CARWASH FOR:
CREW CARWASH
MADISON, WISCONSIN

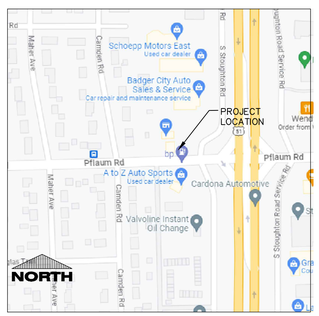
LEGEND

Symbol	Description
000.00	PROPOSED SPOT ELEVATIONS (FLOW LINE OF CURB UNLESS OTHERWISE SPECIFIED)
000.00 EG	EXISTING GRADE SPOT ELEVATIONS
000.00 BG 000.00 FG	PROPOSED SPOT ELEVATIONS (REFERENCE R–WALL DETAIL) BG–FINISHED SURFACE GRADE AT BACK OF WALL FG–FINISHED SURFACE GRADE AT FRONT OF WALL
000.00 TC 000.00 FL	PROPOSED SPOT ELEVATIONS (TOP OF CURB, FLOWLINE OF CURB)
000.00 TW 000.00 BW	PROPOSED SPOT ELEVATIONS (TOP OF WALK, BOTTOM OF WALK @ FLOWLINE)
⊗	EXISTING WATER VALVE IN BOX
⊗	PROPOSED WATER VALVE IN BOX
⊗	EXISTING WATER VALVE IN MANHOLE
✕	EXISTING WATER SERVICE VALVE
Ⓣ	EXISTING TELEPHONE MANHOLE
⊙	EXISTING STORM CATCH BASIN
⊙	PROPOSED STORM CATCH BASIN – ST CB
⊕	PROPOSED STORM FIELD INLET – ST FI
▦	EXISTING SQUARE CATCH BASIN
▭	EXISTING STORM CURB INLET
▬	PROPOSED STORM CURB INLET – ST CI
∅	EXISTING UTILITY POLE
∅→	EXISTING UTILITY POLE WITH GUY WIRE
○–○	EXISTING STREET LIGHT
T	EXISTING TELEPHONE PEDESTAL
Ⓔ	EXISTING ELECTRIC PEDESTAL
⊠	EXISTING ELECTRIC BOX
Ⓒ	EXISTING CABLE TV PEDESTAL
→	PROPOSED DRAINAGE FLOW
■	1–1/4" REBAR SET WEIGHING 4.30 LB/FT.
●	3/4" REBAR SET WEIGHING 1.50 LB/FT.
□	1–1/4" REBAR FOUND
○	3/4" REBAR FOUND
⊚	2" IRON PIPE FOUND
▲	1" IRON PIPE FOUND
◀	EXISTING FLOOD LIGHT
◈	SECTION CORNER
>—	PROPOSED APRON END SECTION
⫶	EXISTING MARSH AREA
◌	EXISTING DECIDUOUS TREE WITH TRUNK DIAMETER
▨	EROSION MATTING
IP	PROPOSED INLET PROTECTION

Symbol	Description
✳	EXISTING CONIFEROUS TREE
✿	EXISTING SHRUB
⌂	EXISTING STUMP
◩	SOIL BORING
Ⓦ	EXISTING WELL
Ⓦ	PROPOSED WELL
○□	PROPOSED LIGHT POLE
☼	EXISTING LIGHT POLE
—o—	PROPOSED SIGN
—o—	EXISTING SIGN
℄	CENTER LINE
♿	EXISTING HANDICAP PARKING STALL
♿	PROPOSED HANDICAP PARKING STALL
⋈	EXISTING GAS VALVE
	EXISTING WOODED AREA
	EXISTING HEDGE
—o—	EXISTING CHAINLINK FENCE
—□—	EXISTING WOOD FENCE
—x—	EXISTING BARBED WIRE FENCE
—	PROPOSED PROPERTY LINE
o—o—o	EXISTING GUARD RAIL
— ST —Ⓓ—	EXISTING STORM SEWER AND MANHOLE
— ST —Ⓓ—	PROPOSED STORM SEWER AND MANHOLE – ST MH
— SA —Ⓢ—	EXISTING SANITARY SEWER AND MANHOLE
— SA —Ⓢ—	PROPOSED SANITARY SEWER AND MANHOLE – SAN MH
— W —	EXISTING WATER LINE AND HYDRANT
— W —	PROPOSED WATER LINE AND HYDRANT
— OU —	EXISTING OVERHEAD UTILITY LINE
— FO —	EXISTING UNDERGROUND FIBER OPTIC LINE
— E —	EXISTING UNDERGROUND ELECTRIC CABLE
— T —	EXISTING UNDERGROUND TELEPHONE CABLE
— G —	EXISTING UNDERGROUND GAS LINE
═	PROPOSED CURB AND GUTTER
═	EXISTING CURB AND GUTTER
— — —	GRADING/SEEDING LIMITS
—— ——	RIGHT–OF–WAY LINE
- - - -	INTERIOR PROPERTY LINE
╪	RAILROAD TRACKS
— — 800 — —	EXISTING GROUND CONTOUR
—800—	PROPOSED GROUND CONTOUR
— POL —Ⓟ—	EXISTING POLISH SEWER AND MANHOLE
— POL —Ⓟ—	PROPOSED POLISH SEWER AND MANHOLE
— P —Ⓟ—	EXISTING PROCESS SEWER AND MANHOLE
— P —Ⓟ—	PROPOSED PROCESS SEWER AND MANHOLE
— CLW —	EXISTING CLEAR WATER LINE
— CLW —	PROPOSED CLEAR WATER LINE

CIVIL SHEET INDEX

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
C2.0	DETAILS
C3.1	SITE PHOTOMETRIC PLAN & DETAILS



PROJECT LOCATION MAP

PLAN SPECIFICATIONS (BASED ON CSI FORMAT)

DIVISION 31 EARTH WORK

31 10 00 SITE CLEARING (DEMOLITION)

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 SITE DEMOLITION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
B. DEMOLITION PLAN IS AN OVERVIEW OF DEMOLITION TO TAKE PLACE ON SITE. CONTRACTOR TO FIELD VERIFY 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 REPLACED AT CONTRACTORS EXPENSE.
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 REQUIREMENTS.
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 EQUIPMENT, 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, STANDARD 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.
   1. 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 CLEAN 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 LESS THAN 95 PERCENT.
   5. UNDER WALKWAYS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT.
   6. UNDER LAWN OR UNPAVED 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.
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 OBTAINED.
J. 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 GRADING PLAN.

31 30 00 EROSION CONTROL/STORMWATER MANAGEMENT

A. THE DESIGN ENGINEER SHALL PREPARE A SITE SPECIFIC EROSION CONTROL AND A STORMWATER MANAGEMENT PLAN PURSUANT TO NR 216.46 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 GENERAL WPDES STORM WATER PERMIT.
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.
C. 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 AMOUNT OF PRECIPITATION RECORDED IN ANY CONTINUOUS 24-HOUR PERIOD. THE CONTRACTOR SHALL REPAIR OR REPLACE EROSION AND 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:
   1. THE DATE, TIME, AND LOCATION OF THE CONSTRUCTION SITE INSPECTION.
   2. 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.
   5. 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 BEST MANAGEMENT PRACTICES TO ACHIEVE THE PERFORMANCE STANDARDS REQUIRED.
   1. SILT FENCE SHALL BE PLACED ON SITE AT LOCATIONS SHOWN ON THE EROSION 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 DNR TECHNICAL STANDARD 1056 (CURRENT EDITION).
   2. DITCH CHECKS SHALL BE PROVIDED TO REDUCE THE VELOCITY OF WATER FLOWING IN DITCH BOTTOMS. PLACE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1062 (CURRENT EDITION).
   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 FULL WIDTH OF THE EGRESS POINT (12' MIN WIDTH) AND SHALL BE A MINIMUM OF 50 FEET LONG. SURFACE WATER MUST BE PREVENTED FROM 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 FOUND 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 EDITION).
   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).
   6. 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.
   7. 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 UPON COMPLETION OF CONSTRUCTION.
   8. 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. PERMANENT RESTORATION APPLIES TO AREAS WHERE PERENNIAL VEGETATIVE COVER IS NEEDED TO PERMANENTLY STABILIZE AREAS OF 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.
   9. IF SITE DEWATERING IS REQUIRED FOR PROPOSED CONSTRUCTION ACTIVITIES, ALL SEDIMENT LADEN WATER GENERATED DURING THE 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.
   10. 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). FLUSHING SHALL NOT BE ALLOWED.
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.
I. 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 PERMIT.
J. ALL POST CONSTRUCTION STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICES SHALL BE CONSTRUCTED BEFORE THE SITE HAS UNDERGONE FINAL STABILIZATION.

DIVISION 32 EXTERIOR IMPROVEMENTS

32 20 00 CONCRETE AND AGGREGATE BASE

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:
   1. SIDEWALK CONCRETE - 4" OF CONCRETE OVER 4" OF 3/4" CRUSHED AGGREGATE BASE. CONTRACTION JOINTS SHALL CONSIST OF 1/8" WIDE BY 1" DEEP TOOLED JOINT WHERE INDICATED ON THE PLANS.
   2. DUMPSTER PAD/APRON 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 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" O.C. ONE HALF OF THE DOWEL SHALL BE GREASED. GREENSTREAK 9" SPEED DOWEL TUBES SHALL BE USED.
   3. HEAVY DUTY CONCRETE- 6" OF CONCRETE OVER 6" OF 3/4" CRUSHED AGGREGATE. CONCRETE SHALL BE REINFORCED WITH #3 REBARS ON CHAIRS AT 3' O.C. REBAR SHALL BE PLACED PLACED IN THE UPPER 1/3 TO ½ OF THE SLAB. CONTRACTION JOINTS SHALL BE SAWCUT 1.5" IN DEPTH AND BE SPACED A MAXIMUM OF 15' ON CENTER.
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 APPROVAL OF EXCEL ENGINEERING, INC. CALCIUM CHLORIDE SHALL NOT BE USED.
   7. MAXIMUM AGGREGATE SIZE FOR ALL EXTERIOR CONCRETE SHALL BE 0.75 INCHES.
F. VERIFY EQUIPMENT CONCRETE PAD SIZES WITH CONTRACTOR REQUIRING PAD. 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 5.5 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 AND 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 CURB AND 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 AND/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 3" WHERE CONCRETE IS DEPOSITED AGAINST THE GROUND WITHOUT THE USE OF FORMS AND NOT LESS THAN 1.5" IN ALL OTHER LOCATIONS. ALL 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.
J. 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 ONE 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 143. 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.
L. LIMIT MAXIMUM WATER-CEMENTITIOUS 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.
N. CONTRACTOR TO PROVIDE 4" WIDE YELLOW PAINTED STRIPING FOR PARKING STALLS, TRAFFIC LANES, AND NO PARKING AREAS. YELLOW PAINT MARKINGS SHALL ALSO BE PROVIDED FOR H.C. ACCESSIBLE SYMBOLS, TRAFFIC ARROWS, AND TRAFFIC MESSAGES.

32 30 00 LANDSCAPING AND SITE STABILIZATION

A. TOPSOIL: CONTRACTOR TO PROVIDE A MINIMUM OF 6" OF TOPSOIL FOR ALL DISTURBED OPEN AREAS, OTHER THAN A LANDSCAPE ISLANDS SHALL 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 PULVERIZING AND 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 SHALL ALSO BE REMOVED.

   TOPSOIL INSTALLATION: LOOSEN SUBGRADE TO A MINIMUM DEPTH OF 6 INCHES AND REMOVE STONES LARGER THAN 1" IN DIAMETER. ALSO REMOVE 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 SPREAD TOPSOIL IF SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET. GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN 0.05 FEET OF FINISHED GRADE ELEVATION.

B. SEEDED LAWNS:
   1. 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 PERMANENT 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 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.
C. SEEDED LAWN MAINTENANCE: CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION. 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 SATISFACTORY.
D. EROSION MATTING:
   1. CONTRACTOR TO PROVIDE EROSION CONTROL MATTING (NORTH AMERICAN GREEN S150) OR EQUIVALENT ON ALL SLOPES THAT ARE 4:1 AND GREATER LAWN SEED SHALL BE PLACED BELOW MATTING IN ACCORDANCE WITH SEEDING REQUIREMENTS AND MANUFACTURER SPECIFICATIONS.
   2. CONTRACTOR TO PROVIDE EROSION MATTING (NORTH AMERICAN GREEN C125) OR EQUIVALENT IN ALL SWALE BOTTOMS AND SIDE SLOPES AS REQUIRED. LAWN SEED SHALL BE PLACED BELOW MATTING IN ACCORDANCE WITH SEEDING REQUIREMENTS AND MANUFACTURER SPECIFICATIONS.
E. TREES AND SHRUBS: 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 TYPE, SIZE, AND LOCATION.
F. TREE AND SHRUB INSTALLATION: EXCAVATE CIRCULAR PITS WITH SIDES SLOPED INWARD. TRIM BASE LEAVING CENTER AREA RAISED SLIGHTLY TO SUPPORT 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.
G. TREE AND SHRUB MAINTENANCE/WARRANTY: CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM THE 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.
H. LANDSCAPE AND LAWN IRRIGATION: CONTRACTOR TO PROVIDE DESIGN AND INSTALLATION OF IRRIGATION SYSTEM PIPING, VALVES, VALVE BOXES, SPRINKLERS, EMITTERS, DRIP TUBES, AND CONTROLS IN COMBINATIONS THAT BEST SUIT THE LANDSCAPE PLAN LAYOUT. ALL LAWN AND LANDSCAPING AREAS SHALL BE PROVIDED WITH IRRIGATION AS DELINEATED ON THE PLAN. THE DESIGN SHOULD MINIMIZE THE AMOUNT OF WATER THAT EXTENDS BEYOND THE PROPERTY AND ON PAVED AREAS. THE SYSTEM SHALL BE DESIGNED FOR FULLY AUTOMATIC OPERATION AND PROVIDE ALL NECESSARY CONTROLS, VALVES, AND WIRING TO OPERATE THE SYSTEM. THE CONTROL UNIT SHALL BE INSTALLED IN A MECHANICAL ROOM OR AT A LOCATION AGREED TO WITH THE OWNER. THE CONTROL UNIT SHOULD BE PROVIDED WITH A LOCKING COVER.

