SITE DEVELOPMENT PLANS
FOR

COON RAPIDS INDUSTRIAL

SECTION 26, TOWNSHIP 31N, RANGE 24W
COON RAPIDS, ANOKA COUNTY, MN

PROJECT TEAM:

ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.

PREPARED BY: CALEB J. FLAKE, P.E.
767 EUSTIS STREET, SUITE 100
ST. PAUL, MN 55114
TELEPHONE: (816) 652-2335
EMAIL: CALEB.FLAKE@KIMLEY-HORN.COM

DEVELOPER
SCANNELL

240 GROVE LANE SUITE 140,
WAYZATA, MN 55391
TELEPHONE: (761) 331-8853
CONTACT: DAN SALZER

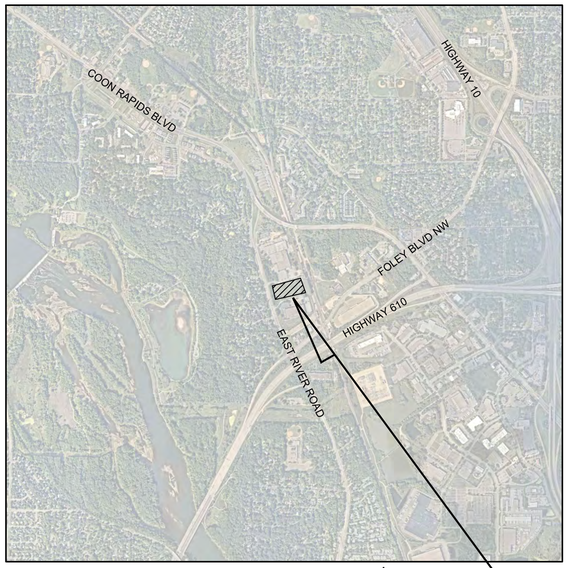
LANDSCAPE ARCHITECT
KIMLEY-HORN AND ASSOCIATES, INC.
PREPARED BY: RYAN HYLLESTED
767 EUSTIS STREET, SUITE 100
ST. PAUL, MN 55114
TELEPHONE: 612-578-2043
EMAIL: RYAN.HYLLESTED@KIMLEY-HORN.COM

SURVEYOR
BOLTEN & MENK
12224 NICOLLET AVENUE
BURNSVILLE, MN 55337
TELEPHONE: (952) 890-0509
CONTACT: ERIC WILFAHRT

GEOTECHNICAL ENGINEER
AMERICAN ENGINEERING TESTING, INC
550 CLEVELAND AVE N
ST. PAUL, MN, 55114
TELEPHONE: (701) 690-9732
CONTACT: THOMAS EVANS, P.E.

ARCHITECT
POPE ARCHITECTS

1295 BANDANA BLVD N, SUITE 200
ST. PAUL, MN 55108-1641
TELEPHONE: (651) 789-1641
CONTACT: BROCK MARTINSON



VICINITY
N.T.S.

NOTES:

1. CONTRACTOR SHALL CONFIRM THAT THE EXISTING CONDITIONS FOR THE SITE MATCH WHAT IS SHOWN ON THE DRAWINGS INCLUDED PRIOR TO CONSTRUCTION.
2. IF REPRODUCED, THE SCALES SHOWN ON THESE PLANS ARE BASED ON A ANSI full bleed D (34.00 x 22.00 Inches) SHEET.
3. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICES COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.
4. ALL GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS.

Sheet List Table

Sheet Number	Sheet Title
C000	COVER SHEET
C100	GENERAL NOTES
C200	DEMO PLAN
C300	EROSION AND SEDIMENT CONTROL PLAN - PHASE 1
C301	EROSION AND SEDIMENT CONTROL PLAN - PHASE 2
C302	OFFSITE EROSION AND SEDIMENT CONTROL PLAN
C303	SWPPP
C304	EROSION AND SEDIMENT CONTROL DETAILS
C400	SITE PLAN
C401	TRUCK TURNING PLAN
C500	GRADING PLAN
C501	GRADING PLAN
C502	GRADING PLAN
C503	GRADING PLAN
C504	OFFISTE GRADING PLAN
C600	UTILITY PLAN
C700	CIVIL DETAILS
C701	CIVIL DETAILS
C702	CIVIL DETAILS
C703	CIVIL DETAILS
L100	LANDSCAPE PLAN
L101	LANDSCAPE DETAILS

BENCHMARKS

SITE BENCHMARKS:
(LOCATIONS SHOWN ON SURVEY)

SBM #1 TOP NUT HYDRANT. SOUTHWEST CORNER OF SITE.
ELEVATION=884.06

SBM #2 TOP NUT HYDRANT. SOUTHEAST CORNER OF SITE.
ELEVATION=880.61

SBM #3 TOP NUT HYDRANT. NORTHWEST CORNER OF SITE.
ELEVATION=885.72

SBM #4 TOP NUT HYDRANT. NORTHERN SECTION OF SITE.
ELEVATION=882.97

811 Know what's **below.** **Call** before you dig.

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
MN LIC. NO. 58751
DATE: 06/30/2022

KHA PROJECT	168543002
DATE	04/27/2022
SCALE	AS SHOWN
DESIGNED BY	CCK
DRAWN BY	CCK
CHECKED BY	CJF

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

COVER SHEET

SHEET NUMBER
C000

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C0-COVER SHEET.dwg May 19, 2022 - 8:21am

K:\TWC_LDE\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C1-GENERAL NOTES.dwg May 19, 2022 - 8:21am

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

GENERAL CONSTRUCTION NOTES

1. THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE MN DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" (LATEST EDITION) AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK, AND, UNLESS OTHERWISE NOTED, ALL WORK SHALL CONFORM AS APPLICABLE TO THESE STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
3. THE EXISTING SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS QUALITY LEVEL "D" UNLESS OTHERWISE NOTED. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ACSE 38/02, ENTITLED STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF SUBSURFACE QUALITY DATA BY THE FHA. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE COMMENCING ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
7. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.
8. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER DIRECTLY FROM THE TESTING AGENCY.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF MN PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
10. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
11. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
13. SHOULD CONTRACTOR ENCOUNTER ANY DEBRIS LADEN SOIL, STRUCTURES NOT IDENTIFIED IN THE DOCUMENTS, OR OTHER SOURCE OF POTENTIAL CONTAMINATION, THEY SHALL IMMEDIATELY CONTACT THE ENGINEER AND OWNER.

EROSION CONTROL MAINTENANCE

ALL MEASURES STATED ON THE EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION AS REQUIRED BY ALL JURISDICTIONS UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A CERTIFIED PERSON AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.

1. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDED AS NEEDED. FOR MAINTENANCE REQUIREMENTS REFER TO THE STANDARD SPECIFICATIONS.
2. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE SILT FENCE.
3. THE CONSTRUCTION ENTRANCE(S) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
4. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
5. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.

TYPICAL OWNER/ENGINEER OBSERVATIONS

CONTRACTOR SHALL NOTIFY OWNER AND/OR ENGINEER 48 HOURS IN ADVANCE OF THE FOLLOWING ACTIVITIES:

- PRE-CONSTRUCTION MEETING, SUBGRADE PREPARATION, BASE INSTALLATION ASPHALT INSTALLATION, UNDERGROUND PIPING AND UTILITIES INSTALLATION, INSTALLATION OF STRUCTURES, CHECK VALVES, HYDRANTS, METERS, ETC., SIDEWALK INSTALLATION, CONNECTIONS TO WATER AND SEWER MAINS, TESTS OF UTILITIES

EROSION CONTROL NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF MN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY OR OWNER.
4. SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ON A PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY. WHEN WASHING IS REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. ALL FINES IMPOSED FOR DISCHARGING SEDIMENT ONTO PUBLIC AREAS SHALL BE PAID BY THE CONTRACTOR.
5. TEMPORARY SEEDING OR OTHER APPROVED METHODS OF STABILIZATION SHALL BE INITIATED WITHIN 7 DAYS OF THE LAST DISTURBANCE ON ANY AREA OF THE SITE.
6. THE CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THE PLAN SHALL BE INITIATED AS SOON AS IS PRACTICABLE.
13. ALL STAGING AREAS, STOCKPILES, SPOILS, ETC. SHALL BE LOCATED SUCH THAT THEY WILL NOT ADVERSELY AFFECT STORM WATER QUALITY. OTHERWISE, COVERING OR ENCIRCLING THESE AREAS WITH SOME PROTECTIVE MEASURE WILL BE NECESSARY.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL DEVICE WHICH THEY DISTURB. EACH CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DEFICIENCIES IN THE ESTABLISHED EROSION CONTROL MEASURES THAT MAY LEAD TO UNAUTHORIZED DISCHARGE OR STORM WATER POLLUTION, SEDIMENTATION, OR OTHER POLLUTANTS. UNAUTHORIZED POLLUTANTS INCLUDE (BUT ARE NOT LIMITED TO) EXCESS CONCRETE DUMPING OR CONCRETE RESIDUE, PAINTS, SOLVENTS, GREASES, FUEL AND LUBRICANT OIL, PESTICIDES, AND ANY SOLID WASTE MATERIALS.
15. EROSION CONTROL DEVICES SHOWN ON THESE PLANS SHALL BE INSTALLED PRIOR TO THE START OF LAND-DISTURBING ACTIVITIES ON THE PROJECT.
16. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THIS PROJECT. CHANGES ARE TO BE APPROVED BEFORE CONSTRUCTION BY THE DESIGN ENGINEER AND THE CITY OF COON RAPIDS ENGINEERING DIVISION.
17. IF THE EROSION CONTROL PLAN AS APPROVED CANNOT CONTROL EROSION AND OFF-SITE SEDIMENTATION FROM THE PROJECT, THE EROSION CONTROL PLAN WILL HAVE TO BE REVISED AND/OR ADDITIONAL EROSION CONTROL DEVICES WILL BE REQUIRED ON SITE. ANY REVISIONS TO THE EROSION CONTROL PLAN MADE BY THE CONTRACTOR MUST BE APPROVED BY THE ENGINEER.

PAVING AND STRIPING NOTES

1. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN JURISDICTION'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR MN/DOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.
2. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D) AND CITY STANDARDS.
3. CONTRACTOR SHALL FURNISH ALL PAVEMENT MARKINGS FOR FIRE LANES, ROADWAY LANES, PARKING STALLS, ACCESSIBLE PARKING SYMBOLS, ACCESS AISLES, STOP BARS AND SIGNS, AND MISCELLANEOUS STRIPING WITHIN THE PARKING LOT AS SHOWN ON THE PLANS.
4. ALL EXPANSION JOINTS SHALL EXTEND THROUGH THE CURB.
5. THE MINIMUM LENGTH OF OFFSET JOINTS AT RADIUS POINTS SHALL BE 2 FEET.
6. ALL JOINTS, INCLUDING EXPANSION JOINTS WITH REMOVABLE TACK STRIPS, SHALL BE SEALED WITH JOINT SEALANT.
7. THE MATERIALS AND PROPERTIES OF ALL CONCRETE SHALL MEET THE APPLICABLE REQUIREMENTS IN THE A.C.I. (AMERICAN CONCRETE INSTITUTE) MANUAL OF CONCRETE PRACTICE.
8. CONTRACTOR SHALL APPLY A SECOND COATING OVER ALL PAVEMENT MARKINGS PRIOR TO ACCEPTANCE BY OWNER FOLLOWED BY A COAT OF GLASS BEADS AS APPLICABLE PER THE PROJECT DOCUMENTS.
9. ANY EXISTING PAVEMENT, CURBS AND/OR SIDEWALKS DAMAGED OR REMOVED WILL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER AND OWNER.
10. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY SUITABLE ACCESSIBLE ROUTES (PER A.D.A). GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2% . IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
11. MAXIMUM JOINT SPACING IS TWICE THE DEPTH OF THE CONCRETE PAVEMENT IN FEET.

GRADING AND DRAINAGE NOTES

1. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE START OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
2. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL ADJUST BMP'S AS NECESSARY AND REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
3. CONTRACTOR SHALL ENSURE THERE IS POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS SO THAT SURFACE RUNOFF WILL DRAIN BY GRAVITY TO NEW OR EXISTING DRAINAGE OUTLETS. CONTRACTOR SHALL ENSURE NO PONDING OCCURS IN PAVED AREAS AND SHALL NOTIFY ENGINEER IF ANY GRADING DISCREPANCIES ARE FOUND IN THE EXISTING AND PROPOSED GRADES PRIOR TO PLACEMENT OF PAVEMENT OR UTILITIES.
4. CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, POWER POLES, GUY WIRES, AND TELEPHONE BOXES THAT ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION. EXISTING CASTINGS AND STRUCTURES TO REMAIN SHALL BE ADJUSTED TO MATCH THE PROPOSED FINISHED GRADES.
5. BACKFILL FOR UTILITY LINES SHALL BE PLACED PER DETAILS, STANDARDS, AND SPECIFICATIONS SO THAT THE UTILITY WILL BE STABLE. WHERE UTILITY LINES CROSS THE PARKING LOT, THE TOP 6 INCHES SHALL BE COMPACTED SIMILARLY TO THE REMAINDER OF THE LOT. UTILITY DITCHES SHALL BE VISUALLY INSPECTED DURING THE EXCAVATION PROCESS TO ENSURE THAT UNDESIRABLE FILL IS NOT USED.
6. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF 4" OF TOPSOIL AT COMPLETION OF WORK. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.
7. AFTER PLACEMENT OF SUBGRADE AND PRIOR TO PLACEMENT OF PAVEMENT, CONTRACTOR SHALL TEST AND OBSERVE PAVEMENT AREAS FOR EVIDENCE OF PONDING. ALL AREAS SHALL ADEQUATELY DRAIN TOWARDS THE INTENDED STRUCTURE TO CONVEY STORM RUNOFF. CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER AND ENGINEER IF ANY DISCREPANCIES ARE DISCOVERED.
8. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT FULL DEPTH FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
9. THE CONTRACTOR SHALL INSTALL PROTECTION OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
10. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
11. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO MN/DOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
12. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
14. SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
15. THE CONTRACTOR SHALL ENSURE THAT LANDSCAPE ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
16. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS AND MN/DOT SPECIFICATION.
17. ALL CONCRETE/ASPHALT SHALL BE INSTALLED PER GEOTECH REPORT, CITY OF COON RAPIDS AND MN/DOT SPECIFICATIONS.
18. SPOT ELEVATIONS ARE TO FLOWLINE OF CURB UNLESS OTHERWISE NOTED.
19. LIMITS OF CONSTRUCTION ARE TO THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED ON THE PLAN.
20. IMMEDIATELY REPORT TO THE OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS.
21. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES, AND SHALL REPAIR ALL DAMAGE TO EXISTING UTILITIES THAT OCCUR DURING CONSTRUCTION WITHOUT COMPENSATION.
22. BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
23. ALL PROPOSED GRADES ONSITE SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE INDICATED ON THE PLANS. ANY SLOPES STEEPER THAN 4:1 REQUIRE EROSION AND SEDIMENT CONTROL BLANKET.
24. ADHERE TO ALL TERMS AND CONDITIONS AS NECESSARY IN THE GENERAL N.P.D.E.S. PERMIT AND STORMWATER POLLUTION PREVENTION PLAN FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
25. ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
26. CONTRACTOR SHALL ENSURE MINIMUM GRADES ARE MET WITHIN PAVED AREAS, 1.2% FOR ASPHALT PAVING AND 0.6% FOR CONCRETE PAVING.

3RD PARTY TEST REPORTS REQ'D

TEST REPORTS REQUIRED FOR CLOSE OUT INCLUDE, BUT ARE NOT LIMITED TO:

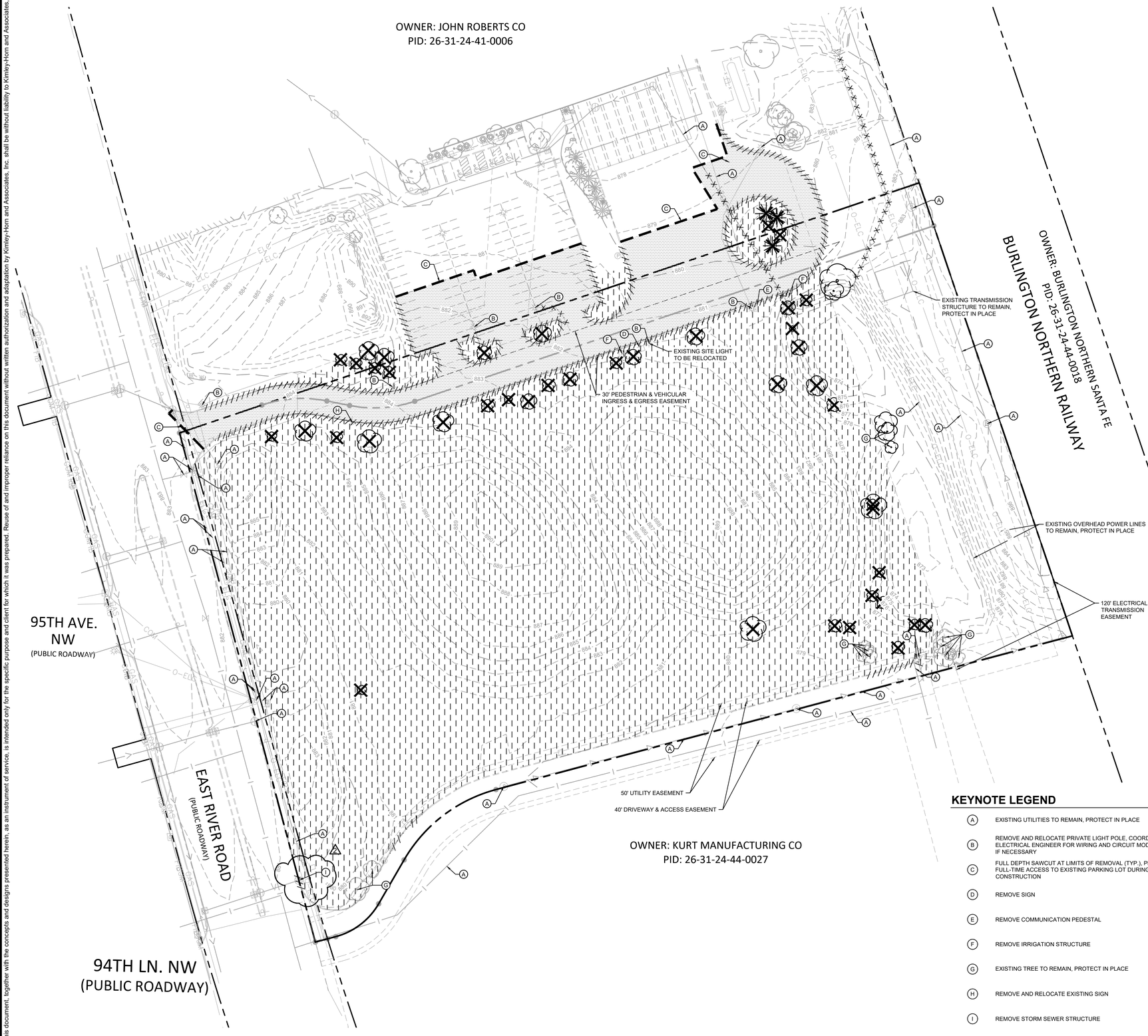
- DENSITY TEST REPORTS
- BACTERIOLOGICAL TESTS OF WATER SYSTEM
- PRESSURE TEST OF WATER/SEWER
- LEAK TESTS ON SEWER SYSTEM AND GREASE TRAPS
- ANY OTHER TESTING REQUIRED BY THE AGENCY/MUNICIPALITY

REFER TO GEOTECHNICAL REPORT NO. P-0006803
AMERICAN ENGINEERING TESTING, INC.
COON RAPIDS, MN
DATED DECEMBER, 17, 2021

WATER STORM SEWER & SANITARY SEWER NOTES

1. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES, GRAVITY SEWER LINES, AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
2. ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR UTILITY LOCATION AND COORDINATION IN ACCORDANCE WITH THE NOTES CONTAINED IN THE GENERAL CONSTRUCTION SECTION OF THIS SHEET.
3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
4. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
5. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING IN ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE, AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. WATER FOR FIRE FIGHTING SHALL BE MADE AVAILABLE FOR USE BY THE CONTRACTOR PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
7. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
8. UNDERGROUND LINES SHALL BE SURVEYED BY A STATE OF MN PROFESSIONAL LAND SURVEYOR PRIOR TO BACK FILLING.
9. CONTRACTOR SHALL PERFORM, AT HIS OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCLUDE, BUT MAY NOT BE LIMITED TO, INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANDREL TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.
10. CONTRACTOR SHALL PROVIDE FOR A MINIMUM HORIZONTAL CLEARANCE OF 10' AND A VERTICAL CLEARANCE OF 18" BETWEEN WATER AND SANITARY SEWER MANHOLES AND LINES.
11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
12. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT UNLESS OTHERWISE STATED BY CITY AND STATE DESIGN STANDARDS AND SPECIFICATIONS.
13. UNLESS OTHERWISE STATED IN CITY AND STATE DESIGN STANDARDS AND SPECIFICATIONS, ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER". EXISTING CASTINGS AND STRUCTURES WITHIN PROJECT LIMITS SHALL BE ADJUSTED TO MEET THESE CONDITIONS AND THE PROPOSED FINISHED GRADE.
14. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
15. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
16. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR FROM INVERT IN TO INVERT OUT.
17. ROOF DRAINS SHALL BE CONNECTED TO STORM SEWER BY PREFABRICATED WYES OR AT STORM STRUCTURES. RO

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



DEMOLITION PLAN NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC. SUCH THAT THE IMPROVEMENTS ON THE PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE PROJECT DOCUMENTS.
2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL. CONTRACTOR SHALL PROVIDE COPIES OF THE PERMIT AND RECEIPTS OF DISPOSAL OF MATERIALS TO THE OWNER AND OWNERS REPRESENTATIVE.
3. THE CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO ADJACENT PROPERTIES AT ALL TIMES. UTILITY SERVICES SHALL NOT BE INTERRUPTED WITHOUT APPROVAL FROM THE CONSTRUCTION MANAGER AND COORDINATION WITH THE ADJACENT PROPERTIES AND/OR THE CITY.
4. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
5. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR LOCATIONS OF EXISTING UTILITIES WITHIN ALL AREAS OF PROPOSED WORK.
6. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS ANY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PRECEDING WITH THE WORK.
7. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC, AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT-OF-WAY DURING CONSTRUCTION.
8. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC. (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES) AS APPROVED BY THE CONSTRUCTION MANAGER. MAINTENANCE OF TRAFFIC CONTROL SHALL BE COORDINATED IN ACCORDANCE WITH COON RAPIDS, ANOKA COUNTY AND MN/DOT.
9. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES DURING CONSTRUCTION, AND SHALL NOTIFY ALL PROPERTIES IF ACCESS WILL BE INTERRUPTED OR ALTERED AT ANY TIME DURING CONSTRUCTION.
10. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
11. CONTRACTOR MAY LIMIT SAW-CUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR.
12. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE FIRE DEPT. AND THE CITY WATER DEPARTMENT TO PLAN PROPOSED IMPROVEMENTS AND TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO THE SITE THROUGHOUT THIS SPECIFIC WORK AND THROUGH ALL PHASES OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY REQUIRED WATER MAIN SHUT OFFS WITH THE CITY OF COON RAPIDS DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATER MAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION WILL BE PROVIDED.
13. REFER TO SURVEY FOR ALL EXISTING INVERT AND RIM ELEVATIONS.
14. ALL UTILITIES SHOWN ARE EXISTING UTILITIES.
15. IN THE EVENT A WELL IS FOUND, THE CONTRACTOR SHALL CONTACT THE ENGINEER AND OWNER IMMEDIATELY. ALL WELLS SHALL BE SEALED BY A LICENSED WELL CONTRACTOR IN ACCORDANCE WITH ALL STATE OF MN REQUIREMENTS.
16. IN THE EVENT THAT UNKNOWN CONTAINERS OR TANKS ARE ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE OWNER AND/OR OWNERS REPRESENTATIVE IMMEDIATELY. ALL CONTAINERS SHALL BE DISPOSED OF AT A PERMITTED LANDFILL PER THE PROJECT DOCUMENTS.
17. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY EXISTING DRAINTILE IS ENCOUNTERED ON SITE. NO ACTIVE DRAINTILE SHALL BE REMOVED WITHOUT APPROVAL FROM THE ENGINEER.

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- REMOVE BITUMINOUS SURFACE
- REMOVE CONCRETE SURFACE
- CLEARING & GRUBBING
- FULL DEPTH SAWCUT
- REMOVE TREE
- REMOVE CONCRETE CURB & GUTTER
- REMOVE UTILITY LINES
- LIMITS OF DISTURBANCE
- O-ELC — EXISTING OVERHEAD POWER LINE
- EXISTING CHAINLINK FENCE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING WATERMAIN
- GAS — EXISTING GAS MAIN
- FIB — EXISTING FIBER LINE
- COM — EXISTING COMM LINE
- 928 — EXISTING CONTOUR
- EXISTING CURB & GUTTER
- EXISTING SIGN
- EXISTING FLARED END SECTION
- EXISTING STORM MANHOLE
- EXISTING STORM CATCHBASIN
- EXISTING GAS METER
- EXISTING HYDRANT
- EXISTING ELECTRICAL METER
- EXISTING GUY WIRE
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- EXISTING TREE
- EXISTING TREE LINE

KEYNOTE LEGEND

A	EXISTING UTILITIES TO REMAIN, PROTECT IN PLACE
B	REMOVE AND RELOCATE PRIVATE LIGHT POLE, COORDINATE WITH ELECTRICAL ENGINEER FOR WIRING AND CIRCUIT MODIFICATIONS, IF NECESSARY
C	FULL DEPTH SAWCUT AT LIMITS OF REMOVAL (TYP.), PROVIDE FULL-TIME ACCESS TO EXISTING PARKING LOT DURING CONSTRUCTION
D	REMOVE SIGN
E	REMOVE COMMUNICATION PEDESTAL
F	REMOVE IRRIGATION STRUCTURE
G	EXISTING TREE TO REMAIN, PROTECT IN PLACE
H	REMOVE AND RELOCATE EXISTING SIGN
I	REMOVE STORM SEWER STRUCTURE

Know what's **below.** **Call** before you dig.

NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
DATE: 06/30/2022 LIC. NO. 58751 MN

KHA PROJECT	
168543002	
DATE	04/27/2022
SCALE	AS SHOWN
DESIGNED BY	CCK
DRAWN BY	CCK
CHECKED BY	CJF

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

DEMO PLAN

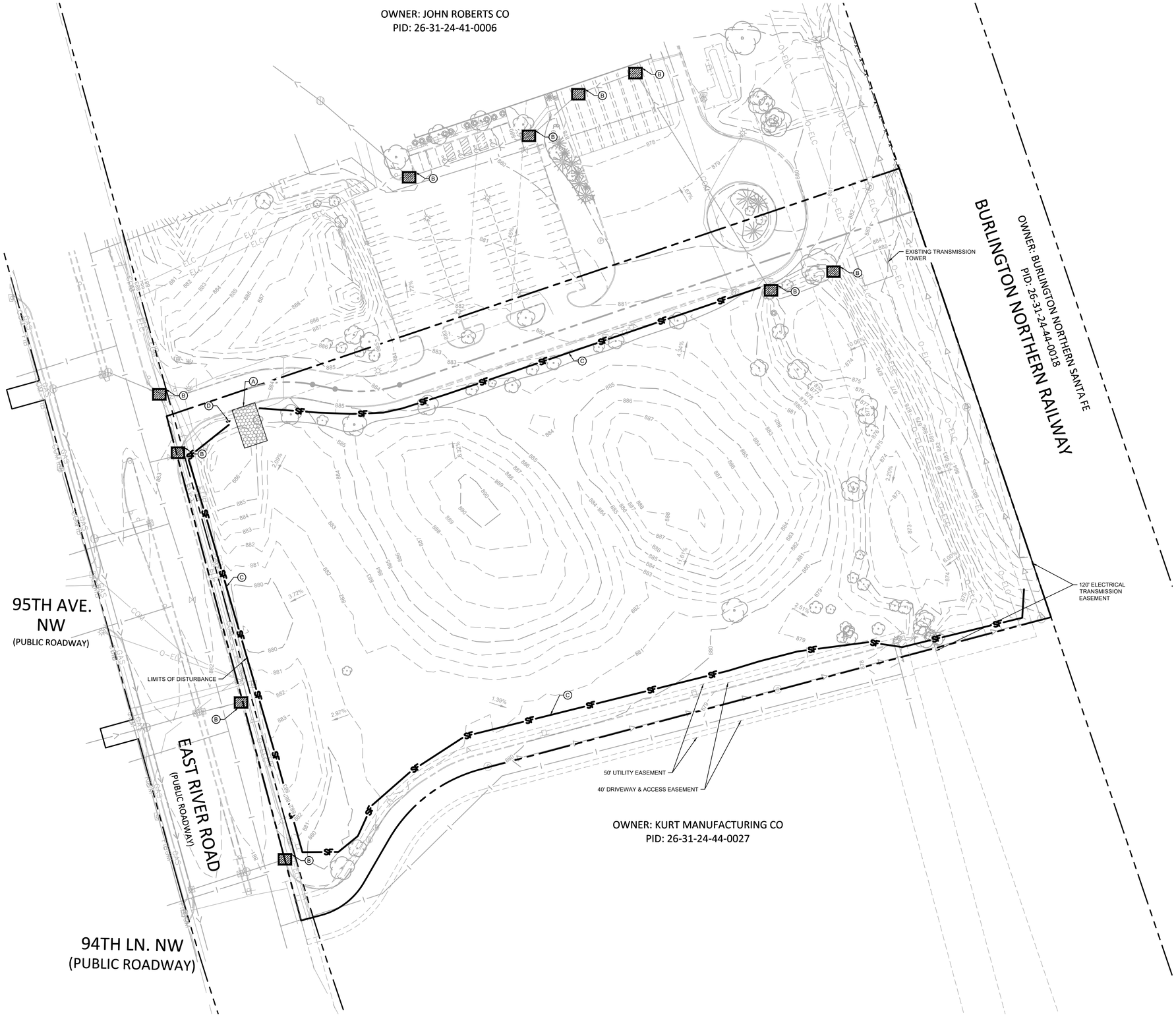
COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

SHEET NUMBER
C200

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C2-DEMO PLAN.dwg May 19, 2022 - 8:21am

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C3-EROS PH1 PLAN.dwg May 19, 2022 - 8:21am

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

- PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- ROCK ENTRANCE
- EROSION CONTROL BLANKET
- INLET PROTECTION
- SILT FENCE
- LIMITS OF DISTURBANCE

EROSION CONTROL PLAN NOTES

1. ALL PERIMETER SILT FENCE AND ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR SHALL CONSTRUCT DRAINAGE BASINS PRIOR TO SITE GRADING.
3. THE CONTRACTOR SHALL INSTALL CATCH BASIN EROSION CONTROL MEASURES.
4. WITHIN ONE WEEK (7 DAYS) OF SITE GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED, SOD, OR ROCK BASE. REFER TO LANDSCAPE PLANS FOR MATERIALS.
5. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY, STATE, AND WATERSHED DISTRICT PERMITS.
6. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES, INCLUDING THE REMOVAL OF SILT IN FRONT OF SILT FENCES DURING THE DURATION OF THE CONSTRUCTION.
7. ANY EXCESS SEDIMENT IN PROPOSED BASINS SHALL BE REMOVED BY THE CONTRACTOR.
8. THE CONTRACTOR SHALL REMOVE ALL EROSION CONTROL MEASURES AFTER VEGETATION IS ESTABLISHED.
9. THE CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENT TRACKED ONTO EXISTING STREETS AND PAVED AREAS AND SHALL SWEEP ADJACENT STREETS AS NECESSARY IN ACCORDANCE WITH CITY REQUIREMENTS.
10. IF BLOWING DUST BECOMES A NUISANCE, THE CONTRACTOR SHALL APPLY WATER FROM A TANK TRUCK TO ALL CONSTRUCTION AREAS.

