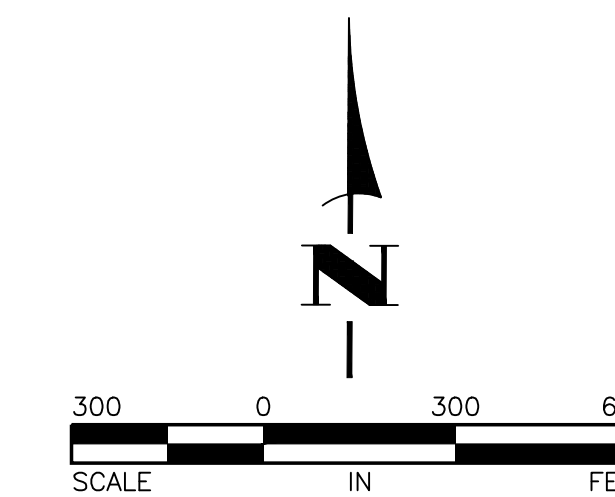
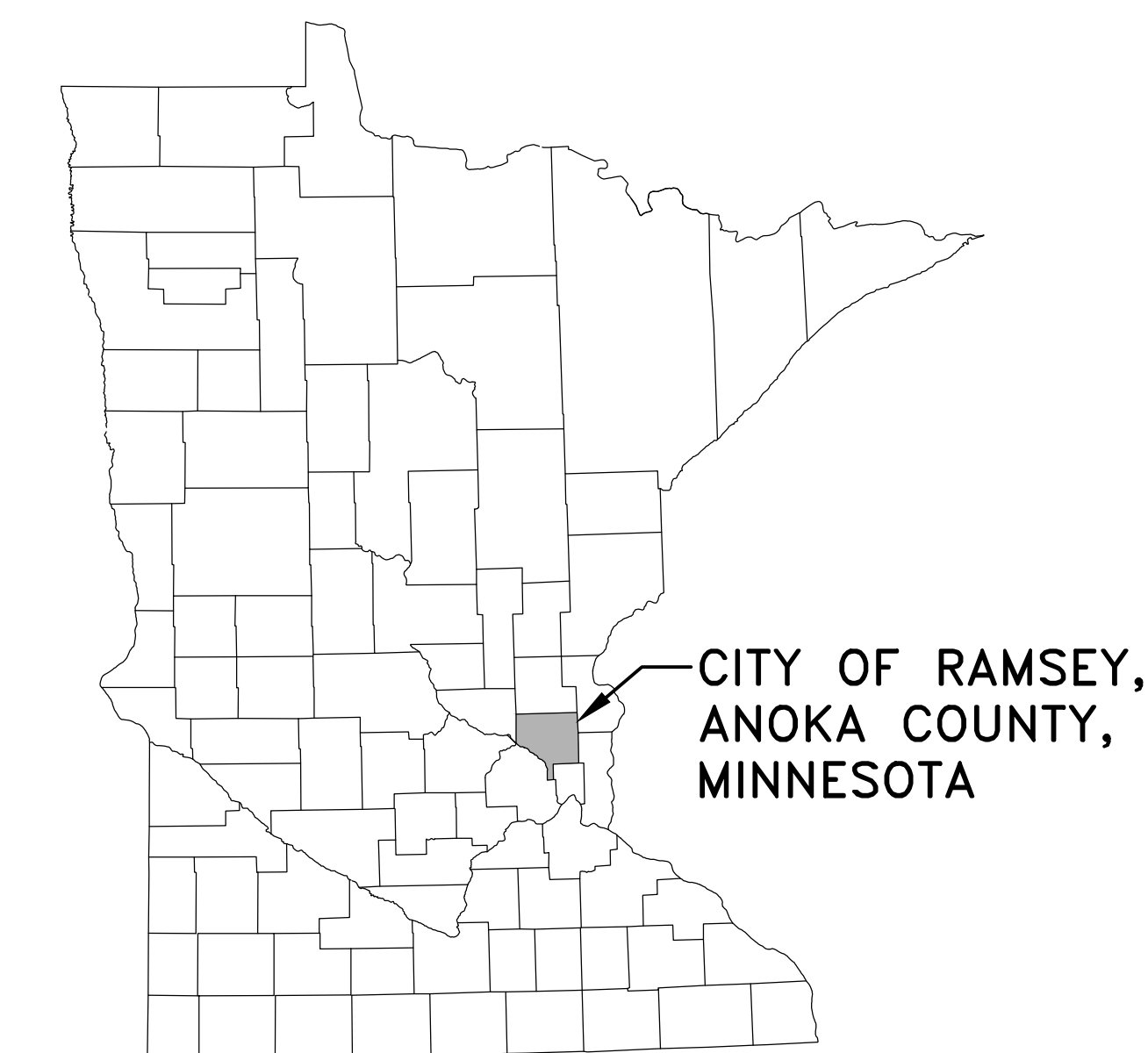
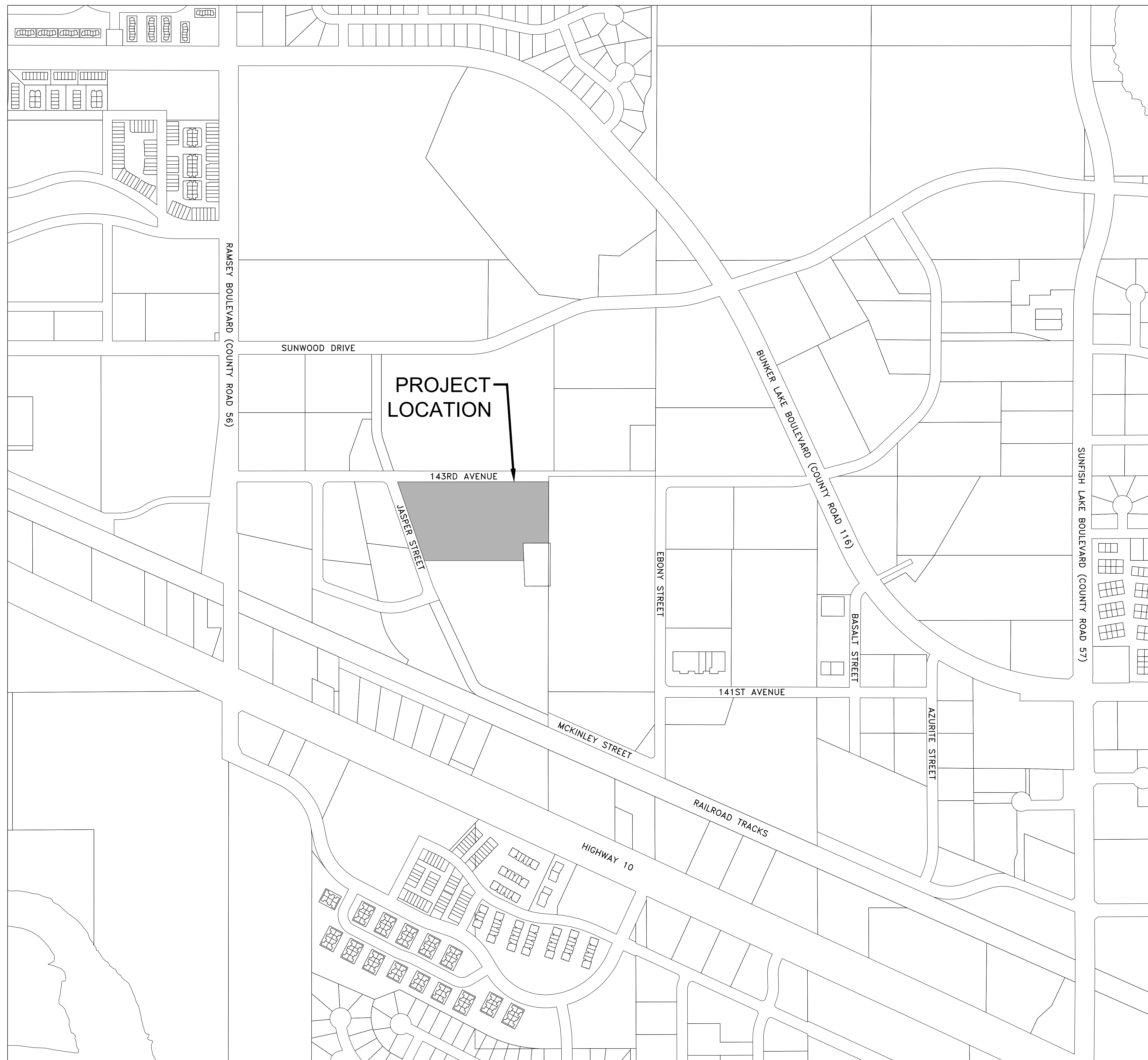


**LOT 1, BLOCK 1 - ANDERSON DAHLEN SOUTH ADDITION**  
**CONSTRUCTION PLANS FOR SITE GRADING AND STORM SEWER, SANITARY SEWER, WATERMAIN,**  
**PARKING LOT AND MISCELLANEOUS CONSTRUCTION**  
**FOR KINGHORN CONSTRUCTION**  
**CITY OF RAMSEY**



**GOVERNING SPECIFICATIONS**  
 THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.  
 THE 2013 EDITION OF THE CITY ENGINEER'S ASSOCIATION OF MINNESOTA "STANDARD SPECIFICATIONS" SHALL GOVERN FOR SANITARY SEWER AND WATERMAIN WORK.  
 ALL FEDERAL, STATE AND LOCAL LAWS, REGULATIONS, AND ORDINANCES SHALL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.  
 ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

**SHEET INDEX**  
 THIS PLAN CONTAINS 8 SHEETS

SHEET NO.	DESCRIPTION
C1	TITLE SHEET
C2	CONSTRUCTION NOTES AND DETAILS
C3	DETAILS
C4	EXISTING TOPOGRAPHY AND REMOVALS PLAN
C5	SITE PLAN
C6	GRADING, DRAINAGE AND EROSION CONTROL PLAN
C7	UTILITY PLAN
C8	PAVING AND RESTORATION PLAN

**GENERAL CONTRACTOR**

KINGHORN CONSTRUCTION  
 21830 INDUSTRIAL COURT  
 ROGERS, MN 55374  
 GRADY KINGHORN  
 gkinghorn@kinghornco.com  
 JOHN KINGHORN  
 johnk@kinghornco.com  
 763-428-8088

**ENGINEER/SURVEYOR**

HAKANSON ANDERSON  
 3601 THURSTON AVENUE  
 ANOKA, MN 55303  
 TIMOTHY A. EGGERICHS, P.E.  
 time@haa-inc.com  
 CHARLES R. CHRISTOPHERSON, P.L.S.  
 charlie@haa-inc.com  
 763-427-5860  
 763-427-0520 (FAX)

**ARCHITECT**

HTG ARCHITECTS  
 9300 HENNEPIN TOWN ROAD  
 EDEN PRAIRIE, MN 55347  
 952-278-8880

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.