   POP-UP SPRAY OR ROTARY SPRINKLERS SHALL BE USED AT LAWN AREAS TO PROVIDE A UNIFORM COVERAGE OF 1 TO 2 INCHES OF WATER PER HOUR. EMITTERS AND DRIP TUBES OR SHRUBBERY SPRINKLERS SHALL BE USED AT PLANTS AND SHRUBS AS APPROPRIATE FOR THE PLANTING DENSITY AND SPECIES TYPE. ALL SPRINKLER HEADS SHALL BE COMMERCIAL GRADE. THE SYSTEM SHALL BE CIRCUITED AS REQUIRED TO PROVIDE ADEQUATE WATER FLOW TO EACH SPRINKLER HEAD. THE CONTROL SYSTEM MUST INCLUDE A RAIN SENSING SHUT OFF DEVICE. THE ENTIRE SYSTEM IS TO BE INSTALLED WITH A MINIMUM UNIFORM SLOPE OF 0.5 PERCENT TOWARD DRAIN VALVES.

DIVISION 33 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 OF THE PROPOSED PLANSET. ALL PROPOSED SANITARY PIPE BELOW PROPOSED & FUTURE BUILDINGS SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE ON C0.1 OF THE PROPOSED PLANSET.
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 OF 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 THE SLEEVE ON ALL SIDES, SLOPING AWAY FROM THE SLEEVE. THE CLEANOUT HOUSING SHALL BE CONSTRUCTED PER MANUFACTURERS REQUIREMENTS.
E. ALL PROPOSED WATER PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE ON C0.1 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. ALL PROPOSED STORM PIPE BELOW BUILDINGS SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE ON C0.1 OF THE PROPOSED PLANSET. SEE UTILITY PLANS FOR ALL STORM PIPE MATERIAL TYPES TO BE USED. 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 UTILITY 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 PLUMBING PLANS. CONTRACTOR TO CUT AND CAP WATER SERVICE 12" ABOVE FINISHED FLOOR ELEVATION.
I. 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.
J. 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 WATER, SANITARY AND STORM SEWER.
K. SEE PLANS FOR ALL OTHER UTILITY SPECIFICATIONS AND DETAILS.

Table A: Allowable Pipe Material Schedule

Utility	Material	Pipe Code	Fitting Code	Joint Code	Comments
Water Lateral	C901/906 PE	AWWA C901/C906	ASTM D2609, ASTM D2683, ASTM D3261	Heat fusion: ASTM D2657	≤ 4", DR11 (200 psi), SDR 9 (250 psi), Mechanical push-on and compression joints allowed per DSPS plumbing code.
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	4"-15", ≤ 20' deep
Storm Sewer	HDPE	ASTM F2648	ASTM F2306 Saddle Gasket	Joint: ASTM F2648 Bell & Spigot Elastomeric Seal: ASTM F477	

CONSTRUCTION STAKING SERVICES

CONSTRUCTION STAKING SHALL BE COMPLETED BY EXCEL ENGINEERING AS REQUESTED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO CONTACT RYAN WILGREEN AT 920–926–9800 OR 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 OWNER. CAD DRAWING FILES AND SURVEY CONTROL WILL NOT BE PROVIDED FOR STAKING PURPOSES.

GENERAL PROJECT NOTES

1. ALL DRIVEWAYS AND CURB CUTS TO BE CONSTRUCTED ACCORDING TO LOCAL ORDINANCES. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL WORK IN ROW PERMITS.

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

CALL DIGGERS HOTLINE
1–800–242–8511
TOLL FREE
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

CIVIL

EXCEL ENGINEERING
100 CAMELOT DRIVE
FOND DU LAC, WISCONSIN 54935
CONTACT:
JASON DAYE
P: (920) 926-9800
F: (920) 926-9801
jason.d@excelengineer.com

CIVIL COVER AND SPECIFICATION SHEET

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

PROJECT INFORMATION

CARWASH FOR:
CREW CARWASH
1412 PFLAUM ROAD • MADISON, WI 53716

PROFESSIONAL SEAL
JASON DAYE
38777-006
FOND DU LAC WISCONSIN

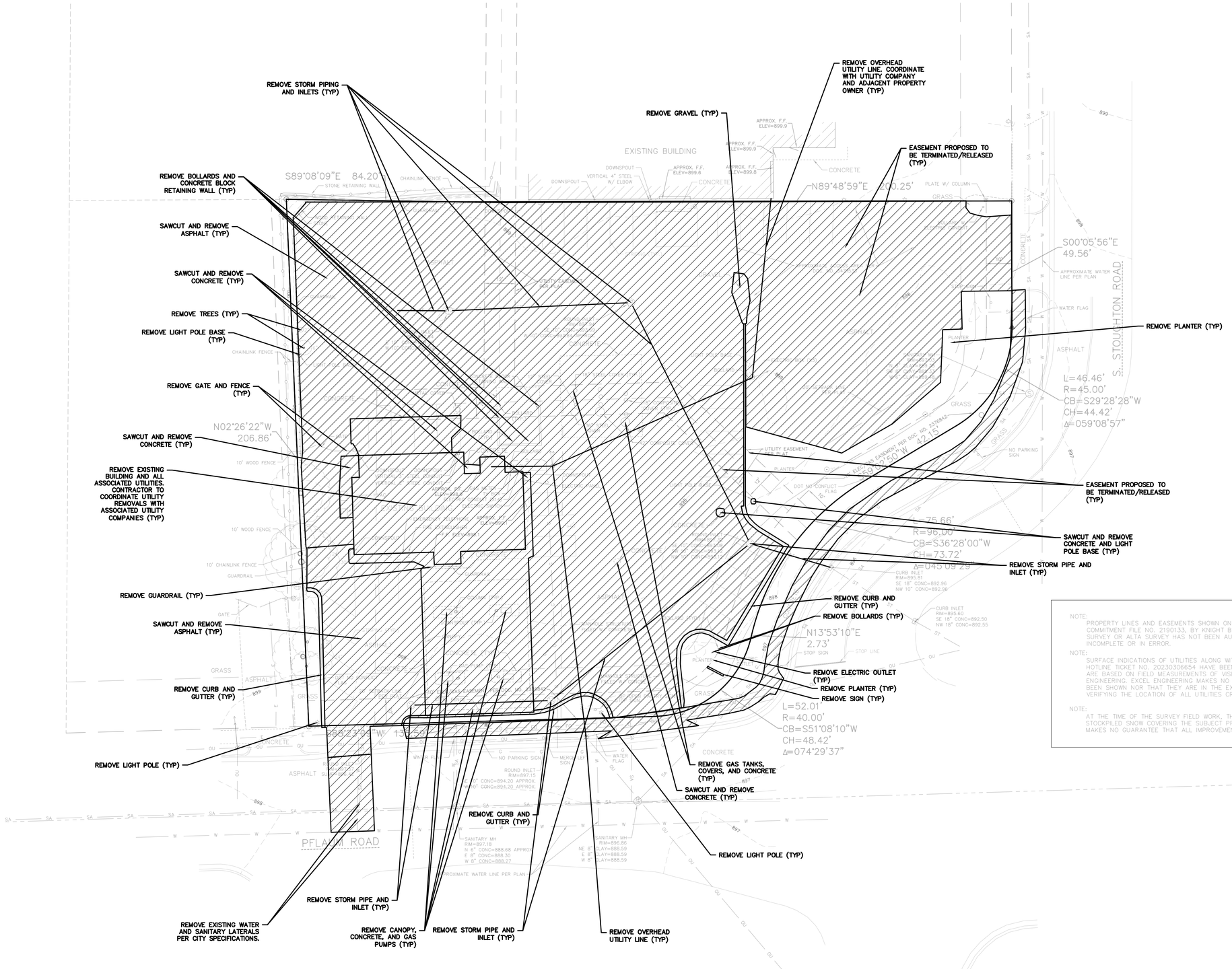
PRELIMINARY DATES
AUG. 3, 2023
AUG. 7, 2023

NOT FOR CONSTRUCTION

JOB NUMBER
230005500

SHEET NUMBER
C0.1

SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS



NOTE:
PROPERTY LINES AND EASEMENTS SHOWN ON THIS PLAN WERE DRAFTED FROM INFORMATION CONTAINED IN TITLE COMMITMENT FILE NO. 2190133, BY KNIGHT BARRY TITLE GROUP, DATED DECEMBER 22, 2022. AN UPDATED PLAT OF SURVEY OR ALTA SURVEY HAS NOT BEEN AUTHORIZED AND THE PROPERTY LINES SHOWN ON THIS PLAN MAY BE INCOMPLETE OR IN ERROR.

NOTE:
SURFACE INDICATIONS OF UTILITIES ALONG WITH DIGGER'S HOTLINE MARKINGS ON THE SURVEYED PARCEL PER DIGGER'S HOTLINE TICKET NO. 20230306654 HAVE BEEN SHOWN. SIZES AND ELEVATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD MEASUREMENTS OF VISIBLE STRUCTURES IN COMBINATION WITH AVAILABLE DATA PROVIDED TO EXCEL ENGINEERING. EXCEL ENGINEERING MAKES NO GUARANTEE THAT ALL THE EXISTING UTILITIES IN THE SURVEYED AREA HAVE BEEN SHOWN NOR THAT THEY ARE IN THE EXACT LOCATION INDICATED. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES CRITICAL TO CONSTRUCTION.

NOTE:
AT THE TIME OF THE SURVEY FIELD WORK, THERE WAS APPROXIMATELY 1"–2" OF SNOW AND STOCKPILED SNOW COVERING THE SUBJECT PROPERTY. AS A RESULT OF THE SNOW COVER, EXCEL MAKES NO GUARANTEE THAT ALL IMPROVEMENTS AND UTILITIES HAVE BEEN SHOWN ON THIS SURVEY.

NORTH
1"= 20' SCALE
20' 0 20' 40' FEET

CIVIL EXISTING SITE AND DEMOLITION PLAN

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

PROJECT INFORMATION

CARWASH FOR:
CREW CARWASH
1412 PFLAUM ROAD • MADISON, WI 53716

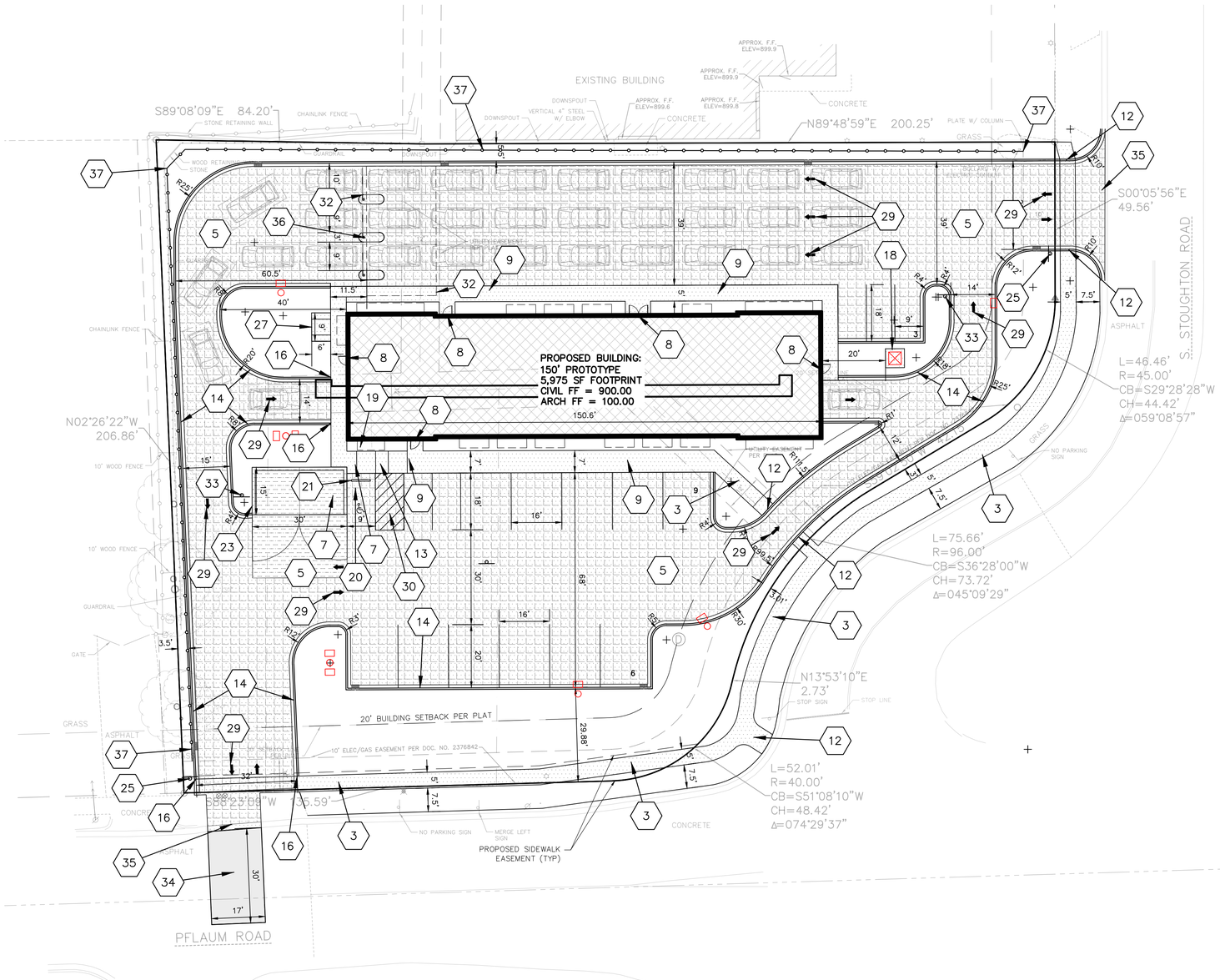
PROFESSIONAL SEAL

PRELIMINARY DATES
AUG. 7, 2023

NOT FOR CONSTRUCTION

JOB NUMBER
230005500

SHEET NUMBER
C1.0



EXISTING SITE DATA

	AREA (AC)	AREA (SF)	RATIO
PROJECT SITE	1.08	46,951	
BUILDING FLOOR AREA	0.10	4,523	9.6%
PAVEMENT (ASP. & CONC.)	0.87	37,692	80.3%
TOTAL IMPERVIOUS	0.97	42,215	89.9%
LANDSCAPE/ OPEN SPACE	0.11	4,736	10.1%

PROPOSED SITE DATA

	AREA (AC)	AREA (SF)	RATIO
PROJECT SITE	1.08	46,951	
BUILDING FLOOR AREA	0.14	5,975	12.7%
PAVEMENT (ASP. & CONC.)	0.68	29,720	63.3%
TOTAL IMPERVIOUS	0.82	35,695	76.0%
LANDSCAPE/ OPEN SPACE	0.26	11,256	24.0%

PAVEMENT HATCH KEY:

- STANDARD ASPHALT
- SIDEWALK CONCRETE
- HEAVY DUTY CONCRETE
- DUMPSTER PAD CONCRETE

SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS

SITE INFORMATION:

PROPERTY AREA: 46,951 S.F. (1.08 ACRES).

