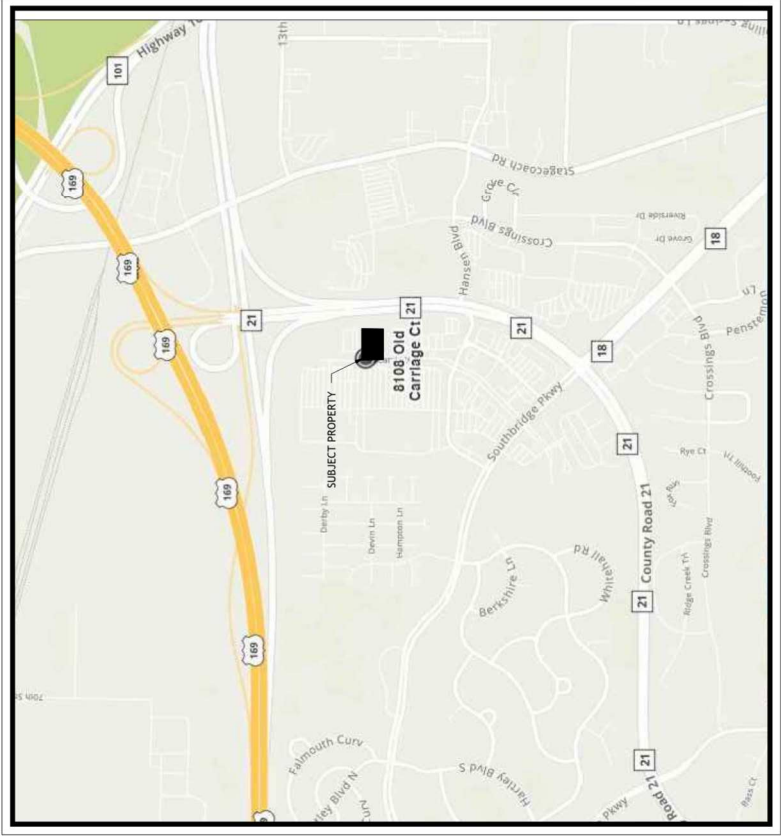


CONSTRUCTION PLAN FOR TAKE 5 CAR WASH SHAKOPEE, MINNESOTA



LEGAL DESCRIPTION

REAL PROPERTY IN THE CITY OF SHAKOPEE, COUNTY OF SCOTT, STATE OF MINNESOTA, DESCRIBED AS FOLLOWS:
THAT PART OF LOT 3, BLOCK 2, SOUTHBRIDGE CROSSINGS SECOND ADDITION, ACCORDING TO THE RECORDED PLAT THEREOF, SCOTT COUNTY, MINNESOTA, LYING SOUTH OF THE FOLLOWING DESCRIBED PROPERTY:

COMMENCING AT THE NORTHWEST CORNER OF SAID LOT 3; THENCE SOUTH 01 DEGREES 24 MINUTES 38 SECONDS WEST, ASSUMED BEARING ALONG A WESTERLY LINE OF SAID LOT 3 AND THE WESTERLY RIGHT OF WAY LINE OF OLD CARRIAGE ROAD, ACCORDING TO THE SAID SOUTHBRIDGE CROSSINGS SECOND ADDITION, A DISTANCE OF 542.55 FEET; THENCE ON A BEARING OF SOUTH 89 DEGREES 59 MINUTES 53 SECONDS EAST, A DISTANCE OF 81.22 FEET TO THE EASTERLY RIGHT OF WAY LINE OF SAID OLD CARRIAGE ROAD AND THE ACTUAL POINT OF BEGINNING OF THE LAND TO BE DESCRIBED; THENCE CONTINUING ON A BEARING OF SOUTH 89 DEGREES 59 MINUTES 53 SECONDS EAST, A DISTANCE OF 249.14 FEET; THENCE NORTH 81 DEGREES 13 MINUTES 38 SECONDS EAST, A DISTANCE OF 93.59 FEET TO THE EAST LINE OF SAID LOT 3; THENCE SOUTH 08 DEGREES 46 MINUTES 22 SECONDS EAST, ALONG SAID EAST LINE, A DISTANCE OF 162.00 FEET; THENCE SOUTH 81 DEGREES 13 MINUTES 44 SECONDS WEST, A DISTANCE OF 69.92 FEET; THENCE ON A BEARING OF NORTH 89 DEGREES 59 MINUTES 53 SECONDS WEST, A DISTANCE OF 297.16 FEET TO THE EASTERLY RIGHT OF WAY LINE OF SAID OLD CARRIAGE ROAD; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, ALONG A NONTANGENTIAL CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 760.00 FEET, AN INCLUDED ANGLE OF 3 DEGREES 24 MINUTES 13 SECONDS AND AN ARC LENGTH OF 45.15 FEET, THE CHORD OF SAID CURVE BEARS NORTH 01 DEGREES 14 MINUTES 35 SECONDS WEST; THENCE CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE ON A BEARING OF NORTH 00 DEGREES 27 MINUTES 38 SECONDS EAST, TANGENT TO LAST DESCRIBED CURVE, A DISTANCE OF 111.36 FEET TO THE POINT OF BEGINNING AND THERE TERMINATING.

AND LYING NORTHERLY OF THE FOLLOWING DESCRIBED LINE, AND ITS WESTERLY EXTENSION:

COMMENCING AT THE NORTHWEST CORNER OF SAID LOT 3; THENCE SOUTH 01 DEGREES 24 MINUTES 38 SECONDS WEST, ASSUMED BEARING, ALONG THE EXTENDED WESTERLY RIGHT OF WAY LINE OF OLD CARRIAGE COURT, AND SAID WESTERLY RIGHT OF WAY LINE, AS PLATTED ACCORDING TO SAID SOUTH BRIDGE CROSSINGS SECOND ADDITION, A DISTANCE OF 702.60 FEET; THENCE SOUTH 01 DEGREES 05 MINUTES 45 SECONDS EAST CONTINUING ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 580.03 FEET, THENCE SOUTH 01 DEGREES 37 MINUTES 05 SECONDS WEST CONTINUING ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 65.02 FEET; THENCE NORTH 89 DEGREES 58 MINUTES 45 SECONDS EAST, A DISTANCE OF 122.11 FEET TO THE EASTERLY RIGHT OF WAY LINE OF SAID OLD CARRIAGE COURT AND THE ACTUAL POINT OF BEGINNING OF THE LINE TO BE DESCRIBED; THENCE CONTINUING NORTH 89 DEGREES 58 MINUTES 45 SECONDS EAST, A DISTANCE OF 410.13 FEET TO THE EAST LINE OF SAID LOT 3 AND SAID LINE THERE TERMINATING.

THE LAND DESCRIBED ABOVE AND SHOWN HEREON IS THE SAME LAND AS DESCRIBED IN TITLE COMMITMENT ISSUED BY FIRST AMERICAN TITLE INSURANCE COMPANY, COMMITMENT FILE NO. NCS-1094255-CHAR, WITH AN EFFECTIVE DATE OF OCTOBER 13, 2021 AT 7:30 A.M..

DRAWING LIST		SHEET NO.	SHEET TITLE	INITIAL SUBMITTAL 03/11/22
C-0	COVER			•
C-1.0	CONSTRUCTION NOTES			•
C-2.0	EXISTING CONDITIONS AND DEMOLITION PLAN			•
C-3.0	SWPPP PLAN			•
C-3.1	SWPPP CONSTRUCTION DETAILS			•
C-4.0	SITE PLAN			•
C-4.1	SITE CONSTRUCTION DETAILS			•
C-5.0	GRADING & DRAINAGE PLAN			•
C-5.1	GBD CONSTRUCTION DETAILS			•
C-6.0	UTILITY PLAN			•
C-6.1	UTILITY CONSTRUCTION DETAILS			•

ISSUED FOR PERMITTING			
DESIGNED BY: JH	DRAWN BY: JH	ISSUE DATE: 03/11/22	
CHECKED BY: TC	APPROVED BY: DD	JOB NO.: 21-517	
NO.	BY	DATE	REVISION DESCRIPTION



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATIONS, AND NOTES WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: *Daniel Dehon*

NAME: DANIEL DOUGLAS DEHON
DATE: 10/20/2021 LICENSE NUMBER: 59701

BEACON
CIVIL ENGINEERING

LAND DEVELOPMENT ENGINEERS
8345 GUNN HIGHWAY
TAMPA, FL 33626



TAKE 5 CAR WASH

8108 OLD CARRIAGE CT
CITY OF SHAKOPEE
SHAKOPEE, MN

SHEET NAME:

COVER SHEET

SHEET NUMBER:
C-0

OWNER
SHAKOPEE CROSSINGS LTD PTNSHP.
8170 OLD CARRIAGE CT N #210
SHAKOPEE, MN 55379
CONTACT: MATHEW GILBERT
PHONE: 980-259-0701

DEVELOPER/APPLICANT
BOING US HOLDCO, INC.
6300 S. SYRACUSE WAY
SUITE 205
CENTENNIAL, CO 80111

ENGINEER
BEACON CIVIL ENGINEERING, LLC.
8345 GUNN HIGHWAY
TAMPA, FL 33626
CONTACT: DANIEL DEHON, P.E.
PHONE: (813) 523-7412

OWNER
BLEW & ASSOCIATES, PA
3825 N. SHILOH DRIVE
FAYETTEVILLE, AK 72760
CONTACT: BUCKLEY D. BLEW, PS
PHONE: (479) 443-4506

GENERAL NOTES:

1. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES, AFFECTING THIS WORK, PRIOR TO CONSTRUCTION.
2. PRIOR TO THE INITIATION OF SITE CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ANY EXISTING UTILITIES INCLUDING GAS, WATER, ELECTRIC, COMMUNICATIONS, CABLE TV, SANITARY AND STORM SEWERS, ON AND/OR ADJACENT TO THE SITE, REMOVE OR CAP AS NECESSARY.
3. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL CALL MINNESOTA ONE CALL "GOPHER STATE" AT 1-800-252-1166, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, TO ARRANGE FOR FIELD LOCATIONS OF BURIED UTILITIES.
4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED, BY THE CONTRACTOR OR SUBCONTRACTORS, AS CALLED FOR IN THESE CONTRACT DOCUMENTS.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT INSPECTION AND CERTIFICATION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES AND THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS/REQUIREMENTS.
6. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRE-CAST AND MANUFACTURED ITEMS TO THE OWNER'S ENGINEER FOR APPROVAL PRIOR TO ORDERING. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
7. ALL UTILITY SERVICE STUB-OUTS (WATER, SANITARY SEWER, etc.), ARE TO BE INSTALLED TO WITHIN 5' OF BUILDING(S), UNLESS OTHERWISE NOTED ON PLANS.
8. CONTRACTOR TO COORDINATE WITH THE APPLICABLE ELECTRIC UTILITY SUPPLIER REGARDING ANY NECESSARY RELOCATION(S) OF UNDERGROUND AND/OR OVERHEAD ELECTRIC FACILITIES, AND FOR THE LOCATION AND INSTALLATION OF TRANSFORMER PAD(S) AND ASSOCIATED ELECTRIC FACILITIES.

EROSION CONTROL NOTES:

1. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIERS (HAY BALES OR SILTATION CURTAINS) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTORS IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.
2. THE CONTRACTOR SHALL LIMIT THE DISCHARGE OF TURBID WATERS OFF-SITE, OR INTO ON-SITE/OFF-SITE WETLANDS (IF APPLICABLE), TO NO MORE THAN THE SPECIFIED NTUS (NEPHELOMETRIC TURBIDITY UNITS) GOVERNED BY THE APPLICABLE GOVERNING JURISDICTION, ABOVE BACKGROUND LEVELS.
3. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.
4. CONTRACTOR SHALL INSPECT AND MAINTAIN ON A DAILY BASIS ALL EROSION/SEDIMENTATION CONTROL FACILITIES.
5. THE CONTRACTOR SHALL ENSURE THAT SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND PLACED IN UPLAND AREAS.
6. CONTRACTOR SHALL MAKE SURE THAT UNDOE SOIL/SAND IS NOT TRACKED OFFSITE, IF IT BECOMES AN ISSUE, CONTRACTOR SHALL ADD A CONSTRUCTION ENTRANCE WITH SEDIMENT REMOVAL (GRAVEL DRIVE) AND SHALL REMOVE ANY SEDIMENT/SOIL TRACKED OFFSITE DAILY OR SOONER.

CONSTRUCTION SITE WORK TESTING:

1. ALL SITE WORK CONSTRUCTION TESTING SHALL BE PERFORMED BY A CERTIFIED/LICENSED GEOTECHNICAL ENGINEERING FIRM.
2. ALL SITE WORK CONSTRUCTION TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROJECTS GEOTECHNICAL REPORT AND/OR THE TESTING PARAMETERS OF THE LOCAL MUNICIPALITY/AGENCY HAVING JURISDICTION OVER THE SITE WORK. THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
3. COPIES OF PASSING TEST RESULTS SHALL BE PROVIDED TO THE DEVELOPER, ENGINEER OF RECORD, CONTRACTOR AND LOCAL MUNICIPALITY/AGENCY FOR PURPOSES, SUCH AS BUT NOT LIMITED TO, CERTIFICATION, AND ACCEPTANCE OF FACILITIES BY THE DEVELOPER AND/OR MUNICIPALITY/AGENCY.
4. THE SERVICES OF A CONSTRUCTION TESTING GEOTECHNICAL FIRM SHALL BE RETAINED BY THE DEVELOPER, UNLESS OTHERWISE SPECIFIED IN THE BID DOCUMENTS.
5. ENGINEER WILL NOT BE RESPONSIBLE FOR SCHEDULING, COORDINATION OR EVALUATION OF THE SOILS TESTING AND CERTIFICATIONS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER/DEVELOPER TO MAKE THE NECESSARY ARRANGEMENTS DIRECTLY WITH THE SOILS TESTING LABORATORY/GEOTECHNICAL FIRM AND THE SITE CONTRACTOR.

13. ALL UNDERGROUND UTILITIES MUST BE IN-PLACE, TESTED AND INSPECTED PRIOR TO BASE AND SURFACE CONSTRUCTION.
14. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH ANY OTHER WORK BEING PERFORMED ON-SITE BY OTHER CONTRACTORS/ SUBCONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE GENERAL CONTRACTOR TO COORDINATE AND SCHEDULE ITS ACTIVITIES ACCORDINGLY.

AS-BUILT:

UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE OWNER'S ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION, CERTIFIED BY A REGISTERED LAND SURVEYOR. THIS "AS-BUILT" INFORMATION SHALL INCLUDE INVERT ELEVATIONS, DRAINAGE STRUCTURES, WEIRS, LOCATIONS OF LOCATIONS AND ELEVATIONS FOR POND AND DITCH/SWALE CONSTRUCTION. NO ENGINEERS CERTIFICATIONS FOR CERTIFICATE OF OCCUPANCY (C.O.) PURPOSES WILL BE MADE UNTIL THIS INFORMATION HAS BEEN RECEIVED AND APPROVED BY THE OWNER'S ENGINEER.

TESTING AND INSPECTION REQUIREMENTS (WATER):

1. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL REMAIN UNCOVERED UNTIL PROPERLY PRESSURE TESTED, AS-BUILT, AND ACCEPTED BY THE OWNER'S ENGINEER. PRESSURE TESTS TO BE IN ACCORDANCE WITH APPLICABLE WATER DEPARTMENT SPECIFICATIONS. CONTRACTOR TO NOTIFY THE OWNER'S ENGINEER AND APPLICABLE AGENCY INSPECTORS 48 HOURS IN ADVANCE OF PERFORMING TESTS.

2. CONTRACTOR SHALL ARRANGE FOR CHLORINATION AND BACTERIOLOGICAL SAMPLING, AND OBTAIN CLEARANCE OF DOMESTIC AND FIRE LINE WATER SYSTEM(S). COPIES OF ALL BACTERIOLOGICAL TEST RESULTS ARE TO BE SUBMITTED TO THE OWNER'S ENGINEER, IMMEDIATELY UPON COMPLETION OF THE WATER SYSTEM, FOR CERTIFICATION PURPOSES.

CLEARING AND SITE PREPARATION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION OF THE EROSION CONTROL DEVICES, AS SHOWN ON THE CONSTRUCTION PLANS, PRIOR TO ANY SITE CLEARING. REFER TO THE "EROSION CONTROL NOTES" SECTION CONTAINED HEREIN FOR ADDITIONAL REQUIREMENTS.
2. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN, AS INDICATED ON THE CONSTRUCTION PLANS, SHALL BE PROTECTED IN ACCORDANCE WITH LOCAL TREE ORDINANCES, AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO (TREES) SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER AND THE LOCAL AGENCY HAVING JURISDICTION OVER THESE ACTIVITIES.

THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. ALL DISTURBED AREAS MUST BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL, IMMEDIATELY FOLLOWING CONSTRUCTION.

