

# NORTHEAST RAMSEY STREET RECONSTRUCTION PROJECT

## CONSTRUCTION PLANS FOR BITUMINOUS PAVEMENT REMOVAL, BITUMINOUS SURFACING, CURB AND GUTTER, STORM SEWER, AND MISCELLANEOUS CONSTRUCTION

### CITIES OF RAMSEY AND NOWTHEN

#### CITY OF RAMSEY PROJECT 24-03 (AREAS A, B, AND C)

### GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL APPLY.

THE 2023 EDITION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD SPECIFICATIONS SHALL APPLY.

ALL FEDERAL, STATE AND LOCAL LAWS, REGULATIONS, AND ORDINANCES SHALL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

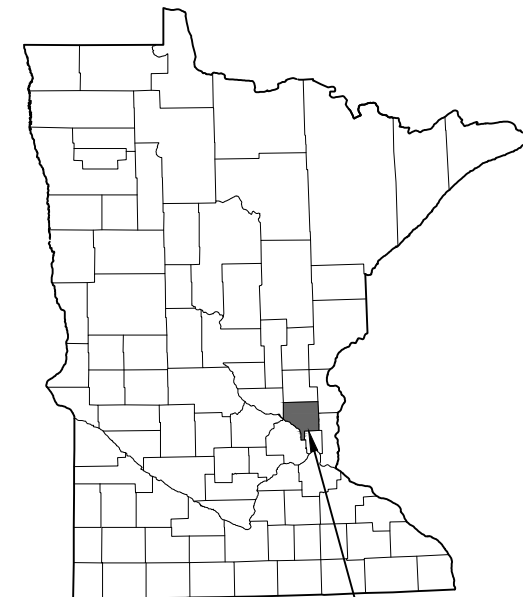
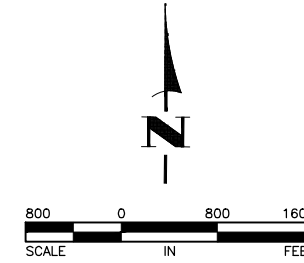
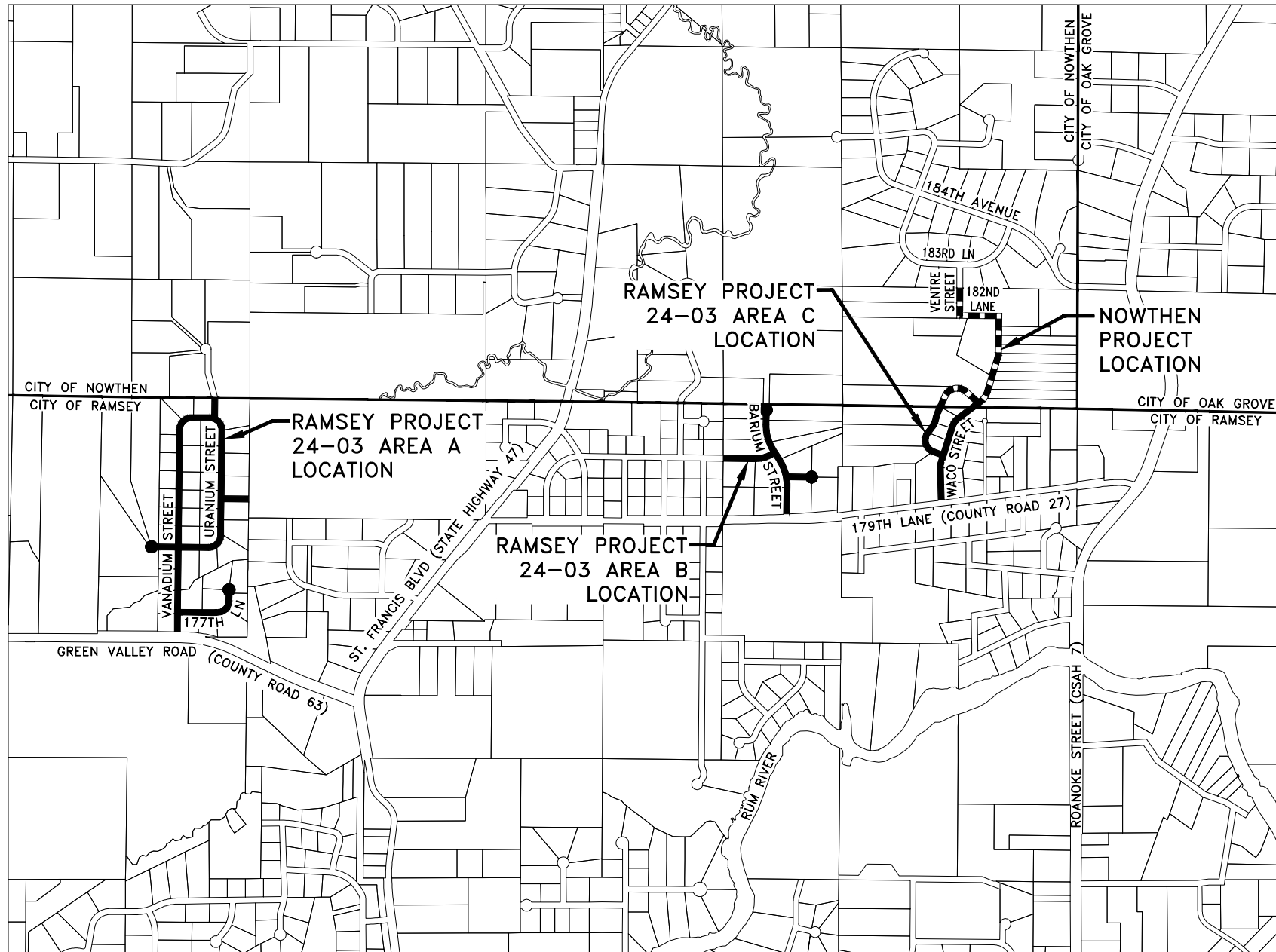
ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

ALL REQUIREMENTS OF THE PROJECT MANUAL FOR THE NORTHEAST RAMSEY STREET RECONSTRUCTION PROJECT.

### SHEET INDEX

THIS PLAN CONTAINS 120 SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	OVERALL LOCATION MAP
3	ESTIMATED QUANTITIES AND TABULATIONS
4	CONSTRUCTION NOTES, DETAILS AND PROJECT LEGEND
5	TYPICAL SECTIONS
6-9	DETAILS
10-11	EXISTING TOPOGRAPHY AND REMOVALS PLAN-VANADIUM STREET
12	EXISTING TOPOGRAPHY AND REMOVALS PLAN-VANADIUM STREET AND 180TH LANE
13	EXISTING TOPOGRAPHY AND REMOVALS PLAN-URANIUM STREET
14	EXISTING TOPOGRAPHY AND REMOVALS PLAN-URANIUM STREET AND 178TH LANE
15	EXISTING TOPOGRAPHY AND REMOVALS PLAN-178TH LANE
16	EXISTING TOPOGRAPHY AND REMOVALS PLAN-177TH LANE
17	EXISTING TOPOGRAPHY AND REMOVALS PLAN-179TH LANE
18	EXISTING TOPOGRAPHY AND REMOVALS PLAN-URANIUM STREET (NORTH)
19-20	EXISTING TOPOGRAPHY AND REMOVALS PLAN-BARIUM STREET
21	EXISTING TOPOGRAPHY AND REMOVALS PLAN-180TH AVENUE (WEST)
22	EXISTING TOPOGRAPHY AND REMOVALS PLAN-180TH AVENUE (EAST)
23-25	EXISTING TOPOGRAPHY AND REMOVALS PLAN-WACO STREET
26	EXISTING TOPOGRAPHY AND REMOVALS PLAN-182ND LANE AND VENTRE STREET
27-28	EXISTING TOPOGRAPHY AND REMOVALS PLAN-WACO DRIVE
29-33	CONSTRUCTION PLAN-VANADIUM STREET
34	CONSTRUCTION PLAN-180TH LANE
35-37	CONSTRUCTION PLAN-URANIUM STREET
38-39	CONSTRUCTION PLAN-178TH LANE
40-41	CONSTRUCTION PLAN-177TH LANE
42	CONSTRUCTION PLAN-179TH LANE
43	CONSTRUCTION PLAN-URANIUM STREET (NORTH)
44-46	CONSTRUCTION PLAN-BARIUM STREET
47-48	CONSTRUCTION PLAN-180TH AVENUE (WEST)
49	CONSTRUCTION PLAN-180TH AVENUE (EAST)
50-54	CONSTRUCTION PLAN-WACO STREET
55	CONSTRUCTION PLAN-182ND LANE
56	CONSTRUCTION PLAN-VENTRE STREET
57-59	CONSTRUCTION PLAN-WACO DRIVE
60-63	STAKING PLAN
64-82	EROSION AND SEDIMENT CONTROL AND RESTORATION PLAN
X1-X6	CROSS SECTIONS-VANADIUM STREET
X7	CROSS SECTIONS-180TH LANE
X8-X10	CROSS SECTIONS-URANIUM STREET
X11	CROSS SECTIONS-URANIUM STREET AND 178TH LANE
X12-X13	CROSS SECTIONS-178TH LANE
X14-X16	CROSS SECTIONS-177TH LANE
X17	CROSS SECTIONS-179TH LANE
X18	CROSS SECTIONS-URANIUM STREET (NORTH)
X19-X22	CROSS SECTIONS-BARIUM STREET
X23-X24	CROSS SECTIONS-180TH AVENUE (WEST)
X25-X26	CROSS SECTIONS-180TH AVENUE (EAST)
X27-X32	CROSS SECTIONS-WACO STREET
X33	CROSS SECTIONS-182ND LANE
X34	CROSS SECTIONS-VENTRE STREET
X35-X38	CROSS SECTIONS-WACO DRIVE



CITIES OF RAMSEY  
AND NOWTHEN,  
ANOKA COUNTY,  
MINNESOTA

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-2, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

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.

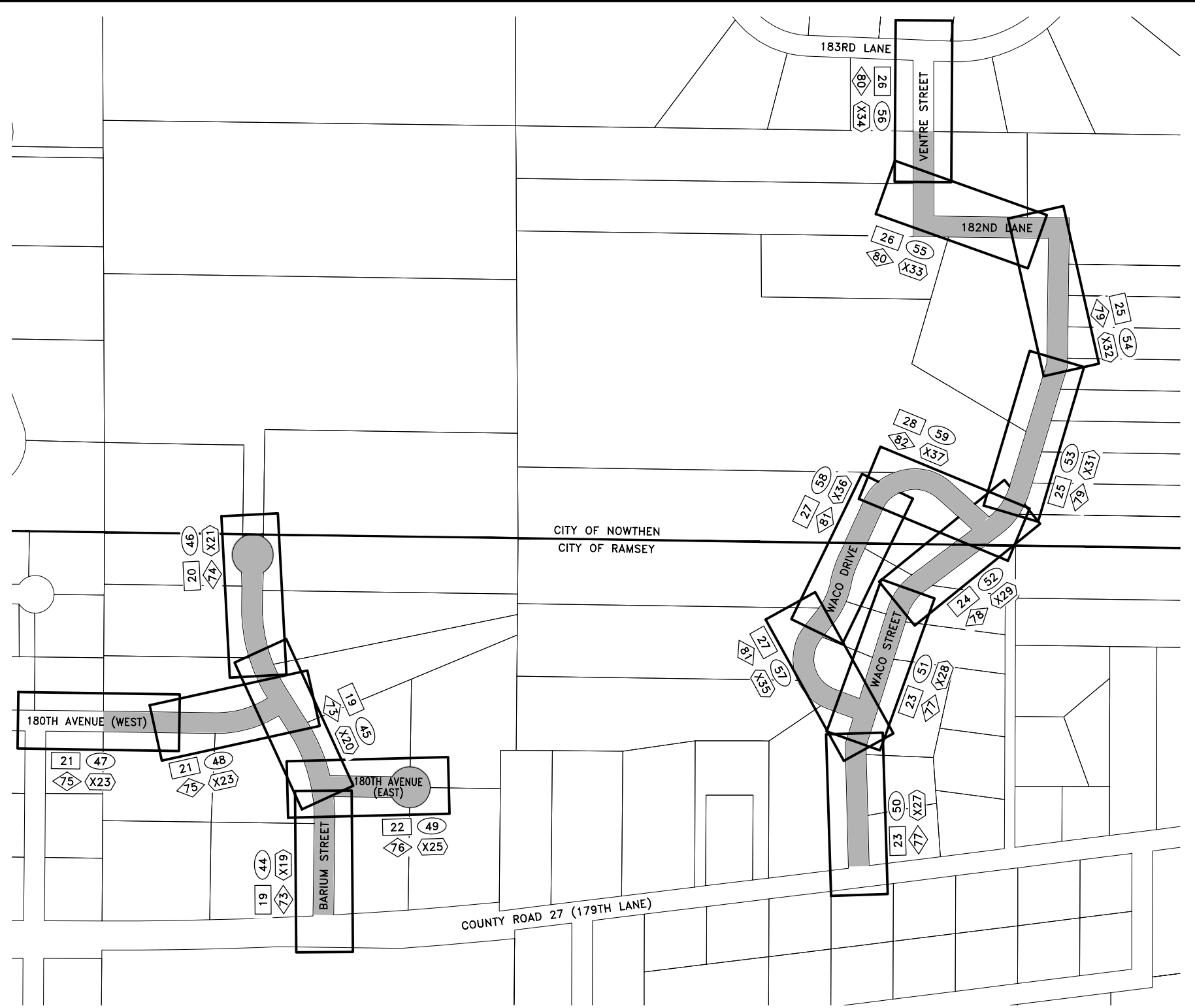
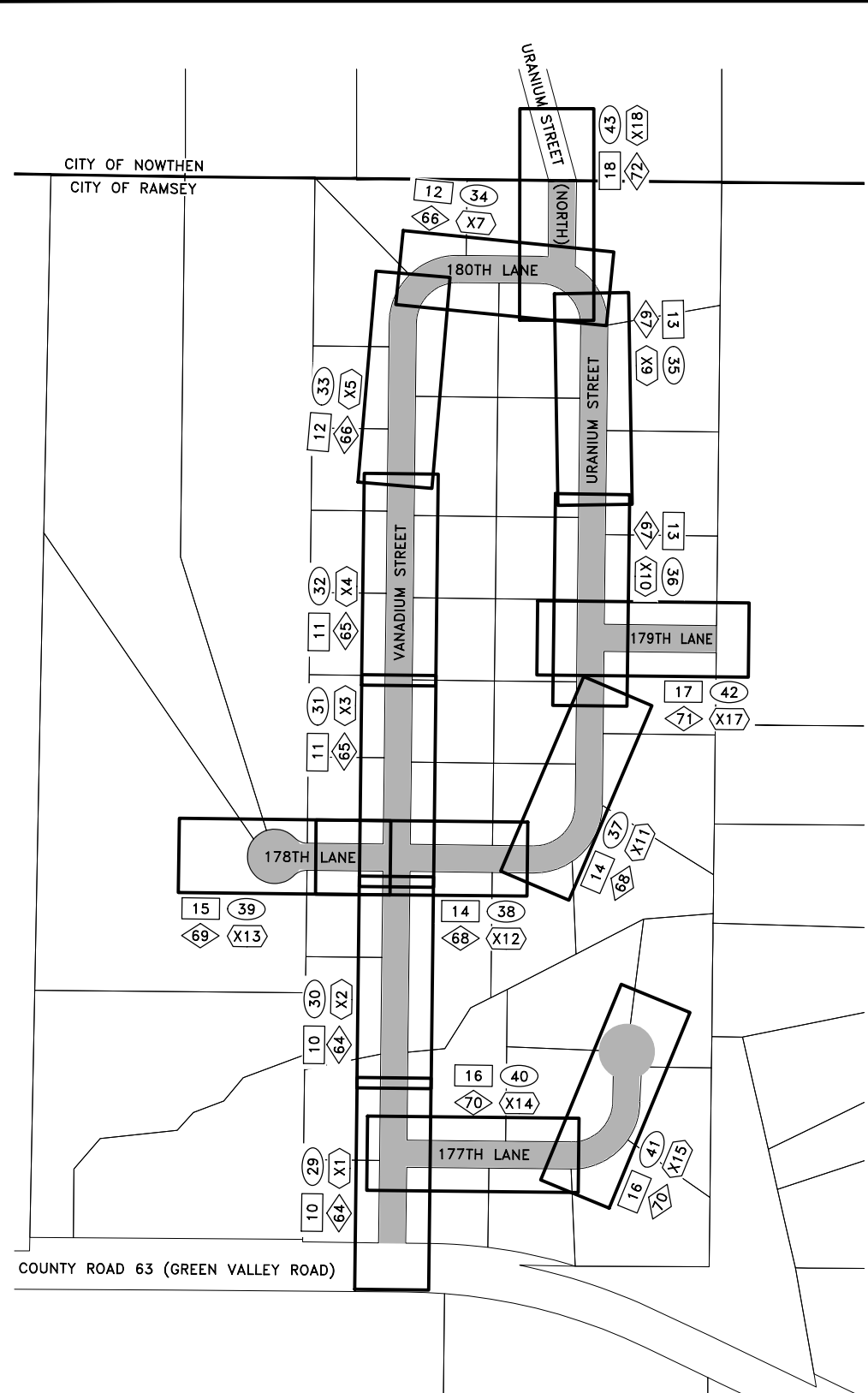
SHANE M. NELSON, P.E.  
 HAKANSON ANDERSON  
 DESIGN ENGINEER

43381      DATE 4/22/24  
 LIC. NO.

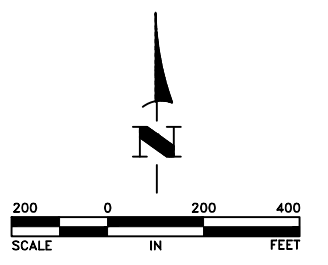
DATE	REVISION

Apr. 22, 2024 - 2:38pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_TITLE.dwg

Apr 22, 2024 - 2:38pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_TITLE.dwg



- LEGEND**
- PROJECT LOCATION
  - XX EXISTING TOPOGRAPHY AND REMOVALS PLAN SHEET NUMBER
  - XX CONSTRUCTION PLAN SHEET NUMBER
  - XX EROSION AND SEDIMENT CONTROL AND RESTORATION PLAN SHEET NUMBER
  - XXX CROSS SECTION SHEET NUMBER



DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN



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

**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

**OVERALL LOCATION MAP**  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 2 OF 82 SHEETS  
RA3189

Apr 22, 2024 - 2:38pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_DETAILS.dwg

ESTIMATED QUANTITIES									
ITEM NO.	REF. NOTES	MN/DOT SPEC. NO.	DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	CITY OF RAMSEY			CITY OF NOWTHEN
						PROJECT 24-03 (AREA A) VANADIUM STREET, URANIUM STREET, 177TH LANE, 178TH LANE, 179TH LANE AND 180TH LANE	PROJECT 24-03 (AREA B) BARIUM STREET AND 180TH AVENUE	PROJECT 24-03 (AREA C) WACO STREET AND WACO DRIVE	WACO STREET, WACO DRIVE, VENTRE STREET AND 182ND LANE
1		2021.501	MOBILIZATION	LUMP SUM	1	0.60	0.16	0.10	0.14
2		2101.505	CLEARING	ACRE	1.00	0.25	0.35	0.15	0.25
3		2101.505	GRUBBING	ACRE	1.00	0.25	0.35	0.15	0.25
4		2104.502	REMOVE MANHOLE OR CATCH BASIN	EACH	1	1			
5	3	2104.502	REMOVE SIGN	EACH	5				5
6		2104.502	SALVAGE MAILBOX SUPPORT	EACH	86	46	13	10	17
7		2104.503	SAWING CONCRETE PAVEMENT - FULL DEPTH	LIN FT	430	262	80	30	58
8		2104.503	SAWING BITUMINOUS PAVEMENT - FULL DEPTH	LIN FT	1502	740	298	229	235
9		2104.503	REMOVE BITUMINOUS CURB	LIN FT	12940		4560	3740	4640
10		2104.503	REMOVE METAL CULVERT	LIN FT	698	428	122		148
11		2104.504	REMOVE CONCRETE PAVEMENT	SQ YD	455	275	95	24	61
12		2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	1353	749	250	129	225
13	7	2106.507	EXCAVATION - SUBGRADE	CU YD	10213	8193	806	611	603
14		2106.507	SELECT GRANULAR EMBANKMENT (CV)	CU YD	6065	6065			
15		2108.504	GEOTEXTILE FABRIC TYPE 10	SQ YD	21240	21240			
16		2112.519	SUBGRADE PREPARATION	ROAD STA	128.2	63.5	22.8	18.7	23.2
17	9	2118.509	AGGREGATE SURFACING SPECIAL	TON	210	90	30	60	30
18		2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	75	30	15	15	15
19		2130.523	WATER	MGAL	100	40	25	20	15
20	4	2211.509	AGGREGATE BASE CLASS 5 MODIFIED	TON	3920	2590	450	381	499
21	5	2211.607	AGGREGATE BASE (CV) FROM STOCKPILE	CU YD	2000	2000			
22		2215.504	FULL DEPTH RECLAMATION	SQ YD	39559	18206	8766	5582	7005
23	6	2215.507	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	16163	7586	3750	2327	2500
24		2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD	3046	1885	426	379	356
25		2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GALLONS	2471	1243	529	313	386
26		2360.504	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C) 3" THICK	SQ YD	1327	799	207	113	208
27		2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	3441	1731	736	436	538
28		2360.509	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)	TON	4481	2248	955	566	712
29		2501.502	15" RC PIPE APRON	EACH	24	16	4		4
30		2501.503	15" RC PIPE CULVERT DESIGN 3006 CLASS V	LIN FT	240	240			
31		2501.602	TRASH GUARD FOR 15" PIPE APRON	EACH	12	4	4		4
32		2502.502	6" PRECAST CONCRETE HEADWALL	EACH	9	9			
33		2502.503	6" PERF PVC PIPE DRAIN	LIN FT	7260	7260			
34		2502.602	6" PVC PIPE DRAIN CLEANOUT	EACH	30	30			
35		2503.503	15" RC PIPE SEWER DESIGN 3006 CLASS V	LIN FT	466	140	203		123
36		2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL (2'X3')	EACH	3		1		2
37		2506.502	CASTING ASSEMBLY	EACH	13	2	5		6
38		2506.503	CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4020	LIN FT	56.5	7.4	24.1		25.0
39		2511.504	GEOTEXTILE FILTER TYPE 4	SQ YD	116.6	95.8	20.8		
40		2511.507	RANDOM RIPRAP CLASS III	CU YD	39.6	34.8	4.8		
41		2531.503	CONCRETE CURB AND GUTTER DESIGN SPECIAL (SURMOUNTABLE)	LIN FT	12353		4323	3555	4475
42		2531.503	CONCRETE CURB AND GUTTER DESIGN B618	LIN FT	378		194	79	105
43		2531.504	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	505	305	88	27	85
44		2531.604	7" CONCRETE VALLEY GUTTER	SQ YD	144			60	84
45		2531.604	CONCRETE DRAINAGE FLUME	SQ YD	65		22	33	10
46	10	2540.602	MAILBOX	EACH	17				17
47	10	2540.602	MAILBOX SUPPORT	EACH	17				17
48		2540.602	INSTALL MAILBOX SUPPORT	EACH	86	46	13	10	17
49		2540.602	TEMPORARY MAILBOX CLUSTER	EACH	6	3	1	1	1
50		2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.60	0.16	0.10	0.14
51		2563.601	TRAFFIC CONTROL SUPERVISOR	LUMP SUM	1	0.60	0.16	0.10	0.14
52	1,3	2564.518	SIGN PANELS TYPE C	SQ FT	5.0				5.0
53	2,3	2564.518	SIGN PANELS TYPE D	SQ FT	25.5				25.5
54		2572.510	PRUNE TREES	HOUR	35	20	5	5	5
55		2573.501	STABILIZED CONSTRUCTION EXIT	LUMP SUM	1	0.60	0.16	0.10	0.14
56		2573.502	STORM DRAIN INLET PROTECTION	EACH	12	1	5		6
57		2573.502	CULVERT END CONTROLS	EACH	11	8	2		1
58		2573.503	SILT FENCE, TYPE MACHINE SLICED	LIN FT	4292	1,145	500	543	2104
59		2573.503	SEDIMENT CONTROL LOG TYPE STRAW	LIN FT	110	110			
60	8	2574.507	COMMON TOPSOIL BORROW	CU YD	2374	1176	422	346	430
61		2574.508	FERTILIZER TYPE 3	POUND	1720	1160	200	160	200
62		2575.504	ROLLED EROSION PREVENTION CATEGORY 20	SQ YD	751	751			
63		2575.504	ROLLED EROSION PREVENTION CATEGORY 72	SQ YD	352	154	66	44	88
64		2575.505	SEEDING	ACRE	4.3	2.9	0.5	0.4	0.5
65		2575.508	SEED MIXTURE 25-131	POUND	946	638	110	88	110
66		2575.508	HYDRAULIC BONDED FIBER MATRIX	POUND	15050	10150	1750	1400	1750
67		2575.601	LANDSCAPE RESTORATION	LUMP SUM	1	0.60	0.16	0.10	0.14

STANDARD PLATES	
THESE STANDARD PLATES AS APPROVED BY THE FHWA SHALL APPLY	
PLATE NO.	DESCRIPTION
3000M	REINFORCED CONCRETE PIPE (6 SHEETS)
3006H	GASKET JOINT FOR R.C. PIPE (2 SHEETS)
3131C	PRECAST CONCRETE HEADWALL FOR SUBSURFACE DRAINS
4010I	CONCRETE ADJUSTING RINGS
4011E	PRECAST CONCRETE BASE
4020J	MANHOLE OR CATCH BASIN (FOR USE WITH OR WITHOUT TRAFFIC LOADS) (2 SHEETS)
4022A	MANHOLE OR CATCH BASIN COVER (3 FT. X 2 FT. OPENING)
4026B	CONCRETE ENCASED CONCRETE ADJUSTING RINGS
7100H	CONCRETE CURB AND GUTTER (DESIGN B AND DESIGN V)
8000K	TEMPORARY CHANNELIZERS (3 SHEETS)

BASIS OF ESTIMATED QUANTITIES	
NON WEARING BITUMINOUS COURSE MIXTURE	113 lbs/yd <sup>2</sup> /in
WEARING COURSE BITUMINOUS MIXTURE	113 lbs/yd <sup>2</sup> /in
BITUMINOUS MATERIAL FOR TACK COAT	0.05 gal/yd <sup>2</sup>
SEED MIXTURE 25-131	220 lbs/acre
HYDRAULIC BONDED FIBER MATRIX	3500 lbs/acre
TYPE 3, SLOW RELEASE FERTILIZER	400 lbs/acre

**REFERENCE NOTES:**

- ① ITEM INCLUDES PAYMENT FOR ALL SIGNS EXCEPT FOR STREET NAME SIGNS.
- ② ITEM INCLUDES PAYMENT FOR ALL STREET NAME SIGNS.
- ③ THE CITY OF RAMSEY WILL REMOVE AND REPLACE THEIR OWN SIGNS AS REQUIRED. THE CONTRACTOR IS ONLY RESPONSIBLE FOR THE SIGNS IN THE CITY OF NOWTHEN.
- ④ AGGREGATE BASE PLACEMENT SHALL BE APPROVED BY THE ENGINEER. CLASS 5 AGGREGATE BASE SHALL MEET THE REQUIREMENTS OF CITY PLATE NO. STR-26.
- ⑤ THE CITY OF RAMSEY MAY HAVE AGGREGATE BASE MATERIAL AVAILABLE FOR USE ON THIS PROJECT. ITEM 2211-AGGREGATE BASE (CV) FROM STOCKPILE SHALL BE UTILIZED FOR LOADING, HAULING, PLACING, AND COMPACTING AGGREGATE BASE FROM THE CITY STOCKPILE TO THE EXTENT THE MATERIAL IS AVAILABLE AND AS DIRECTED BY THE ENGINEER.
- ⑥ ITEM INCLUDES ALL LABOR AND EQUIPMENT REQUIRED TO TEMPORARILY STOCKPILE RECLAMATION MATERIAL TO ALLOW FOR OTHER WORK TO BE COMPLETED (I.E. SUBGRADE EXCAVATION). THIS ITEM WILL ALSO INCLUDE ALL LABOR AND EQUIPMENT REQUIRED TO MOVE THE STOCKPILED MATERIAL BACK TO THE ROADWAY SECTION.
- ⑦ EXCESS SOIL WITH A USCS CLASSIFICATION OF SP, SP-SM OR SM SHALL BECOME THE PROPERTY OF THE CITY OF RAMSEY AND SHALL BE PLACED AT THE WATER TOWER SITE LOCATED AT 16600 ST. FRANCIS BOULEVARD. ALL OTHER MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF OFF SITE.
- ⑧ TOPSOIL BORROW SHALL MEET THE REQUIREMENTS OF CITY PLATE NO. ERO-6.
- ⑨ ALL GRAVEL DRIVEWAYS SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. DRIVEWAY MATERIAL SHALL MATCH THE EXISTING DRIVEWAY MATERIAL.
- ⑩ NEW MAILBOXES AND SUPPORTS SHALL BE PLACED ON A CASE-BY-CASE BASIS AND AS DIRECTED BY THE ENGINEER. MAILBOX SUPPORTS SHALL MEET THE REQUIREMENTS OF MN/DOT STANDARD PLATE 9350.

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN



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

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

ESTIMATED QUANTITIES AND TABULATIONS  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 3 OF 82 SHEETS  
RA3189

**GENERAL CONSTRUCTION AND SOILS NOTES:**

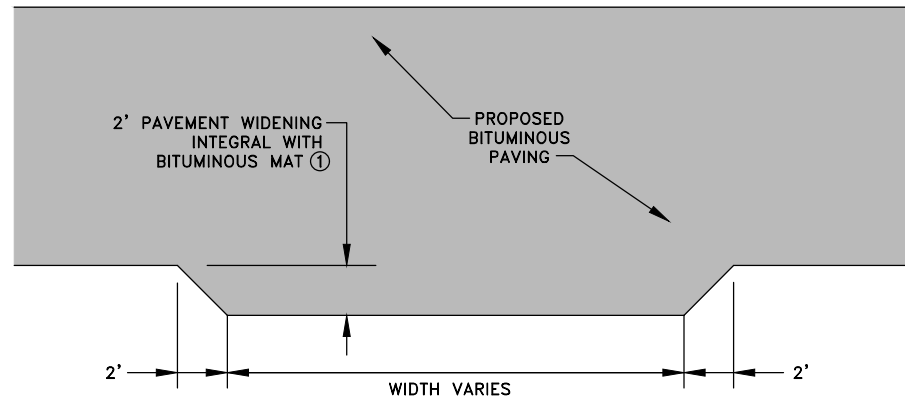
- CONTRACTOR SHALL REVIEW THE GEOTECHNICAL EXPLORATION REPORTS PREPARED BY HAUGO GEOTECHNICAL SERVICES, DATED JANUARY 23, 2024 AND FEBRUARY 21, 2024, FOR ADDITIONAL CONSTRUCTION REQUIREMENTS.
- WHEN PLACING NEW PAVEMENT ADJACENT TO INPLACE PAVEMENT CUT VERTICALLY TO THE BOTTOM OF INPLACE SURFACING OR TOP OF GRADING SUBGRADE WHICHEVER IS DEEPER AT A 1(V):2(H) TO THE BOTTOM OF EXCAVATION.
- PROVIDE A SAW CUT WHEN PLACING NEW PAVEMENT ADJACENT TO INPLACE PAVEMENT AND AT TERMINI OF CONSTRUCTION TO ENSURE A UNIFORM JOINT.
- 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.
- PERFORMANCE GRADED (PG) ASPHALT BINDER PG 58H-34 SHALL BE USED FOR ALL BITUMINOUS MIXES ON THIS PROJECT.
- IF NECESSARY, THE UTILITY COMPANIES WILL RELOCATE THEIR FACILITIES CONCURRENTLY WITH THE CONSTRUCTION OPERATIONS UNDER THIS CONTRACT. CONTRACTOR SHALL SCHEDULE CONSTRUCTION IN COOPERATION WITH UTILITY RELOCATION.
- CONTRACTOR SHALL PLACE TOPSOIL AT ALL DRIVEWAYS TO MATCH THE NEW SURFACE.
- ANY DEWATERING REQUIRED FOR CONSTRUCTION SHALL MEET REGULATORY REQUIREMENTS AND BEST MANAGEMENT PRACTICES SUCH THAT THE RECEIVING WATER IS NOT ADVERSELY AFFECTED. ALL DEWATERING SHALL BE INCIDENTAL.
- CONTRACTOR SHALL SALVAGE AND REINSTALL MAILBOXES AND MAILBOX SUPPORTS AS NECESSARY TO COMPLETE THE WORK. THIS WORK SHALL BE PAID PER ITEMS 2104-SALVAGE MAILBOX SUPPORT AND 2540-INSTALL MAILBOX SUPPORT. CONTRACTOR SHALL ALSO SALVAGE AND REINSTALL PAPER BOXES AND PAPER BOX SUPPORTS. THIS WORK SHALL BE INCIDENTAL.
- CONTRACTOR SHALL OBTAIN A PERMIT FROM THE ANOKA COUNTY HIGHWAY DEPARTMENT PRIOR TO STARTING ANY WORK IN THE COUNTY RIGHT-OF-WAY.
- CONTRACTOR SHALL CLEAR AND GRUB BRUSH AS NECESSARY TO COMPLETE THE WORK. THE BRUSH LOCATIONS MAY NOT BE SHOWN IN THE PLANS. THIS WORK SHALL BE INCIDENTAL.

**GENERAL EROSION CONTROL NOTES:**

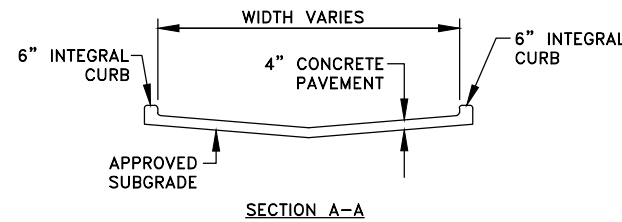
- EROSION CONTROL SHALL CONFORM TO THE MN/DOT EROSION CONTROL HANDBOOK.
- PRIOR TO ANY CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL ACQUIRE THE MPCA CONSTRUCTION STORMWATER GENERAL PERMIT. A COPY OF THE PERMIT SHALL BE SUBMITTED TO THE CITY PRIOR TO THE PRECONSTRUCTION MEETING.
- PRIOR TO IMPORTING OR EXPORTING MATERIAL FROM THE PROJECT SITES. CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION EXIT PER CITY PLATE NO. ERO-5 AT ALL ACCESS POINTS.
- A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN PREPARED COVERING CONSTRUCTION ACTIVITIES. THE SWPPP IS INCLUDED IN THE PROJECT MANUAL.
- 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 THEIR OPERATIONS 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 AN INSPECTION LOG. WEEKLY INSPECTION LOGS AND INSPECTION LOGS AFTER EVERY 1/2" AND GREATER RAIN EVENT SHALL BE SUBMITTED TO THE CITY INSPECTOR.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY DISPOSED OF WITHIN THIRTY DAYS AFTER FINAL SITE STABILIZATION IS APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL FILE NOTICE OF TERMINATION WITH THE MPCA AFTER FINAL STABILIZATION HAS BEEN APPROVED. THE CITY SHALL REVIEW AND APPROVE THE NOTICE OF TERMINATION PRIOR TO SUBMITTAL TO THE MPCA.
- WHEN SEDIMENTS DEPOSIT IN A WATER OF THE STATE, THE MATERIAL MUST BE REMOVED WITHIN SEVEN DAYS.
- CONTRACTOR SHALL IMMEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL AREAS AND COMPLETE THE STABILIZATION WITHIN SEVEN CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE TEMPORARILY OR PERMANENTLY CEASES.
- ALL TEMPORARY STABILIZATION REQUIRED TO COMPLY WITH ANY PERMITS AND THE SPECIFICATIONS SHALL BE INCIDENTAL.
- PRIOR TO SEEDING, SOIL SHALL BE PREPARED PER MN/DOT SPEC. 2574.3.A.3. THIS WORK SHALL BE INCIDENTAL.
- ALL DISTURBED AREAS REQUIRE TOPSOIL, MN/DOT SEED MIXTURE 25-131, TYPE 3 FERTILIZER AND EITHER HYDRAULIC BONDED FIBER MATRIX OR ROLLED EROSION PREVENTION. SEED SHALL BE PLACED IN ACCORDANCE WITH MN/DOT SPEC. 2575. APPLICATION OF THE HYDRAULIC BONDED FIBER MATRIX SHALL BE COMPLETED SEPARATELY FROM THE SEED. PLACE HYDRAULIC BONDED FIBER MATRIX PER MN/DOT SPEC. 2575.3.E.2.d. RATES OF SEED, FERTILIZER AND HYDRAULIC BONDED FIBER MATRIX PLACEMENT SHALL BE IN ACCORDANCE WITH THE BASIS OF ESTIMATED QUANTITIES SHOWN ON SHEET 3 AND THE MN/DOT SPECIFICATIONS. TOPSOIL SHALL MEET THE REQUIREMENTS OF CITY PLATE NO. ERO-3. CONTRACTOR MAY SALVAGE AND RE-USE EXISTING TOPSOIL IF THE TOPSOIL MEETS THE REQUIREMENTS OF CITY PLATE NO. ERO-3. SEE SHEETS 64-82 FOR THE EROSION AND SEDIMENT CONTROL AND RESTORATION PLANS.
- ALL PERMANENT AND TEMPORARY EROSION CONTROL AND RESTORATION ITEMS REQUIRED BY THE SPECIFICATIONS AND NOT PROVIDED FOR IN THE ESTIMATED QUANTITIES SHALL BE INCIDENTAL.

**REFERENCE NOTES:**

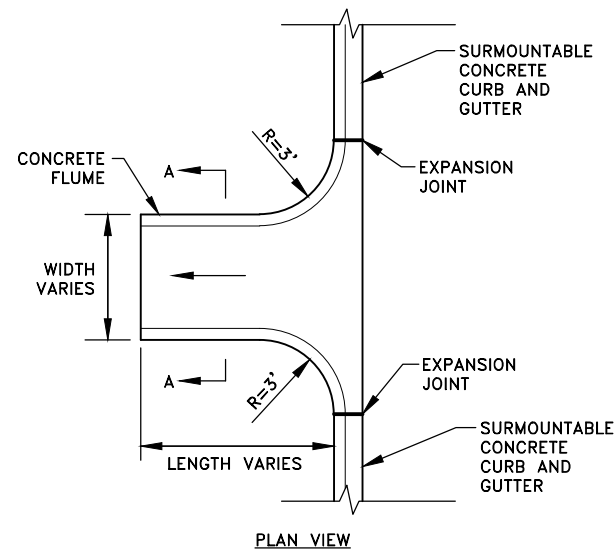
- CLASS 5 AGGREGATE BASE SHALL EXTEND 6" BEYOND THE BITUMINOUS SURFACE IN PAVEMENT WIDENING AREAS.



**1 PAVEMENT WIDENING AT GRAVEL DRIVEWAYS**  
NO SCALE



**SECTION A-A**



**PLAN VIEW**

**2 CONCRETE FLUME DETAIL**  
NO SCALE

**LEGEND**

---	RIGHT-OF-WAY/PROPERTY LINE
- - - - -	EASEMENT LINE
---	SECTION LINE
---	EXISTING CONTOUR
->>>---	EXISTING STORM SEWER
->>>---	PROPOSED STORM SEWER
->>>---	PROPOSED DRAINTILE
W W W	DELINEATED WETLAND LINE
- x - x -	EXISTING FENCE
=====	PROPOSED CONCRETE CURB AND GUTTER
G G	GAS LINE
P-OH	OVERHEAD ELECTRIC LINE
P-BUR	BURIED ELECTRIC LINE
T-BUR	BURIED TELEPHONE LINE
FO-BUR	BURIED FIBER OPTIC LINE
TV-BUR	BURIED CABLE TELEVISION LINE
[Pattern]	EXISTING BITUMINOUS PAVEMENT
[Pattern]	EXISTING CONCRETE PAVEMENT
[Pattern]	EXISTING GRAVEL
[Symbol]	UTILITY PEDESTALS
[Symbol]	LIGHT POLE
[Symbol]	UTILITY POLE
[Symbol]	GUY WIRE
[Symbol]	STREET NAME SIGN
[Symbol]	SIGN
[Symbol]	EXISTING CATCH BASIN
[Symbol]	PROPOSED CATCH BASIN
[Symbol]	PROPOSED STORM SEWER PIPE APRON
[Symbol]	EDGE OF SHRUBS/TREE DRIPLINE
[Symbol]	CONIFEROUS AND DECIDUOUS TREES
[Symbol]	MAILBOX
[Symbol]	PROPERTY ADDRESS
[Symbol]	SOIL BORING LOCATION
[Symbol]	DETAIL NUMBER
[Symbol]	SHEET NUMBER

Apr 22, 2024 - 2:36pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_DETAILS.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

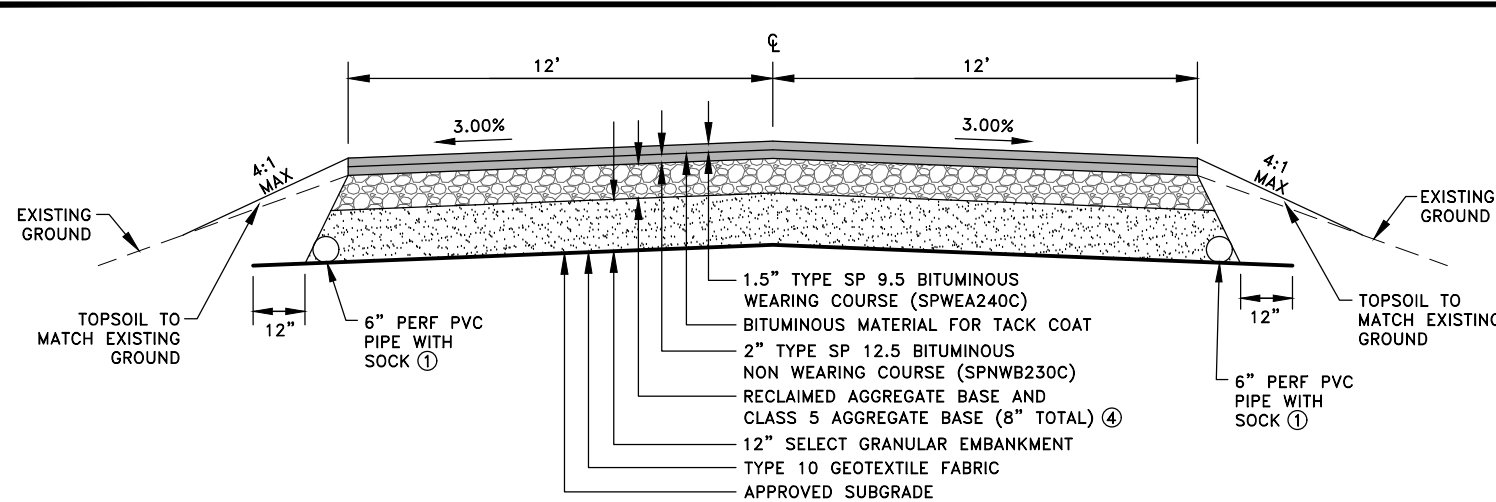


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

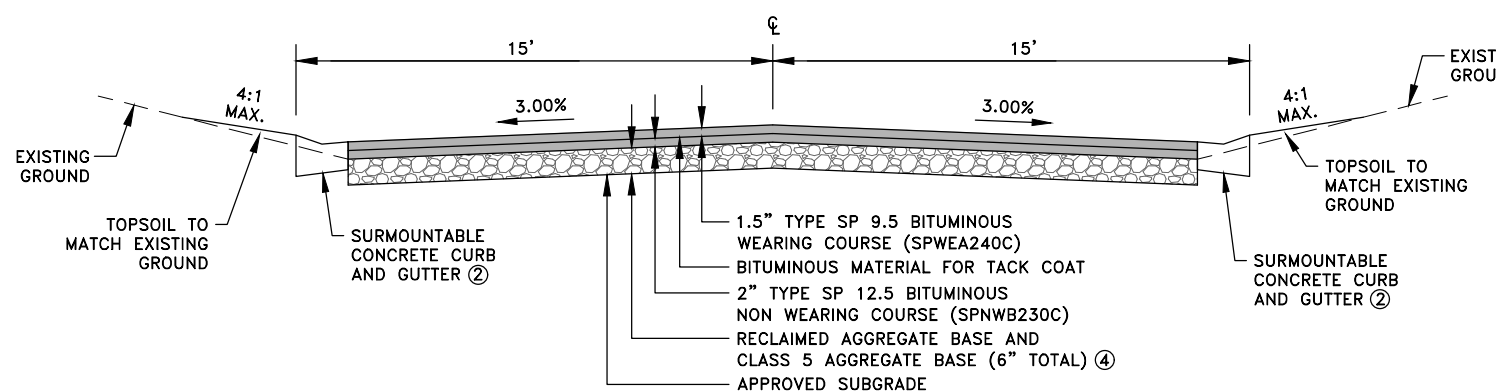
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION NOTES, DETAILS AND  
 PROJECT LEGEND**  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

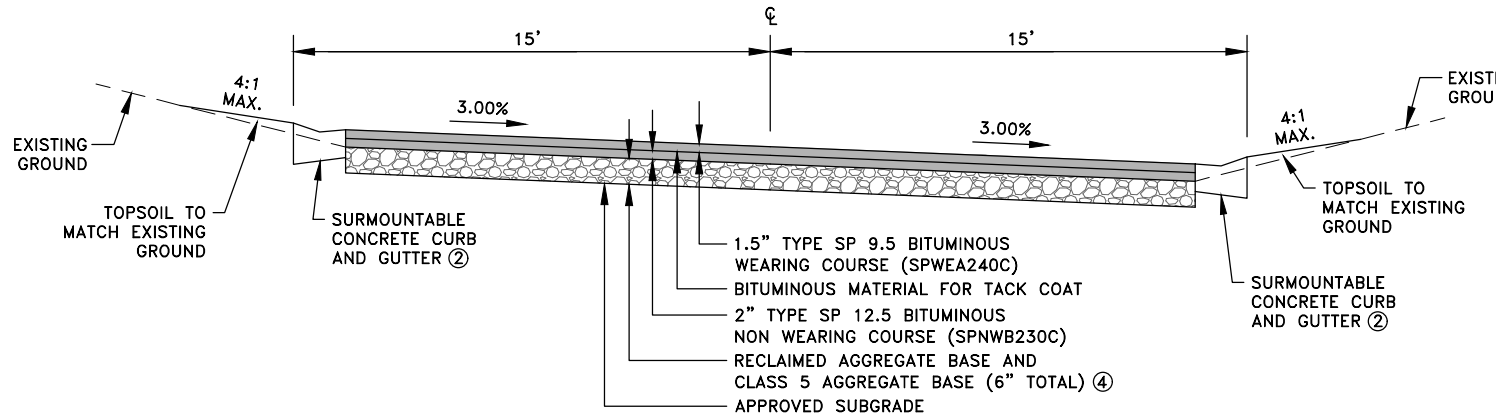
SHEET **4** OF **82**  
 SHEETS  
 RA3189



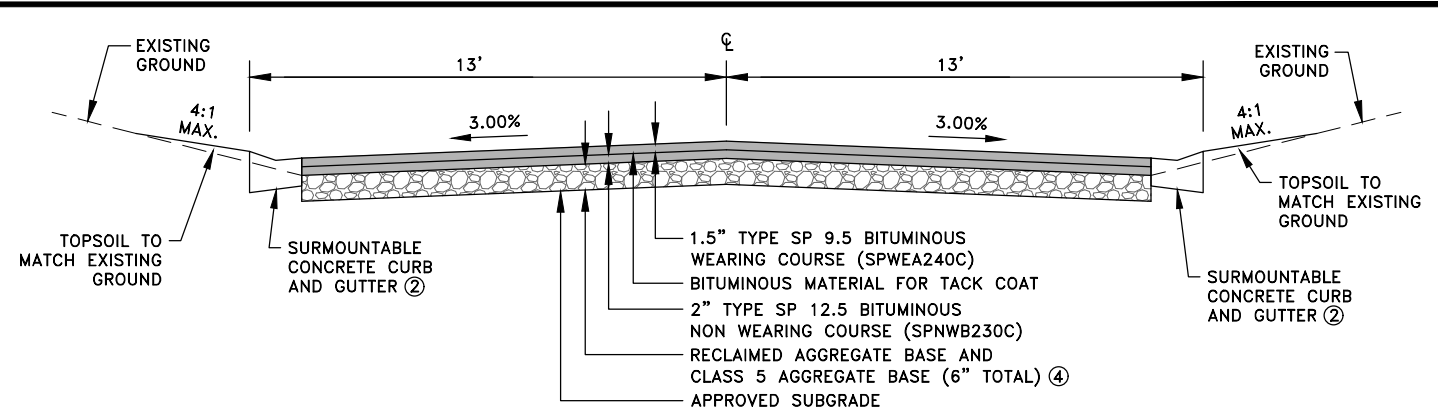
1  
5  
**TYPICAL SECTION**  
VANADIUM STREET, URANIUM STREET, URANIUM STREET (NORTH),  
178TH LANE, 179TH LANE AND 180TH LANE



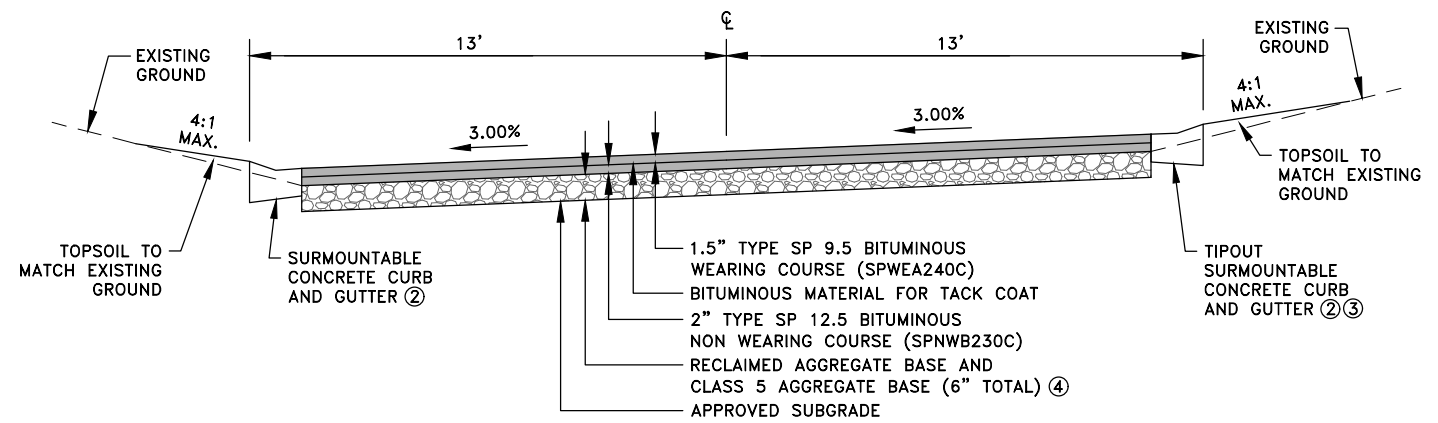
2  
5  
**TYPICAL SECTION**  
BARIUM STREET (STA 1+93 TO STA 12+50), 180TH AVENUE (WEST)  
AND 180TH AVENUE (EAST)



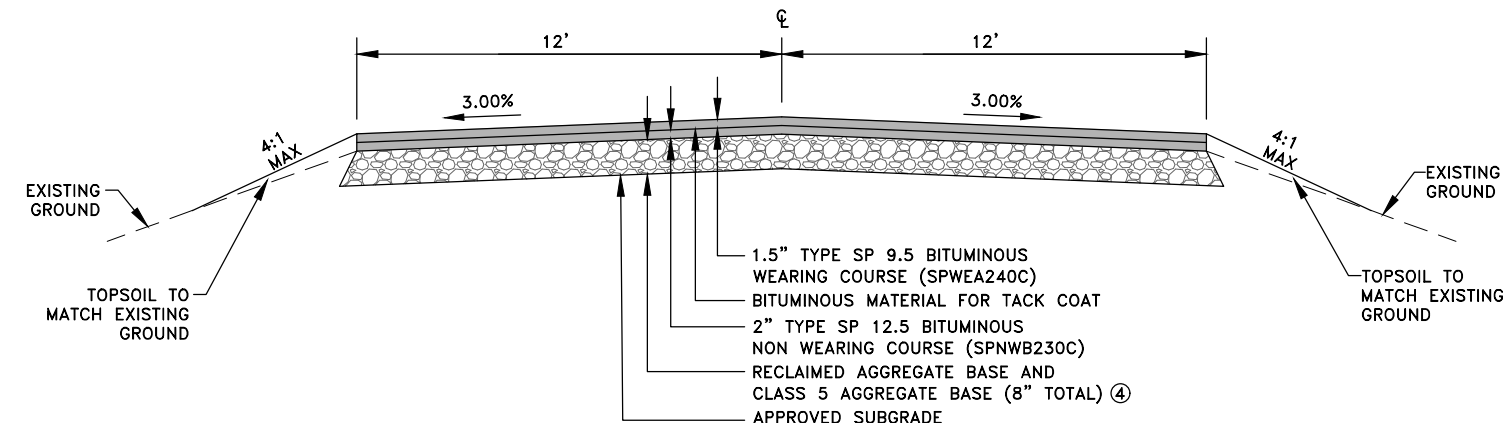
3  
5  
**TYPICAL SECTION**  
BARIUM STREET (STA 12+50 TO STA 13+40)



4  
5  
**TYPICAL SECTION**  
WACO STREET, 182ND LANE, VENTRE STREET  
AND WACO DRIVE (STA 1+84 TO STA 12+00)



5  
5  
**TYPICAL SECTION**  
WACO DRIVE (STA 12+00 TO STA 14+00)



6  
5  
**TYPICAL SECTION**  
177TH LANE

- GENERAL NOTES:  
1. THE RIGHT-OF-WAY LINES ARE SHOWN ON THE CROSS SECTIONS.
- REFERENCE NOTES:  
① SEE CONSTRUCTION PLANS FOR THE DRAINTILE LOCATIONS.  
② SURMOUNTABLE CURB SHALL BE PER CITY PLATE NO. STR-1.  
③ TIPOUT CURB AT 2.00%  
④ CLASS 5 AGGREGATE BASE SHALL MEET THE REQUIREMENTS OF CITY PLATE NO. STR-26.

Apr 22, 2024 - 2:38pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_DETAILS.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

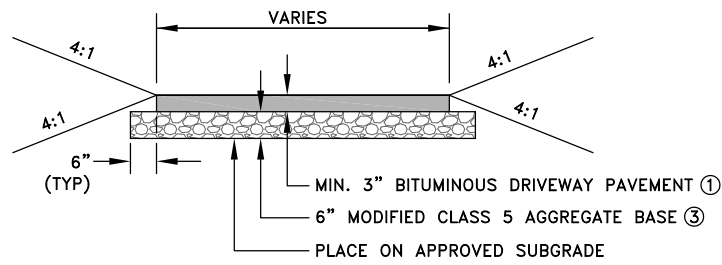


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

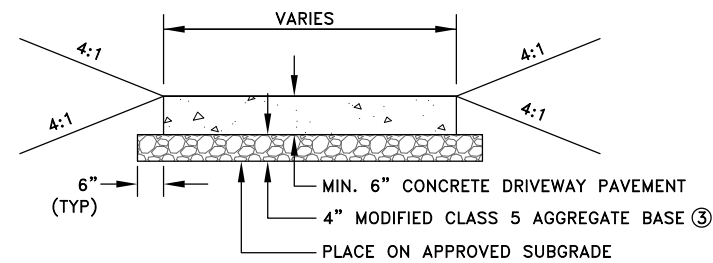
**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

**TYPICAL SECTIONS**  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

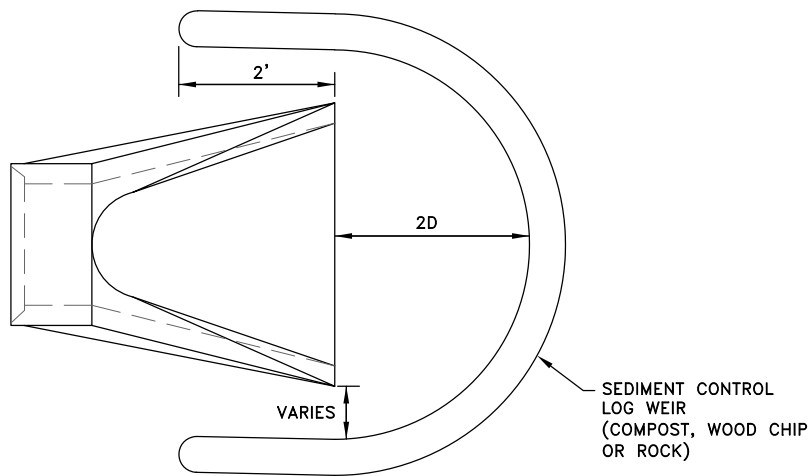
SHEET  
5  
OF  
82  
SHEETS



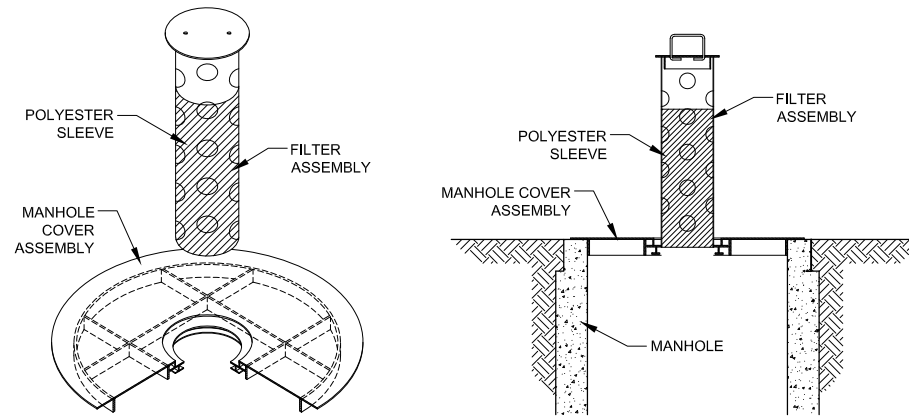
1 BITUMINOUS DRIVEWAY SECTION ④  
6 NO SCALE



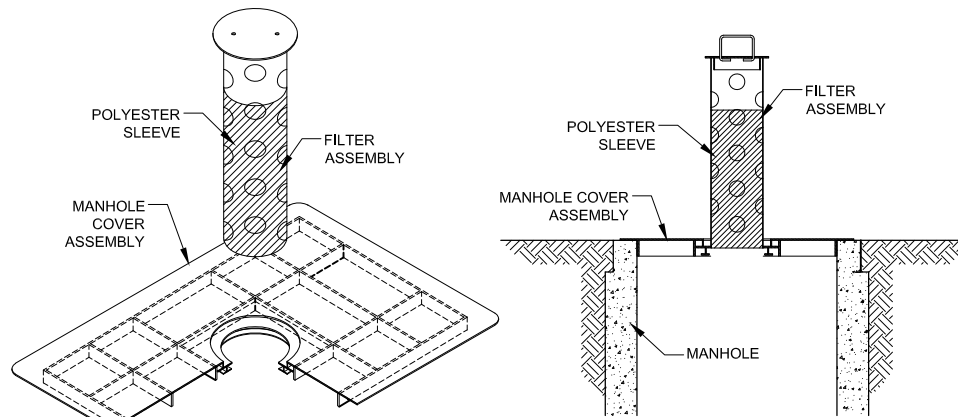
2 CONCRETE DRIVEWAY SECTION ④  
6 NO SCALE



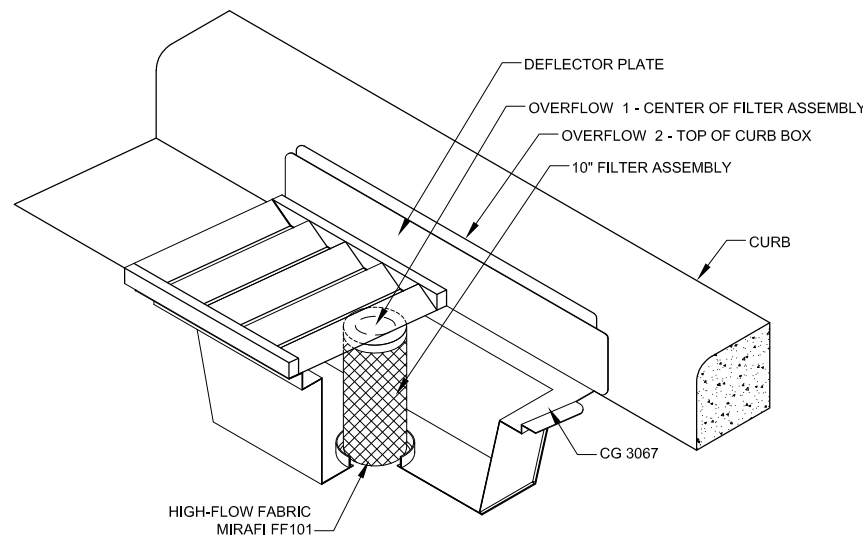
3 CULVERT END CONTROLS ②  
6



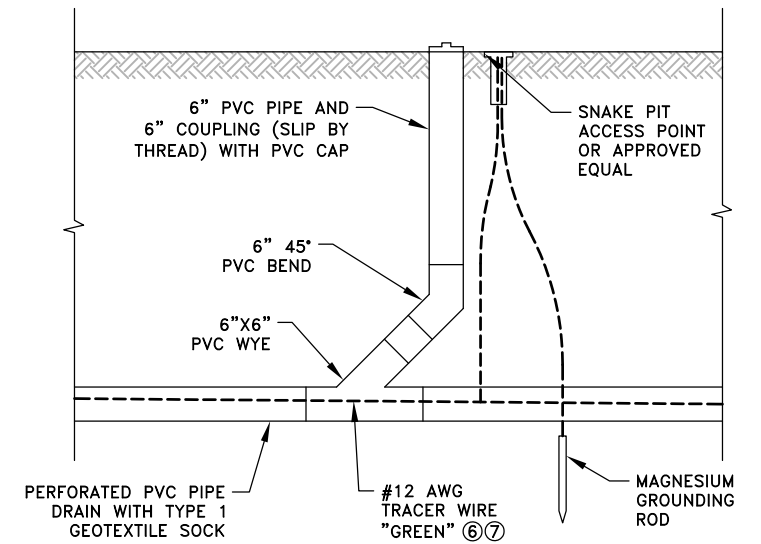
4 STORM DRAIN INLET PROTECTION ⑤  
6



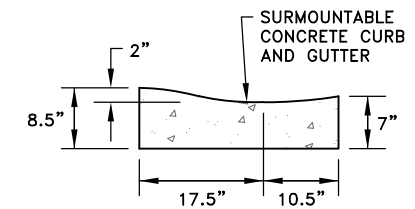
5 STORM DRAIN INLET PROTECTION ⑤  
6



6 STORM DRAIN INLET PROTECTION ⑤  
6



7 DRAINTILE CLEANOUT  
6 NO SCALE



8 CONCRETE CURB DETAIL AT DRIVEWAYS  
6 NO SCALE

- REFERENCE NOTES:
- BITUMINOUS DRIVEWAY PAVEMENT SHALL BE PAID PER ITEM 2360-TYPE SP 9.5 WEARING COURSE MIXTURE (3;C) 3" THICK.
  - ALTERNATIVE CULVERT END CONTROLS ARE SHOWN ON SHEET 8 OF 8 OF MN/DOT STANDARD PLAN 5-297.405.
  - SEE CITY PLATE NO. STR-26 FOR THE MODIFIED CLASS 5 AGGREGATE BASE SPECIFICATIONS.
  - SEE CITY PLATE NOS. STR-30 AND STR-33 FOR ADDITIONAL DRIVEWAY CONSTRUCTION DETAILS.
  - INLET PROTECTION SHALL BE INSTALLED ON ALL CASTINGS RECEIVING RUNOFF FROM THE PROJECT AREA. WIMCO MODELS RD 23, RD 27 AND CG 3067 ARE SHOWN.
  - TRACER WIRE SYSTEM SHALL CONFORM TO THE MINNESOTA RURAL WATER ASSOCIATION STANDARD SPECIFICATIONS.
  - TRACER WIRE SYSTEM SHALL BE INCIDENTAL.

Apr 22, 2024 - 2:56pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_DETAILS.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

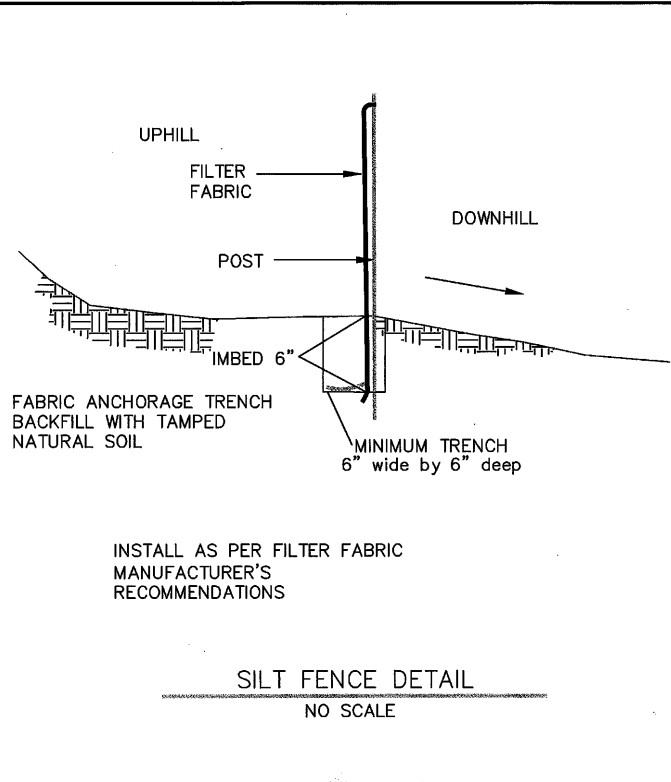


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

DETAILS  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

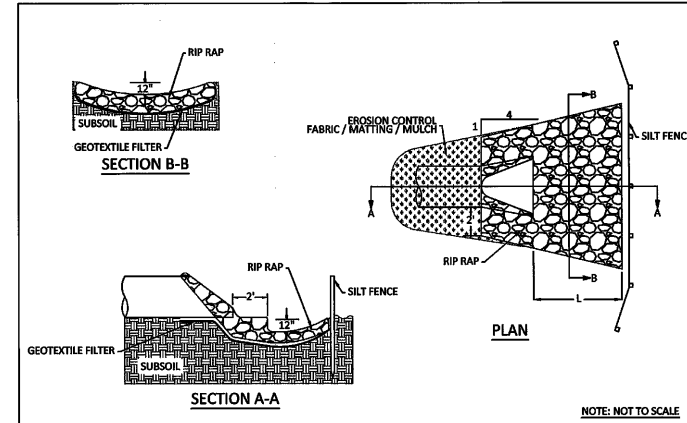
SHEET 6 OF 82 SHEETS  
RA3189



APPROVED: 1 - 2016

**City of RAMSEY**  
CITY PLATE No. ERO-1

STANDARD DETAILS: SILT FENCE



- NOTES:
- ON SLOPES 4:1 OR GREATER, ANCHOR OR STRAIGHT DISKED STRAW MULCH, SEEDING NETTING, FABRIC, OR MATTING SUCH AS EXCELSIOR SHALL BE USED TO STABILIZE DISTURBED SOILS. THESE EXPOSED SOILS MUST BE STABILIZED IMMEDIATELY AFTER GRADING OF SOIL IS COMPLETE.
  - A SKIRTING OF EROSION CONTROL FABRIC OR MULCH MUST BE USED TO PROTECT OUTLETS AS ILLUSTRATED REGARDLESS OF SLOPE.
  - RIP RAP IS CLASS III PLACED 18" THICK.
  - FOR PIPE GREATER THAN 48" DIAMETER OR 50' SPAN, QUANTITY OF GEOTEXTILE FABRIC AND RIP RAP WILL BE HANDLED IN A CASE BY CASE MANNER.
  - GEOTEXTILE FABRIC SHALL COVER THE BOTTOM AND SIDES OF THE AREA EXCAVATED FOR THE RIP RAP MATERIAL.

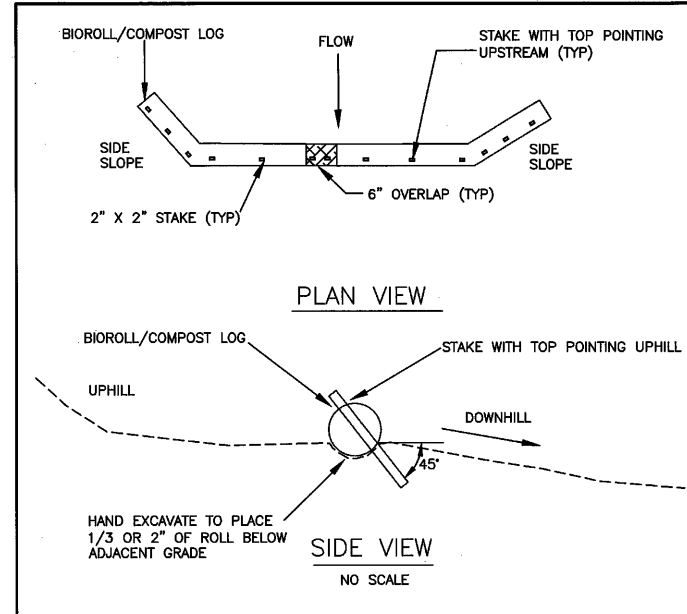
DIA. OF PIPE (IN.)	L (FT.)	GEOTEXTILE 18" DEPTH FABRIC (SQ. YD.)	RIP RAP (CU. YD.)
12	8	19.6	4.4
15	10	25.6	5.8
18	12	31.6	7.2
21	14	37.6	8.6
24	16	43.6	10.0
27	18	49.6	11.4
30	20	55.6	12.8
36	24	71.6	16.0
42	28	87.6	19.2
48	32	103.6	22.4

SPAN OF PIPE (IN.)	L (FT.)	GEOTEXTILE 18" DEPTH FABRIC (SQ. YD.)	RIP RAP (CU. YD.)
22	10	25.6	5.8
28	12	31.6	7.2
34	14	37.6	8.6
40	16	43.6	10.0
46	18	49.6	11.4
52	20	55.6	12.8

APPROVED: 9 - 2016

**City of RAMSEY**  
CITY PLATE No. ERO-3

STANDARD DETAILS: RIP-RAP

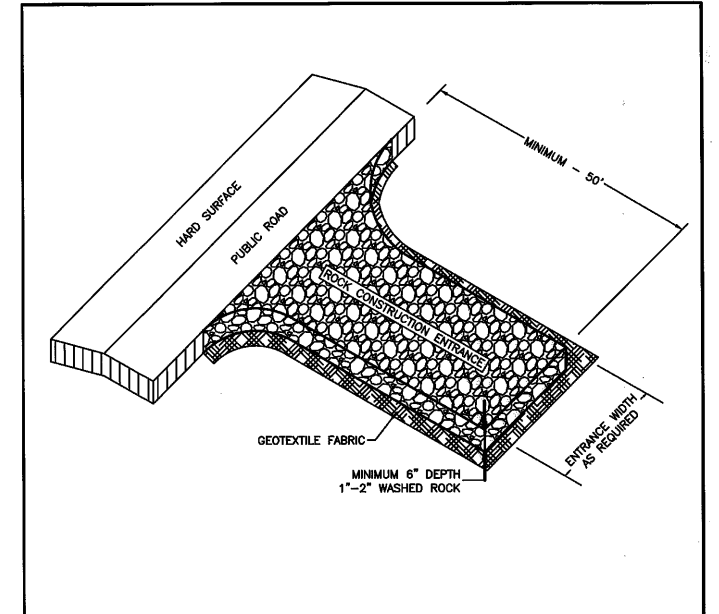


- NOTE:
- STAKE INTO GROUND WITH WOOD STAKES DRIVING STAKE 6" INTO GROUND AND PROTRUDING 2" ABOVE LOG
- WOOD STAKES ARE A MINIMUM 0.5" X 2" X 16" AND PLACED EVERY 1' UNLESS PRECLUDED BY A ROCK
- WHEN MORE THAN 1 BIOROLL/COMPOST LOG IS NEEDED, OVERLAP ENDS A MINIMUM OF 6" AND STAKE
- WOOD STAKES ARE DRIVEN THROUGH BACK HALF OF BIOROLL OR COMPOST LOG AT 45° ANGLE WITH TOP OF STAKE POINTING UPHILL

APPROVED: 3 - 2016

**City of RAMSEY**  
CITY PLATE No. ERO-4

STANDARD DETAILS: BIO ROLL (COMPOST LOG)



- NOTE:
- MINIMUM CONSTRUCTION ENTRANCE WIDTH EQUAL TO PROPOSED ROADWAY WIDTH.
  - WIDTH OF RADIUS AS REQUIRED TO ENSURE VEHICLES DO NOT TRACK ONTO PUBLIC ROAD.
  - MAINTENANCE AS REQUIRED TO PREVENT TRACKING ONTO PUBLIC ROADS. THIS MAY REQUIRE TOP DRESSING WITH ADDITIONAL ROCK OR REMOVAL AND REINSTALLATION OF THE ENTRANCE AS NEEDED.

APPROVED: 1 - 2016

**City of RAMSEY**  
CITY PLATE No. ERO-5

STANDARD DETAILS: ROCK CONSTRUCTION ENTRANCE

Notes:

- INSTALLATION OF 4" OF TOPSOIL REQUIRED ACROSS ALL DISTURBED AREAS.
- TOPSOIL IS DEFINED AS BLACK DIRT COMPOSED OF UNCONSOLIDATED MATERIAL, LARGELY UNDECOMPOSED ORGANIC MATTER WHICH IS SUITABLE FOUNDATION FOR VEGETATIVE GROWTH.
- THE COMPOSITION OF TOPSOIL SHOULD CONTAIN NO MORE THAN THIRTY-FIVE PERCENT (35%) SAND CONTENT.

APPROVED: 7 - 2019

**City of RAMSEY**  
CITY PLATE No. ERO-6

STANDARD DETAILS: TOPSOIL REQUIREMENTS

Apr 22, 2024 - 2:36pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_DETAILS.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

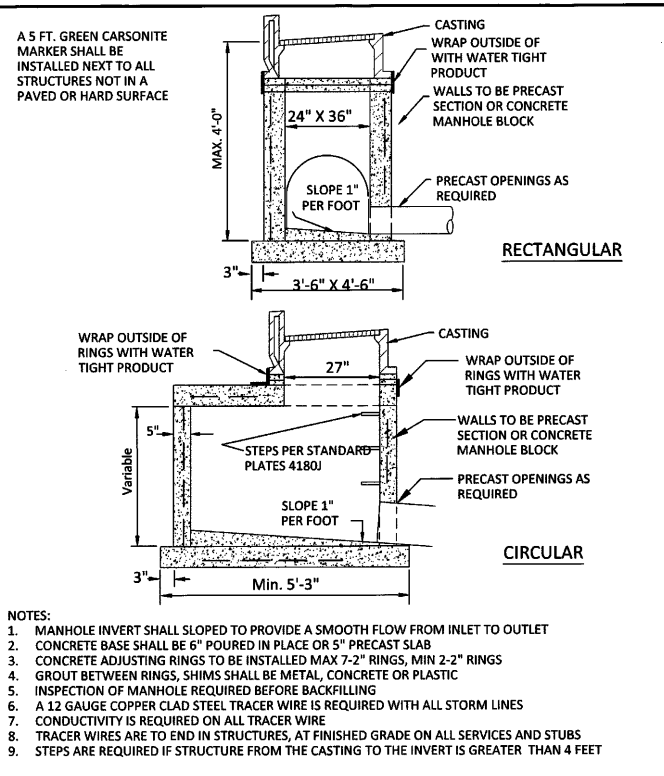


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

DETAILS  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 7 OF 82 SHEETS  
RA3189

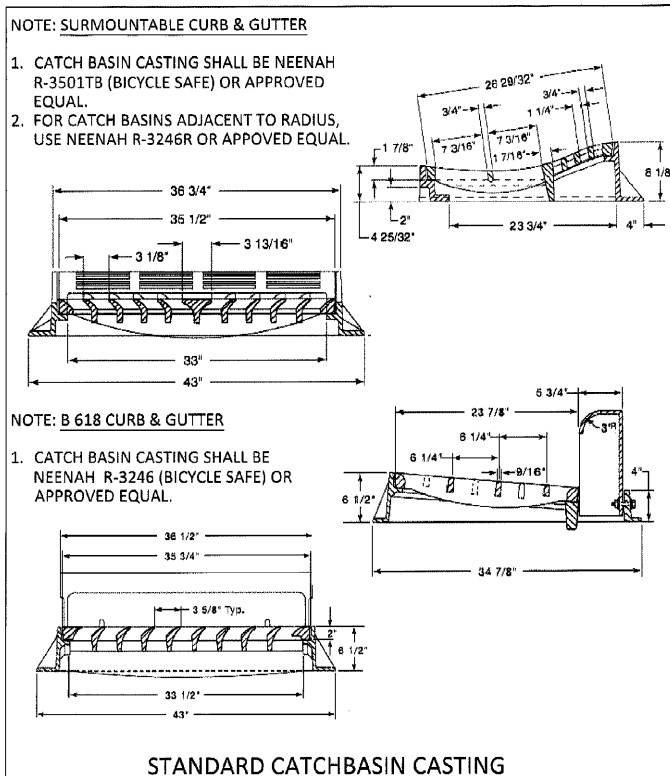


APPROVED: 1 - 2024

**City of RAMSEY**

CITY PLATE No. **STO-1**

STANDARD DETAILS: CATCH BASIN

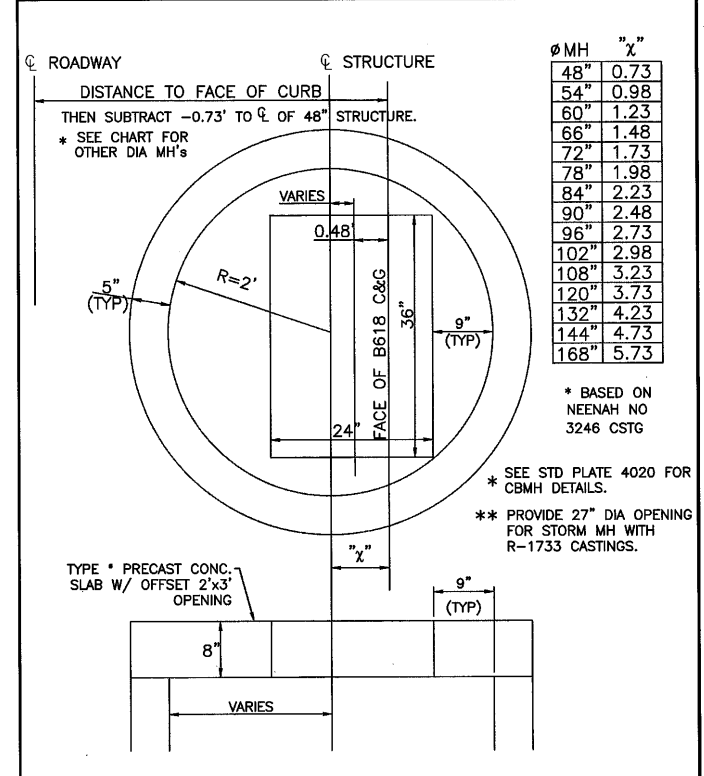


APPROVED: 1 - 2024

**City of RAMSEY**

CITY PLATE No. **STO-4**

STANDARD DETAILS: STORMWATER CASTING



APPROVED: 4 - 2005

**City of RAMSEY**

CITY PLATE No. **STO-5**

STANDARD DETAILS: SLAB TOP MANHOLE COVER

R-2560 Series  
Beehive Grates with Frames

SUITABLE FOR DRAINAGE ON CIRCUMSTANCES WHERE CLOGGING OF A FLAT GRATING IS A PROBLEM. EXCELLENT FOR ROADSIDE OR EARTH DITCH CATCH BASINS.