EXISTING ZONING: CC-T COMMERCIAL CORRIDOR-TRANSITIONAL DISTRICT

PROPOSED ZONING: CC-T COMMERCIAL CORRIDOR-TRANSITIONAL DISTRICT

PROPOSED USE: AUTOMATIC CARWASH

AREA OF SITE DISTURBANCE: 50,586 SF (1.16 AC)

SETBACKS: BUILDING: FRONT = MIN. 50% OF STREET FACING BUILDING WALL SHALL BE SETBACK NOT MORE THAN 25'
SIDE = 5'
REAR = 5'
STREET = SAME AS FRONT

PAVEMENT: FRONT = WIDTH OF FRONTAGE LANDSCAPING
SIDE = SCREEN WITH 6' FENCE OR WALL
REAR = SCREEN WITH 6' FENCE OR WALL
STREET = WIDTH OF FRONTAGE LANDSCAPING

PROPOSED BUILDING HEIGHT: 35' (MAX. HEIGHT ALLOWED: 78')

PARKING REQUIRED: 1 SPACE PER 2 EMPLOYEES + 1 FOR OWNER OR MANAGER
RESERVOIR PARKING REQUIRED: 5 TIMES EACH 20' OF PRODUCTION LINE (38 REQ.)

PARKING PROVIDED: 17 SPACES (1 H.C. ACCESSIBLE) (11 VACUUM STALLS)
RESERVOIR PARKING PROVIDED: 39 STALLS (7 ON CONVEYOR)

HANDICAP STALLS REQUIRED: 1, HANDICAP STALLS PROVIDED: 1

LANDSCAPE REQUIREMENTS: MIN. LANDSCAPE SURFACE RATIO: 15%

SITE PLAN KEYNOTES

3	CONCRETE SIDEWALK (TYP.)
5	HEAVY DUTY CONCRETE (TYP.)
7	DUMPSTER PAD/APRON CONCRETE (TYP.)
8	CONCRETE STOOP (TYP.) SEE ARCH. PLANS FOR DETAILS.
9	RAISED WALK (TYP.)
12	CURB RAMP (TYP.)
13	ADA CURB RAMP (TYP.)
14	18" CURB & GUTTER (TYP.)
16	CURB TAPER (TYP.)
18	CONCRETE TRANSFORMER PAD BY UTILITY SUPPLIER (CONTRACTOR TO VERIFY FINAL LOCATION & DESIGN PRIOR TO CONSTRUCTION)
19	HANDICAP SIGN (TYP.)
20	HANDICAP STALL & STRIPING PER STATE CODES.
21	PRECAST CONCRETE WHEEL STOP (TYP.)
23	DUMPSTER ENCLOSURE (SEE ARCH PLANS FOR DETAILS)
25	STOP SIGN (TYP.)
27	BIKE RACK (TYPE & COLOR BY OWNER)
29	TRAFFIC FLOW ARROWS. COLOR TO MATCH PARKING STALL STRIPING.
30	PAINT STRIPING (TYP). COLOR TO MATCH PARKING STALL STRIPING.
32	CANOPY (TYP) SEE ARCH PLANS.
33	DO NOT ENTER SIGN (TYP).
34	ASPHALT PER CITY STANDARDS (TYP).
35	MOUNTABLE CURB AND GUTTER PER CITY STANDARDS (TYP).
36	POS PER ARCH PLANS (TYP).
37	6' BOARD ON BOARD WOOD FENCE. PAINT/STAIN COLOR BY OWNER (TYP).

NORTH

1" = 20' SCALE — 20' 0 20' 40' FEET

CIVIL SITE PLAN

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

PROJECT INFORMATION

CARWASH FOR:
CREW CARWASH
1412 PFLAUM ROAD • MADISON, WI 53716

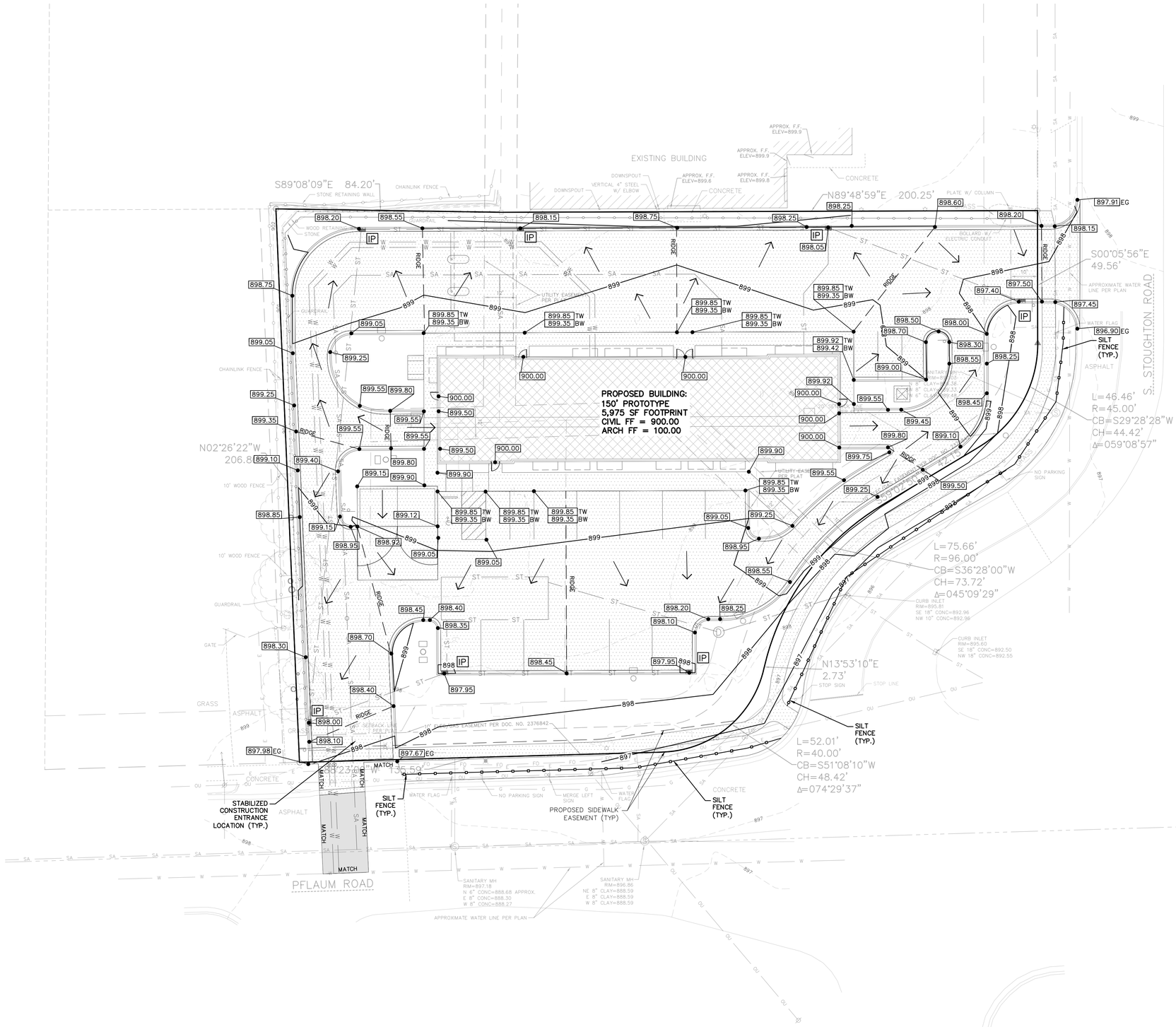
PROFESSIONAL SEAL

PRELIMINARY DATES
MAR. 9, 2023
MAR. 31, 2023
APR. 28, 2023
MAY 1, 2023
MAY 3, 2023
AUG. 1, 2023
AUG. 7, 2023

NOT FOR CONSTRUCTION

JOB NUMBER
230005500

SHEET NUMBER
C1.1



SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS

NOTES:

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

IP 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.

NORTH

1" = 20' SCALE 20' 0 20' 40' FEET

CIVIL GRADING AND EROSION CONTROL PLAN

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

PROJECT INFORMATION

CARWASH FOR:
CREW CARWASH
1412 PFLAUM ROAD • MADISON, WI 53716

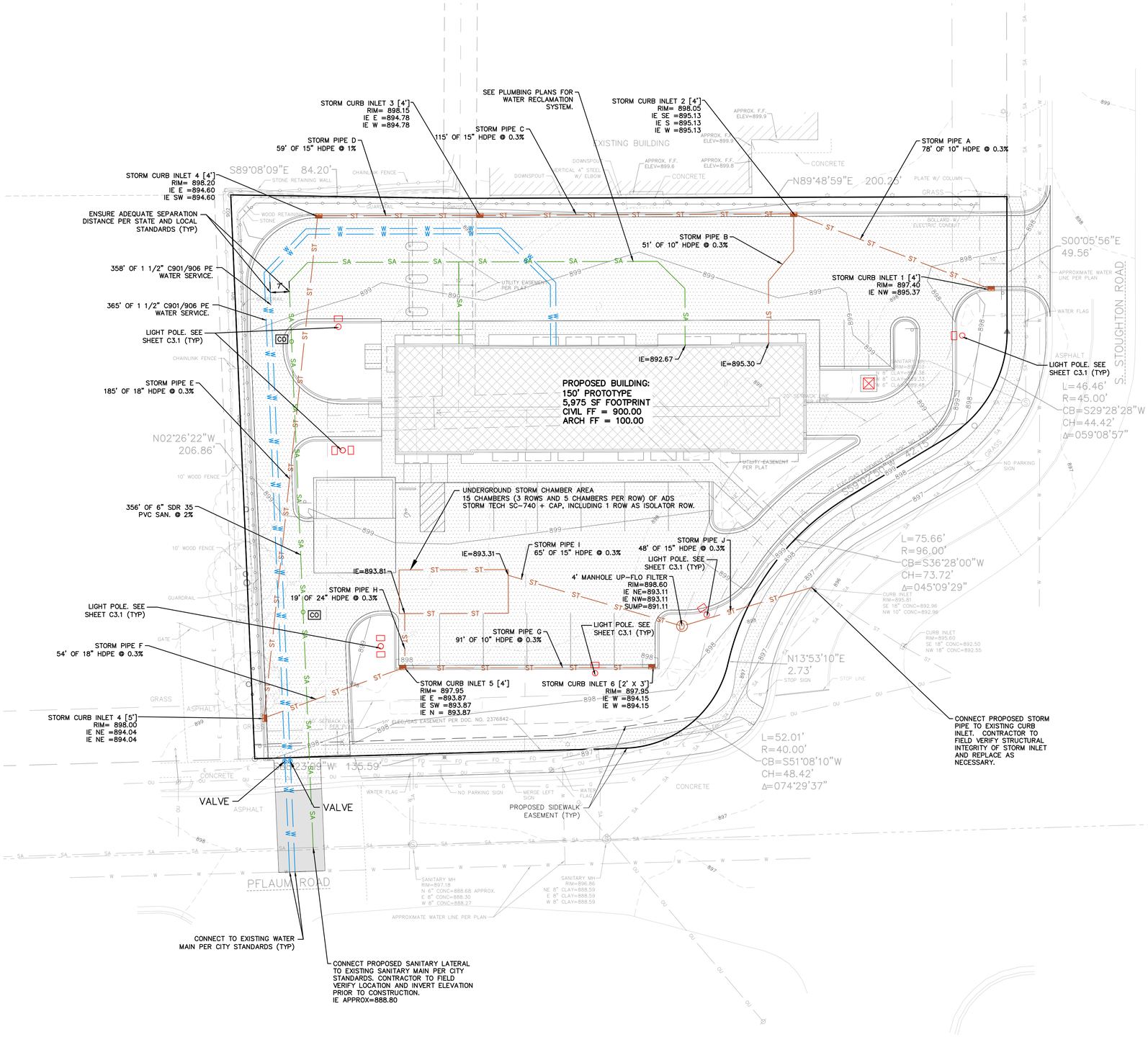
PROFESSIONAL SEAL

PRELIMINARY DATES
AUG. 7, 2023

NOT FOR CONSTRUCTION

JOB NUMBER
230005500

SHEET NUMBER
C1.2



SPECIFICATION NOTE:
SEE SHEET C0.1 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.

CLEANOUT NOTE:

CO = DENOTES LOCATIONS WHERE CONTRACTOR SHALL INSTALL CLEANOUTS, SEE C0.1 FOR SPECIFICATION.

CURB INLET NOTE:

ALL CURB INLETS TO CONTAIN FLOWGARD +PLUS OIL FILTER SEPARATOR INSERT. SEE DETAIL ON C2.0.