SEQUENCE OF CONSTRUCTION:

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:

1. INSTALL INLET PROTECTION AT EXISTING STORMWATER INLETS.
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (1), CONCRETE WASHOUT PIT (1) AND INSTALL SILT FENCE.
3. PREPARE TEMPORARY PARKING AND STORAGE AREA.
4. COMPLETE REMOVALS AS INDICATED IN PLANS.
5. PERFORM MASS GRADING. ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
6. START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
7. IMMEDIATELY STABILIZE ANY EXPOSED SOIL AREAS AND COMPLETE STABILIZATION WITHIN 7 DAYS OF CEASING CONSTRUCTION ACTIVITIES IN THAT PORTION OF THE SITE.

KEYNOTE LEGEND

- (A) INSTALL ROCK CONSTRUCTION ENTRANCE
- (B) INSTALL INLET PROTECTION
- (C) INSTALL SILT FENCE
- (D) INSTALL SWPPP SIGN

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

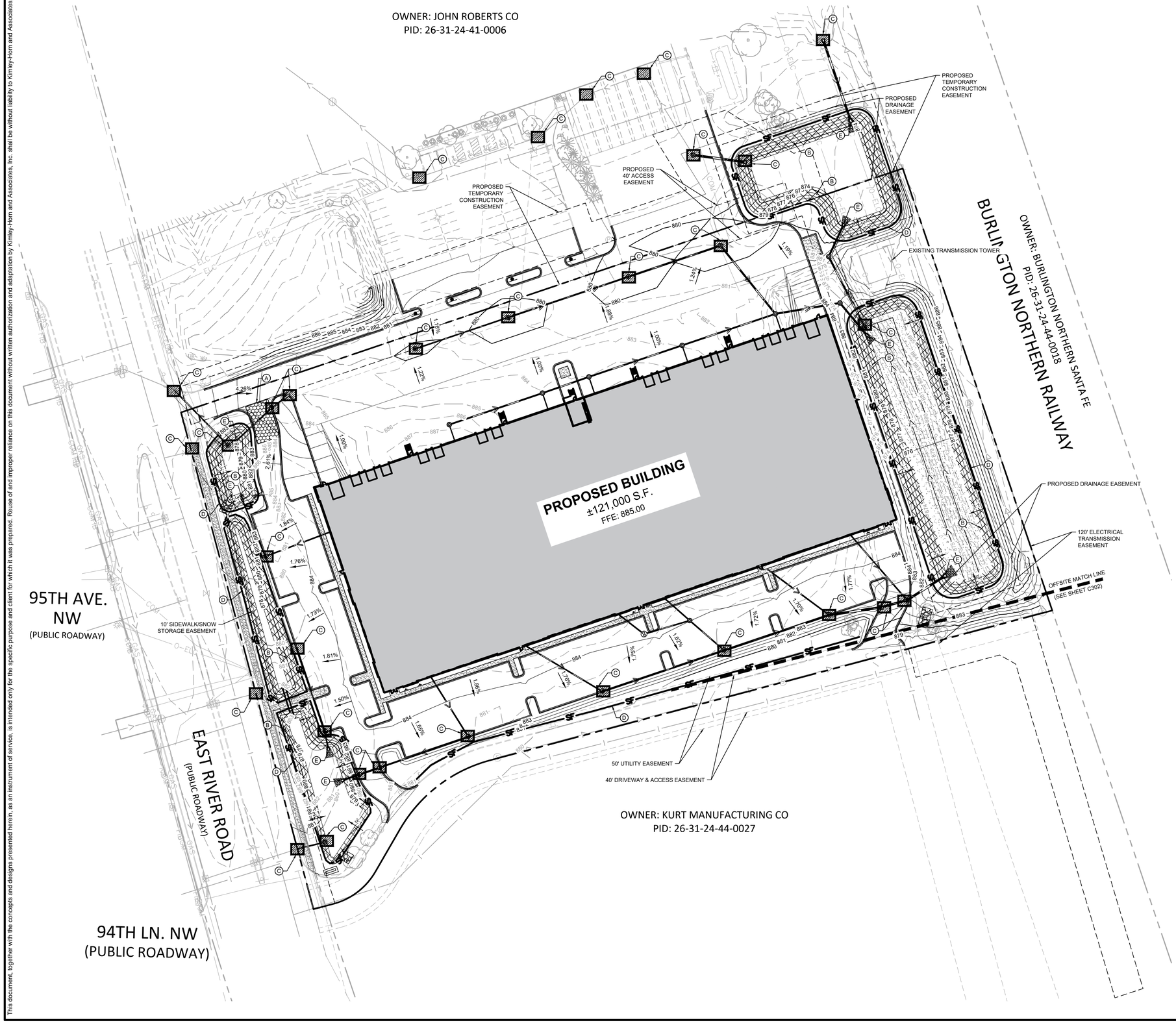
CALEB J. FLAKE
DATE: 06/30/2022 | MN LIC. NO. 58751

KHA PROJECT	168543002
DATE	04/27/2022
SCALE	AS SHOWN
DESIGNED BY	CCK
DRAWN BY	CCK
CHECKED BY	CJF

EROSION AND SEDIMENT CONTROL PLAN - PHASE 1

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS | MN

SHEET NUMBER
C300



LEGEND

- ROCK ENTRANCE
- EROSION CONTROL BLANKET
- INLET PROTECTION
- SF — SILT FENCE
- LIMITS OF DISTURBANCE

EROSION CONTROL PLAN NOTES

1. ALL PERIMETER SILT FENCE AND ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR SHALL CONSTRUCT DRAINAGE BASINS PRIOR TO SITE GRADING.
3. THE CONTRACTOR SHALL INSTALL CATCH BASIN EROSION CONTROL MEASURES.
4. WITHIN ONE WEEK (7 DAYS) OF SITE GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED, SOD, OR ROCK BASE. REFER TO LANDSCAPE PLANS FOR MATERIALS.
5. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY, STATE, AND WATERSHED DISTRICT PERMITS.
6. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES, INCLUDING THE REMOVAL OF SILT IN FRONT OF SILT FENCES DURING THE DURATION OF THE CONSTRUCTION.
7. ANY EXCESS SEDIMENT IN PROPOSED BASINS SHALL BE REMOVED BY THE CONTRACTOR.
8. THE CONTRACTOR SHALL REMOVE ALL EROSION CONTROL MEASURES AFTER VEGETATION IS ESTABLISHED.
9. THE CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENT TRACKED ONTO EXISTING STREETS AND PAVED AREAS AND SHALL SWEEP ADJACENT STREETS AS NECESSARY IN ACCORDANCE WITH CITY REQUIREMENTS.
10. IF BLOWING DUST BECOMES A NUISANCE, THE CONTRACTOR SHALL APPLY WATER FROM A TANK TRUCK TO ALL CONSTRUCTION AREAS.

SEQUENCE OF CONSTRUCTION:

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:

1. IMMEDIATELY STABILIZE ANY EXPOSED SOIL AREAS AND COMPLETE STABILIZATION WITHIN 7 DAYS OF CEASING CONSTRUCTION ACTIVITIES IN THAT PORTION OF THE SITE.
2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.
3. INSTALL APPROPRIATE INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED.
4. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
5. AFTER INITIAL GRADING, INSTALL SILT FENCE AROUND INFILTRATION AND FILTRATION BASIS
6. PREPARE SITE FOR PAVING.
7. PAVE SITE AND INSTALL STRIPING.
8. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
9. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.
10. OBTAIN CONCURRENCE WITH THE CIVIL ENGINEERING CONSULTANT THAT THE SITE HAS BEEN FULLY STABILIZED THEN:
    - 10.1. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES
    - 10.2. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMPS.

KEYNOTE LEGEND

- (A) INSTALL ROCK CONSTRUCTION ENTRANCE
- (B) INSTALL EROSION CONTROL BLANKET
- (C) INSTALL INLET PROTECTION
- (D) INSTALL SILT FENCE
- (E) INSTALL RIPRAP AT STORM PIPE OUTLET

GRAPHIC SCALE IN FEET
0 25 50 100

NORTH

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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

CALEB J. FLAKE
DATE: 05/30/2022 LIC. NO. 58751 MN

KHA PROJECT 168543002
DATE 04/27/2022
SCALE AS SHOWN
DESIGNED BY CCK
DRAWN BY CCK
CHECKED BY CJF

EROSION AND SEDIMENT CONTROL PLAN - PHASE 2

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

SHEET NUMBER
C301

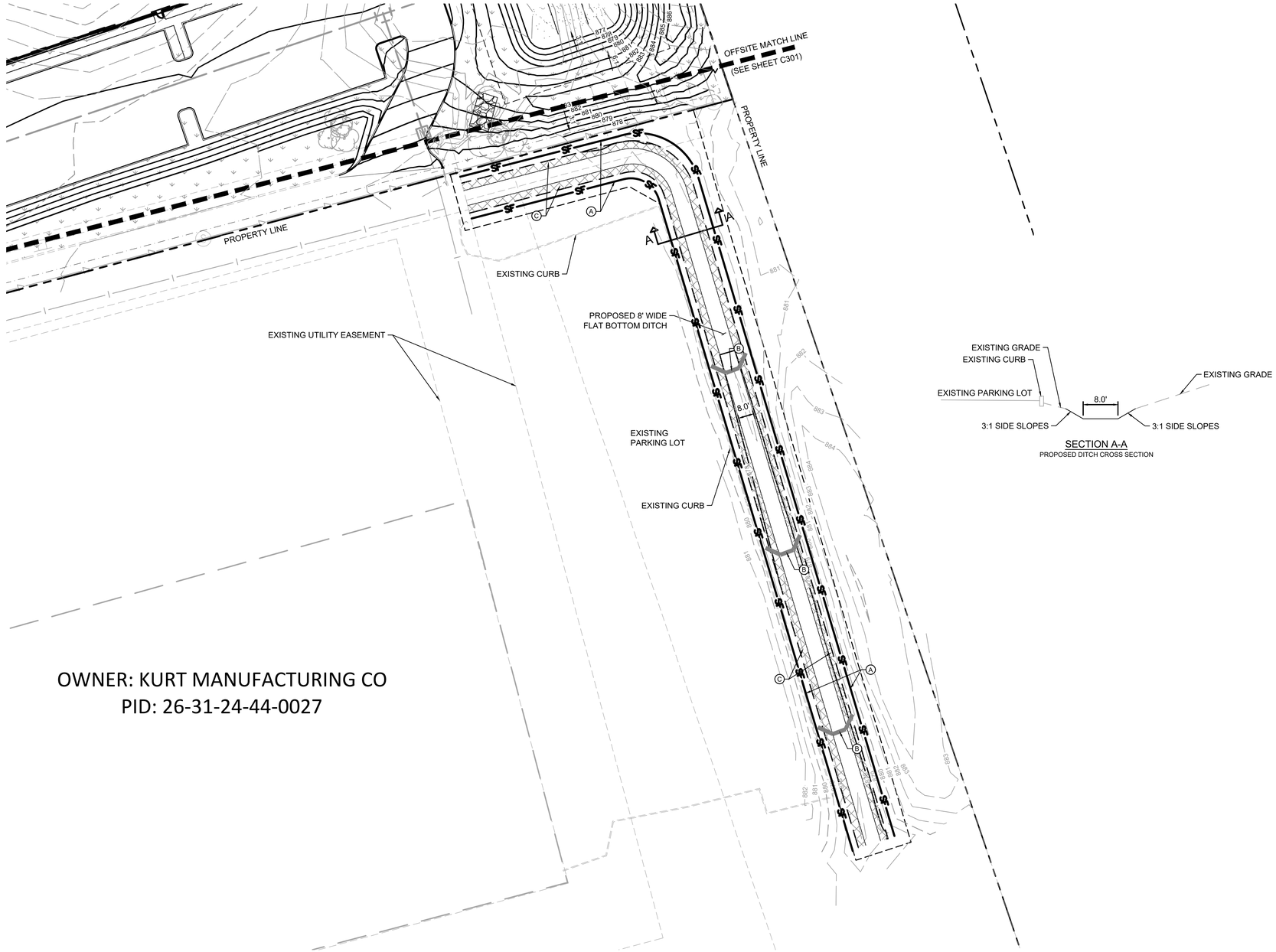
ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C3-EROS PH2 PLAN.dwg May 19, 2022 - 8:21am

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C5-GRADING PLAN - Kurt Manufacturing GIS .dwg May 19, 2022 - 8:21am



OWNER: KURT MANUFACTURING CO
PID: 26-31-24-44-0027

SECTION A-A
PROPOSED DITCH CROSS SECTION

LEGEND

- ROCK ENTRANCE
- EROSION CONTROL BLANKET
- INLET PROTECTION
- SILT FENCE
- LIMITS OF DISTURBANCE
- BIOROLL

EROSION CONTROL PLAN NOTES

1. ALL PERIMETER SILT FENCE AND ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR SHALL CONSTRUCT DRAINAGE BASINS PRIOR TO SITE GRADING.
3. THE CONTRACTOR SHALL INSTALL CATCH BASIN EROSION CONTROL MEASURES.
4. WITHIN ONE WEEK (7 DAYS) OF SITE GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED, SOD, OR ROCK BASE. REFER TO LANDSCAPE PLANS FOR MATERIALS.
5. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY, STATE, AND WATERSHED DISTRICT PERMITS.
6. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES, INCLUDING THE REMOVAL OF SILT IN FRONT OF SILT FENCES DURING THE DURATION OF THE CONSTRUCTION.
7. ANY EXCESS SEDIMENT IN PROPOSED BASINS SHALL BE REMOVED BY THE CONTRACTOR.
8. THE CONTRACTOR SHALL REMOVE ALL EROSION CONTROL MEASURES AFTER VEGETATION IS ESTABLISHED.
9. THE CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENT TRACKED ONTO EXISTING STREETS AND PAVED AREAS AND SHALL SWEEP ADJACENT STREETS AS NECESSARY IN ACCORDANCE WITH CITY REQUIREMENTS.
10. IF BLOWING DUST BECOMES A NUISANCE, THE CONTRACTOR SHALL APPLY WATER FROM A TANK TRUCK TO ALL CONSTRUCTION AREAS.

SEQUENCE OF CONSTRUCTION:

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:

1. IMMEDIATELY STABILIZE ANY EXPOSED SOIL AREAS AND COMPLETE STABILIZATION WITHIN 7 DAYS OF CEASING CONSTRUCTION ACTIVITIES IN THAT PORTION OF THE SITE.
2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.
3. INSTALL APPROPRIATE INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED.
4. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
5. PREPARE SITE FOR PAVING.
6. PAVE SITE AND INSTALL STRIPING.
7. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
8. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.
9. OBTAIN CONCURRENCE WITH THE CIVIL ENGINEERING CONSULTANT THAT THE SITE HAS BEEN FULLY STABILIZED THEN:
   - 9.1. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES
   - 9.2. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMPS.

KEYNOTE LEGEND

- (A) INSTALL SILT FENCE
- (B) INSTALL ROCK DITCH CHECK
- (C) INSTALL EROSION CONTROL BLANKET

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
DATE: 06/30/2022 LIC. NO. 58751 MN

KHA PROJECT	168543002
DATE	04/27/2022
SCALE	AS SHOWN
DESIGNED BY	CCK
DRAWN BY	CCK
CHECKED BY	CJF

OFFSITE EROSION AND SEDIMENT CONTROL PLAN

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

SHEET NUMBER
C302

DESCRIPTION OF PROJECT AND CONSTRUCTION ACTIVITY

PROJECT INFORMATION:

PROJECT LOCATION:
SECTION 26, TOWNSHIP 31N, RANGE 24W, COON RAPIDS, ANOKA COUNTY, MINNESOTA

MPCA ADDRESS:
MINNESOTA POLLUTION CONTROL AGENCY
CONSTRUCTION STORMWATER PERMIT PROGRAM
520 LAFAYETTE ROAD NORTH
ST. PAUL, MN 55155-4194
PHONE: (800) 443-4729

WATER SHED DISTRICT:
COON CREEK WATERSHED DISTRICT
13632 VAN BUREN ST
HAM LAKE, MN 55304
PHONE: (763) 755-0975

GEOTECHNICAL INFORMATION:
GEOTECHNICAL EXPLORATION AND ENGINEERING REVIEW WAS DONE BY AMERICAN ENGINEERING TESTING, INC. REFERENCE REPORT NO. P-0006803.1, DATED DECEMBER 17, 2021. THE REPORT INDICATES THAT, WITHIN THE PRIMARILY UNDEVELOPED SITE, THE TOPSOIL MOSTLY CONSISTS OF FILL SOILS UNDERLAIN BY SANDY ALLUVIAL DEPOSITS. THE SANDY SOILS ARE THEN UNDERLAIN BY GLACIAL TILL DEPOSITS. THE SAND ALLUVIUM RANGED IN RELATIVE DENSITY FROM LOOSE TO DENSE. THE OBSERVED GLACIAL TILL DEPOSITS WERE PRIMARILY VERY SOFT TO STIFF SANDY LEAN CLAY. A LAYER OF LOOSE SILT OR FIRM LEAN CLAY ALLUVIUM WAS ENCOUNTERED BETWEEN THE SANDY ALLUVIUM AND THE GLACIAL TILL SOILS.

PROJECT DESCRIPTION:

THE PROJECT WILL CONSIST OF CONSTRUCTING A SINGLE-STORY BUILDING OF APPROXIMATELY 121,000 SQUARE FEET IN AREA TO SERVE AS A WAREHOUSE. PRELIMINARY SITE PLANS DATED FEBRUARY 7, 2022 INDICATE THAT THE DEVELOPMENT WILL INCLUDE PAVED SURFACE PARKING AND ACCESS DRIVE LANES, LOADING DOCKS WITH A CONCRETE DOCK APRON, AND MUTLIPLE STORMWATER RETENTION / INFILTRATION PONDS. CONSTRUCTION WILL ALSO INCLUDE PRIVATE UNDERGROUND UTILITIES. THE SUBJECT PROPERTY LIES WITHIN ZONE X PER FEMA FIRM MAP NUMBER: 27003C0318E HAVING AN EFFECTIVE DATE OF DECEMBER 16, 2015.

THE STORMWATER POLLUTION PREVENTION PLAN WILL DEFINE THE CHARACTERISTICS OF THE SITE AND THE TYPE OF CONSTRUCTION TO OCCUR; INCLUDE A SITE PLAN SHOWING THE CONSTRUCTION; DESCRIBE THE PRACTICES THAT WILL BE USED TO CONTROL EROSION AND THE RELEASE OF POLLUTANTS IN THE STORMWATER, INDICATE A SCHEDULE TO HELP ENSURE THAT THE PRACTICE INDICATED ARE IMPLEMENTED AND TO HELP EVALUATE THE EFFECTIVENESS OF THE PRACTICES IN REDUCING EROSION AND POLLUTANTS DISCHARGED FROM THE SITE; AND TO DESCRIBE THE FINAL STABILIZATION MEASURES REQUIRED TO HELP MINIMIZE EROSION AND OTHER STORMWATER IMPACTS AFTER CONSTRUCTION.

CONSTRUCTION ACTIVITY:

PROJECT TYPE:
THE PROJECT CONSISTS OF CLEARING AND GRUBBING OF EXISTING CONDITIONS. THE PROPOSED PROJECT WILL CONSIST OF CONSTRUCTION OF A 121,000 SF INDUSTRIAL BUILDING, ASSOCIATED GRADING, CONCRETE SURFACES, UTILITY SERVICES AND A STORMWATER SYSTEM TO MANAGE RUNOFF FROM THE SITE.

RECEIVING WATERS:
THE SITE DISCHARGES TO THE MISSISSIPPI RIVER APPROXIMATELY 0.65 MILES WEST OF THE SITE. THE MISSISSIPPI RIVER IS AN IMPAIRED BODY OF WATER.

SPECIAL OR IMPAIRED WATERS:
THE SITE DISCHARGES TO, AND IS WITHIN ONE MILE OF THE MISSISSIPPI RIVER.THE RIVER IN THIS SEGMENT IS IMPAIRED FOR MERCURY IN FISH TISSUE, NUTRIENTS, PCBS, AND FECAL COLIFORM.

DESCRIPTION OF PROPOSED CONSTRUCTION ACTIVITES:
THE PROJECT WILL CONSIST OF CONSTRUCTING A SINGLE-STORY BUILDING OF APPROXIMATELY 121,000 SQUARE FEET IN AREA TO SERVE AS A WAREHOUSE. PRELIMINARY SITE PLANS DATED FEBRUARY 7, 2022 INDICATE THAT THE DEVELOPMENT WILL INCLUDE PAVED SURFACE PARKING AND ACCESS DRIVE LANES, LOADING DOCKS WITH A CONCRETE DOCK APRON, AND MUTLIPLE STORMWATER RETENTION / INFILTRATION PONDS. THE TOTAL DISTURBED AREA IS 8.0 ACRES. THE PROJECT ADDS 5.5 ACRES OF IMPERVIOUS SURFACE TO THE EXISTING SITE.

SEQUENCE OF MAJOR CONSTRUCTION ACTIVIES:
PHASE 1:
1. INSTALL INLET PROTECTION AT EXISTING STORMWATER INLETS.
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, CONCRETE WASHOUT PIT AND INSTALL PERIMETER CONTROL (SAFTEY FENCE, SILT SOCK, AND SILT FENCE).
3. PREPARE TEMPORARY PARKING STORAGE AREA.
4. COMPLETE REMOVALS AS INDICATED IN PLANS.
5. PERFORM MASS GRADING. ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
6. START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
7. IMMEDIATELY STABILIZE ANY EXPOSED SOIL AREAS AND COMPLETE STABILIZATION WITHIN 7 DAYS OF CEASING CONSTRUCTION ACTIVITIES IN THAT PORTION OF THE SITE.

PHASE 2:
1. IMMEDIATELY STABILIZE ANY EXPOSED SOIL AREAS AND COMPLETE STABILIZATION WITHIN 7 DAYS OF CEASING CONSTRUCTION ACTIVITIES IN THAT PORTION OF THE SITE.
2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.
3. INSTALL APPROPRIATE INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED.
4. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
5. AFTER INITIAL GRADING, INSTALL SILT FENCE AROUND INFILTRATION AND FILTRATION BASINS.
6. PREPARE SITE FOR PAVING.
7. PAVE SITE AND INSTALL STRIPING.
8. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
9. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.
10. OBTAIN CONCURRENCE WITH THE CIVIL ENGINEERING CONSULTANT THAT THE SITE HAS BEEN FULLY STABILIZED THEN:

10.1. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES

10.2. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMPS.

EROSION AND SEDIMENT CONTROL PLAN AND DETAIL SHEETS:
SHEET C200 - DEMO PLAN
SHEET C300 - EROSION AND SEDIMENT CONTROL PLAN - PHASE 1
SHEET C301 - EROSION AND SEDIMENT CONTROL PLAN - PHASE 2
SHEET C302 - OFFSITE EROSION AND SEDIMENT CONTROL PLAN
SHEET C303 - SWPPP
SHEET C304 - EROSION AND SEDIMENT CONTROL DETAILS

NORMAL WETTED PERMETER OF PERMANENT AND TEMPORARY DITCH OR SWALE:
THE LAST 200 FEET OF TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE SHALL BE STABILIZED WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER OR PROPERTY EDGE IN ACCORDANCE WITH MNDOT SPEC. 2575.3.F.2. (PART 8.6).

TIMING OF CONTOL MEASURES

THE FOLLOWING CONTROL MEASURES WILL BE COORDINATED WITH CONSTRUCTION ACTIVITIES:
1. STORM SEWER INLET PROTECTION SHALL BE THE FIRST ITEM CONSTRUCTED AND SHALL REMAIN IN PLACE UNTIL PERMANENT STABILIZATION HAS TAKEN PLACE.
2. SILT FENCE SHALL BE CONSTRUCTED PRIOR TO ANY SOIL DISTURBANCE AND SHALL REMAIN IN PLACE UNTIL PERMANENT STABILIZATION HAS TAKEN PLACE.
3. STRUCTURAL BMPS, SUCH AS DIVERSIONS, AND SEDIMENT TRAPS OR BASINS (IF REQUIRED), SHALL BE INSTALLED PRIOR TO MAJOR SOIL DISTURBANCE;
4. CLEARING, GRADING AND PAVEMENT REMOVAL WILL NOT OCCUR IN AN AREA UNTIL IT IS NECESSARY FOR CONSTRUCTION TO PROCEED;
5. INFILTRATION AREA (IF REQUIRED) SHALL NOT BE EXCAVATED TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED. IN ADDITION RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS MUST BE IMPLEMENTED TO KEEP ALL RUNOFF AND SEDIMENT OUT OF THE INFILTRATION PRACTICE.

EROSION AND SEDIMENT CONTROL DEVICES WILL BE SATISFACTORILY MAINTAINED UNTIL THE CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR EROSION HAS PASSED.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

THE STORM WATER POLLUTION PREVENTION PLAN REFLECTS MINNESOTA POLLUTION CONTROL AGENCY GUIDELINES FOR STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION ACTIVITIES. THE STORM WATER POLLUTION PREVENTION PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT. BMPS SHALL BE INCORPORATED IN ACCORDANCE WITH THE NPDES/SDS STORMWATER PERMIT FOR CONSTRUCTION.

MAINTENANCE AND INSPECTION RECORDS

THE OWNER AND CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING INSPECTION AND MAINTENANCE PRACTICES TO MAINTAIN EROSION AND SEDIMENT CONTROLS.
1. PERMITTEES MUST IMMEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL AREAS AND COMPLETE STABILIZATION WITHIN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE TEMPORARILY OR PERMANENTLY CEASES.
2. ALL CONTROL MEASURES WILL BE INSPECTED AT LEAST ONCE EACH WEEK AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER IN 24 HOURS. THE INSPECTION WILL BE COMPLETED BY THE EROSION CONTROL SUPERVISOR.
3. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
4. BIO ROLLS WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE CONCRETE BARRIERS.
5. INLET PROTECTION DEVICES WILL BE INSPECTED FOR DEPTH OF SEDIMENT AND FREE OF ANY TEARS. DEVICES SHALL BE INSPECTED TO ENSURE THEY ARE SECURELY IN PLACE.
6. SILT FENCE SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, FABRIC ATTACHMENT TO POSTS, AND THAT POSTS AND FABRIC BOTTOM ARE FIRMLY IN THE GROUND.
7. BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE FENCE.

SPILL PREVENTION

GOOD HOUSEKEEPING:
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.
1. DESIGNATE AREAS FOR EQUIPMENT MAINTENANCE AND REPAIR, TAKING STEPS TO MINIMIZE SPILLS AND CONTROL THE RUNOFF FROM THESE AREAS;
2. PROVIDE WASTE RECEPTACLES AT CONVENIENT LOCATIONS. THE RECEPTACLES SHOULD BE COVERED AND THE WASTE SHOULD BE REGULARLY COLLECTED;
3. PROVIDE APPROPRIATE CONTROL OF EQUIPMENT WASH WATERS, SUCH AS CONCRETE WASHOUTS, TO PREVENT UNAUTHORIZED DRY WEATHER DISCHARGES AND AVOID MIXING THE WASH WATER WITH STORM WATER;
4. PROVIDE PROTECTED STORAGE AREAS FOR CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS, GASOLINE, AND OTHER POTENTIALLY TOXIC MATERIALS. THESE AREAS SHOULD PROVIDE CONTAINMENT TO PREVENT STORM WATER FROM ENTERING THE CHEMICAL STORAGE AREA AND PREVENT LEAKS FROM LEAVING THE CHEMICAL STORAGE AREA; AND
5. PROVIDE ADEQUATELY MAINTAINED SANITARY FACILITIES.

HAZARDOUS PRODUCTS:
THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.
1. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS IT CANNOT BE RESEALED.
2. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS WILL BE RETAINED ON SITE AND ACCESSIBLE AT ALL TIMES; THEY CONTAIN IMPORTANT PRODUCT AND SAFETY INFORMATION.
3. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

SPILL CONTROL PRACTICES:
IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
1. MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
2. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN A MATERIAL STORAGE AREA LOCATED ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
3. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
4. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
5. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE. IN ADDITION TO REPORTING TO LOCAL AUTHORITIES, REPORT SPILLS TO THE MINNESOTA POLLUTION CONTROL AGENCY (STATE DUTY OFFICER: 800-422-0798 OR 651-297-8610). ANY SPILLS ABOVE THE REPORTABLE QUANTITIES LIMITS IN THE CODE OF FEDERAL REGULATIONS (CFR), TITLE 40, PART 302 SHALL BE REPORTED TO THE EPA NATIONAL RESPONSE CENTER (800-424-8802). THE REPORT WILL INCLUDE MEASURES TO PREVENT SPILLS FROM REOCCURRING AND INFORMATION REGARDING HOW TO REMEDIATE SPILLS IF A SIMILAR OCCURRENCE HAPPENS. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
6. THE CONTRACTOR'S EROSION CONTROL SUPERVISOR SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
7. SPILLS WILL BE STUDIED TO UNDERSTAND WHY THEY OCCURRED AND PREVENTIVE METHODS WILL BE CREATED TO ENSURE SIMILAR SPILLS DO NOT OCCUR IN THE FUTURE.

