

PROPOSED COFFEE SHOP FOR: 7-BREW LA CROSSE

LA CROSSE, WI

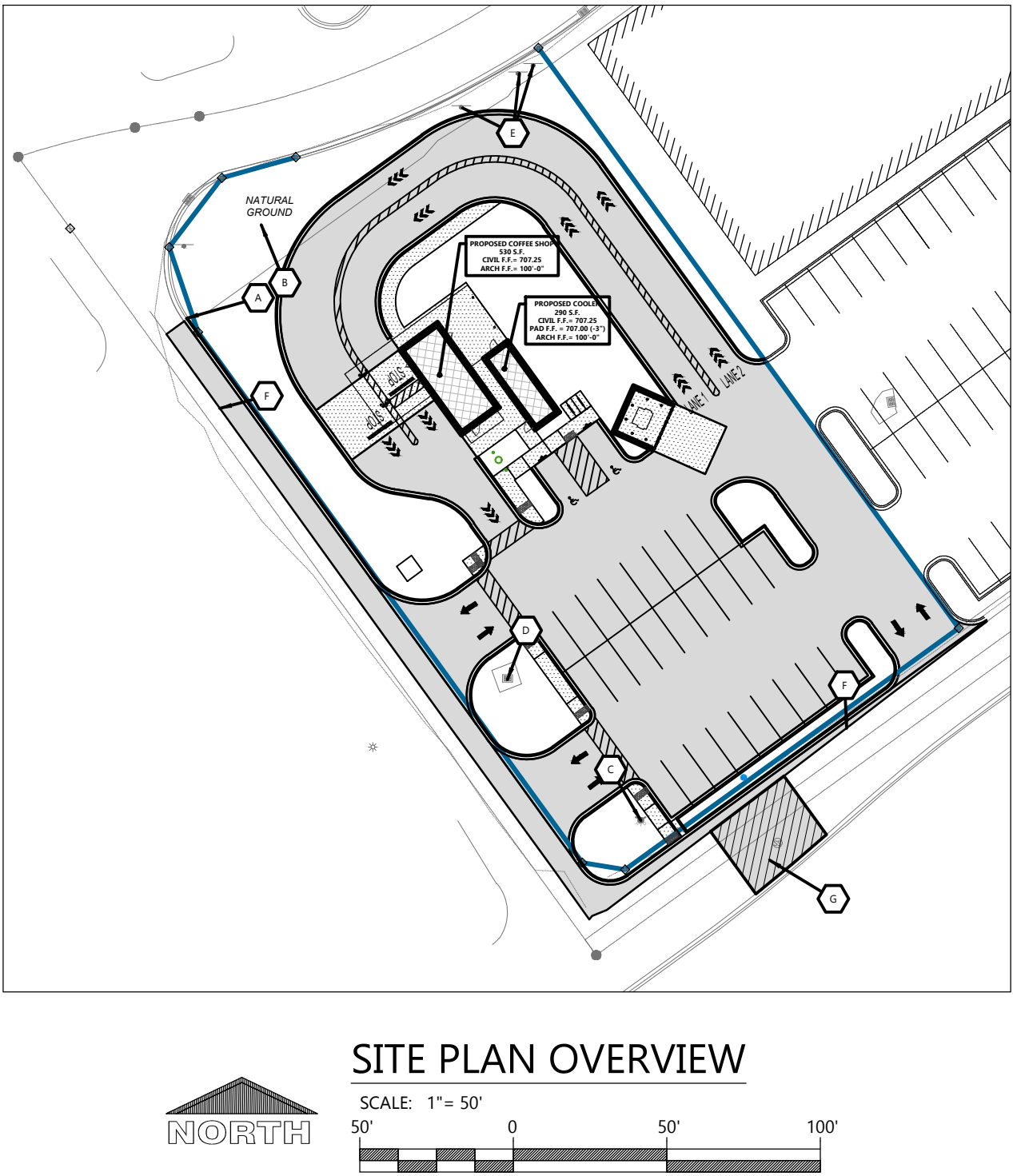


TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

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



EXCEL LEGEND

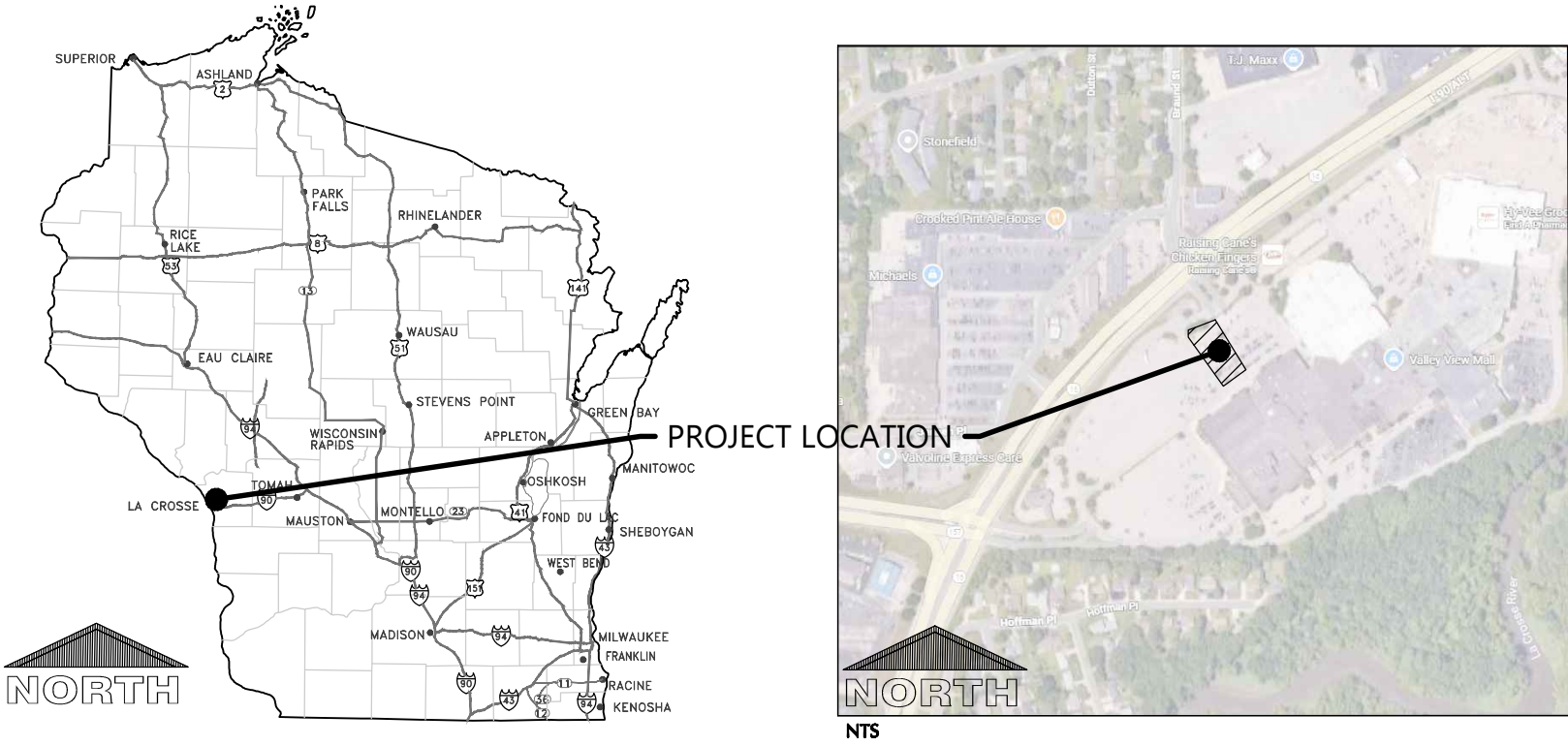
NOTE: ALL SYMBOLS SHOWN MAY NOT APPEAR ON DRAWINGS.

SYM.	IDENTIFICATION	SYM.	IDENTIFICATION
SPOT ELEVATIONS			
• 0000.00	PROPOSED SPOT ELEVATIONS (FLOW LINE OF CURB UNLESS OTHERWISE SPECIFIED)	• 0000.00 TC 0000.00 FL	PROPOSED SPOT ELEVATIONS (TOP OF CURB, FLOWLINE OF CURB)
• 0000.00 EG	EXISTING GRADE SPOT ELEVATIONS	• 0000.00 TW 0000.00 BW	PROPOSED SPOT ELEVATIONS (TOP OF WALK, BOTTOM OF WALK @ FLOWLINE)
• 0000.00 BG 0000.00 FG	PROPOSED SPOT ELEVATIONS (REFERENCE R-WALL DETAIL) BG-FINISHED SURFACE GRADE AT BACK OF WALL FG-FINISHED SURFACE GRADE AT FRONT OF WALL		
PROPOSED SITE SYMBOLS			
→	PROPOSED DRAINAGE FLOW	CO	PROPOSED CLEANOUT
•	PROPOSED WATER VALVE IN BOX	DS	PROPOSED DOWNSPOUT
•	PROPOSED WELL	↔	PROPOSED APRON END SECTION
○ □	PROPOSED LIGHT POLE	■	SOIL BORING
•	PROPOSED STORM CATCH BASIN - ST CB	CL	CENTER LINE
•	PROPOSED STORM FIELD INLET - ST FI	♿	PROPOSED HANDICAP PARKING STALL
•	PROPOSED STORM CURB INLET - ST CI	♿	PROPOSED SIGN
PROPOSED LINETYPES			
—	PROPOSED PROPERTY LINE	----	INTERIOR PROPERTY LINE
ST	PROPOSED STORM SEWER AND MANHOLE - ST MH		RAILROAD TRACKS
SA	PROPOSED SANITARY SEWER AND MANHOLE - SAN MH	---	EXISTING GROUND CONTOUR
•	PROPOSED WATER LINE AND HYDRANT	800	PROPOSED GROUND CONTOUR
—	PROPOSED CURB AND GUTTER	POL	PROPOSED POLISH SEWER AND MANHOLE
—	GRADING/SEEDING LIMITS	P	PROPOSED PROCESS SEWER AND MANHOLE
—	RIGHT-OF-WAY LINE	CLW	PROPOSED CLEAR WATER LINE
T	PROPOSED UNDERGROUND TELEPHONE CABLE	G	PROPOSED UNDERGROUND GAS LINE
•	PROPOSED GUARD RAIL	E	PROPOSED UNDERGROUND ELECTRIC CABLE
FO	PROPOSED UNDERGROUND FIBER OPTIC LINE		

PROJECT CONTACTS

OWNER INFORMATION:	CIVIL:	CITY PLANNER:	CITY ENGINEER:	CITY FIRE CHIEF:	CITY BUILDING INSPECTOR:	CITY DIRECTOR OF PUBLIC WORKS:
78 La Crosse 382, LLC Kara Condie 3400 College Blvd, Suite 200 Leawood, KS 66211 Phone: (913) 299-5737 Email: kcondie@plazastreetpartners.com	Eric Drazkowski, P.E. Phone: (920) 926-9800 E-mail: eric.drazkowski@excelengineer.com	Jenna Dinkel Phone: (608) 789-8676 E-mail: dinkelj@cityoflacrosse.org	Matthew Gallagher Phone: (608) 789-7505	Bee Ziong Phone: (608) 789-7264 E-mail: xiongb@cityoflacrosse.org	David Reinhard Phone: (608) 789-7564	Matthew Gallagher Phone: (608) 789-7505

LOCATION MAP



SHEET INDEX

SHEETS BELOW INTENDED TO BE PRINTED IN COLOR. REFER TO DIGITAL FORMAT DRAWINGS IF PRINTED GRAYSCALE TO ENSURE SCOPE CLARITY.

NUMBER	SHEET NAME / DESCRIPTION
C0.1	CIVIL COVER SHEET
C0.2	CIVIL SPECIFICATIONS
C1.0	EXISTING SITE AND DEMOLITION PLAN
C1.1A	SITE PLAN
C1.1B	STRIPING PLAN
C1.2	GRADING AND EROSION CONTROL PLAN
C1.3A	SANITARY, WATER, AND DRY UTILITY PLAN
C1.3B	STORM UTILITY PLAN
C1.4	LANDSCAPE AND RESTORATION PLAN
C2.0	DETAILS
C2.1	DETAILS
C3.1	SITE PHOTOMETRIC PLAN & DETAILS

•	FOUND MONUMENT AS NOTED
•	COMPUTED POINT
•	FIRE HYDRANT
•	LIGHT
•	SANITARY MANHOLE
•	SIGN
•	WATER VALVE
•	GRATE INLET
•	GRATE INLET
•	BACK OF CURB
•	FLOWLINE
•	EDGE OF CONCRETE
•	EDGE OF ASPHALT
•	TOP OF GRAVEL
•	NATURAL GROUND
•	TOP OF ASPHALT
•	TOP OF BANK
•	BOTTOM OF BANK
•	REINFORCED CONCRETE PIPE
•	CORRUGATED PLASTIC PIPE
•	POLYVINYL CHLORIDE PIPE
•	MEASURED/CALCULATED DIMENSION
•	RECORD DIMENSION
•	NOW OR FORMERLY
•	BOUNDARY LINE
•	BASEMENT LINE
•	RIGHT-OF-WAY LINE
•	TEMPORARY FENCE
•	UNDERGROUND WATER LINE
•	UNDERGROUND ELECTRIC LINE
•	UNDERGROUND TV CABLE LINE
•	UNDERGROUND TELEPHONE LINE
•	UNDERGROUND FIBER OPTIC LINE
•	UNDERGROUND STORM DRAIN LINE
•	UNDERGROUND SEWER LINE
•	MAJOR CONTOUR
•	MINOR CONTOUR



Always a Better Plan

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

PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:
7-BREW LA CROSSE
3710 STATE ROAD 16 • LA CROSSE, WI 54650

PROFESSIONAL SEAL



SHEET DATES

ISSUED FOR APPROVAL

IFA DEC. 11, 2025

JOB NUMBER

250351400

SHEET NUMBER

C0.1

CIVIL SPECIFICATIONS

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. CONTRACTOR TO FIELD TELEVIEW ALL EXISTING SANITARY AND STORM LATERALS THAT ARE SCHEDULED TO BE RE-USED AND/OR CONNECTED TO ON SITE AT TIME OF DEMOLITION. THE TELEVIEWING SHALL BE COMPLETED TO ENSURE THE EXISTING LATERALS ARE FREE OF OBSTRUCTIONS AND IN SOUND STRUCTURAL CONDITION. TELEVIEWING OF THESE LATERALS SHOULD BE COMPLETED AT BEGINNING OF CONSTRUCTION AND DESIGN ENGINEER SHALL BE NOTIFIED OF ANY PIPE OBSTRUCTIONS AND/OR STRUCTURAL DEFICIENCIES IMMEDIATELY AFTER COMPLETION OF FIELD TELEVIEWING.
- C. 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.
- D. CONTRACTOR TO PROTECT EXISTING IMPROVEMENTS THAT ARE SCHEDULED TO REMAIN. ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPLACED AT CONTRACTORS EXPENSE.
- E. 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 TOPSOILS, PADS, OTHER UNPAVED 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 SUBGRADE 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 95 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 SUGGESTED THAT THE GEOTECHNICAL FIRM USED TO PERFORM THE SUBSURFACE SOIL INVESTIGATION BE ENGAGED FOR THE FIELD QUALITY CONTROL TESTS.
- 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

- A. THE GRADING PLAN REFLECTS LESS THAN 1 ACRE OF DISTURBED AREA. THE SITE IS THEREFORE EXEMPT FROM WISCONSIN DEPARTMENT OF NATURAL RESOURCES NR 216 NOTICE OF INTENT REQUIREMENTS. THE DESIGN ENGINEER SHALL PREPARE AN EROSION CONTROL PLAN TO MEET NR 151.105 CONSTRUCTION SITE PERFORMANCE STANDARDS FOR NON-PERMITTED SITES.
- B. 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 TRACKING PADS, INCLUDING SITE FILL, AND 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.
 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 AIR FIELD 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.
- C. ALL EROSION CONTROL DEVICES SHALL AT A MINIMUM BE INSPECTED EVERY 7 CALENDAR DAYS OR EVERY 14 DAYS AND WITHIN 24 HOURS OF THE END OF A RAIN EVENT OF 0.5" OR MORE. MAINTENANCE SHALL BE PERFORMED PER WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151 STORMWATER MANAGEMENT TECHNICAL STANDARD REQUIREMENTS.
- D. EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL THE AREA(S) SERVED HAVE ESTABLISHED VEGETATIVE COVER.
- E. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL EROSION CONTROL PERMITS.