NORTH

1"= 20' SCALE 20' 0 20' 40' FEET

CIVIL UTILITY PLAN

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

PROJECT INFORMATION

CARWASH FOR:
CREW CARWASH
1412 PFLAUM ROAD • MADISON, WI 53716

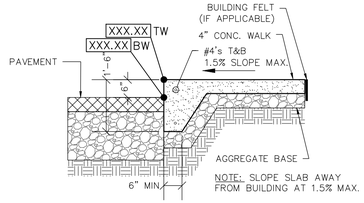
PROFESSIONAL SEAL

PRELIMINARY DATES
AUG. 7, 2023

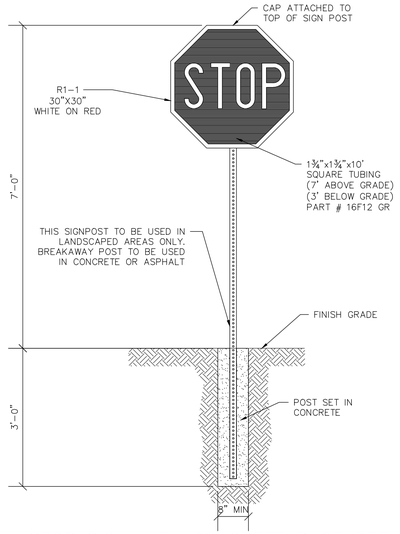
NOT FOR CONSTRUCTION

JOB NUMBER
230005500

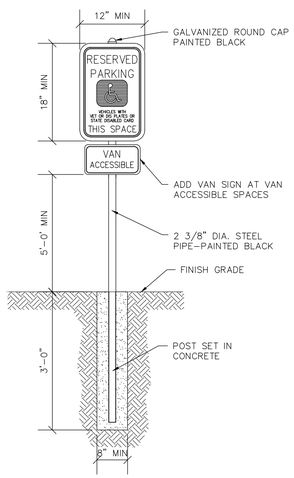
SHEET NUMBER
C1.3



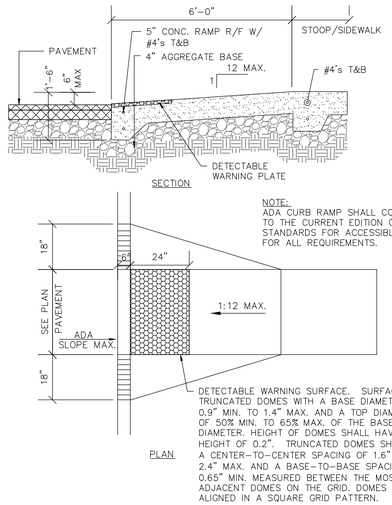
RAISED WALK DETAIL
NO SCALE



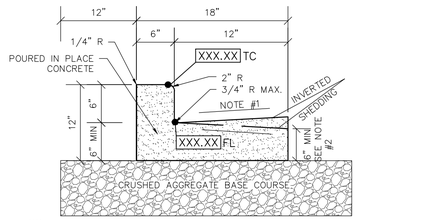
STOP SIGN WITH CONCRETE BASE DETAIL
NO SCALE



HANDICAP SIGNAGE WITH CONCRETE BASE DETAIL
NO SCALE



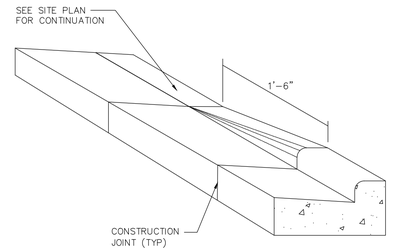
CURB RAMP DETAIL
NO SCALE



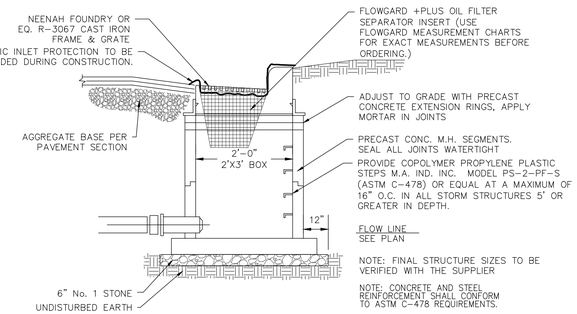
NOTE:
1. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MIN. GUTTER THICKNESS IS MAINTAINED.
3. SEE SITE PLAN & GRADING PLAN FOR INVERTED & SHEDDING CURB LOCATIONS

18" CONCRETE CURB & GUTTER DETAIL
NO SCALE

SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN
SPECIFICATIONS AND REQUIREMENTS

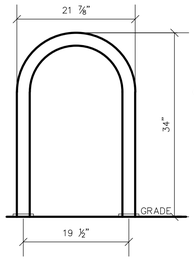


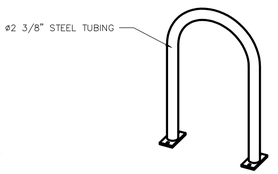
CURB TAPER DETAIL
NO SCALE

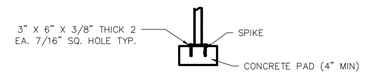


NOTE: FLOWGARD +PLUS INSERT SHALL BE MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES, WHICH AT A MINIMUM SHALL BE THREE INSPECTIONS PER YEAR AND A FILTER MEDIUM CHANGE ONCE PER YEAR.

STORM CURB INLET W/ OIL SEPARATOR DETAIL
NO SCALE

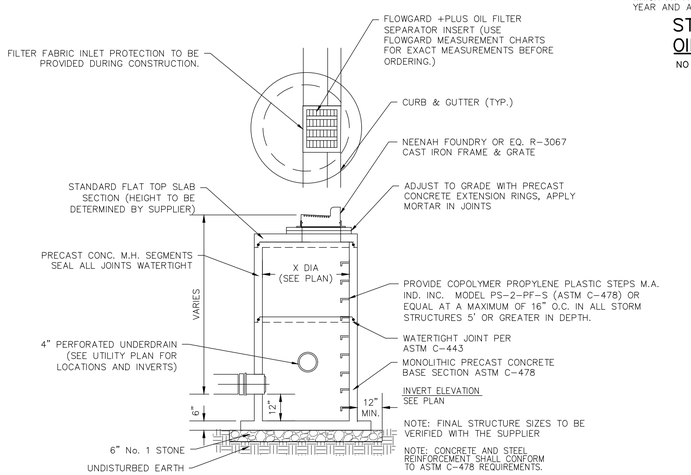






NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. OWNER SHALL SELECT COLOR & FINISH
3. SEE SITE PLAN FOR APPROX. LOCATION. COORDINATE W/ OWNER PRIOR TO CONSTRUCTION.
4. MANUFACTURED BY MADRAX; PRODUCT: U238-IG (SF); 'U' BIKE RACK 2 BIKE

SINGLE LOOP BIKE RACK
NO SCALE



STORM CURB INLET W/ SUMPED ROUND STRUCTURE DETAIL
NO SCALE

CONSTRUCTION SEQUENCE

PHASE	TYPE OF ACTION
1. PRE-CONSTRUCTION ACTION	1. CONTRACTOR TO CALL DIGGERS HOTLINE AT A MINIMUM OF 3 DAYS PRIOR TO CONSTRUCTION.
	2. PLACE ALL SILT FENCE.
	3. CONSTRUCT TRACKING STONE ENTRANCES AND ANY TEMPORARY CONSTRUCTION ROADWAYS AS NEEDED.
	4. CONSTRUCT PERMANENT DETENTION AND PERMANENT STORMWATER CONVEYANCE SYSTEMS.
	5. CONSTRUCT TEMPORARY SEDIMENT TRAPS, SEDIMENT BASINS, AND ANY TEMPORARY STORMWATER CONVEYANCE SYSTEMS AS NEEDED.
	6. STABILIZE ALL TEMPORARY AND PERMANENT EROSION CONTROL AND STORMWATER CONVEYANCE SYSTEMS BEFORE TOPSOIL CAN BE STRIPPED.
2. CONSTRUCTION ACTION	1. SITE DEMOLITION AS REQUIRED.
	2. STRIP AND RELOCATE TOPSOIL TO THE DESIGNATED TOPSOIL STOCKPILE. FINAL LOCATION BY CONTRACTOR (VERIFY W/ OWNER). PROVIDE PERIMETER SILT FENCE UNTIL STABLIZED.
	3. BEGIN MASS EARTH WORK FOR THE BUILDING PAD AND PAVEMENT AREAS.
	4. CONSTRUCT ANY REMAINING STORMWATER CONVEYANCE SYSTEMS, AND INSTALL ALL OTHER UTILITIES ON SITE.
	5. DIG AND POUR ALL BUILDING FOOTINGS.
	6. PLACE GRAVEL FOR ALL PROPOSED PAVEMENT AREAS, INCLUDING FIRE LANES.
	7. TOPSOIL, SEED, AND MULCH ALL DISTURBED AREAS OUTSIDE THE BUILDING AND PROPOSED PAVEMENT AREAS.
	8. CONSTRUCT BUILDING.
	9. PAVE DRIVEWAYS AND PARKING AREAS.
	10. TOPSOIL, SEED, AND MULCH ALL OTHER DISTURBED AREAS. PLACE EROSION MATTING AND RIP RAP.
3. POST CONSTRUCTION ACTION	1. CONTRACTOR TO REMOVE TEMPORARY EROSION CONTROL MEASURES UPON SITE STABILIZATION.
	2. SEE THE POST CONSTRUCTION MAINTENANCE PLAN FOR PERMANENT STORMWATER MANAGEMENT SYSTEMS.