PRODUCT SPECIFIC PRACTICES

PETROLEUM PRODUCTS:
ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED MATERIALS USED ON SITE WILL BE APPLIED AND STORED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. ANY SPILLED PETROLEUM PRODUCTS OF 5 GALLONS OR MORE SHALL BE REPORTED TO THE MINNESOTA POLLUTION CONTROL AGENCY AT 651-297-8610.

PAINTS AND CLEANING SOLVENTS:
ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT AND SOLUTIONS WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE AND CONCRETE TRUCKS:
CONCRETE, CONCRETE TOOLS AND TRUCKS ALL MUST WASH OUT IN A DESIGNATED AREA. THE DESIGNATED AREA MUST BE CLEARLY IDENTIFIED ON THE SITE AND COMMUNICATED TO ALL PERSONNEL INVOLVED WITH CAST-IN-PLACE CONCRETE AS THE WASHOUT AREA. THIS DESIGNATED AREA MUST MEET THE MPCA AND EPA REGULATIONS OF A DEFINED CONCRETE WASHOUT AREA. THE FOLLOWING THREE OPTIONS ARE CONSIDERED AN APPROVED METHOD:
1. KEEPING ALL CONCRETE WASHOUT SELF-CONTAINED AND RETURNED TO AN INDUSTRIAL SITE TO BE DISPOSED OF IN A MPCA APPROVED MANNER.
2. PROVIDING A PREFABRICATED CONCRETE WASHOUT CONTAINER THAT ALL CONCRETE WASHOUT CAN BE COLLECTED IN. THESE CONTAINERS SHOULD BE MAINTAINED ON A REGULAR BASIS.
3. CREATING A SELF-INSTALLED WASHOUT FACILITY WITH AN IMPERMEABLE LINER. AN ENGINEERED CLAY LINER WILL BE CONSIDERED AN IMPERMEABLE LINER.

FOR ADDITIONAL INFORMATION ON CONCRETE WASHOUT REGULATIONS, PLEASE SEE THE MPCA'S MEMORANDUM "CONCRETE WASHOUT GUIDANCE" AND THE EPA "STORMWATER BEST MANAGEMENT PRACTICES CONCRETE WASHOUT".

VEHICLE AND EQUIPMENT WASHING:
IF VEHICLES OR EQUIPMENT ARE WASHED ON THE PROJECT SITE IT MUST BE DONE IN A DESIGNATED AREA. THE DESIGNATED AREA MUST BE CLEARLY IDENTIFIED ON THE SITE AND COMMUNICATED TO ALL PERSONNEL INVOLVED. RUNOFF FROM THE WASHING AREA MUST BE CONTAINED IN A SEDIMENT BASIN OR OTHER SIMILAR CONTROL METHOD AND MUST BE PROPERLY DISPOSED OF.

INSPECTIONS AND MAINTENANCE

EROSION CONTROL SUPERVISOR (MNDOT 2573):
THE CONTRACTOR SHALL ASSIGN AN EROSION CONTROL SUPERVISOR FOR THE PROJECT WHO SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE PROJECT SWPPP. THE EROSION CONTROL SUPERVISOR (ECS) SHALL COMPLY WITH THE MOST CURRENT ADDITION OF THE MNDOT STANDARD SPECIFICATION FOR CONSTRUCTION FOR ALL APPLICABLE SECTIONS. THE ECS SHALL:
1. IMPLEMENT THE SWPPP PLAN.
2. OVERSEE MAINTENANCE PRACTICES IDENTIFIED IN THE SWPPP.
3. CONDUCT OR PROVIDE FOR INSPECTION AND MONITORING ACTIVITIES
4. INSPECT SITE AND BEGIN CORRECTIVE ACTIONS TO DEFICIENT BMP'S NO LATER THAN 24 HOURS AFTER A RAINFALL EVENT.
5. PREPARE WEEKLY SCHEDULE OF EROSION ACTIVITIES (MNDOT 1717.2D). WEEKLY REPORTS SHALL BE SUBMITTED TO THE CITY OF ARDEN HILLS UPON REQUEST.
6. PREPARE AND UPDATE THE CONTRACTORS EROSION/SEDIMENT CONTROL SITE PLAN AS NECESSARY (MNDOT1717.2E)
7. IDENTIFY OTHER POTENTIAL POLLUTANT SOURCES AND MAKE SURE REMEDIES ARE ADDED TO THE SWPPP.
8. IDENTIFY ANY DEFICIENCIES IN THE SWPPP AND IDENTIFY BEST MANAGEMENT PRACTICES (BMPS) TO ADDRESS THE DEFICIENCIES AND ASSURE THEY ARE ADDED TO THE SWPPP.
9. IF CHANGES IN CONSTRUCTION DOCUMENTS ARE NOT ADDRESSED IN THE SWPPP, THEN THE ECS SHALL AMEND THE SWPPP TO INCLUDE THE CHANGES
10. CONTRACTOR SHALL SUBMIT EROSION CONTROL SUPERVISOR INFORMATION TO THE CITY OF ARDEN HILLS FOR REVIEW AND APPROVAL.

MAINTENANCE AND INSPECTION REQUIREMENTS SHALL BE CONSISTENT WITH NPDES CSW PERMIT PARTS 11.2-11.11.

CONTRACTOR'S EROSION/SEDIMENT CONTROL SITE PLAN:
THE CONTRACTOR SHALL SUBMIT A CONTRACTOR'S EROSION / SEDIMENT CONTROL SITE PLAN TO THE ENGINEER A MINIMUM OF 24 HOURS PRIOR TO THE FIRST PRE-CONSTRUCTION MEETING. THE CONTRACTOR'S EROSION / SEDIMENT CONTROL SITE PLAN SHALL INCLUDE:
1. THE NAME OF THE CONTRACTOR'S DESIGNATED EROSION CONTROL SUPERVISOR WITH 24-HOUR CONTACT INFORMATION. (I.E. PHONE NUMBER, EMAIL, ETC.)
2. NAME AND CONTACT INFORMATION FOR THE INDIVIDUAL(S) RESPONSIBLE FOR PERFORMING AND MAINTAINING THE SITE INSPECTION LOGS ON A WEEKLY BASIS (OR WITHIN 24 HOURS OF 0.5 INCHES OF A RAIN IN A 24 HOUR PERIOD).
3. NAME AND CONTACT INFORMATION OF THE INDIVIDUAL(S) RESPONSIBLE FOR TEMPORARY AND PERMANENT STABILIZATION.
4. NAME AND CONTACT INFORMATION OF THE INDIVIDUAL(S) WHO WILL BE RESPONSIBLE FOR EMERGENCY REPAIRS AND REPLACEMENTS.
5. LOCATION WHERE THE SWPPP DOCUMENT AND NPDES PERMIT WILL BE KEPT ON-SITE. THE DOCUMENT SHOULD BE ACCESSIBLE AT ALL TIMES AND AVAILABLE IN THE TIME OF ESSENCE.
6. WHERE AND HOW CONCRETE WASHOUT WILL OCCUR AND BE IN COMPLIANCE OF THE MINNESOTA POLLUTION CONTROL AGENCY'S (MPCA) MEMORANDUM "CONCRETE WASHOUT GUIDANCE".
7. LOCATION OF STOCKPILES OF NATIVE SOILS AND/OR BORROW MATERIALS INDICATE HOW STOCKPILES WILL BE KEPT IN COMPLIANCE WITH NPDES AND MPCA REQUIREMENTS.

THE CONTRACTOR WILL NOT BE ALLOWED TO START WORK UNTIL THE ENGINEER HAS REVIEWED AND ACCEPTED THE CONTRACTOR'S EROSION / SEDIMENT CONTROL SITE PLAN.

INSPECTION AND MAINTENANCE PRACTICES
1. ALL CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EACH WEEK AND WITHIN 24 HOURS ON THE END OF A STORM EVENT RESULTING IN 0.5 INCHES OR GREATER WITHIN A 24 HOUR PERIOD. THE INSPECTION SHALL BE COMPLETED BY THE ECS.
2. PERMITTEES MUST IMMEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL AREAS AND COMPLETE STABILIZATION WITHIN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE TEMPORARILY OR PERMANENTLY CEASES.
3. ALL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.
4. SILT FENCE SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, FABRIC ATTACHMENT TO POSTS, AND THAT POSTS AND FABRIC BOTTOM ARE FIRMLY IN THE GROUND.
5. BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE FENCE OR SOONER.
6. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, ABSENCE OF TEARS AND TO ASSURE THAT THE DEVICES ARE SECURELY IN PLACE.

CONSTRUCTION NOTES:
1. PRIOR COMMENCEMENT OF CONSTRUCTION ACTIVITIES IN ANY AREA OF THE PROJECT, DOWN GRADIENT EROSION AND SEDIMENT CONTROL MEASURES AND CONCRETE BARRIERS DELINEATING THE CONSTRUCTION LIMITS SHALL BE INSTALLED AND INSPECTED BY THE ECS AND THE ENGINEER.
2. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED BY THE MPCA'S NPDES PERMIT FOR CONSTRUCTION. THIS INCLUDES ANY ADDITIONAL EROSION AND SEDIMENT CONTROLS BEYOND THAT SHOWN ON THE PLAN.
3. PHASED CONSTRUCTION SHALL BE USED TO MINIMIZE SEDIMENT TRANSPORT.
4. THE MAXIMUM TIME ANY AREA CAN REMAIN OPEN WHILE NOT BEING WORKED IS 7 DAYS. FERTILIZER SHOULD BE DISTRIBUTED AT A RATE OF 250 LBS/ACRE.
5. IF DOWN GRADIENT BMPS ARE OVERLOADED DURING A STORM EVENT, ADDITIONAL UP GRADIENT BMPS ARE REQUIRED TO ELIMINATE THE OVERLOAD. THE ADDITIONAL BMPS MUST BE RECORDED ON THIS SWPPP IN THE AMENDMENTS TO SWPPP SECTION.
6. TEMPORARY STOCKPILES MUST HAVE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS, AND CANNOT BE PLACED IN SURFACE WATERS INCLUDING STORM WATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS, OR CONDUITS AND DITCHES. ALL STOCKPILES SHALL BE COVERED OR STABILIZED TO LIMIT WIND EROSION.
7. A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED FOR THE PROJECT. A VEHICLE TRACKING PAD SHALL BE INSTALLED IN ACCORDANCE WITH THE CONSTRUCTION PLAN AT EVERY PROJECT ENTRANCE. ENTRANCES MUST BE INSPECTED AND MAINTAINED TO ENSURE PROPER FUNCTION.
8. THE CONTRACTOR SHALL CLEAN ALL TRACKED MATERIALS USING A STREET SWEEPER WITH A PICK UP BROOM ON ADJACENT ROADWAYS ON A DAILY BASIS AND AS DIRECTED BY THE ENGINEER OR AHJ.
9. CONCRETE WASHOUT SHALL BE DONE IN ACCORDANCE WITH THE MPCA AND THE EPA CONCRETE WASHOUT GUIDANCE.

CONTROLS

PERIMETER/SEDIMENT CONTROLS:
ONE CONSTRUCTION EXITENTRANCE SHALL BE INCORPORATED INTO THE PROJECT. ALL CONSTRUCTION TRAFFIC SHALL UTILIZE THE CONSTRUCTION EXIT(S) SUCH THAT TRACK OUT OF SEDIMENT IS MINIMIZED IN ACCORDANCE WITH THE GENERAL PERMIT. SILT FENCING, BIOROLL AND SILT DIKES SHALL BE INSTALLED ON THE PERIMETER AND/OR DOWNSTREAM GRADIENT OF THE AREA TO BE DISTURBED. INLET PROTECTION WILL ALSO BE REQUIRED ON ALL EXISTING AND PROPOSED STORM SEWER CATCH BASINS AND MAINTAINED THROUGHOUT CONSTRUCTION.

THE PERMIT REQUIRES THAT TEMPORARY EROSION AND SEDIMENT CONTROLS BE IN PLACE PRIOR TO BEGINNING CONSTRUCTION, AND THAT THEY BE INSPECTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. EFFECTIVE BMP'S MUST BE IN PLACE ON ALL EXPOSED SOIL AREAS WHERE NO CONSTRUCTION ACTIVITIES WILL OCCUR FOR A PERIOD OF 7 DAYS OR MORE.

STABILIZATION PRACTICES:
TEMPORARY STABILIZATION INCLUDES THE INSTALLATION OF SILT FENCING ON THE DOWNSTREAM GRADIENT OF THE AREA TO BE DISTURBED. INLET PROTECTION WILL ALSO BE REQUIRED ON ALL EXISTING AND PROPOSED STORM SEWER CATCH BASINS AND MAINTAINED THROUGHOUT CONSTRUCTION. EFFECTIVE BMP'S MUST BE IN PLACE ON ALL EXPOSED SOIL AREAS WHERE NO CONSTRUCTION ACTIVITIES WILL OCCUR FOR A PERIOD OF 7 DAYS OR MORE. STABILIZING MUST OCCUR WITHIN 7 DAYS OF THE LAST CONSTRUCTION ACTIVITY.

STOCKPILES WILL BE KEPT IN AN ORDERLY FASHION IN AN AREA DESIGNATED BY THE EROSION CONTROL SUPERVISOR ON THE CONTRACTOR'S EROSION / SEDIMENT CONTROL SITE PLAN. THE STOCKPILES MUST HAVE PERIMETER CONTROL AND STABILIZATION IF SOIL STOCK PILES REMAIN FOR MORE THAN 7 DAYS. STABILIZATION OR COVERING THE PILE WITH PLASTIC OR GEO-TEXTILE MAY ALSO BE NECESSARY FOR CONTROLLING DUST.

PERMANENT STABILIZATION INCLUDES BUILDING CONSTRUCTION, PLACEMENT OF CURB AND GUTTER, PAVEMENT, AND FINAL LANDSCAPING AND GROUNDCOVER ACCORDING TO THE CONSTRUCTION DRAWINGS.

ANY REMOVALS SHALL BE LIMITED TO THAT WHICH IS REQUIRED AND IN AN ORDER THAT IS CONSISTENT WITH THE REMOVAL AND CONSTRUCTION SEQUENCE.

OTHER CONTROLS

WASTE MATERIALS:
ALL WASTE MATERIALS SHALL BE PROPERLY HANDLED, STORED, AND DISPOSED OF. CONSTRUCTION CHEMICALS AND CONCRETE WASHOUT WILL BE PROPERLY CONTROLLED TO PREVENT POLLUTANTS FROM ENTERING STORM WATER DISCHARGES.

SANITARY WASTE:
ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PROTABLE UNITS AS REQUIRED BY LOCAL REGULATION .

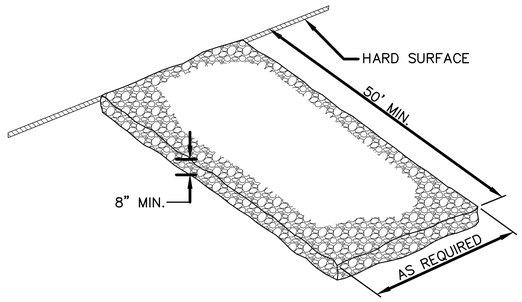
HAZARDOUS WASTE MATERIALS:
ALL HAZARDOUS WASTE MATERIALS SHALL BE STORED AND DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION. MATERIALS WITH THE POTENTIAL TO LEACH SHALL BE STORED UNDER COVER (E.G. PLASTIC SHEETING OR TEMPORARY ROOFS.) MATERIALS SHALL BE STORED IN A RESTRICTED ACCESS STORAGE AREA TO PREVENT VANDALISM. THE CONTRACTOR'S PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES AND THE CONTRACTOR'S EROSION CONTROL SUPERVISOR SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

OFF-SITE VEHICLE TRACKING:
PAVED STREETS ADJACENT TO THE PROJECT SITE SHALL BE KEPT CLEAN OF DEBRIS. STREETS SHALL BE SWEPT WITH A PICK-UP BROOM AS NECESSARY OR AS DIRECTED BY THE ENGINEER OR AHJ. DUMP TRUCKS HAULING MATERIAL TO AND FROM THE CONSTRUCTION AREA SHALL BE COVERED WITH A TARPAULIN. ALL VEHICLES EXITING THE SITE SHALL BE GUIDED AND REQUIRED TO GO THROUGH THE CONSTRUCTION EXIT.

DEWATERING AND BASIN DRAINING:
IF DEWATERING IS REQUIRED PRACTICES DESCRIBED IN THE EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT MANUAL SHOULD BE FOLLOWED. THE DEWATERING PLAN MUST INCLUDE BMPS TO PREVENT SEDIMENT TRANSPORT, EROSION, AND ADVERSE IMPACTS TO DOWNSTREAM RECEIVING WATERS. IN ADDITION, DEWATERING PLAN MUST INCLUDE ANY SPECIFIC CHEMICAL TREATMENTS THAT ARE USED. DISCHARGE OF STORM WATER AND GROUND WATER FROM CONSTRUCTION DEWATERING ACTIVITIES IS COVERED UNDER THE GENERAL PERMIT.

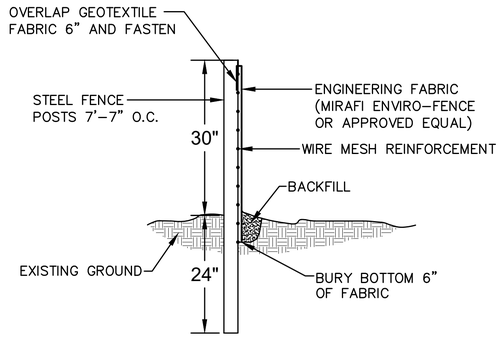
VEHICLE FUELING & MAINTENANCE:
WHENEVER POSSIBLE, VEHICLE REFUELING AND MAINTENANCE SHOULD NOT BE PERFORMED ON THE CONSTRUCTION SITE. HOWEVER, ANY VEHICLE REFUELING OR MAINTENANCE THAT MUST TAKE PLACE ON THE CONSTRUCTION SITE MUST HAVE PROPER SPILL PREVENTION CONTROLS IN PLACE PRIOR TO COMMENCING WORK.

EQUIPMENT AND VEHICLES MUST BE CLEANED REGULARLY TO PREVENT A BUILDUP OF OIL AND GREASE. BERMS, SANDBAGS, OR OTHER BARRIERS SHOUL



NOTES:
A GEOTEXTILE FABRIC SHALL BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.

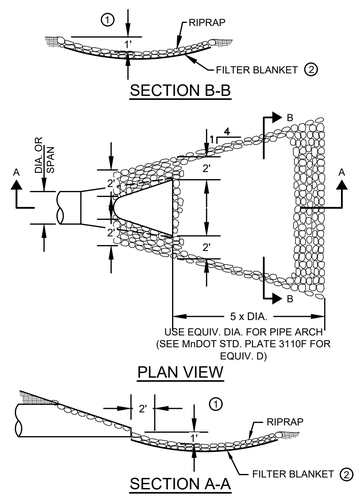
1 TEMPORARY ROCK CONSTRUCTION ENTRANCE
SCALE: NTS



NOTE:
PAID FOR AS SILT FENCE-HEAVY DUTY

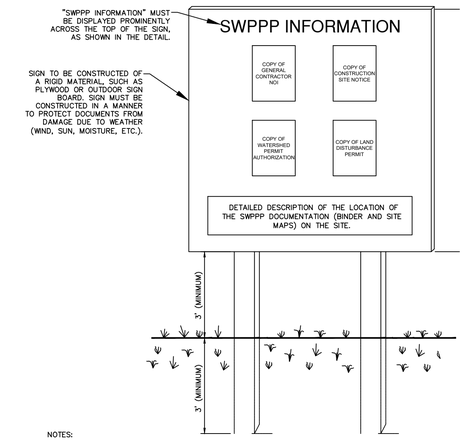
CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL EROSION CONTROL MATERIALS FOLLOWING TURF ESTABLISHMENT

2 SILT FENCE
SCALE: NTS



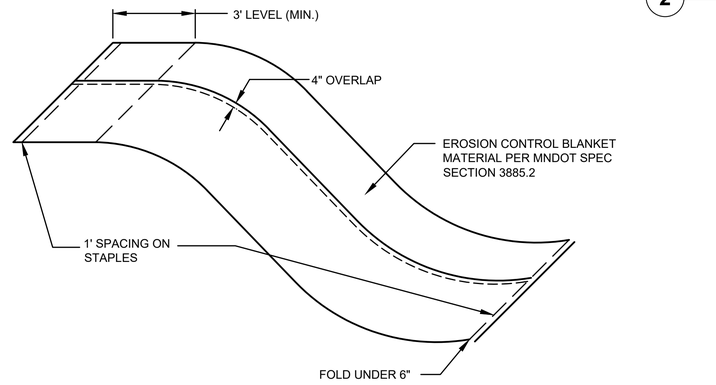
NOTES:
1) FOR PIPE GREATER THAN OR EQUAL TO 48", USE 2'0" FILTER BLANKET SHALL BE GEOTEXTILE FABRIC, MnDOT SPEC. 3601 UNLESS OTHERWISE SPECIFIED IN THE PLANS.
2) THE FABRIC SHOULD COVER THIS AREA OF RIPRAP AND EXTEND UNDER THE CULVERT APRON 3 FT.

3 RIPRAP AT STORM PIPE OUTLET
SCALE: NTS

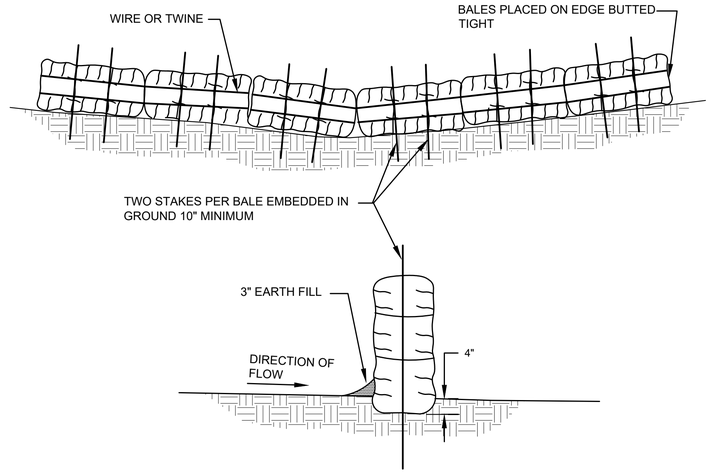


NOTES:
1. THE SWPPP INFORMATION SIGN MUST BE LOCATED IN A PROMINENT, PUBLICLY ACCESSIBLE LOCATION NEAR THE MAIN ENTRANCE OF THE SITE, SUCH THAT THE DOCUMENTATION CAN BE READ WITHOUT ACCESSING THE JOBSITE, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A TRAFFIC SAFETY HAZARD.
2. ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE PERMIT.
3. ALL PAGES OF NOTICES OF INTENT AND PERMIT AUTHORIZATIONS MUST BE POSTED. THE CONTRACTOR MAY UTILIZE ACCESSIBLE WATERPROOF FOLDERS TO STORE THESE DOCUMENTS IF IT WILL BE DIFFICULT TO POST ALL PAGES INDIVIDUALLY.
4. CONTRACTOR SHALL POST OTHER STORMWATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCIES.
5. SUBSEQUENT PERMIT MODIFICATION REQUESTS OR RENEWAL APPLICATIONS AND THEIR ASSOCIATED AUTHORIZATIONS OR RESPONSES SHALL BE POSTED ON THE SWPPP SIGN.
6. SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
7. CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWPPP INFORMATION SIGN.

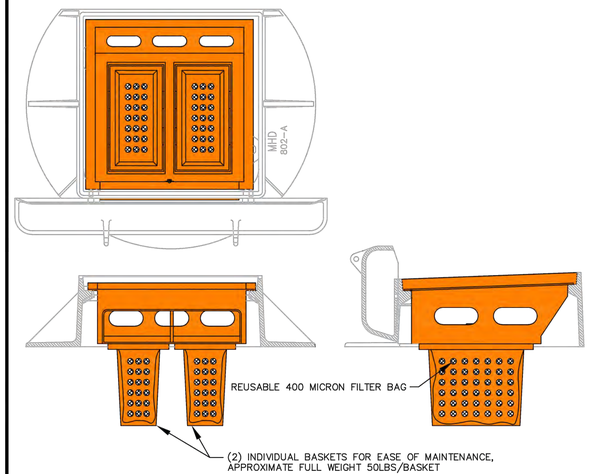
4 SWPPP INFORMATION SIGN
SCALE: NTS



5 EROSION CONTROL BLANKET
SCALE: NTS



6 ROCK DITCH CHECK
SCALE: NTS



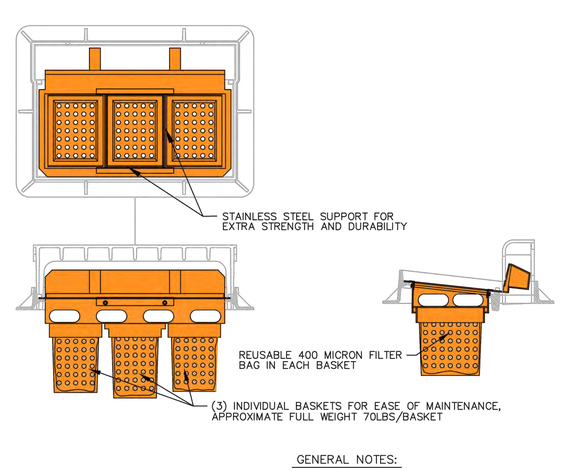
FILTER AREA	2.75 FT²
OVERFLOW AREA	0.4 FT²
MAXIMUM OVERFLOW RATE (@ 7" HEAD)	2.00 CFS
MAXIMUM OVERFLOW RATE (@ 13" HEAD)	2.90 CFS
BASKET WEIGHT (EMPTY)	1 LB
BASKET WEIGHT (FULL-APPROX.)	50 LBS

GENERAL NOTES:
1. PRODUCT DESIGN DOES NOT INTERFERE WITH LOAD BEARING CAPACITY OF FRAMES.
2. MADE OF UV RESISTANT MATERIAL.
3. DURABLE ECO-FRIENDLY HDPE PROVIDES A LIGHTWEIGHT AND STRONG PRODUCT THAT CAN EASILY BE RE-USED NEXT PROJECT.
4. FLOW RATES COMPARE TO OR EXCEED FLOW RATES OF COMMONLY USED GRATES.
5. BASKET DESIGN PROVIDES LARGER FILTER AREA AND PROVIDES EASY CLEANING, REDUCING OVERFLOW INSTANCES AND SEDIMENT LOAD ON THE SEWER SYSTEM.
6. DESIGNED TO FIT NEENAH R-3250-006 (Mndot 802 OR 805).

COON RAPIDS Minnesota
City of Coon Rapids, 11155 Robinson Drive, Coon Rapids, MN 55433-3761, Tel: 763-755-2880, Fax: 763-767-6481, www.coonrapidsmn.gov

INFRASAFE 2'X2' INLET PROTECTION DEVICE

DRAWN: R.L.S. | DATE: 3/4/2019 | SCALE: NONE | PLATE NO. EC-3



FILTER AREA	6.5 FT²
OVERFLOW AREA	0.6 FT²
MAXIMUM OVERFLOW RATE (@ 7" HEAD)	3.00 CFS
MAXIMUM OVERFLOW RATE (@ 13" HEAD)	4.00 CFS
BASKET WEIGHT (EMPTY)	1 LB
BASKET WEIGHT (FULL-APPROX.)	70 LBS

GENERAL NOTES:
1. PRODUCT DESIGN DOES NOT INTERFERE WITH LOAD BEARING CAPACITY OF FRAMES.
2. MADE OF UV RESISTANT MATERIAL.
3. DURABLE ECO-FRIENDLY HDPE PROVIDES A LIGHTWEIGHT AND STRONG PRODUCT THAT CAN EASILY BE RE-USED NEXT PROJECT.
4. FLOW RATES COMPARE TO OR EXCEED FLOW RATES OF COMMONLY USED GRATES.
5. BASKET DESIGN PROVIDES LARGER FILTER AREA AND PROVIDES EASY CLEANING, REDUCING OVERFLOW INSTANCES AND SEDIMENT LOAD ON THE SEWER SYSTEM.
6. DESIGNED TO FIT NEENAH R-3067 OR R-3290 SERIES.

