Town of Brookfield 645 N. Janacek Road Brookfield, WI 53045

Telephone: 262-796-3788 FAX: 262-796-0339

TUESDAY, MAY 23, 2023



May 18, 2023

PUBLIC HEARING

MEETING NOTICE

7:00PM

Meeting will be held at the **TOWN HALL**, 645 N. Janacek Road, Brookfield, WI:

1.	Confirmation of meeting notice.			
2.	Public Hearing to receive comment on a request for a proposed Zoning Code Text Amendment to Section 17.02(14)(b)1, related to conditional use permit procedures.			
3.	Adjourn.			
TUESDAY, M	AY 23, 2023 IMMEDIATELY FOLLOWING PLANNING COMMISSON			
AGENDA:				
1.	Confirmation of meeting notice.			
2.	Approval of April 25, 2023 Plan Commission Minutes.			
3. SD-0523-01	Corey Wallace (Wesenberg Architects), representing Quest Interiors, for a recommendation for Preliminary and Final Approval of a new building consisting of an office, product showroom, and product storage and shipping area located at 21055 Crossroads Circle.			
4. P-0523-01	Recommendation to schedule a public hearing for a Zoning Code Text Amendment related to adult and children day care centers.			
5. P-0523-02	Discussion regarding a potential Municipal Code Text Amendment to add Section 12.08, which establishes requirements for mobile food trucks operating within the Town of Brookfield.			
6. P-0423-01	Town of Brookfield for a recommendation of approval for a Zoning Code Text Amendment to Section 17.02(14)(b)1, related to conditional use permit procedures.			
7. P-0822-02	Town of Brookfield for a recommendation of approval for a Zoning Code Text			

P	Planning Issue	
SD	Site Development	

Amendment to Section 17.02(14)(g)11 related to fences.

Bryce Hembrook, AICP Town Planner

Correspondence.

Adjourn.

8.

9.

TOWN OF BROOKFIELD PLAN COMMISSION MINUTES April 25, 2023

Town Chairman Keith Henderson called the meeting to order at 7:01pm on Tuesday, April 25, 2023, at the Town of Brookfield Town Hall, 645 North Janacek Road, Brookfield, Wisconsin. Also, present at the meeting were Commissioners Gordon Gaeth, William Neville, Len Smeltzer, and Town Planner Bryce Hembrook. Commissioners Kevin Riordan and Jeremy Watson were absent, with Commissioner Watson being excused.

CONFIRMATION OF MEETING NOTICE

Town Planner Bryce Hembrook reported that the agenda was noticed and posted as required.

MINUTES

Commissioner Neville moved to approve the minutes of the regular meeting of the March 22, 2023 Plan Commission meeting as presented. The motion was seconded by Commissioner Gaeth, voted on, and carried unanimously.

RECOMMENDATION TO SCHEDULE A PUBLIC HEARING FOR A ZONING CODE TEXT AMENDMENT TO SECTION 17.02(14)(b)1, RELATED TO CONDITIONAL USE PERMIT PROCEDURES.

Town Planner Hembrook presented the item and reported that this is a common requirement in Wisconsin when considering an amendment to the zoning code. Commissioner Smeltzer made a motion to **recommend** the Town Board schedule a public hearing for a zoning code text amendment to section 17.02(14)(b)1, related to Conditional Use Permit procedures. The motion was seconded by Commissioner Gaeth, voted on, and carried unanimously.

CORRESPONDENCE AND ANNOUNCEMENTS

None.

ADJOURN

There being no further business, Commissioner Neville made a motion to adjourn the meeting. The motion was seconded by Commissioner Gaeth, voted on, and carried unanimously. Chairman Henderson closed the meeting at 7:06pm.

Respectfully submitted, Bryce Hembrook



Building a Better World for All of Us®

TOWN OF BROOKFIELD PLAN COMMISSION ZONING REPORT

TO: Plan Commission

FROM: Bryce Hembrook, AICP

Town Planner

REPORT DATE: May 18, 2023 PC MEETING DATE: May 23, 2023

RE: Quest Interiors – Preliminary Approval 21055 Crossroads Circle BKFT1129999007

SEH No. 171421, TASK 5

Applicant: Corey Wallace, Wesenberg Architects representing Quest Interiors

Application Type: Preliminary Approval

Request

Preliminary approval of a new building consisting of an office area, showroom, and product storage and shipping area, located at 21055 Crossroads Circle.

Summary of Request

- Zoning District = B-2 Limited General Business District
- Currently a vacant 3.68 acre parcel in an office park.
- Proposed structure = 23,431 square foot one-story facility for Quest Interiors consisting of an office
 area, product showroom, and product storage/shipping area. The business's main customer is local
 home builders and contractors. The land use is considered to be a building supply store and office.
- Approximately 49 parking stalls currently proposed; 39 in customer parking area and 10 stalls intended for staff.
 - According to the code, 35 parking spaces are required. Stall per land use breakdown below:
 - Office area = 14
 - Warehouse = 12
 - Showroom = 9
- Proposed setbacks:
 - o Front = 108'
 - Side = 109' south and 50' north
 - o Rear = 121'
 - o All setbacks will meet code requirements.
- Sum total of floor area
 - o Proposed = 14.6% of lot area.

- Required = No less than 6,000sf or 15% of the lot area, whichever is less. Shall not exceed 50% of lot area.
- o Requirement is met.
- Proposed building height appears to be approximately 28'.
- There are single-family residences directly to the west of the subject property, but only one of the adjacent parcels is zoned residential. The majority of trees along the western property line are proposed to remain to maintain the buffer between the residential properties and the new building.

Preliminary Approval Requirements

The purpose of preliminary project review is to determine that proposed structures are properly located and to review the project plans. The project plans, in the maximum scale of one-inch equals 40 feet, for any multifamily residential, commercial, industrial, park, or institutional development shall include a plat of survey prepared by a registered land surveyor showing the location, boundaries, dimensions, elevations, existing and proposed grades to the Town of Brookfield datum. In addition, the plat of survey shall show the location, elevation, existing grades, and use of any abutting lands and their structures within 100 feet of the subject site. This information was provided by the applicant and included in the plan sets.

The Commission needs to review the proposed uses and sizes of the following:

- Subject site
- Existing and proposed structures and easements
- Streets and other public ways
- Off-street parking, loading areas, driveways, ingress and egress plans
- Landscaping and open space utilization plans
- Existing and proposed street, side, and rear yards

When deciding whether to approve the preliminary plans, the Committee should consider these elements.

Development Review Team Feedback

The Development Review Team has reviewed the proposed plans and all of their comments and/or concerns are described in the review letter from the Town Engineer. Overall, town staff believes these items can be addressed prior to final approval from the Town Board.

Next Steps

If approved, the next step will be final plan review by the Architectural Review Committee in June, followed by Plan Commission review, and final review/approval by Town Board.

Architectural Review Committee Recommendation

Recommended preliminary approval of the proposed building to the Plan Commission.

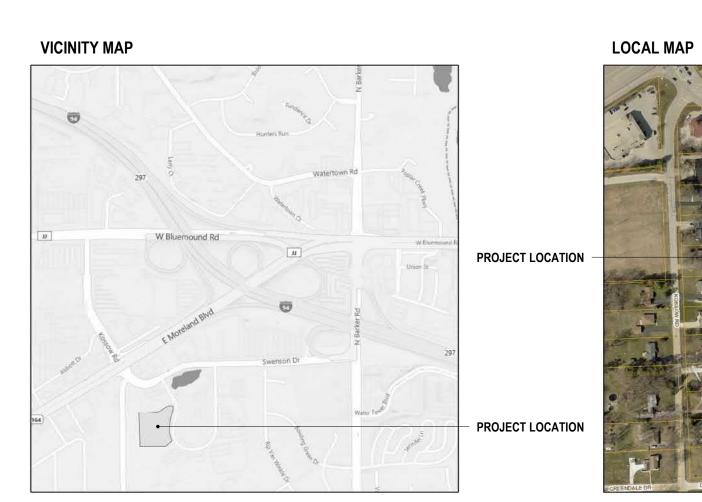
PROPOSED SHOWROOM, OFFICE & WAREHOUSE BUILDING

QUEST INTERIORS

21055 Crossroads Circle Town of Brookfield, WI









ARCHITECT: WESENBERG ARCHITECTS
146 ALGOMA BLVD OSHKOSH, WISCONSIN 54901 (920) 230 - 4900 Chet Wesenberg chet.wesenberg@cwarchitect.net
OWNER: KTFM, LLC
N7799 US HWY 51 FOND DU LAC, WISCONSIN 54935 (920) 233 - 3200 Mark Twohig mtwohig@questinteriorsusa.com
STRUCTURAL ENGINEER: PATERA, LLC
2601 S. SUNNYSLOPE ROAD NEW BERLIN, WI 53151 (262) 786 - 6676 John Lavin john@PateraLLC.com
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100 CAMELOT DRIVE FOND DU LAC, WI 54935 (920) 926 - 9800 Tim Stoppleworth tim.stoppleworth@excelengineer.com

SHEET		
NUMBER	SHEET NAME	DISCIPLINE
G100	COVER SHEET	GENERAL
C0.1	CIVIL COVER AND SPECIFICATION SHEET	CIVIL
C1.0	EXISTING SITE AND DEMOLITION PLAN	CIVIL
C1.1	SITE PLAN	CIVIL
C1.2	GRADING AND EROSION CONTROL PLAN	CIVIL
C1.3	UTILITY PLAN	CIVIL
C1.4	LANDSCAPE AND RESTORATION PLAN	CIVIL
C2.0	DETAILS	CIVIL
C2.1	DETAILS	CIVIL
C2.2	DETAILS	CIVIL
C3.1	SITE PHOTOMETRICS PLAN & DETAILS	CIVIL
AS100	SITE CONTEXT PLAN	ARCHITECTURAL SITE
AS101	ARCHITECTURAL SITE PLAN	ARCHITECTURAL SITE
A100	FIRST FLOOR DESIGN PLAN	ARCHITECTURAL
Z300	EXTERIOR DESIGN ELEVATIONS	ARCHITECTURAL PRESENTAT
Z301	EXTERIOR DESIGN ELEVATIONS	ARCHITECTURAL PRESENTAT
Z400	BUILDING SECTION DIAGRAM	ARCHITECTURAL PRESENTAT
Z900	PRESENTATION DRAWING	ARCHITECTURAL PRESENTAT
Z901	PRESENTATION DRAWING	ARCHITECTURAL PRESENTAT

ZONING SUBMITTAL JRAL SITE JRAL SITE NO. DESCRIPTION DATE RAL PRESENTATION RAL PRESENTATION

COVER SHEET

PRINTED: 4/19/2023 2:08:09 PM

PREPARATION OF SHOP DRAWINGS, CONSTRUCTION AND INSTALLATION.

© Wesenberg Architects

ISSUE DATE:

19 April, 2023

SET TYPE:

REVISIONS:

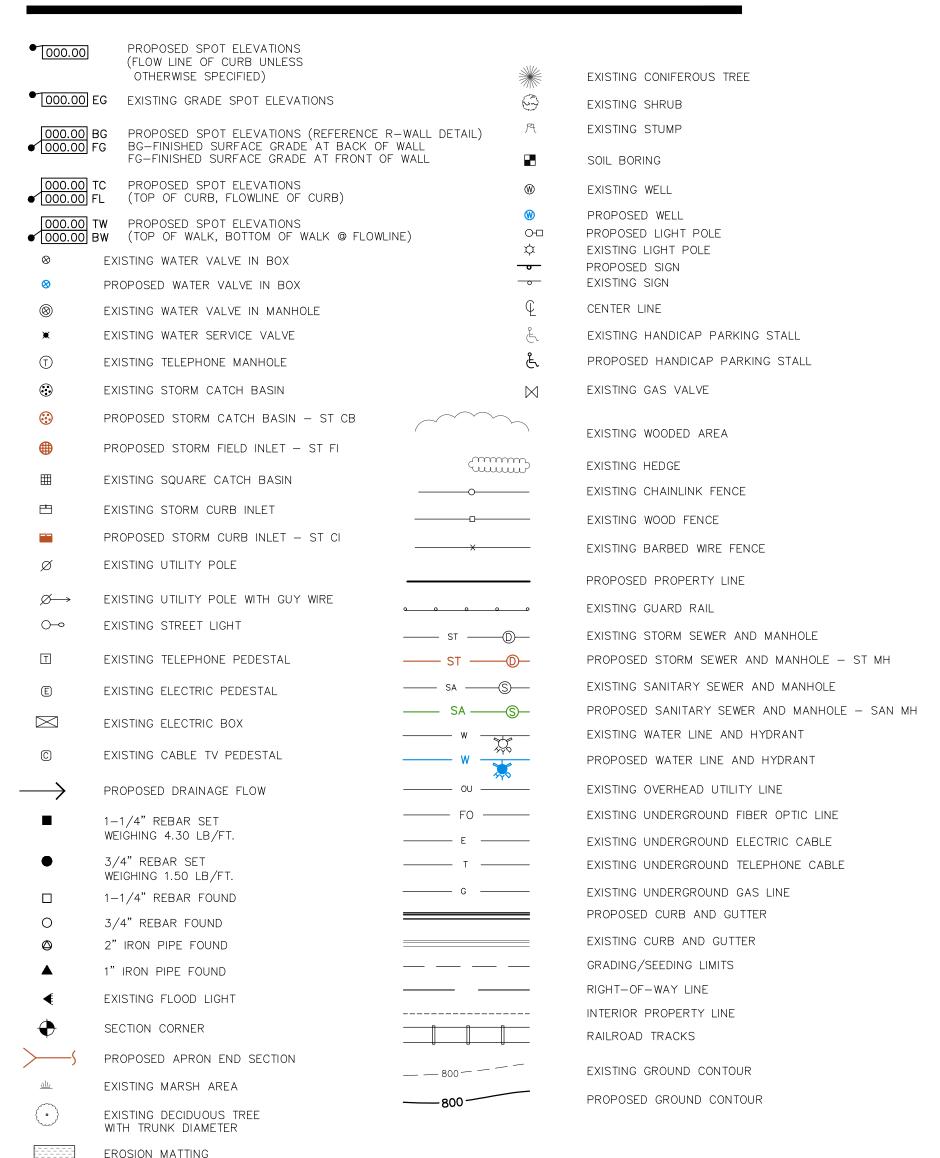
PROJECT NUMBER

FOR PROPER INTERPRETATION, THESE DRAWINGS SHALL BE PRINTED IN COLOR

SHEET NUMBER

PROPOSED OFFICES, SHOWROOM AND WAREHOUSE FOR: KTFM, LLC

TOWN OF BROOKFIELD, WI **LEGEND**



CIVIL SHEET INDEX

PROPOSED INLET PROTECTION

SHEET	SHEET TITLE
C0.1	CIVIL COVER AND SPECIFICATION SHEET
C1.0	EXISTING SITE AND DEMOLITION PLAN
C1.1	SITE PLAN
C1.2	GRADING AND EROSION CONTROL PLAN
C1.3	UTILITY PLAN
C1.4	LANDSCAPE AND RESTORATION PLAN
C2.0	DETAILS
C2.1	DETAILS
C2.2	DETAILS
C3.1	SITE PHOTOMETRIC PLAN & DETAILS



PROJECT LOCATION MAP

DIVISION 31 EARTH WORK

31 10 00 SITE CLEARING (DEMOLITION)

- A CONTRACTOR SHALL CALL DIGGER'S HOT LINE AND CONDUCT A PRIVATE LITILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING SITE DEMOLITION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD
- B. DEMOLITION PLAN IS AN OVERVIEW OF DEMOLITION TO TAKE PLACE ON SITE. CONTRACTOR TO FIFLD VERIEY EXISTING SITE CONDITIONS PRIOR TO BIDDING. CONTRACTOR SHALL REMOVE, REPLACE, OR DEMOLISH ALL ITEMS AS NEEDED DURING CONSTRUCTION. C. CONTRACTOR TO PROTECT EXISTING IMPROVEMENTS THAT ARE SCHEDULED TO REMAIN. ANY DAMAGE TO EXISTING FACILITIES SHALL BE
- D. ALL CONCRETE NOTED TO BE REMOVED SHALL BE REMOVED TO THE NEAREST CONTROL JOINT.

31 20 00 EARTH MOVING

- A. CONTRACTOR SHALL CALL DIGGER'S HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING EXCAVATION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
- B. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR ALL EXCAVATION, GRADING, FILL AND BACKFILL WORK AS REQUIRED TO COMPLETE THE GENERAL CONSTRUCTION WORK. ALL EXCAVATION AND BACKFILL FOR ELECTRICALS AND MECHANICALS ARE THE RESPONSIBILITY OF THE
- RESPECTIVE CONTRACTOR UNLESS OTHERWISE SPECIFIED IN THE BID DOCUMENTS C. ALL ORGANIC TOPSOIL INSIDE THE BUILDING AREA, UNDER PAVED AREAS, AND AT SITE FILL AREAS SHALL BE REMOVED. PROOF ROLL SUBGRADES BEFORE PLACING FILL WITH HEAVY PNEUMATIC-TIRED EQUIPMENT, SUCH AS A FULLY-LOADED TANDEM AXLE DUMP TRUCK, TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. CONTRACTOR SHALL VERIFY TOPSOIL DEPTHS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL
- REVIEW AND FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ACCOUNT FOR EXISTING CONDITIONS PRIOR TO SUBMITTING BID FOR THE PROJECT. EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY LOCAL ZONING D. PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL LAYER BEFORE COMPACTION AS RECOMMENDED TO ACHIEVE SPECIFIED DRY DENSITY. REMOVE AND REPLACE, OR SCARIFY AND
- AIR DRY, OTHERWISE SATISFACTORY SOIL MATERIAL THAT IS TOO WET TO COMPACT TO SPECIFIED DRY DENSITY. E. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EOUIPMENT, AND NOT MORE THAN 4" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. F. COMPACT THE SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 698, STANDAR PROCTOR TEST. FILL MAY NOT BE PLACED ON FROZEN GROUND AND NO FROZEN MATERIALS MAY BE USED FOR BACK FILL. APPLY THE MORE STRINGENT REQUIREMENTS WHEN COMPARING BETWEEN THE FOLLOWING AND THE GEOTECHNICAL REPORT.
- UNDER FOUNDATIONS SUBGRADE, AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 98 PERCENT 2. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS MORE THAN 3 FEET BELOW THE SLAB - PLACE A DRAINAGE COURSE LAYER OF 3/4' CRUSHED STONE, WITH 5% TO 12% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
- 3. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS WITHIN 3 FEET OF THE SLAB SURFACE- PLACE A DRAINAGE COURSE LAYER OF LEAN 3/4" CRUSHED STONE, WITH NO MORE THAN 5% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT. 4. UNDER EXTERIOR CONCRETE AND ASPHALT PAVEMENTS - COMPACT THE SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT
- 5. UNDER WALKWAYS COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT 6. LINDER LAWN OR LINPAVED AREAS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL. TO NOT LESS THAN 85 PERCENT G. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS. CONTRACTOR SHALL PROVIDE DOCUMENTATION OF PASSING DENSITY TESTING AND PROOF-ROLLING TO ENGINEER UPON COMPLETION. IT IS
- ONTROL TESTS. THE GEOTECHNICAL REPORT WAS PERFORMED BY PSI INTERTEK. H. ALLOW THE TESTING AGENCY TO TEST AND INSPECT SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS. PROVIDE ONE TEST FOR EVERY 2000 SQUARE FEET OF PAVED AREA OR BUILDING SLAB, ONE TEST FOR EACH SPREAD FOOTING, AND ONE TEST FOR EVERY 50 LINEAR FEET OF WALL STRIP FOOTING.

 I. WHEN THE TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS . THE BUILDING SITE SHALL BE GRADED TO PROVIDE DRAINAGE AWAY FROM THE BUILDING AS INDICATED ON THE PLANS, SITE EARTHWORK SHALL BE

GRADED TO WITHIN 0.10' OF REQUIRED EARTHWORK ELEVATIONS ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE

SUGGESTED THAT THE GEOTECHNICAL FIRM USED TO PERFORM THE SUBSURFACE SOIL INVESTIGATION BE ENGAGED FOR THE FIELD QUALITY

31 30 00 EROSION CONTROL/STORMWATER MANAGEMENT

- AND NR 216.47. THE DESIGN ENGINEER SHALL ALSO FILE A CONSTRUCTION NOTICE OF INTENT WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES PURSUANT TO NR 216.43 OR TO AN AUTHORIZED LOCAL PROGRAM PURSUANT TO NR 216.415 TO OBTAIN COVERAGE UNDER THE
- B. THE CONTRACTOR SHALL KEEP THE NOTICE OF INTENT PERMIT, APPROVED EROSION CONTROL AND STORMWATER MANAGEMENT PLANS, AND PLAN AMENDMENTS ON THE CONSTRUCTION SITE AT ALL TIMES PURSUANT TO NR 216.455 UNTIL PERMIT COVERAGE IS TERMINATED. . THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL EROSION CONTROL PERMITS.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE MONITORING, MAINTENANCE, AND REPORTING REQUIREMENTS OF NR 216.48. INSPECTIONS OF IMPLEMENTED EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MUST AT A MINIMUM BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A PRECIPITATION EVENT OF 0.5" OR MORE. A PRECIPITATION EVENT MAY BE CONSIDERED TO BE THE TOTAL SEDIMENT CONTROL AS NECESSARY WITHIN 24 HOURS OF AN INSPECTION OR AFTER A DEPARTMENT NOTIFICATION WHERE REPAIR OR REPLACEMENT IS REQUESTED.
- E. THE CONTRACTOR SHALL MAINTAIN, AT THE CONSTRUCTION SITE OR AVAILABLE VIA AN INTERNET WEBSITE, WEEKLY WRITTEN REPORTS OF ALL INSPECTIONS CONDUCTED. WISCONSIN DNR CONSTRUCTION SITE INSPECTION REPORT FORM 3400-187 SHALL BE USED. WEEKLY INSPECTION REPORTS SHALL INCLUDE ALL OF THE FOLLOWING: THE DATE, TIME, ANDLOCATION OF THE CONSTRUCTION SITE INSPECTION.
- . THE NAME OF THE INDIVIDUAL WHO PERFORMED THE INSPECTION. 3. AN ASSESSMENT OF THE CONDITION OF THE EROSION AND SEDIMENT CONTROLS.
- 4. A DESCRIPTION OF ANY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE IMPLEMENTATION AND MAINTENANCE PERFORMED. . A DESCRIPTION OF THE PRESENT PHASE OF LAND DISTURBING CONSTRUCTION ACTIVITY AT THE CONSTRUCTION SITE. F. EROSION AND SEDIMENT CONTROL IMPLEMENTED DURING CONSTRUCTION SHALL STRICTLY COMPLY WITH THE GUIDELINES AND REQUIREMENTS SET FORTH IN WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151, THE STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES RUNOFF Management Performance Standards. Technical Standards Published by the Wisconsin DNR Shall also be utilized to implement THE REQUIRED PERFORMANCE STANDARDS. THE METHODS AND TYPES OF EROSION CONTROL WILL BE DEPENDENT ON THE LOCATION AND TYPE OF WORK INVOLVED. ALL SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION, AND INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL. BELOW IS A LIST OF EROSION AND SEDIMENT CONTROL ST MANAGEMENT PRACTICES TO ACHIEVE THE PERFORMANCE STANDARDS REQUIRED
- 1. SILT FENCE SHALL BE PLACED ON SITE AT LOCATIONS SHOWN ON THE FROSION CONTROL PLAN. SILT FENCE SHALL ALSO BE PROVIDED AROUND THE PERIMETER OF ALL SOIL STOCKPILES THAT WILL EXIST FOR MORE THAN 7 DAYS. FOLLOW PROCEDURES FOUND IN WISCONSIN
- 2. DITCH CHECKS SHALL BE PROVIDED TO REDUCE THE VELOCITY OF WATER FLOWING IN DITCH BOTTOMS. PLACE AT LOCATIONS SHOWN ON THE 3. STONE TRACKING PADS AND TRACKOUT CONTROL PRACTICES SHALL BE PLACED AT ALL CONSTRUCTION SITE ENTRANCES AND SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE CONSTRUCTION SITE. SEE THE EROSION CONTROL PLAN FOR LOCATIONS. THE AGGREGATE USED FOR THE STONE TRACKING PAD SHALL BE 3/8" TO 3 INCH CLEAR OR WASHED STONE AND SHALL BE PLACED IN A LAYER AT LEAST 12 INCHES THICK. THE STONE SHALL BE UNDERLAIN WITH A WISDOT TYPE R GEOTEXTILE FABRIC AS NEEDED. THE TRACKING PAD SHALL BE THE
- PASSING THROUGH THE TRACKING PAD. OTHER TRACKOUT CONTROL PRACTICES INCLUDING STABILIZED WORK SURFACES, MANUFACTURED TRACKOUT CONTROL DEVICES, TIRE WASHING, AND STREET/PAVEMENT CLEANING SHALL BE IMPLEMENTED AS NECESSARY TO MITIGATE THE TRACKOUT OF SEDIMENT OFFSITE FOLLOW PROCEDURES FOLIND IN WISCONSIN DNR TECHNICAL STANDARD 1057 (CURRENT EDITION) 4. STORM DRAIN INLET PROTECTION SHALL BE PROVIDED FOR ALL NEW AND DOWNSTREAM STORM CATCH BASINS AND CURB INLETS. TYPE B OR C PROTECTION SHOULD BE PROVIDED AND SHALL BE IN CONFORMANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1060 (CURRENT

FULL WIDTH OF THE EGRESS POINT (12' MIN WIDTH) AND SHALL BE A MINIMUM OF 50 FEET LONG. SURFACE WATER MUST BE PREVENTED FROM

5. DUST CONTROL MEASURES SHALL BE PROVIDED TO REDUCE OR PREVENT THE SURFACE AND AIR TRANSPORT OF DUST DURING CONSTRUCTION. CONTROL MEASURES INCLUDE APPLYING MULCH AND ESTABLISHING VEGETATION, WATER SPRAYING, SURFACE ROUGHENING, APPLYING POLYMERS, SPRAY-ON TACKIFIERS, CHLORIDES, AND BARRIERS. SOME SITES MAY REQUIRE AN APPROACH THAT UTILIZES A COMBINATION OF MEASURES FOR DUST CONTROL. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1068 (CURRENT EDITION). 1. THE USE, STORAGE, AND DISPOSAL OF CHEMICALS, CEMENT, AND OTHER COMPOUNDS AND MATERIALS USED ON SITE SHALL BE MANAGED

DURING THE CONSTRUCTION PERIOD TO PREVENT THEIR TRANSPORT BY RUNOFF INTO WATERS OF THE STATE.

- 2. CONTRACTOR SHALL PROVIDE AN OPEN AGGREGATE CONCRETE TRUCK WASHOUT AREA ON SITE. CONTRACTOR TO ENSURE THAT CONCRETE WASHOUT SHALL BE CONTAINED TO THIS DESIGNATED AREA AND NOT BE ALLOWED TO RUN INTO STORM INLETS OR INTO THE OVERLAND STORMWATER DRAINAGE SYSTEM, WASHOUT AREA SHALL BE REMOVED LIPON COMPLETION OF CONSTRUCTION . TEMPORARY SITE RESTORATION SHALL TAKE PLACE IN DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 14 DAYS AND REQUIRES VEGETATIVE COVER FOR LESS THAN ONE YEAR. THIS TEMPORARY SITE RESTORATION REQUIREMENT ALSO APPLIES TO SOIL STOCKPILES THAT EXIST FOR MORE THAN 7 DAYS.
- EXPOSED SOIL, PERMANENT STABILIZATION SHALL OCCUR WITHIN 3 WORKING DAYS OF FINAL GRADING. TOPSOIL, SEED, AND MULCH SHALL BE IN GENERAL CONFORMANCE WITH TECHNICAL STANDARDS 1058 AND 1059 AND SHALL MEET THE SPECIFICATIONS FOUND IN THE LANDSCAPING AND SITE STABILIZATION SECTION OF THIS CONSTRUCTION DOCUMENT. ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR FINAL STABILIZATION MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
- DEWATERING PROCESS SHALL BE TREATED TO REMOVE SEDIMENT PRIOR TO DISCHARGING OFF-SITE OR TO WATERS OF THE STATE. FOLLOW ALL
- PROCEDURES FOUND IN TECHNICAL STANDARD 1061. 5. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH WORKING DAY. DUST CONTROL REQUIREMENTS SHALL BE FOLLOWED PER WI DNR TECHNICAL STANDARD 1068 (CURRENT EDITION). G. EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL THE AREA(S) SERVED HAVE ESTABLISHED VEGETATIVE COVER
- H. ONCE THE CONSTRUCTION SITE HAS BEEN FULLY STABILIZED AND TEMPORARY EROSION CONTROL BEST MANAGEMENT PRACTICES HAVE BEEN REMOVED, THE CONTRACTOR SHALL FILE A CONSTRUCTION NOTICE OF TERMINATION WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES IN ACCORDANCE WITH NR 216.55.
- AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL GIVE THE OWNER COPIES OF THE EROSION CONTROL AND STORM WATER MANAGEMENT PLANS, AMENDMENTS TO PLANS, SUPPORTING PLAN DATA, AND CONSTRUCTION SITE EROSION CONTROL INSPECTION REPORTS.
- THE OWNER SHALL RETAIN THESE FOR A PERIOD OF 3 YEARS FROM THE DATE OF TERMINATING COVERAGE UNDER WPDES GENERAL PERMI J. ALL POST CONSTRUCTION STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES SHALL BE CONSTRUCTED BEFORE THE SITE HAS

PLAN SPECIFICATIONS (BASED ON CSI FORMAT)

DIVISION 32 EXTERIOR IMPROVEMENTS

32 10 00 AGGREGATE BASE & ASPHALT PAVEMENT

A CONTRACTOR TO PROVIDE COMPACTED AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT WHERE INDICATED ON THE PLANS. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. PROVIDE HOT MIX ASPHALT MIXTURE TYPES PER SECTION 460 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION CONTRACTOR SHALL OBTAIN AND REVIEW SOILS REPORT FOR RECOMMENDATIONS FOR GEO-GRID / GEOTEXTILE BELOW CRUSHED AGGREGATE (IF APPLICABLE). CONTRACTOR TO PROVIDE AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT TYPES AND DEPTHS AS

12" OF 1-1/4" CRUSHED AGGREGATE

- STANDARD ASPHALT PAVING SECTION HEAVY ASPHALT PAVING SECTION 1-3/4" SURFACE COURSE (5 LT 58-28S) 1-3/4" SURFACE COURSE (5 LT 58-28S) (WISDOT 455.2.5 TACK COAT (STAGED PAVING) WISDOT 455.2.5 TACK COAT (STAGED PAVING) 2" BINDER COURSE (4 LT 58-28S)
- B. CONTRACTOR TO COMPACT THE AGGREGATE BASE, ASPHALT BINDER COURSE, AND ASPHALT SURFACE COURSE TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL ASPHALT PAVEMENT AREAS SHALL BE PAVED TO WITHIN 0.05' OF DESIGN SURFACE GRADES WITH POSITIVE DRAINAGE BEING MAINTAINED IN ACCORDANCE WITH DESIGN PLANS. A MINIMUM OF 1.5% SLOPE SHALL BE MAINTAINED IN ALL ASPHALT PAVEMENT AREA.