STRIPPED TOPSOIL REMOVED DURING CLEARING AND GRUBBING ACTIVITIES SHALL BE STOCKPILED, TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER. REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE, PROVIDED THE MATERIAL IS DEEMED SUITABLE BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO EITHER BE STOCKPILED ON-SITE, AS DIRECTED BY THE OWNER OR OWNERS ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING EXCESS EARTHWORK FROM THE SITE.

5. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE, BY THE CONTRACTOR, IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS.

6. THE CONTRACTOR IS TO PREPARE THE SITE IN ACCORDANCE WITH THE SOILS REPORT, COPIES OF WHICH ARE AVAILABLE THROUGH THE OWNER OR SOILS TESTING COMPANY DIRECTLY.

PAVING AND GRADING NOTES:

1. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNERS ENGINEER, OR OWNERS SOILS TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.

3. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOILS TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS.

4. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADES UNLESS OTHERWISE NOTED.

5. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. CONTRACTOR TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES.

6. CONTRACTOR SHALL SAW CUT, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT, PER DETAILS HEREIN.

7. CURBING SHALL BE PLACED AT THE EDGES OF ALL PAVEMENT, UNLESS OTHERWISE NOTED. REFER TO THE LATEST EDITION OF Mn.D.O.T. "MnDOT DESIGN MANUAL" FOR DETAILS AND SPECIFICATIONS OF ALL Mn.D.O.T. TYPE CURB AND GUTTERS CALLED FOR IN THESE PLANS.

8. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE SOILS ENGINEER FOR APPROVAL.

9. CONTRACTOR TO PROVIDE A 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER MATERIALS (STRUCTURES, OTHER PLACED CONCRETE, ETC.)

10. ALL PAVEMENT MARKINGS SHALL BE MADE IN ACCORDANCE WITH Mn.D.O.T. DESIGN STANDARDS.

11. THE CONTRACTOR WILL STABILIZE, BY SEED AND MULCH, SOD, OR OTHER APPROVED MATERIALS, ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER. CONTRACTOR TO COORDINATE WITH OWNER REGARDING TYPE OF MATERIAL, LANDSCAPING AND IRRIGATION REQUIREMENTS.

TESTING AND INSPECTION REQUIREMENTS (PAVING/GRADING):

1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH SITE SPECIFIC GEOTECHNICAL REPORT FOR THE SITE, AS WELL AS THE TESTING SCHEDULE REQUIRED BY MnDOT AND THE AFFECTED MUNICIPALITY. UPON COMPLETION OF WORK, THE SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER AND OWNERS ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.
2. A QUALIFIED TESTING LABORATORY SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN-PLACE MATERIALS AS REQUIRED BY THESE PLANS AND THE VARIOUS AGENCIES. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING.

SANITARY SYSTEM NOTES:

1. ALL DIP PIPE SHALL BE CLASS 50 OR HIGHER. ADEQUATE MEASURES AGAINST CORROSION SHALL BE UTILIZED.
2. ALL PVC PIPE SHALL BE SOLID WALL POLYVINYL CHLORIDE PIPE AND COMPLY WITH ASTM D 3034 AND ALL APPLICABLE ASTM DOCUMENTS AS COVERED IN SECTION No. 2 OF ASTM D 3034. MAIN LINES SHALL BE A MINIMUM OF 8" DIAMETER, AND LATERALS SHALL BE A MINIMUM 6" DIAMETER.

3. ALL SANITARY SEWER MAINS, LATERALS AND FORCE MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER, UNLESS OTHERWISE NOTED ON PLANS.

4. ALL GRAVITY SEWERS MUST BE SDR 35 PVC OR DIP CLASS 54 PIPE. ALTERNATIVES MUST BE APPROVED BY APPLICABLE JURISDICTION/ENGINEER OF RECORD. ELASTOMERIC GASKET JOINTS SHALL BE UTILIZED FOR PVC PIPE, AND SHALL COMPLY WITH ASTM F477, ASTM D3231 & ASTM F1336. JOINTS SHALL COMPLY WITH ASTM D3212.

5. ALL PVC FORCE MAINS (IF REQUIRED) SHALL BE CLASS 200, DR 14 FOR 4" DIAMETER, AND CLASS 150, DR 18 FOR 6" TO 12" DIAMETER PIPE, IN ACCORDANCE WITH AWWA C900 STANDARDS. PVC FORCE MAIN PIPE SMALLER THAN 4" DIAMETER SHALL BE CLASS 200, SDR 21, IN ACCORDANCE WITH ASTM D 2241. FORCE MAINS SHALL BE SPIRAL WRAPPED WITH 2 INCH WIDE DARK GREEN STICK-ON VINYL TAPE. FORCE MAINS WITHIN THE RIGHT-OF-WAY SHALL BE CLASS 52 DIP, MINIMUM 3" DIAMETER.

6. ALL SANITARY MANHOLES SHALL BE LOCATED NO MORE THAN 400 FEET APART AND SHALL CONFORM TO THE DETAILS CONTAINED HEREIN, AS WELL AS WITH ASTM C478.

7. ALL DUCTILE IRON PIPE SHALL MEET REQUIREMENTS OF AWWA C151, ANSI SPEC. A21.51.

8. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE PROVIDED WITH A VIRGIN POLYETHYLENE INTERIOR LINING COMPLYING WITH ASTM D 1248 (40 MILS THICK) HEAT BONDED TO THE INTERIOR OF ALL PIPES. ALL DIP PIPE SHALL HAVE A STANDARD OUTSIDE COATING COMPLYING WITH ASTM C151-8.1.

9. ALL SLOPES FOR GRAVITY SEWER MAINS AND SERVICE CONNECTIONS SHALL COMPLY WITH THE FOLLOWING MINIMUM GRADES: 6" @ 1.00%, 8" @ 0.50%.

10. ALL SANITARY SEWER WORK SHALL CONFORM WITH APPLICABLE JURISDICTIONAL STANDARD SPECIFICATIONS.

11. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING PROPOSED FACILITIES TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATIONS) OF EXISTING CONNECTION POINT(S) AND NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.

12. SANITARY SEWER MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE(S) BURIED AT LEAST 18 INCHES ABOVE THE MAIN LINES.

13. FORCE MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPE(S) BURIED AT LEAST 18 INCHES ABOVE THE FORCE MAIN.

WATER SYSTEM NOTES:

1. SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS SHOULD ALWAYS CROSS UNDERNEATH WATER MAINS. INSTALLATIONS OF SANITARY SEWERS, FORCE MAINS AND STORM SEWERS, AT CROSSINGS OF WATER MAINS, SHALL BE PERFORMED SO AS TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE, WHENEVER POSSIBLE. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS AND WATER JOINTS SHALL BE EQUITANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10 FEET BETWEEN ANY TWO JOINTS. WHERE SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP), AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED.). SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO (2) JOINTS IN LIEU OF DIP. THE SANITARY SEWER MAY BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE, AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT THE CROSSING, WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING OVER WATER MAINS. THE CRITERIA FOR MINIMUM SEPARATION OF 18 INCHES BETWEEN LINES, AND 10 FEET BETWEEN JOINTS CENTERED AT THE POINT OF CROSSING SHALL BE REQUIRED. THE WATER MAIN SHALL BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN. ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUITANT FROM THE POINT OF CROSSING (i.e., PIPES CENTERED ON THE CROSSING), WHERE A PROPOSED PIPE CONFLICTS WITH AN EXISTING PIPE. THE PROPOSED PIPE SHALL BE CONSTRUCTED OF DIP, AND THE CROSSING SHALL BE ARRANGED SO AS TO SATISFY THE REQUIREMENTS IDENTIFIED ABOVE.

2. A MINIMUM 10 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER (INCLUDING FORCE MAINS) AND EXISTING OR PROPOSED WATER MAINS, IN PARALLEL INSTALLATIONS, WHENEVER POSSIBLE. THE DISTANCE FOR SEPARATION SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE INSTALLED IN A SEPARATE TRENCH, OR IN AN UNDISTURBED EARTH SHELF, LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN, AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE, AND WATER AND SEWER JOINTS SHALL BE STAGGERED, WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES. IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR FORCE MAIN SHALL BE CONSTRUCTED OF DIP (IF AVAILABLE IN THE SIZE PROPOSED), WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE LOCATED ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (i.e., STAGGERED JOINTS).

3. ALL DIP PIPE SHALL BE MW CLASS 50 OR PRESSURE CLASS 250. REFER TO NOTE # 8 BELOW FOR ADDITIONAL DIP SPECIFICATIONS. ADEQUATE MEASURES AGAINST CORROSION SHALL BE UTILIZED.

4. ALL WATER MAIN PIPE FITTINGS AND APPURTENANCES SHALL BE INSTALLED TO COMPLY WITH APPLICABLE UTILITY DEPARTMENT SPECIFICATIONS.

5. ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 36 INCHES OF COVER, WHERE POSSIBLE, 48" MAXIMUM COVER.

6. ALL WATER SERVICE LINES, VALVES AND METERS SHALL BE INSTALLED TO COMPLY WITH APPLICABLE MUNICIPALITY/AGENCY DEPARTMENT STANDARDS AND SPECIFICATIONS.

7. THRUST BLOCKING/RESTAINED JOINTS SHALL BE PROVIDED AT ALL FITTINGS AND HYDRANTS, IN ACCORDANCE WITH APPLICABLE UTILITY DEPT. SPECIFICATIONS.

8. ALL DUCTILE IRON PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITION OF AWWA C151/A21.51. PIPE SHALL BE FURNISHED IN 18 OR 20 FOOT SECTIONS, PIPE THICKNESS SHALL BE CLASS 50, UNLESS OTHERWISE SPECIFIED..

9. ALL WATER SYSTEM CONSTRUCTION, UP TO AND INCLUDING POINT OF METERING AND BACK FLOW PREVENTION (IF REQUIRED), SHALL BE BUILT ACCORDING TO THE PREVIOUSLY REFERENCED STANDARDS AND SPECIFICATIONS.

10. ALL ON-SITE FIRE HYDRANTS SHALL BE PAINTED WITH HIGH GRADE ENAMEL FEDERAL. COLOR SHALL COMPLY WITH APPLICABLE UTILITY HAVING JURISDICTION, AND BE OSHA APPROVED, AND MUST BE LOCATED A MINIMUM OF 6 FEET, OR AS APPROVED BY THE APPLICABLE JURISDICTION, FROM THE EDGE OF PAVEMENT OR BACK OF CURB. OTHERWISE BOLLARDS WILL BE REQUIRED FOR PROTECTION. ALL FIRE HYDRANTS SHALL COMPLY WITH AWWA STANDARDS C502-80 THEREOF.

11. CONTRACTOR TO INSTALL TEMPORARY BLOWOFFS, AT THE ENDS) OF PROPOSED WATER MAINS AND SERVICE LATERALS TO BUILDINGS), TO ASSURE ADEQUATE FLUSHING AND DISINFECTION/CHLORINATION.

12. ALL WATER MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH AWWA MANUAL M23, CONCERNING HYDROSTATIC TESTING OF PVC PIPING. OFF-SITE UTILITIES HYDROSTATIC TESTING TO BE WITNESSED BY MUNICIPAL UTILITY DEPARTMENT INSPECTOR.

13. ALL WATER MAINS SHALL BE STERILIZED IN ACCORDANCE WITH THE APPLICABLE SECTION OF THE LATEST AWWA SPECIFICATION C651 AND JURISDICTIONAL UTILITY DEPARTMENT SPECIFICATIONS.

14. ALL PVC WATER MAIN, 4" TO 12" DIAMETER PIPING, SHALL CONFORM TO AWWA C900 (OR 18) STANDARD SPECIFICATIONS, PRESSURE CLASS 150 PSI. ALL PVC WATER MAIN PIPING LESS THAN 4" DIAMETER SHALL BE SCHEDULE 80, PRESSURE CLASS 200 PSI.

15. ALL PVC WATER MAINS SHALL HAVE A SUITABLE MAGNETIC LOCATOR TAPE BURIED OVER THE WATER MAIN, BURIED NO LESS THAN 18 INCHES ABOVE MAIN LINES. THE TAPE SHALL BE AT LEAST 5-1/2 MILS THICK, 2 INCH MINIMUM WIDTH, AND MADE WITH AN ALUMINUM MATERIAL SANDWICHED BETWEEN 2 LAYERS OF POLYETHYLENE. IT SHALL HAVE UNPRINTED, IN PERMANENT BLACK INK WITH ONE INCH TALL LETTERS, "CAUTION: WATER LINE BURIED BELOW", ON BLUE BACKGROUND. THE TAPE SHALL BE CONTINUOUS BETWEEN VALVES, AND SECURED TO EACH VALVE. WHERE OTHER LINES OR SERVICE LINES JOIN THE WATER MAIN, THE TAPE USED FOR DETECTION OF THESE LINES SHALL BE SECURED TO THE MAIN LINE TAPE.

16. FIRE LINES SHALL BE INSTALLED BY A CONTRACTOR, DULY LICENSED BY THE STATE OF MINNESOTA FIRE MARSHALLS' OFFICE. CONTRACTOR TO VERIFY REQUIREMENTS PRIOR TO CONSTRUCTION OF THE FIRE PROTECTION SYSTEM.

17. FIRE PROTECTION SHALL MEET ALL THE REQUIREMENTS OF THE APPLICABLE MUNICIPALITY OR COUNTY.

8108 OLD CARRIAGE CT
CITY OF SHAKOPEE
SHAKOPEE, MN

SHEET NAME:

CONSTRUCTION
NOTES

SHEET NUMBER:

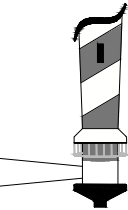
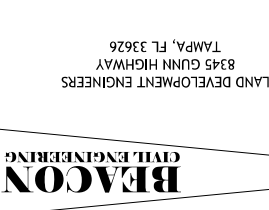
C-1



I HEREBY CERTIFY THAT THE PLAN PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER OF THE STATE OF MINNESOTA.

SIGNATURE: *[Signature]*
NAME: DANIEL DOUGLAS DEION
LICENSE NO./2021 LICENSE NUMBER: 9791

DANIEL DEION, PE #59701



TAKE 5
CAR WASH

ISSUED FOR PERMITTING			
DESIGNED BY:	JH	DRAWN BY:	JH
CHECKED BY:	TC	APPROVED BY:	DB
NO.	BY	DATE	REVISION DESCRIPTION
			JOB NO.: 21-517
			ISSUE DATE: 03/11/22



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

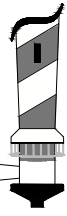
SIGNATURE:  NAME: DANIEL DOUGLAS DEHON
DATE: 10/20/2021 LICENSE NUMBER: 59701

DANIEL DEHON, PE #59701

N

BEACON
CIVIL ENGINEERS

LAND DEVELOPMENT ENGINEERS
8345 GUNN HIGHWAY
TAMPA, FL 33626

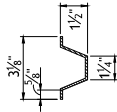
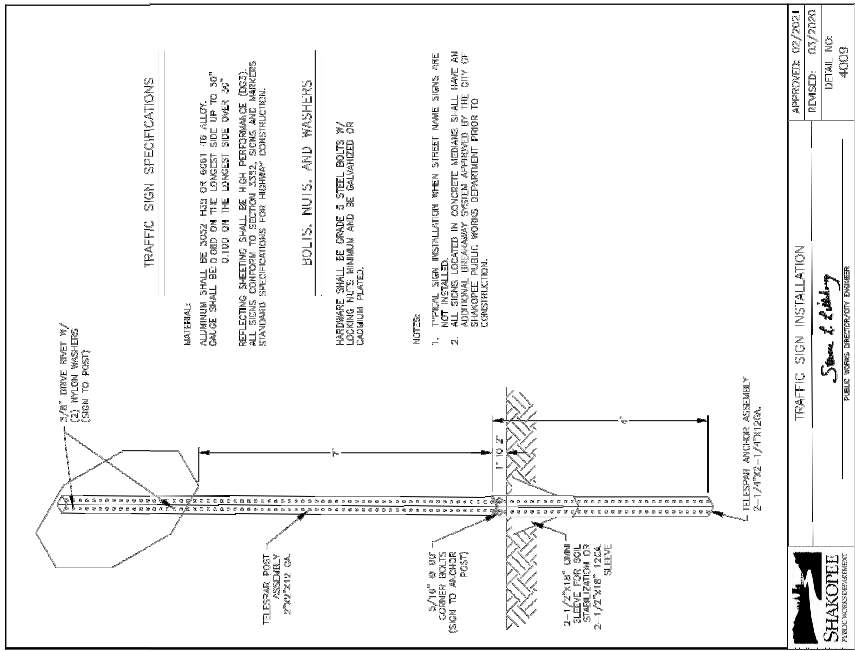
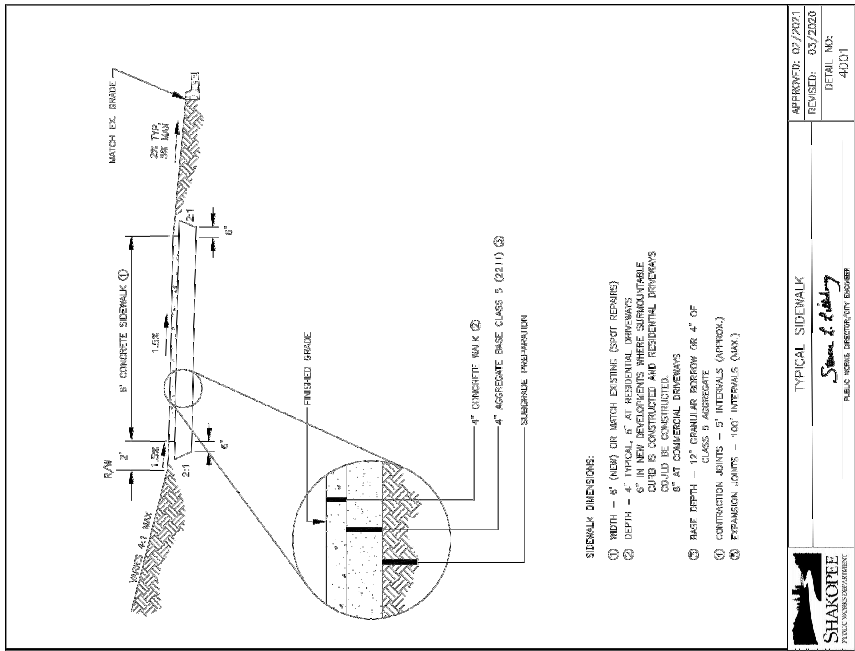


