at: http://www.mvp.usace.army.mil/Missions/Regulatory.aspx and at the MN DNR's Native Plant Community Classification's website: http://www.dnr.state.mn.us/npc/classification.html.

J. **PCNs for Bridges, Structures, and Vessels more than 50 years old:** A project proponent must notify the District by submitting a PCN if work or fill requiring District authorization would affect a bridge, structure or permanently moored or sunken vessels more than 50 years old.

K. **PCNs for Suspected Sediment or Soil Contamination:** A project proponent must notify the District by submitting a PCN if any regulated activity would occur in areas of known or suspected sediment or soil contamination, including but not limited to Superfund sites. Superfund sites in Minnesota or Wisconsin can be located by searching the EPA's website: https://www.epa.gov/superfund/search-superfund-sites-where-you-live. This condition does not apply to NWP 20. Response Operations for Oil or Hazardous Substances.

L. **PCNs for the Apostle Islands National Lakeshore and Madeline Island:** A project proponent must notify the District by submitting a PCN if the regulated activity would result in the work, fill or placement of a structure within the boundaries of the Apostle Islands National Lakeshore or Madeline Island in Wisconsin. **Prior to beginning regulated activities in these waters, a District NWP verification letter must be received.**

M. **PCNs for Temporary Impacts:** A project proponent must notify the District by submitting a PCN if temporary impacts would remain in place for longer than 90 days between May 15 and November 15. The PCN must specify how long the temporary impact will remain and include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions. See also Regional Condition Q.

Mitigation Requirements

N. **Compensatory Mitigation:** Proposed projects that require a PCN must include a statement describing how permanent *and* temporary impacts to waters of the U.S. would be avoided and minimized. The PCN must also include either: (a) a statement describing how impacts to waters of the U.S. would be compensated in accordance with the Federal Mitigation Rule (33 CFR Part 332) and the current St Paul District Policies for Compensatory Mitigation or (b) a statement explaining why compensatory mitigation should not be required for the proposed impacts.

Site Protection

O. **Site Inspection:** The permittee shall allow representatives from the District to inspect the proposed project site and the authorized activity to ensure that it is being, or has been, constructed and maintained in accordance with the NWP authorization.

P. **Restoration for Temporary Impacts:** All temporary impacts in waters of the U.S., including wetlands, that occur as a result of the regulated activity must be fully contained with appropriate erosion control or containment methods, be restored to preconstruction contours and elevations, and revegetated with native, non-invasive vegetation. A project proponent may request, in writing, a waiver from this condition from the District. An acceptable reason for a waiver to this condition may include, but is not limited to, the District allowing natural restoration of the site when the resulting grade and existing seed bank are sufficient for the site to restore to pre-construction conditions.

Q. **Duration of Temporary Impacts:** Temporary impacts in waters of the U.S., including wetlands, must be avoided and limited to the smallest area and the shortest duration required to accomplish the project purpose.
PART A, ACTIVITIES WITHOUT PCN REQUIREMENTS:
Temporary impacts may not remain in place longer than 90 days between May 15 and November 15. Before those 90 days have lapsed all temporary discharges must be removed in their entirety. If the temporary impacts would remain in place for longer than 90 days between May 15 and November 15, a PCN is required and the activity is subject to the requirements and limitations described in part B of this regional condition.
PART B, ACTIVITIES WITH PCN REQUIREMENTS:
The PCN must specify how long the temporary impact will remain and include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions. Temporary impacts are allowed to stay in place as long as specified in the PCN unless otherwise conditioned in a Corps NWP verification. All temporary impacts must be removed in their entirety in accordance with the plan described in the PCN unless otherwise conditioned in a NWP verification provided by the District.

R. **Culverts and Crossings:** Unless a NWP verification authorizes otherwise, replacement and installation of culverts or crossings authorized by a NWP are to follow (or be restored to) the natural alignment and profile of the tributary. The culvert(s) or bridge(s) must adequately pass bedload, sediment load, and provide site-appropriate fish and wildlife passage. Example design elements include recessing single culverts to accommodate natural bankfull width and adjusting additional culvert inverts at an elevation higher than the bankfull elevation.