HOT MIX ASPHALT CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF GEOTECHNICAL REPORT OR CONSTRUCTION

- D. CONTRACTOR TO PROVIDE 4" WIDE YELLOW PAINTED STRIPING FOR PARKING STALLS, TRAFFIC LANES, AND NO PARKING AREAS. YELLOW PAIN' MARKINGS SHALL ALSO BE PROVIDED FOR H.C. ACCESSIBLE SYMBOLS, TRAFFIC ARROWS, AND TRAFFIC MESSAGES.
- 32 20 00 CONCRETE AND AGGREGATE BASE

10" OF 1-1/4" CRUSHED AGGREGATE

- A. CONTRACTOR TO PROVIDE CRUSHED AGGREGATE BASE AND CONCRETE WHERE INDICATED ON THE PLANS. B. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL AGGREGATE PLACED MUST BE COMPACTED TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR
- HIGHWAY AND STRUCTURE CONSTRUCTION.
 C. DESIGN AND CONSTRUCTION OF ALL CAST-IN-PLACE EXTERIOR CONCRETE FLAT WORK SHALL CONFORM TO ACI 330R-08 & ACI 318-08. D. EXTERIOR CONCRETE FLAT WORK CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF THE GEOTECHNICAL REPORT OR THIS SPECIFICATION CONCRETE FLAT WORK CONSTRUCTION IS AS FOLLOWS:

SIDEWALK CONCRETE - 4" OF CONCRETE OVER 4" OF 3/4" CRUSHED AGGREGATE BASE. CONTRACTION JOINTS SHALL CONSIST OF 1/8" WIDE BY

- I" DEEP TOOLED JOINT WHERE INDICATED ON THE PLANS LOADING DOCK CONCRETE - 8" OF CONCRETE OVER 6" OF 3/4" CRUSHED AGGREGATE BASE. CONCRETE SHALL BE REINFORCED WITH ONE OF THE FOLLOWING AND PLACED IN THE UPPER 1/3 TO 1/2 OF THE SLAB:
- 1). 4"X4" W5.5XW5.5 W.W.F TWO LAYERS OF 4"X4" W 2.9XW2.9 W.W.F. #3 REBARS AT 7-1/2" O.0
- #4 REBARS AT 13" O.C b. LOADING DOCK CONCRETE JOINTING SHALL BE AS FOLLOWS:
- 1). CONTRACTION SAWCUT JOINT -CONTRACTOR SHALL PROVIDE A SAWCUT JOINT AT MAXIMUM SPACING OF 15' ON CENTER. SAWCUT JOINT SHALL BE 2" IN DEPTH.
- 2). TYPICAL POUR CONTROL JOINT POUR CONTROL JOINT SHALL BE PROVIDED WITH 1-1/4" DIAMETER BY 20" LONG SMOOTH DOWEL PLACED AT 12" ON CENTER. ONE HALF OF THE DOWEL SHALL BE GREASED. GREENSTREAK 9" SPEED DOWEL TUBES SHALL BE USED. DUMPSTER PAD CONCRETE - 8" OF CONCRETE OVER 6" OF AGGREGATE BASE.

 a. CONCRETE SHALL BE STEEL REINFORCED WITH THE FOLLOWING AND PLACED IN THE UPPER 1/3 TO ½ OF THE SLAB.
- 1). TIE BARS AT ALL CONTRACTION JOINTS OF THE CONCRETE. TIE BARS SHALL BE #4 REBAR 30" LONG PLACED AT 30" O.C. b. DUMPSTER PAD CONCRETE JOINTING SHALL BE AS FOLLOWS:
- 1). CONTRACTION SAWCUT JOINT CONTRACTOR SHALL PROVIDE A SAWCUT JOINT AT MAXIMUM SPACING OF 15' ON CENTER. SAWCUT
- 2). TYPICAL POUR CONTROL JOINT POUR CONTROL JOINT SHALL BE PROVIDED WITH 1-1/4" DIAMETER BY 20" LONG SMOOTH DOWEL
- PLACED AT 12" O.C. ONE HALF OF THE DOWEL SHALL BE GREASED. GREENSTREAK 9" SPEED DOWEL TUBES SHALL BE USED. EAVY DUTY CONCRETE - 7" OF CONCRETE OVER 6" OF 3/4" CRUSHED AGGREGATE BASE. CONCRETE SHALL BE REINFORCED WITH MICRO-FIBERS that are 100% virgin polypropylene. Fibrillated, rough textured, interconnected fibers containing no preprocessed olefin
- MATERIALS AND SPECIFICALLY MANUFACTURED FOR CONCRETE REINFORCEMENT AT A RATE OF 1.5LBS FIBER/YARD³ OF CONCRETE. FIBER REINFORCEMENT SHALL BE FIBERMESH 300 (OR EQ.) AND CONFORM WITH ASTM C 1116, TYPE III FIBER REINFORCED CONCRETE. CONTRACTION JOINTS SHALL BE SAWCUT 1.5" IN DEPTH AND BE SPACED A MAXIMUM OF 15' O.C. a. CONCRETE SHALL BE STEEL REINFORCED AS FOLLOWS: 1). TIE BARS AT OUTERMOST CONTRACTION JOINT (FIRST JOINT FROM EDGE OR AT CURB JOINT) AROUND PERIMETER OF CONCRETE. TIE BARS
- TYPICAL POUR CONTROL JOINT POUR CONTROL JOINT SHALL BE PROVIDED WITH 1/4" X 4-1/2" X 4-1/4" DIAMOND SHAPED TAPERED PLATE DOWELS MANUFACTURED PER ASTM A36. INSTALL PER MANUFACTURERS SPECIFICATIONS
- E. DESIGN MIXES SHALL BE IN ACCORDANCE WITH ASTM C94 1. STRENGTH TO BE MINIMUM OF 4,500 PSI AT 28 DAYS FOR EXTERIOR CONCRETE.
- 2. MAXIMUM WATER/CEMENT RATIO SHALL BE 0.45. 3. SLUMP SHALL NOT EXCEED 4" FOR EXTERIOR CONCRETE FLAT WORK
- 4. SLUMP SHALL BE 2.5" OR LESS FOR SLIP-FORMED CURB AND GUTTER 5. SLUMP SHALL BE BETWEEN 1.5" TO 3" FOR NON SLIP-FORMED CURB AND GUTTER
- 6. ALL EXTERIOR CONCRETE SHALL BE AIR ENTRAINED WITH 4% TO 7% AIR CONTENT. NO OTHER ADMIXTURES SHALL BE USED WITHOUT
- 7. MAXIMUM AGGREGATE SIZE FOR ALL EXTERIOR CONCRETE SHALL BE 0.75 INCHES. F. VERIFY EQUIPMENT CONCRETE PAD SIZES WITH RESPECTIVE CONTRACTORS. PADS SHALL HAVE FIBERMESH 300 FIBERS AT A RATE OF 1.5 LBS/CU. YD.
- OR 6 X 6-W1.4 X W1.4 WELDED WIRE MESH WITH MINIMUM 1 INCH COVER. EQUIPMENT PADS SHALL BE 3.5 INCHES THICK WITH 1 INCH CHAMFER UNLESS SPECIFIED OTHERWISE. COORDINATE ADDITIONAL PAD REQUIREMENTS WITH RESPECTIVE CONTRACTOR. G. ALL CONCRETE FLAT WORK SURFACES AND CONCRETE CURB FLOWLINES SHALL BE CONSTRUCTED TO WITHIN 0.05' OF DESIGN SURFACE ANI
- FLOWLINE GRADES ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE DESIGN PLANS. H. CONCRETE FLAT WORK SHALL HAVE CONSTRUCTION JOINTS OR SAW CUT JOINTS PLACED AS INDICATED ON THE PLANS OR PER THIS SPECIFICATION. SAWCUTS SHALL BE DONE AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER CONCRETE IS PLACED. CONCRETE CURE ND GUTTER JOINTING SHALL BE PLACED EVERY 10' OR CLOSER (6' MIN.). IF CONCRETE PAVEMENT IS ADJACENT TO CONCRETE CURB, JOINTING IN THE PAVEMENT AND CURB SHALL ALIGN. ALL EXTERIOR CONCRETE SHALL HAVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE. A UNIFORM
- COAT OF A HIGH SOLIDS CURING COMPOUND MEETING ASTM C309 SHOULD BE APPLIED TO ALL EXPOSED CONCRETE SURFACES. ALL CONCRETE IS TO BE CURED FOR 7 DAYS. EXTERIOR CONCRETE SHALL BE SEPARATED FROM BUILDINGS WITH CONTINUOUS 0.5 INCH FIBER EXPANSION JOINT ND/OR 0.25 INCH FIBER EXPANSION JOINT AT DECORATIVE MASONRY UNITS I. ALL REINFORCING BARS SHALL BE ASTM A615 GRADE 60. THICKNESS OF CONCRETE COVER OVER REINFORCEMENT SHALL BE NOT LESS THAN HERE CONCRETE IS DEPOSITED AGAINST THE GROUND WITHOUT THE USE OF FORMS AND NOT LESS THAN 1.5" IN ALL OTHER LOCATIONS. A REINFORCING SHALL BE LAPPED 36 DIAMETERS FOR UP TO #6 BARS, 60 DIAMETERS FOR #7 TO #10 BARS OR AS NOTED ON THE DRAWINGS AND
- EXTENDED AROUND CORNERS WITH CORNER BARS. PLACING AND DETAILING OF STEEL REINFORCING AND REINFORCING SUPPORTS SHALL BE IN ACCORDANCE WITH CRSI AND ACI MANUAL AND STANDARD PRACTICES. THE REINFORCEMENT SHALL NOT BE PAINTED AND MUST BE FREE OF GREASE/OIL, DIRT OR DEEP RUST WHEN PLACED IN THE WORK. ALL WELDED WIRE FABRIC SHALL MEET THE REQUIREMENTS OF ASTM A 185. WELDED WIRE FABRIC SHALL BE PLACED 2" FROM TOP OF SLAB, UNLESS INDICATED OTHERWISE. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO SAMPLE MATERIALS, PERFORM TESTS, AND SUBMIT TEST REPORTS DURING CONCRETE PLACEMENT. TESTS WILL BE PERFORMED ACCORDING TO ACI 301. CAST AND LABORATORY CURE ON SET OF FOUR STANDARD CYLINDERS FOR EACH COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIX EXCEEDING 5 CU. YD., BUT
- LESS THAN 25 CU. YD., PLUS ONE SET FOR EACH ADDITIONAL 50 CU. YD. OR FRACTION THEREOF. PERFORM COMPRESSIVE-STRENGTH TESTS ACCORDING TO ASTM C 39. TEST TWO SPECIMENS AT 7 DAYS AND TWO SPECIMENS AT 28 DAYS, PERFORM SLUMP TESTING ACCORDING TO ASTM C 43. PROVIDE ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIX. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE K. PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. IN HOT, DRY, AND WINDY
- WEATHER, APPLY AN EVAPORATION-CONTROL COMPOUND ACCORDING TO MANUFACTURER'S INSTRUCTIONS AFTER SCREEDING AND BULL FLOATING, BUT BEFORE POWER FLOATING AND TROWELLING.
- LIMIT MAXIMUM WATER-CEMENTIOUS RATIO OF CONCRETE EXPOSED TO FREEZING, THAWING AND DEICING SALTS TO 0.45. M. TEST RESULTS WILL BE REPORTED IN WRITING TO THE DESIGN ENGINEER, READY-MIX PRODUCER, AND CONTRACTOR WITHIN 24 HOURS AFTER TESTS. REPORTS OF COMPRESSIVE STRENGTH TESTS SHALL CONTAIN THE PROJECT IDENTIFICATION NAME AND NUMBER. DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE TESTING SERVICE, CONCRETE TYPE AND CLASS, LOCATION OF CONCRETE BATCH IN STRUCTURE, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIX PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH, AND TYPE OF BREAK FOR BOTH 7-DAY TESTS AND 28-DAY TESTS.

32 30 00 LANDSCAPING AND SITE STABILIZATION

- TOPSOIL: CONTRACTOR TO PROVIDE A MINIMUM OF 6" OF TOPSOIL FOR ALL DISTURBED OPEN AREAS. OTHER THAN A LANDSCAPE ISLANDS SHALI BE PROVIDED WITH A MINIMUM OF 10" OF TOPSOIL. REUSE SURFACE SOIL STOCKPILED ON SITE AND SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN QUANTITIES ARE INSUFFICIENT. EXCAVATOR SHALL BE RESPONSIBLE FOR ROUGH PLACEMENT OF TOPSOIL TO WITHIN 1" OF FINAL GRADE PRIOR TO LANDSCAPER FINAL GRADING LANDSCAPER TO PROVIDE PLILVERIZING AN FINAL GRADING OF TOPSOIL, PROVIDE SOIL ANALYSIS BY A QUALIFIED SOIL TESTING LABORATORY AS REQUIRED TO VERIFY THE SUITABILITY OF SOIL TO BE USED AS TOPSOIL AND TO DETERMINE THE NECESSARY SOIL AMENDMENTS. TEST SOIL FOR PRESENCE OF ATRAZINE AND INFORM EXCEL ENGINEERING, INC. IF PRESENT PRIOR TO BIDDING PROJECT. TOPSOIL SHALL HAVE A PH RANGE OF 5.5 TO 8, CONTAIN A MINIMUM OF 5 PERCENT ORGANIC MATERIAL CONTENT, AND SHALL BE FREE OF STONES 1 INCH OR LARGER IN DIAMETER. ALL MATERIALS HARMFUL TO PLANT GROWTH
- topsoil installation: loosen subgrade to a minimum depth of 6 inches and remove stones larger than 1" in diameter. Also OVE ANY STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND DISPOSE OF THEM OFF THE PROPERTY. SPREAD TOPSOIL TO A DEPTH OF 6" BUT NOT LESS THAN WHAT IS REQUIRED TO MEET FINISHED GRADES AFTER LIGHT ROLLING AND NATURAL SETTLEMENT. DO NOT LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN 0.05 FEET OF FINISHED GRADE ELEVATION.
- PERMANENT LAWN AREAS SHALL BE SEEDED WITH THE FOLLOWING MIXTURE: 65% KENTUCKY BLUEGRASS BLEND (2.0-2.6 LBS./1,000 S.F.), 20% PERENNIAL RYEGRASS (0.6-0.8 LBS./1.000 S.F.), 15% FINE FESCUE (0.4-0.6 LBS/1.000 S.F.), STRAW AND MULCH SHALL BE LAID AT 100LBS/1.000 S.F. FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS/1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. ALL SITE DISTURBED AREAS NOT DESIGNATED FOR OTHER LANDSCAPING AND SITE STABILIZATION METHODS SHALL BE SEEDED AS PERMANEN LAWN. NO BARE TOPSOIL SHALL BE LEFT ONSITE. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059. 2. ALL PERMANENT AND TEMPORARY STORM WATER CONVEYANCE SWALE BOTTOMS AND SIDE SLOPES AS WELL AS STORMWATER MANAGEMEN BASIN BOTTOMS AND SIDE SLOPES SHALL BE SEEDED WITH THE FOLLOWING MIXTURE: 45% KENTUCKY BLUEGRASS (0.60 LBS,/1000 S.F.), 40% CREEPING RED FESCUE (0.50 LBS./1.000 S.F.). AND 15% PERENNIAL RYEGRASS (0.20 LBS./1.000 S.F.). FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10
- OR EQUIVALENT AT 5-6 LBS./1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059. 3. ALL TEMPORARY SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE: 100% RYEGRASS AT 1.9 LBS./1.000 S.F. STRAW AND MULCH SHALL BE LAID AT 100 LBS./1,000 S.F. FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS./1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059.
- SEEDED LAWN MAINTENANCE: CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM THE DATE OF NSTALLATION. AT THE END OF THE MAINTENANCE PERIOD. A HEALTHY, UNIFORM, CLOSE STAND OF GRASS SHOULD BE ESTABLISHED FREE OF WEEDS AND SURFACE IRREGULARITIES. LAWN COVERAGE SHOULD EXCEED 90% AND BARE SPOTS SHOULD NOT EXCEED 5"X5". CONTRACTOR SHOULD REESTABLISH LAWNS THAT DO NOT COMPLY WITH THESE REQUIREMENTS AND CONTINUE MAINTENANCE UNTIL LAWNS ARE
- D. EROSION MATTING CONTRACTOR TO PROVIDE EROSION CONTROL MATTING (NORTH AMERICAN GREEN \$150) OR EQUIVALENT ON ALL SLOPES THAT ARE 4:1 AND MATTING IN ACCORDANCE WITH SEEDING REQUIREMENTS AND MANUFACTURER SPECIFICATIONS 2 CONTRACTOR TO PROVIDE FROSION MATTING (NORTH AMERICAN GREEN C125) OR FOLITVALENT IN ALL SWALE BOTTOMS AND SIDE SLOPES AS
- WELL AS STORMWATER MANAGEMENT BASIN BOTTOMS AND SIDE SLOPES AS REQUIRED. LAWN SEED SHALL BE PLACED BELOW MATTING IN ACCORDANCE WITH SEEDING REQUIREMENTS AND MANUFACTURER SPECIFICATIONS. : STORMWATER MANAGEMENT POND SAFETY SHELF SEEDING: SAFETY SHELF SHALL BE SEEDED WITH A WET PRAIRIE EMERGENT PLANT TYPE MIX. : RIP RAP: ALL RIP RAP ASSOCIATED WITH STORMWATER MANAGEMENT AND STORMWATER CONVEYANCE, AS DELINEATED ON THE PLANS, SHALL BE ONSTRUCTED WITH THE TOP OF RIP RAP MATCHING THE PROPOSED ADJACENT GRADE ELEVATIONS. PLACEMENT OF RIP RAP ABOVE THE
- PROPOSED ADJACENT GRADE ELEVATIONS IS NOT ACCEPTABLE. ALL RIP RAP SHALL BE PLACED ON TYPE HR FILTER FABRIC PER SECTION 645 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURAL CONSTRUCTION. 5. <u>TREES AND SHRUBS:</u> FURNISH NURSERY-GROWN TREES AND SHRUBS WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, AND HEALTHY LOOKING STOCK. STOCK SHOULD ALSO BE FREE OF DISEASE, INSECTS, EGGS,
- LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. SEE THE LANDSCAPE PLAN FOR SPECIFIC SPECIE H. TREE AND SHRUB INSTALLATION: EXCAVATE CIRCULAR PITS WITH SIDES SLOPED INWARD. TRIM BASE LEAVING CENTER AREA RAISED SLIGHTLY TO
- PORT ROOT BALL. EXCAVATE PIT APPROXIMATELY THREE TIMES AS WIDE AS THE ROOT BALL DIAMETER. SET TREES AND SHRUBS PLUMB AND IN CENTER OF PIT WITH TOP OF BALL 1" ABOVE ADJACENT FINISHED GRADES. PLACE PLANTING SOIL MIX AROUND ROOT BALL IN LAYERS AND TAMP TO SETTLE MIX. WATER ALL PLANTS THOROUGHLY. PROVIDE TEMPORARY STAKING FOR TREES AS REQUIRED.
- TREE AND SHRUB MAINTENANCE/WARRANTY: CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM HE DATE OF INSTALLATION. MAINTENANCE TO INCLUDE REGULAR WATERING AS REQUIRED FOR SUCCESSFUL PLANT ESTABLISHMENT. CONTRACTOR TO PROVIDE 1 YEAR WARRANTY ON ALL TREES, SHRUBS, AND PERENNIALS
- ORGANIC MULCH: PROVIDE 3" MINIMUM THICK BLANKET OF SHREDDED HARDWOOD MULCH AT ALL PLANTING AREAS INDICATED ON THE LANDSCAPE PLAN. INSTALL OVER NON-WOVEN WEED BARRIER FABRIC. COLOR BY OWNER.
- (. LANDSCAPE STONE: PROVIDE 3" MINIMUM THICK BLANKET OF 1.5" MINIMUM TO 2.5" MAXIMUM CRUSHED DECORATIVE STONE AT ALL PLANTING PLASTIC EDGING: INSTALL VALLEY VIEW INDUSTRIES BLACK DIAMOND LAWN EDGING TO SEPARATE ALL PLANTING BEDS FROM LAWN AREAS. EDGING TO BE 5.5" TALL WITH METAL STAKES INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS

DIVISION 33 UTILITIES

33 10 00 SITE UTILITIES

- A. CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES ON SITE. CONTRACTOR TO VERIFY PIPE LOCATIONS, SIZES, AND DEPTHS AT POINT OF PROPOSED CONNECTIONS AND VERIFY PROPOSED UTILITY ROUTES ARE CLEAR (PER CODE) OF ALL EXISTING UTILITIES AND OTHER
- OBSTRUCTIONS PRIOR TO CONSTRUCTION. COSTS INCURRED FOR FAILURE TO DO SO SHALL BE THE CONTRACTORS RESPONSIBILITY. B. ALL PROPOSED SANITARY PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE ON C0.1
- C. SANITARY MANHOLES SHALL BE 48" PRECAST AND CONFORM TO THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION IN WISCONSIN-CURRENT EDITION UNLESS OTHERWISE DIRECTED BY THE ENGINEER. SANITARY MANHOLE FRAME AND GRATE TO BE NEENAH R-1550-A OR EQUAL. RIM ELEVATION TO BE SET AT FINISHED GRADE IN DEVELOPED AREAS AND 12" ABOVE FINISHED GRADE IN UNDEVELOPED AREAS EXCEPT AS OTHERWISE DIRECTED BY THE ENGINEER.
- D. CLEANOUTS SHALL BE PROVIDED FOR THE SANITARY SERVICE AT LOCATIONS INDICATED ON THE UTILITY PLAN. THE CLEANOUT SHALL CONSIST (A COMBINATION WYE FITTING IN LINE WITH THE SANITARY SERVICE WITH THE CLEANOUT LEG OF THE COMBINATION WYE FACING STRAIGHT UP.
 THE CLEANOUT SHALL CONSIST OF A 6" VERTICAL PVC PIPE WITH A WATER TIGHT REMOVABLE CLEANOUT PLUG. AN 8" PVC FROST SLEEVE SHALL BE PROVIDED. THE BOTTOM OF THE FROST SLEEVE SHALL TERMINATE 12" ABOVE THE TOP OF THE SANITARY LATERAL OR AT LEAST 6" BELOW THE PREDICTED FROST DEPTH, WHICHEVER IS SHALLOWER. THE CLEANOUT SHALL EXTEND, JUST ABOVE THE SURFACE GRADE IN LAWN OR LANDSCAPE AREAS WITH THE FROST SLEEVE TERMINATING AT THE GRADE SURFACE. THE CLEANOUT SHALL EXTEND TO 4 INCHES BELOW SURFACE GRADE IN PAVED SURFACES WITH A ZURN (Z-1474-N) HEAVY DUTY CLEANOUT HOUSING PLACED OVER THE TOP OF THE CLEANOUT FLUSH WITH THE SURFACE GRADE. IN PAVED SURFACES, THE FROST SLEEVE SHALL TERMINATE IN A CONCRETE PAD AT LEAST 6" THICK AND EXTENDING AT LEAST 9" FROM
- E. ALL PROPOSED WATER PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE ON CO.1 OF THE PROPOSED PLANSET. 6' MINIMUM COVER SHALL BE PROVIDED OVER ALL WATER PIPING UNLESS OTHERWISE SPECIFIED. F. ALL PROPOSED STORM PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE ON C0.1 OF
- THE PROPOSED PLANSET. PIPE SHALL BE PLACED MIN. 8' HORIZONTALLY FROM FOUNDATION WALLS. G. SANITARY, STORM, AND WATER UTILITY PIPE INVERTS SHALL BE CONSTRUCTED WITHIN 0.10' OF DESIGN INVERT ELEVATIONS ASSUMING PIPE SLOPE AND SEPARATION IS MAINTAINED PER THE LITILITY DESIGN PLANS AND STATE REQUIREMENTS H. SITE UTILITY CONTRACTOR SHALL RUN SANITARY SERVICE TO A POINT WHICH IS A MINIMUM OF 5' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN STORM SEWER FOR INTERNALLY DRAINED BUILDINGS TO A POINT WHICH IS A MINIMUM OF
- 5' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN DOWNSPOUT LEADS TO BUILDING FOUNDATION AND UP 6" ABOVE SURFACE GRADE FOR CONNECTION TO DOWNSPOUT. ALL DOWNSPOUT LOCATIONS SHOULD BE VERIFIED WITH ARCHITECTURAL PLANS AND DOWNSPOUT CONTRACTOR/GC PRIOR TO INSTALLATION OF DOWNSPOUT LEADS. DOWNSPOUT LEADS SHALL NOT UNDERMINE BUILDING FOUNDATIONS. SITE UTILITY CONTRACTOR SHALL RUN WATER SERVICE TO A POINT WITHIN THE FOUNDATION SPECIFIED BY THE LUMBING PLANS. CONTRACTOR TO CUT AND CAP WATER SERVICE 12" ABOVE FINISHED FLOOR ELEVATION . ALL UTILITIES SHALL BE INSTALLED WITH PLASTIC COATED TRACER WIRE (10 TO 14 GAUGE SOLID COPPER, OR COPPER COATED STEEL WIRE). PLASTIC WIRE MAY BE TAPED TO PLASTIC WATER OR SEWER PIPE. IF ATTACHED, THE TRACER WIRE SHALL BE SECURED EVERY 6 TO 20 FEET AND AT ALL
- BENDS. TRACER WIRE SHALL HAVE ACCESS POINTS AT LEAST EVERY 300 FEET. TRACER WIRE SHALL TERMINATE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AT GRADE OR IN TERMINATION BOX PER LOCAL/STATE REQUIREMENTS. ALL UTILITIES SHALL BE INSTALLED PER STATE, LOCAL, AND INDUSTRY STANDARDS. WATER, SANITARY, AND STORM SEWER SHALL BE INSTALLED PER "STANDARD SPECIFICATION FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN". THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR
- OBTAINING STATE PLUMBING REVIEW APPROVAL. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER PERMITS REQUIRED TO INSTALL K. SEE PLANS FOR ALL OTHER UTILITY SPECIFICATIONS AND DETAILS.

33 20 00 PUBLIC SITE UTILITIES

A. CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES ON SITE. CONTRACTOR TO VERIFY PIPE LOCATIONS, SIZES, AND DEPTHS AT POINT OF PROPOSED CONNECTIONS AND VERIFY PROPOSED UTILITY ROUTES ARE CLEAR (PER CODE) OF ALL EXISTING UTILITIES AND OTHER OBSTRUCTIONS PRIOR TO CONSTRUCTION. COSTS INCURRED FOR FAILURE TO DO SO SHALL BE THE CONTRACTORS RESPONSIBILITY. B. SEE SHEETS (XX) FOR PUBLIC WATERMAIN/SANITARY MAIN SPECIFICATIONS.

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	Utility	Material	Pipe Code	Fitting Code	Joint Code
Combined Domestic/Fire Service		C900 PVC	AWWA C900, ASTM D1785, ASTM D2241	AWWA C110, AWWA C153, ASTM D2464, ASTM D2466, ASTM D2467, ASTM D3311, ASTM F409, ASTM F1336, ASTM F1866	Joint: ASTM D3139 Integral Bell & Spigot Elastomeric Seal: ASTM F477
	Sanitary Sewer	SDR 35 PVC	ASTM D1785, ASTM D2665, ASTM D3034, ASTM F891	ASTM F1336	Push On: ASTM D3212 for Tightness Elastomeric Gasket: ASTM F477
	Storm Sewer	HDPE	ASTM F2648	ASTM F2306 Saddle Gasket	Joint: ASTM F2648 Bell & Spigot Elastomeric Seal: ASTM F477
	Pavement Underdrain	Single Wall HDPE-Socked	ASTM F667	ASTM F667	ASTM D1056 Grade 2A2 Gasketed

Table A: Allowable Pipe Material Schedule

<u>GENERAL PROJECT NOTES</u>

ALL DRIVEWAYS AND CURB CUTS TO BE CONSTRUCTED ACCORDING TO LOCAL ORDINANCES. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS.

CONSTRUCTION STAKING SHALL BE COMPLETED BY EXCEL ENGINEERING AS REQUESTED BY THE CONTRACTOR AT

THE OWNER. CAD DRAWING FILES AND SURVEY CONTROL WILL NOT BE PROVIDED FOR STAKING PURPOSES.

RYAN.W@EXCELENGINEER.COM TO GET STAKING PRICE TO INCLUDE IN BID TO OWNER. PAYMENT OF STAKING COSTS ABOVE AND BEYOND THE BASE PRICE DUE TO RESTAKING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR, NOT

THE CONTRACTOR'S EXPENSE. CONTRACTOR TO CONTACT RYAN WILGREEN AT 920-926-9800 OR

- 2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL WORK IN ROW PERMITS.
- CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AS-BUILT SURVEY OF STORMWATER POND FOLLOWING COMPLETION OF THE POND.