Catalog No.	Dimensions in Inches							WT. LBS.
	A	B	C	D	E	F	G	
R-2560-A	12	1/2	11	12 1/2	19	4	4	80
R-2560-B	15	1/2	14	15	21	5	5	120
R-2560-C	18	1/2	17	18 1/2	24	6	6	180
R-2560-D	22	1/2	21	22 1/2	28	8	8	240
R-2560-E	24	1/2	23	24 1/2	31	9	9	270
R-2560-F	28	1/2	27	28 1/2	35	11	11	315
R-2560-G	30	1/2	29	30 1/2	37	12	12	360
R-2560-H	36	1/2	35	36 1/2	45	15	15	540
R-2560-I	42	1/2	41	42 1/2	53	18	18	630
R-2560-J	48	1/2	47	48 1/2	61	21	21	840
R-2560-K	54	1/2	53	54 1/2	69	24	24	960
R-2560-L	60	1/2	59	60 1/2	77	27	27	1080
R-2560-M	66	1/2	65	66 1/2	85	30	30	1260
R-2560-N	72	1/2	71	72 1/2	93	33	33	1440
R-2560-O	78	1/2	77	78 1/2	101	36	36	1620
R-2560-P	84	1/2	83	84 1/2	109	39	39	1800
R-2560-Q	90	1/2	89	90 1/2	117	42	42	2160
R-2560-R	96	1/2	95	96 1/2	125	45	45	2520
R-2560-S	102	1/2	101	102 1/2	133	48	48	2880
R-2560-T	108	1/2	107	108 1/2	141	51	51	3240
R-2560-U	114	1/2	113	114 1/2	149	54	54	3600
R-2560-V	120	1/2	119	120 1/2	157	57	57	4080
R-2560-W	126	1/2	125	126 1/2	165	60	60	4560
R-2560-X	132	1/2	131	132 1/2	173	63	63	5040
R-2560-Y	138	1/2	137	138 1/2	181	66	66	5520
R-2560-Z	144	1/2	143	144 1/2	189	69	69	6000

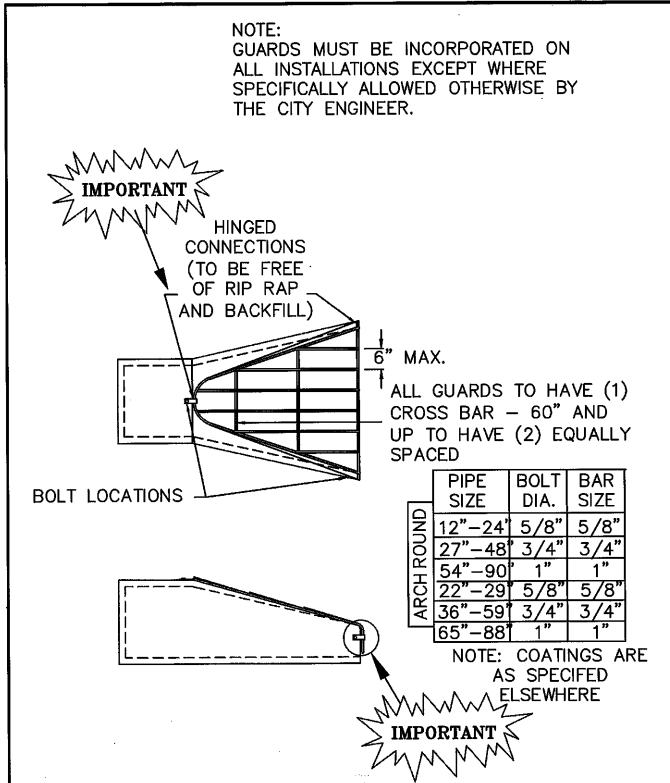
R-2570 Catch Basin Frame, Grate  
Light Duty  
Total Weight 170 Pounds

APPROVED: 9 - 2011

**City of RAMSEY**

CITY PLATE No. **STO-6**

STANDARD DETAILS: STORM CASTING - NON TRAFFIC AREAS

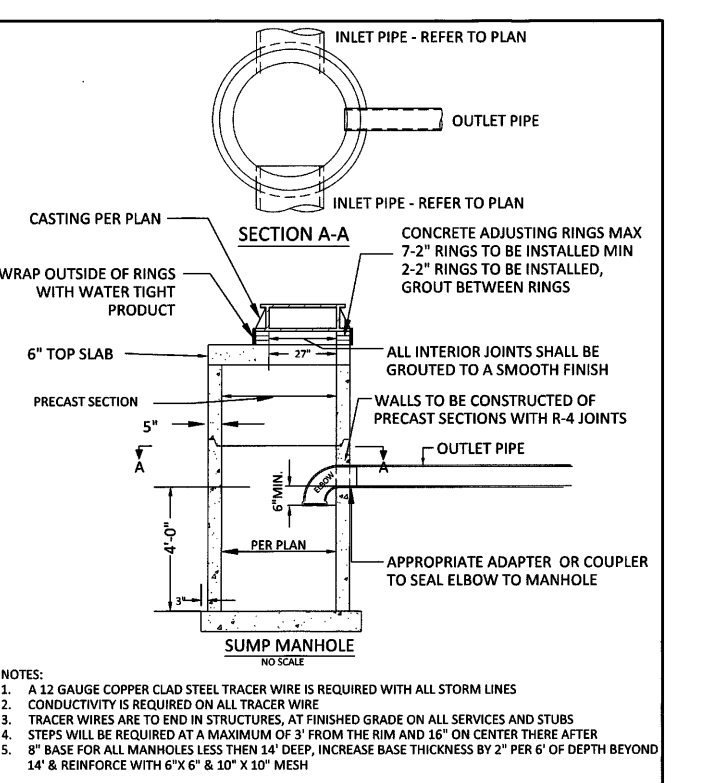


APPROVED: 2 - 2006

**City of RAMSEY**

CITY PLATE No. **STO-8**

STANDARD DETAILS: TRASH GUARD

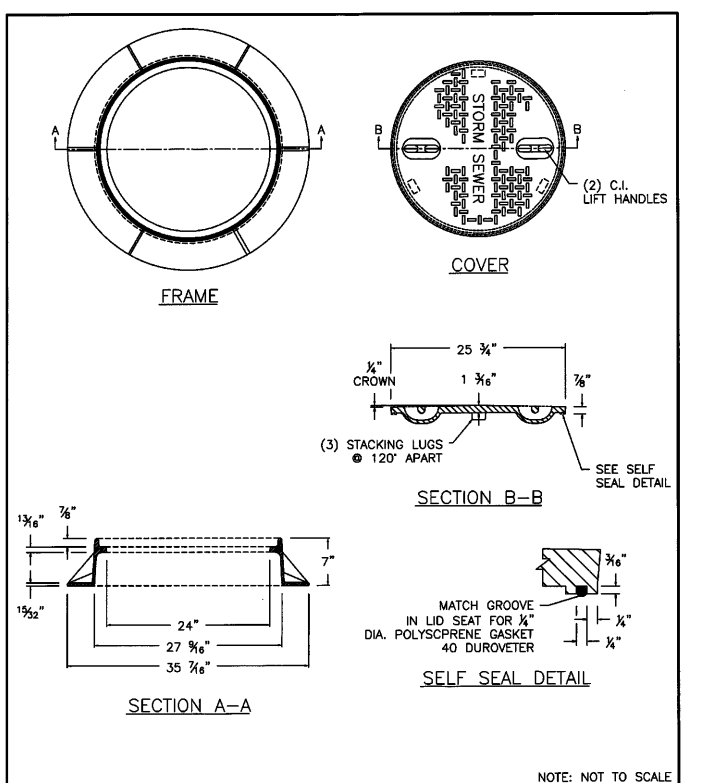


APPROVED: 1 - 2024

**City of RAMSEY**

CITY PLATE No. **STO-9**

STANDARD DETAILS: SUMP MANHOLE



APPROVED: 2 - 2019

**City of RAMSEY**

CITY PLATE No. **STO-14**

STANDARD DETAILS: WATER TIGHT CASTING

Apr. 22, 2024 - 2:39pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_DETAILS.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

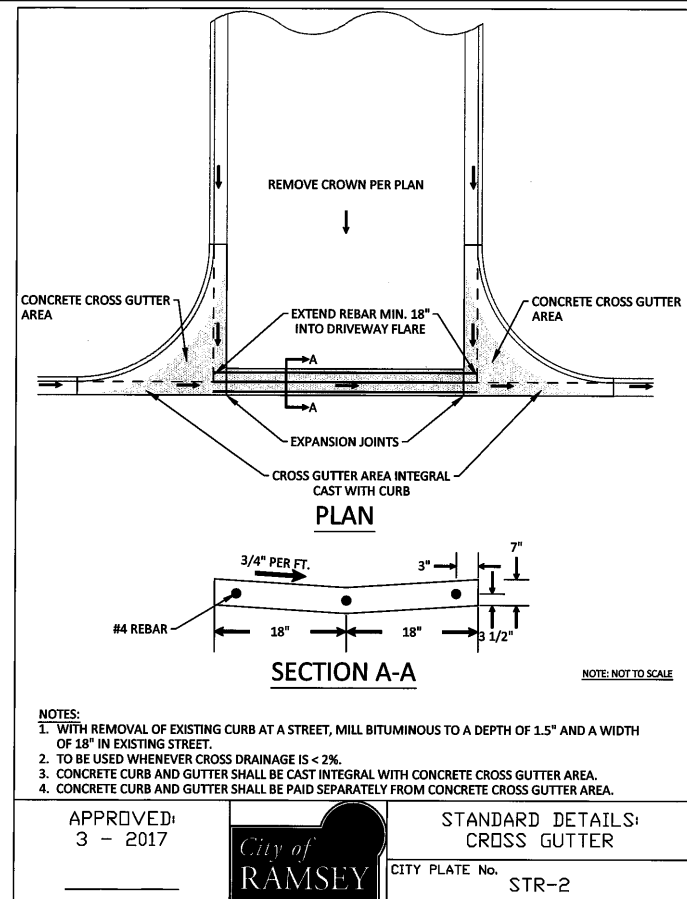
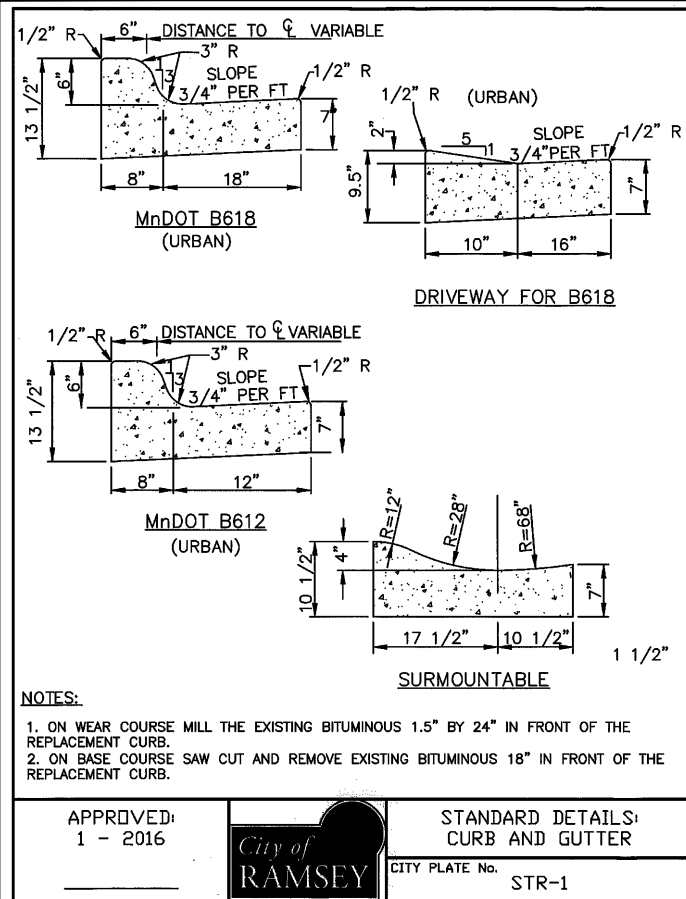
DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

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

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

DETAILS  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 8 OF 82 SHEETS  
RA3189

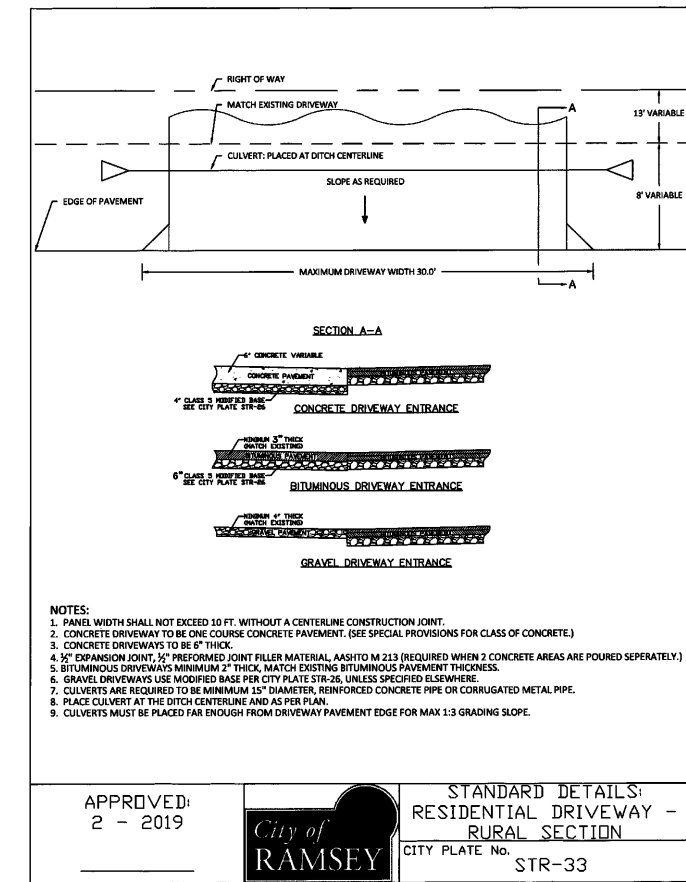
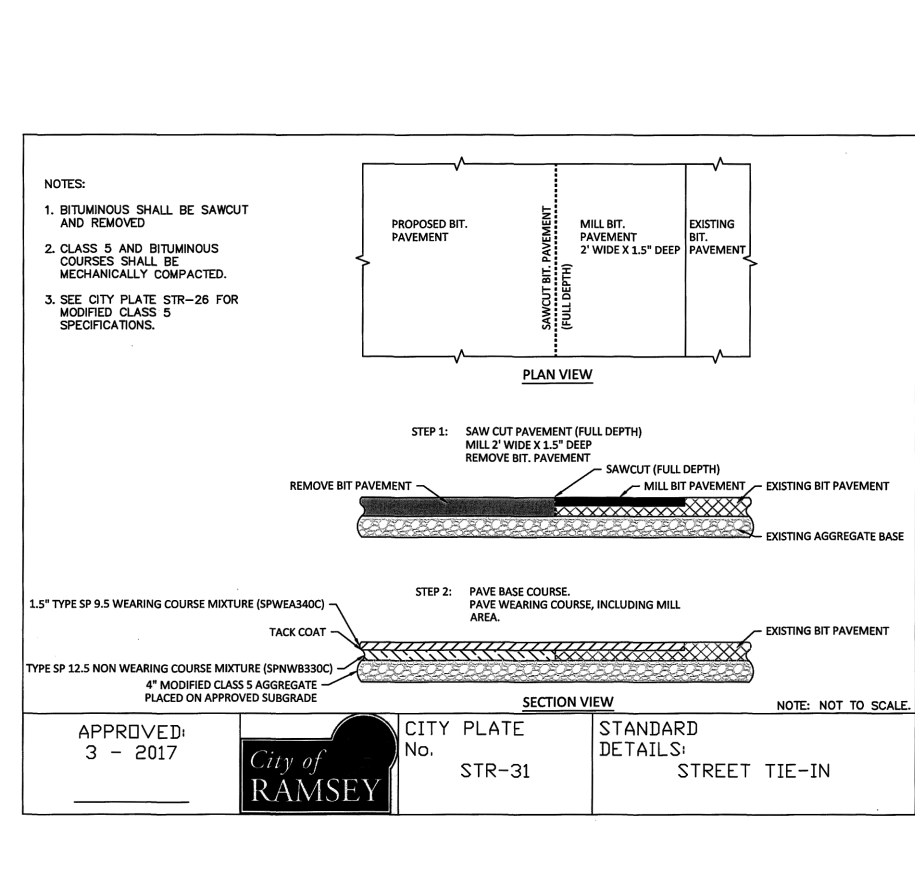
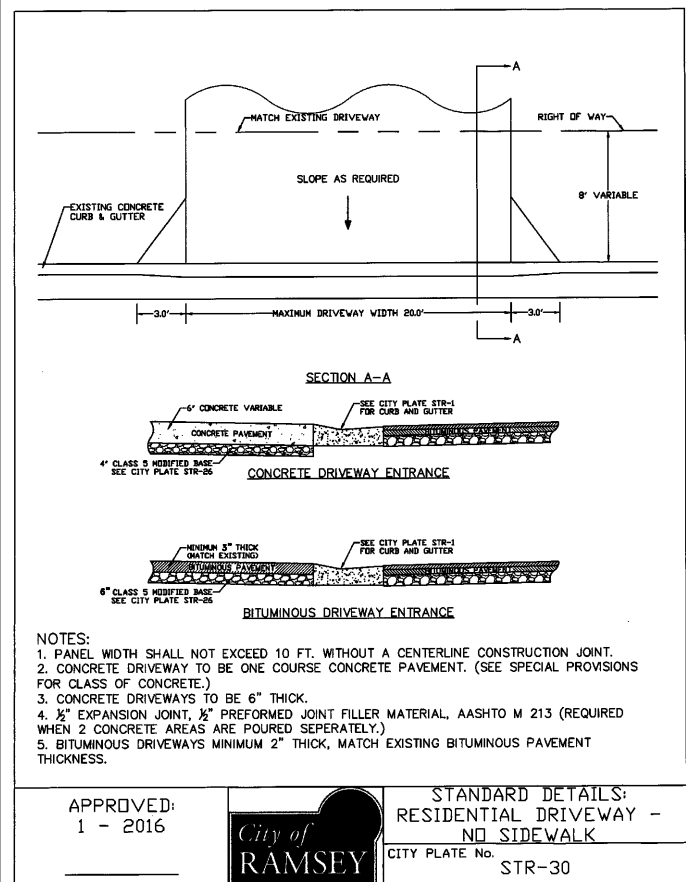
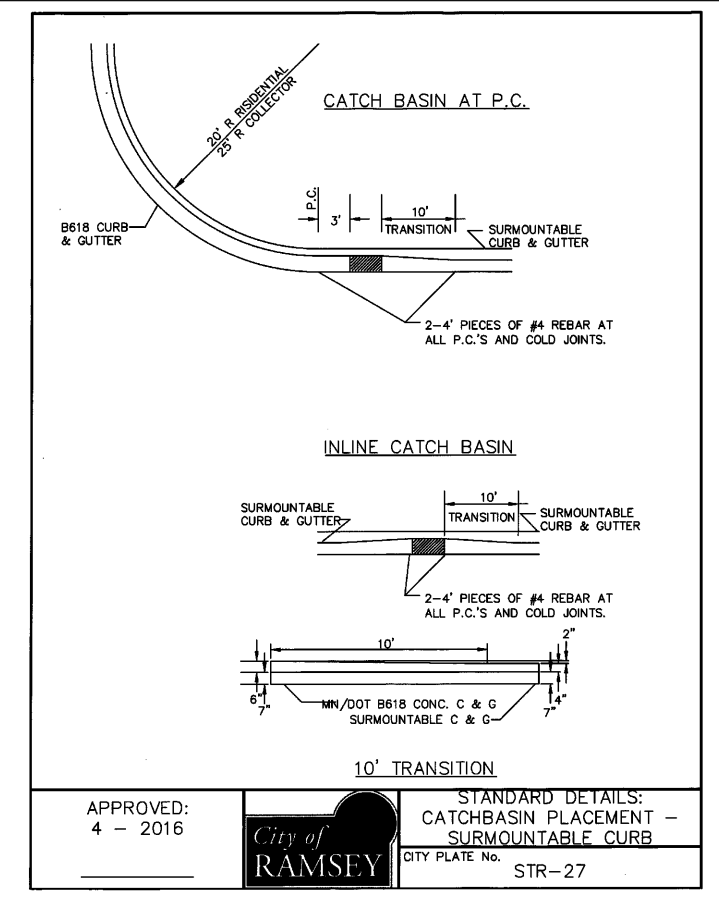


### TABLE A MODIFIED CLASS 5 SPECIFICATIONS

% PASSING	
1"	100
3/4"	90 - 100
3/8"	50 - 80
No.4	35 - 70
No.10	20 - 60
No.40	10 - 35
No.200	5 - 10

**NOTES:**  
1. THE AGGREGATE BASE CONSTRUCTION WILL BE ACCEPTED FOR PAYMENT IN ACCORDANCE WITH THE PROVISIONS IN TABLE A.  
2. IF THE AGGREGATE BASE FAILS TO MEET THE REQUIREMENTS OF TABLE A THE MATERIAL CAN BE CORRECTED IN PLACE OR REMOVED AND REPLACED WITH MATERIAL THAT MEET THE REQUIREMENTS OF TABLE A.  
3. IN THE EVENT THAT RECYCLED MATERIAL IS USE IT MUST MEET MNDOT REQUIREMENTS FOR RECYCLED BASE.

APPROVED: 2 - 2003  
City of RAMSEY  
STANDARD DETAILS: MODIFIED CLASS 5 SPECIFICATIONS  
CITY PLATE No. STR-26



Apr 22, 2024 - 2:39pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_DETAILS.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

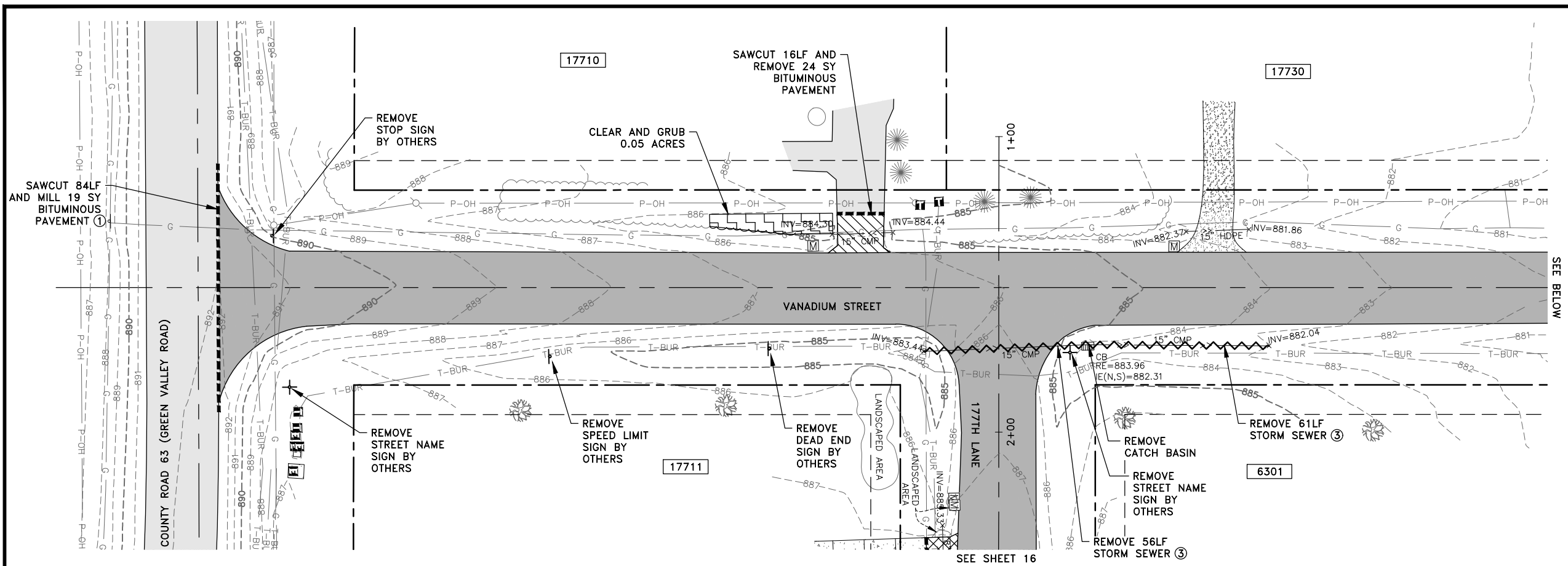


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

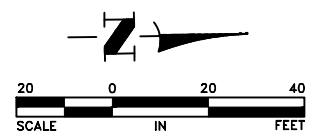
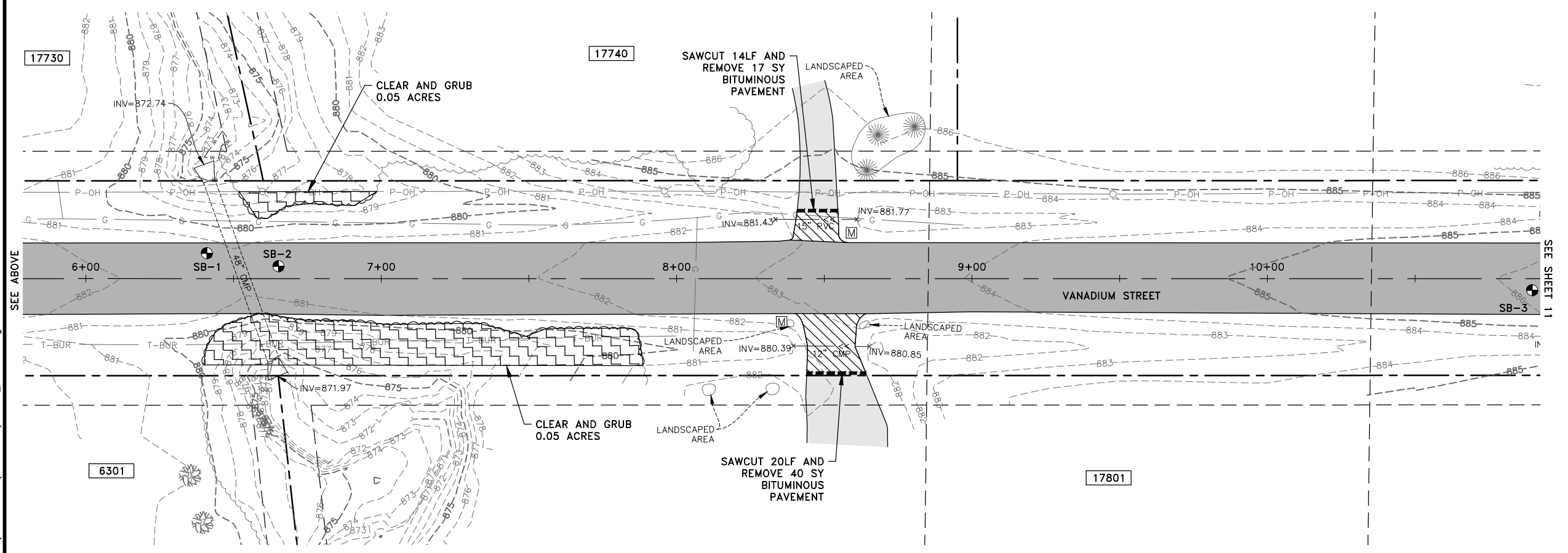
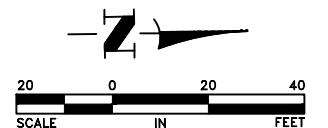
**DETAILS**  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 9 OF 82 SHEETS  
RA3189



**LEGEND**

	FULL DEPTH RECLAMATION, SALVAGE RECLAMATION MATERIAL, SUBGRADE EXCAVATION ②
	BITUMINOUS PAVEMENT REMOVAL
	CLEAR AND GRUB
	SAWCUT BITUMINOUS OR CONCRETE
	STORM SEWER REMOVAL



- GENERAL NOTES:**
- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.
- REFERENCE NOTES:**
- BITUMINOUS MILLING SHALL BE PER CITY PLATE NO. STR-31.
  - THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.
  - THIS WORK SHALL BE PAID PER ITEM 2104-REMOVE METAL CULVERT.

Apr. 22, 2024 - 2:39pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Lic. No. 43381  
 Date 4/22/24

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
SMN



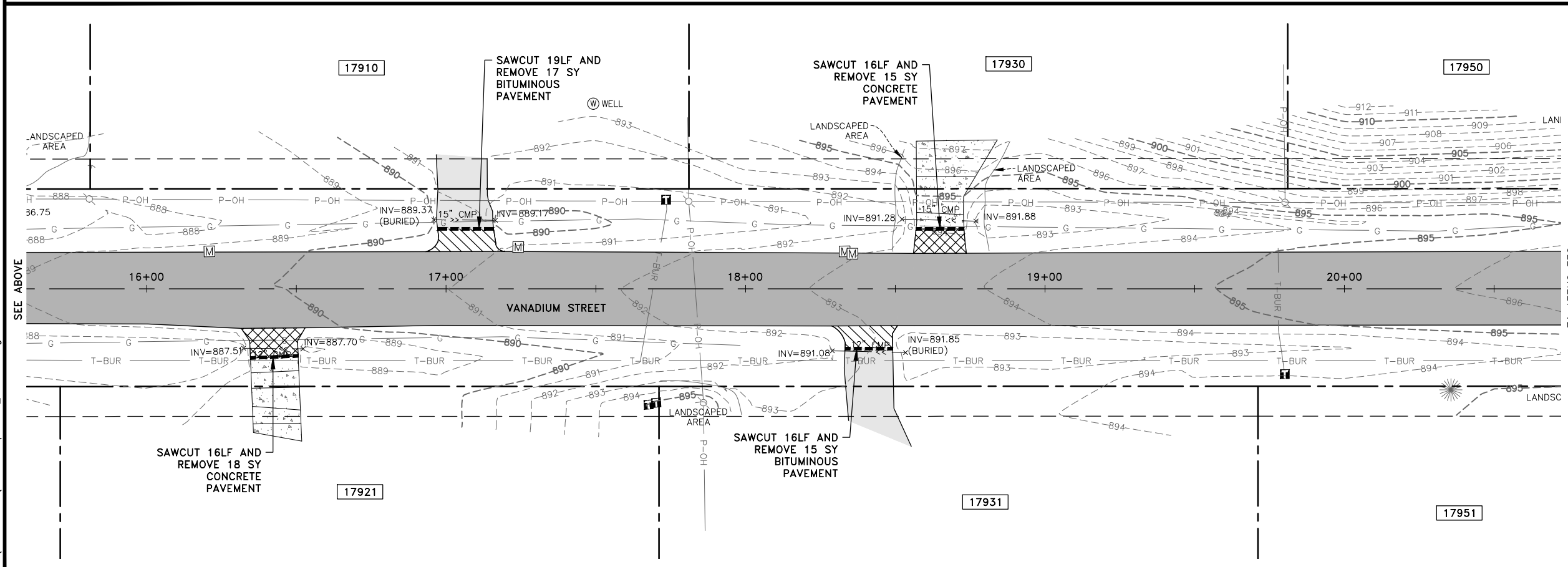
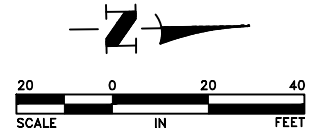
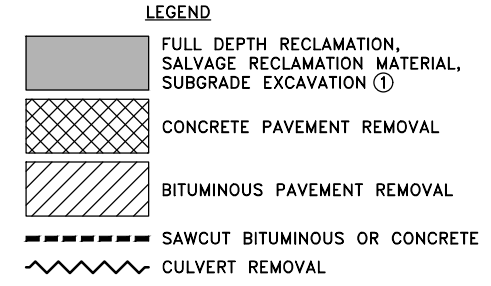
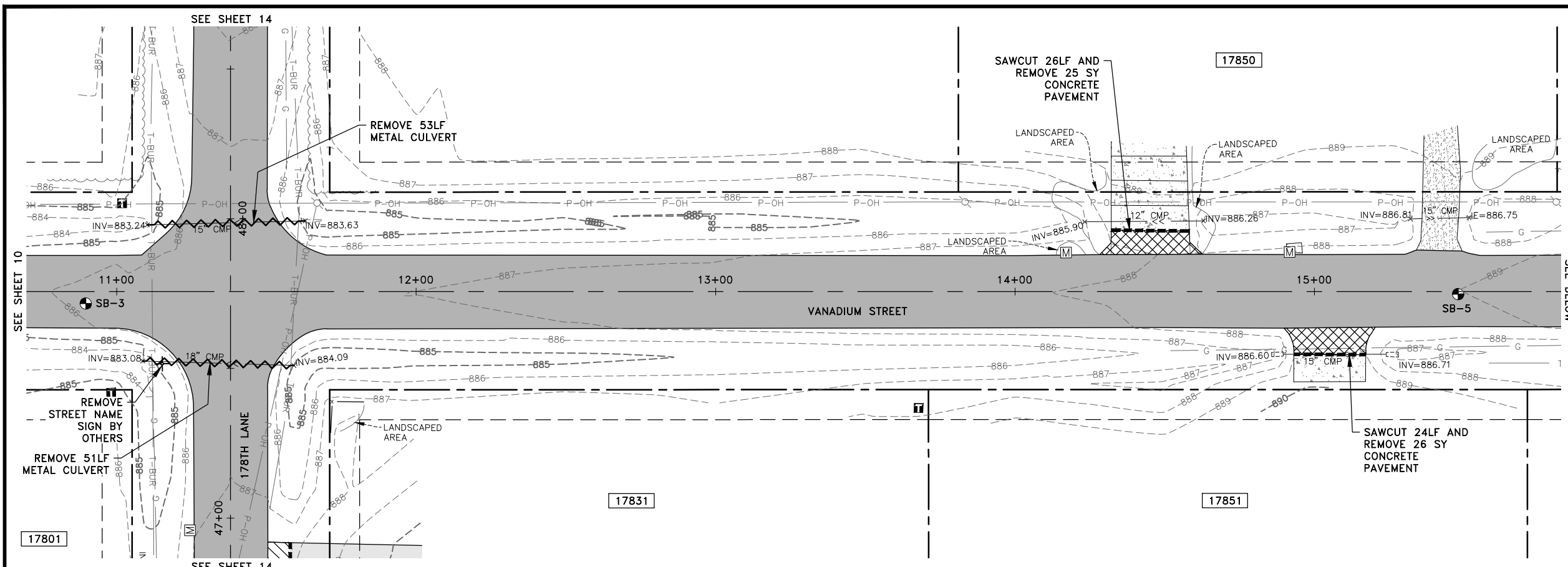
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**

VANADIUM STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
 10  
 OF  
 82  
 SHEETS

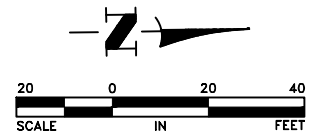


**GENERAL NOTES:**

- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.

**REFERENCE NOTES:**

- THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.



Apr 22, 2024 - 2:39pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

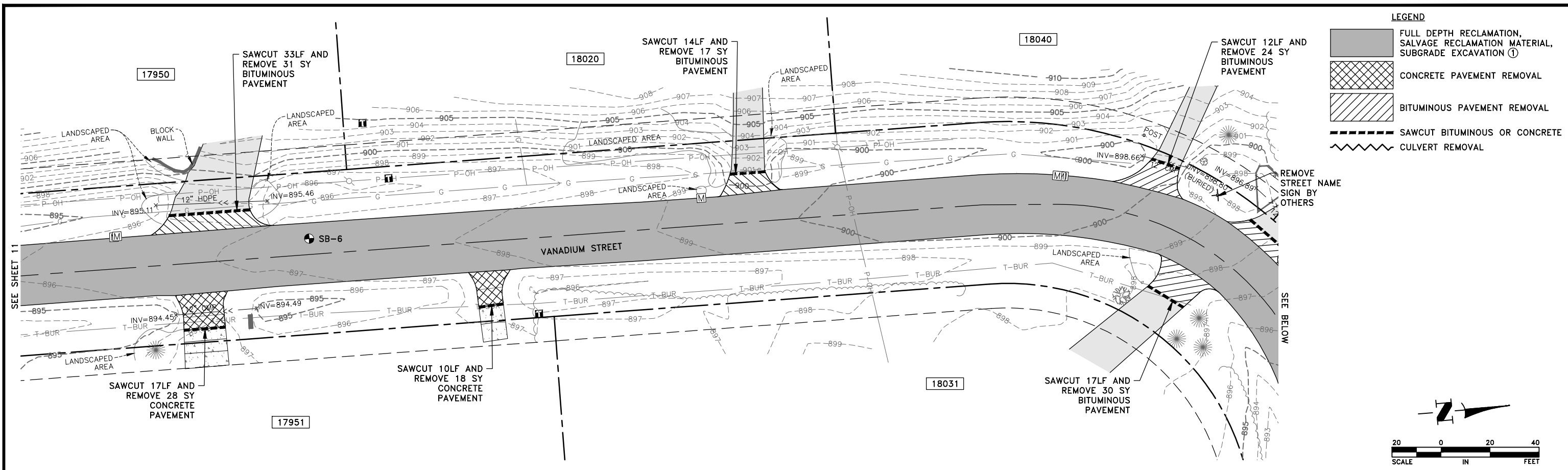


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

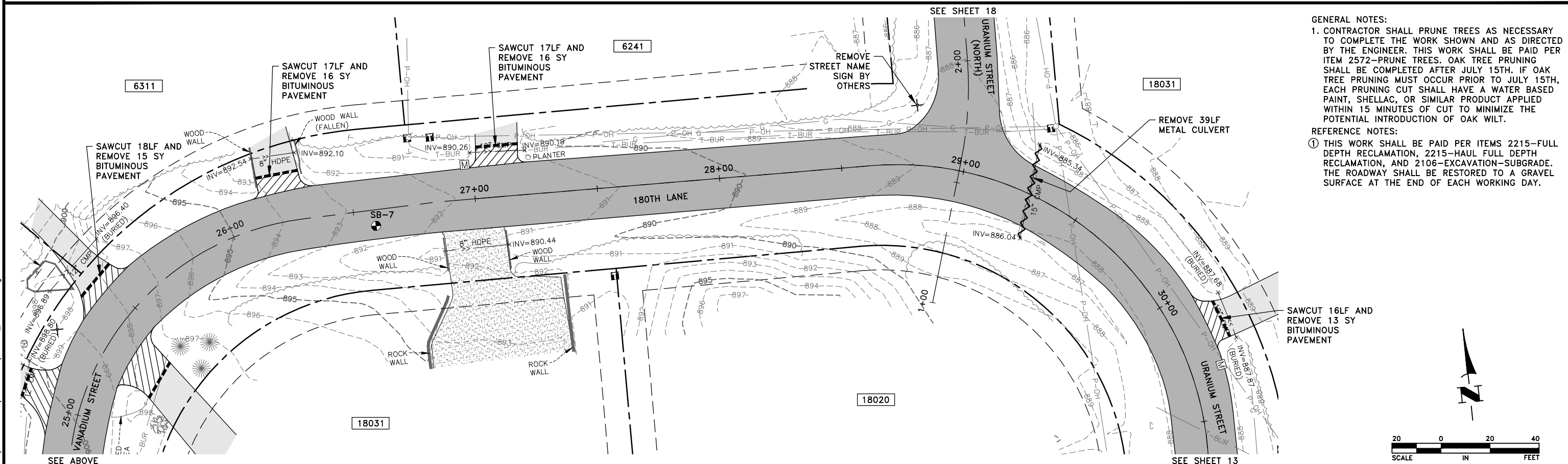
**EXISTING TOPOGRAPHY AND REMOVALS PLAN**  
 VANADIUM STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 11 OF 82 SHEETS  
 RA3189



**LEGEND**

	FULL DEPTH RECLAMATION, SALVAGE RECLAMATION MATERIAL, SUBGRADE EXCAVATION ①
	CONCRETE PAVEMENT REMOVAL
	BITUMINOUS PAVEMENT REMOVAL
	SAWCUT BITUMINOUS OR CONCRETE
	CULVERT REMOVAL



**GENERAL NOTES:**

- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.

**REFERENCE NOTES:**

- THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.

Apr. 22, 2024 - 2:40pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

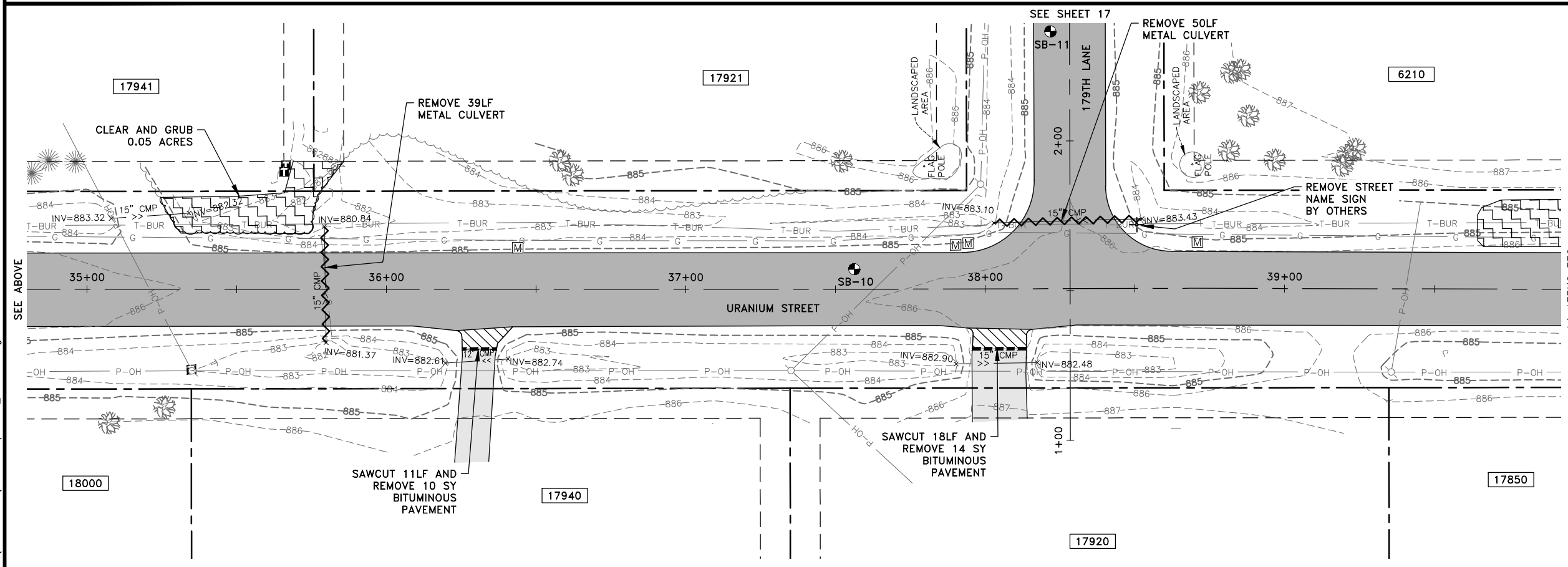
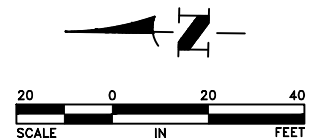
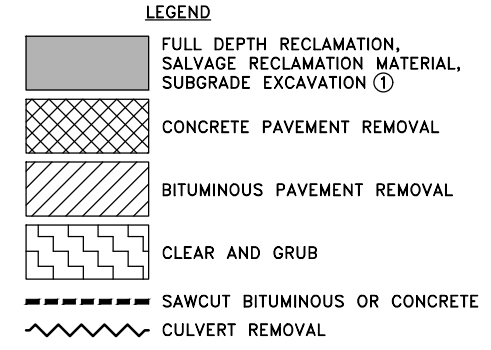
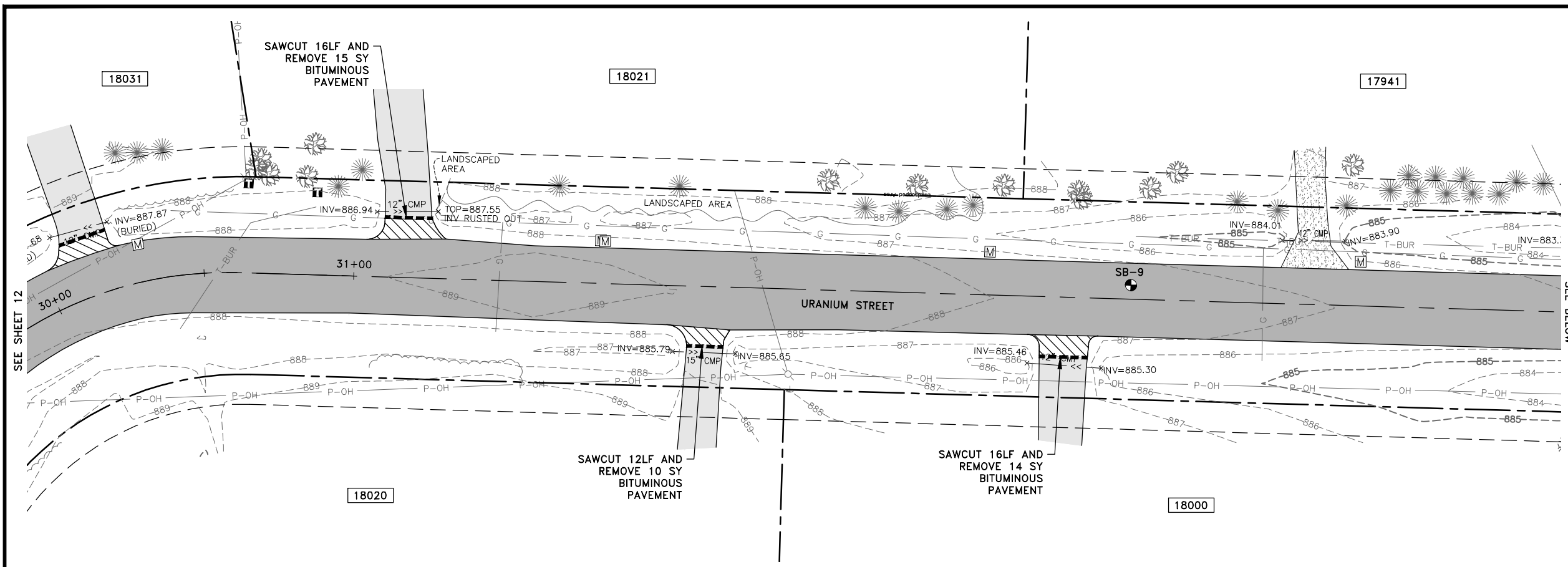


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**  
 VANADIUM STREET AND 180TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 12 OF 82 SHEETS  
 RA3189

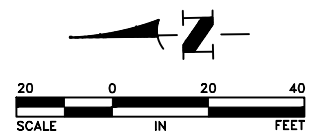


**GENERAL NOTES:**

1. CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.

**REFERENCE NOTES:**

- ① THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.



Apr. 22, 2024 - 2:40pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN



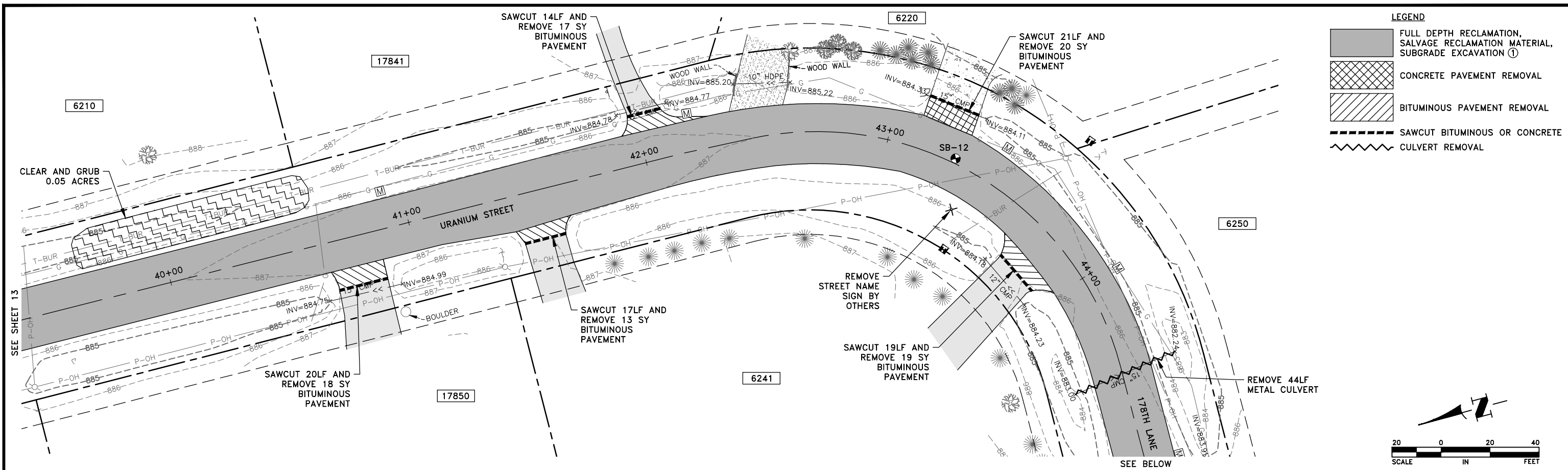
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**

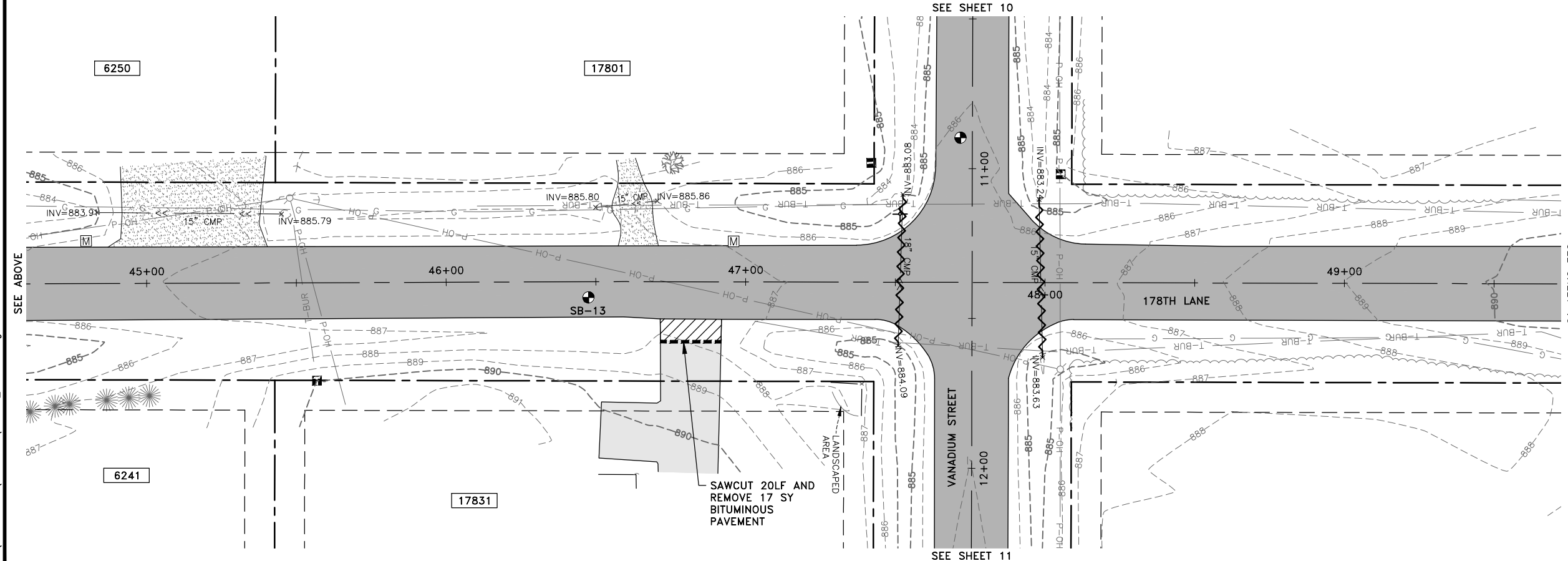
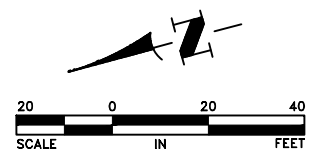
**URANIUM STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 13 OF 82 SHEETS  
 RA3189



**LEGEND**

	FULL DEPTH RECLAMATION, SALVAGE RECLAMATION MATERIAL, SUBGRADE EXCAVATION ①
	CONCRETE PAVEMENT REMOVAL
	BITUMINOUS PAVEMENT REMOVAL
	SAWCUT BITUMINOUS OR CONCRETE
	CULVERT REMOVAL

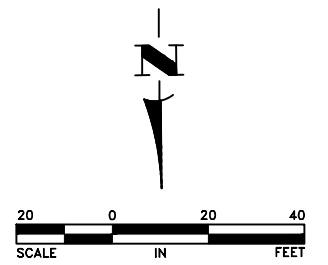


**GENERAL NOTES:**

- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.

**REFERENCE NOTES:**

- THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.



Apr 22, 2024 - 2:40pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

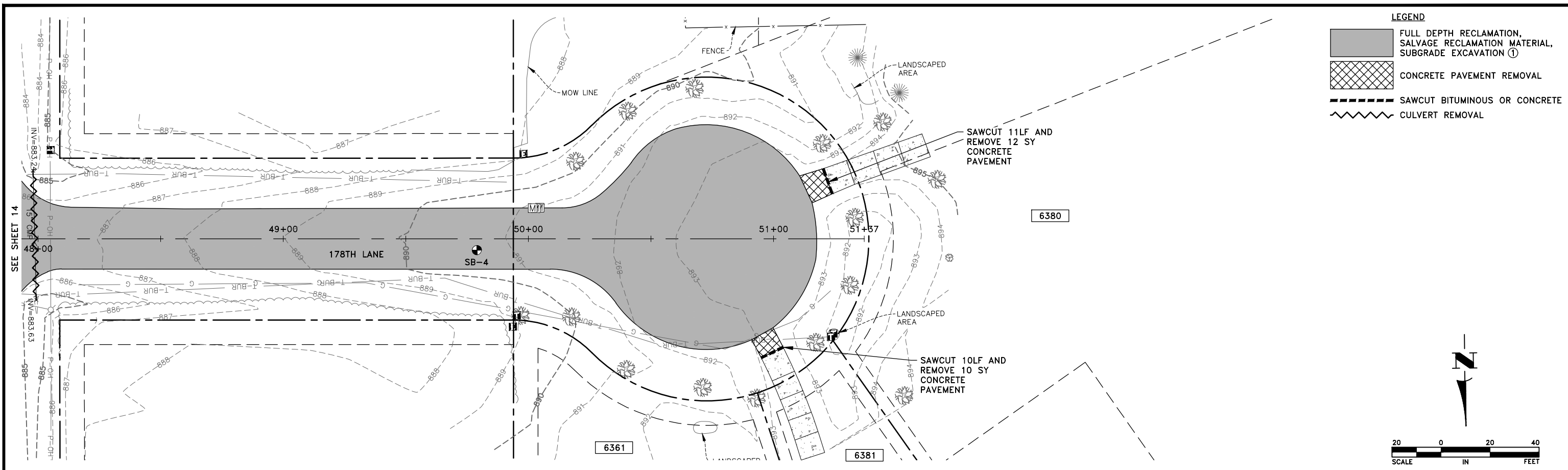


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**  
 URANIUM STREET AND 178TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 14 OF 82 SHEETS  
 RA3189



GENERAL NOTES:

- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.

REFERENCE NOTES:

① THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.

Apr 22, 2024 - 2:40pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN



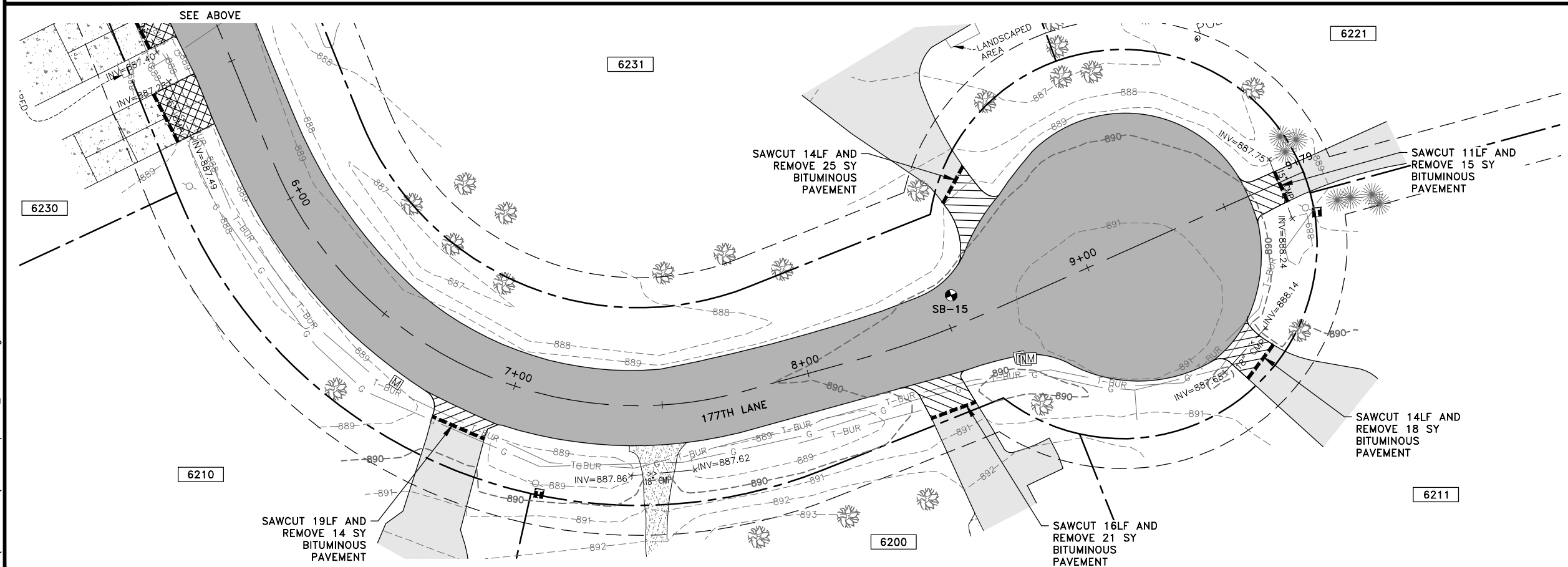
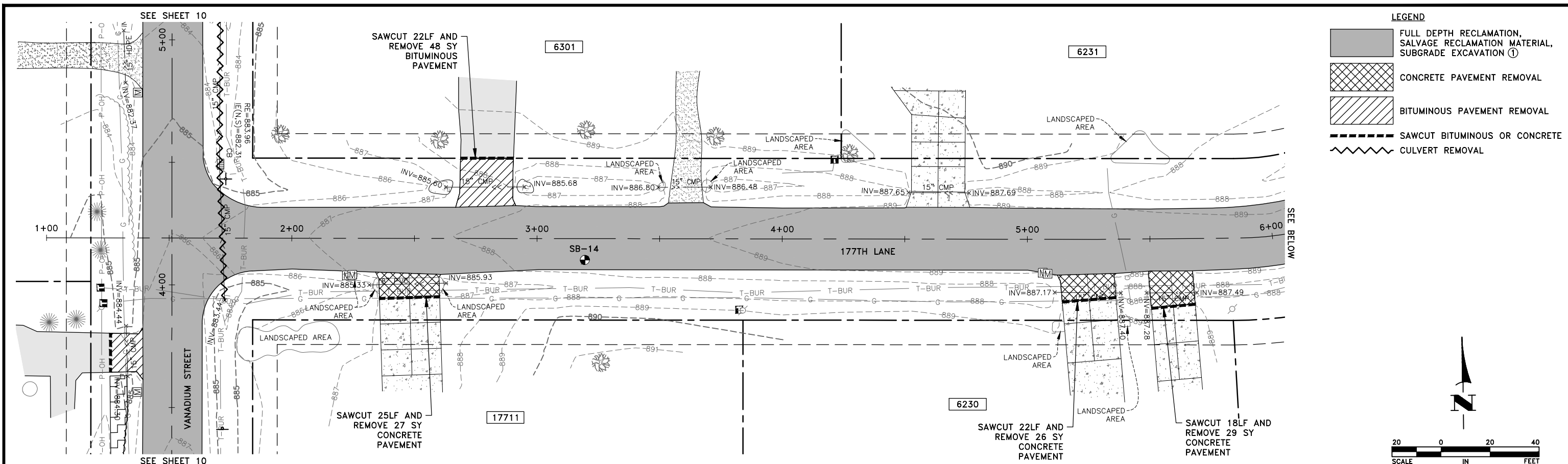
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**

178TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 15 OF 82 SHEETS



**GENERAL NOTES:**

- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.

**REFERENCE NOTES:**

- THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.

Apr 22, 2024 - 2:41pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN



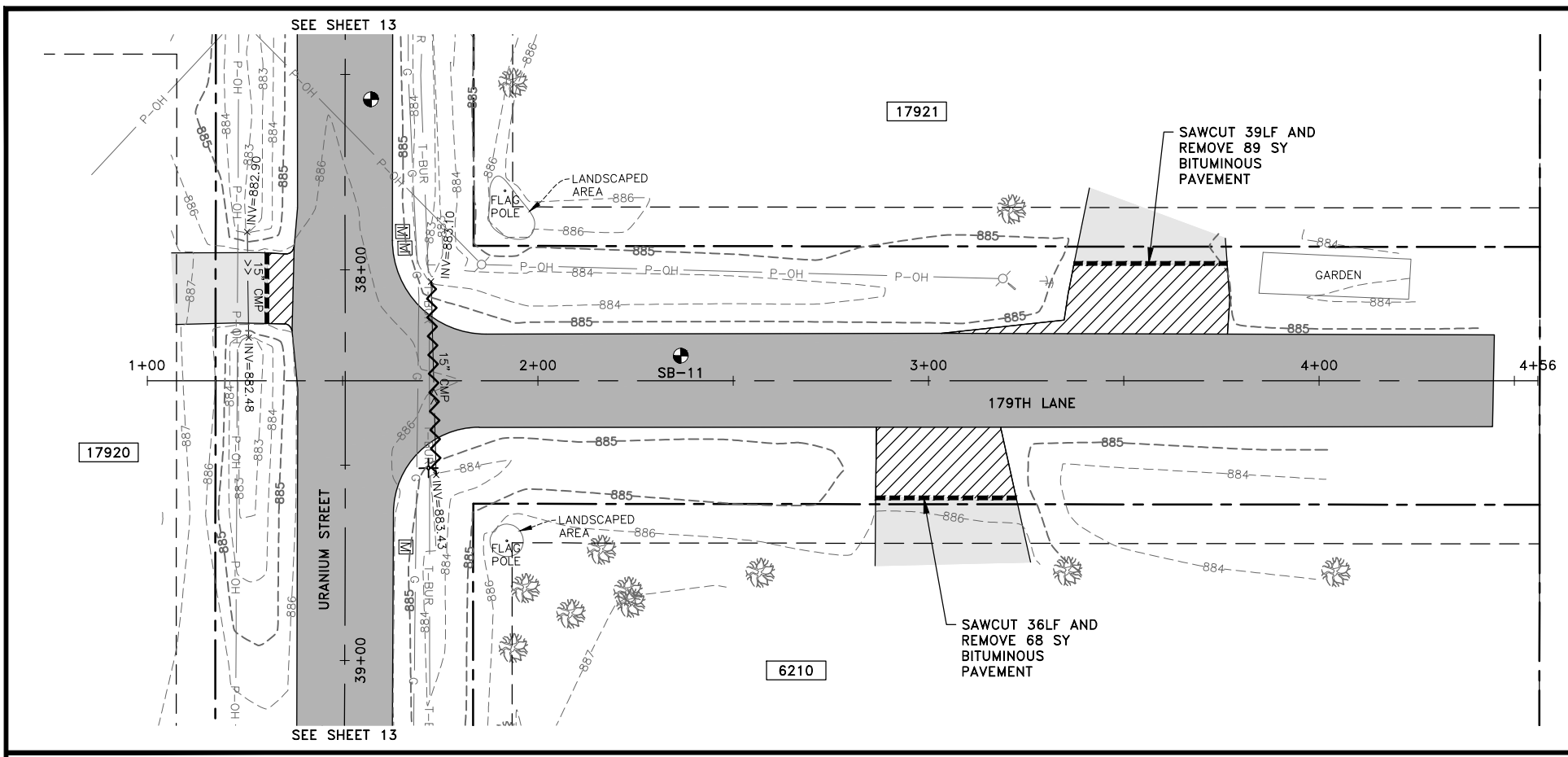
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**

177TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 16 OF 82 SHEETS  
 RA3189



**LEGEND**

	FULL DEPTH RECLAMATION, SALVAGE RECLAMATION MATERIAL, SUBGRADE EXCAVATION ①
	BITUMINOUS PAVEMENT REMOVAL
	SAWCUT BITUMINOUS OR CONCRETE
	CULVERT REMOVAL

- GENERAL NOTES:**
- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.
- REFERENCE NOTES:**
- THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.

Apr 22, 2024 - 2:41pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE  
 DRAWN BY:  
TAE  
 CHECKED BY:  
SMN



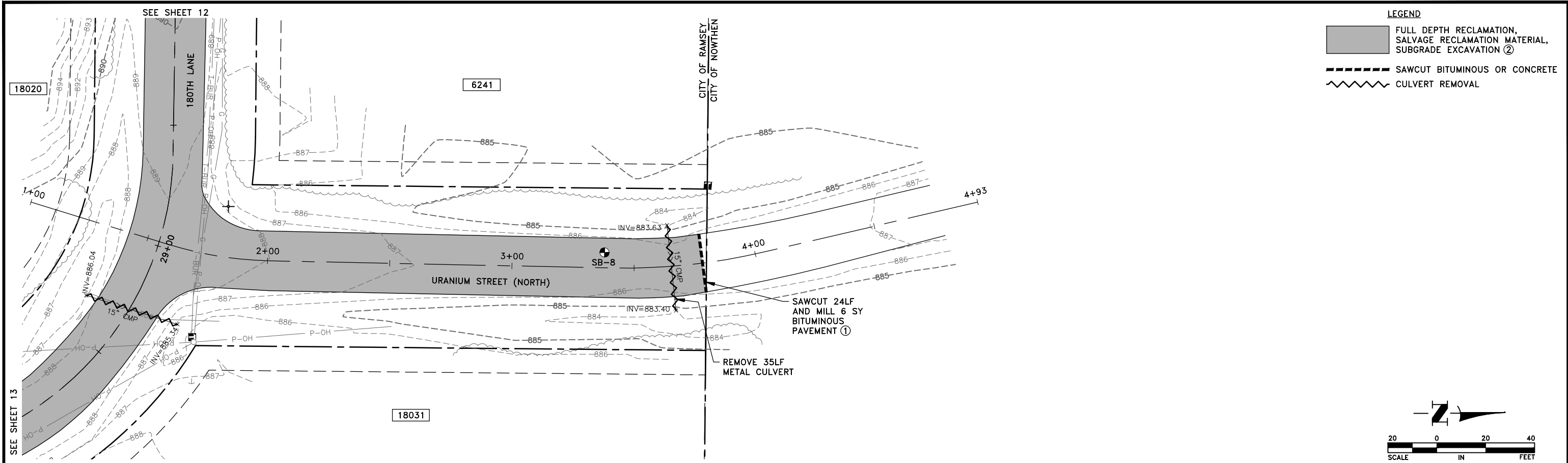
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**

179TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 17 OF 82 SHEETS  
 RA3189



**LEGEND**

	FULL DEPTH RECLAMATION, SALVAGE RECLAMATION MATERIAL, SUBGRADE EXCAVATION ②
	SAWCUT BITUMINOUS OR CONCRETE
	CULVERT REMOVAL

- GENERAL NOTES:**
- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.
- REFERENCE NOTES:**
- ① BITUMINOUS MILLING SHALL BE PER CITY PLATE NO. STR-31.
  - ② THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.

K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg Apr 22, 2024 - 2:41pm

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN



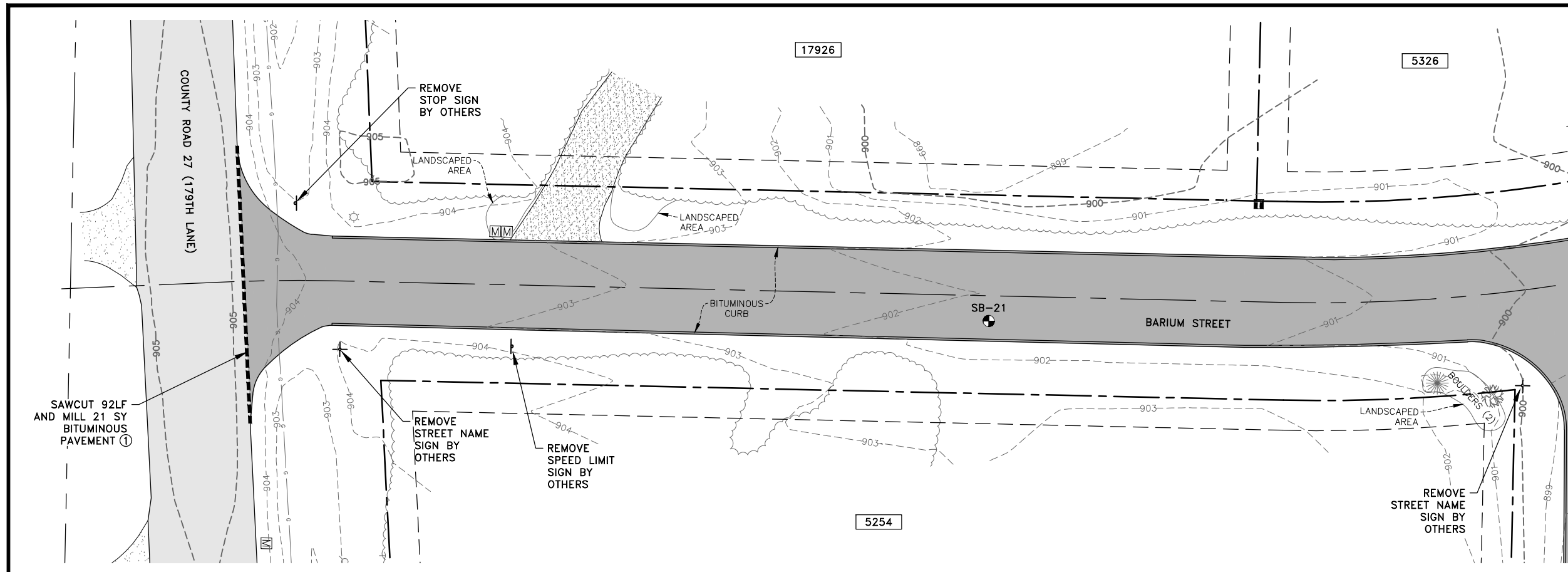
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

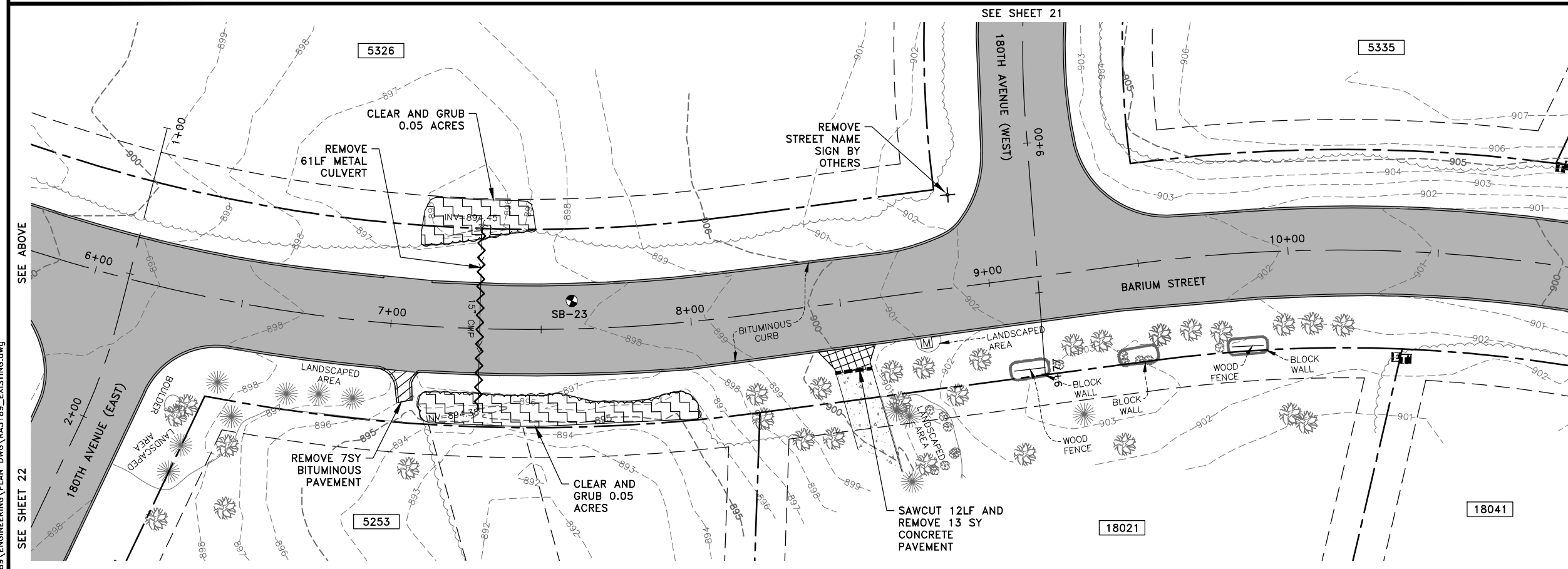
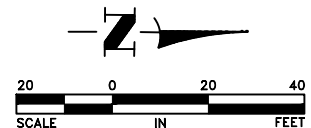
**EXISTING TOPOGRAPHY AND REMOVALS PLAN**

**URANIUM STREET (NORTH)  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

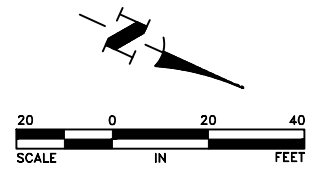
SHEET 18 OF 82 SHEETS



- LEGEND**
- FULL DEPTH RECLAMATION, SALVAGE RECLAMATION MATERIAL, SUBGRADE EXCAVATION ②③
  - CONCRETE PAVEMENT REMOVAL
  - BITUMINOUS PAVEMENT REMOVAL
  - CLEAR AND GRUB
  - SAWCUT BITUMINOUS OR CONCRETE
  - CULVERT REMOVAL



- GENERAL NOTES:**
1. CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.
- REFERENCE NOTES:**
- ① BITUMINOUS MILLING SHALL BE PER CITY PLATE NO. STR-31.
  - ② THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.
  - ③ CONTRACTOR SHALL REMOVE ALL BITUMINOUS CURB. REMOVAL OF BITUMINOUS CURB SHALL BE PAID PER ITEM 2104-REMOVE BITUMINOUS CURB.



Apr 22, 2024 - 2:41pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

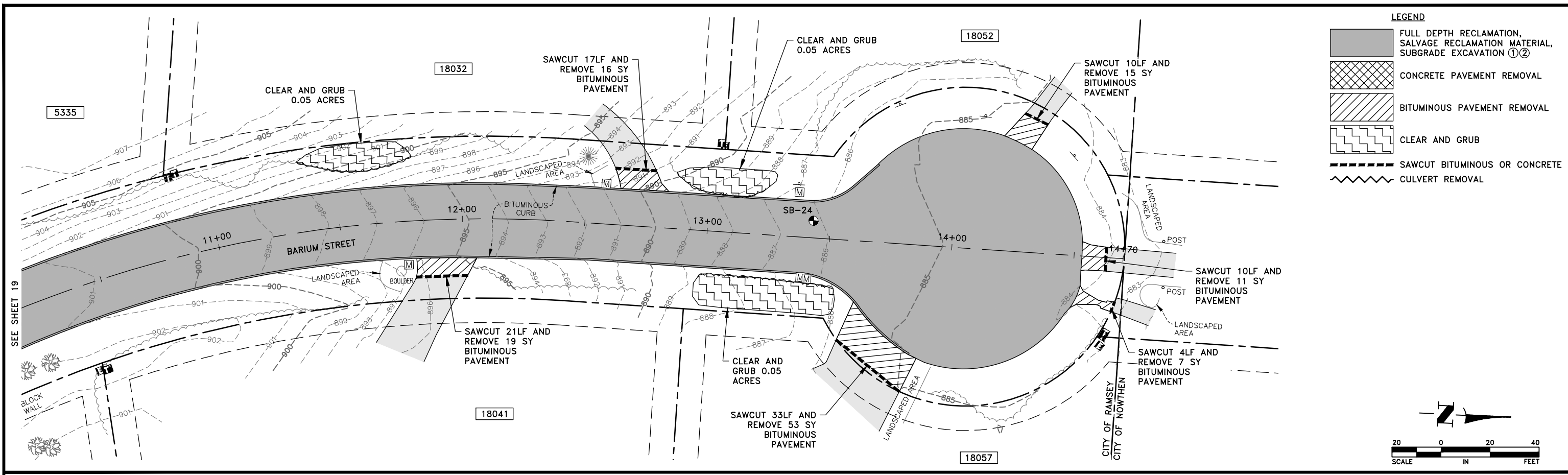


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**  
**BARIUM STREET**  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 19 OF 82 SHEETS  
 RA3189



- GENERAL NOTES:**
- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.
- REFERENCE NOTES:**
- THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.
  - CONTRACTOR SHALL REMOVE ALL BITUMINOUS CURB. REMOVAL OF BITUMINOUS CURB SHALL BE PAID PER ITEM 2104-REMOVE BITUMINOUS CURB.

Apr 22, 2024 - 2:41pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Lic. No. 43381  
 Date 4/22/24

DESIGNED BY:  
TAE  
 DRAWN BY:  
TAE  
 CHECKED BY:  
SMN

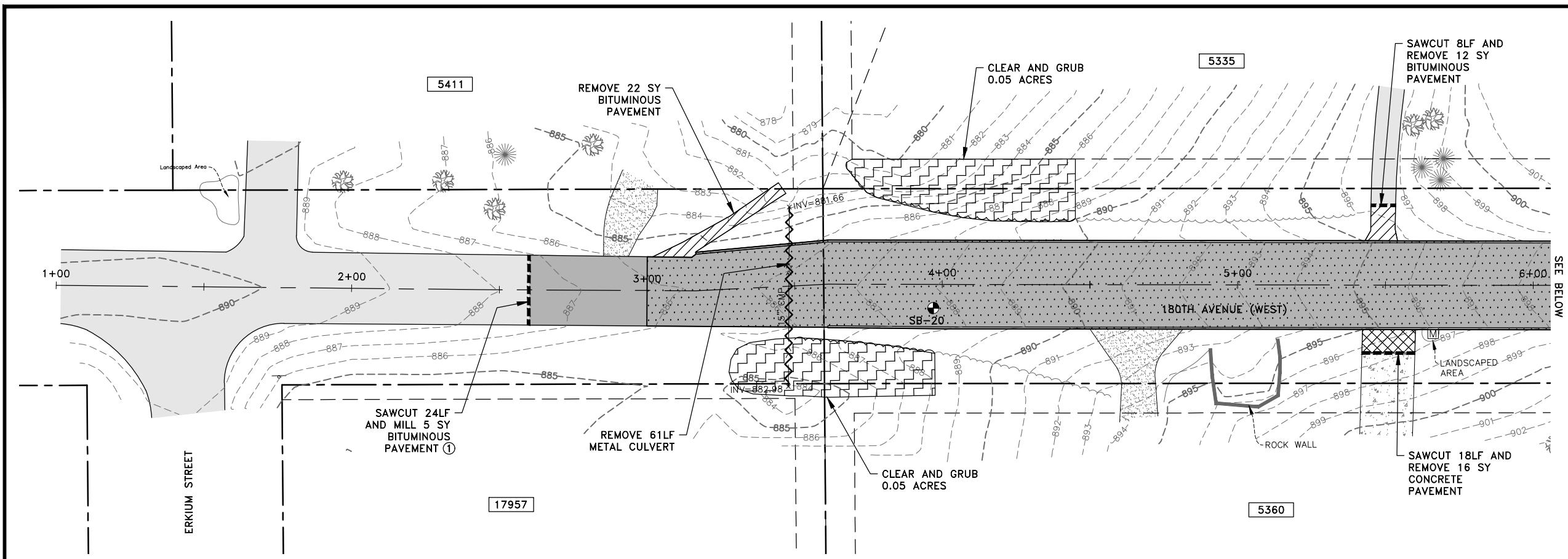


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

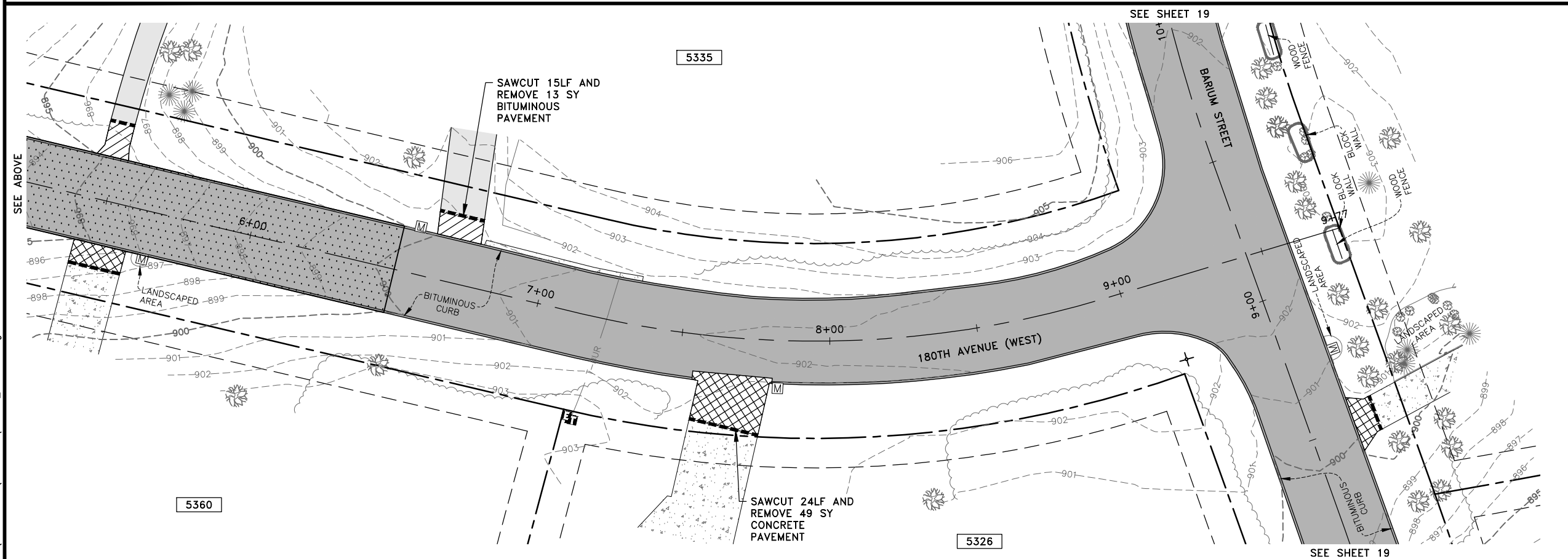
**EXISTING TOPOGRAPHY AND REMOVALS PLAN**  
 BARIUM STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 20 OF 82 SHEETS  
 RA3189



**LEGEND**

	FULL DEPTH RECLAMATION
	FULL DEPTH RECLAMATION, SALVAGE RECLAMATION MATERIAL, SUBGRADE EXCAVATION ②③
	CONCRETE PAVEMENT REMOVAL
	BITUMINOUS PAVEMENT REMOVAL
	CLEAR AND GRUB
	SAWCUT BITUMINOUS OR CONCRETE
	CULVERT REMOVAL



- GENERAL NOTES:**
- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.
- REFERENCE NOTES:**
- BITUMINOUS MILLING SHALL BE PER CITY PLATE NO. STR-31.
  - THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.
  - CONTRACTOR SHALL REMOVE ALL BITUMINOUS CURB. REMOVAL OF BITUMINOUS CURB SHALL BE PAID PER ITEM 2104-REMOVE BITUMINOUS CURB.

Apr 22, 2024 - 2:42pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

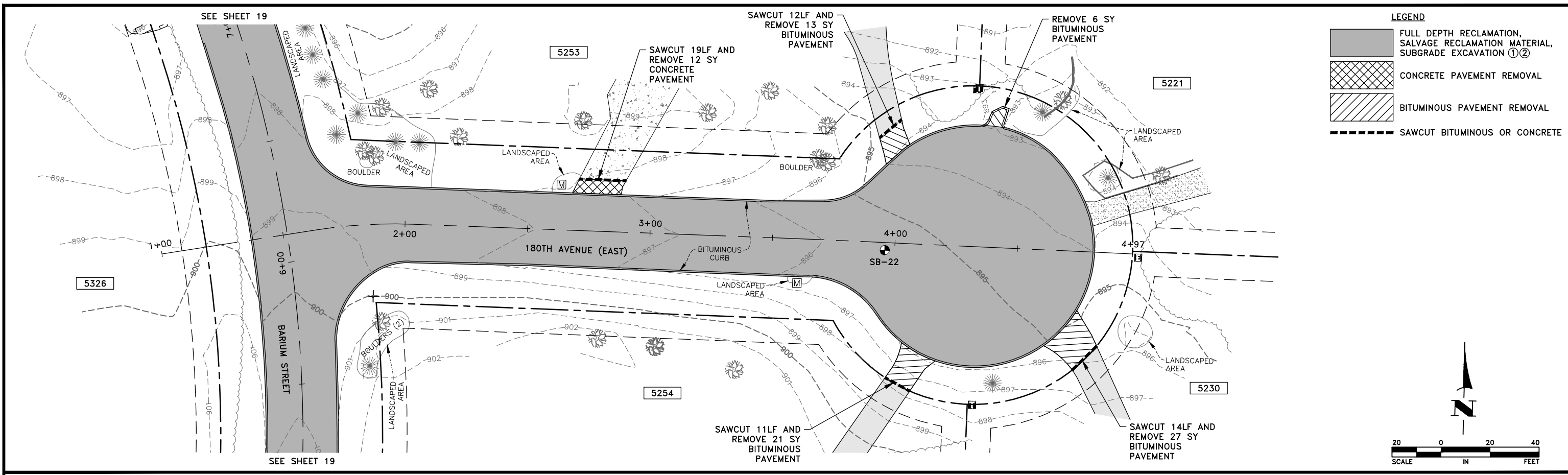


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**  
180TH AVENUE (WEST)  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 21 OF 82 SHEETS  
RA3189



- GENERAL NOTES:**
- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.
- REFERENCE NOTES:**
- THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.
  - CONTRACTOR SHALL REMOVE ALL BITUMINOUS CURB. REMOVAL OF BITUMINOUS CURB SHALL BE PAID PER ITEM 2104-REMOVE BITUMINOUS CURB.

Apr 22, 2024 - 2:42pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
SMN



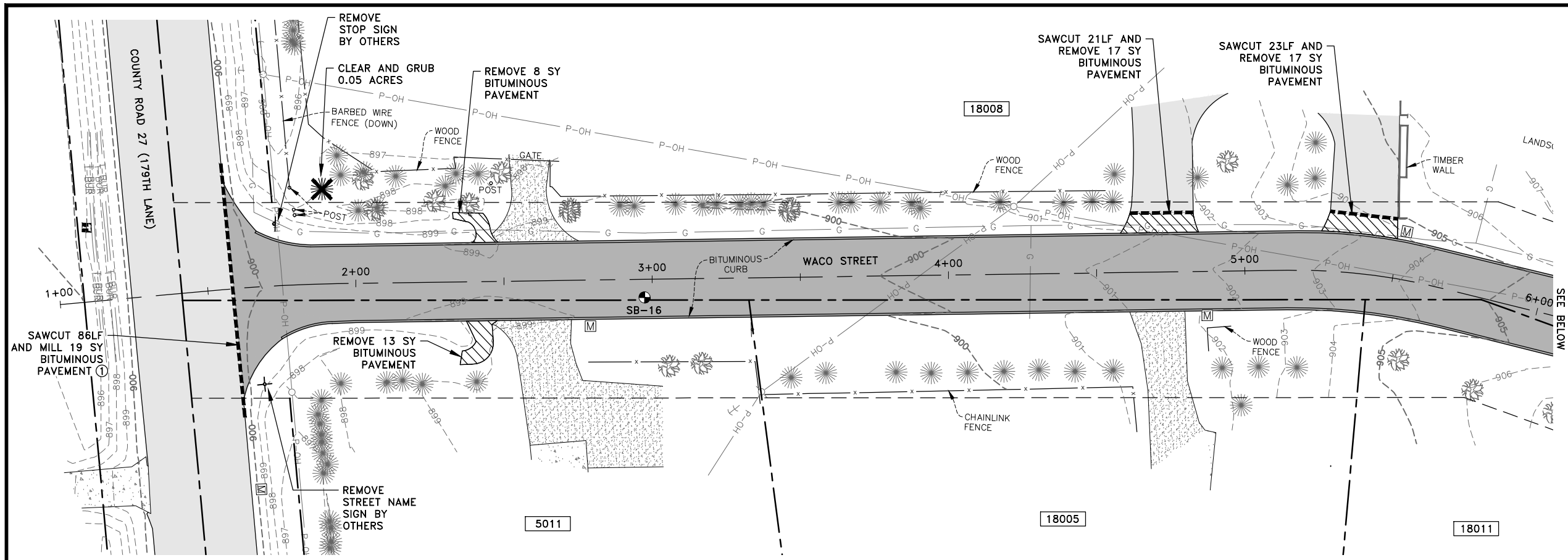
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**

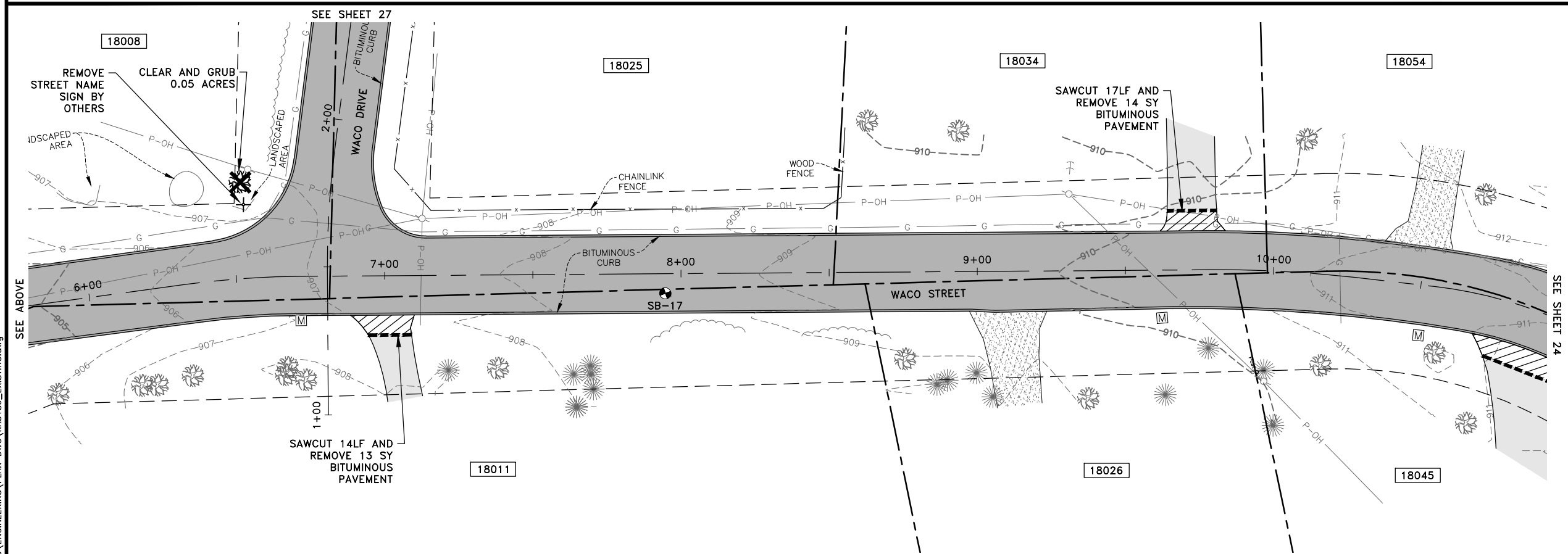
180TH AVENUE (EAST)  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 22 OF 82 SHEETS



**LEGEND**

	FULL DEPTH RECLAMATION, SALVAGE RECLAMATION MATERIAL, SUBGRADE EXCAVATION ②③
	CONCRETE PAVEMENT REMOVAL
	BITUMINOUS PAVEMENT REMOVAL
	SAWCUT BITUMINOUS OR CONCRETE
	CULVERT REMOVAL



- GENERAL NOTES:**
- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.
- REFERENCE NOTES:**
- BITUMINOUS MILLING SHALL BE PER CITY PLATE NO. STR-31.
  - THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.
  - CONTRACTOR SHALL REMOVE ALL BITUMINOUS CURB. REMOVAL OF BITUMINOUS CURB SHALL BE PAID PER ITEM 2104-REMOVE BITUMINOUS CURB.

Apr 22, 2024 - 2:42pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
SMN



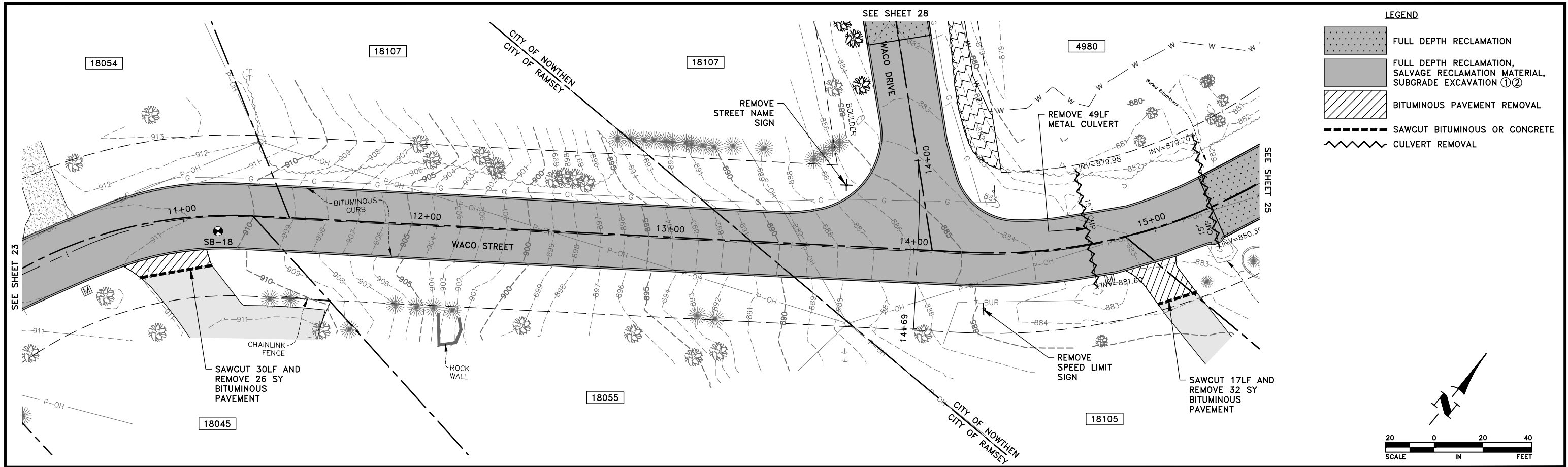
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**

WACO STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
**23**  
 OF  
**82**  
 SHEETS



- GENERAL NOTES:
- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.
  - PAY ITEM 2104-REMOVE SIGN INCLUDES PAYMENT FOR REMOVING SIGN POST, REGARDLESS OF THE NUMBER OF SIGN PANELS ATTACHED TO THE POST.
- REFERENCE NOTES:
- THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.
  - CONTRACTOR SHALL REMOVE ALL BITUMINOUS CURB. REMOVAL OF BITUMINOUS CURB SHALL BE PAID PER ITEM 2104-REMOVE BITUMINOUS CURB.

Apr 22, 2024 - 2:42pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
SMN



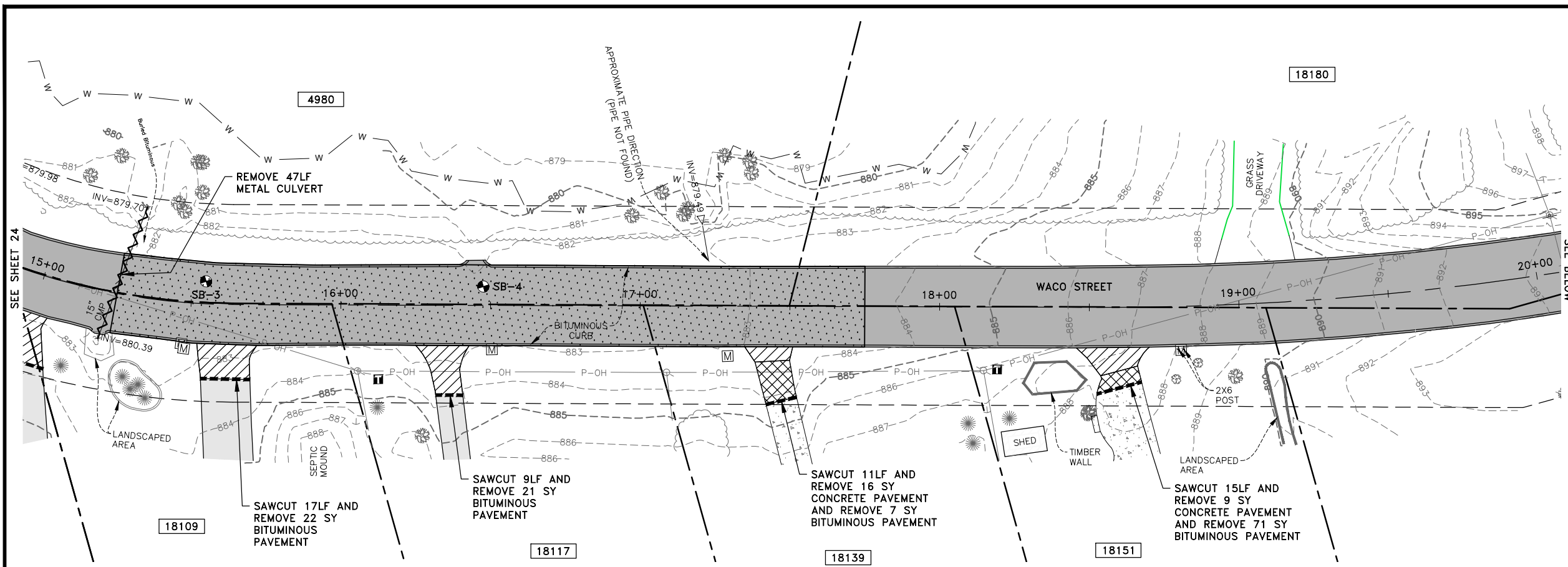
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**

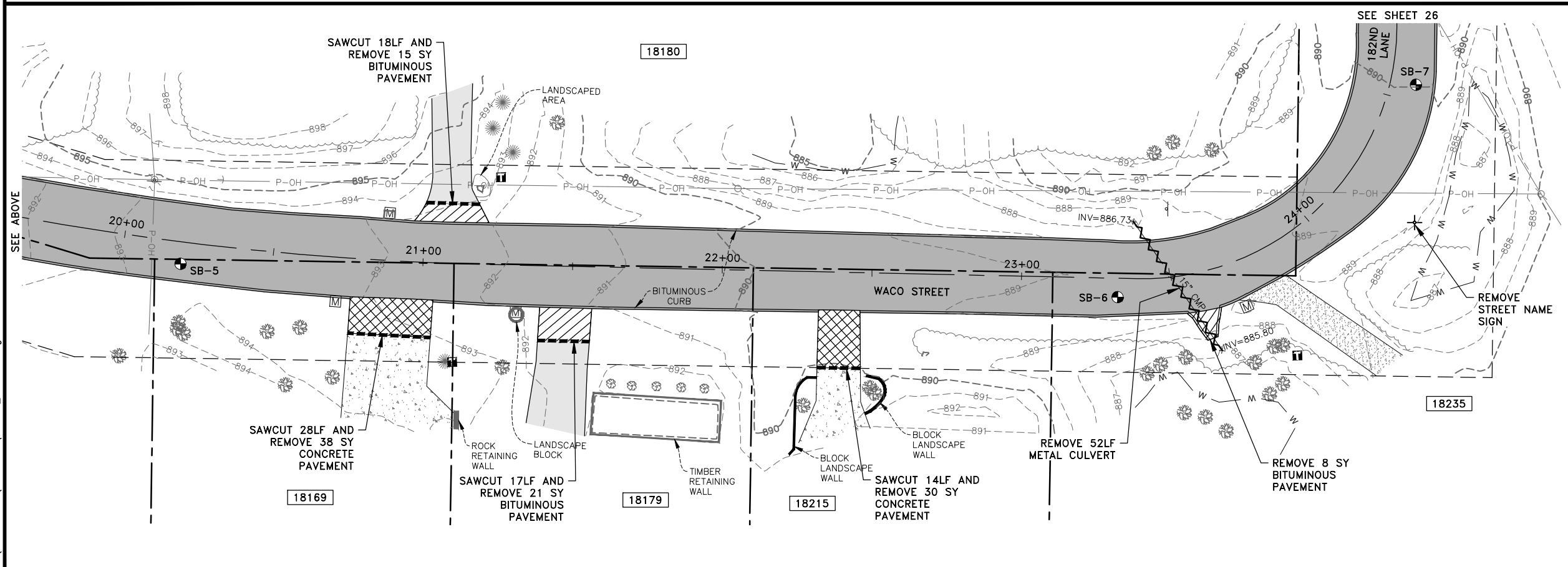
**WACO STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 24 OF 82 SHEETS  
 RA3189



**LEGEND**

	FULL DEPTH RECLAMATION
	FULL DEPTH RECLAMATION, SALVAGE RECLAMATION MATERIAL, SUBGRADE EXCAVATION ①②
	CONCRETE PAVEMENT REMOVAL
	BITUMINOUS PAVEMENT REMOVAL
	SAWCUT BITUMINOUS OR CONCRETE
	CULVERT REMOVAL



- GENERAL NOTES:**
- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.
  - PAY ITEM 2104-REMOVE SIGN INCLUDES PAYMENT FOR REMOVING SIGN POST, REGARDLESS OF THE NUMBER OF SIGN PANELS ATTACHED TO THE POST.
- REFERENCE NOTES:**
- THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.
  - CONTRACTOR SHALL REMOVE ALL BITUMINOUS CURB. REMOVAL OF BITUMINOUS CURB SHALL BE PAID PER ITEM 2104-REMOVE BITUMINOUS CURB.