S. **Best Management Practices:** To minimize adverse effects from soil loss and/or sediment transport that may occur as a result of the authorized discharge and associated earth work, appropriate best management practices shall be maintained and remain in place until the affected area is stabilized with vegetation or ground cover.

T. **Riprap:** For all NWPs that allow for the use of riprap material for bank stabilization, only rock shall be used and it must be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal or high flows. A project proponent may request from the District, in writing, approval to use alternative riprap materials.

U. **Pollutant or Hazardous Waste Spills:** If a spill of any potential pollutant or hazardous waste occurs, it is the responsibility of the permittee to immediately notify the National Response Center at 1-800-424-8802 or www.nrc.uscg.mil AND
IN WISCONSIN: the Wisconsin Department of Natural Resources' Spills Team at 1-800-943-0003
IN MINNESOTA: the Minnesota State Duty Officer at 1-800-422-0798.
The permittee is responsible for removing such pollutants and hazardous materials and for minimizing any contamination resulting from a spill in accordance with state and federal laws.

V. **Clean Construction Equipment:** All construction equipment must be clean prior to entering and before leaving the work site in order to prevent the spread of invasive species.

W. **Compliance:** The permittee is responsible for ensuring that whoever performs, supervises or oversees any portion of the physical work associated with the construction of the project has a copy of and is familiar with all the terms and conditions of the NWP and any special conditions included in any written verification letter from the District. The permittee is ultimately responsible for ensuring that all the terms and conditions of the NWPs are complied with.

The following General Conditions are applicable to all NWPs:

1. Navigation.

(a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects from Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or

high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers.

(a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or Study River (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. Tribal Rights. No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species.

(a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non- Federal applicant of the Corps' determination within 45 days of receipt of a complete preconstruction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species or critical habitat, or until ESA section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their World Wide Web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to

determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties.

(a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed.

(d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns.

Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)).

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 **Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.**

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____

(Transferee)

_____

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible

mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification.

(a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a preconstruction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-Federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-Federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination:

(1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for:

(i) all NWP activities that require preconstruction notification and result in the loss of greater than 1/2-acre of waters of the United States;

(ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed;

(iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and

(iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

BEFORE THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Application of the United States Department of the Army,)
Corps of Engineers, for Water Quality Certification for the)
Final Regulations Pertaining to the Issuance, Reissuance,)
and Modification of Nationwide Permits)

On January 6, 2017, the United States Department of the Army, Corps of Engineers (COE), published its final notice regarding the Issuance of Nationwide Permits (NWPs) in the Federal Register (agency docket number COE-2015-0017). The publication includes new, existing, and modified NWPs. Publication of these NWPs serves as the Corps' application to the State for water quality certification (WQC) under Section 401 of the Federal Clean Water Act (CWA).

The Wisconsin Department of Natural Resources (WDNR) has examined the final regulations pursuant to Section 401, CWA, and Chapter NR 299, Wisconsin Administrative Code (Wis. Adm. Code).

The WDNR has determined the following conditions for the NWPs are required to ensure compliance with state water quality standards enumerated in s. 299.04, Wis. Adm. Code. The certification contained herein shall expire on March 19, 2022.

Section 401 Certification does not release the permittee from obtaining all other necessary federal, state, and local permits, licenses, certificates, approvals, registrations, charters, or similar forms of permission required by law. It does not limit any other state permit, license, certificate, approval, registration, charter, or similar form of permission required by law that imposes more restrictive requirements. It does not eliminate, waive, or vary the permittee's obligation to comply with all other laws and state statutes and rules throughout the construction, installation, and operation of the project. This Certification does not release the permittee from any liability, penalty, or duty imposed by Wisconsin or federal statutes, regulations, rules, or local ordinances, and it does not convey a property right or an exclusive privilege.

This Certification does not replace or satisfy any environmental review requirements, including those under the Wisconsin Environmental Policy Act (WEPA) or the National Environmental Policy Act (NEPA).

Note: The specific language in the NWPs is not included in this document. Copies of complete nationwide permits published in the Federal Register on January 6, 2017, may be obtained from your local COE field office.

STATE CONDITIONS AND LIMITATIONS OF CERTIFICATION

GENERAL CONDITIONS:

1. The permittee shall allow the WDNR reasonable entry and access to the discharge site to inspect the discharge for compliance with the certification and applicable laws.