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

CIVIL DETAILS

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

PROJECT INFORMATION

CARWASH FOR:
CREW CARWASH
1412 PFLAUM ROAD • MADISON, WI 53716

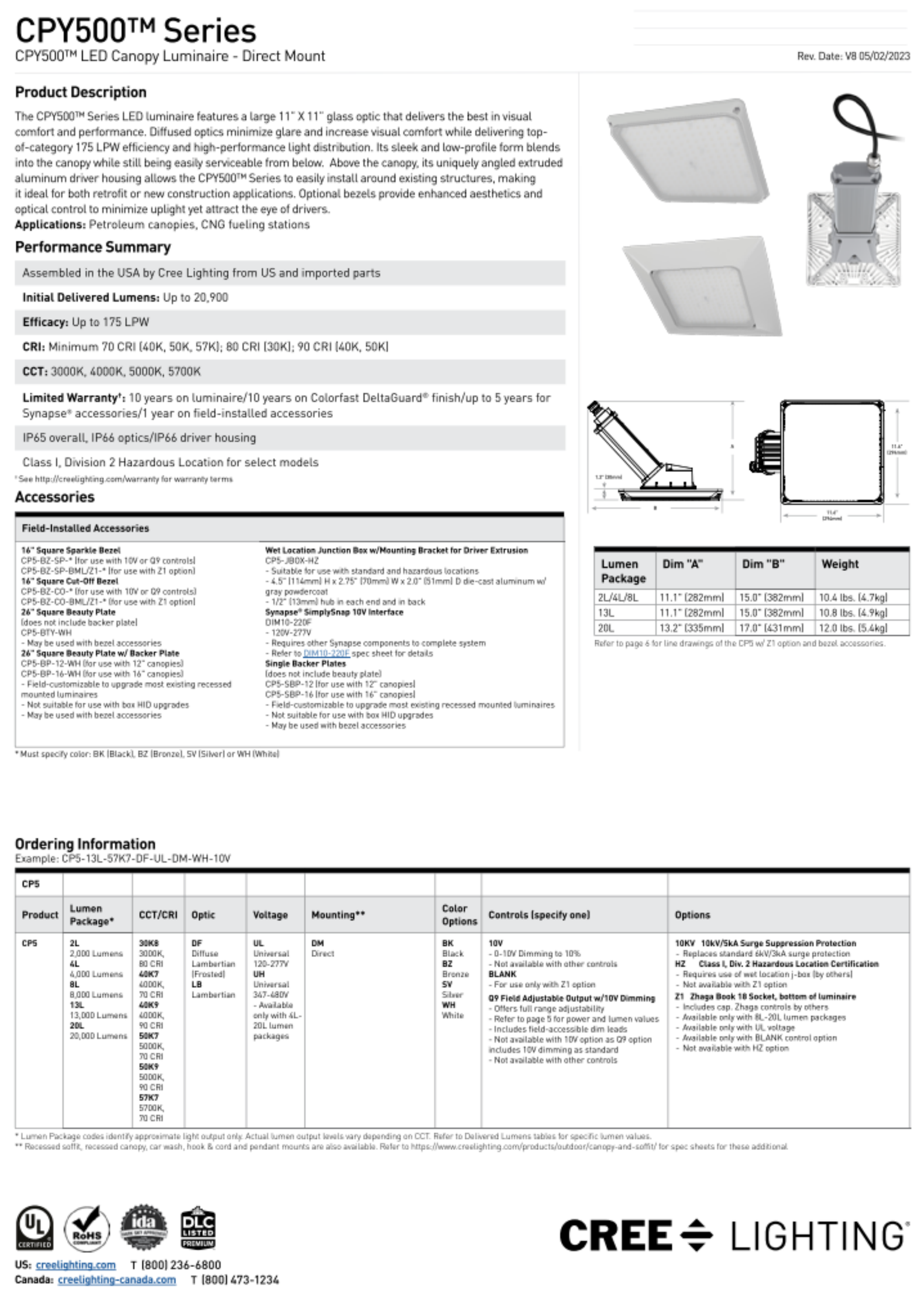
PROFESSIONAL SEAL

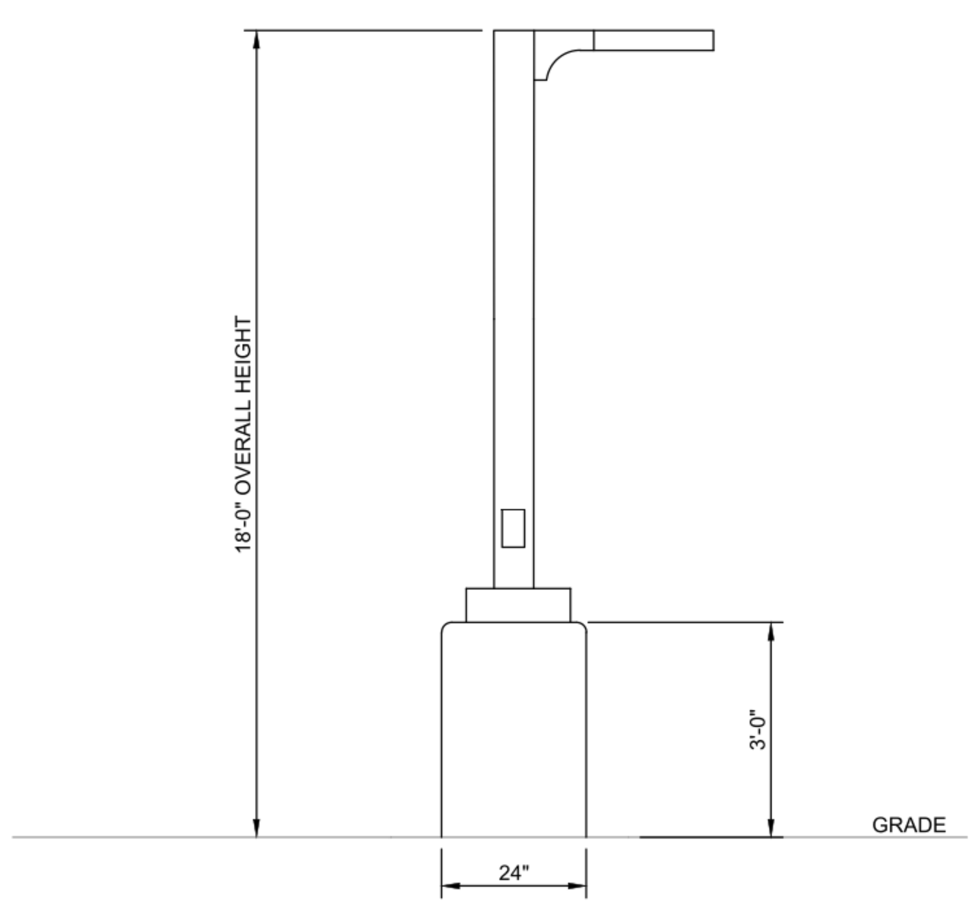
PRELIMINARY DATES
AUG. 7, 2023

NOT FOR CONSTRUCTION

JOB NUMBER
230005500

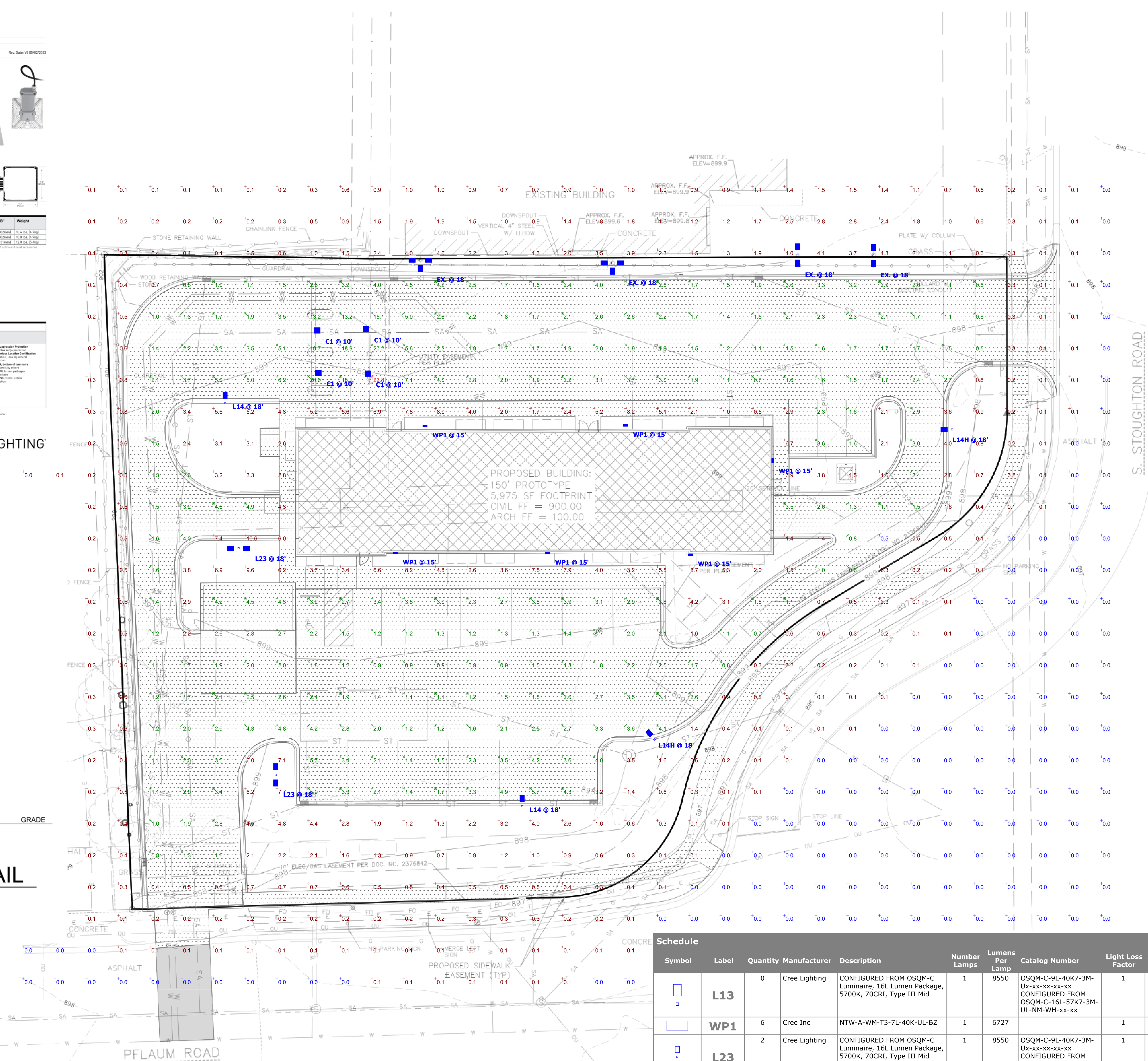
SHEET NUMBER
C2.0

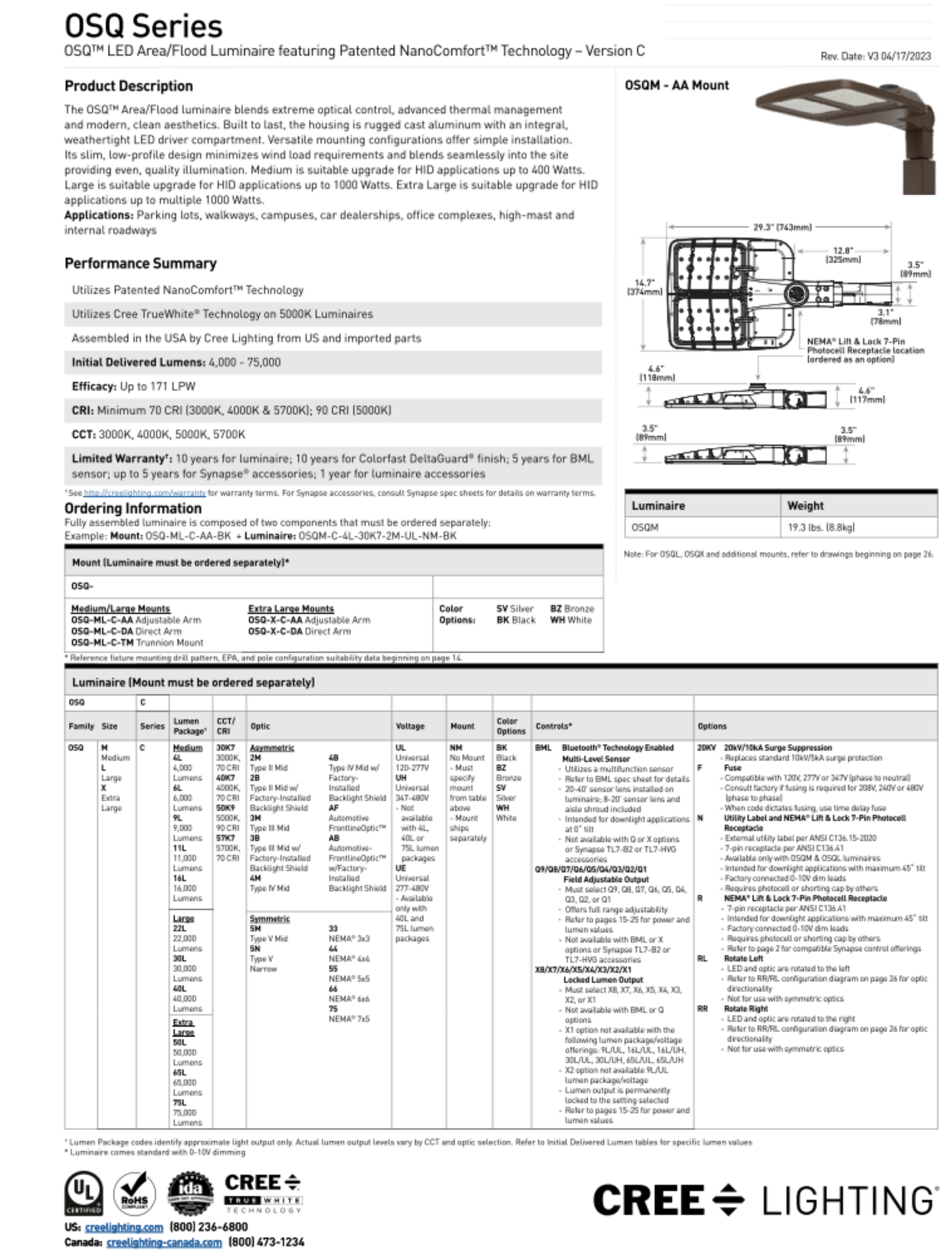


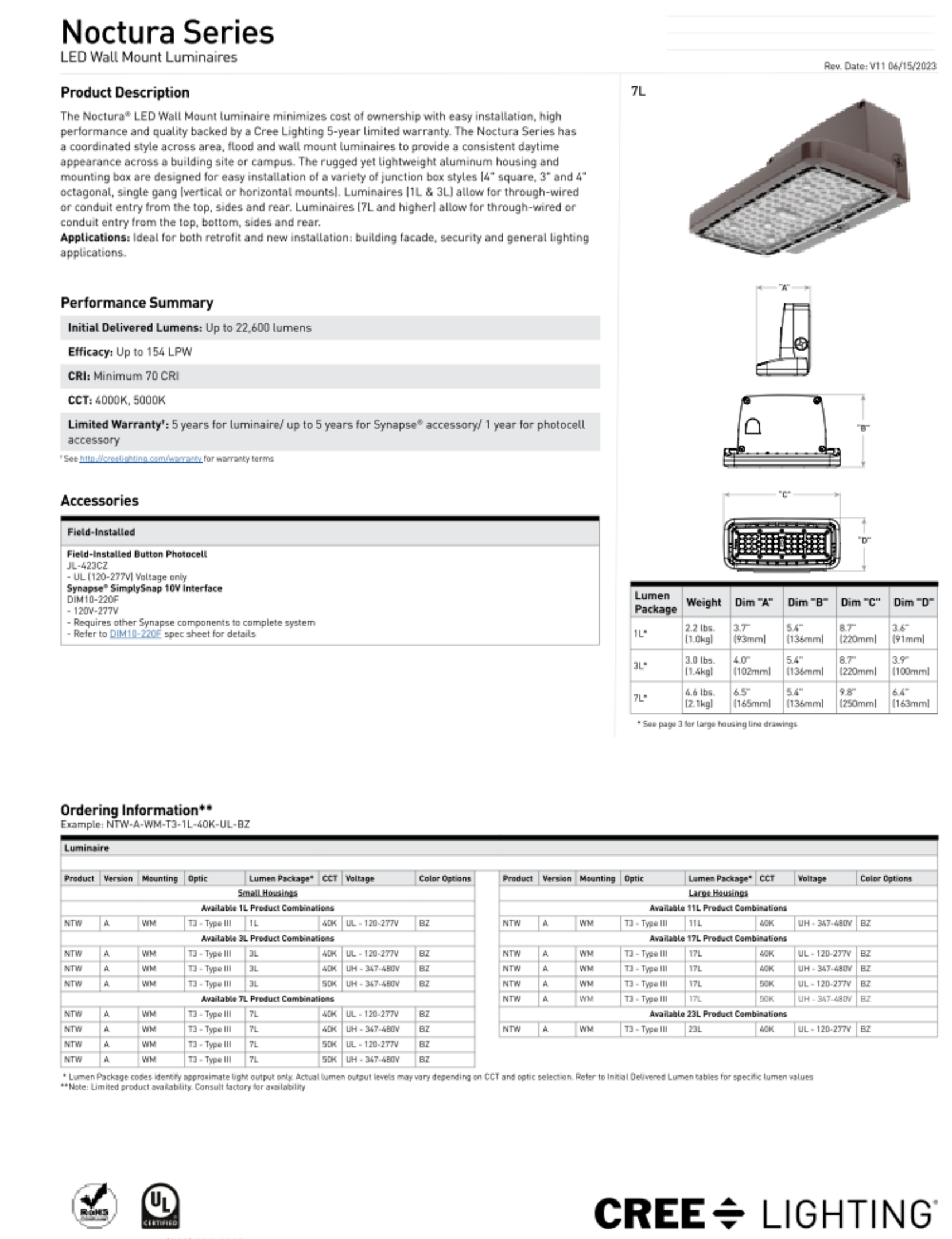


LIGHT POLE DETAIL

NO SCALE







Schedule

Symbol	Label	Quantity	Manufacturer	Description	Number Lamps	Lumens Per Lamp	Catalog Number	Light Loss Factor	Wattage	Wattage
	L13	0	Cree Lighting	CONFIGURED FROM OSQM-C Luminaire, 16L Lumen Package, 5700K, 70CRI, Type III Mid	1	8550	OSQM-C-9L-40K7-3M-Ux-xx-xx-xx-xx CONFIGURED FROM OSQM-C-16L-57K7-3M-UL-NM-WH-xx-xx	1	55	
	WP1	6	Cree Inc	NTW-A-WM-T3-7L-40K-UL-BZ	1	6727		1	46.4	
	L23	2	Cree Lighting	CONFIGURED FROM OSQM-C Luminaire, 16L Lumen Package, 5700K, 70CRI, Type III Mid	1	8550	OSQM-C-9L-40K7-3M-Ux-xx-xx-xx-xx CONFIGURED FROM OSQM-C-16L-57K7-3M-UL-NM-WH-xx-xx	1	110	
	L14	2	Cree Lighting	CONFIGURED FROM OSQM-C Luminaire, 16L Lumen Package, 5700K, 70CRI, Type IV Mid	1	8550	OSQM-C-9L-40K7-4M-Ux-xx-xx-xx-xx CONFIGURED FROM OSQM-C-16L-57K7-4M-UL-NM-WH-xx-xx	1	55	
	L14H	2	Cree Lighting	CONFIGURED FROM OSQM-C Luminaire, 16L Lumen Package, 5700K, 70 CRI, Type IV Mid w-BLS	1	5400	OSQM-C-9L-40K7-4B-Ux-xx-xx-xx-xx CONFIGURED FROM OSQM-C-16L-57K7-4B-UL-NM-WH-xx-xx	1	55	
	C1	4	Cree Lighting	CONFIGURED FROM CPY250 Canopy Luminaire, 13L Lumen Package, 5700K, 70 CRI, Flat Lens, 120-277V	1	4890	CPY250-C-4L-57K7-F-UL-xx-xx-xxxx CONFIGURED FROM CPY250-C-13L-57K7-F-UL-xx-xx-xxx	1	31	

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	1.5 fc	22.8 fc	0.0 fc	N/A	N/A
PARKING LOT	✳	2.9 fc	22.8 fc	0.5 fc	45.6:1	5.8:1

NORTH

1"= 20'

20' 0 20' 40'

SCALE FEET

CIVIL SITE PHOTOMETRIC PLAN & DETAILS

EXCEL

Always a Better Plan

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

PROJECT INFORMATION

PROJECT CARWASH FOR:

CREW CARWASH

1412 PFLAUM ROAD • MADISON, WI 53716

PROFESSIONAL SEAL

PRELIMINARY DATES

AUG. 7, 2023

NOT FOR CONSTRUCTION

JOB NUMBER

230005500

SHEET NUMBER

C3.1

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

DIGGERS HOTLINE

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

SHADE TREES (DECIDUOUS)

SSM	State Street Miyabe Maple
PPH	Prairie Pride Hackberry
BC	Bald Cypress

EVERGREEN TREES

IJ	Iowa Juniper (upright)

DECIDUOUS SHRUBS

BBH	Bobo Hydrangea
LLH	Little Lime Hydrangea
GLS	Gro Low Fragrant Sumac
MKL	Miss Kim Dwarf Lilac
SBW	Sonic Bloom Weigela