TAKE 5 CAR WASH

8108 OLD CARRIAGE CT
CITY OF SHAKOPEE
SHAKOPEE, MN

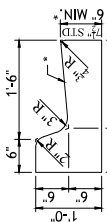
SHEET NAME:

C-4.1



METNEAL POST DETAIL

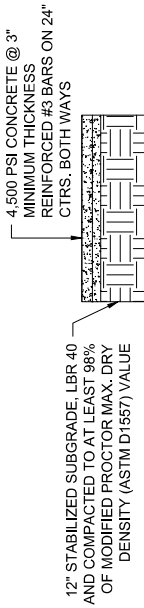
WEIGHT OF POST SHALL BE 2 LBS./FT. MIN.



TYPE F CURB

N.T.S.

* WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.



12" STABILIZED SUBGRADE, LBR 40

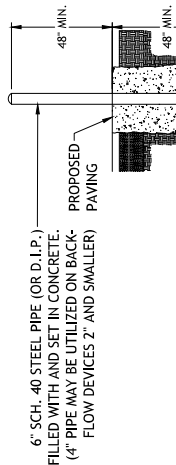
COMPACTED TO AT LEAST 98%
MODIFIED PROCTOR MAX. DRY
DENSITY (ASTM D1557) VALUE

NOTES

1. SUBGRADE SOILS MUST BE DESIGNED TO AT LEAST 98% MPMD TO A DEPTH OF AT LEAST 1-FOOT DIRECTLY BELOW THE BOTTOM OF CONCRETE SLAB.
2. THE SURFACE OF THE SUBGRADE SOILS MUST BE SMOOTH, AND ANY DISTURBANCES OR WHEEL RUTTING CORRECTED PRIOR TO PLACEMENT OF CONCRETE.
3. THE SUBGRADE SOILS MUST BE MOISTENED PRIOR TO PLACEMENT OF CONCRETE.
4. CONCRETE PAVEMENT THICKNESS SHOULD BE UNIFORM THROUGHOUT, WITH EXCEPTION TO THE THICKENED EDGES (CURBS OR FOOTING).
5. THE BOTTOM OF THE PAVEMENT SHOULD BE SEPARATED FROM THE ESTIMATED SHWT¹ LEVEL BY AT LEAST 24 INCHES.
6. SLAB THICKNESS FOR STANDARD DUTY CONCRETE PAVEMENTS ARE BASED ON (1) THE SUBGRADE SOILS DESIGNED TO AT LEAST 98% MPMD, (2) MODULUS OF SUBGRADE REACTION (K) EQUAL TO 150 PCI, (3) A 30-YEAR DESIGN LIFE, AND (4) TOTAL EQUIVALENT 18 KIP SINGLE AXLE LOADS (ESAL) OF 45,000.
7. MINIMUM CONTROL JOINT SPACING SHALL BE 10'x10'.

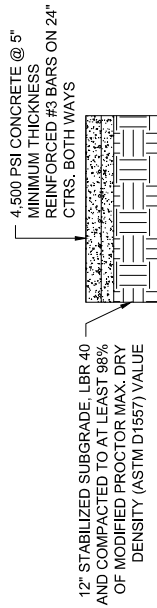
LIGHT DUTY CONCRETE PAVEMENT SECTION

N.T.S.



INSTALLATION

BOLLARD GUARD POST
N.T.S.



12" STABILIZED SUBGRADE LBR 4

AND COMPACTED TO AT LEAST 98%
OF MODIFIED PROCTOR MAX. DR.
DENSITY (ASTM D1557) VALU

NOTES

1. SUBGRADE SOILS MUST BE DESIGNED TO AT LEAST 98% MPMD TO A DEPTH OF AT LEAST 1-FOOT DIRECTLY BELOW THE BOTTOM OF CONCRETE SLAB.
2. THE SURFACE OF THE SUBGRADE SOILS MUST BE SMOOTH, AND ANY DISTURBANCES OR WHEEL RUTTING CORRECTED PRIOR TO PLACEMENT OF CONCRETE.
3. THE SUBGRADE SOILS MUST BE MOISTENED PRIOR TO PLACEMENT OF CONCRETE.
4. CONCRETE PAVEMENT THICKNESS SHOULD BE UNIFORM THROUGHOUT, WITH EXCEPTION TO THE THICKENED EDGES (CURB OR FOOTING).
5. THE BOTTOM OF THE PAVEMENT SHOULD BE SEPARATED FROM THE ESTIMATED SHWT LEVEL BY AT LEAST 24 INCHES.
6. SLAB THICKNESS FOR STANDARD DUTY CONCRETE PAVEMENTS ARE BASED ON (1) THE SUBGRADE SOILS DESIGNED TO AT LEAST 98% MPMD, (2) MODULUS OF SUBGRADE AND REACTION (K) EQUIVALENT TO 150 PCI, (3) A 30-YEAR DESIGN LIFE, AND (4) TOTAL EQUIVALENT 18 KIP SINGLE AXLE LOADS (ESAL) OF 45,000.
7. MAXIMUM CONTROL JOINT SPACING SHALL BE 10x10'.

HEAVY DUTY CONCRETE PAVEMENT SECTION

N.T.S.

ISSUED FOR PERMITTING			
DESIGNED BY:	JH	DRAWN BY:	JH
CHECKED BY:	TC	APPROVED BY:	TC
DATE:	03/11/22	JOB NO.:	21-517
REVISION DESCRIPTION			
NO.	BY	DATE	



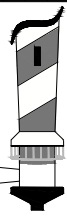
I HEREBY CERTIFY THAT THIS PLAN
AND SPECIFICATIONS WERE PREPARED
BY ME OR UNDER MY DIRECT SUPERVISION
AND THAT I AM A DULY LICENSED
PROFESSIONAL ENGINEER UNDER THE LAWS
OF THE STATE OF MINNESOTA.