COON RAPIDS Minnesota
City of Coon Rapids, 11155 Robinson Drive, Coon Rapids, MN 55433-3761, Tel: 763-755-2880, Fax: 763-767-6481, www.coonrapidsmn.gov

INFRASAFE 2'X3' INLET PROTECTION DEVICE

DRAWN: R.L.S. | DATE: 3/1/2019 | SCALE: NONE | PLATE NO. EC-2

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
DATE: 06/30/2022 | MN LIC. NO. 58751

KHA PROJECT 168543002
DATE 04/27/2022
SCALE AS SHOWN
DESIGNED BY CCK
DRAWN BY CCK
CHECKED BY CJF

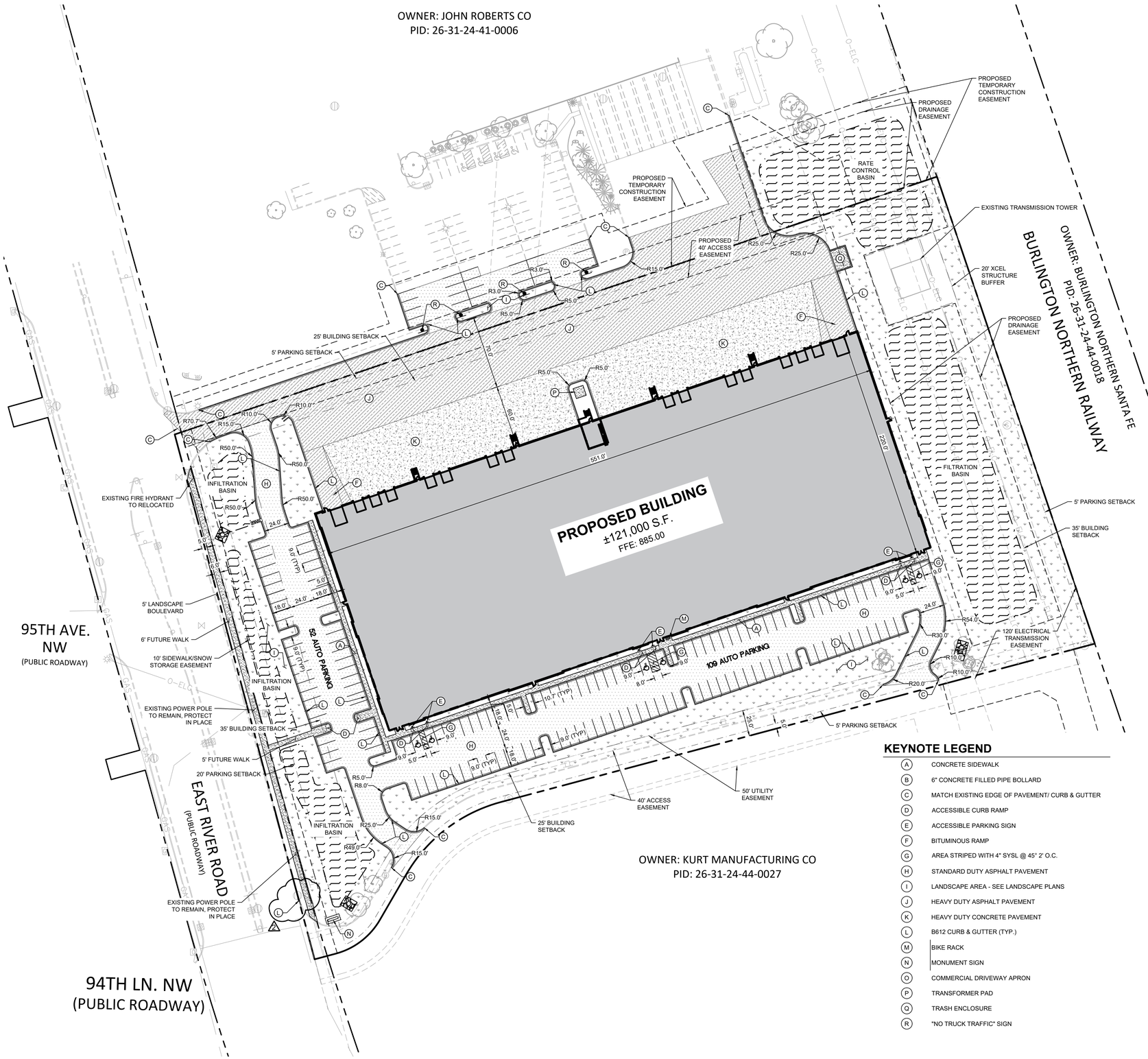
EROSION AND SEDIMENT CONTROL DETAILS

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

SHEET NUMBER
C304

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C3-EROS DETAILS.dwg May 19, 2022 - 8:21am
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



KEYNOTE LEGEND

A	CONCRETE SIDEWALK
B	6" CONCRETE FILLED PIPE BOLLARD
C	MATCH EXISTING EDGE OF PAVEMENT/ CURB & GUTTER
D	ACCESSIBLE CURB RAMP
E	ACCESSIBLE PARKING SIGN
F	BITUMINOUS RAMP
G	AREA STRIPED WITH 4" SYSL @ 45° 2' O.C.
H	STANDARD DUTY ASPHALT PAVEMENT
I	LANDSCAPE AREA - SEE LANDSCAPE PLANS
J	HEAVY DUTY ASPHALT PAVEMENT
K	HEAVY DUTY CONCRETE PAVEMENT
L	B612 CURB & GUTTER (TYP.)
M	BIKE RACK
N	MONUMENT SIGN
O	COMMERCIAL DRIVEWAY APRON
P	TRANSFORMER PAD
Q	TRASH ENCLOSURE
R	"NO TRUCK TRAFFIC" SIGN

LEGEND

- PROPERTY LINE
- PROPOSED FENCE
- SETBACK LINE
- RETAINING WALL
- PROPOSED CURB AND GUTTER
- PROPOSED HEAVY DUTY ASPHALT
- PROPOSED STANDARD DUTY ASPHALT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED STORMWATER MANAGEMENT AREA
- PROPOSED CONCRETE SIDEWALK

PROPERTY SUMMARY

COON RAPIDS INDUSTRIAL	
TOTAL PROPERTY AREA	336,080 SF (7.7 AC)
PROPOSED IMPERVIOUS AREA	242,368 SF (5.5 AC)
PROPOSED PERVIOUS AREA	106,914 SF (2.5 AC)
TOTAL DISTURBED AREA	349,282 SF (8.0 AC)

ZONING SUMMARY

EXISTING ZONING	INDUSTRIAL (I)
PROPOSED ZONING	INDUSTRIAL (I)
PARKING SETBACKS	SIDE/REAR = 5' ROAD = 20'
BUILDING SETBACKS	FRONT = 35' SIDE = 25' REAR = 25'

BUILDING DATA SUMMARY

AREAS	
PROPOSED PROPERTY	336,081 SF (7.7 AC)
BUILDING AREA	121,000 SF (36% OF TOTAL PROPERTY AREA)
PARKING	
REQUIRED PARKING	121 SPACES @ 1/1,000 SF
PROPOSED PARKING	161 SPACES
ADA STALLS REQ'D / PROVIDED	6 STALLS / 6 STALLS

SITE PLAN NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
3. ALL INNER CURBED RADII ARE TO BE 3' AND OUTER CURBED RADII ARE TO BE 10' UNLESS OTHERWISE NOTED. STRIPED RADII ARE TO BE 5'.
4. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
7. SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY BY BOLTON AND MENK, DATED 12/21/2021.

   KIMLEY-HORN ASSUMES NO LIABILITY FOR ANY ERRORS, INACCURACIES, OR OMISSIONS CONTAINED THEREIN.
8. TOTAL LAND AREA IS 7.7 ACRES.
9. PYLON / MONUMENT SIGNS SHALL BE CONSTRUCTED BY OTHERS. SIGNS ARE SHOWN FOR GRAPHICAL & INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY SIZE, LOCATION AND ANY REQUIRED PERMITS NECESSARY FOR THE CONSTRUCTION OF THE PYLON / MONUMENT SIGN.
10. CONTRACTOR SHALL REFERENCE ARCH / MEP PLANS FOR SITE LIGHTING AND ELECTRICAL PLAN.
11. NO PROPOSED LANDSCAPING SUCH AS TREES OR SHRUBS, ABOVE AND UNDERGROUND STRUCTURES, OR OTHER OBSTRUCTIONS SHALL BE LOCATED WITHIN EXISTING OR PROPOSED UTILITY EASEMENTS AND RIGHTS OF WAY UNLESS SPECIFICALLY NOTED ON PLANS OTHERWISE.
12. REFER TO FINAL PLAT OR ALTA SURVEY FOR EXACT LOT AND PROPERTY BOUNDARY DIMENSIONS.
13. ALL AREAS ARE ROUNDED TO THE NEAREST SQUARE FOOT.
14. ALL DIMENSIONS ARE ROUNDED TO THE NEAREST TENTH FOOT.
15. ALL PARKING STALLS TO BE 9' IN WIDTH AND 18' IN LENGTH UNLESS OTHERWISE INDICATED.
16. FOR OFFSITE IMPROVEMENTS, SEE SHEET C504.

NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
DATE: 06/30/2022 LIC. NO. 58751 MN

KHA PROJECT	168543002
DATE	04/27/2022
SCALE	AS SHOWN
DESIGNED BY	CCK
DRAWN BY	CCK
CHECKED BY	CJF

SITE PLAN

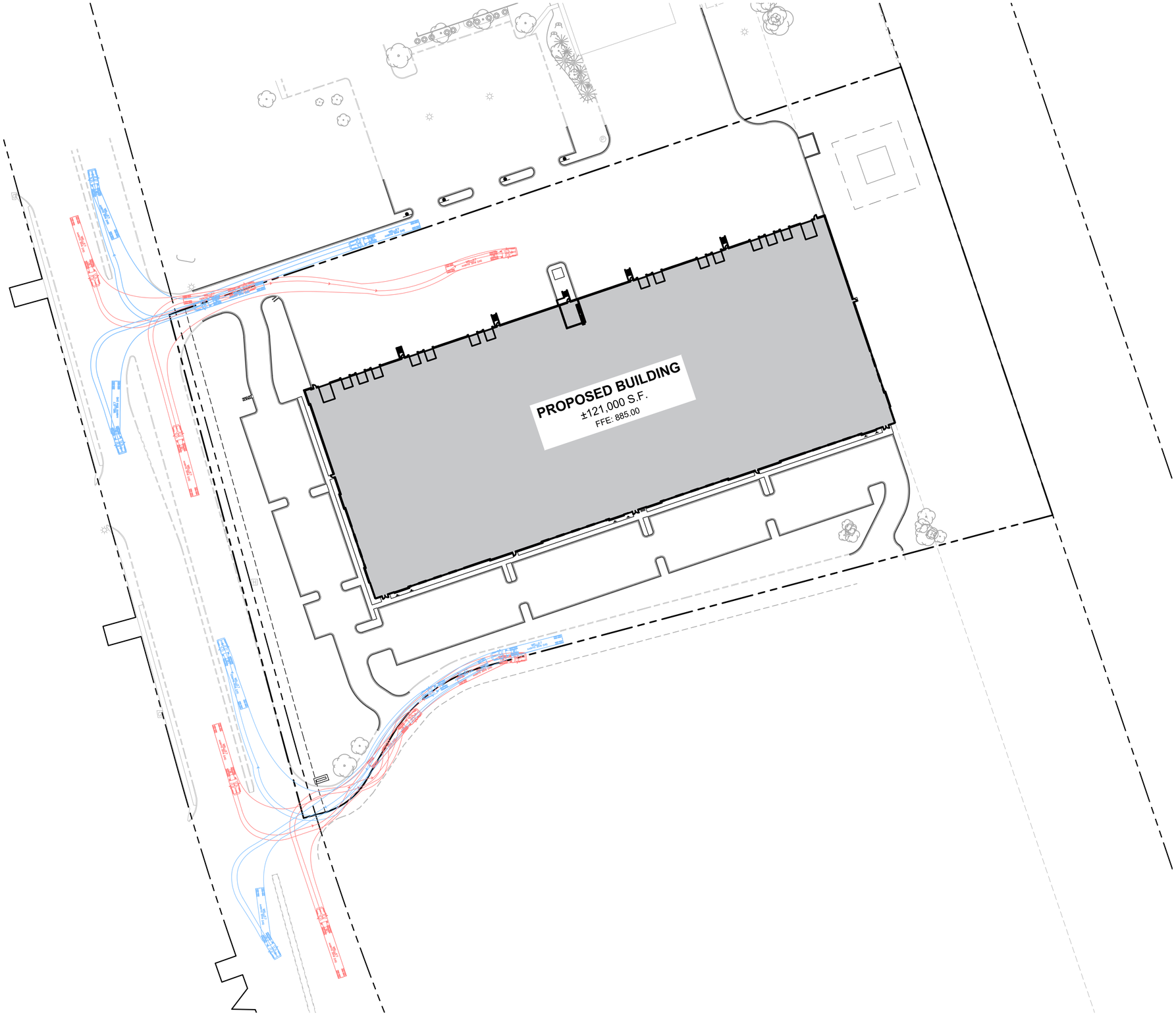
COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

SHEET NUMBER
C400

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C4-SITE PLAN.dwg May 19, 2022 - 8:21am
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

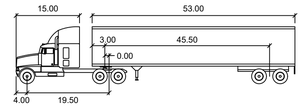
K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C4.1-TRUCK TURNING.dwg May 19, 2022 - 8:21am

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

- PROPERTY LINE
- PROPOSED FENCE
- SETBACK LINE
- PROPOSED CURB AND GUTTER



WB-67

feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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

CALEB J. FLAKE
DATE: 06/30/2022 | MN LIC. NO. 58751

KHA PROJECT 168543002
DATE 04/27/2022
SCALE AS SHOWN
DESIGNED BY CCK
DRAWN BY CCK
CHECKED BY CJF

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

TRUCK TURNING PLAN

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

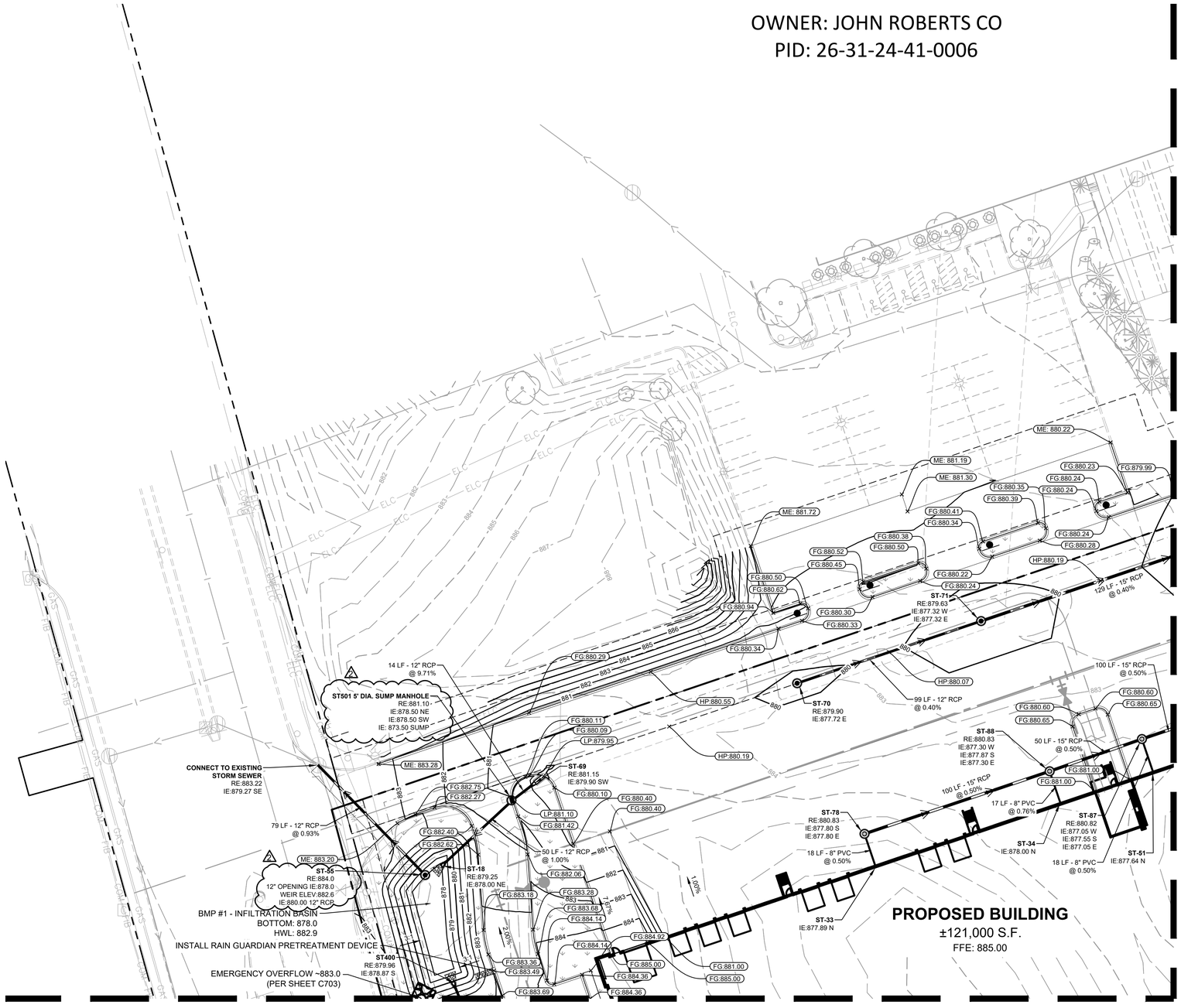
SHEET NUMBER
C401

NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C5-GRADING PLAN 30scale.dwg May 19, 2022 - 8:21am

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

- PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- 928 EXISTING CONTOUR
- 925 PROPOSED CONTOUR
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
- PROPOSED STORM SEWER CLENOUT
- PROPOSED FLARED END SECTION
- PROPOSED RIPRAP
- PROPOSED STORM SWALE
- PROPOSED DRAINTILE
- PROPOSED STORM SEWER
- 100.00 PROPOSED SPOT ELEVATION
- HP:0.0 PROPOSED HIGH POINT ELEVATION
- LP:0.0 PROPOSED LOW POINT ELEVATION
- G:0.00 PROPOSED GUTTER ELEVATION
- T:0.00 PROPOSED TOP OF CURB ELEVATION
- FG:0.0 PROPOSED SPOT ELEVATION
- ME:0.0 MATCH EXISTING ELEVATION
- EOF:0.0 PROPOSED EMERGENCY OVERFLOW
- 0.0% PROPOSED DRAINAGE DIRECTION
- 0.00% PROPOSED ADA SLOPE

GRADING PLAN NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF COON RAPIDS, SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
2. CONTRACTOR TO CALL GOPHER STATE CALL ONE @ 1-800-252-1166 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
3. STORM SEWER PIPE SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76
   HDPE: 0" - 10" PER AASHTO M-252
   HDPE: 12" OR GREATER PER ASTM F-2306
   PVC SCH. 40 PER ASTM D-1785
   STORM SEWER FITTINGS SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76, JOINTS PER ASTM C-361, C-990, AND C-443
   HDPE PER ASTM 3212
   PVC PER ASTM D-3034, JOINTS PER ASTM D-3212
4. CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OR EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
5. SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
7. CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
8. GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.
9. ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
10. REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.
11. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES TO PROVIDE POSITIVE DRAINAGE.
12. INSTALL A MINIMUM OF 4" CLASS 5 AGGREGATE BASE UNDER CURB AND GUTTER AND CONCRETE SIDEWALKS.
13. UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 4" OF TOPSOIL.
14. ALL SPOT ELEVATIONS/CONTOURS ARE TO GUTTER / FLOW LINE UNLESS OTHERWISE NOTED.
15. GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2% . IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
16. MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.
17. CONTRACTOR TO PROVIDE 3" INSULATION BY 5' WIDE CENTERED ON STORM PIPE IF LESS THAN 4' OF COVER IN PAVEMENT AREAS AND LESS THAN 3' OF COVER IN LANDSCAPE AREAS.
18. ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT INCLUDING MANHOLE CONNECTIONS.
19. ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
20. MAINTAIN A MINIMUM OF 1.25% SLOPE IN BITUMINOUS PAVEMENT AREAS, 0.5% SLOPE IN CONCRETE PAVEMENT AREAS.
21. CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL CURB" WHERE PAVEMENT DRAINS TOWARD GUTTER, AND "OUTFALL" CURB WHERE PAVEMENT DRAINS AWAY FROM GUTTER.
22. GRADED PERVIOUS AREAS SHALL BE DECOMPACTED USING RIP-TYPE TILLAGE EQUIPMENT TO A MINIMUM DEPTH OF 12 INCHES TO PREVENT COMPACTION OF THE SOILS. DURING TILLING, INSTALLATION MUST STOP IF SMEARING AND COMPACTION OCCURS.
23. ALL STORMWATER MANHOLES TO BE 4' DIA. UNLESS NOTED OTHERWISE.

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
MN LIC. NO. 58751
DATE: 06/30/2022

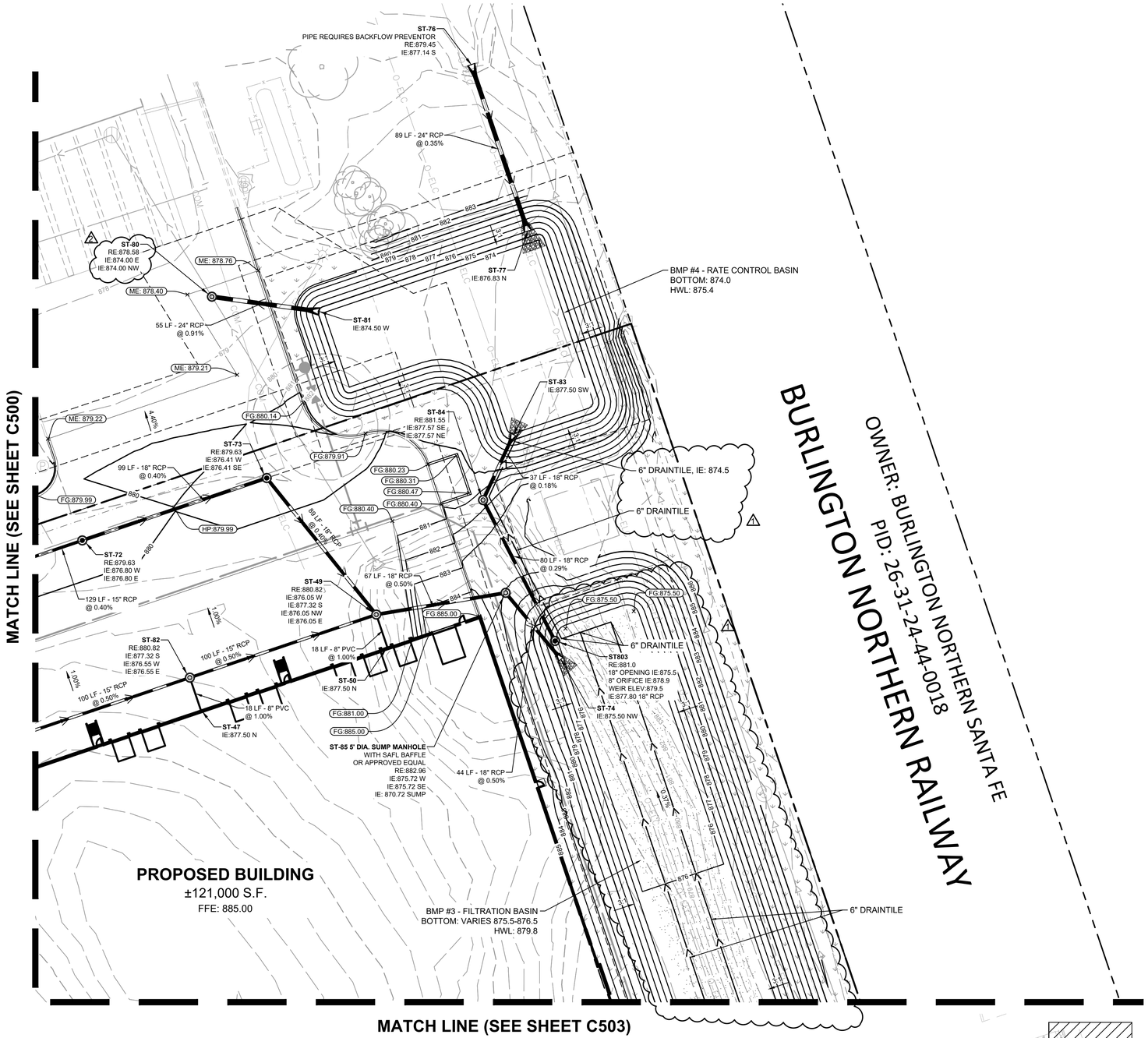
KHA PROJECT	
168543002	
DATE	
04/27/2022	
SCALE	AS SHOWN
DESIGNED BY	CCK
DRAWN BY	CCK
CHECKED BY	CJF

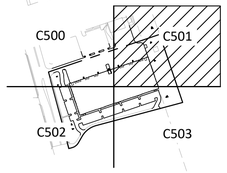
ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

GRADING PLAN

SHEET NUMBER
C500





VICINITY MAP
N.T.S.

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
- PROPOSED STORM SEWER CLENOUT
- PROPOSED FLARED END SECTION
- PROPOSED RIPRAP
- PROPOSED STORM SWALE
- PROPOSED DRAINTILE
- PROPOSED STORM SEWER
- PROPOSED SPOT ELEVATION
- PROPOSED HIGH POINT ELEVATION
- PROPOSED LOW POINT ELEVATION
- PROPOSED GUTTER ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED SPOT ELEVATION
- MATCH EXISTING ELEVATION
- PROPOSED EMERGENCY OVERFLOW
- PROPOSED DRAINAGE DIRECTION
- PROPOSED ADA SLOPE

GRADING PLAN NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF COON RAPIDS, SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
2. CONTRACTOR TO CALL GOPHER STATE CALL ONE @ 1-800-252-1166 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
3. STORM SEWER PIPE SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76
   HDPE: 0" - 10" PER AASHTO M-252
   HDPE: 12" OR GREATER PER ASTM F-2306
   PVC SCH. 40 PER ASTM D-1785
   STORM SEWER FITTINGS SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76, JOINTS PER ASTM C-361, C-990, AND C-443
   HDPE PER ASTM 3212
   PVC PER ASTM D-3034, JOINTS PER ASTM D-3212
4. CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OR EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
5. SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
7. CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
8. GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.
9. ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
10. REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.
11. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES TO PROVIDE POSITIVE DRAINAGE.
12. INSTALL A MINIMUM OF 4" CLASS 5 AGGREGATE BASE UNDER CURB AND GUTTER AND CONCRETE SIDEWALKS.
13. UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 4" OF TOPSOIL.
14. ALL SPOT ELEVATIONS/CONTOURS ARE TO GUTTER / FLOW LINE UNLESS OTHERWISE NOTED.
15. GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2% . IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%, IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
16. MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.
17. CONTRACTOR TO PROVIDE 3" INSULATION BY 5' WIDE CENTERED ON STORM PIPE IF LESS THAN 4' OF COVER IN PAVEMENT AREAS AND LESS THAN 3' OF COVER IN LANDSCAPE AREAS.
18. ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT INCLUDING MANHOLE CONNECTIONS.
19. ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
20. MAINTAIN A MINIMUM OF 1.25% SLOPE IN BITUMINOUS PAVEMENT AREAS, 0.5% SLOPE IN CONCRETE PAVEMENT AREAS.
21. CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL CURB" WHERE PAVEMENT DRAINS TOWARD GUTTER, AND "OUTFALL" CURB WHERE PAVEMENT DRAINS AWAY FROM GUTTER.
22. GRADED PERVIOUS AREAS SHALL BE DECOMPACTED USING RIP-TYPE TILLAGE EQUIPMENT TO A MINIMUM DEPTH OF 12 INCHES TO PREVENT COMPACTION OF THE SOILS. DURING TILLING, INSTALLATION MUST STOP IF SMEARING AND COMPACTION OCCURS.
23. ALL STORMWATER MANHOLES TO BE 4' DIA. UNLESS NOTED OTHERWISE.

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
DATE: 06/30/2022
MN LIC. NO. 58751

KHA PROJECT 168543002
DATE 04/27/2022
SCALE AS SHOWN
DESIGNED BY CCK
DRAWN BY CCK
CHECKED BY CJF

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

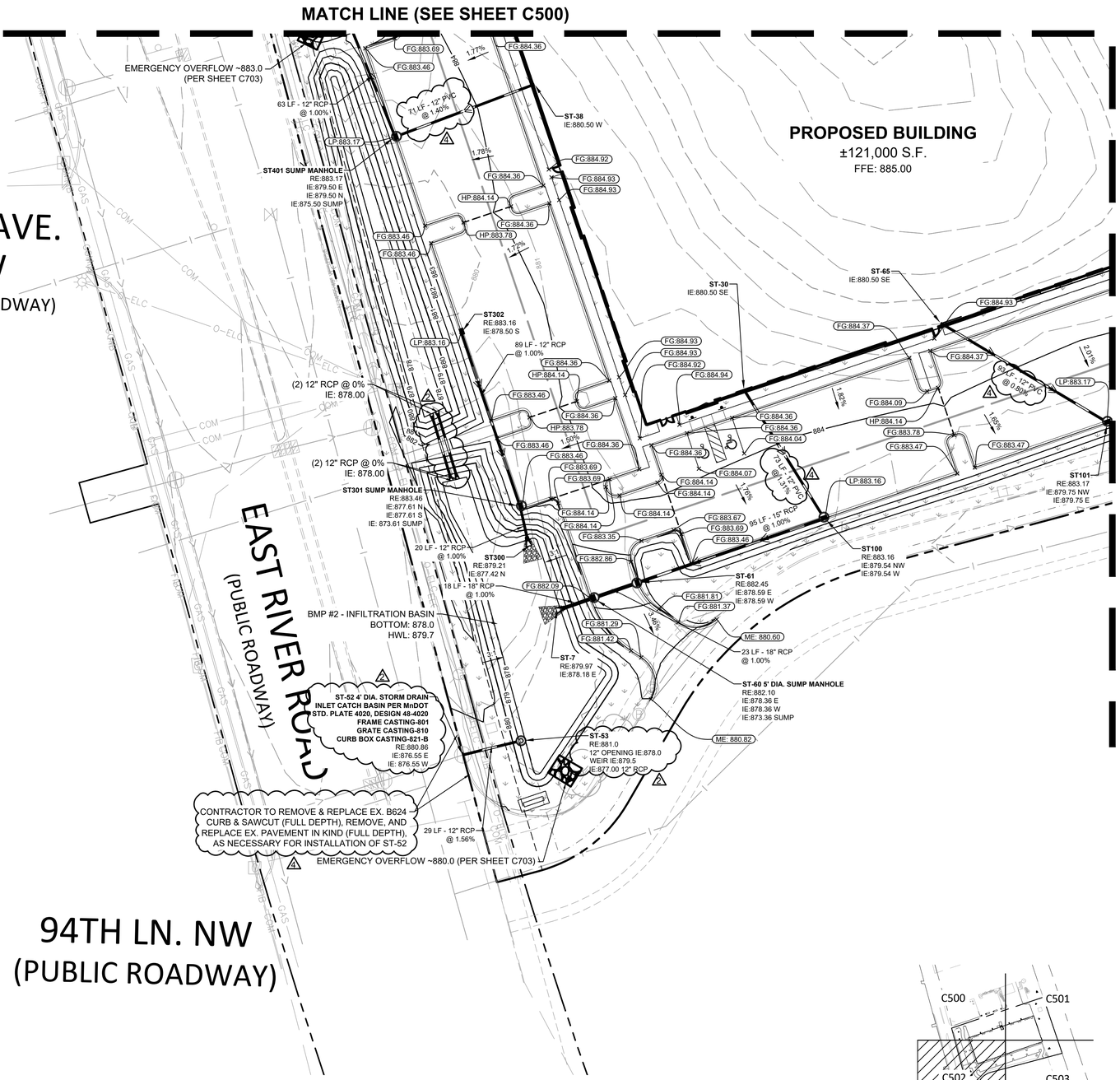
GRADING PLAN

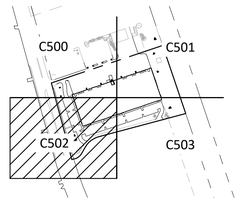
SHEET NUMBER
C501

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C5-GRADING PLAN 30scale.dwg May 19, 2022 - 8:21am
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

K:\TWC_LDE\VScannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C5-GRADING PLAN 30scale.dwg July 21, 2022 - 3:49pm

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.





VICINITY MAP
N.T.S.