STORMWATER POND ASBUILT NOTE

CONSTRUCTION STAKING SERVICES

CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AN AS—BUILT SURVEY FOLLOWING COMPLETION OF THE CONSTRUCTION OF THE STORMWATER POND. THE SURVEY SHALL BE COMPLETED PRIOR TO THE POND FILLING WITH WATER. CONTRACTOR SHALL GIVE EXCEL ENGINEERING A MINIMUM OF A 3 DAY NOTICE. PLEASE NOTE THAT THE HORIZONTAL TOLERANCE FOR POND CONSTRUCTION IS 0.50' AND THE VERTICAL TOLERANCE FOR POND, OUTLET, AND SPILLWAY CONSTRUCTION IS 0.10'. ANY ADDITIONAL WORK REQUIRED TO SURVEY A POND FULL OF WATER OR FOR SURVEYING FOLLOWING REWORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN CALL DIGGERS HOTLINE 1-800-242-8511 TELEFAX (414) 259-0947 TDD (FOR THE HEARING IMPAIRED) 1-800 542-2289 WISCONSIN STATUTE 182.0175 (1974) REQUIRES MINIMUM OF 3 WORK DAYS

NOTICE BEFORE YOU EXCAVATE

CONTACTS

OWNER OUEST INTERIORS 21055 CROSSROADS CIRCLE TOWN OF BROOKFIELD, WI CONTACT: MARK TWOHIG P: (920) 922-2006 mtwohig@questinterioursusa.com

100 CAMELOT DRIVE FOND DU LAC, WISCONSIN 54935 **CONTACT: KURTIS GEIGER** P: (920) 926-9800 F: (920) 926-9801 kurt.geiger@excelengineer.com

CIVIL COVER AND SPECIFICATION SHEET



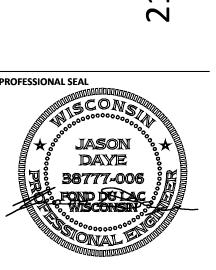
Always a Better Plan

100 Camelot Drive Fond du Lac, WI 54935 920-926-9800 excelengineer.com

PROJECT INFORMATION

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APR. 19, 2023

230030600

SHEET NUMBER

Always a Better Plan

100 Camelot Drive Fond du Lac, WI 54935 920-926-9800 excelengineer.com

PROJECT INFORMATION

18

FOR: WAREHOUSE BROOKFIELD, AND

SHOWROOM, KTFM, L OFFICE SROADS

21055

PROPOSE

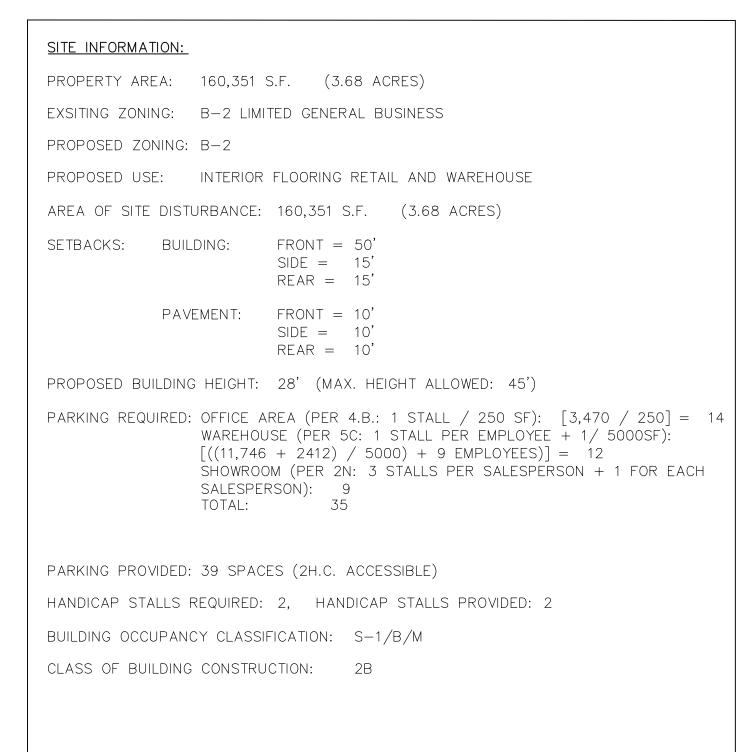
PRELIMINARY DATES APR. 19, 2023

JOB NUMBER 230030600

SHEET NUMBER

CIVIL EXISTING SITE AND DEMOLITION PLAN

2021 © EXCEL ENGINEERING, INC.



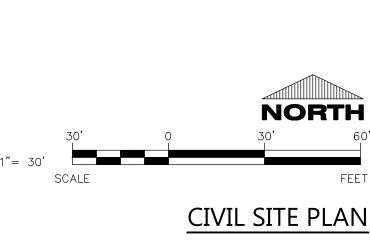


PAVEMENT HATCH KEY:

CONCRETE

STANDARD ASPHALT

HEAVY DUTY ASPHALT





Always a Better Plan 100 Camelot Drive

Fond du Lac, WI 54935

920-926-9800

excelengineer.com

PROJECT INFORMATION

FOR WAREHOUSE KFIELD,

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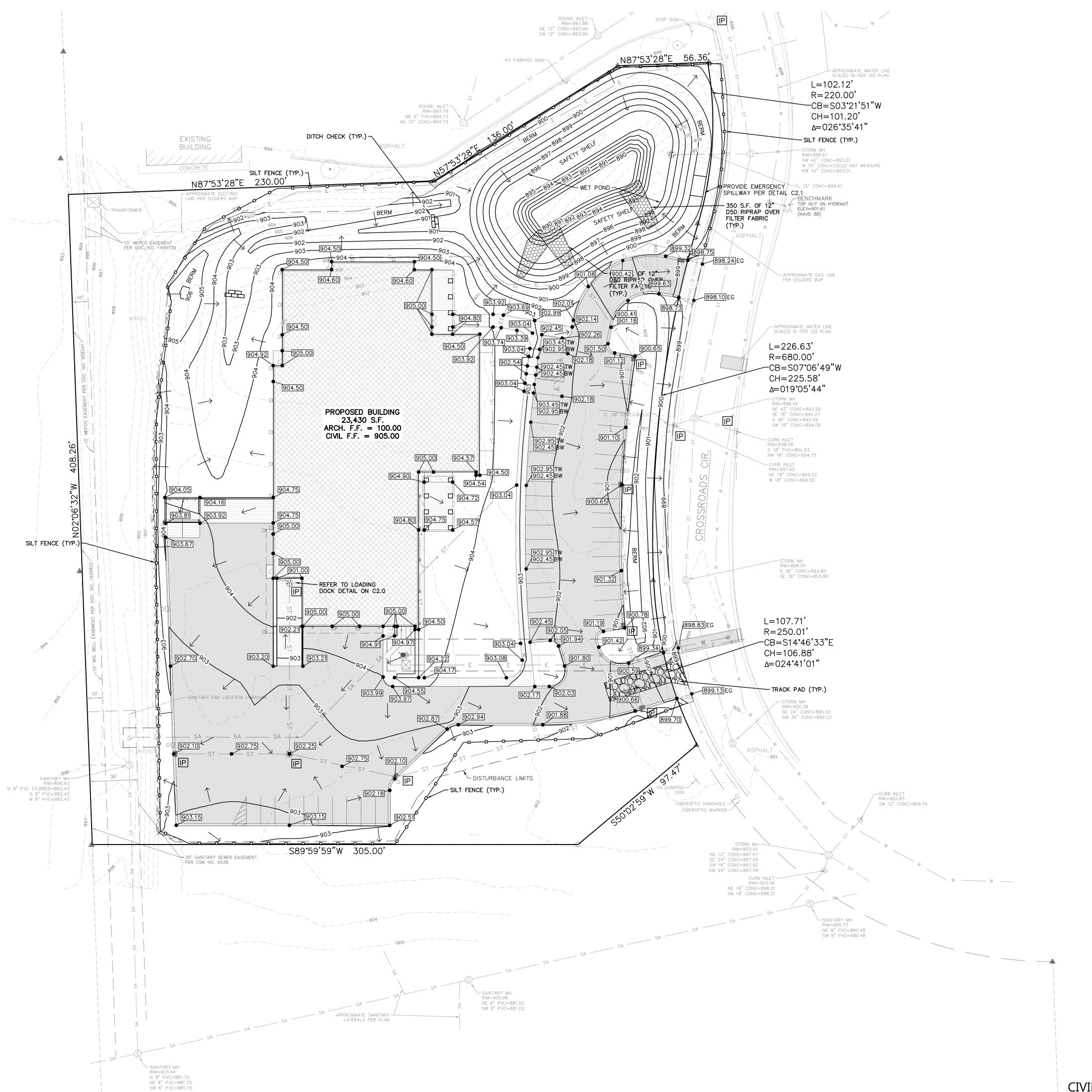
PROFESSIONAL SEAL

PRELIMINARY DATES	7
APR. 19, 2023	OR CONSTRUCTION

JOB NUMBER 230030600

SHEET NUMBER

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1. HANDICAP STALL AND ACCESS AISLES SHALL NOT EXCEED A SLOPE OF 1.50% IN ANY DIRECTION. HANDICAP STALL & ACCESS AISLES SHALL CONFORM TO ADA REQUIREMENTS (CURRENT EDITION)

2. ÀLL SIDEWALKS SHALL NOT EXCEED A MAXIMUM CROSS SLOPE OF 1.50% AND RUNNING SLOPE OF 4.50% UNLESS OTHERWISE SPECIFIED.

INLET PROTECTION NOTE:

CONTRACTOR SHALL PROVIDE TEMPORARY INLET PROTECTION FOR ALL CURB INLETS & CATCH BASINS ONSITE & OFFSITE IMMEDIATELY DOWNSTREAM OF THE PROJECT SITE PER LOCAL CODE.

STABILIZED CONSTRUCTION ENTRANCE NOTE:

CONTRACTOR SHALL PROVIDE STABILIZED CONSTRUCTION ENTRANCE AT CONSTRUCTION ENTRANCE FOR PROPOSED IMPROVEMENTS AS REQUIRED PER CODE.

CONCRETE WASHOUT NOTE:

CONTRACTOR SHALL PROVIDE CONCRETE WASHOUT AS REQUIRED PER CODE. FINAL LOCATION TBD BY CONTRACTOR.

Always a Better Plan

100 Camelot Drive Fond du Lac, WI 54935 920-926-9800 excelengineer.com

PROJECT INFORMATION

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PROFESSIONAL SEAL

PRELIMINARY DATES APR. 19, 2023

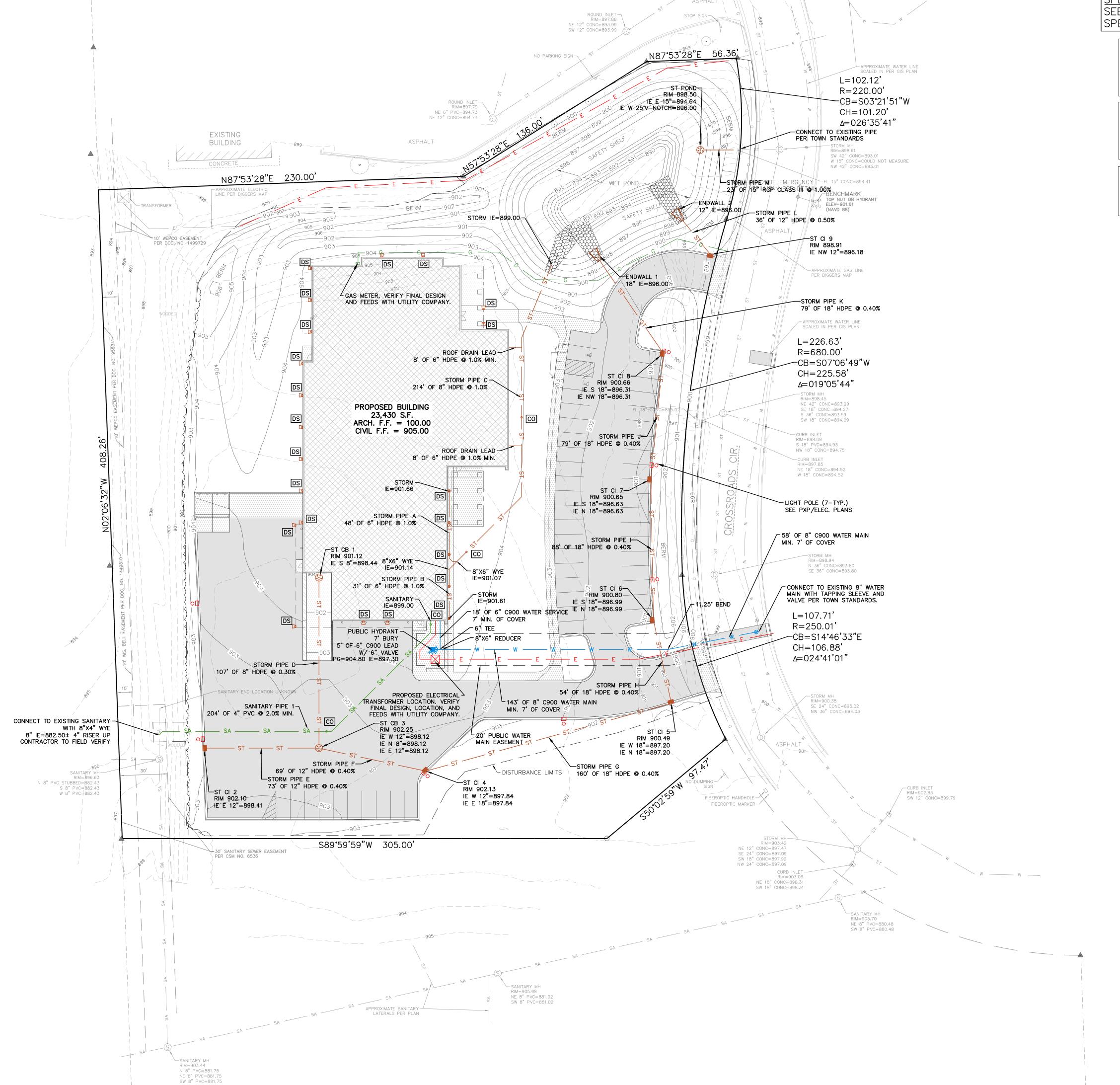
JOB NUMBER 230030600

SHEET NUMBER

NORTH

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CIVIL GRADING AND EROSION CONTROL PLAN



DOWNSPOUT NOTE:

DS = DENOTES DOWNSPOUT TO GRADE LOCATIONS. PROVIDE SPLASH BLOCKS AT ALL DS TO GRADE LOCATIONS. SEE ARCH PLANS FOR FINAL LOCATIONS.

DOWNSPOUT NOTE:

= DENOTES DOWNSPOUT CONNECT TO CLEANOUT AT GRADE FOR STORM SEWER LEAD. SEE ARCH PLANS FOR FINAL LOCATIONS.

CLEANOUT NOTE:

• = DENOTES LOCATIONS WHERE CONTRACTOR SHALL INSTALL CLEANOUTS, SEE CO.1 FOR SPECIFICATION.



PROJECT INFORMATION

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18 FOR 2 WAREHOUSE KFIELI

AND HOWROOM, SH OFFICE

PROFESSIONAL SEAL

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PRELIMINARY DATES APR. 19, 2023

JOB NUMBER 230030600

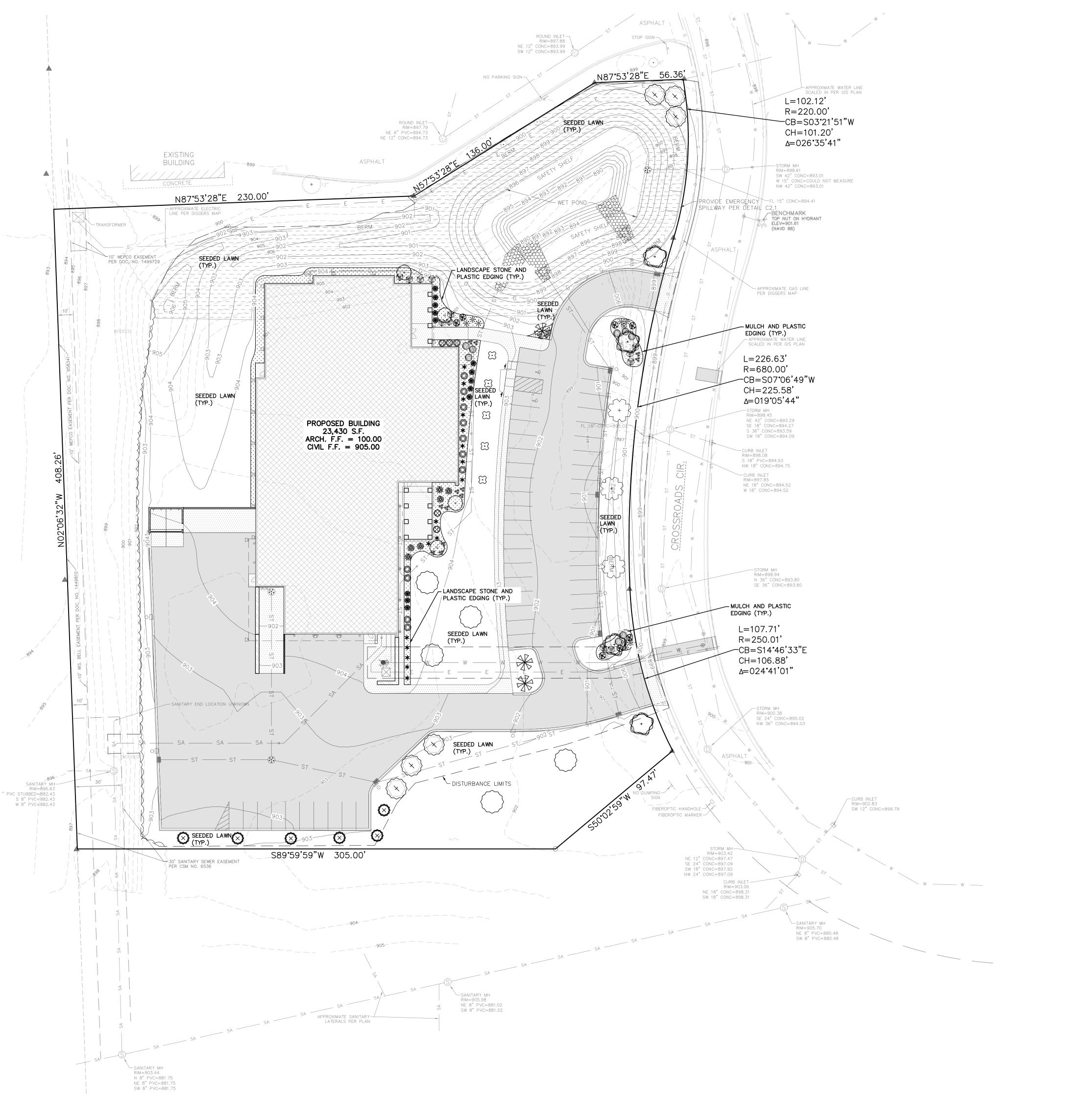
SHEET NUMBER

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SCALE CIVIL UTILITY PLAN

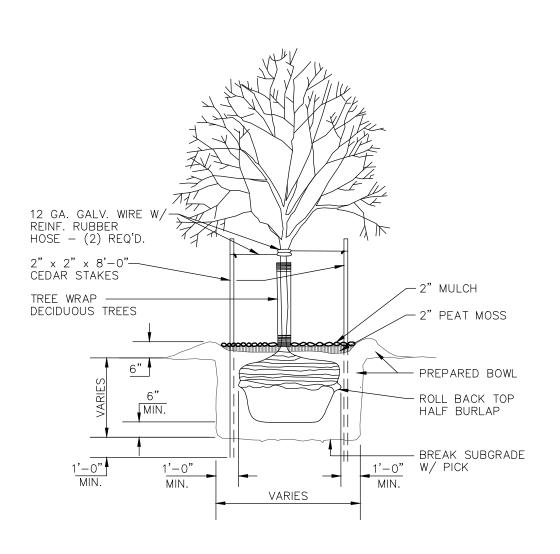
1"= 20'

NORTH

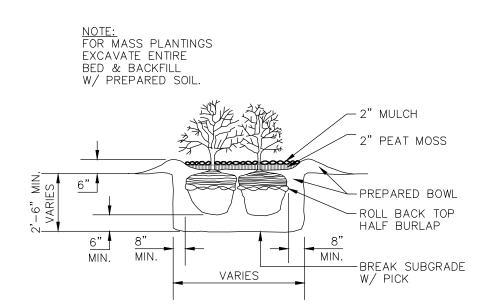


EROSION MATTING LOCATION

SYMBOL	COMMON NAME BOTANICAL NAME		PLANTED SIZE	QUANTI	
	<u>DE</u>	ECIDUOUS TREES			
O	Skyline Honeylocust	Gleditsia triacanthos 'Skyline'	2"	4	
(;)	Autumn Blaze Maple	Acer x freemanii 'Jeffsred'	2"	3	
0	Redmond Linden	Tilia americana	2"	5	
*	Jack Flowering Pear	Pyrus calleryana 'Jaczam'	2"	3	
0	Ann Magnolia	Magnolia liliflora 'Nigra'	2"	4	
	<u>EV</u>	/ERGREEN TREES			
<u> </u>	Black Hills Spruce	Picea glauca	6'	6	
⊗	Arborvitae — Nigra	Thuja occidentalis 'Nigra'	2'	6	
** *	Anthony Waterer Spirea Gro-Low Fragrant Sumac	Spiraea x bumalda 'Anthony Water' Rhus aromatica 'Gro Low'	15"-18" 18"	6 13	
**	Anthony Waterer Spirea	Spiraea x bumalda 'Anthony Water'	15"-18"	6	
	Rhododendron		15"-18"	9	
<u> </u>	Limelight Hydrangea Tree	Rhodendron haaga Hydrangea paniculata 'Limelight'	4'-5'	5	
		ERGREEN SHRUBS			
- ₩	Arcadia Juniper	Juniperus sabina 'arcadia'	24"	7	
<u> </u>	Taunton Yew	Tauntonii	24"	5	
0	Wintergreen Boxwood	Buxus sinica var Insularis 'Wintergreen'	18"	11	
		<u>PERENNIALS</u>			
*	Karl Foerster Reed Grass	Clamagrostis x acutiflora 'Karl Foerster'	1 gal pot	16	
**	Daylilies 'Stella de Oro'	Hemerocallis 'Stella de Oro'	1 gal pot	15	
*	Walker's Low Catmint	Nepeta x faassenii 'Walker's low'	1 gal pot	9	
*	Hostas	Hostas 'Royal Standard'	1 gal pot	13	

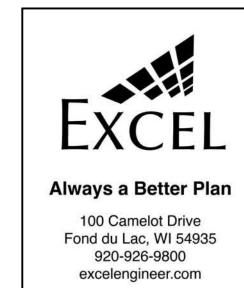


TREE PLANTING DETAIL NO SCALE



SHRUB PLANTING DETAIL NO SCALE





PROJECT INFORMATION

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FOR \mathcal{C} 2 WAREHOUSE

KFIELD, ROOI AND MO SHOWRO OFFICE SROADS

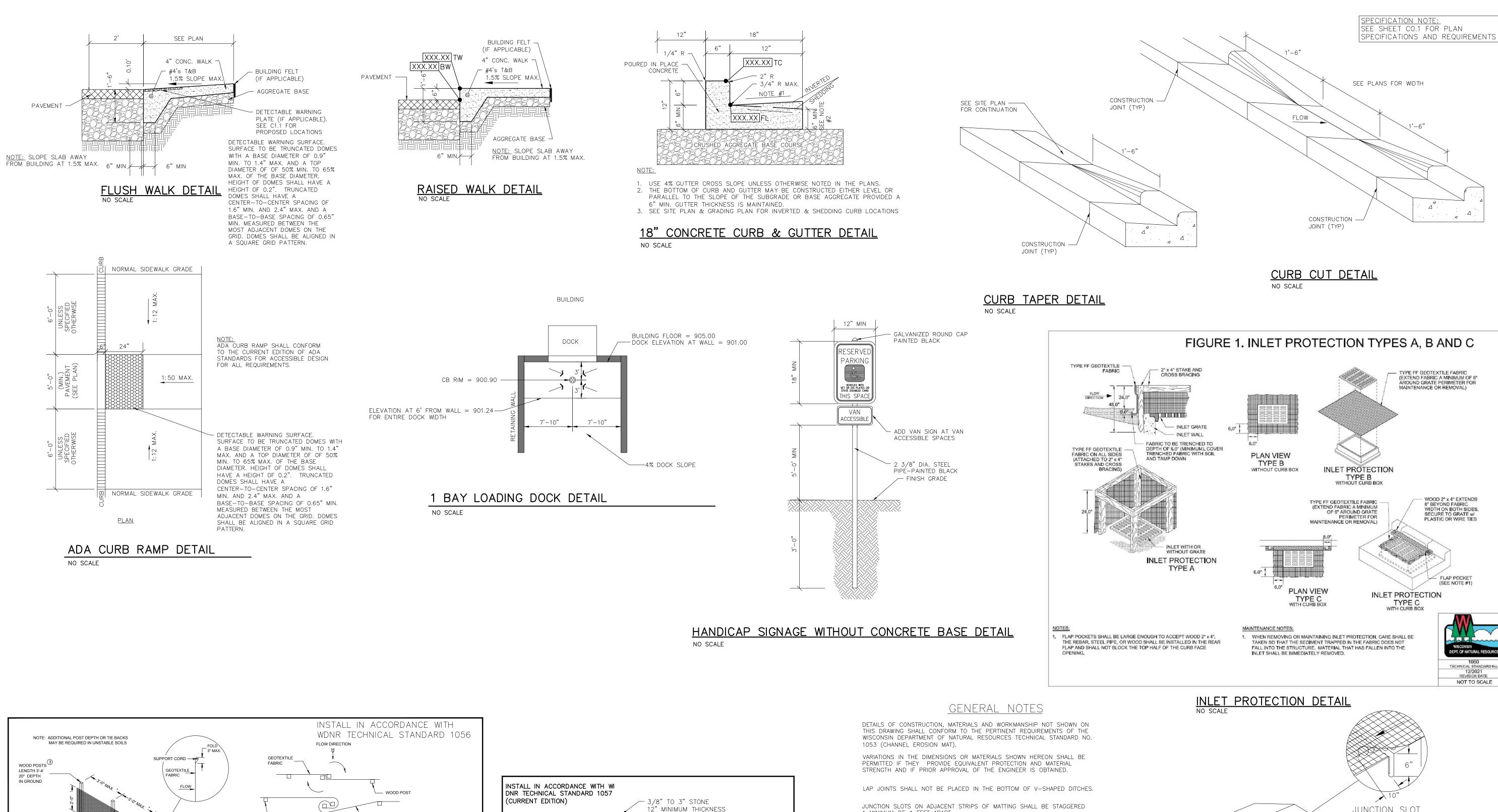
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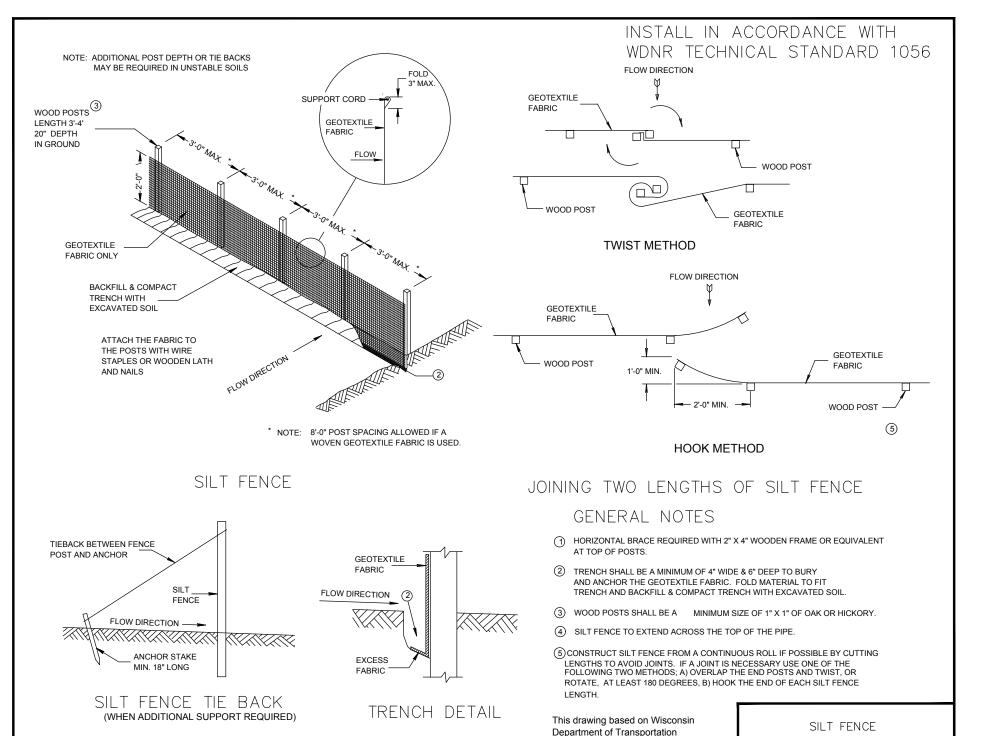
PRELIMINARY DATES APR. 19, 2023