SIGNATURE: *[Signature]*
NAME: DANIEL DOUGLAS DEKON
DATE: 03/20/2021 LICENSE NUMBER: 9701

DANIEL DEKON, PE #59701

LAND DEVELOPMENT ENGINEERS
8345 GUNN HIGHWAY
TAMPA, FL 33626

BEACON
CIVIL ENGINEERING

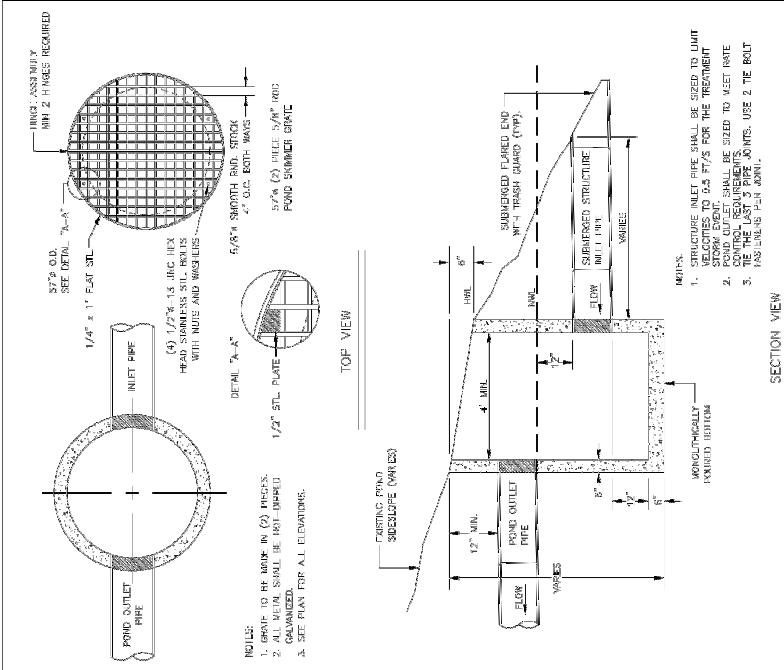


TAKE 5 CAR WASH

8108 OLD CARRIAGE CT
CITY OF SHAKOPEE
SHAKOPEE, MN

SHEET NAME:
G&D
CONSTRUCTION
DETAILS

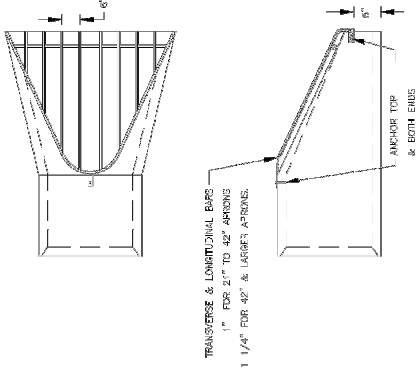
SHEET NUMBER:
C-5.1



APPROVED: 02/20/21
REVISED: 03/20/20
DETAIL NO.: 3008

SHAKOPEE
PUBLIC WORKS DEPARTMENT

TRASH GUARD FOR FLARED END SECTION
Sam & Kelly
MINN. REG. ENV. ENG'G/GEOTECH. ENGINEER



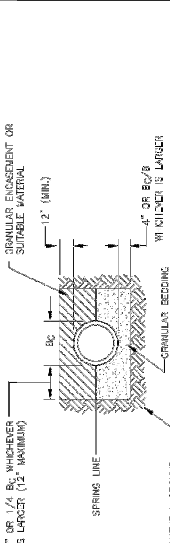
NOTES:

1. REFERENCE INNOT STANDARD PLATE 3150 FOR RIPRAP DETAILS. ALL RIPRAP SHALL BE FIELDSTONE.
2. TRASH GUARD SHALL BE USED FOR 24\"/>
3. MINIMUM 3\"/>
4. 3000 INSTEAD OF 1800 FROM TOP TO BOTTOM OF PIPE.

APPROVED: 02/20/21
REVISED: 03/20/20
DETAIL NO.: 3006

SHAKOPEE
PUBLIC WORKS DEPARTMENT

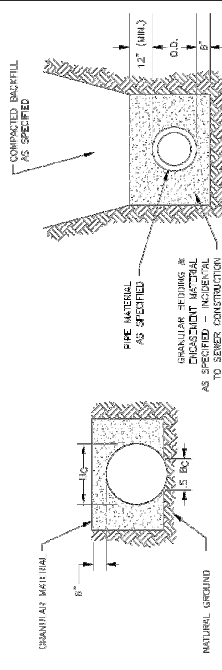
TRASH GUARD FOR FLARED END SECTION
Sam & Kelly
MINN. REG. ENV. ENG'G/GEOTECH. ENGINEER



NOTE:

1. ALL COSTS OF EXCAVATION BELOW GRADE AND PLACEMENT OF GRANULAR BEDDING SHALL BE INCLUDED IN THE BID PRICES FOR PIPE ITEMS UNLESS SPECIFIC BID QUANTITIES ARE LISTED FOR GRANULAR BEDDING.

CLASS "B" PIPE BEDDING (RCP STORM PIPE)



NOTES:

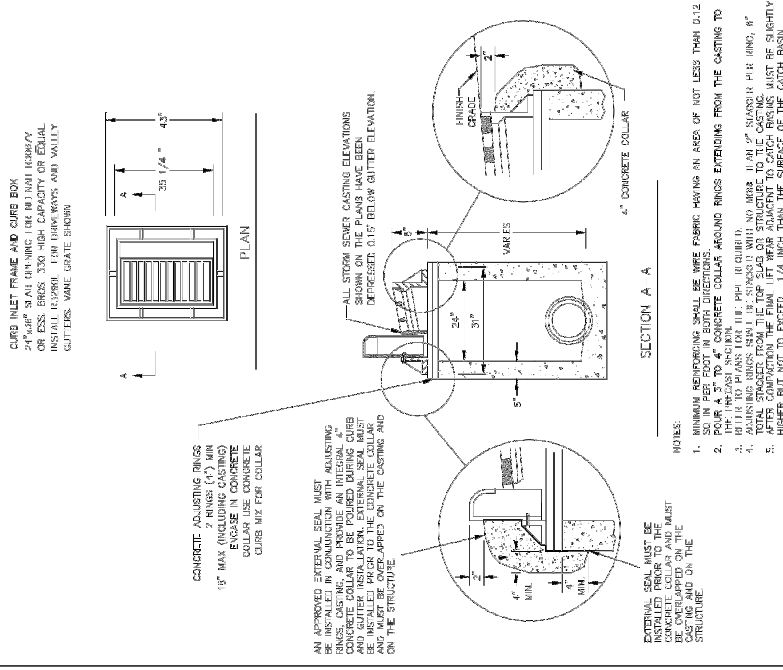
1. THE BOTTOM OF THE TRENCH SHALL BE GRADDED TO FIT THE PIPE BARREL FOR AT LEAST 50% OF THE OUTSIDE DIAMETER. THE REMAINDER OF THE PIPE IS BANKS. IT'S TOP BY SELECT FILL MATERIALS, STAKED BY HAND TO MATCH EXISTING SURFACE. ALL SPACES UNDER AND ADJACENT TO THE PIPE SHALL BE EXCAVATED BELOW GRADE AND FILL WITH SELECTED FILL MATERIALS. ALL FILL SHALL BE INCLUDED IN THE BID PRICES FOR PIPE ITEMS.

CLASS "C" PIPE BEDDING (RCP STORM PIPE)

APPROVED: 02/20/21
REVISED: 03/20/20
DETAIL NO.: 3005

SHAKOPEE
PUBLIC WORKS DEPARTMENT

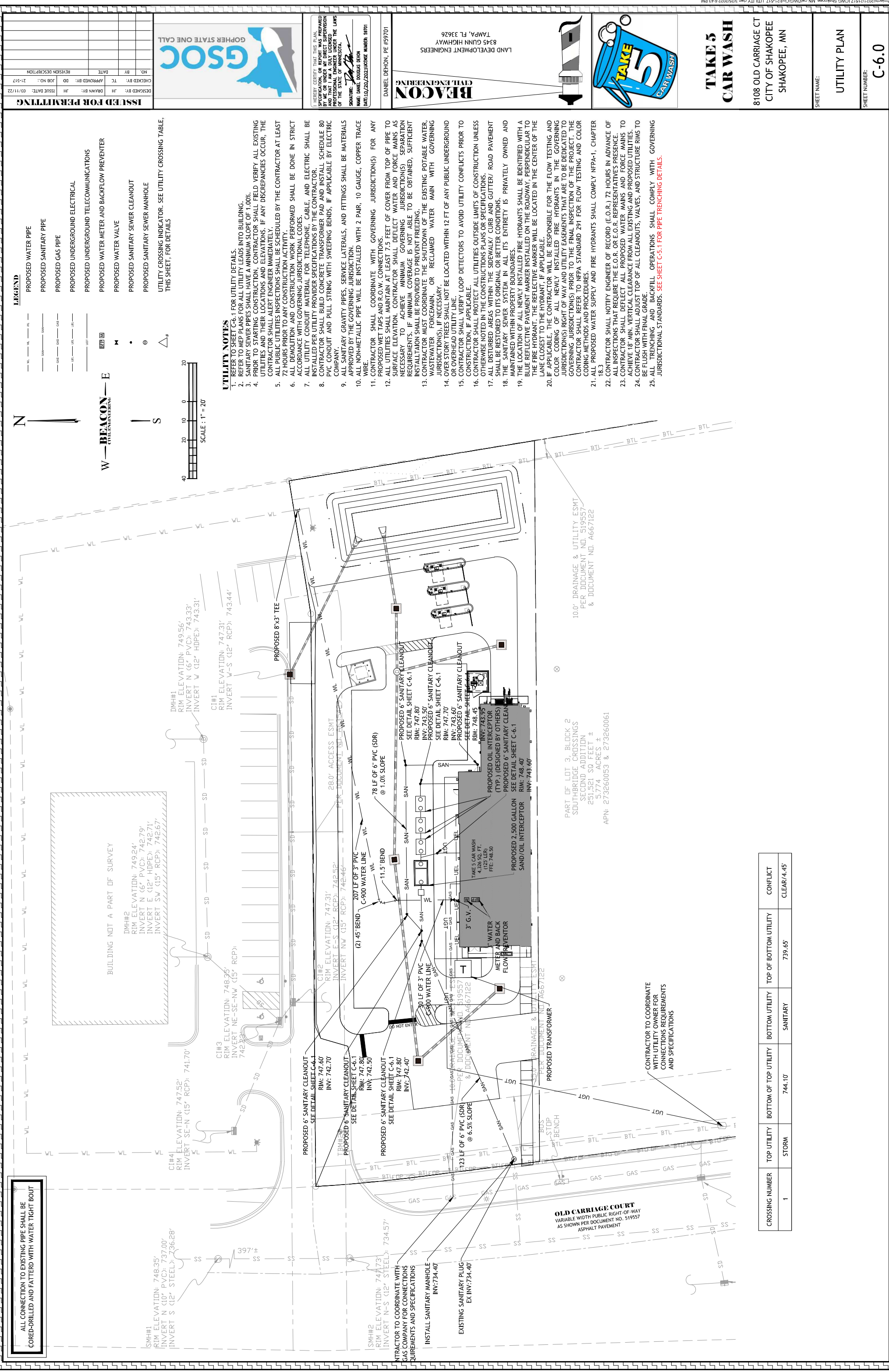
PIPE BEDDING
Sam & Kelly
MINN. REG. ENV. ENG'G/GEOTECH. ENGINEER