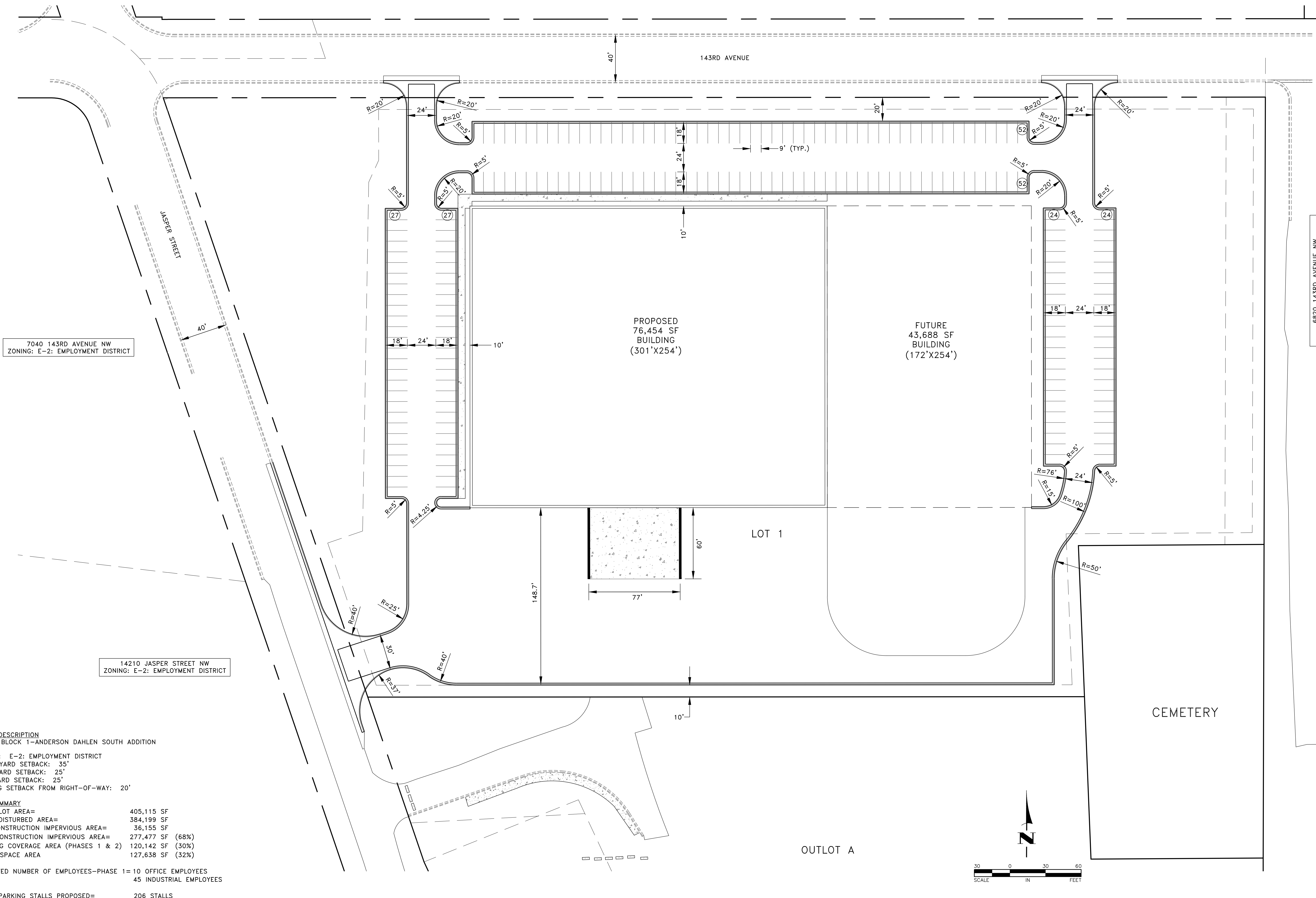
*Timothy A. Eggerichs*  
 TIMOTHY A. EGGERICHS, P.E. 43362 DATE 4/19/19  
 HAKANSON ANDERSON LIC. NO.

DATE	REVISION
5/1/19	CITY SUBMITTAL

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520

7000 SUNFISH LAKE BOULEVARD NW  
ZONING: E-2: EMPLOYMENT DISTRICT



7040 143RD AVENUE NW  
ZONING: E-2: EMPLOYMENT DISTRICT

14210 JASPER STREET NW  
ZONING: E-2: EMPLOYMENT DISTRICT

6820 143RD AVENUE NW  
ZONING: E-1: EMPLOYMENT DISTRICT

**LEGAL DESCRIPTION**  
LOT 1, BLOCK 1-ANDERSON DAHLEN SOUTH ADDITION  
ZONING: E-2: EMPLOYMENT DISTRICT  
FRONT YARD SETBACK: 35'  
REAR YARD SETBACK: 25'  
SIDE YARD SETBACK: 25'  
PARKING SETBACK FROM RIGHT-OF-WAY: 20'

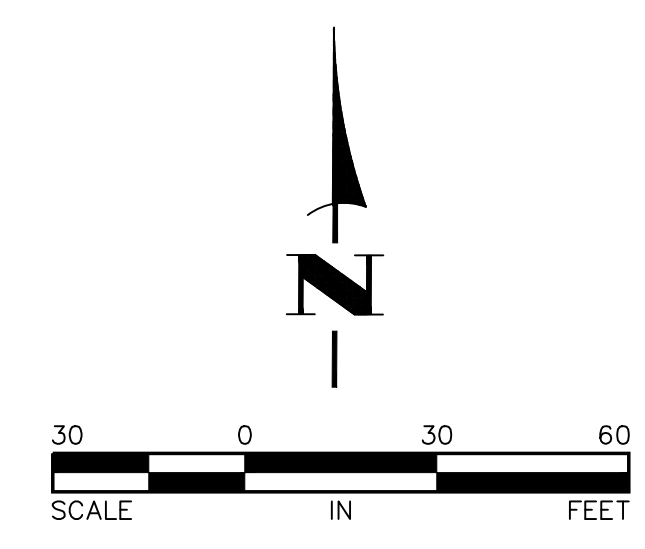
**LOT SUMMARY**  
TOTAL LOT AREA= 405,115 SF  
TOTAL DISTURBED AREA= 384,199 SF  
PRE-CONSTRUCTION IMPERVIOUS AREA= 36,155 SF  
POST CONSTRUCTION IMPERVIOUS AREA= 277,477 SF (68%)  
BUILDING COVERAGE AREA (PHASES 1 & 2) 120,142 SF (30%)  
GREEN SPACE AREA 127,638 SF (32%)

ESTIMATED NUMBER OF EMPLOYEES-PHASE 1= 10 OFFICE EMPLOYEES  
45 INDUSTRIAL EMPLOYEES  
TOTAL PARKING STALLS PROPOSED= 206 STALLS

LOT 1

OUTLOT A

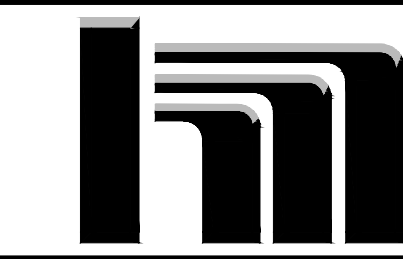
CEMETERY



DATE	REVISION	DATE	REVISION
5/1/19	CITY SUBMITTAL		

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.  
*Timothy A. Edgerichs, P.E.*  
Date 4/19/19 Lic. No. 43362

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: CJJ

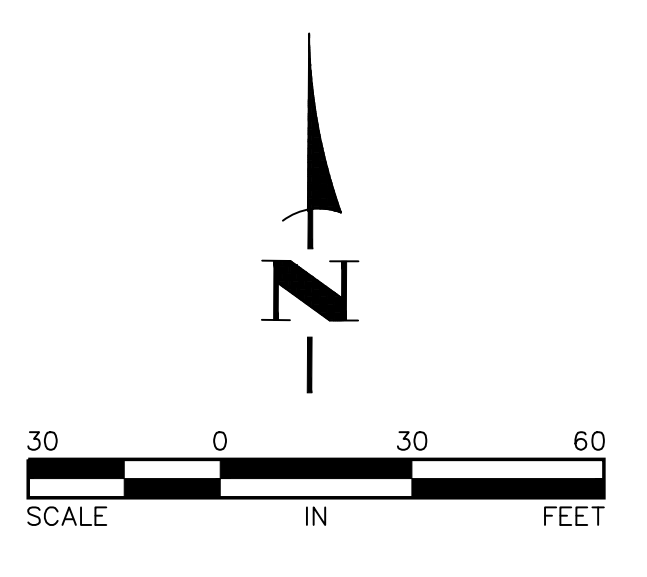


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

LOT 1, BLOCK 1  
ANDERSON DAHLEN SOUTH ADDITION

SITE PLAN  
CITY OF RAMSEY, MINNESOTA

SHEET C5 OF C8 SHEETS



REFERENCE NOTES:  
 ① CONTRACTOR SHALL COORDINATE WITH THE OWNER TO DETERMINE THE EXTENT OF THE REMOVALS OF THE ONSITE UTILITIES, WELL, WATERMAIN PIPING AND OTHER MISCELLANEOUS FEATURES.