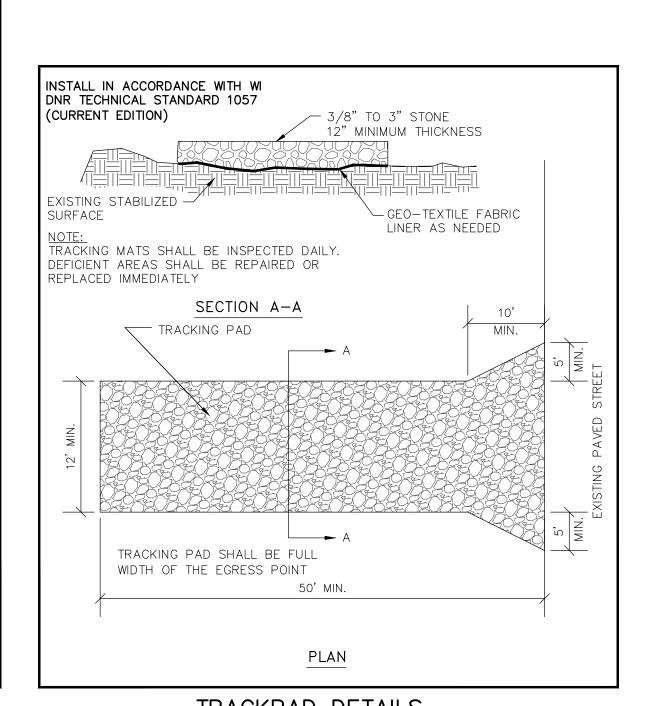
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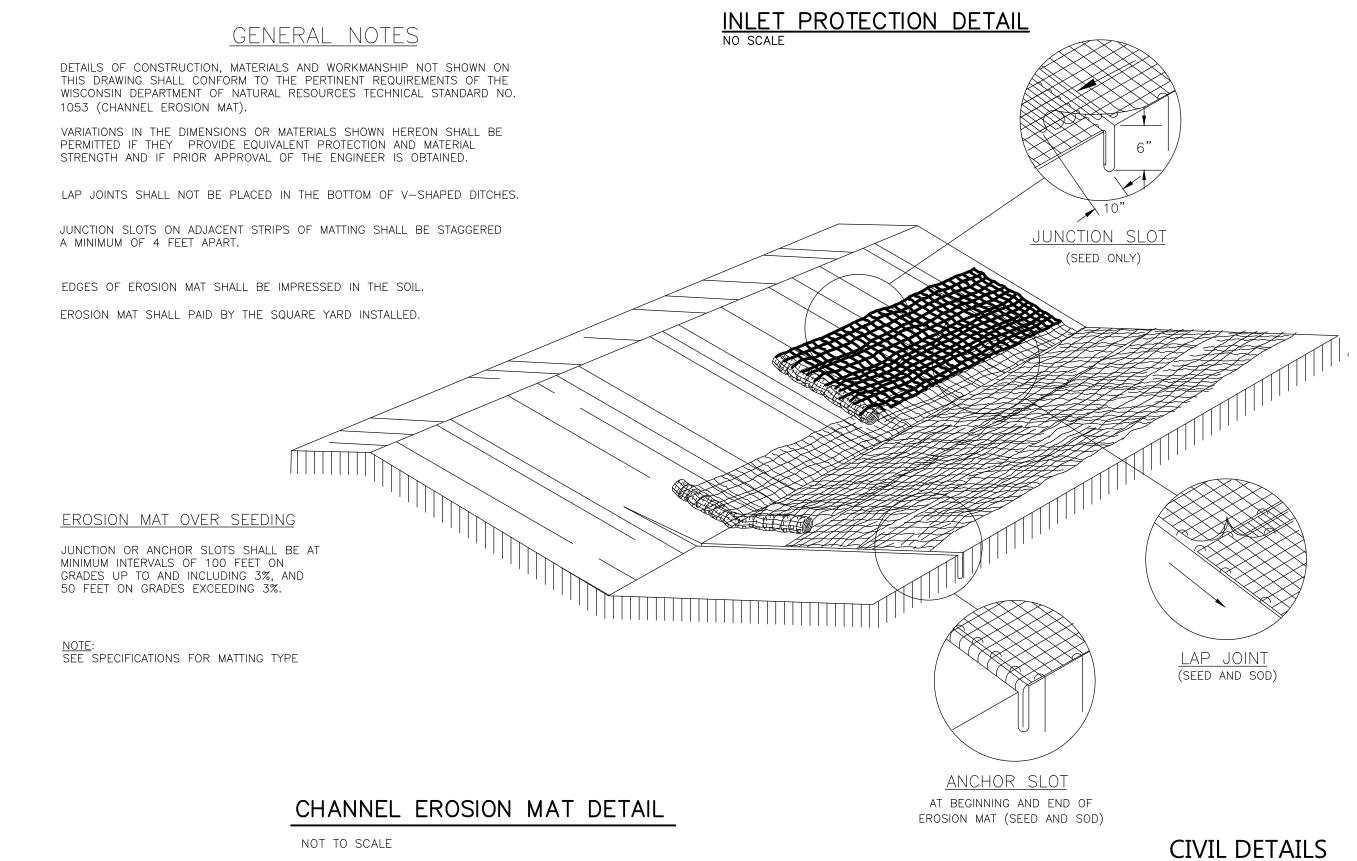
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PROJECT INFORMATION

18

FOR \mathcal{C} 2 \leq

WAREHOUSE ROOKFIELD, $\mathbf{\Omega}$ AN

TYPE FF GEOTEXTILE FABRIC
(EXTEND FABRIC A MINIMUM OF 6"
AROUND GRATE PERIMETER FOR
MAINTENANCE OR REMOVAL)

WOOD 2" x 4" EXTENDS 8" BEYOND FABRIC

WIDTH ON BOTH SIDES, SECURE TO GRATE w/

FLAP POCKET

12/2021 REVISION DATE NOT TO SCALE

TYPE C WITH CURB BOX

PLASTIC OR WIRE TIES

0 RO SH FFICE: SROAL 0

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PROFESSIONAL SEAL

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PRELIMINARY DATES APR. 19, 2023

JOB NUMBER 230030600

SHEET NUMBER

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<u>SILT FENCE - INSTALLATION DETAIL</u>

Standard Detail Drawing 8 E 9-6

TRACKPAD DETAILS

STORM CATCH BASIN W/ SUMP DETAIL

IE=896.00

.

25° V-NOTCH WEIR

WET RETENTION POND

PRECAST CONC. M.H.—

SEGMENTS. ALL JOINTS

SHALL BE WATERTIGHT

NEENAH FOUNDRY OR — EQ. R-3067 CAST IRON FRAME & GRATE ADJUST TO GRADE WITH PRECAST CONCRETE EXTENSION RINGS, APPLY MORTAR IN JOINTS AGGREGATE BASE PER -PAVEMENT SECTION - PRECAST CONC. M.H. SEGMENTS. SEAL ALL JOINTS WATERTIGHT 2'X3' BOX - PROVIDE COPOLYMER PROPYLENE PLASTIC STEPS M.A. IND. INC. MODEL PS-2-PF-S (ASTM C-478) OR EQUAL AT A MAXIMUM OF 16" O.C. IN ALL STORM STRUCTURES 5' OR GREATER IN DEPTH. NOTE: FINAL STRUCTURE SIZES TO BE VERIFIED WITH THE SUPPLIER NOTE: CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO ASTM C-478 REQUIREMENTS. 6" No. 1 STONE UNDISTURBED EARTH -STORM CURB INLET DETAIL

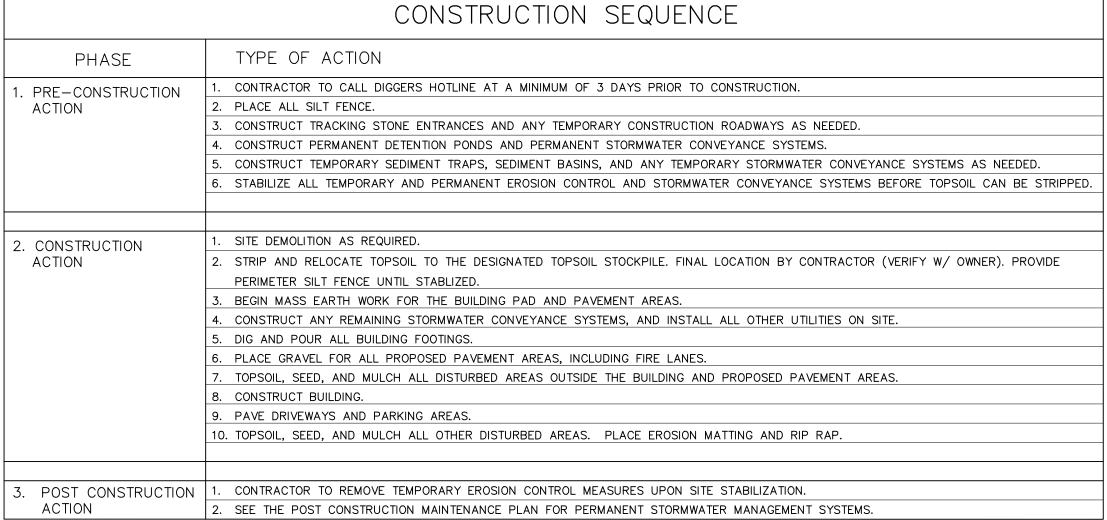
"ZURN" Z-1474-N HEAVY DUTY CLEANOUT HOUSING - CLEANOUT PLUG CONCRETE FINISHED GRADE IN PAVED AREAS GRAVEL FINISHED GRADE IN LAWN AREAS 8" PVC FROST SLEEVE COMBINATION -WYE FITTING

<u>SPECIFICATION NOTE</u>

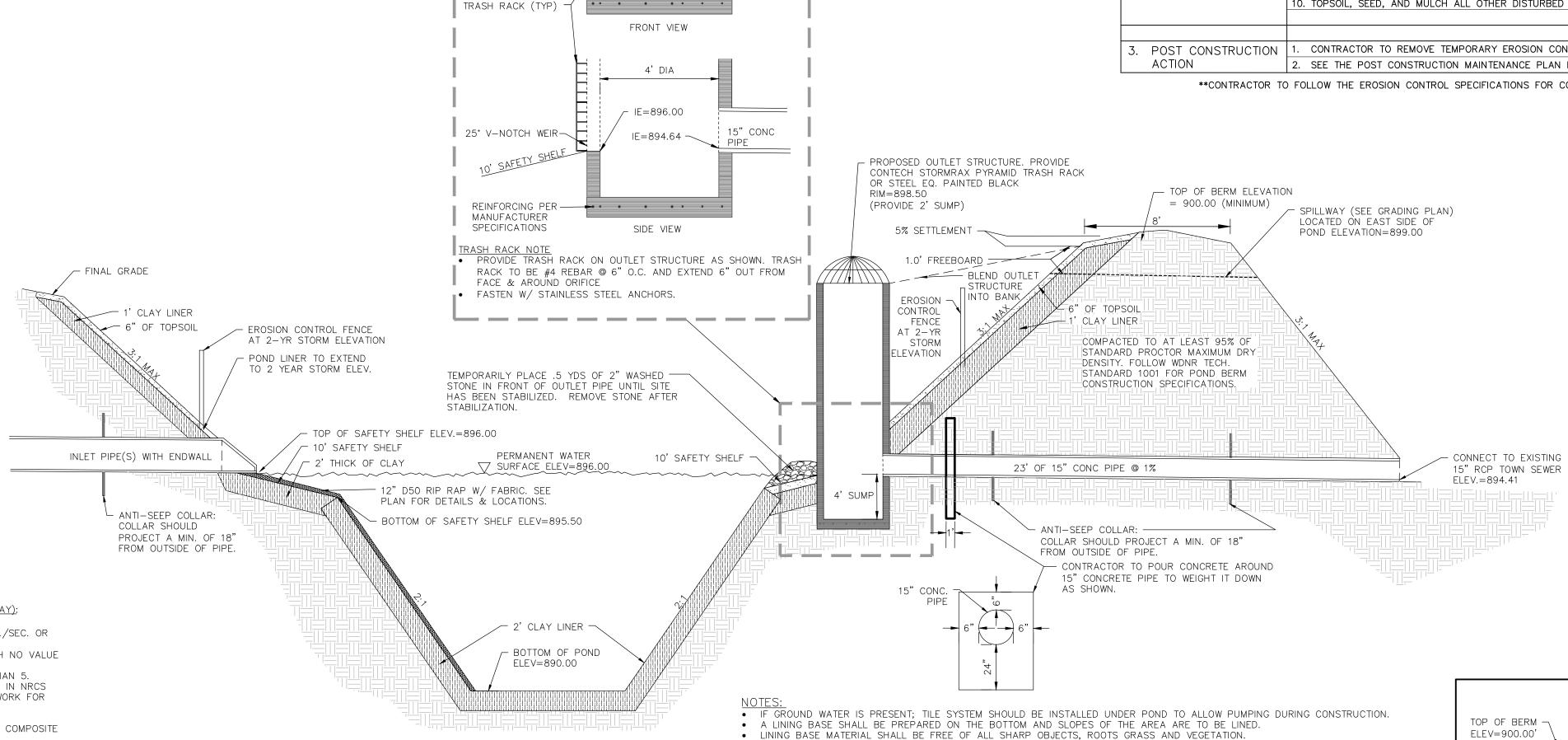
SEE SHEET CO.1 FOR PLAN

SPECIFICATIONS AND REQUIREMENTS

CLEANOUT TO GRADE DETAIL



CONTRACTOR TO FOLLOW THE EROSION CONTROL SPECIFICATIONS FOR CONSTRUCTION EROSION CONTROL INSPECTION AND MAINTENANCE.



TYPE B

POND LINER CRITERIA FOR SAFETY SHELF AND BELOW (CLAY):

- 50% FINES (200 SIEVE) OR MORE. • AN IN-PLACE HYDRAULIC CONDUCTIVITY OF 1x10-6 CM./SEC. OR
- AVERAGE LIQUID LIMIT VALUE OF 16 OR GREATER, WITH NO VALUE
- AVERAGE PI OF 7 OR MORE WITH NO VALUES LESS THAN 5. CLAY COMPACTION AND DOCUMENTATION AS SPECIFIED IN NRCS
- WISCONSIN CONSTRUCTION SPECIFICATION 204, EARTHWORK FOR WASTE STORAGE FACILITIES.
- MINIMUM THICKNESS OF TWO FEET.
- SPECIFY METHOD FOR KEEPING POOL FULL OR USE OF COMPOSITE SOILS BELOW LINER.

POND LINER ALTERNATE:

LESS THAN 14.

 CONTRACTOR TO PROVIDE 40 MIL/HDPE POND LINER IN LIEU OF CLAY LINER TO LINE ENTIRE POND AREA UP TO THE 2 YEAR, 24-HOUR WATER PONDING ELEVATION (SEE ELEVATION ON DETAIL)

DESIGN ACCORDING TO THE CRITERIA IN TABLE 3 OF THE NRCS

- 313, WASTE STORAGE FACILITY TECHNICAL STANDARD INSTALL ACCORDING TO NRCS WISCONSIN CONSTRUCTION SPECIFICATION 202, POLYETHYLENE GEOMEMBRANE LINING.
- 4-6" ROUND STONE OVER FILTER FABRIC SHALL BE PROVIDED TO

COVER THE ENTIRE LINER. TOP OF STONE SHALL MATCH PROPOSED

OVERALL STORMWATER FACILITY DETAIL

NO SCALE

• THE BASE MATERIAL SHALL BE NATIVE MATERIALS OR MATERIALS OBTAINED FROM A BORROW SOURCE COMPACTED TO A MIN.

• THE SUBGRADE SHALL BE PREPARED IMMEDIATELY PRIOR TO THE PLACING OF THE LINER. THE SURFACE ON WHICH THE LINER

AT END OF SITE CONSTRUCTION, POND DEPTH SHALL BE CHECKED FOR SEDIMENTATION AND DREDGED, IF NECESSARY, TO THE

CONSTRUCTION OF THE STORMWATER POND. THE SURVEY SHALL BE COMPLETED PRIOR TO THE POND FILLING WITH WATER.

CONSTRUCTION IS 0.10'. ANY ADDITIONAL WORK REQUIRED TO SURVEY A POND FULL OF WATER OR FOR SURVEYING FOLLOWING

• CONTRACTOR TO CONTACT EXCEL ENGINEERING TO COMPLETE AN AS-BUILT SURVEY FOLLOWING COMPLETION OF THE

CONTRACTOR SHALL GIVE EXCEL ENGINEERING A MINIMUM OF A 3 DAY NOTICE. PLEASE NOTE THAT THE HORIZONTAL TOLERANCE FOR POND CONSTRUCTION IS 0.50' AND THE VERTICAL TOLERANCE FOR POND, OUTLET, AND SPILLWAY

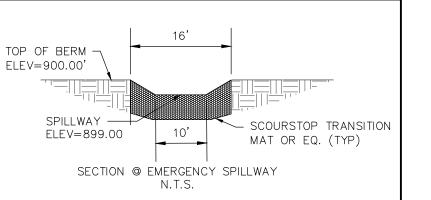
• CONTRACTOR SHALL PROVIDE EROSION MATTING AS REQUIRED PER SPECIFICATIONS NOTED ON CO.1.

OF 95% COMPACTING OR AN APPROVED CONSTRUCTION FABRIC.

IS TO BE PLACED IS TO BE FIRM, CLEAN, DRY AND SMOOTH.

REWORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

DESIGN DEPTH ORIGINALLY PROPOSED.



(DIRECTION) EMERGENCY

Always a Better Plan 100 Camelot Drive Fond du Lac, WI 54935 920-926-9800

PROJECT INFORMATION

excelengineer.com

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0 **PROP**(2 0 PROFESSIONAL SEAL

PRELIMINARY DATES APR. 19, 2023

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SHEET NUMBER

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SHOWROON

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2105 PROFESSIONAL SEAL

OFFICE

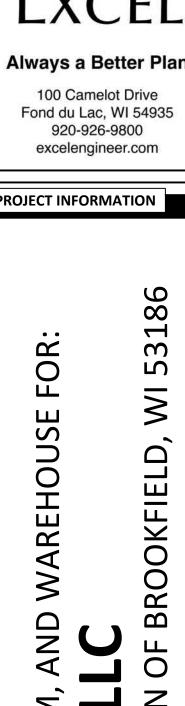
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PRELIMINARY DATES APR. 19, 2023

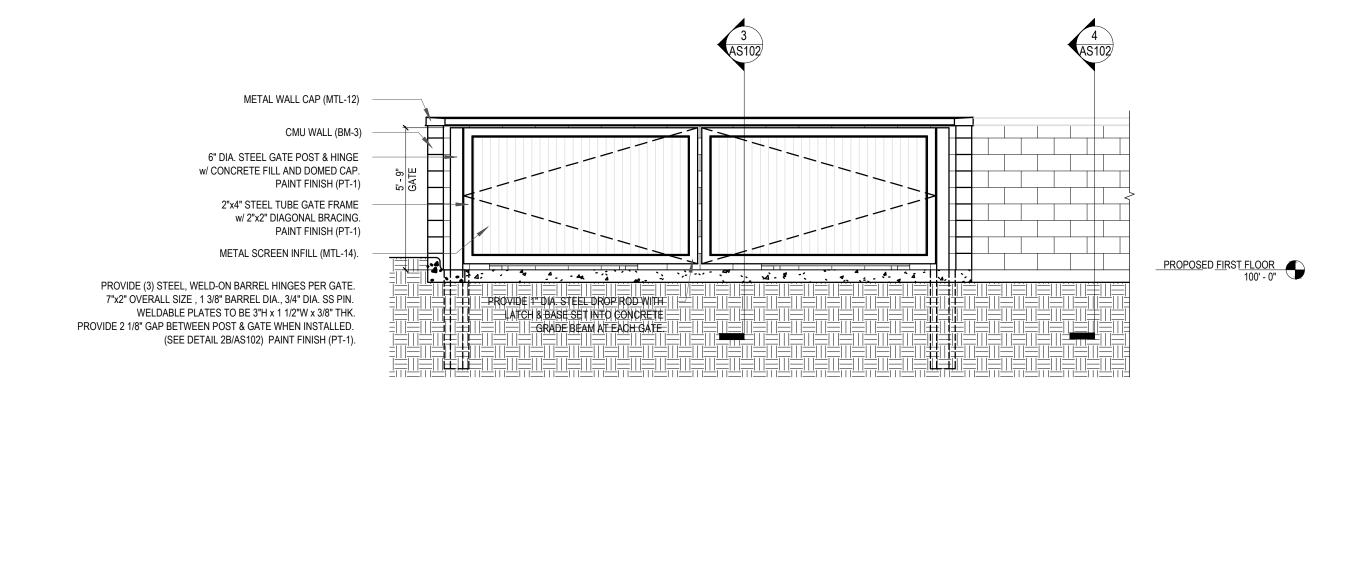
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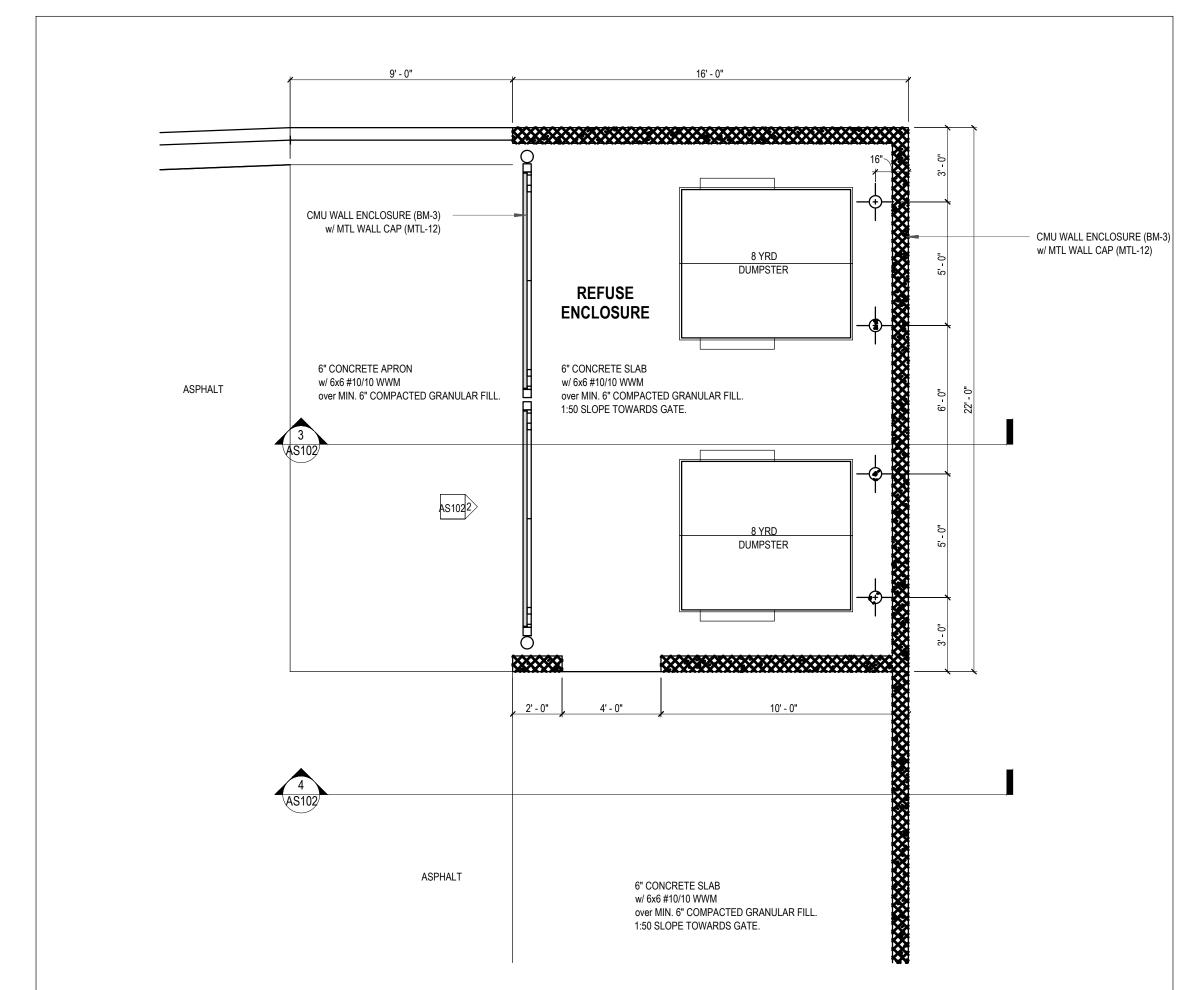
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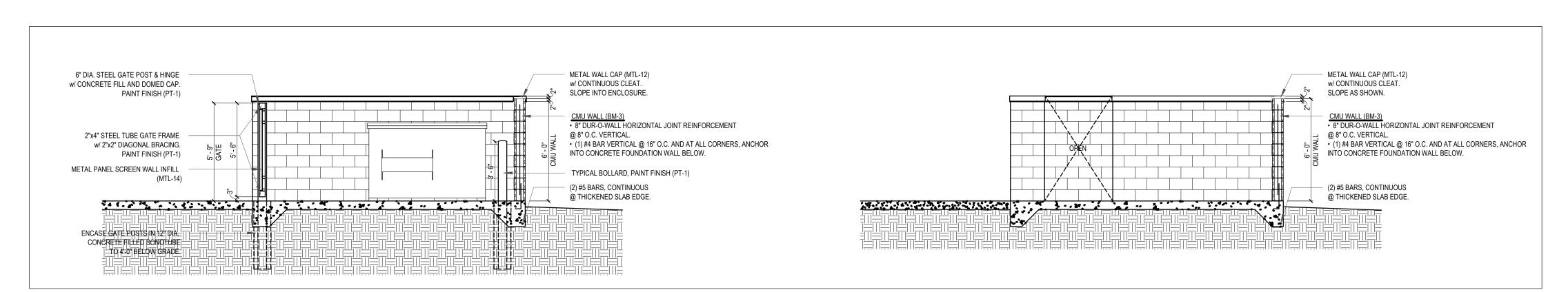
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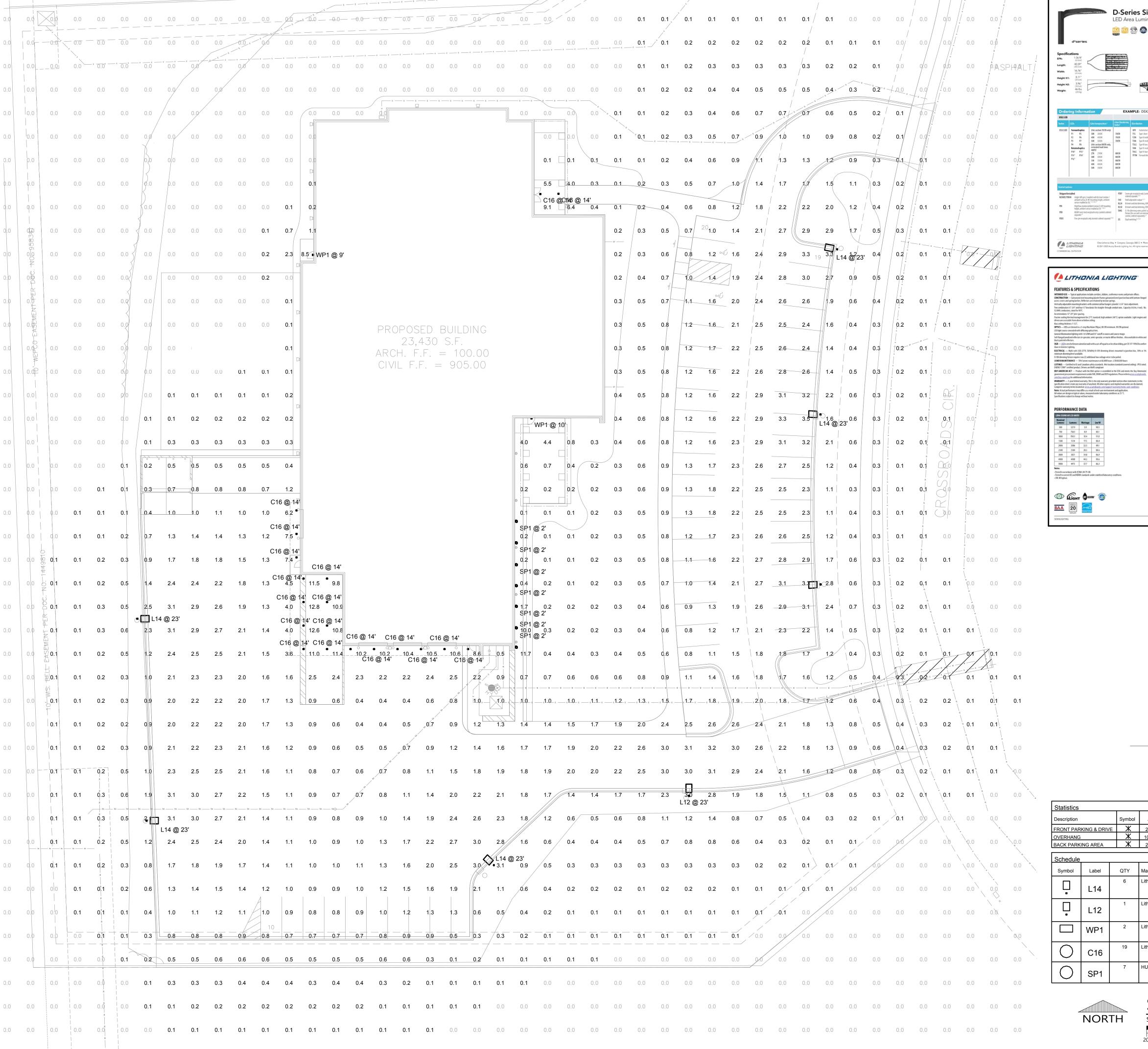
CIVIL DETAILS