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 A PLAN SHOWING THE LOCATION AND DEPTHS AS INDICATED BELOW.
- | | |
|--|--|
| STANDARD ASPHALT PAVING SECTION | HEAVY ASPHALT PAVING SECTION |
| 1-1/2" SURFACE COURSE (4 LT 58-285) | 1-1/2" SURFACE COURSE (4 LT 58-285) |
| WISDOT 455.2.5 TACK COAT (STAGED PAVING) | WISDOT 455.2.5 TACK COAT (STAGED PAVING) |
| 2" BINDER COURSE (4 LT 58-285) | 2-1/2" BINDER COURSE (4 LT 58-285) |
| 10" OF 1-1/4" CRUSHED AGGREGATE | 12" OF 1-1/4" CRUSHED AGGREGATE |
- 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% SLOPE SHALL BE MAINTAINED IN ALL ASPHALT PAVEMENT AREA.
- C. HOT MIX ASPHALT CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF GEOTECHNICAL REPORT AND LOCAL ORDINANCES.
- D. CONTRACTOR TO PROVIDE 4" WIDE WHITE PAINTED STRIPING FOR PARKING STALLS, TRAFFIC LANES, AND NO PARKING AREAS. WHITE PAINT MARKINGS SHALL ALSO BE PROVIDED FOR H.C. ACCESSIBLE SYMBOLS, TRAFFIC ARROWS, AND TRAFFIC MESSAGES.

32 20 00 CONCRETE AND AGGREGATE BASE

- A. CONTRACTOR TO PROVIDE CRUSHED AGGREGATE BASE AND CONCRETE WHERE INDICATED ON THE PLANS AND/OR IN THE SPECIFICATIONS.
- 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. CONSTRUCTION JOINTS SHALL CONSIST OF 1/8" WIDE BY 1" DEEP TOOLED JOINT WHERE INDICATED ON THE PLANS.
 2. CURB/RETAINING PAD/SPALL 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 1/2 OF THE SLAB:
 - i. THE BARS AT ALL CONTRACTION JOINTS OF THE CONCRETE. THE BARS SHALL BE #4 REBAR 30" LONG PLACED AT 30" O.C.
 - ii. DUMPS/TER PAD CONCRETE JOINTING SHALL BE AS FOLLOWS:
 - j. CONTRACTION SAWCUT JOINT - CONTRACTOR SHALL PROVIDE A SAWCUT JOINT AT MAXIMUM SPACING OF 15' ON CENTER. SAWCUT SHALL BE 2" IN DEPTH.
 - j. TYPICAL POOR 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.
 - iii. HEAVY DUTY CONCRETE (TRUCK TRAFFIC) - 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 1/2 OF THE SLAB. CONTRACTION JOINTS SHALL BE SAWCUT 1.5" IN DEPTH AND REINFORCED WITH A MAXIMUM OF 15' ON CENTER.
 3. HEAVY DUTY CONCRETE (TRUCK TRAFFIC) - 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 1/2 OF THE SLAB. CONTRACTION JOINTS SHALL BE SAWCUT 1.5" IN DEPTH AND REINFORCED WITH A MAXIMUM OF 15' ON CENTER.
- E. DESIGN NOTES SHALL BE IN ACCORDANCE WITH ASTM C94
1. STRENGTH TO BE MINIMUM OF 4500 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 AGG 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 REQUIREING PAD. PADS SHALL HAVE FIBERMESH 300 FIBERS AT A RATE OF 1.5 LBS/CU. YD. OR 6 X 6-W14 X W14 WELDED WIRE MESH WITH MINIMUM 1 INCH COVER. EQUIPMENT PADS SHALL BE 5.5 INCHES THICK WITH 1 INCH CHAMFER UNLESS SPECIFIED OTHERWISE. CONCRETE SHALL BE PROVIDED ON 6" OF 3/4" CRUSHED AGGREGATE BASE. 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 BROOM FINISH UNLESS NOTED OTHERWISE. A UNIFORM COAT OF A HIGH SOLIDS CURING COMPOUND MEETING ASTM C309 SHALL 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" FOR UP TO #5 BARS AND 2" FOR #6 TO #10 BARS IN ALL OTHER LOCATIONS. ALL REINFORCING SHALL BE LAPPED 48 DIAMETERS FOR UP TO #6 BARS, 62 DIAMETERS FOR #7 TO #9 BARS, 68 DIAMETERS FOR #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 1064. 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 ON SITE, 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 WHITE PAINTED STRIPING FOR PARKING STALLS, TRAFFIC LANES, AND NO PARKING AREAS. WHITE 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 CONSOIL. CONSOIL: PROVIDE CONSOIL PROOFER 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 7.0, CONTAIN A MINIMUM OF 5 PERCENT ORGANIC MATERIAL, 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. SEEDING LAWNS:
1. PERMANENT LAWN AREAS SHALL BE SEEDDED 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 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. ALL SITE DISTURBED AREAS NOT DESIGNATED FOR OTHER LANDSCAPING AND SITE STABILIZATION METHODS SHALL BE SEEDDED AS PERMANENT LAWN. NO BARE TOPSOIL SHALL BE LEFT ON SITE. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059.
 2. ALL PERMANENT AND TEMPORARY STORM WATER CONVEYANCE SWALE BOTTOMS AND SIDE SLOPES SHALL BE SEEDDED 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 5X5". 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 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.
 2. RIP RAP: ALL RIP RAP ASSOCIATED WITH STORMWATER MANAGEMENT AND STORMWATER CONVEYANCE, AS DELINEATED ON THE PLANS, SHALL BE CONSTRUCTED 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.
 3. TREES AND SHRUBS: FURNISH NURSERY-GROWN TREES AND SHRUBS WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPANTING 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.
 4. 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.
 5. 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.
 6. MINERAL MULCH: PROVIDE 3" MINIMUM THICK BLANKET OF 1.5" MINIMUM TO 2.5" MAXIMUM CRUSHED DECORATIVE STONE AT ALL PLANTING AREAS INDICATED ON THE LANDSCAPE PLAN. INSTALL OVER NON-WOVEN WEED BARRIER FABRIC. COLOR BY OWNER.
 7. 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. CONTRACTOR TO FIELD TELEVIEW ALL EXISTING SANITARY AND STORM LATERALS THAT ARE SCHEDULED TO BE RE-USED AND/OR CONNECTED TO ON SITE. THE TELEVIEWING SHALL BE COMPLETED TO ENSURE THE EXISTING LATERALS ARE FREE OF OBSTRUCTIONS AND IN SOUND STRUCTURAL CONDITION. TELEVIEWING OF THESE LATERALS SHOULD BE COMPLETED AT BEGINNING OF CONSTRUCTION AND DESIGN ENGINEER SHALL BE NOTIFIED OF ANY PIPE OBSTRUCTIONS AND/OR STRUCTURAL DEFICIENCIES IMMEDIATELY AFTER COMPLETION OF FIELD TELEVIEWING.
- C. ALL SANITARY PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE. INSULATION SHALL BE PROVIDED PER STATE PLUMBING CODES AS NECESSARY BASED ON PROPOSED DEPTH PER PLANS.
- D. CLEANOUTS SHALL BE PROVIDED FOR THE SANITARY & STORM SERVICES AT LOCATIONS INDICATED ON THE UTILITY PLAN. THE CLEANOUT SHALL CONSIST OF A COMBINATION WYE FITTING IN LINE WITH THE SANITARY/STORM SERVICE WITH THE CLEANOUT LEG OF THE COMBINATION WYE FACING STRAIGHT UP. THE CLEANOUT SHALL CONSIST OF A (4" OR 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 TURN (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. 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. 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 MAXIMUM 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 MAXIMUM 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 FOR ALL DOWNSPOUT TO RISER (DSR) CONNECTIONS. DOWNSPOUTS TO DRADE (DSG) SHALL BE PROVIDED WITH SPLASH BLOCKS AT THE DISCHARGE LOCATION. ALL DOWNSPOUT LOCATIONS SHOULD BE VERIFIED WITH ARCHITECTURAL PLANS AND DOWNSPOUT CONTRACTOR/VC 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 EXCEL ENGINEERING DESIGN ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING STATE PLUMBING REVIEW APPROVAL (IF REQUIRED). 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.



Excel

Always a Better Plan

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

PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:
7-BREW LA CROSSE
3710 STATE ROAD 16 • LA CROSSE, WI 54650

PROFESSIONAL SEAL

SHEET DATES

ISSUED FOR APPROVAL

IFA DEC. 11, 2025

JOB NUMBER

250351400

SHEET NUMBER

C0.2

TABLE A: ALLOWABLE PIPE MATERIAL SCHEDULE

Utility	Material	Pipe Code	Fitting Code	Joint Code
Water Lateral	C901/906 PE	AWWA C901/C906	ASTM D2609, ASTM D2683, ASTM D3261	Heat fusion: ASTM D2657
Sanitary Sewer	SDR 35 PVC	ASTM D1785, ASTM D2665, ASTM D3034	ASTM F1336	Push On: ASTM D3212 for Tightness Elastomeric Gasket: ASTM F477
*Sanitary Sewer	SCH-40 PVC	ASTM D1785, ASTM D2665	ASTM F1336	Primer: ASTM F656 Solvent Cement: ASTM D2564
Storm Sewer	HDPE	ASTM F2648, ASTM F2306, AASHTO M252, TYPE S (4 IN - 10 IN), AASHTO M294, TYPE S (12 IN - 60 IN)	ASTM F2648, ASTM F2306, AASHTO M252, or AASHTO M294	Joint: ASTM F2648, ASTM F2306, AASHTO M252, or AASHTO M294 Elastomeric Seal: ASTM F477
Storm Sewer	SDR 35 PVC	ASTM D1785, ASTM D2665, ASTM D3034	ASTM F1336	Push On: ASTM D3212 for Tightness Elastomeric Seal: ASTM F477

KEYNOTES	
A	PROTECT EXISTING CURB
B	PROTECT EXISTING LANDSCAPING
C	PROTECT EXISTING HYDRANT
D	PROTECT RIM
E	PROTECT SIGNAGE
F	PATCH PAVEMENT AS NECESSARY FOR TYING IN PROPOSED PAVEMENT
G	SAW CUT AND REMOVE PAVEMENT FOR UTILITY CONNECTION.



EXCEL

Always a Better Plan

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

PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:
7-BREW LA CROSSE
3710 STATE ROAD 16 • LA CROSSE, WI 54650

PROFESSIONAL SEAL

SHEET DATES

ISSUED FOR APPROVAL

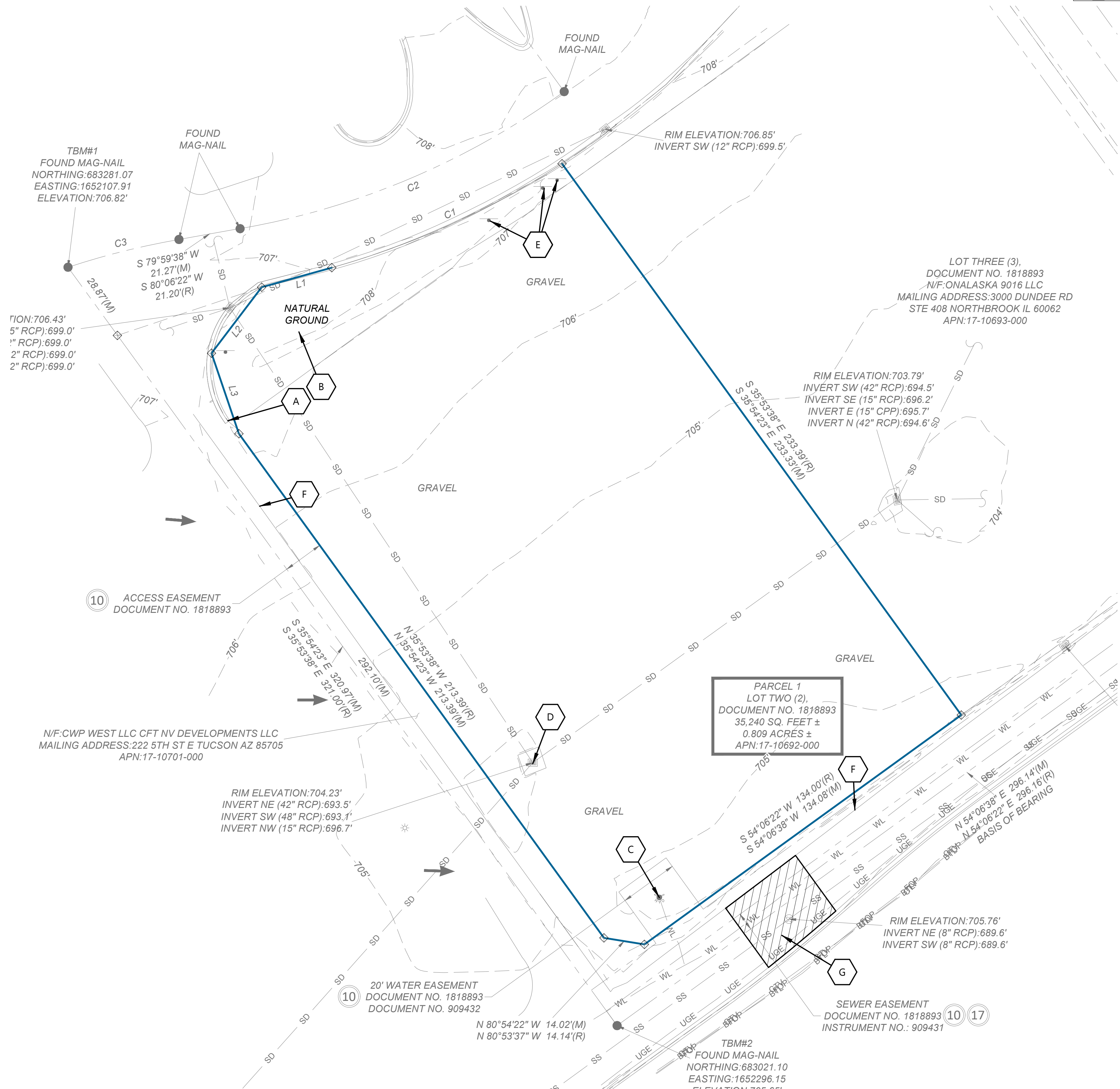
IFA DEC. 11, 2025

JOB NUMBER

250351400

SHEET NUMBER

C1.0



CIVIL EXISTING SITE AND DEMOLITION PLAN

GENERAL NOTES:

- PRIOR TO CONSTRUCTION CONTRACTOR TO OBTAIN WRITTEN PERMISSION FROM NEIGHBORING PROPERTY OWNER FOR SITE IMPROVEMENTS ON ADJACENT PROPERTY

SITE INFORMATION:

PROPERTY AREA: 35,240 S.F. (0.809 ACRES).
EXISTING ZONING: C-2 COMMERCIAL
PROPOSED ZONING: C-2 COMMERCIAL
EXISTING USE: PARKING LOT
PROPOSED USE: DRIVE THRU COFFEE SHOP
AREA OF SITE DISTURBANCE: 37,686 S.F. (0.865 ACRES)
SETBACKS:
BUILDING: SIDE(DIRECTION) = 0'
REAR(DIRECTION) = 9'
PROPOSED BUILDING HEIGHT: 19.83' (MAX. HEIGHT ALLOWED: 100')
PARKING REQUIRED: 1 SPACE PER 150 S.F. (4 SPACES REQ.)
PARKING PROVIDED: 28 SPACE (2 H.C. ACCESSIBLE)
HANDICAP STALLS REQUIRED: 2, HANDICAP STALLS PROVIDED: 2
BICYCLE PARKING REQUIRED: 1 PER 10 PARKING SPACES (4 SPACES) OR 1 PER 20 EMPLOYEES (1 SPACE)
BICYCLE PARKING PROVIDED: 4 SPACES
DRIVE THRU STACKING REQUIRED: 3 STACKING PER CUSTOMER WINDOW (6 REQUIRED)
DRIVE THRU STACKING PROVIDED:
LANDSCAPE REQUIREMENTS: MIN. LANDSCAPE SURFACE RATIO: 10%