- LEGEND**
- RIGHT-OF-WAY
  - PROPERTY LINE
  - EASEMENT LINE
  - - - - - EXISTING CONTOUR
  - - - - - EXISTING CONCRETE CURB
  - - - - - BURIED TELEPHONE LINE
  - - - - - BURIED GAS LINE
  - ☆ LIGHT POLE
  - EXISTING SANITARY SEWER
  - EXISTING STORM SEWER
  - EXISTING WATERMAIN
  - EXISTING STORM SEWER APRON
  - EXISTING CATCH BASIN
  - EXISTING STORM SEWER MANHOLE
  - EXISTING SANITARY SEWER MANHOLE
  - EXISTING WATER VALVE
  - EXISTING HYDRANT
  - EXISTING TREES
  - EXISTING FENCE
  - EXISTING SIGN
  - B-X APPROXIMATE SOIL BORING LOCATION
  - REMOVE BITUMINOUS PAVEMENT
  - ▨ REMOVE CONCRETE PAVEMENT
  - ▧ CLEAR AND GRUB TREES
  - ✕✕ CLEAR AND GRUB TREES
  - REMOVE CONCRETE CURB
  - SAWCUT BITUMINOUS OR CONCRETE PAVEMENT



DATE	REVISION	DATE	REVISION
5/1/19	CITY SUBMITTAL		

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.  
 Timothy A. Ebersichs, P.E.  
 Date 4/19/19 Lic. No. 43362

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: CJJ

**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

LOT 1, BLOCK 1  
 ANDERSON DAHLEN SOUTH ADDITION

EXISTING TOPOGRAPHY  
 AND REMOVALS PLAN  
 CITY OF RAMSEY, MINNESOTA

SHEET C4 OF C8 SHEETS  
 3395.10

7000 SUNFISH LAKE BOULEVARD NW  
ZONING: E-2: EMPLOYMENT DISTRICT

7040 143RD AVENUE NW  
ZONING: E-2: EMPLOYMENT DISTRICT

14210 JASPER STREET NW  
ZONING: E-2: EMPLOYMENT DISTRICT

6820 143RD AVENUE NW  
ZONING: E-1: EMPLOYMENT DISTRICT

LEGAL DESCRIPTION  
LOT 1, BLOCK 1-ANDERSON DAHLEN SOUTH ADDITION

ZONING: E-2: EMPLOYMENT DISTRICT  
FRONT YARD SETBACK: 35'  
REAR YARD SETBACK: 25'  
SIDE YARD SETBACK: 25'  
PARKING SETBACK FROM RIGHT-OF-WAY: 20'

LOT SUMMARY  
TOTAL LOT AREA= 405,115 SF  
TOTAL DISTURBED AREA= 384,199 SF  
PRE-CONSTRUCTION IMPERVIOUS AREA= 36,155 SF  
POST CONSTRUCTION IMPERVIOUS AREA= 277,477 SF (68%)  
BUILDING COVERAGE AREA (PHASES 1 & 2) 120,142 SF (30%)  
GREEN SPACE AREA 127,638 SF (32%)

ESTIMATED NUMBER OF EMPLOYEES-PHASE 1= 10 OFFICE EMPLOYEES  
45 INDUSTRIAL EMPLOYEES

TOTAL PARKING STALLS PROPOSED= 206 STALLS

DATE	REVISION	DATE	REVISION
5/17/19	CITY SUBMITTAL		

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.  
*Timothy A. Eberharts, P.E.*  
Date: 4/19/19 Timothy A. Eberharts, P.E. Lic. No. 43362

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: CJJ



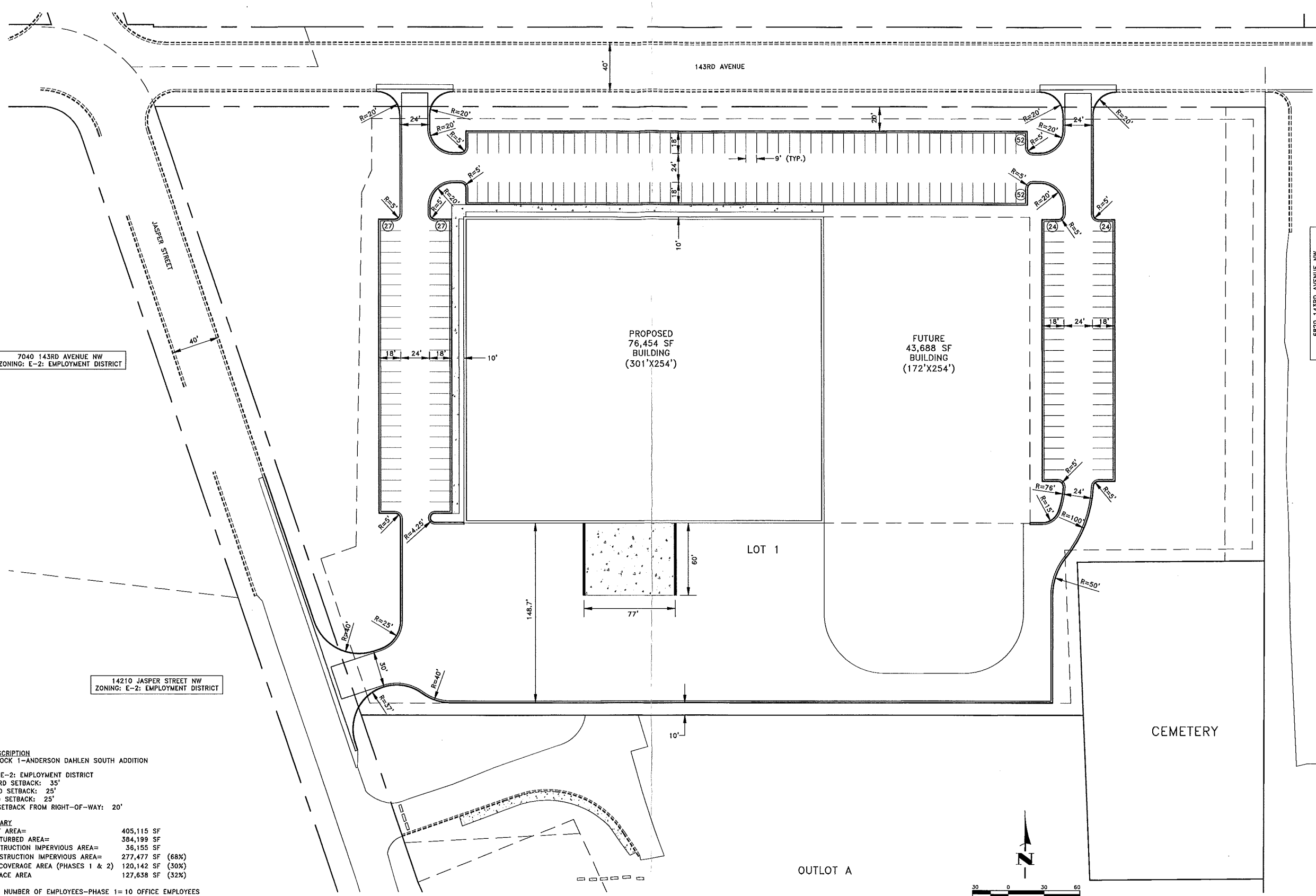
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