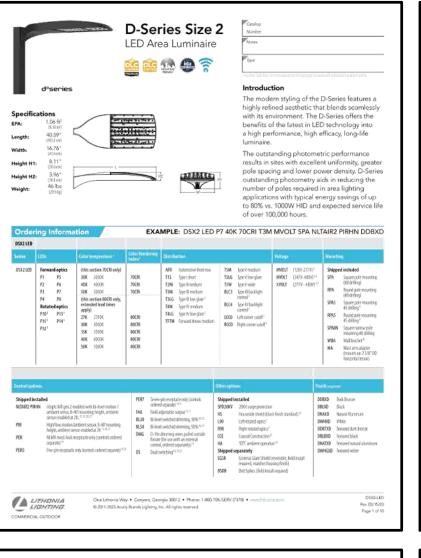


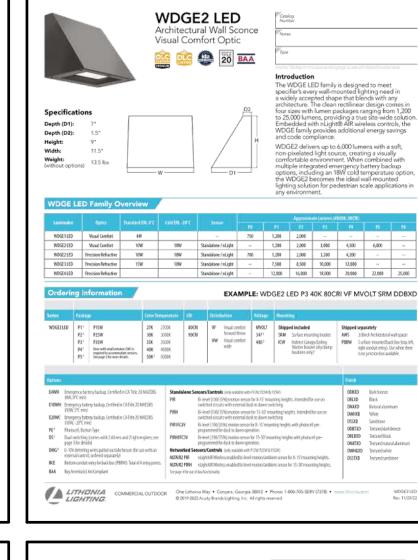


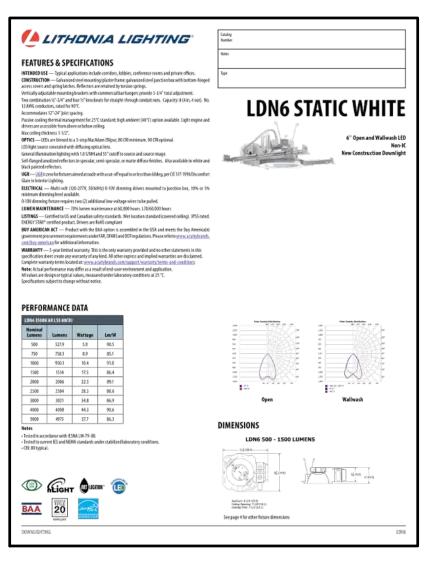


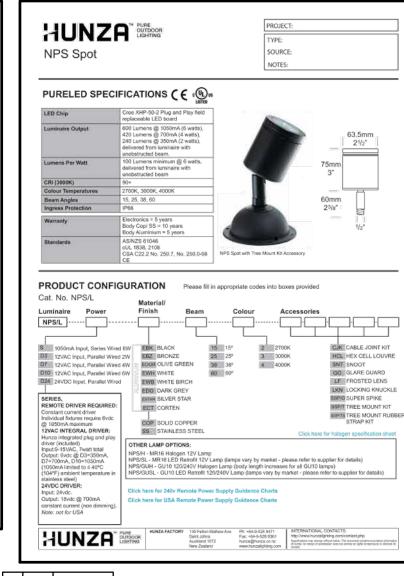
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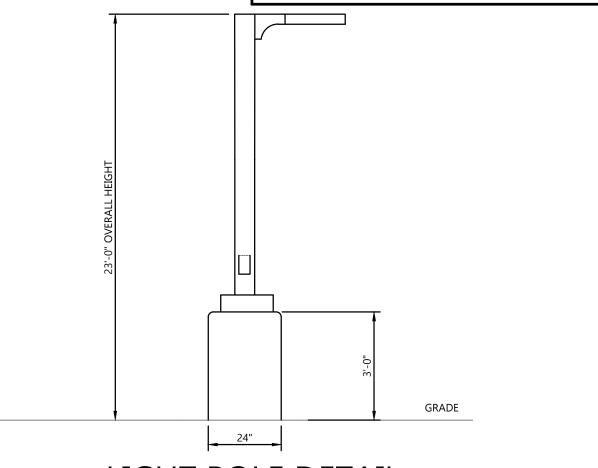












LIGHT POLE DETAIL

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
FRONT PARKING & DRIVE	Ж	2.0 fc	3.5 fc	0.2 fc	17.5:1	10.0:1
OVERHANG	Ж	10.8 fc	12.8 fc	8.6 fc	1.5:1	1.3:1
BACK PARKING AREA	Ж	2.1 fc	12.8 fc	0.3 fc	42.7:1	7.0:1

Schedule									
Symbol	Label	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power
	L14	6	Lithonia Lighting	DSX2 LED P1 40K 80CRI T4M HS D-Series Size 2 Area Luminaire P1 1 15605 Performance Package 4000K CCT 80 CRI Type 4 Medium Houseside Shield		15605	0.9	134.5029	
	L12	1	Lithonia Lighting	DSX2 LED P1 40K 80CRI T2M	D-Series Size 2 Area Luminaire P1 Performance Package 4000K CCT 80 CRI Type 2 Medium	1	17668	0.9	134.5
	WP1	2	Lithonia Lighting	WDGE1 LED P2 40K 80CRI VF	WDGE1 LED WITH P2 - PERFORMANCE PACKAGE, 4000K, 80CRI, VISUAL COMFORT FORWARD OPTIC	1	1978	0.9	15.0178
0	C16	19	Lithonia Lighting	LDN6 40/15 LO6AR LSS	6IN LDN, 4000K, 1500LM, CLEAR, SEMI- SPECULAR REFLECTOR, CRI80	1	1516	0.9	17.52
0	SP1	7	HUNZA	NPS-L-S-25-4	NPS SPOT- PURE LED - SERIES WIRED 1050MA - IP66 - 4000K - 25 DEG - REMOTE DRIVER REQUIRED	1	573	1	6.3



SITE PLAN - PHOTOMETRIC

SITE PLAN PHOTOMETRIC

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PROJECT INFORMATION

WAREHOU

SH **PROPOSED**

PROFESSIONAL SEAL

PRELIMINARY DATES APR. 19, 2023

JOB NUMBER 230030600

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FIELD VERIFY ALL GIVEN DATA BEFORE PREPARATION OF SHOP DRAWINGS, CONSTRUCTION AND INSTALLATION.

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SITE CONTEXT PLAN

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PROJECT NUMBER 2236

SHEET NUMBER



1 CONTEXT PLAN 1" = 80'-0"

FOR PROPER INTERPRETATION, THESE DRAWINGS SHALL BE PRINTED IN COLOR

N 1 ARCHITECTURAL SITE PLAN
1" = 20'-0"

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ISSUE DATE:

19 April, 2023

SET TYPE:

ZONING SUBMITTAL

REVISIONS: NO. DESCRIPTION DATE

ARCHITECTURAL SITE PLAN

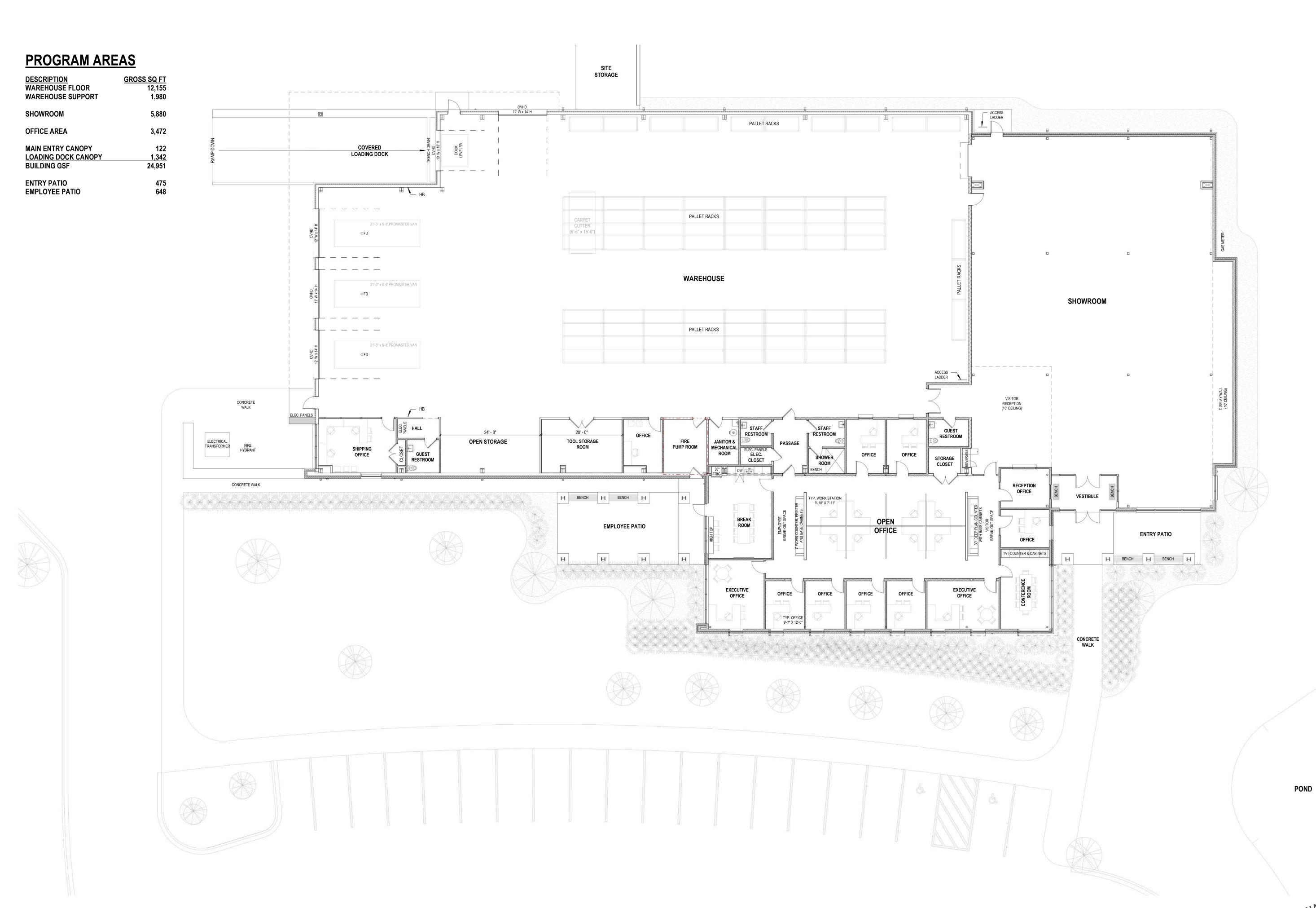
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REVISIONS: NO. DESCRIPTION DATE

FIRST FLOOR DESIGN PLAN

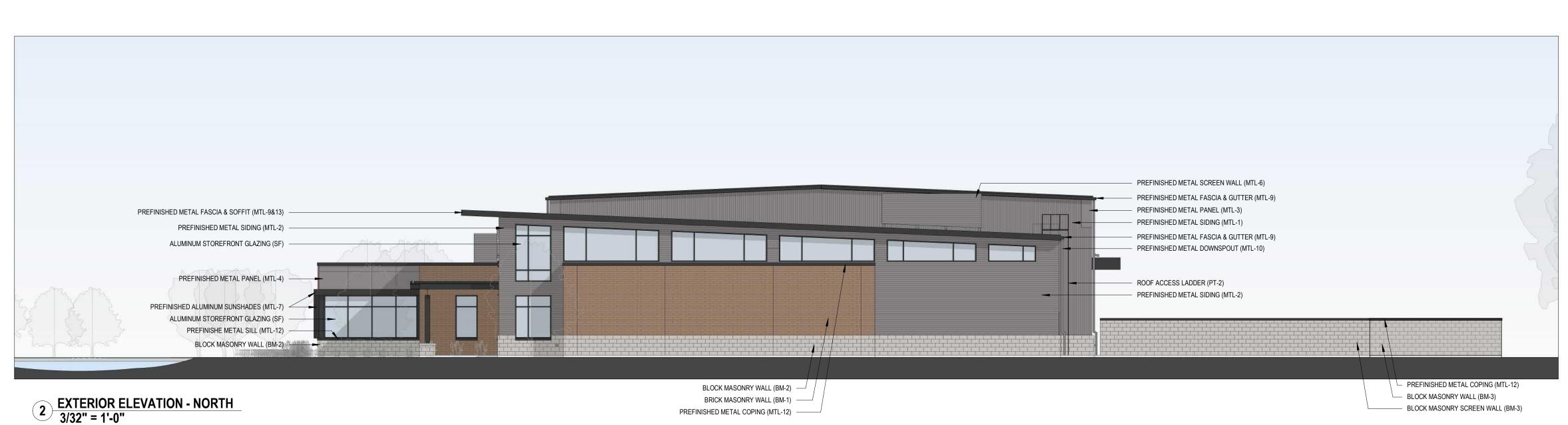
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EXTERIOR MATERIAL LEGEND COLOR / FINISH MARK DESCRIPTION BM-1 BRICK MASONRY - PRIMARY BRICK WALLS BRONZE N/F BM-2 BLOCK MASONRY - MASONRY WALL BASE DOVE GREY N/F BM-3 BLOCK MASONRY - REFUSE ENCLOSURE, SITE SCREEN & PATIO PIERS DOVE GREY N/F CW ALUMINUM CURTAIN WALL FRAMING SYSTEM ANODIZED BLACK MTL-1 METAL SIDING - WAREHOUSE - INSULATED, VERTICAL INSUL-RIB CHARCOAL / PVDF MTL-2 METAL SIDING - SHOWROOM - INSULATED, HORIZONTAL CORRUGATED CHARCOAL / PVDF MTL-3 METAL SIDING - WAREHOUSE - INSULATED, SMOOTH PANEL MTL-4 METAL SIDING - OFFICE - INSULATED, SMOOTH PANEL CHARCOAL / PVDF MTL-5 METAL PANEL - WAREHOUSE CANOPY & WING WALL - SMOOTH PANEL MTL-6 METAL SIDING - MECHANICAL SCREEN, HORIZONTAL AND VERTICAL RIB CHARCOAL TO MATCH (MTL-1) MTL-7 PREFINISHED ALUMINUM - SUN SCREENS, SMOOTH PANEL BLACK TO MATCH (MTL-5) MTL-8 METAL LINER PANEL - INSULATED, SMOOTH PANEL UNFINISHED MTL-9 PREFINISHED METAL - FASCIA AND GUTTER MIDNIGHT BLACK / PVDF MTL-10 PREFINISHED METAL - DOWNSPOUT CHARCOAL / PVDF MTL-11 PREFINISHED METAL - MISC CHARCOAL TO MATCH (MTL-1) MTL-12 PREFINISHED METAL - MISC BLACK TO MATCH (MTL-5) MTL-13 PREFINISHED METAL - SOFFIT PANEL MIDNIGHT BLACK / PVDF MTL-14 PREFINISHED METAL - SITE SCREEN, VERTICAL RIB CHARCOAL / PVDF PC-1 PRECAST CONCRETE - WALL CAPS PT-1 EXTERIOR PAINT CHARCOAL TO MATCH (MTL-1) PT-2 EXTERIOR PAINT BLACK TO MATCH (MTL-5) SF ALUMINUM STOREFRONT FRAMING SYSTEM ANODIZED BLACK WD-1 WOOD BENCH SEAT COLOR STAIN FINISH, TBD

PRINTED: 4/19/2023 10:58:18 AM PROJECT NUMBER 2236 SHEET NUMBER

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IN COLOR

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KTFM, 21055 Cro Town of B

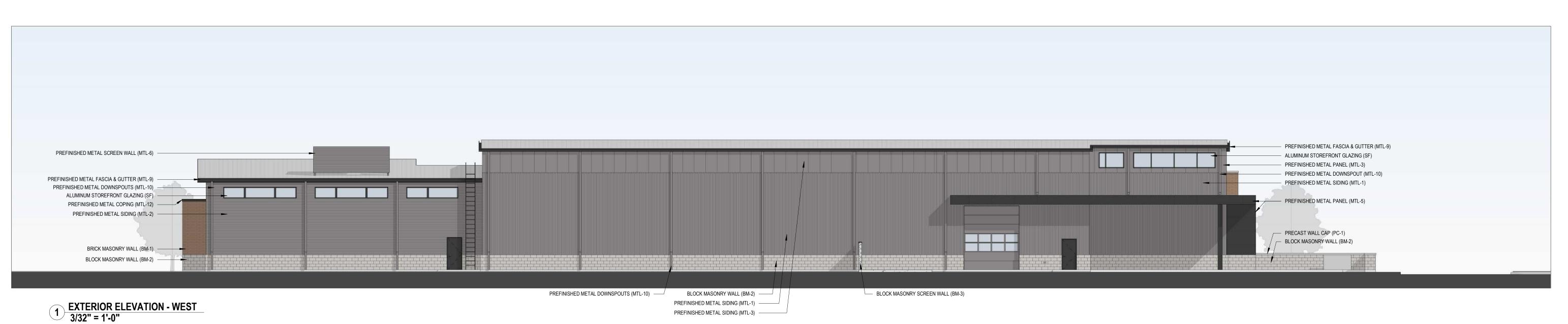
ISSUE DATE: 19 April, 2023

SET TYPE:

ZONING SUBMITTAL **REVISIONS**:

NO. DESCRIPTION DATE

EXTERIOR DESIGN **ELEVATIONS**



PRECAST WALL CAP (PC-1)

ALUMINUM STOREFRONT GLAZING (SF)

PREFINISHED METAL FASCIA & GUTTER (MTL-9) ALUMINUM STOREFRONT GLAZING (SF) PREFINISHED METAL FASCIA & SOFFIT (MTL-9&13) PREFINISHED METAL PANEL (MTL-3) PREFINISHED METAL SIDING (MTL-2) PREFINISHED METAL SIDING (MTL-1) PREFINISHED METAL SCREEN WALL (MTL-6) PREFINISHED METAL PANEL (MTL-5) - PREFINISHED METAL COPING (MTL-12) PREFINISHED METAL PANEL (MTL-4) PREFINISHED METAL COPING (MTL-12) BLOCK MASONRY SCREEN WALL (BM-3) PREFINISHED METAL PANEL (MTL-12) ALUMINUM STOREFRONT GLAZING (SF) PREFINISHED METAL GATE (MTL-6) BRICK MASONRY WALL (BM-1) PREFINISHED METAL SILL (MTL-12) BLOCK MASONRY WALL (BM-2) - BLOCK MASONRY WALL (BM-2) PREFINISHED METAL PANEL (MTL-5)

2 EXTERIOR ELEVATION - SOUTH 3/32" = 1'-0"

EXTERIOR MATERIAL LEGEND COLOR / FINISH MARK DESCRIPTION BM-1 BRICK MASONRY - PRIMARY BRICK WALLS BRONZE N/F BM-2 BLOCK MASONRY - MASONRY WALL BASE DOVE GREY N/F BM-3 BLOCK MASONRY - REFUSE ENCLOSURE, SITE SCREEN & PATIO PIERS DOVE GREY N/F CW ALUMINUM CURTAIN WALL FRAMING SYSTEM ANODIZED BLACK MTL-1 METAL SIDING - WAREHOUSE - INSULATED, VERTICAL INSUL-RIB CHARCOAL / PVDF MTL-2 METAL SIDING - SHOWROOM - INSULATED, HORIZONTAL CORRUGATED CHARCOAL / PVDF MTL-3 METAL SIDING - WAREHOUSE - INSULATED, SMOOTH PANEL MTL-4 METAL SIDING - OFFICE - INSULATED, SMOOTH PANEL CHARCOAL / PVDF MTL-5 METAL PANEL - WAREHOUSE CANOPY & WING WALL - SMOOTH PANEL MTL-6 METAL SIDING - MECHANICAL SCREEN, HORIZONTAL AND VERTICAL RIB CHARCOAL TO MATCH (MTL-1) MTL-7 PREFINISHED ALUMINUM - SUN SCREENS, SMOOTH PANEL BLACK TO MATCH (MTL-5) MTL-8 METAL LINER PANEL - INSULATED, SMOOTH PANEL UNFINISHED MTL-9 PREFINISHED METAL - FASCIA AND GUTTER MIDNIGHT BLACK / PVDF MTL-10 PREFINISHED METAL - DOWNSPOUT CHARCOAL / PVDF MTL-11 PREFINISHED METAL - MISC CHARCOAL TO MATCH (MTL-1) MTL-12 PREFINISHED METAL - MISC BLACK TO MATCH (MTL-5) MTL-13 PREFINISHED METAL - SOFFIT PANEL MIDNIGHT BLACK / PVDF MTL-14 PREFINISHED METAL - SITE SCREEN, VERTICAL RIB CHARCOAL / PVDF PC-1 PRECAST CONCRETE - WALL CAPS PT-1 EXTERIOR PAINT CHARCOAL TO MATCH (MTL-1) PT-2 EXTERIOR PAINT BLACK TO MATCH (MTL-5) SF ALUMINUM STOREFRONT FRAMING SYSTEM ANODIZED BLACK WD-1 WOOD BENCH SEAT COLOR STAIN FINISH, TBD

PRELIMINARY
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ISSUE DATE:
19 April, 2023

SET TYPE:

ZONING SUBMITTAL

REVISIONS:

REVISIONS:

NO. DESCRIPTION DATE

EXTERIOR DESIGN ELEVATIONS

PRINTED: 4/19/2023 11:01:21 AM

PROJECT NUMBER

SHEET NUMBER

Z301

IN COLOR



BUILDING SECTION DIAGRAM
3/16" = 1'-0"

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ISSUE DATE:

19 April, 2023 SET TYPE:

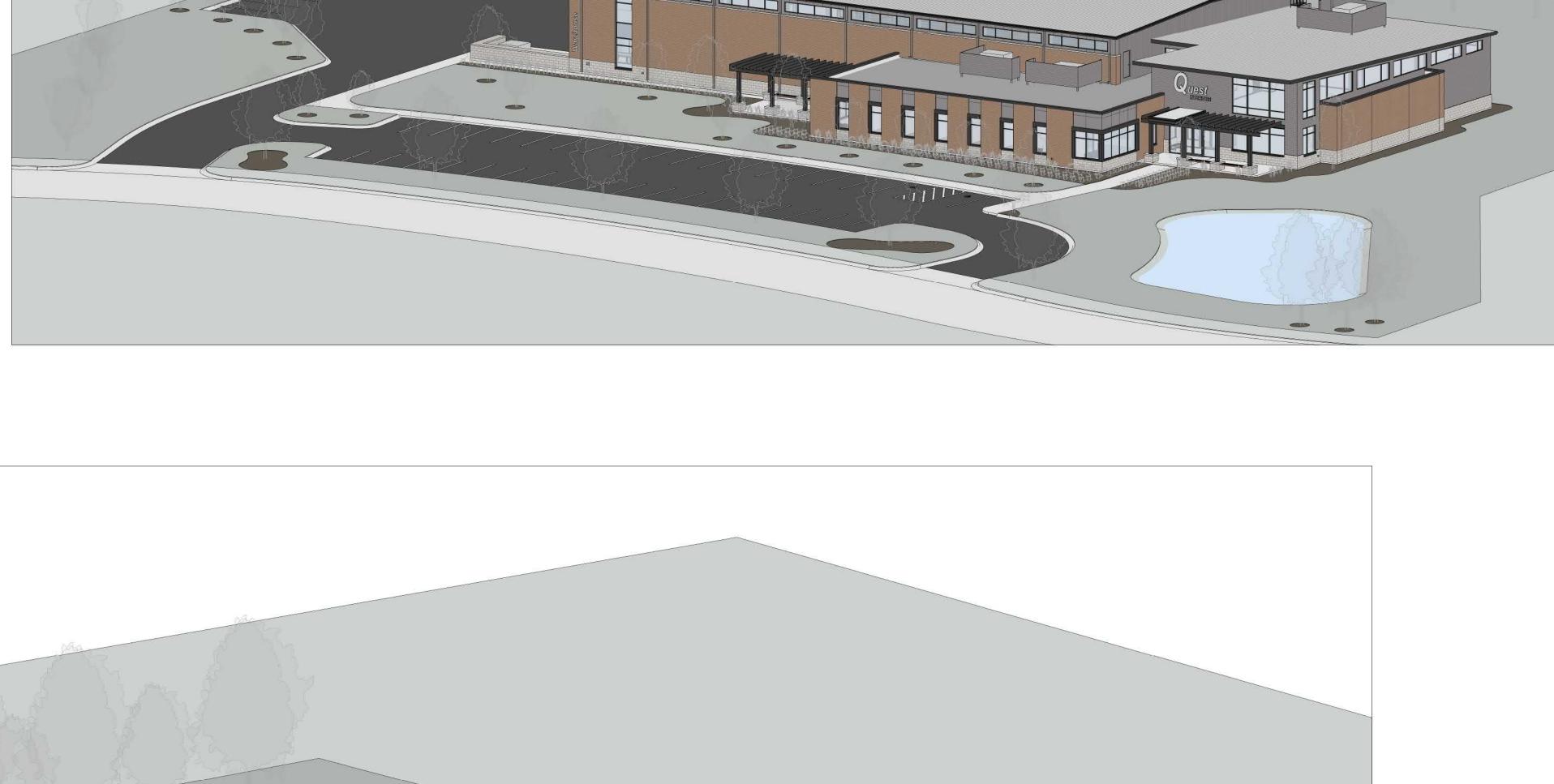
ZONING SUBMITTAL REVISIONS: NO. DESCRIPTION DATE

BUILDING SECTION DIAGRAM

PRINTED: 4/19/2023 11:02:31 AM PROJECT NUMBER

2236 SHEET NUMBER

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SET TYPE: ZONING SUBMITTAL

REVISIONS: NO. DESCRIPTION DATE

PRESENTATION DRAWING

PRINTED: 4/19/2023 11:03:58 AM PROJECT NUMBER

2236 SHEET NUMBER

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IN COLOR

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REVISIONS: NO. DESCRIPTION DATE

PRESENTATION DRAWING

SHEET NUMBER

PRINTED: 4/19/2023 2:06:19 PM PROJECT NUMBER 2236

FOR PROPER INTERPRETATION, THESE DRAWINGS SHALL BE PRINTED IN COLOR



PROJECT:			
TYPE:	SP1		
SOURCE:			
NOTES:			

PURELED SPECIFICATIONS (€ : @us

LED Chip	Cree XHP-50-2 Plug and Play field replaceable LED board
Luminaire Output	600 Lumens @ 1050mA (6 watts), 420 Lumens @ 700mA (4 watts), 240 Lumens @ 350mA (2 watts), delivered from luminaire with unobstructed beam.
Lumens Per Watt	100 Lumens minimum @ 6 watts, delivered from luminaire with unobstructed beam
CRI (3000K)	90+
Colour Temperatures	2700K, 3000K, 4000K
Beam Angles	15, 25, 38, 60
Ingress Protection	IP66
Warranty	Electronics = 5 years Body Cop/ SS = 10 years Body Aluminium = 5 years
Standards	AS/NZS 61046

cUL 1838, 2108

CSA C22.2 No. 250.7. No. 250.0-08

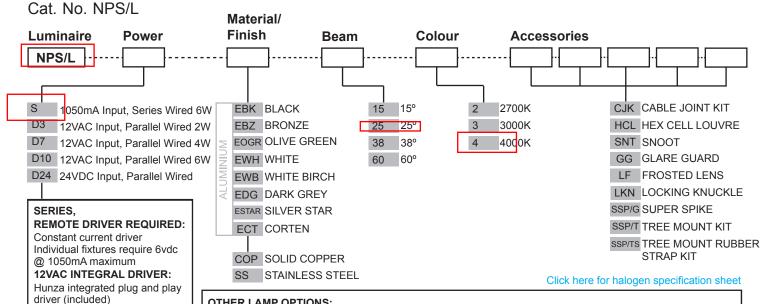


63.5mm 21/2" 75mm 3" 60mm 23/8"

NPS Spot with Tree Mount Kit Accessory

PRODUCT CONFIGURATION

Please fill in appropriate codes into boxes provided



OTHER LAMP OPTIONS:

NPS/H - MR16 Halogen 12V Lamp

NPS/SL - MR16 LED Retrofit 12V Lamp (lamps vary by market - please refer to supplier for details)

NPS/GUH - GU10 120/240V Halogen Lamp (body length increases for all GU10 lamps)

NPS/GUSL - GU10 LED Retrofit 120/240V Lamp (lamps vary by market - please refer to supplier for details)

Click here for 240v Remote Power Supply Guidance Charts Click here for USA Remote Power Supply Guidance Charts



Input:9-15VAC, 7watt total

D7=700mA, D10=1050mA

(1050mA limited to ≤ 40°C

Output: 18vdc @ 700mA

stainless steel) 24VDC DRIVER:

Note: not for USA

Input: 24vdc.

(104°F) ambient temperature in

constant current (non dimming).

Output: 6vdc @ D3=350mA,

HUNZA FACTORY

130 Felton Mathew Ave Auckland 1072 New Zealand

Ph: +64-9-528 9471 Fax: +64-9-528 9361 hunza@hunza.co.nz www.hunzalighting.com

INTERNATIONAL CONTACTS http://www.hunzalighting.com/contact.php

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LUMINAIRE CONSTRUCTION

CNC machined from one of the following metals:

Aluminium:

Body: high corrosion resistant 63.5mm (21/2") x 10mm (3/8") aluminium.

End cap: solid aluminium 63.5mm ($2^{1/2}$ ") rod, with chromate substrate and high UV resistant polyester powder coat.

Colours:

Black, Bronze, Silver Star, White, White Birch, Olive Green, Dark Grey, Corten.

Copper:

Body: 63.5mm (21/2") x 10mm (3/8"). End cap: solid copper 63.5mm (21/2") rod.

316 Stainless Steel:

Body: 63.5mm (21/2") x 10mm (13/32"). End cap: solid 316 stainless steel 63.5 (21/2")

Knuckles:

Aluminium and Copper luminaires - 360° rotation and 0-90° elevation, solid brass with anti rust spring.

Stainless Steel luminaires - 360° rotation and 0-90° elevation, full stainless steel construction.

Step Lens:

10mm (3/8") Extra clear, low iron, shatter resistant glass. Lifetime warranty

Gaskets:

Silicone, iron impregnated 220°C (428°F)

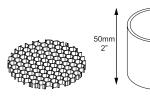
Mounting:

Designed with a 1/2" NPS thread, this luminaire is easily fitted to a Hunza Super Spike or Hunza Tree Mount Kit. It also fits any 1/2" NPS threaded fitting.