EXISTING SITE DATA

	AREA (AC)	AREA (SF)	RATIO
BUILDING FLOOR AREA	0.00	0	0.0%
PAVEMENT (ASP. & CONC.)	0.75	32,616	92.6%
TOTAL IMPERVIOUS	0.75	32,616	92.6%
LANDSCAPE/ OPEN SPACE	0.06	2,624	7.4%
PROJECT SITE	0.81	35,240	100.0%

PROPOSED SITE DATA

	AREA (AC)	AREA (SF)	RATIO
BUILDING FLOOR AREA	0.02	820	2.3%
PAVEMENT (ASP. & CONC.)	0.54	23,739	67.4%
TOTAL IMPERVIOUS	0.56	24,559	69.7%
LANDSCAPE/ OPEN SPACE	0.25	10,681	30.3%
PROJECT SITE	0.81	35,240	100.0%

KEYNOTES

1	CONCRETE STOOP (SEE STRUCTURAL PLANS FOR DETAILS)
2	RAISED WALK (SEE DETAIL)
3	FLUSH WALK (SEE DETAIL)
4	CURB RAMP (SEE DETAIL)
5	ADA CURB RAMP (SEE DETAIL)
7	18" CURB & GUTTER (SEE DETAIL)
8	18" MOUNTABLE CURB & GUTTER (SEE DETAIL)
9	CURB TAPER (SEE DETAIL)
10	CURB CUT (SEE DETAIL)
11	CONCRETE TRANSFORMER PAD BY UTILITY SUPPLIER (CONTRACTOR TO VERIFY FINAL LOCATION & DESIGN PRIOR TO CONSTRUCTION)
12	HANDICAP SIGN PER STATE CODE (SEE DETAIL)
13	HANDICAP STALL & STRIPING PER STATE CODES
16	DUMPSTER ENCLOSURE (SEE ARCH PLANS FOR DETAILS)
17	6" CONCRETE BOLLARDS (TYP.) (SEE ARCH PLANS FOR DETAILS)
20	BIKE RACK (TYP.) (TYPE & COLOR BY OWNER)
21	DETECTABLE WARNING PLATE PER STATE CODE

LEGEND:

HATCH	PAVEMENT SECTION
	STANDARD ASPHALT
	HEAVY DUTY ASPHALT
	SIDEWALK CONCRETE
	HEAVY DUTY CONCRETE
	DUMPSTER PAD CONCRETE



CIVIL SITE PLAN



Always a Better Plan

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

PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:
7-BREW LA CROSSE
3710 STATE ROAD 16 • LA CROSSE, WI 54650

PROFESSIONAL SEAL

SHEET DATES

ISSUED FOR APPROVAL

IFA DEC. 11, 2025

JOB NUMBER

250351400

SHEET NUMBER

C1.1A



Always a Better Plan

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

PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:
7-BREW LA CROSSE
3710 STATE ROAD 16 • LA CROSSE, WI 54650

PROFESSIONAL SEAL

SHEET DATES

ISSUED FOR APPROVAL

IFA DEC. 11, 2025

JOB NUMBER

250351400

SHEET NUMBER

C1.1B

GENERAL NOTES:

- SEE SHEET C0.2 FOR PLAN SPECIFICATIONS AND REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL WORK IN ROW PERMITS.
- CONTRACTOR TO OBTAIN PERMISSION PRIOR TO ANY OFFSITE WORK OR WITHIN SHARED ACCESS.

STRIPING PAINT COLORS:

SUBSTITUTION TO COLORS MUST BE APPROVED BY 7 BREW

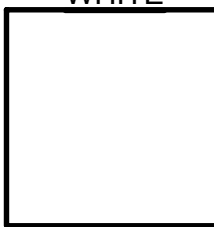
PMS 000C

C: 0%
M: 0%
Y: 0%
K: 0%

R: 255
G: 255
B: 255

HEX: FFFFFF

WHITE



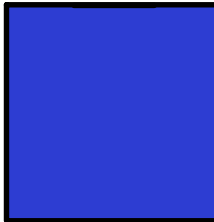
PMS 293

C: 100%
M: 63%
Y: 0%
K: 35%

R: 0
G: 61
B: 165

HEX: 003DA5

BLUE



PMS 202

C: 29.54%
M: 95.11%
Y: 74.72%
K: 29.59%

R: 138
G: 36
B: 50

HEX: 8A2432

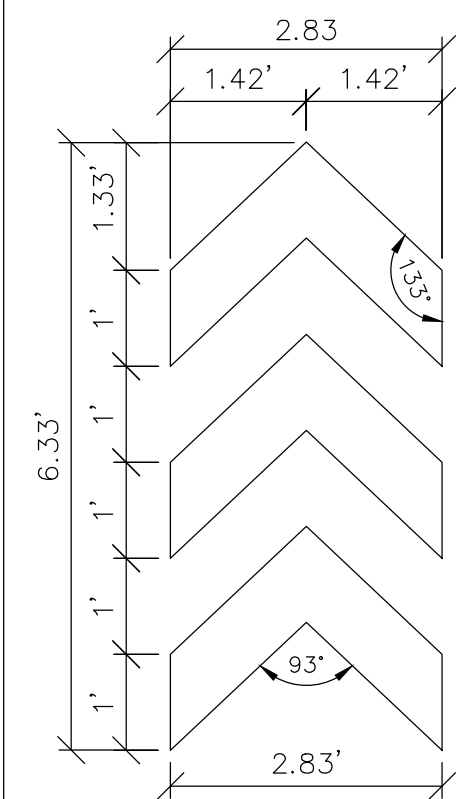
RED



PAINT TYPE:

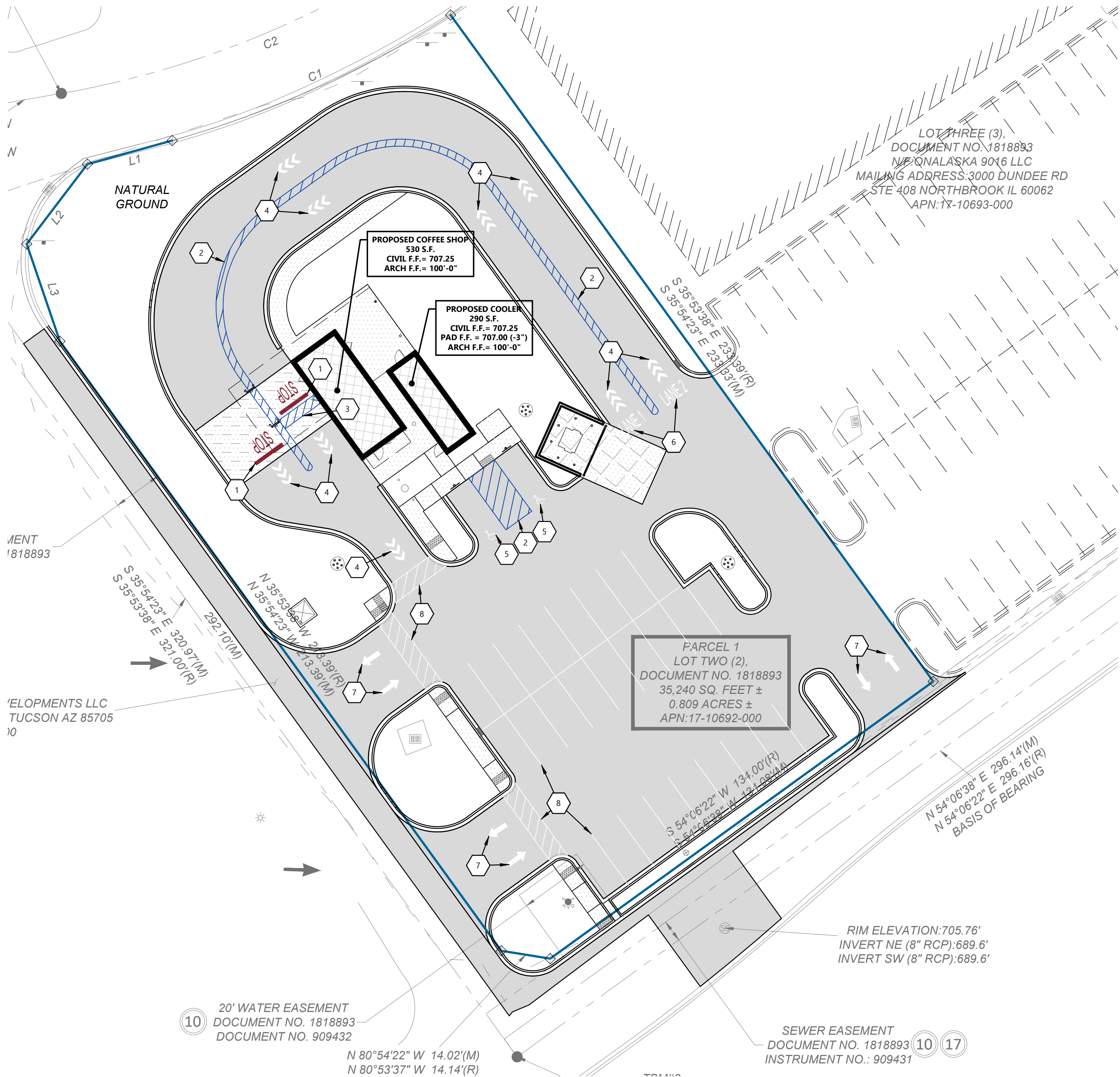
SHERWIN- WILLIAMS PRO PARK, SETFAST,
HOTLINE OR AN APPROVED EQUAL.

7 BREW ARROW TEMPLATE



STRIPING PLAN KEYNOTES

1	12" TALL RED STOP BAR WITH 48-INCH TALL "STOP" TEXT PAINTED IN RED
2	4" SOLID BLUE PAVEMENT MARKER, TYPICAL MIDLINES SPACED AT 24" O.C.
3	ALIGN 4" SOLID BLUE CROSS WALK MARKER WITH SLIDING DOOR PANEL AT FRONT OPENING
4	SOLID WHITE TRIPLE ARROW PAVEMENT MARKER
5	WHITE PAINTED ADA ACCESSIBLE PARKING SYMBOL
6	48-INCH TALL "LANE #" PAINTED IN WHITE
7	SOLID WHITE DIRECTIONAL ARROW PAVEMENT MARKING
8	4" SOLID WHITE PAVEMENT MARKER, TYPICAL



CIVIL STRIPING PLAN

- 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)
- ALL SIDEWALKS SHALL NOT EXCEED A MAXIMUM CROSS SLOPE OF 1.50% AND RUNNING SLOPE OF 4.50% UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR SHALL PROVIDE STABILIZED CONSTRUCTION ENTRANCE AT CONSTRUCTION ENTRANCE FOR PROPOSED IMPROVEMENTS AS REQUIRED PER CODE.
- CONTRACTOR SHALL PROVIDE CONCRETE WASHOUT AS REQUIRED PER CODE. FINAL LOCATION TBD BY CONTRACTOR.
- CONTRACTOR SHALL PROVIDE TEMPORARY INLET PROTECTION FOR ALL CURB INLETS & CATCH BASINS ONSITE & OFFSITE IMMEDIATELY DOWNSTREAM OF THE PROJECT SITE PER LOCAL CODE.



EC 1	STABILIZED CONSTRUCTION ENTRANCE
EC 2	INLET PROTECTION
EC 3	6" OF D50 RIP RAP OVER FABRIC
EC 4	SEDIMENT LOG

PROFESSIONAL SEAL



CIVIL GRADING AND EROSION CONTROL PLAN

GENERAL NOTES:
• CONTRACTOR TO PROVIDE GAS SERVICE TO BUILDING. FINAL ROUTE BY UTILITY COMPANY. CONTRACTOR TO COMPLETE PERMITTING, FIELD VERIFY ROUTE, AND NOTIFY ENGINEER OF ANY CONFLICTS.



Always a Better Plan

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

PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:
7-BREW LA CROSSE
3710 STATE ROAD 16 • LA CROSSE, WI 54650