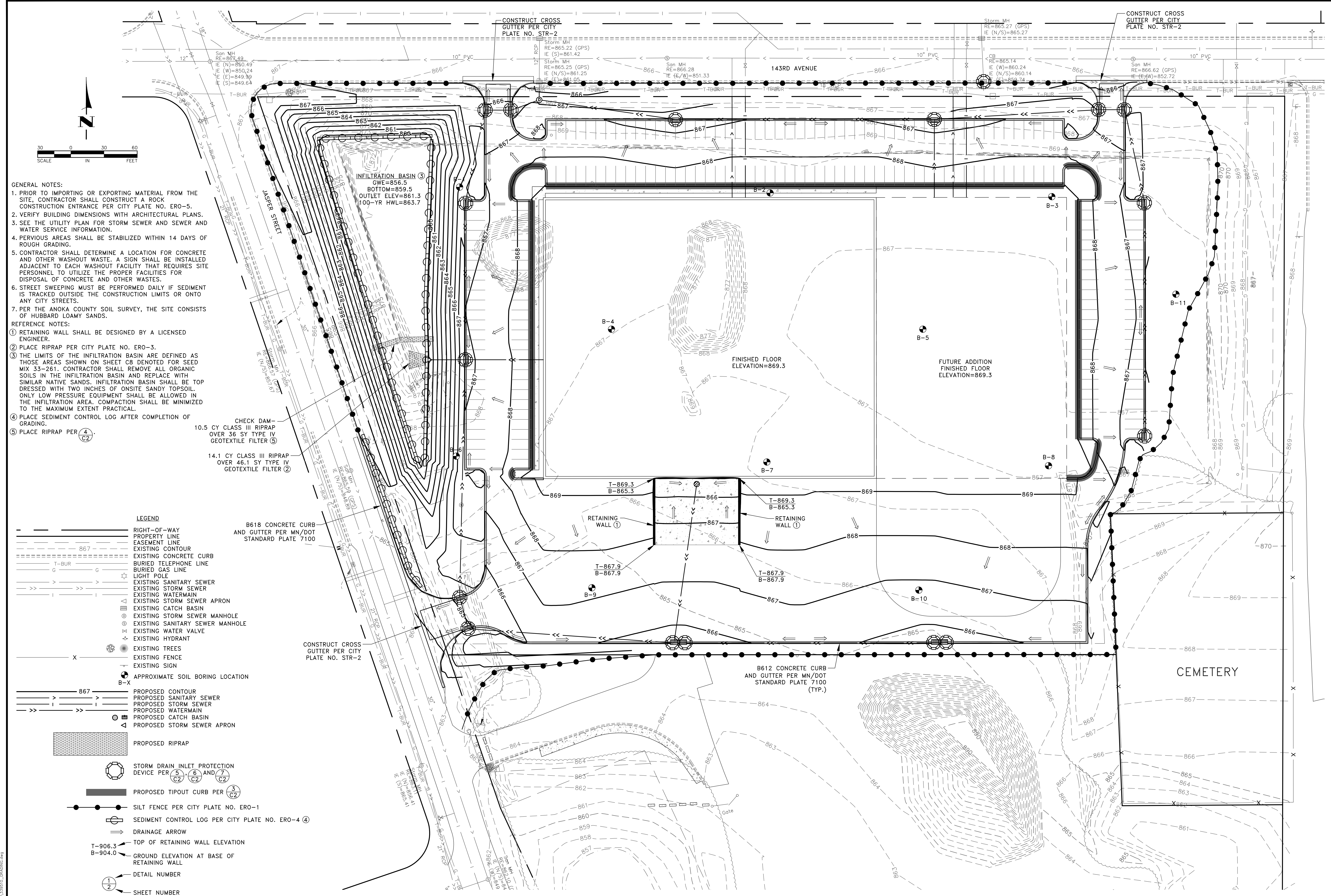
LOT 1, BLOCK 1  
ANDERSON DAHLEN SOUTH ADDITION

SITE PLAN  
CITY OF RAMSEY, MINNESOTA

SHEET  
C5  
OF  
C8  
SHEETS

3395.10





- GENERAL NOTES:**
- PRIOR TO IMPORTING OR EXPORTING MATERIAL FROM THE SITE, CONTRACTOR SHALL CONSTRUCT A ROCK CONSTRUCTION ENTRANCE PER CITY PLATE NO. ERO-5.
  - VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
  - SEE THE UTILITY PLAN FOR STORM SEWER AND SEWER AND WATER SERVICE INFORMATION.
  - PERVIOUS AREAS SHALL BE STABILIZED WITHIN 14 DAYS OF ROUGH GRADING.
  - CONTRACTOR SHALL DETERMINE A LOCATION FOR CONCRETE AND OTHER WASHOUT WASTE. A SIGN SHALL BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR DISPOSAL OF CONCRETE AND OTHER WASTES.
  - STREET SWEEPING MUST BE PERFORMED DAILY IF SEDIMENT IS TRACKED OUTSIDE THE CONSTRUCTION LIMITS OR ONTO ANY CITY STREETS.
  - PER THE ANOKA COUNTY SOIL SURVEY, THE SITE CONSISTS OF HUBBARD LOAMY SANDS.
- REFERENCE NOTES:**
- RETAINING WALL SHALL BE DESIGNED BY A LICENSED ENGINEER.
  - PLACE RIPRAP PER CITY PLATE NO. ERO-3.
  - THE LIMITS OF THE INFILTRATION BASIN ARE DEFINED AS THOSE AREAS SHOWN ON SHEET C8 DENOTED FOR SEED MIX 33-261. CONTRACTOR SHALL REMOVE ALL ORGANIC SOILS IN THE INFILTRATION BASIN AND REPLACE WITH SIMILAR NATIVE SANDS. INFILTRATION BASIN SHALL BE TOP DRESSED WITH TWO INCHES OF ONSITE SANDY TOPSOIL. ONLY LOW PRESSURE EQUIPMENT SHALL BE ALLOWED IN THE INFILTRATION AREA. COMPACTION SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICAL.
  - PLACE SEDIMENT CONTROL LOG AFTER COMPLETION OF GRADING.
  - PLACE RIPRAP PER (C2).

- LEGEND**
- RIGHT-OF-WAY
  - PROPERTY LINE
  - EASEMENT LINE
  - EXISTING CONTOUR
  - EXISTING CONCRETE CURB
  - BURIED TELEPHONE LINE
  - BURIED GAS LINE
  - LIGHT POLE
  - EXISTING SANITARY SEWER
  - EXISTING STORM SEWER
  - EXISTING WATERMAIN
  - EXISTING STORM SEWER APRON
  - EXISTING CATCH BASIN
  - EXISTING STORM SEWER MANHOLE
  - EXISTING SANITARY SEWER MANHOLE
  - EXISTING WATER VALVE
  - EXISTING HYDRANT
  - EXISTING TREES
  - EXISTING FENCE
  - EXISTING SIGN
  - APPROXIMATE SOIL BORING LOCATION
  - PROPOSED CONTOUR
  - PROPOSED SANITARY SEWER
  - PROPOSED STORM SEWER
  - PROPOSED WATERMAIN
  - PROPOSED CATCH BASIN
  - PROPOSED STORM SEWER APRON
  - PROPOSED RIPRAP
  - STORM DRAIN INLET PROTECTION DEVICE PER (5), (6) AND (7) (C2)
  - PROPOSED TIPOUT CURB PER (3) (C2)
  - SILT FENCE PER CITY PLATE NO. ERO-1
  - SEDIMENT CONTROL LOG PER CITY PLATE NO. ERO-4 (4)
  - DRAINAGE ARROW
  - TOP OF RETAINING WALL ELEVATION
  - GROUND ELEVATION AT BASE OF RETAINING WALL
  - DETAIL NUMBER
  - SHEET NUMBER

DATE	REVISION	DATE	REVISION
5/1/19	CITY SUBMITTAL		

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.

*Timothy A. Edgerichs, P.E.*  
 Date 4/19/19 Lic. No. 43362

**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

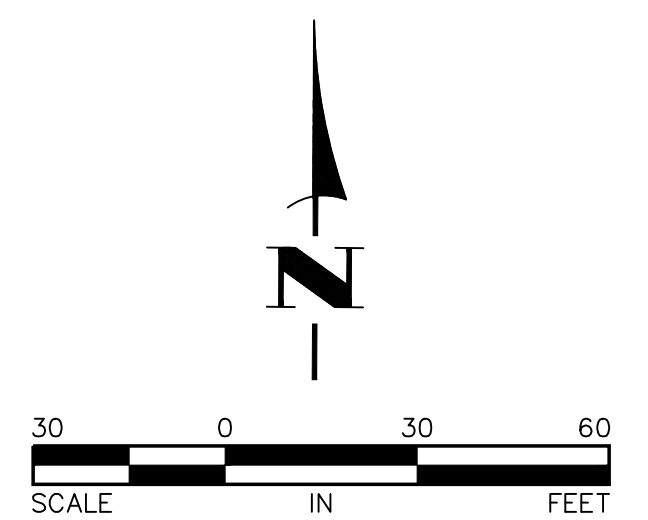
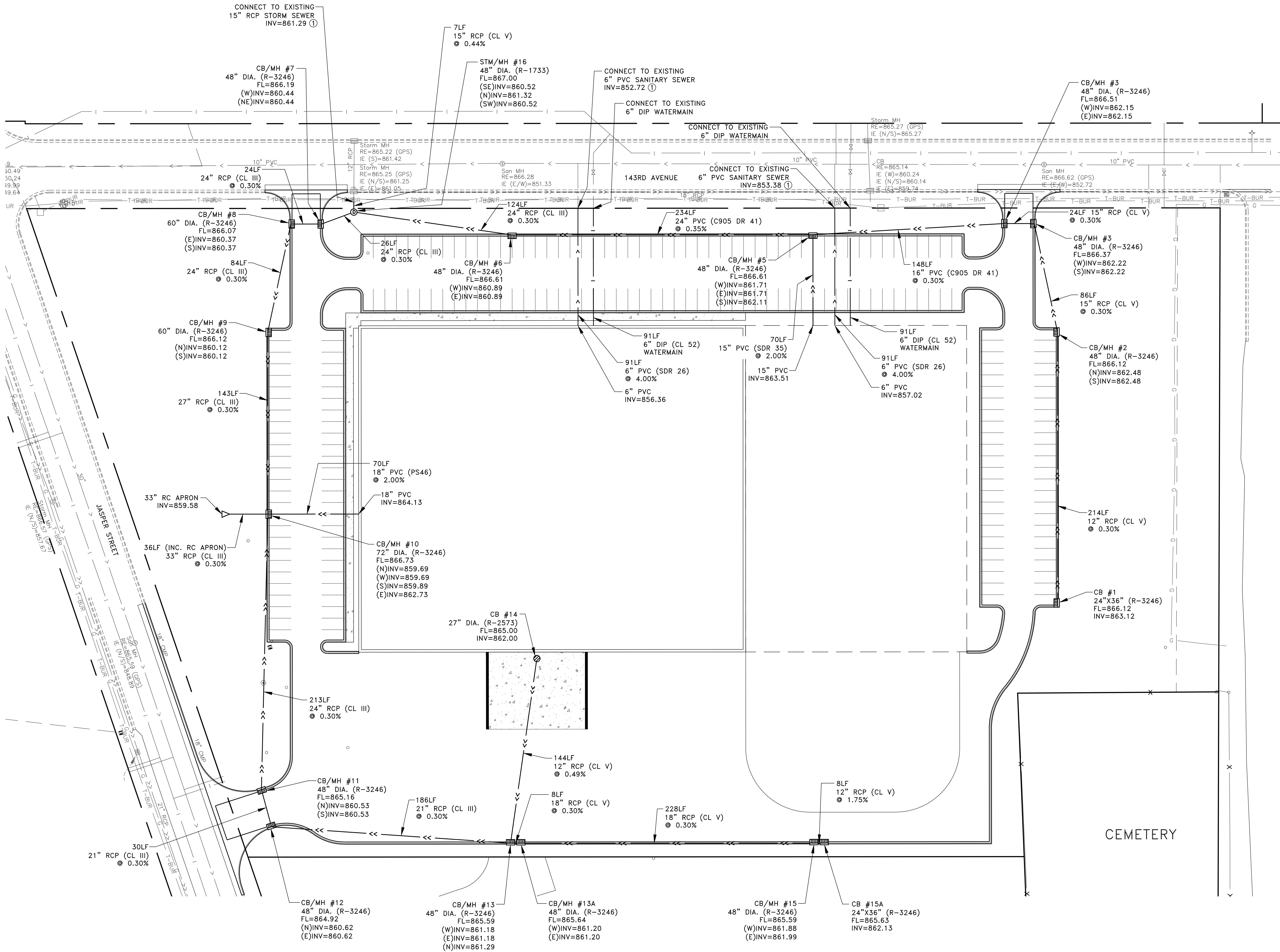
DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: CJJ