Apr. 22, 2024 - 2:42pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

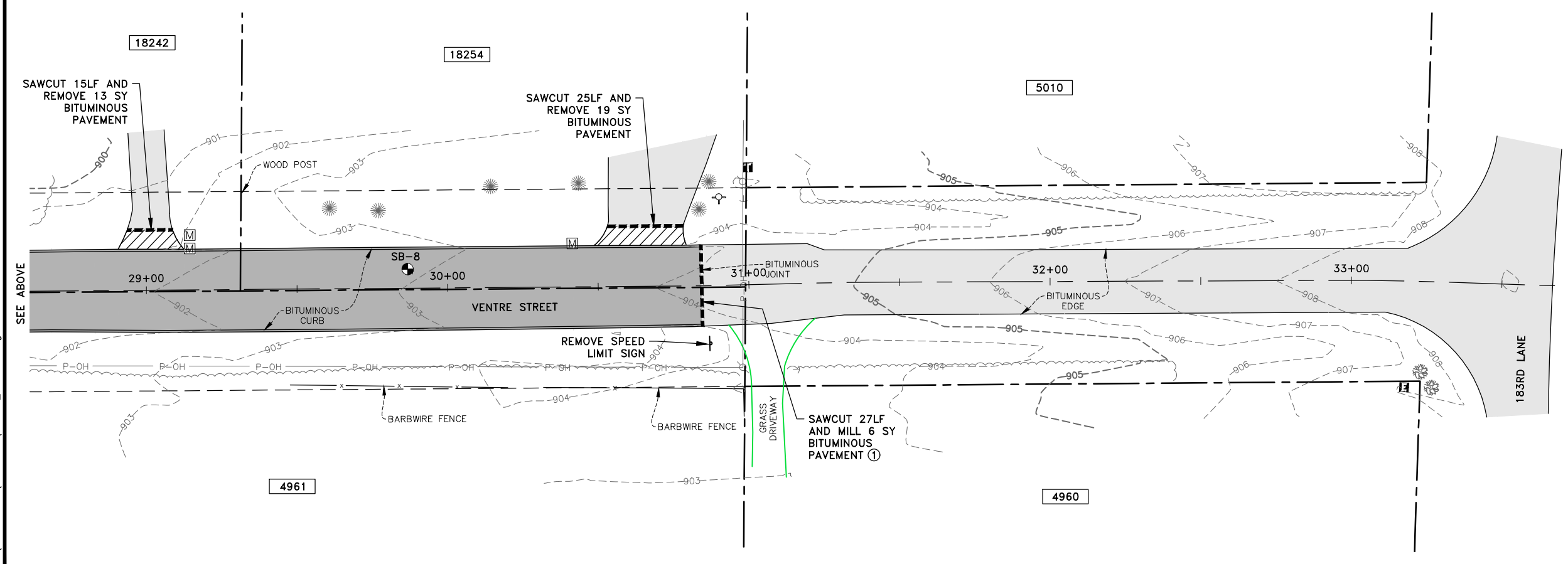
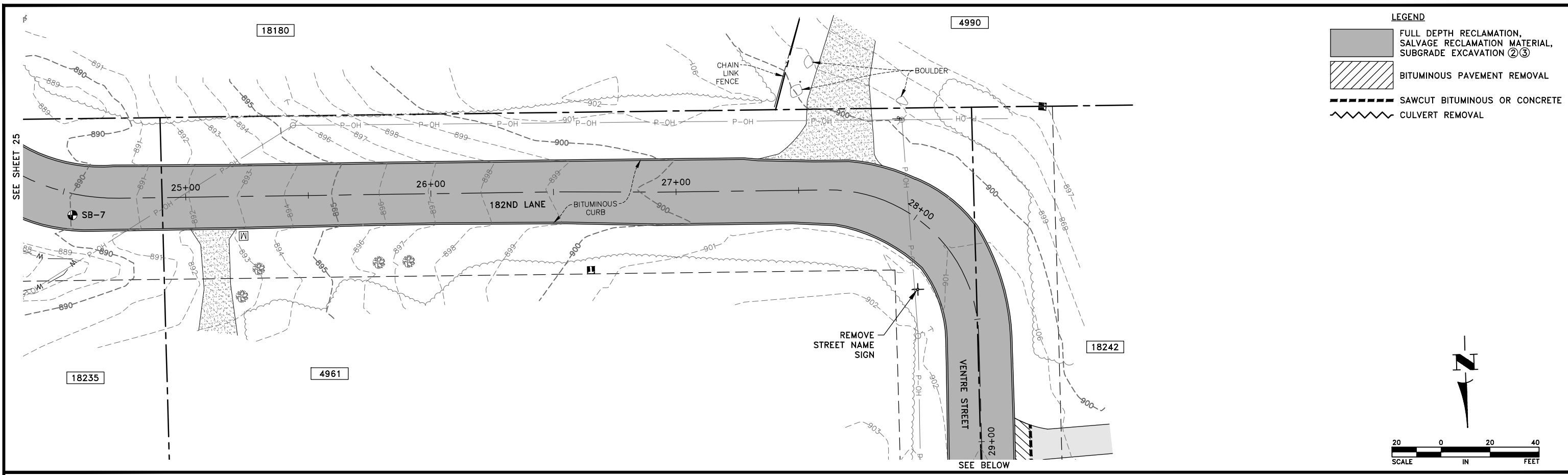


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

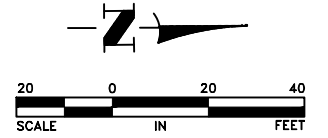
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**  
 WACO STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 25 OF 82 SHEETS  
 RA3189



- GENERAL NOTES:
- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.
  - PAY ITEM 2104-REMOVE SIGN INCLUDES PAYMENT FOR REMOVING SIGN POST, REGARDLESS OF THE NUMBER OF SIGN PANELS ATTACHED TO THE POST.
- REFERENCE NOTES:
- BITUMINOUS MILLING SHALL BE PER CITY PLATE NO. STR-31.
  - THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.
  - CONTRACTOR SHALL REMOVE ALL BITUMINOUS CURB. REMOVAL OF BITUMINOUS CURB SHALL BE PAID PER ITEM 2104-REMOVE BITUMINOUS CURB.



Apr. 22, 2024 - 2:45pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

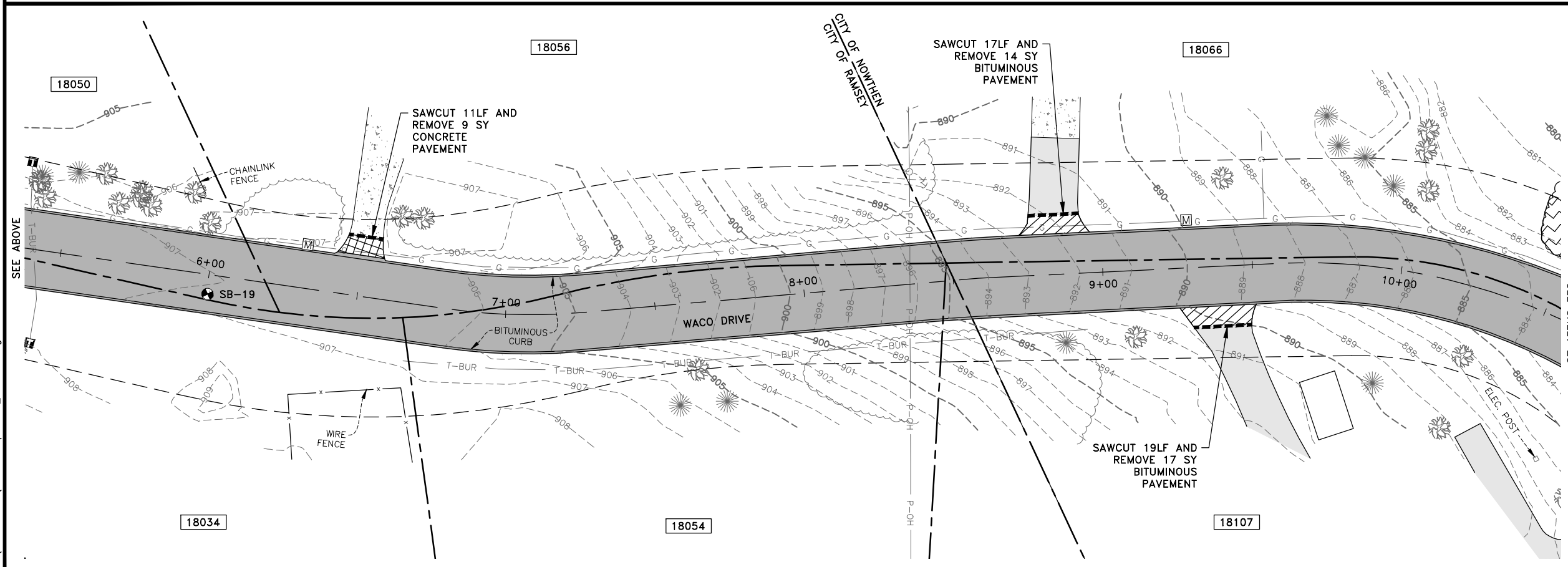
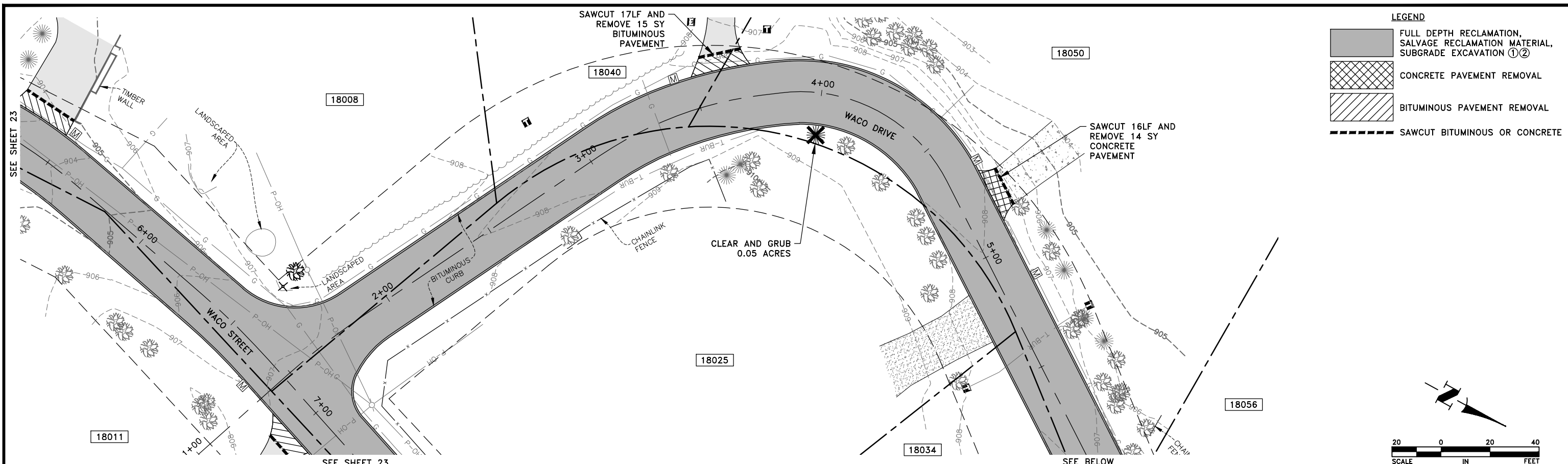


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**  
182ND LANE AND VENTRE STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 26 OF 82 SHEETS  
RA3189



**GENERAL NOTES:**

- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.
- PAY ITEM 2104-REMOVE SIGN INCLUDES PAYMENT FOR REMOVING SIGN POST, REGARDLESS OF THE NUMBER OF SIGN PANELS ATTACHED TO THE POST.

**REFERENCE NOTES:**

- THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.
- CONTRACTOR SHALL REMOVE ALL BITUMINOUS CURB. REMOVAL OF BITUMINOUS CURB SHALL BE PAID PER ITEM 2104-REMOVE BITUMINOUS CURB.

K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg Apr 22, 2024 - 2:45pm

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

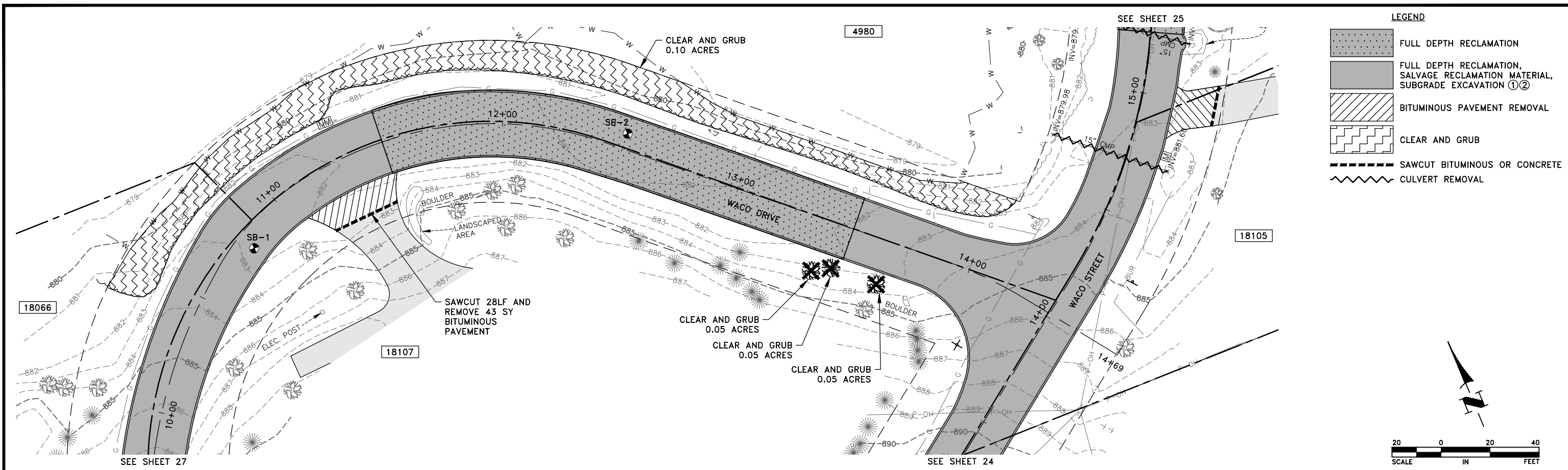


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EXISTING TOPOGRAPHY AND REMOVALS PLAN**  
 WACO DRIVE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 27 OF 82 SHEETS  
 RA3189



**GENERAL NOTES:**

- CONTRACTOR SHALL PRUNE TREES AS NECESSARY TO COMPLETE THE WORK SHOWN AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID PER ITEM 2572-PRUNE TREES. OAK TREE PRUNING SHALL BE COMPLETED AFTER JULY 15TH. IF OAK TREE PRUNING MUST OCCUR PRIOR TO JULY 15TH, EACH PRUNING CUT SHALL HAVE A WATER BASED PAINT, SHELLAC, OR SIMILAR PRODUCT APPLIED WITHIN 15 MINUTES OF CUT TO MINIMIZE THE POTENTIAL INTRODUCTION OF OAK WILT.

**REFERENCE NOTES:**

- THIS WORK SHALL BE PAID PER ITEMS 2215-FULL DEPTH RECLAMATION, 2215-HAUL FULL DEPTH RECLAMATION, AND 2106-EXCAVATION-SUBGRADE. THE ROADWAY SHALL BE RESTORED TO A GRAVEL SURFACE AT THE END OF EACH WORKING DAY.
- CONTRACTOR SHALL REMOVE ALL BITUMINOUS CURB. REMOVAL OF BITUMINOUS CURB SHALL BE PAID PER ITEM 2104-REMOVE BITUMINOUS CURB.

Apr 22, 2024 - 2:43pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_EXISTING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
SMN



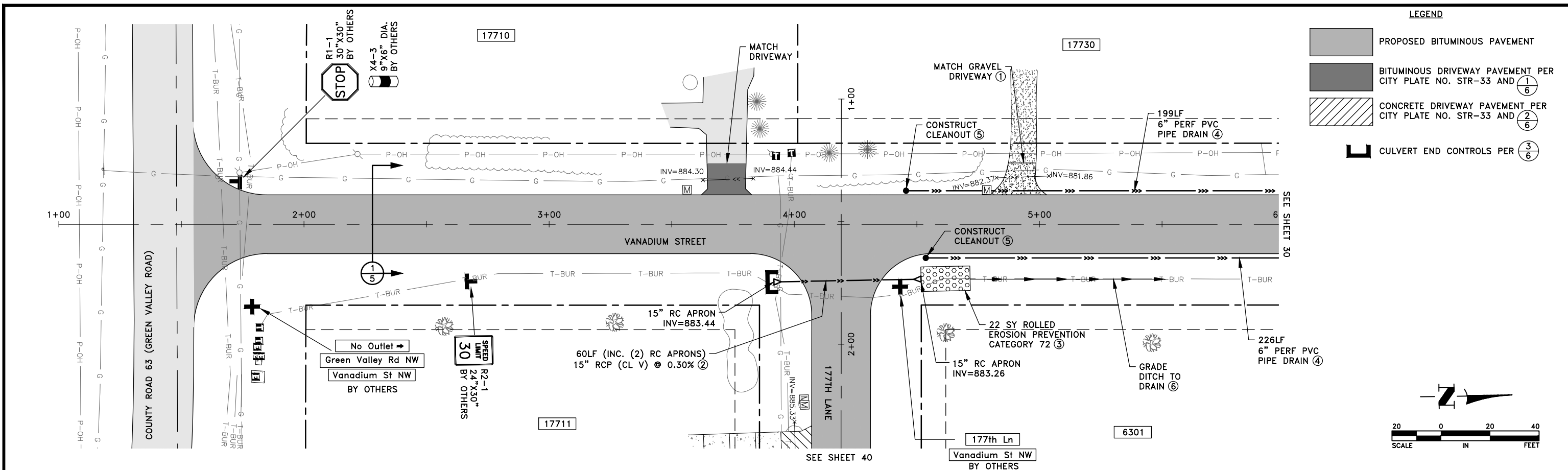
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

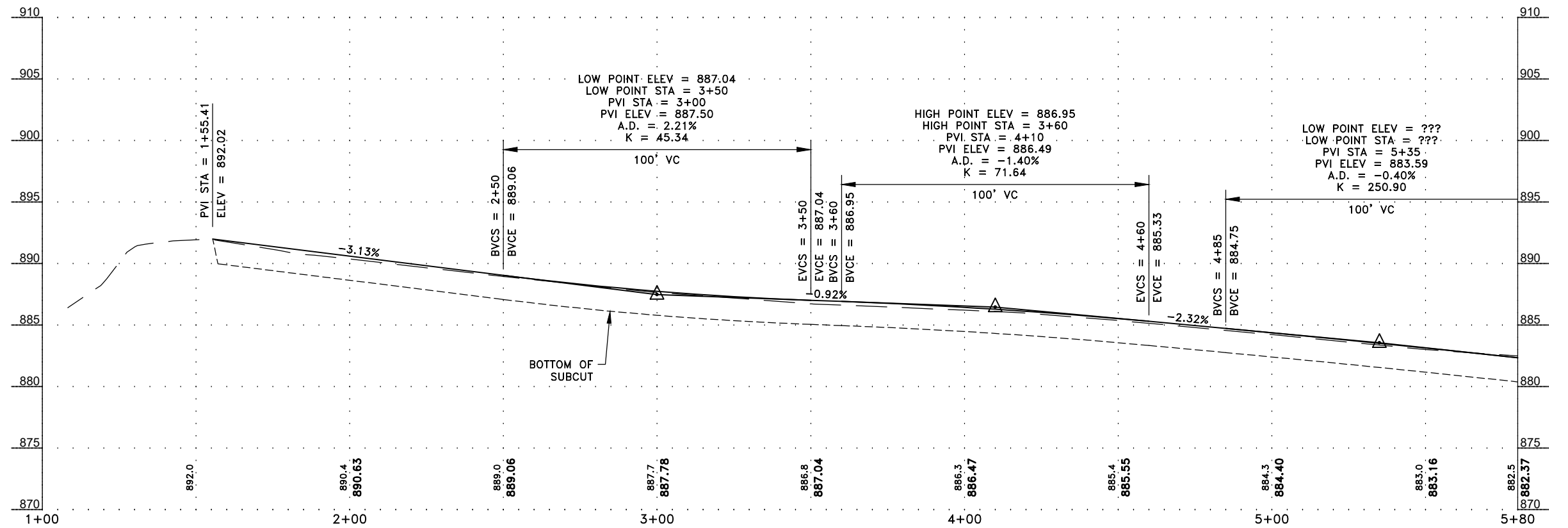
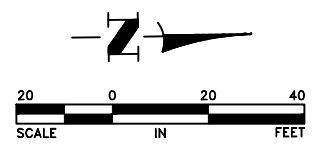
**EXISTING TOPOGRAPHY AND REMOVALS PLAN**

WACO DRIVE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 28 OF 82 SHEETS  
 RA3189



- LEGEND**
- PROPOSED BITUMINOUS PAVEMENT
  - BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND  $\frac{1}{6}$
  - CONCRETE DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND  $\frac{2}{6}$
  - CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. SEE SHEET 60 FOR THE INTERSECTION STAKING PLANS.
  2. SIGN DETAILS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
- REFERENCE NOTES:**
- ① MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.
  - ② TIE ALL PIPE JOINTS PER MN/DOT STANDARD PLATE 3145. THIS WORK SHALL BE INCIDENTAL.
  - ③ ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.b.
  - ④ PIPE DRAIN SHALL BE CAPPED AND SHALL INCLUDE TRACER WIRE AND TRACER WIRE ACCESS BOXES. TRACER WIRE AND TRACER WIRE ACCESS BOXES SHALL BE INCIDENTAL.
  - ⑤ CONSTRUCT CLEANOUT PER  $\frac{7}{6}$ .
  - ⑥ SEE CROSS SECTIONS FOR PROPOSED DITCH GRADES.

Apr. 22, 2024 - 2:43pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_VANADIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

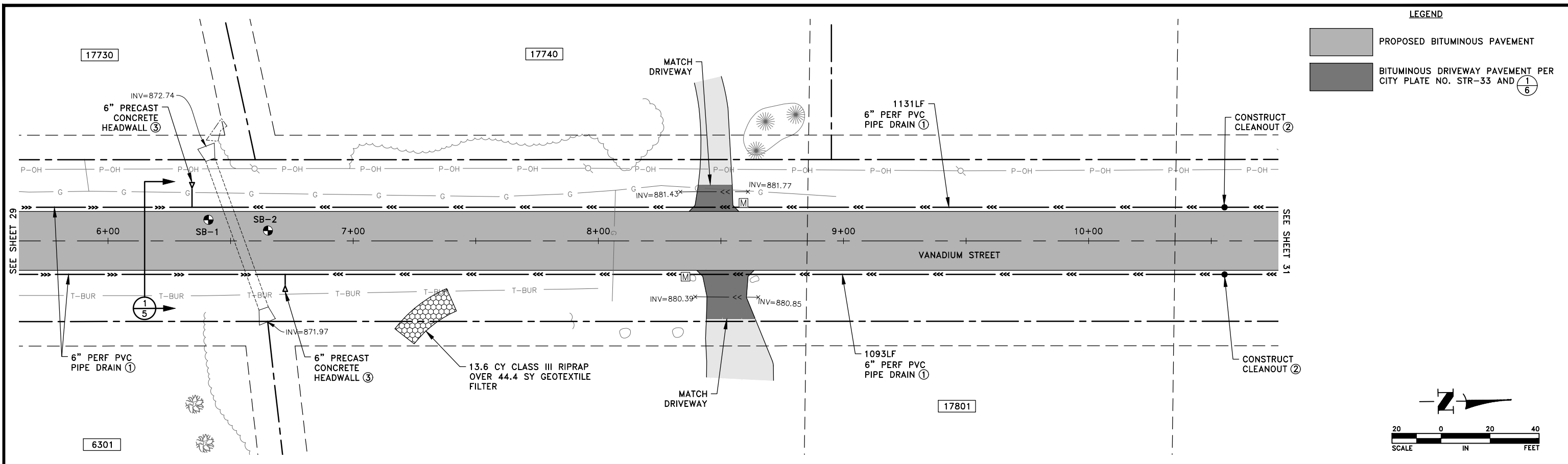


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

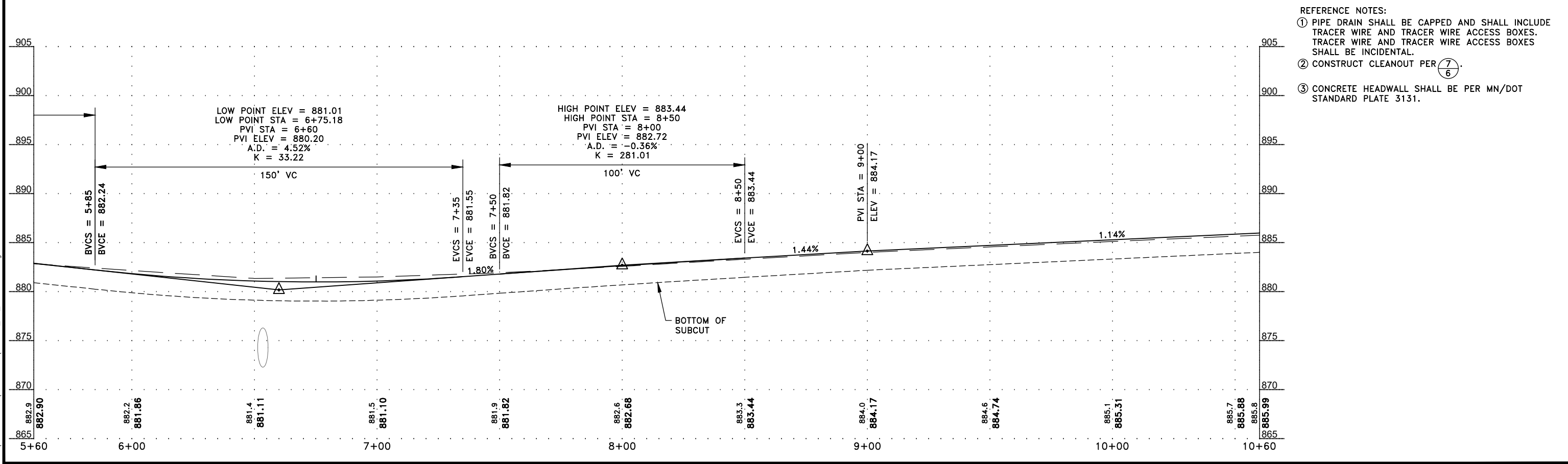
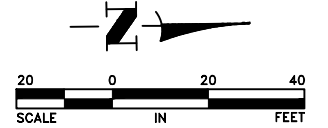
**CONSTRUCTION PLAN**  
**VANADIUM STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 29 OF 82 SHEETS  
 RA3189



**LEGEND**

- PROPOSED BITUMINOUS PAVEMENT
- BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND 1/6



- REFERENCE NOTES:**
- PIPE DRAIN SHALL BE CAPPED AND SHALL INCLUDE TRACER WIRE AND TRACER WIRE ACCESS BOXES. TRACER WIRE AND TRACER WIRE ACCESS BOXES SHALL BE INCIDENTAL.
  - CONSTRUCT CLEANOUT PER 7/6.
  - CONCRETE HEADWALL SHALL BE PER MN/DOT STANDARD PLATE 3131.

Apr 22, 2024 - 2:43pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_VANADIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

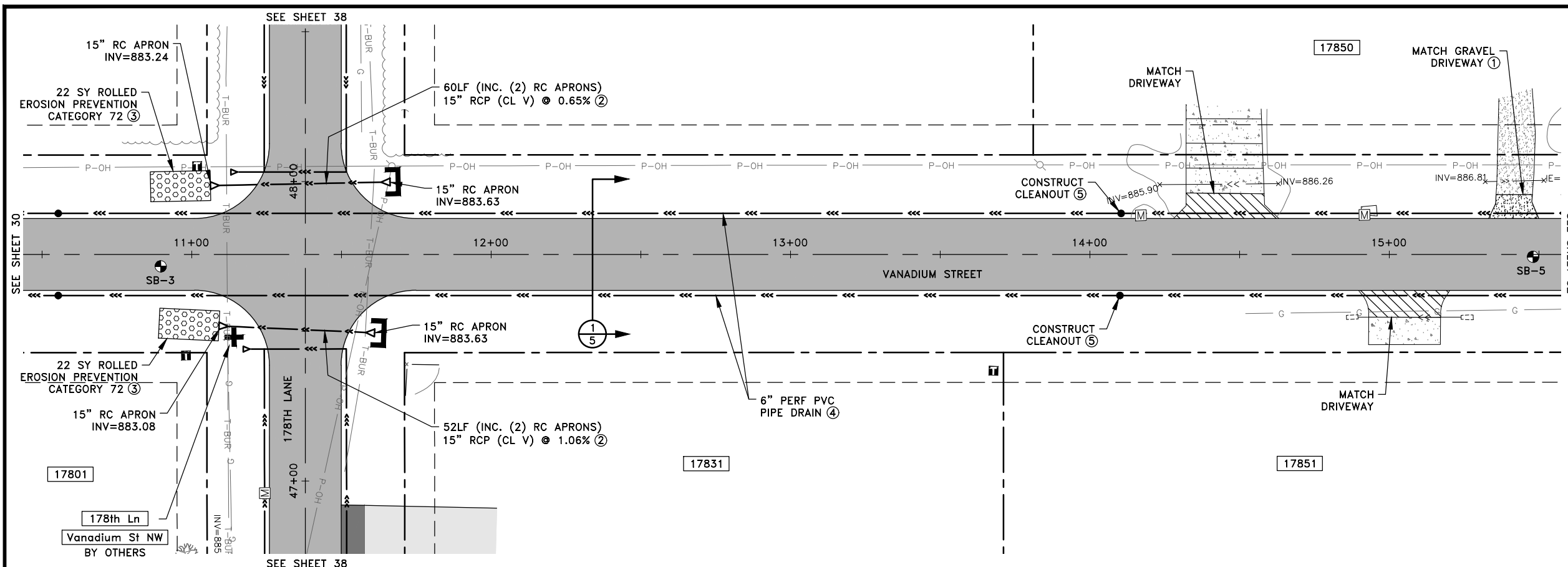


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

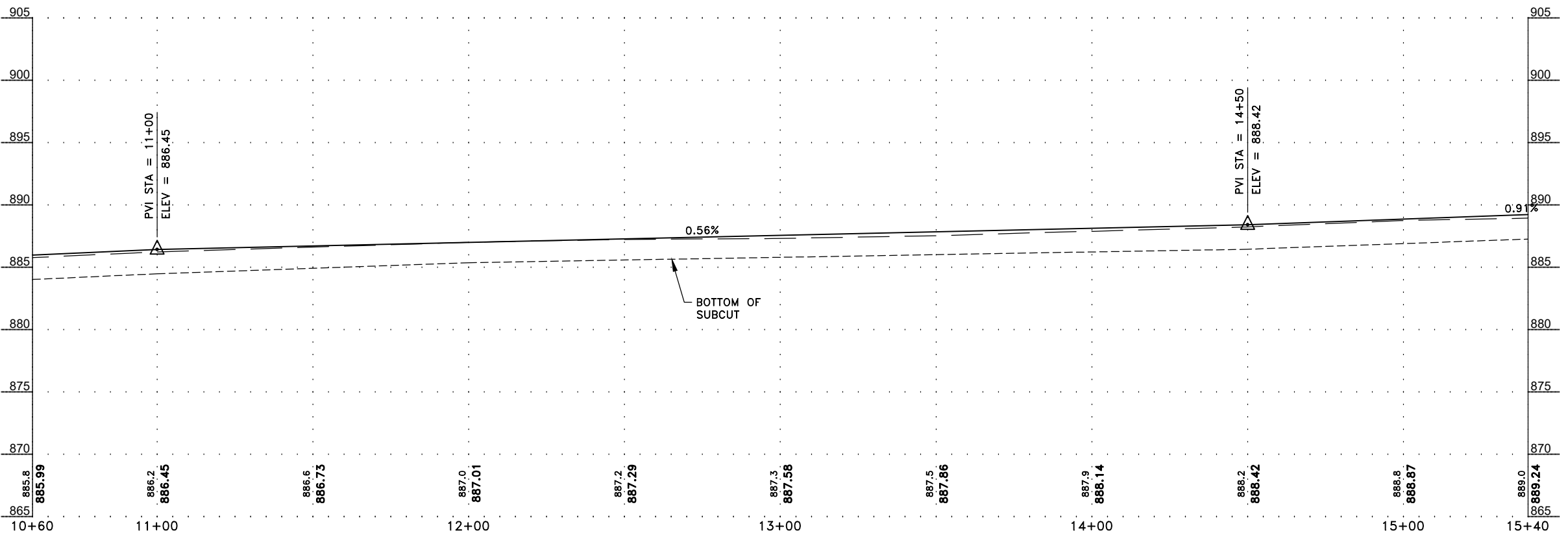
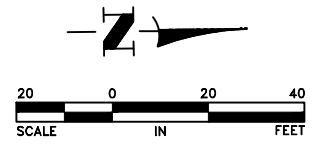
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
**VANADIUM STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 30 OF 82 SHEETS  
 RA3189



- LEGEND**
- PROPOSED BITUMINOUS PAVEMENT
  - BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND  $\frac{1}{6}$
  - CONCRETE DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND  $\frac{2}{6}$
  - CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. SEE SHEET 60 FOR THE INTERSECTION STAKING PLAN.
- REFERENCE NOTES:**
- ① MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.
  - ② TIE ALL PIPE JOINTS PER MN/DOT STANDARD PLATE 3145. THIS WORK SHALL BE INCIDENTAL.
  - ③ ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.b.
  - ④ PIPE DRAIN SHALL BE CAPPED AND SHALL INCLUDE TRACER WIRE AND TRACER WIRE ACCESS BOXES. TRACER WIRE AND TRACER WIRE ACCESS BOXES SHALL BE INCIDENTAL.
  - ⑤ CONSTRUCT CLEANOUT PER  $\frac{7}{6}$ .

Apr. 22, 2024 - 2:43pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_VANADIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Lic. No. 43381  
 Date 4/22/24

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

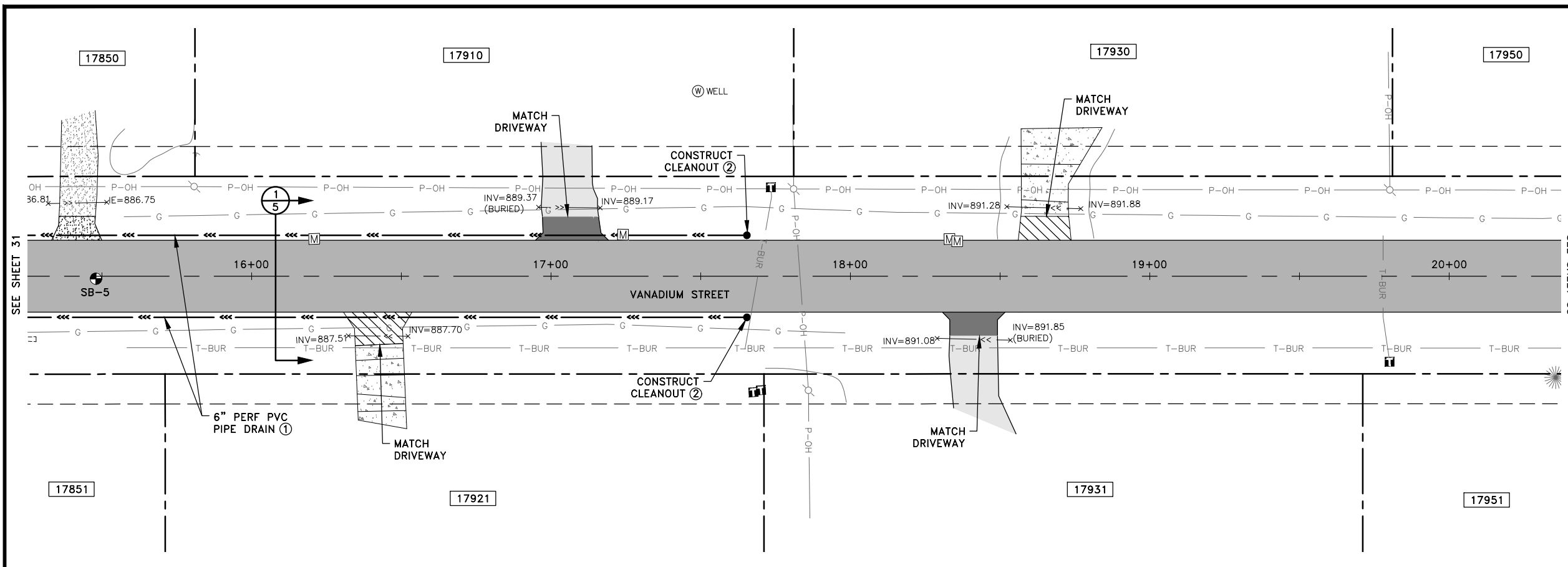


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

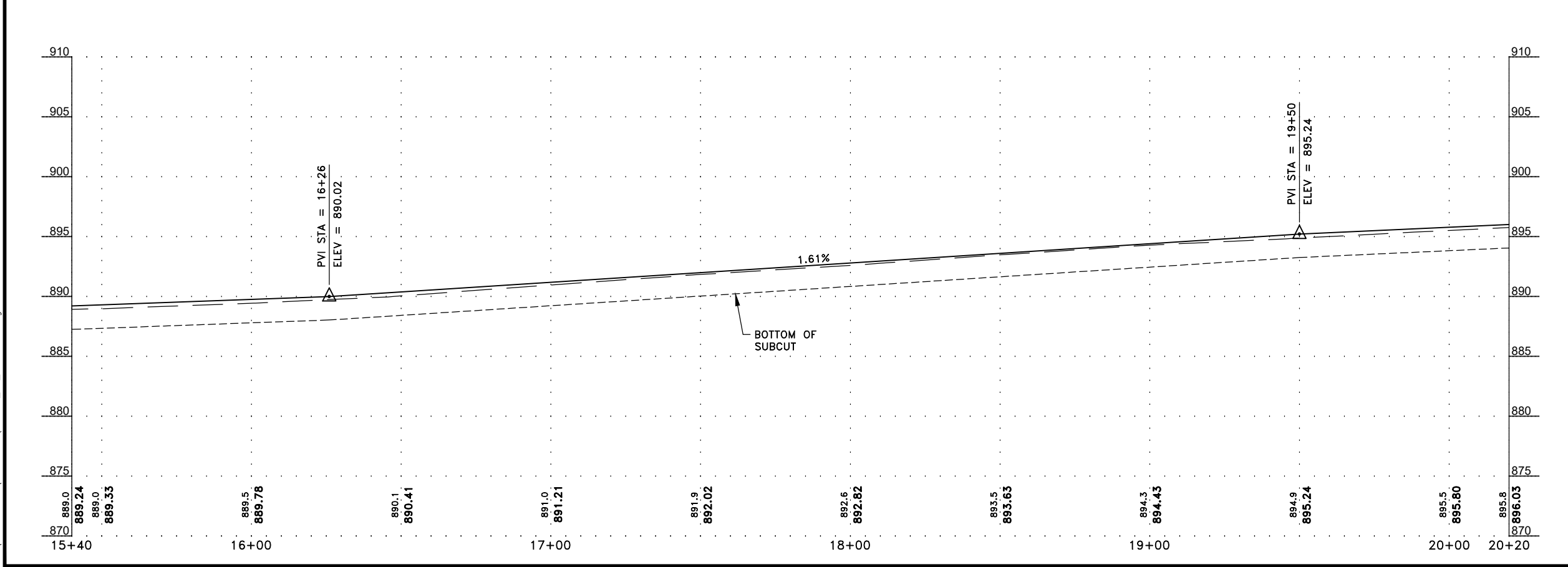
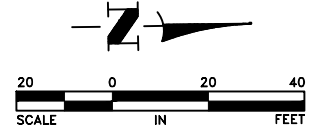
**CONSTRUCTION PLAN**  
**VANADIUM STREET**  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 31 OF 82 SHEETS  
 RA3189



**LEGEND**

- PROPOSED BITUMINOUS PAVEMENT
- BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND  $\frac{1}{6}$
- CONCRETE DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND  $\frac{2}{6}$



- REFERENCE NOTES:**
- ① PIPE DRAIN SHALL BE CAPPED AND SHALL INCLUDE TRACER WIRE AND TRACER WIRE ACCESS BOXES. TRACER WIRE AND TRACER WIRE ACCESS BOXES SHALL BE INCIDENTAL.
  - ② CONSTRUCT CLEANOUT PER  $\frac{7}{6}$ .

Apr 22, 2024 - 2:43pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_VANADIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

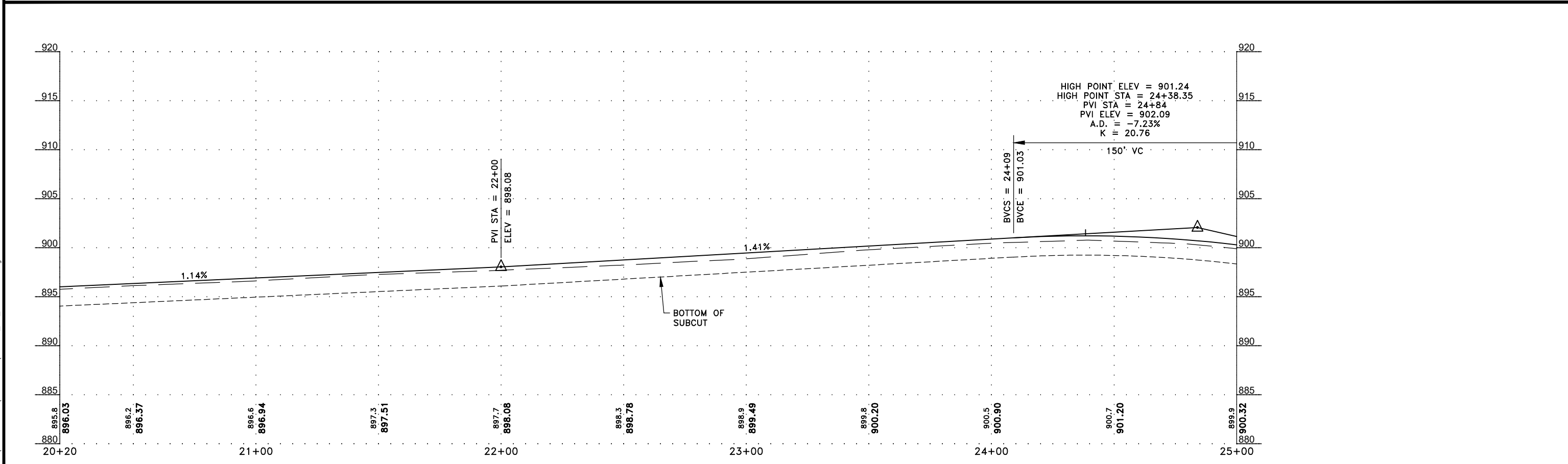
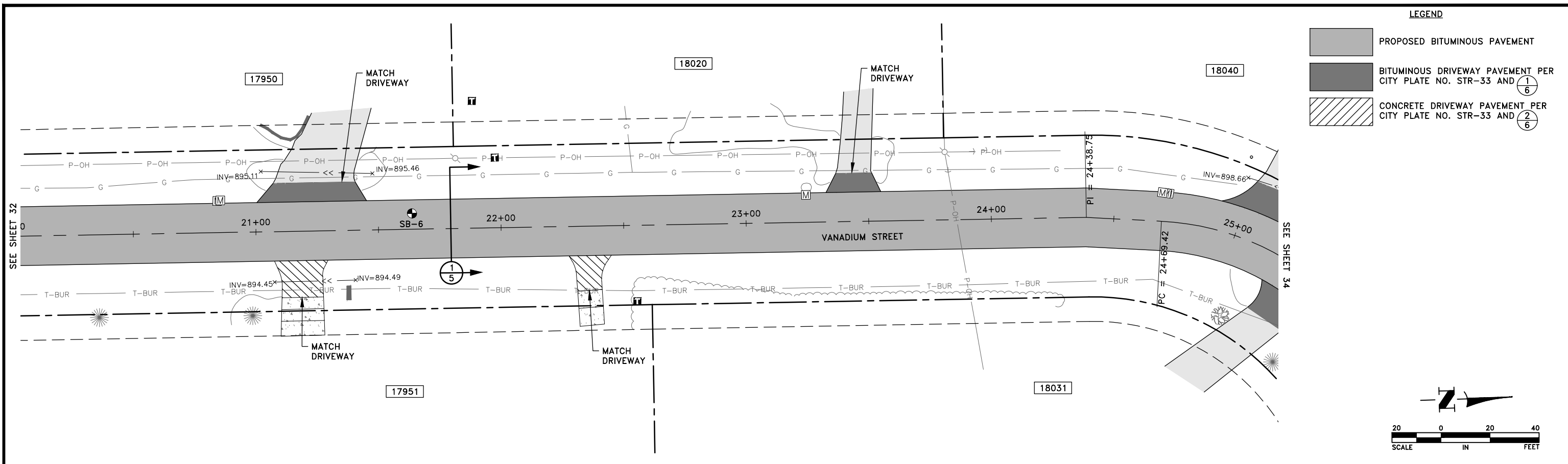


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
**VANADIUM STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 32 OF 82 SHEETS  
 RA3189



Apr 22, 2024 - 2:44pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_VANADIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

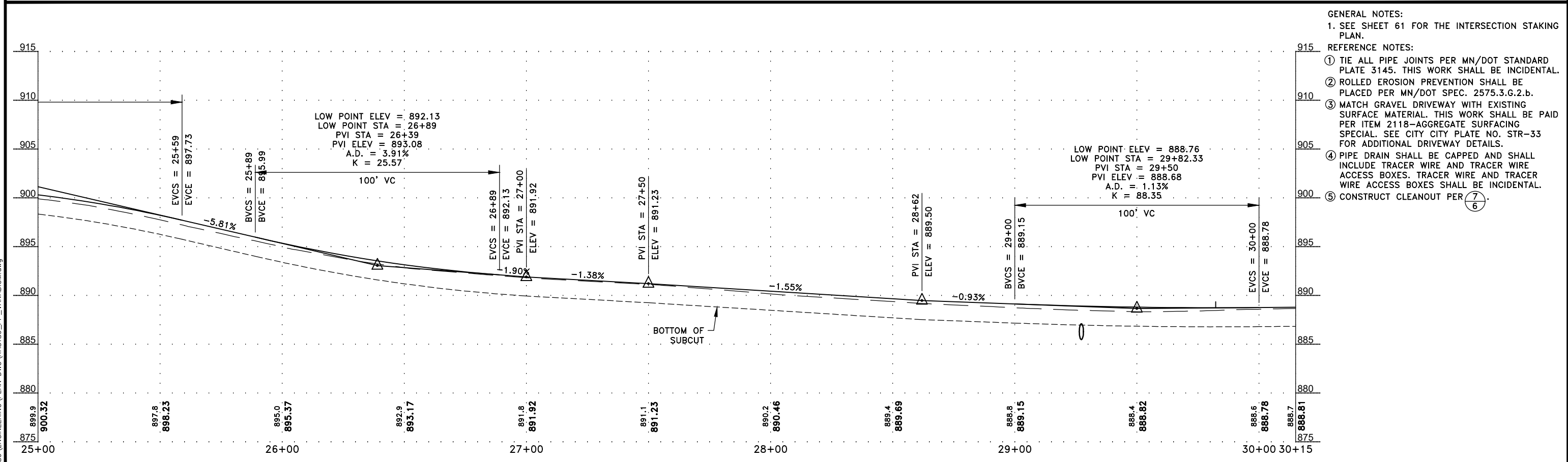
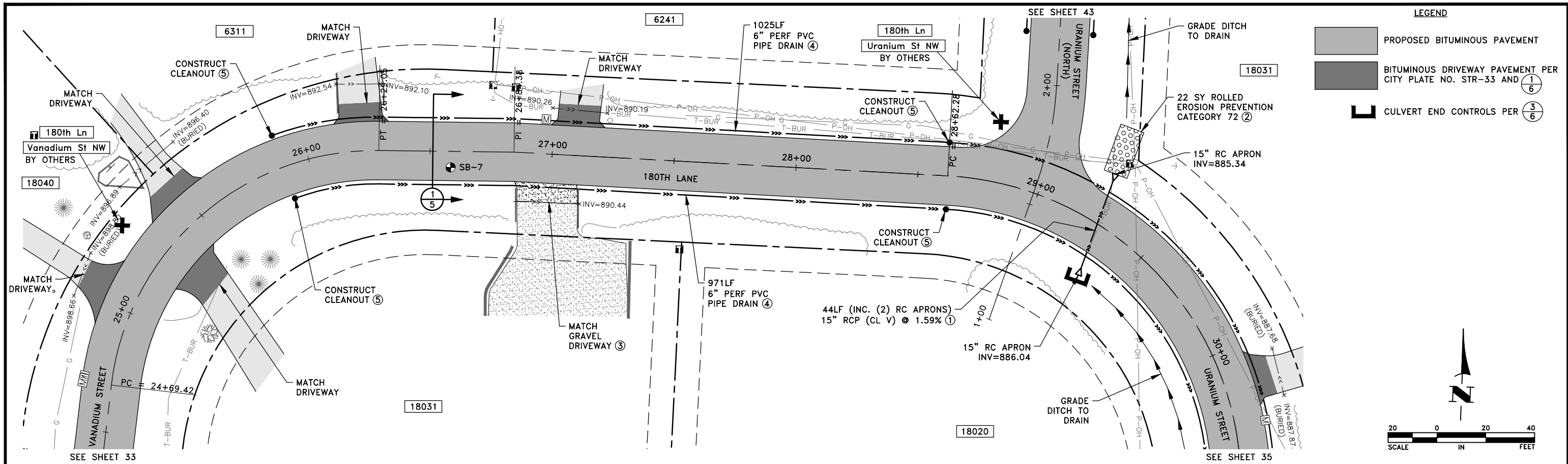


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
**VANADIUM STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET **33** OF **82**  
 SHEETS  
 RA3189



Apr 22, 2024 - 2:44pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_VANADIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

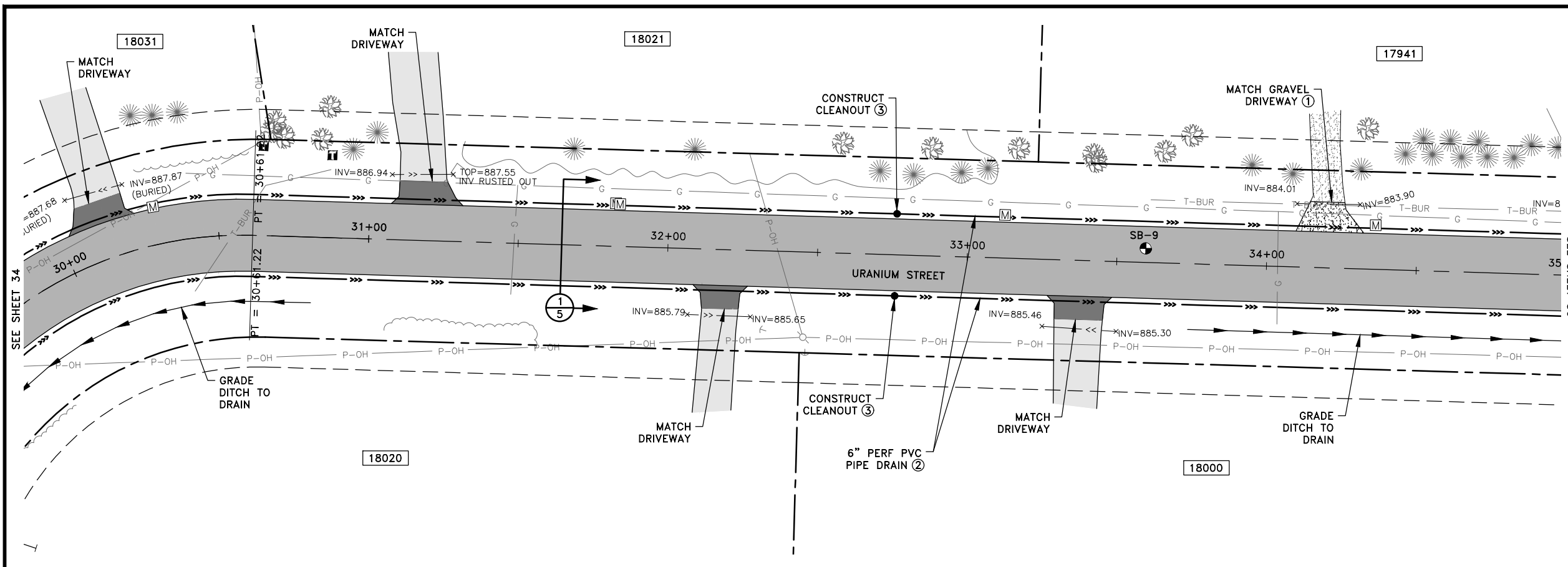


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

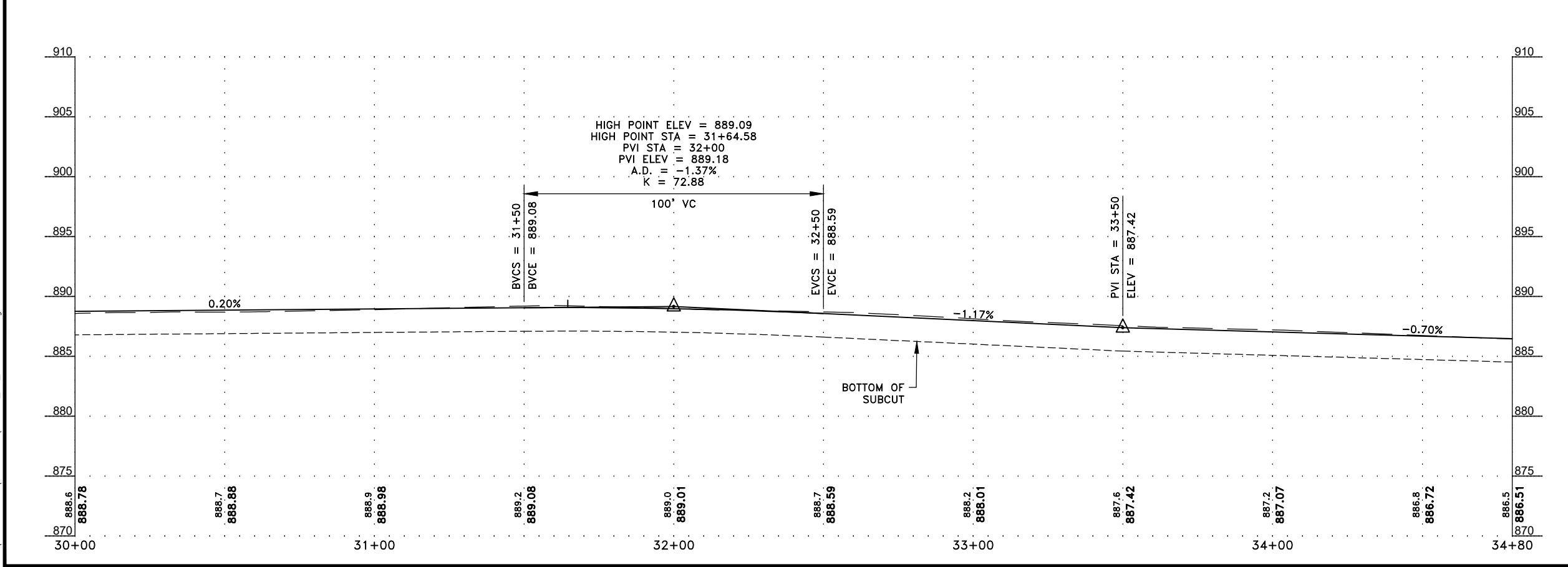
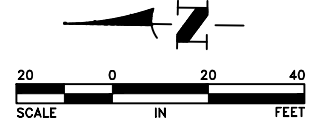
**CONSTRUCTION PLAN**  
 180TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 34 OF 82 SHEETS  
 RA3189



**LEGEND**

- PROPOSED BITUMINOUS PAVEMENT
- BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND  $\frac{1}{6}$



- REFERENCE NOTES:**
- ① MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.
  - ② PIPE DRAIN SHALL BE CAPPED AND SHALL INCLUDE TRACER WIRE AND TRACER WIRE ACCESS BOXES. TRACER WIRE AND TRACER WIRE ACCESS BOXES SHALL BE INCIDENTAL.
  - ③ CONSTRUCT CLEANOUT PER  $\frac{7}{6}$ .

Apr 22, 2024 - 2:44pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_VANADIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

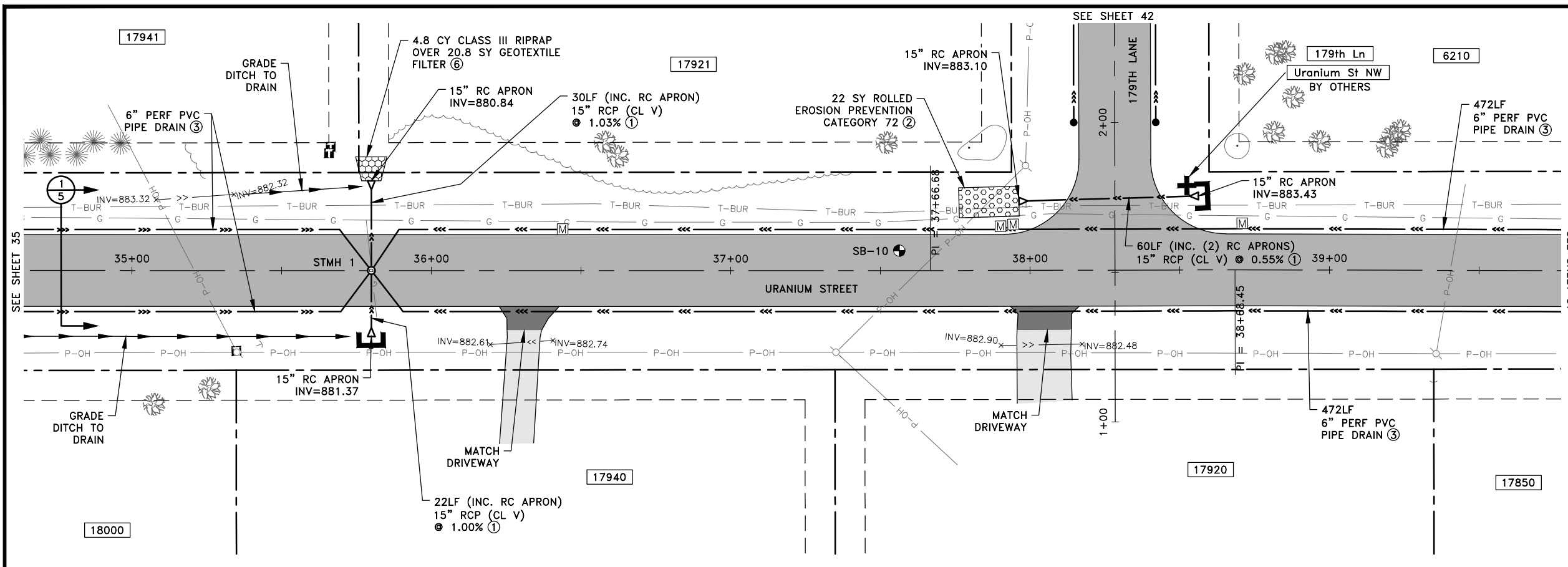


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

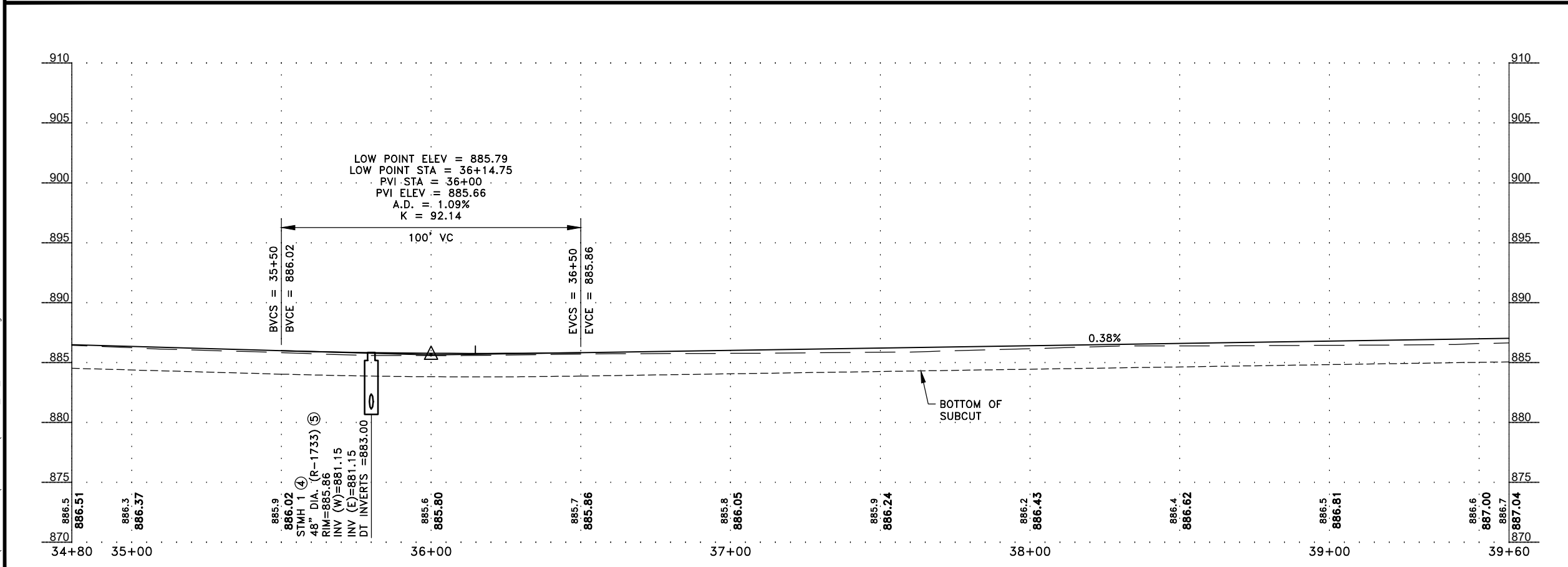
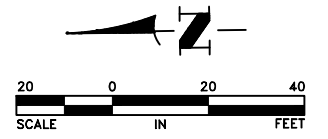
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
**URANIUM STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 35 OF 82 SHEETS  
 RA3189



- LEGEND**
- PROPOSED BITUMINOUS PAVEMENT
  - BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND  $\frac{1}{6}$
  - CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. SEE SHEET 61 FOR THE INTERSECTION STAKING PLAN.
- REFERENCE NOTES:**
- ① TIE ALL PIPE JOINTS PER MN/DOT STANDARD PLATE 3145. THIS WORK SHALL BE INCIDENTAL.
  - ② ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.B.
  - ③ PIPE DRAIN SHALL BE CAPPED AND SHALL INCLUDE TRACER WIRE AND TRACER WIRE ACCESS BOXES. TRACER WIRE AND TRACER WIRE ACCESS BOXES SHALL BE INCIDENTAL.
  - ④ STRUCTURE SHALL BE PER CITY PLATE STO-1.
  - ⑤ CASTING SHALL BE PER CITY PLATE NO. STO-14.
  - ⑥ PLACE RIPRAP PER CITY PLATE NO. ERO-3.

Apr 22, 2024 - 2:44pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_VANADIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Lic. No. 43381

Date 4/22/24

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

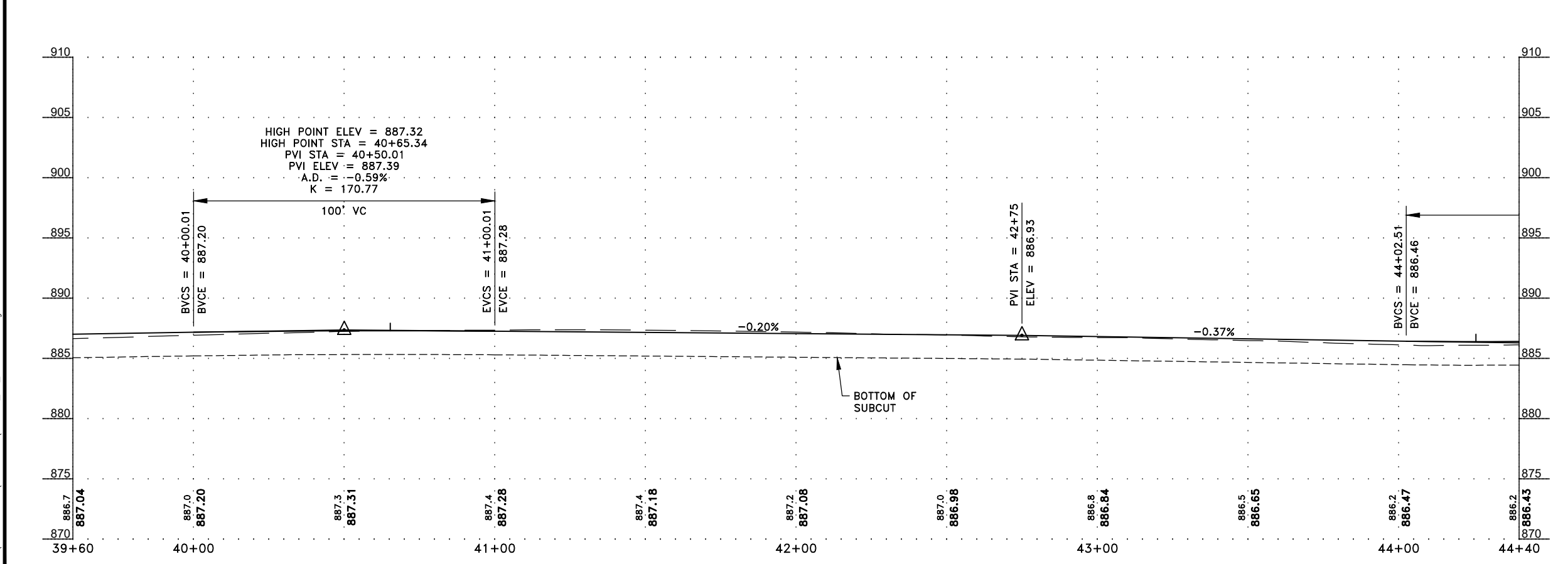
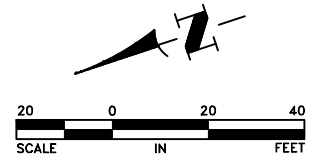
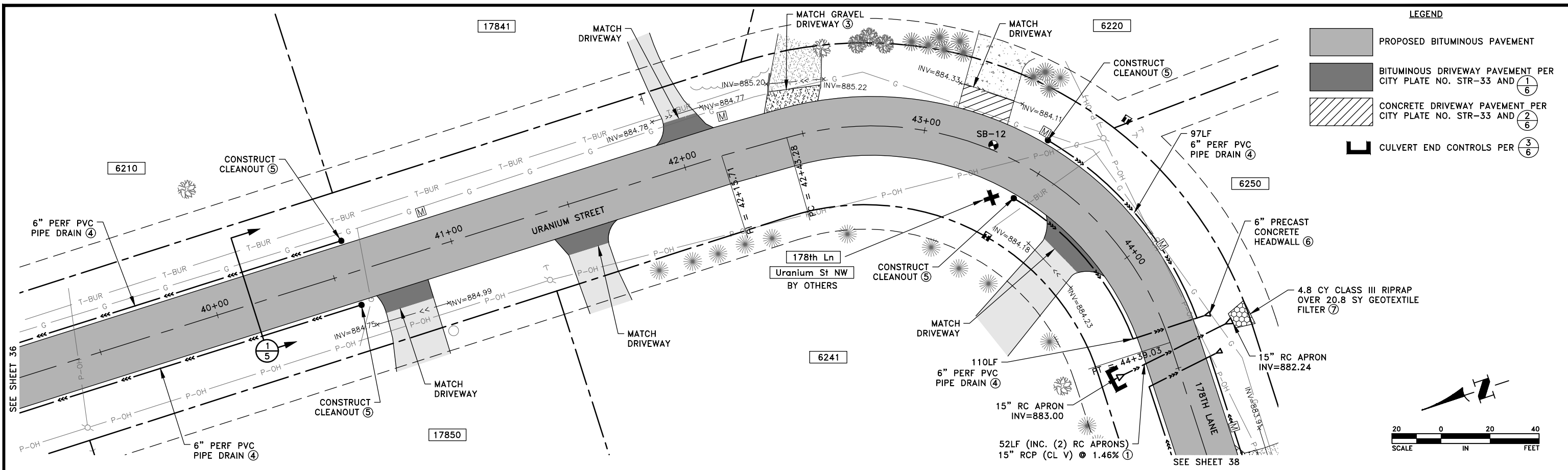


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
 URANIUM STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET **36** OF **82**  
 SHEETS  
 RA3189



- REFERENCE NOTES:
- ① TIE ALL PIPE JOINTS PER MN/DOT STANDARD PLATE 3145. THIS WORK SHALL BE INCIDENTAL.
  - ② ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.b.
  - ③ MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.
  - ④ PIPE DRAIN SHALL BE CAPPED AND SHALL INCLUDE TRACER WIRE AND TRACER WIRE ACCESS BOXES. TRACER WIRE AND TRACER WIRE ACCESS BOXES SHALL BE INCIDENTAL.
  - ⑤ CONSTRUCT CLEANOUT PER ⑦.
  - ⑥ CONCRETE HEADWALL SHALL BE PER MN/DOT STANDARD PLATE 3131.
  - ⑦ PLACE RIPRAP PER CITY PLATE NO. ERO-3.

Apr. 22, 2024 - 2:44pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_VANADIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

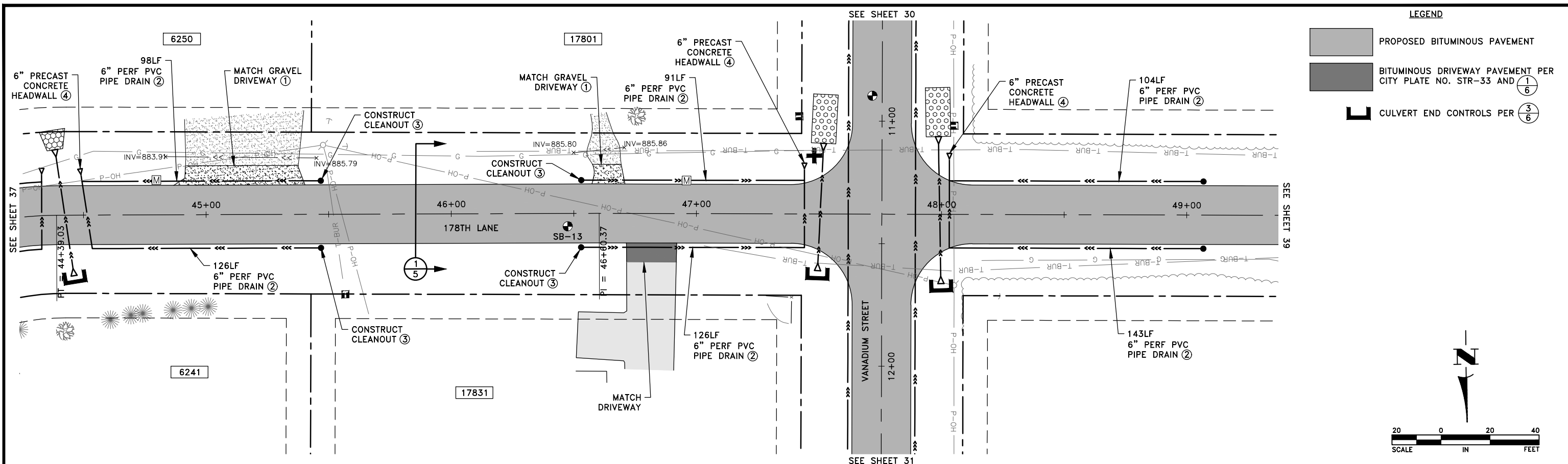


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

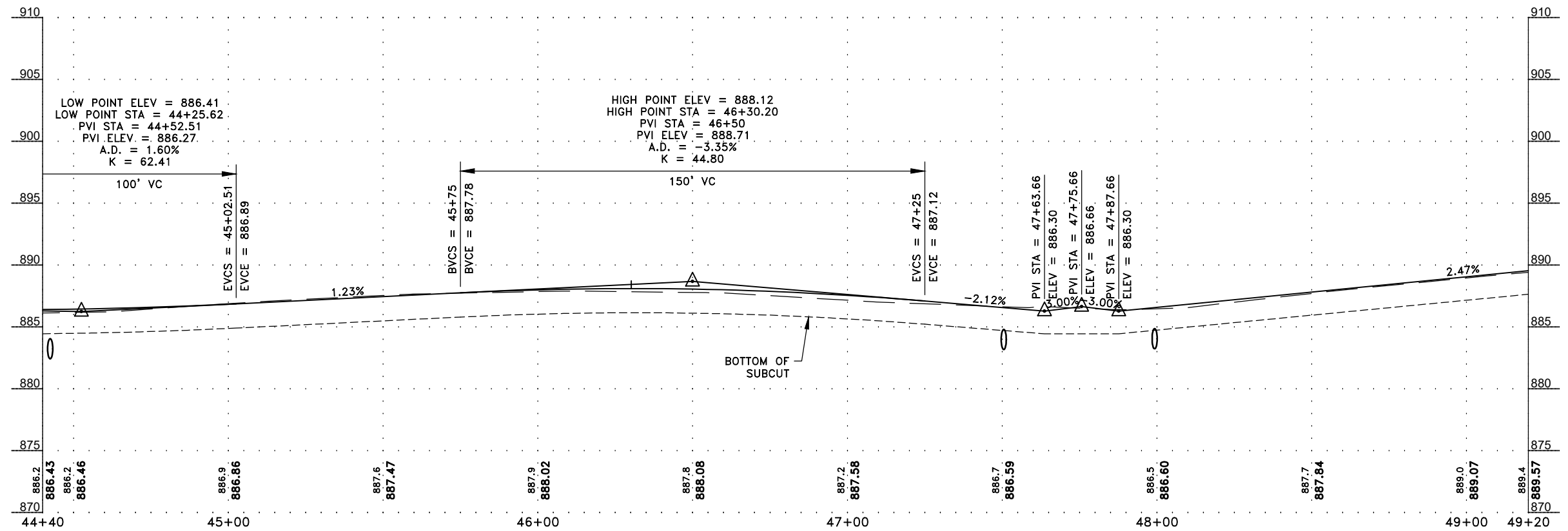
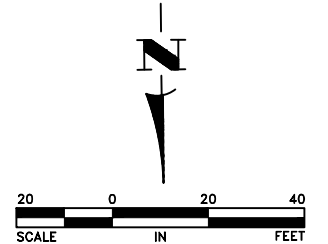
**CONSTRUCTION PLAN**  
**URANIUM STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 37 OF 82 SHEETS  
 RA3189



**LEGEND**

- PROPOSED BITUMINOUS PAVEMENT
- BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND  $\frac{1}{6}$
- CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
- SEE SHEET 60 FOR THE INTERSECTION STAKING PLAN.
- REFERENCE NOTES:**
- MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118--AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.
  - PIPE DRAIN SHALL BE CAPPED AND SHALL INCLUDE TRACER WIRE AND TRACER WIRE ACCESS BOXES. TRACER WIRE AND TRACER WIRE ACCESS BOXES SHALL BE INCIDENTAL.
  - CONSTRUCT CLEANOUT PER  $\frac{7}{6}$ .
  - CONCRETE HEADWALL SHALL BE PER MN/DOT STANDARD PLATE 3131.

Apr. 22, 2024 - 2:44pm  
 K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_VANADIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN





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

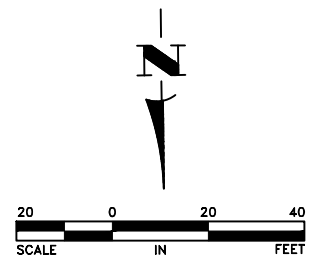
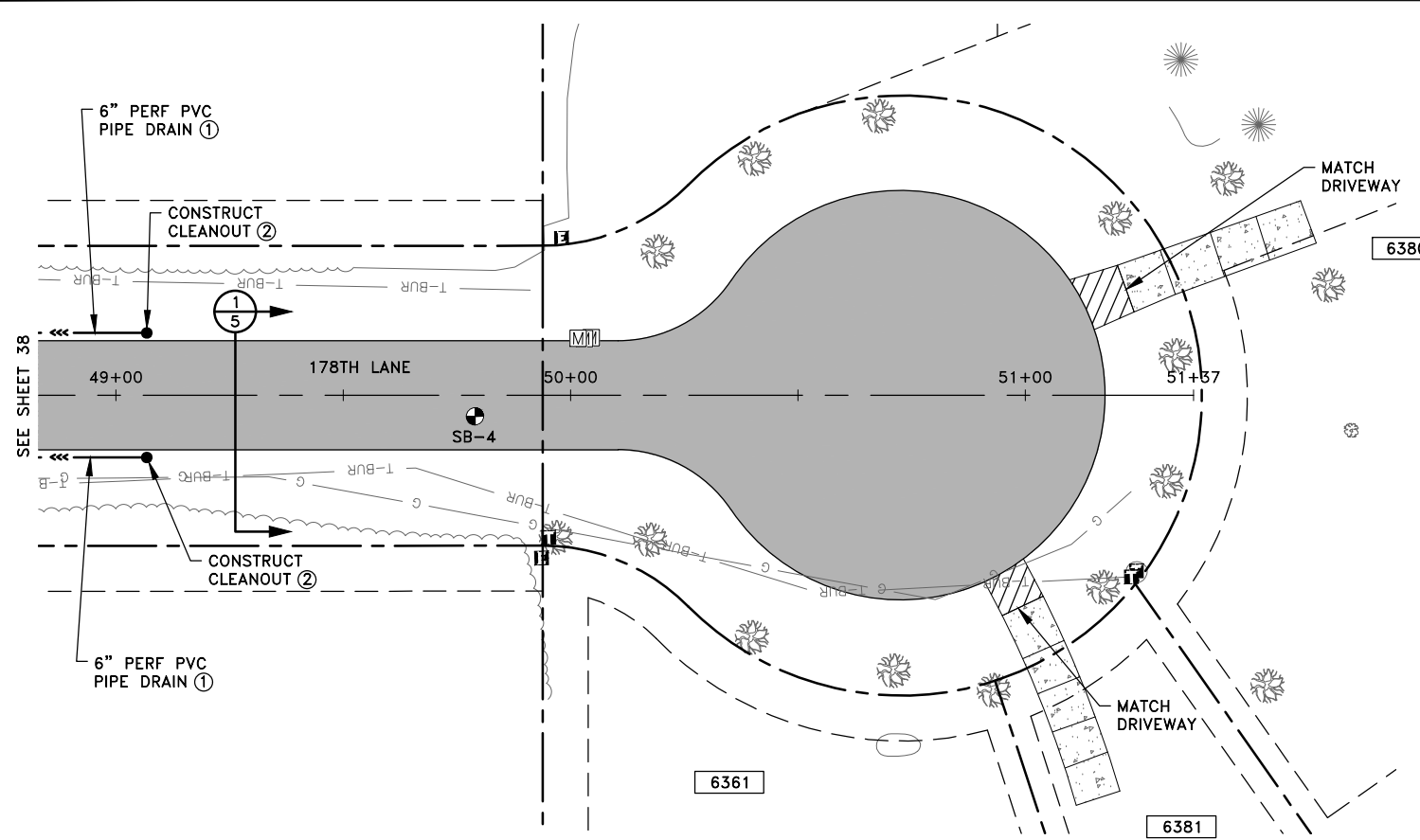
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
 178TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

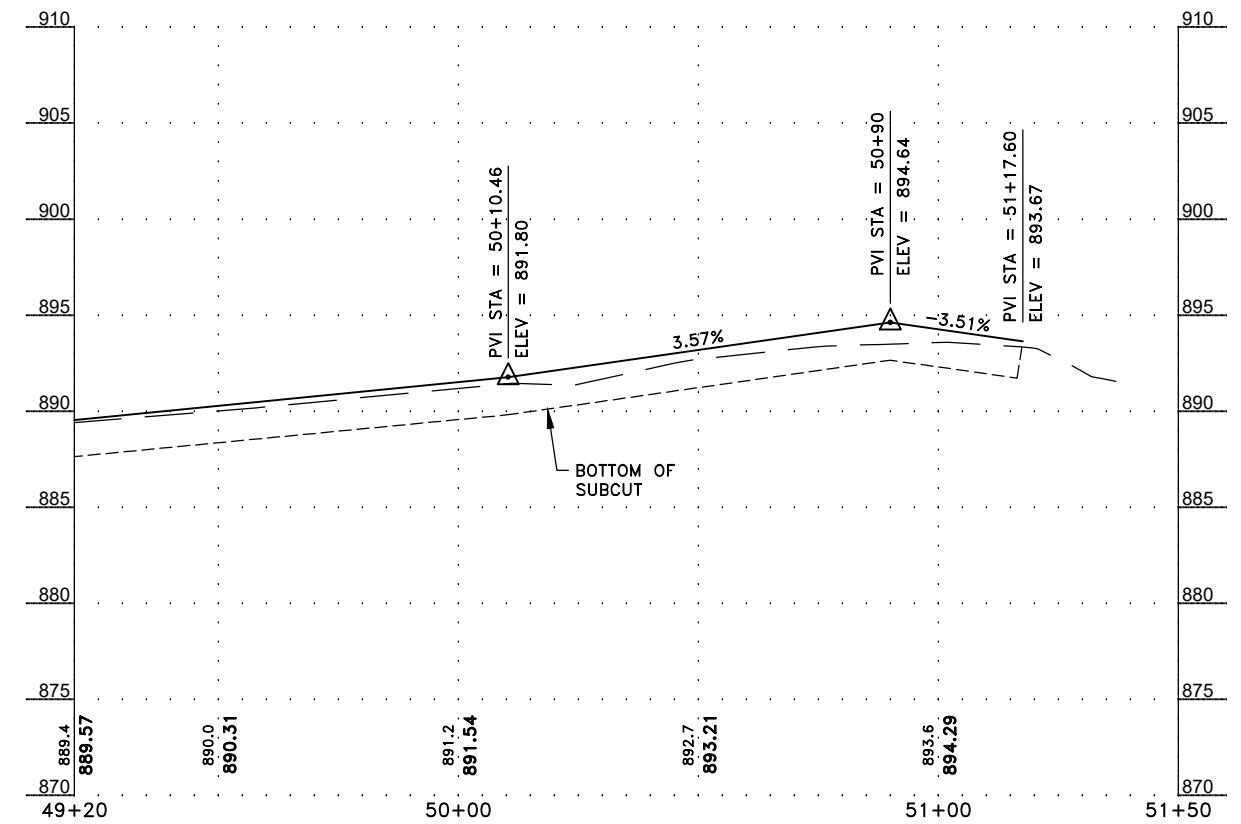
SHEET 38 OF 82 SHEETS  
 RA3189

LEGEND

-  PROPOSED BITUMINOUS PAVEMENT
-  CONCRETE DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND  $\frac{2}{6}$



- GENERAL NOTES:  
 1. SEE SHEET 61 FOR THE CUL-DE-SAC STAKING PLAN.
- REFERENCE NOTES:  
 ① PIPE DRAIN SHALL BE CAPPED AND SHALL INCLUDE TRACER WIRE AND TRACER WIRE ACCESS BOXES. TRACER WIRE AND TRACER WIRE ACCESS BOXES SHALL BE INCIDENTAL.  
 ② CONSTRUCT CLEANOUT PER  $\frac{7}{6}$ .



Apr 22, 2024 - 2:44pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_VANADIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

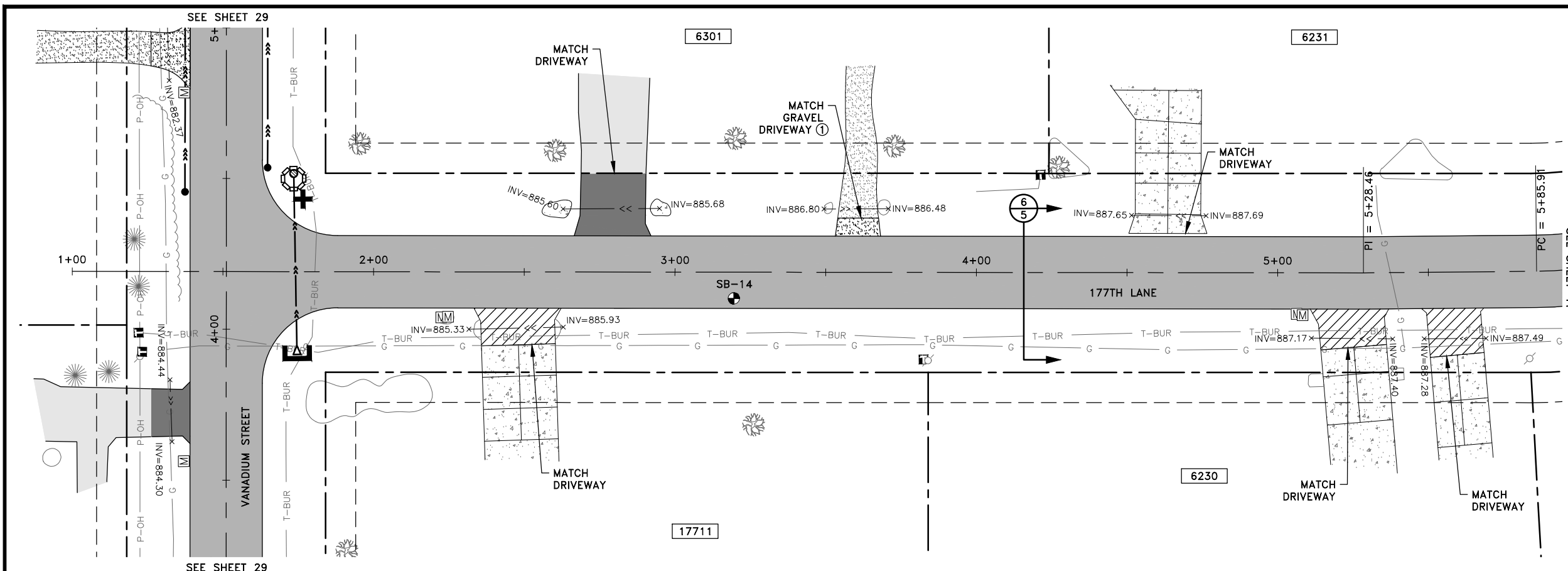


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

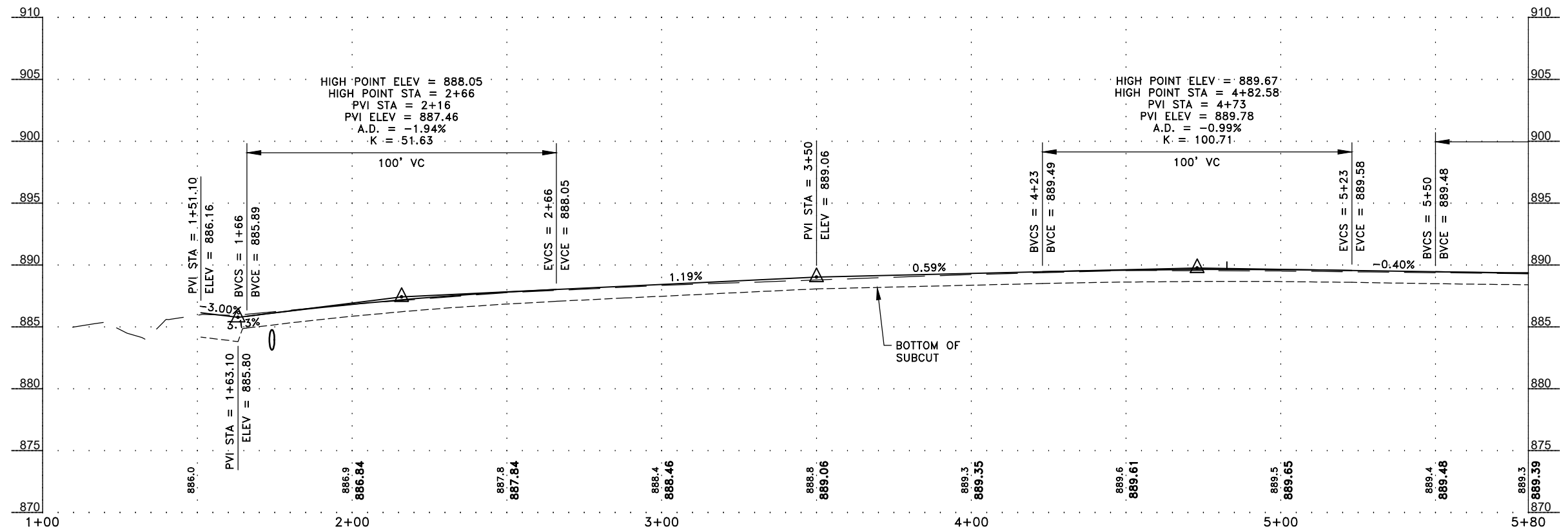
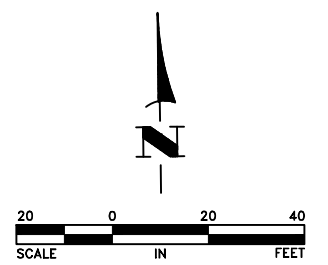
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
 178TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 39 OF 82 SHEETS  
 RA3189



- LEGEND**
- PROPOSED BITUMINOUS PAVEMENT
  - BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND ①/⑥
  - CONCRETE DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND ②/⑥
  - STORM DRAIN INLET PROTECTION ②
  - CULVERT END CONTROLS PER ③/⑥



- GENERAL NOTES:**
- SEE SHEET 60 FOR THE INTERSECTION STAKING PLAN.
- REFERENCE NOTES:**
- MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.
  - STORM DRAIN INLET PROTECTION SHALL BE PER ④/⑥ OR APPROVED EQUAL.