PROFESSIONAL SEAL

SHEET DATES

ISSUED FOR APPROVAL

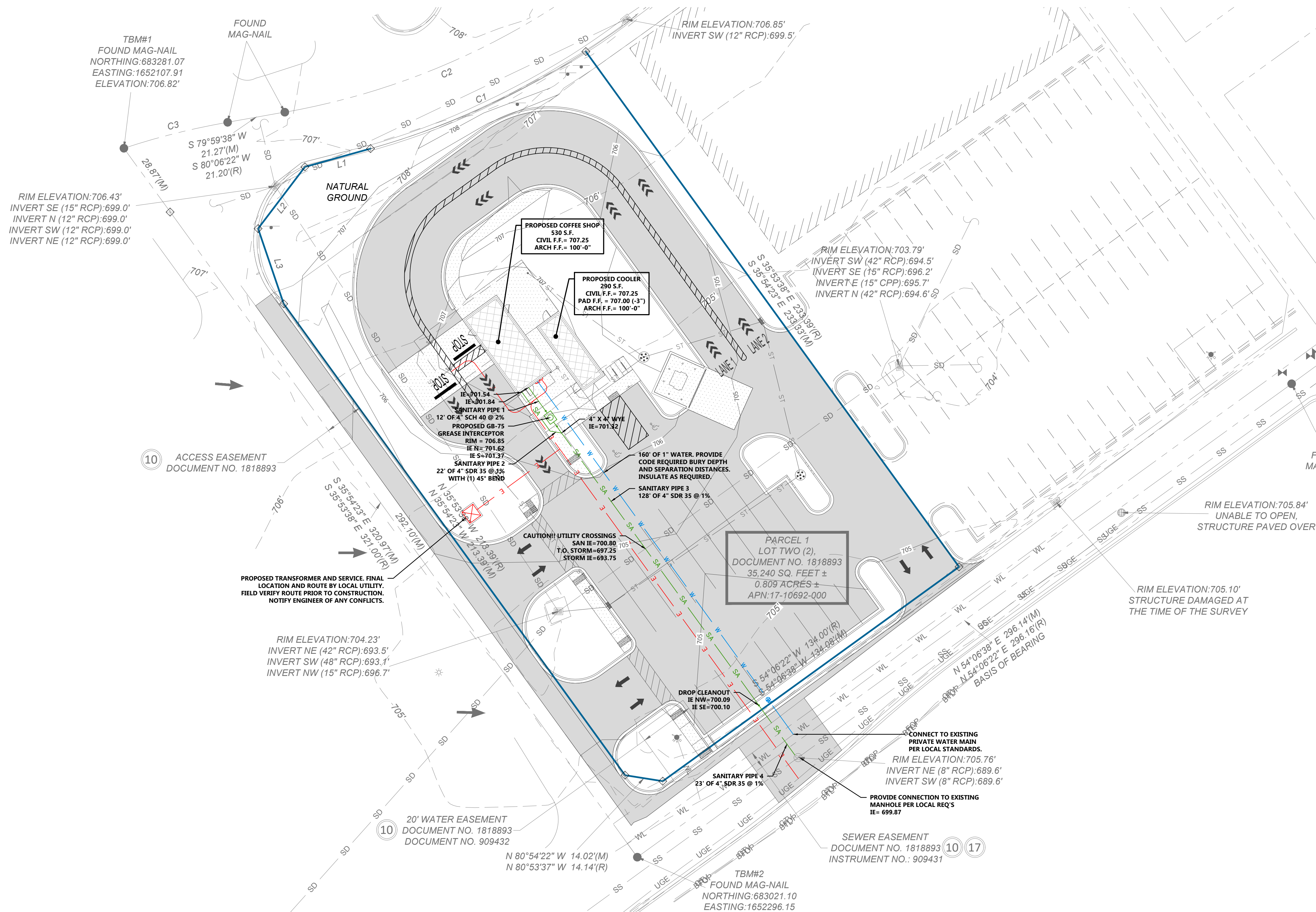
IFA DEC. 11, 2025

JOB NUMBER

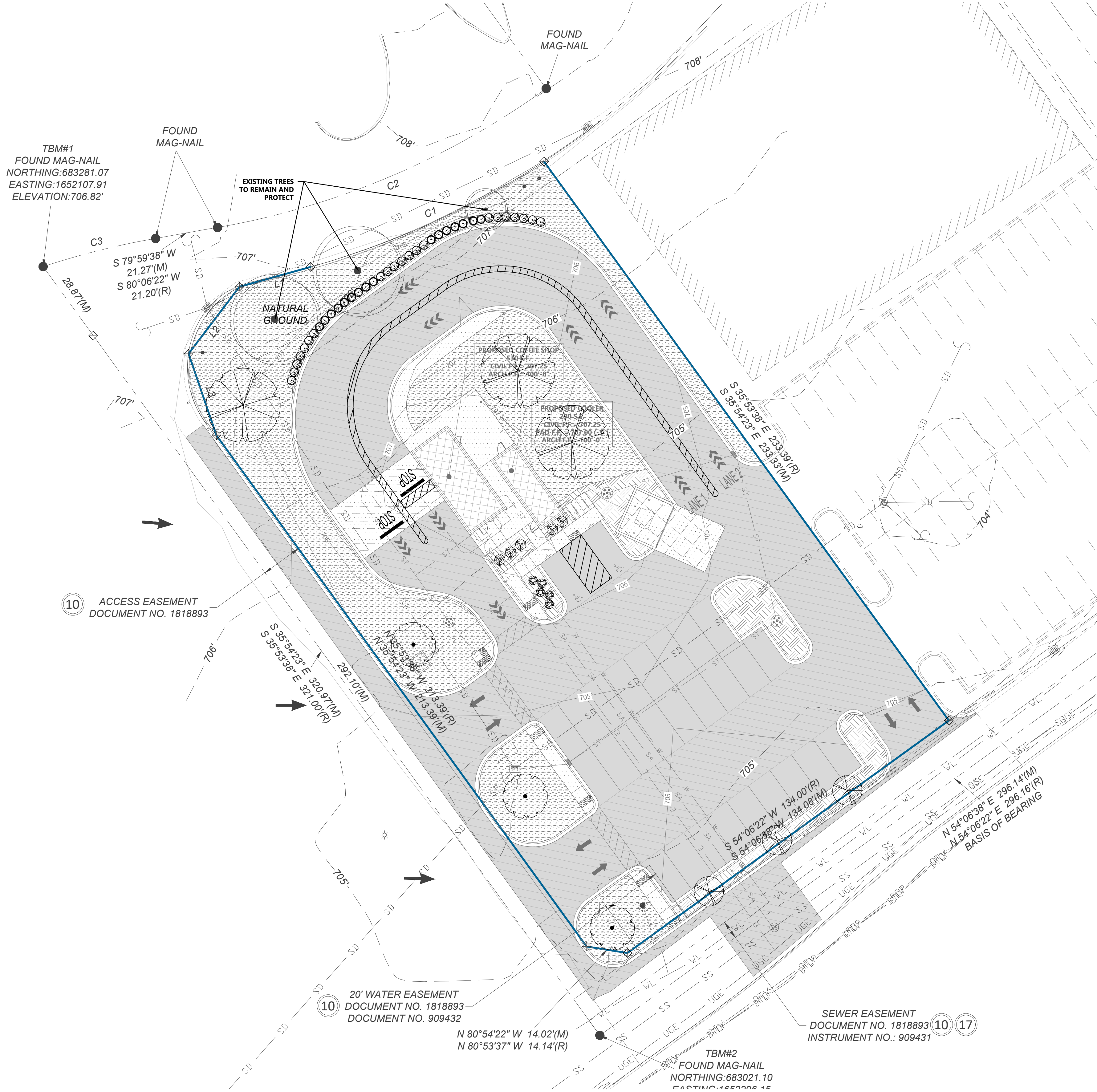
250351400

SHEET NUMBER

C1.3A



CIVIL SANITARY, WATER, AND DRY UTILITY PLAN



PLANT SCHEDULE					
SYMBOL	COMMON NAME	BOTANICAL NAME	QUANTITY	PLANTED SIZE	ROOT
SHADE TREES					
⊙	EXISTING TREES		3	N/A	N/A
⊙	Robin Hill Serviceberry	Amelanchier x grandiflora 'Robin Hill'	3	2" CAL	B&B
⊙	Dakota Pinnacle Asian White Birch	Betula platyphylla 'Fargo'	3	2" CAL	B&B
⊙	Harvest Gold Linden	Tilia x 'Harvest Gold'	3	2" CAL	B&B
DECIDUOUS SHRUBS					
⊙	Kodiak Orange Bush Honeysuckle	Diervilla x 'G2X88544'	5	5 GAL.	CONT.
⊙	Spilled Wine Weigela	Weigela florida	5	5 GAL.	CONT.
EVERGREEN SHRUBS					
⊙	Green Gem Boxwood	Buxus x 'Green Gem'	16	5 GAL.	CONT.
⊙	Slowmound Mugo Pine	Pinus mugo 'Slowmound'	21	5 GAL.	CONT.

LANDSCAPING CALCULATIONS		
ZONE	REQ. PLANTS	PLANTS PROVIDED
PARKING	NO LESS THAN 5% OF ISLANDS SHALL BE INTERIOR TO THE PARKING LOT. LANDSCAPE BUFFERS, GREEN SPACE, AND PLANTING ISLANDS MUST TOTAL A MIN. OF 10% OF LOT. PARKING AREAS SHALL BE SEPARATED FROM PRIMARY BUILDINGS BY A LANDSCAPED BUFFER. 13,092 x .05 = 654.6 SF. 35,240 x .10 = 3,524 SF.	2,880 SF OF INTERIOR ISLANDS (22% OF PARKING). 3,693 SF TOTAL ISLAND AREA (10.5% OF LOT).
SITE	10% LANDSCAPE AREA REQUIRED. 2 TREES AND 8 SHRUBS PER 600 SF OF LANDSCAPE AREA. 35,240 x .10 = 3,524 SF. 3,524/600 = 5.87 x 2 = 11.7. 5.87 x 8 = 46.9.	12 TREES AND 47 SHRUBS.

NOTE: FOR MASS PLANTINGS EXCAVATE ENTIRE BED & BACKFILL W/ PREPARED SOIL.

FINISHED GRADE

VARIES

LOOSEN SOIL, DIG AND TURN SOIL TO REDUCE COMPACTION TO THE AREA AND DEPTH SHOWN.

2-3 TIMES DIMENSION OF ROOT BALL

PLANT AT FINISHED GRADE. DO NOT BURY BOTTOM BRANCHES. PRUNE OUT DEAD AND BROKEN BRANCHES.

3" MULCH - NO MORE THAN 1" ON TOP OF ROOT BALL.

PRIOR TO MULCHING, LIGHTLY TAMP SOIL AROUND ROOT BALL IN 6" LIFTS TO BRACE SHRUB. DO NOT OVER COMPACT. WHEN HOLE HAS BEEN BACKFILLED, DEEPLY WATER AROUND ROOT BALL TO SETTLE SOIL.

EXISTING SUBGRADE

ROOT BALL RESTS ON EXISTING OR RECOMPACTED SOIL.

HATCH KEY:

HATCH	LANDSCAPE MATERIAL
	MINERAL MULCH
	SEEDED LAWN

GENERAL NOTES:

- SEE SHEET C0.2 FOR LANDSCAPE SPECIFICATIONS.
- BARE DISTURBED SOIL OUTSIDE OF MULCHED AREA TO BE SEED.
- EXISTING TREE LOCATIONS ARE ESTIMATED. CONTRACTOR TO VERIFY LOCATIONS OF TREES ON SITE. IF TREES ARE SIGNIFICANTLY DAMAGED DURING CONSTRUCTION, REPLACE AS NECESSARY WITH HARVEST GOLD LINDEN OR APPROVED SUBSTITUTE.

DECIDUOUS SHRUB PLANTING DETAIL

NOT TO SCALE

NOTE: FOR MASS PLANTINGS EXCAVATE ENTIRE BED & BACKFILL W/ PREPARED SOIL.

FINISHED GRADE

VARIES

LOOSEN SOIL, DIG AND TURN SOIL TO REDUCE COMPACTION TO THE AREA AND DEPTH SHOWN.

2-3 TIMES DIMENSION OF ROOT BALL

PLANT AT FINISHED GRADE. DO NOT BURY BOTTOM BRANCHES. PRUNE OUT ANY BROWN BRANCHES.

3" MULCH - NO MORE THAN 1" ON TOP OF ROOT BALL.

PRIOR TO MULCHING, LIGHTLY TAMP SOIL AROUND ROOT BALL IN 6" LIFTS TO BRACE SHRUB. DO NOT OVER COMPACT. WHEN HOLE HAS BEEN BACKFILLED, DEEPLY WATER AROUND ROOT BALL TO SETTLE SOIL.

EXISTING SUBGRADE

ROOT BALL RESTS ON EXISTING OR RECOMPACTED SOIL.

NOTE: ONLY USE TREE STAKING IF UNABLE TO STABILIZE TREE PROPERLY DURING BACKFILLING.

PRUNE BROKEN BRANCHES AFTER INSTALLATION AS NECESSARY.

ONLY WRAP TREE IF PLANTED NEAR END OF GROWING SEASON (REMOVE IN SPRING).

SITUATE EXPOSED ROOT FLARE 2-3" ABOVE FINISHED GRADE.

3" MULCH

DIG HOLE 2-3 TIMES WIDER THAN DIAMETER OF ROOT BALL.

BACKFILL USING CLEAN EXISTING SOIL REMOVED FROM HOLE AND SUPPLEMENT WITH CLEAN NATIVE SOIL AS NECESSARY. ELIMINATE VOIDS, LIGHTLY TAMP, AND WATER WELL. (SEE SPECIFICATIONS).

BREAK UP SUBGRADE AND EXPOSED SIDES OF HOLE USING HAND TOOLS.

EXISTING SUBGRADE

EVERGREEN SHRUB PLANTING DETAIL

NOT TO SCALE

REMOVE BURLAP, TWINE, AND WIRE CAGE FROM TOP 1/3 OF ROOT BALL.

VARIES

DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE



CIVIL LANDSCAPE AND RESTORATION PLAN

Always a Better Plan

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

PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:
7-BREW LA CROSSE
3710 STATE ROAD 16 • LA CROSSE, WI 54650

PROFESSIONAL SEAL

SHEET DATES

ISSUED FOR APPROVAL

IFA DEC. 11, 2025

JOB NUMBER

250351400

SHEET NUMBER

C1.4

PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:
7-BREW LA CROSSE
3710 STATE ROAD 16 • LA CROSSE, WI 54650