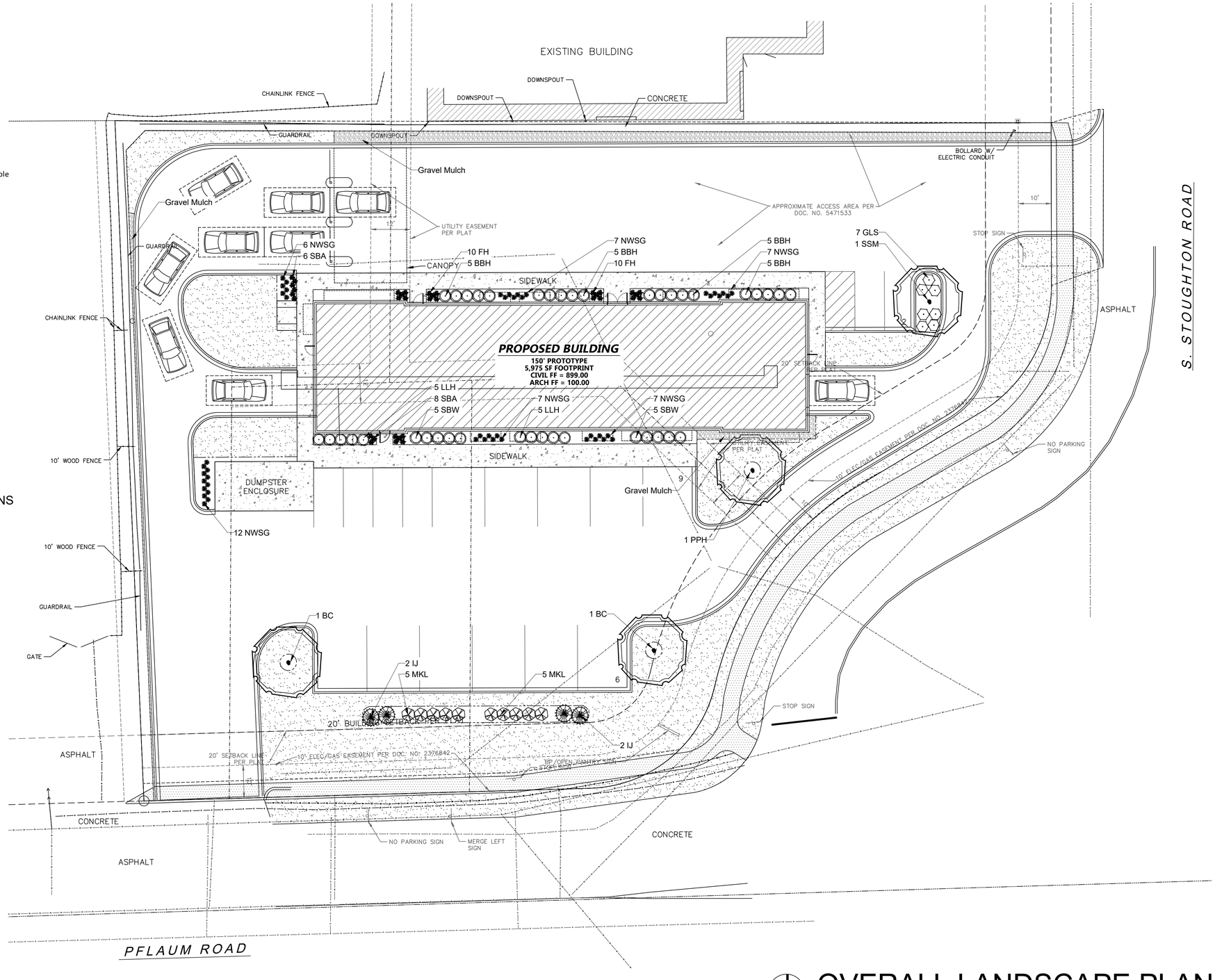
ORNAMENTAL GRASSES

NWSG	Northwind Switch Grass

HERBACEOUS PERENNIALS

SBA	Summer Beauty Allium
FH	Francee Hosta

PLANT ABBREVIATIONS



NORTH

OVERALL LANDSCAPE PLAN

Scale: 1" = 16'0"

0 8 16 32

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
ph 262.639.9733
david@wdavidheller.com
www.wdavidheller.com

PROJECT

CREW CARWASH

1412 Pflaum Road
Madison, WI 53716

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
8.07.23	FIRST ISSUE

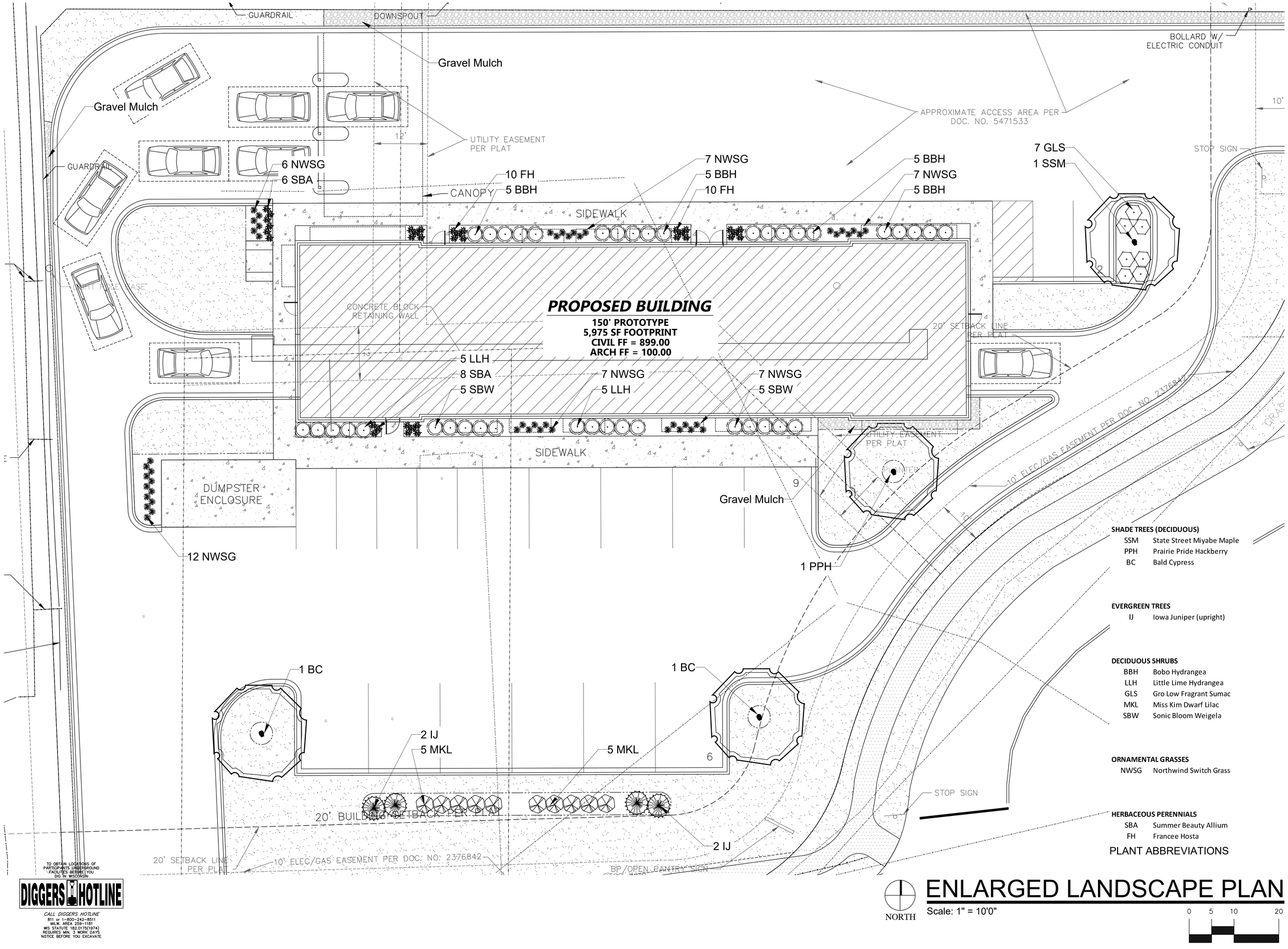
These plans were prepared by:
W. David Heller, ASLA
Registered Landscape Architect
#438-014

Information contained herein is based on survey information, field inspection, and believed to be accurate.

SHEET TITLE

OVERALL LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	23-046
DATE	08.07.23
SHEET NUMBER	L 1.0



SHADE TREES (DECIDUOUS)

SSM	State Street Miyabe Maple
PPH	Prairie Pride Hackberry
BC	Bald Cypress

EVERGREEN TREES

IJ	Iowa Juniper (upright)

DECIDUOUS SHRUBS

BBH	Bobo Hydrangea
LLH	Little Lime Hydrangea
GLS	Gro Low Fragrant Sumac
MKL	Miss Kim Dwarf Lilac
SBW	Sonic Bloom Weigela

ORNAMENTAL GRASSES

NWSG	Northwind Switch Grass

HERBACEOUS PERENNIALS

SBA	Summer Beauty Allium
FH	Francee Hosta

PLANT ABBREVIATIONS

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

DIGGERS HOTLINE

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

NORTH

ENLARGED LANDSCAPE PLAN

Scale: 1" = 10'0"

0 5 10 20

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LANDSCAPE ARCHITECTURE
P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
ph 262.639.9733
david@wdavidheller.com
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PROJECT

CREW CARWASH

1412 Pflaum Road
Madison, WI 53716

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
8.07.23	FIRST ISSUE

These plans were prepared by:
W. David Heller, ASLA
Registered Landscape Architect
#438-014

Information contained herein is based on survey information, field inspection, and believed to be accurate.

SHEET TITLE

ENLARGED LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	23-046
DATE	08.07.23
SHEET NUMBER	L 1.1

1. Contractor responsible for contacting Diggers Hotline (811 or 800-242-8511) to have site marked prior to excavation or planting.

2. Contractor to verify all plant quantities shown on Plant & Material List and landscape planting symbols and report any discrepancies to Landscape Architect or General Contractor.

3. All plantings shall comply with standards as described in American Standard of Nursery Stock - Z60.1 ANSI (latest version). Landscape Architect reserves the right to inspect, and potentially reject any plants that are inferior, compromised, undersized, diseased, improperly transported, installed incorrectly or damaged. No sub-standard "B Grade" or "Park Grade" plant material shall be accepted. Plant material shall originate from nursery(ies) with a similar climate as the planting site.

4. Any potential plant substitutions must be approved by Landscape Architect or Owner. All plants must be installed as per sizes indicated on Plant & Material Schedule, unless approved by Landscape Architect. Any changes to sizes shown on plan must be submitted in writing to the Landscape Architect prior to installation.

5. Topsoil in Parking Lot Islands (if applicable): All parking lot islands to be backfilled with topsoil to a minimum depth of 12" to insure long-term plant health. Topsoil should be placed within 3" of finish grade by General Contractor / Excavation Contractor during rough grading operations/activity. The landscape contractor shall be responsible for the fine grading of all disturbed areas, planting bed areas, and lawn areas. Crown all parking lot islands a minimum of 4" to provide proper drainage, unless otherwise specified.

6. Tree Planting: Plant all trees slightly higher than finished grade at the root flare. Remove excess soil from the top of the root ball, if needed. Remove and discard non-biodegradable ball wrapping and support wire. Removed biodegradable burlap and wire cage (if present) from the top $\frac{1}{3}$ of the rootball and carefully bend remaining wire down to the bottom of the hole. Once the tree has been placed into the hole and will no longer be moved, score the remaining $\frac{2}{3}$ of the burlap and remove the twine. Provide one slow release fertilizer packets (per 1" caliper) for each tree planted.

7. Tree Planting: Backfill tree planting holes 80% existing soils removed from excavation and 20% Soil Amendments (see Note 11). Avoid air pockets and do not tamp soil down. Discard any gravel, rocks, heavy clay, or concrete pieces. When hole is $\frac{2}{3}$ full, trees shall be watered thoroughly, and water left to soak in before proceeding to fill the remainder of the hole. Water again to full soak in the new planting. Each tree shall receive a 3" deep, 4-5' diameter (see planting details or planting plan) shredded hardwood bark mulch ring / saucer around all trees. Do not build up any mulch onto the trunk of any tree. Trees that are installed incorrectly will be replaced at the time and expense of the Landscape Contractor.

8. Shrub Planting: All shrubs to be planted in groupings as indicated on the Landscape Plan. Install with the planting of shrubs a 50/50 mix of Soil Amendments with blended, pulverized topsoil. Install topsoil into all plant beds as needed to achieve proper grade and displace undesirable soils (see planting detail). Remove all excessive gravel, clay and stones from plant beds prior to planting. When hole(s) are $\frac{2}{3}$ full, shrubs shall be watered thoroughly, and water left to soak in before proceeding. Provide slow-release fertilizer packets at the rater of 1 per 24" height/diameter of shrub at planting.

9. Mulching: All tree rings to receive a 3" deep layer of high quality shredded hardwood bark mulch (not pigment dyed or enviro-mulch). All shrub planting and perennial planting bed areas (groupings) shall receive a 2" layer of double-shredded hardwood bark mulch, and groundcover areas a 2" layer of the same mulch. Do not mulch annual flower beds (if applicable). Do not allow mulch to contact plant stems and tree trunks.

10. Edging: All planting beds shall be edged with a 4" deep spade edge using a flat landscape spade or a mechanical edger. Bedlines are to be cut crisp, smooth as per plan. A clean definition between landscape beds and lawn is required. Pack mulch against lawn edge to hold in place.

11. Plant bed preparation/Soil Amendment composition: All perennial, groundcover and annual areas (if applicable) are required to receive a blend of organic soil (Soil Amendments) amendments prior to installation. Roto-till the following materials at the following ratio, into existing soil beds or installed topsoil beds to a depth of approximately 8"-10". Containerized and balled & burlapped plant material should be back-filled with amended soil:

Per 100 SF of bed area (Soil Amendment composition):
⅔ CY Peat Moss or Mushroom Compost
⅔ CY blended/pulverized Topsoil
⅓ CY composted manure

In roto-tilled beds only, also include in above mixture:
2 lbs Starter Fertilizer

12. Installation preparation for all seeded areas: remove/kill off any existing unwanted vegetation prior to seeding. Prepare the topsoil (if adequate or provide as in item #6 above) and seed bed by removing all surface stones 1" or larger. Apply a starter fertilizer (20-10-5, or approved comparable) and specified seed uniformly at the specified rate, and provide mulch covering suitable to germinate and establish turf. Provide seed and fertilizer specifications to Landscape Architect and Owner prior to installation. Erosion control measures are to be used in swales and on slopes in excess of 1:3 and where applicable (see Civil Engineering Drawings). Methods of installation may vary are the discretion of the Landscape Contractor on his/her responsibility to establish and guarantee a smooth, uniform, quality turf. A minimum of 2" of blended, prepared and non-compacted topsoil is required for all lawn areas. If straw mulch is used as a mulch covering, a tackifier may be necessary to avoid wind dispersal of mulch covering. Marsh hay containing reed canary grass is NOT acceptable as a mulch covering.