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- 928 EXISTING CONTOUR
- 925 PROPOSED CONTOUR
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
- PROPOSED STORM SEWER CLENOUT
- PROPOSED FLARED END SECTION
- PROPOSED RIPRAP
- PROPOSED STORM SWALE
- PROPOSED DRAINTILE
- PROPOSED STORM SEWER
- 100.00 PROPOSED SPOT ELEVATION
- HP:0.0 PROPOSED HIGH POINT ELEVATION
- LP:0.0 PROPOSED LOW POINT ELEVATION
- G:0.00 PROPOSED GUTTER ELEVATION
- T:0.00 PROPOSED TOP OF CURB ELEVATION
- FG:0.0 PROPOSED SPOT ELEVATION
- ME:0.0 MATCH EXISTING ELEVATION
- EOF:0.0 PROPOSED EMERGENCY OVERFLOW
- 0.0% PROPOSED DRAINAGE DIRECTION
- 0.00% PROPOSED ADA SLOPE

GRADING PLAN NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF COON RAPIDS, SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
2. CONTRACTOR TO CALL GOPHER STATE CALL ONE @ 1-800-252-1166 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
3. STORM SEWER PIPE SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76
   HDPE: 0" - 10" PER AASHTO M-252
   HDPE: 12" OR GREATER PER ASTM F-2306
   PVC SCH. 40 PER ASTM D-1785
   STORM SEWER FITTINGS SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76, JOINTS PER ASTM C-361, C-990, AND C-443
   HDPE PER ASTM 3212
   PVC PER ASTM D-3034, JOINTS PER ASTM D-3212
4. CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OR EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
5. SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
7. CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
8. GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.
9. ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
10. REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.
11. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES TO PROVIDE POSITIVE DRAINAGE.
12. INSTALL A MINIMUM OF 4" CLASS 5 AGGREGATE BASE UNDER CURB AND GUTTER AND CONCRETE SIDEWALKS.
13. UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 4" OF TOPSOIL.
14. ALL SPOT ELEVATIONS/CONTOURS ARE TO GUTTER / FLOW LINE UNLESS OTHERWISE NOTED.
15. GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2%. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%, IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
16. MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.
17. CONTRACTOR TO PROVIDE 3" INSULATION BY 5' WIDE CENTERED ON STORM PIPE IF LESS THAN 4' OF COVER IN PAVEMENT AREAS AND LESS THAN 3' OF COVER IN LANDSCAPE AREAS.
18. ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT INCLUDING MANHOLE CONNECTIONS.
19. ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
20. MAINTAIN A MINIMUM OF 1.25% SLOPE IN BITUMINOUS PAVEMENT AREAS, 0.5% SLOPE IN CONCRETE PAVEMENT AREAS.
21. CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL CURB" WHERE PAVEMENT DRAINS TOWARD GUTTER, AND "OUTFALL" CURB WHERE PAVEMENT DRAINS AWAY FROM GUTTER.
22. GRADED PERVIOUS AREAS SHALL BE DECOMPACTED USING RIP-TYPE TILLAGE EQUIPMENT TO A MINIMUM DEPTH OF 12 INCHES TO PREVENT COMPACTION OF THE SOILS. DURING TILLING, INSTALLATION MUST STOP IF SMEARING AND COMPACTION OCCURS.
23. ALL STORMWATER MANHOLES TO BE 4' DIA. UNLESS NOTED OTHERWISE.
24. CONTRACTOR TO REPAIR ANY PAVEMENT AND/OR CURB ALONG EAST RIVER ROAD THAT IS DAMAGED DURING WORK PERFORMED BY THE CONTRACTOR.

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK
3	REVISED IN RESPONSE TO RFI #3 & #4	05/25/2022	CCK
4	REV'D PER COUNTY COMMENTS & RFI	06/20/2022	CCK

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
DATE: 06/30/2022 LIC. NO. 58751 MN

KHA PROJECT 168543002
DATE 04/27/2022
SCALE AS SHOWN
DESIGNED BY CCK
DRAWN BY CCK
CHECKED BY CJF

COON RAPIDS INDUSTRIAL

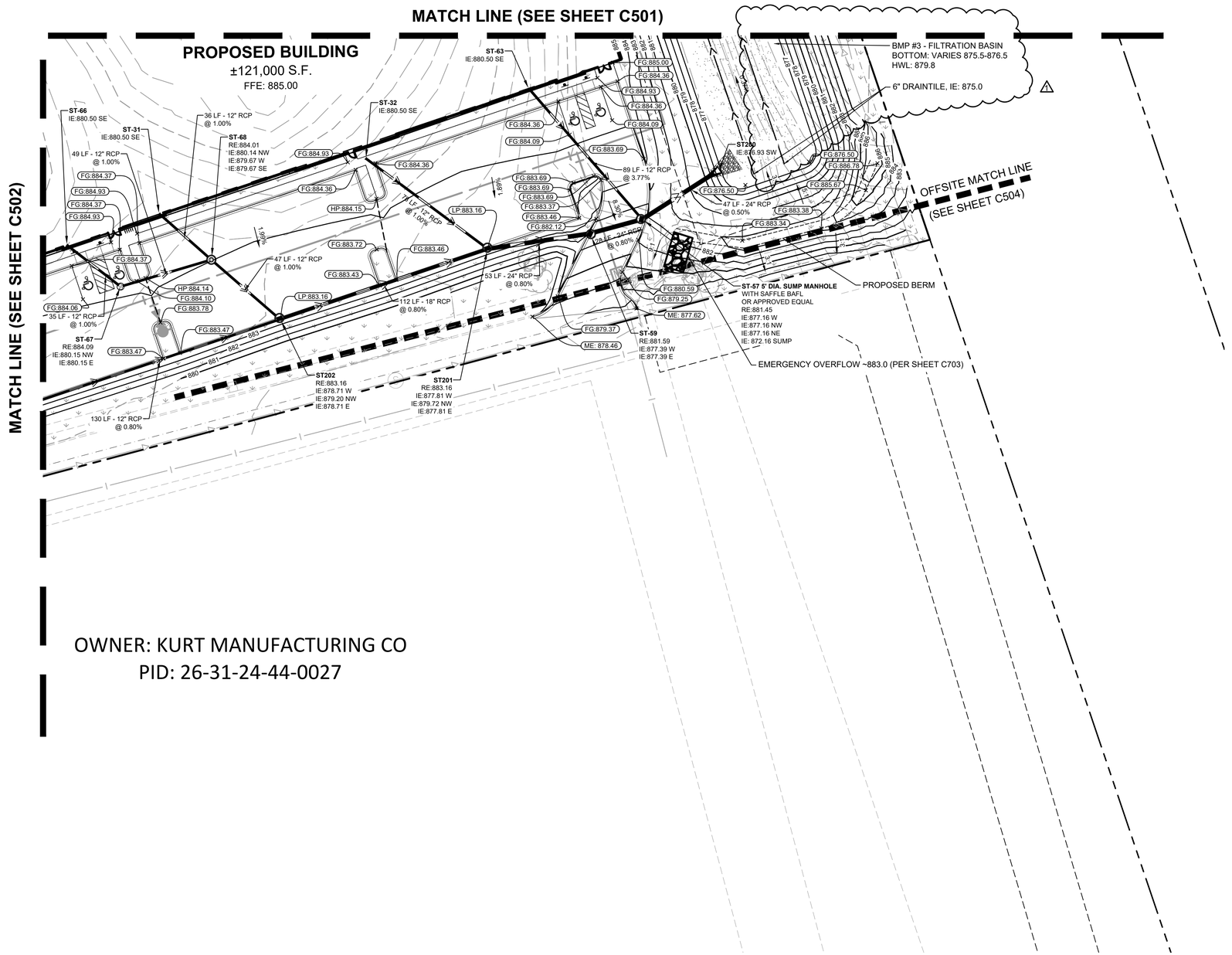
PREPARED FOR

SCANNELL

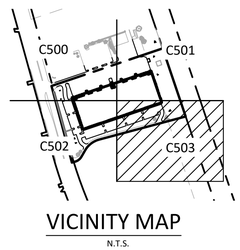
COON RAPIDS MN

GRADING PLAN

SHEET NUMBER
C502



OWNER: KURT MANUFACTURING CO
PID: 26-31-24-44-0027



VICINITY MAP
N.T.S.

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
- PROPOSED STORM SEWER CLENOUT
- PROPOSED FLARED END SECTION
- PROPOSED RIPRAP
- PROPOSED STORM SWALE
- PROPOSED DRAINTILE
- PROPOSED STORM SEWER
- PROPOSED SPOT ELEVATION
- PROPOSED HIGH POINT ELEVATION
- PROPOSED LOW POINT ELEVATION
- PROPOSED GUTTER ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED SPOT ELEVATION
- MATCH EXISTING ELEVATION
- PROPOSED EMERGENCY OVERFLOW
- PROPOSED DRAINAGE DIRECTION
- PROPOSED ADA SLOPE

GRADING PLAN NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF COON RAPIDS, SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
2. CONTRACTOR TO CALL GOPHER STATE CALL ONE @ 1-800-252-1166 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
3. STORM SEWER PIPE SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76
   HDPE: 0" - 10" PER AASHTO M-252
   HDPE: 12" OR GREATER PER ASTM F-2306
   PVC SCH. 40 PER ASTM D-1785
   STORM SEWER FITTINGS SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76, JOINTS PER ASTM C-361, C-990, AND C-443
   HDPE PER ASTM 3212
   PVC PER ASTM D-3034, JOINTS PER ASTM D-3212
4. CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OR EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
5. SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
7. CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
8. GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.
9. ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
10. REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.
11. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES TO PROVIDE POSITIVE DRAINAGE.
12. INSTALL A MINIMUM OF 4" CLASS 5 AGGREGATE BASE UNDER CURB AND GUTTER AND CONCRETE SIDEWALKS.
13. UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 4" OF TOPSOIL.
14. ALL SPOT ELEVATIONS/CONTOURS ARE TO GUTTER / FLOW LINE UNLESS OTHERWISE NOTED.
15. GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2% . IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
16. MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.
17. CONTRACTOR TO PROVIDE 3" INSULATION BY 5' WIDE CENTERED ON STORM PIPE IF LESS THAN 4' OF COVER IN PAVEMENT AREAS AND LESS THAN 3' OF COVER IN LANDSCAPE AREAS.
18. ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT INCLUDING MANHOLE CONNECTIONS.
19. ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
20. MAINTAIN A MINIMUM OF 1.25% SLOPE IN BITUMINOUS PAVEMENT AREAS, 0.5% SLOPE IN CONCRETE PAVEMENT AREAS.
21. CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL CURB" WHERE PAVEMENT DRAINS TOWARD GUTTER, AND "OUTFALL" CURB WHERE PAVEMENT DRAINS AWAY FROM GUTTER.
22. GRADED PERVIOUS AREAS SHALL BE DECOMPACTED USING RIP-TYPE TILLAGE EQUIPMENT TO A MINIMUM DEPTH OF 12 INCHES TO PREVENT COMPACTION OF THE SOILS. DURING TILLING, INSTALLATION MUST STOP IF SMEARING AND COMPACTION OCCURS.
23. ALL STORMWATER MANHOLES TO BE 4' DIA. UNLESS NOTED OTHERWISE.

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
MN LIC. NO. 58751
DATE: 06/30/2022

KHA PROJECT	168543002
DATE	04/27/2022
SCALE	AS SHOWN
DESIGNED BY	CCK
DRAWN BY	CCK
CHECKED BY	CJF

GRADING PLAN

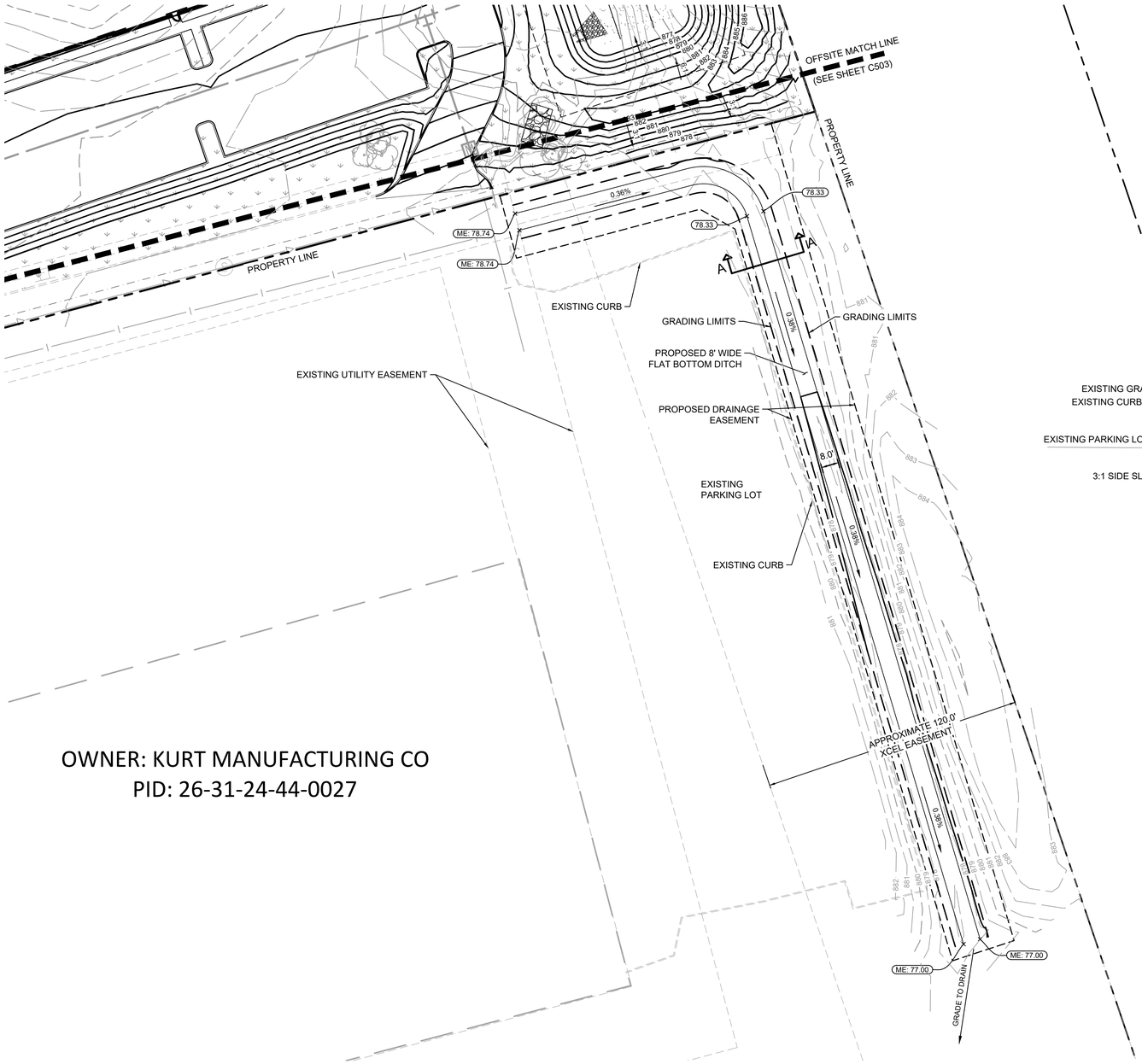
COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

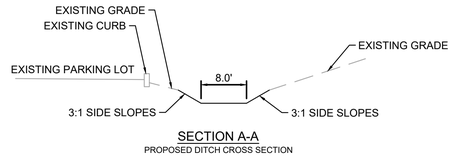
SHEET NUMBER
C503

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C5-GRADING PLAN 30scale.dwg May 19, 2022 - 8:21am
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C5-GRADING PLAN - Kurt Manufacturing GIS .dwg May 19, 2022 - 8:21am

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.





SECTION A-A
PROPOSED DITCH CROSS SECTION

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
- PROPOSED STORM SEWER CLENOUT
- PROPOSED FLARED END SECTION
- PROPOSED RIPRAP
- PROPOSED STORM SWALE
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER
- PROPOSED SPOT ELEVATION
- PROPOSED HIGH POINT ELEVATION
- PROPOSED LOW POINT ELEVATION
- PROPOSED GUTTER ELEVATION
- PROPOSED TOP OF CURB ELEVATION
- PROPOSED FLUSH PAVEMENT ELEVATION
- MATCH EXISTING ELEVATION
- PROPOSED EMERGENCY OVERFLOW
- PROPOSED DRAINAGE DIRECTION

GRADING PLAN NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF COON RAPIDS, SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
2. CONTRACTOR TO CALL GOPHER STATE CALL ONE @ 1-800-252-1166 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
3. STORM SEWER PIPE SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76
   HDPE: 0" - 10" PER AASHTO M-252
   HDPE: 12" OR GREATER PER ASTM F-2306
   PVC SCH. 40 PER ASTM D-1785
   STORM SEWER FITTINGS SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76, JOINTS PER ASTM C-361, C-990, AND C-443
   HDPE PER ASTM 3212
   PVC PER ASTM D-3034, JOINTS PER ASTM D-3212
4. CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OR EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
5. SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
7. CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
8. GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.
9. ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
10. REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.
11. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES TO PROVIDE POSITIVE DRAINAGE.
12. INSTALL A MINIMUM OF 4" CLASS 5 AGGREGATE BASE UNDER CURB AND GUTTER AND CONCRETE SIDEWALKS.
13. UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 4" OF TOPSOIL.
14. ALL SPOT ELEVATIONS/CONTOURS ARE TO GUTTER / FLOW LINE UNLESS OTHERWISE NOTED.
15. GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2% . IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
16. MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.
17. CONTRACTOR TO PROVIDE 3" INSULATION BY 5' WIDE CENTERED ON STORM PIPE IF LESS THAN 4' OF COVER IN PAVEMENT AREAS AND LESS THAN 3' OF COVER IN LANDSCAPE AREAS.
18. ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT INCLUDING MANHOLE CONNECTIONS.
19. ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
20. MAINTAIN A MINIMUM OF 1.25% SLOPE IN BITUMINOUS PAVEMENT AREAS, 0.5% SLOPE IN CONCRETE PAVEMENT AREAS.
21. CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL CURB" WHERE PAVEMENT DRAINS TOWARD GUTTER, AND "OUTFALL" CURB WHERE PAVEMENT DRAINS AWAY FROM GUTTER.

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

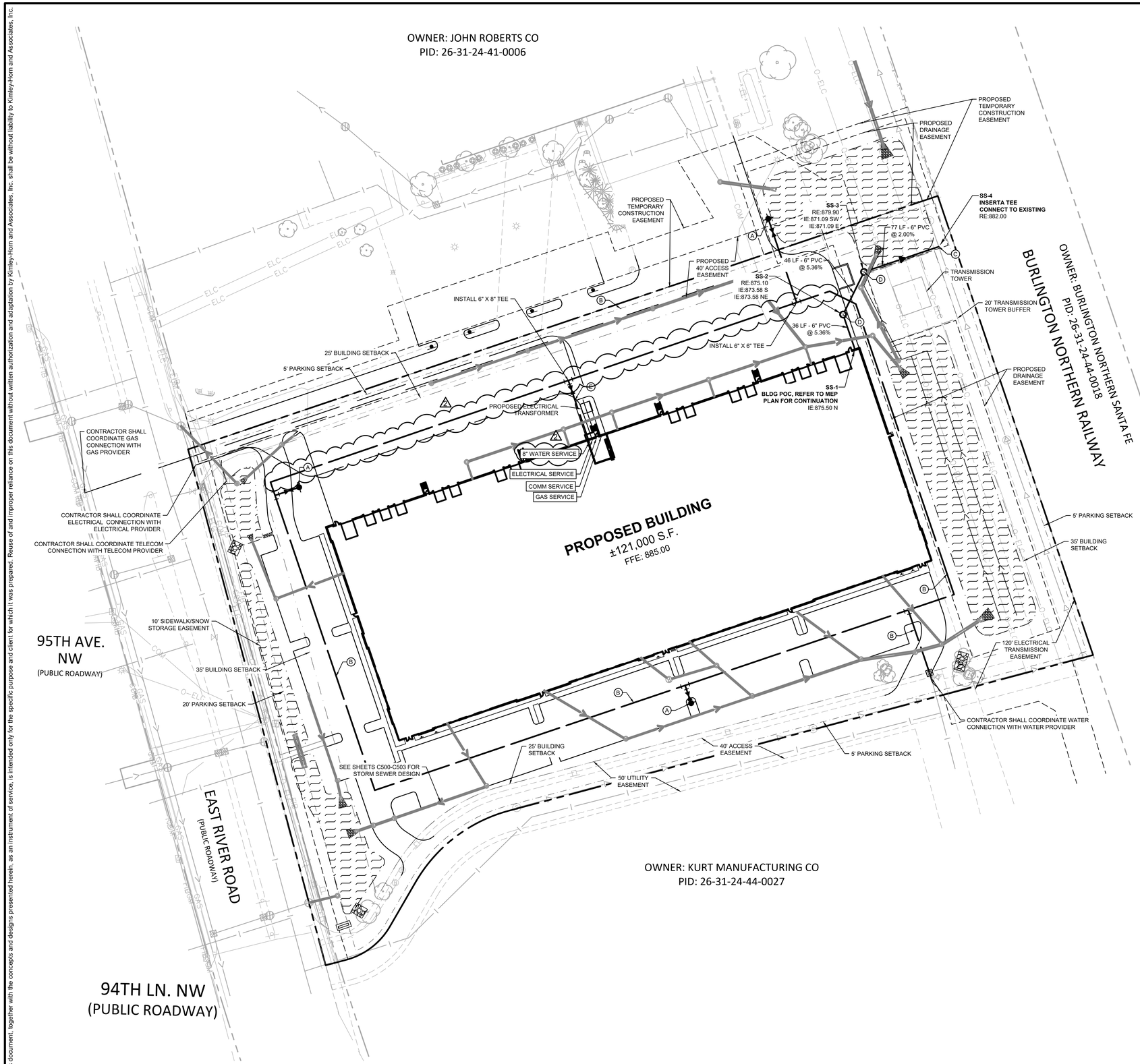
CALEB J. FLAKE
MN
DATE: 06/30/2022 LIC. NO. 58751

KHA PROJECT 168543002
DATE 04/27/2022
SCALE AS SHOWN
DESIGNED BY CCK
DRAWN BY CCK
CHECKED BY CJF

OFFSITE GRADING PLAN

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

SHEET NUMBER
C504



LEGEND

EXISTING	PROPOSED	
		GATE VALVE
		HYDRANT
		REDUCER
		TEE
		SANITARY SEWER MANHOLE
		SANITARY CLEANOUT
		WATERMAIN
		SANITARY SEWER
		STORM SEWER
ELC	ELC	UNDERGROUND ELECTRIC
COM	COM	TELEPHONE
GAS	GAS	GAS MAIN

UTILITY PLAN NOTES

1. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
2. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
   8" PVC SDR35 PER ASTM D-3034, FOR PIPES LESS THAN 12' DEEP
   8" PVC SDR26 PER ASTM D-3034, FOR PIPES MORE THAN 12' DEEP
   6" PVC SCHEDULE 40 PER ASTM D-1785
   DUCTILE IRON PIPE PER AWWA C150
3. WATER LINES SHALL BE AS FOLLOWS:
   6" AND LARGER, PVC C-900 PER ASTM D 2241
   CLASS 200 UNDER COUNTY ROADS, OTHERWISE CLASS 150
   4" AND LARGER DUCTILE IRON PIPE PER AWWA C150
   SMALLER THAN 3" PIPING SHALL BE COPPER TUBE TYPE "K" PER ANSI 816.22 OR PVC, 200 P.S.I., PER ASTM D1784 AND D2241.
4. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
5. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH RESTRAINTS SUCH AS THRUST BLOCKING, WITH STAINLESS STEEL OR COBALT BLUE BOLTS, OR AS INDICATED IN THE CITY SPECIFICATIONS AND PROJECT DOCUMENTS.
6. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE OR STRUCTURE).
7. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 7'-5" COVER ON ALL WATERLINES.
8. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES, OR ANY OBSTRUCTION (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE SCH. 40 OR C900 WITH MECHANICAL JOINTS AT LEAST 10 FEET ON EITHER SIDE OF THE CENTER LINE OF THE CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE FASTENERS AS REQUIRED TO PROVIDE A MINIMUM OF 18" VERTICAL SEPARATION. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
9. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
10. TOPS OF MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS, IN GREEN AREAS, WITH WATERTIGHT LIDS.
11. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
12. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
13. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
14. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE CITY OF COON RAPIDS AND/OR STATE OF MN WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
15. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
16. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES.
17. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
18. CONTRACTOR SHALL REFERENCE ARCH / MEP PLANS FOR SITE LIGHTING AND ELECTRICAL PLAN.
19. BACKFLOW DEVICES (DDCV AND PRZ ASSEMBLIES) AND METERS ARE LOCATED IN THE INTERIOR OF THE BUILDING. REF. ARCH / MEP PLANS.
20. ALL ONSITE WATERMAINS AND SANITARY SEWERS SHALL BE PRIVATELY OWNED AND MAINTAINED.
21. ALL WATERMAIN STUBOUTS SHALL BE MECHANICALLY RESTRAINED WITH REACTION BLOCKING.

KEYNOTE LEGEND

- (A) PROPOSED FIRE HYDRANT
- (B) 6" FIRE LINE
- (C) CONNECT TO EXISTING SANITARY SERVICE
- (D) PROPOSED SANITARY SEWER CLEANOUT
- (E) 8" FIRE SERVICE

NORTH

GRAPHIC SCALE IN FEET
0 25 50 100

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
DATE: 06/30/2022 | MN LIC. NO. 58751

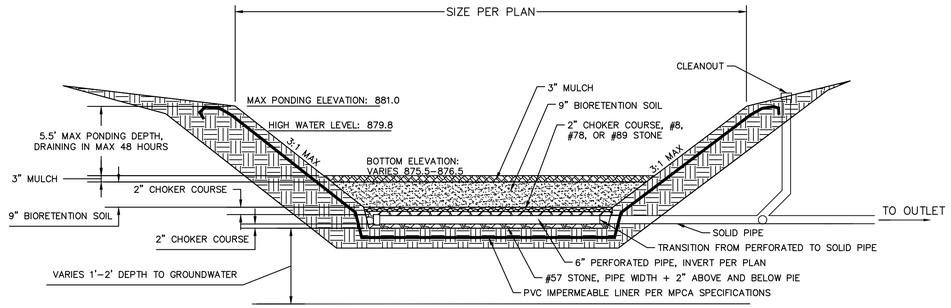
KHA PROJECT 168543002
DATE 04/27/2022
SCALE AS SHOWN
DESIGNED BY CCK
DRAWN BY CCK
CHECKED BY CJF

UTILITY PLAN

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

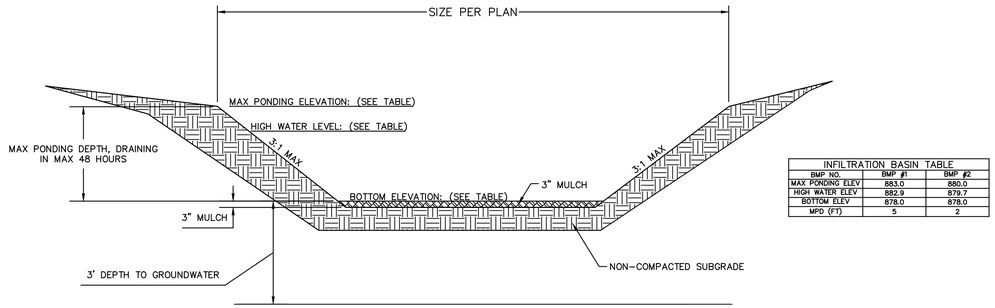
SHEET NUMBER
C600

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C6-UTILITY PLAN.dwg May 19, 2022 - 8:21am
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



BIOFILTRATION WITH LINER

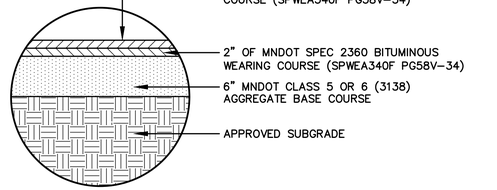
NOT TO SCALE



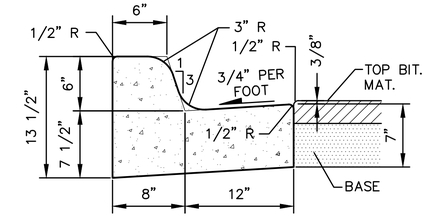
INFILTRATION BASIN TABLE		
BMP NO.	BMP #1	BMP #2
MAX PONDING ELEV	883.0	880.0
HIGH WATER ELEV	882.9	879.7
BOTTOM ELEV	878.0	878.0
MPD (FT)	5	2