LOT 1, BLOCK 1  
 ANDERSON DAHLEN SOUTH ADDITION

GRADING, DRAINAGE AND EROSION CONTROL PLAN  
 CITY OF RAMSEY, MINNESOTA

SHEET C6 OF C8 SHEETS  
 3395.10

- GENERAL NOTES:  
 1. ALL STORM SEWER STRUCTURES SHALL BE PRECAST CONCRETE SECTIONS PER MN/DOT STANDARD PLATES 4006 AND 4020.  
 2. MAINTAIN A MINIMUM OF 7.5' OF COVER OVER WATER SERVICES.  
 REFERENCE NOTES:  
 ① LOCATION AND INVERT OF EXISTING SANITARY SEWER AND STORM SEWER STUBS SHALL BE VERIFIED PRIOR TO CONSTRUCTION.



DATE	REVISION	DATE	REVISION
5/1/19	CITY SUBMITTAL		

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.  
 Timothy A. Eberschke, P.E.  
 Date 4/19/19 Lic. No. 43362

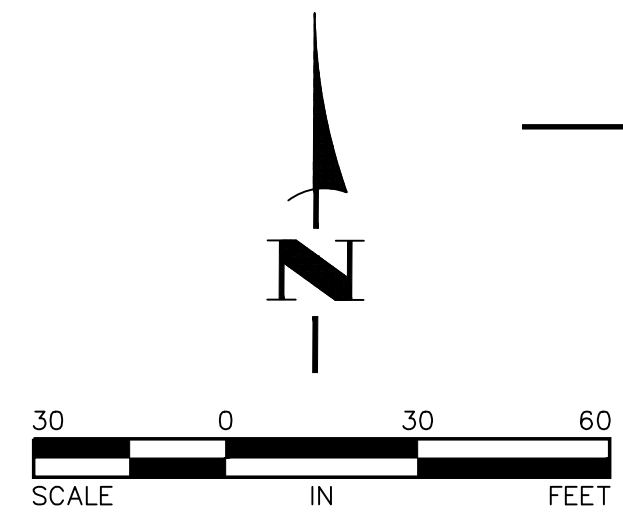
DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: CJJ

**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

LOT 1, BLOCK 1  
 ANDERSON DAHLEN SOUTH ADDITION

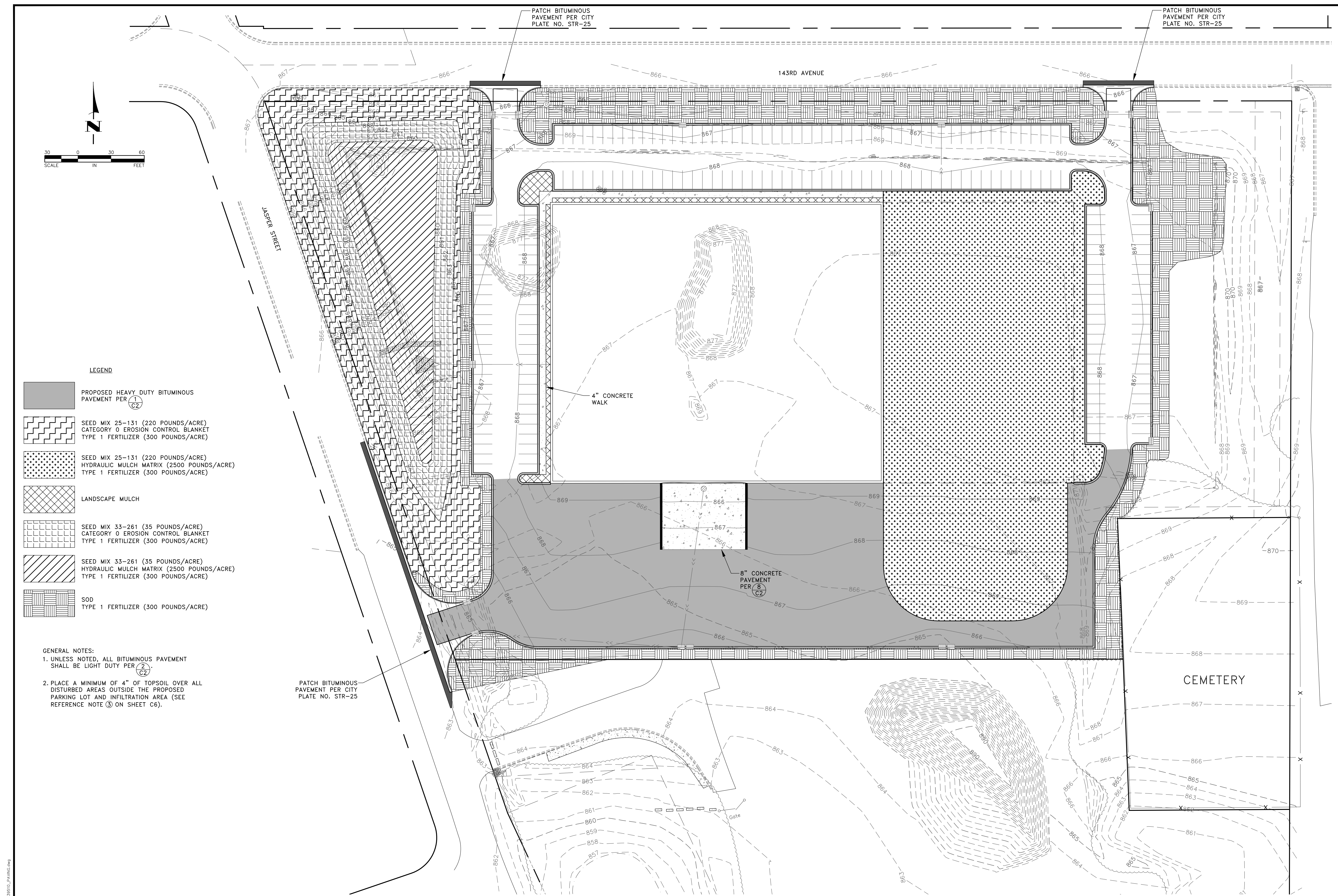
UTILITY PLAN  
 CITY OF RAMSEY, MINNESOTA

SHEET C7 OF C8 SHEETS  
 3395.10



- LEGEND**
- PROPOSED HEAVY DUTY BITUMINOUS PAVEMENT PER  $\frac{1}{C2}$
  - SEED MIX 25-131 (220 POUNDS/ACRE)  
CATEGORY 0 EROSION CONTROL BLANKET  
TYPE 1 FERTILIZER (300 POUNDS/ACRE)
  - SEED MIX 25-131 (220 POUNDS/ACRE)  
HYDRAULIC MULCH MATRIX (2500 POUNDS/ACRE)  
TYPE 1 FERTILIZER (300 POUNDS/ACRE)
  - LANDSCAPE MULCH
  - SEED MIX 33-261 (35 POUNDS/ACRE)  
CATEGORY 0 EROSION CONTROL BLANKET  
TYPE 1 FERTILIZER (300 POUNDS/ACRE)
  - SEED MIX 33-261 (35 POUNDS/ACRE)  
HYDRAULIC MULCH MATRIX (2500 POUNDS/ACRE)  
TYPE 1 FERTILIZER (300 POUNDS/ACRE)
  - SOD  
TYPE 1 FERTILIZER (300 POUNDS/ACRE)

- GENERAL NOTES:**
1. UNLESS NOTED, ALL BITUMINOUS PAVEMENT SHALL BE LIGHT DUTY PER  $\frac{2}{C2}$
  2. PLACE A MINIMUM OF 4" OF TOPSOIL OVER ALL DISTURBED AREAS OUTSIDE THE PROPOSED PARKING LOT AND INFILTRATION AREA (SEE REFERENCE NOTE ③ ON SHEET C6).



DATE	REVISION	DATE	REVISION
5/1/19	CITY SUBMITTAL		

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.