An acceptable quality seed installation is defined as having:
No bare spots larger than one (1) square foot
No more than 10% of the total area with bare areas larger than one (1) square foot
A uniform coverage through all turf areas

13. Warranty and Replacements: All plantings are to be watered thoroughly at the time of planting, through construction and upon completion of project as required. Trees, Evergreens, and Shrubs (deciduous and evergreen) shall be guaranteed (100% replacement) for a minimum of one (1) year from the date of project completion. Perennials, groundcovers, and ornamental grasses shall be guaranteed for a minimum of one (1) growing season. Perennials, groundcovers, and ornamental grasses planted after September 15th shall be guaranteed through May 31st of the following year. Only one replacement per plant will be required during the warranty period, except for losses or replacements due to failure to comply with specified requirements. Watering and general ongoing maintenance instructions are to be supplied by the Landscape Contractor to the Owner upon completion of the project.

14. The Landscape Contractor is responsible for the watering and maintenance of all landscape areas for a period of 45 days after the substantial completion of the landscape installation. This shall include all trees, shrubs, evergreens, perennials, ornamental grasses, turf grass, no-mow grass, and native prairie seed mix / stormwater seed mix. Work also includes weeding, edging, mulching (only if required), fertilizing, trimming, sweeping up grass clippings, pruning and deadheading.

15. Project Completion: Landscape Contractor is responsible to conduct a final review of the project, upon completion, with the Landscape Architect, Client or Owner / Client Representative, and the General Contractor to answer questions, provide written care instructions for new plantings and turf, and insure that all specifications have been met.

LANDSCAPE GENERAL NOTES

PLANT & MATERIAL SCHEDULE

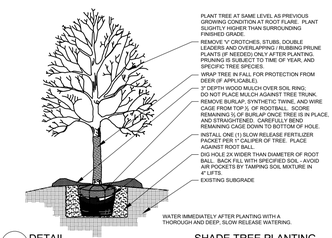
PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CALIPER/HEIGHT SIZE	ROOT	SPECIFICATION / NOTES	PLANT SPACING	POINT VALUE EACH	TOTAL
Proposed Landscape Materials									
SHADE TREES (DECIDUOUS)									
SSM	1	Acer miyabei 'Morton'	State Street Miyabe Maple	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting		35	35
PPH	1	Celtis occidentalis 'Prairie Pride'	Prairie Pride Hackberry	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting		35	35
BC	2	Taxodium distichum	Bald Cypress	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting		35	70
PLANT KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED BOTANICAL NAME**	**COMMON NAME**	**HEIGHT SIZE**	**ROOT**	**SPECIFICATION / NOTES**	**PLANT SPACING**		
EVERGREEN TREES									
IJ	4	Juniperus chinensis 'Iowa'	Iowa Juniper (upright)	54"	B&B	Evenly shaped tree with branching to the ground	42"	10	40
PLANT KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED BOTANICAL NAME**	**COMMON NAME**	**SHRUB SIZE (HEIGHT)**	**ROOT/ CONT.**	**SPECIFICATION / NOTES**	**PLANT SPACING**		
DECIDUOUS SHRUBS									
BBH	20	Hydrangea paniculata 'ILBOVO'	Bobo Hydrangea	18"	Cont.	Full, well rooted plant, evenly shaped	42"	3	60
LLH	10	Hydrangea paniculata 'Jane'	Little Lime Hydrangea	18"	Cont.	Full, well rooted plant, evenly shaped	42"	3	30
GLS	7	Rhus aromatica 'Gro-Low'	Gro Low Fragrant Sumac	18-24"	Cont.	Full, well rooted plant, evenly shaped	42"	3	21
MKL	10	Syringa patula 'Miss Kim'	Miss Kim Dwarf Lilac	24"	Cont.	Full, well rooted plant, evenly shaped	48"	3	30
SBW	10	Weigela florida 'Sonic Bloom'	Sonic Bloom Weigela	18"	Cont.	Full, well rooted plant, evenly shaped	42"	3	30
PLANT KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED BOTANICAL NAME**	**COMMON NAME**	**CONTAINER SIZE**		**SPECIFICATION / NOTES**	**PLANT SPACING**		
ORNAMENTAL GRASSES									
NWSG	46	Panicum virgatum 'Northwind'	Northwind Switch Grass	#1	Cont.	Full, well rooted plant	18"	2	92
PLANT KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED BOTANICAL NAME**	**COMMON NAME**	**CONTAINER SIZE**		**SPECIFICATION / NOTES**	**PLANT SPACING**		
HERBACEOUS PERENNIALS									
SBA	14	Allium 'Summer Beauty'	Summer Beauty Allium	#1	Cont.	Full, well rooted plant, evenly shaped	18"	2	28
FH	20	Hosta fortunei 'Francee'	Francee Hosta	#1	Cont.	Full, well rooted plant, evenly shaped	18"	2	40
						TOTAL POINTS SHOWN:			**511**
PLAN KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED SPECIFIED SEED MIX / SOD**		**CONTAINER SIZE**		**SPECIFICATION / NOTES**	**PLANT SPACING**		
LAWN	1170	Lawn Establishment Area / Grading Area			SY	Reinder's Deluxe 50 Seed Mix (800-785-3301)			
	10529	Erosion Matting for seeded areas	*all proposed seeded areas*		SF	EroTex DS75 Erosion Control Blanket (or approved equal)			
Hardscape Materials									
	12	Heritage River Gravel Mulch (1.0-1.5" pieces)	*Area: 790 SF*		TN	*2" depth*			
	75	Aluminum Edge Restraint (gravel areas)	Permaloc ProSlide 3/16"x5.5" Black Duraflex Finish		LF				
	800	Landscape Fabric	*SF*		SF				
	31	Shredded Hardwood Mulch (3" depth)	*Area: 3,400 SF*		CY	Bark Mulch; apply Preemergent after installation of mulch			
	21	Soil Amendments (2" depth)	*Area: 3,400 SF*		CY				
	64	Pulverized Topsoil (2" over all seeded areas)	*Area: 10,550 SF*		CY				
	21	Pulverized Topsoil (2" over bed areas)	*Area: 3,400 SF*		CY				

*Landscape counts & quantities are provided as a service to the Landscape Contractor; Landscape Contractor is responsible for verifying these counts and quantities in order to provide a complete landscape installation as outlined on this Landscape Master Plan. In the event that a discrepancy occurs between this schedule and the Landscape Master Plan, the Landscape Master Plan- including the graphics and notations depicted therein- shall govern.

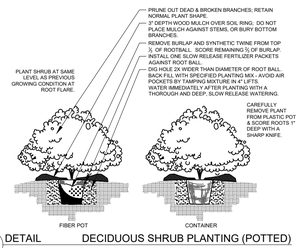
Seed Compositions:

Reinder's Deluxe 50 Seed Mix (800-785-3301): Seed at rate of 150-200# per acre

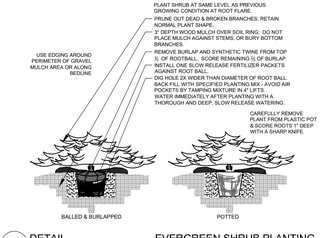
20% Kentucky Bluegrass (Sod Quality)
15% Newport Kentucky Bluegrass
15% Ken Blue Kentucky Bluegrass
25% Creeping Red Fescue
15% Quebec Perennial Ryegrass
10% Fiesta III Perennial Ryegrass



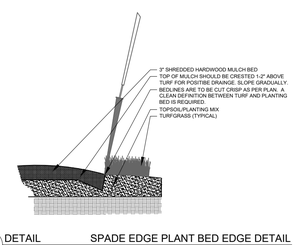
1 DETAIL SHADE TREE PLANTING
N.T.S. SECTION



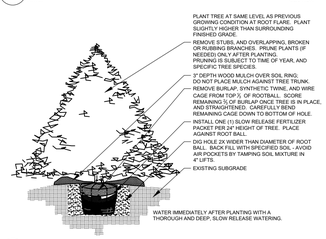
2 DETAIL DECIDUOUS SHRUB PLANTING (POTTED)
N.T.S. SECTION



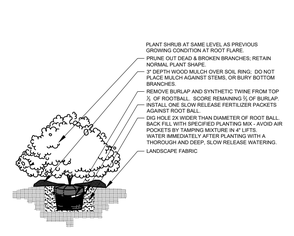
3 DETAIL EVERGREEN SHRUB PLANTING
N.T.S. SECTION



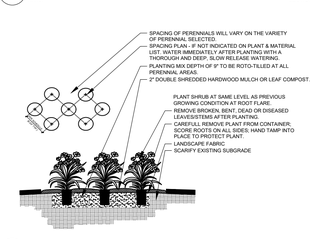
4 DETAIL SPADE EDGE PLANT BED EDGE DETAIL
N.T.S. SECTION



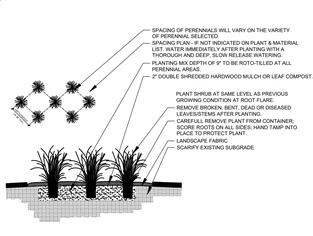
5 DETAIL EVERGREEN TREE PLANTING
N.T.S. SECTION



6 DETAIL DECIDUOUS SHRUB PLANTING (B&B)
N.T.S. SECTION



7 DETAIL GROUNDCOVER / PERENNIAL PLANTING
N.T.S. SECTION



8 DETAIL ORNAMENTAL GRASS PLANTING
N.T.S. SECTION

PLANTING & HARDSCAPE DETAILS

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
ph 262.639.9733
david@wdavidheller.com
www.wdavidheller.com

PROJECT

CREW CARWASH

1412 Pflaum Road
Madison, WI 53716

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
8.07.23	FIRST ISSUE

These plans were prepared by:
W. David Heller, ASLA
Registered Landscape Architect
#438-014

Information contained herein is based on survey information, field inspection, and believed to be accurate.

SHEET TITLE

LANDSCAPE DETAILS, NOTES & SCHEDULES

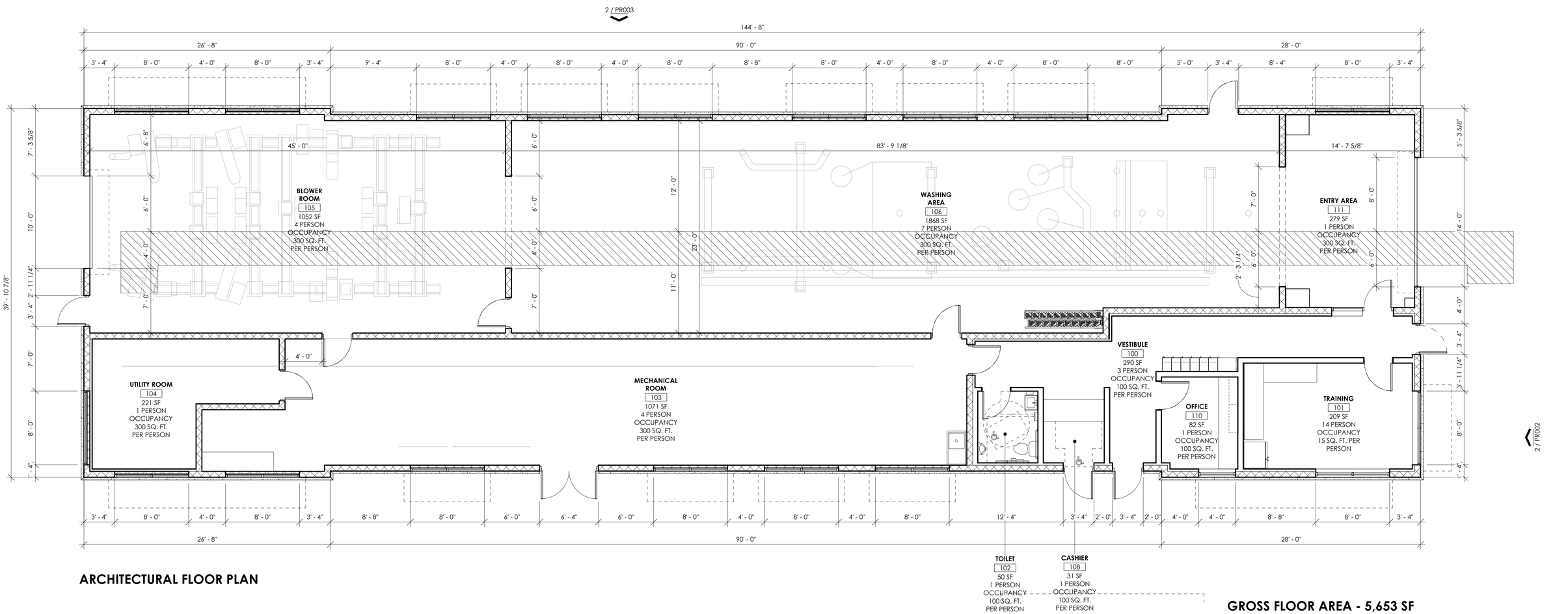
PROJECT MANAGER WDH

PROJECT NUMBER 23-046

DATE 08.07.23

SHEET NUMBER

L 1.2



ARCHITECTURAL FLOOR PLAN

GROSS FLOOR AREA - 5,653 SF

BUILDING FLOOR PLAN

CREW CARWASH, INC
Madison BP

NORTH

4/28/23

PRO2023

3/16" = 1'-0"