INFILTRATION BASIN

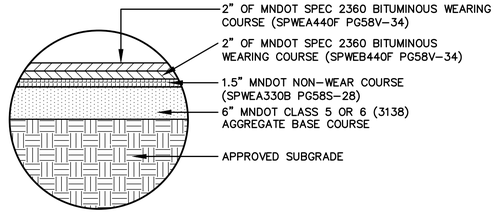
NOT TO SCALE



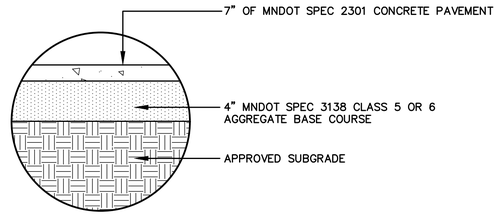
LIGHT DUTY BITUMINOUS



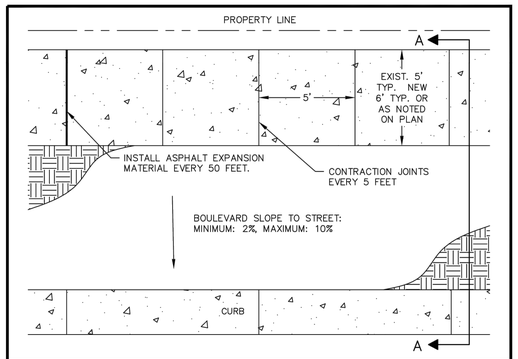
B612 CURB & GUTTER



HEAVY DUTY BITUMINOUS

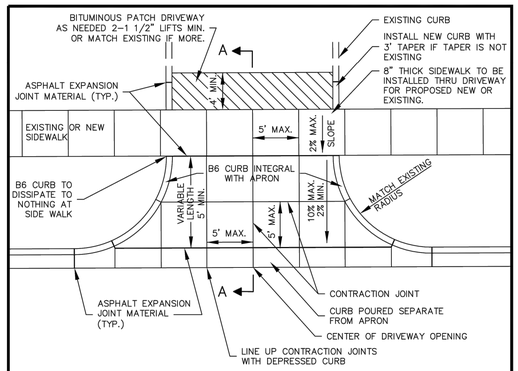


HEAVY DUTY CONCRETE



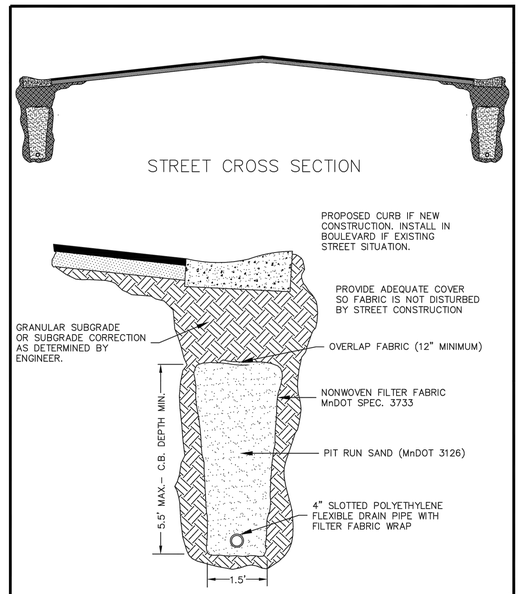
CONCRETE SIDEWALK SECTION

DRAWN: R.L.S. | DATE: 1/3/2019 | SCALE: NONE | PLATE NO. STR-6



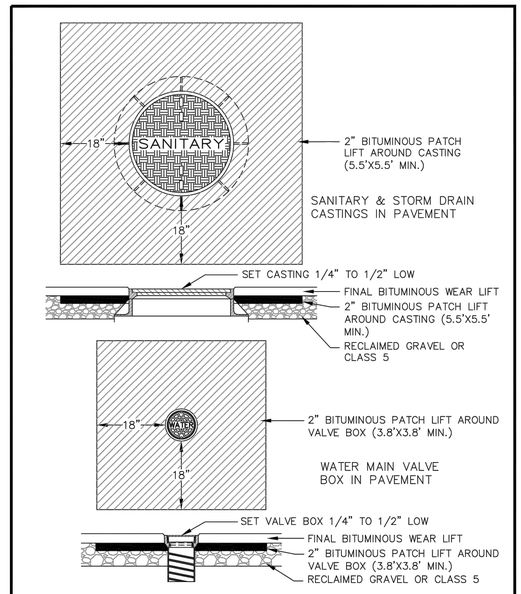
COMMERCIAL DRIVEWAY FOR STREET RECONSTRUCTION

DRAWN: R.L.S. | DATE: 1/3/2019 | SCALE: NONE | PLATE NO. STR-9



DRAINTILE DETAIL

DRAWN: A.S.W. | DATE: 12/17/2014 | SCALE: NONE | PLATE NO. STR-15



2" BITUMINOUS PATCH AROUND MANHOLES AND VALVES BEFORE FINAL PAVING LIFT

DRAWN: R.L.S. | DATE: 1/29/2018 | SCALE: NONE | PLATE NO. STR-24

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
MN
LIC. NO. 58751
DATE: 06/30/2022

KHA PROJECT 168543002
DATE 04/27/2022
SCALE AS SHOWN
DESIGNED BY CCK
DRAWN BY CCK
CHECKED BY CJF

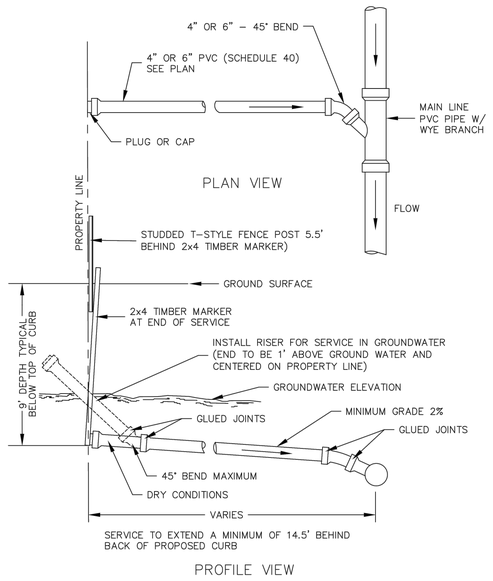
CIVIL DETAILS

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

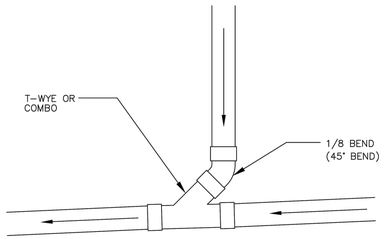
SHEET NUMBER
C700

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C700 CIVIL DETAILS.dwg May 19, 2022 - 8:21am
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



TYPICAL SEWER SERVICE

R.L.S. | 1/16/2020 | NONE | SAN–1

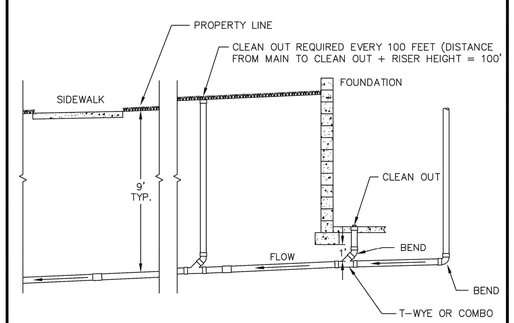


VERTICAL TO HORIZONTAL
OR HORIZONTAL TO HORIZONTAL

COON RAPIDS Minnesota

SANITARY SEWER PIPE WITH A CHANGE IN DIRECTION

DRAWN: R.L.S. | DATE: 1/7/2019 | SCALE: NONE | PLATE NO. SAN–2



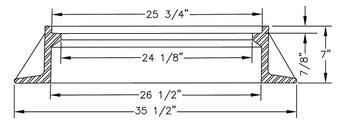
SCHEDULE 40 TO BE USED FROM MAIN TO INSIDE BUILDING

COON RAPIDS Minnesota

SANITARY SEWER SERVICE FROM PROPERTY LINE TO INSIDE BUILDING

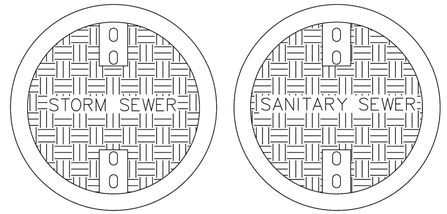
DRAWN: R.L.S. | DATE: 1/7/2019 | SCALE: NONE | PLATE NO. SAN–3

CASTING – NEENAH FOUNDRY NO. R–1733 SERIES MANHOLE FRAME OR APPROVED EQUAL. CASTING & RINGS TO HAVE INFI–SHIELD INSTALLED.



COVER–ESS BROTHER 301–CP LID. OR EQUAL WITH RUBBER GASKET ON THE BOTTOM OF THE LID.

NEENAH R1733–5044 | NEENAH R1733–5044



NOTE: ALL LIDS MUST HAVE RUBBER GASKET ON THE BOTTOM OF THE LID.

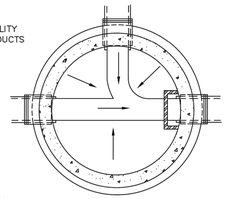
COON RAPIDS Minnesota

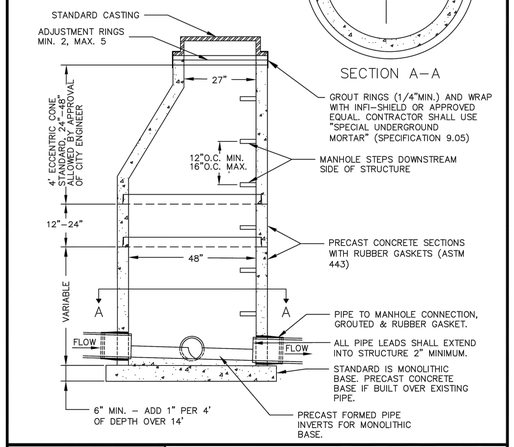
STANDARD MANHOLE CASTINGS

DRAWN: R.L.S. | DATE: 1/25/2019 | SCALE: NONE | PLATE NO. SAN–7

NOTES:

1. GROUT SHALL BE SPECIAL UNDERGROUND UTILITY MORTAR MADE BY TWIN CITY CONCRETE PRODUCTS OF ST. PAUL OR APPROVED EQUAL.
2. STRUCTURE TO BE PRECAST UNLESS APPROVED BY CITY ENGINEER.



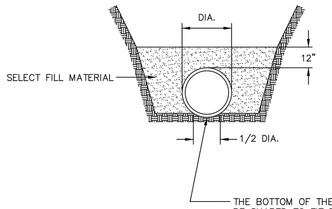


COON RAPIDS Minnesota

STANDARD SANITARY SEWER MANHOLE

DRAWN: R.L.S. | DATE: 1/25/2019 | SCALE: NONE | PLATE NO. SAN–8

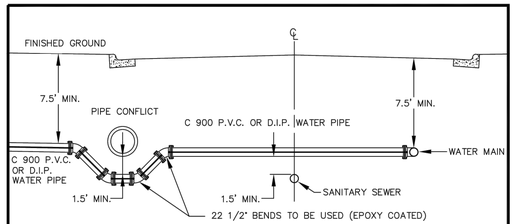
NOTE:
SURROUND THE PIPE TO A MINIMUM OF 12" ABOVE IT'S TOP WITH SELECT FILL MATERIAL, PLACED IN 2 LIFTS, FIRST LIFT NO MORE THEN 1' DEPTH, AND COMPACTED WITH GAS POWERED WHACKER FOR FULL LENGTH OF THE PIPE, TO ENSURE FILLING OF ALL VOIDS UNDER AND ADJACENT TO THE PIPE.



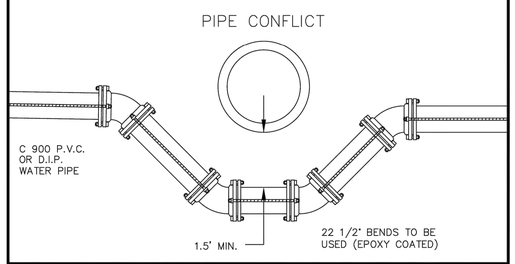
COON RAPIDS Minnesota

CLASS C PIPE BEDDING

DRAWN: R.L.S. | DATE: 1/12/2005 | SCALE: NONE | PLATE NO. WM–5



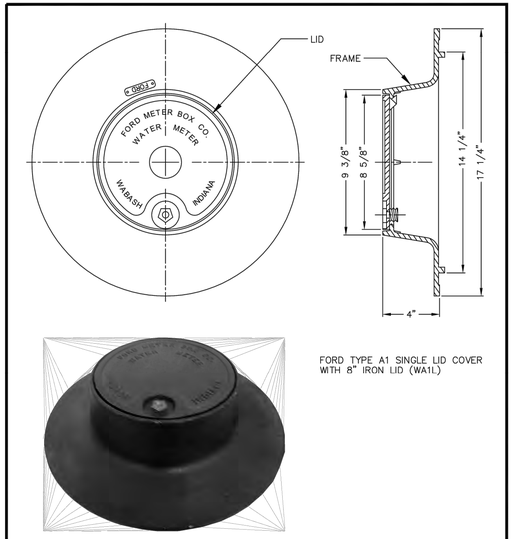
NOTE: ALL RODDING, EYE BOLTS AND OTHER HARDWARE USED FOR RODDING TO BE SPRAYED WITH TAR COATING AFTER INSTALLATION. C900 WATER PIPE JOINTS WILL HAVE MEGA–LUG MECHANICAL JOINT RESTRAINT AND RODDING. D.I.P. WATER PIPE WILL ONLY HAVE MEGA–LUG MECHANICAL JOINT RESTRAINT.



COON RAPIDS Minnesota

VERTICAL BENDS DETAIL

DRAWN: R.L.S. | DATE: 1/7/2019 | SCALE: NONE | PLATE NO. WM–6



FORD TYPE A1 SINGLE LID COVER WITH 8" IRON LID (WA1L)

NOTE: METER BOX COVER TO BE USED WHEN WATER SERVICE CURB STOP BOX OR SANITARY SEWER SERVICE CLEANOUTS ARE IN A HARD SURFACE, DRIVEWAY, SIDEWALK, ETC.

COON RAPIDS Minnesota

METER BOX COVER

DRAWN: R.L.S. | DATE: 1/23/2019 | SCALE: NONE | PLATE NO. WM–7

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
MN
LIC. NO. 58751
DATE: 06/30/2022

KHA PROJECT	DESIGNED BY	DRAWN BY	CHECKED BY
168543002	CCK	CCK	CJF
DATE 04/27/2022	SCALE AS SHOWN		

CIVIL DETAILS

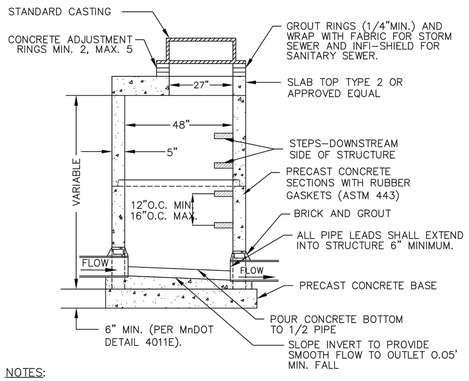
COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

SHEET NUMBER
C701

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C700 CIVIL DETAILS.dwg May 19, 2022 - 8:21am
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

K:\TWC_LDE\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C700 CIVIL DETAILS.dwg May 19, 2022 - 8:21am
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

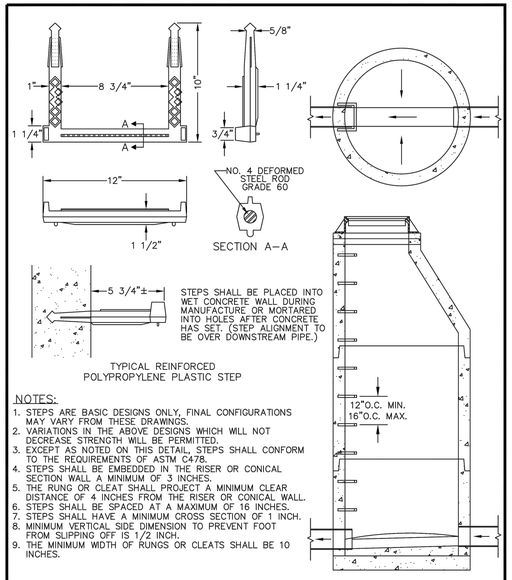


NOTES:

1. THIS TYPE SHALL BE USED WHEN SPECIFIED OR WHEN MANHOLE DEPTH IS LESS THAN 8'.
2. SLOPE BENCH TO INVERT, TOP OF BENCH TO BE AT HALF THE HEIGHT OF DOWN STREAM PIPE DIAMETER. (DO NOT ADD FILLERS BEFORE POURING BENCH)
3. FILL VOID BETWEEN STRUCTURE AND PIPE WITH BRICK AND GROUT BETWEEN THEM AND ACROSS THE FACE. CONTRACTOR SHALL USE "SPECIAL UNDERGROUND UTILITY MORTAR". (SEE SPECIFICATION 9.05)
4. STRUCTURE TO BE PRECAST UNLESS APPROVED BY CITY ENGINEER.

SLAB TOP MANHOLE

DRAWN: R.L.S. | DATE: 1/7/2019 | SCALE: NONE | PLATE NO. STM-1



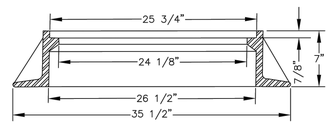
NOTES:

1. STEPS ARE BASIC DESIGNS ONLY, FINAL CONFIGURATIONS MAY VARY FROM THESE DRAWINGS.
2. VARIATIONS IN THE ABOVE DESIGNS WHICH WILL NOT DECREASE STRENGTH WILL BE PERMITTED.
3. EXCEPT AS NOTED ON THIS DETAIL, STEPS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C478.
4. STEPS SHALL BE EMBEDDED IN THE RISER OR CONICAL SECTION WALL A MINIMUM OF 3 INCHES.
5. THE RUNG OR CLEAT SHALL PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE RISER OR CONICAL WALL.
6. STEPS SHALL BE SPACED AT A MAXIMUM OF 16 INCHES.
7. STEPS SHALL HAVE A MINIMUM CROSS SECTION OF 1 INCH.
8. MINIMUM VERTICAL SIDE DIMENSION TO PREVENT FOOT FROM SLIPPING OFF IS 1/2 INCH.
9. THE MINIMUM WIDTH OF RUNGS OR CLEATS SHALL BE 10 INCHES.

MANHOLE OR CATCH BASIN STEP

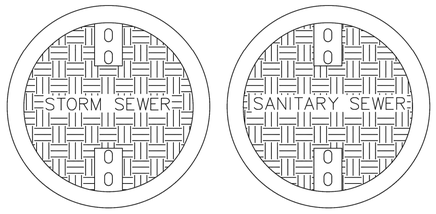
DRAWN: R.L.S. | DATE: 1/7/2019 | SCALE: NONE | PLATE NO. STM-3

CASTING – NEENAH FOUNDRY NO. R-1733 SERIES MANHOLE FRAME OR APPROVED EQUAL. CASTING & RINGS TO HAVE INFI-SHIELD INSTALLED.



COVER-ESS BROTHER 301-CP LID. OR EQUAL WITH RUBBER GASKET ON THE BOTTOM OF THE LID.

NEENAH R1733-5044 NEENAH R1733-5044

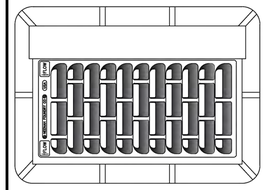


NOTE: ALL LIDS MUST HAVE RUBBER GASKET ON THE BOTTOM OF THE LID.

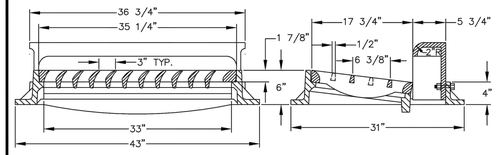
STANDARD MANHOLE CASTINGS

DRAWN: R.L.S. | DATE: 2/27/2018 | SCALE: NONE | PLATE NO. STM-6

R-3067-L NEENAH COMBINATION INLET FRAME, GRATE, CURB BOX. IF NEEDED R-3067-L LOW PROFILE FRAME ESS BROS.



TYPE L GRATE



NOTE: LOW POINTS SHALL HAVE A TYPE L BI-DIRECTIONAL GRATE.

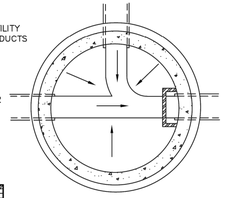
NEENAH R-3067-L STORM INLET CASTING WITH CURB BOX

DRAWN: R.L.S. | DATE: 1/31/2019 | SCALE: NONE | PLATE NO. STM-7

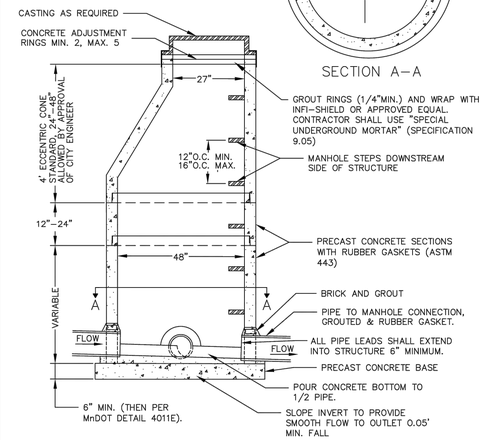
NOTES:

1. GROUT SHALL BE SPECIAL UNDERGROUND UTILITY MORTAR MADE BY TWIN CITY CONCRETE PRODUCTS OF ST. PAUL OR APPROVED EQUAL.
2. STRUCTURE TO BE PRECAST UNLESS APPROVED BY CITY ENGINEER.

POUR CONCRETE BOTTOM TO 1/2 PIPE DIAMETER AND SLOPE AS SHOWN BY ARROWS.



SECTION A-A



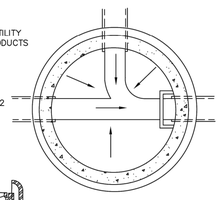
STANDARD STORM DRAIN MANHOLE

DRAWN: R.L.S. | DATE: 1/29/2019 | SCALE: NONE | PLATE NO. STM-9

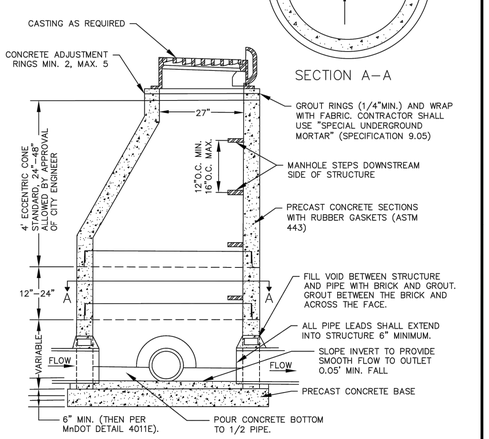
NOTES:

1. GROUT SHALL BE SPECIAL UNDERGROUND UTILITY MORTAR MADE BY TWIN CITY CONCRETE PRODUCTS OF ST. PAUL OR APPROVED EQUAL.
2. STRUCTURE TO BE PRECAST UNLESS APPROVED BY CITY ENGINEER.

POUR CONCRETE BOTTOM TO 1/2 PIPE DIAMETER AND SLOPE AS SHOWN BY ARROWS.

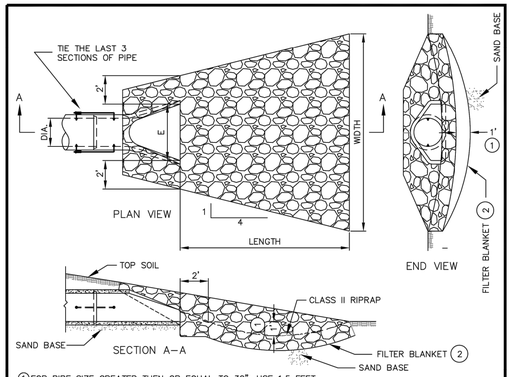


SECTION A-A



STANDARD STORM DRAIN INLET MANHOLE

DRAWN: R.L.S. | DATE: 1/29/2019 | SCALE: NONE | PLATE NO. STM-11



① FOR PIPE SIZE GREATER THEN OR EQUAL TO 30", USE 1.5 FEET

② GEOTEXTILE FILTER BLANKET UNLESS OTHERWISE SPECIFIED IN THE PLANS. THE FABRIC SHOULD COVER THE AREA OF THE RIPRAP AND EXTEND UNDER THE FLARED END SECTION TO THE TOP OF RIPRAP.

TABLE OF QUANTITIES FOR RIPRAP
(RIPRAP TO BE FIELD STONE OR GRANITE)

DIA. OF PIPE (IN.)	LENGTH (FEET)	WIDTH (FEET)	E=WIDTH F.E.S.(IN.)	12" DEPTH CL II RIPRAP(CU.YDS.)
12	8	10	24	2.8
15	8	10.5	30	2.9
18	10	12	36	3.9
21	10	12.5	42	4.2
24	12	14	48	5.5
27	12	14.5	54	5.8
30	14	16	60	7.3
36	16	18	72	9.2
42	18	19.5	78	10.9
48	20	21	84	12.9

PIPE SIZES LARGER THAN THOSE SHOWN REQUIRE A SPECIAL DESIGN

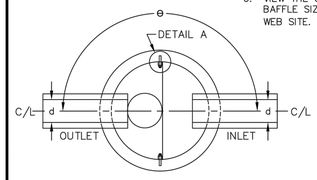
RIPRAP DETAIL (NO MOW STRIP)

DRAWN: R.L.S. | DATE: 11/28/2018 | SCALE: NONE | PLATE NO. STM-12

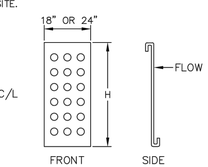
d (IN.)	H (IN.)	θ (DEG.) MIN.	θ (DEG.) MAX.	y (IN.)	Ys	Yb	Yt	D
12	36	130	230	12	MIN. 4 FT.			
15	36	130	230	12				
18	36	130	230	12				
21	46	140	220	12	MIN. 3 FT.			
24	46	140	220	12				
27	46	140	220	12	0" TO 6"			
30	57	150	210	12				
36	57	150	210	12	VARIES			

NOTES:

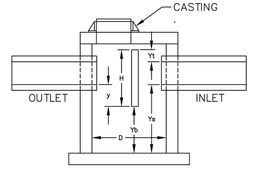
1. IDEAL BAFFLE HEIGHT = DISTANCE FROM TOP OF THE HIGHEST INLET PIPE TO THE BOTTOM OF THE OUTLET PIPE PLUS 18" OR GREATER.
2. MINIMUM ACCEPTABLE BAFFLE HEIGHT = DISTANCE FROM TOP OF THE HIGHEST INLET PIPE TO THE BOTTOM OF THE OUTLET PIPE PLUS 12".
3. HEIGHTS GREATER THAN 57" REQUIRE 2 BAFFLES STACKED.
4. CONTACT UPSTREAM TECHNOLOGIES FOR PIPES LARGER THAN 48" I.D.
5. FOR MORE INFORMATION SEE THE DESIGN GUIDE AT UPSTREAM TECHNOLOGIES WEB SITE.
6. VIEW THE COMPLETE LIST OF AVAILABLE BAFFLE SIZES AT UPSTREAM TECHNOLOGIES WEB SITE.



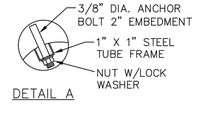
TOP VIEW OF SUMP



SAFL BAFFLE PANEL



SIDE VIEW OF SUMP



DETAIL A

Rev C (07-24-2019)

SAFL BAFFLE DETAIL UPSTREAM TECHNOLOGIES INC.

DRAWN: R.L.S. | DATE: 1/21/2020 | SCALE: NONE | PLATE NO. STM-20

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

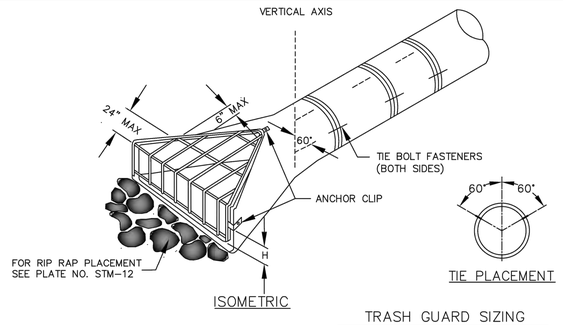
CALEB J. FLAKE
MN LIC. NO. 59751
DATE: 05/30/2022

KHA PROJECT: 168543002
DATE: 04/27/2022
SCALE: AS SHOWN
DESIGNED BY: CCK
DRAWN BY: CCK
CHECKED BY: CJF

CIVIL DETAILS

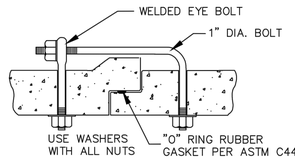
COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

SHEET NUMBER
C702



ISOMETRIC

TIE PLACEMENT



TIE BOLT & FASTENER ASSEMBLY

TRASH GUARD SIZING

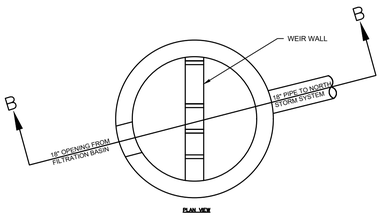
PIPE SIZE (IN.)	BOLT DIAMETER (IN.)	BARS (IN.)	H (IN.)
15	5/8	3/4	4
18	5/8	3/4	4
21	3/4	1	6
24	3/4	1	6
27	3/4	1	6
30	3/4	1	6
36	3/4	1	6
42	3/4	1	6
48	1	1 1/4	12

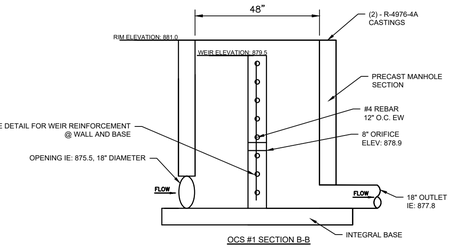
NOTES:
1. USE TWO TIE BOLT FASTENERS PER JOINT INSTALLED AT 60 DEGREES FROM TOP OF PIPE.
2. LAST THREE JOINTS SHALL BE TIED.
3. TYING AND TRASH GUARD SHALL BE INCLUDED IN THE UNIT PRICE BID FOR APRON SECTION.
4. BARS AND PLATES ARE HOT-ROLLED STEEL.
5. BARS, PLATES, PIPE AND BOLTS ARE GALVANIZED.
6. MARKING POSTS SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.