*Timothy A. Ebersichs*  
TIMOTHY A. EBERSICHS, P.E.  
Date 4/19/19 Lic. No. 43362

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
CJJ

**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

LOT 1, BLOCK 1  
ANDERSON DAHLEN SOUTH ADDITION

PAVING AND RESTORATION PLAN  
CITY OF RAMSEY, MINNESOTA

SHEET  
**C8**  
OF  
**C8**  
SHEETS  
3395.10



GENERAL CONSTRUCTION AND SOILS NOTES:

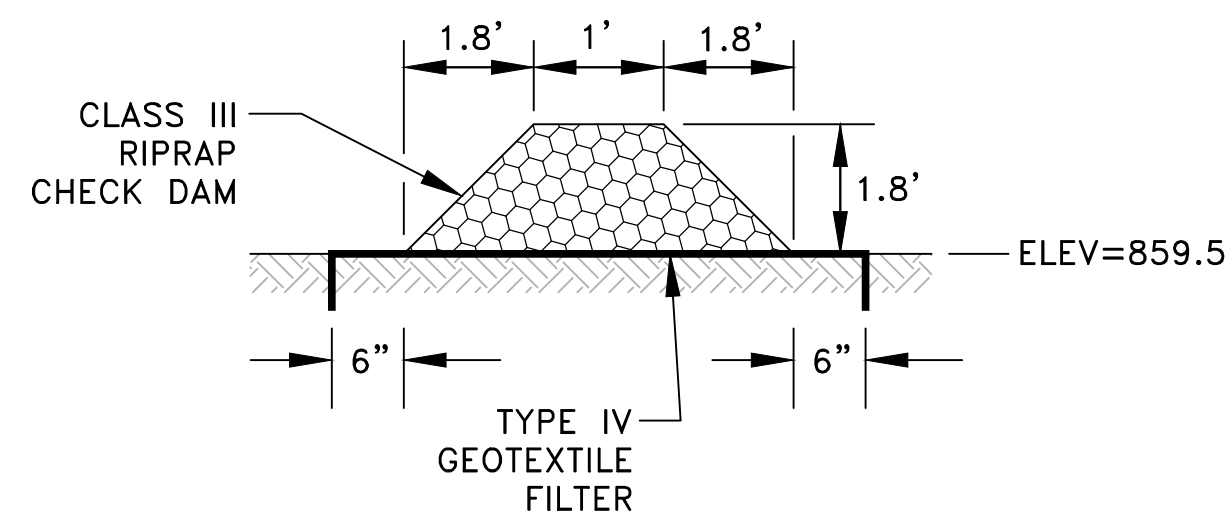
- STRIP ALL INPLACE TOPSOIL IN AREAS TO BE DISTURBED BY CONSTRUCTION AND REUSE AS SLOPE DRESSING. IN AREAS OF PARKING LOT AND BUILDING CONSTRUCTION, THE EXPOSED SAND SHALL BE SURFACE COMPACTED TO AT LEAST 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY, ASTM D698, IN AT LEAST THE UPPER 3 FEET.
- UNLESS OTHERWISE RECOMMENDED IN THESE PLANS, THE GRADING SUBGRADE SHALL BE CONSTRUCTED OF SUITABLE GRADING MATERIAL. THE FILL SHALL BE PLACED IN 8" TO 10" LOOSE LIFTS, AND COMPACTED TO 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY.
- SUITABLE GRADING MATERIAL FOR THIS PROJECT SHALL CONSIST OF ALL SOILS ENCOUNTERED WITH THE EXCEPTION OF TOPSOIL, SILT, DEBRIS, ORGANIC MATERIAL AND OTHER UNSTABLE MATERIAL.
- CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORT FOR ADDITIONAL SITE PREPARATION REQUIREMENTS.
- PROVIDE A SAW CUT WHEN PLACING NEW PAVEMENT ADJACENT TO INPLACE PAVEMENT AND AT TERMINI OF CONSTRUCTION TO ENSURE A UNIFORM JOINT.
- BITUMINOUS AND CONCRETE ITEMS DISTURBED BY CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH MN/DOT SPEC. 2104.
- USE TACK COAT BETWEEN ALL BITUMINOUS MIXTURES. THE BITUMINOUS TACK COAT MATERIAL SHALL BE APPLIED AT A UNIFORM RATE OF 0.04 GAL/SY TO 0.06 GAL/SY BETWEEN BITUMINOUS LAYERS. THE APPLICATION RATES ARE FOR UNDILUTED EMULSIONS (AS SUPPLIED FROM THE REFINERY) OR MC AND RC LIQUID ASPHALTS.
- PERFORMANCE GRADED (PG) ASPHALT BINDER PG 58S-28, SPEC. 3151, SHALL BE USED FOR ALL BITUMINOUS MIXES ON THIS PROJECT. SPECIFIC PG GRADES ARE LISTED AT THE END OF THE MIX DESIGNATION NUMBER SHOWN ON THE TYPICAL SECTIONS.
- THE BITUMINOUS MIXTURES SHALL MEET THE REQUIREMENTS OF SPECIFICATIONS 2360 AND 3139.

GENERAL EROSION CONTROL NOTES:

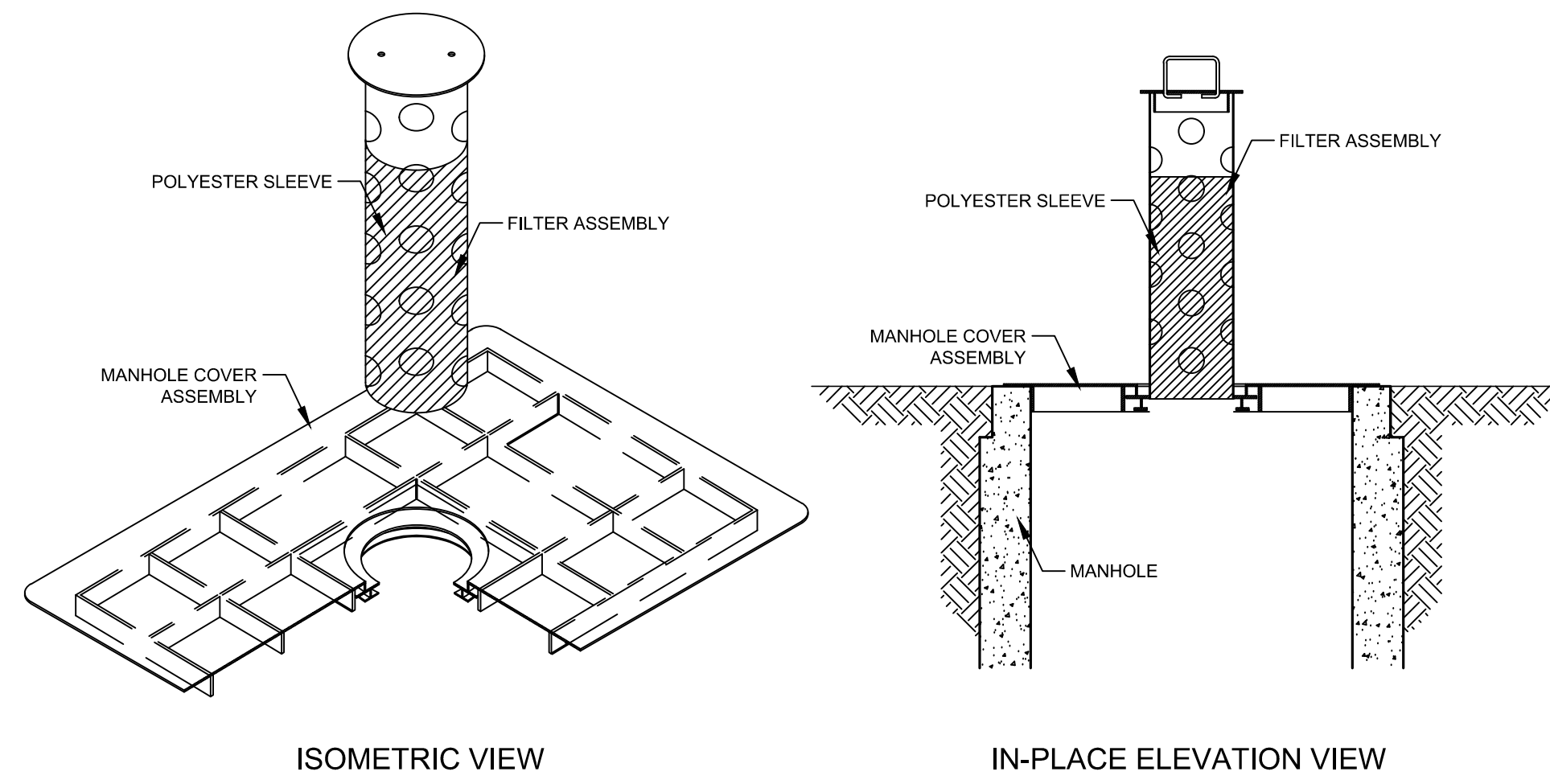
- EROSION CONTROL SHALL CONFORM TO THE MN/DOT EROSION CONTROL HANDBOOK.
- PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ACQUIRE THE NECESSARY MPCA NPDES STORMWATER PERMIT.
- THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL FACILITIES (BMP'S) PRIOR TO GRADING AND REMOVAL ACTIVITIES. BMP'S SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION ACTIVITIES AND POTENTIAL FOR EROSION HAS PASSED.
- THE CONTRACTOR SHALL SCHEDULE HIS OPERATION TO MINIMIZE THE AMOUNT OF DISTURBED AREA AT ANY GIVEN TIME.
- BMP'S SHALL BE INSPECTED DAILY BY THE CONTRACTOR. OBSERVATIONS SHALL BE RECORDED IN THE INSPECTION LOG.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY DISPOSED OF WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION.
- THE CONTRACTOR SHALL FILE A NOTICE OF TERMINATION WITH THE MPCA AFTER FINAL STABILIZATION HAS BEEN APPROVED.