2. If any of these §401 water quality certification conditions are found invalid or unenforceable, the water quality certification is denied for all activities to which that condition applies.

3. Water quality certification is denied without prejudice for activities involving the temporary stockpiling of dredged or fill material in waters of the state, including wetlands.

4. No discharges of dredged or fill material below the ordinary high water mark of a navigable stream as defined by s. 310.03(5), Wis. Adm. Code, may take place during fish spawning periods or times when nursery areas would be adversely impacted. These periods are:

- September 15th through May 15th for all trout streams and upstream to the first dam or barrier on the Root River (Racine County), the Kewaunee River (Kewaunee County), and Strawberry Creek (Door County). To determine if a waterway is a trout stream, you may use the WDNR website trout maps at http://dnr.wi.gov/topic/fishing/trout/streammaps.html.
- March 1st through June 15th for ALL OTHER waters.

5. Unless specifically exempt from state statute and federal Pre-Construction Notification (PCN) requirements, Applicants seeking authorization under these NWPs shall complete the Joint State/Federal Permit Application on the department e-permitting site at http://dnr.wi.gov/Permits/Water/.

Nationwide Permits Granted Water Quality Certification:

- NWP 3 – Maintenance
- NWP 4 – Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities
- NWP 5 – Scientific Measurement Devices
- NWP 6 – Survey Activities
- NWP 13 – Bank Stabilization
- NWP 15 – U.S. Coast Guard Approved Bridges
- NWP 16 – Return Water From Upland Contained Disposal Areas
- NWP 18 – Minor Discharges
- NWP 20 –Response Operations for Oil or Hazardous Substances
- NWP 22 – Removal of Vessels
- NWP 25 – Structural Discharges
- NWP 27 – Aquatic Habitat Restoration, Enhancement, and Establishment Activities
- NWP 28 – Modifications of Existing Marinas
- NWP 30 – Moist Soil Management for Wildlife
- NWP 31 – Maintenance of Existing Flood Control Facilities
- NWP 35 – Maintenance Dredging of Existing Basins
- NWP 36 – Boat Ramps
- NWP 37 – Emergency Watershed Protection and Rehabilitation
- NWP 38 – Cleanup of Hazardous and Toxic Waste
- NWP 45 – Repair of Uplands Damaged by Discrete Events
- NWP 53 – Removal of Low-Head Dams
- NWP 54 – Living Shorelines

Nationwide Permits for which Water Quality Certification is Partially Denied

WQC is certified or denied without prejudice as indicated below for the activities authorized by the following NWPs. Certified activities are subject to WQC conditions 1-5 above. If activities are denied without prejudice, the applicant must apply to the WDNR for an individual 401 WQC.

- NWP 7 - Outfall Structures and Associated Intake Structures
  - WQC denied: Where the effluent from the outfall is not regulated under the WPDES permit program. WPDES permit information is available at: http://dnr.wi.gov/topic/wastewater/PermitApplications.html
  - WQC certified: All other NWP 7 activities.
- NWP 32 - Completed Enforcement Actions
  - WQC denied: If WDNR is not a party to the agreement or if WDNR has not concurred in writing with the settlement agreement.
  - WQC certified: All other NWP 32 activities.
- NWP 39 - Commercial and Institutional Developments
  - WQC denied: Discharges of dredged or fill material for the construction of the following attendant features: yards, recreation facilities, stormwater management facilities or wastewater management facilities.
  - WQC certified: All other NWP 39 activities.
- NWP 41 - Reshaping Existing Drainage Ditches
  - WQC denied: If any portion of the project will occur in or adjacent to a trout stream or any perennial tributaries to a trout stream. To determine if a waterway is a trout stream, you may use the WDNR website trout maps at http://dnr.wi.gov/topic/fishing/trout/streammaps.html.
  - WQC certified: All other NWP 41 activities.
- NWP 42 - Recreational Activities
  - WQC denied: If the project involves the placement of any dredged or fill material into Wisconsin navigable waters as defined in s. NR 310.03(5), Wis. Adm. Code.
  - WQC certified: All other NWP 42 activities.
- NWP 44 - Mining Activities
  - WQC denied: If the project involves the placement of any dredged or fill material into Wisconsin navigable waters as defined in s. NR 310.03(5), Wis. Adm. Code.
- NWP 46 - Discharges in Ditches
  - WQC denied: If the project involves the placement of any dredged or fill material into Wisconsin navigable waters as defined in s. NR 310.03(5), Wis. Adm. Code.
  - WQC certified: All other NWP 46 activities.
- NWP 51 - Land-Based Renewable Energy Generation Facilities
  - WQC denied: Discharges of dredged or fill material for the construction of the following attendant features: yards, recreation facilities, stormwater management facilities or wastewater management facilities.
  - WQC certified: All other NWP 51 activities.