City of Coon Rapids
11155 Robinson Drive
Coon Rapids, MN 55433-3761
Tel: 763-755-2880
Fax: 763-767-6481
www.coonrapidsmn.gov

STANDARD FLARED END SECTION AND TRASH GUARD

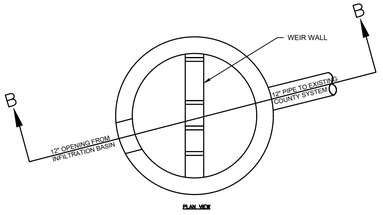
DRAWN: R.L.S. | DATE: 2/4/2020 | SCALE: NONE | PLATE NO. STM-22

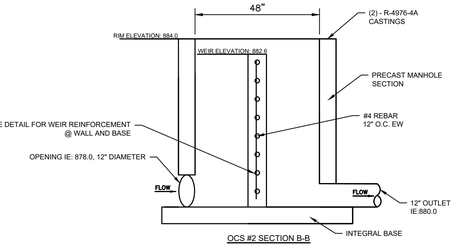




OCS #1 SECTION B-B

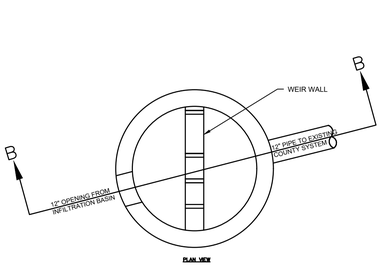
ST 803: OUTLET CONTROL STRUCTURE
NO SCALE

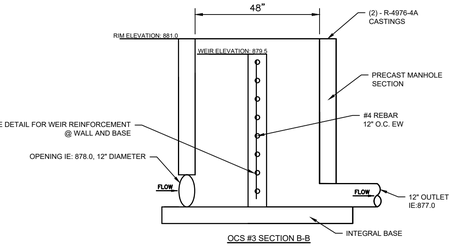




OCS #2 SECTION B-B

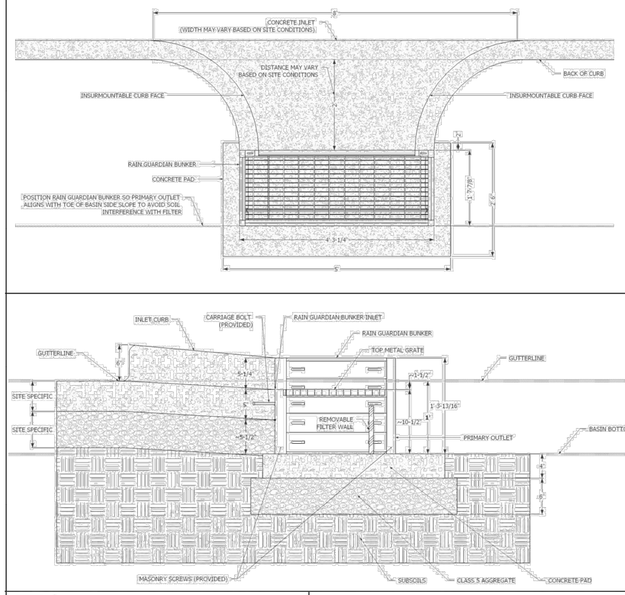
ST 55: OUTLET CONTROL STRUCTURE
NO SCALE





OCS #3 SECTION B-B

ST 53: OUTLET CONTROL STRUCTURE
NO SCALE

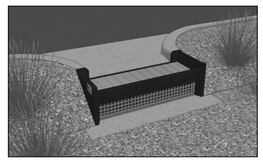


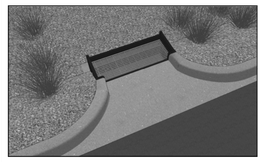
PLAN VIEW NOTES

1. INLET WIDTH AND DISTANCE BETWEEN BACK OF CURB AND RAIN GUARDIAN BUNKER MAY VARY WITH SITE CONDITIONS. INSTALLATION FLUSH WITH THE BACK OF THE CURB CAN ALSO BE COMPLETED WITH THE RAIN GUARDIAN BUNKER.

2. CONCRETE PAD EXTENDS BEYOND THE FILTER WALL OF THE RAIN GUARDIAN BUNKER TO SERVE AS A SPLASH DISSIPATOR.

INSTALLED VIEWS





CROSS-SECTION VIEW NOTES

1. THE TOP OF THE CLASS 5 BASE (COMPACTED TO 95% STANDARD PROCTOR) IS PRECISELY 1'4" BELOW THE GUTTERLINE ELEVATION.

2. THE TOP OF THE CONCRETE PAD IS PRECISELY 1' BELOW THE GUTTERLINE.

INSTALLATION NOTES

1. INSTALL THE CONCRETE PAD WITH A 1' 10" OFFSET FROM THE BACK OF THE CURB TO ACCOMMODATE THE CONCRETE INLET. THIS DISTANCE MAY VARY BASED ON SITE CONDITIONS, BUT CONSIDERATIONS SHOULD INCLUDE SLOPE OF THE INLET AND BASIN SIDE SLOPES ADJACENT TO THE RAIN GUARDIAN BUNKER. POSITION RAIN GUARDIAN BUNKER SO PRIMARY OUTLET ALIGNS WITH TOE OF BASIN SIDE SLOPE TO AVOID SOIL INTERFERENCE WITH REMOVABLE FILTER WALL. THE CONCRETE PAD SHOULD BE REINFORCED WITH REBAR.

2. EXCAVATE 1' 10" BELOW THE GUTTERLINE ELEVATION (I.E. THE BIORETENTION OVERFLOW ELEVATION) TO ACCOMMODATE THE 1' PONDING DEPTH, 6" CLASS 5 AGGREGATE, AND 4" CONCRETE PAD TO WHICH THE RAIN GUARDIAN BUNKER WILL BE SECURED. THEREFORE, THE TOP OF THE FINISHED CONCRETE PAD IS PRECISELY 1' BELOW THE GUTTERLINE ELEVATION. THE TOP OF THE RAIN GUARDIAN BUNKER METAL GRATE WILL BE 10-1/2" ABOVE THE TOP OF THE CONCRETE PAD AND 1-1/2" BELOW THE GUTTERLINE ELEVATION TO ACCOMMODATE A SLOPED INLET FROM THE GUTTER TO THE RAIN GUARDIAN BUNKER.

3. THE RAIN GUARDIAN BUNKER SHOULD BE POSITIONED 2" FROM THE EDGE OF THE CONCRETE PAD CLOSEST TO THE BACK OF THE CURB. THEREFORE, THE RAIN GUARDIAN BUNKER WILL BE 2' FROM THE BACK OF THE CURB.

4. USING THE PILOT HOLE IN EACH OF THE FOUR CORNER POSTS, PREDRILL 5/32" HOLES INTO THE CONCRETE PAD WITH A 4-1/2" MASONRY BIT AND HAMMER DRILL.

5. SECURE RAIN GUARDIAN BUNKER TO CONCRETE PAD WITH FOUR 3/16" X 2-3/4" MASONRY SCREWS (PROVIDED).

6. INSTALL FRAMING FOR INLET BETWEEN RAIN GUARDIAN BUNKER AND BACK OF CURB. TOP ELEVATIONS OF THE FRAMING SHOULD MATCH THE TOP OF THE CURB ON THE STREET SIDE AND THE TOP OF THE RAIN GUARDIAN BUNKER ON THE BIORETENTION SIDE.

7. WHEN POURING THE CONCRETE INLET, ENSURE THE CARRIAGE BOLTS ON THE RAIN GUARDIAN BUNKER ARE SURROUNDED BY AT LEAST 2" OF CONCRETE ON ALL SIDES.

8. SIDE CURBS OF THE POURED INLET MUST HAVE AN INSURMOUNTABLE PROFILE TO PREVENT WATER FLOW FROM OVERTOPPING THE DOWNSTREAM SIDE OF THE INLET.

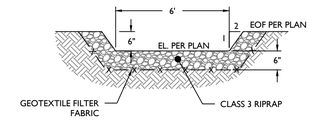
9. WRAP CABLE THROUGH TOP METAL GRATE AND SECURE WITH PROVIDED CLAMP. ENSURE SUFFICIENT SLACK EXISTS IN CABLE TO ALLOW FOR GRATE REMOVAL AND PLACEMENT IN CONCRETE INLET DURING CLEANING. REMOVABLE FILTER WALL SHOULD BE INSTALLED WITH FILTER FABRIC FACING THE RAIN GUARDIAN BUNKER INLET.

RAIN GUARDIAN
U.S. PATENT NO. 8,500,098
PRETREATMENT FOR BIORETENTION
Rain Gardens • Swales • Filtration Basins • Infiltration Basins
www.RainGuardian.biz

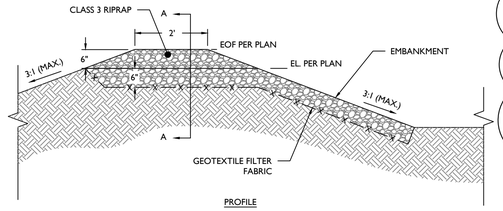
RAIN GUARDIAN BUNKER
PRETREATMENT CHAMBER
BIORETENTION PONDING DEPTH: 1'
TYPICAL DETAIL

REVISION HISTORY			
REV	BY	DATE	DESCRIPTION
A	MDH	12/1/15	BUNKER—1'
SCALE		VARIABLE	
U.S. PATENT		8,501,016	

Anoka Conservation District
1318 McKay Dr. NE, Suite 300
Ham Lake, MN 55304
763-434-2030

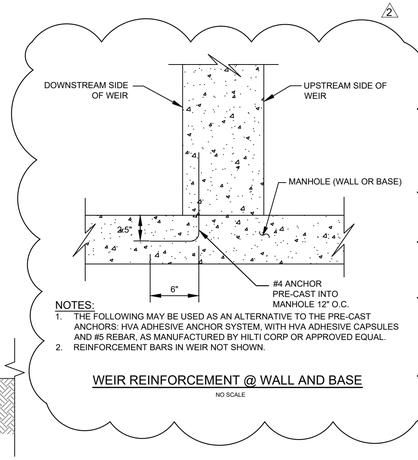


SECTION A-A



PROFILE

EMERGENCY SPILLWAY
NO SCALE



NOTES:
1. THE FOLLOWING MAY BE USED AS AN ALTERNATIVE TO THE PRE-CAST ANCHORS: HVA ADHESIVE ANCHOR SYSTEM, WITH HVA ADHESIVE CAPSULES AND #5 REBAR, AS MANUFACTURED BY HILTI CORP OR APPROVED EQUAL.
2. REINFORCEMENT BARS IN WEIR NOT SHOWN.

WEIR REINFORCEMENT @ WALL AND BASE
NO SCALE

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

CALEB J. FLAKE
MN LIC. NO. 58751
DATE: 06/30/2022

KHA PROJECT 168543002
DATE 04/27/2022
SCALE AS SHOWN
DESIGNED BY CCK
DRAWN BY CCK
CHECKED BY CJF

CIVIL DETAILS

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

SHEET NUMBER
C703

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C700 CIVIL DETAILS.dwg May 19, 2022 - 8:21am
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NOTES & GUIDELINES

GENERAL INFORMATION:

1. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN THE DEVICES IN THIS TRAFFIC CONTROL PLAN UNLESS OTHERWISE NOTED.
2. FIELD CONDITIONS MAY REQUIRE MODIFICATIONS OF THIS LAYOUT AS DEEMED NECESSARY BY THE ENGINEER.
3. ALL DISTANCES ARE APPROXIMATE.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ANY WORK AREAS NEAR TRAFFIC IN ACCORDANCE WITH THE MN MUTCD.
5. IF THE CONTRACTOR DECIDES TO PERFORM THE CONSTRUCTION WORK IN A SEQUENCE OTHER THAN SHOWN IN THIS TRAFFIC CONTROL PLAN THE CONTRACTOR SHALL PROVIDE COMPLETE REVISED TRAFFIC CONTROL PLANS TO BE APPROVED BY THE ENGINEER.

SIGNING:

1. ALL TRAFFIC CONTROL DEVICES, INCLUDING OVERHEAD SIGNS, ON ROADS OPEN TO TRAFFIC THAT ARE NOT CONSISTENT WITH TRAFFIC OPERATION SHALL BE COVERED, REMOVED OR REVISED AS DIRECTED BY THE ENGINEER.
2. WHEN SIGNS ARE PLACED, THEY SHALL BE MOUNTED ON POSTS DRIVEN INTO THE GROUND AT THE PROPER HEIGHT AND LATERAL OFFSET AS SHOWN IN THE "TYPICAL TEMPORARY SIGN FRAMING & INSTALLATION DETAILS" IN THE PLAN. IF THIS IS NOT POSSIBLE, THEY WILL BE MOUNTED ON PORTABLE SUPPORTS AS APPROVED BY THE ENGINEER. WHEN THE SIGNS ARE REMOVED THE SIGN POSTS SHALL ALSO BE REMOVED AS SOON AS POSSIBLE.
3. ALL ORANGE WARNING AND ORANGE GUIDE SIGNS SHALL BE FABRICATED WITH SIGN SHEETING MATERIAL AS LISTED ON THE MnDOT APPROVED PRODUCT LIST FOR "SHEETING FOR RIGID TEMPORARY WORK ZONE SIGNS, DELINEATORS, AND MARKERS".
4. BARRICADES SHALL BE FABRICATED WITH SIGN SHEETING MATERIAL AS LISTED ON THE MnDOT APPROVED PRODUCT LIST FOR "BARRICADE SHEETING",
5. LONGITUDINAL DROPOFFS SHALL BE SIGNED AS SHOWN IN THE "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS" FIELD MANUAL UNLESS OTHERWISE SPECIFIED IN THESE PLANS.

BARRIER & DELINEATION:

1. TOP MOUNTED BARRIER DELINEATORS WILL HAVE A MINIMUM OF 24 SQ. IN. OF REFLECTIVE SURFACE AREA AND BE PLACED AT 25' SPACES ON TOP OF THE BARRIER WHEN THE BARRIER IS WITHIN 10' OF TRAFFIC UNLESS OTHERWISE NOTED OR AS DIRECTED BY THE ENGINEER. IF THE TRAFFIC ENGINEER REQUIRES SIDE MOUNTED BARRIER DELINEATORS, THEY WILL HAVE A MINIMUM OF 12 SQ. IN. OF REFLECTIVE SURFACE AREA AND BE PLACED AT 25' SPACES. IF A SMALLER APPROVED BARRIER DELINEATOR IS USED IT SHALL BE AT ONE HALF THE SPACING.

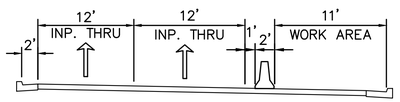
TRAFFIC CONTROL DEVICES & SYMBOLS LEGEND

SYMBOL	DESCRIPTION
⊢	TRAFFIC CONTROL SIGN
⌴	TYPE III BARRICADE =
———	PORTABLE PRECAST CONC BARRIER DES 8337 WITH DELINEATORS AT 25' SPACES (PPCB)
▭▭▭	IMPACT ATTENUATOR (TL2)
•	DRUM-LIKE CHANNELIZER (TYPE B) =
Ⓕ	TYPE A FLASHING WARNING LIGHT

GRAPHIC SCALE IN FEET
0 30 60 120

NORTH

EAST RIVER ROAD NB



SECTION A-A

No.	REVISIONS	DATE	BY
1.	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2.	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK
3.	REVISED IN RESPONSE TO RFI #3 & #4	05/25/2022	CCK
4.	REV'D PER COUNTY COMMENTS & RFI	06/20/2022	CCK

Kimley»Horn

© 2022 KIMLEY-HORN AND ASSOCIATES, INC.

767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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

JOEL A. HINNENKAMP, PE
DATE: 06/30/2022 MN LIC. NO. 53081

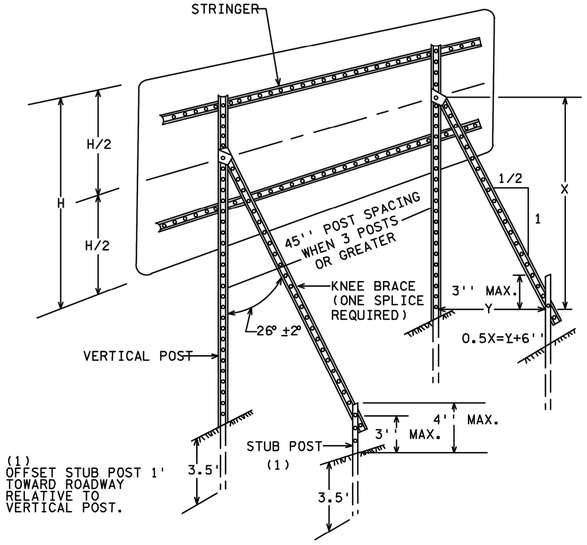
KHA PROJECT 168543002
DATE 04/27/2022
SCALE AS SHOWN
DESIGNED BY CCK
DRAWN BY CCK
CHECKED BY JAH

TRAFFIC CONTROL PLAN

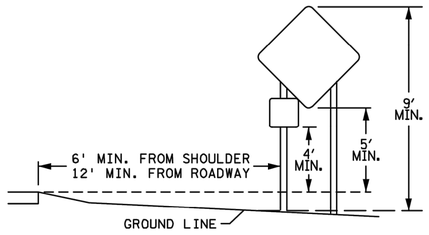
COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

SHEET NUMBER
C800

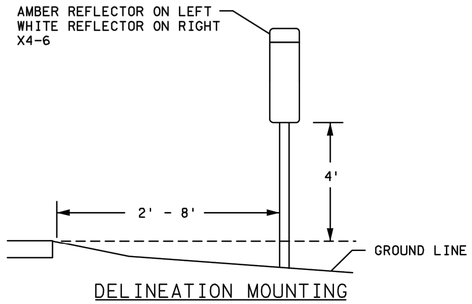
K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C8-TRAFFIC CONTROL PLAN.dwg July 21, 2022 - 3:34pm
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



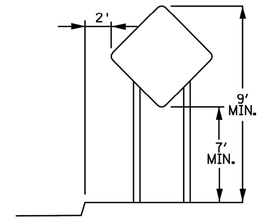
TYPICAL "A-FRAME" INSTALLATION
TYPE "D" SIGNS



TYPICAL RURAL DESIGN

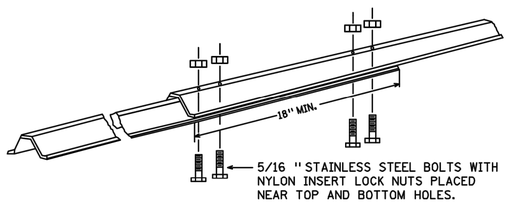


DELINEATION MOUNTING



TYPICAL URBAN DESIGN

"U" POST BREAKAWAY SPLICE



KNEE BRACE STRUCTURAL SPLICE

1/26/18

SIGN DATA

SIGNS TO BE PLACED ON DRIVEN U-POSTS SHALL BE PLACED IN ACCORDANCE WITH TABLE 1 OR 2 BELOW.IF THE TTC PLAN PLACES POST MOUNTED TEMPORARY SIGNS ADJACENT TO EXISTING STRUCTURES THERE SHALL BE NO MORE THAN TWO U-POST WITHIN 84 INCHES OF EACH OTHER ALIGNED IN THE SAME PLANE SO AS NOT TO COMPROMISE THAT STRUCTURE'S AND THE NEW DEVICE'S CRASHWORTHINESS. IF IT IS NOT POSSIBLE TO MAINTAIN THIS SPACING THEN THE POST MOUNTED TEMPORARY SIGNS SHALL BE PLACED A MIN OF 4' BEYOND THE IN PLACE STRUCTURES. SIGN PANELS SHALL BE PLACED ON SIGN STRUCTURES TO MEET THE 5' MIN DEPICTED ON THE TYPICAL RURAL DESIGN DETAIL, THE 7' MIN DEPICTED ON THE TYPICAL URBAN DESIGN DETAIL, AND THE 9' MIN DEPICTED ON THE TYPICAL MOUNTING DETAIL ON THIS SHEET.

STANDARD CONSTRUCTION SIGNS IN MnDOT STANDARD SIGNS AND MARKINGS MANUAL

TABLE 1

PANEL SIZE (IN.)	POSTS			
	NO. & TYPE	SPACING (IN.)	KNEE BRACES QUANT.	LENGTH (FT.)
24 x 24	2-U	18		13
30 x 24	2-U	18		13
36 x 30	2-U	24		13
36 x 36	2-U	18		14
42 x 36	2-U	30		14
48 x 48	2-U	30		15
60 x 60	2-U	42	1	16
66 X 60	2-U	42	2	16
72 x 72	2-U	42	2	17
96 x 54	2-U	54	2	19
96 X 84	2-U	54	2	19
132 X 108	3-U	45	3	22
168 x 132	4-U	48	4	25

GENERAL NOTES:
1. POST LENGTHS ARE APPROXIMATE AND INCLUDE EMBEDMENT, BUT DO NOT INCLUDE ADDITIONAL LENGTH REQUIRED FOR SPLICE.
2. SEE MnDOT STANDARD SIGNS AND MARKINGS MANUAL FOR PUNCHING HOLES.
3. MINIMUM OF 45" SPACING BETWEEN POSTS MUST BE MAINTAINED WHEN USING MORE THAN TWO POSTS.

TABLE 2

SPECIAL DESIGN CONSTRUCTION SIGNS

PANEL SIZE		POSTS			
LENGTH (IN.)	HEIGHT (IN.)	NO. & TYPE	SPACING (IN.)	KNEE BRACES QUANT.	LENGTH (FT.)
54 - 96	78	2-U	42	2	20
102 - 138	78	3-U	45	3	20
144 - 180	78	4-U	45	4	20

DESIGNER NOTE: INCLUDE SPECIAL SIGN DETAILS IN THE TRAFFIC CONTROL PLAN IN TABLE TWO.

NOTES: FOR TEMPORARY CONSTRUCTION SIGN FRAMING, THE CONTRACTOR MAY USE GRADE 5 ZINC PLATED BOLTS FOR ALL BOLTED CONNECTIONS, EXCEPT FOR THE KNEE BRACE CONNECTION TO THE REAR STUB POST, WHICH SHALL UTILIZE A 5/16 INCH STAINLESS STEEL BOLT AND NYLON INSERT LOCK NUT. ADDITIONAL SIGN FRAMING DETAILS CAN BE FOUND IN THE TRAFFIC ENGINEERING MANUAL PART 6.

IF THE CONTRACTOR ELECTS TO USE SOME OTHER TYPE OF SIGN SUPPORT (OTHER THAN U-CHANNEL SIGN POSTS) FOR MOUNTING CONSTRUCTION SIGNS, DETAILS OF THE PROPOSED SIGN STRUCTURE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE SIGN STRUCTURE COMPONENTS. ANY SIGN STRUCTURE TO BE SUBMITTED TO THE ENGINEER SHALL BE AN FHWA ACCEPTED BREAKAWAY SIGN SUPPORT. SIGN STRUCTURE SHALL ALSO BE APPROVED FOR 90 MPH WIND LOAD.

TYPICAL TEMPORARY SIGN FRAMING AND INSTALLATION DETAILS

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK
3	REVISED IN RESPONSE TO RFI #3 & #4	05/25/2022	CCK
4	REV'D PER COUNTY COMMENTS & RFI	06/20/2022	CCK

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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.

JOEL A. HINNENKAMP, PE
DATE: 06/30/2022 LIC. NO. 53081 MN

KHA PROJECT 168543002
DATE 04/27/2022
SCALE AS SHOWN
DESIGNED BY CCK
DRAWN BY CCK
CHECKED BY JAH

TRAFFIC CONTROL DETAILS

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

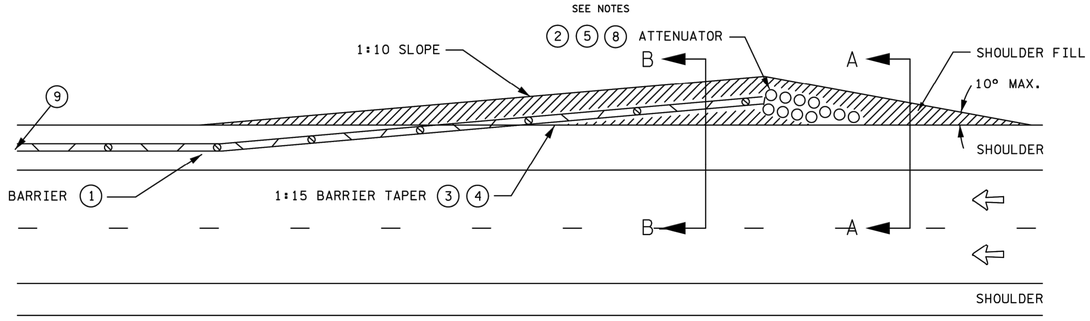
ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

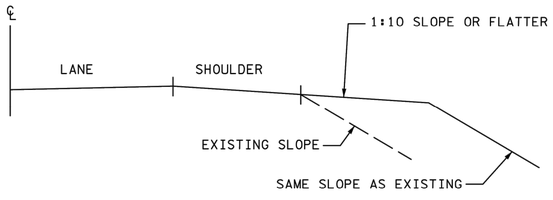
SHEET NUMBER
C801

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C8-TRAFFIC CONTROL DETAILS.dwg July 21, 2022 - 3:34pm
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

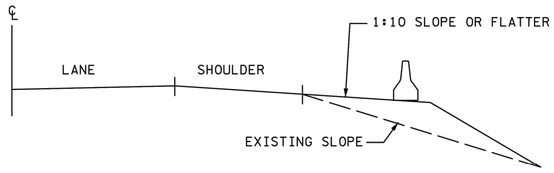
K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\C8-TRAFFIC CONTROL DETAILS.dwg July 21, 2022 - 3:34pm
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

SAND FILLED BARREL ATTENUATOR





SECTION A-A



SECTION B-B

DESIGNER NOTES (REMOVE FROM LAYOUT BEFORE INSERTING IN PLAN):

1. IT IS DESIRABLE TO MAINTAIN FULL SHOULDER WIDTH WHENEVER POSSIBLE. IF THAT IS NOT POSSIBLE, THE MINIMUM DESIRABLE LATERAL OFFSETS ARE BASED ON THE FOLLOWING POSTED SPEED LIMITS:

   70 MPH - 12.0 FEET
   60 MPH - 8.0 FEET
   50 MPH - 6.5 FEET
   40 MPH - 5.0 FEET

   FOR RESTRICTED CONDITIONS, LESSER OFFSETS MAY BE USED. THE OFFSETS SHOULD BE A MINIMUM OF 2 FEET UNLESS THE CONDITIONS ARE EXTREME. LATERAL OFFSETS ARE MEASURED TO THE BOTTOM OF THE BARRIER. BARRIER OFFSET FROM THE EDGE OF THE THRU LANE SHOULD NOT EXCEED 15 FEET.

2. DESIRABLE TREATMENTS FOR EXPOSED BARRIER ENDS ARE; A CONNECTION TO EXISTING BARRIER; IMPACT ATTENUATOR; TAPER AWAY TO THE EDGE OF THE CLEAR ZONE; AND EXTENDING THROUGH A PLATE BEAM GUARDRAIL BY REMOVING A PANEL.

   FOR POSTED SPEED LIMITS OF 30 MPH OR LESS, THE TAPERING AWAY FROM THE TRAFFIC IS DESIRABLE AND THE USE OF AN IMPACT ATTENUATOR IS OPTIONAL.

3. A 1:8 TAPER MAY BE USED WHEN THE POSTED SPEED LIMIT IS 35 MPH OR LESS.

   A 1:12 TAPER MAY BE USED WHEN THE POSTED SPEED LIMIT IS 45 MPH OR LESS.

4. IF THE BARRIER IS TO BE EXTENDED BEYOND THE SHOULDER, ADDITIONAL FILL WILL BE NEEDED IN ORDER TO PROVIDE A FLAT (1:10) APPROACH AREA TO THE BARRIER. (SEE SHOULDER FILL DETAIL).

5. THE IMPACT ATTENUATOR BARRELS SHOULD BE OFFSET A MINIMUM OF 2 FEET FROM THE EDGE OF THE THRU LANE AND ORIENTED TO ACCOMMODATE THE PROBABLE IMPACT ANGLE OF THE ENCROACHING VEHICLE. FOR MOST ROADSIDE CONDITIONS, AN ANGLE OF APPROXIMATELY 10 DEGREES, AS MEASURED BETWEEN THE HIGHWAY AND THE IMPACT ATTENUATOR LONGITUDINAL CENTERLINE, IS CONSIDERED APPROPRIATE. (SEE SHOULDER FILL DETAIL). SEE MANUFACTURERS SPECIFICATIONS FOR BARREL ARRAY AND INSTALLATION.

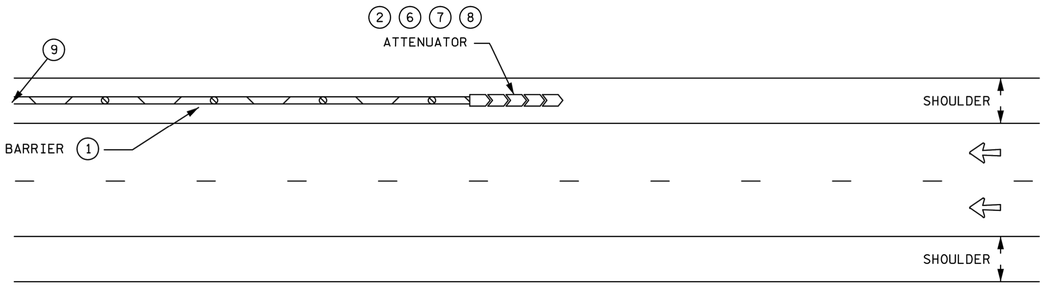
6. SPECIFY (NON-GATING, REDIRECTIVE) OR (GATING, NON-REDIRECTIVE) STYLE OF ATTENUATOR.

7. SEE MANUFACTURERS SPECIFICATIONS FOR ATTENUATOR ARRAY AND INSTALLATION.

8. SPECIFY REQUIRED TEST LEVEL AND MPH.

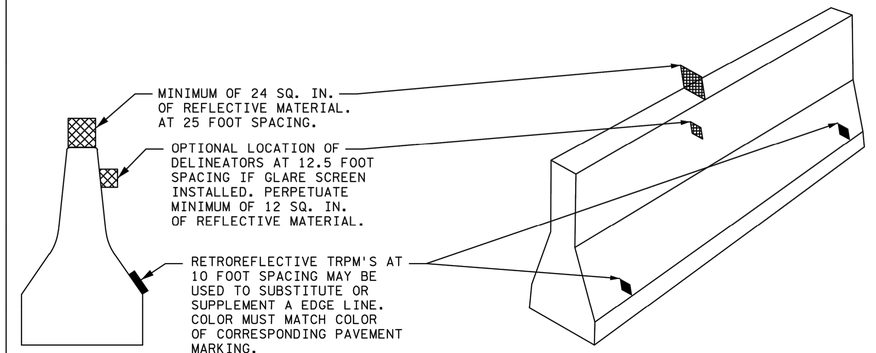
9. FOR TWO-LANE, TWO-WAY TRAFFIC, BOTH ENDS OF THE BARRIER SHOULD BE TREATED IN THE SAME MANNER AS DESCRIBED IN 2.