Luminaire Weight:

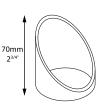
Alum: 0.450kg (15oz) Cop: 1.250kg (2lb 12oz) SS: 0.960kg (2lb 1oz)

ACCESSORIES



Hex Cell Louvre

Snoot



Glare Guard



Super Spike



Tree Mount Kit

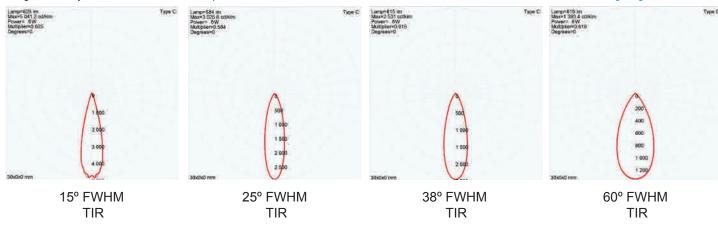


Locking Knuckle

BEAM ANGLES

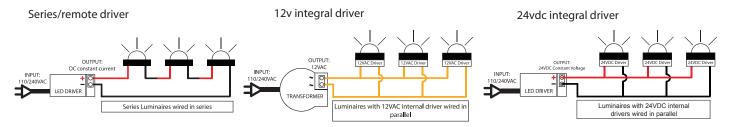
High efficiency PMMA TIR lenses. Field replaceable

IES files available for download: hunzalighting.com/downloads



WIRING GUIDE

Available for download: hunzalighting.com/downloads



Diagrams are a guide only, wire colours and polarity may change depending on fixture and country

Specifications may change without notification

Aug 2017



WDGE1 LED

Architectural Wall Sconce





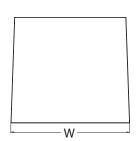


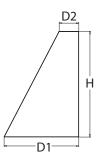




Specifications

Depth (D1): 5.5" Depth (D2): 1.5" 8" Height: Width: Q١١ Weight: 9 lbs (without options)





Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing true site-wide solution.

WDGE1 delivers up to 2,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of WDGE1, with its integrated emergency battery backup option, makes it an ideal over-the-door wall-mounted lighting solution.

WDGE LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Sensor	Lumens (4000K)								
Luilliaire	Staliualu EM, V C	Cold Livi, -20 C		P1	P2	P3	P4	P5	P6			
WDGE1 LED	4W	-		1,200	2,000							
WDGE2 LED	10W	18W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000				
WDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000					
WDGE4 LED			Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000			

Ordering Information

EXAMPLE: WDGE1 LED P2 40K 80CRI VF MVOLT SRM PE DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGET LED	PT P2	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K ¹ 5000K	90CRI	VF Visual comfort forward throw VW Visual comfort wide	MVOLI 347 ²	Shipped included SRM Surface mounting bracket ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only) ⁵ Shipped separately AWS 3/8inch Architectural wall spacer PBBW Surface-mounted back box (top, left, right conduit entry) Use when there is no junction box available.

Options		Finish			
E4WH ³	Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min)	DDBXD	Dark bronze	DDBTXD	Textured dark bronze
PE ⁴	Photocell, Button Type	DBLXD	Black	DBLBXD	Textured black
DS	Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)	DNAXD	Natural aluminum	DNATXD	Textured natural aluminum
DMG	0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	DWHXD	White	DWHGXD	Textured white
BCE	Bottom conduit entry for back box (PBBW). Total of 4 entry points.	DSSXD	Sandstone	DSSTXD	Textured sandstone
BAA	Buy America(n) Act Compliant				

Accessories

WDGEAWS DDBXD WDGE 3/8inch Architectural Wall Spacer (specify finish) WDGE1PBBW DDBXD U WDGE1 surface-mounted back box (specify finish)

COMMERCIAL OUTDOOR

NOTES

- 1 50K not available in 90CRI.
- 347V not available with E4WH. DS or PE.
- E4WH not available with PE or DS.
- 4 PE not available with DS.
- Not qualified for DLC. Not available with E4WH.



Lumen Output

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

Performance		System	System 27K (2700K, 80 CRI)			30K (3000K, 80 CRI)		35K (3500K, 80 CRI)			40K (4000K, 80 CRI)				50K (5000K, 80 CRI)													
Package Watts	Dist. Type	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U		Lumens	LPW	В		G		
	D1	101//	VF	1,120	112	0	0	0	1,161	116	0	0	0	1,194	119	0	0	0	1,227	123	0	0	0	1,235	123	0	0	0
P1 10W	1000	VW	1,122	112	0	0	0	1,163	116	0	0	0	1,196	120	0	0	0	1,229	123	0	0	0	1,237	124	0	0	0	
	D2	1514	VF	1,806	120	1	0	0	1,872	125	1	0	0	1,925	128	1	0	0	1,978	132	1	0	0	1,992	133	1	0	0
P2 15	15W	VW	1,809	120	1	0	0	1,876	125	1	0	0	1,929	128	1	0	0	1,982	132	1	0	0	1,996	133	1	0	0	

Electrical Load

Performance	Custom Watts	Current (A)								
Package	System Watts	120V	208V	240V	277V	347V				
P1 -	10W	0.082	0.049	0.043	0.038					
	13W					0.046				
P2	15W	0.132	0.081	0.072	0.064					
r2	18W	-	-			0.056				

Lumen Multiplier for 90CRI

ССТ	Multiplier
27K	0.845
30K	0.867
35K	0.845
40K	0.885
50K	0.898

Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Dist. Type	Lumens
F4WH	VF	646
E4WH	VW	647

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40 $^{\circ}C$ (32-104 $^{\circ}F).$

Amb	Ambient							
0°C	32°F	1.03						
10°C	50°F	1.02						
20°C	68°F	1.01						
25°C	77°F	1.00						
30°C	86°F	0.99						
40°C	104°F	0.98						

Projected LED Lumen Maintenance

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

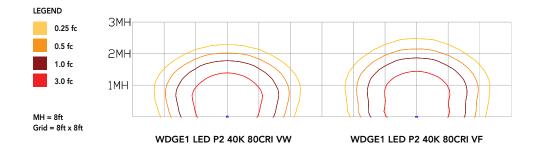
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.95	>0.91



Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.



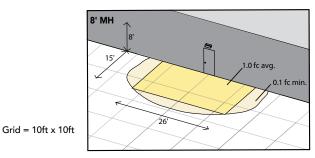
Emergency Egress Options

Emergency Battery Backup

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90minutes.

Applicable codes: NFPA 70/NEC - section 700.16, NFPA 101 Life Safety Code Section 7.9

The example below shows illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E4WH and VF distribution.



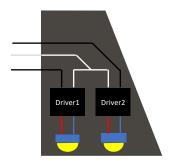
WDGE1 LED xx 40K 80CRI VF MVOLT E4WH

Dual Switching (DS) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with two drivers and two light engines. These work completely independent to each other so that a failure of any individual component does not cause the whole luminaire to go dark. This option is typically used with a back generator or inverter providing emergency power.

Applicable codes: NFPA 70/NEC - section 700.16, NFPA 101 Life Safety Code Section 7.9

COMMERCIAL OUTDOOR





Mounting, Options & Accessories



E4WH – 4W Emergency Battery Backup

D = 5.5"

H = 8"

W = 9"



AWS - 3/8inch Architectural Wall Spacer

D = 0.38"

H = 4.4"

W = 7.5"



PBBW – Surface-Mounted Back Box Use when there is no junction box available.

D = 1.75"

H = 8"

W = 9"

FEATURES & SPECIFICATIONS

INTENDED USE

Common architectural look, with clean rectilinear shape, of the WDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

CONSTRUCTION

The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

FINISH

Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS

Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2). Fixture ships standard with 0-10v dimmable driver.

COMMERCIAL OUTDOOR

INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

BUY AMERICAN ACT

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations.

Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

www.acuitybrands.com/support/warranty/terms-and-conditions

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





D-Series Size 2

LED Area Luminaire









d"series

Specifications

1.06 ft² EPA:

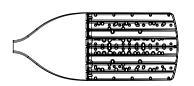
40.59" Length: (103.1 cm)

16.76" Width: (42.6 cm)

8.11" Height H1: (20.6 cm)

3.96" Height H2: (10.1 cm)

46 lbs Weight: (20.9 kg)







Catalog Number

L12 & L14 W/20' POLE

Notes

Туре

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of up to 80% vs. 1000W HID and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX2 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX2 LED							
Series	LEDs Color temperature Color Rendering Index			Distribution	Voltage	Mounting	
DSX2 LED	Forward optics	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K (this section 80CRI only, extended lead times apply) 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI 80CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3LG Type III low glare 3 T4M Type IV medium T4LG Type IV low glare 3 TFTM Forward throw medium T5LG Type IV low glare 3 TCHM Type IV medium T4LG Type IV low glare 3 TFTM Forward throw medium T5LG Type V low glare 3 Type IV backlight control 3 LCCO Left corner cutoff 3 RCCO Right corner cutoff 3	MVOLT (120V-277V) ⁴ HVOLT (347V-480V) ^{5,6} XVOLT (277V - 480V) ^{7,8}	Shipped included SPA Square pole mounting (#8 drilling) RPA Round pole mounting (#8 drilling) SPA5 Square pole mounting #5 drilling 3 RPA5 Round pole mounting #5 drilling 9 SPA8N Square narrow pole mounting #8 drilling WBA Wall bracket 10 MA Mast arm adapter (mounts on 2 3/8" 0D horizontal tenon)	

Control options			Other opti	ons	Finish (required)		
NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient senso, 8-40' mounting height, ambient sensor enabled at 2fc. 11, 12, 20, 21 PIR High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc. 12, 20, 21 PER NEMA twist-lock receptacle only (controls ordered separate) 14 PERS Five-pin receptacle only (controls ordered separate) 14,	PER7 FA0 BL30 BL50 DMG	Seven-pin receptacle only (controls ordered separate) ^{14,21} Field adjustable output ^{15,21} Bi-level switched dimming, 30% ^{16,21} Bi-level switched dimming, 50% ^{16,21} 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ¹⁷ Dual switching ^{18,19,21}	Shipped i SPD20KV HS L90 R90 CCE HA Shipped s EGSR	nstalled 20KV surge protection Houseside shield (black finish standard) ²² Left rotated optics ¹ Right rotated optics ¹ Coastal Construction ²³ 50°C ambient operation ²⁴ separately External Glare Shield (reversible, field install required, matches housing finish) Bird Spikes (field install required)	DDBXD DBLXD DNAXD DWHXD DDBTXD DBLBXD DNATXD DWHGXD	Dark Bronze Black Natural Aluminum White Textured dark bronze Textured black Textured natural aluminum Textured white	



Ordering Information

Accessories

red and shipped separately

DLL127F 1.5 JU Photocell - SSL twist-lock (120-277V) 25 DLL347F 1.5 CUL JU Photocell - SSL twist-lock (347V) 25 DLL480F 1.5 CUL JU Photocell - SSL twist-lock (480V) 25 DSHORT SBK Shorting cap 25

House-side shield (enter package number 1-13 in DSX2HS P#

place of #)

DSXRPA (FINISH) Round pole adapter (#8 drilling, specify finish) DSXSPA5 (FINISH) Square pole adapter #5 drilling (specify finish) DSXRPA5 (FINISH) Round pole adapter #5 drilling (specify finish) DSX1EGSR (FINISH) External glare shield (specify finish) DSX2BSDB (FINISH) Bird spike deterrent bracket (specify finish)

- Rotated optics available with packages P10, P11, P12, P13 and P14. Must be combined with option L90 or R90.
- 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations. T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).

 HVOLT not available with package P10 when combined with option NLTAIR2 PIRHN or option PIR.
- XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
- XVOLT not available in package P10. SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
- 10 WBA cannot be combined with Type 5 distributions plus photocell (PER).
- 11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this link
- 12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PERS, PERS, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P10 using HVOLT. NLTAIR2 PIRHN not available with P10 using XVOLT.
- 13 PIR not available with NLTAIR2 PIRHN, PER, PER5, PER7, FAO BL30, BL50, DMG and DS, PIR not available with P10 using HVOLT, PIR not available with P10 using XVOLT
- 14 14) PER/PER5/PER7 not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from
- Acuity Brands Controls. See accessories. Shorting Cap included.

 15 FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, DMG and DS.
- 16 BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO, DMG and DS. 17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DS.
- 18 DS not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DMG
- 19 DS requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads on P1, P2, P3, P4, P5 (2 drivers). Note: Provides 60/40 operation using (2) different sets of leads on P6, P7, P8, P9, P10, P11, P12, P13, P14 (3 drivers).
- 20 Reference Motion Sensor Default Settings table on page 4 to see functionality.
- 21 Reference Controls Options table on page 4.
 22 HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
- 23 CCE option not available with option BS and EGSR. Contact Technical Support for availability.
- 24 Option HA not available with performance packages P5, P6, P7, P8, P13 and P14.
 25 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.

Shield Accessories



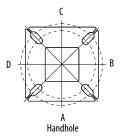
External Glare Shield (EGSR)

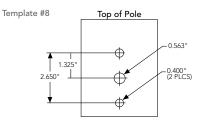


House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION





Tenon Mounting Slipfitter

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

			1				
		-=	==	₹.	<u> </u>	*	-1-
Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
			N	linimum Acceptable	Outside Pole Dimer	sion	
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPA5	#5	3"	3"	3"	3"		3"
RPA5	#5	3"	3"	3"	3"	3"	3"
5PA8N #8		3"	3"	3"	3"		3"

DSX2 Area Luminaire - EPA

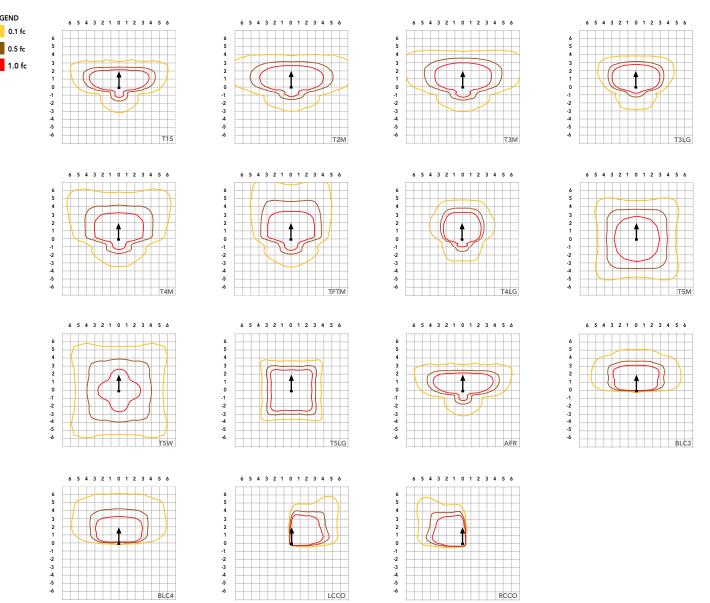
*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type	-		₹.	_T_	**	
DSX2 with SPA	1.06	2.12	1.84	2.32		2.33
DSX2 with SPA5, SPA8N	1.07	2.14	1.90	2.43		2.44
DSX2 with RPA, RPA5	1.07	2.14	1.90	2.43	2.31	2.44
DSX2 with MA	1.20	2.40	2.12	3.00	2.92	3.00



LEGEND

Isofootcandle plots for the DSX2 LED P8 40K 70CRI. Distances are in units of mounting height (40').



Lumen Ambient Temperature (LAT) Multipliers

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

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

Projected LED Lumen Maintenance

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

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

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.95
50,000	0.90
100,000	0.82

FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use published values for each package based on input watts and lumens by optic type.

Electrical Load

							Curre	nt (A)		
	Performance Package	LED Count	Drive Current (mA)	Wattage	120V	208V	240V	277V	347V	480V
	P1	80	530	135	1.12	0.65	0.56	0.49	0.39	0.28
	P2	80	700	181	1.49	0.86	0.75	0.65	0.52	0.37
	P3	80	850	222	1.83	1.05	0.91	0.79	0.63	0.46
Forward Optics	P4	80	1050	277	2.27	1.31	1.14	0.98	0.79	0.57
(Non-Rotated)			1250	333	2.72	1.57	1.36	1.18	0.94	0.68
	P6	100	1050	345	2.85	1.64	1.42	1.23	0.98	0.71
	P7	100	1250	414	3.41	1.97	1.70	1.48	1.18	0.85
	P8	100	1400	466	3.85	2.22	1.93	1.67	1.33	0.96
	P10	90	530	152	1.27	0.73	0.63	0.55	0.44	0.32
Rotated Optics	P11	90	700	203	1.69	0.97	0.84	0.73	0.58	0.42
(Requires L90	P12	90	850	249	2.06	1.19	1.03	0.89	0.71	0.52
or R90)	P13 90 1200		1200	358	2.95	1.70	1.47	1.28	1.02	0.74
	P14	90	1400	421	3.46	2.00	1.73	1.50	1.20	0.87

LED Color Temperature / Color Rendering Multipliers

	70 CRI		80	OCRI	90CRI				
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability			
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)			
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)			
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)			
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)			
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)			

 $Note: Some \ LED \ types \ are \ available \ as \ per \ special \ request. \ Contact \ Technical \ Support \ for \ more \ information.$

Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Phototcell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V



Lumen Output

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

Forward Op	tics																														
Performance			Drive				30K					40K			50K																
Package	System Watts	LED Count	Current (mA)	Distribution Type			00K, 70					00K, 70				_	00K, 70	_													
				T1S	19,946	B 2	0	G 3	148	Lumens 20,787	<u>B</u>	0	G 3	155	21,192	B 2	0	3	LPW 158												
				T2M	18,477	3	0	4	137	19,256	3	0	4	143	19,632	3	0	4	146												
				T3M	18,691	3	0	5	139	19,480	3	0	5	145	19,859	3	0	5	148												
				T3LG	16,696	2	0	2	124	17,400	2	0	2	129	17,740	2	0	2	132												
				T4M	18,970	3	0	5	141	19,770	3	0	5	147	20,155	3	0	5	150												
				T4LG TFTM	17,253	2	0	2	128	17,981	3	0	5	134	18,331	2	0	5	136												
P1	135W	80	530	T5M	19,101 19,517	3 5	0	5 3	142 145	19,907 20,341	5	0	3	148 151	20,295	5	0	3	151 154												
	13511	00	330	T5W	19,834	5	0	3	147	20,670	5	0	3	154	21,073	5	0	3	157												
				T5LG	19,574	4	0	2	146	20,400	4	0	2	152	20,797	4	0	2	155												
				BLC3	13,595	0	0	3	101	14,169	0	0	3	105	14,445	0	0	3	107												
				BLC4	14,042	0	0	4	104	14,634	0	0	4	109	14,919	0	0	4	111												
				RCCO	13,718	1	0	3	102	14,297	1	0	3	106	14,576	1	0	3	108												
				LCCO AFR	13,718	1	0	3	102	14,297	1	0	3	106	14,576	1	0	3	108												
				T1S	19,946 25,520	3	0	3	148 142	20,787	3	0	3	155 148	21,192 27,116	3	0	3	158 151												
				T2M	23,641	3	0	5	132	24,638	3	0	5	137	25,118	3	0	5	140												
				T3M	23,915	3	0	5	133	24,924	3	0	5	139	25,410	3	0	5	142												
				T3LG	21,363	3	0	3	119	22,264	3	0	3	124	22,698	3	0	3	127												
				T4M	24,272	3	0	5	135	25,296	3	0	5	141	25,789	3	0	5	144												
				T4LG	22,075	3	0	3	123	23,006	3	0	3	128	23,455	3	0	3	131												
D 2	47014	00	700	TFTM	24,440	3	0	5	136	25,471	3	0	5	142	25,967	3	0	5	145												
P2	179W	80	700	T5M T5W	24,972 25,377	5	0	3 4	139 142	26,026 26,448	5	0	3	145 148	26,533 26,963	5	0	4	148 150												
				TSLG	25,045	4	0	2	140	26,101	4	0	2	146	26,610	4	0	2	148												
				BLC3	17,395	0	0	4	97	18,129	0	0	4	101	18,482	0	0	4	103												
				BLC4	17,966	0	0	4	100	18,724	0	0	5	104	19,089	0	0	5	107												
				RCCO	17,552	1	0	4	98	18,293	1	0	4	102	18,649	1	0	4	104												
				LCCO	17,552	1	0	4	98	18,293	1	0	4	102	18,649	1	0	4	104												
					AFR	25,520	3	0	3	142	26,597	3	0	3	148	27,116	3	0	3	151											
																T1S T2M	30,127 27,908	3	0	5	137 127	31,398	3	0	4 5	143 133	32,010	3	0	5	146 135
																									T3M	28,232	3	0	5	127	29,085 29,423
				T3LG	25,218	3	0	3	115	26,282	3	0	3	120	26,794	3	0	3	122												
				T4M	28,652	3	0	5	131	29,861	3	0	5	136	30,443	3	0	5	139												
				T4LG	26,059	3	0	3	119	27,159	3	0	3	124	27,688	3	0	3	126												
				TFTM	28,851	3	0	5	132	30,068	3	0	5	137	30,654	3	0	5	140												
P3	219W	80	850	T5M	29,479	5	0	4	134	30,723	5	0	4	140	31,322	5	0	4	143												
				T5W T5LG	29,957	5 4	0	4	137	31,221	5	0	2	142 140	31,830	5	0	2	145												
				BLC3	29,565 20,535	0	0	4	135 94	30,812 21,401	0	0	4	98	31,413 21,818	0	0	4	143 99												
				BLC4	21,209	0	0	5	97	22,104	0	0	5	101	22,534	0	0	5	103												
				RCCO	20,720	1	0	4	94	21,594	1	0	4	98	22,015	1	0	4	100												
				LCC0	20,720	1	0	4	94	21,594	1	0	4	98	22,015	1	0	4	100												
				AFR	30,127	3	0	4	137	31,398	3	0	4	143	32,010	3	0	4	146												
				T1S	35,879	3	0	4	132	37,392	3	0	4	137	38,121	3	0	4	140												
				T2M	33,236	3	0	5	122	34,638	3	0	5	127	35,313	3	0	5	130												
				T3M T3LG	33,622 30,033	3	0	5 4	123 110	35,040 31,300	3	0	5 4	129 115	35,723 31,910	3	0	5 4	131 117												
				T4M	34,123	3	0	5	125	35,562	3	0	5	130	36,255	3	0	5	133												
				T4LG	31,035	3	0	4	114	32,344	3	0	4	119	32,974	3	0	4	121												
				TFTM	34,359	3	0	5	126	35,808	3	0	5	131	36,506	3	0	5	134												
P4	273W	80	1050	T5M	35,108	5	0	4	129	36,589	5	0	4	134	37,302	5	0	4	137												
				T5W	35,677	5	0	4	131	37,182	5	0	5	136	37,907	5	0	5	139												
				TSLG	35,209	5	0	3	129	36,695	5	0	3	135	37,410	5	0	3	137												
				BLC3 BLC4	24,456	0	0	4	90	25,487	0	0	5	93	25,984	0	0	5	95 98												
				RCCO	25,258 24,676	1	0	5 4	93 91	26,324 25,717	1	0	4	97 94	26,837 26,218	1	0	4	96												
				LCCO	24,676	1	0	4	91	25,717	1	0	4	94	26,218	1	0	4	96												
				AFR	35,879	3	0	4	132	37,392	3	0	4	137	38,121	3	0	4	140												
					, ,,,,,,,					, ,,,,,,					,																



Lumen Output

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

Processor Proc	Forward Op	tics																																												
Part	Porformanco			Drivo																																										
TIS		System Watts	LED Count		Distribution Type									_			_	_	_																											
Table 18.0					T1S																																									
Time																1																														
PS 317W 100 1729 1740 30,185 3 0 5 120 120, 120, 120 3 0 5 125 126, 143, 18 3 0 5 127																																														
PS 3127W 20						34,445		0		105			0		110	36,598		0																												
P5 337W 80 1239																																														
P5 327W 88 1250																																														
PS	D5	327W	80	1250																																										
Fig.	13	32711	00	1250																																										
BILC4 28,999 0 0 5 89 30,101 0 0 5 92 30,779 0 0 5 94														_					_																											
PRODE 28,301 2 0 5 87 29,495 2 0 5 90 30,070 2 0 5 92					BLC3	28,048	0	0	5	86	29,231	0	0		90	29,801	0	0	5	91																										
Property																																														
P6 342W																																														
P6 342W																																														
Property																																														
P6 342W 100 1080 1080 1080 1080 1080 1080 1080																																														
P6 342W 100 1050 1FIFM 44,021 3 0 4 116 41,438 3 0 4 124 42,247 3 0 5 129 46,578 4 0 5 134 46,772 4 0 5 134 46,772 4 0 5 134 46,772 4 0 5 134 46,772 4 0 5 134 46,772 4 0 5 144 46,783 5 0 5 137 44,792 5 0 5 134 45,565 5 0 5 133 44 153 140 0 5 92 24,247 4 9 5 96 33,291 0 0 5 95 33,2249 2 0 5 96 33,291 0 0 5 98 34,249 2 0 5 99 24,3244 0 5 10								0			40,102		0			40,884		0		120																										
P6 342W 100 105														_																																
P6																																														
TSW	D.c	24214	100	1050											1																															
T516	Po	342W	100	1050																																										
BIG3																																														
RCO 31,615 2 0 5 93 32,949 2 0 5 96 33,591 2 0 5 98																																														
					BLC4	32,361	0	0	5	95	33,726	0	0	5	99	34,384	0	0	5	101																										
## AFR 45,968 3 0 4 135 47,907 3 0 5 140 48,841 3 0 5 143						31,615		0				2	0		1	33,591		0		98																										
T1S \$2,692 3 0 5 129 54,915 3 0 5 134 55,986 3 0 5 127																																														
TZM																																														
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P7 409W 100 1250 175M 50,160 4 108 45,968 3 0 0 4 112 46,864 3 0 5 115 130 1416 45,579 3 0 4 111 47,501 3 0 4 116 48,427 3 0 0 5 130 130 14 116 48,277 3 0 0 4 116 48,277 3 0 0 4 116 48,277 3 0 0 4 116 48,277 3 0 0 4 116 48,27 3 0 0 4 118 18 1813 1316 48,27 3 0 0 4 118 18 1813 151 50 15 12 12 12 12 12 12 12 12 12 12 12 12 12																																														
P7 409W 100 1250 1250 1250 1250 126 45,579 3 0 4 111 47,501 3 0 4 116 48,477 3 0 4 1118 118 118 15160 45,579 3 0 4 111 47,501 3 0 4 116 48,477 3 0 0 4 1118 118 118 118 118 118 118 118 118														_					_																											
P7 409W 100 1250					T4M	50,114	4	0	5	122	52,228	4	0	5	128	53,246	4	0	5	130																										
P7 409W 100 1250 15M 51,560 5 0 5 126 53,735 5 0 5 131 54,783 5 0 5 134 15W 52,396 5 0 5 138 15K0 55,00 5 138 15K0 55,00 5 136 15K0 55,00 5 137 55K0 55,396 5 0 5 128 54,607 5 0 5 0 5 133 55,671 5 0 5 0 5 136 15K0 55,00 5 137 64 130 8LC3 35,916 1 0 5 88 37,431 1 0 5 91 38,660 0 0 5 91 38,161 1 0 5 94 39,413 0 0 5 96 RCCC0 36,240 2 0 5 89 37,769 2 0 5 92 38,505 2 0 5 94 4 140 160 17SS 47,662 3 0 5 129 49,915 3 0 5 92 38,505 2 0 5 94 4 140 15S,688 4 0 5 130 130 15K6 48,267 3 0 5 117 56,314 4 0 5 117 56,314 4 0 5 117 56,314 4 0 5 112 57,412 4 0 5 113 15K6 48,267 3 0 5 114 15K6 48,267 3 0 5 117 56,314 4 0 5 117 56,314 4 0 5 117 56,314 4 0 5 118 55,299 4 3 0 5 118 15K6 48,267 3 0 5 119 57,154 4 0 5 112 52,994 3 0 5 115 15K6 56,23 5 0 5 122 58,803 5 0 5 112 59,949 5 0 5 130 15K6 15K6 15K6 15K6 15K6 15K6 15K6 15K6							3	0					0			48,427	3	0	_																											
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P8 462W 100 1400 1400 1500 1400 1500 1500 1500					RCCO	36,240	2	0	5	89	37,769	2	0	5	92	38,505	2	0	5	94																										
P8 462W 100 1400 15 175													0																																	
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P8 462W 100 1400 1400 150,304 4 0 5 117 56,314 4 0 5 122 57,412 4 0 5 124 1316 48,267 3 0 5 104 50,304 3 0 5 109 51,284 4 0 5 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1															1																															
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BLC3 39,303 1 0 5 85 40,962 1 0 5 89 41,760 1 0 5 90 BLC4 40,593 0 0 5 88 42,306 0 0 5 91 43,130 0 0 5 93 RCC0 39,658 2 0 5 86 41,331 2 0 5 89 42,137 2 0 5 91																																														
BLC4 40,593 0 0 5 88 42,306 0 0 5 91 43,130 0 0 5 93 RCC0 39,658 2 0 5 86 41,331 2 0 5 89 42,137 2 0 5 91																																														
RCCO 39,658 2 0 5 86 41,331 2 0 5 89 42,137 2 0 5 91																																														
					LCCO	39,658	2	0	5	86	41,331	2	0	5	89	42,137	2	0	5	91																										
AFR 57,662 3 0 5 125 60,094 4 0 5 130 61,266 4 0 5 132																																														