PROFESSIONAL SEAL

SHEET DATES

ISSUED FOR APPROVAL

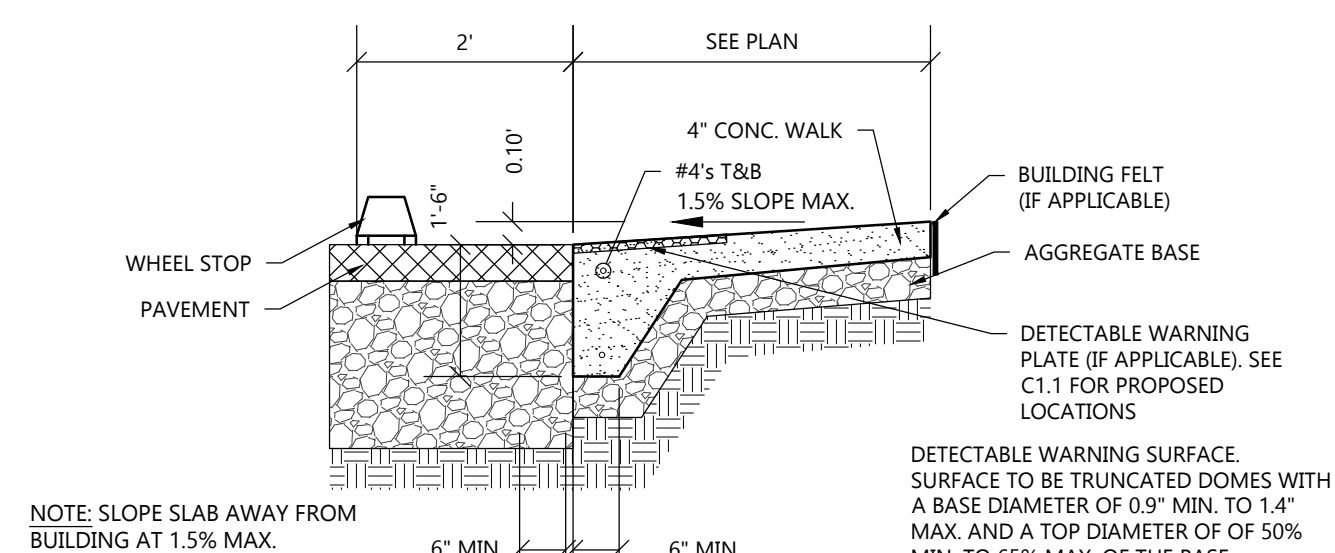
IFA DEC. 11, 2025

JOB NUMBER

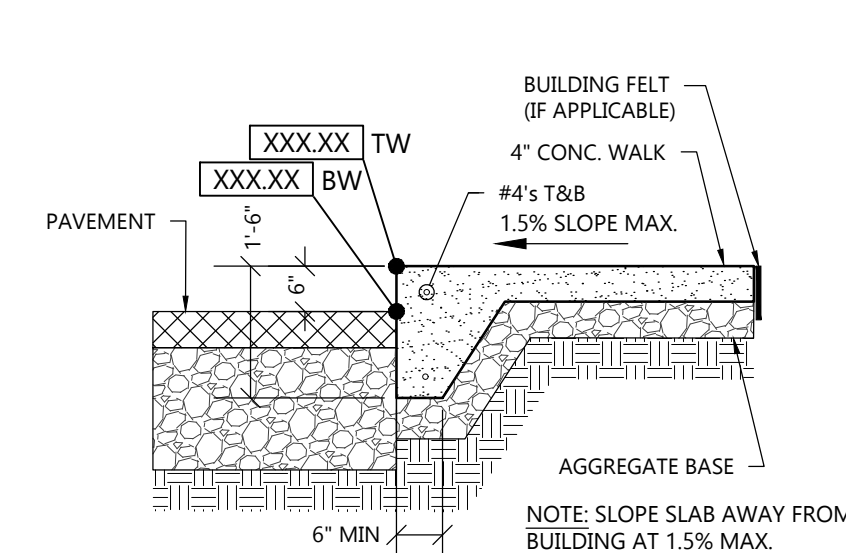
250351400

SHEET NUMBER

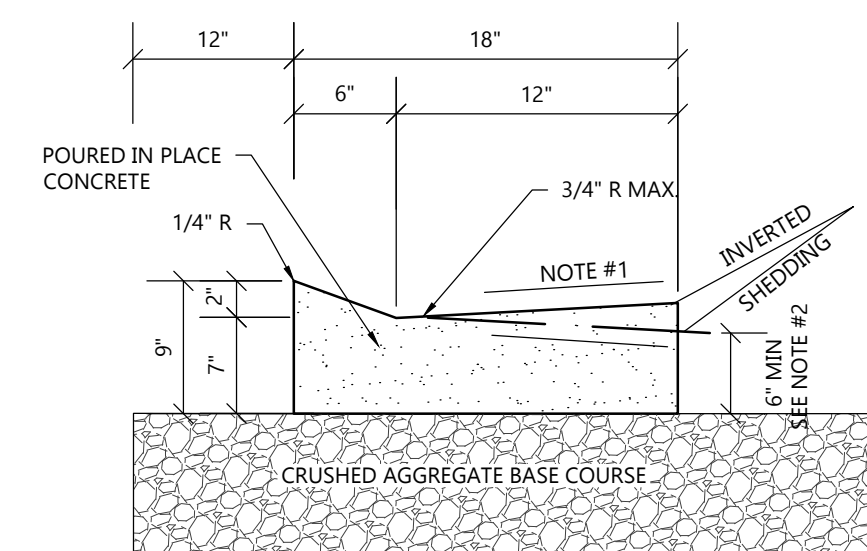
C2.0



FLUSH WALK DETAIL
NOT TO SCALE

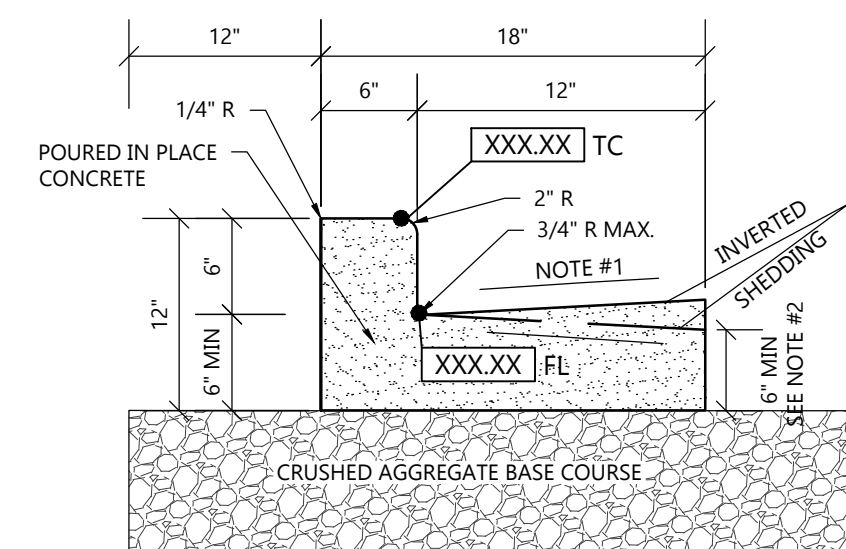


RAISED WALK DETAIL
NOT TO SCALE



- 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

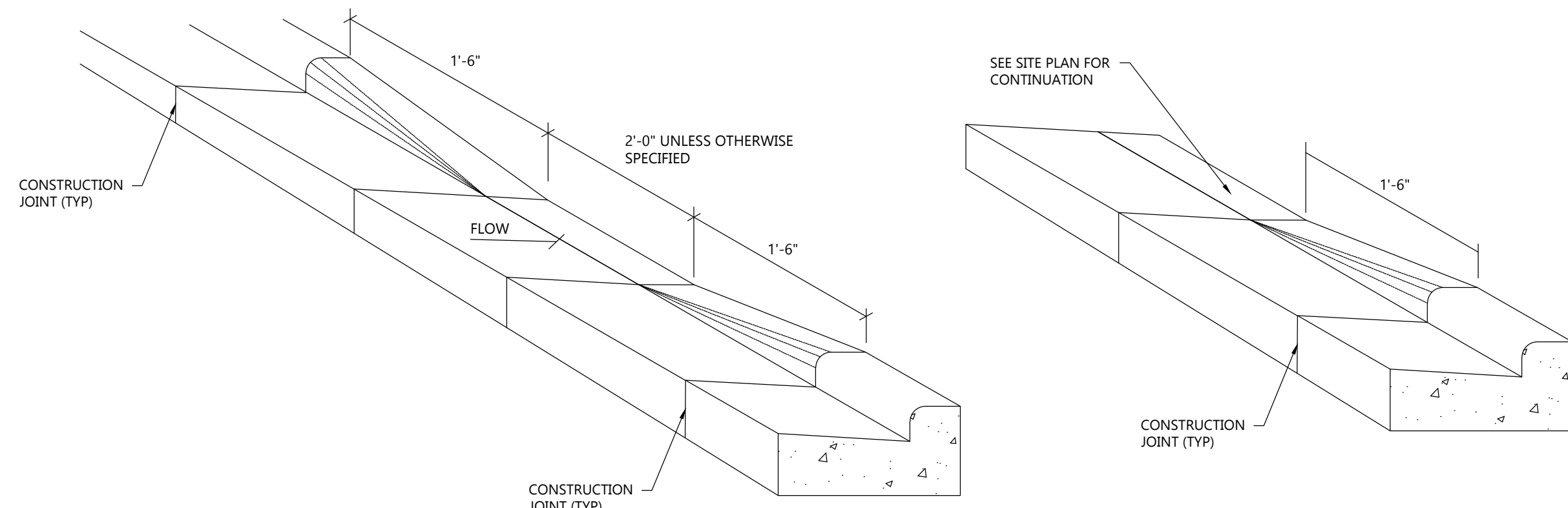
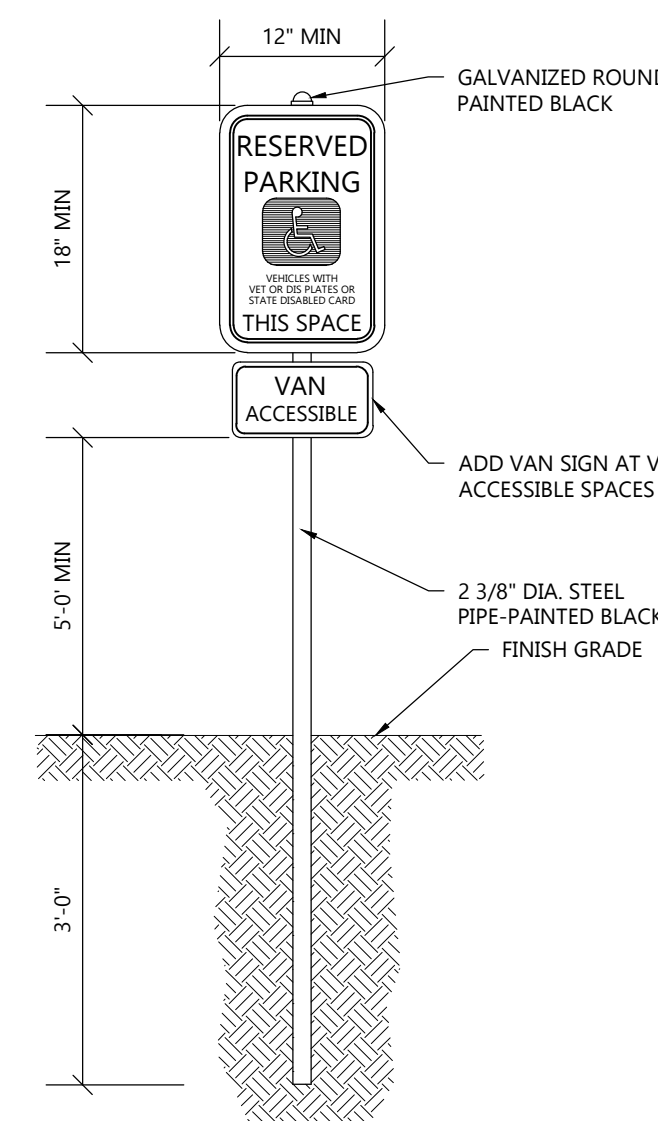
18" MOUNTABLE CURB & GUTTER DETAIL
NOT TO SCALE



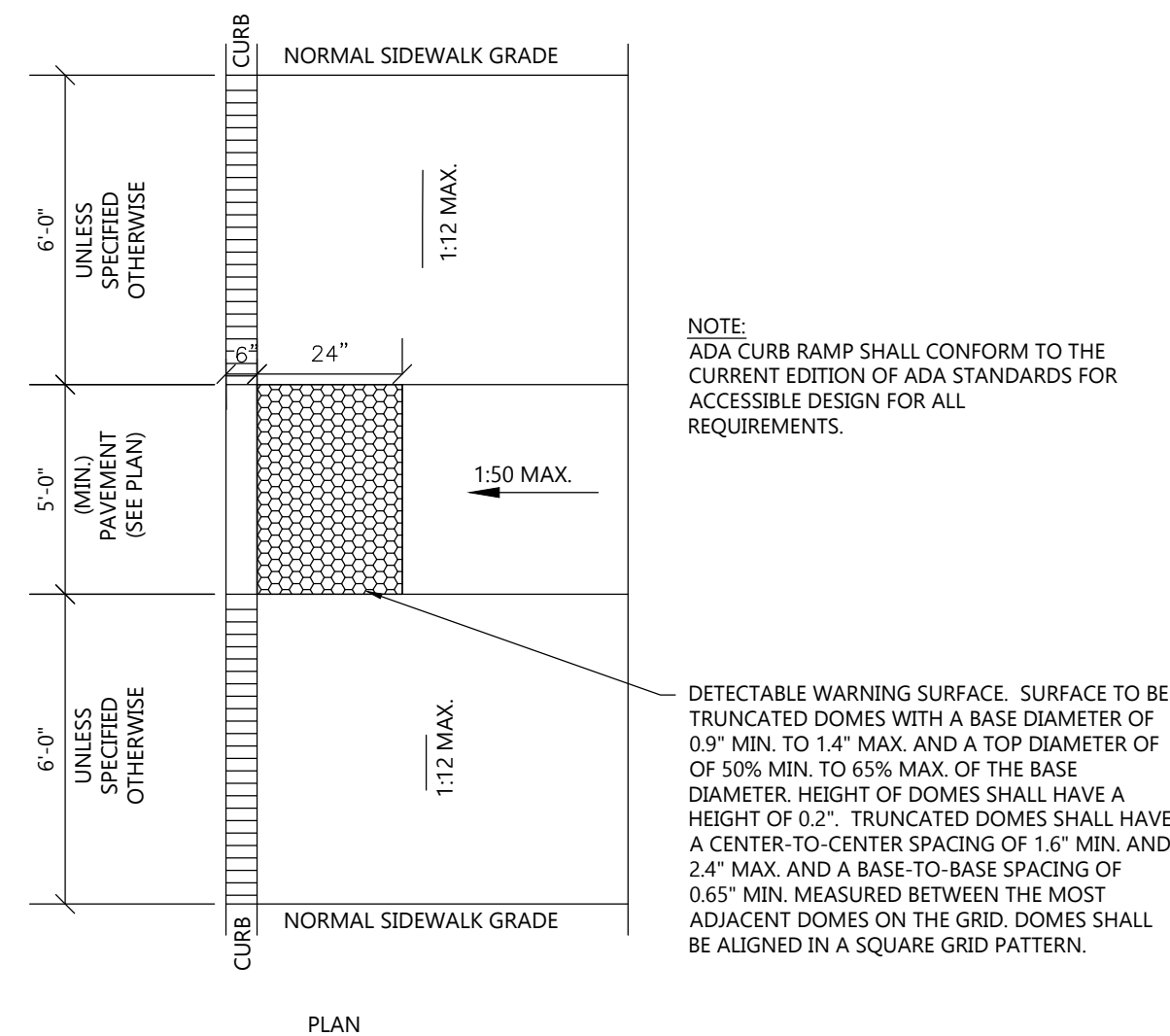
- NOTE:
1. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
 2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MIN. GUTTER THICKNESS IS MAINTAINED.
 3. SEE SITE PLAN & GRADING PLAN FOR INVERTED & SHEDDING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