REFERENCE NOTES:

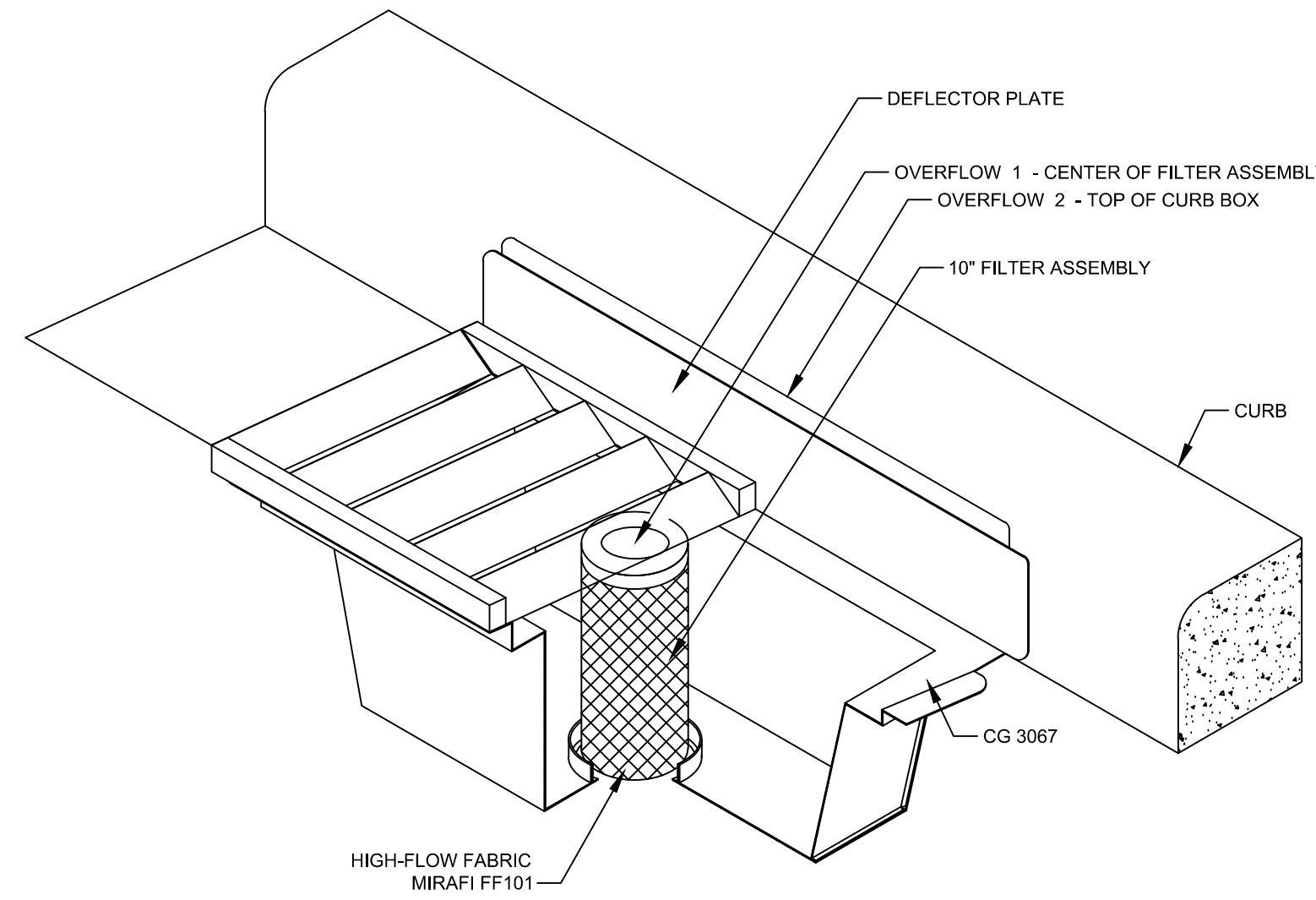
- PAVEMENT SECTION SHALL BE VERIFIED BY GEOTECHNICAL ENGINEER.
- TYPE 1 INLET PROTECTION SHALL BE INSTALLED AS NECESSARY TO MINIMIZE PONDING OF WATER DURING CONSTRUCTION. WIMCO MODEL RD 23 IS SHOWN.
- TYPE 2 INLET PROTECTION SHALL BE INSTALLED ON ALL CASTINGS RECEIVING RUNOFF FROM THE PROJECT AREA. INLET PROTECTION SHALL BE INSTALLED ON EXISTING, OFF SITE CASTINGS PRIOR TO THE START OF CONSTRUCTION. WIMCO MODEL CG 3067 IS SHOWN.
- TYPE 3 INLET PROTECTION SHALL BE INSTALLED AS NECESSARY TO MINIMIZE PONDING OF WATER DURING CONSTRUCTION. WIMCO MODEL RD 27 IS SHOWN.