Lumen Output

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

Rotated Optics																			
							30K					40K					50K		
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type		(300	OK, 70	CRI)			(40	OOK, 70	CRI)			(50	00K, 70	CRI)	
Tuckage			carrent (III/I)		Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW
				T1S	22,798	4	0	4	150	23,760	4	0	4	156	24,223	4	0	4	159
				T2M	21,119	5	0	5	139	22,010	5	0	5	145	22,439	5	0	5	148
				T3M	21,361	5	0	5	141	22,262	5	0	5	147	22,696	5	0	5	149
				T3LG	19,084	4	0	4	126	19,889	4	0	4	131	20,277	4	0	4	133
				T4M	21,679	5	0	5	143	22,594	5	0	5	149	23,034	5	0	5	152
				T4LG	19,717	4	0	4	130	20,549	4	0	4	135	20,950	4	0	4	138
D10	153W	00	520	TFTM T5M	21,833	5	0	5	144	22,754	5	0	5	150	23,197	5	0	5	153 156
P10	152W	90	530	T5W	22,305 22,667	5	0	3	147 149	23,246	5	0	4	153 155	23,699	5	0	4	158
				T5LG	22,007	4	0	2	149	23,623 23,314	4	0	2	153	24,084 23,768	4	0	2	156
				BLC3	15,539	4	0	4	102	16,194	4	0	4	107	16,510	4	0	4	109
				BLC4	16,048	4	0	4	102	16,725	4	0	4	110	17,051	4	0	4	112
				RCCO	15,679	1	0	3	103	16,340	1	0	3	108	16,659	1	0	3	110
				LCCO	15,679	1	0	3	103	16,340	1	0	3	108	16,659	1	0	3	110
				AFR	22,798	4	0	4	150	23,760	4	0	4	156	24,223	4	0	4	159
				T1S	29,222	4	0	4	144	30,455	4	0	4	150	31,048	4	0	4	153
				T2M	27,070	5	0	5	134	28,212	5	0	5	139	28,762	5	0	5	142
				T3M	27,380	5	0	5	135	28,535	5	0	5	141	29,091	5	0	5	144
				T3LG	24,462	4	0	4	121	25,493	4	0	4	126	25,990	4	0	4	128
				T4M	27,788	5	0	5	137	28,960	5	0	5	143	29,525	5	0	5	146
				T4LG	25,273	4	0	4	125	26,339	4	0	4	130	26,853	4	0	4	133
		90		TFTM	27,985	5	0	5	138	29,165	5	0	5	144	29,734	5	0	5	147
P11	203W		700	T5M	28,591	5	0	4	141	29,797	5	0	4	147	30,377	5	0	4	150
				T5W	29,054	5	0	4	143	30,280	5	0	4	149	30,870	5	0	4	152
				T5LG	28,673	4	0	2	142	29,883	4	0	2	148	30,465	5	0	2	150
				BLC3	19,917	4	0	4	98	20,757	4	0	4	102	21,162	4	0	4	104
				BLC4	20,570	5	0	5	102	21,437	5	0	5	106	21,855	5	0	5	108
				RCCO	20,097	1	0	4	99	20,945	1	0	4	103	21,353	1	0	4	105
				LCCO	20,097	1	0	4	99	20,945	1	0	4	103	21,353	1	0	4	105
				AFR	29,222	4	0	4	144	30,455	4	0	4	150	31,048	4	0	4	153
				T1S	34,526	5	0	5	139	35,983	5	0	5	145	36,684	5	0	5	148
				T2M T3M	31,984	5	0	5	129 131	33,333	5	0	5	135	33,983	5	0	5	137 139
				T3LG	32,350 28,902	4	0	4	117	33,715 30,121	4	0	4	136 122	34,372 30,708	4	0	4	139
				T4M	32,832	5	0	5	133	34,217	5	0	5	138	34,884	5	0	5	141
				T4LG	29,861	4	0	4	121	31,120	4	0	4	126	31,727	5	0	4	128
				TFTM	33,064	5	0	5	134	34,459	5	0	5	139	35,131	5	0	5	142
P12	248W	90	850	T5M	33,780	5	0	4	136	35,205	5	0	4	142	35,891	5	0	4	145
		.0	550	T5W	34,327	5	0	4	139	35,776	5	0	4	145	36,473	5	0	4	147
				T5LG	33,878	5	0	3	137	35,307	5	0	3	143	35,995	5	0	3	145
				BLC3	23,532	5	0	5	95	24,525	5	0	5	99	25,003	5	0	5	101
				BLC4	24,303	5	0	5	98	25,328	5	0	5	102	25,822	5	0	5	104
				RCCO	23,745	1	0	4	96	24,747	1	0	4	100	25,229	1	0	4	102
				LCCO	23,745	1	0	4	96	24,747	1	0	4	100	25,229	1	0	4	102
				AFR	34,526	5	0	5	139	35,983	5	0	5	145	36,684	5	0	5	148



Performance Data

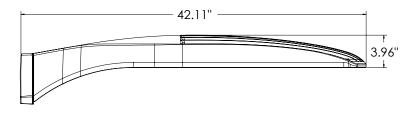
Lumen Output

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

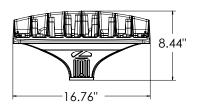
Rotated Op																			
Performance			Drive Current (mA)				30K					40K					50K		
Package	System Watts	LED Count		Distribution Type	(3000K, 70 CRI)				_	00K, 70	_			_	00K, 70				
					Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LP
				T1S	45,748	5	0	5	129	47,678	5	0	5	135	48,608	5	0	5	13
				T2M	42,380	5	0	5	120	44,168	5	0	5	125	45,029	5	0	5	12
				T3M	42,865	5	0	5	121	44,673	5	0	5	126	45,544	5	0	5	12
				T3LG	38,296	5	0	5	108	39,911	5	0	5	113	40,689	5	0	5	11
				T4M	43,503	5	0	5	123	45,339	5	0	5	128	46,222	5	0	5	13
				T4LG	39,566	5	0	5	112	41,235	5	0	5	117	42,039	5	0	5	11
				TFTM	43,811	5	0	5	124	45,659	5	0	5	129	46,549	5	0	5	13
P13	354W	90	1200	T5M	44,760	5	0	5	126	46,648	5	0	5	132	47,557	5	0	5	13
				T5W	45,485	5	0	5	129	47,404	5	0	5	134	48,328	5	0	5	13
				T5LG	44,889	5	0	3	127	46,783	5	0	3	132	47,695	5	0	3	1.
				BLC3	31,181	5	0	5	88	32,496	5	0	5	92	33,130	5	0	5	9
				BLC4	32,202	5	0	5	91	33,561	5	0	5	95	34,215	5	0	5	9
				RCCO	31,463	2	0	5	89	32,790	2	0	5	93	33,429	2	0	5	9
				LCCO	31,463	2	0	5	89	32,790	2	0	5	93	33,429	2	0	5	9
				AFR	45,748	5	0	5	129	47,678	5	0	5	135	48,608	5	0	5	13
				T1S	51,272	5	0	5	123	53,435	5	0	5	129	54,476	5	0	5	13
				T2M	47,497	5	0	5	114	49,500	5	0	5	119	50,465	5	0	5	12
				T3M	48,040	5	0	5	116	50,067	5	0	5	121	51,043	5	0	5	12
				T3LG	42,919	5	0	5	103	44,730	5	0	5	108	45,602	5	0	5	11
				T4M	48,756	5	0	5	117	50,813	5	0	5	122	51,803	5	0	5	12
				T4LG	44,343	5	0	5	107	46,214	5	0	5	111	47,115	5	0	5	11
				TFTM	49,101	5	0	5	118	51,172	5	0	5	123	52,169	5	0	5	12
P14	415W	90	1400	T5M	50,164	5	0	5	121	52,280	5	0	5	126	53,299	5	0	5	1.
				T5W	50,977	5	0	5	123	53,127	5	0	5	128	54,163	5	0	5	1.
				T5LG	50,309	5	0	4	121	52,432	5	0	4	126	53,453	5	0	4	1.
				BLC3	34,945	5	0	5	84	36,420	5	0	5	88	37,130	5	0	5	8
				BLC4	36,090	5	0	5	87	37,613	5	0	5	91	38,346	5	0	5	9
				RCCO	35,261	2	0	5	85	36,749	2	0	5	88	37,465	2	0	5	9
				LCC0	35,261	2	0	5	85	36,749	2	0	5	88	37,465	2	0	5	9
				AFR	51,272	5	0	5	123	53,435	5	0	5	129	54,476	5	0	5	1

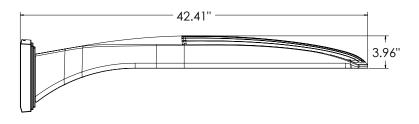


Dimensions

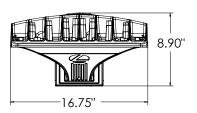


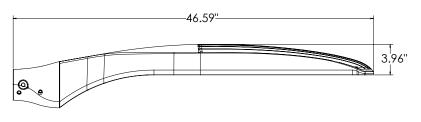
DSX2 with RPA, RPA5, SPA5, SPA8N mount Weight: 48 lbs



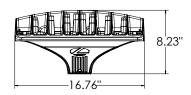


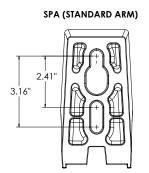
DSX2 with WBA mount Weight: 50 lbs

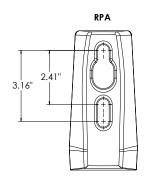


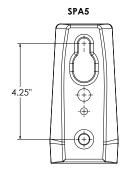


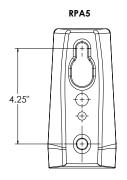
DSX2 with MA mount Weight: 50 lbs

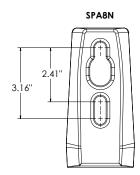










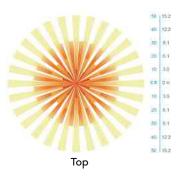


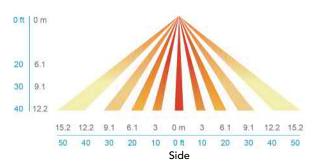
nLight Control - Sensor Coverage and Settings

nLight Sensor Coverage Pattern

NLTAIR2 PIRHN







FEATURES & SPECIFICATIONS

INTENDED USE

The sleek design of the D-Series Area Size 2 reflects the embedded high performance LED technology. It is ideal for applications like car dealerships and large parking lots adjacent to malls, transit stations, grocery stores, home centers, and other big-box retailers.

CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 1.5G. Low EPA (1.06 ft²) for optimized pole wind loading.

FINISH

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

Coastal Construction (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

OPTICS

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K, or 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 2 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L82/100,000 hrs at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily-serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

INSTALLATION

Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

STANDARD CONTROLS

The DSX2 LED area luminaire has a number of control options. DSX Size 2, comes standard with 0-10V dimming drivers. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensor with onboard photocells feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

nLIGHT AIR CONTROLS

The DSX2 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 rated. Rated for -40°C minimum ambient.

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

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

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

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





FEATURES & SPECIFICATIONS

INTENDED USE — Typical applications include corridors, lobbies, conference rooms and private offices.

CONSTRUCTION — Galvanized steel mounting/plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches. Reflectors are retained by torsion springs.

Vertically adjustable mounting brackets with commercial bar hangers provide 3-3/4" total adjustment.

Two combination $\frac{1}{2}$ " -3/4" and four $\frac{1}{2}$ " knockouts for straight-through conduit runs. Capacity: 8 (4 in, 4 out). No. 12 AWG conductors, rated for 90°C.

Accommodates 12"-24" joist spacing.

Passive cooling thermal management for 25°C standard; high ambient (40°C) option available. Light engine and drivers are accessible from above or below ceiling.

Max ceiling thickness 1-1/2".

OPTICS — LEDs are binned to a 3-step MacAdam Ellipse; 80 CRI minimum. 90 CRI optional.

LED light source concealed with diffusing optical lens.

General illumination lighting with 1.0 S/MH and 55° cutoff to source and source image.

Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and black painted reflectors.

A+CAPABLE LUMINAIRE — This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning when used with Acuity Brands controls products. All configurations of this luminaire are calibrated and tested to meet the Acuity Brands' specifications for chromatic consistency – including color rendering, color fidelity and color temperature tolerance around standard CIE chromaticity coordinates. To learn more about A+ standards, specifications, and $testing\ visit\ \underline{www.acuitybrands.com/aplus}.$

UGR— <u>UGR</u> is zero for fixtures aimed at nadir with a cut-offequal to or less than 60 deg, per CIE 117-1996 Discomfort Glare in Interior Lighting.

ELECTRICAL — Multi-volt (120-277V, 50/60Hz) 0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level available.

0-10V dimming fixture requires two (2) additional low-voltage wires to be pulled.

LUMEN MAINTENANCE — 70% lumen maintenance at 60,000 hours. L70/60,000 hours

LISTINGS — Certified to US and Canadian safety standards. Wet location standard (covered ceiling). IP55 rated. ENERGY STAR® certified product. Drivers are RoHS compliant

BUY AMERICAN ACT — Product with the BAA option is assembled in the USA and meets the Buy America(n) $government procurement requirements under FAR, DFARS and DOT regulations. Please refer to \underline{www.acuitybrands.}\\$ com/buy-american for additional information.

WARRANTY — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

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

PERFORMANCE DATA

LDN6 3500K	AR LSS 80CRI		
Nominal Lumens	Lumens	Wattage	Lm/W
500	527.9	5.8	90.5
750	758.1	8.9	85.1
1000	950.1	10.4	91.0
1500	1514	17.5	86.4
2000	2006	22.5	89.1
2500	2504	28.3	88.6
3000	3021	34.8	86.9
4000	4008	44.3	90.6
5000	4975	57.7	86.3

- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 80 typical.

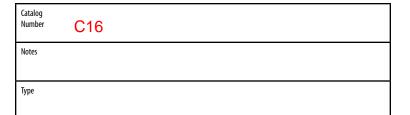












LDN6 STATIC WHITE

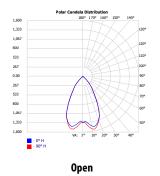


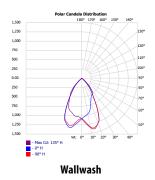




Open Trim Wallwash Trim

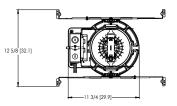
DISTRIBUTIONS

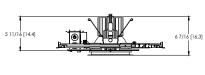




DIMENSIONS

LDN6 500-3000 Lumens





Overlap Trim: Ø 7-1/2" [19.1]

See page 4 for other fixture dimensions



Example: LDN6 35/15 LO6 AR LSS MVOLT EZ10

ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

LDN6															
Series	Color temperature		e Lumens‡		Trim Style Trim Color			Trim Finish		Flange Color ‡		Voltage			
LDN6 6" round	27/ 30/ 35/ 40/ 50/	2700K 3000K 3500K 4000K 5000K		05 07 10 15 20	750 lumens 1000 lumens 1500 lumens 2000 lumens	LU6 LW6	Downlight Wallwash	AR WR ‡ BR ‡ TCPC ‡ TRALTBD ‡	Clear White Black Custom painted trim RAL painted	LSS LD LS	Semi-specular Matte diffuse Specular	TRW TRBL FCPC FRALTBD	White painted flange Black painted flange Custom painted flange only RAL painted flange only	MVOLT 120 277 347 ‡	Multi-volt 120V 277V 347V
				25 30 40 50	2500 lumens 3000 lumens 4000 lumens 5000 lumens			THALIDD +	trim						

Driver	Emergency ‡	Control Input ‡	Options
GZ10 0-10V driver dims to 10% GZ1 0-10V driver dims to 1% D10 Minimum dimming 10% driver for use with JOT D1 Minimum dimming 1% driver for use with JOT EZ1 0-10V eldoLED driver with smooth and flicker- free deep dimming performance down to 1% EDAB eldoLED DALI SOLDRIVE dim to dark	(blank) No Emergency Needed EL Battery pack (10W constant power), non-T20 compliant, integral test switch ELR Battery pack (10W constant power), non-T20 compliant, remote test switch ELSD Self-diagnostic battery pack (10W constant power), non-T20 compliant, integral test switch ELRSD Self-diagnostic battery pack (10W constant power), non-T20 compliant, remote test switch E10WCP Battery pack (10W constant power), T20 compliant, integral test switch E10WCPR Battery pack (10W constant power), T20 compliant, remote test switch E10WRSTAR Emergency battery pack, 10W with remote test switch and lota STAR technology	(blank) No Control Input Needed JOT Wireless room control with "Just One Touch" pairing NPP16D nLight® network power/relay pack with 0-10V dim- ming for non-eldoLED drivers (G210, G21). NPP16DER nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (G210, G21). ER controls fixtures on emergency circuit. NPS80EZ nLight® dimming pack controls 0-10V eldoLED drivers (E21). NPS80EZER nLight® dimming pack controls 0-10V eldoLED driv- ers (E21). ER controls fixtures on emergency circuit. N80 nLight™ Lumen Compensation NLTAIR2 nLight® Air enabled NLTAIREM2 nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit, not available with battery pack options NLTAIREM2 nLight® AIR Dimming Pack Wireless Controls. Lught® AIR Dimming Pack Wireless Controls. Lught® AIR Dimming Pack Wireless Controls. NLTAIREM2 nLight® AIR Dimming Pack Wireless Controls. Available with battery pack options.	HAO # High ambient option (40°C) CP # REL_ REL_ RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature. Available only in RRLA, RRLB, RRLAF, and RRLC12S. BAA Buy America(n) Act Compliant 90CRI High CRI (90+) SF # Single fuse

	# Option Value Ordering Restrictions								
Option value	Restriction								
Lumens	Overall height varies based on lumen package; refer to dimensional chart.								
WR, BR	Not available with finishes.								
347	Not available with emergency options.								
SF	Must specify voltage 120V or 277V.								
TRW, TRBL	Available with clear (AR) reflector only.								
EL, ELR, ELSD, ELRSD, E10WCP, E10WCPR	12.5" of plenum depth or top access required for battery pack maintenance.								
NPP16D, NPP16DER, NPS80EZ, NPS80EZER	Specify voltage. ER for use with generator supply EM power. Will require an emergency hot feed and normal hot feed. See UL 924 Sequence of Operation table.								
N80	Fixture begins at 80% light level. Must be specified with NPS80EZ or NPS80EZ ER. Only available with EZ1 drivers.								
NLTAIR, NLTAIR2, NLTAIRER2, NLTAIREM2	Not available with CP, NPS80EZ, NPS80EZER, NPP16D, NPP16DER or N80 options. not recommended for metal ceiling installations.								
HAO	Fixture height is 6.5" for all lumen packages with HAO.								
СР	Must specify voltage for 3000lm and above. 5000lm with marked spacing 24 L x 24 W x 14 H. Not available with emergency battery pack option.								
JOT	Must specify D10 or D1 driver. Not available with nLight options. Not available with CP. Not recommended for metal ceiling installation. Not for use with emergency backup power systems other than battery packs.								
Reloc® Options	Refer to RRL specification sheet on acuitybrands.com for further details.								
RRLAE	Commercial fixtures should disconnect the TSPL before unplugging the RRL so it does not go into discharge mode.								
RRLC12S	RRLC12S option is to be used with the OnePass OCU, OCS, OD, OFC and OD for 0-24V integrated single-circuit or 0-10V low voltage controls applications. Not available with integral dimming sensors.								
TRALTBD, FRALTBD	RALTBD for pricing only. Replace with applicable RAL number and finish when ready to order. See the RAL BROCHURE for available color options.								
TCPC, FCPC	CPC options for pricing only. Custom color chip needs to be sent in to your Customer Resolution specialist before order can be processed. Click HERE for more details								
E10WRSTAR	Not available with wet location, EC1, EC6, QDS, CP, 347V, NPS80EZ ER, NLTAIRER2, NLTAIREM2, ALO3 & ALO4 w/DAL1, OR 2000-4500 lumens w/JOT. Top access installation or 17.5" plenum clearance required for roomside installation. Not available with integral test switch								

Accessories: Order as separate catalog number.									
EAC ISSM 375	Compact interruptible emergency AC power system	SCA6	Sloped Ceiling Adapter. Degree of slope must be specified (5D, 10D, 15D, 20D,						
EAC ISSM 125	Compact interruptible emergency AC power system		25D, 30D). Ex: SCA6 10D						
GRA68 JZ	Oversized trim ring with 8" outside diameter								



Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. *See ordering tree for details

(Maximum order quantity for design select lead times is 112.)



LDN6

Emergency Battery Pack Options - Field Installable

Battery Model Number	Wattage	Runtime (Minutes)	Lumen Output* @ 120 Lumens/Watt	Other
ILB CP07 2H A	7W	120	840	Storm Shelter / 2 Hour Runtime
ILB CP10 A	10W	90	1200	
ILBLP CP10 HE SD A+	10W	90	1200	Title 20, Self Diagnostic
ILBLP CP15 HE SD A+	15W	90	1800	Title 20, Self Diagnostic
ILB CP20 HE A	20W	90	2400	Title 20
ILB CP20 HE SD A	20W	90	2400	Title 20, Self Diagnostic
ILBHI CP10 HE SD A+	10W	90	1200	347-480V AC Input, Title 20, Self Diagnostic
ILBHI CP15 HE SD A+	15W	90	1800	347-480V AC Input, Title 20, Self Diagnostic

All the above are UL Listed products that are certified for field install external/remote to the fixture.



 $^{{\}bf *Minimum\ delivered\ lumen\ output\ to\ assist\ in\ product\ selection\ for\ increased\ fixture\ mounting\ height.}$

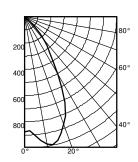
The CP10 delivered emergency illumination outperforms legacy 1400 lumen fluorescent emergency ballast.

Please contact us at techsupport@iotaengineering.com for any Emergency Battery related questions.

PHOTOMETRY

Distribution Curve Distribution Data Output Data Illuminance Data at 30" Above Floor for a Single Luminaire

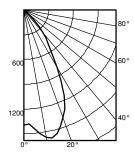
LDN6 35/10 L06AR, input watts: 10.44, delivered lumens: 987.10, LM/W = 94.54, spacing criterion at 0 = 1.02, test no. ISF 30716P262.



	Ave	Lumens	Zone Lumens % Lamp
0	876		0°-30° 680.7 69.0
5	905	89	0°-40° 895.0 90.7
15	971	269	0°-60° 986.0 99.9
25	720	322	0°-90° 987.0 100.0
35	330	214	90°-120° 0.0 0.0
45	110	87	90°-130° 0.0 0.0
55	1	4	90°-150° 0.0 0.0
35	1	1	90°-180° 0.0 0.0
75	0	0	0°-180° 987.0 *100.0
35	0	0	*Efficiency

		50% beam -		10% be		
		54.5°		82.2	0	
	Inital FC					
Mounting	Center					
_Height	Beam	Diameter	FC	Diameter	FC	
8.0	29.0	5.7	14.5	9.6	2.9	
10.0	15.6	7.7	7.8	13.1	1.6	
12.0	9.7	9.8	4.9	16.6	1.0	
14.0	6.6	11.8	3.3	20.1	0.7	
16.0	4.8	13.9	2.4	23.6	0.5	

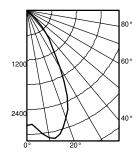
LDN6 35/15 L06AR, input watts: 17.52, delivered lumens: 1572.9, LM/W = 89.77, spacing criterion at 0 = 1.02, test no. ISF 30716P265.



	Ave	Lumens	Zone	Lumens	% Lamp
0	1396		0°-30°	1084.6	69.0
5	1442	142	0°-40°	1426.2	90.7
15	1547	429	0°-60°	1571.3	99.9
25	1147	514	0°-90°	1572.9	100.0
35	526	342	90° - 120°	0.0	0.0
45	176	139	90° - 130°	0.0	0.0
55	2	6	90° - 150°	0.0	0.0
65	1	1	90° - 180°	0.0	0.0
75	1	1	0°-180°	1572.9	*100.0
85	0	0	*	Efficiency	
90	0				

		50% be	am -	10% beam -		
		54.5	°	82.2°		
	Inital FC					
Mounting	Center					
Height	Beam	Diameter	FC	Diameter	FC	
8.0	46.2	5.7	23.1	9.6	4.6	
10.0	24.8	7.7	12.4	13.1	2.5	
12.0	15.5	9.8	7.7	16.6	1.5	
14.0	10.6	11.8	5.3	20.1	1.1	
16.0	7.7	13.9	3.8	23.6	8.0	

LDN6 35/30 LO6AR, input watts: 34.75, delivered lumens: 3138.5, LM/W = 90.31, spacing criterion at 0 = 1.02, test no. ISF 30716P274.



	Ave	Lumens	Zone	Lumone	% Lamp			
	AVE	Lumens	ZUITE	Lumens	/6 Lamp			
0	2786		0°-30°	2164.3	69.0			
5	2877	284	0°-40°	2845.9	90.7			
15	3087	855	0°-60°	3135.3	99.9			
25	2289	1025	0°-90°	3138.5	100.0			
35	1049	682	90° - 120°	0.0	0.0			
45	350	277	90° - 130°	0.0	0.0			
55	5	12	90° - 150°	0.0	0.0			
65	2	2	90° - 180°	0.0	0.0			
75	1	1	0°-180°	3138.5	*100.0			
85	0	0	*Efficiency					
90	0							

Inital FC				
Center				
Beam	Diameter	FC	Diameter	FC
92.1	5.7	46.1	9.6	9.2
49.5	7.7	24.8	13.1	5.0
30.9	9.8	15.4	16.6	3.1
21.1	11.8	10.5	20.1	2.1
15.3	13.9	7.6	23.6	1.5
	Center Beam 92.1 49.5 30.9 21.1	54.5	Center Beam Diameter Diameter FC 92.1 5.7 46.1 49.5 7.7 24.8 30.9 9.8 15.4 21.1 11.8 10.5	S4.5 S2.2

HOW TO ESTIMATE DELIVERED LUMENS IN EMERGENCY MODE

Use the formula below to estimate the delivered lumens in emergency mode

Delivered Lumens = 1.25 x P x LPW

P = Ouput power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

The LPW rating is also available at **Designlight Consortium**.

LUMEN OUTPUT MULTIPLIERS - FINISH				
Clear (AR) White (WR) Black (BR)				
Specular (LS)	1.0	N/A	N/A	
Semi-specular (LSS)	0.950	N/A	N/A	
Matte diffuse (LD)	0.85	N/A	N/A	
Painted	N/A	0.87	0.73	

LUMEN OUTPUT MULTIPLIERS - CRI		
80	1.0	
90	0.874	

Notes

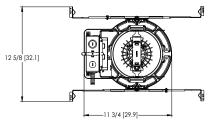
- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 80 typical.

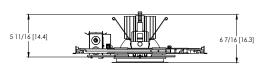
LUMEN OUTPUT MULTIPLIERS - CCT					
	2700K	3000K	3500K	4000K	5000K
80CRI	0.950	0.966	1.000	1.025	1.101



* All dimensions are inches (centimeters) unless otherwise noted.

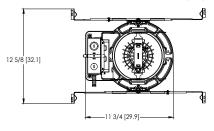
LDN6 500-3000 Lumens

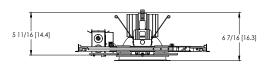




Aperture: Ø 6-1/4" [15.9] Ceiling Cutout: Ø 7-1/8" [18.1] Self-flanged Overlap Trim: Ø 7-1/2" [19.1]

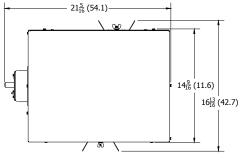
LDN6 4000-5000 Lumens

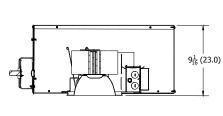




Marked Spacing: 24" x 24" x 10" Aperture: Ø 6-1/4" [15.9] Ceiling Cutout: Ø 7-1/8" [18.1] Self-flanged Overlap Trim: Ø 7-1/2" [19.1]

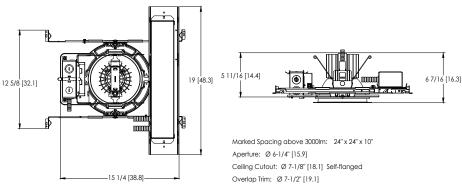
LDN6 CP





Aperture: 6-1/4 (15.9) Ceiling Opening: 7-1/8 (18.1) Overlap Trim: 7-1/2 (19.1)

LDN6 EL



ADDITIONAL DATA



The Sensor Switch JOT enabled solution offers a wireless, app-free approach to single room lighting control. JOT enabled products use Bluetooth® Low Energy (BLE) technology to enable wireless dimming and switching.

Diagram







LDN6 Series



Sensor Switch WSXA JOT

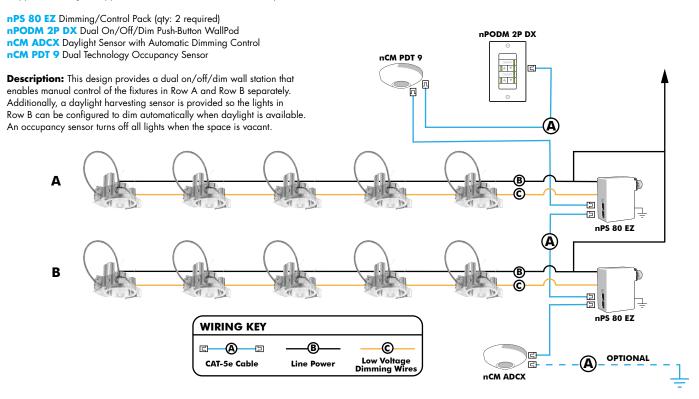
- 1. Power: Install JOT enabled fixtures and controls as
- 2. Pair: Insert the pairing tool into the pinhole on the wall switch; press and hold any button for 6 seconds.
- **3. Play:** Once paired, each fixture will individually dim down to 10% brightness. All products will be fully functional.

COMPATIBLE 0-10V WALL-MOUNT DIMMERS			
MANUFACTURER	PART NO.	POWER BOOSTER AVAILABLE	
	Diva® DVTV		
Lutron®	Diva® DVSCTV		
Lution	Nova T® NTFTV		
	Nova® NFTV		
	AWSMT-7DW	CN100	
	AWSMG-7DW	PE300	
Leviton®	AMRMG-7DW		
	Leviton Centura Fluorescent Control System		
	IllumaTech® IP7 Series		
	ISD BC		
Synergy®	SLD LPCS	RDMFC	
	Digital Equinox (DEQ BC)		
Douglas Lighting Controls	WPC-5721		
	Tap Glide TG600FAM120 (120V)		
Entertainment Technology	Tap Glide Heatsink TGH1500FAM120 (120V)		
	Oasis 0A2000FAMU		
Honeywell	EL7315A1019	EL7305A1010	
noneywen	EL7315A1009	(optional)	
	Preset slide: PS-010-IV and PS-010-WH		
	Preset slide: PS-010-3W-IV and PS-010-3W-WH		
HUNT Dimming	Preset slide, controls FD-010: PS-IFC-010-IV and PS-IFC-010-WH-120/277V		
	Preset slide, controls FD-010: PS-IFC-010-3W-IV and PS-IFC-010-3W-WH-120/277V		
	Remote mounted unit: FD-010]	
Lehigh Electronic Products	Solitaire	PBX	
PDM Electrical Products	WPC-5721		
Starfield Controls	TR61 with DALI interface port	RT03 DALInet Router	
WattStopper®	LS-4 used with LCD-101 and LCD-103		

EXAMPLE

Group Fixture Control*

*Application diagram applies for fixtures with eldoLED drivers only.