Water Quality Certification Is Also Denied for the Nationwide Permits Revoked by the Corps of Engineers in Wisconsin and Listed Below:

- NWP 8 – Oils and Gas Structures on the Outer Continental Shelf
- NWP 12 – Utility Line Activities
- NWP 14 – Linear Transportation Projects
- NWP 15 – U.S. Coast Guard Approved Bridges
- NWP 21 – Surface Coal Mining Activities
- NWP 23 – Approved Categorical Exclusions
- NWP 24 – Indian Tribe or State Administered Section 404 Programs
- NWP 34 – Cranberry Production Activities
- NWP 49 – Coal Re-mining Activities
- NWP 50 – Underground Coal Mining Activities

Nationwide Permits Denied Water Quality Certification Without Prejudice At This Time:

The following NWP categories are denied Water Quality Certification (WQC) in their entirety and require an individual Section 401 WQC for all activities under these NWPs. In instances where a state has denied the 401 WQC for discharges under a particular NWP, permittees must furnish the District Engineer for the COE with an individual 401 WQC.

Each category was reviewed and it was determined that: potential water quality and beneficial use impacts would be beyond that considered minimal; the activity was not likely to occur in Wisconsin; the NWP doesn't align with state general permit standards required by statute (NWP 29, 40, 43); inadequate data was available for WDNR to fully evaluate potential water quality and beneficial use impacts; or the category was empty (Reserved).

- NWP 17 – Hydropower Projects
- NWP 19 – Minor Dredging
- NWP 26 – Reserved
- NWP 29 – Residential Developments
- NWP 33 – Temporary Construction, Access and Dewatering
- NWP 40 – Agricultural Activities
- NWP 43 – Stormwater Management Facilities
- NWP 47 – Reserved
- NWP 48 – Existing Commercial Shellfish Aquaculture Activities
- NWP 52 – Water-Based Renewable Energy Generation Pilot Projects

Note: State water quality certification is not required for the following Section 10 only NWPs: 1 – Aids to Navigation, 2 – Structures in Artificial Canals, 9 – Structures in Fleeting and Anchorage Areas, 10 – Mooring Buoys, 11 – Temporary Recreational Structures, 28 – Modifications of Existing Marinas, 35 – Maintenance Dredging of Existing Basins.

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin Statutes and administrative rules establish time periods within which requests to review Department decisions must be filed.

To request a contested case hearing pursuant to section 227.42, Wisconsin Statutes, you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources.

This determination becomes final in accordance with the provisions of s. NR 299.05(7), Wisconsin Administrative Code, and is judicially reviewable when final. For judicial review of a decision pursuant to Sections 227.52 and 227.53, Wisconsin Statutes, you have 30 days after the decision becomes final to file your petition with the appropriate circuit court and to serve the petition on the Secretary of the Department of Natural Resources. The petition must name the Department of Natural Resources as the respondent.

Reasonable accommodation, including the provision of informational material in an alternative format, will be provided for qualified individuals with disabilities upon request.

This notice is provided pursuant to section 227.48(2), Wisconsin Statutes.

Dated at Madison, Wisconsin June 1, 2017

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By for Ed Eberle
Cathy Stepp, Secretary

US Army Corps of Engineers ®
St. Paul District

COMPLIANCE CERTIFICATION

Regulatory File Number: 2018-01520-MHK (parking lot expansion)

Name of Permittee: Tyler Morse (The Prestwick Group, Inc.)

County/State: Waukesha County/Wisconsin

Date of Issuance: December 21, 2018

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the Corps contact identified in your verification letter within 30 days.

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

By signing below, the permittee is certifying that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the permit, and any required mitigation was completed in accordance with the permit conditions.

_____ _____

Signature of Permittee Date