Apr 22, 2024 - 2:44pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_177TH.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

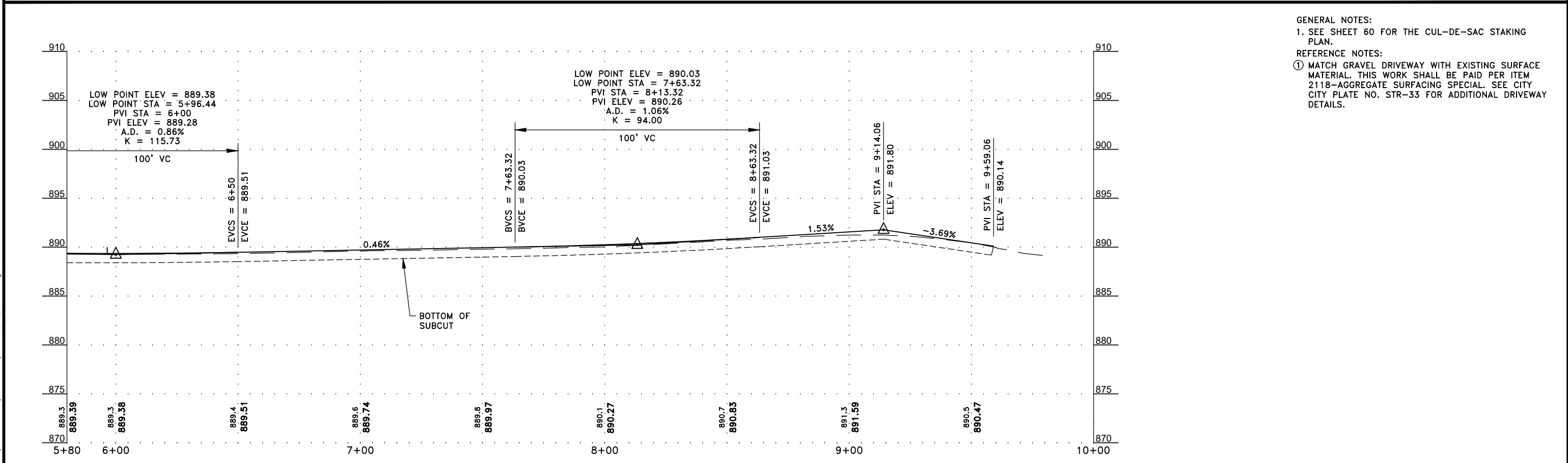
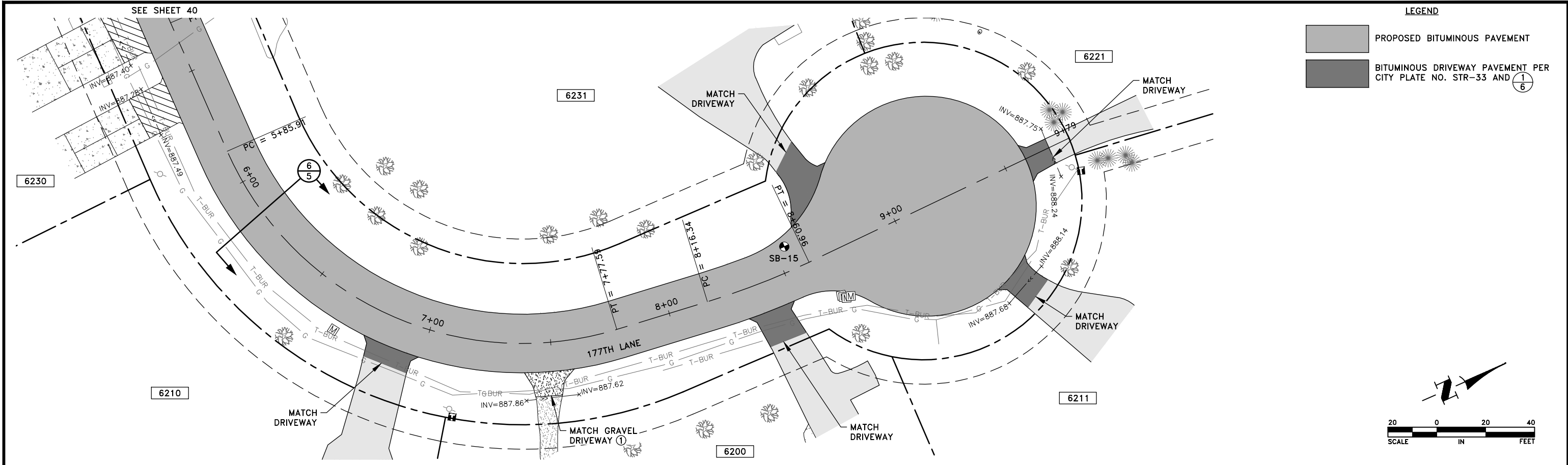


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
 177TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 40 OF 82 SHEETS  
 RA3189



GENERAL NOTES:  
 1. SEE SHEET 60 FOR THE CUL-DE-SAC STAKING PLAN.

REFERENCE NOTES:  
 ① MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.

Apr 22, 2024 - 2:44pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_177TH.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

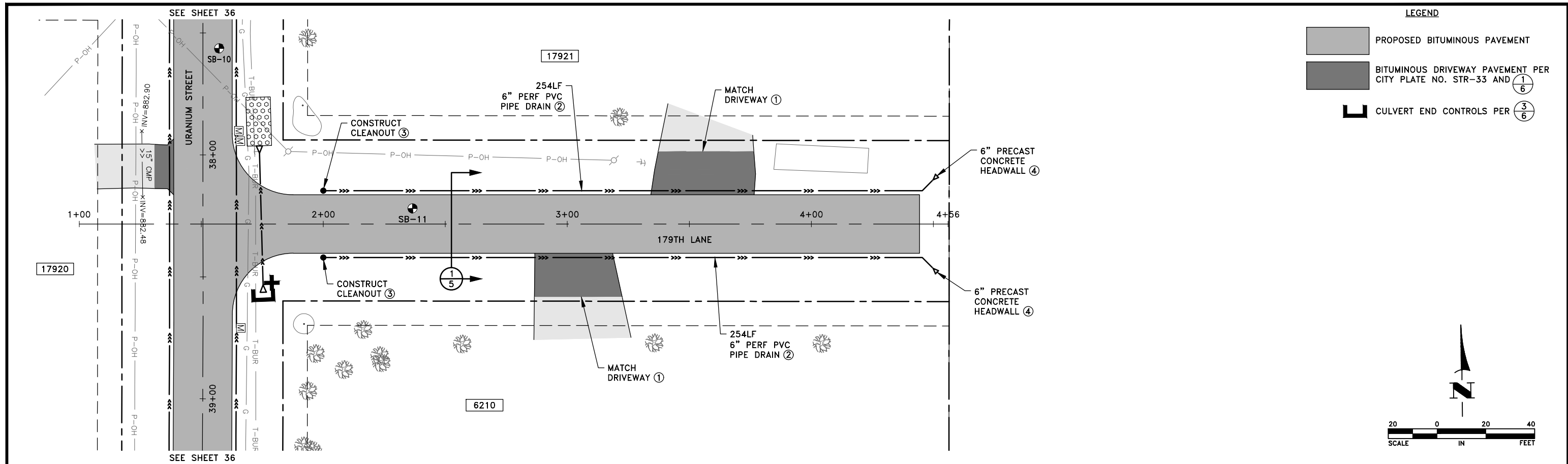


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

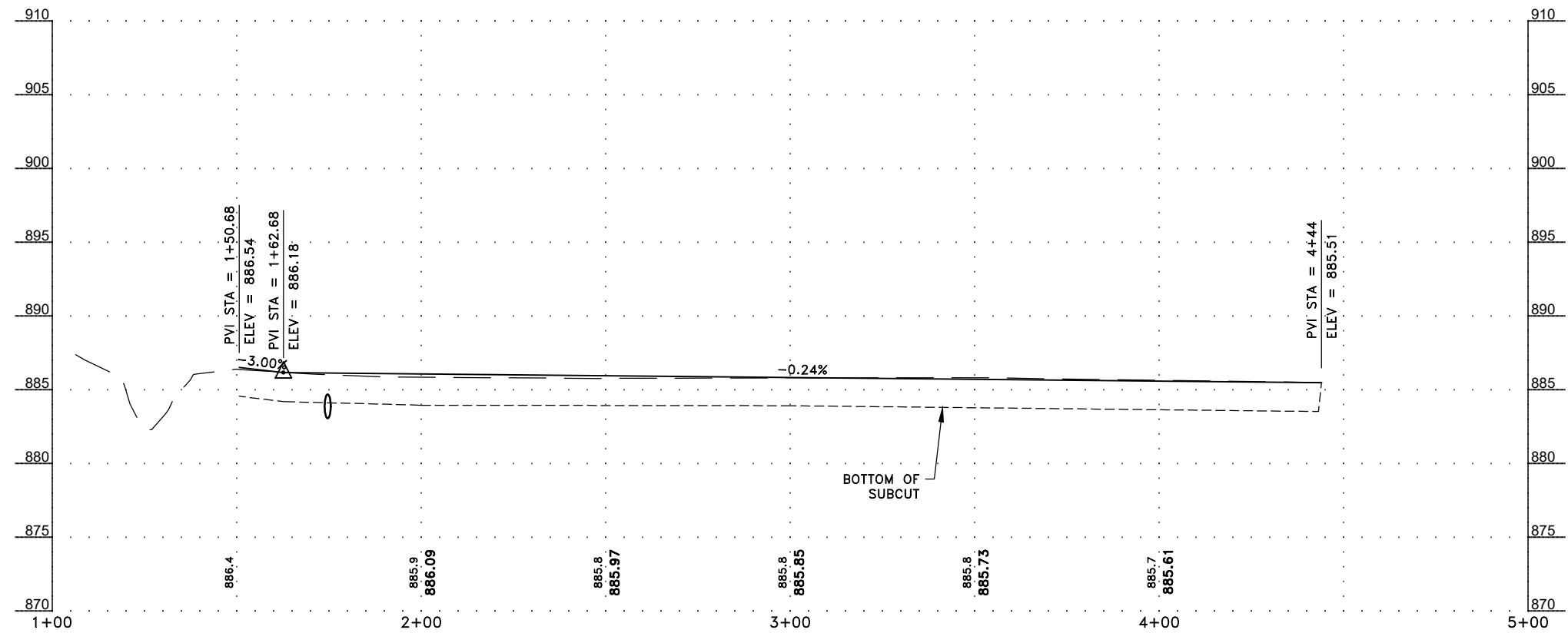
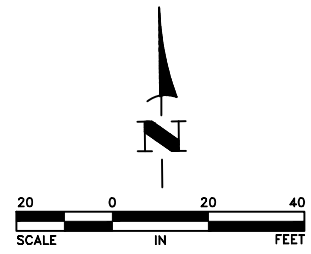
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
 177TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 41 OF 82 SHEETS  
 RA3189



- LEGEND**
- PROPOSED BITUMINOUS PAVEMENT
  - BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-33 AND  $\frac{1}{6}$
  - CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. SEE SHEET 61 FOR THE INTERSECTION STAKING PLAN.
- REFERENCE NOTES:**
- ① GRADE DRIVEWAY TO DRAIN. THIS WORK SHALL BE INCIDENTAL.
  - ② PIPE DRAIN SHALL BE CAPPED AND SHALL INCLUDE TRACER WIRE AND TRACER WIRE ACCESS BOXES. TRACER WIRE AND TRACER WIRE ACCESS BOXES SHALL BE INCIDENTAL.
  - ③ CONSTRUCT CLEANOUT PER  $\frac{7}{6}$ .
  - ④ CONCRETE HEADWALL SHALL BE PER MN/DOT STANDARD PLATE 3131.

Apr 22, 2024 - 2:44pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_179TH.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

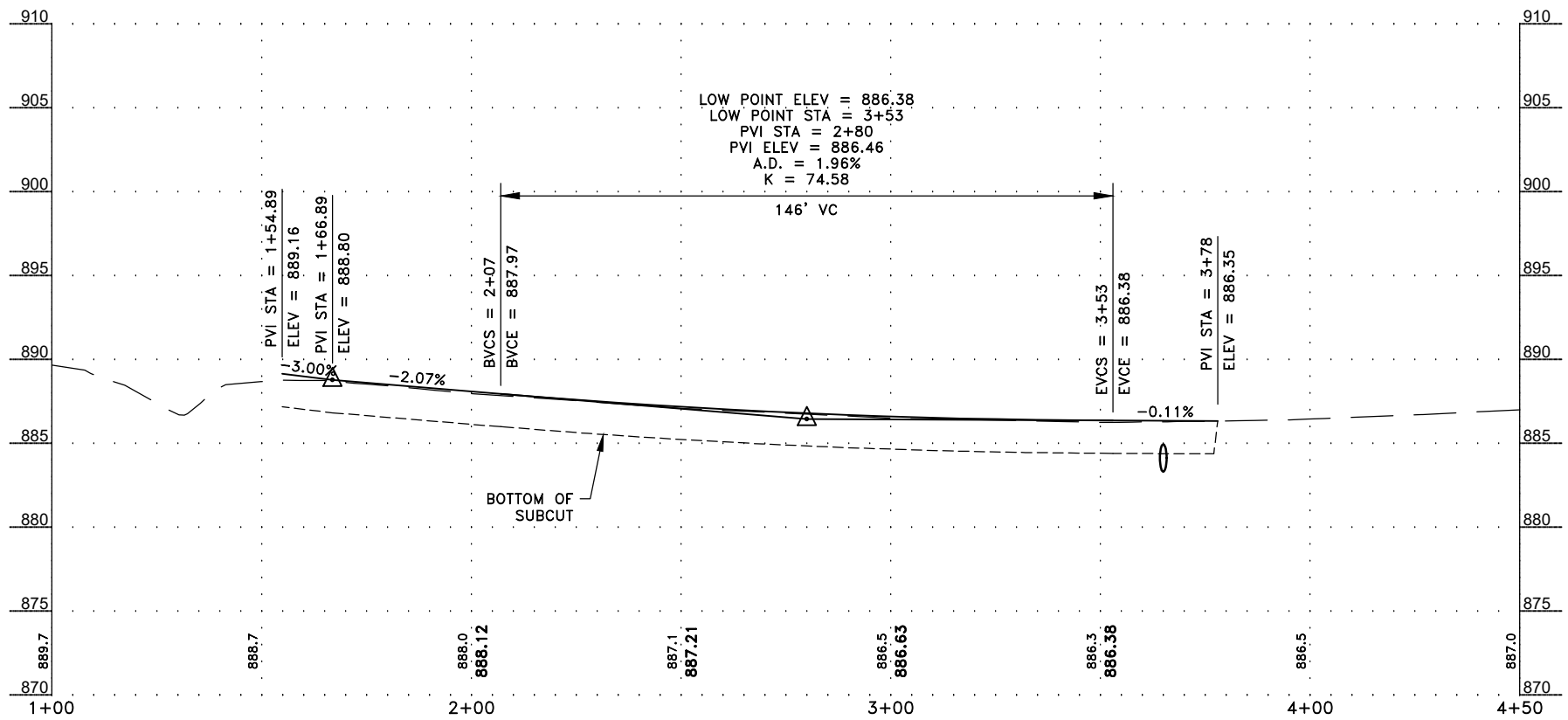
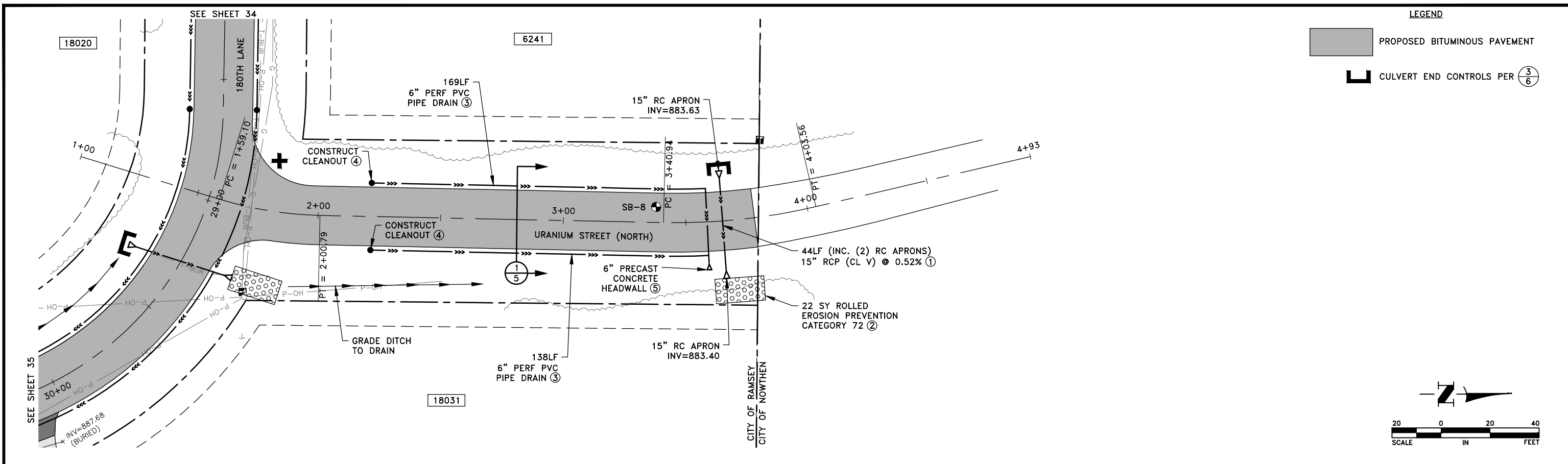


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
 179TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 42 OF 82 SHEETS  
 RA3189



- GENERAL NOTES:**
- SEE SHEET 61 FOR THE INTERSECTION STAKING PLANS.
- REFERENCE NOTES:**
- TIE ALL PIPE JOINTS PER MN/DOT STANDARD PLATE 3145. THIS WORK SHALL BE INCIDENTAL.
  - ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.b.
  - PIPE DRAIN SHALL BE CAPPED AND SHALL INCLUDE TRACER WIRE AND TRACER WIRE ACCESS BOXES. TRACER WIRE AND TRACER WIRE ACCESS BOXES SHALL BE INCIDENTAL.
  - CONSTRUCT CLEANOUT PER 7/6.
  - CONCRETE HEADWALL SHALL BE PER MN/DOT STANDARD PLATE 3131.

Apr 22, 2024 - 2:45pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_URANIUM\_NORTH.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

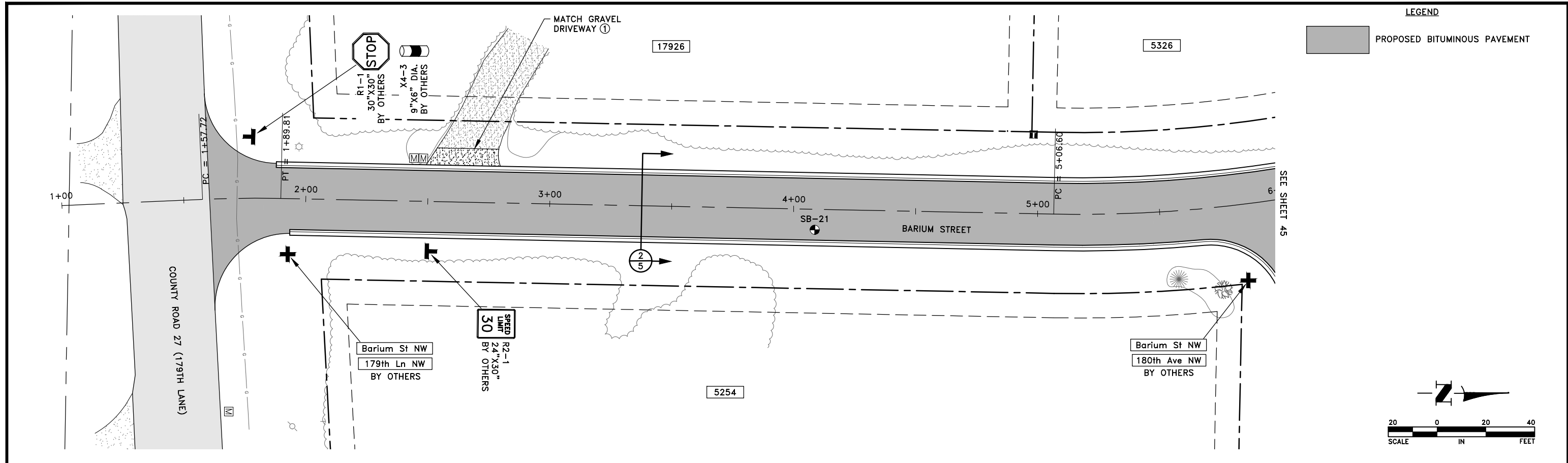


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

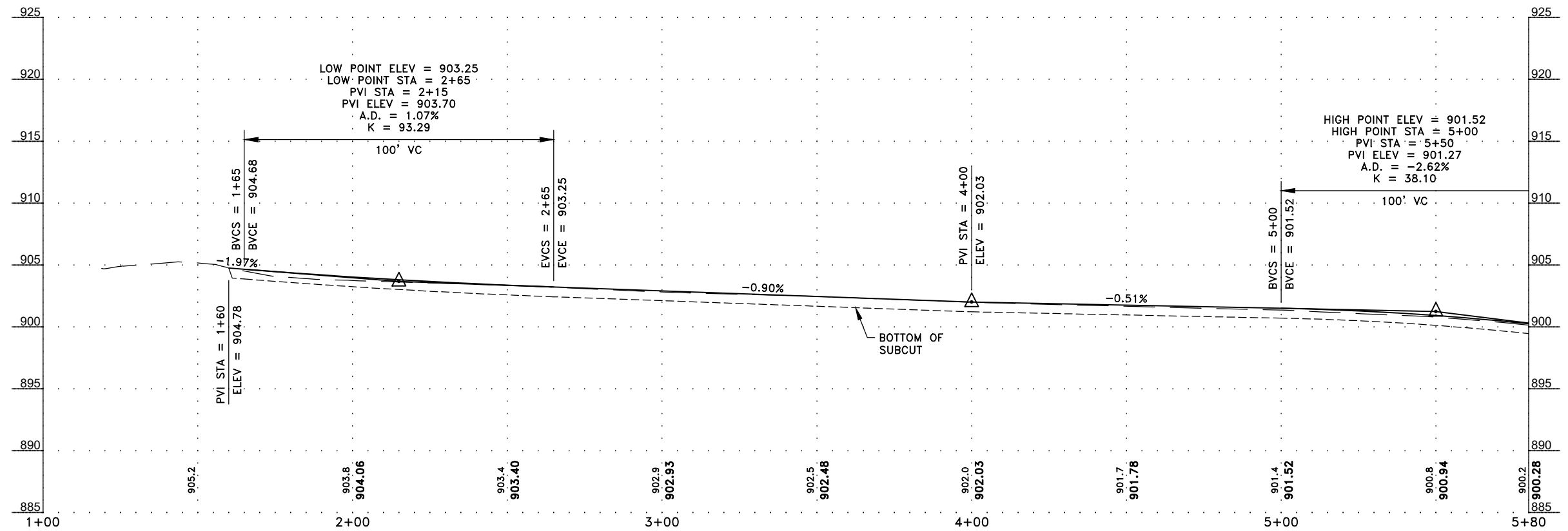
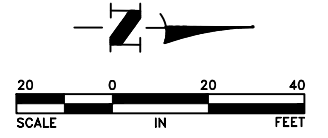
**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
URANIUM STREET (NORTH)  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 43 OF 82 SHEETS  
RA3189



**LEGEND**  
 PROPOSED BITUMINOUS PAVEMENT



- GENERAL NOTES:**
- SEE SHEET 62 FOR THE INTERSECTION STAKING PLAN.
  - CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER  $\frac{8}{6}$ .
- REFERENCE NOTES:**
- MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118--AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.

Apr 22, 2024 - 2:45pm  
 K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_BARIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

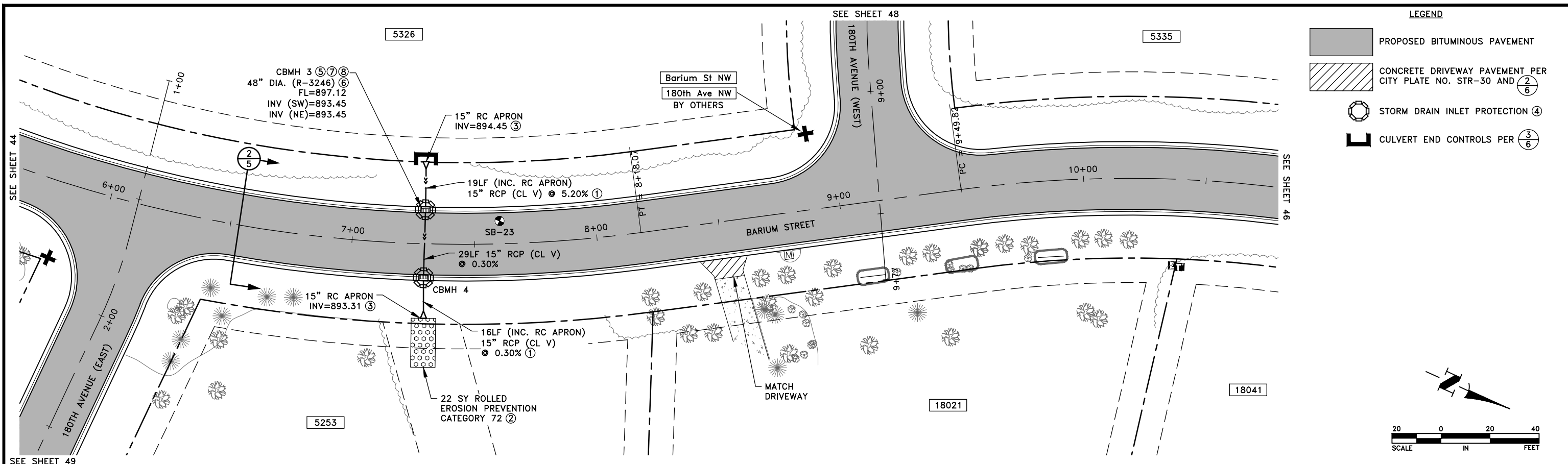


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

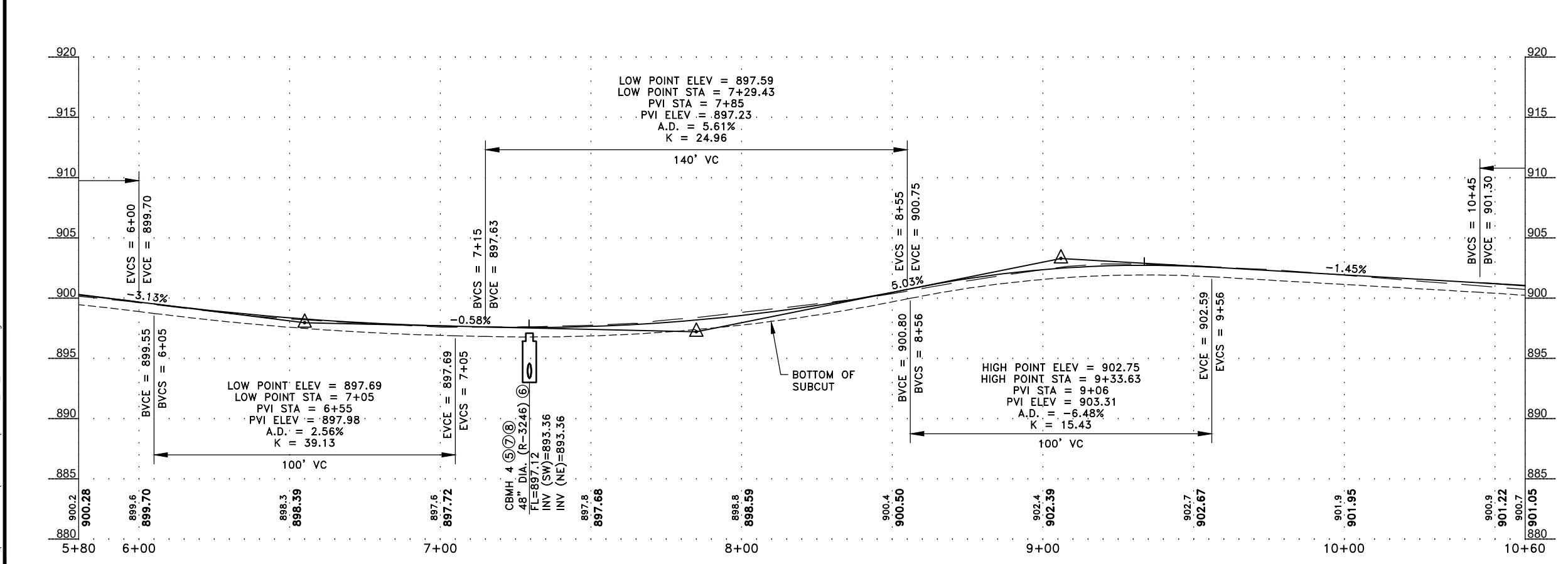
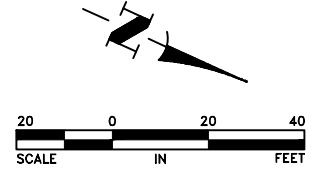
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
**BARIUM STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET **44** OF **82**  
 SHEETS  
 RA3189



- LEGEND**
- PROPOSED BITUMINOUS PAVEMENT
  - CONCRETE DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-30 AND (2/6)
  - STORM DRAIN INLET PROTECTION (4)
  - CULVERT END CONTROLS PER (3/6)



- GENERAL NOTES:**
1. SEE SHEET 62 FOR THE INTERSECTION STAKING PLANS.
  2. CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER (8/6).
- REFERENCE NOTES:**
- (1) TIE ALL PIPE JOINTS PER MN/DOT STANDARD PLATE 3145. THIS WORK SHALL BE INCIDENTAL.
  - (2) ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.b.
  - (3) APRON SHALL INCLUDE A TRASH GUARD PER CITY PLATE NO. ST0-8.
  - (4) STORM DRAIN INLET PROTECTION SHALL BE PER (5/6) AND (6/6) OR APPROVED EQUAL.
  - (5) STRUCTURE SHALL BE PER CITY PLATE NO. ST0-1.
  - (6) CASTING SHALL BE PER CITY PLATE NO. ST0-4.
  - (7) TRANSITION CURB AT CATCH BASIN PER CITY PLATE NO. STR-27.
  - (8) MANHOLE COVER SHALL BE PLACED PER CITY PLATE NO. ST0-5.

Apr. 22, 2024 - 2:45pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_BARIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

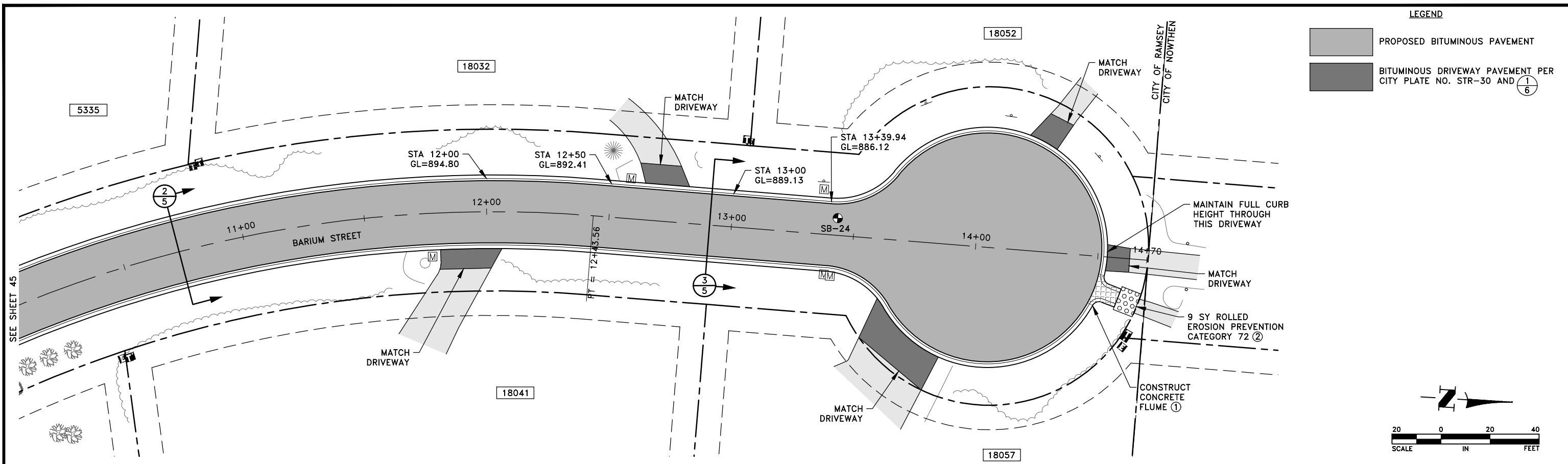


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

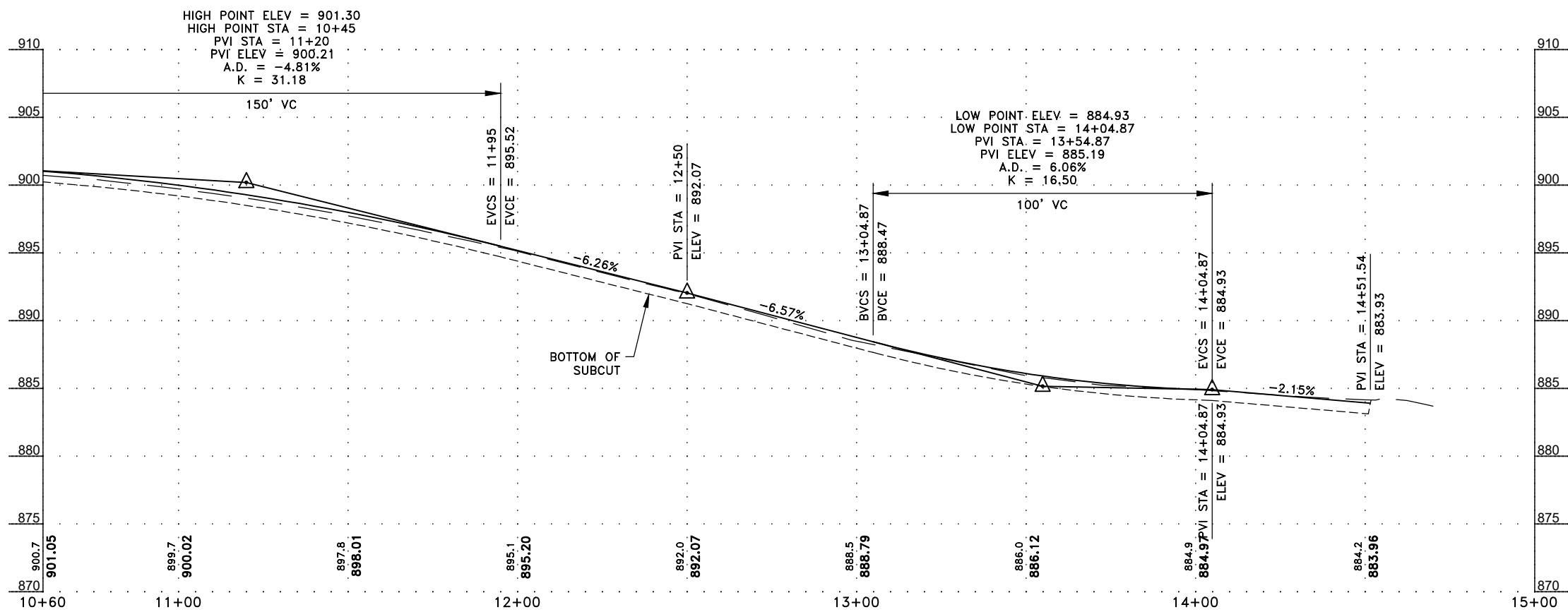
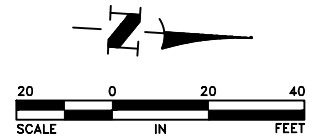
**CONSTRUCTION PLAN**  
**BARIUM STREET**  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 45 OF 82 SHEETS  
RA3189



**LEGEND**

- PROPOSED BITUMINOUS PAVEMENT
- BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-30 AND 1/6



- GENERAL NOTES:**
- SEE SHEET 63 FOR THE CUL-DE-SAC STAKING PLAN.
  - UNLESS NOTED, CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER 8/6.
- REFERENCE NOTES:**
- HATCHED AREA SHALL BE PAID PER ITEM 2531-CONCRETE DRAINAGE FLUME.
  - ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.B.

Apr. 22, 2024 - 2:45pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_BARIUM.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

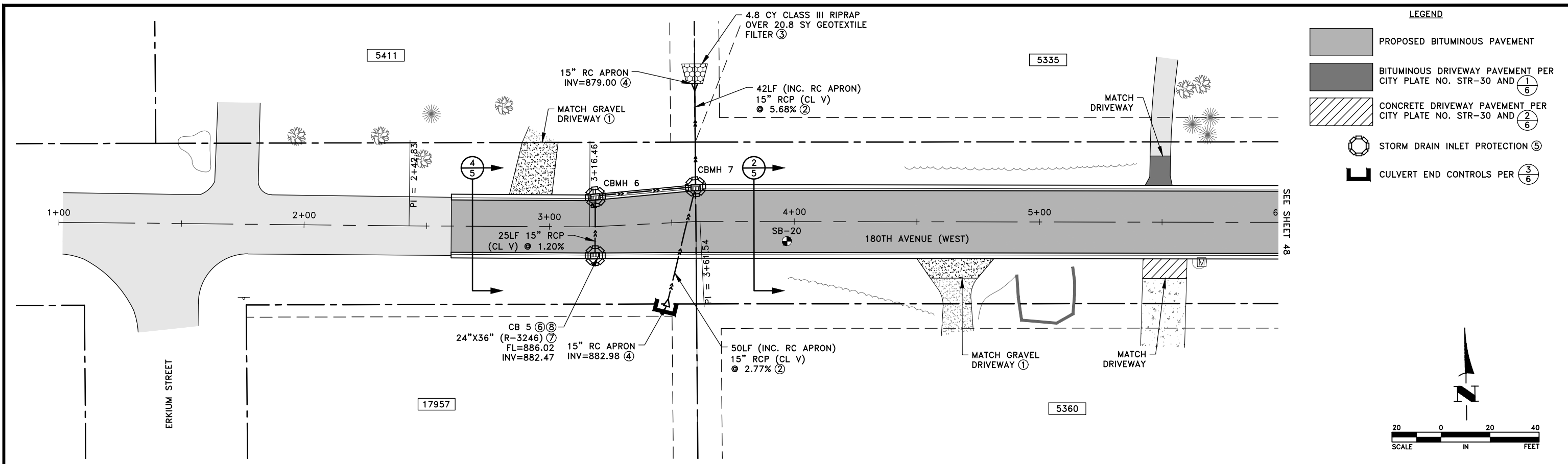


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

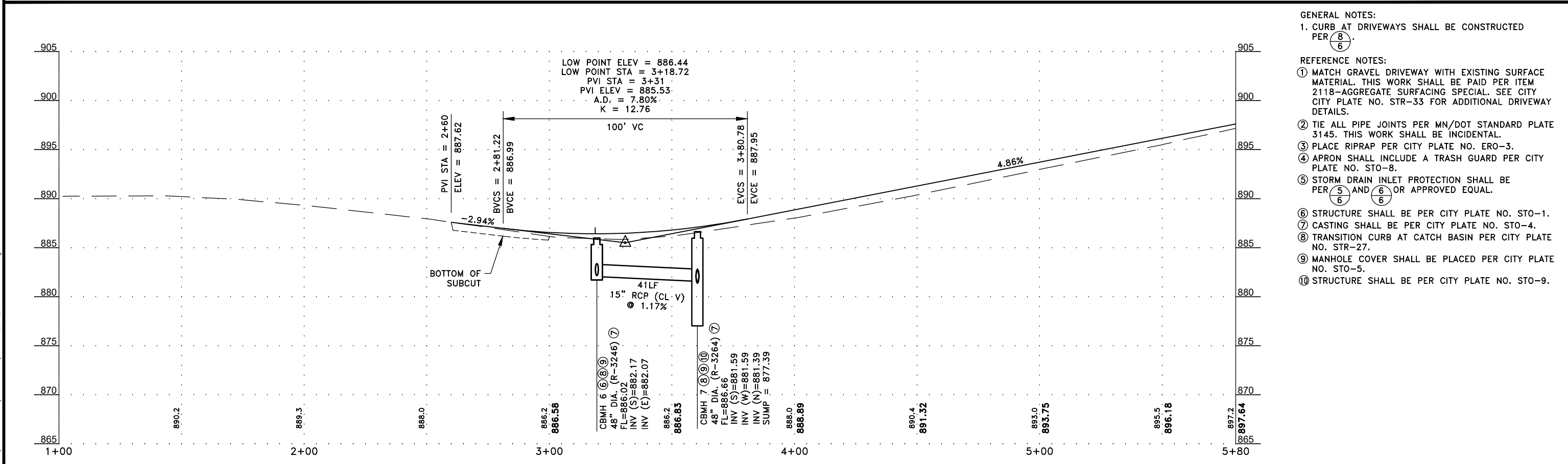
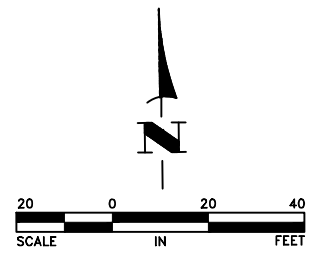
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
**BARIUM STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 46 OF 82 SHEETS  
 RA3189



- LEGEND**
- PROPOSED BITUMINOUS PAVEMENT
  - BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-30 AND  $\frac{1}{6}$
  - CONCRETE DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-30 AND  $\frac{2}{6}$
  - STORM DRAIN INLET PROTECTION  $\frac{5}{6}$
  - CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER  $\frac{8}{6}$ .
- REFERENCE NOTES:**
- ① MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.
  - ② TIE ALL PIPE JOINTS PER MN/DOT STANDARD PLATE 3145. THIS WORK SHALL BE INCIDENTAL.
  - ③ PLACE RIPRAP PER CITY PLATE NO. ERO-3.
  - ④ APRON SHALL INCLUDE A TRASH GUARD PER CITY PLATE NO. STO-8.
  - ⑤ STORM DRAIN INLET PROTECTION SHALL BE PER  $\frac{5}{6}$  AND  $\frac{6}{6}$  OR APPROVED EQUAL.
  - ⑥ STRUCTURE SHALL BE PER CITY PLATE NO. STO-1.
  - ⑦ CASTING SHALL BE PER CITY PLATE NO. STO-4.
  - ⑧ TRANSITION CURB AT CATCH BASIN PER CITY PLATE NO. STR-27.
  - ⑨ MANHOLE COVER SHALL BE PLACED PER CITY PLATE NO. STO-5.
  - ⑩ STRUCTURE SHALL BE PER CITY PLATE NO. STO-9.

Apr. 22, 2024 - 2:45pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_180TH\_WEST.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

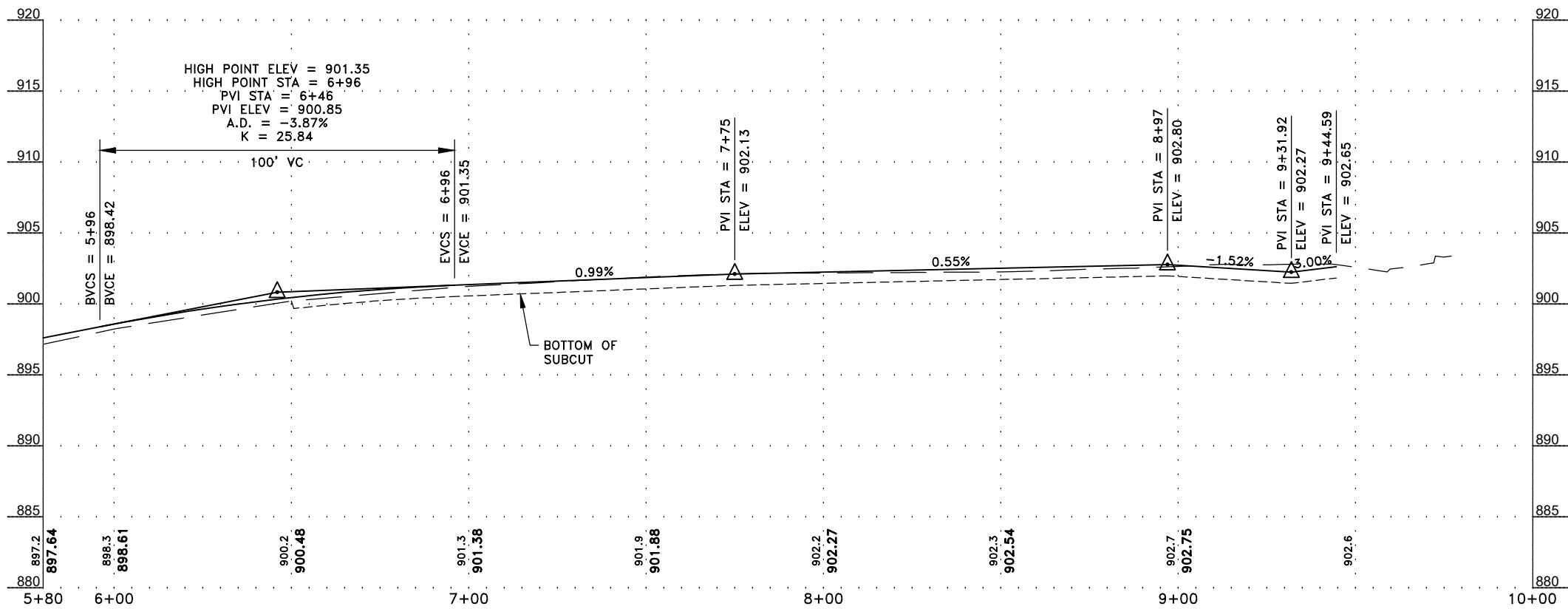
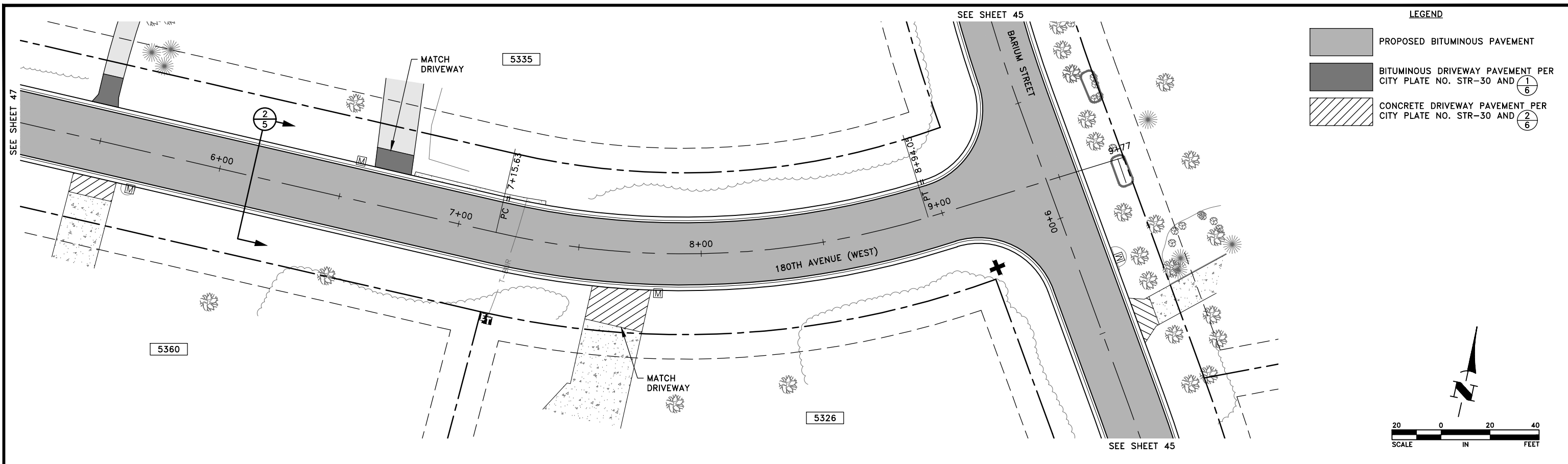


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
180TH AVENUE (WEST)  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 47 OF 82 SHEETS  
RA3189



- GENERAL NOTES:**
- SEE SHEET 62 FOR THE INTERSECTION STAKING PLAN.
  - CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER  $\frac{8}{6}$ .

Apr 22, 2024 - 2:45pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_180TH\_WEST.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

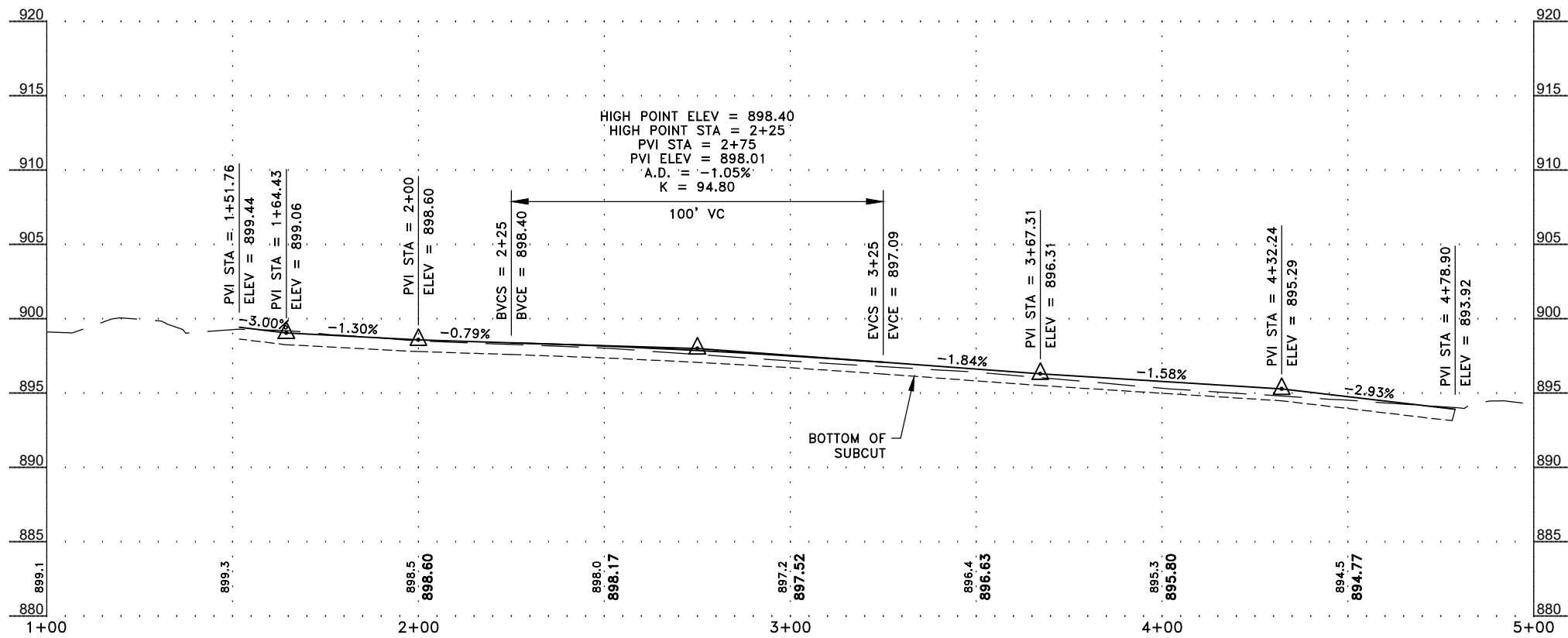
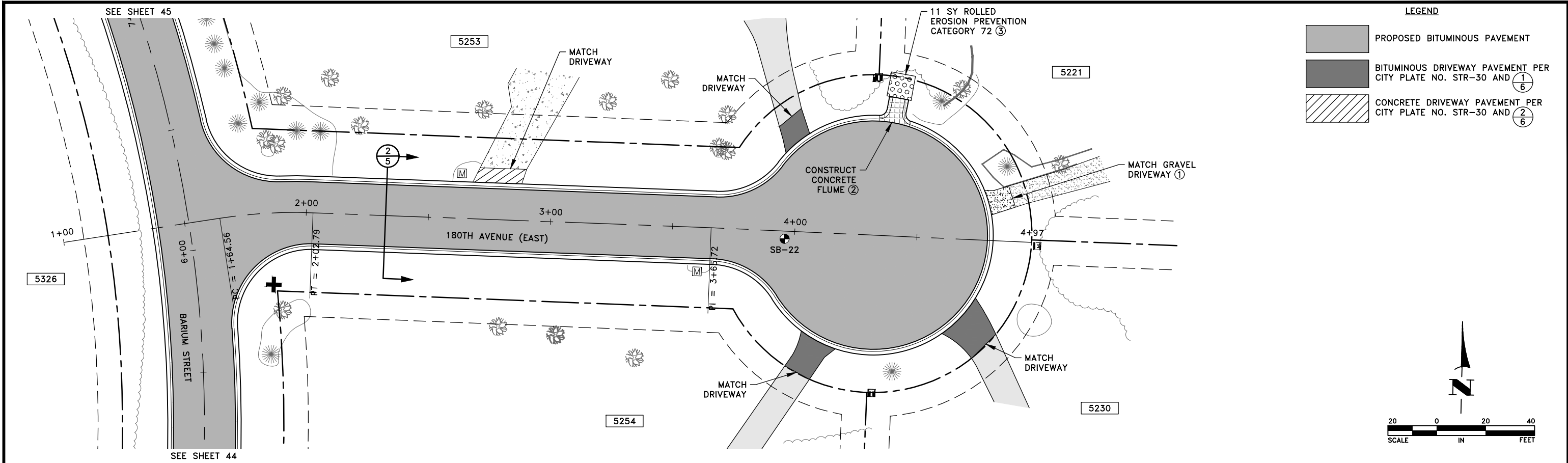


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
**180TH AVENUE (WEST)**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET **48** OF **82**  
 SHEETS  
 RA3189



- GENERAL NOTES:
- SEE SHEET 62 FOR THE INTERSECTION AND CUL-DE-SAC STAKING PLANS.
  - CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER ⑧/6.
- REFERENCE NOTES:
- MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.
  - HATCHED AREA SHALL BE PAID PER ITEM 2531-CONCRETE DRAINAGE FLUME.
  - ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.B.

Apr 22, 2024 - 2:45pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_180TH\_EAST.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

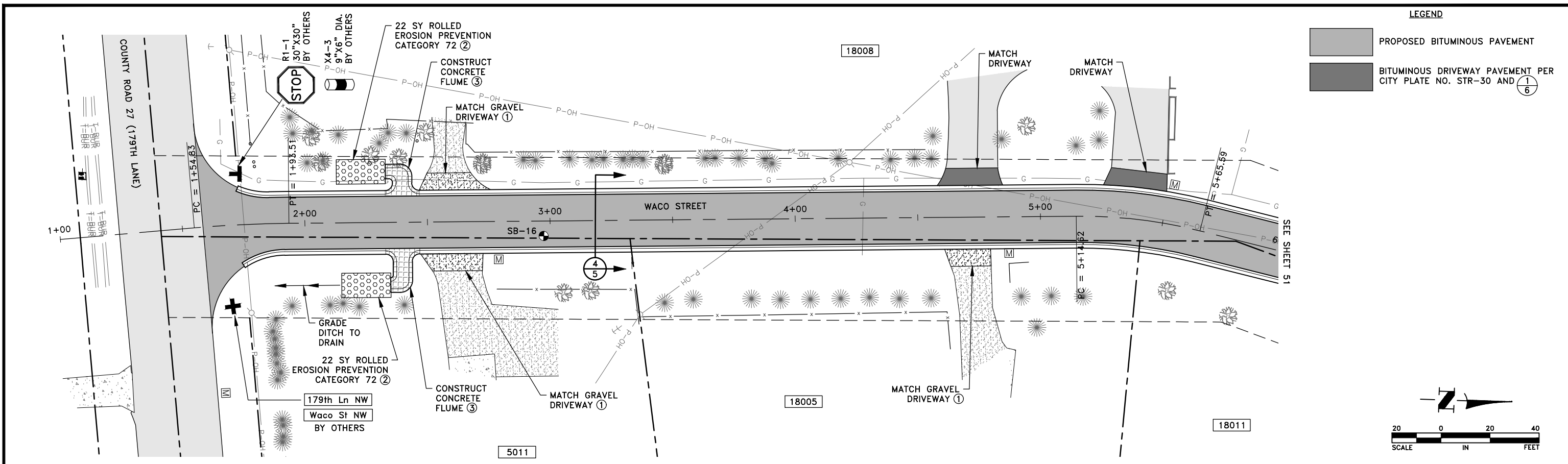


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

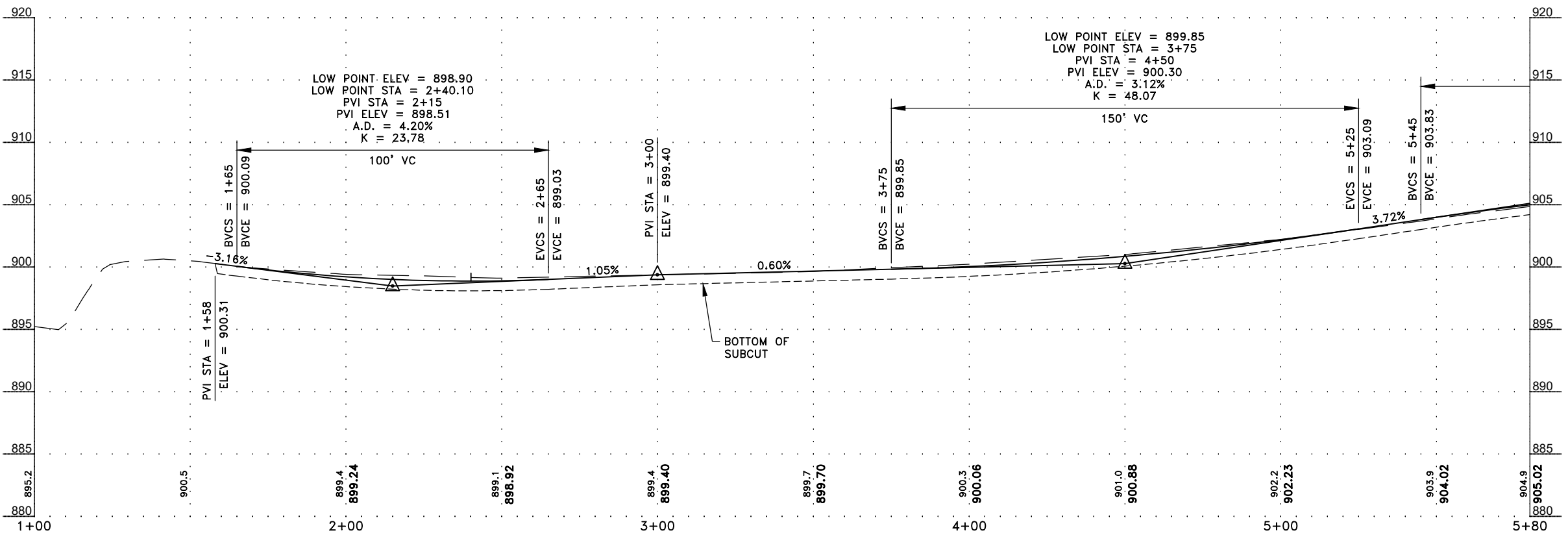
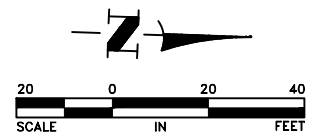
**CONSTRUCTION PLAN**  
180TH AVENUE (EAST)  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 49 OF 82 SHEETS  
RA3189



**LEGEND**

- PROPOSED BITUMINOUS PAVEMENT
- BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-30 AND  $\frac{1}{6}$



- GENERAL NOTES:**
- SEE SHEET 63 FOR THE INTERSECTION AND CONCRETE FLUME STAKING PLANS.
  - CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER  $\frac{8}{6}$ .
- REFERENCE NOTES:**
- MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.
  - ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.b.
  - HATCHED AREA SHALL BE PAID PER ITEM 2531-CONCRETE DRAINAGE FLUME.

Apr. 22, 2024 - 2:46pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_WACO STREET.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Lic. No. 43381  
Date 4/22/24

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

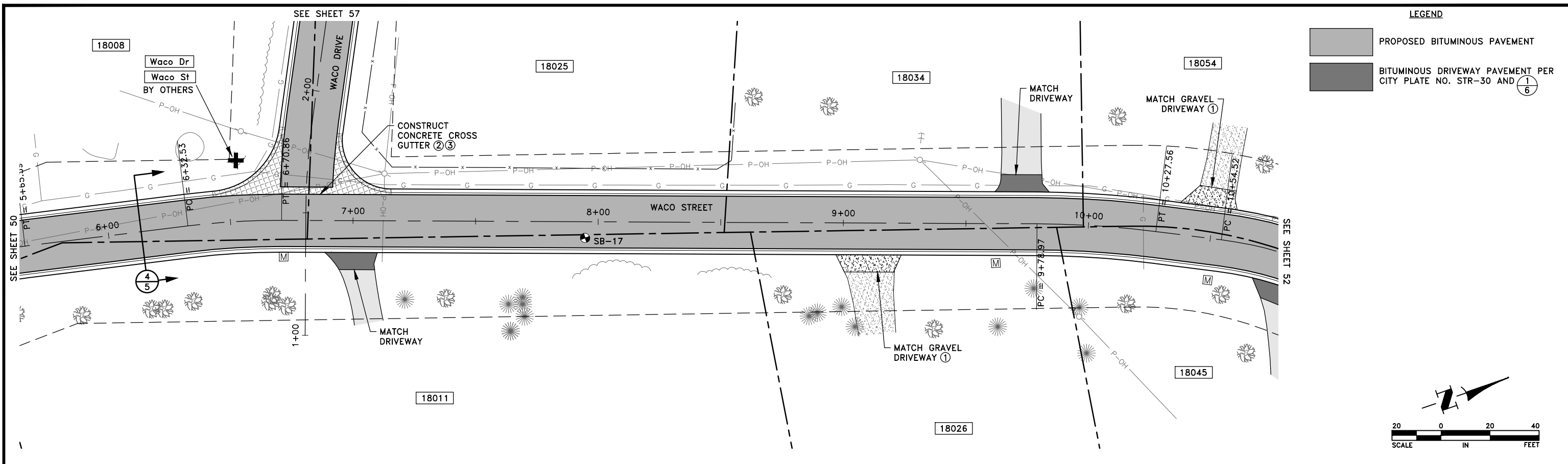


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

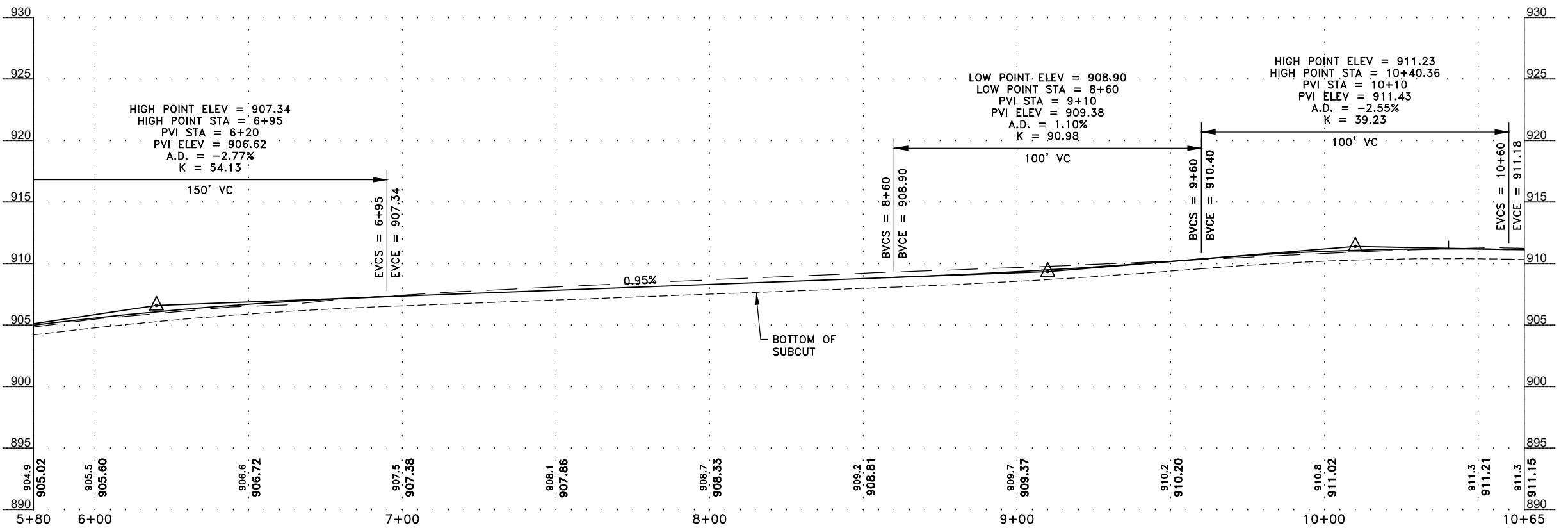
CONSTRUCTION PLAN  
WACO STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 50 OF 82 SHEETS  
RA3189



**LEGEND**

- PROPOSED BITUMINOUS PAVEMENT
- BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-30 AND  $\frac{1}{6}$



- GENERAL NOTES:**
1. SEE SHEET 63 FOR THE INTERSECTION STAKING PLANS.
  2. CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER  $\frac{8}{6}$ .
- REFERENCE NOTES:**
- ① MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.
  - ② CONCRETE CROSS GUTTER SHALL BE PER CITY PLATE NO. STR-2. CONTRACTOR SHALL CONSTRUCT THE TWO CROSS GUTTERS AT WACO STREET AND WACO DRIVE (STA 6+75 AND STA 14+00) A MINIMUM OF SEVEN DAYS APART TO ALLOW RESIDENTS ACCESS TO THEIR PROPERTY. CONTRACTOR SHALL PROTECT THE CONCRETE WITH BARRICADES AND FLASHERS AS NECESSARY FOR A MINIMUM OF SEVEN DAYS PRIOR TO ALLOWING TRAFFIC ON THE NEW CONCRETE.
  - ③ HATCHED AREA SHALL BE PAID PER ITEM 2531-7" CONCRETE VALLEY GUTTER.

Apr 22, 2024 - 2:46pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_WACO STREET.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

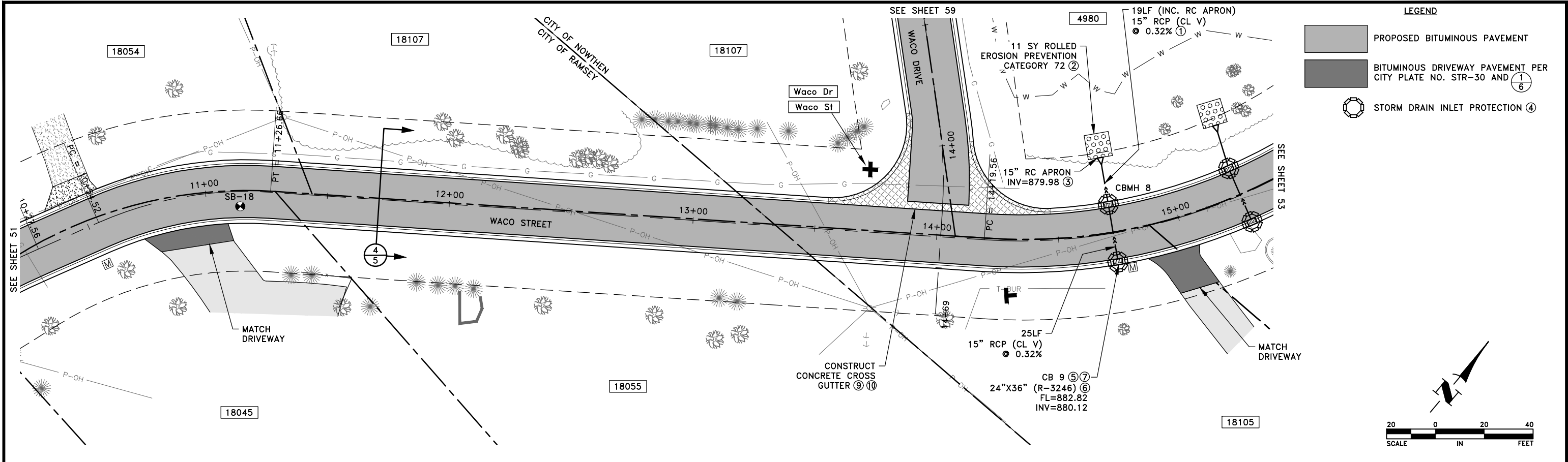


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

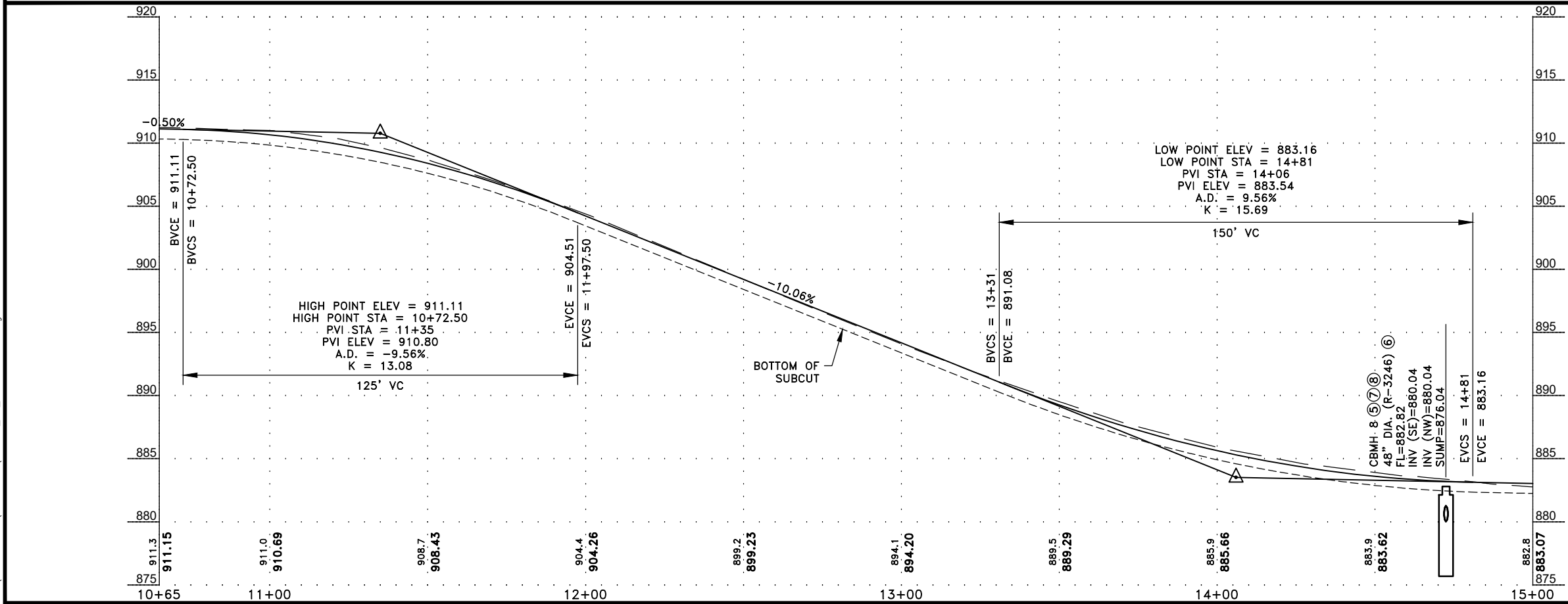
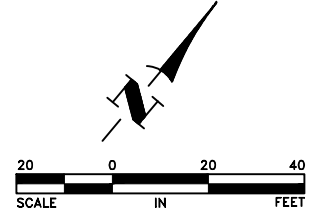
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
**WACO STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 51 OF 82 SHEETS  
 RA3189



- LEGEND**
- PROPOSED BITUMINOUS PAVEMENT
  - BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-30 AND 1/6
  - STORM DRAIN INLET PROTECTION ④



- GENERAL NOTES:**
1. SEE SHEET 63 FOR THE INTERSECTION STAKING PLAN.
  2. CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER 8/6.
- REFERENCE NOTES:**
- ① TIE ALL PIPE JOINTS PER MN/DOT STANDARD PLATE 3145. THIS WORK SHALL BE INCIDENTAL.
  - ② ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.b.
  - ③ APRON SHALL INCLUDE A TRASH GUARD PER CITY PLATE NO. STO-8.
  - ④ STORM DRAIN INLET PROTECTION SHALL BE PER 5/6 AND 6/6 OR APPROVED EQUAL.
  - ⑤ STRUCTURE SHALL BE PER CITY PLATE NO. STO-1.
  - ⑥ CASTING SHALL BE PER CITY PLATE NO. STO-4.
  - ⑦ TRANSITION CURB AT CATCH BASIN PER CITY PLATE NO. STR-27.
  - ⑧ MANHOLE COVER SHALL BE PLACED PER CITY PLATE NO. STO-5.
  - ⑨ CONCRETE CROSS GUTTER SHALL BE PER CITY PLATE NO. STR-2. CONTRACTOR SHALL CONSTRUCT THE TWO CROSS GUTTERS AT WACO STREET AND WACO DRIVE (STA 6+75 AND STA 14+00) A MINIMUM OF SEVEN DAYS APART TO ALLOW RESIDENTS ACCESS TO THEIR PROPERTY. CONTRACTOR SHALL PROTECT THE CONCRETE WITH BARRICADES AND FLASHERS AS NECESSARY FOR A MINIMUM OF SEVEN DAYS PRIOR TO ALLOWING TRAFFIC ON THE NEW CONCRETE.
  - ⑩ HATCHED AREA SHALL BE PAID PER ITEM 2531-7" CONCRETE VALLEY GUTTER.

Apr 22, 2024 - 2:46pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_WACO STREET.dwg

DATE	REVISION

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.

SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

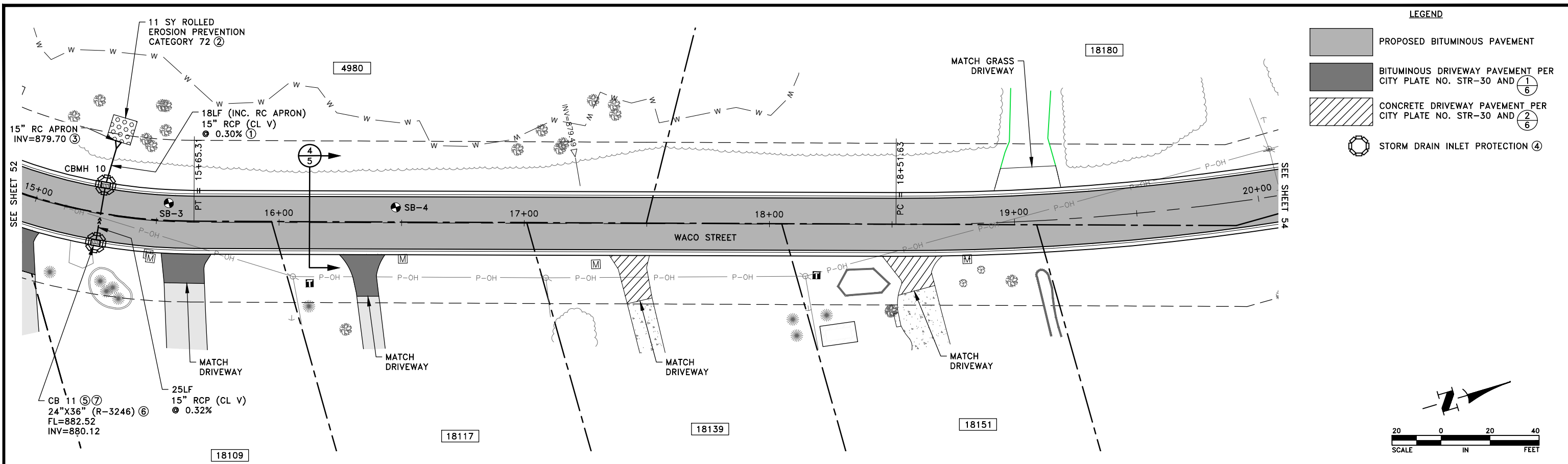


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

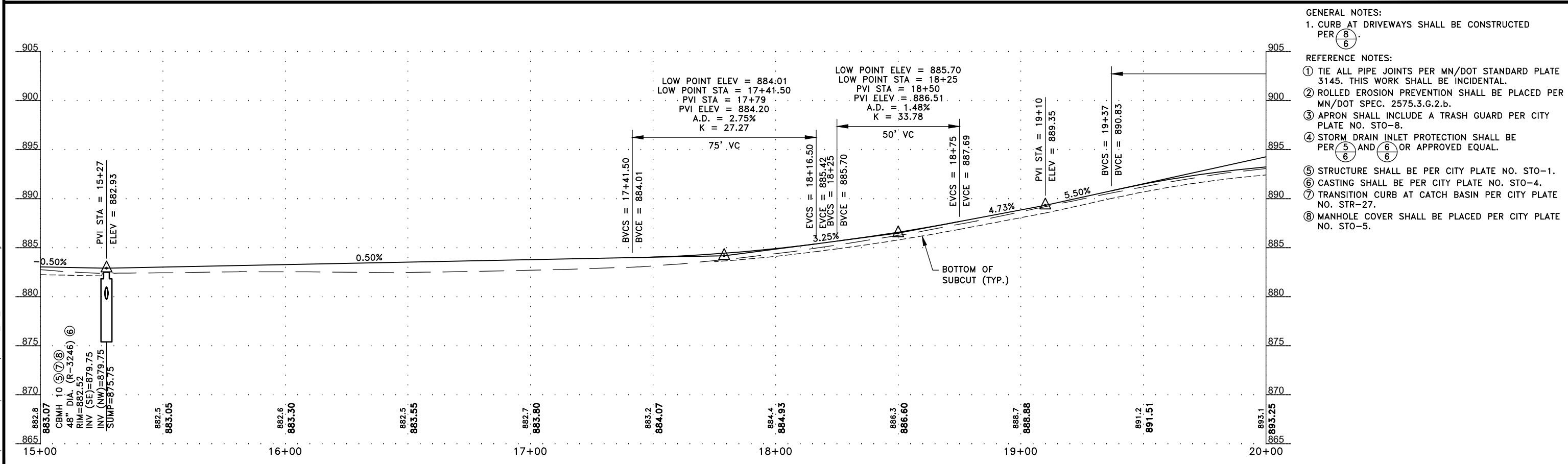
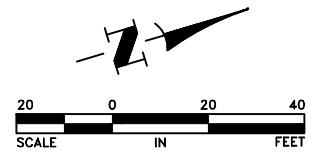
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
 WACO STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 52 OF 82 SHEETS  
 RA3189



- LEGEND**
- PROPOSED BITUMINOUS PAVEMENT
  - BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-30 AND (1/6)
  - CONCRETE DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-30 AND (2/6)
  - STORM DRAIN INLET PROTECTION (4)



- GENERAL NOTES:**
1. CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER (8/6).
- REFERENCE NOTES:**
- (1) TIE ALL PIPE JOINTS PER MN/DOT STANDARD PLATE 3145. THIS WORK SHALL BE INCIDENTAL.
  - (2) ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.b.
  - (3) APRON SHALL INCLUDE A TRASH GUARD PER CITY PLATE NO. STO-8.
  - (4) STORM DRAIN INLET PROTECTION SHALL BE PER (5/6) AND (6/6) OR APPROVED EQUAL.
  - (5) STRUCTURE SHALL BE PER CITY PLATE NO. STO-1.
  - (6) CASTING SHALL BE PER CITY PLATE NO. STO-4.
  - (7) TRANSITION CURB AT CATCH BASIN PER CITY PLATE NO. STR-27.
  - (8) MANHOLE COVER SHALL BE PLACED PER CITY PLATE NO. STO-5.

Apr 22, 2024 - 2:46pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_WACO STREET.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

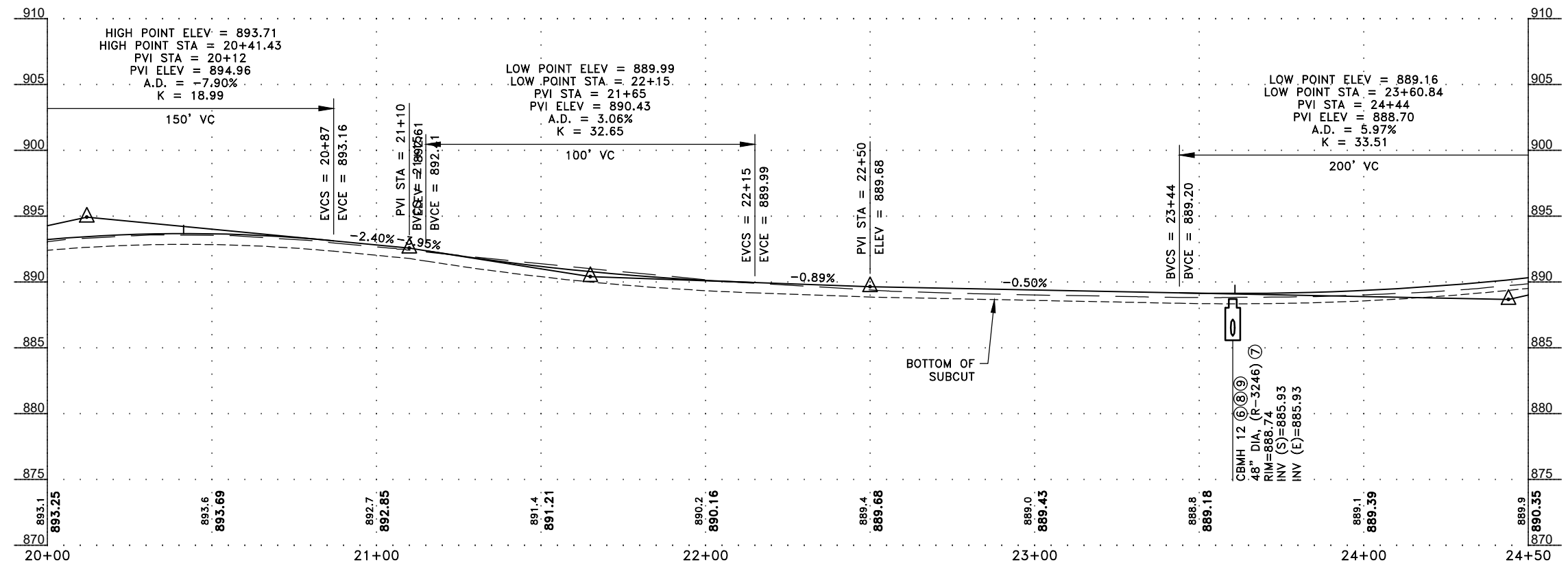
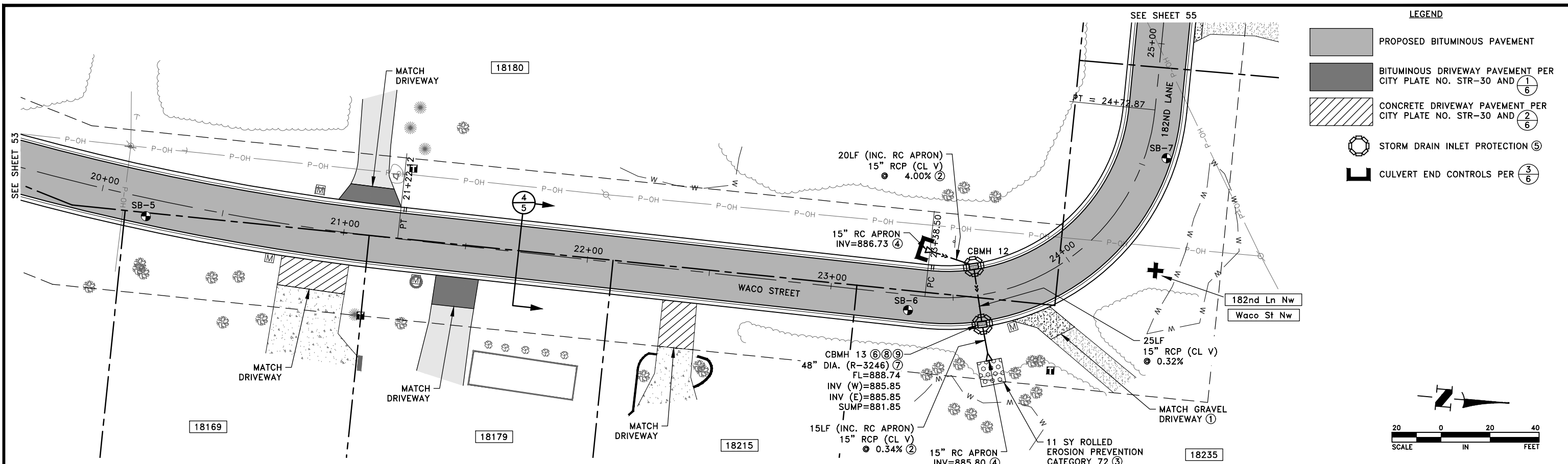


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
**WACO STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET **53** OF **82**  
 SHEETS  
 RA3189



- GENERAL NOTES:**
- CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER ⑧/⑥.
- REFERENCE NOTES:**
- MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.
  - TIE ALL PIPE JOINTS PER MN/DOT STANDARD PLATE 3145. THIS WORK SHALL BE INCIDENTAL.
  - ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.b.
  - APRON SHALL INCLUDE A TRASH GUARD PER CITY PLATE NO. STO-8.
  - STORM DRAIN INLET PROTECTION SHALL BE PER ⑤ AND ⑥ OR APPROVED EQUAL.
  - STRUCTURE SHALL BE PER CITY PLATE NO. STO-1.
  - CASTING SHALL BE PER CITY PLATE NO. STO-4.
  - TRANSITION CURB AT CATCH BASIN PER CITY PLATE NO. STR-27.
  - MANHOLE COVER SHALL BE PLACED PER CITY PLATE NO. STO-5.