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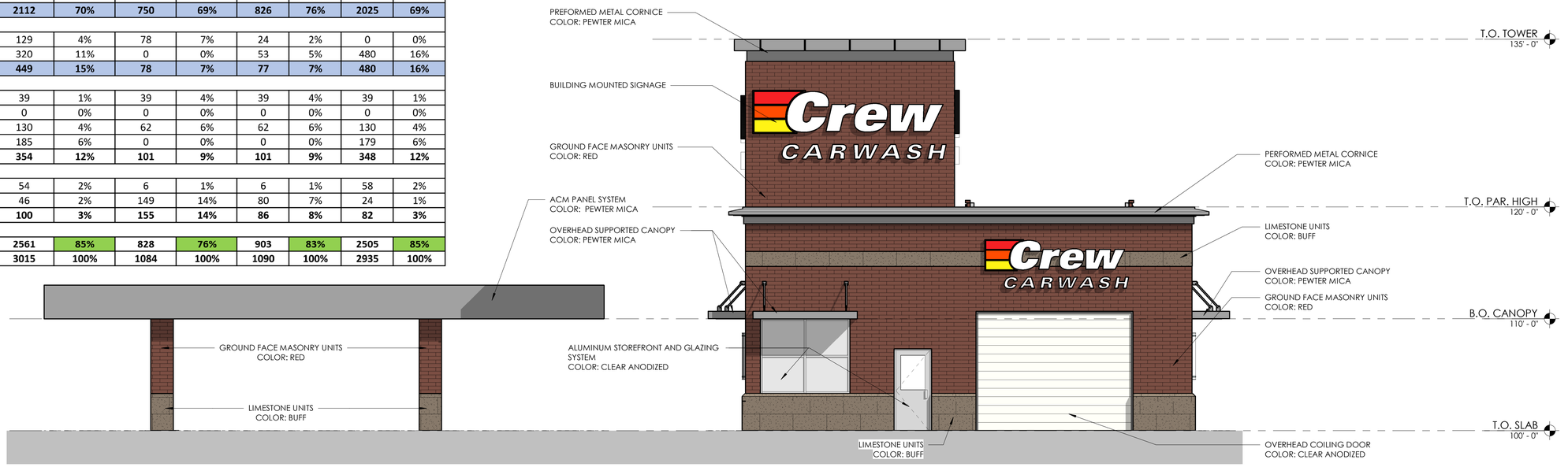
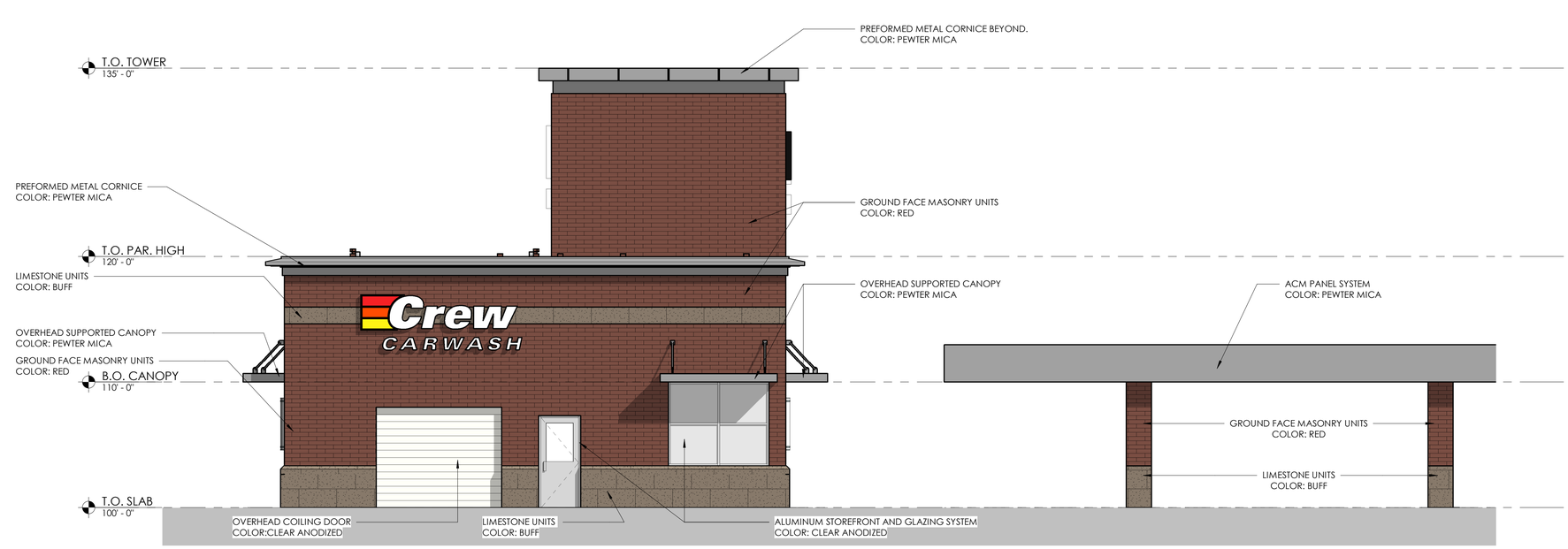
	Crew Carwash - Eden Prairie, MN: Carwash Exterior Materials								
	Materials	**East Elevation**		**North Elevation (W. 78th St.)**		**South Elevation (Terry Pine Dr.)**		**West Elevation (Eden Prairie Rd.)**	
Masonry (Class 1)	Brick, Modular	1598	53%	620	57%	682	63%	1552	53%
	Limestone	514	17%	130	12%	144	13%	473	16%
	Subtotal	**2112**	**70%**	**750**	**69%**	**826**	**76%**	**2025**	**69%**
Glazing (Class 1)	Storefront w/ Clear Glass	129	4%	78	7%	24	2%	0	0%
	Storefront w/ Spandrel Glass	320	11%	0	0%	53	5%	480	16%
	Subtotal	**449**	**15%**	**78**	**7%**	**77**	**7%**	**480**	**16%**
Metal Panel & Trim	Architectural Metal Panels	39	1%	39	4%	39	4%	39	1%
	Architectural Metal Louver	0	0%	0	0%	0	0%	0	0%
	Metal Trim/Coping/Cornice	130	4%	62	6%	62	6%	130	4%
	Equipment Screen	185	6%	0	0%	0	0%	179	6%
	Subtotal	**354**	**12%**	**101**	**9%**	**101**	**9%**	**348**	**12%**
Misc.	Architectural Metal Canopy	54	2%	6	1%	6	1%	58	2%
	Metal Door (Stainless or Aluminum)	46	2%	149	14%	80	7%	24	1%
	Subtotal	**100**	**3%**	**155**	**14%**	**86**	**8%**	**82**	**3%**
	Class 1 Material Gross Area	**2561**	**85%**	**828**	**76%**	**903**	**83%**	**2505**	**85%**
	Gross Area	**3015**	**100%**	**1084**	**100%**	**1090**	**100%**	**2935**	**100%**



NORTH ELEVATION



SOUTH ELEVATION

CREW CARWASH - BUILDING ELEVATIONS

CREW CARWASH, INC
Madison BP

04/28/23
PRO2023
3/16" = 1'-0"

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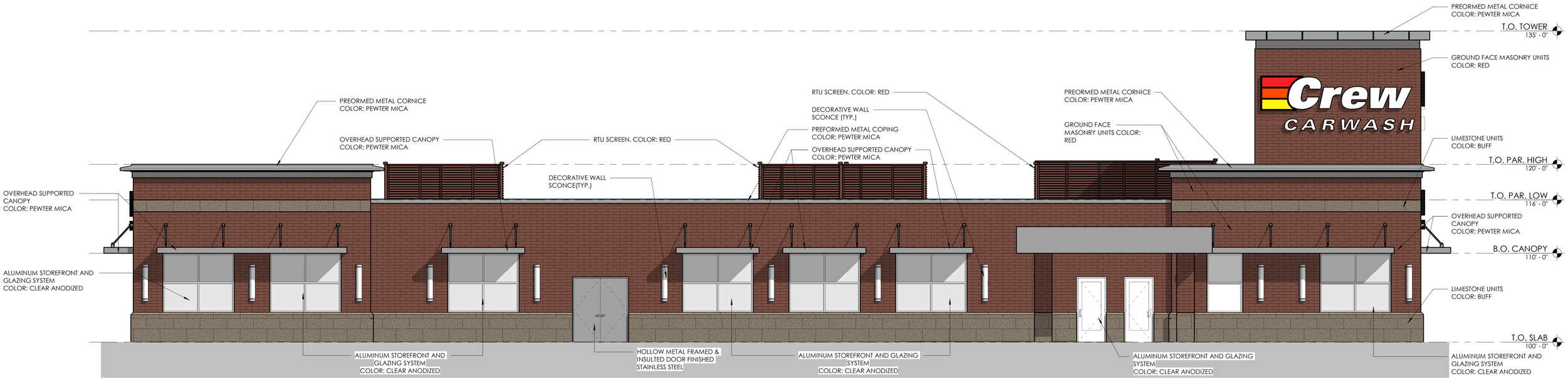
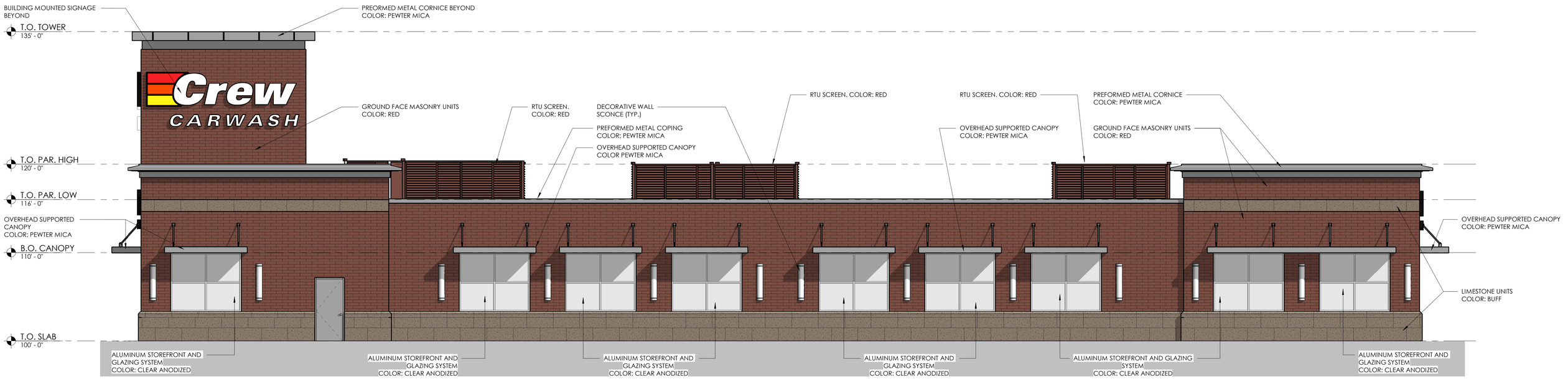


EAST ELEVATION



WEST ELEVATION

CREW CARWASH - BUILDING ELEVATIONS

CREW CARWASH, INC
Madison BP

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3/16" = 1'-0"

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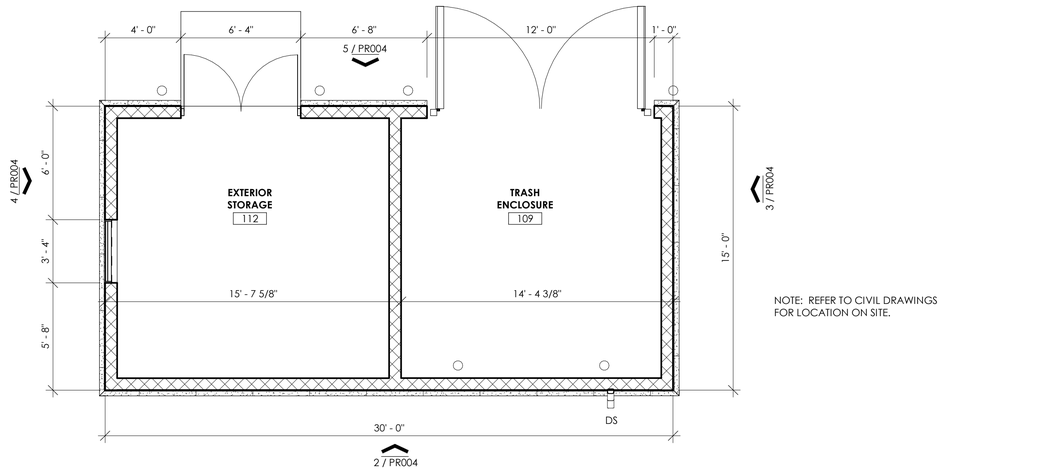
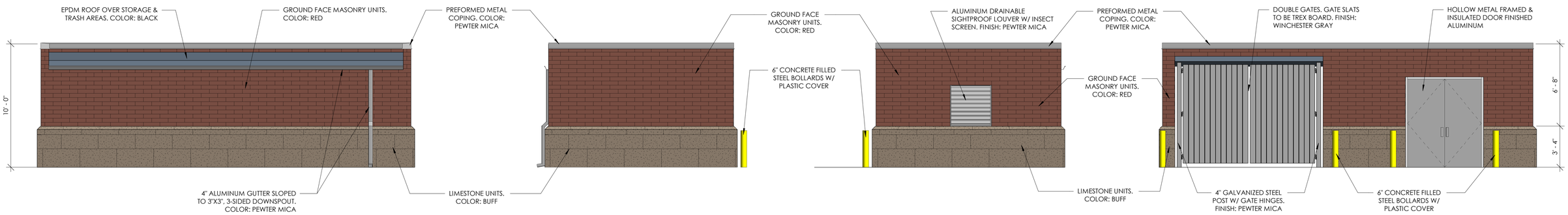
	Crew Carwash - Eden Prairie, MN: Site Enclosure Exterior Materials							
	Materials	**East Elevation**		**North Elevation (W. 78th St.)**		**South Elevation (Terry Pine Dr.)**		**West Elevation (Eden Prairie Rd.)**	
Masonry (Class 1)	Brick, Modular	94	30%	83	54%	94	61%	140	50%
	Limestone	41	13%	52	34%	52	34%	102	36%
	Subtotal	**135**	**43%**	**135**	**88%**	**146**	**95%**	**242**	**86%**
Glazing (Class 1)	Storefront w/ Clear Glass	0	0%	0	0%	0	0%	0	0%
	Storefront w/ Spandrel Glass	0	0%	0	0%	0	0%	0	0%
	Subtotal	**0**	**0%**	**0**	**0%**	**0**	**0%**	**0**	**0%**
Metal Panel & Trim	Architectural Metal Panels	0	0%	0	0%	0	0%	0	0%
	Architectural Metal Louver	0	0%	11	7%	0	0%	0	0%
	Metal Trim/Coping/Cornice	39	13%	8	5%	8	5%	39	14%
	Subtotal	**39**	**13%**	**19**	**12%**	**8**	**5%**	**39**	**14%**
Misc.	Metal Door (Stainless or Aluminum)	52	17%	0	0%	0	0%	0	0%
	Composite Trim (Trex Board)	85	27%	0	0%	0	0%	0	0%
	Subtotal	**137**	**44%**	**0**	**0%**	**0**	**0%**	**0**	**0%**
	Class 1 Material Gross Area	**135**	**43%**	**135**	**88%**	**146**	**95%**	**242**	**86%**
	Gross Area	**311**	**100%**	**154**	**100%**	**154**	**100%**	**281**	**100%**



NOTE: REFER TO CIVIL DRAWINGS FOR LOCATION ON SITE.

TRASH/STORAGE ENCLOSURE PLAN

NORTH



WEST ELEVATION **SOUTH ELEVATION** **NORTH ELEVATION** **EAST ELEVATION**

SITE ENCLOSURE PLAN & ELEVATIONS

CREW CARWASH, INC
Madison BP

04/28/23
PRO2023
1/4" = 1'-0"

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