18" CONCRETE CURB & GUTTER DETAIL
NOT TO SCALE

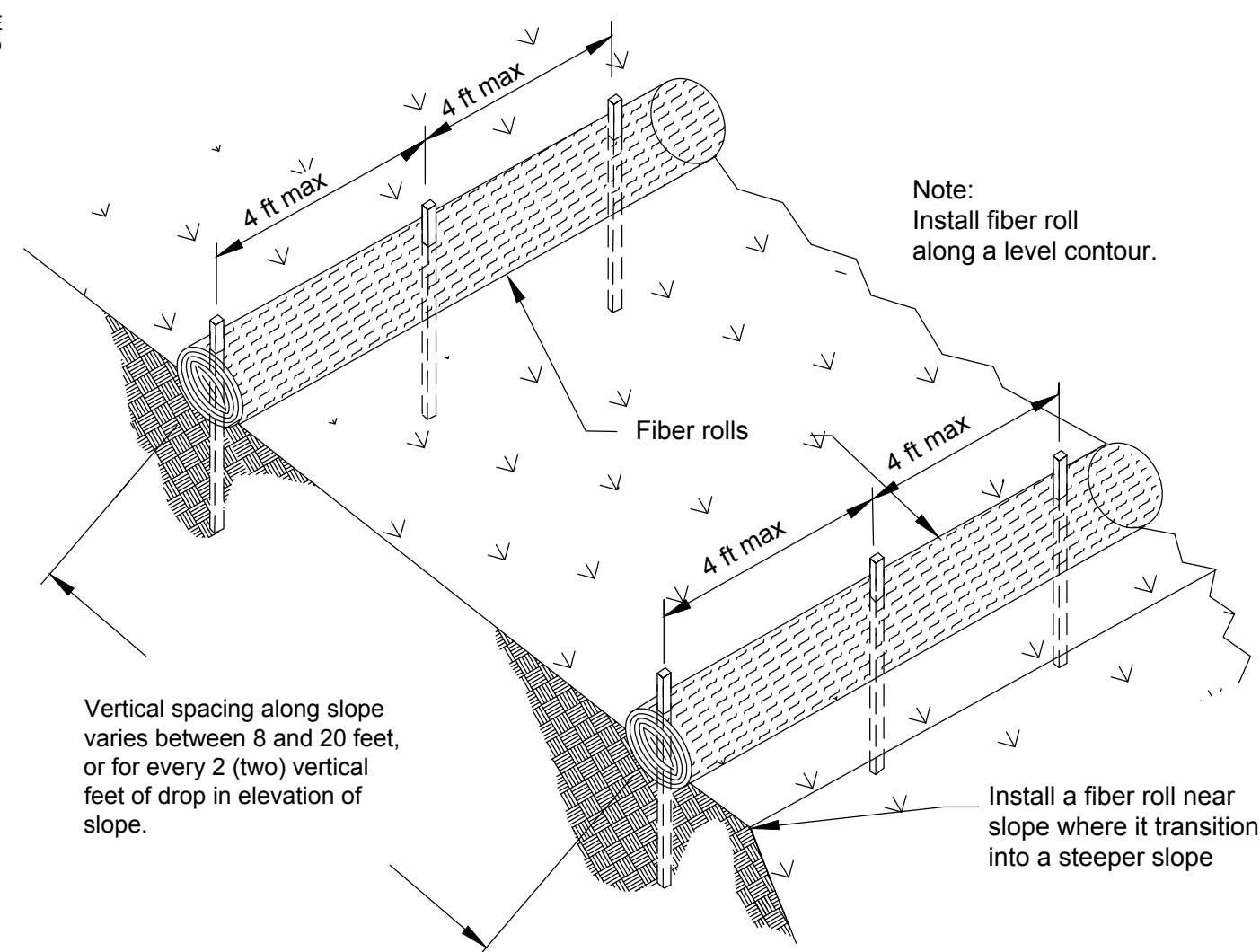
HANDICAP SIGNAGE WITHOUT CONCRETE BASE DETAIL
NOT TO SCALE



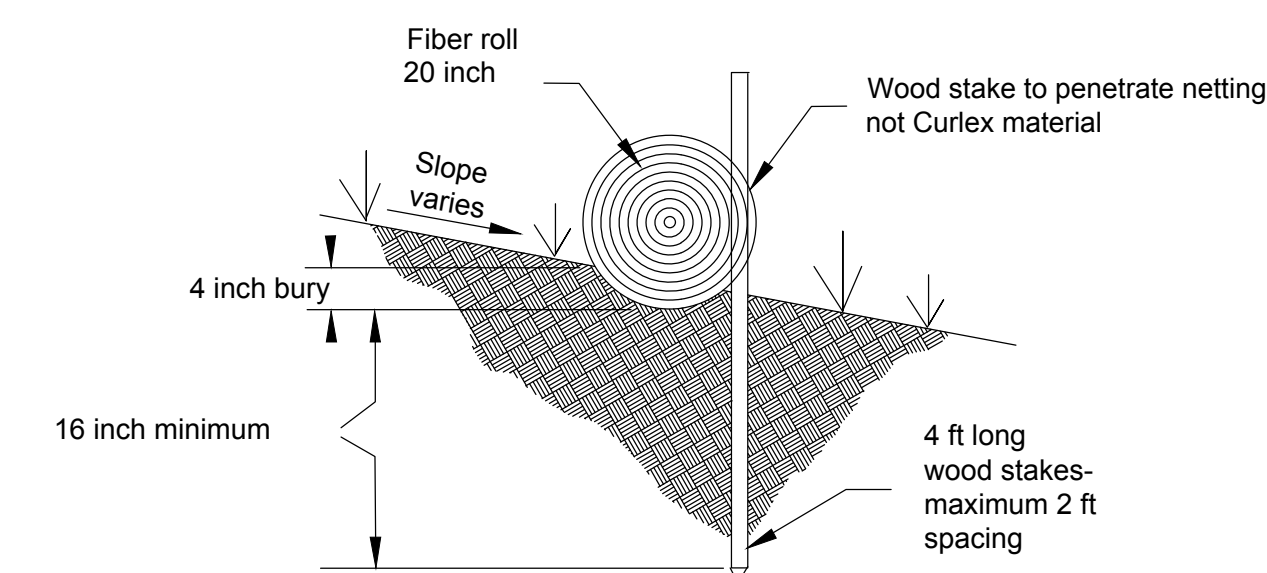
CURB TAPER DETAIL
NOT TO SCALE



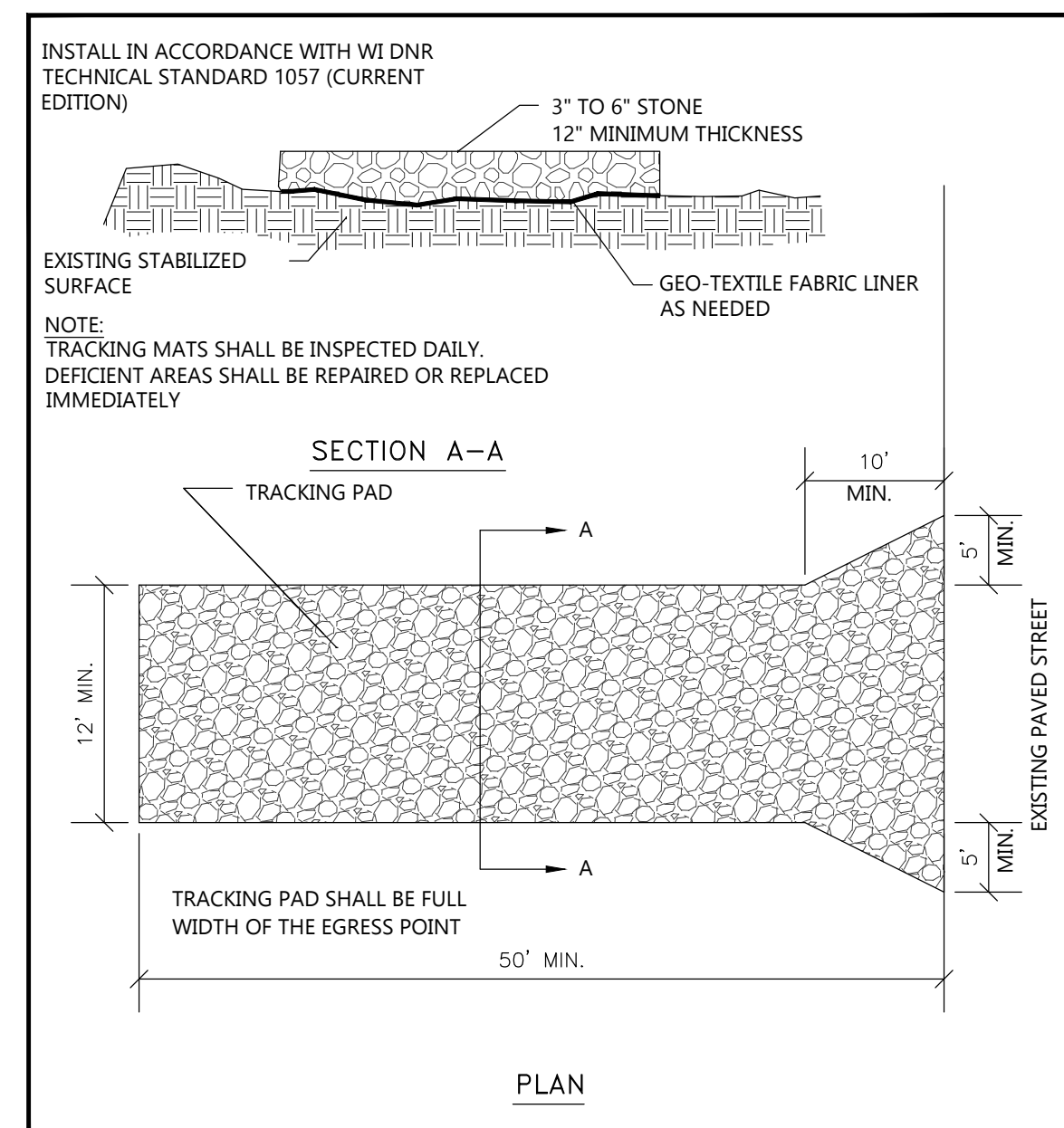
ADA SIDEWALK RAMP DETAIL
NOT TO SCALE



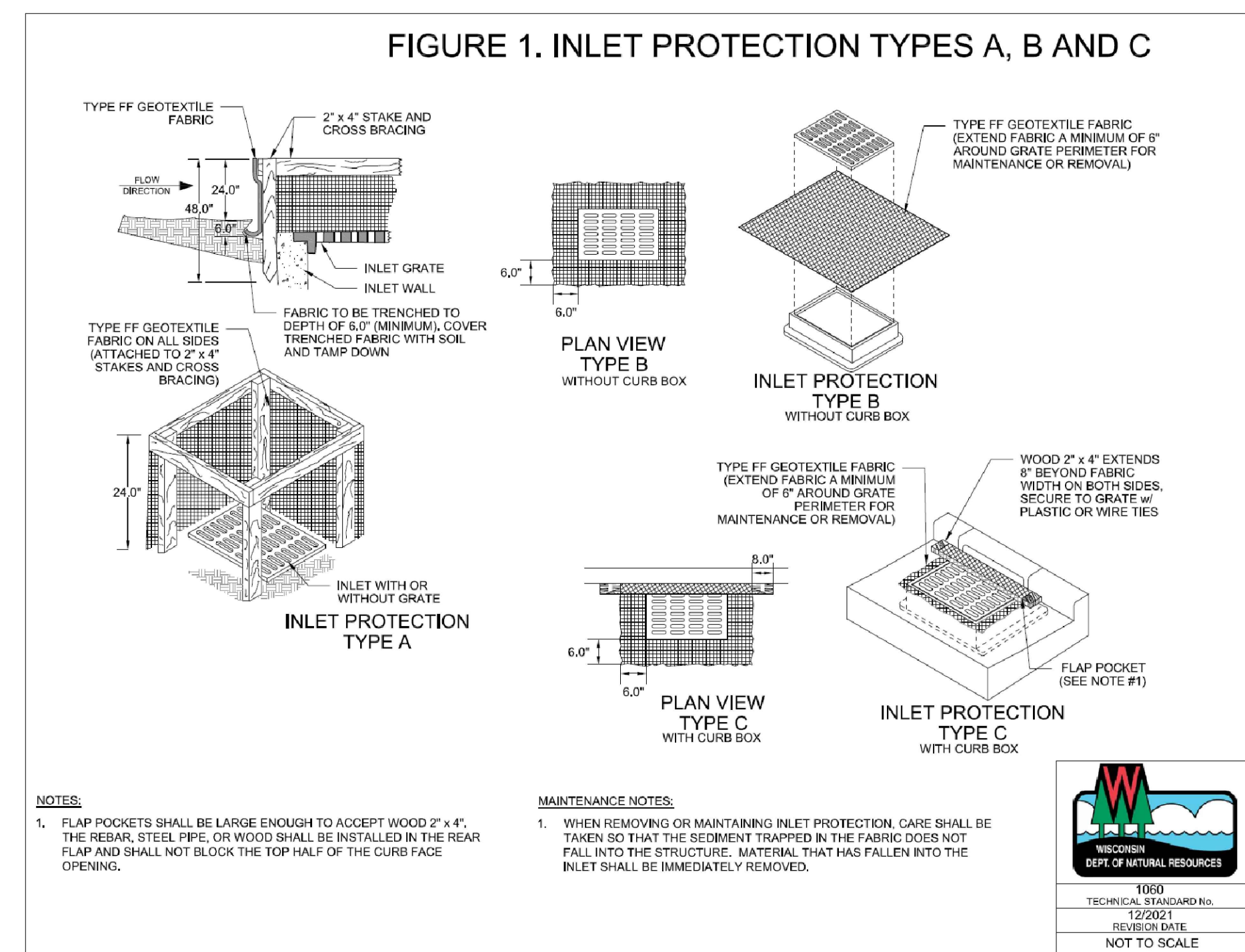
TYPICAL FIBER ROLL INSTALLATION
N.T.S.



SEDIMENT LOG INSTALLATION
NOT TO SCALE

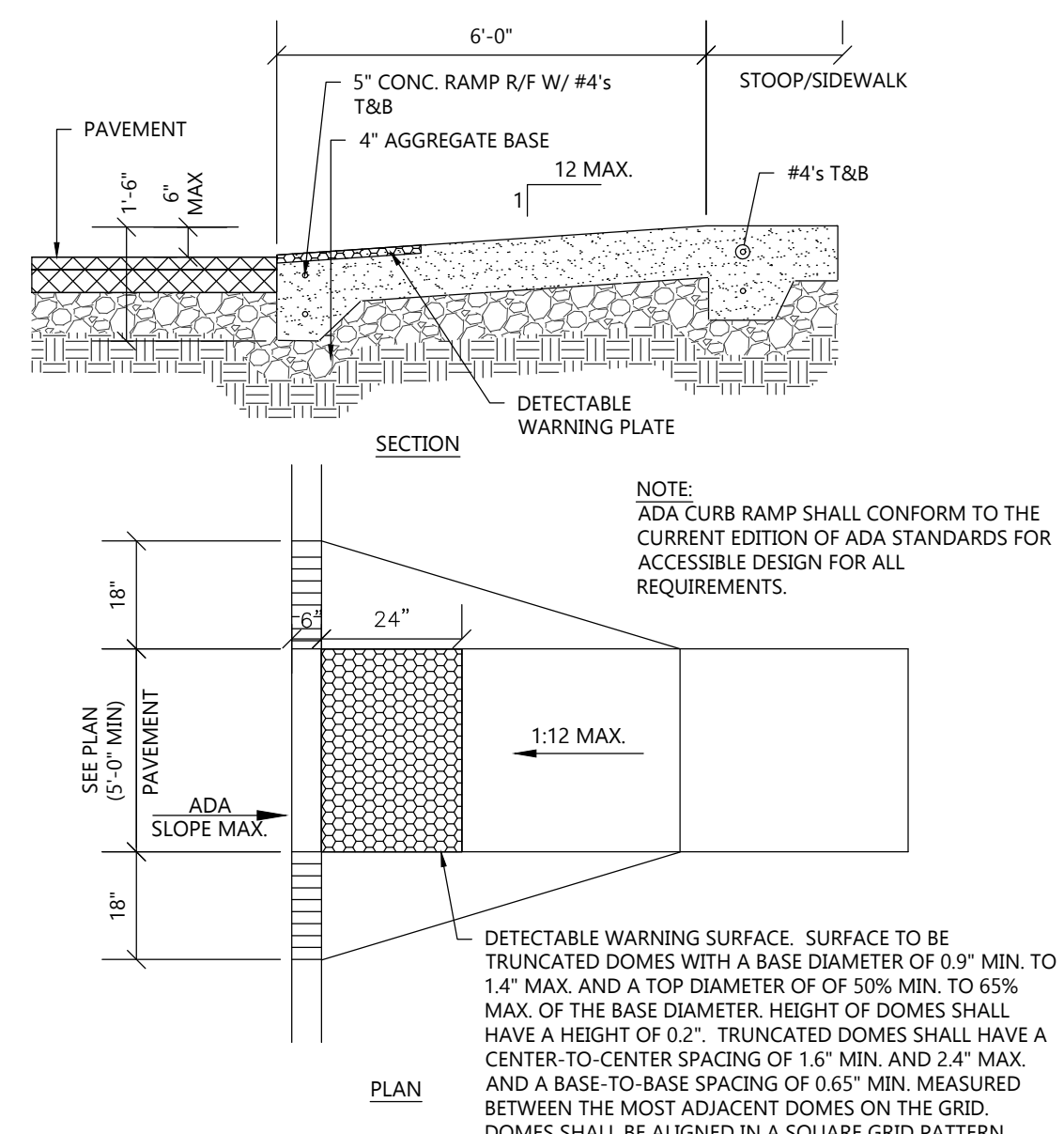


TRACKPAD DETAILS
NOT TO SCALE



INLET PROTECTION DETAIL
NOT TO SCALE

CIVIL DETAILS



CURB RAMP DETAIL
NOT TO SCALE



Always a Better Plan

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

PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:
7-BREW LA CROSSE
3710 STATE ROAD 16 • LA CROSSE, WI 54650