Choose Wall Controls

nLight offers multiple styles of wall controls - each with varying features and user experience.



Push-Button Wallpod Traditional tactile buttons and LED user feedback



Graphic Wallpod
Full color touch screen
provides a sophisticated
look and feel

nLight [®] Wired Controls Accessories:			
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight for complete listing of nLight controls.			
WallPod Stations Model number Occupancy sensors Model Number			
On/Off	nPODM (Color)	Small motion 360°, ceiling (PIR/dual Tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPOD DX (Color)	Large motion 360°, ceiling (PIR/dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX (Color)	Wide View (PIR/dual tech)	nWV 16 / nWV PDT 16
Photocell controls Model Number Wall Switch w/ Raise/Lower (PIR/dual tech) nWSX LV DX / nWSX PDT LV DX			
Dimming	nCM ADCX	Cat-5 cables (plenum rated)	Model Number
10', CATS 10FT CATS 10FT J1			CATS 10FT J1
15, CATS 15FT CATS 15FT J1			

nLight® AIR Control Accessories:
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlightair.

Wall switches	Model number
On/Off single pole	rPODB [color]
On/Off two pole	rPODB 2P [color]
On/Off & raise/lower single pole	rPODB DX [color]
On/Off & raise/lower two pole	rPODB 2P DX [color]
On/Off & raise/lower single pole	rPODBZ DX WH1

Notes

Can only be ordered with the RES7Z zone control sensor version.

UL924 Sequence of Operation

The below information applies to all nLight AIR devices with an EM option.

- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CLAIRITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices. See specification sheets for control devices and luminaires for more information on options that support normal power sensing.

nLight AIR

nLight AIR is the ideal solution for retrofit or new construction spaces where adding communication is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each Lithonia LDN Luminaire. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.







Simple as 1,2,3

- 1. Install the nLight® AIR fixtures with embedded smart sensor
- 2. Install the wireless battery-powered wall switch
- 3. With CLAIRITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome



nLight AIR rPODB 2P DX





Strand Associates, Inc.®



910 West Wingra Drive Madison, WI 53715 (P) 608.251.4843 www.strand.com

May 3, 2023

Mr. Bryce Hembrook Town of Brookfield 645 North Janacek Road Brookfield, WI 53045

Re: Quest Interiors Development 21055 Crossroads Circle Town of Brookfield, Wisconsin (Town)

Dear Bryce,

Strand Associates, Inc.® (Strand) has finished its initial review of the construction drawings and Storm Water & Erosion Control Calculations for the Quest Interiors Development that were received from the Town on April 25, 2023, for conformance with the Town specifications and general engineering practices. Before construction may begin, the contractor shall submit all required permits for the development to the state, Wisconsin Department of Natural Resources (WDNR), Town, and any other relevant agencies. New drawings, stormwater management plan and calculations, and a letter describing the revisions should be returned to Strand after the following concerns have been addressed.

Stormwater Management Plan

- 1. The time of concentration calculation for the pre-development basin has a sheet flow length of 178 feet. Standard engineering protocol is to use a maximum sheet flow length of 100 feet.
- 2. The time of concentration values appear to be directly entered into the HydroCAD model for the proposed 1A (2S) and 1B (3S) drainage areas. These time of concentration calculations should be provided. Also, the time of concentration paths should be shown on the Post-Development Basin Area exhibit in Appendix B.
- 3. Within the WinSLAMM input information in Appendix F, the total area draining to the pond (2S) is listed as 2.147 acres. The HydroCAD model notes that the drainage area into the proposed pond is 2.54 acres. Clarification should be given and/or modeling updated accordingly.
- 4. A stormwater maintenance agreement should be established between the owner and Town.

Stormwater Conveyance

Storm sewer sizing and inlet capacity calculations should be provided for the proposed storm sewers.

Civil Existing Site and Demolition Plan–Sheet C1.0

Specifications or a detail should be provided describing or showing how the storm sewer pipe will be plugged.

Mr. Bryce Hembrook Town of Brookfield Page 2 May 3, 2023

Civil Site Plan-Sheet C1.1

- 1. According to 17.06(3)(c)(4) in the Town ordinance, the minimum dimensions for all parking spaces provided for use by physically disabled shall be 12 feet by 18 feet. It appears that these stalls are 9 feet by 18 feet.
- 2. There is a callout for a Keynote 27 in the plan, but there is no description for "27" in the Keynote legend.
- 3. A turning movement exhibit should be provided to verify the largest vehicle (including any emergency vehicles) that will access the site can perform the required turning movements with the proposed layout.

Civil Grading and Erosion Control Plan-Sheet C1.2

- 1. The anticipated locations of the topsoil stockpiles should be shown on the plan.
- 2. Silt fence should be provided between the two driveway entrances just upstream of the curb line to prevent sediment from washing on to Crossroads Circle.
- 3. Safety railings should be provided where the top of wall elevation is more than 30 inches above the adjacent grade according to Section 1013.1 of the Unified Building Code. The top of the retaining wall on the west side of the loading dock ramp. There is a drop of approximately 4 feet from top of the retaining wall on the west side of the loading dock ramp to the bottom of ramp near the building.
- 4. The scale bar appears to be incorrect.

Civil Utility Plan-Sheet C1.3

- 1. The callout for the rim elevation of CB-1 (901.12) does not match the callout for the rim elevation shown in the Bay Loading Dock Detail (900.90).
- 2. Evaluate that proper separation between water, storm, and sanitary sewer mains are meeting the requirements of Section NR 811.74 of the Wisconsin Administrative Code (WAC).
- 3. The storm sewer structure and casting types should be called out on the plan.
- 4. Review that all water main design meets the requirements of Section NR 811.70 of WAC and Section 12 of the Town Sanitary District No. 4 technical specifications (see Sections 12.1–Water Main Material, 12.2–Valve Type, 12.3–Pipe Cover and length requirements, 12.5–Thrust Restraint, and 12.18–Fire Hydrant Type). Supporting documentation should be provided.
- 5. It should be noted that, before water utility construction can begin, a modification to the water service application will need to be submitted to the Town and, if plumbing fixtures are being added, calculations should be provided for proper meter sizing.
- 6. A note should be added stating that the contractor shall notify the Town Sanitary District No. 4 and field staff a minimum of 72 hours before the start of any construction or connection to existing public utilities.

Mr. Bryce Hembrook Town of Brookfield Page 3 May 3, 2023

- 7. The existing sanitary sewer is not shown correctly on the west side of the property where the proposed sanitary service connection to the main is taking place. The sewer main is entering the manhole from the west and then heads south. There is no sewer line running north of this manhole (see enclosed markup). This will require a modification of the proposed sewer service connection to the main.
- 8. A 6-inch water valve should be added to the proposed water service (see enclosed markup).
- 9. The proposed water main tapping location is near an existing water service connection. A note should be added stating the required distance from the existing connection.
- 10. The scale bar appears to be incorrect.

Civil Landscape and Restoration Plan-Sheet C1.4

- 1. Please denote intended tree protection or woodland area protection provided on-site.
- 2. Landscaping Planting Schedule Comments
 - a. According to plant symbols and the plant data chart, selected species appear appropriate. A full comparison of plan quantities as laid-out versus in the planting table was not completed. It may be appropriate for plant callout leaders for use in the field or for final reviews. Planting densities, arrangement, and selection appear appropriate. See notes.
 - b. Varieties of flowering pear (Pyrus calleryana) are regarded as potentially invasive. If acceptable, please explore potential replacements such as suitable varieties of flowering crabapple (Malus species) or redbud (Cercis canadensis).
 - c. Deciduous shrub "Planted Size" below 18 inches does not meet code. Please remove 15-inch reference for deciduous shrubs.
 - d. Similarly, arborvitae "Planted Size" should be corrected to the 6-foot requirement, in accordance with code.
 - e. Please revise Botanical Name (genus) for Karl Forester Reed Grass as "Calamogrostis."
- 3. Long-term light pole interference—The seeded lawn area between the parking lot and Crossroads Circle (and some other project areas) contain light poles with large deciduous tree plantings (basswood and honeylocust) within 10 to 12 feet of the poles. Please evaluate spacing arrangements or evaluate the use of smaller trees as needed.
- 4. Because of proximities within 12 feet of the Crossroads Circle road surface, please review planting beds that are present north and south of site access drives to confirm that they are appropriately resistant or distant to potential salt spray and other effects of the roadway and associated ditch.
- 5. To potentially avoid installation "settling" of plantings, burial of root collars, and potential survivability issues; please consider additions to the Tree Planting and Shrub Planting Details. This may involve altering the figure or potentially calling out plants to be "set" in the planting hole on a rigid substrate and similarly denoting the location of the root collar relative to planting and mulch placement.
- 6. The scale bar appears to be incorrect.

Mr. Bryce Hembrook Town of Brookfield Page 4 May 3, 2023

Civil Details—Sheet C2.1

- 1. The Wet Retention Pond Detail should include the 2.5-foot rise dimension for the sharp-crested vee weir that is modeled in HydroCAD.
- 2. The Wet Retention Pond detail notes a 2-foot sump in the callout for the pyramid trash rack on top of the outlet structure which does not match the callout for a 4-foot sump dimension noted on the bottom of the structure. Detail should be updated accordingly.
- 3. The Wet Retention Pond Detail contains callouts for the "2 Year Storm Elev.". This elevation should be provided on the detail so the contractor knows the exact elevation to install the erosion control fence and pond clay liner.

Site Lighting Plan

The light level at the property line shall not exceed 0.2 foot-candles at any point. Revise light pole locations or add shielding to reduce light levels at the southern property line to 0.2 foot-candles or lower.

Comments will be provided during future submittals.

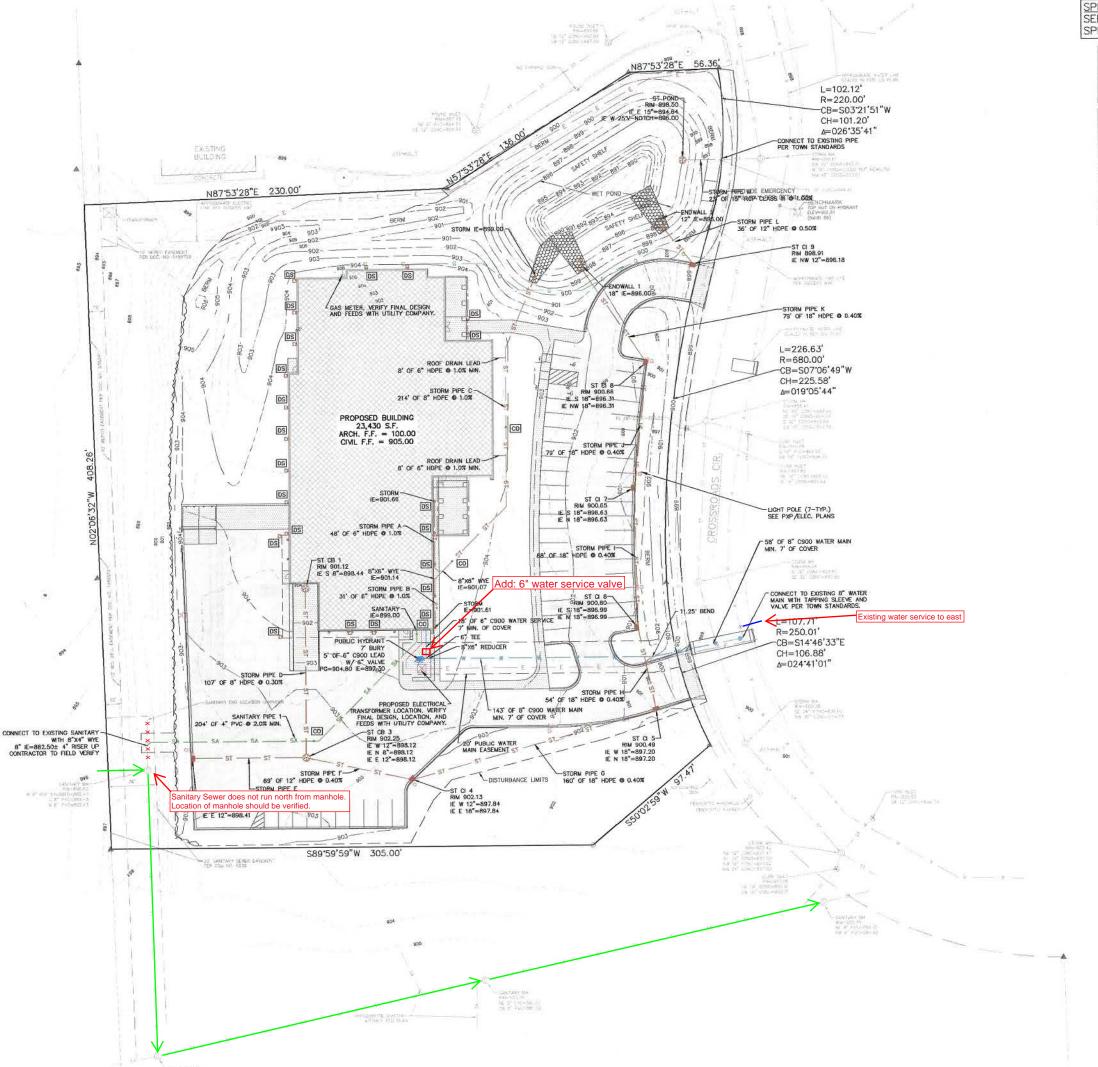
Please call 608-251-4843 if you have any questions.

Sincerely,

STRAND ASSOCIATES, INC.®

Justin J. Gutoski, P.E.

c: Tom Hagie, P.E. Town Administrator, Town of Brookfield
 Tony Skof, Sanitary District No. 4 Superintendent, Town of Brookfield
 Scott Hartung, Department of Public Works Superintendent, Town of Brookfield



SPECIFICATION NOTE: SEE SHEET CO.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS

DOWNSPOUT NOTE:

DS = DENOTES DOWNSPOUT TO GRADE LOCATIONS. PROVIDE SPLASH BLOCKS AT ALL DS TO GRADE LOCATIONS. SEE ARCH PLANS FOR FINAL LOCATIONS.

DOWNSPOUT NOTE:

= DENOTES DOWNSPOUT
CONNECT TO CLEANOUT AT GRADE FOR STORM
SEWER LEAD. SEE ARCH PLANS FOR FINAL
LOCATIONS.

CLEANOUT NOTE:

- DENOTES LOCATIONS WHERE CONTRACTOR SHALL INSTALL CLEANOUTS, SEE CO.1 FOR SPECIFICATION.



Always a Better Plan 100 Camelot Drive Fond du Lac, WI 54935 920-926-9800

excelengineer.com

PROJECT INFORMATION

53186 \leq BROOKFIELD,

AND WAREHOUSE FOR SHOWROOM, KTFM, OFFICES,

PF

TOWN

CIRCLE

CROSSROADS

21055

PROPOSED

PRELIMINARY DATES APR. 19, 2023 FOR CONSTRUCTION NOT

JOB NUMBER 230030600

NORTH

CIVIL UTILITY PLAN

SHEET NUMBER

STATE OF WISCONSIN:	TOWN OF BROOKFIELD:	WAHKESHA	COUNTY

Ord. No.	
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ORDINANCE AMENDING, OR REPEALING AND RECREATING, CERTAIN PROVISIONS IN CHAPTER 17 OF THE MUNICIPAL CODE OF THE TOWN OF BROOKFIELD

NOW THEREFORE, the Town Board of the Town of Brookfield, Wisconsin does ordain as follows:

<u>SECTION 1</u>: The following provision of Section 17.01 of the Town Code is hereby stricken and removed from the Town Code:

DAY-CARE CENTER

An establishment providing care and supervision for four or more persons under the age of seven, licensed by the state under § 48.65, Wis. Stats.

<u>SECTION 2</u>: The following provision of Section 17.01 of the Town Code is hereby repealed and recreated to read as follows:

FAMILY CHILD CARE HOME

A dwelling licensed as a child care center by the state under §§ 48.65 and 66.1017, Wis. Stats., where care is provided for not more than eight children.

SECTION 3: Section 17.01 of the Town Code shall be amended to include the following provision:

COMMERCIAL DAYCARE CENTER

A child care center licensed by the state under § 48.65, Wis. Stats., where care and supervision is provided for four or more children under the age of seven for less than 24 hours a day, or an adult day care center licensed by the state under § 49.45(47), Wis. Stats., that provides services for part of a day in a group setting to adults who need an enriched health-supportive or social experience and who may need assistance with activities of daily living, supervision or protection. A family child care home is not a commercial daycare center.

<u>SECTION 4</u>: The following provision of Section 17.01 of the Town Code is hereby repealed and recreated to read as follows:

COMMUNITY LIVING ARRANGEMENT

The following facilities licensed and operated or permitted under the authority of the Wisconsin Statutes: child welfare agencies under § 48.60, group foster homes for children under § 48.02(7), and, adult family homes and community-based residential facilities under § 50.033; but does not include commercial daycare centers, nursing homes, general hospitals, special hospitals, prisons or jails. The establishment of community living arrangements is governed by §§ 46.03(22), 59.69(15), 60.23, and 62.63(7)(i), Wis. Stats.

<u>SECTION 5</u>: "Family day care homes" in Sections 17.04(4)(a)4., 17.04(5)(a)4., 17.04(6)(a)4., 17.04(7)(a)4., 17.04(8)(a)4., 17.04(9)(a)4., 17.04(10)(a)4. of the Town Code shall be stricken and replaced with "Family child care homes".

<u>SECTION 6</u>: "Commercial day-care centers" in Section 17.04(12)(a) of the Town Code shall be stricken and removed from the Town Code.

<u>SECTION 7</u>: Section 17.06(3)(h)6.h.iii. of the Town Code is hereby repealed and recreated to read as follows:

Children's nursery schools and commercial daycare centers: one space per employee for the work shift with the greatest number of employees, plus one space per six students at the highest class attendance period.

SECTION 8: Section 17.02(14)(b)4.i. of the Town Code is hereby repealed and recreated to read as follows: "Commercial daycare centers in B-2 Limited General Business District and B-3 Office and Professional Districts.".

<u>SECTION 9</u>: Except as expressly provided by this Ordinance, all other provisions contained in the Town Code shall remain in full force and effect.

<u>SECTION 10:</u> All ordinances or parts of this Ordinance conflicting or contravening the provisions of this Ordinance are hereby repealed.

SECTION 11: This Ordinance shall take effect upon passage and posting or publication as provided by law.

PASSED AND ADOPTED by the	Town Board of the Town of Brookfield, Waukesha
County, Wisconsin this, day of	, 2023.
By: Keith Henderson, Chairman	By:Steve Kohlmann, Supervisor
By:	By: John R. Schatzman, Supervisor
By:	Attest: Tom Hagie, Administrator and Interim Clerk

STATE OF WISCONSIN:	TOWN OF BROOKFIELD:	WAUKESHA	COUNTY

Ord. No.	
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ORDINANCE CREATING SECTION 12.08 OF THE MUNICIPAL CODE OF THE TOWN OF BROOKFIELD

NOW THEREFORE, the Town Board of the Town of Brookfield, Wisconsin does ordain as follows:

<u>SECTION 1</u>: Section 12.08 of the Town Code is hereby created to read as follows:

(1) Definitions. The terms used in this section shall be defined as follows:

FOOD

All articles used for food, non-alcoholic drinks, or condiments including ice or water used for human consumption whether simple, mixed, or compound articles used or intended for use as ingredients in the composition or preparation thereof.

MOBILE FOOD ESTABLISHMENT

A restaurant or retail food establishment where ready-to eat food is cooked, wrapped, packaged, processed, served, or sold from a vehicle, car, truck, trailer, cart, or similar portable device which may or could be capable of periodically changing locations. Mobile food establishment does not include the home delivery of food and beverage items.

MOBILE VENDOR

The owner, including any corporate or individual owner, owner's agent, or owner's employees of a mobile food establishment.

(2) Permit Required. It shall be unlawful for a person to operate as a mobile vendor and serve, sell, or distribute food from a mobile food establishment or cook, wrap, package, process, serve, or portion food in a mobile food establishment in the Town of Brookfield without first obtaining a mobile food establishment permit from the Building Inspector in accordance with this section.

- (3) Application. Any person desiring to operate a mobile food establishment shall file a written application for a mobile food establishment permit with the Building Inspector. The application shall be on the form provided by the Building Inspector and include all of the following:
 - (a) The name, signature, and address of each applicant and each member or officer of a corporate applicant.
 - (b) A description of the mobile food establishment vehicle, including the make, model, vehicle identification number, and license plate.
 - (c) A valid copy of all necessary licenses, permits, or inspection compliance forms for the operation of the mobile food establishment, including but not limited to, licenses or certificates required by the Town of Brookfield Fire Department, Waukesha County Health Department, the State of Wisconsin, or any other governmental entity.
 - (d) A signed statement that the applicant shall hold harmless and indemnify the Town of Brookfield, its officers, and employees from any claims for damage to property or injury to persons that arise out of or relate to the activities authorized by the mobile food establishment permit.
 - (e) Certificate of insurance demonstrating that the applicant has and will maintain public liability insurance coverage of not less than \$1,000,000.00 covering the mobile food establishment.
 - (f) The proposed location of the mobile food establishment and any additional information deemed necessary by the Building Inspector.
- (4) Location Restrictions. Except as provided herein, all mobile food establishments and mobile vendors shall:
 - (a) Not serve food upon or within the public road right-of-way or public alleys, including any State Trunk Highway, U.S. Highway, or County Trunk Highway, unless such highway is legally closed for an event;
 - (b) Comply with all state and municipal traffic and parking laws;
 - (c) Ensure the free use of a sidewalk for pedestrian traffic or indicate the mobile food establishment has exclusive rights to a certain location; and
 - (d) Obtain the written consent of the private property owner if the mobile food establishment is operating on private, non-residential property.

(5) General Operation Restrictions.

- (a) Mobile food establishments may only operate between the hours of 8:00 a.m. and 11:00 p.m.
- (b) A mobile food establishment shall not draw from any public utilities. No power cable or equipment shall be extended over any Town right-of-way or sidewalk.
- (c) No mobile vendor or mobile food establishment shall use or maintain any outside sound amplifying equipment, or noisemakers of any kind, while stationary.
- (d) Mobile vendors shall provide ample trash or refuse receptacles for its mobile food establishment and remove such receptacles immediately after ceasing operation of the mobile food establishment. Trash or refuse from the mobile food establishment's receptacles shall not be placed in any public or private trash receptacles, including dumpsters, without the private trash receptacle's owner's consent.
- (e) Mobile vendors shall take all necessary action to ensure that the operation of the Mobile food establishment does not materially affect the peace and welfare of the general public or cause any unreasonably loud, disturbing, or unnecessary noise, or any other noise of any character, intensity, or duration as to be detrimental or disturbing to the public peace or welfare.
- (f) The mobile food establishment permit shall be displayed on the mobile food establishment during all hours of operation.

(6) Fees and Conditions.

- (a) All applicants for a new mobile food establishment permit and any applicants applying for a renewal of a mobile food establishment permit shall pay an annual permit fee as established by the Town's Fee Schedule.
- (b) Upon issuance, all permits are deemed to have commenced on April 1 and expire on March 31 of the following calendar year. Permit fees shall not be prorated.
- (c) The mobile food establishment permit is not transferrable from person to person.
- (d) The mobile food establishment permit is only valid for one the mobile food establishment vehicle. Each mobile vendor or mobile food establishment shall obtain a separate permit.
- (e) All mobile vendors and any mobile food establishments shall comply with the National Fire Protection Association Fire Code and Wisconsin Administrative Code SPS 314.50.

- (f) All mobile vendors and mobile food establishments shall be inspected by the Town of Brookfield Fire Department prior to obtaining a permit.
- (7) Renewal. In order to renew a mobile food establishment permit, a permit holder shall file a renewal application on the form provided by the Building Inspector and pay the renewal fee set forth on the Town's Fee Schedule. The permit holder shall file a renewal application prior to the expiration of the mobile food establishment permit.
- (8) Suspension, Revocation, or Non-Renewal. A mobile food establishment permit may be suspended, revoked, or not renewed Building Inspector if the applicant or permit holder makes any material omission or materially inaccurate statement in the permit application, violates any provision of this section, or was convicted of any offense which is directly related to the permit holder's fitness to operate a mobile food establishment. Notice of suspension, revocation, or nonrenewal shall be sent by regular mail to or personally served upon, the permit holder at least 10 days prior to hearing before a final determination is made by the Town Board.

<u>SECTION 2:</u> All ordinances or parts of this ordinance conflicting or contravening the provisions of this ordinance are hereby repealed.

SECTION 3: This ordinance shall take effect upon passage and posting or publication as provided by law.

PASSED AND ADOPTED by the Town Board of the Town of Brookfield, Waukesha

County, Wisconsin this, day of	, 2023.
By: Keith Henderson, Chairman	By:Steve Kohlmann, Supervisor
By:	By:
By:	Attest: Tom Hagie, Administrator and Interim Clerk

STATE OF WISCONSIN: TOWN OF BROOKFIELD: WAUKESHA COUNTY

Ord.	No.:		
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ORDINANCE CREATING SECTION 17.02(14)(B)1.K. OF THE MUNICIPAL CODE OF THE TOWN OF BROOKFIELD

NOW THEREFORE, the Town Board of the Town of Brookfield, Wisconsin does ordain as follows:

<u>SECTION 1</u>: Section 17.02(14)(b)1.k. of the Town Code is hereby created to read as follows:

Effect of denial. If an application for a conditional use permit is denied, a new application for the same conditional use or an application for a similar use will not be considered by the Town Board for a period of 12 months from the date of denial, except on grounds of new evidence, as determined by the Zoning Administrator.

<u>SECTION 2:</u> All other provisions of the Town Code shall remain in full force and effect.

<u>SECTION 3:</u> All ordinances or parts of this ordinance conflicting or contravening the provisions of this ordinance are hereby repealed.

<u>SECTION 4:</u> This ordinance shall take effect upon passage and posting or publication as provided by law.

PASSED AND ADOPTED by the Town Board of the Town of Brookfield, Waukesha

County, Wisconsin this, day of	, 2023.
BY:	BY:
KEITH HENDERSON, Chairman	STEVE KOHLMANN, Supervisor
BY:	
JOHN CHARLIER, Supervisor	JOHN R. SCHATZMAN, Supervisor
BY:RYAN STANELLE, Supervisor	_ ATTEST:
	Tom Hagie, Administrator and
	Interim Clerk

- 11. Fences. Fences are a permitted accessory use in any district and may be erected without a permit, provided that fences shall comply with the following requirements:
 - a. Residential fences shall be constructed in such a manner that the "finished" side shall face the neighboring property. Fence posts shall be on the side of the fence facing the subject property.
 - i. Open residential fences are permitted up to the lot line in the side and rear yards of residential districts, but shall not exceed a height of four feet, and shall not extend into the street yard.
 - ii. Solid residential fences, as defined in § 17.01(9)(b) of this chapter, shall meet the offset requirements of the district are permitted up to the lot line in the side and rear yard of residential districts, Fencesbut shall not exceed six feet in height, and shall be placed in the rear yard only.

iii. Any fence proposed to be located within 5 feet of a property line will require a copy of a property survey prior to permit approval.

[Amended at time of adoption of Code (see Ch. 25, General Provisions, Art. II)]

- b. Ornamental fences, as defined in § 17.01(9)(b) of this chapter, are permitted in the street yard in any district, but shall not be erected in a street right-of-way and shall not exceed a fence height of three feet. Ornamental fences shall comply with the traffic visibility requirements set forth in § 17.06 of this chapter.
- c. Security fences or screening fences are permitted up to the property lines in all districts except residential districts, but shall not exceed 10 feet in total height and shall be "open fences" as defined in § 17.01(9)(b) of this chapter when located in the street yard. Security fences may include up to four strands of barbed wire on the top of the fence, provided that the barbed wire is at least eight feet above grade with the vertical supports for the barbed wire slanting inward away from the property line. Security and screening fences shall comply with the traffic visibility requirements set forth in § 17.06 of this chapter. Security fences shall be constructed in such a manner that the "finished" side shall face the neighboring property. Fence posts shall be on the side of the fence facing the permit applicant's property.
- d. Solid, privacy fences, as described in § 17.01(9)(b) of this chapter, not exceeding six feet in height, may be placed in a street yard of double frontage or corner lots subject to approval by the Building Inspector. or Architectural Review Committee. Approval shall be based upon a neighborhood continuity standard. Such fencing may be placed at a minimum five-foot setback to a street right-of-way, providing the side facing the street is attractively landscaped.
- e. <u>The following are prohibited materials, unless exempt elsewhere in this Section:</u> Barbed wire, <u>razor wire, corrugated metal, chicken wire, t/u post, fences and e</u>lectric fences are prohibited in the Town of Brookfield.

f. Exemptions from permit and permit standards.

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<u>i. Temporary fencing including the protection of excavation and construction sites and the protection of individuals plants.</u>

ii. Decorative fencing, fences encompassing a garden, and other similar fences including pet kennels are exempt from a required permit provided they are not located in the front yard, are setback a minimum of 5 feet from all property lines, and do not exceed 6 feet in height.

f. Any and all fences or decorative posts shall be maintained in a structurally sound and attractive manner.

h. Any utility equipment located within a fence shall be safe and accessible. If the metering location becomes unsafe or inaccessible, the owner shall be required to remove the fence or have the utility equipment moved at the owner's expense.

if. Fence permits may be approved administratively by the building inspector and/or zoning administrator. Any proposed fence which would not conform with the above provisions shall be considered a conditional use as described in § 17.02(14) of this chapter.

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