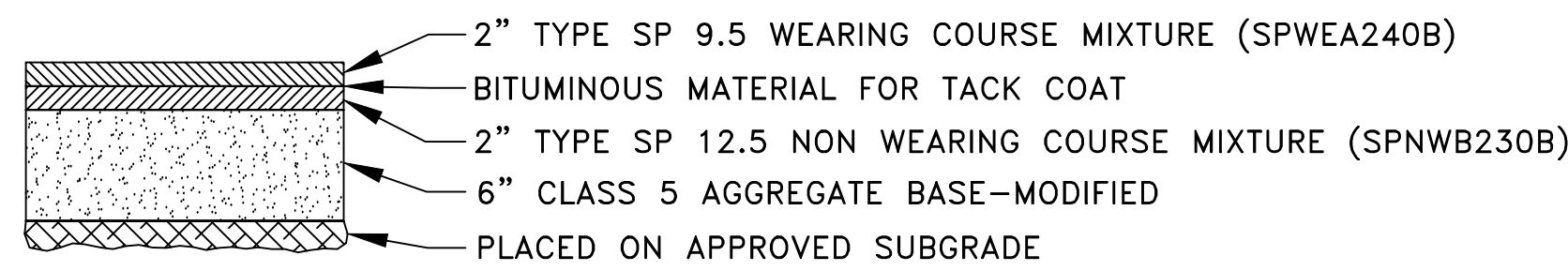
4 CHECK DAM DETAIL  
C2



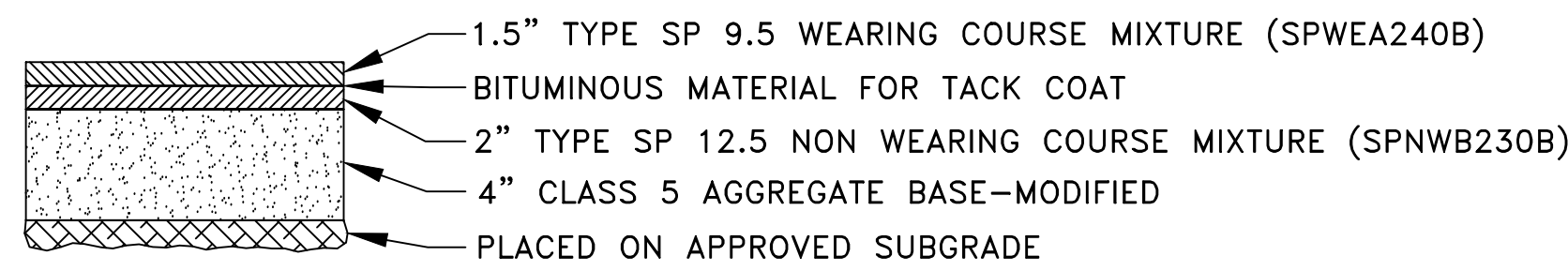
5 STORM DRAIN INLET PROTECTION TYPE 1 ②  
C2 PRE-CURB



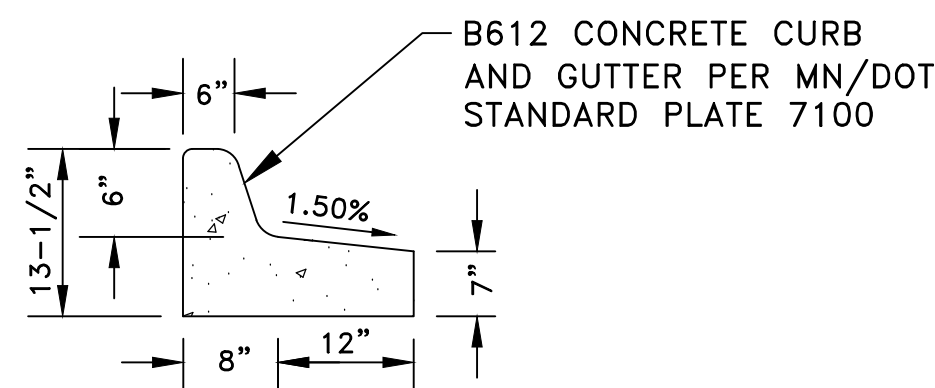
6 STORM DRAIN INLET PROTECTION TYPE 2 ③  
C2 POST-CURB



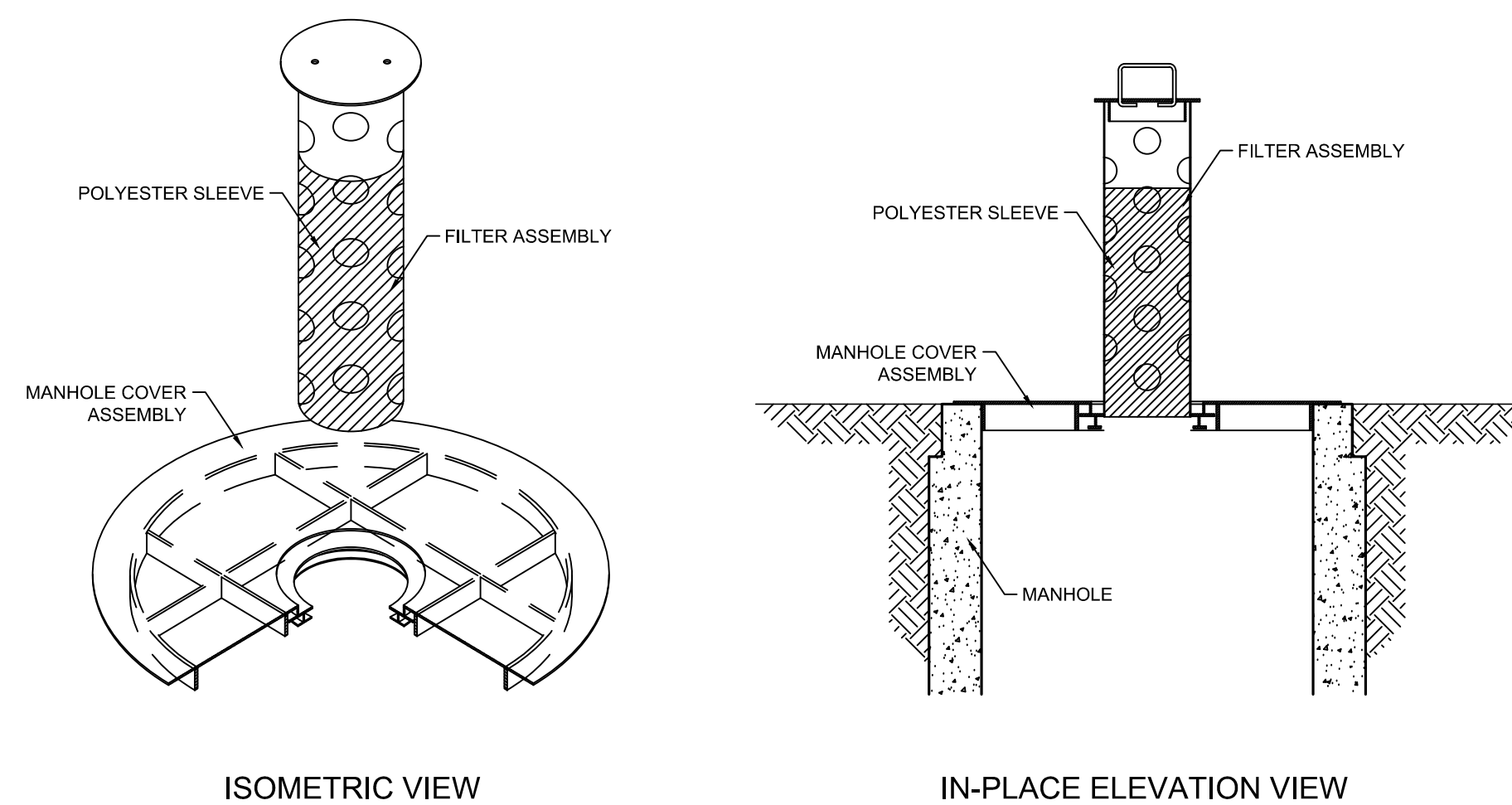
1 HEAVY DUTY BITUMINOUS PAVEMENT SECTION ①  
C2 NO SCALE



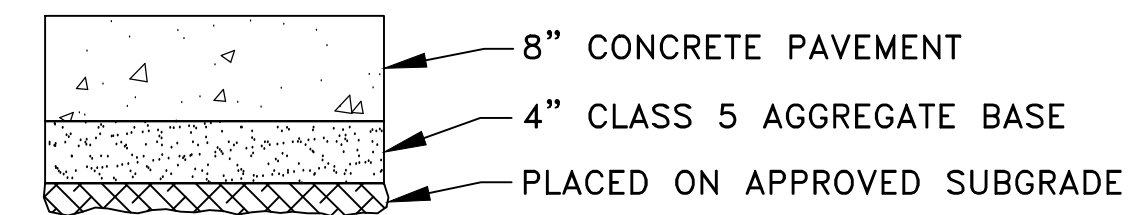
2 LIGHT DUTY BITUMINOUS PAVEMENT SECTION ①  
C2 NO SCALE



3 TIPOUT CURB DETAIL  
C2 NO SCALE



7 STORM DRAIN INLET PROTECTION TYPE 3 ④  
C2



8 CONCRETE PAVEMENT SECTION ①  
C2 NO SCALE

4/19/19 11:58 AM C:\Users\james\AppData\Local\Temp\339810\_DETALS.dwg

DATE	REVISION	DATE	REVISION
5/1/19	CITY SUBMITTAL		

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.  
  
 TIMOTHY A. EDSERSICHS, P.E.  
 Lic. No. 43362  
 Date 4/19/19

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: CJJ

**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

LOT 1, BLOCK 1  
 ANDERSON DAHLEN SOUTH ADDITION

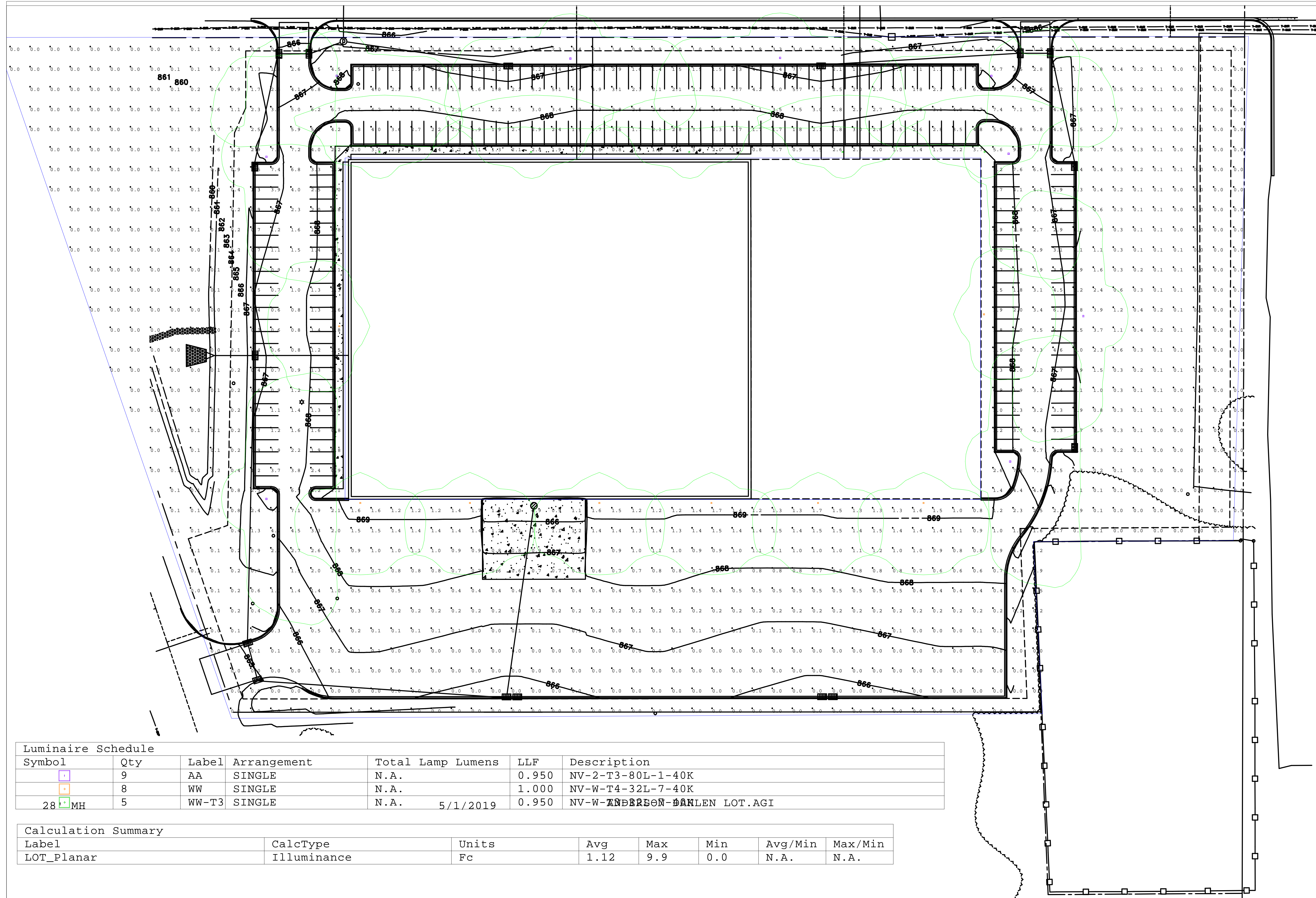
CONSTRUCTION NOTES AND DETAILS  
 CITY OF RAMSEY, MINNESOTA

SHEET  
 C2  
 OF  
 C8  
 SHEETS









Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
□	9	AA	SINGLE	N.A.	0.950	NV-2-T3-80L-1-40K
□	8	WW	SINGLE	N.A.	1.000	NV-W-T4-32L-7-40K
28 MH	5	WW-T3	SINGLE	N.A.	0.950	NV-W-T3-80L-1-40K

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
LOT_Planar	Illuminance	Fc	1.12	9.9	0.0	N.A.	N.A.



Excellence in Illumination  
Engineering Software  
Since 1984  
Lighting Analysts  
www.agi32.com

Sample Report  
Copyright 2016  
Lighting Analysts, Inc.

#	Date	Comments

Revisions

Drawn By:  
Checked By:  
Date: 5/1/2019

Scale:

ANDERSON DAHLEN LOT