PROFESSIONAL SEAL

SHEET DATES

ISSUED FOR APPROVAL

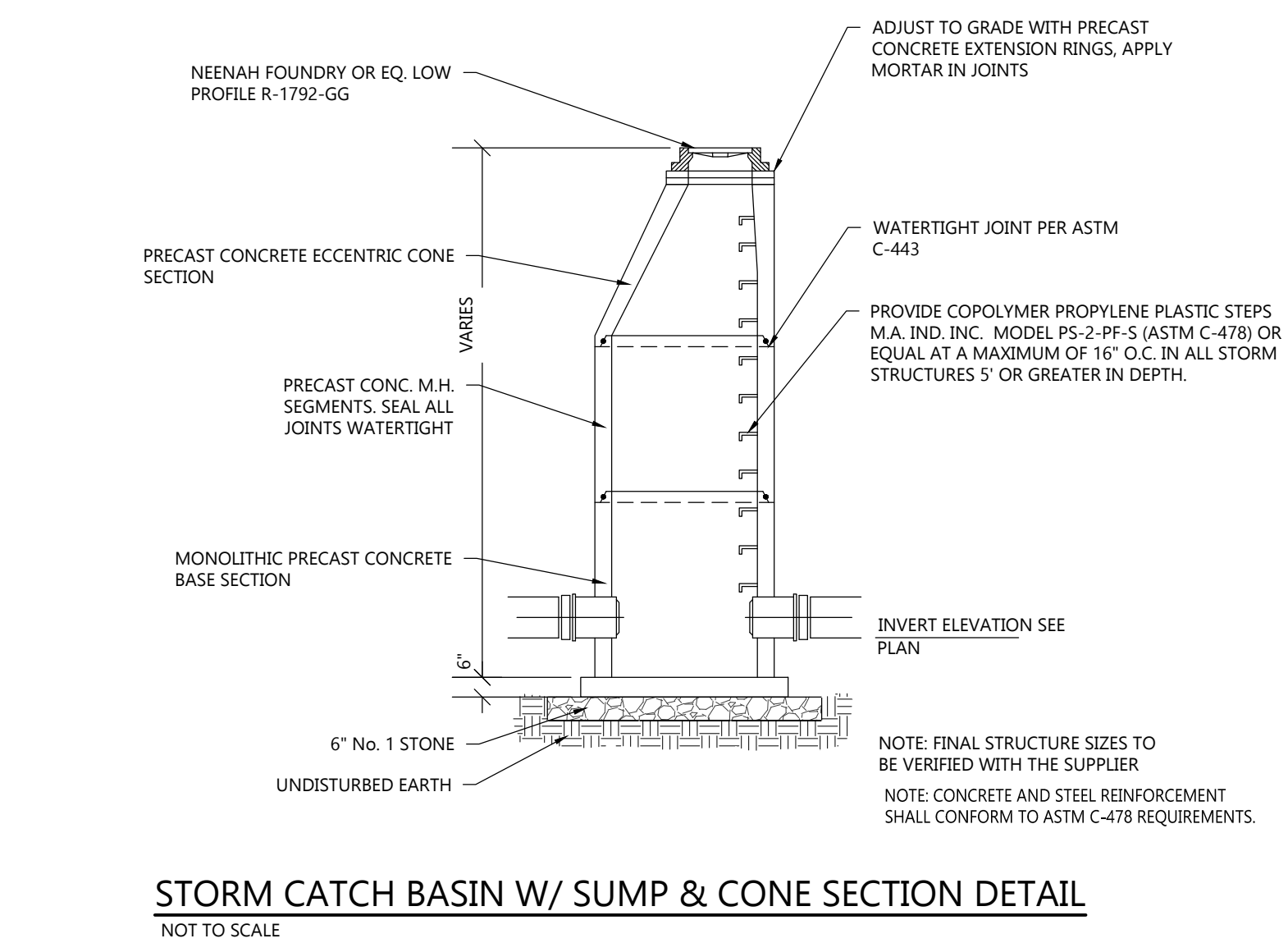
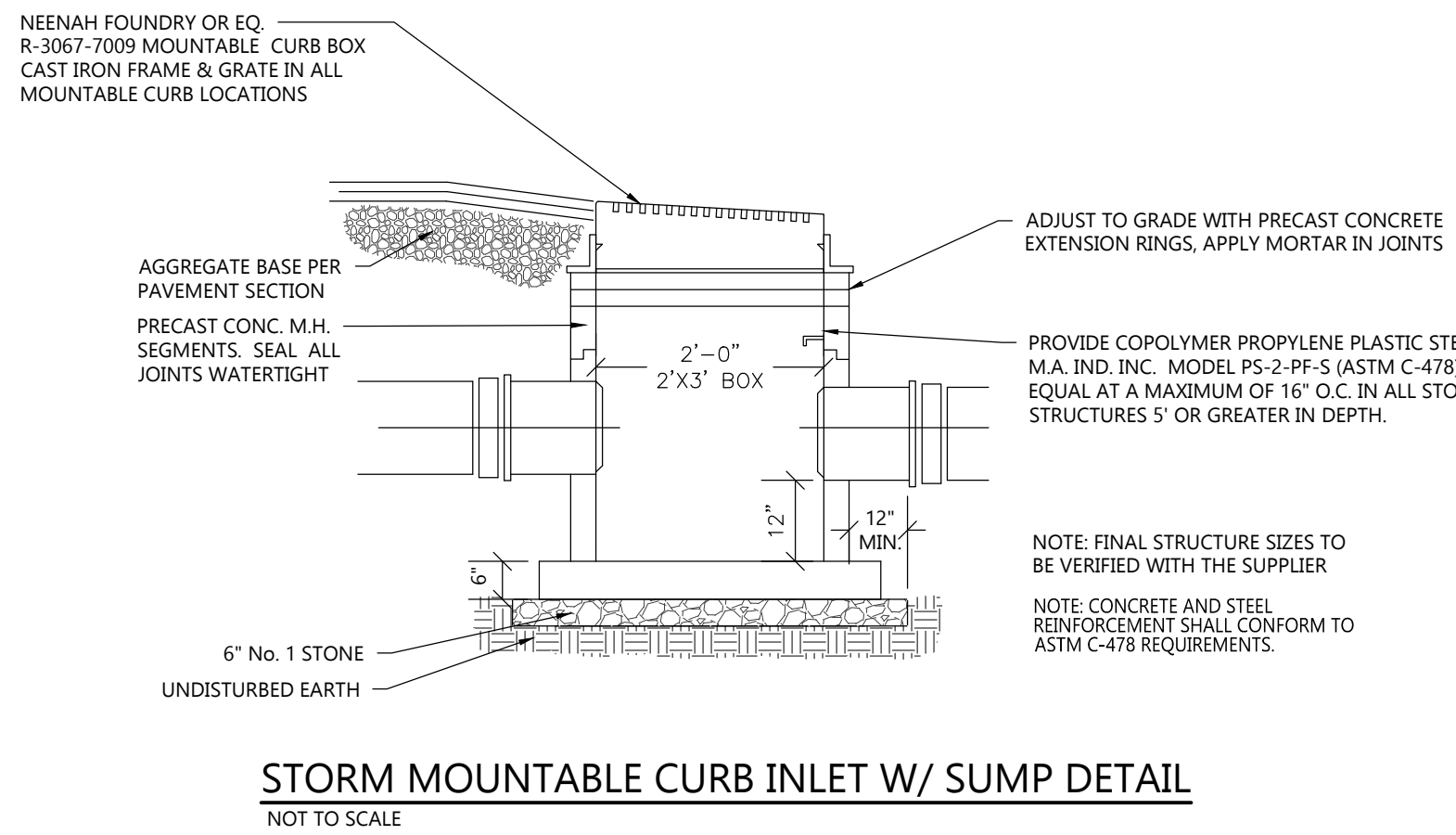
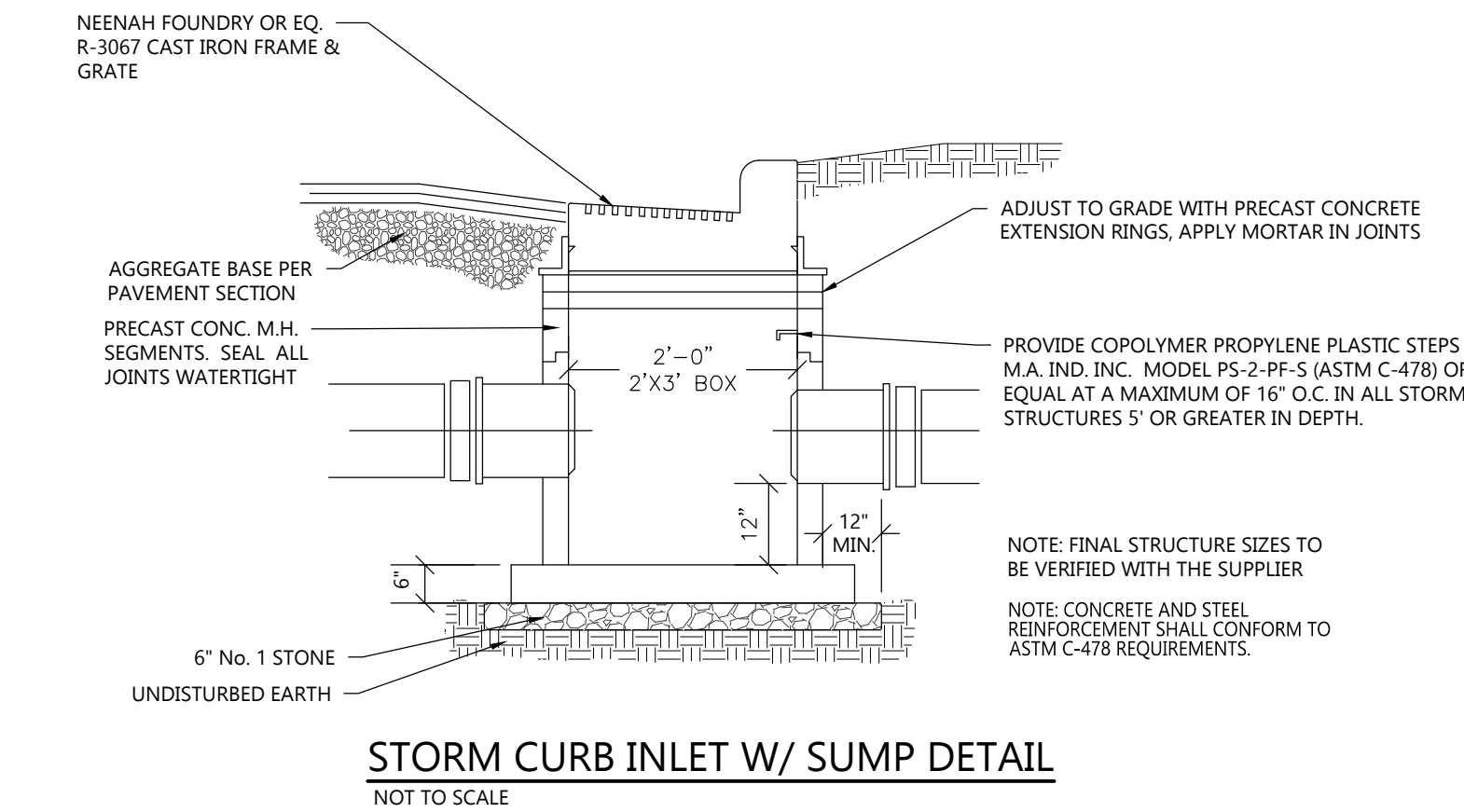
IFA DEC. 11, 2025

JOB NUMBER

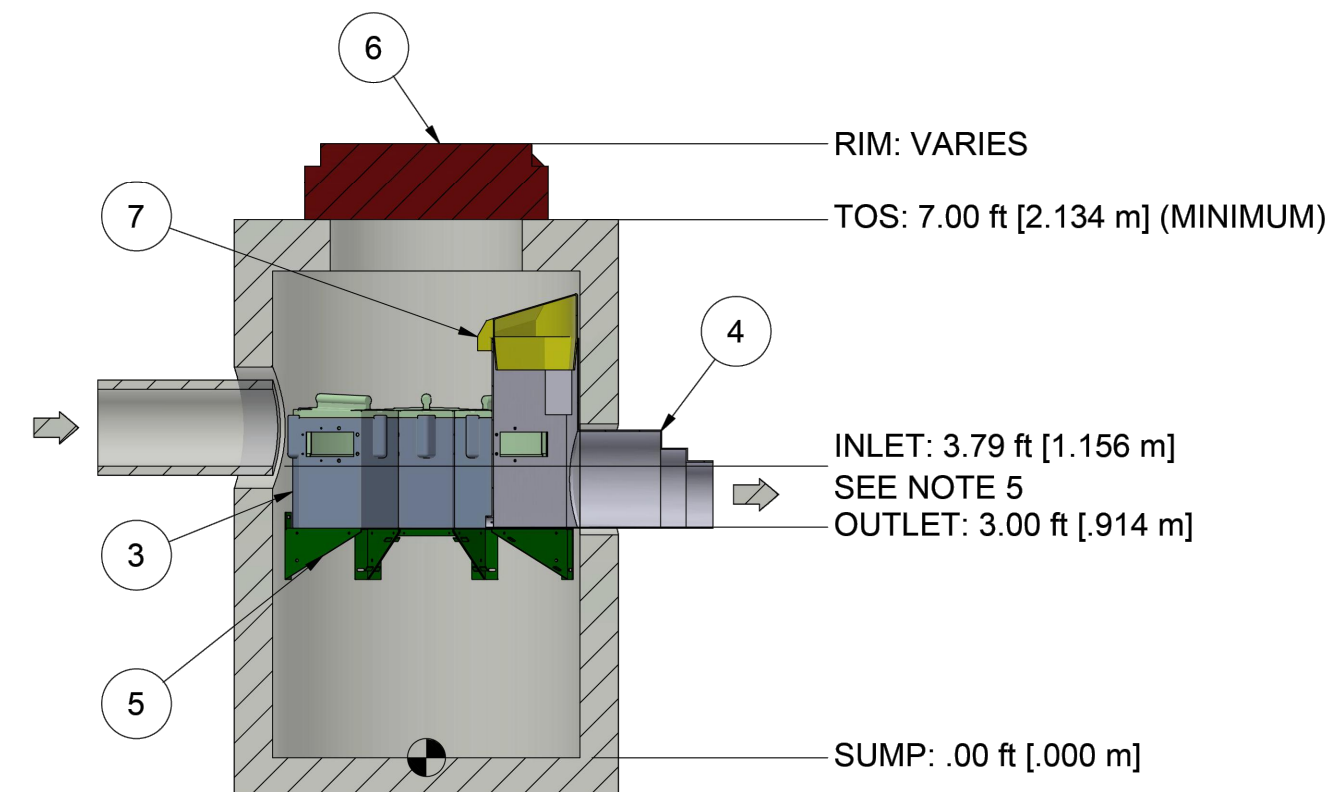
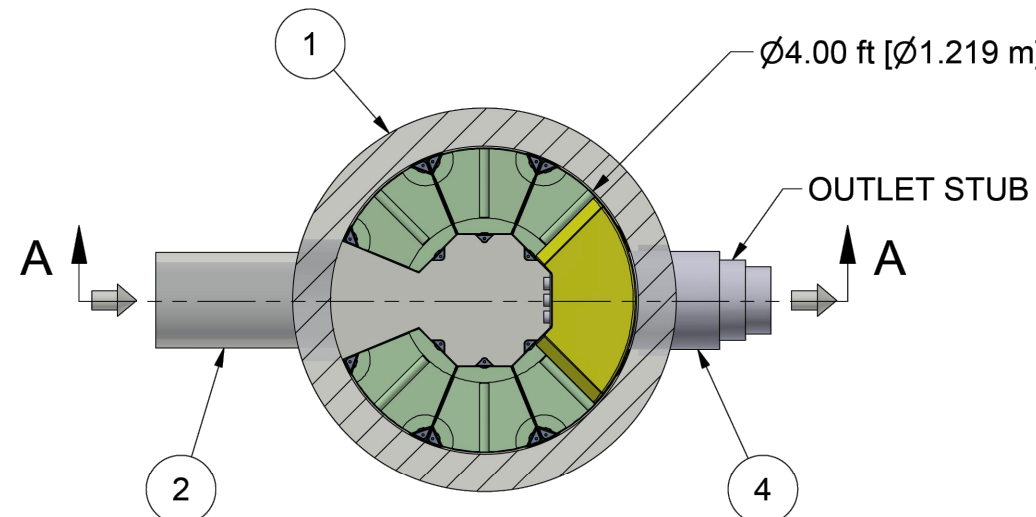
250351400

SHEET NUMBER

C2.1



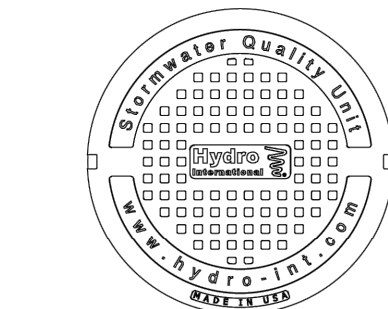
GENERAL ARRANGEMENT
NOT FOR CONSTRUCTION



- PRODUCT NOTES:
- MINIMUM PERFORMANCE: 80% TSS REMOVAL. NJCAT/WASHINGTON DOE* VERIFIED AT THE PEAK TREATMENT FLOW.
 - PEAK TREATMENT FLOW: .056 CFS (1.6 LPS) (25 GPM) PER MODULE.
 - PEAK ONLINE FLOW: 3.5 CFS (28 LPS).
 - *SEE WA DOE GENERAL USE LEVEL DESIGNATION FOR BASIC TSS AND PHOSPHORUS TREATMENT REPORT.
 - NORMAL OPERATING W.S.E. IS 2.46 ft (.75 m) ABOVE THE OUTLET INVERT.
 - CPZ FILTER WILL EXPERIENCE PROLONGED DRAIN-DOWN TIMES WITHOUT 9 $\frac{1}{2}$ " (241mm) DROP.
 - INLET POSITION MAY NOT INTERFERE WITH MODULE OR BRACKET PLACEMENT.
 - UNIT SHALL CONFORM TO HS20-44 LOAD RATINGS.
 - FOR MORE PRODUCT INFORMATION INCLUDING REGULATORY ACCEPTANCES, PLEASE VISIT: <https://hydro-int.com/en/products/flo-filter>
 - OUTLET PIPE STUB SIZE INFORMATION:
OUTSIDE DIAMETER: 10 $\frac{1}{2}$ " (267mm), 12 $\frac{1}{2}$ " (318mm), 15 $\frac{1}{8}$ " (389mm)
CONCRETE PENETRATION: PIPE BOOT (BY HYDRO)
HOOK-UP: FERNCO-TYPE COUPLING (BY OTHERS)