(NON-GATING, REDIRECTIVE) OR (GATING NON-REDIRECTIVE) ATTEUNATOR



NOT TO SCALE

DELINEATION OPTIONS FOR BARRIER



PORTABLE CONCRETE BARRIER PLACEMENT AND END TREATMENT

1/26/18 LAYOUT 19

No.	REVISIONS	DATE	BY
1.	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2.	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK
3.	REVISED IN RESPONSE TO RFI #3 & #4	05/25/2022	CCK
4.	REV'D PER COUNTY COMMENTS & RFI	06/20/2022	CCK

Kimley»Horn
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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

JOEL A. HINNENKAMP, PE
DATE: 06/30/2022 MN LIC. NO. 53081

KHA PROJECT 168543002
DATE 04/27/2022
SCALE AS SHOWN
DESIGNED BY CCK
DRAWN BY CCK
CHECKED BY JAH

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

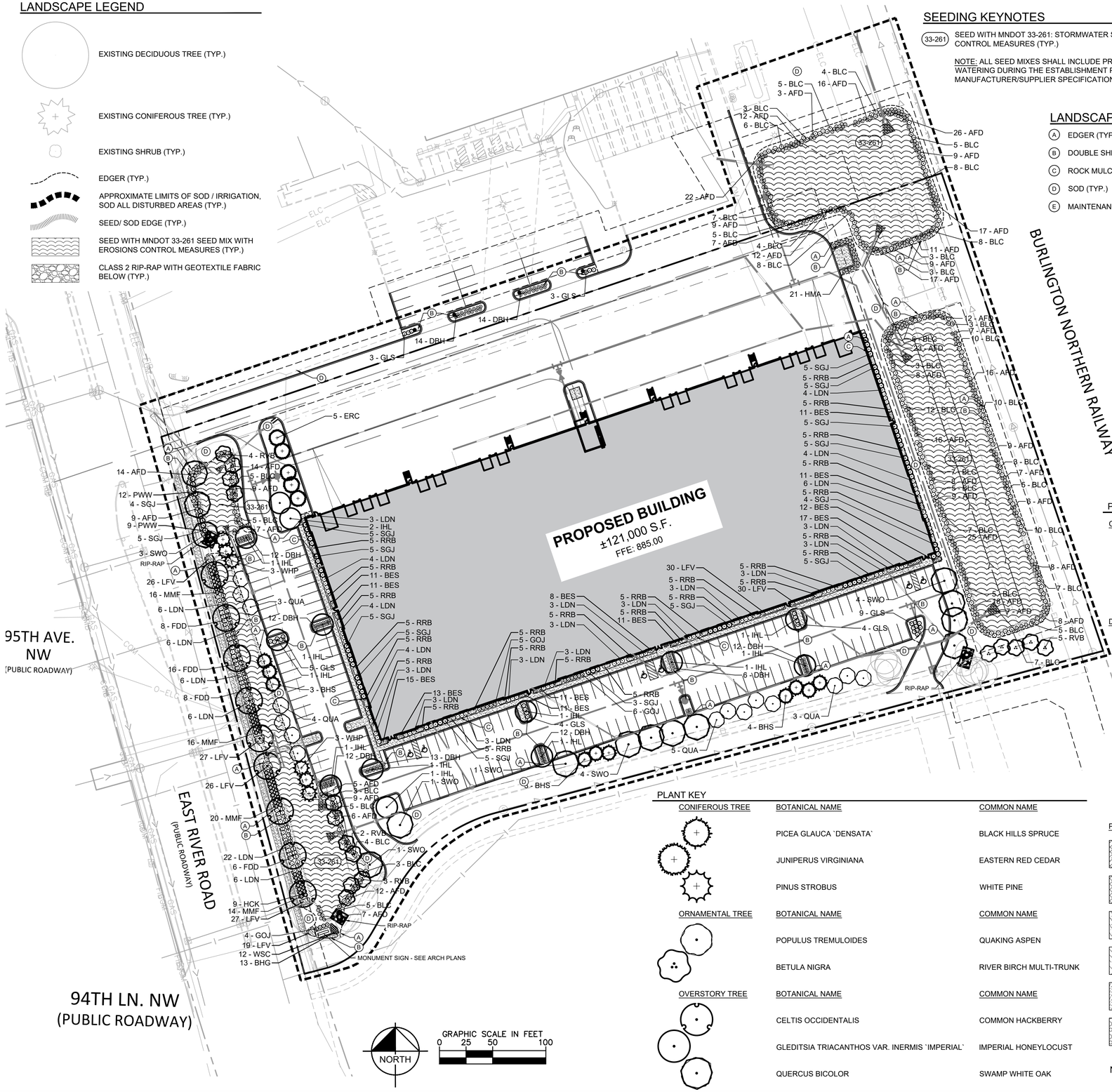
TRAFFIC CONTROL DETAILS

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

SHEET NUMBER
C802

LANDSCAPE LEGEND

- EXISTING DECIDUOUS TREE (TYP.)
- EXISTING CONIFEROUS TREE (TYP.)
- EXISTING SHRUB (TYP.)
- EDGER (TYP.)
- APPROXIMATE LIMITS OF SOD / IRRIGATION, SOD ALL DISTURBED AREAS (TYP.)
- SEED/ SOD EDGE (TYP.)
- SEED WITH MNDOT 33-261 SEED MIX WITH EROSIONS CONTROL MEASURES (TYP.)
- CLASS 2 RIP-RAP WITH GEOTEXTILE FABRIC BELOW (TYP.)



SEEDING KEYNOTES

(33-261) SEED WITH MNDOT 33-261: STORMWATER SOUTH & WEST SEED MIX WITH EROSION CONTROL MEASURES (TYP.)

NOTE: ALL SEED MIXES SHALL INCLUDE PROPER EROSION CONTROL FEATURES, WATERING DURING THE ESTABLISHMENT PERIOD AND ONGOING MAINTENANCE PER MANUFACTURER/SUPPLIER SPECIFICATIONS AND REQUIREMENTS.

LANDSCAPE KEYNOTES

- (A) EDGER (TYP.)
- (B) DOUBLE SHREDDED HARDWOOD MULCH (TYP.)
- (C) ROCK MULCH (TYP.)
- (D) SOD (TYP.)
- (E) MAINTENANCE STRIP (TYP.)

LANDSCAPE LOCATION SUMMARY

STREET FRONTAGE REQUIREMENTS ON EAST RIVER ROAD:
1 OVER-STORY TREE PER 40 FT OF FRONTAGE
1 DECIDUOUS AND EVERGREEN SHRUB PER 5 FT OF FRONTAGE

FRONTAGE:	460 LF
OVER-STORY TREES REQUIRED:	12 TREES
DECIDUOUS AND EVERGREEN SHRUBS REQUIRED:	184 SHRUBS

OPEN YARD REQUIREMENTS:
1 OVER-STORY TREE PER 3,000 SF OF OPEN AREA
1 ORNAMENTAL TREE PER 1,500 SF OF OPEN AREA
1 EVERGREEN TREE PER 3,000 SF OF OPEN AREA
1 DECIDUOUS OR EVERGREEN SHRUB PER 100 SF OF OPEN AREA

OPEN YARD:	106,914 SF (EXCLUDES HARDSCAPE)
OVER-STORY TREES REQUIRED:	36 TREES
OVER-STORY TREES PROVIDED:	36 TREES
ORNAMENTAL TREES REQUIRED:	72 TREES
ORNAMENTAL TREES PROVIDED:	31 TREES
EVERGREEN TREES REQUIRED:	36 TREES
EVERGREEN TREES PROVIDED:	21 TREES
DECIDUOUS OR EVERGREEN SHRUBS REQUIRED:	1,070 SHRUBS
DECIDUOUS OR EVERGREEN SHRUBS PROVIDED:	1,126 SHRUBS

PARKING LOT REQUIREMENTS:

REQUIRED INTERIOR LANDSCAPING:	3% OF THE PARKING AREA MUST CONTAIN LANDSCAPE ISLANDS
PROVIDED INTERIOR LANDSCAPING:	1,307 SF = 43,546 SF * 3%
REQUIRED TREES:	2 OVER STORY TREES / ISLAND
PROVIDED TREES:	8 TREES

TOTAL:

OVER-STORY TREES REQUIRED:	49 TREES
OVER-STORY TREES PROVIDED:	49 TREES (13 EXISTING TREES TO REMAIN)
ORNAMENTAL TREES REQUIRED:	72 TREES
ORNAMENTAL TREES PROVIDED:	31 TREES
EVERGREEN TREES REQUIRED:	36 TREES
EVERGREEN TREES PROVIDED:	21 TREES
DECIDUOUS OR EVERGREEN SHRUBS REQUIRED:	1,254 SHRUBS
DECIDUOUS OR EVERGREEN SHRUBS PROVIDED:	1,126 SHRUBS = (1,019 + 107 EVERGREEN)

SCREENING:

REQUIRED SCREENING:	PARKING AREAS TO BE SCREENED FROM RIGHT OF WAY AND ADJACENT RESIDENTIAL USES 736 UNIT BUFFER = 160 UNITS / 100 LF OF ADJACENT USE PROPERTY LINE = 460 LF (160) / 100
PROVIDED SCREENING:	SEE PLAN 507 UNIT BUFFER = 16 OVERSTORY, 9 EVERGREEN, 18 ORNAMENTAL, 293 SHRUBS

*OVERSTORY TREE = 10 UNITS, EVERGREEN OR ORNAMENTAL = 2 UNITS, SHRUB = 1 UNIT

PLANT KEY

CONIFEROUS SHRUBS	BOTANICAL NAME	COMMON NAME
	JUNIPERUS VIRGINIANA `GREY OWL`	GREY OWL JUNIPER
	THUJA OCCIDENTALIS `HOLMSTRUP`	HOLMSTRUP ARBORVITAE
	JUNIPERUS CHINENSIS `SEA GREEN`	SEA GREEN JUNIPER
DECIDUOUS SHRUBS	**BOTANICAL NAME**	**COMMON NAME**
	CORNUS SERICEA `ARTIC FIRE`	ARTIC FIRE DOGWOOD
	ARONIA MELANOCARPA `IROQUOIS BEAUTY` TM	IROQUOIS BEAUTY BLACK CHOKEBERRY
	DIERVILLA LONICERA	DWARF BUSH HONEYSUCKLE
	CORNUS SERICEA `BAILADELINE` TM	FIREDANCE RED TWIG DOGWOOD
	RHUS AROMATICA `GRO-LOW`	GRO-LOW FRAGRANT SUMAC
	PHYSOCARPUS OPULIFOLIUS `DONNA MAY` TM	LITTLE DEVIL DWARF NINEBARK
	SORBARIA SORBIFOLIA `SMNSSC` TM	MR. MUSTARD FALSESPIREA
PERENNIALS	**BOTANICAL NAME**	**COMMON NAME**
	RUDBECKIA FULGIDA `GOLDSTURM`	BLACK-EYED SUSAN
	SCHIZACHYRIUM SCOPARIUM `BLUE HEAVEN`	BLUE HEAVEN LITTLE BLUESTEM
	LIATRIS SPICATA `FLORISTAN VIOLET`	FLORISTAN VIOLET BLAZING STAR
	ECHINACEA PURPUREA `PAS702917` TM	POWWOW WILD BERRY CONEFLOWER
	PANICUM VIRGATUM `RR1` TM	RUBY RIBBONS SWITCH GRASS
	ECHINACEA PURPUREA `WHITE SWAN`	WHITE SWAN CONEFLOWER

PLANT KEY

CONIFEROUS TREE	BOTANICAL NAME	COMMON NAME
	PICEA GLAUCA `DENSATA`	BLACK HILLS SPRUCE
	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR
	PINUS STROBUS	WHITE PINE
ORNAMENTAL TREE	**BOTANICAL NAME**	**COMMON NAME**
	POPULUS TREMULOIDES	QUAKING ASPEN
	BETULA NIGRA	RIVER BIRCH MULTI-TRUNK
OVERSTORY TREE	**BOTANICAL NAME**	**COMMON NAME**
	CELTIS OCCIDENTALIS	COMMON HACKBERRY
	GLEDITSIA TRIACANTHOS VAR. INERMIS `IMPERIAL`	IMPERIAL HONEYLOCUST
	QUERCUS BICOLOR	SWAMP WHITE OAK

NOTE: SEE SHEET L101 FOR LANDSCAPE SCHEDULE

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.
G:\Proj\LB\BAR\Signature\MGC R.A.png
MITCHELL G. COOKAS, PLA
DATE: 06/30/2022 LIC. NO. 55522 MN

KHA PROJECT:	168543002
DATE	04/27/2022
SCALE	AS SHOWN
DESIGNED BY	BPS
DRAWN BY	BPS
CHECKED BY	MGC

LANDSCAPE PLAN

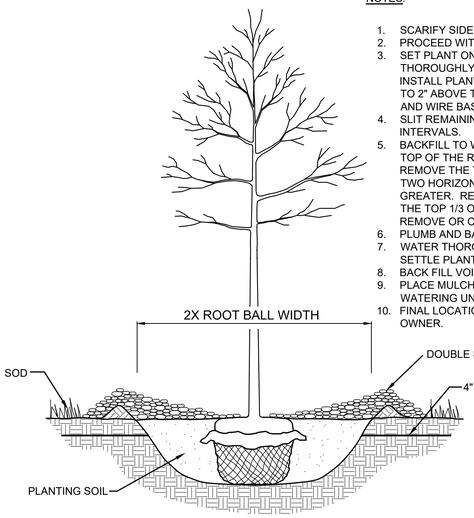
COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

SHEET NUMBER
L100

K:\TWC_LDE\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\L1-LANDSCAPE PLAN.dwg May 19, 2022 - 8:21am
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

K:\TWC_LDEV\Scannell\Coon Rapids Industrial\3 Design\CAD\PlanSheets\L1-LANDSCAPE DETAILS.dwg May 19, 2022 - 8:21am

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

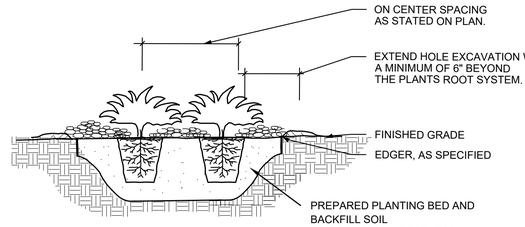


NOTES:

1. SCARIFY SIDES AND BOTTOM OF HOLE.
2. PROCEED WITH CORRECTIVE PRUNING.
3. SET PLANT ON UNDISTURBED NATIVE SOIL OR THOROUGHLY COMPACTED PLANTING SOIL. INSTALL PLANT SO THE ROOT FLARE IS AT OR UP TO 2" ABOVE THE FINISHED GRADE WITH BURLAP AND WIRE BASKET, (IF USED), INTACT.
4. SLIT REMAINING TREATED BURLAP AT 6" INTERVALS.
5. BACKFILL TO WITHIN APPROXIMATELY 12" OF THE TOP OF THE ROOTBALL, THEN WATER PLANT. REMOVE THE TOP 1/3 OF THE BASKET OR THE TOP TWO HORIZONTAL RINGS WHICHEVER IS GREATER. REMOVE ALL BURLAP AND NAILS FROM THE TOP 1/3 OF THE BALL. REMOVE ALL TWINE. REMOVE OR CORRECT STEM GIRDLING ROOTS.
6. PLUMB AND BACKFILL WITH PLANTING SOIL.
7. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
8. BACK FILL VOIDS AND WATER SECOND TIME.
9. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.
10. FINAL LOCATION OF TREE TO BE APPROVED BY OWNER.

1 TREE PLANTING DETAIL

SCALE: N.T.S. L101

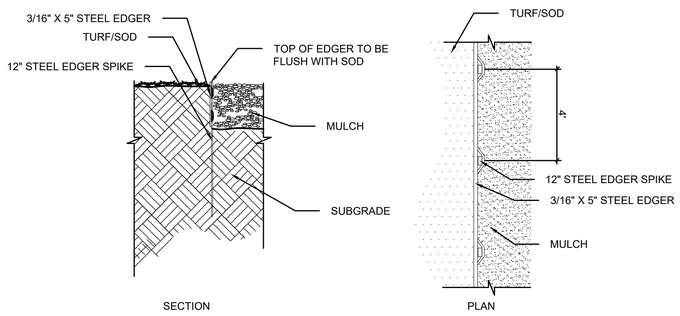


NOTES:

1. SCARIFY SIDES AND BOTTOM OF HOLE.
2. PROCEED WITH CORRECTIVE PRUNING OF TOP AND ROOT.
3. REMOVE CONTAINER AND SCORE OUTSIDE OF SOIL MASS TO REDIRECT AND PREVENT CIRCLING FIBROUS ROOTS. REMOVE OR CORRECT STEM GIRDLING ROOTS.
4. PLUMB AND BACKFILL WITH PLANTING SOIL.
5. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
6. BACK FILL VOIDS AND WATER SECOND TIME.
7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.
8. MIX IN 3-4" OF ORGANIC COMPOST.

2 SHRUB / PERENNIAL PLANTING DETAIL

SCALE: N.T.S. L101



3 STEEL EDGER DETAIL

SCALE: N.T.S. L101

PLANT SCHEDULE

CONIFEROUS TREE	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL/SIZE
	BHS	10	PICEA GLAUCA `DENSATA`	BLACK HILLS SPRUCE	B & B	6` HT.
	ERC	5	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	B & B	6` HT.
	WHP	6	PINUS STROBUS	WHITE PINE	B & B	6` HT.

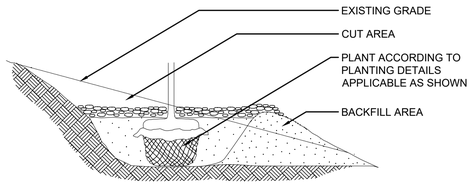
ORNAMENTAL TREE	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL/SIZE
	QUA	15	POPULUS TREMULOIDES	QUAKING ASPEN	B & B	2" CAL.
	RVB	16	BETULA NIGRA	RIVER BIRCH MULTI-TRUNK	B & B	8` HT.

OVERSTORY TREE	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL/SIZE
	HCK	9	CELTIS OCCIDENTALIS	COMMON HACKBERRY	B & B	2.5" CAL.
	IHL	13	GLEDITSIA TRIACANTHOS VAR. INERMIS `IMPERIAL`	IMPERIAL HONEYLOCUST	B & B	2.5" CAL.
	SWO	14	QUERCUS BICOLOR	SWAMP WHITE OAK	B & B	2.5" CAL.

CONIFEROUS SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SPACING
	GOJ	15	JUNIPERUS VIRGINIANA `GREY OWL`	GREY OWL JUNIPER	#5 CONT.	4` O.C.
	HMA	21	THUJA OCCIDENTALIS `HOLMSTRUP`	HOLMSTRUP ARBORVITAE	#5 CONT.	3` O.C.
	SGJ	71	JUNIPERUS CHINENSIS `SEA GREEN`	SEA GREEN JUNIPER	#5 CONT.	5` O.C.

DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SPACING
	AFD	455	CORNUS SERICEA `ARTIC FIRE`	ARTIC FIRE DOGWOOD	#5 CONT.	4` O.C.
	BLC	204	ARONIA MELANOCARPA `IROQUOIS BEAUTY` TM	IROQUOIS BEAUTY BLACK CHOKEBERRY	#5 CONT.	4` O.C.
	DBH	111	DIERVILLA LONICERA	DWARF BUSH HONEYSUCKLE	#5 CONT.	3` O.C.
	FDD	38	CORNUS SERICEA `BAILADELINE` TM	FIREDANCE RED TWIG DOGWOOD	#5 CONT.	5` O.C.
	GLS	28	RHUS AROMATICA `GRO-LOW`	GRO-LOW FRAGRANT SUMAC	#5 CONT.	4` O.C.
	LDN	117	PHYSOCARPUS OPULIFOLIUS `DONNA MAY` TM	LITTLE DEVIL DWARF NINEBARK	#5 CONT.	4` O.C.
	MMF	66	SORBARIA SORBIFOLIA 'SMNSSC' TM	MR. MUSTARD FALSESPIREA	#5 CONT.	4` O.C.

PERENNIALS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPACING
	BES	142	RUDBECKIA FULGIDA `GOLDSTURM`	BLACK-EYED SUSAN	18" o.c.
	BHG	13	SCHIZACHYRIUM SCOPARIUM `BLUE HEAVEN`	BLUE HEAVEN LITTLE BLUESTEM	24" o.c.
	LFV	185	LIATRIS SPICATA `FLORISTAN VIOLET`	FLORISTAN VIOLET BLAZING STAR	18" o.c.
	PWW	21	ECHINACEA PURPUREA `PAS702917` TM	POWWOW WILD BERRY CONEFLOWER	24" o.c.
	RRB	130	PANICUM VIRGATUM `RR1` TM	RUBY RIBBONS SWITCH GRASS	30" o.c.
	WSC	12	ECHINACEA PURPUREA `WHITE SWAN`	WHITE SWAN CONEFLOWER	24" o.c.



NOTE:

1. EXTENDED EXCAVATION AND BACKFILL SOIL TO A POINT DOWNSLOPE EQUAL TO OR LOWER IN ELEVATION THAN THE BOTTOM OF THE HOLE DIRECTLY BENEATH THE PLANT TO INSURE ADEQUATE DRAINAGE IN HEAVY SOILS. GRANULAR SOIL MUST BE ADDED AS BACKFILL IN AREAS OF POOR DRAINAGE.

4 STEEP SLOPE PLANTING

SCALE: N.T.S. L101

LANDSCAPE NOTES

1. CONTRACTOR SHALL CONTACT COMMON GROUND ALLIANCE AT 811 OR CALL811.COM TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY PLANTS OR LANDSCAPE MATERIAL.
2. ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
3. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
4. ALL SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO SUBMISSION OF ANY BID AND/OR QUOTE BY THE LANDSCAPE CONTRACTOR.
5. CONTRACTOR SHALL PROVIDE TWO YEAR GUARANTEE OF ALL PLANT MATERIALS. THE GUARANTEE BEGINS ON THE DATE OF THE LANDSCAPE ARCHITECT'S OR OWNER'S WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. REPLACEMENT PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING.
6. ALL PLANTS TO BE SPECIMEN GRADE, MINNESOTA-GROWN AND/OR HARDY. SPECIMEN GRADE SHALL ADHERE TO, BUT IS NOT LIMITED BY, THE FOLLOWING STANDARDS:
   ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, SCARS, ETC.
   ALL PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES.
   ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES.
   ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING.
   CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO OF NO LESS THAN 5:3.
7. PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.
8. PLANTS TO BE INSTALLED AS PER MNLA & ANSI STANDARD PLANTING PRACTICES.
9. PLANTS SHALL BE IMMEDIATELY PLANTED UPON ARRIVAL AT SITE. PROPERLY HEEL-IN MATERIALS IF NECESSARY; TEMPORARY ONLY.
10. PRIOR TO PLANTING, FIELD VERIFY THAT THE ROOT COLLAR/ROOT FLARE IS LOCATED AT THE TOP OF THE BALLED & BURLAP TREE. IF THIS IS NOT THE CASE, SOIL SHALL BE REMOVED DOWN TO THE ROOT COLLAR/ROOT FLARE. WHEN THE BALLED & BURLAP TREE IS PLANTED, THE ROOT COLLAR/ROOT FLARE SHALL BE EVEN OR SLIGHTLY ABOVE FINISHED GRADE.
11. OPEN TOP OF BURLAP ON BB MATERIALS; REMOVE POT ON POTTED PLANTS; SPLIT AND BREAK APART PEAT POTS.
12. PRUNE PLANTS AS NECESSARY - PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
13. WRAP ALL SMOOTH-BARKED TREES - FASTEN TOP AND BOTTOM. REMOVE BY APRIL 1ST.
14. STAKING OF TREES AS REQUIRED; REPOSITION, PLUMB AND STAKE IF NOT PLUMB AFTER ONE YEAR.
15. THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR THE NEED OF ANY SOIL AMENDMENTS.
16. BACKFILL SOIL AND TOPSOIL TO ADHERE TO MN/DOT STANDARD SPECIFICATION 3877 (SELECT TOPSOIL BORROW) AND TO BE EXISTING TOP SOIL FROM SITE FREE OF ROOTS, ROCKS LARGER THAN ONE INCH, SUBSOIL DEBRIS, AND LARGE WEEDS UNLESS SPECIFIED OTHERWISE. MINIMUM 4" DEPTH TOPSOIL FOR ALL LAWN GRASS AREAS AND 12" DEPTH TOPSOIL FOR TREE, SHRUBS, AND PERENNIALS.
17. MULCH TO BE AT ALL TREE, SHRUB, PERENNIAL, AND MAINTENANCE AREAS. TREE AND SHRUB PLANTING BEDS SHALL HAVE 4" DEPTH OF DOUBLE SHREDDED HARDWOOD MULCH. DOUBLE SHREDDED HARDWOOD MULCH TO BE USED AROUND ALL PLANTS WITHIN TURF AREAS. PERENNIAL AND ORNAMENTAL GRASS BEDS SHALL HAVE 2" DEPTH DOUBLE SHREDDED HARDWOOD MULCH. MULCH TO BE FREE OF DELETERIOUS MATERIAL AND NATURAL IN COLOR, OR APPROVED EQUAL. ROCK MULCH TO BE RIVER ROCK, 1 1/2" DIAMETER, AT MINIMUM 3" DEPTH, OR APPROVED EQUAL. ROCK MULCH TO BE ON COMMERCIAL GRADE FILTER FABRIC, BY TYPAR, OR APPROVED EQUAL WITH NO EXPOSURE. MULCH AND FABRIC TO BE APPROVED BY OWNER PRIOR TO INSTALLATION. MULCH TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).
18. EDGING TO BE COMMERCIAL GRADE COL-MET (OR EQUAL) STEEL EDGING; 3/16" THICK, COLOR BLACK, OR SPADED EDGE, AS INDICATED. STEEL EDGING SHALL BE PLACED WITH SMOOTH CURVES AND STAKED WITH METAL SPIKES NO GREATER THAN 4 FOOT ON CENTER WITH TOP OF EDGER AT GRADE, FOR MOWERS TO CUT ABOVE WITHOUT DAMAGE. UTILIZE CURBS AND SIDEWALKS FOR EDGING WHERE POSSIBLE. SPADED EDGE TO PROVIDE V-SHAPED DEPTH AND WIDTH TO CREATE SEPARATION BETWEEN MULCH AND GRASS. INDIVIDUAL TREE, SHRUB, OR RAIN-GARDEN BEDS TO BE SPADED EDGE, UNLESS NOTED OTHERWISE. EDGING TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).
19. ALL DISTURBED AREAS TO BE SODDED OR SEEDED, UNLESS OTHERWISE NOTED. PARKING LOT ISLANDS TO BE SODDED WITH SHREDDED HARDWOOD MULCH AROUND ALL TREES AND SHRUBS. SOD TO BE STANDARD MINNESOTA GROWN AND HARDY BLUEGRASS MIX, FREE OF LAWN WEEDS. ALL TOPSOIL AREAS TO BE RAKED TO REMOVE DEBRIS AND ENSURE DRAINAGE. SLOPES OF 3:1 OR GREATER SHALL BE STAKED. SEED AS SPECIFIED AND PER MN/DOT SPECIFICATIONS. IF NOT INDICATED ON LANDSCAPE PLAN, SEE EROSION CONTROL PLAN.
20. PROVIDE IRRIGATION TO ALL PLANTED AREAS ON SITE. IRRIGATION SYSTEM TO BE DESIGN/BUILD BY LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR TO PROVIDE SHOP DRAWINGS TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. CONTRACTOR TO PROVIDE OPERATION MANUALS, AS-BUILT PLANS, AND NORMAL PROGRAMMING. SYSTEM SHALL BE WINTERIZED AND HAVE SPRING STARTUP DURING FIRST YEAR OF OPERATION. SYSTEM SHALL HAVE ONE-YEAR WARRANTY ON ALL PARTS AND LABOR. ALL INFORMATION ABOUT INSTALLATION AND SCHEDULING CAN BE OBTAINED FROM THE GENERAL CONTRACTOR.
21. CONTRACTOR SHALL PROVIDE NECESSARY WATERING OF PLANT MATERIALS UNTIL THE PLANT IS FULLY ESTABLISHED OR IRRIGATION SYSTEM IS OPERATIONAL. OWNER WILL NOT PROVIDE WATER FOR CONTRACTOR.
22. REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.
23. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.
24. RAIN GARDEN NOTE: PROVIDE AND INSTALL EROSION CONTROL BLANKET AT RAIN GARDEN AREA SIDE SLOPES AFTER ALL PLANTING HAVE BEEN INSTALLED. BLANKET TO BE ONE SEASON GEOJUTE, MN/DOT CATEGORY 2 (STRAW 1S, WOOD FIBER 1S), OR APPROVED EQUAL. BLANKET TO BE OVERLAPPED BY 4" AND ANCHORED BY SOD STAPLES. PLACE BLANKET PERPENDICULAR TO THE SLOPE. TRENCH IN EDGES OF BLANKET AREA TO PREVENT UNDER MINING. PROVIDE SILT FENCE AT TOP OF SLOPE AS NEEDED. SHREDDED HARDWOOD MULCH TO MATCH OTHER PROJECT PLANTING MULCH. PLACE 4" DEPTH OF MULCH AT ALL PLANTING AND EROSION CONTROL BLANKET AREA (NO FILTER FABRIC). SEE RAIN GARDEN DETAIL FOR FURTHER INFORMATION. RAIN GARDEN TO PROVIDE PROPER INFILTRATION AND DRAINAGE REQUIREMENTS PER ENGINEERS APPROVAL.
25. MAINTAIN TREES, SHRUBS, AND OTHER PLANTS UNTIL PROJECT COMPLETION, BUT IN NO CASE, LESS THAN FOLLOWING PERIOD; 1 YEAR AFTER PROJECT COMPLETION. MAINTAIN TREES, SHRUBS, AND OTHER PLANTS BY PRUNING, CULTIVATING, AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING SAUCERS. TIGHTEN AND REPAIR STAKE AND GUY SUPPORTS AND RESET TREES AND SHRUBS TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED. RESTORE OR REPLACE DAMAGED WRAPPINGS. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE. REPLENISH MULCH TO THE REQUIRED DEPTH. MAINTAIN LAWNS FOR 45 DAYS AFTER INSTALLING SOD INCLUDING MOWING WHEN SOD RECITES 4" IN HEIGHT. WEED PLANTING BEDS AND MULCH SAUCERS AT MINIMUM ONCE A MONTH DURING THE GROWING SEASON. PROVIDE A MONTHLY REPORT TO THE OWNER ON WEEDING AND OTHER MAINTENANCE RESPONSIBILITIES.
26. SEE ELECTRICAL PLANS FOR SITE LIGHTING.

No.	REVISIONS	DATE	BY
1	REVISED PER CCWD COMMENTS	04/27/2022	CCK
2	MISC. REVISIONS/COUNTY COMMENTS	05/12/2022	CCK

Kimley»Horn
2022 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

G:\Proj\LB\BAR\Signature\MGC Pt A.png

MITCHELL G. COOKAS, PLA
DATE: 06/30/2022 LIC. NO. 55522 MN

KHA PROJECT	168543002		
DATE	04/27/2022		
SCALE	AS SHOWN		
DESIGNED BY	BPS	DRAWN BY	BPS
CHECKED BY	MGC		

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

LANDSCAPE DETAILS

COON RAPIDS INDUSTRIAL
PREPARED FOR
SCANNELL
COON RAPIDS MN

SHEET NUMBER
L101