Apr 22, 2024 - 2:46pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_WACO STREET.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

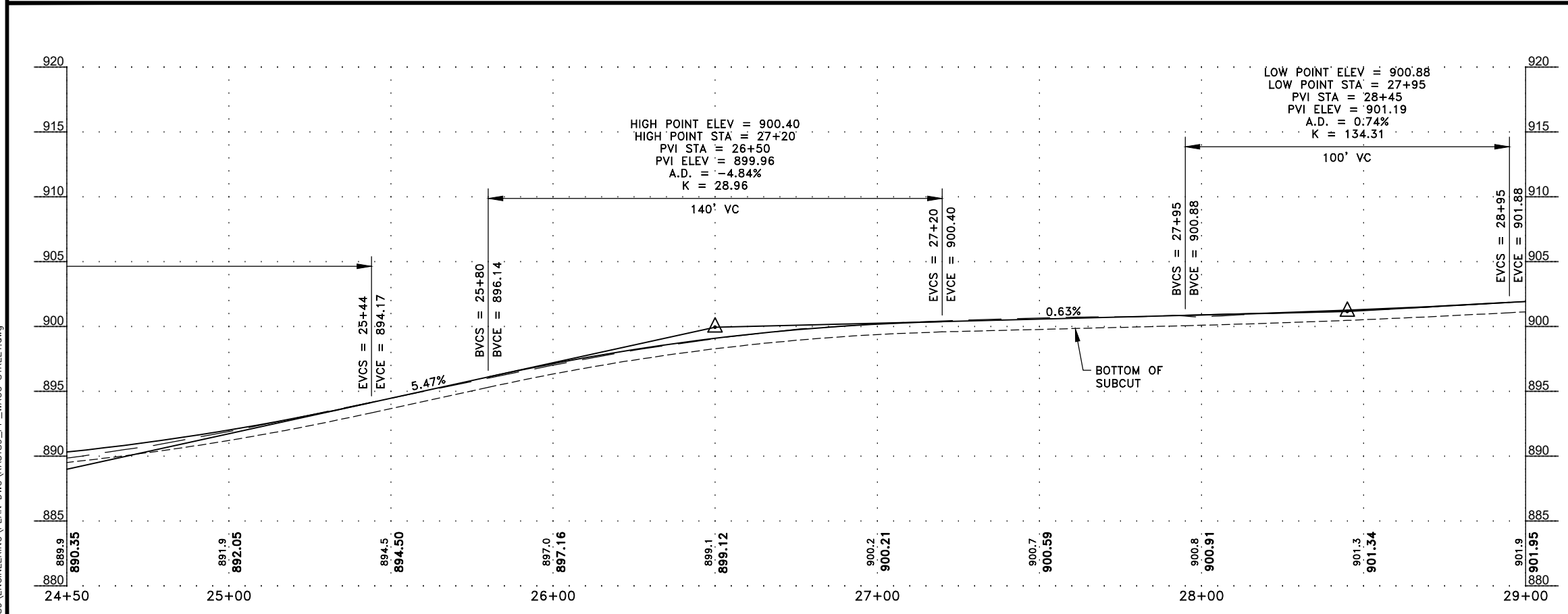
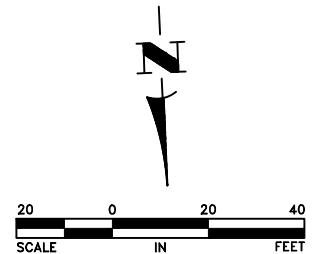
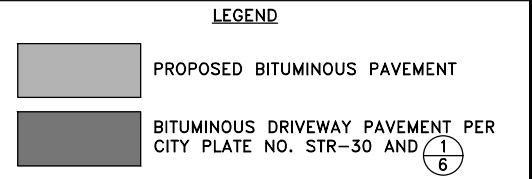
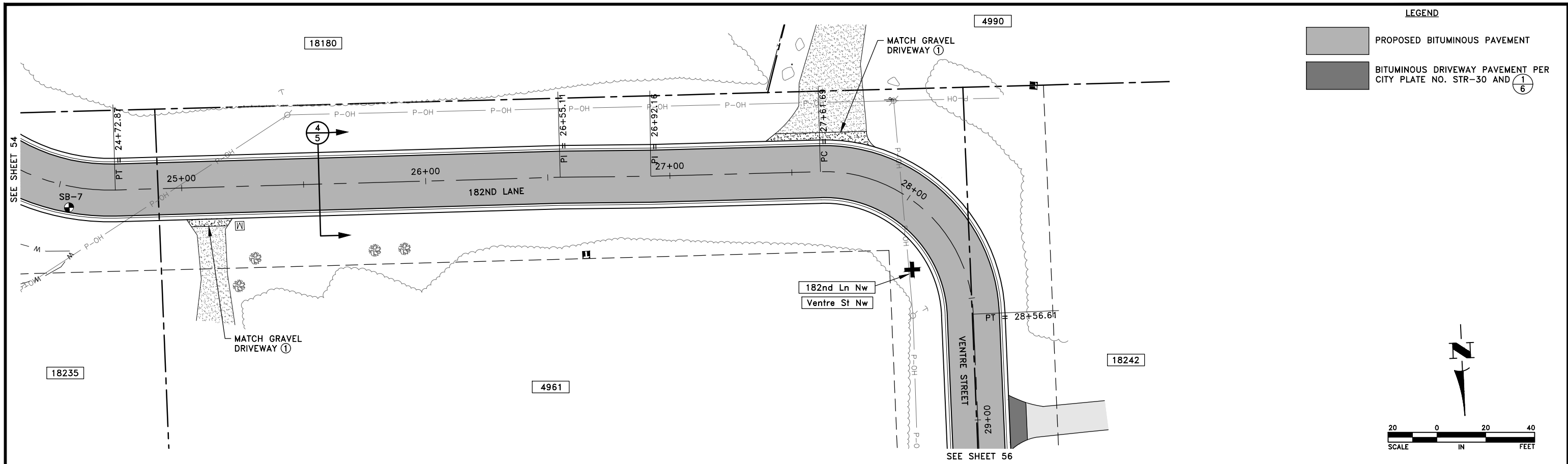


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
**WACO STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET **54** OF **82**  
 SHEETS  
 RA3189



- GENERAL NOTES:**
- CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER 8/6.
- REFERENCE NOTES:**
- MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118—AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.

Apr 22, 2024 - 2:46pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_WACO STREET.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

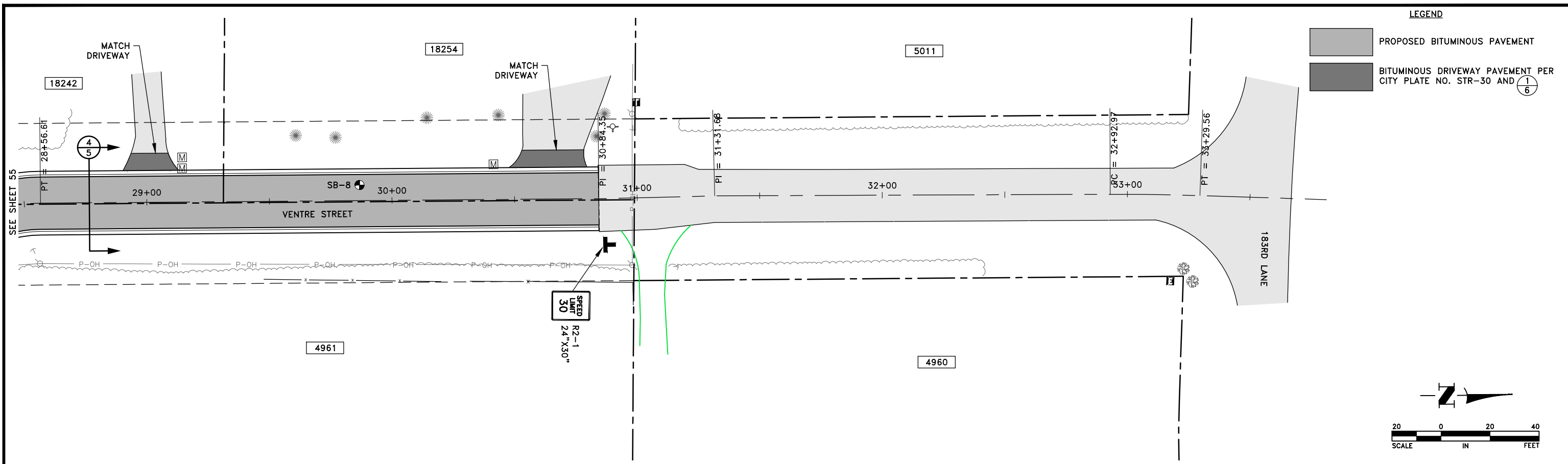


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
 182ND LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

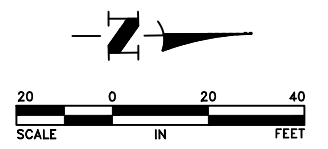
SHEET 55 OF 82 SHEETS  
 RA3189



**LEGEND**

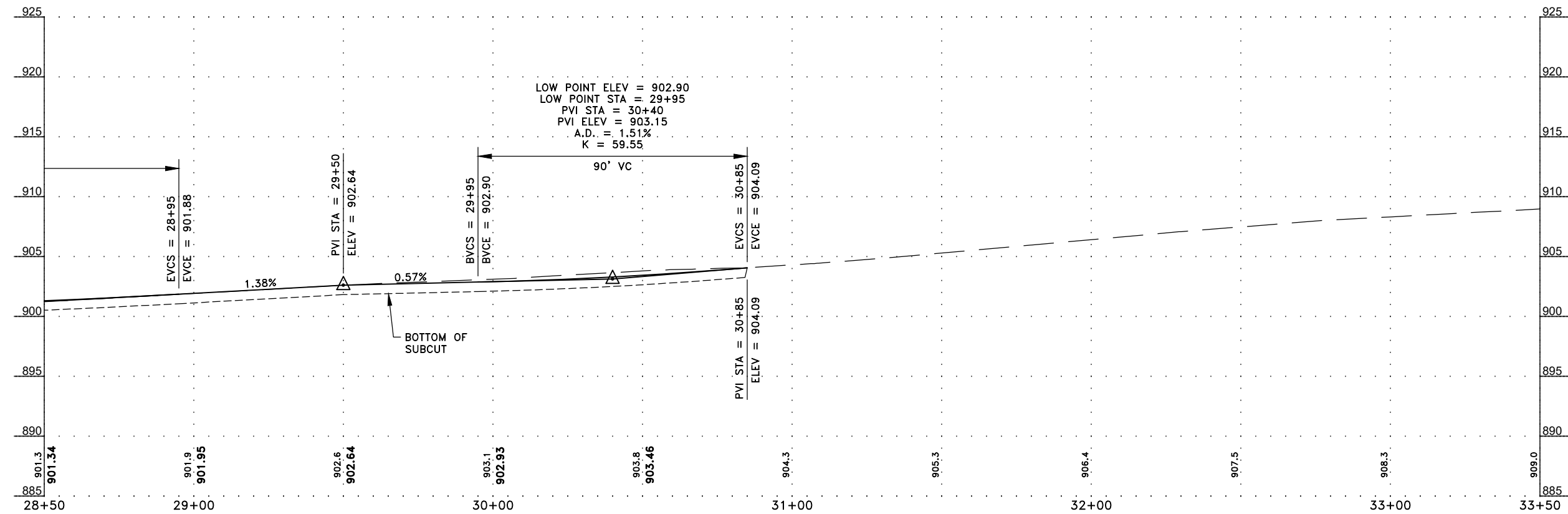
PROPOSED BITUMINOUS PAVEMENT

BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-30 AND  $\frac{1}{6}$



**GENERAL NOTES:**

1. CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER  $\frac{8}{6}$ .



Apr 22, 2024 - 2:46pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_WACO STREET.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

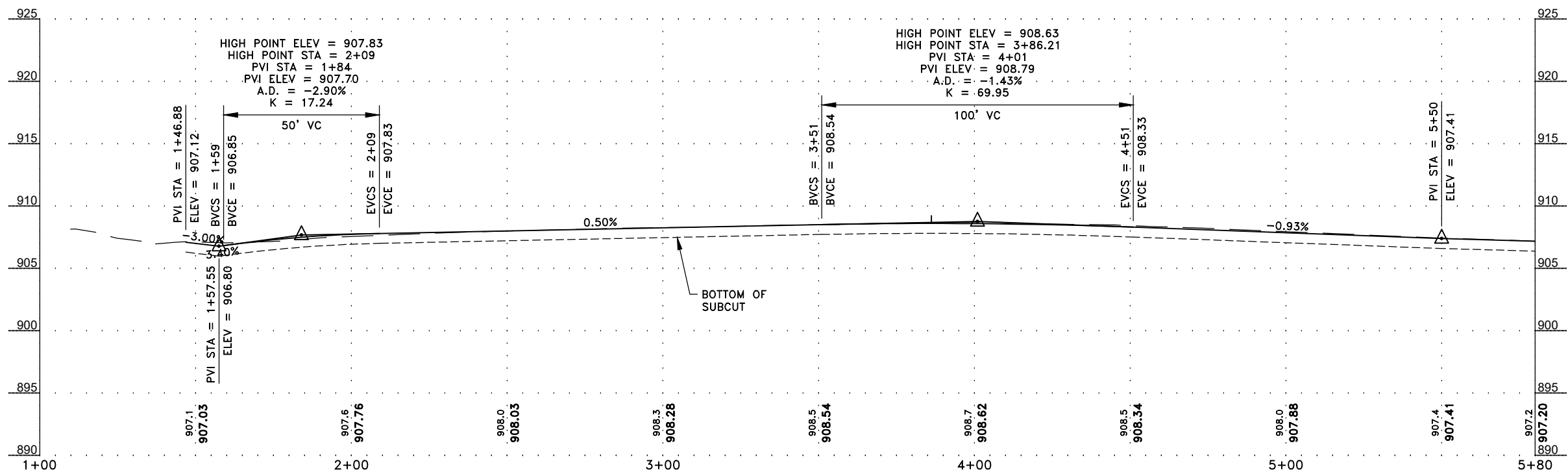
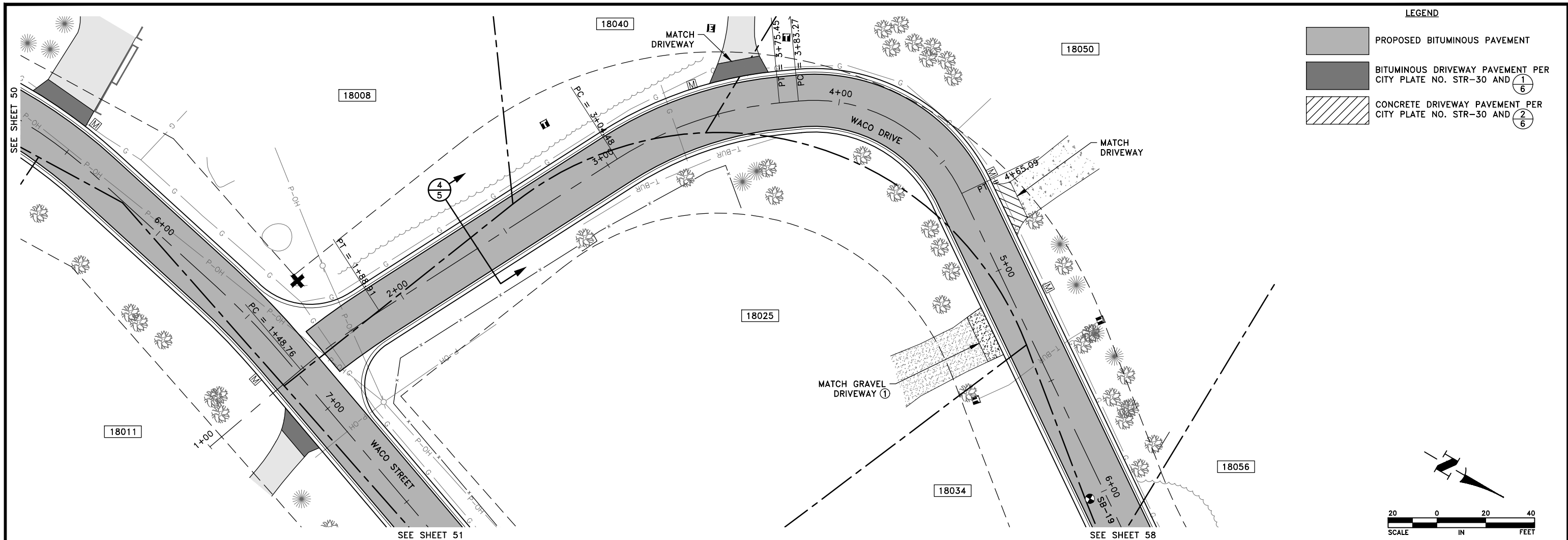


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
**VENTRE STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET **56** OF **82**  
 SHEETS  
 RA3189



**GENERAL NOTES:**

- SEE SHEET 63 FOR THE INTERSECTION STAKING PLAN.
- CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER ⑧/6.

**REFERENCE NOTES:**

① MATCH GRAVEL DRIVEWAY WITH EXISTING SURFACE MATERIAL. THIS WORK SHALL BE PAID PER ITEM 2118-AGGREGATE SURFACING SPECIAL. SEE CITY CITY PLATE NO. STR-33 FOR ADDITIONAL DRIVEWAY DETAILS.

Apr 22, 2024 - 2:46pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_WACO DRIVE.dwg

DATE	REVISION

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.

SHANE M. NELSON, P.E.  
Lic. No. 43381  
Date 4/22/24

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

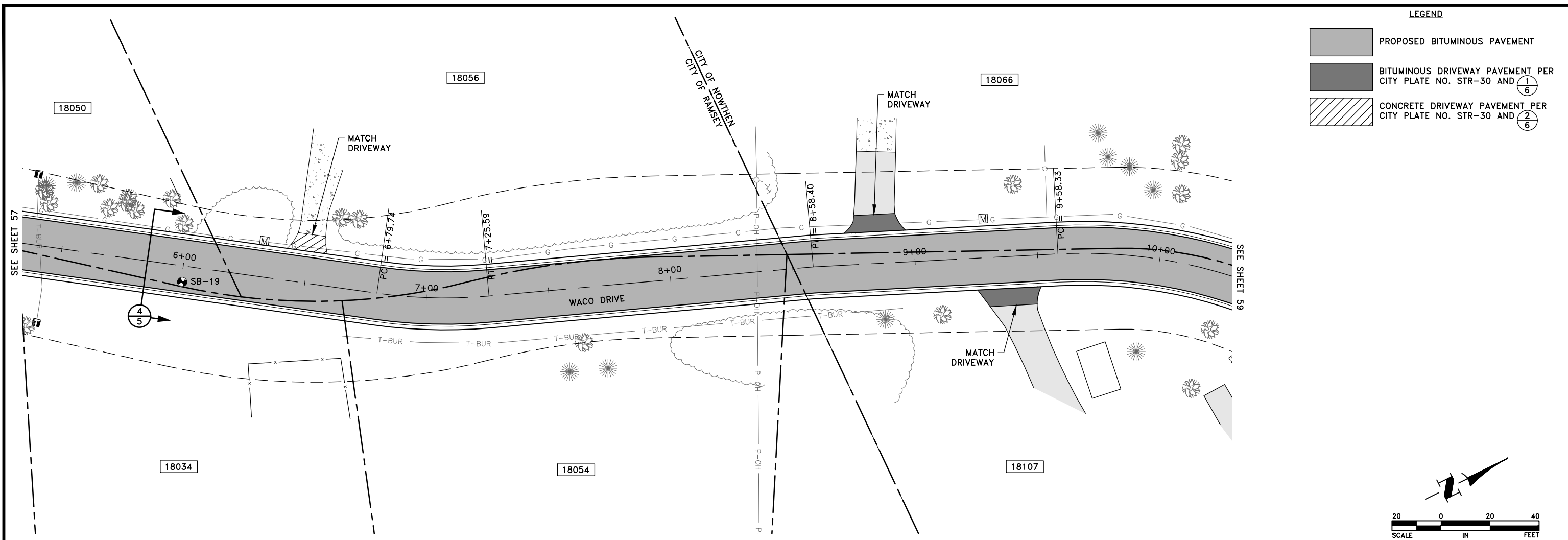


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET RECONSTRUCTION PROJECT**

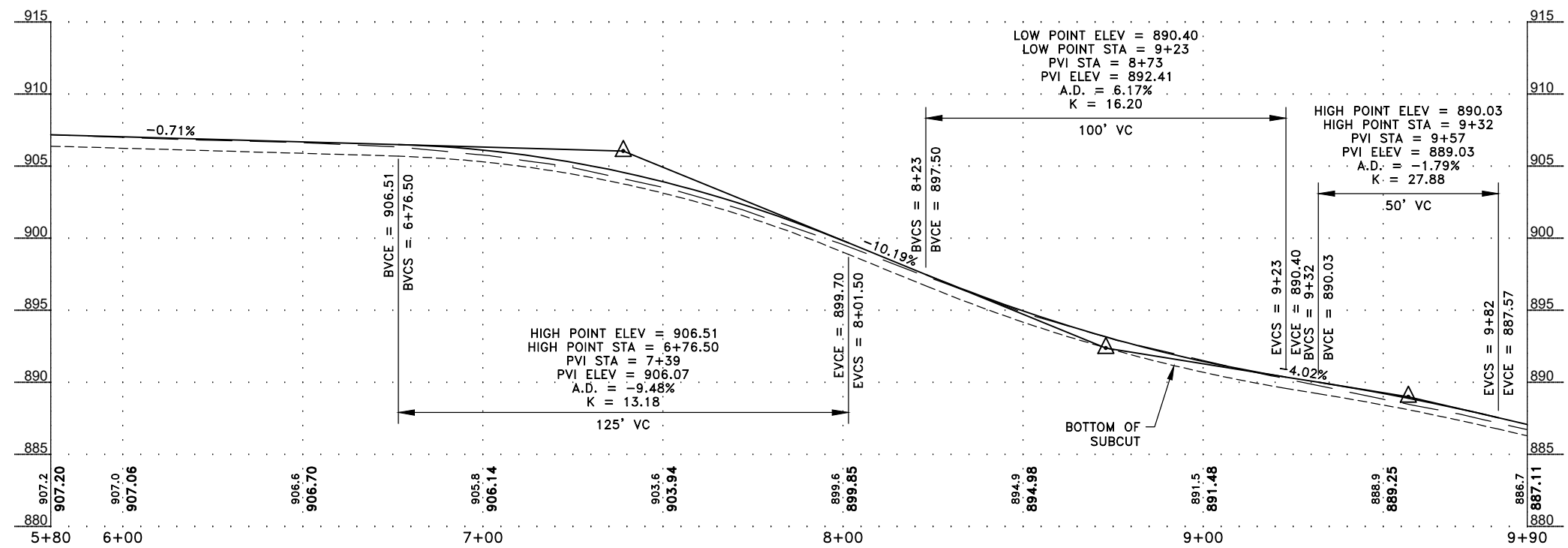
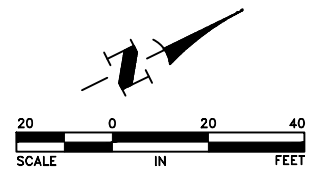
**CONSTRUCTION PLAN**  
WACO DRIVE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 57 OF 82 SHEETS  
RA3189



**LEGEND**

[Solid Grey Box]	PROPOSED BITUMINOUS PAVEMENT
[Dark Grey Box]	BITUMINOUS DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-30 AND (1/6)
[Hatched Box]	CONCRETE DRIVEWAY PAVEMENT PER CITY PLATE NO. STR-30 AND (2/6)



GENERAL NOTES:  
 1. CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER (8/6).

Apr 22, 2024 - 2:46pm  
 K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_WACO\_DRIVE.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

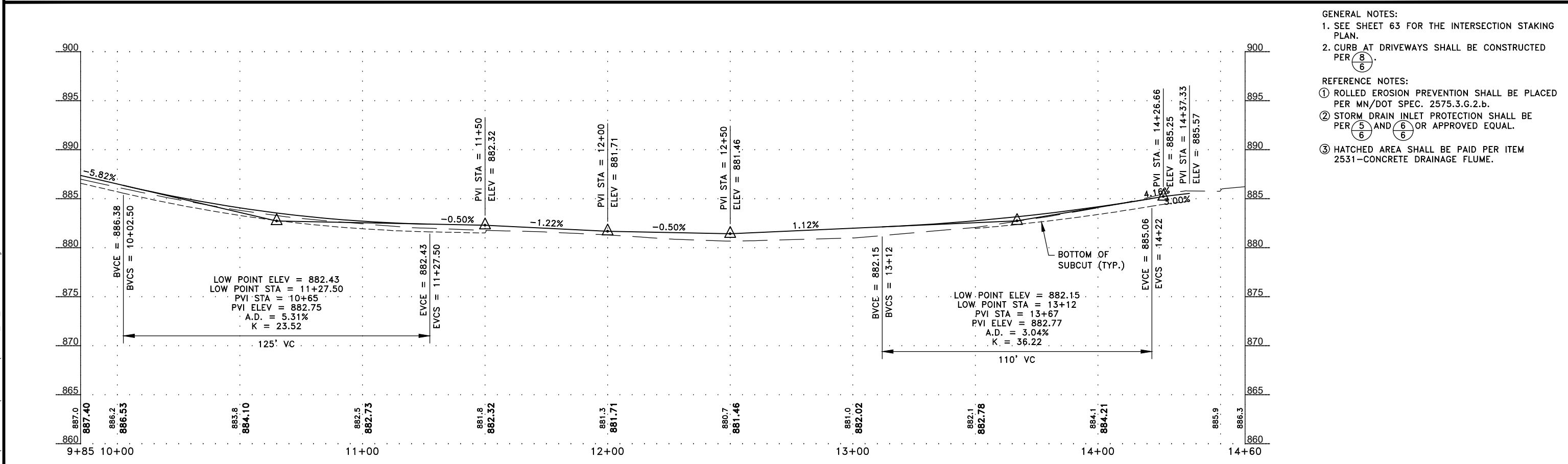
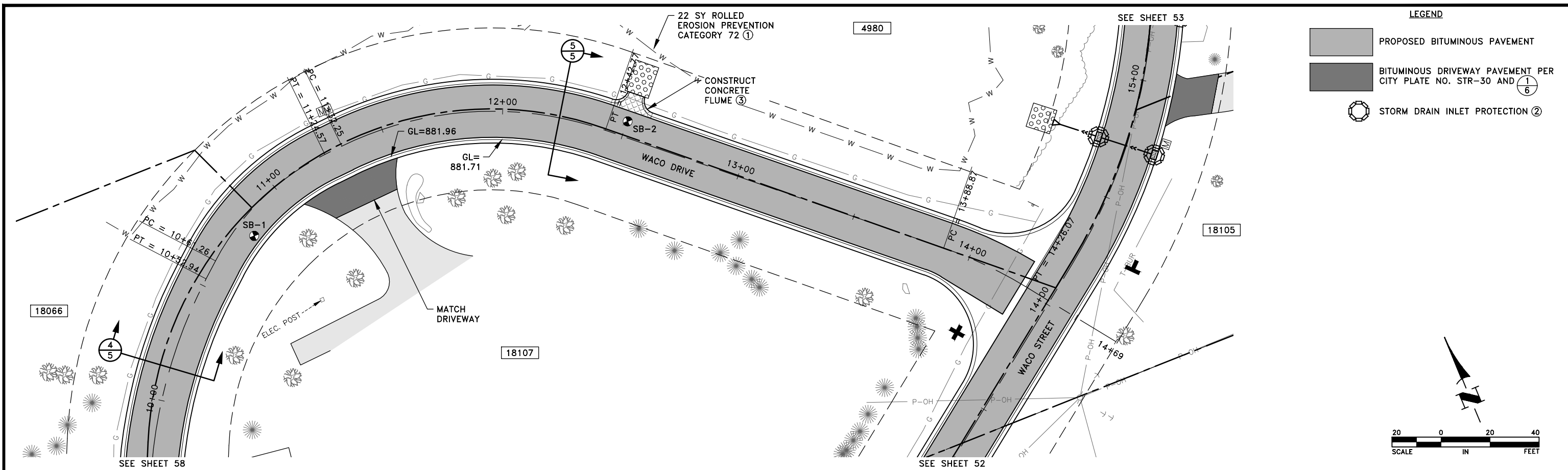


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
 WACO DRIVE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 58 OF 82 SHEETS  
 RA3189



- GENERAL NOTES:**
- SEE SHEET 63 FOR THE INTERSECTION STAKING PLAN.
  - CURB AT DRIVEWAYS SHALL BE CONSTRUCTED PER  $\frac{8}{6}$ .
- REFERENCE NOTES:**
- ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.2.b.
  - STORM DRAIN INLET PROTECTION SHALL BE PER  $\frac{5}{6}$  AND  $\frac{6}{6}$  OR APPROVED EQUAL.
  - HATCHED AREA SHALL BE PAID PER ITEM 2531-CONCRETE DRAINAGE FLUME.

Apr. 22, 2024 - 2:46pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_PP\_WACO DRIVE.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
DRAWN BY: TAE  
CHECKED BY: SMN

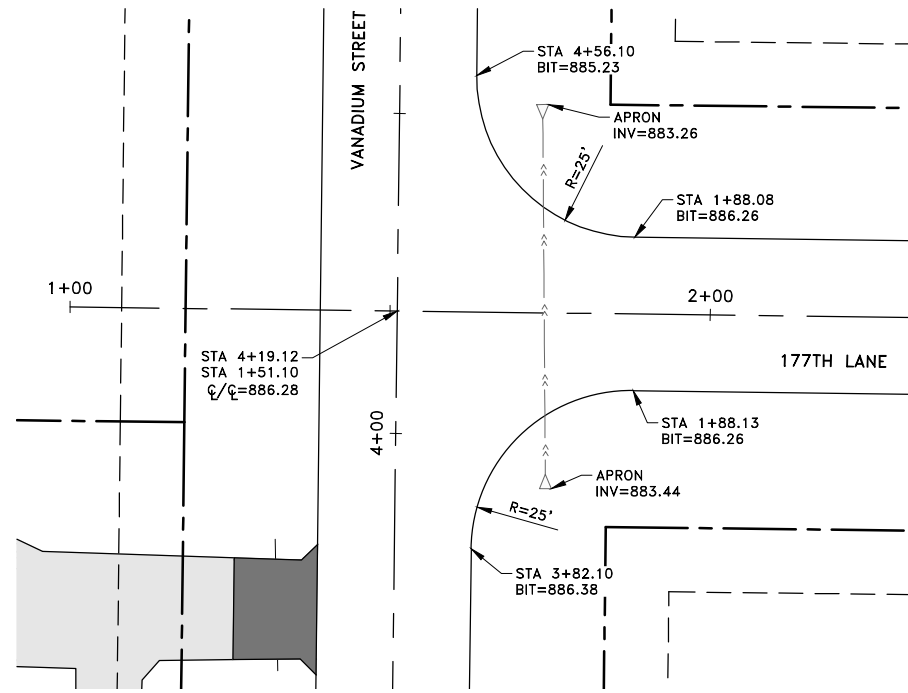


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

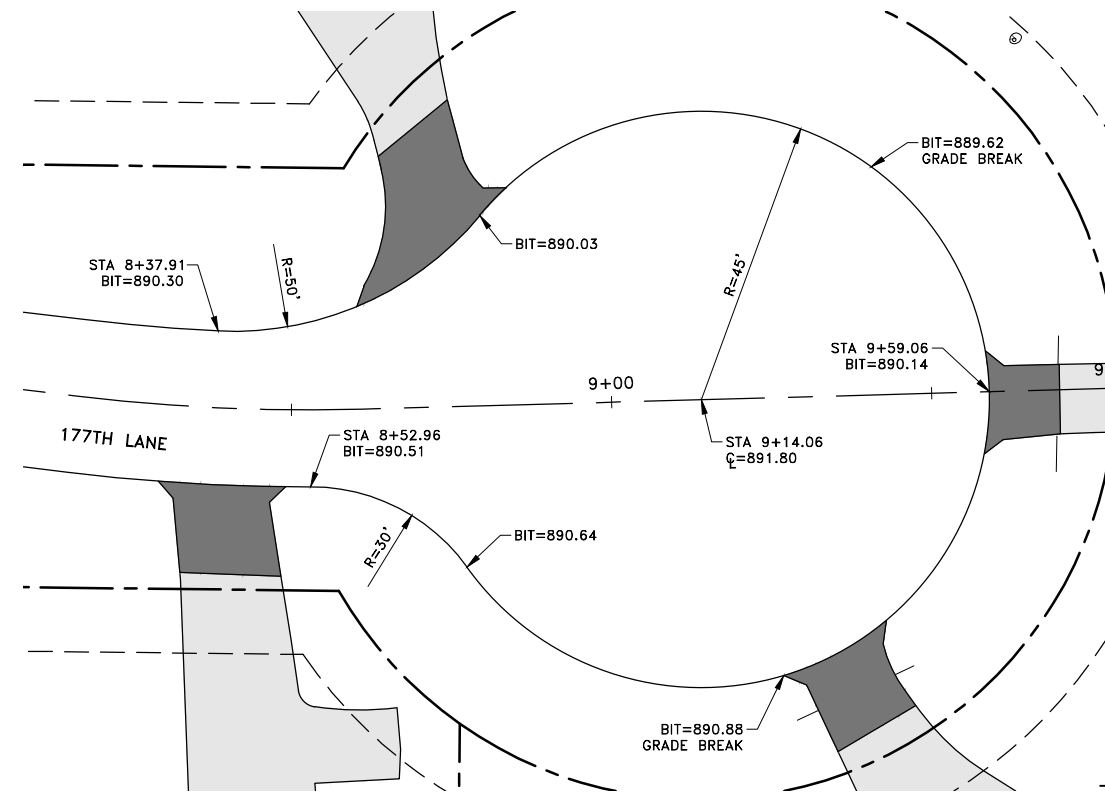
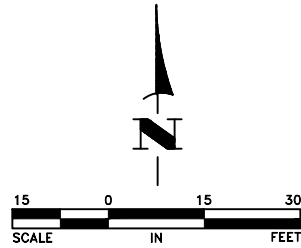
**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

**CONSTRUCTION PLAN**  
**WACO DRIVE**  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

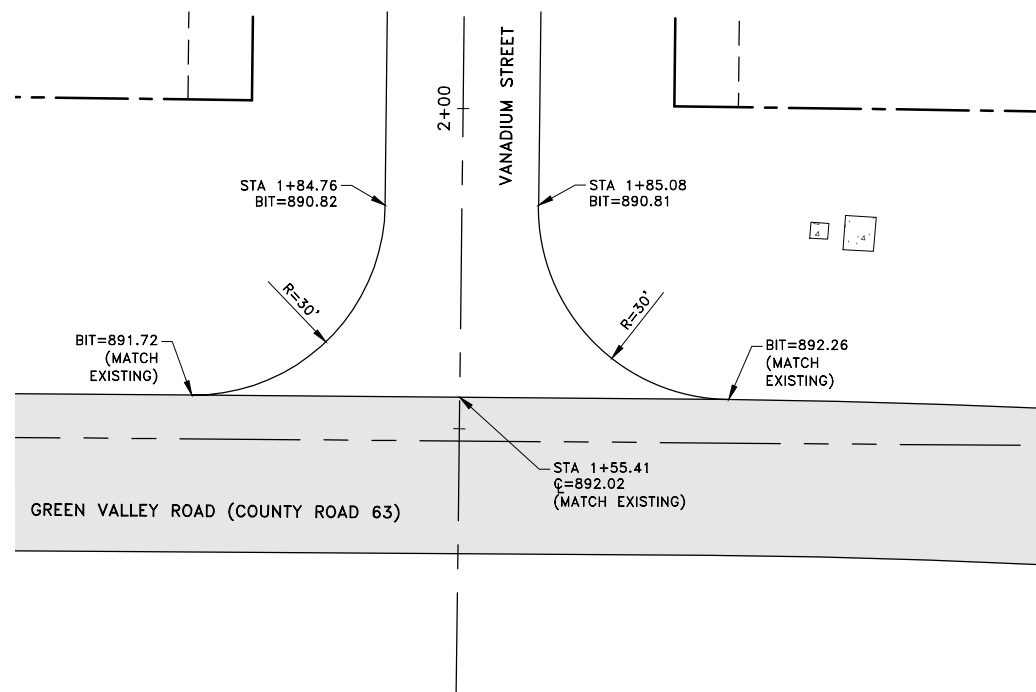
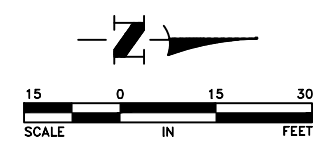
SHEET 59 OF 82 SHEETS  
RA3189



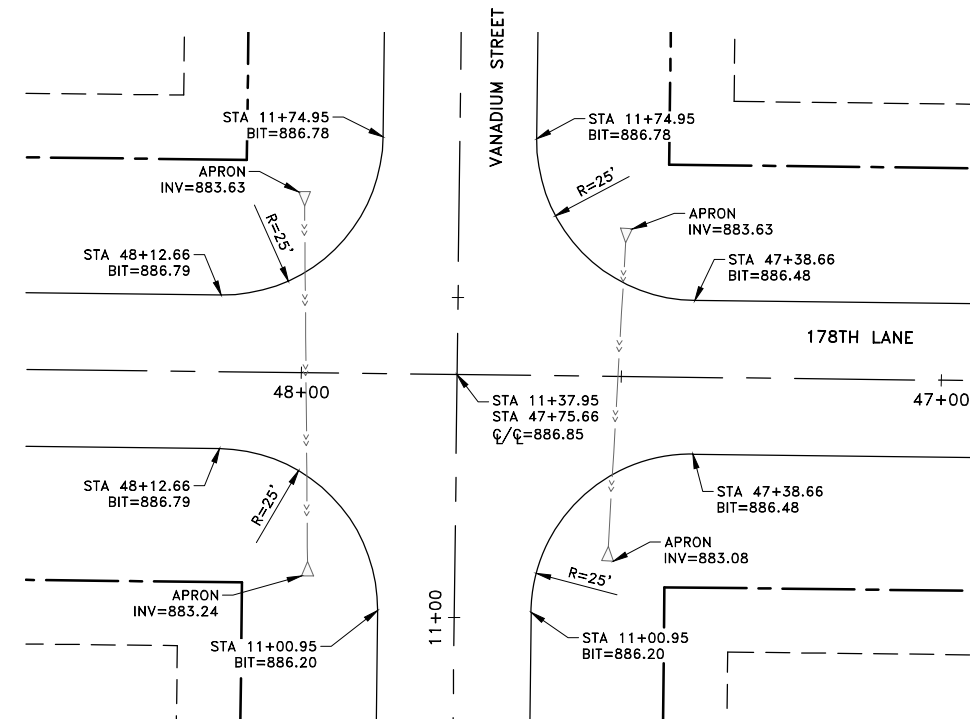
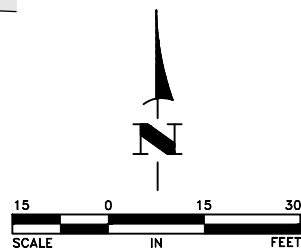
VANADIUM STREET/177TH LANE INTERSECTION



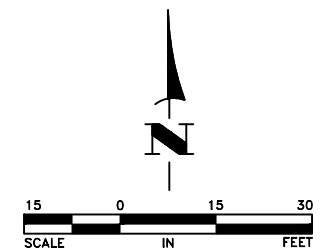
177TH LANE CUL-DE-SAC



GREEN VALLEY ROAD (COUNTY ROAD 63)/VANADIUM STREET INTERSECTION



VANADIUM STREET/178TH LANE INTERSECTION



Apr 22, 2024 - 2:47pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_STAKING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN



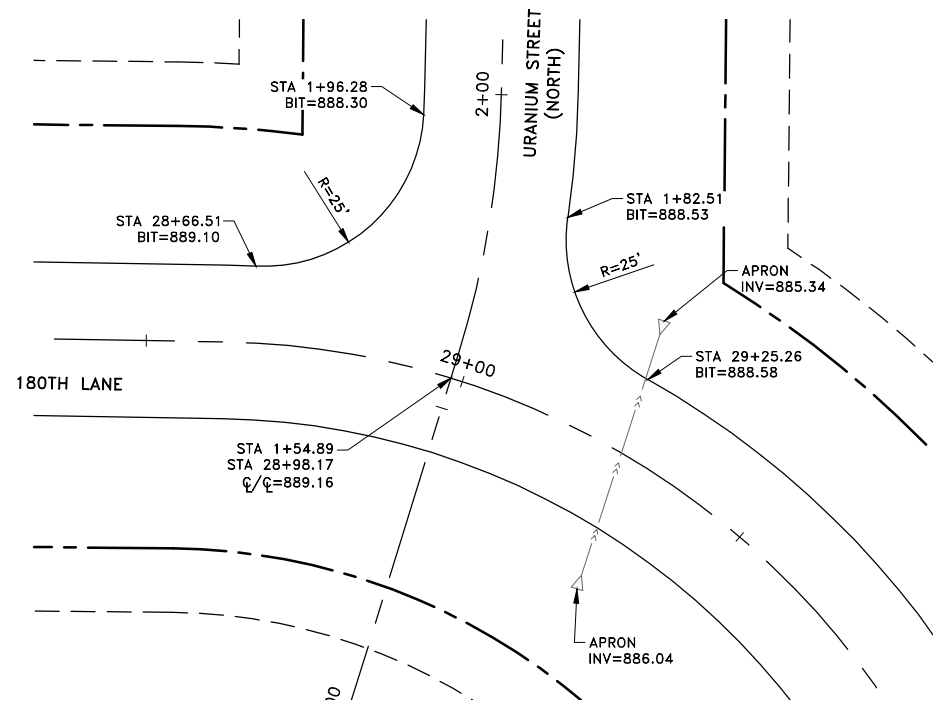
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

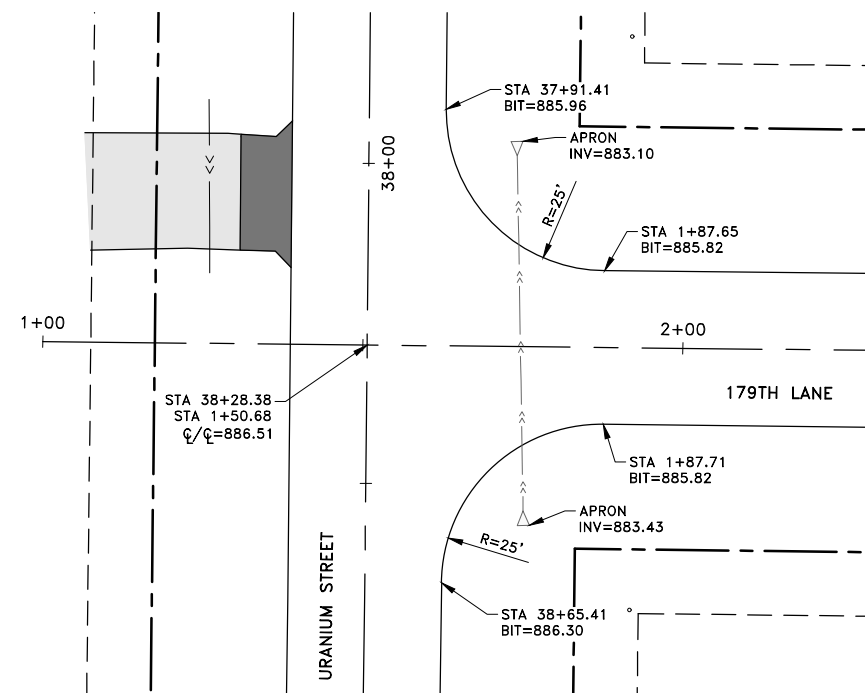
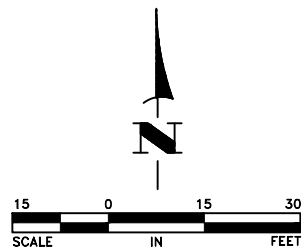
**STAKING PLAN**

**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

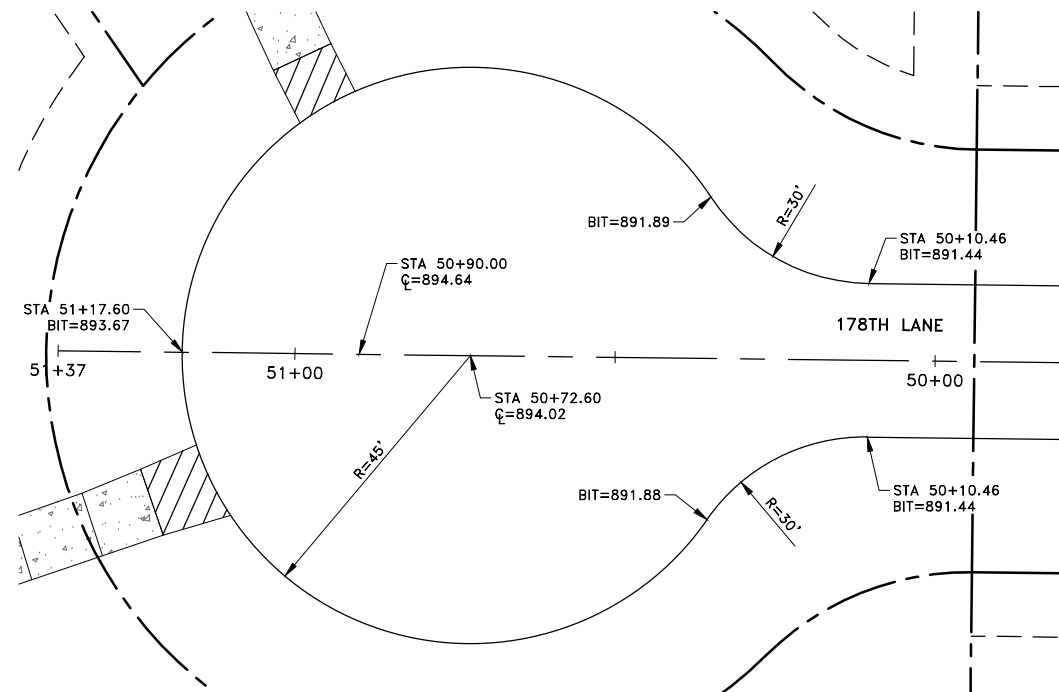
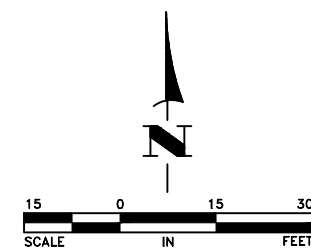
SHEET 60 OF 82 SHEETS  
 RA3189



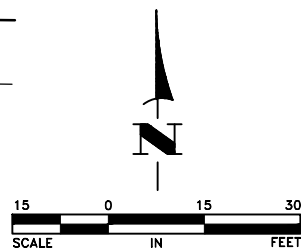
180TH LANE/URANIUM STREET (NORTH) INTERSECTION



URANIUM STREET/179TH LANE INTERSECTION



178TH LANE CUL-DE-SAC



Apr 22, 2024 - 2:47pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_STAKING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

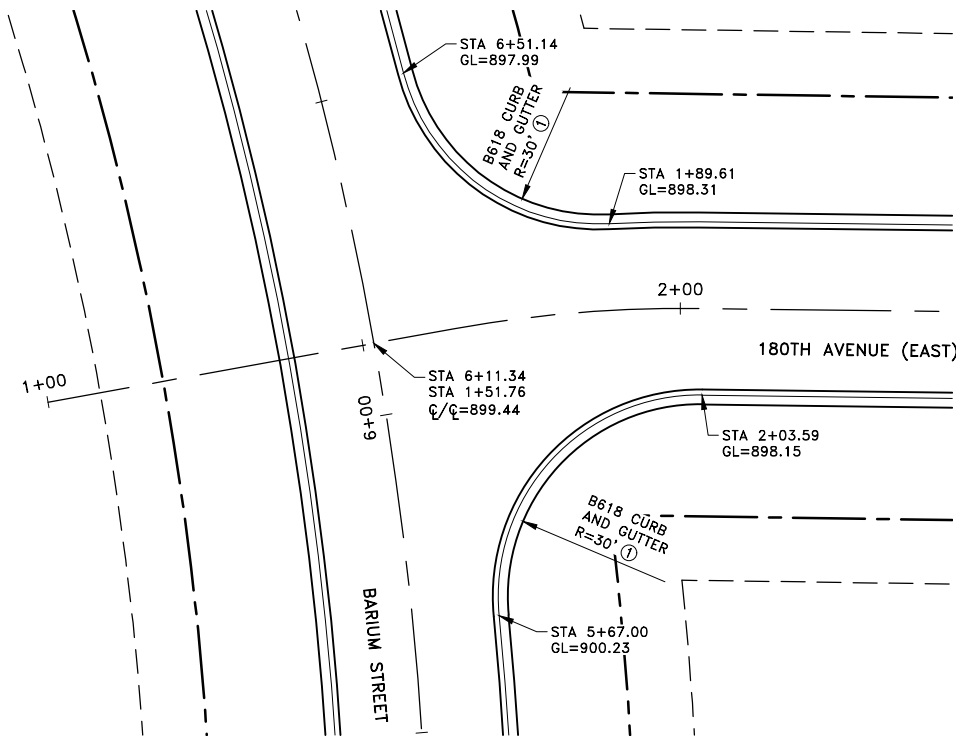


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

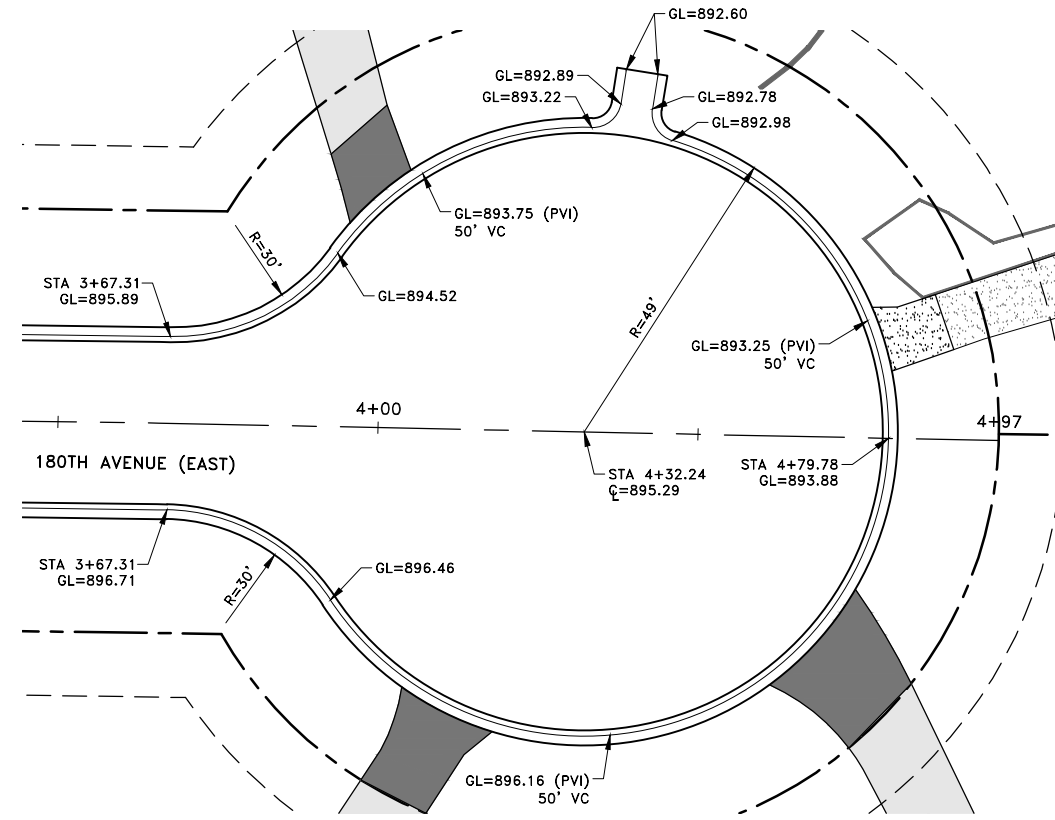
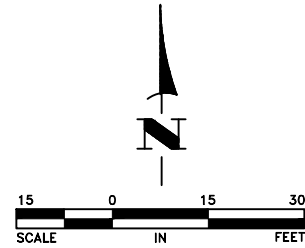
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**STAKING PLAN**  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

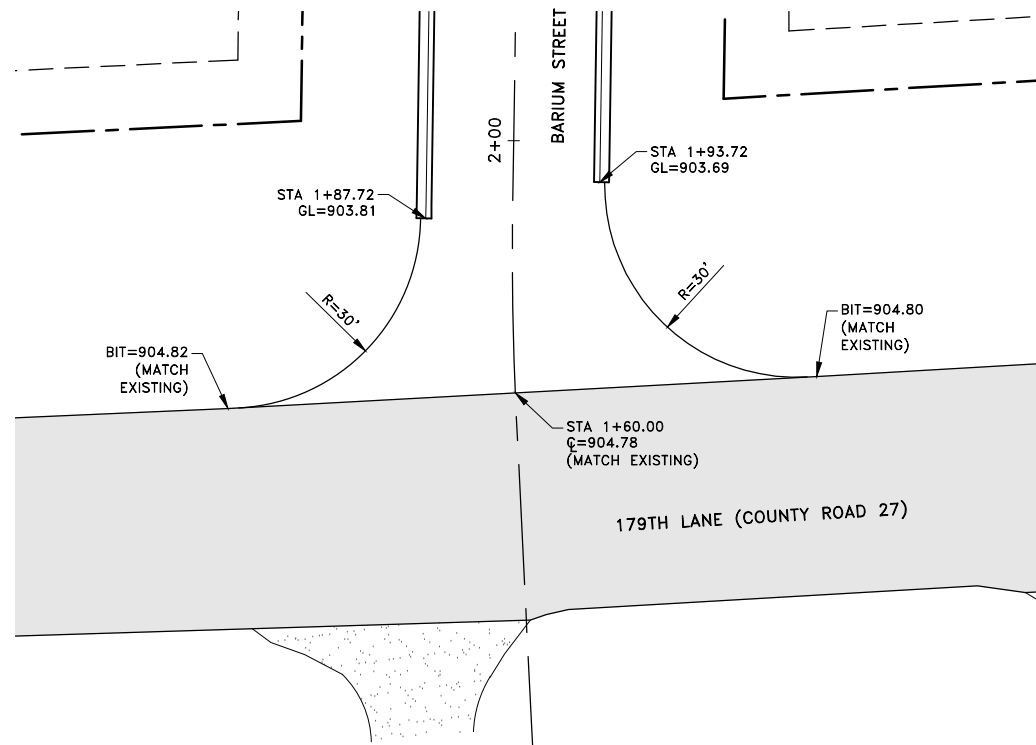
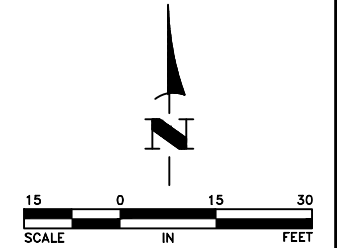
SHEET 61 OF 82 SHEETS  
 RA3189



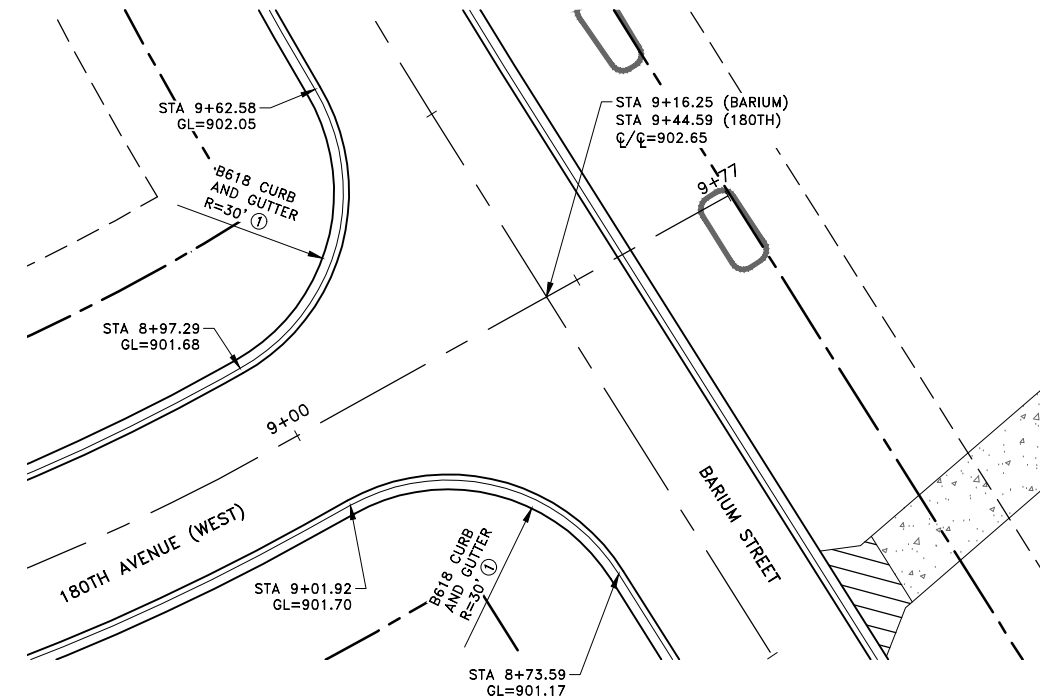
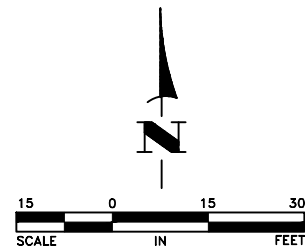
BARIUM STREET/180TH AVENUE (EAST) INTERSECTION



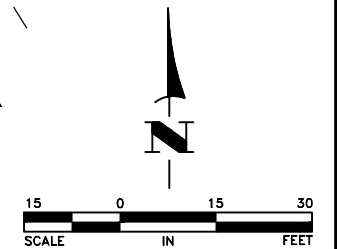
180TH AVENUE (EAST) CUL-DE-SAC



179TH LANE (COUNTY ROAD 27)/BARIUM STREET INTERSECTION



180TH AVENUE (WEST)/BARIUM STREET INTERSECTION



REFERENCE NOTES:  
 ① CONSTRUCT CURB AT RADIUS PER CITY PLATE NO. STR-27.

Apr 22, 2024 - 2:47pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_STAKING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN



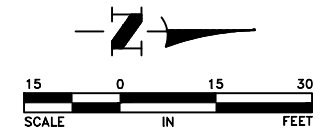
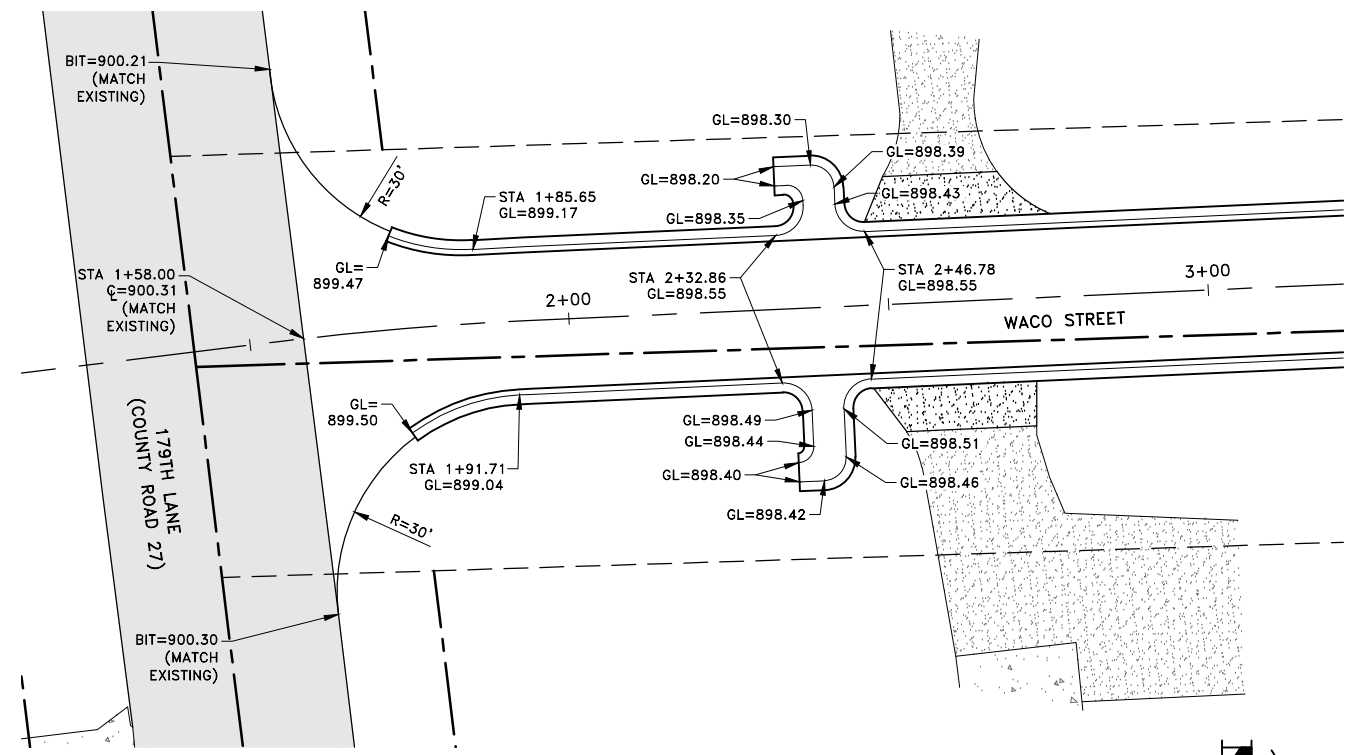
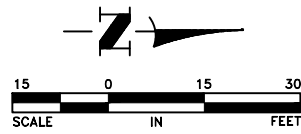
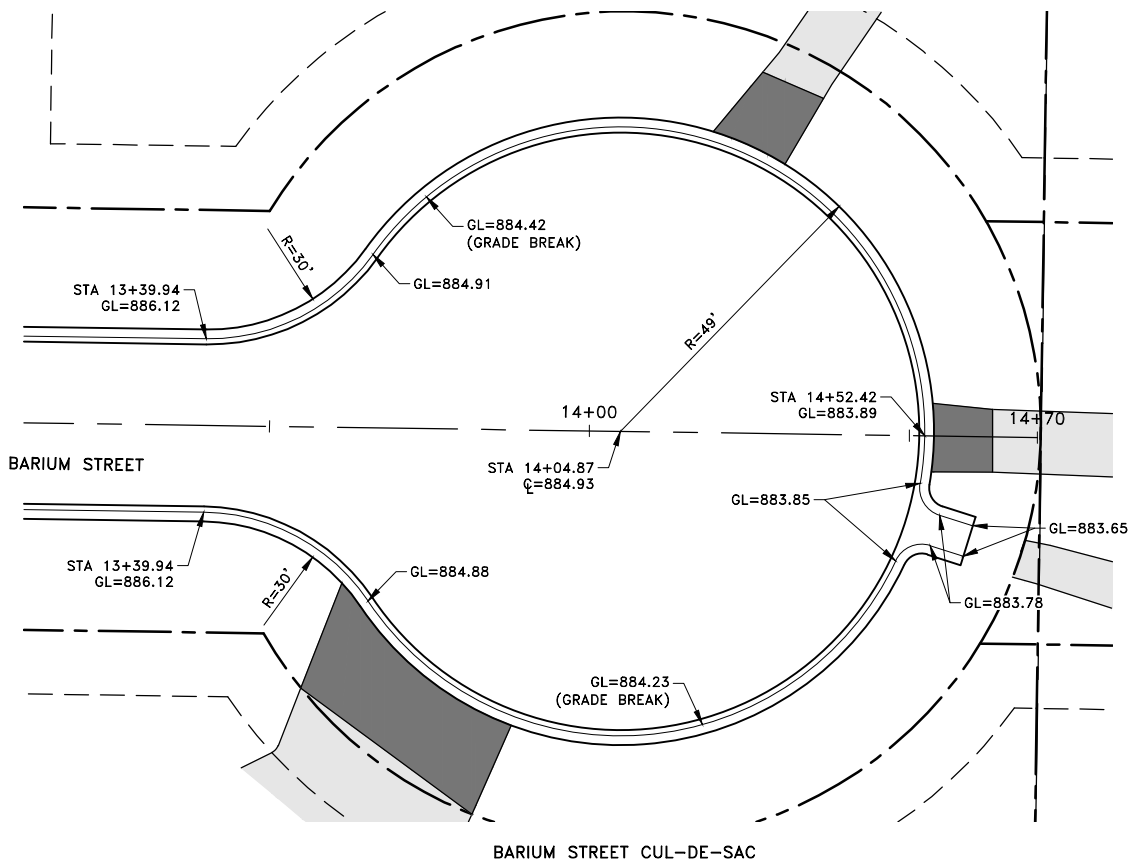
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT

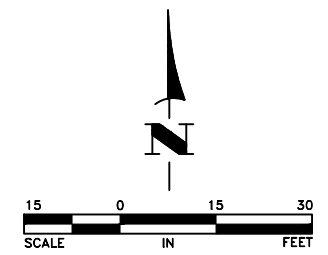
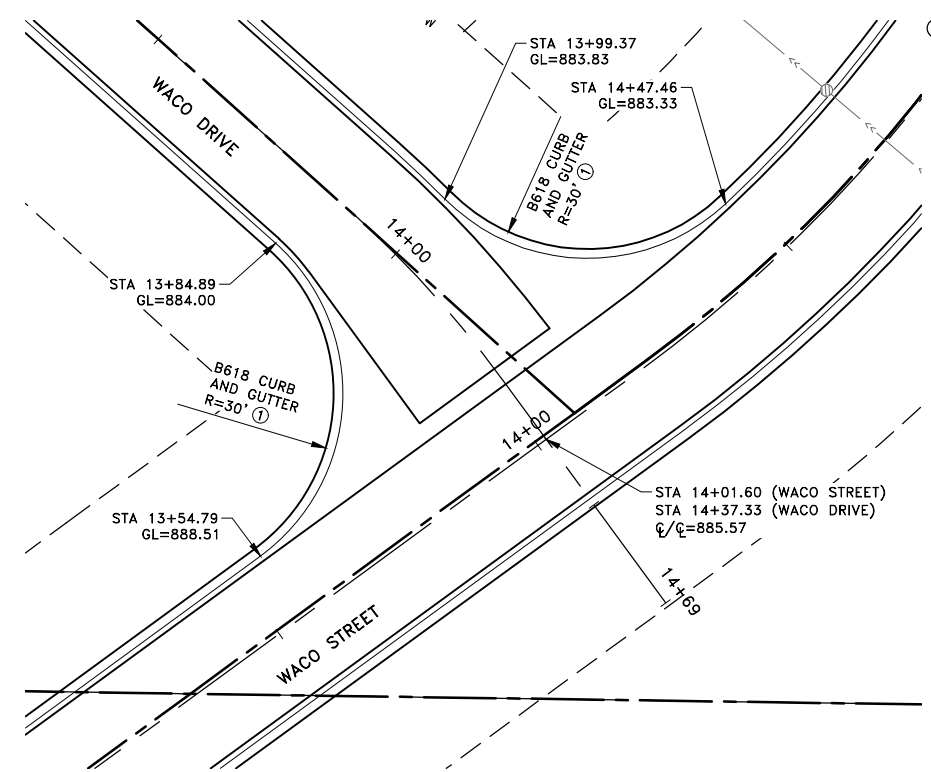
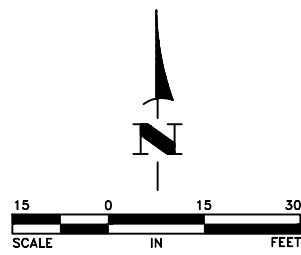
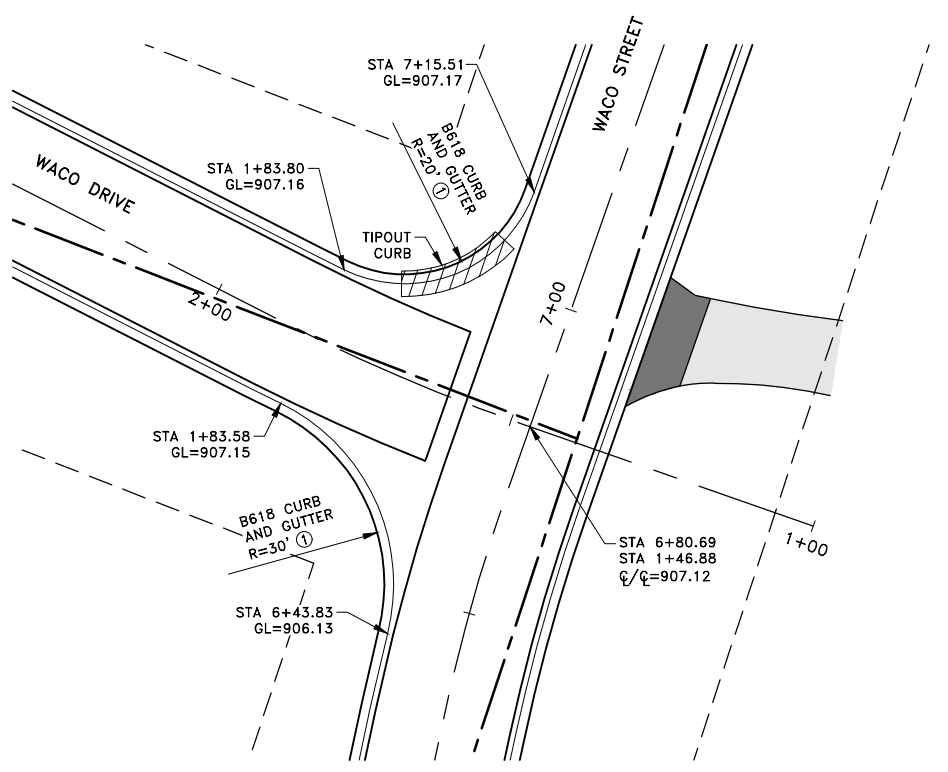
STAKING PLAN

CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 62 OF 82 SHEETS  
 RA3189



179TH LANE (COUNTY ROAD 27)/WACO STREET INTERSECTION



WACO STREET/WACO DRIVE INTERSECTION

REFERENCE NOTES:  
 ① CONSTRUCT CURB AT RADIUS PER CITY PLATE NO. STR-27.

Apr 22, 2024 - 2:47pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_STAKING.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

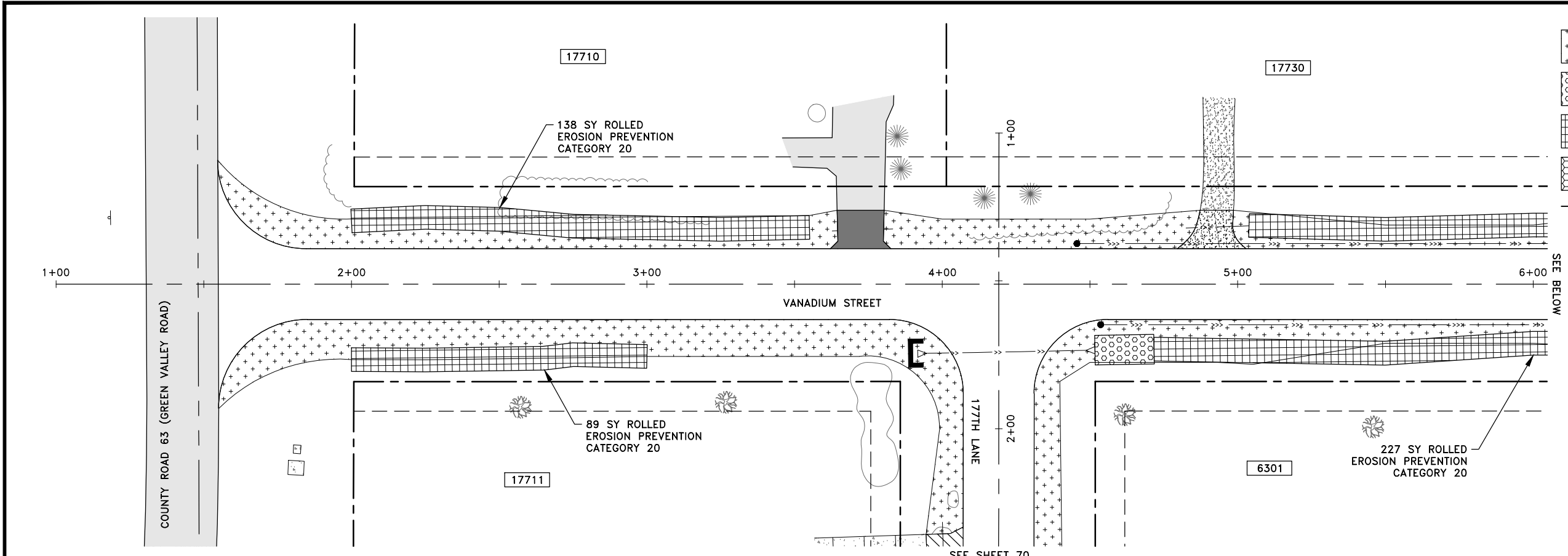


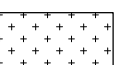
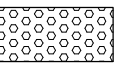
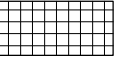
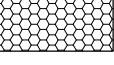
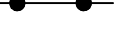

**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

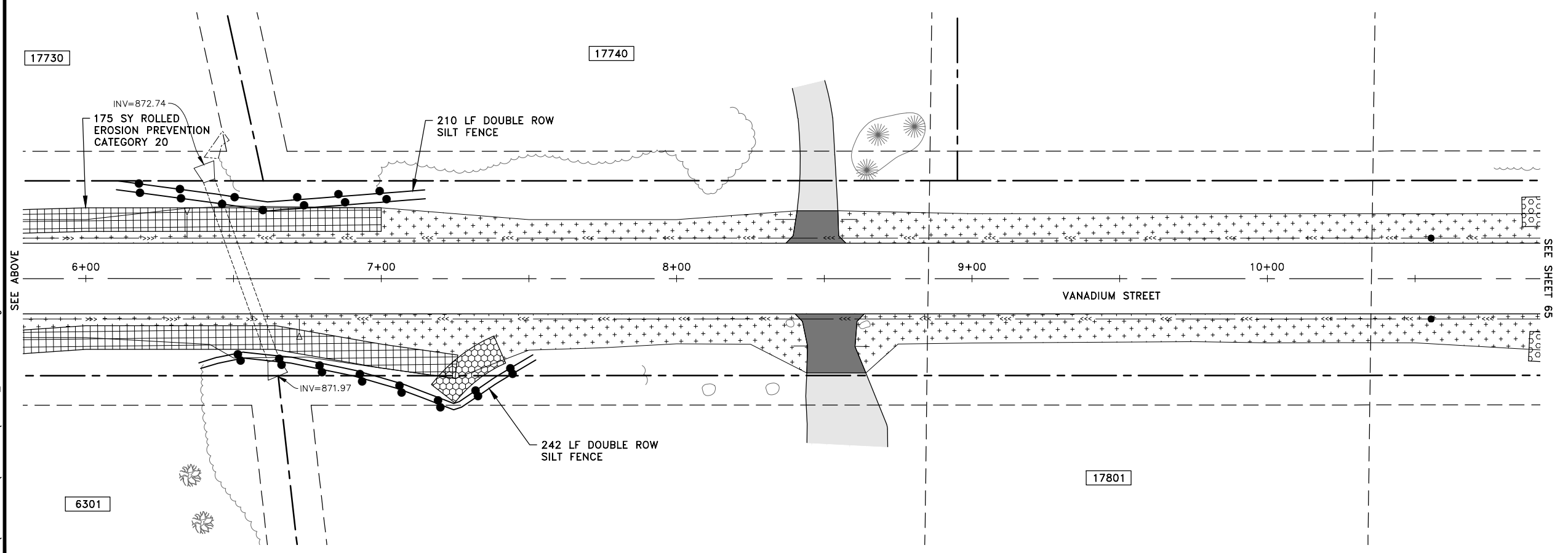
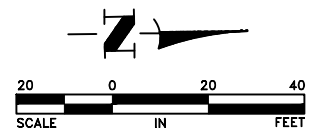
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**STAKING PLAN**  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

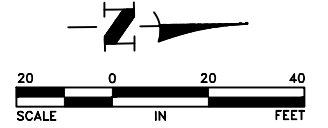
SHEET **63** OF **82**  
 SHEETS  
 RA3189



- LEGEND**
-  SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 72  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 20  
TYPE 3 SLOW RELEASE FERTILIZER
  -  CLASS III RIPRAP
  -  SILT FENCE PER CITY PLATE NO. ERO-1
  -  CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.



K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORETION.dwg

Apr 22, 2024 - 2:47pm

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

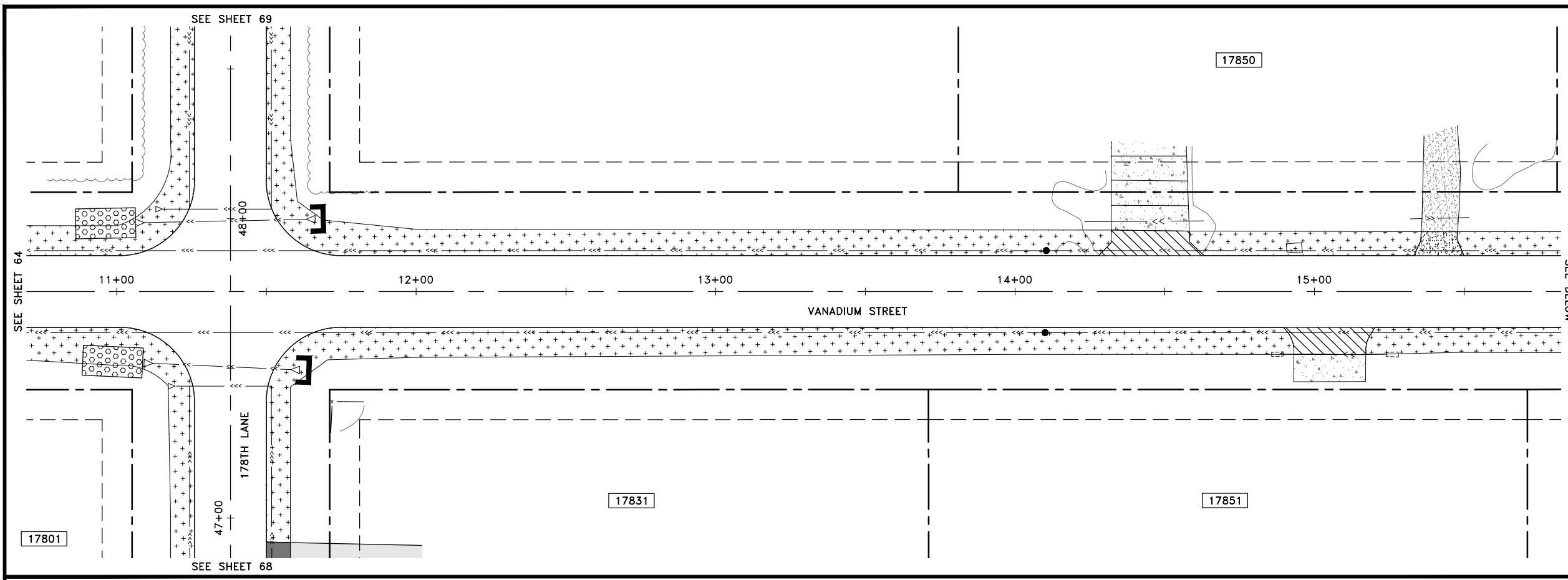


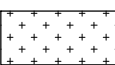
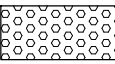

**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

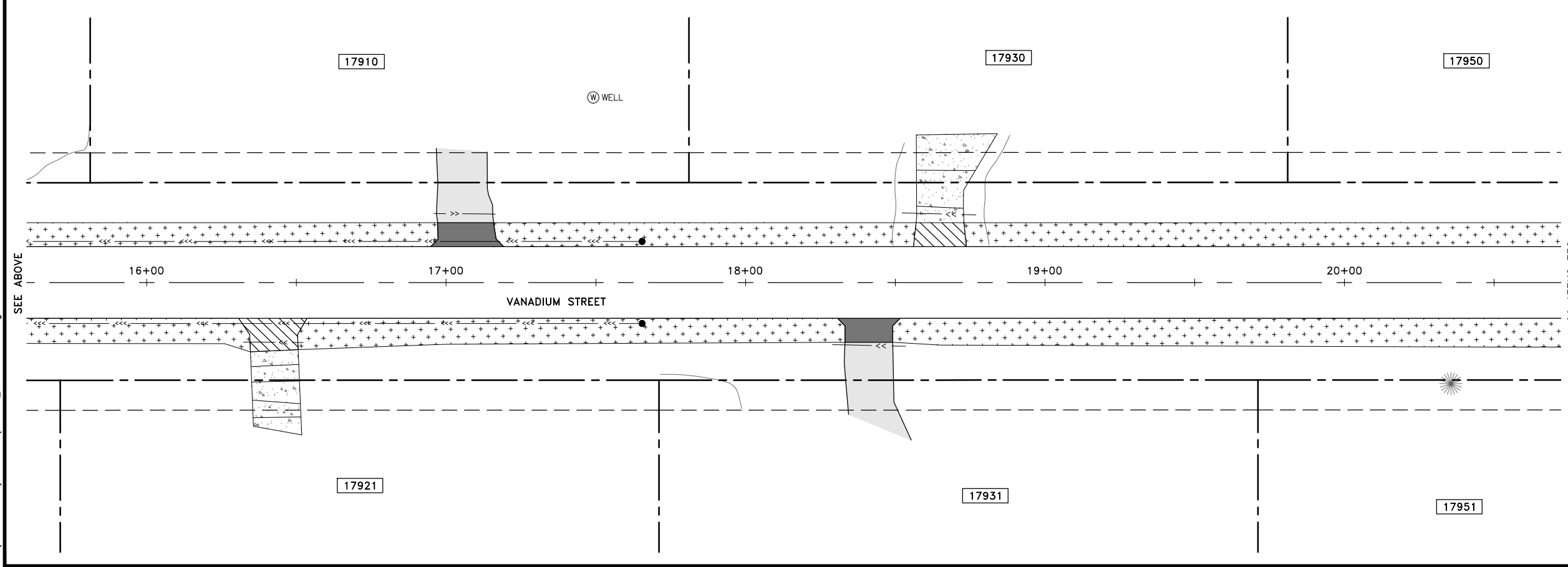
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN  
 VANADIUM STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 64 OF 82 SHEETS  
 RA3189



- LEGEND**
-  SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 72  
TYPE 3 SLOW RELEASE FERTILIZER
  -  CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN



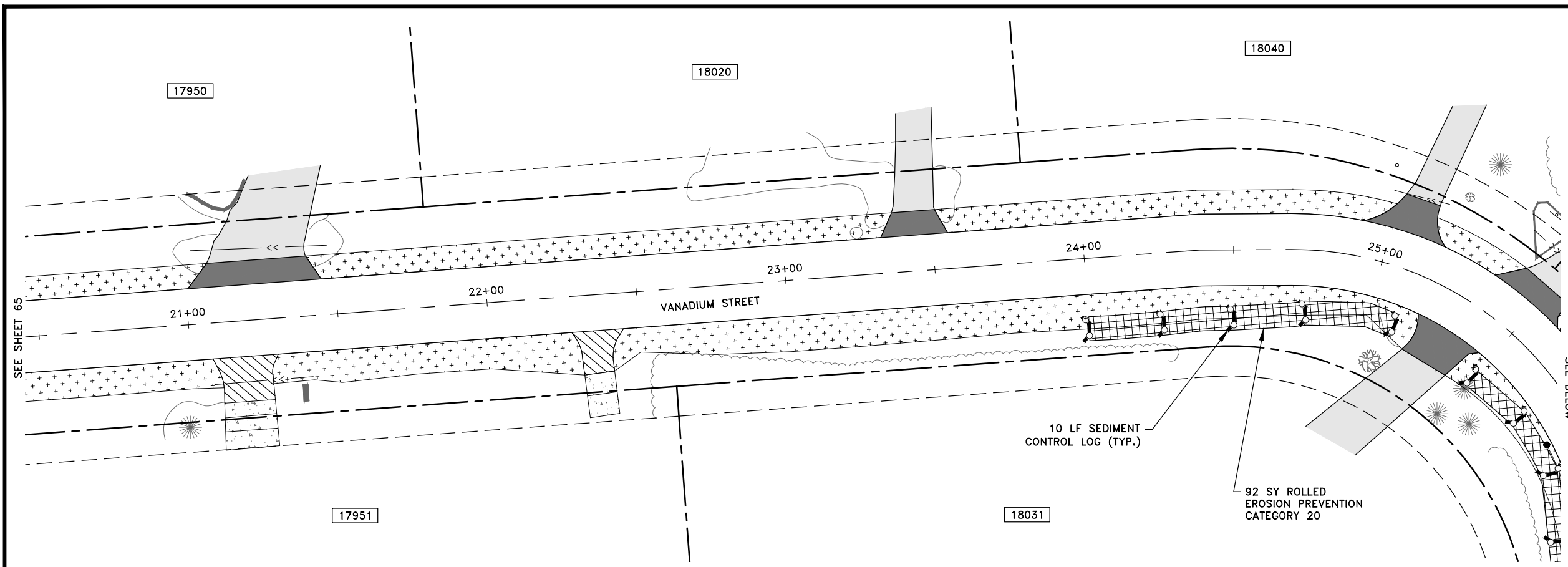
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

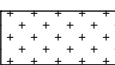
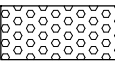


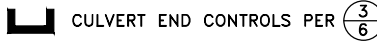
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

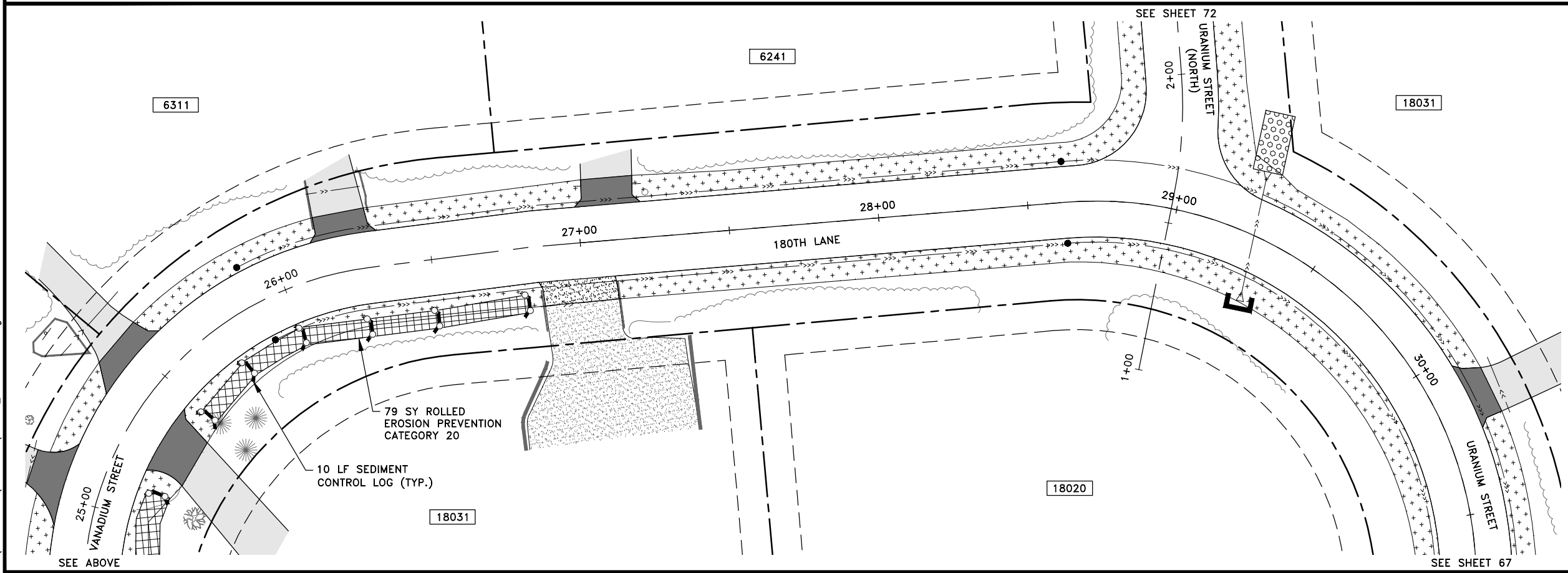
**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN  
 VANADIUM STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 65 OF 82 SHEETS

Apr 22, 2024 - 2:47pm  
 K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg



- LEGEND**
-  SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 72  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 20  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SEDIMENT CONTROL LOG PER  
CITY PLATE NO. ERO-4
  -  CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.