APPROVED: 02/20/21
REVISED: 02/20/21
DETAIL NO.: 3002

SHAKOPEE
PUBLIC WORKS DEPARTMENT

2' X 3' CATCH BASIN
Sam & Kelly
MINN. REG. ENV. ENG'G/GEOTECH. ENGINEER



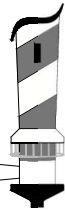
CROSSING NUMBER	TOP UTILITY	BOTTOM OF TOP UTILITY	BOTTOM UTILITY	TOP OF BOTTOM UTILITY	CONFLICT
1	STORM	744.10'	SANITARY	739.65'	CLEAR/4.45'

[illegible]

I HEREBY CERTIFY THAT THIS PLAN,
SPECIFICATION, OR REPORT WAS PREPARED
BY ME OR UNDER MY DIRECT SUPERVISION
AND THAT I AM A DULY LICENSED
PROFESSIONAL ENGINEER UNDER THE LAWS
OF THE STATE OF MINNESOTA.

SIGNATURE: *Daniel Douglas Dehon*
NAME: DANIEL DOUGLAS DEHON
DATE: 10/20/2021 LICENSE NUMBER: 59701

BEACON CIVIL ENGINEERING
LAND DEVELOPMENT ENGINEERS
8345 GUNN HIGHWAY
TAMPA, FL 33626



TAKED 5 CAR WASH

8108 OLD CARRIAGE CT
CITY OF SHAKOPEE
SHAKOPEE, MN

SHEET NAME:

UTILITY PLAN

SHEET NUMBER:
C-6.0

ISSUED FOR PERMITTING			
DESIGNED BY: JH	DRAWN BY: JH	ISSUE DATE: 03/11/22	
CHECKED BY: TC	APPROVED BY: DD	JOB NO.: 21-517	REVISION DESCRIPTION
NO.	BY	DATE	

ISSUED FOR PERMITTING



I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

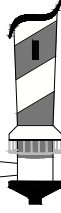
SIGNATURE: *Daniel Douglas Dehon*
NAME: DANIEL DOUGLAS DEHON
DATE: 10/25/2021 LICENSE NUMBER: 55701

NAME: DANIEL DOUGLAS DEHON
DATE: 10/20/2021 LICENSE NUMBER: 59701

DANIEL DEHON, PE #59701

BEACON

LAND DEVELOPMENT ENGINEERS
8345 GUNN HIGHWAY
TAMPA, FL 33626



TAKE 5 CAR WASH

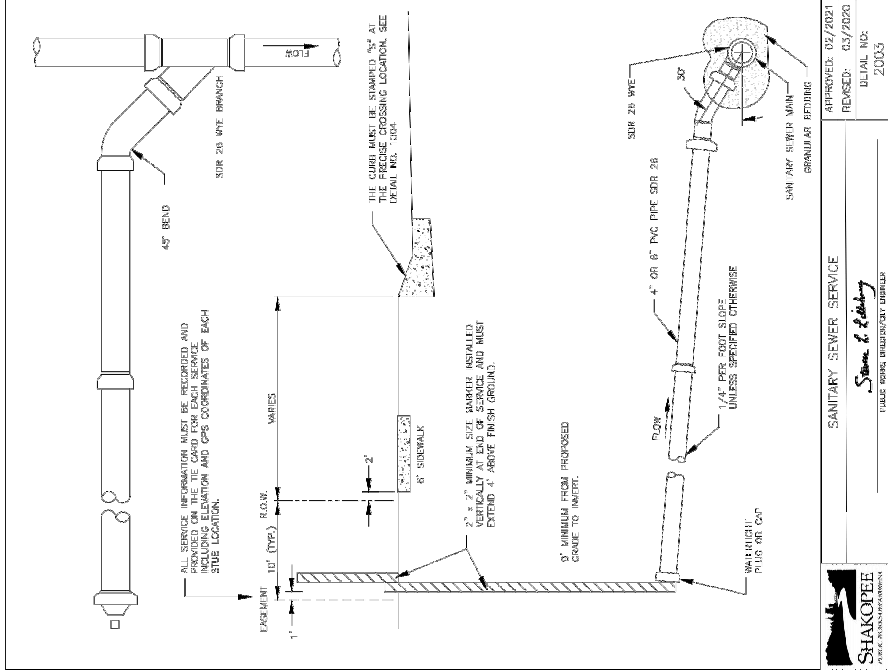
8108 OLD CARRIAGE CT
CITY OF SHAKOPEE
SHAKOPEE, MN

SHEET NAME:

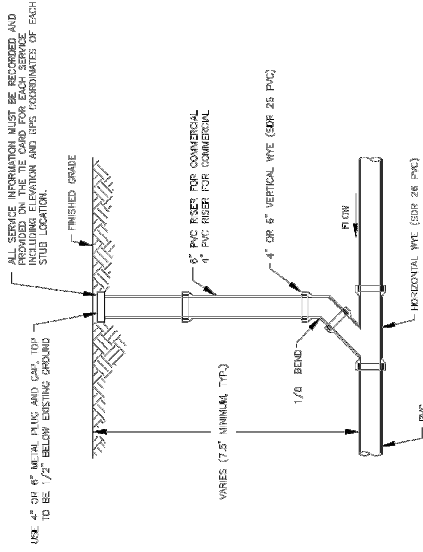
UTILITY CONSTRUCTION DETAILS

SHEET NUMBER:

C-6.1



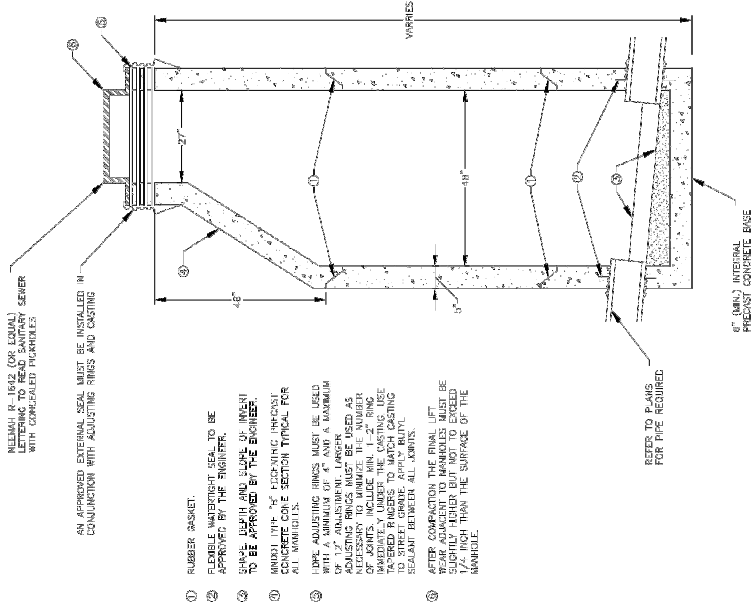
 SHAKOPEE PUBLIC UTILITY COMMISSION	SANITARY SEWER SERVICE	APPROVED: 03/20/2020 REVISED: 03/20/2020
	_____ <i>Steven G. Schilling</i> CLARK BOWEN CONSULTANT/UTILITIES	UTIL. NO.: 20035