PARTS LIST				
ITEM	QTY	SIZE (in)	SIZE (mm)	DESCRIPTION
1	1	48	1200	PRECAST MANHOLE
2	1			INLET PIPE (BY OTHERS)
3	6 MAX			FILTER MODULE
4	1			OUTLET MODULE
5				SUPPORT FRAME
6	1	30	750	FRAME AND COVER (ROUND)
7	1			BYPASS HOOD

ANY WARRANTY GIVEN BY HYDRO INTERNATIONAL WILL APPLY ONLY TO THOSE ITEMS SUPPLIED BY IT. ACCORDINGLY HYDRO INTERNATIONAL CANNOT ACCEPT ANY RESPONSIBILITY FOR ANY STRUCTURE, PLANT, OR EQUIPMENT, OR THE PERFORMANCE THERE OF (DESIGNED, BUILT, MANUFACTURED, OR SUPPLIED BY ANY THIRD PARTY. HYDRO INTERNATIONAL HAVE A POLICY OF CONTINUOUS DEVELOPMENT AND RESERVE THE RIGHT TO AMEND THE SPECIFICATION. HYDRO INTERNATIONAL CANNOT ACCEPT LIABILITY FOR PERFORMANCE OF ITS EQUIPMENT, (OR ANY PART THEREOF), IF THE EQUIPMENT IS SUBJECT TO CONDITIONS OUTSIDE ANY DESIGN SPECIFICATION. HYDRO INTERNATIONAL OWNS THE COPYRIGHT OF THIS DRAWING, WHICH IS SUPPLIED IN CONFIDENCE. IT MUST NOT BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUPPLIED AND MUST NOT BE REPRODUCED, IN WHOLE OR IN PART, WITHOUT PRIOR PERMISSION IN WRITING FROM HYDRO INTERNATIONAL.
©2024 HYDRO INTERNATIONAL



HYDRO FRAME AND COVER (INCLUDED)
GRADE RINGS BY OTHERS AS REQUIRED



IF IN DOUBT ASK

DATE: 4/3/2024 SCALE: 1:30

DRAWN BY: CHECKED BY: APPROVED BY:

THE CPZ UP-FLO FILTER 4FL MANHOLE GENERAL ARRANGEMENT

6 MODULES MAX
ONLINE WITHOUT BYPASS WEIR

Patent: www.hydro-int.com/patents

Hydro International
hydro-int.com
©2024 HYDRO INTERNATIONAL

WEIGHT: MATERIAL:

REFERENCE NUMBER:

DRAWING NO.: 4FL MANHOLE CPZ UFF GA

SHEET SIZE: B SHEET: 1 OF 1

Rev: N/A

PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:
7-BREW LA CROSSE
3710 STATE ROAD 16 • LA CROSSE, WI 54650

PROFESSIONAL SEAL

SHEET DATES

ISSUED FOR APPROVAL

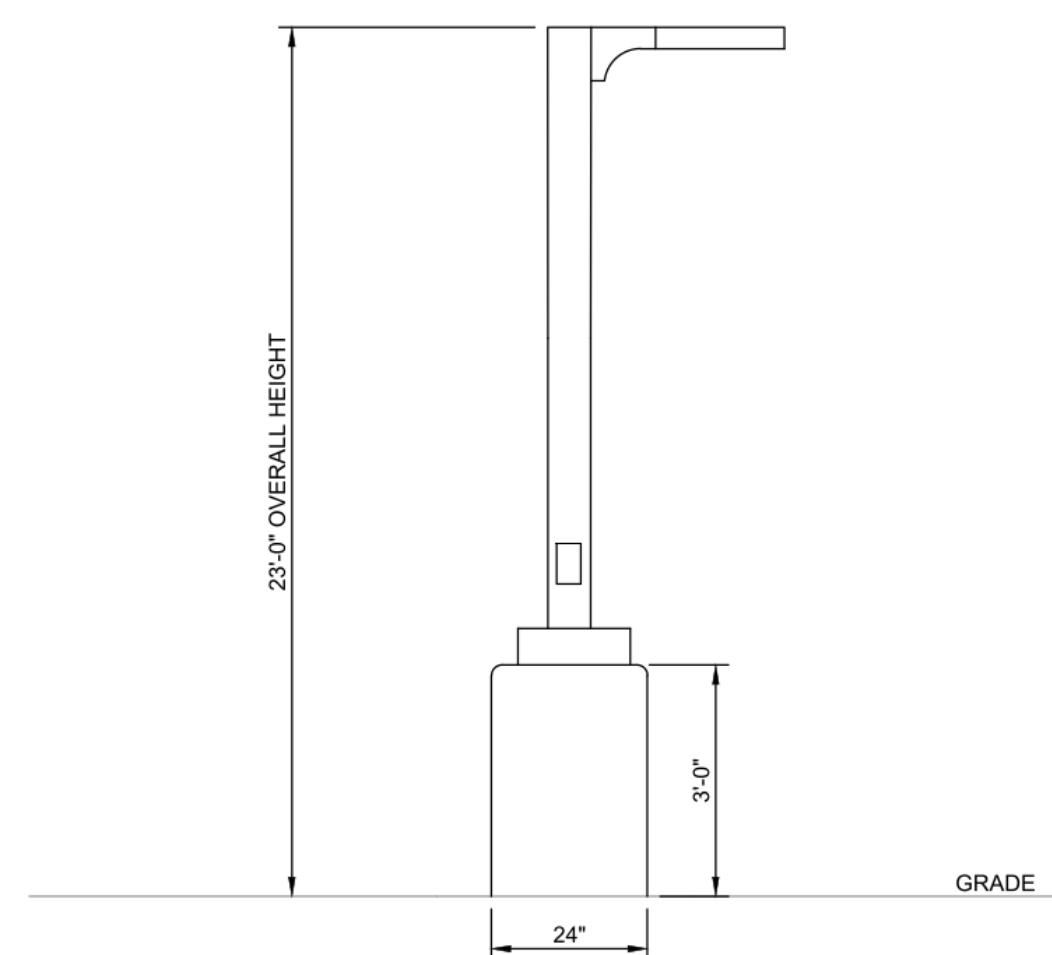
IFA DEC. 11, 2025

JOB NUMBER

250351400

SHEET NUMBER

C3.1



LIGHT POLE DETAIL

NO SCALE



Mirada Medium (MRM)
Outdoor LED Area Light



OVERVIEW

Lumen Package	7,000 - 55,000
Voltage Range	48 - 458
Efficacy Range (LPW)	15 - 162
Weight (lbs)	50 (L24)
Control Options	MSBT, ALB, ALS, 7-pin, PLC

QUICK LINKS

Ordering Guide	Performance	Photometrics	Dimensions
----------------	-------------	--------------	------------

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
- Designed to mount to square or round poles.
- 0-10V dimming (0% - 100%) standard.
- Standard Universal Voltage (120-277 VAC) input. 50/60 Hz or optional High Voltage (247-480 VAC).
- LED Calculated Life >100k Hours (See Lumen Maintenance chart).
- Total harmonic distortion <20%.
- Operating temperature: -40°C to +50°C (-40°F to +122°F). 42, and 48, lumen packages rated to +40°C. SSL lumen package rated to +35°C.
- Power factor > .90.
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation per ANSI/IEEE C84.12.
- High-efficiency LEDs mounted to metal-core circuit board to maximize heat dissipation.
- Components are fully enclosed in potting material for moisture resistance. Driver and key electronic components can easily be accessed.
- Zero uplight.
- Available in 5000K, 4000K, and 3000K color temperatures per ANSI C78.377. Also Available in Phosphor Converted Amber with Peak Intensity at 600nm.
- Minimum CRI of 70.
- Integral lower (L) and integral heat lower (H) options available for enhanced backlight control.

Optical System

- State-of-the-art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated sealed optical chamber in 1 component.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in IES Types 2, 3, 4, 5A, FT, FTA, AH, and LC/RC.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93-95%.
- Available in 5000K, 4000K, and 3000K color temperatures per ANSI C78.377. Also Available in Phosphor Converted Amber with Peak Intensity at 600nm.
- Minimum CRI of 70.
- Integral lower (L) and integral heat lower (H) options available for enhanced backlight control.

LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • (513) 372-3200 • www.lsiinc.com

Electrical

- High-performance programmable driver features over-voltage, under-voltage, short-circuit and over-temperature protection. Custom lumen and wattage packages available.
- A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment.
- Included terminal block accepts up to 12 ga wire.
- Utilizes LSI's traditional 3" drill pattern B3 for easy fastening of LSI products.

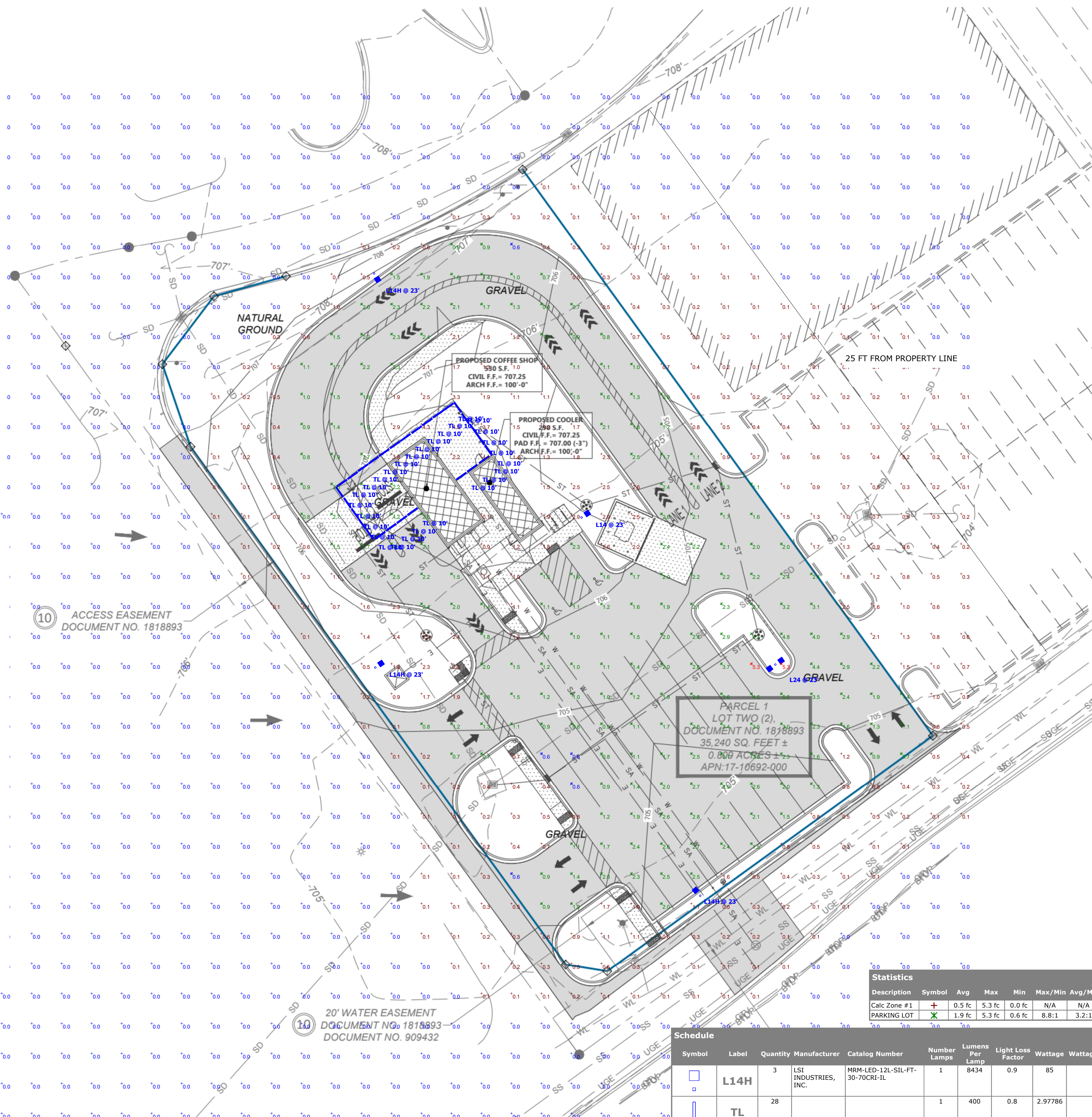
Warranty

- LSI LED Fixtures carry a 5-year warranty.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Bay Area Air Quality Management District (BAAQMD) requirements.
- Dark Sky compliant, with 3000K color temperature selection.
- Title 24 Compliant, see local ordinance for qualification information.
- Barely compliant.
- Suitable for wet locations.
- IP66 rated Luminaire per IEC 60598.
- 5G rated for ANSI C38.51 high vibration applications are qualified.
- Designlights Consortium (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/DLC to confirm which versions are qualified.
- Patented Silicone Optics (US Patent NO. 10,816,165 B2).
- IK08 rated luminaire per IEC 60628 mechanical impact code.

Print 1/13 Rev. 07/21/24 SPEC.0003.0422

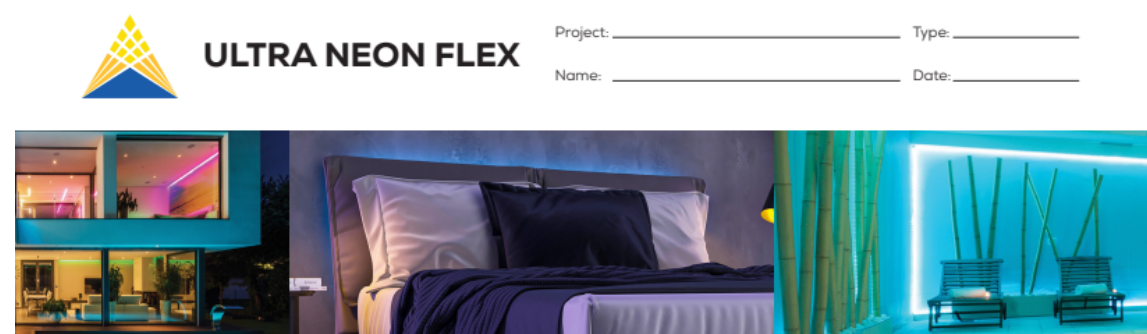


Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.5 fc	5.3 fc	0.0 fc	N/A	N/A
PARKING LOT	X	1.9 fc	5.3 fc	0.6 fc	8.8:1	3.2:1

Symbol	Label	Quantity	Manufacturer	Catalog Number	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage	Wattage
□	L14H	3	LSI INDUSTRIES, INC.	MRM-LED-12L-SIL-FT-30-70CRI-IL	1	8434	0.9	85	
□	TL	28			1	400	0.8	2,97786	
□	L14	1	LSI INDUSTRIES, INC.	MRM-LED-12L-SIL-FT-30-70CRI	1	13143	0.9	85	
□	L24	1	LSI INDUSTRIES, INC.	MRM-LED-12L-SIL-FT-30-70CRI	1	13143	0.9	170	



CIVIL SITE PHOTOMETRIC PLAN & DETAILS



OVERVIEW

Applications: Indoor/Outdoor IP65

Efficiency: 70-90lm/W

Dimming: TRIAC

LED Type: SMD2835

Operating Temp: -4° to 113° F

Lifespan: 50,000 hours

Warranty: 5 years (Indoors)

3 years (Outdoors)

FEATURES

- Uniform, dot-free and smooth neon light up to 164ft (50m) of run length.
- Driverless design with on-board constant current IC driver and rectifier.
- Direct AC power supply with external driver.
- Thick silicone jacket insures electrical safety by ETL and RoHS standards.
- Environmentally-friendly silicone, bend flexibility, impact resistant and inclement weather resistant.
- Advanced silicone extrusion technology.



855-997-2746 LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • (513) 372-3200 • www.lsiinc.com