Apr 22, 2024 - 2:47pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
SMN

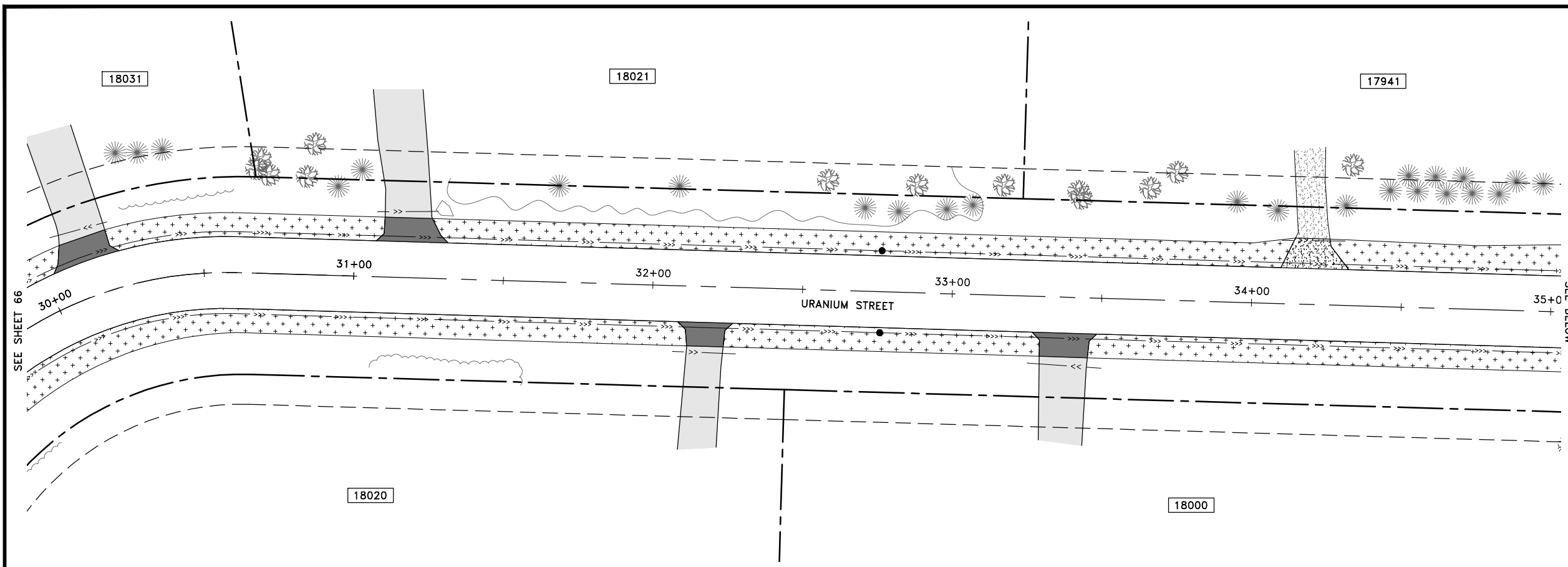


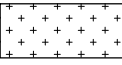
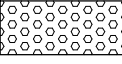
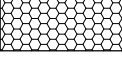
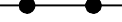

**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

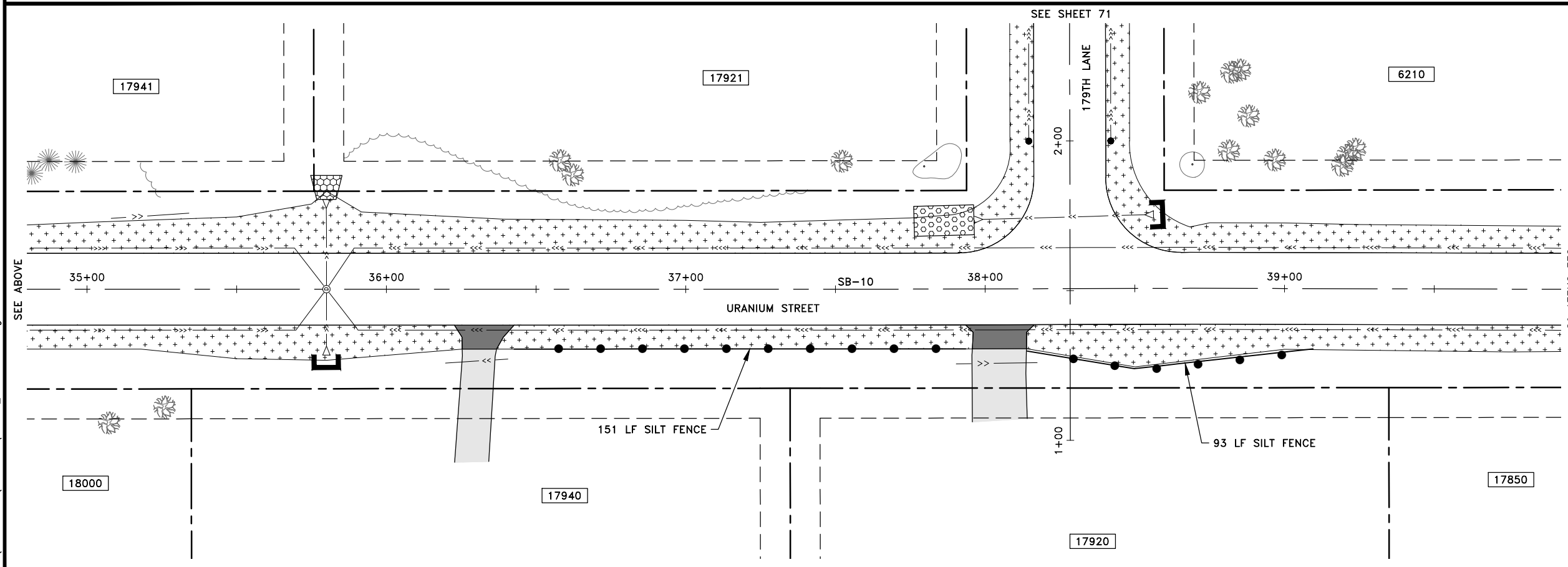
**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
AND RESTORATION PLAN**  
VANADIUM STREET AND 180TH LANE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
**66**  
OF  
**82**  
SHEETS



- LEGEND**
-  SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 72  
TYPE 3 SLOW RELEASE FERTILIZER
  -  CLASS III RIPRAP
  -  SILT FENCE PER CITY PLATE NO. ERO-1
  -  CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.

K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
SMN

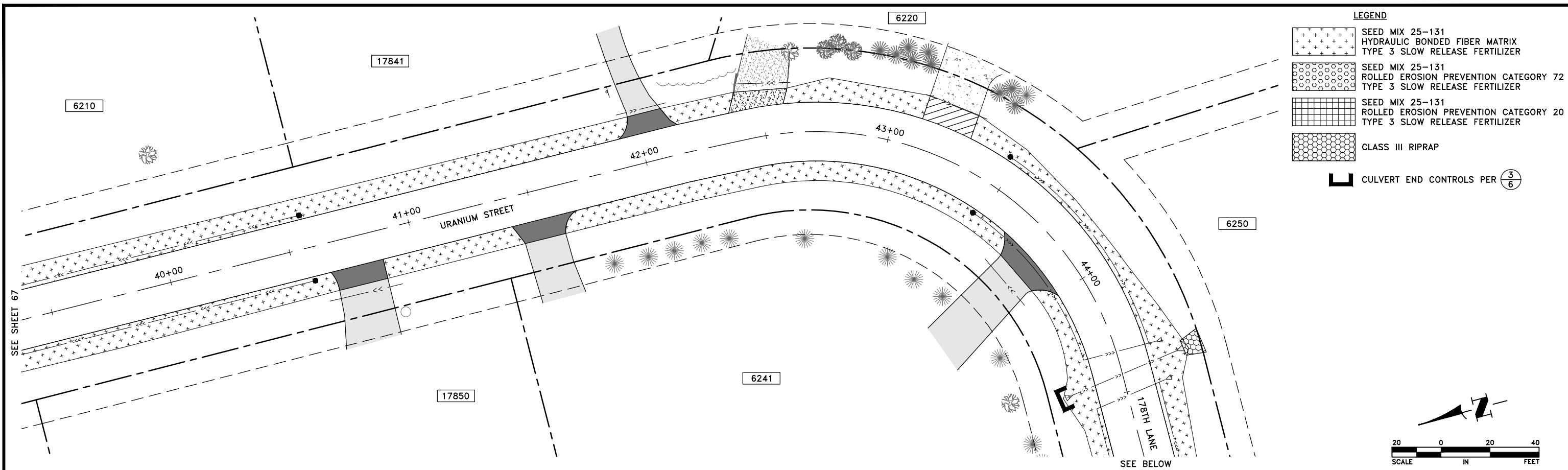


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

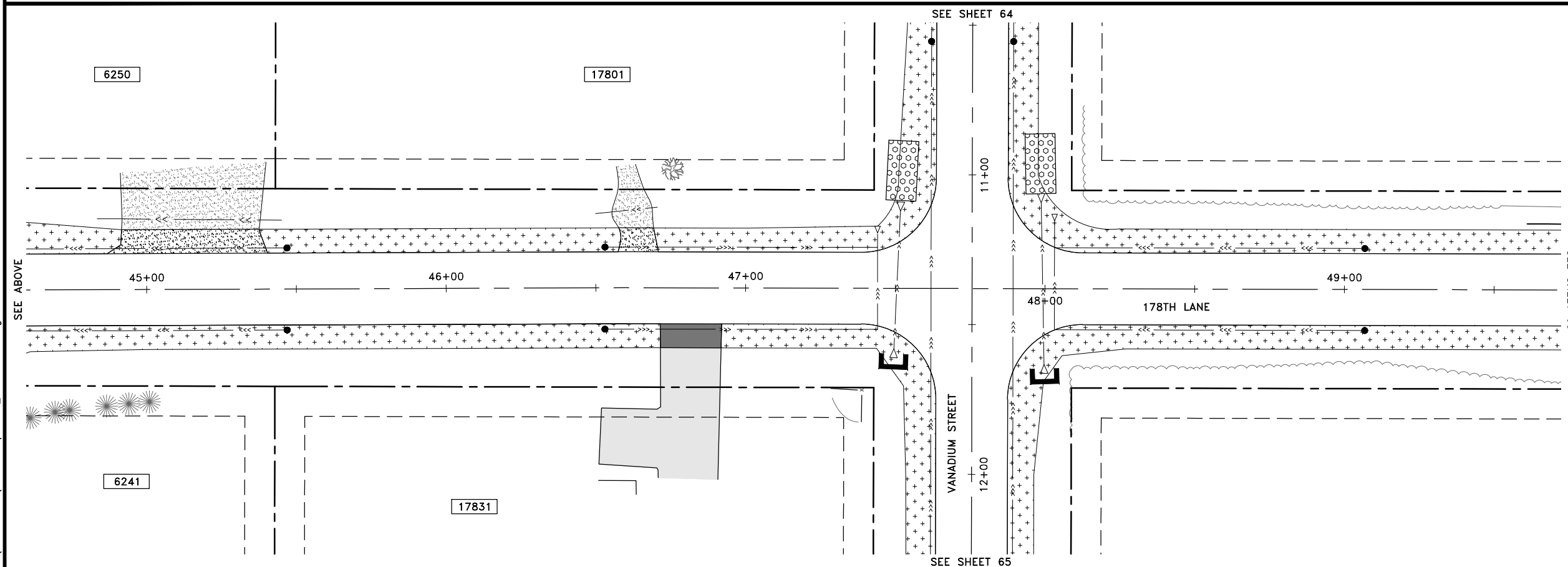
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN  
 URANIUM STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET  
**67**  
 OF  
**82**  
 SHEETS



- LEGEND**
- SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
  - SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 72  
TYPE 3 SLOW RELEASE FERTILIZER
  - SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 20  
TYPE 3 SLOW RELEASE FERTILIZER
  - CLASS III RIPRAP
  - CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.

Apr 22, 2024 - 2:47pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



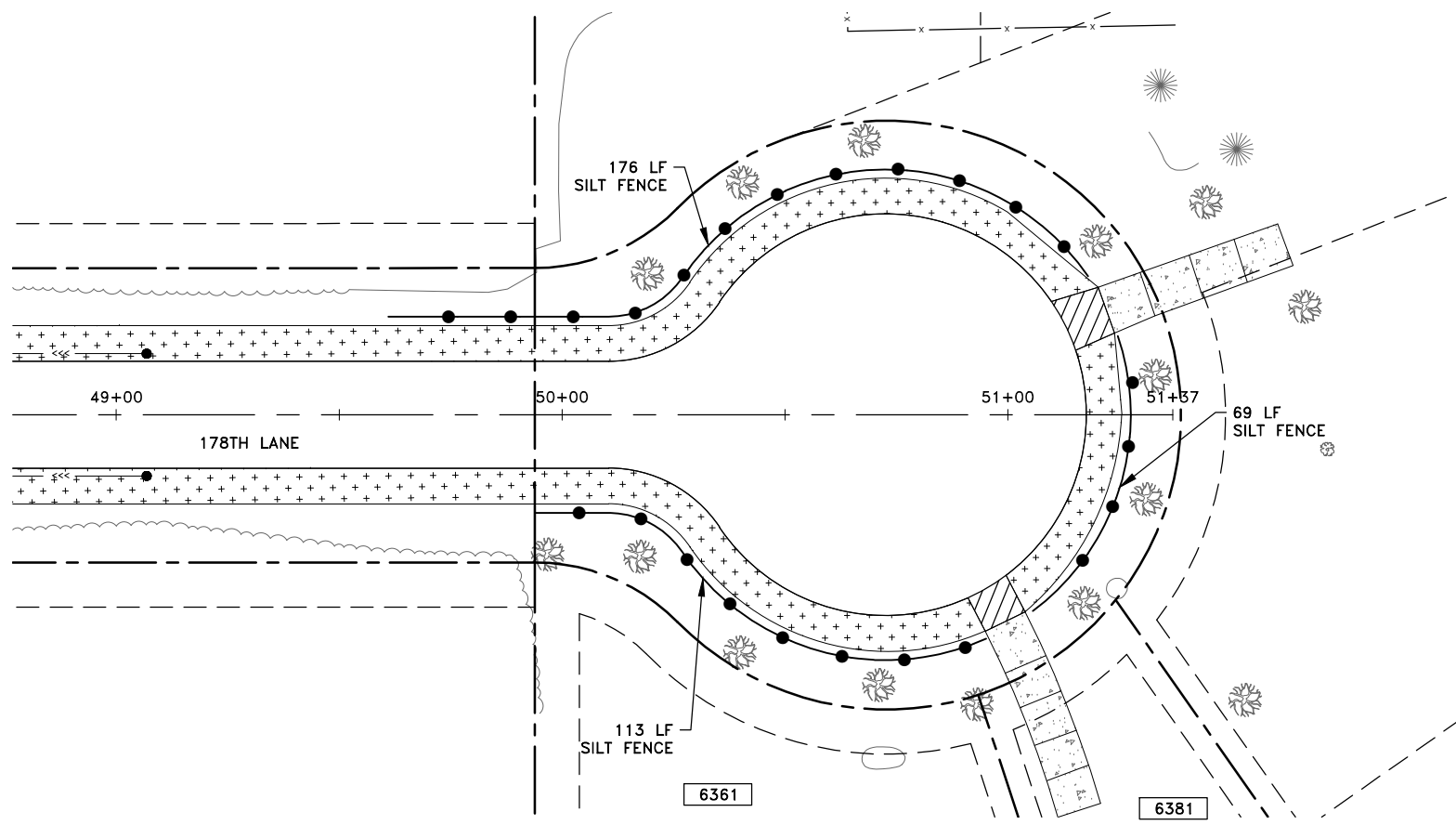
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

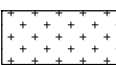

**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

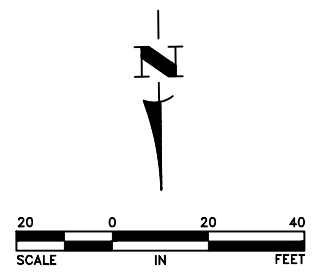
**EROSION AND SEDIMENT CONTROL  
AND RESTORATION PLAN**  
URANIUM STREET AND 178TH LANE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
**68**  
OF  
**82**  
SHEETS

SEE SHEET 68



- LEGEND**
-  SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SILT FENCE PER CITY PLATE NO. ERO-1



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.

K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg Apr 22, 2024 - 2:47pm

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Lic. No. 43381  
 Date 4/22/24

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
SMN

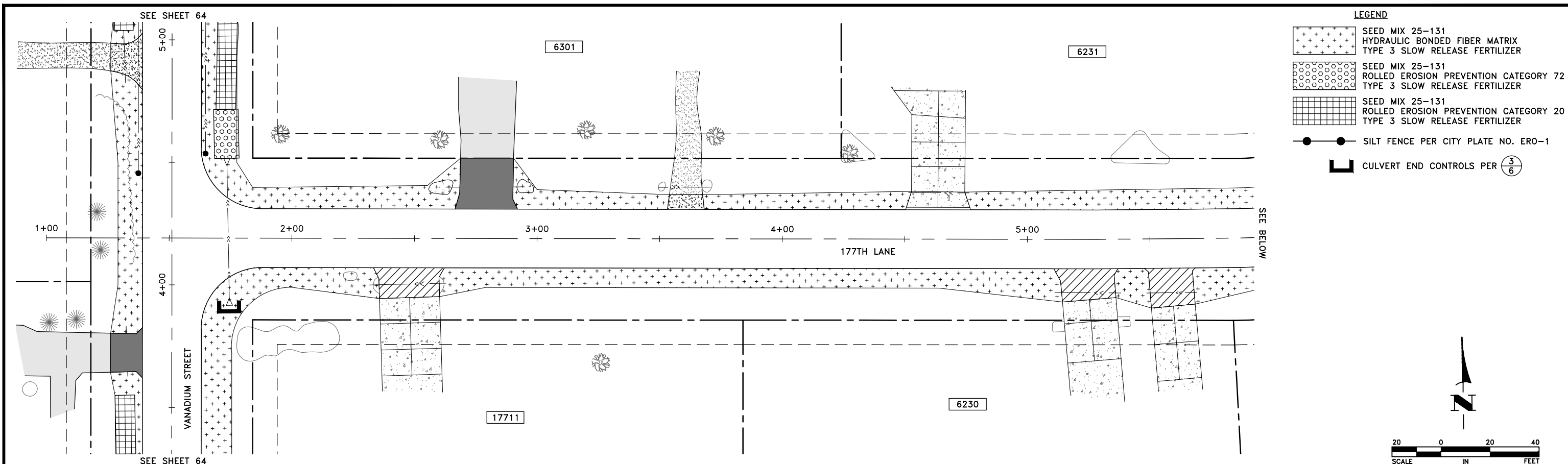


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

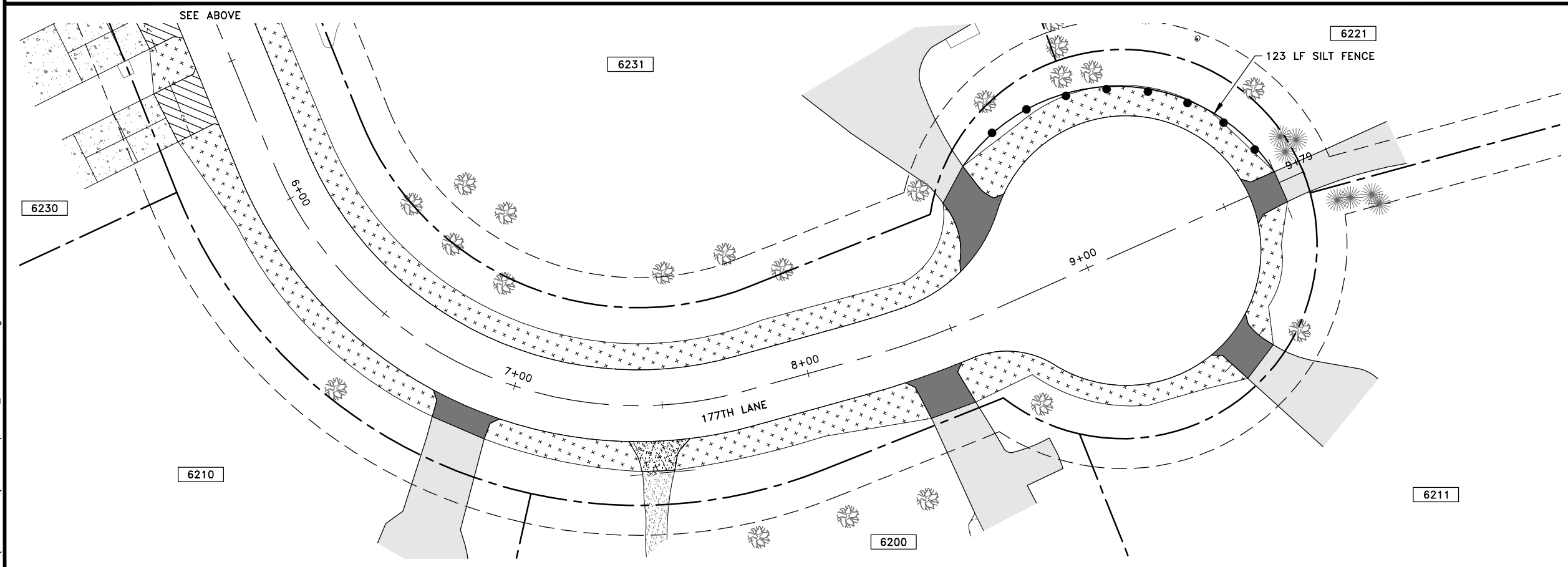
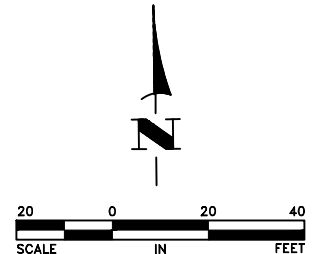
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN**  
 178TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

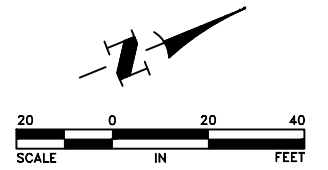
SHEET 69 OF 82 SHEETS  
 RA3189



- LEGEND**
- SEED MIX 25-131 HYDRAULIC BONDED FIBER MATRIX TYPE 3 SLOW RELEASE FERTILIZER
  - SEED MIX 25-131 ROLLED EROSION PREVENTION CATEGORY 72 TYPE 3 SLOW RELEASE FERTILIZER
  - SEED MIX 25-131 ROLLED EROSION PREVENTION CATEGORY 20 TYPE 3 SLOW RELEASE FERTILIZER
  - SILT FENCE PER CITY PLATE NO. ERO-1
  - CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.



Apr 22, 2024 - 2:48pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

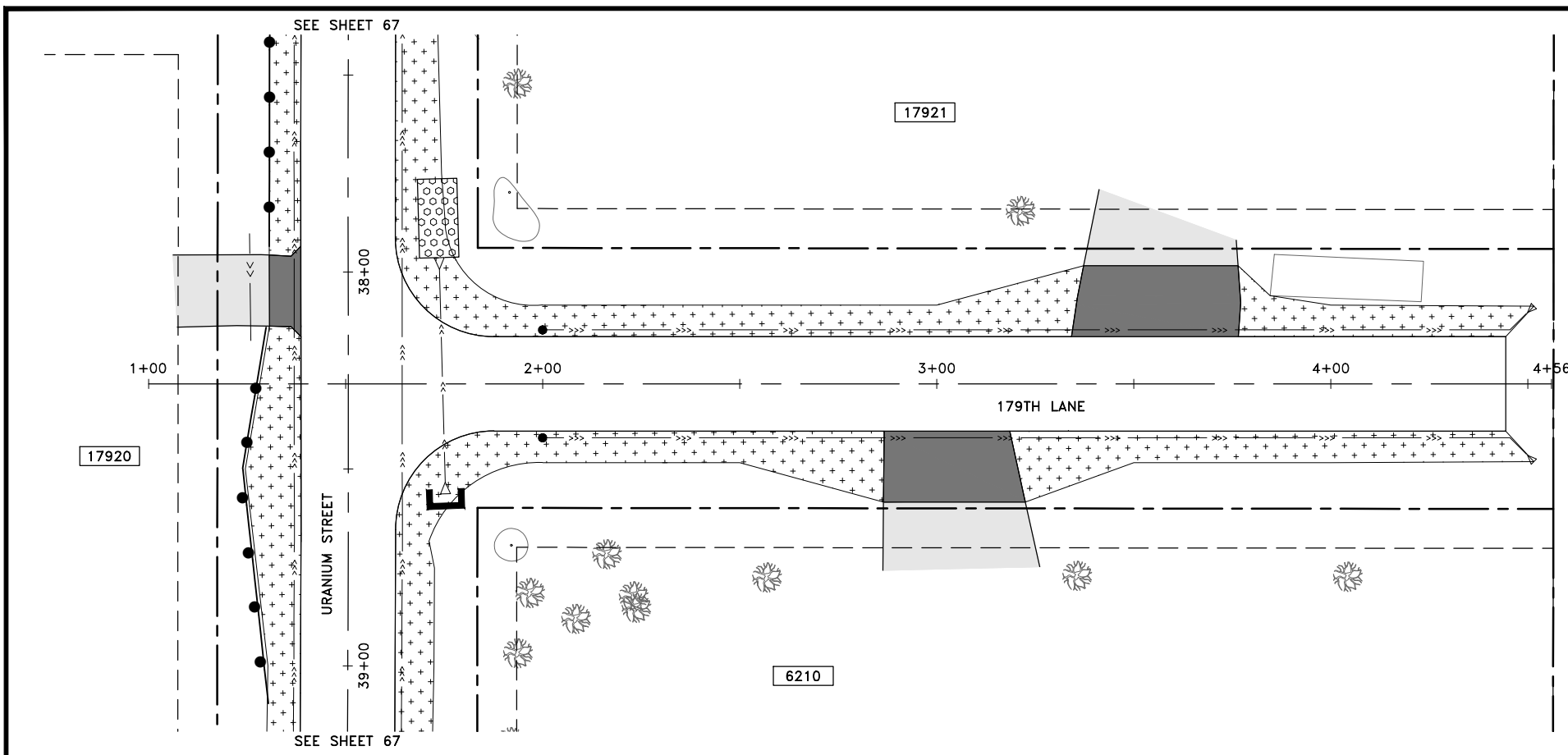


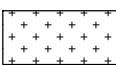
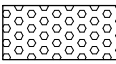


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

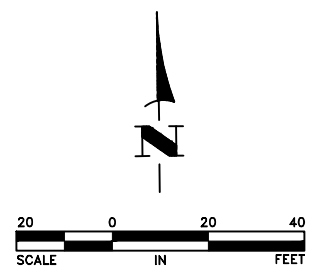
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN**  
 177TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 70 OF 82 SHEETS  
 RA3189



- LEGEND**
-  SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 72  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SILT FENCE PER CITY PLATE NO. ERO-1
  -  CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.

Apr 22, 2024 - 2:48pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
SMN

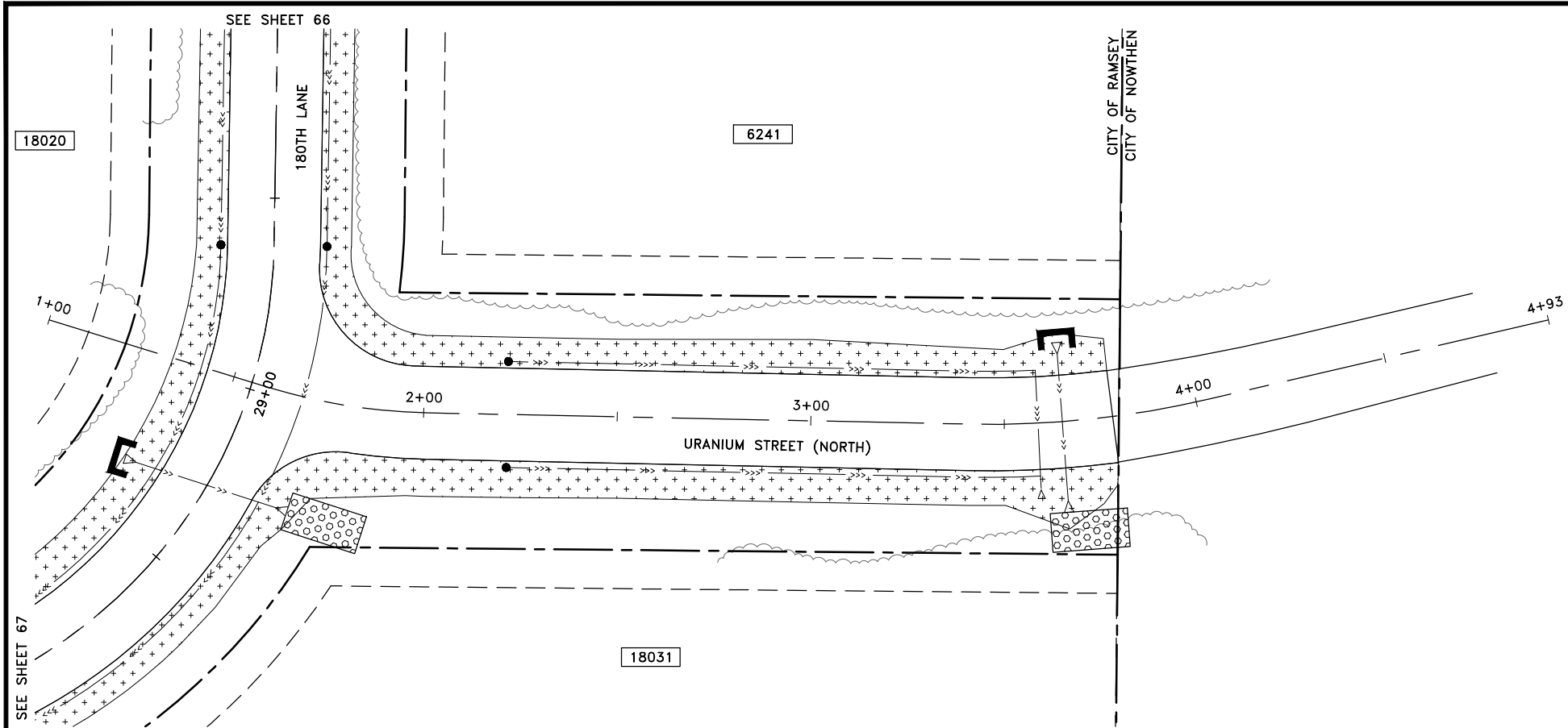


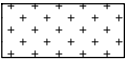
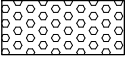

**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

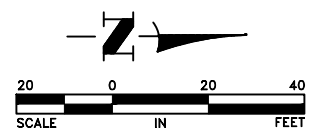
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN**  
 179TH LANE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
71  
OF  
82  
SHEETS



- LEGEND**
-  SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 72  
TYPE 3 SLOW RELEASE FERTILIZER
  -  CULVERT END CONTROLS PER  $\frac{3}{6}$



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.

Apr 22, 2024 - 2:48pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
SMN

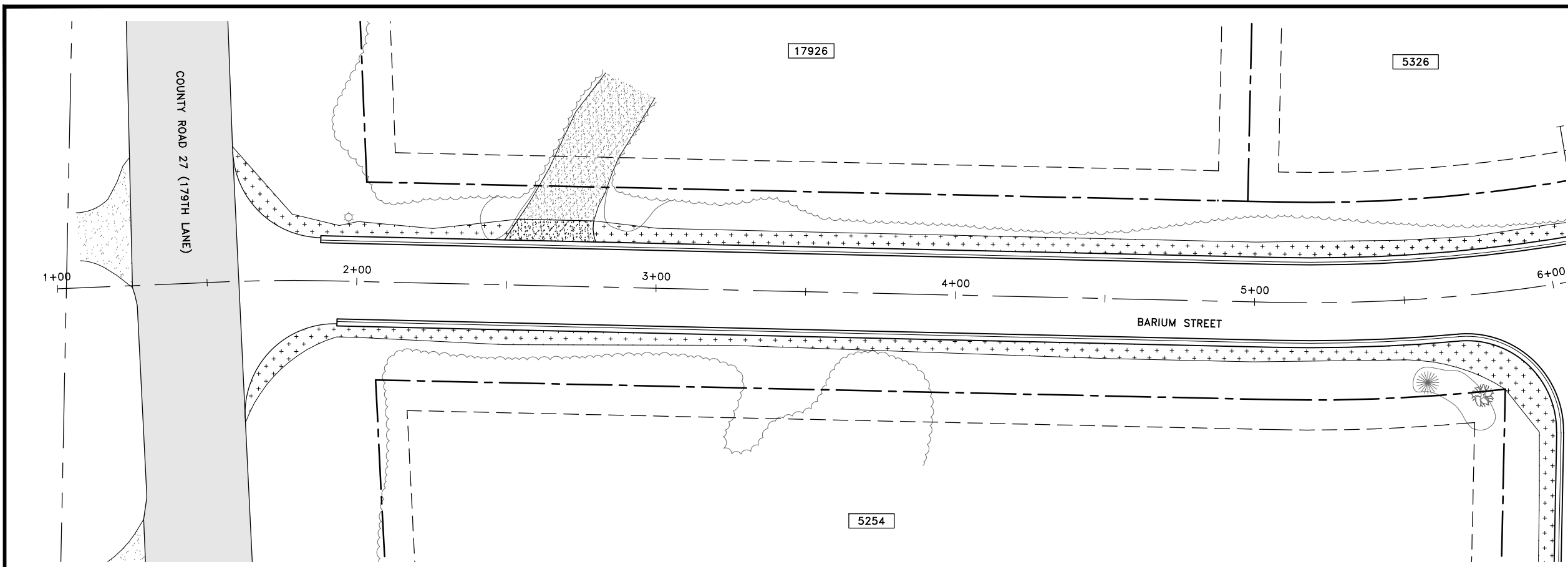


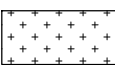
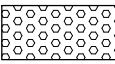


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

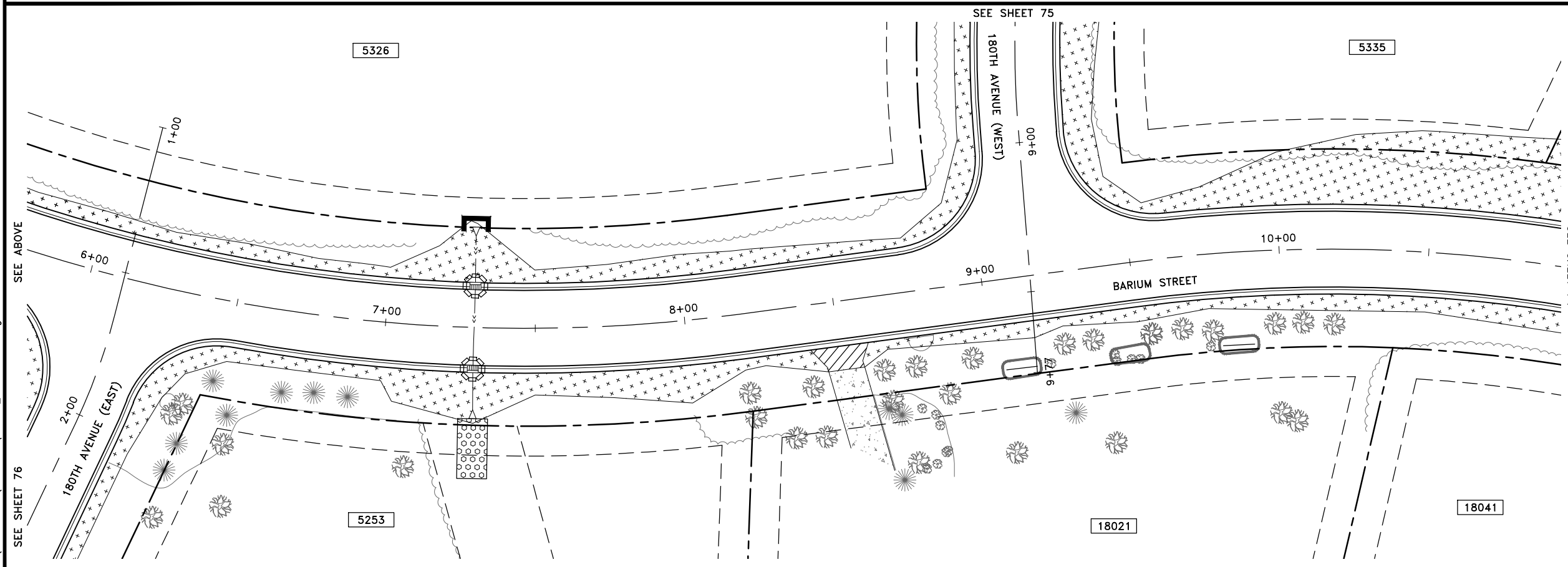
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN  
 URANIUM STREET (NORTH)  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET  
72  
OF  
82  
SHEETS



- LEGEND**
-  SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 72  
TYPE 3 SLOW RELEASE FERTILIZER
  -  STORM DRAIN INLET PROTECTION ①
  -  CULVERT END CONTROLS PER ③/⑥



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.
- REFERENCE NOTES:**
- ① STORM DRAIN INLET PROTECTION SHALL BE PER ⑤/⑥ AND ⑥/⑥ OR APPROVED EQUAL.

Apr 22, 2024 - 2:48pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
SHANE M. NELSON, P.E.  
Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

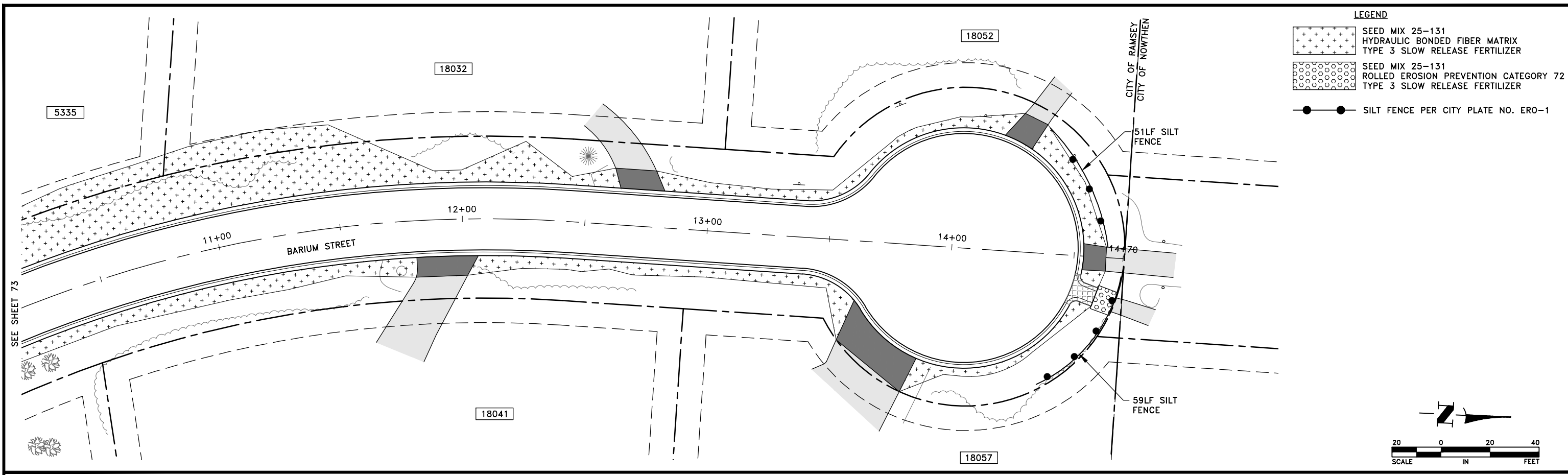





**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

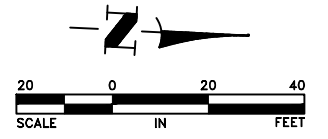
**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
AND RESTORATION PLAN  
BARIUM STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET  
73  
OF  
82  
SHEETS



- LEGEND**
-  SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 72  
TYPE 3 SLOW RELEASE FERTILIZER
  -  SILT FENCE PER CITY PLATE NO. ERO-1

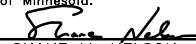


- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.

K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
SMN

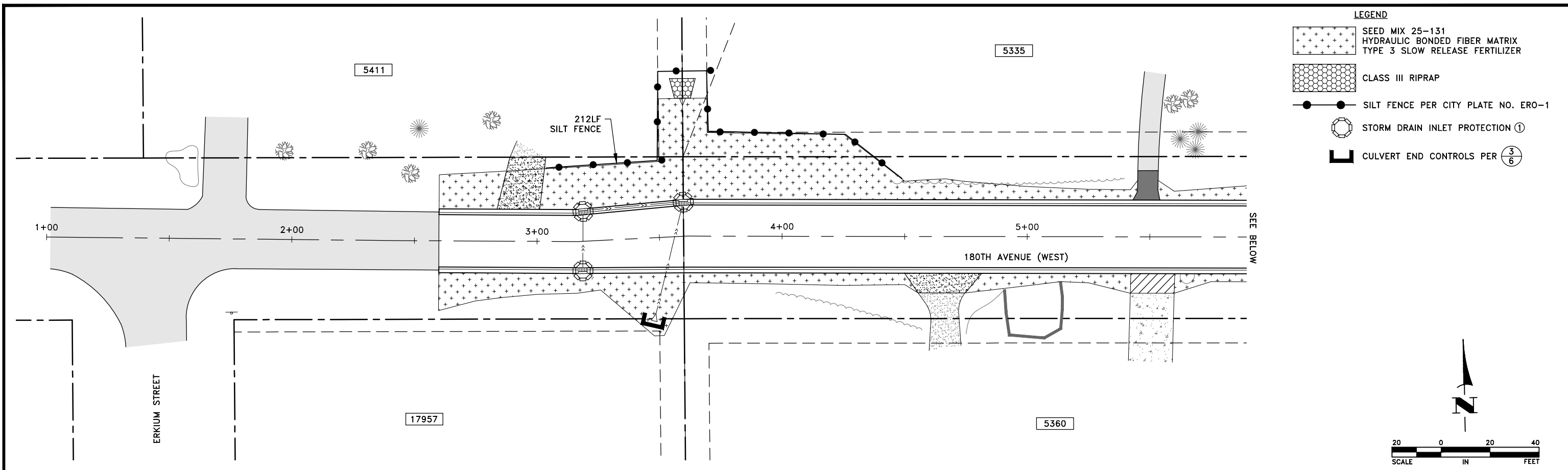


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

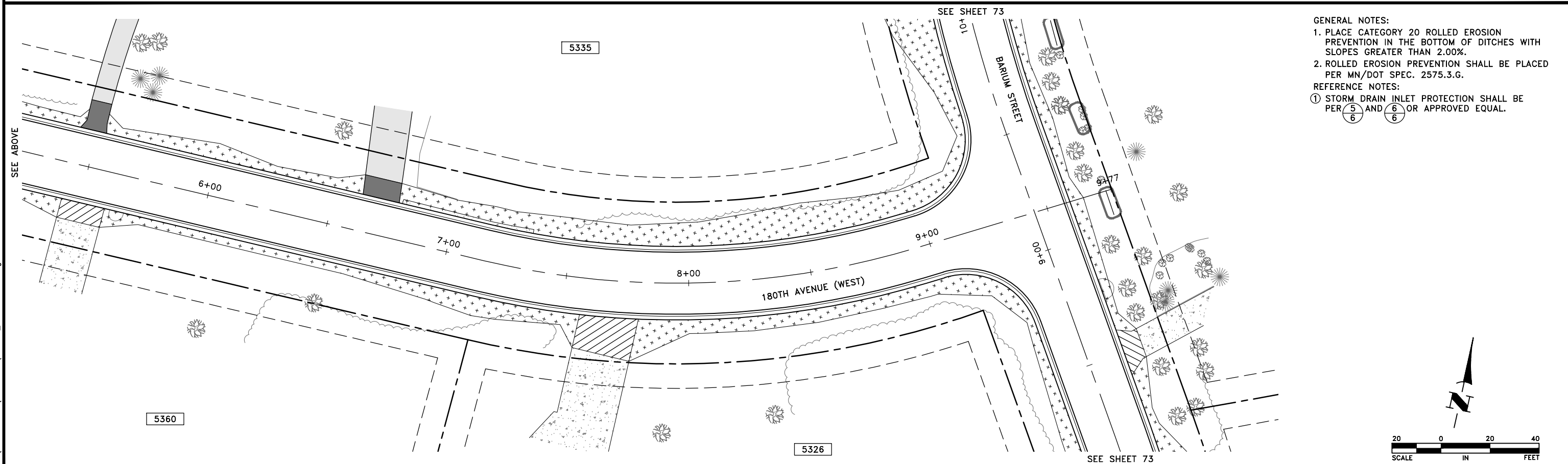
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN  
 BARIUM STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET  
74  
OF  
82  
SHEETS



- LEGEND**
- SEED MIX 25-131 HYDRAULIC BONDED FIBER MATRIX TYPE 3 SLOW RELEASE FERTILIZER
  - CLASS III RIPRAP
  - SILT FENCE PER CITY PLATE NO. ERO-1
  - STORM DRAIN INLET PROTECTION ①
  - CULVERT END CONTROLS PER ③/⑥



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.
- REFERENCE NOTES:**
- ① STORM DRAIN INLET PROTECTION SHALL BE PER ⑤/⑥ AND ⑥/⑥ OR APPROVED EQUAL.

Apr 22, 2024 - 2:48pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

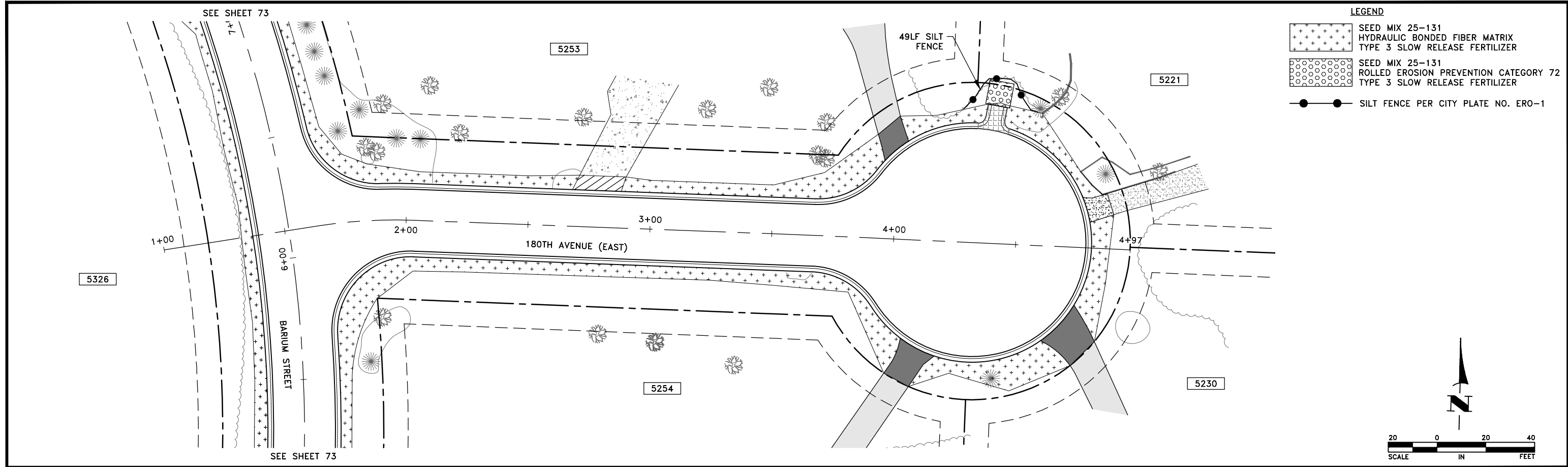


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN  
 180TH AVENUE (WEST)  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 75 OF 82 SHEETS



- GENERAL NOTES:
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.

Apr 22, 2024 - 2:48pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY:  
TAE

DRAWN BY:  
TAE

CHECKED BY:  
SMN



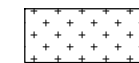
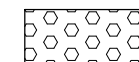
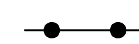
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

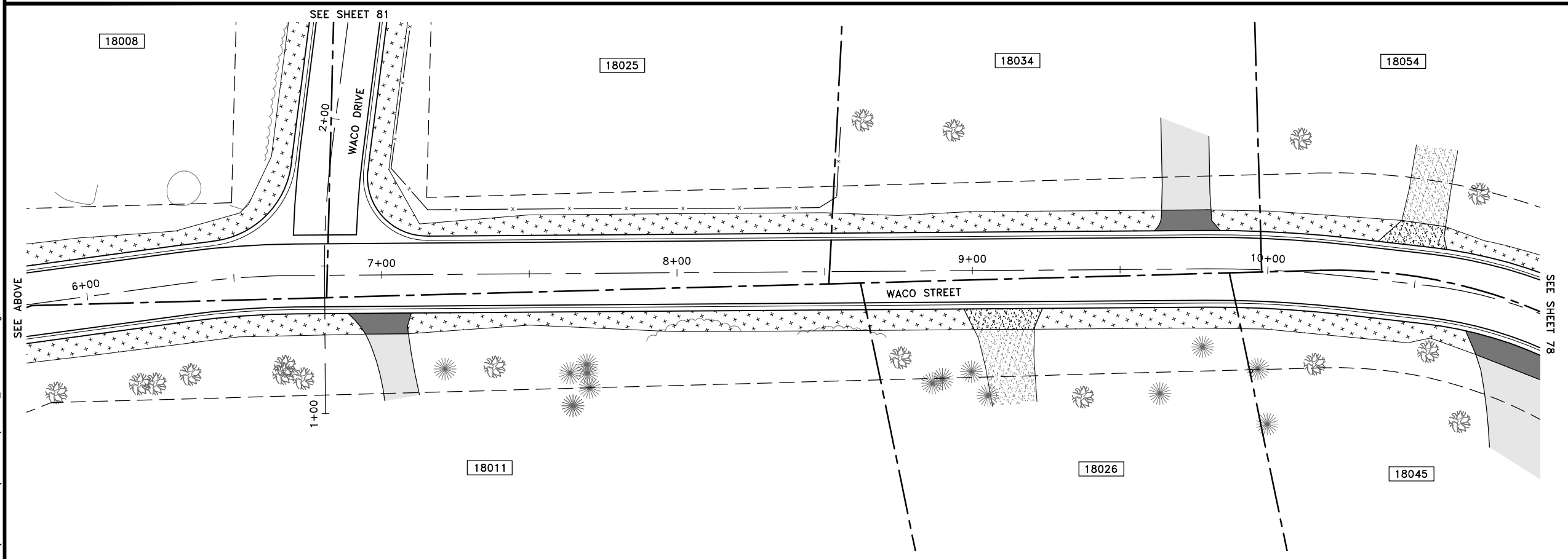
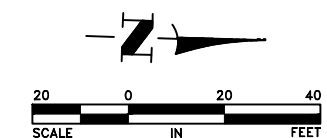
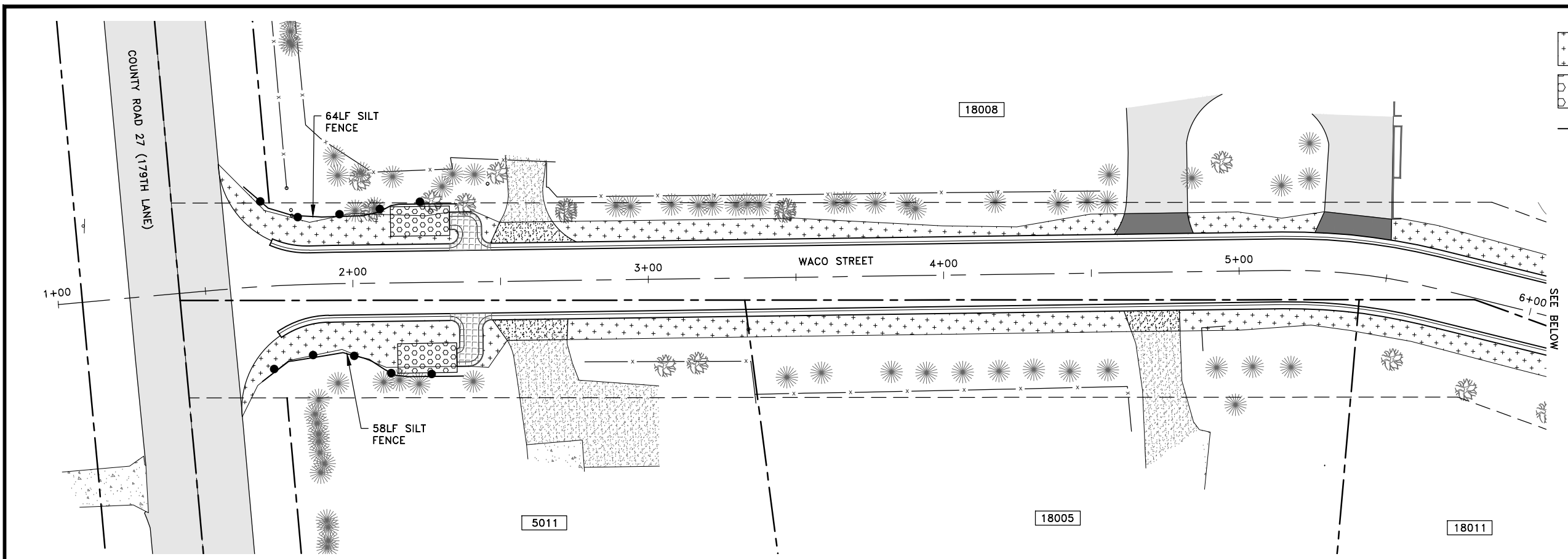
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN  
 180TH AVENUE (EAST)  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

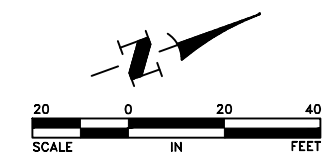
SHEET 76 OF 82 SHEETS  
 RA3189

LEGEND

-  SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
-  SEED MIX 25-131  
ROLLED EROSION PREVENTION CATEGORY 72  
TYPE 3 SLOW RELEASE FERTILIZER
-  SILT FENCE PER CITY PLATE NO. ERO-1



- GENERAL NOTES:
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.



K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg Apr 22, 2024 - 2:48pm

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Lic. No. 43381  
 Date 4/22/24

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

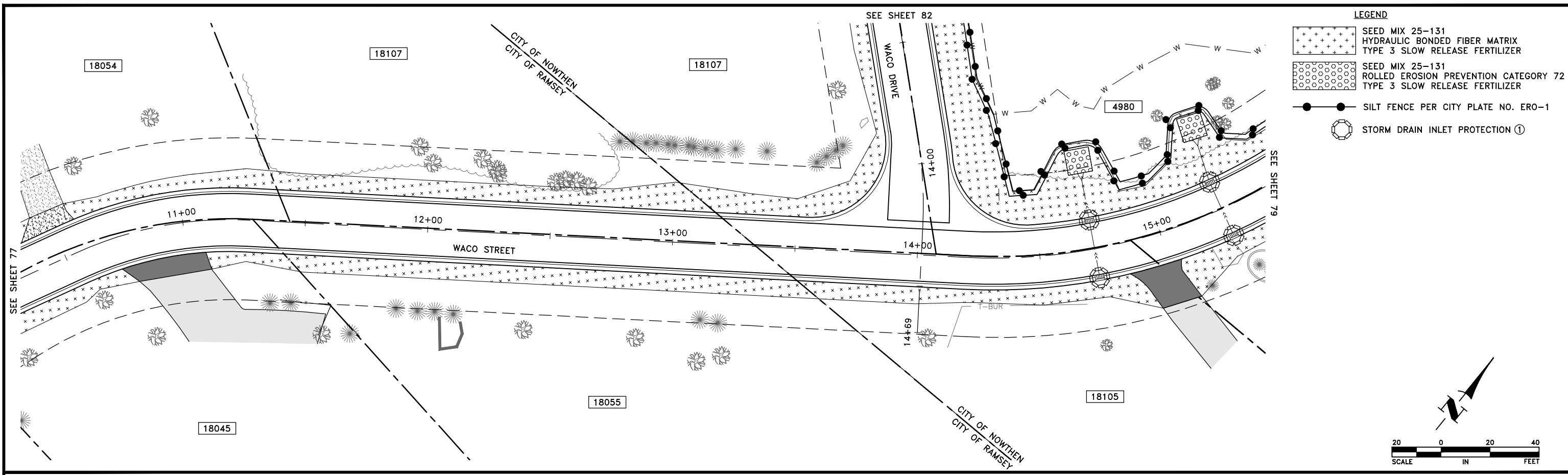


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

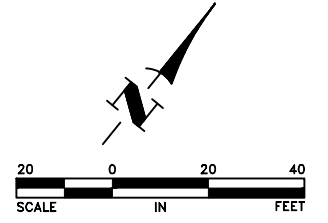
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN  
 WACO STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 77 OF 82 SHEETS  
 RA3189



- LEGEND**
- SEED MIX 25-131 HYDRAULIC BONDED FIBER MATRIX TYPE 3 SLOW RELEASE FERTILIZER
  - SEED MIX 25-131 ROLLED EROSION PREVENTION CATEGORY 72 TYPE 3 SLOW RELEASE FERTILIZER
  - SILT FENCE PER CITY PLATE NO. ERO-1
  - STORM DRAIN INLET PROTECTION ①



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.
- REFERENCE NOTES:**
- ① STORM DRAIN INLET PROTECTION SHALL BE PER ⑤ AND ⑥ OR APPROVED EQUAL.

K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg Apr 22, 2024 - 2:49pm

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

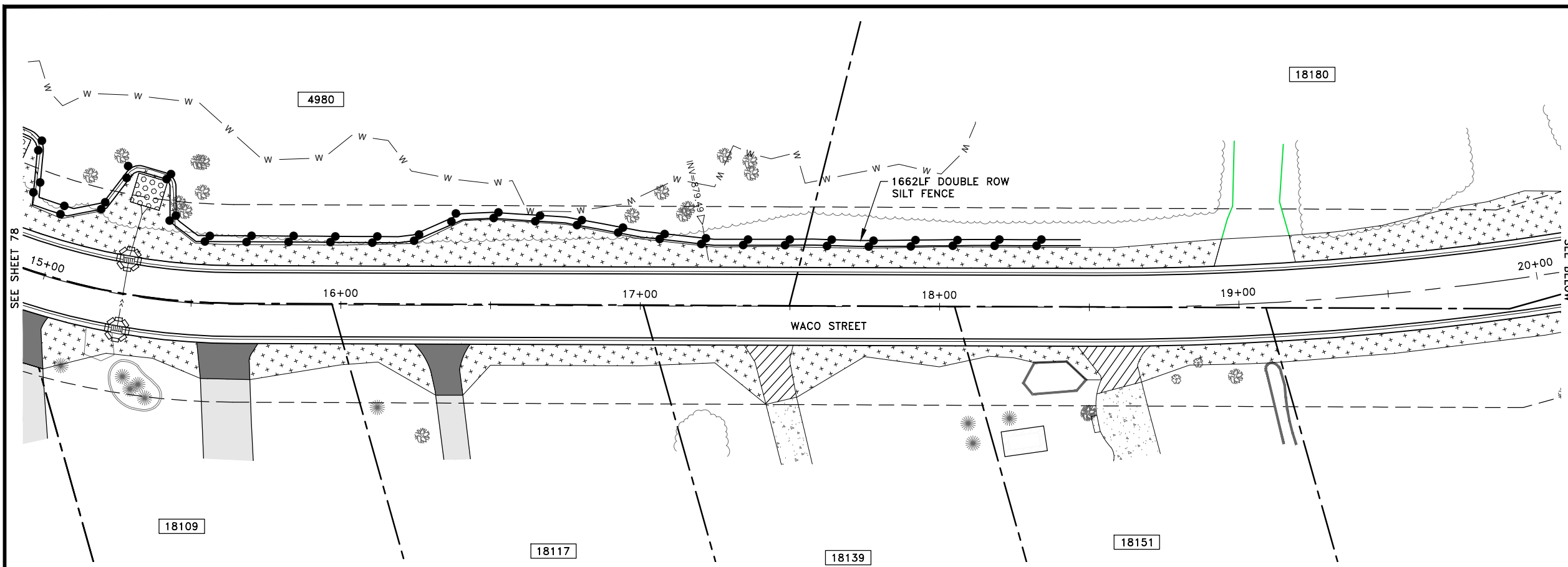


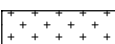
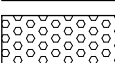
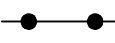


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

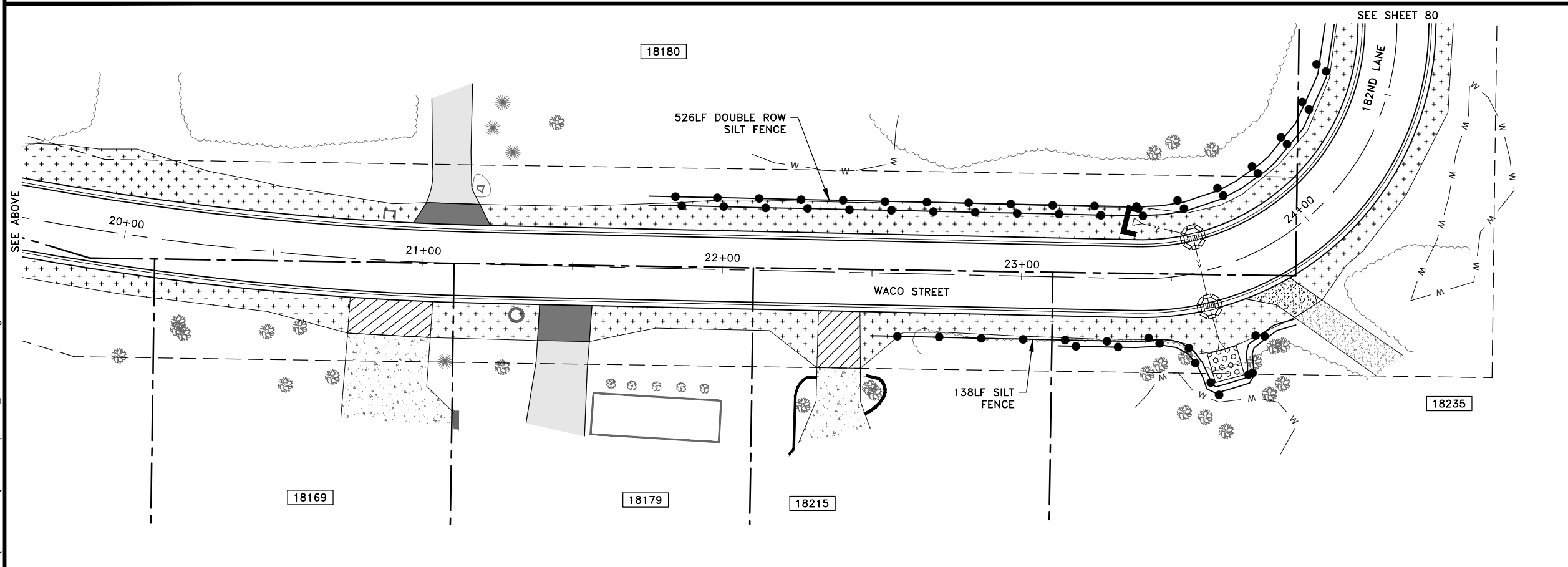
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN  
 WACO STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 78 OF 82 SHEETS  
 RA3189



- LEGEND**
-  SEED MIX 25-131 HYDRAULIC BONDED FIBER MATRIX TYPE 3 SLOW RELEASE FERTILIZER
  -  SEED MIX 25-131 ROLLED EROSION PREVENTION CATEGORY 72 TYPE 3 SLOW RELEASE FERTILIZER
  -  SILT FENCE PER CITY PLATE NO. ERO-1
  -  STORM DRAIN INLET PROTECTION ①
  -  CULVERT END CONTROLS PER ③/⑥



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.
- REFERENCE NOTES:**
- ① STORM DRAIN INLET PROTECTION SHALL BE PER ⑤/⑥ AND ⑥/⑥ OR APPROVED EQUAL.

Apr 22, 2024 - 2:49pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

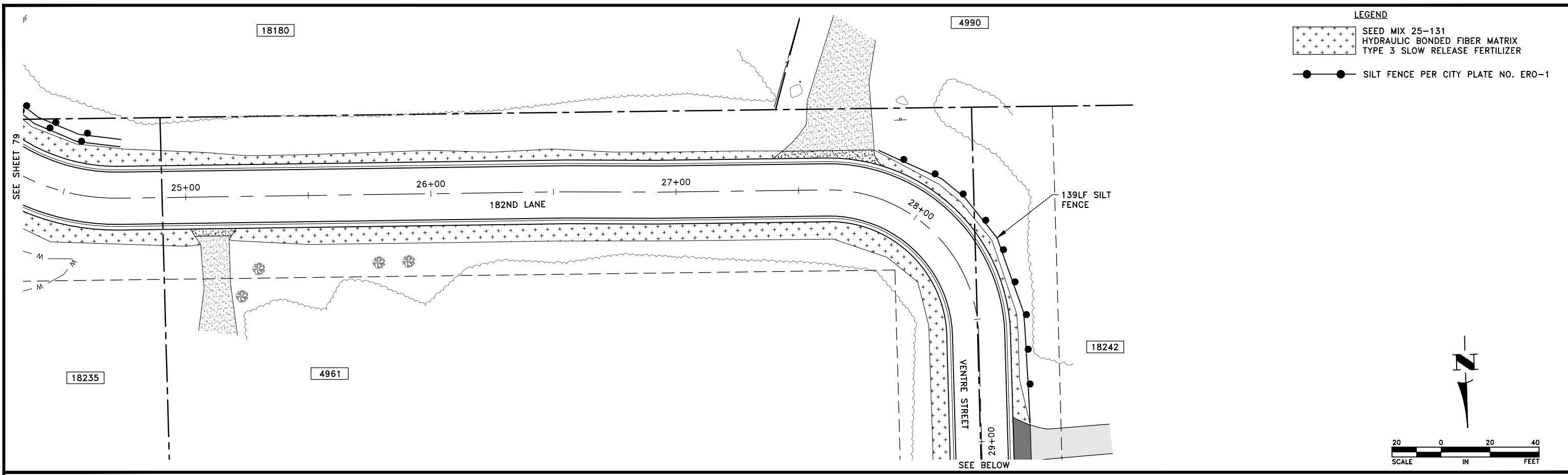


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

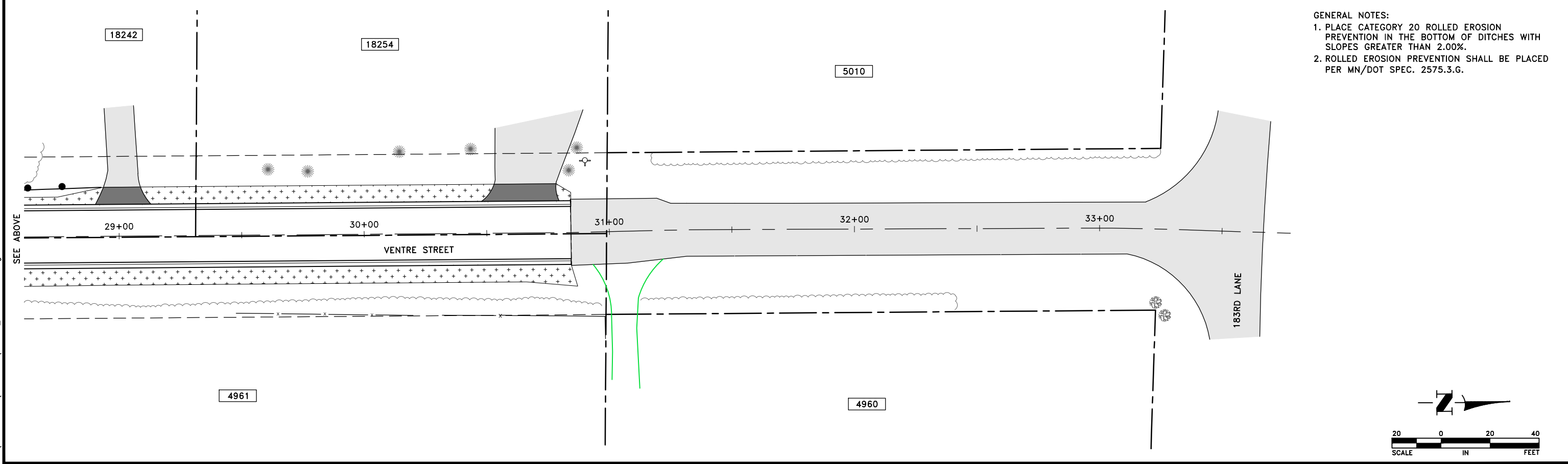
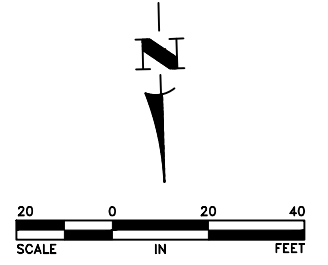
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN  
 WACO STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

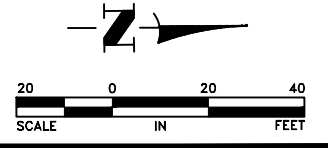
SHEET 79 OF 82 SHEETS  
 RA3189



- LEGEND**
- SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
  - SILT FENCE PER CITY PLATE NO. ERO-1



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.



Apr 22, 2024 - 2:49pm  
K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Lic. No. 43381  
 Date 4/22/24

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

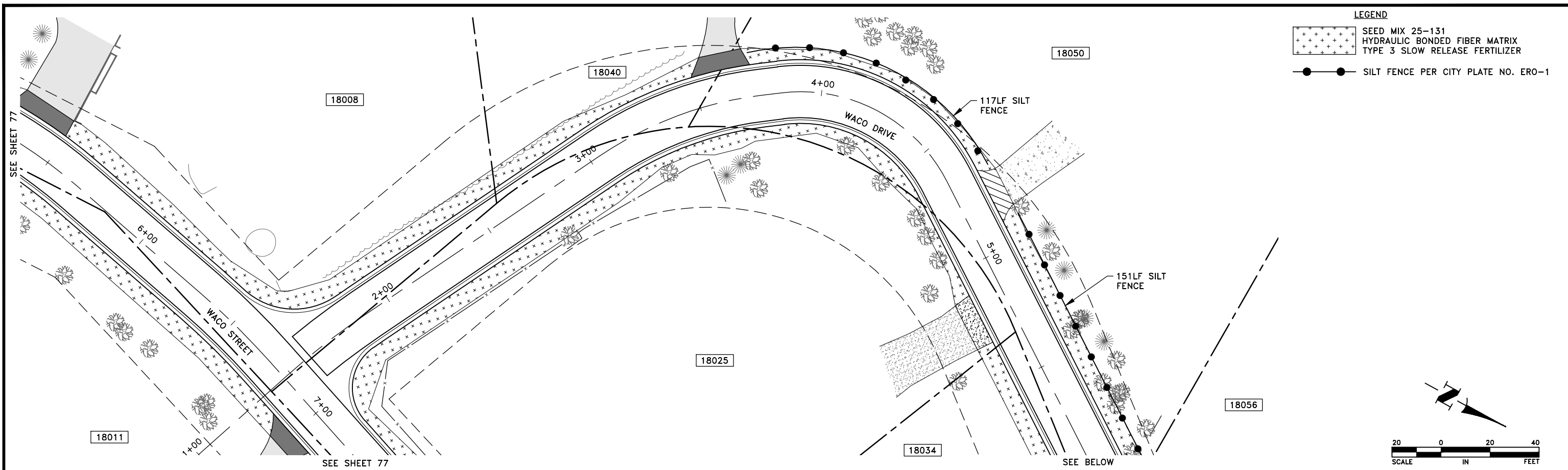


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

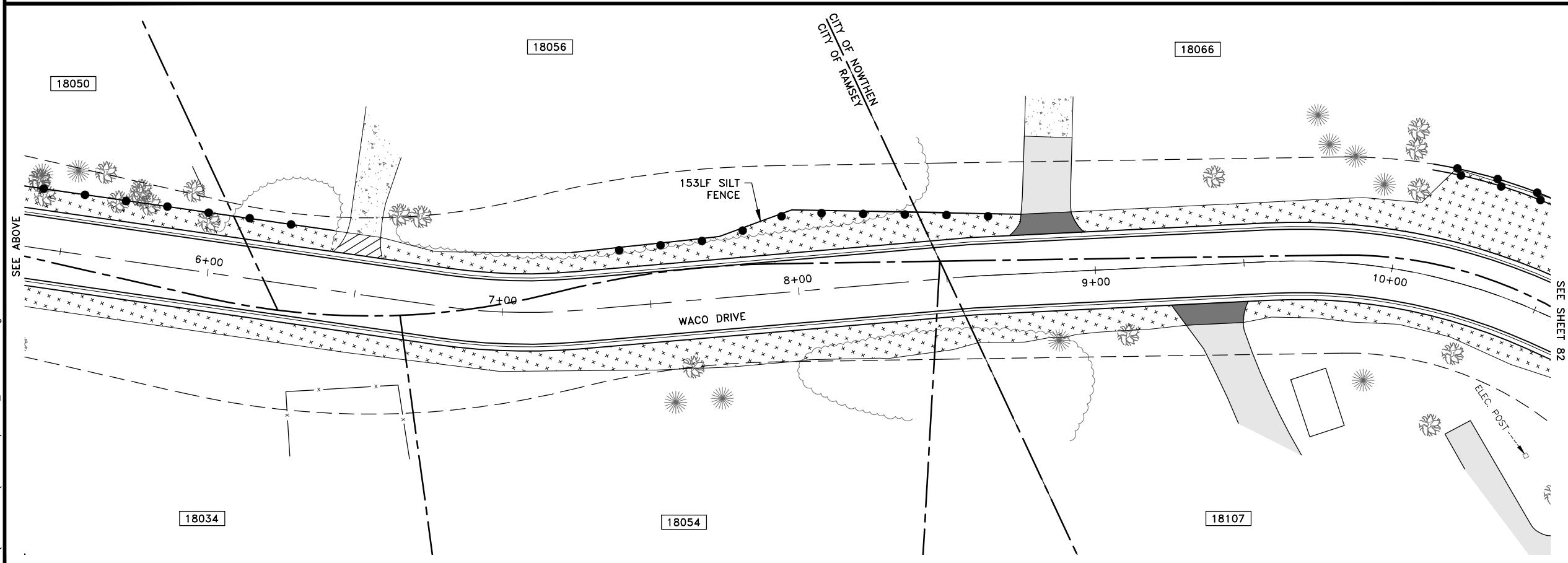
**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN**  
 182ND LANE AND VENTRE STREET  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET 80 OF 82 SHEETS  
 RA3189



- LEGEND**
- SEED MIX 25-131  
HYDRAULIC BONDED FIBER MATRIX  
TYPE 3 SLOW RELEASE FERTILIZER
  - SILT FENCE PER CITY PLATE NO. ERO-1



- GENERAL NOTES:**
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.

K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg Apr 22, 2024 - 2:49pm

DATE	REVISION

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.

*Shane M. Nelson*  
**SHANE M. NELSON, P.E.**  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN

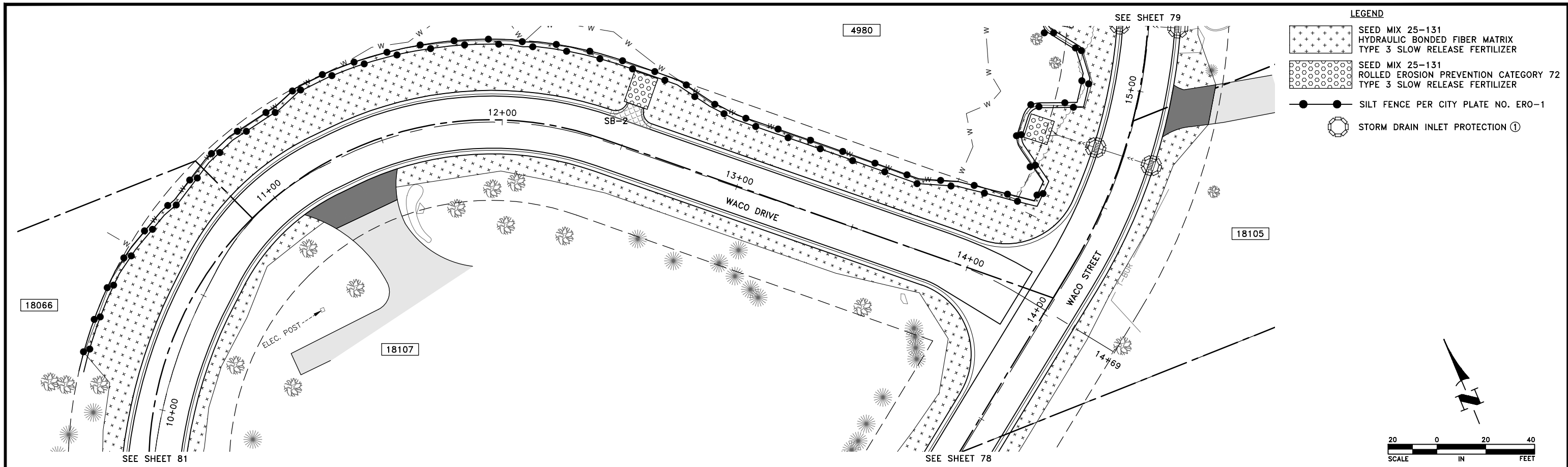


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN  
 WACO DRIVE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 81 OF 82 SHEETS  
 RA3189



- GENERAL NOTES:
1. PLACE CATEGORY 20 ROLLED EROSION PREVENTION IN THE BOTTOM OF DITCHES WITH SLOPES GREATER THAN 2.00%.
  2. ROLLED EROSION PREVENTION SHALL BE PLACED PER MN/DOT SPEC. 2575.3.G.
- REFERENCE NOTES:
- ① STORM DRAIN INLET PROTECTION SHALL BE PER  $\frac{5}{6}$  AND  $\frac{6}{6}$  OR APPROVED EQUAL.

Apr 22, 2024 - 2:49pm K:\MUNICIPAL\RA3189\ENGINEERING\PLAN DWG\RA3189\_RESTORATION.dwg

DATE	REVISION

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.

*Shane M. Nelson*  
 SHANE M. NELSON, P.E.  
 Date 4/22/24 Lic. No. 43381

DESIGNED BY: TAE  
 DRAWN BY: TAE  
 CHECKED BY: SMN



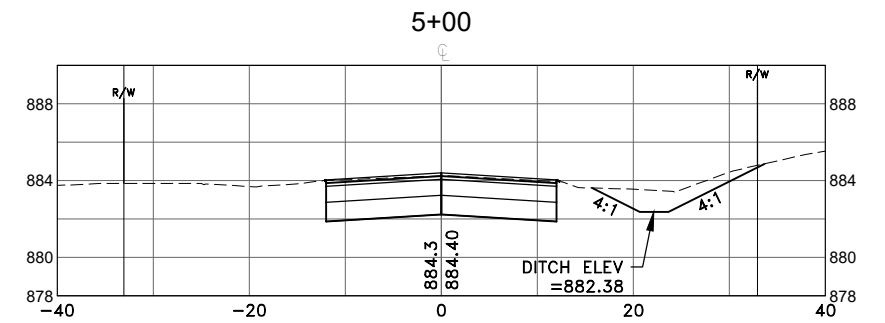
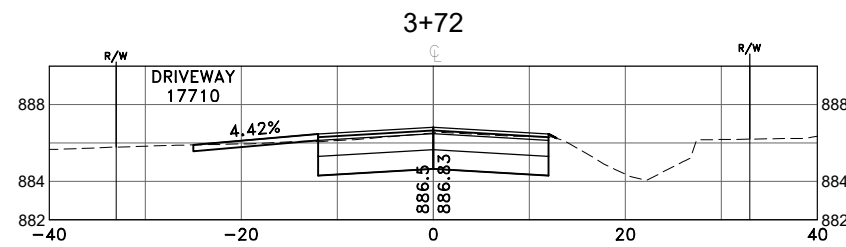
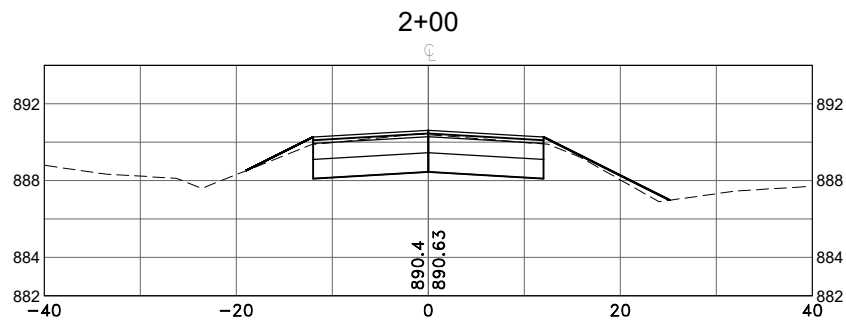
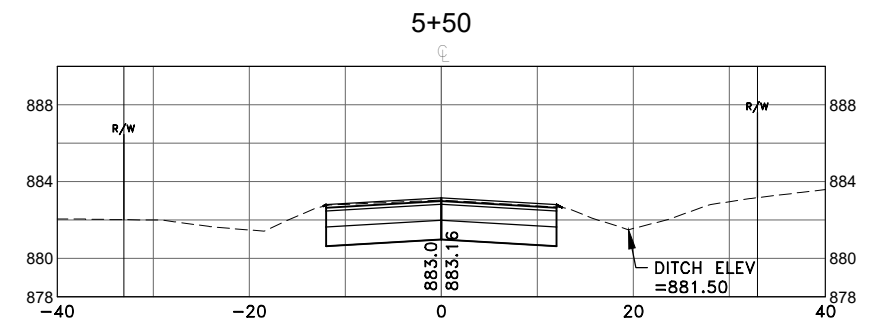
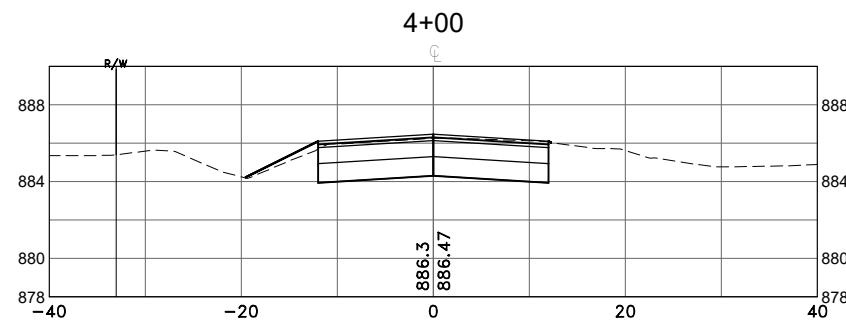
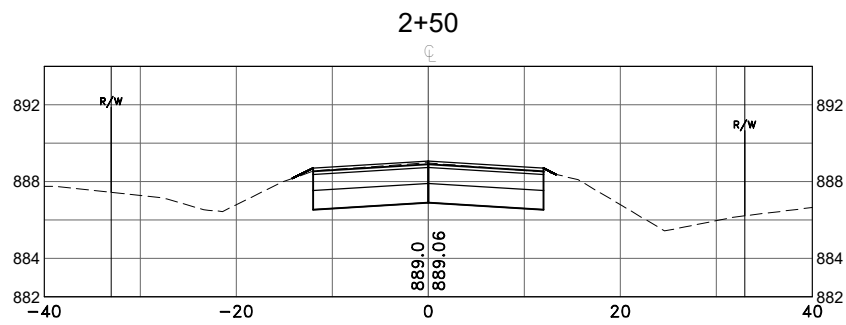
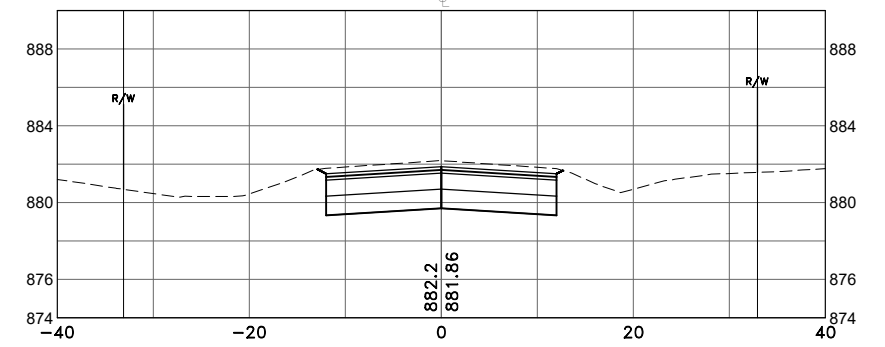
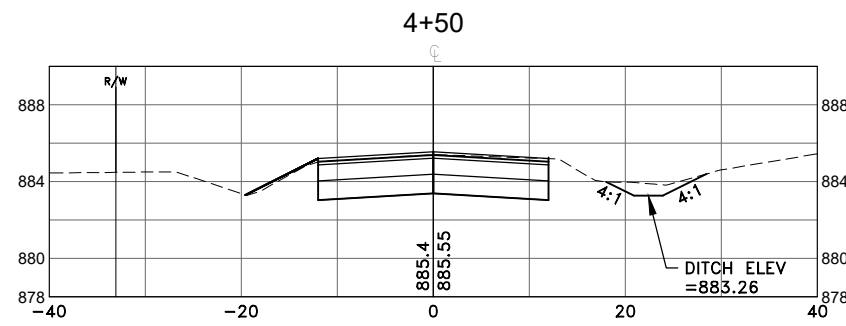
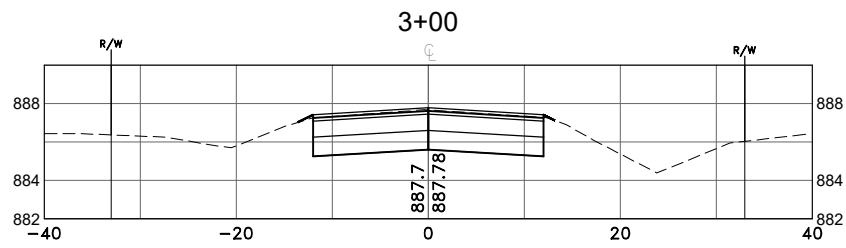
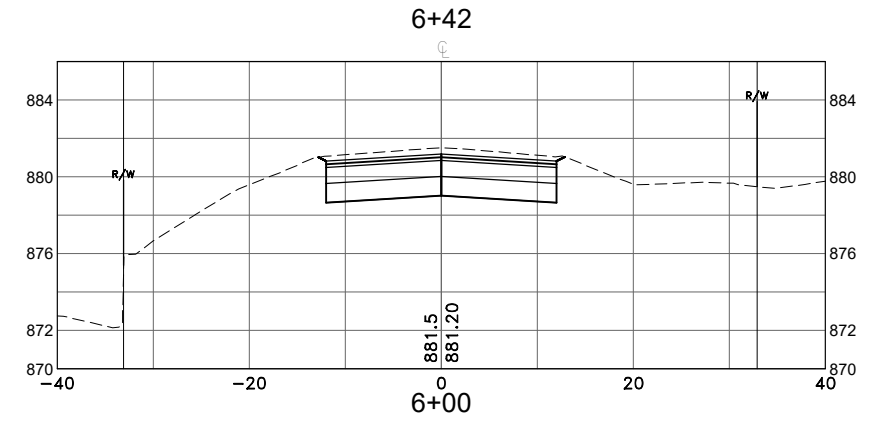
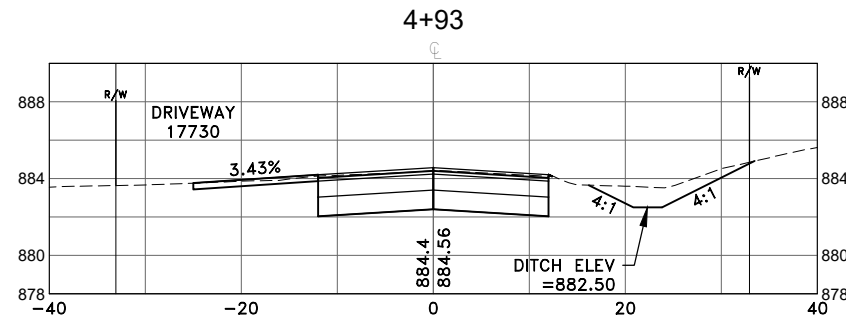
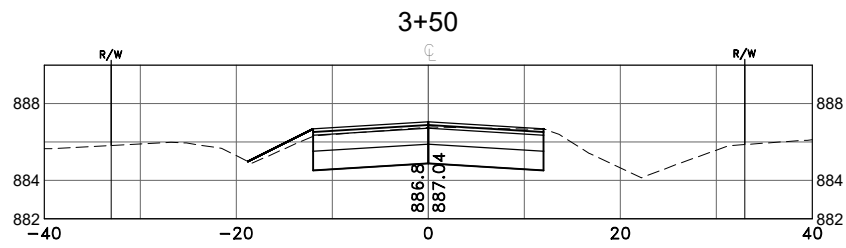
**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT**

**EROSION AND SEDIMENT CONTROL  
 AND RESTORATION PLAN  
 WACO DRIVE  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET 82 OF 82 SHEETS  
 RA3189