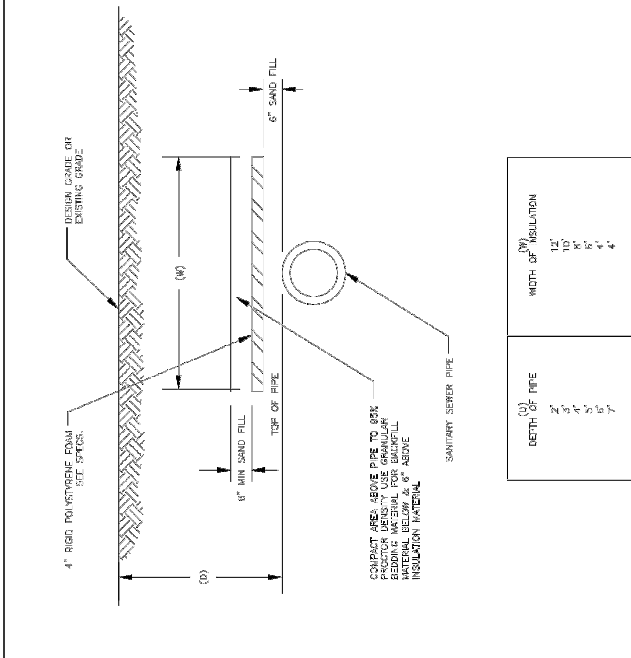
NOTE:

1. CLEAN CUTS REQUIRED AT MAXIMUM 70' INTERVALS FROM MAIN CROWNED LINE

 SHAKOPEE PUBLIC WORKS & UTILITIES	SANITARY SEWER SERVICE CLEAN OUT		APPROVED: 02/28/21
	_____ <i>Steve L. Leberg</i>		REVISED: 03/3/2020
DATE: 03/04/2020		DETAIL NO: 2008	



SHAKOPEE
WISKA WATERSHED DISTRICT
 STANDARD SANITARY MANHOLE
ISSUED: 02/2021
DRAFT NO.: 2701
PUBLIC WORKS DEPARTMENT



NOTE:

1. THIS LABEL IS NOT FOR NEW CONSTRUCTION. THIS IS FOR EXISTING CONDITIONS AFFECTED BY EXISTING SLOPE OR OTHER LIMITING CONDITIONS. IT SHALL NOT BE USED WITHOUT THE AUTHORITY OF THE ENGINEER.
2. SEE SECTION 706.01 FOR A BUILT UP RAMP CORNER DETAIL.
SECTION 706.01 OF 709

 SHAKOPEE PUBLIC WORKS DEPARTMENT	INSULATION	APPROVED: 02/2021 REVISED: 03/2020	DETAIL NO: 2007
	PROJECT: 20151-0014/0017/0018/0019/0020/0021/0022/0023/0024/0025/0026/0027/0028/0029/0030/0031/0032/0033/0034/0035/0036/0037/0038/0039/0040/0041/0042/0043/0044/0045/0046/0047/0048/0049/0050/0051/0052/0053/0054/0055/0056/0057/0058/0059/0060/0061/0062/0063/0064/0065/0066/0067/0068/0069/0070/0071/0072/0073/0074/0075/0076/0077/0078/0079/0080/0081/0082/0083/0084/0085/0086/0087/0088/0089/0090/0091/0092/0093/0094/0095/0096/0097/0098/0099/0100/0101/0102/0103/0104/0105/0106/0107/0108/0109/0110/0111/0112/0113/0114/0115/0116/0117/0118/0119/0120/0121/0122/0123/0124/0125/0126/0127/0128/0129/0130/0131/0132/0133/0134/0135/0136/0137/0138/0139/0140/0141/0142/0143/0144/0145/0146/0147/0148/0149/0150/0151/0152/0153/0154/0155/0156/0157/0158/0159/0160/0161/0162/0163/0164/0165/0166/0167/0168/0169/0170/0171/0172/0173/0174/0175/0176/0177/0178/0179/0180/0181/0182/0183/0184/0185/0186/0187/0188/0189/0190/0191/0192/0193/0194/0195/0196/0197/0198/0199/0200/0201/0202/0203/0204/0205/0206/0207/0208/0209/0210/0211/0212/0213/0214/0215/0216/0217/0218/0219/0220/0221/0222/0223/0224/0225/0226/0227/0228/0229/0230/0231/0232/0233/0234/0235/0236/0237/0238/0239/0240/0241/0242/0243/0244/0245/0246/0247/0248/0249/0250/0251/0252/0253/0254/0255/0256/0257/0258/0259/0260/0261/0262/0263/0264/0265/0266/0267/0268/0269/0270/0271/0272/0273/0274/0275/0276/0277/0278/0279/0280/0281/0282/0283/0284/0285/0286/0287/0288/0289/0290/0291/0292/0293/0294/0295/0296/0297/0298/0299/0300/0301/0302/0303/0304/0305/0306/0307/0308/0309/0310/0311/0312/0313/0314/0315/0316/0317/0318/0319/0320/0321/0322/0323/0324/0325/0326/0327/0328/0329/0330/0331/0332/0333/0334/0335/0336/0337/0338/0339/0340/0341/0342/0343/0344/0345/0346/0347/0348/0349/0350/0351/0352/0353/0354/0355/0356/0357/0358/0359/0360/0361/0362/0363/0364/0365/0366/0367/0368/0369/0370/0371/0372/0373/0374/0375/0376/0377/0378/0379/0380/0381/0382/0383/0384/0385/0386/0387/0388/0389/0390/0391/0392/0393/0394/0395/0396/0397/0398/0399/0400/0401/0402/0403/0404/0405/0406/0407/0408/0409/0410/0411/0412/0413/0414/0415/0416/0417/0418/0419/0420/0421/0422/0423/0424/0425/0426/0427/0428/0429/0430/0431/0432/0433/0434/0435/0436/0437/0438/0439/0440/0441/0442/0443/0444/0445/0446/0447/0448/0449/0450/0451/0452/0453/0454/0455/0456/0457/0458/0459/0460/0461/0462/0463/0464/0465/0466/0467/0468/0469/0470/0471/0472/0473/0474/0475/0476/0477/0478/0479/0480/0481/0482/0483/0484/0485/0486/0487/0488/0489/0490/0491/0492/0493/0494/0495/0496/0497/0498/0499/0500/0501/0502/0503/0504/0505/0506/0507/0508/0509/0510/0511/0512/0513/0514/0515/0516/0517/0518/0519/0520/0521/0522/0523/0524/0525/0526/0527/0528/0529/0530/0531/0532/0533/0534/0535/0536/0537/0538/0539/0540/0541/0542/0543/0544/0545/0546/0547/0548/0549/0550/0551/0552/0553/0554/0555/0556/0557/0558/0559/0560/0561/0562/0563/0564/0565/0566/0567/0568/0569/0570/0571/0572/0573/0574/0575/0576/0577/0578/0579/0580/0581/0582/0583/0584/0585/0586/0587/0588/0589/0590/0591/0592/0593/0594/0595/0596/0597/0598/0599/0600/0601/0602/0603/0604/0605/0606/0607/0608/0609/0610/0611/0612/0613/0614/0615/0616/0617/0618/0619/0620/0621/0622/0623/0624/0625/0626/0627/0628/0629/0630/0631/0632/0633/0634/0635/0636/0637/0638/0639/0640/0641/0642/0643/0644/0645/0646/0647/0648/0649/0650/0651/0652/0653/0654/0655/0656/0657/0658/0659/0660/0661/0662/0663/0664/0665/0666/0667/0668/0669/0670/0671/0672/0673/0674/0675/0676/0677/0678/0679/0680/0681/0682/0683/0684/0685/0686/0687/0688/0689/0690/0691/0692/0693/0694/0695/0696/0697/0698/0699/0700/0701/0702/0703/0704/0705/0706/0707/0708/0709/0710/0711/0712/0713/0714/0715/0716/0717/0718/0719/0720/0721/0722/0723/0724/0725/0726/0727/0728/0729/0730/0731/0732/0733/0734/0735/0736/0737/0738/0739/0740/0741/0742/0743/0744/0745/0746/0747/0748/0749/0750/0751/0752/0753/0754/0755/0756/0757/0758/0759/0760/0761/0762/0763/0764/0765/0766/0767/0768/0769/0770/0771/0772/0773/0774/0775/0776/0777/0778/0779/0780/0781/0782/0783/0784/0785/0786/0787/0788/0789/0790/0791/0792/0793/0794/0795/0796/0797/0798/0799/0800/0801/		