Apr 22, 2024 - 2:50pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



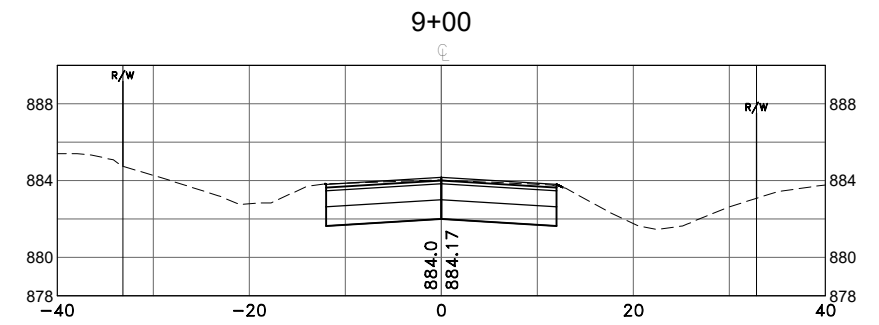
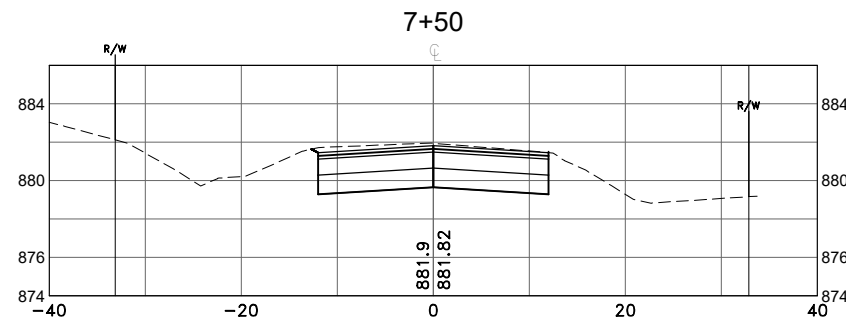
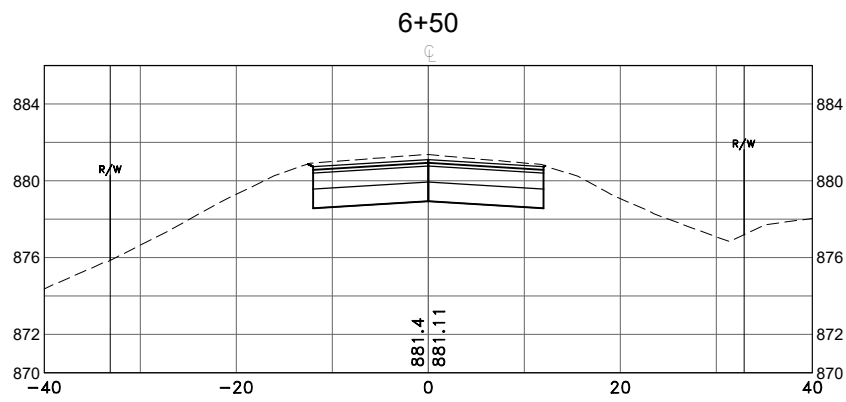
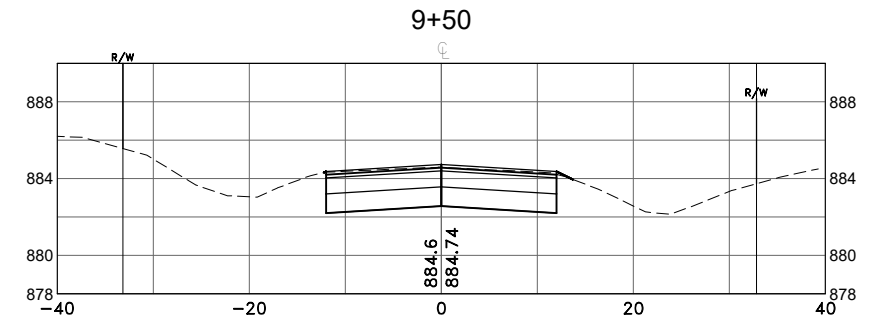
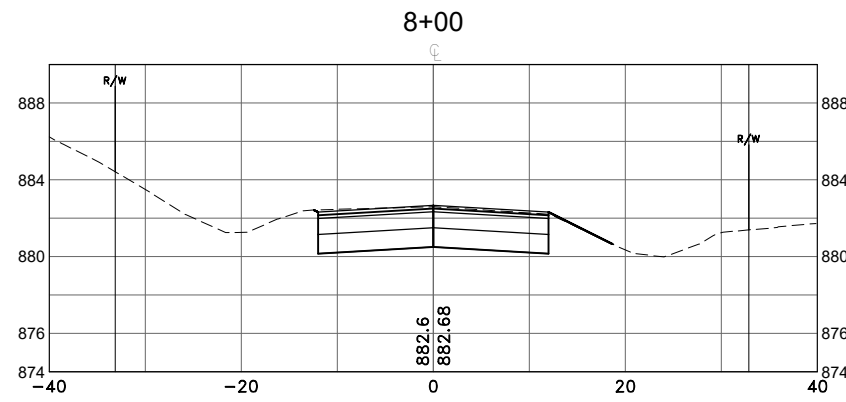
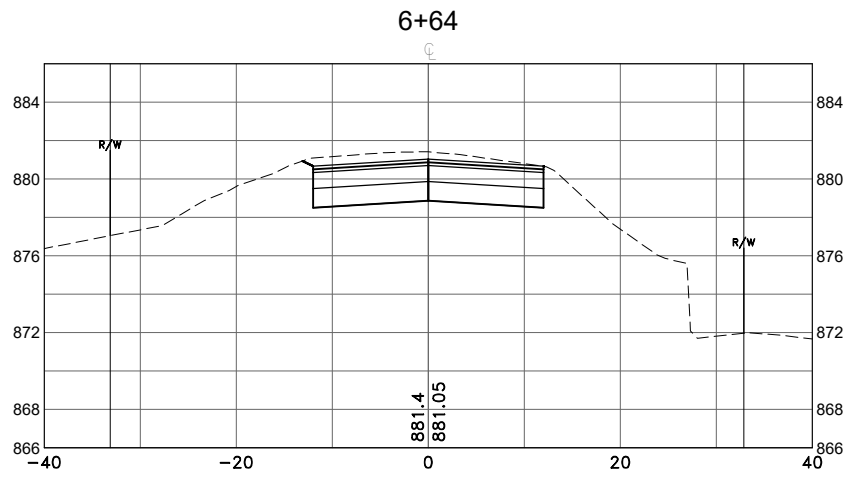
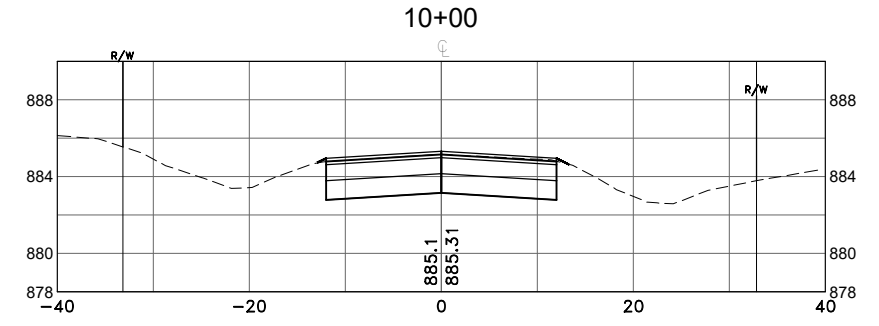
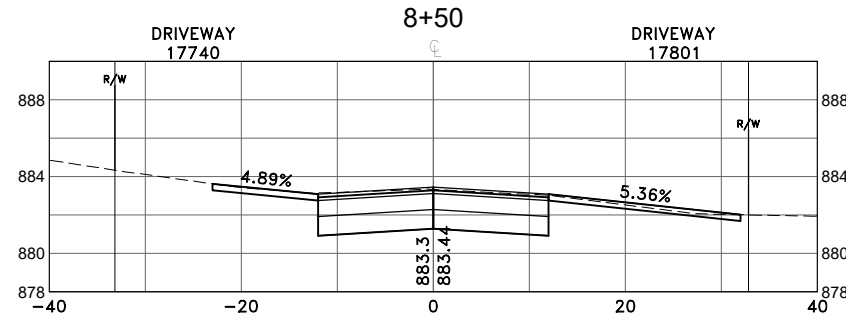
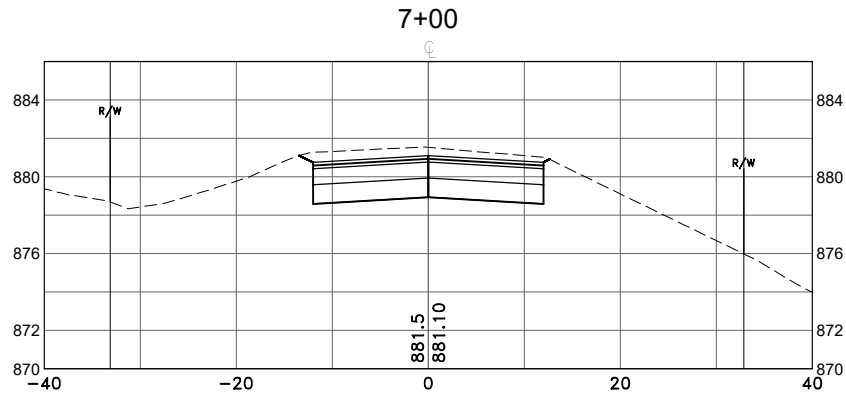
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
VANADIUM STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET X1  
OF X38  
SHEETS  
RA3189

Apr 22, 2024 - 2:50pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



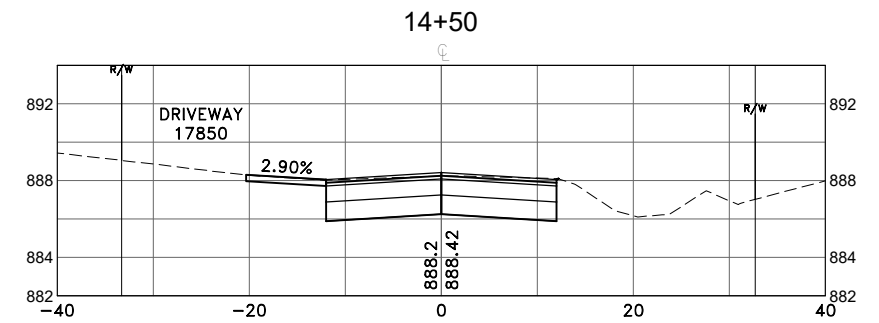
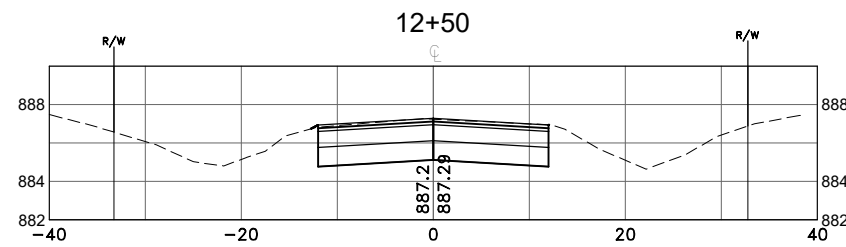
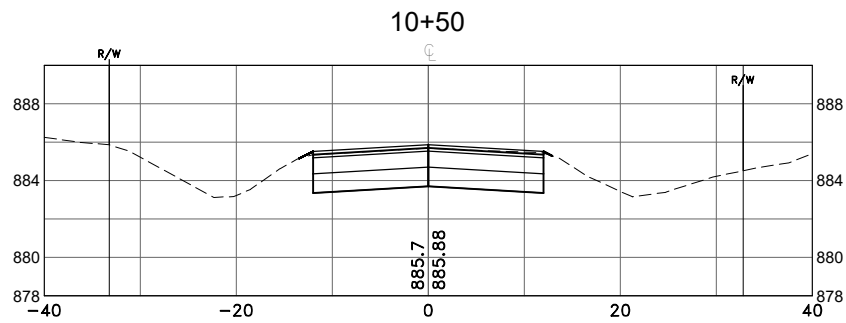
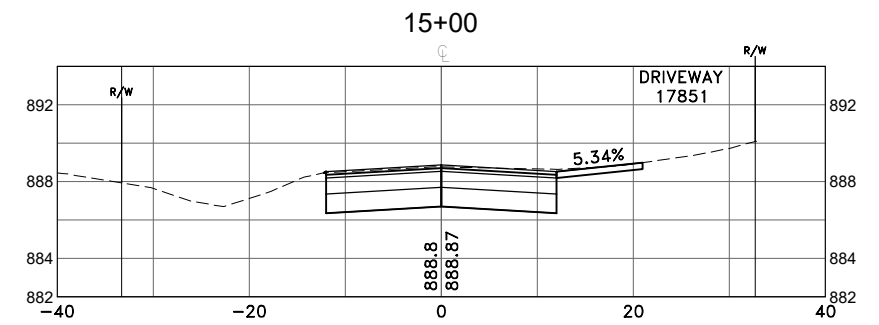
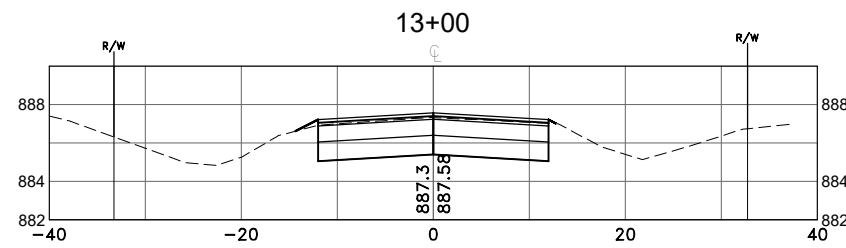
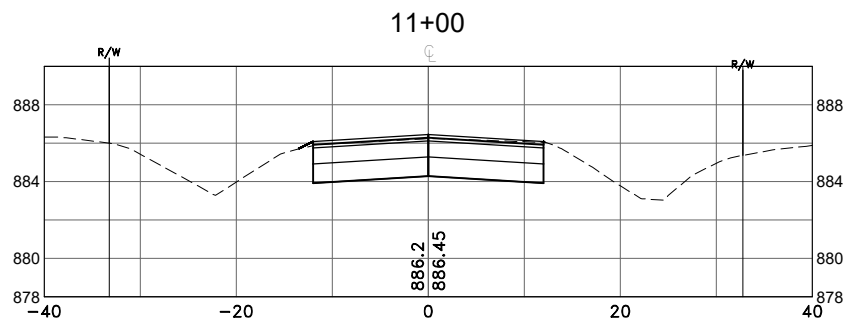
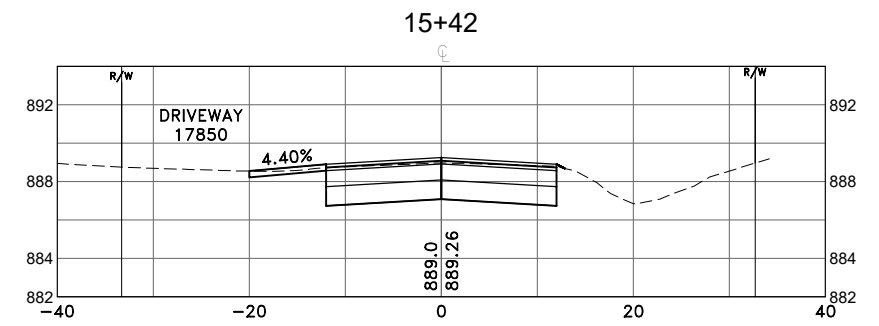
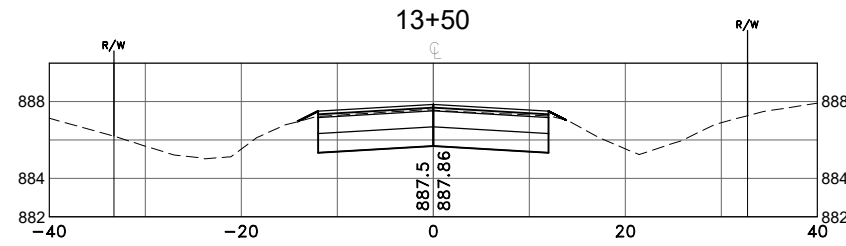
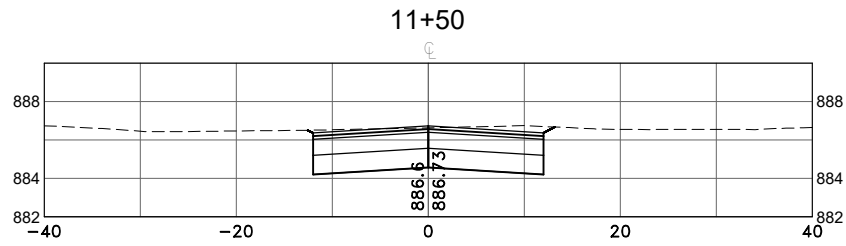
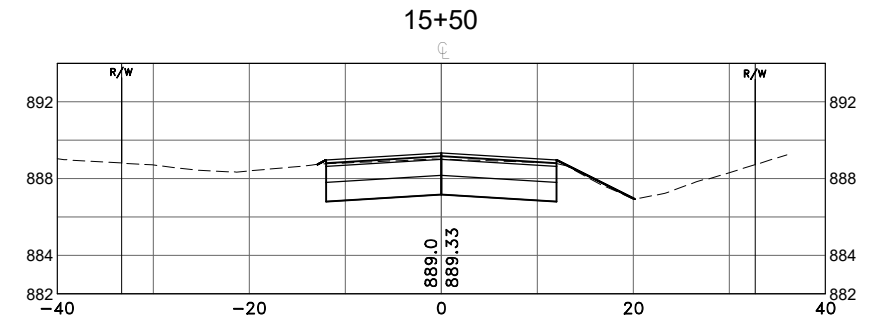
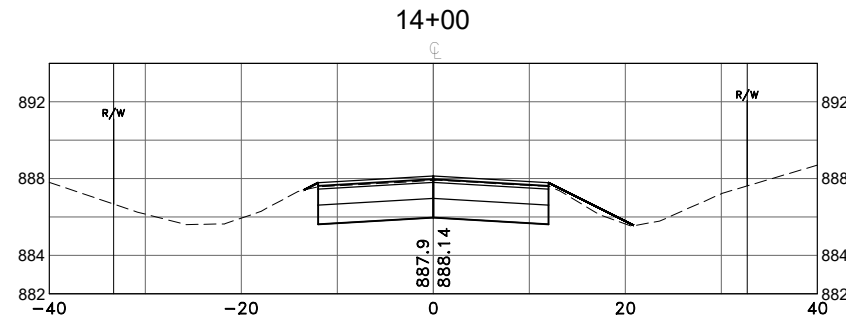
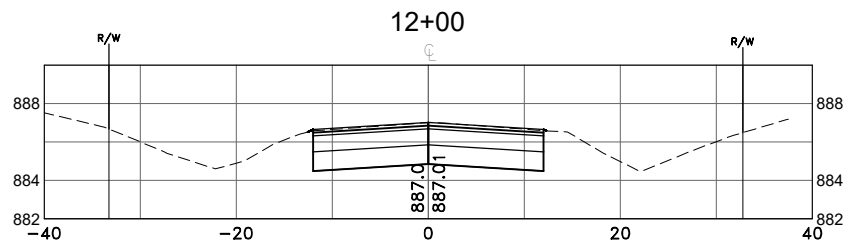
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

**CROSS SECTIONS**  
**VANADIUM STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET **X2** OF **X38**  
SHEETS  
RA3189

Apr 22, 2024 - 2:50pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

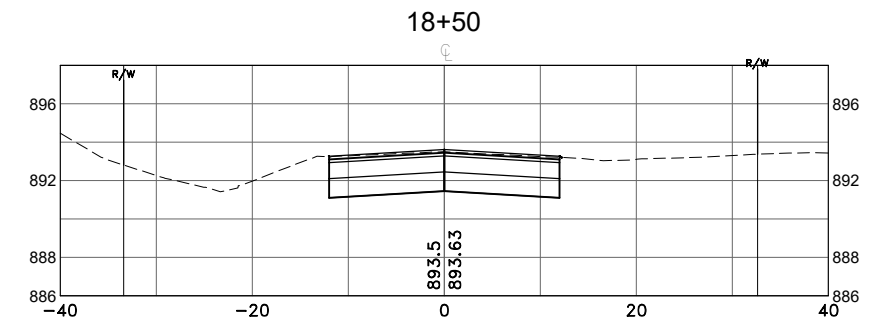
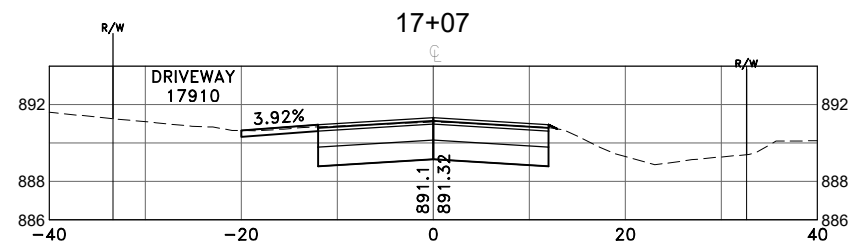
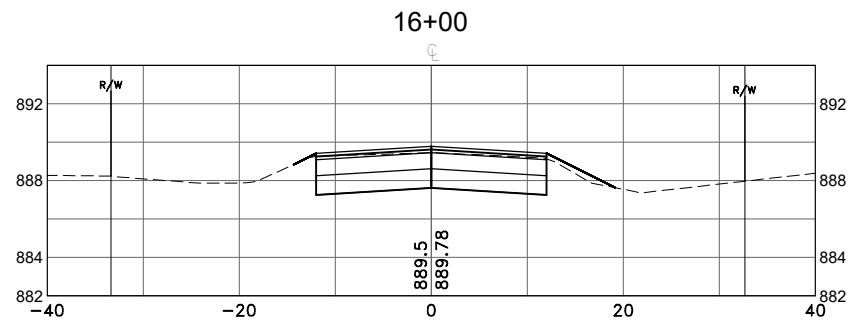
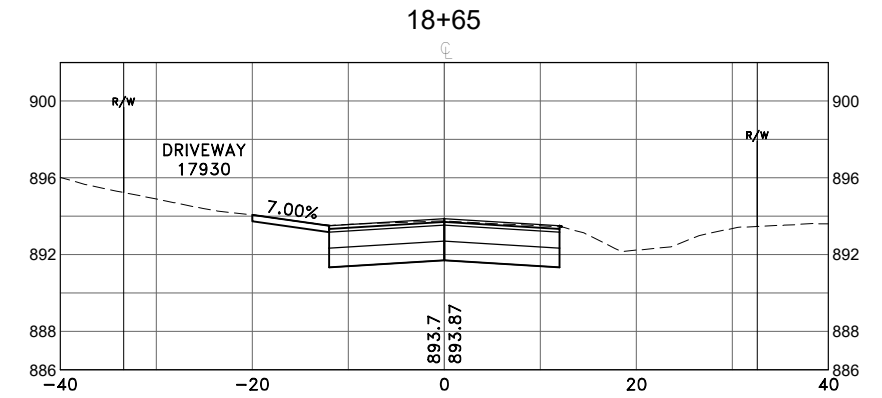
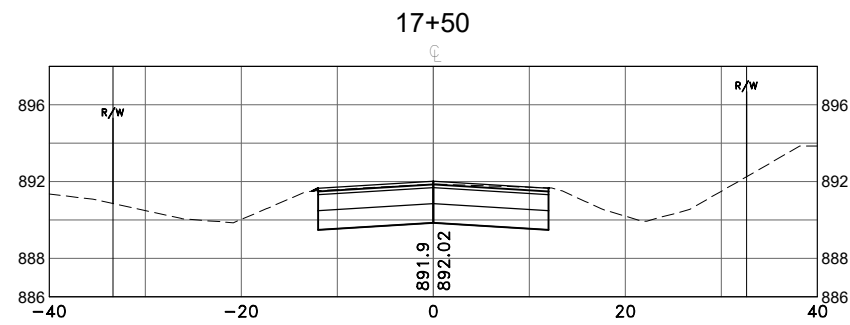
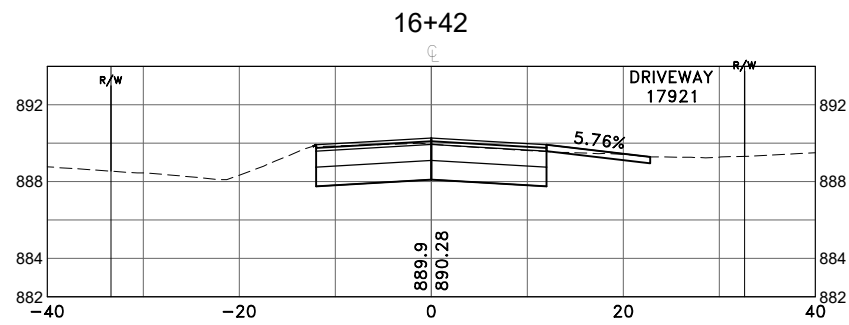
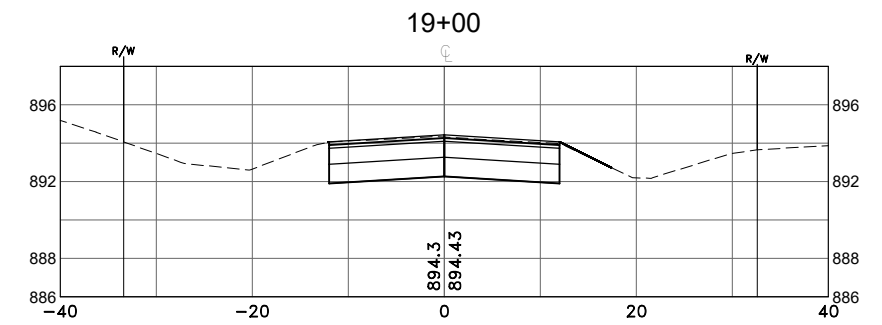
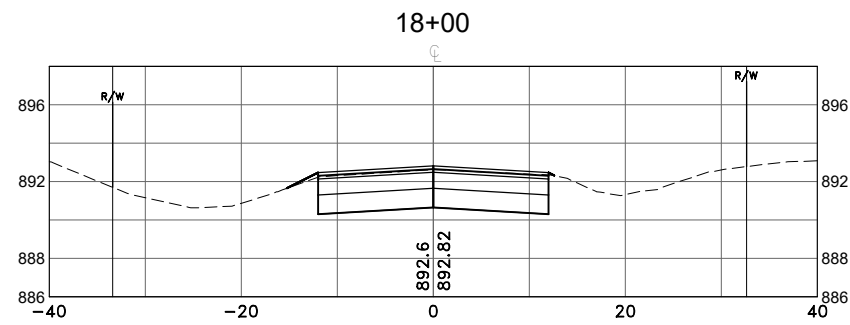
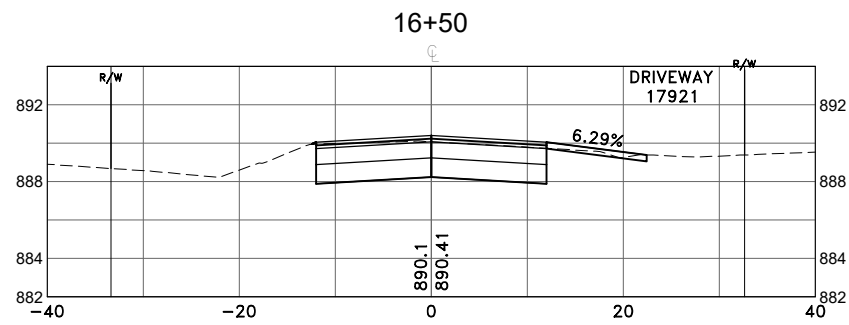
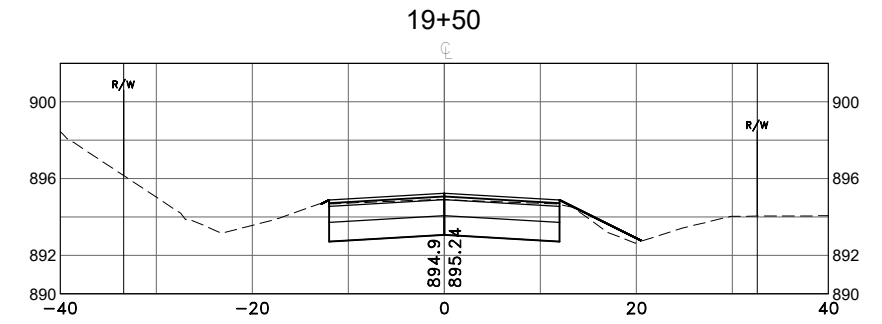
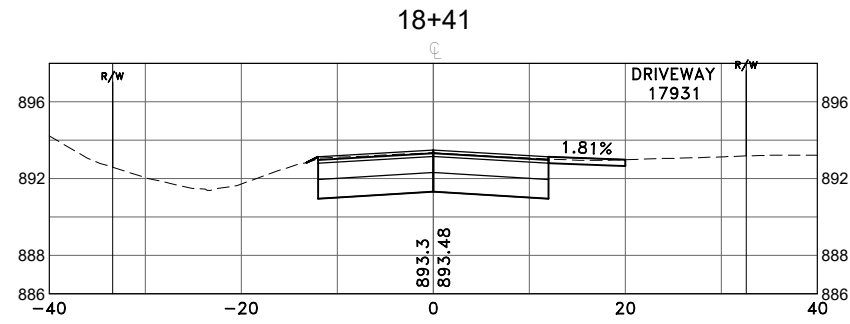
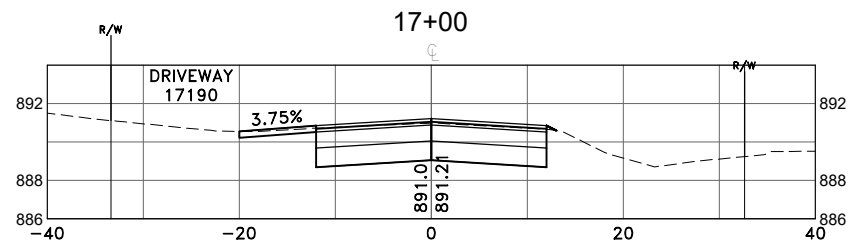


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
VANADIUM STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X3  
OF  
X38  
SHEETS  
RA3189



Apr 22, 2024 - 2:50pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



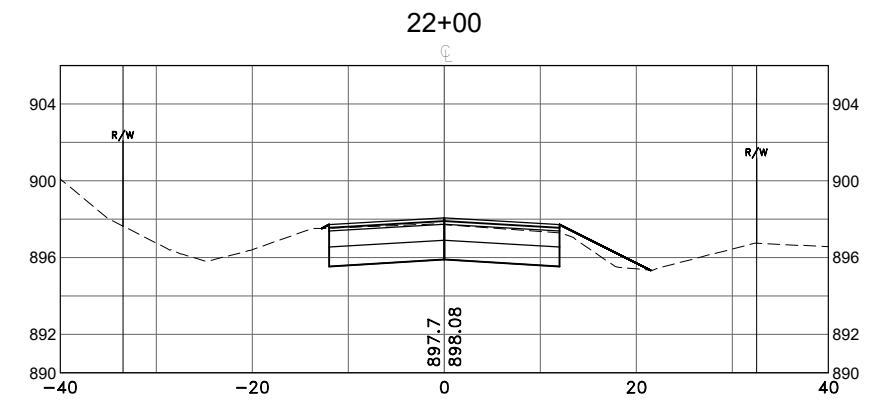
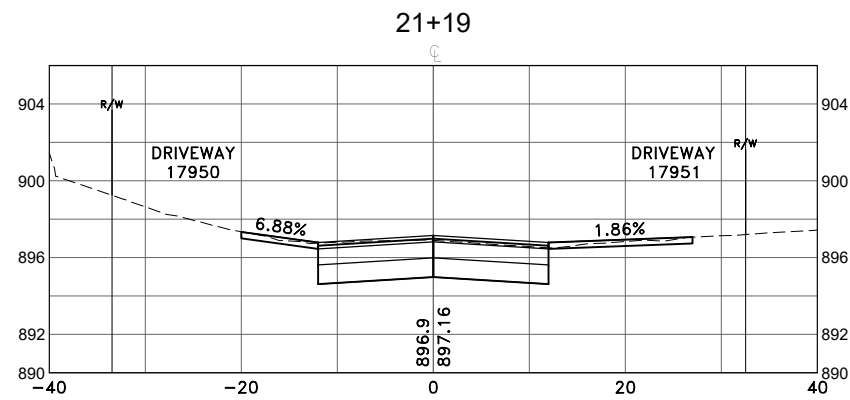
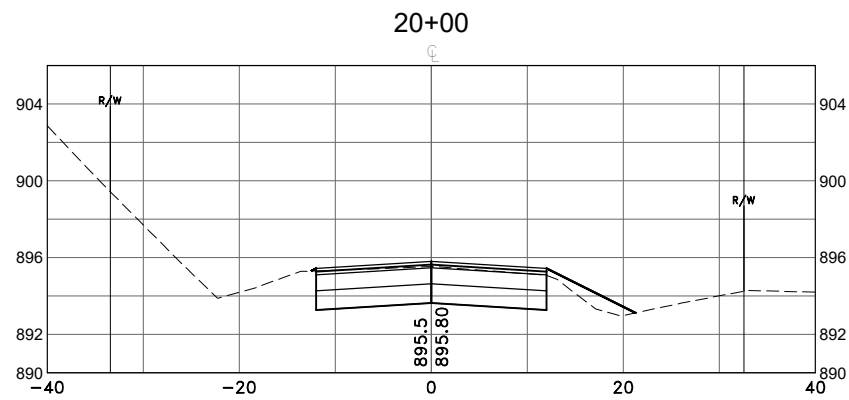
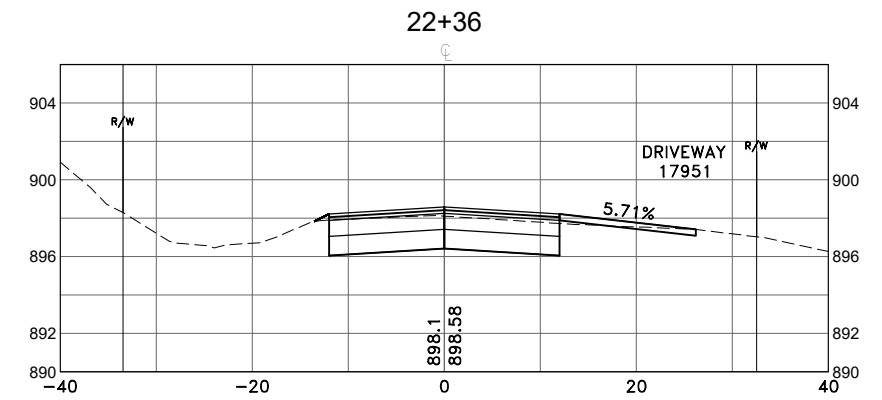
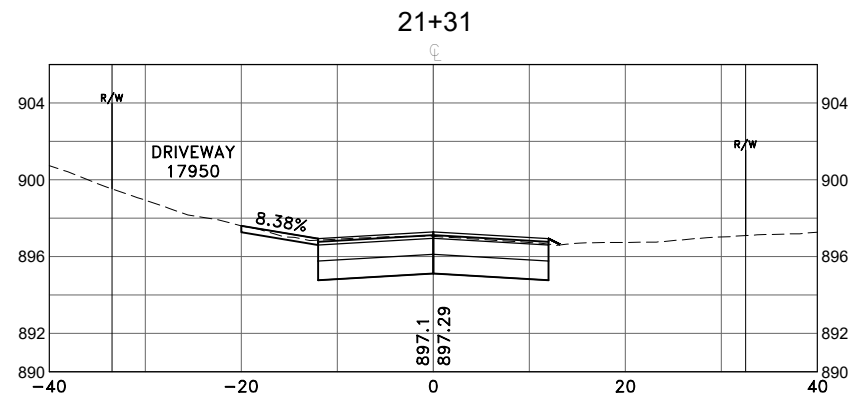
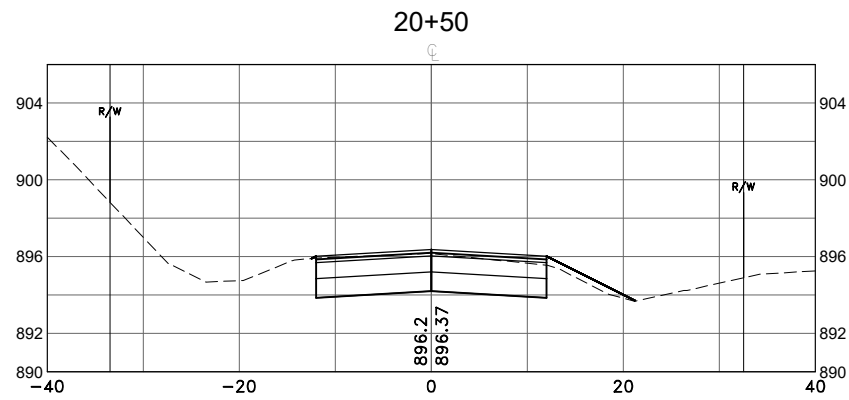
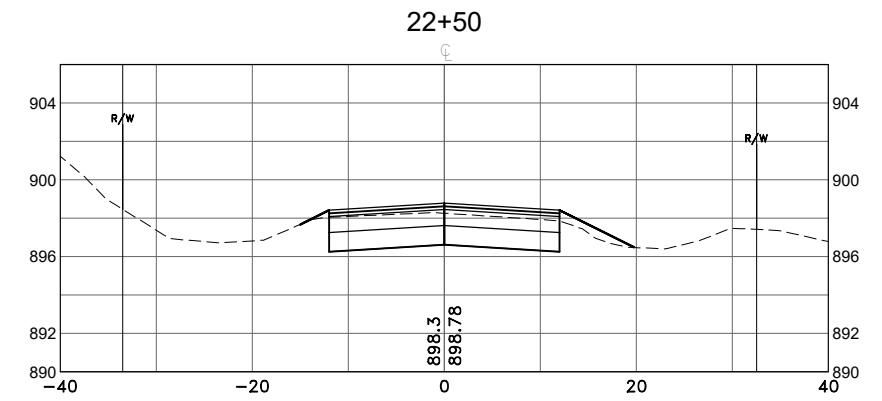
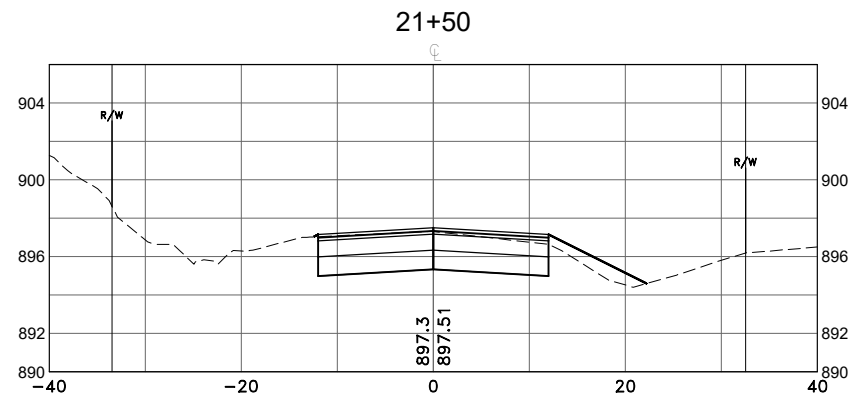
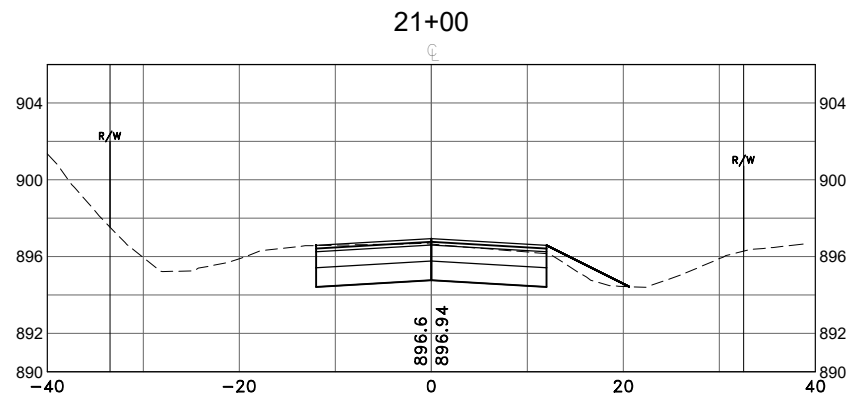
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
VANADIUM STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET X4  
OF  
X38  
SHEETS  
RA3189

Apr 22, 2024 - 2:50pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



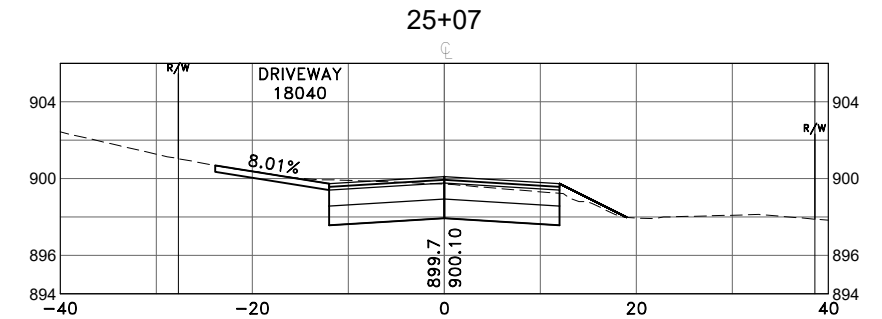
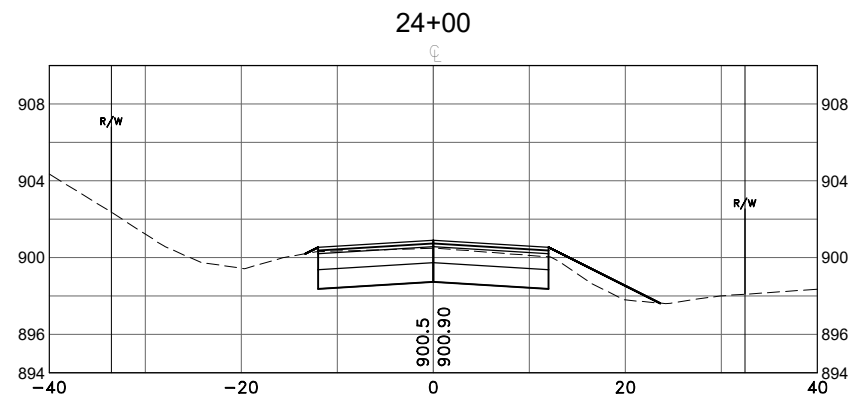
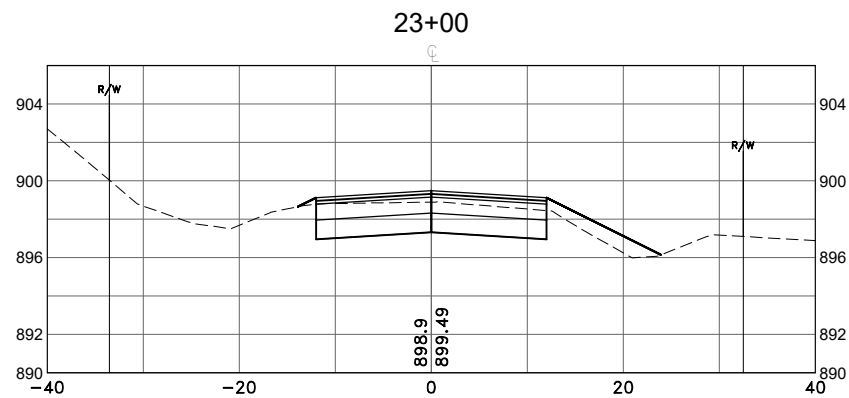
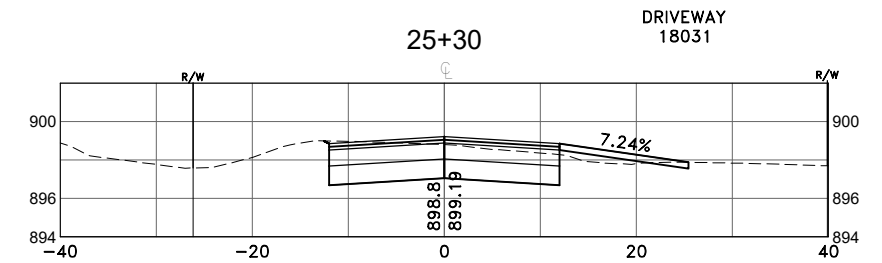
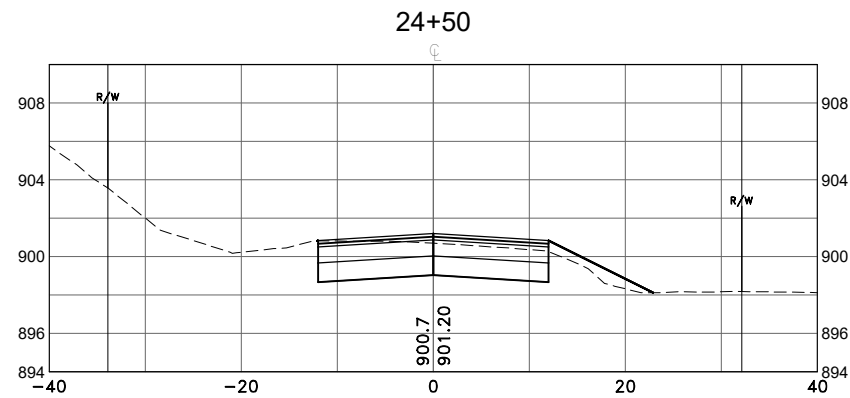
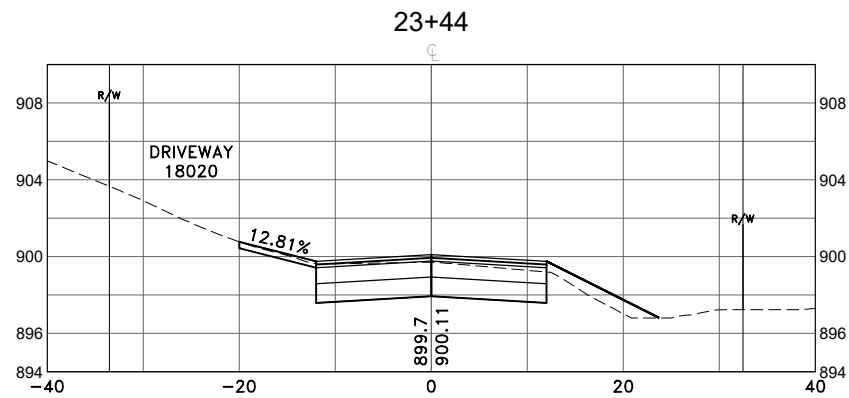
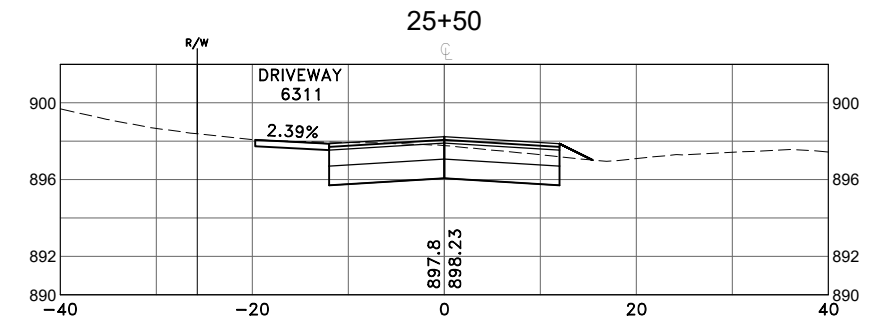
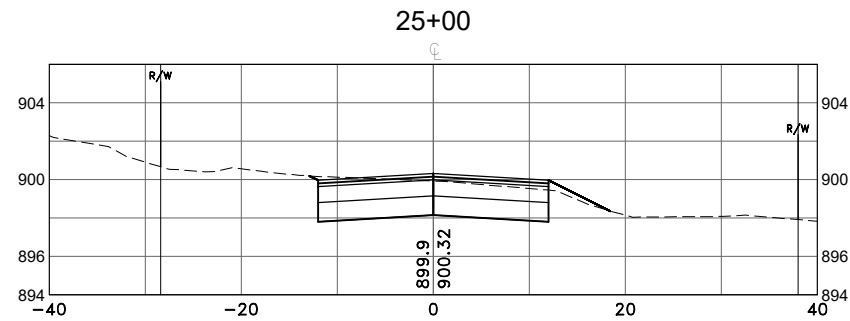
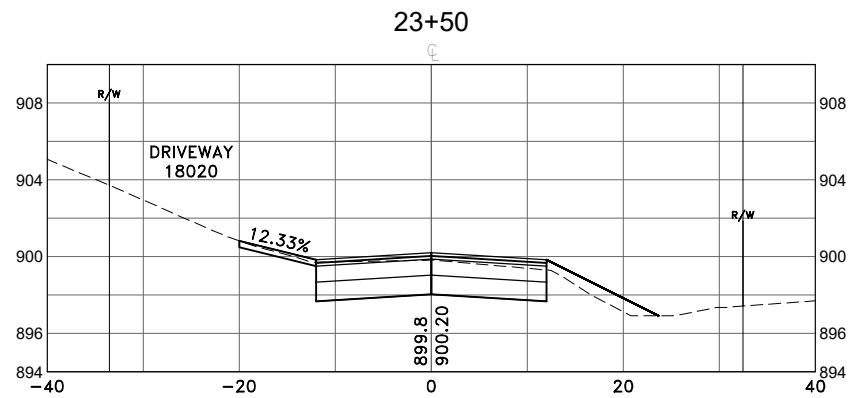
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
VANADIUM STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET X5  
OF X38  
SHEETS

Apr 22, 2024 - 2:50pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

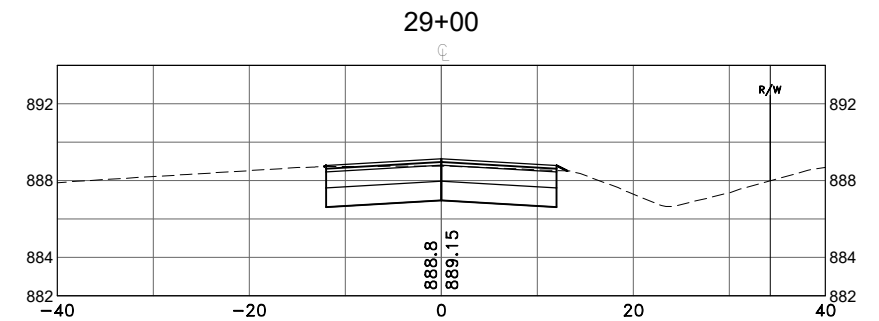
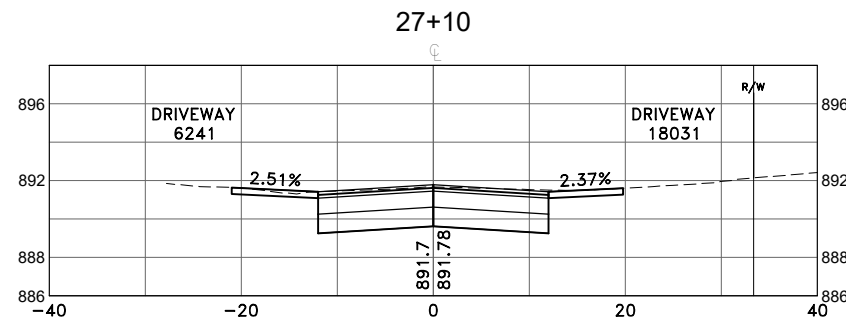
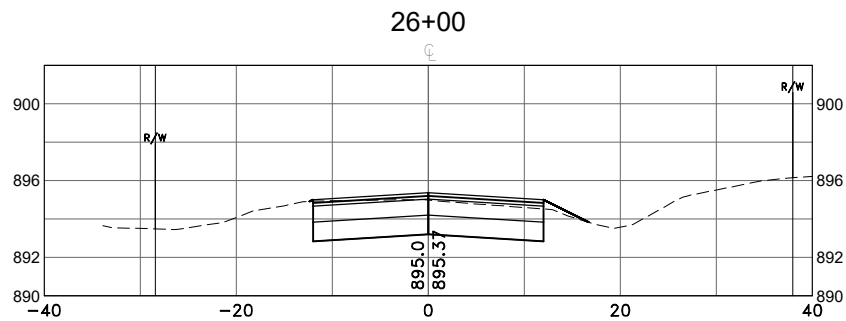
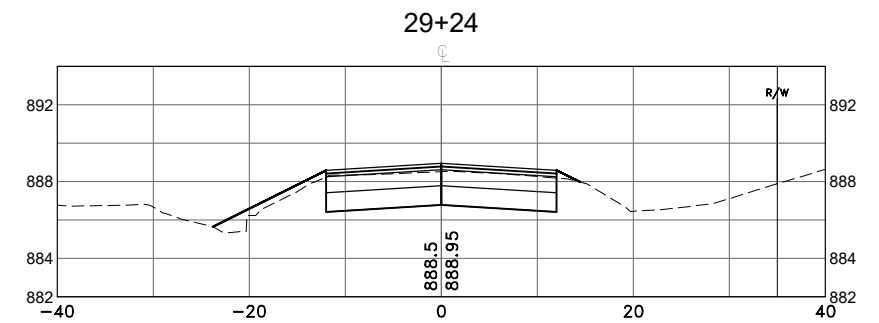
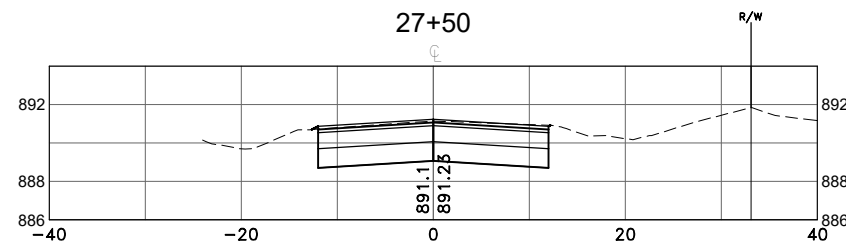
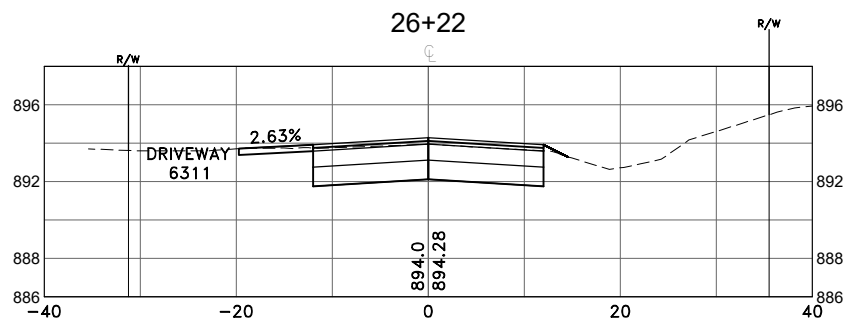
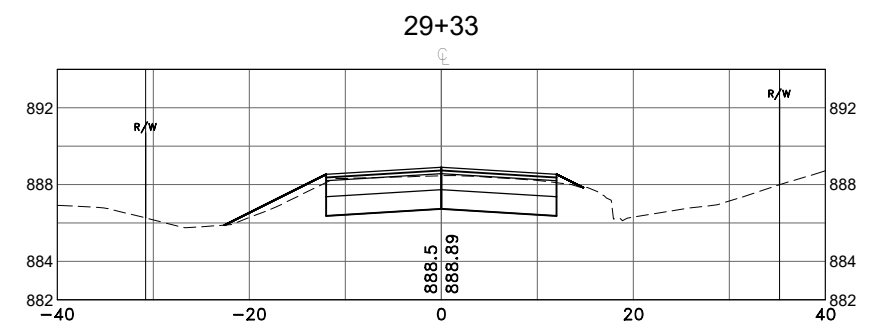
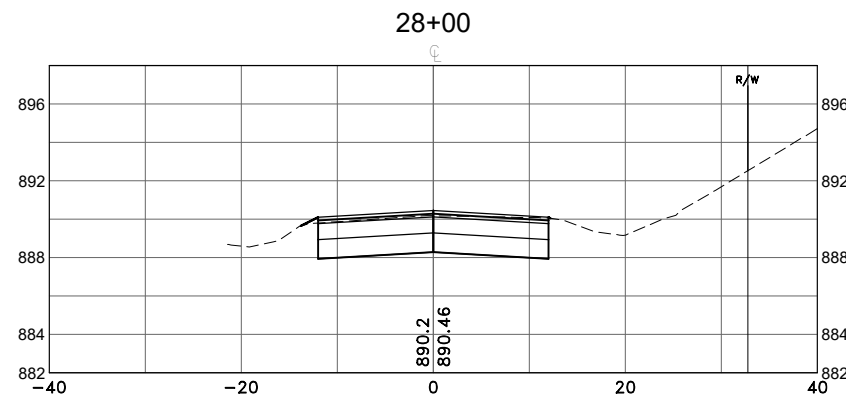
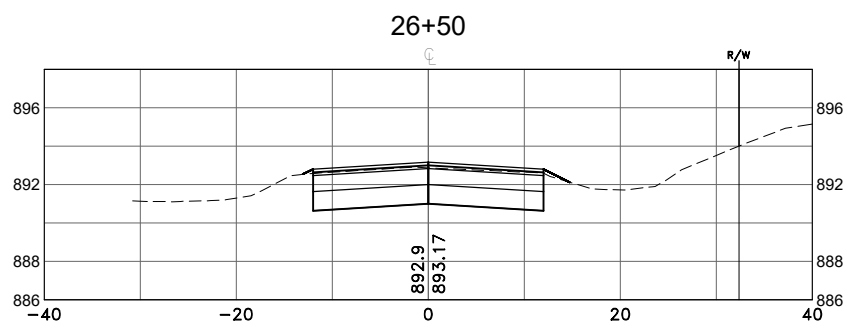
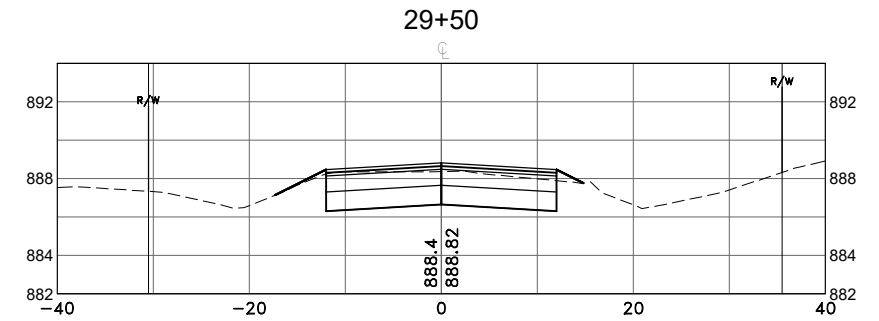
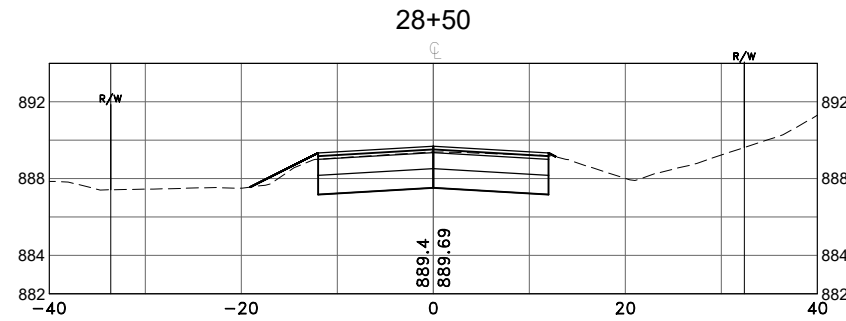
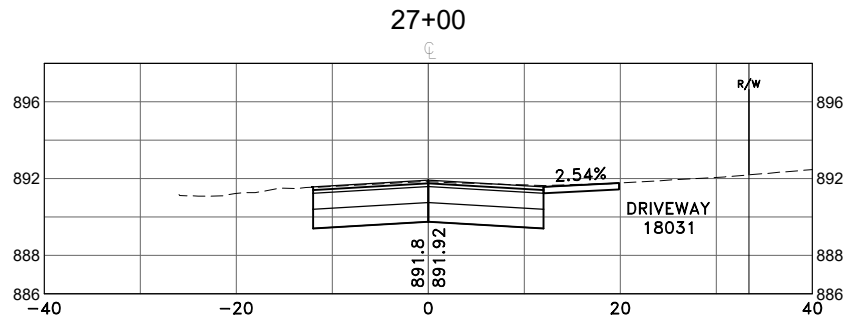


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

**CROSS SECTIONS**  
**VANADIUM STREET**  
**CITIES OF RAMSEY AND NOWTHEN, MINNESOTA**

SHEET  
**X6**  
OF  
**X38**  
SHEETS



Apr 22, 2024 - 2:51pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



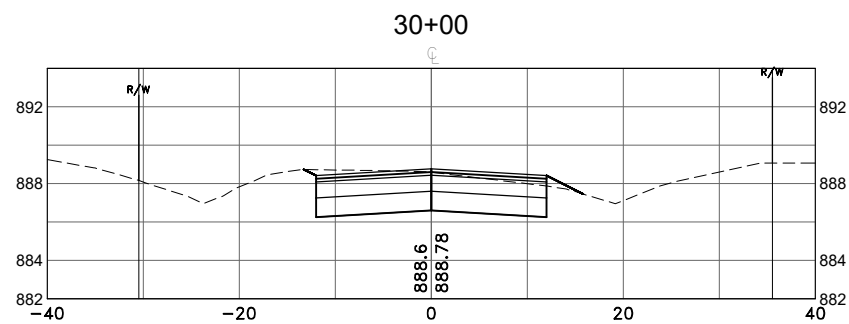
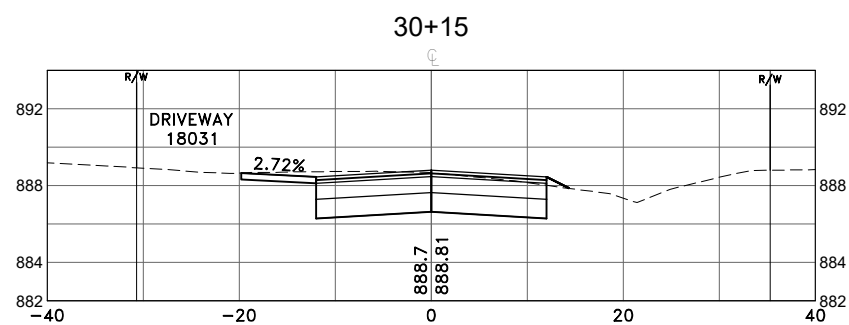
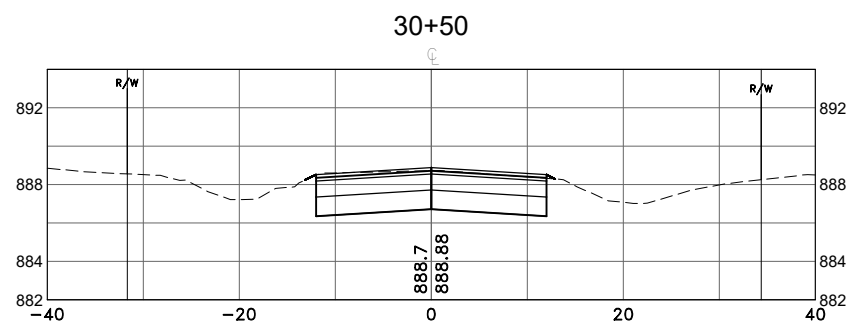
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
180TH LANE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET X7  
OF X38  
SHEETS

Apr 22, 2024 - 2:51pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY: TAE
DRAWN BY: TAE
CHECKED BY: SMN



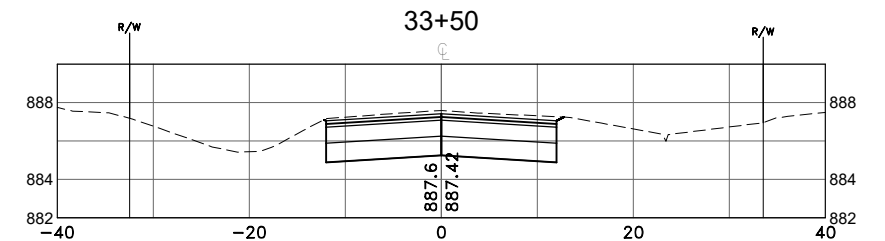
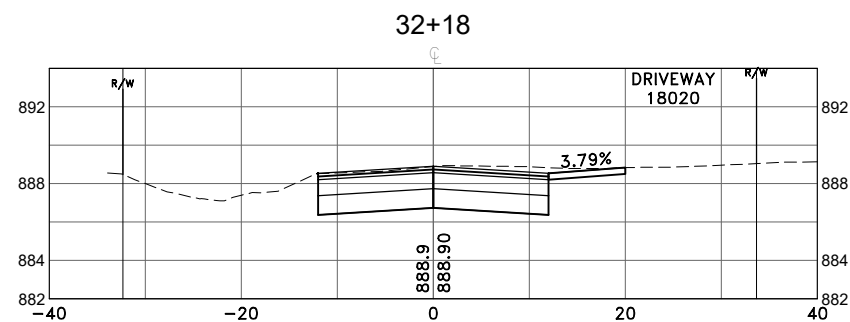
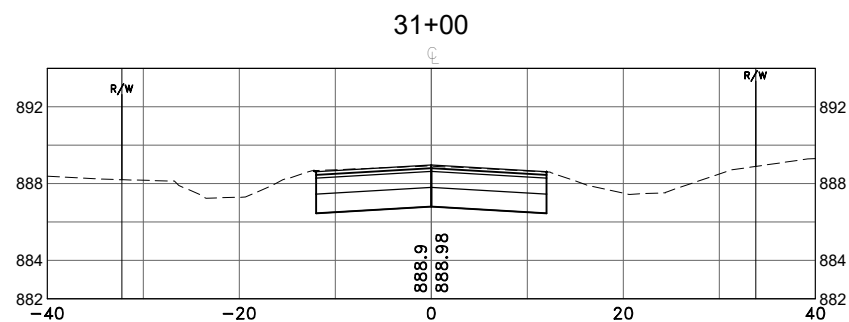
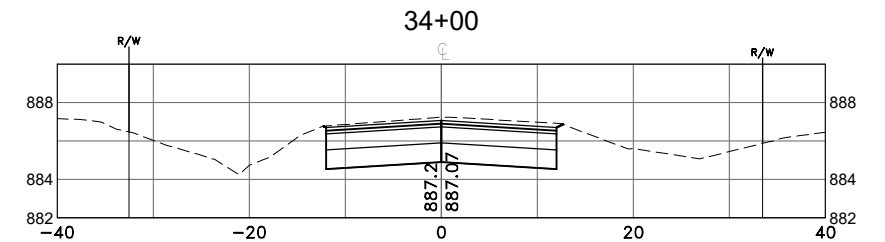
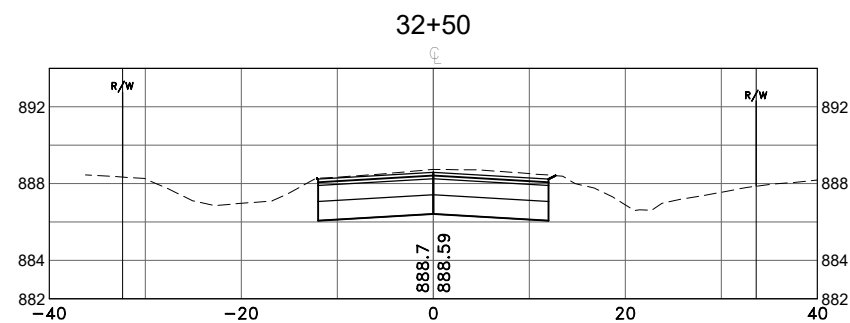
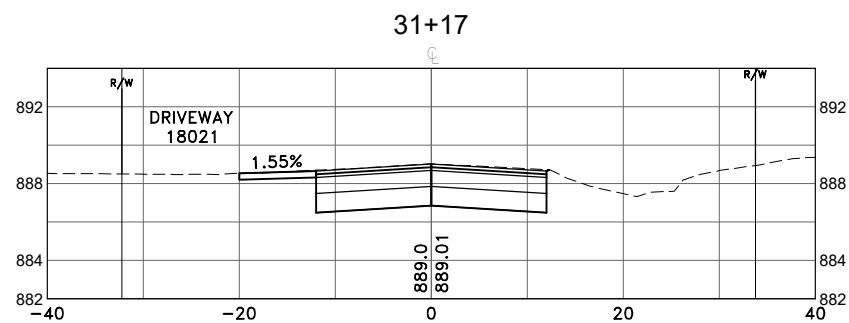
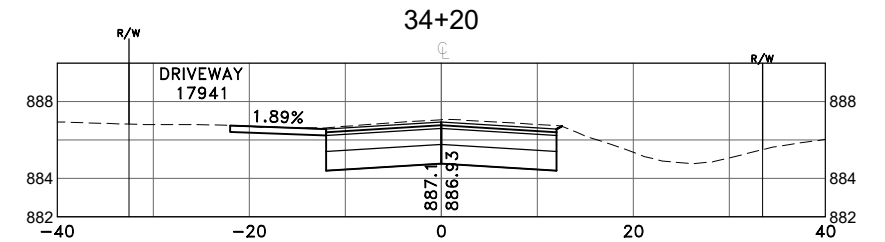
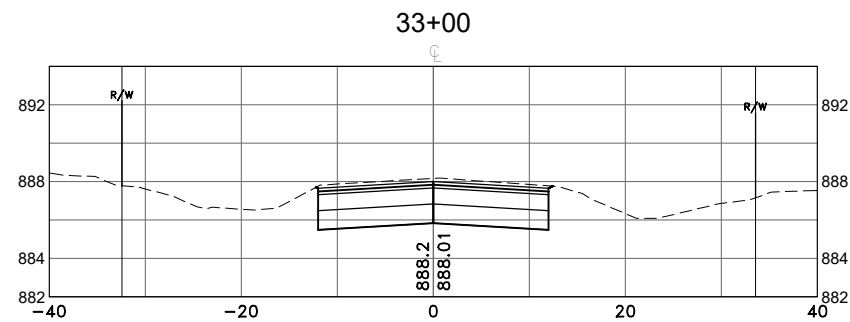
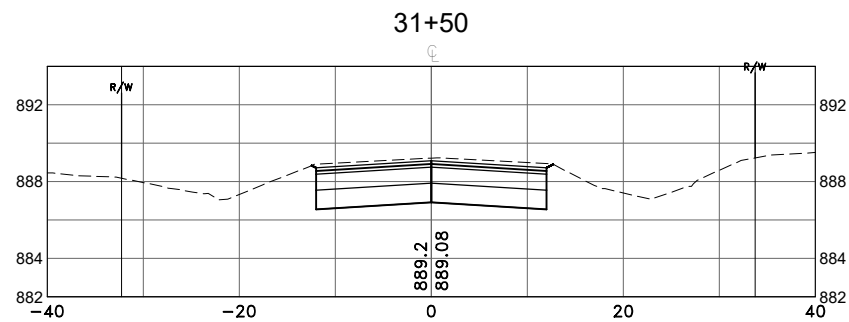
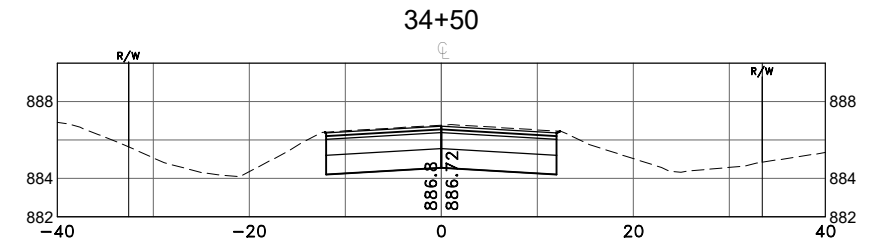
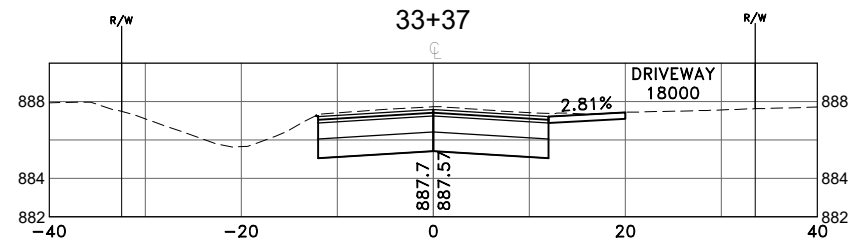
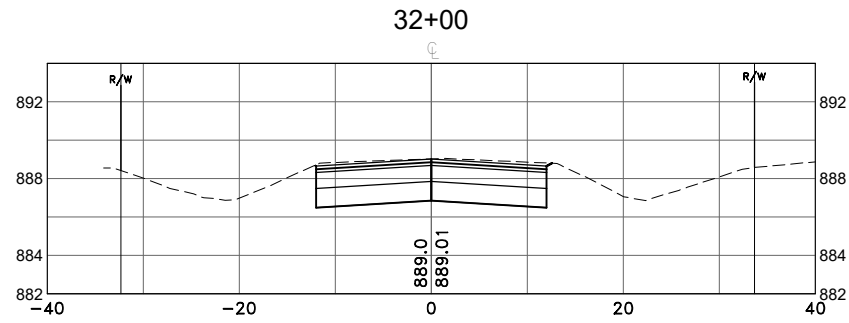
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
URANIUM STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X8  
OF  
X38  
SHEETS

Apr 22, 2024 - 2:51pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



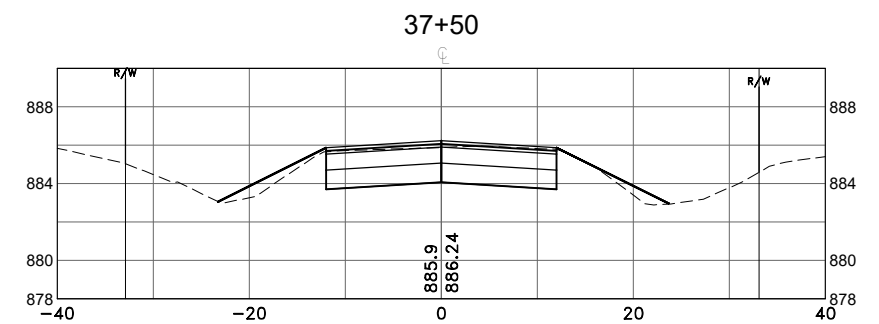
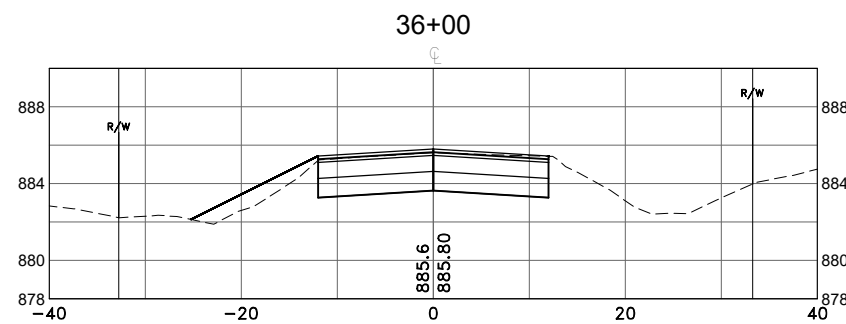
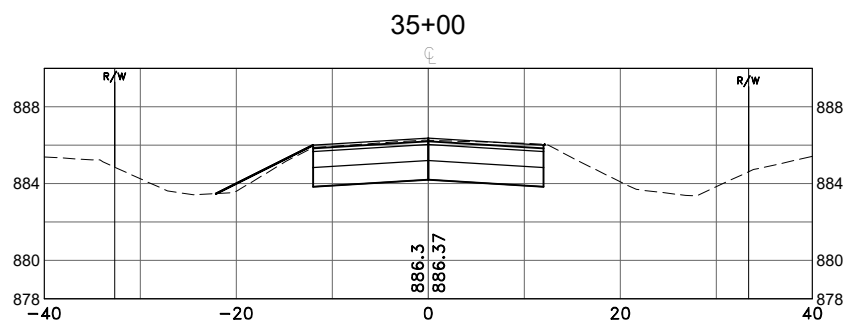
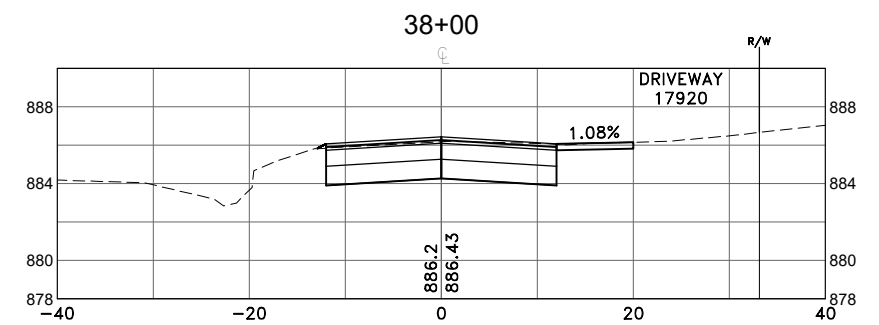
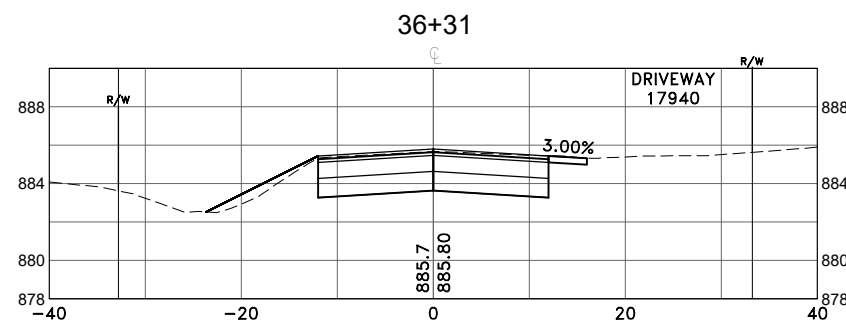
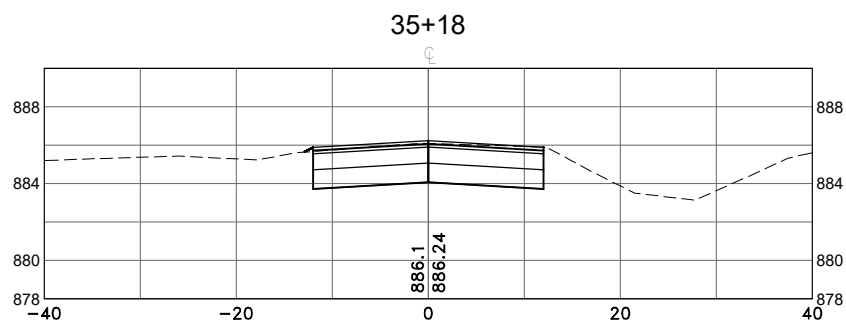
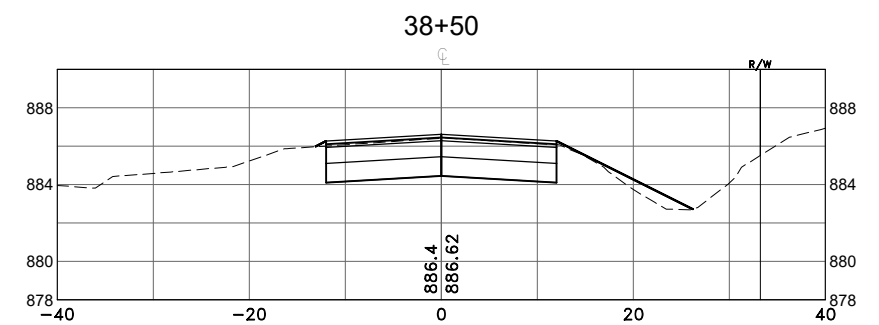
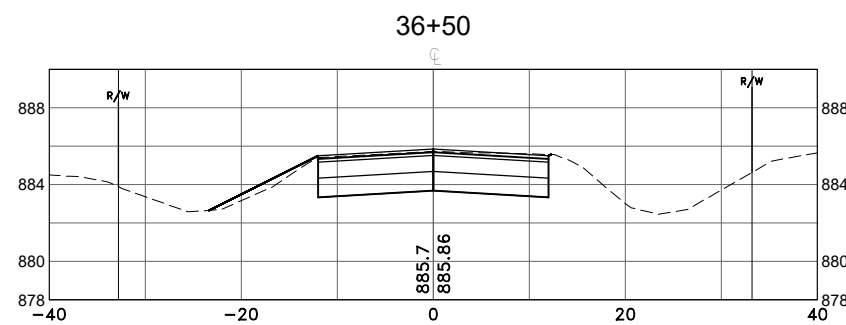
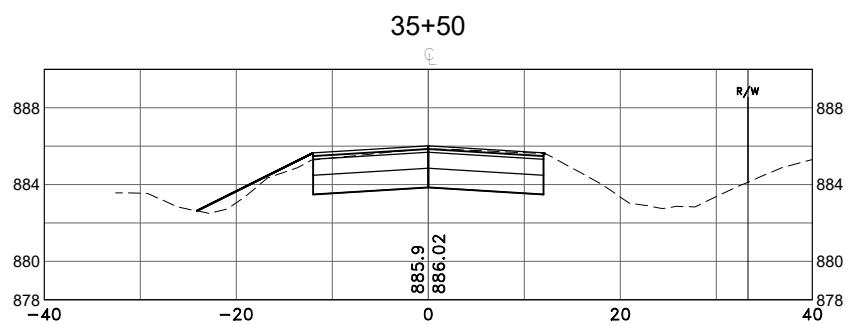
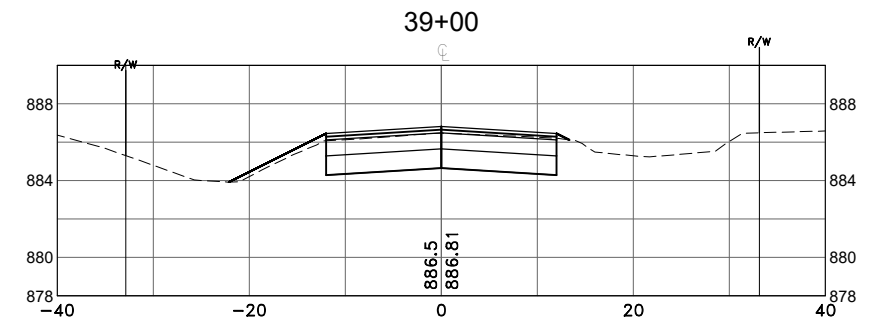
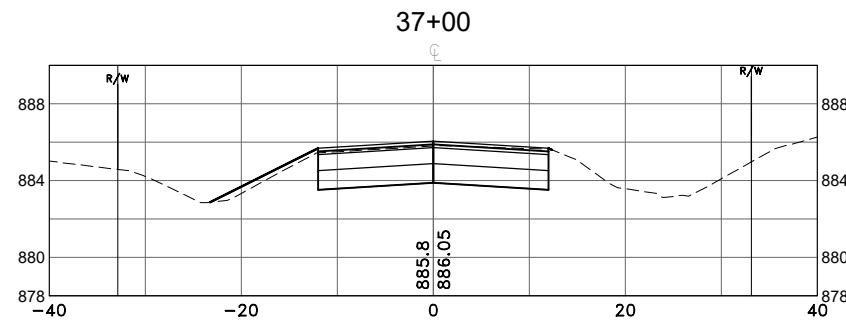
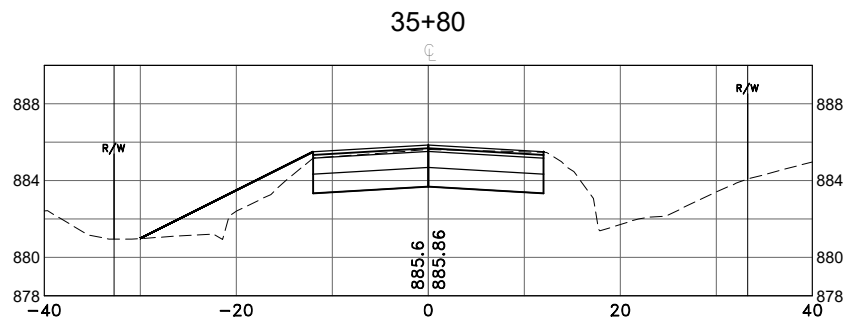
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
URANIUM STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET X9  
OF X38  
SHEETS

Apr 22, 2024 - 2:51pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



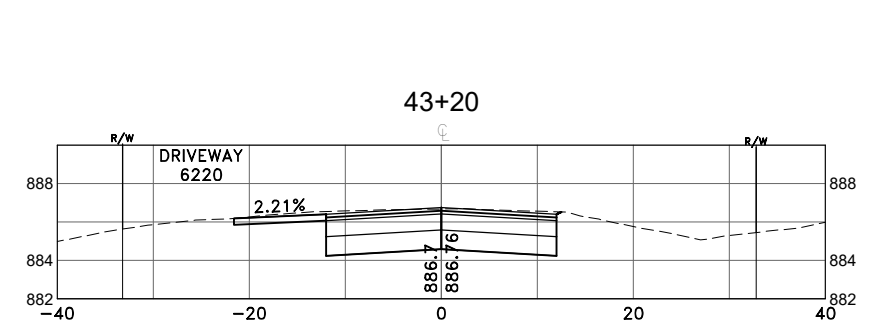
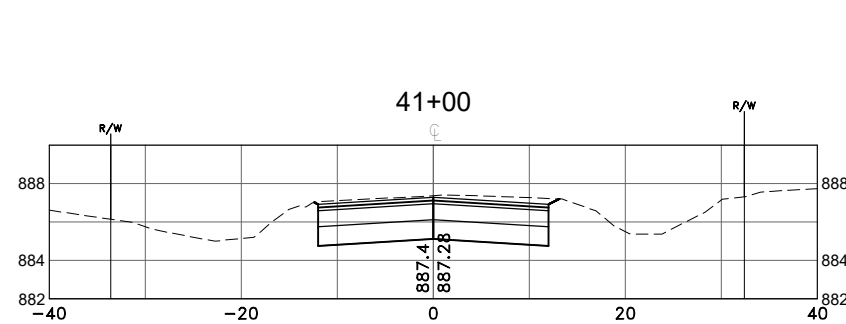
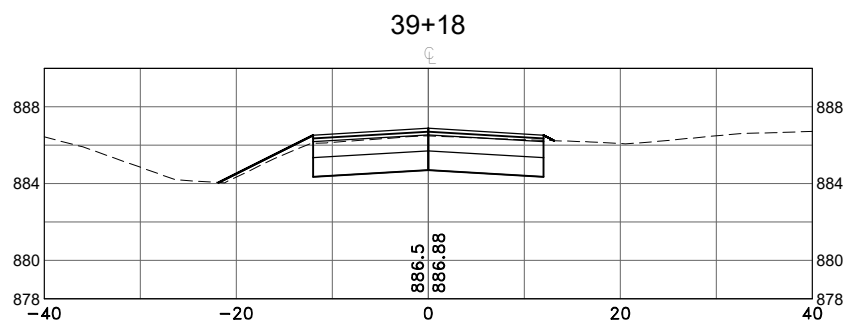
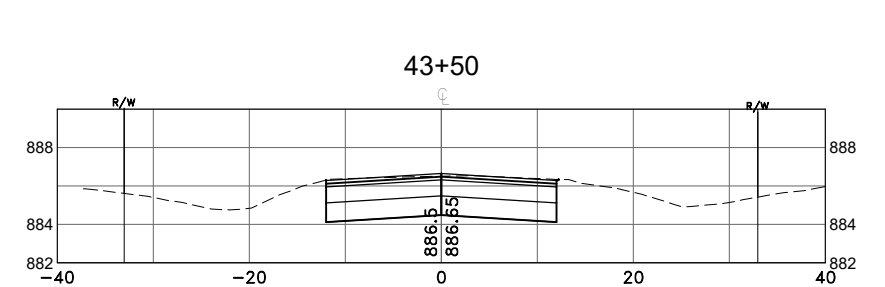
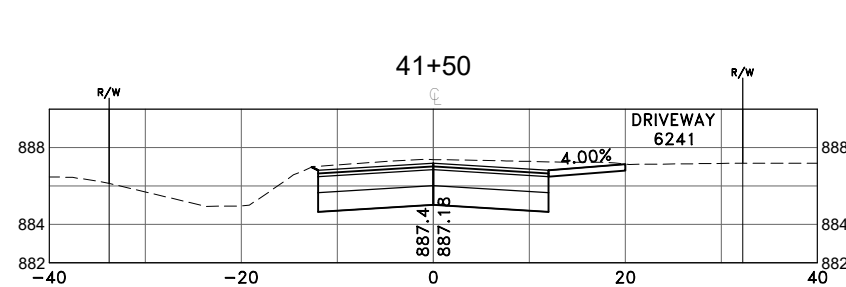
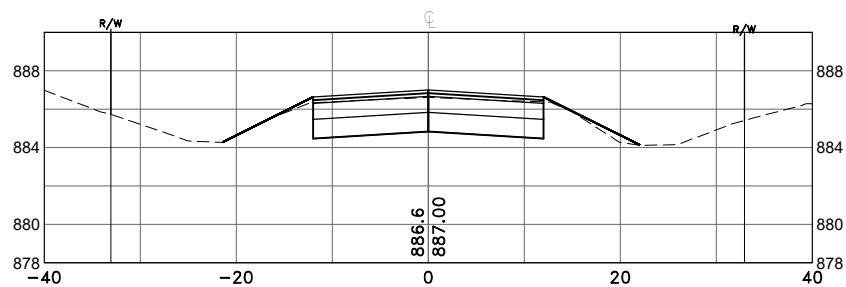
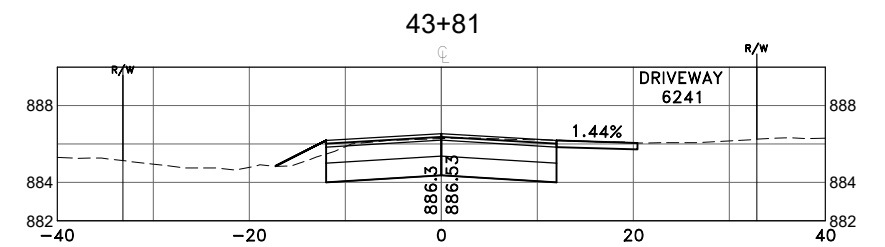
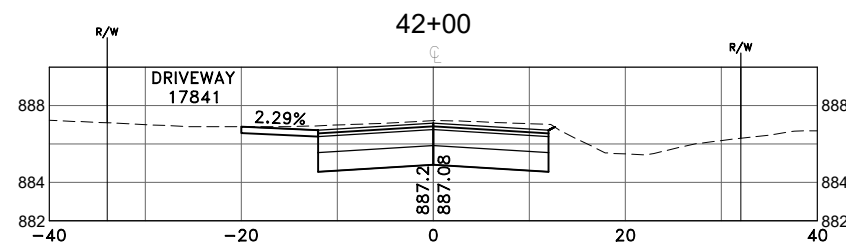
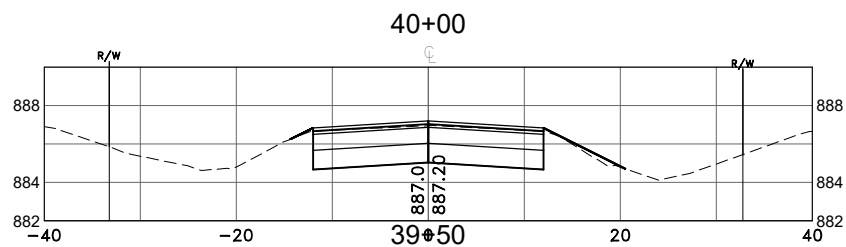
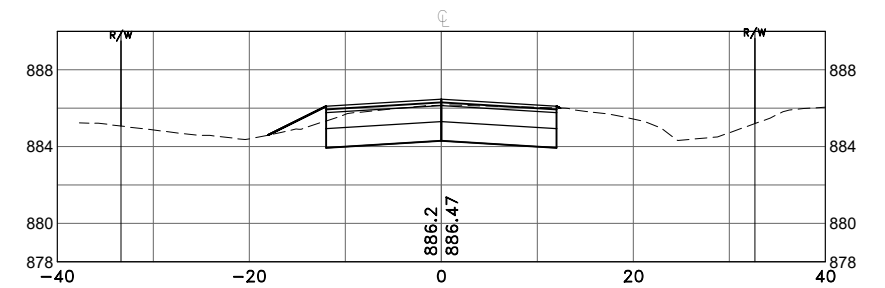
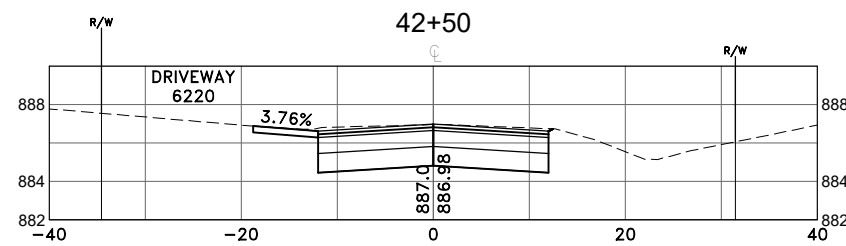
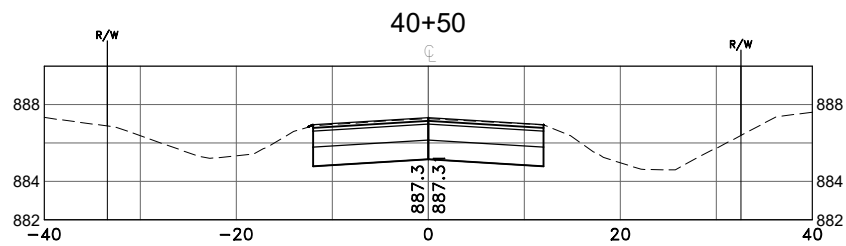
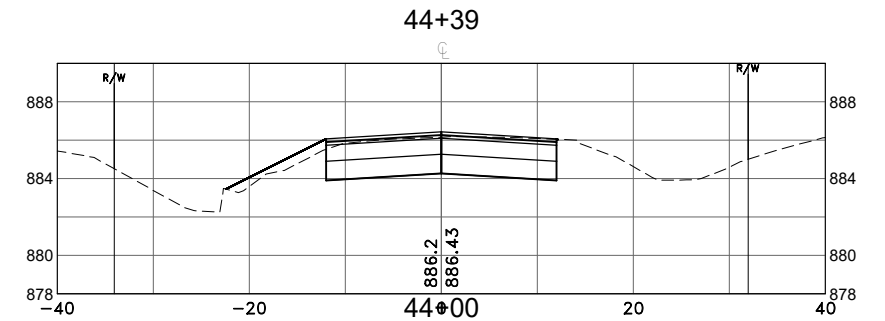
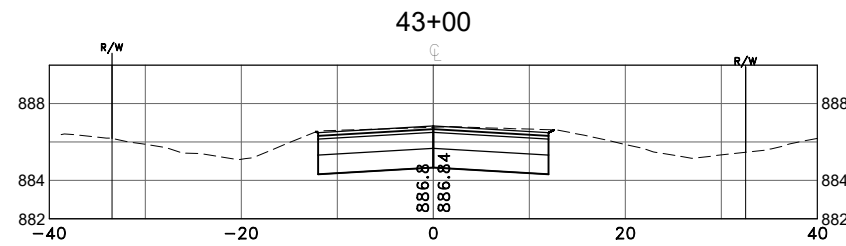
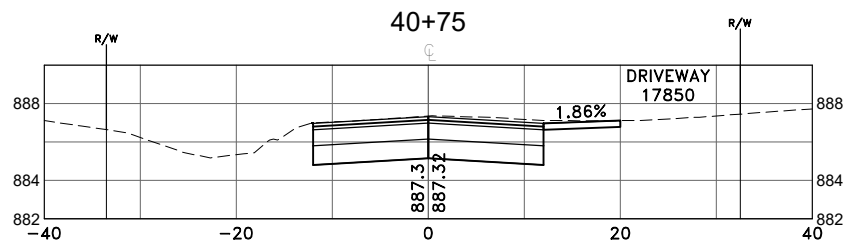
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
URANIUM STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X10  
OF  
X38  
SHEETS

Apr 22, 2024 - 2:51pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



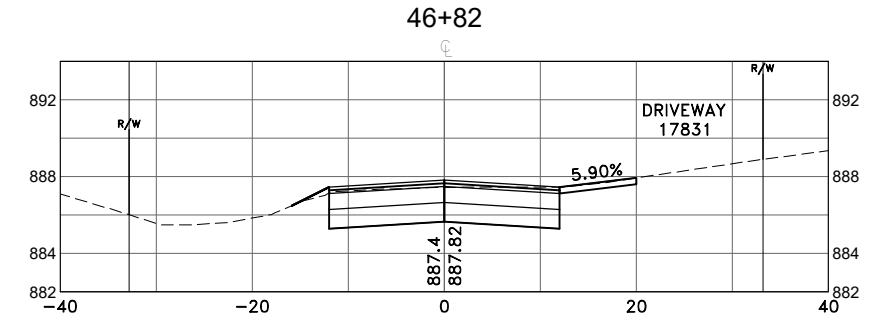
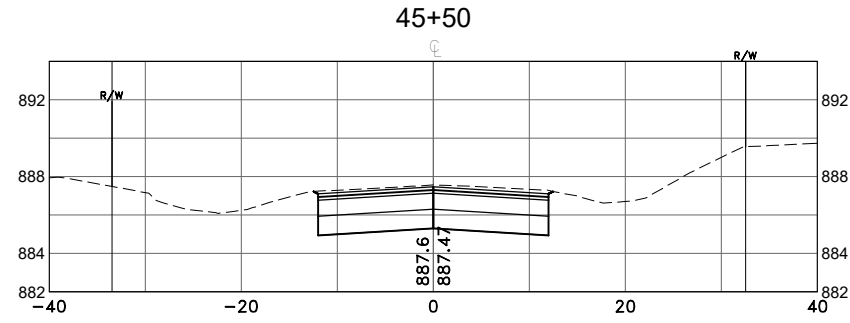
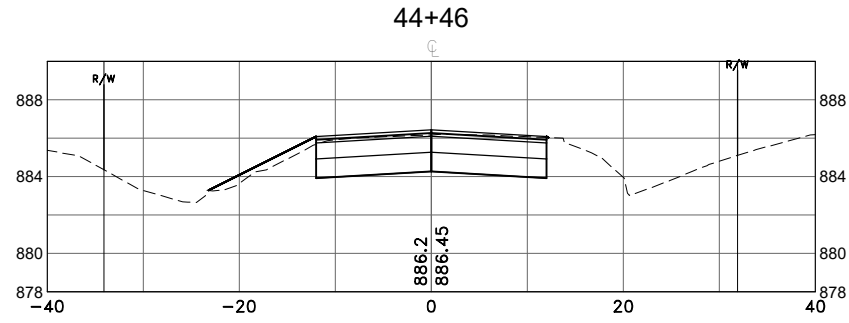
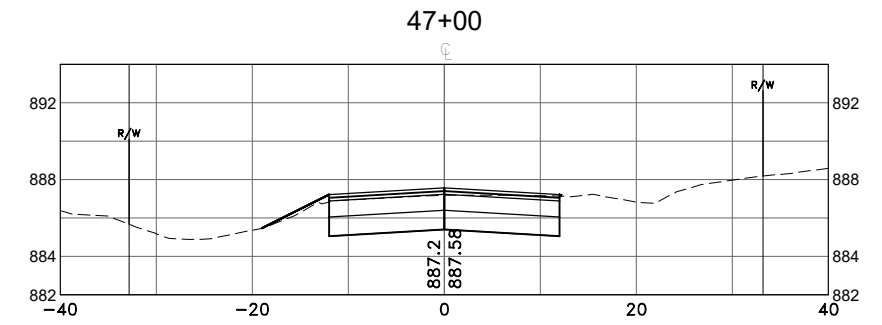
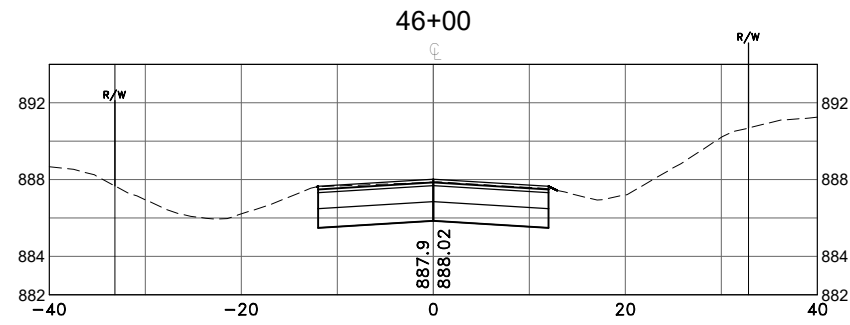
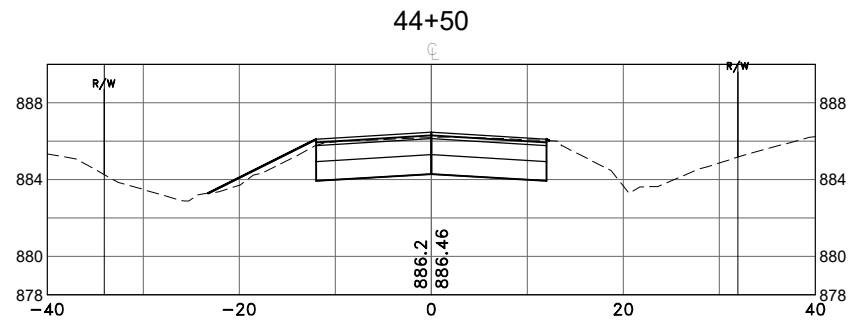
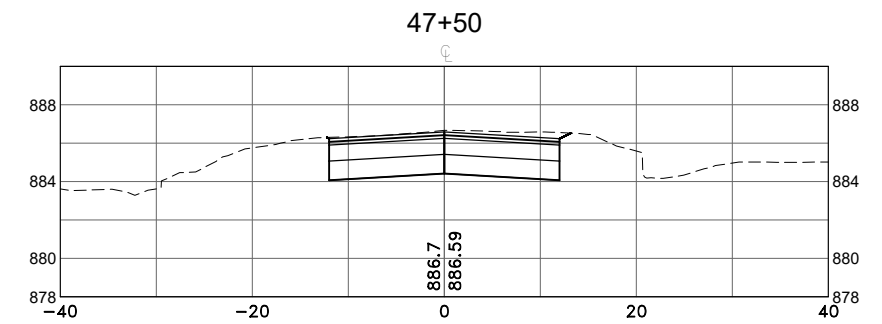
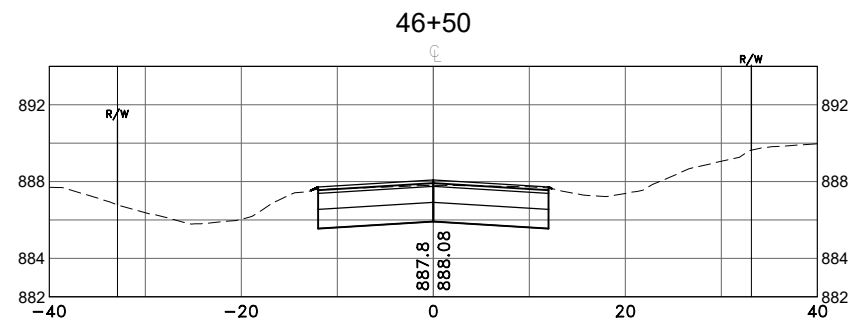
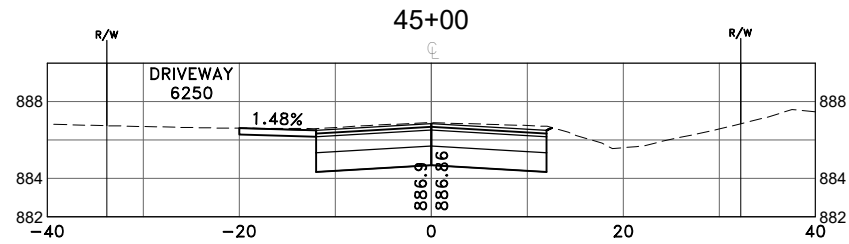
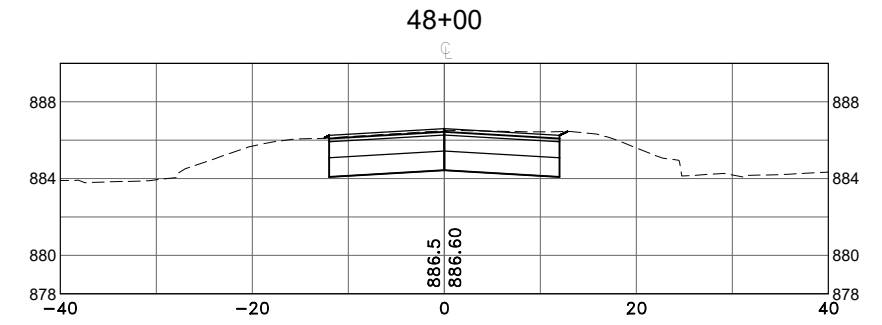
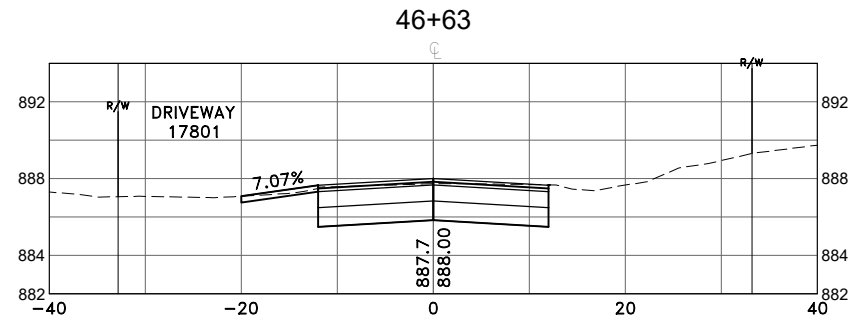
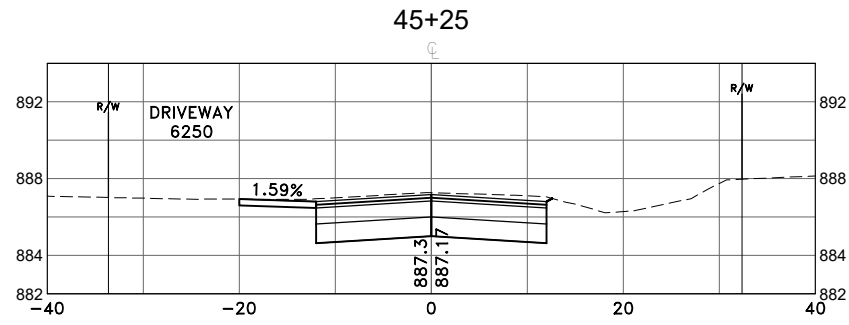
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
URANIUM STREET AND 178TH LANE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET X11  
OF X38  
SHEETS  
RA3189

Apr 22, 2024 - 2:51pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

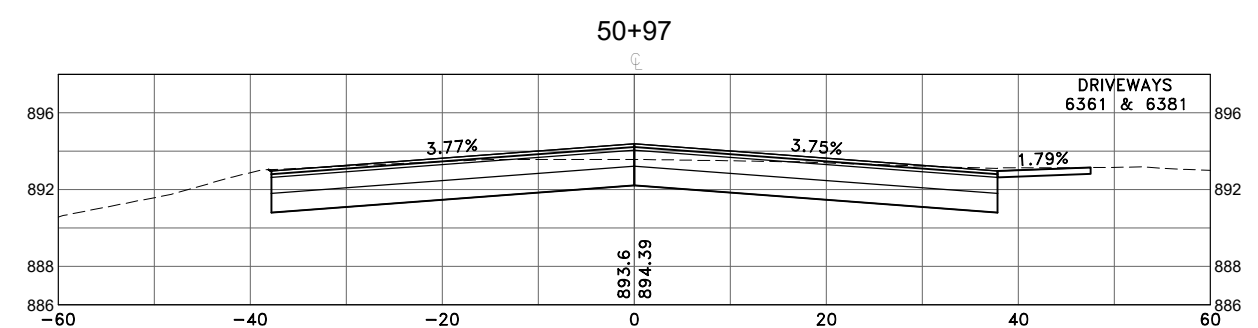
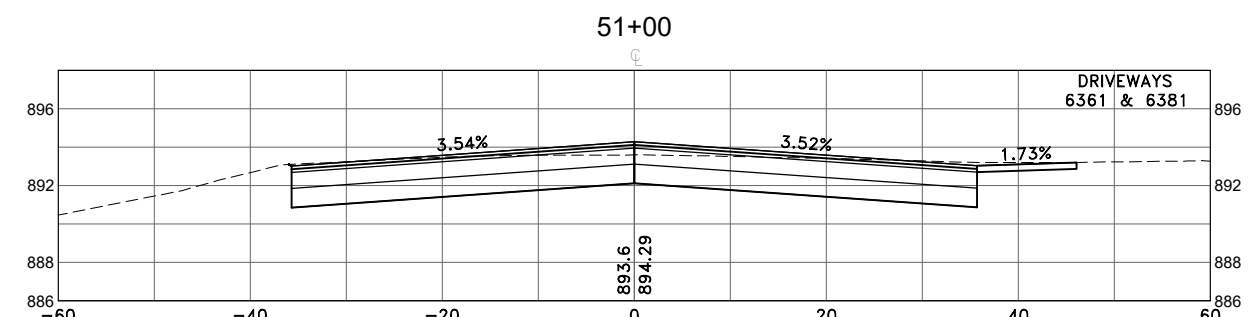
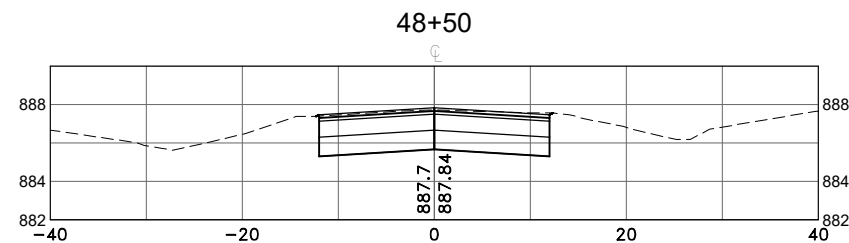
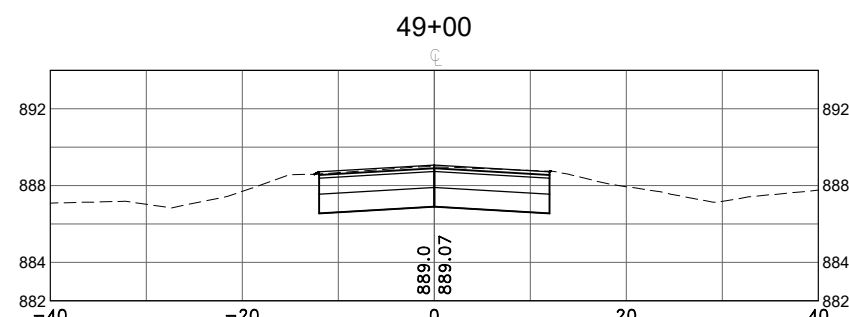
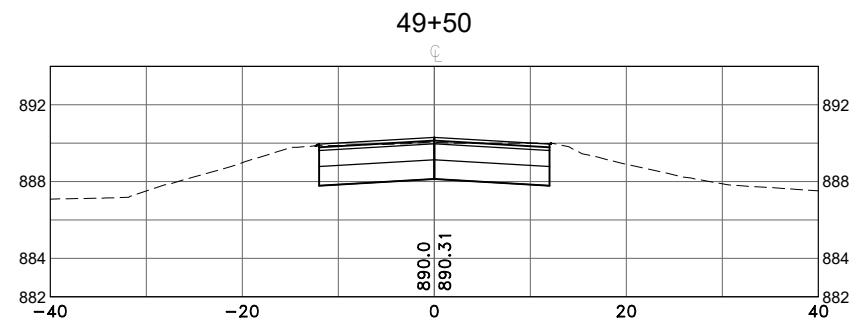
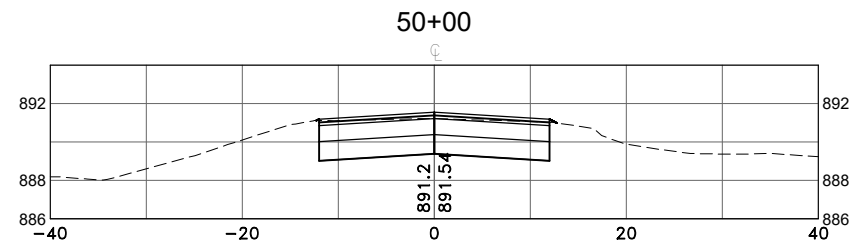
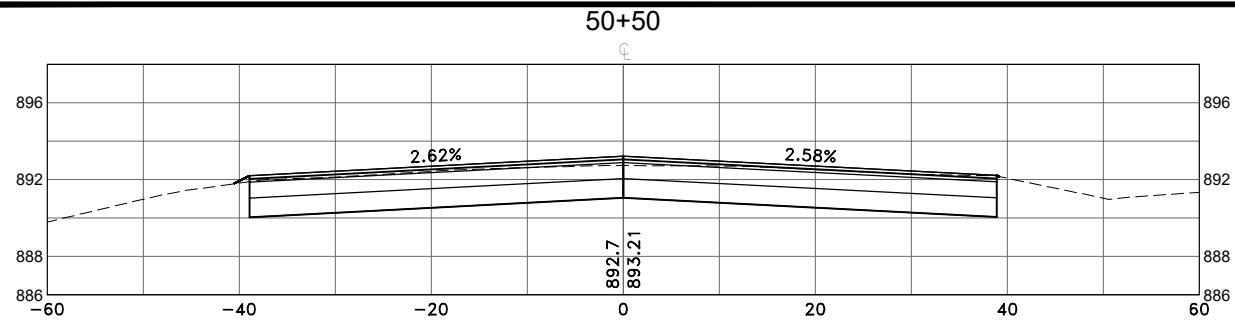


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
178TH LANE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X12  
OF  
X38  
SHEETS



Apr 22, 2024 - 2:51pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



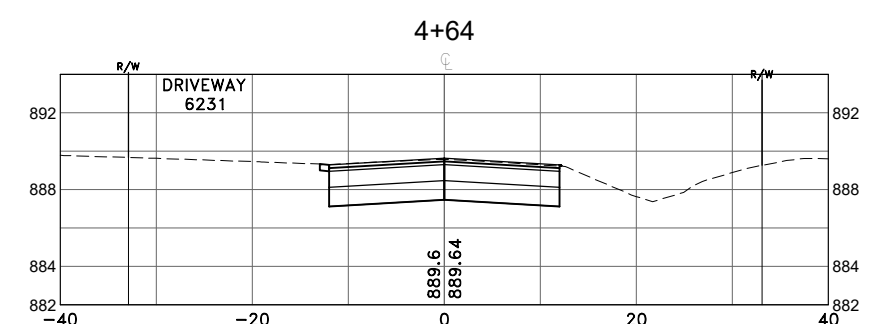
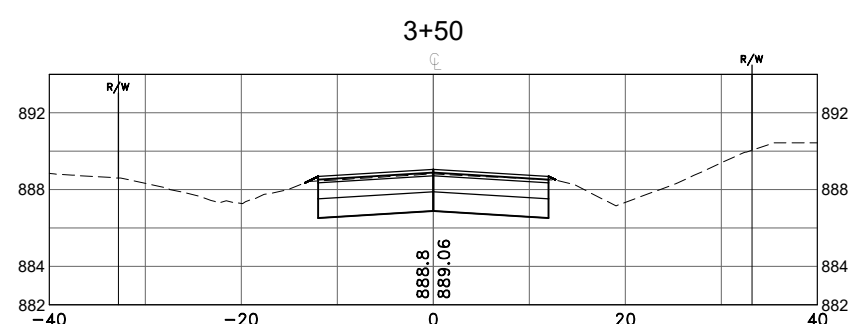
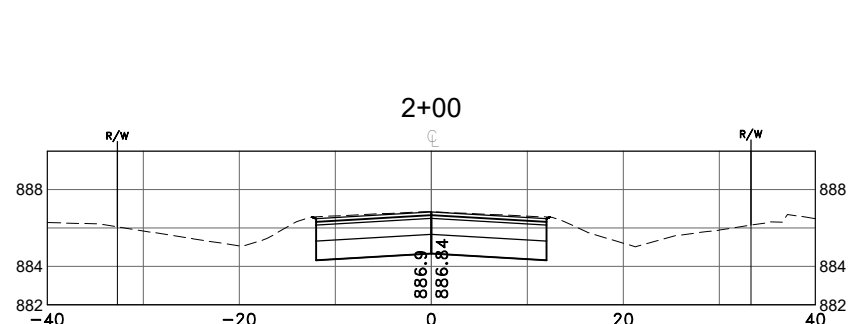
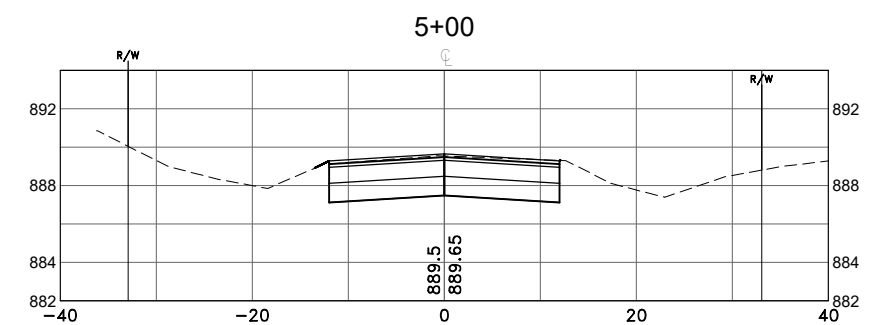
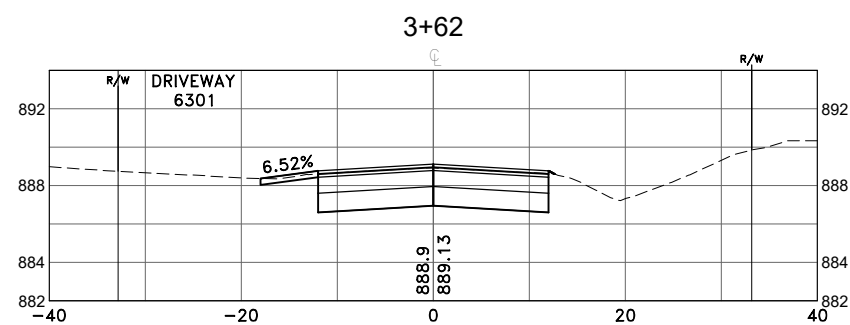
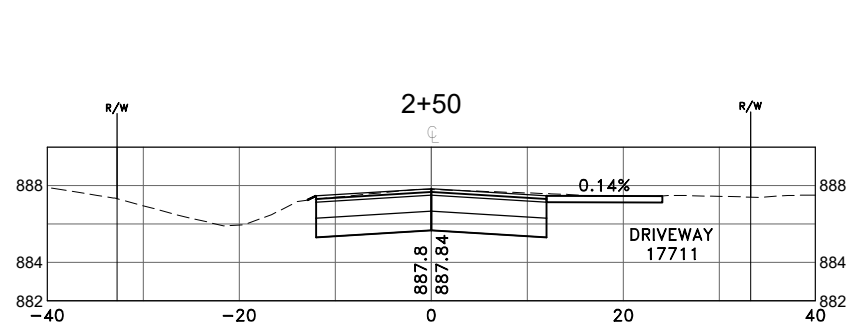
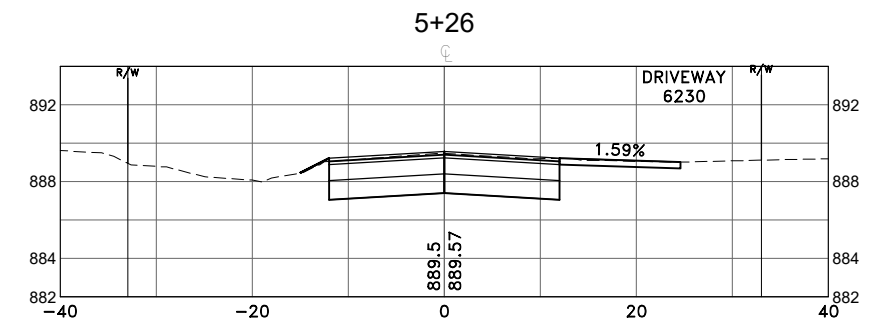
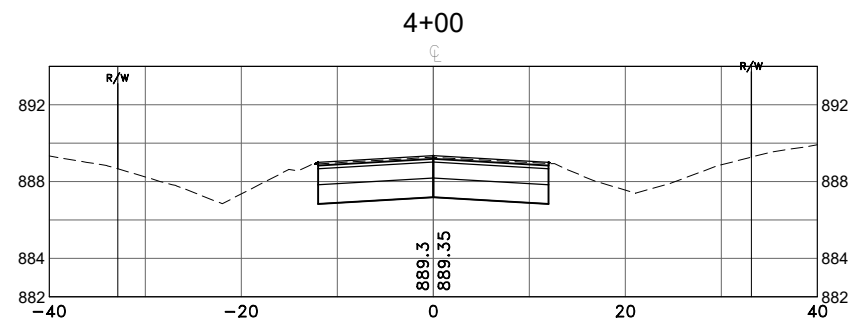
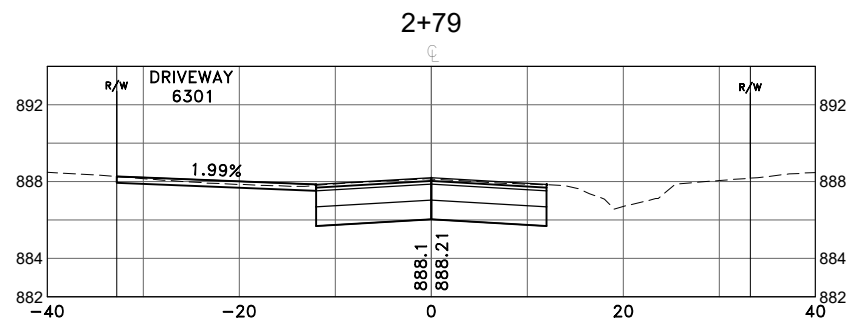
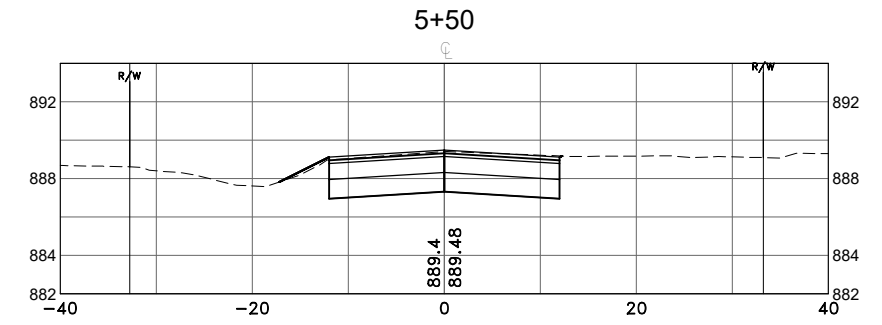
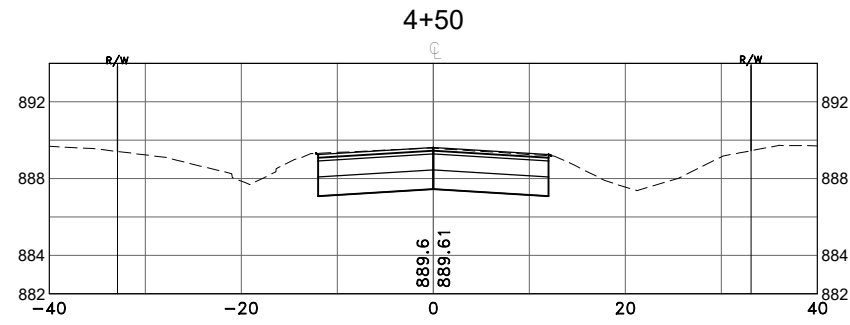
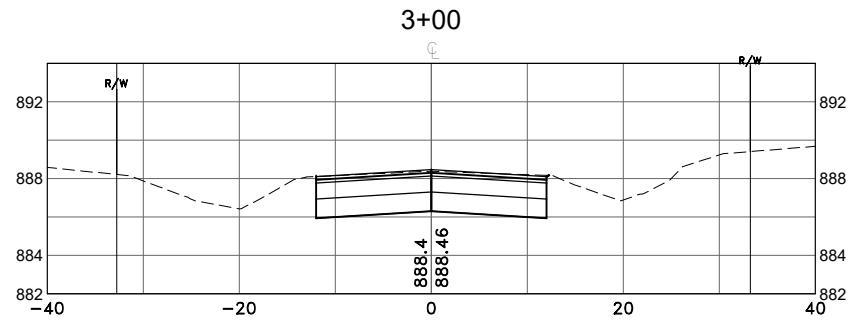
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

**NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT**

**CROSS SECTIONS**  
  
178TH LANE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
**X13**  
OF  
**X38**  
SHEETS

Apr 22, 2024 - 2:51pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



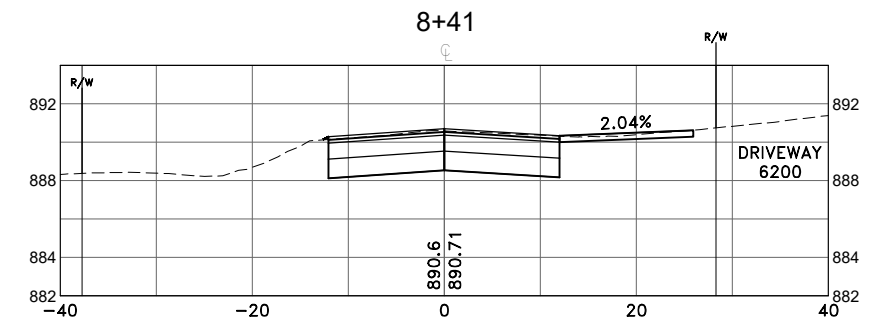
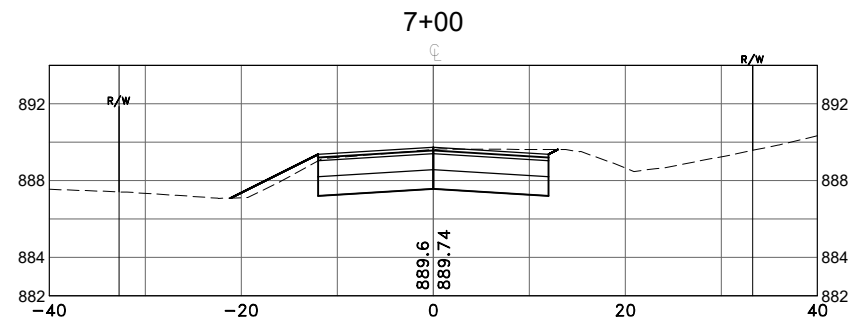
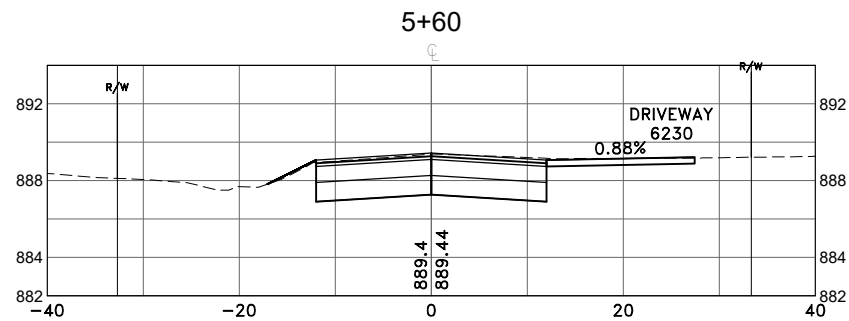
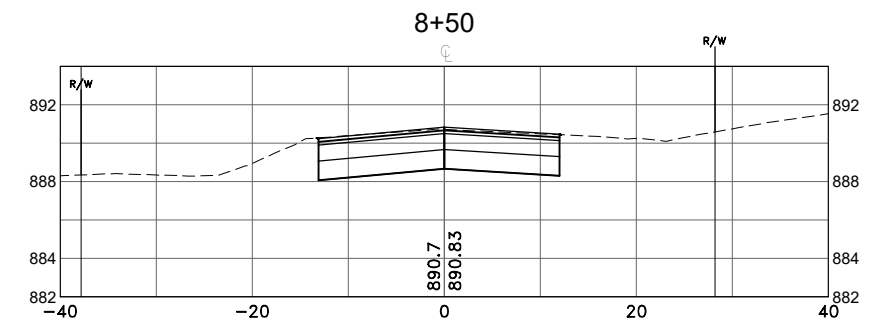
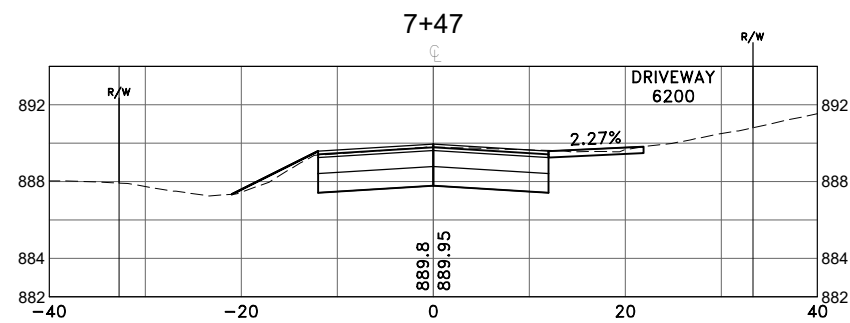
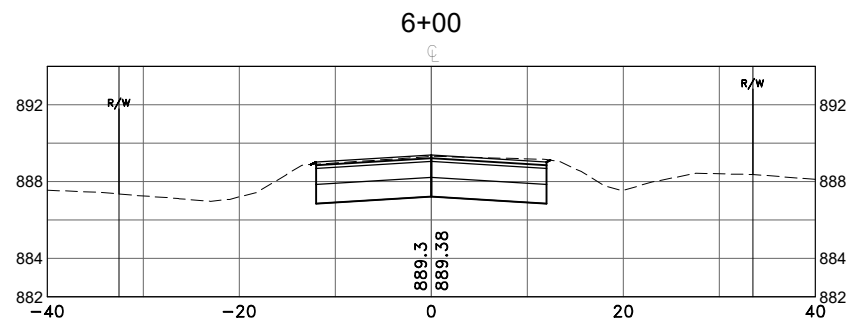
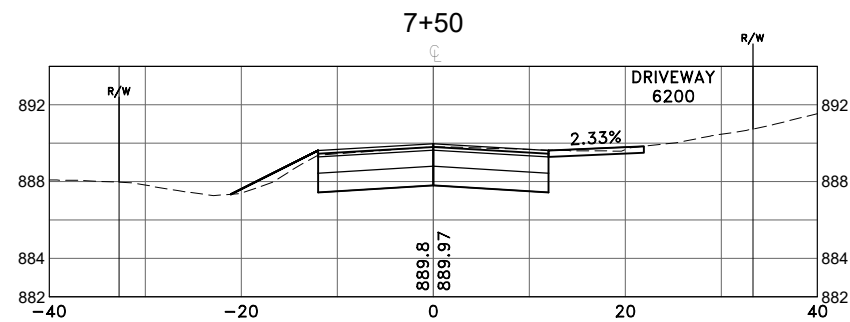
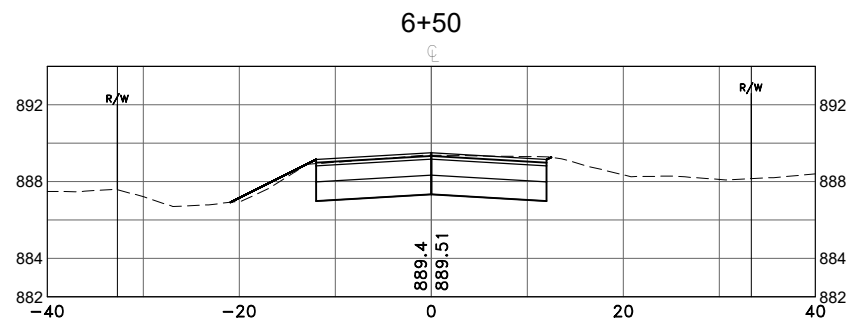
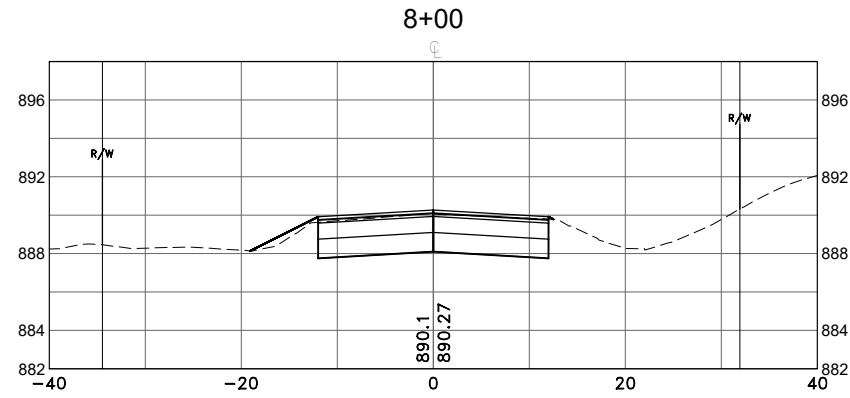
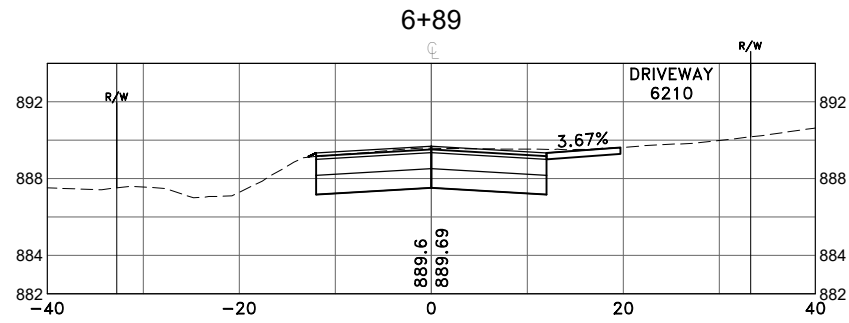
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
177TH LANE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET X14  
OF X38  
SHEETS  
RA3189

Apr 22, 2024 - 2:51pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

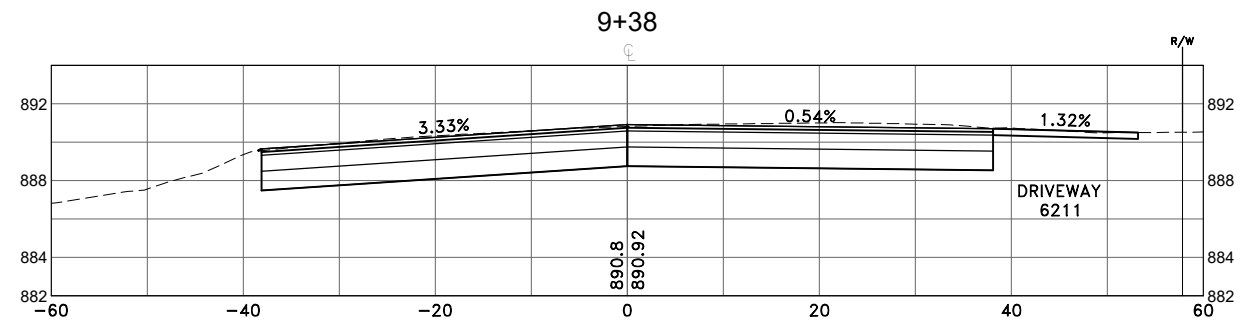
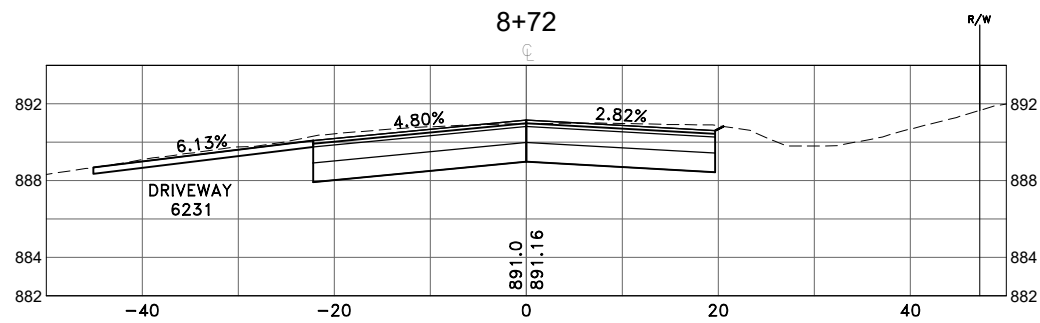
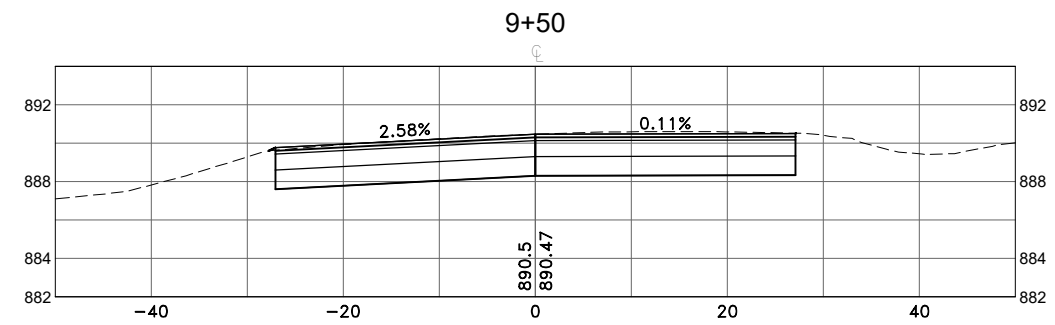
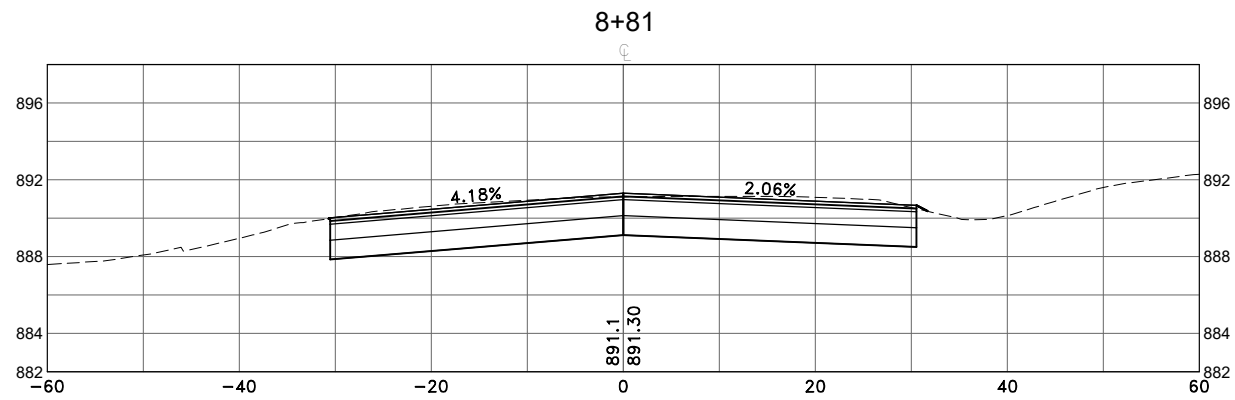
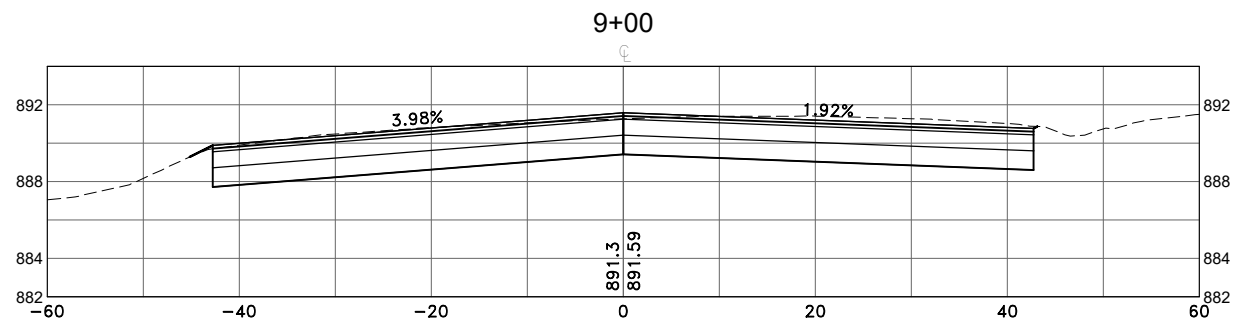
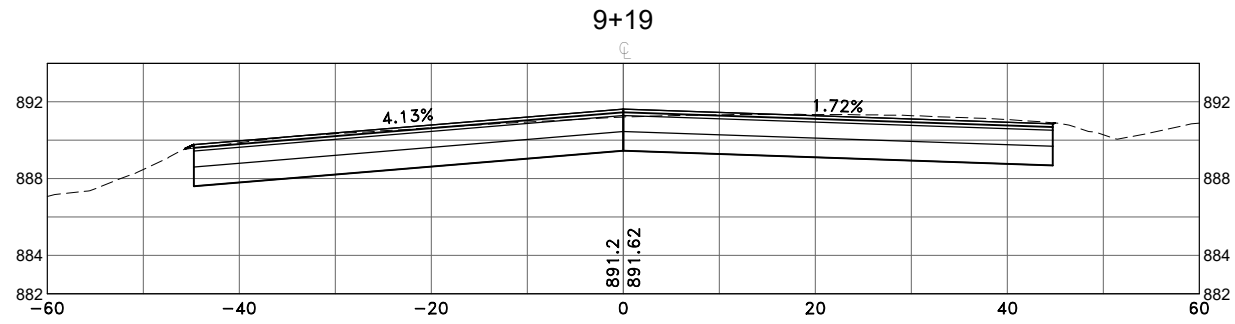


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
177TH LANE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X15  
OF  
X38  
SHEETS  
RA3189



Apr 22, 2024 - 2:51pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

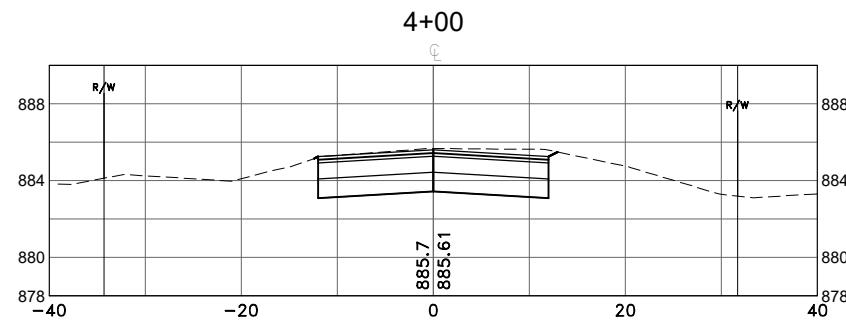
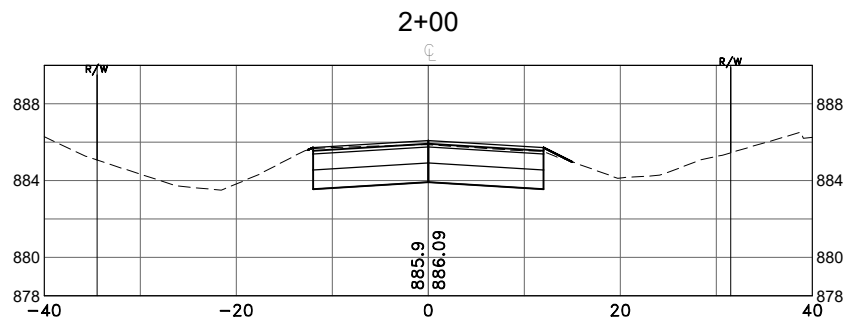
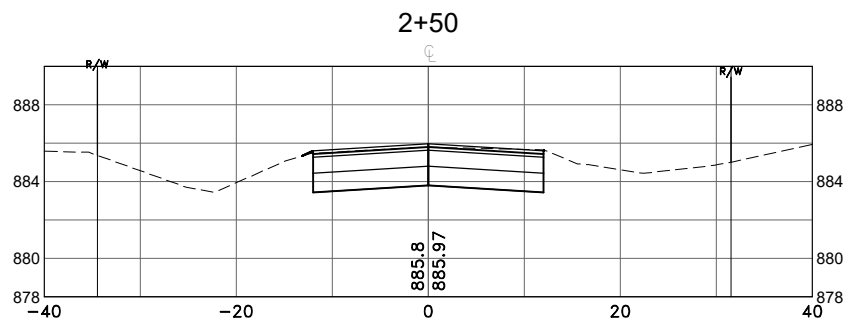
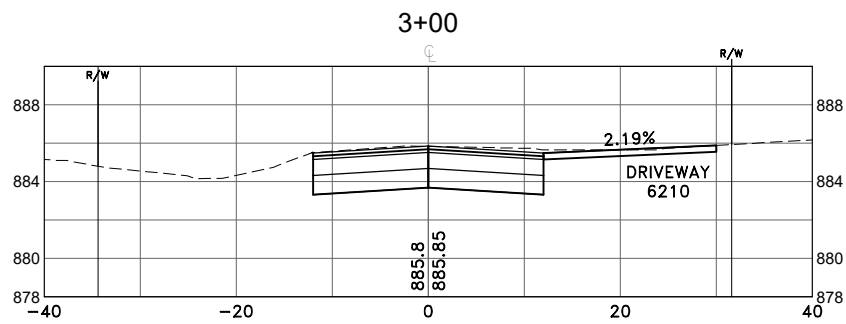
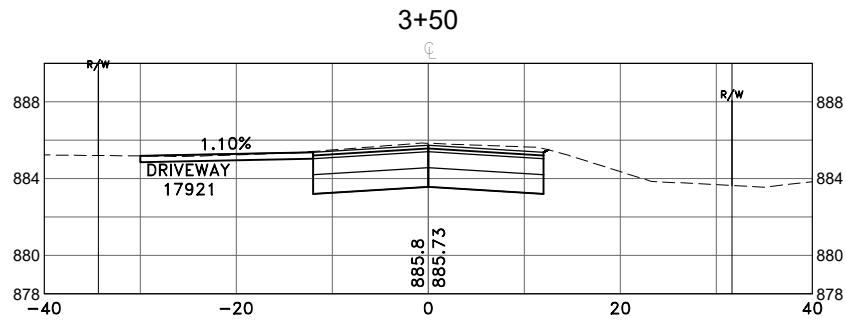


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
177TH LANE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X16  
OF  
X38  
SHEETS  
RA3189



Apr 22, 2024 - 2:52pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

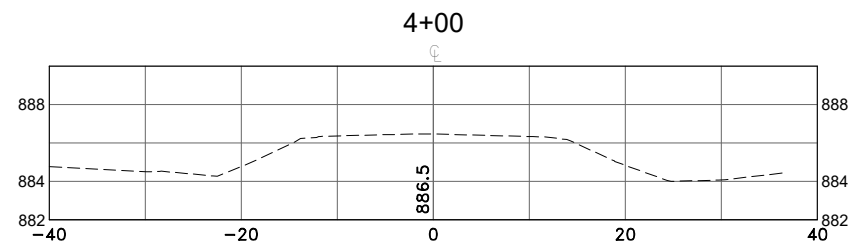
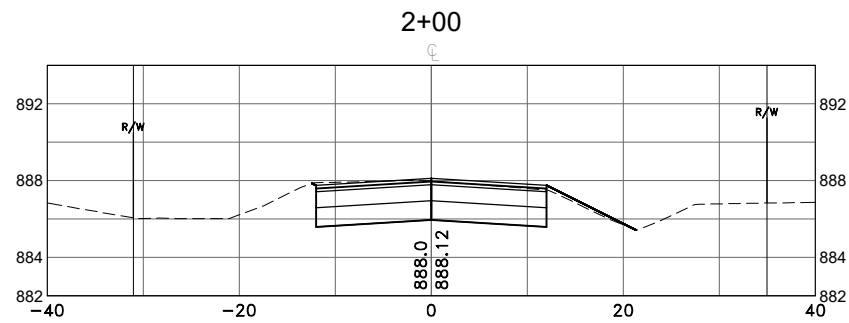
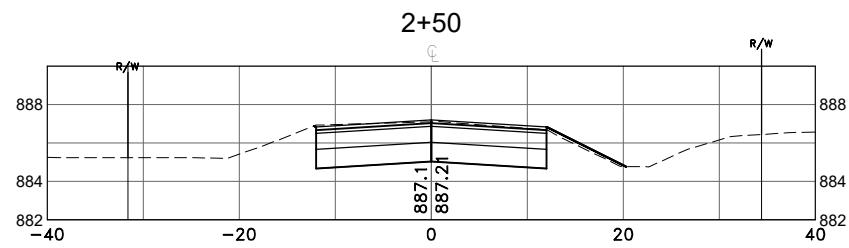
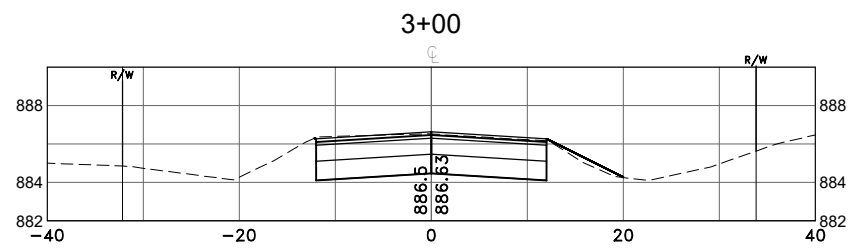
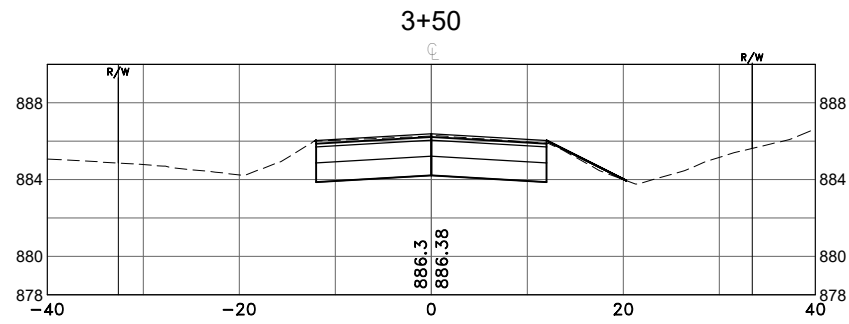
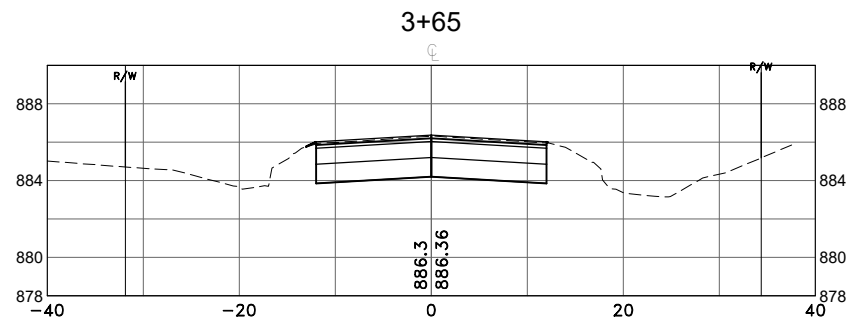


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
179TH LANE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X17  
OF  
X38  
SHEETS



Apr 22, 2024 - 2:52pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



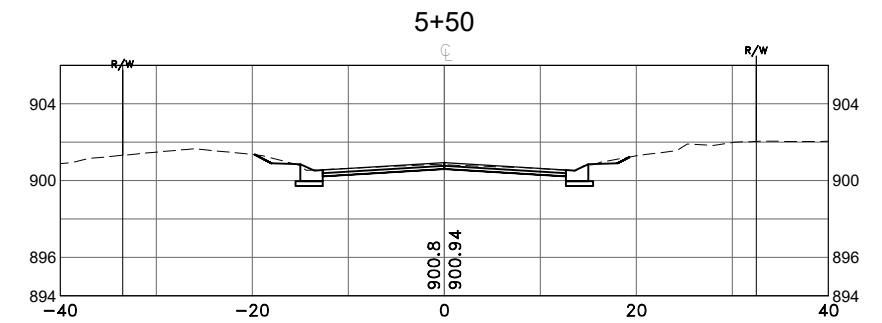
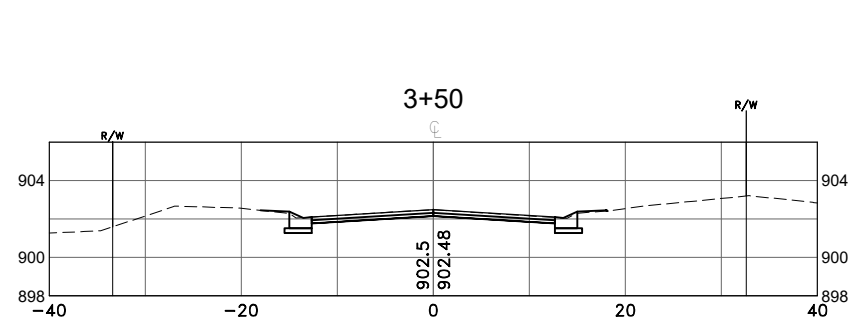
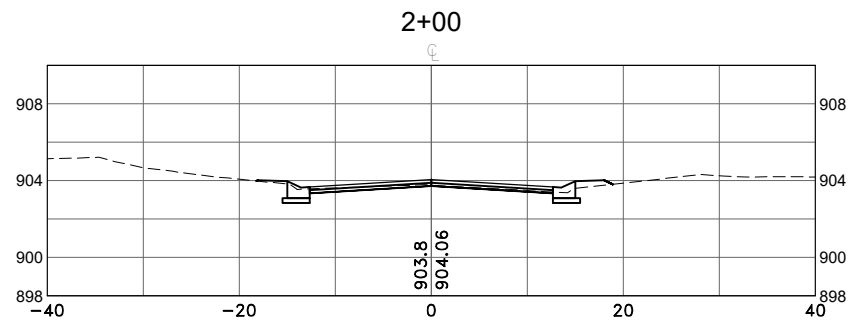
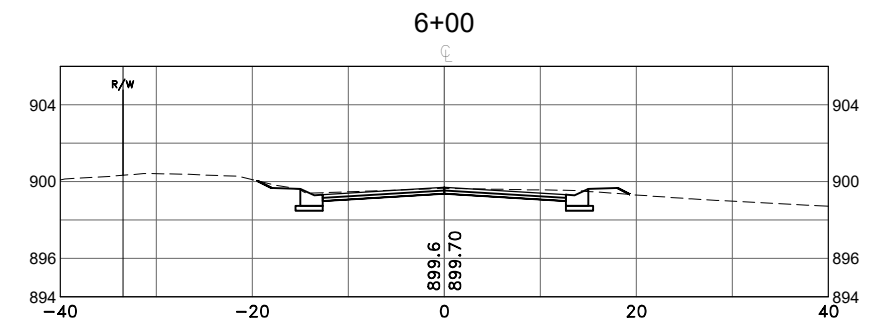
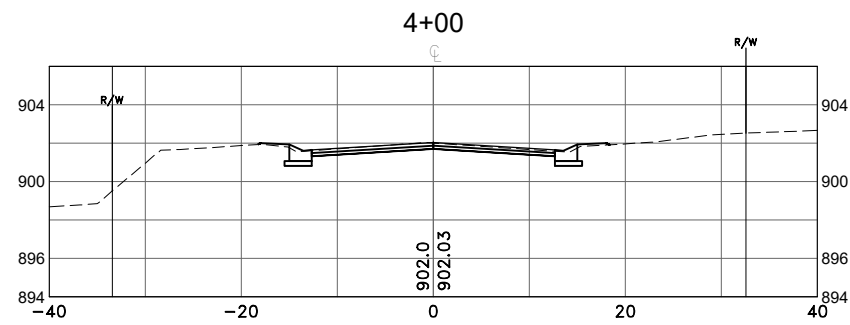
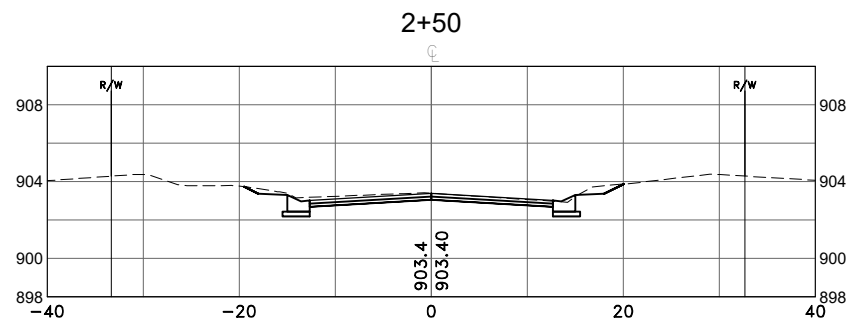
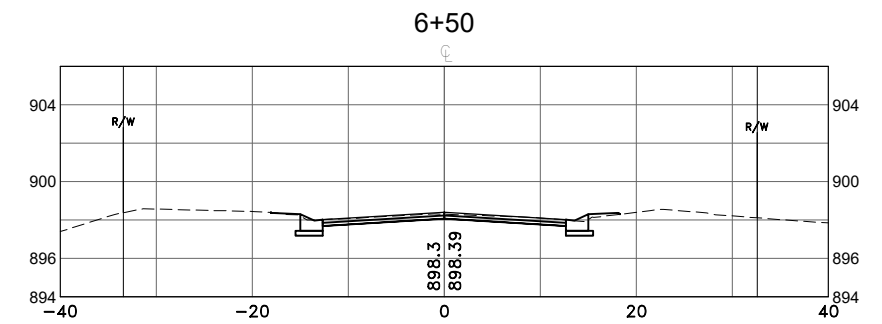
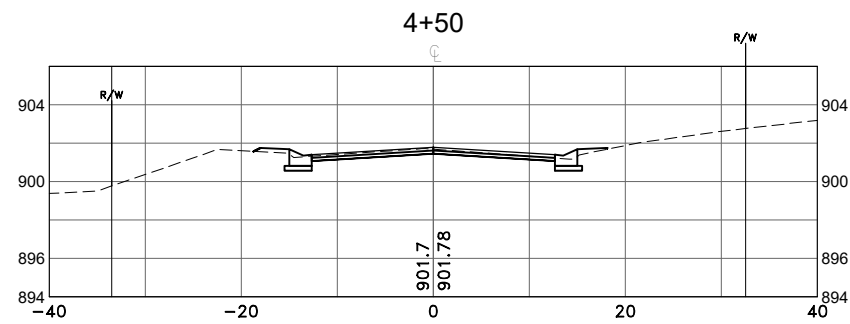
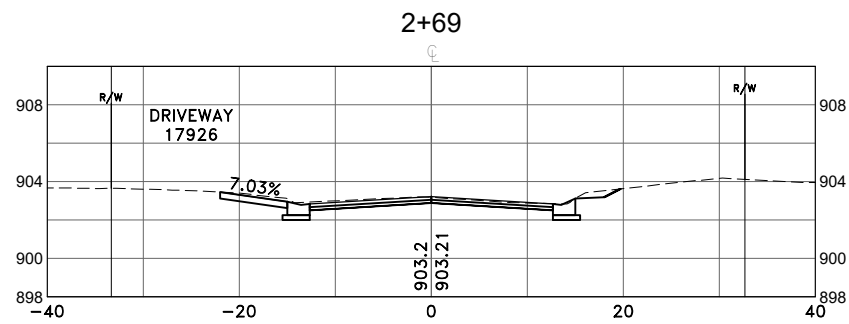
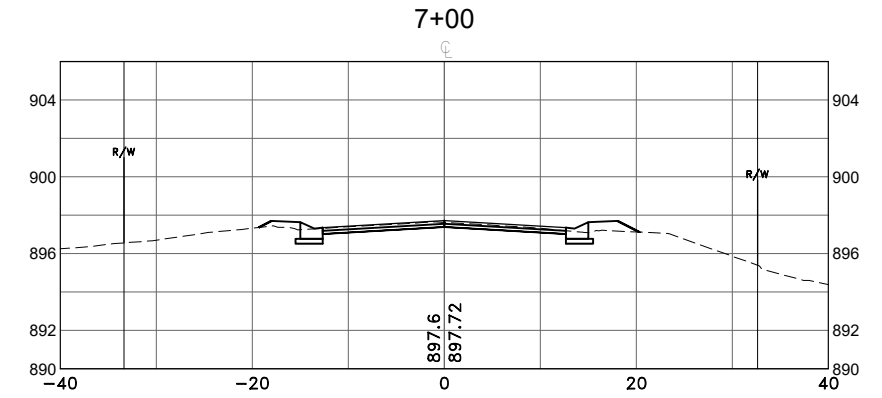
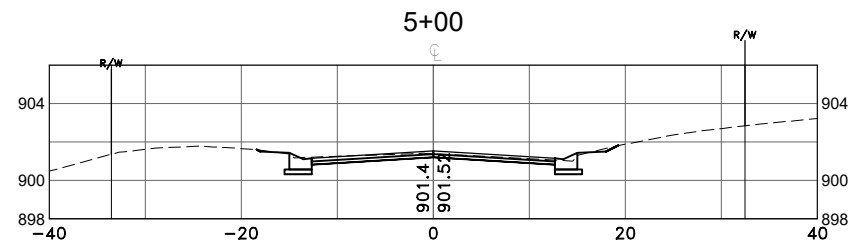
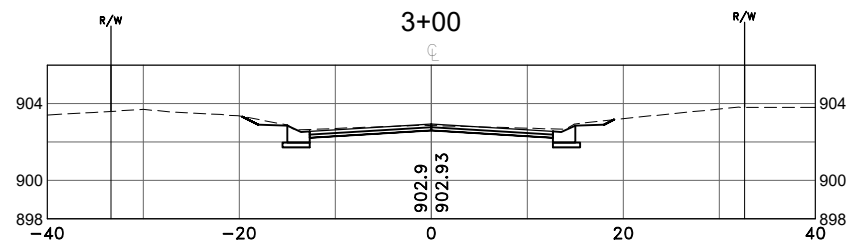
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
URANIUM STREET (NORTH)  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X18  
OF  
X38  
SHEETS

Apr 22, 2024 - 2:52pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



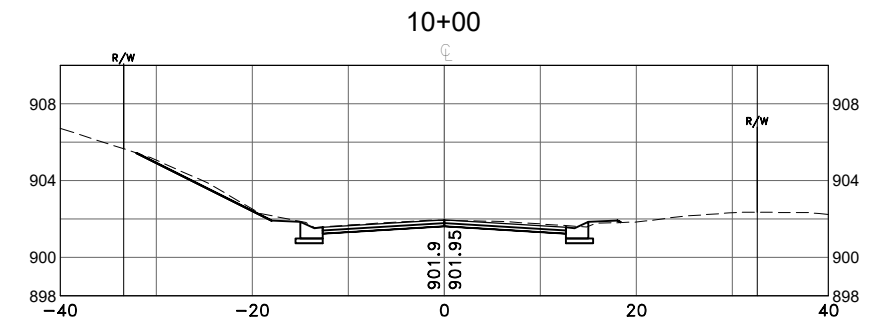
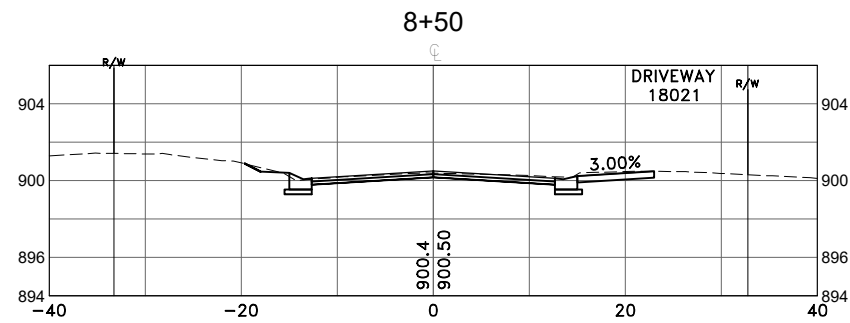
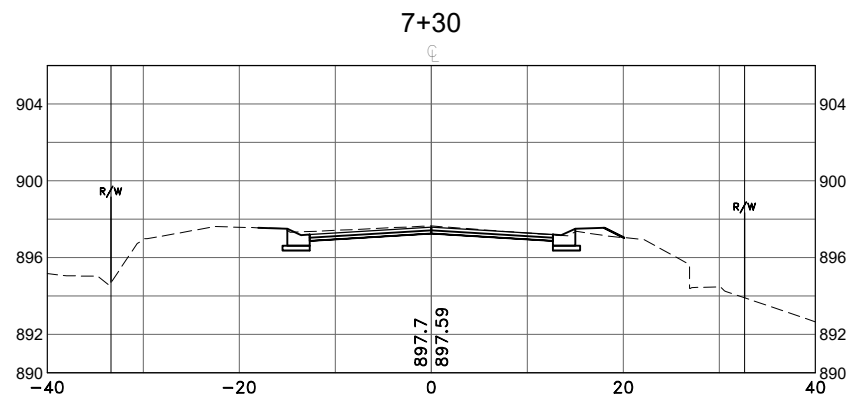
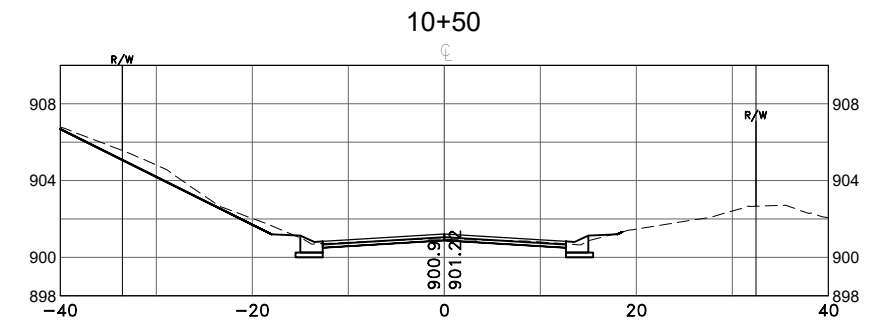
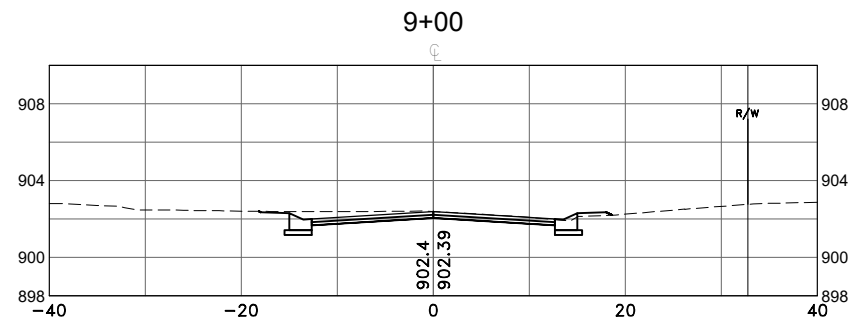
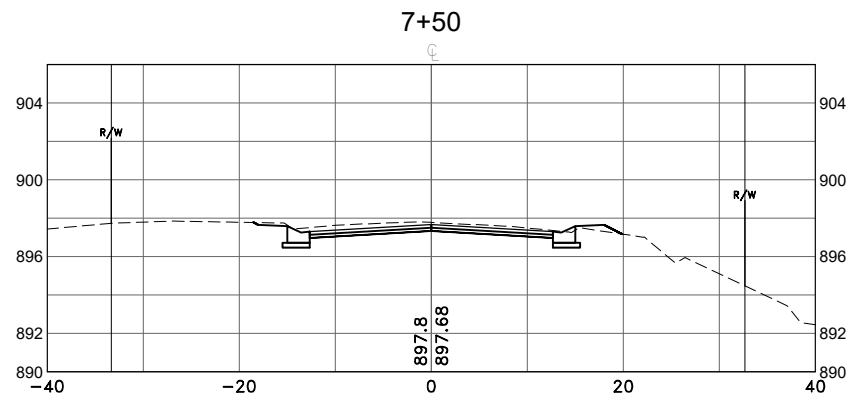
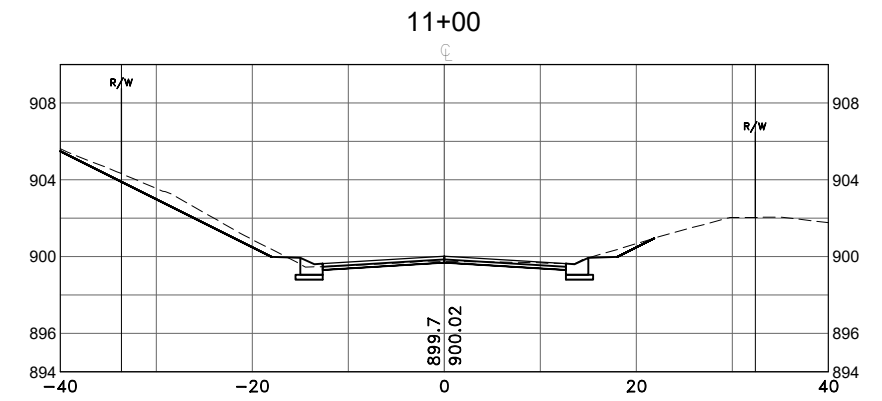
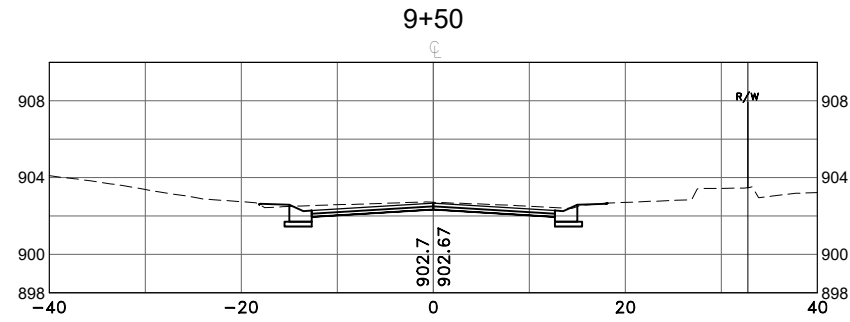
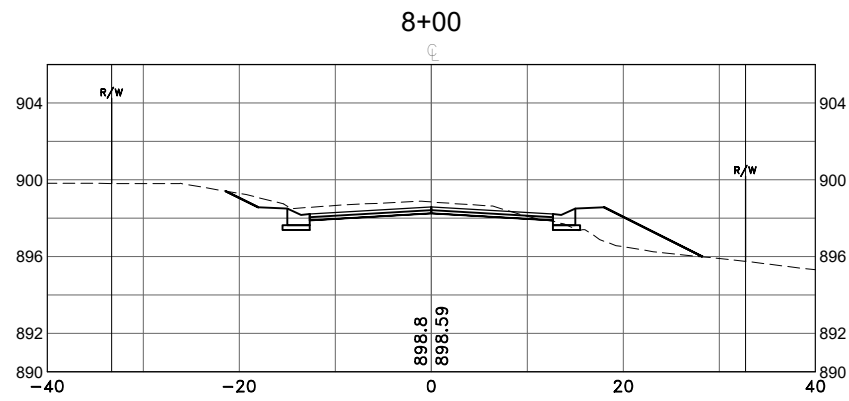
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
BARIUM STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X19  
OF  
X38  
SHEETS

Apr 22, 2024 - 2:52pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

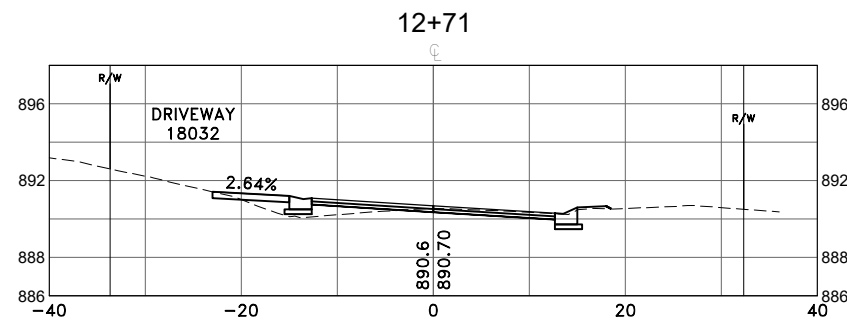
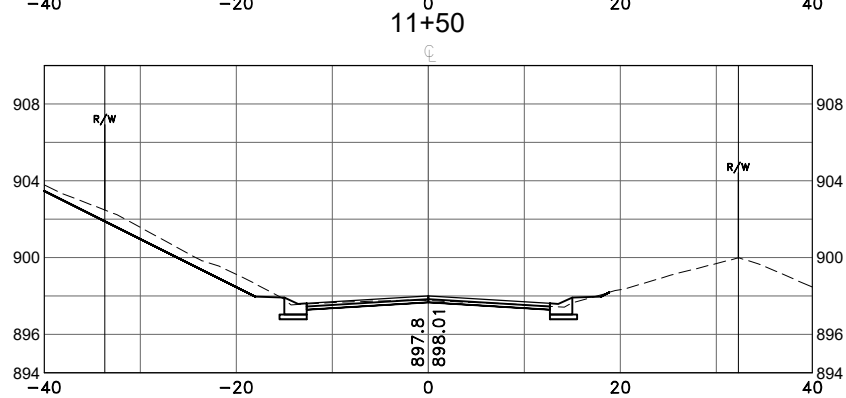
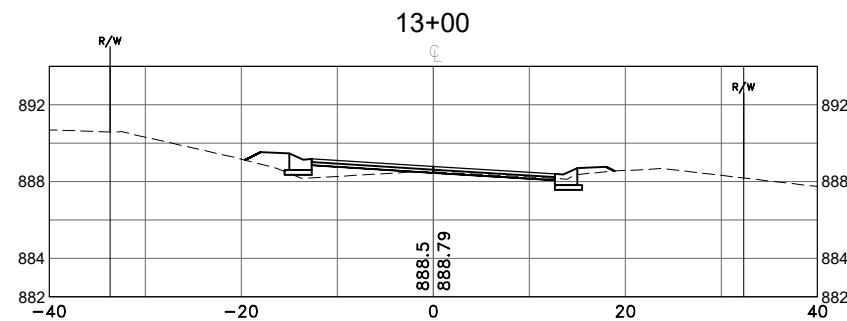
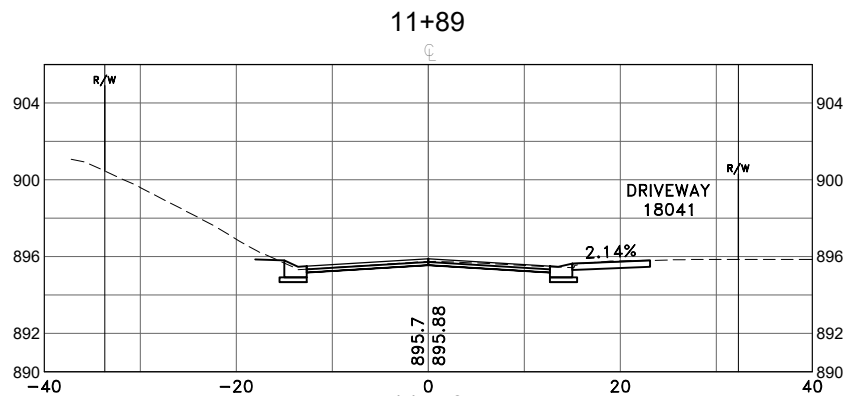
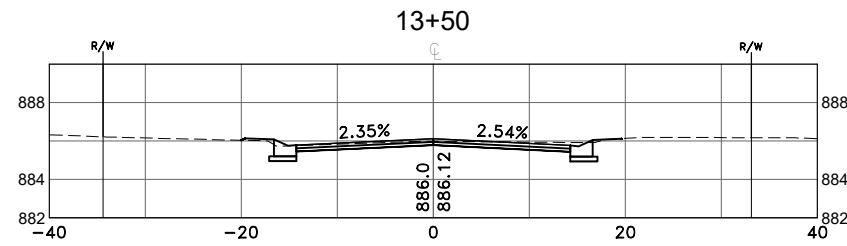
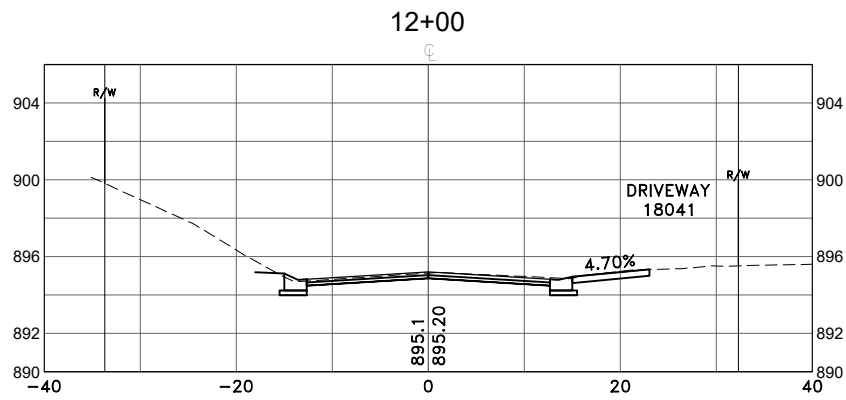
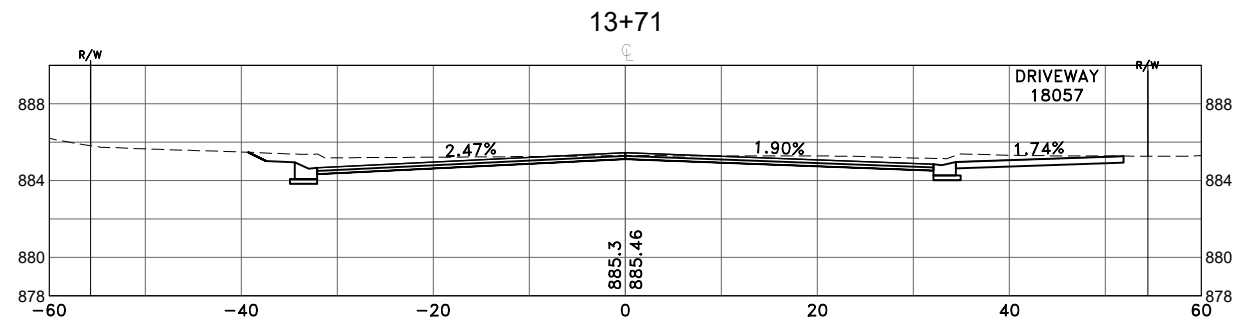
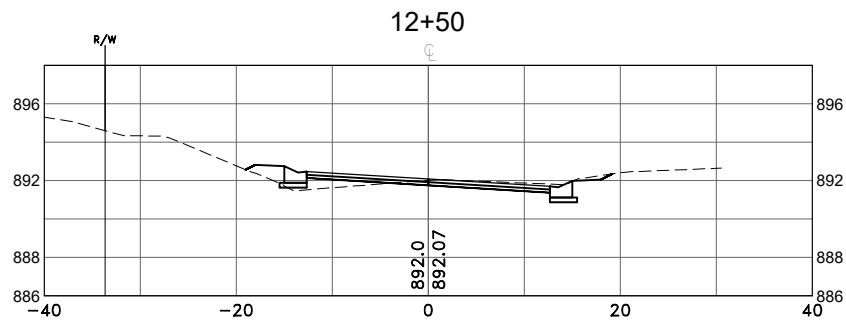


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
BARIUM STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X20  
OF  
X38  
SHEETS  
RA3189



Apr 22, 2024 - 2:52pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



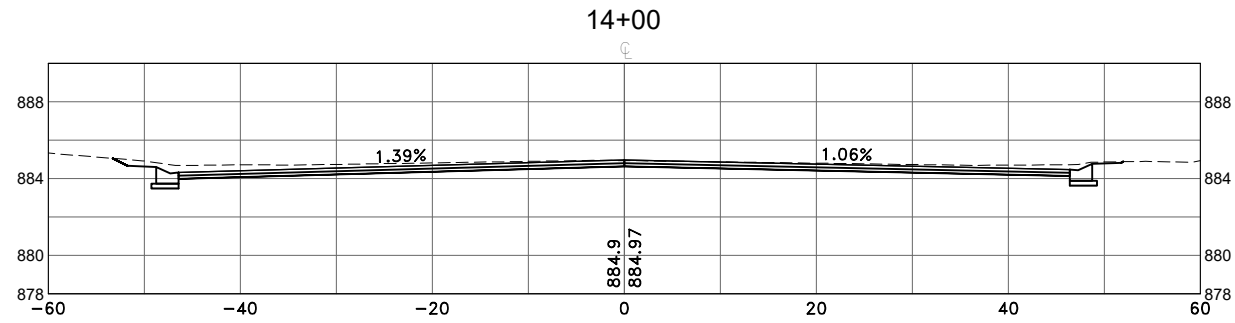
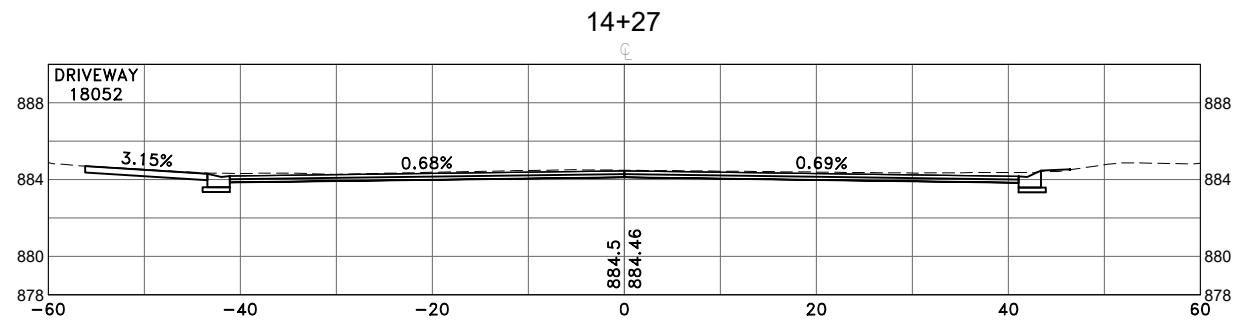
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
BARIUM STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET X21  
OF X38  
SHEETS  
RA3189

Apr 22, 2024 - 2:52pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



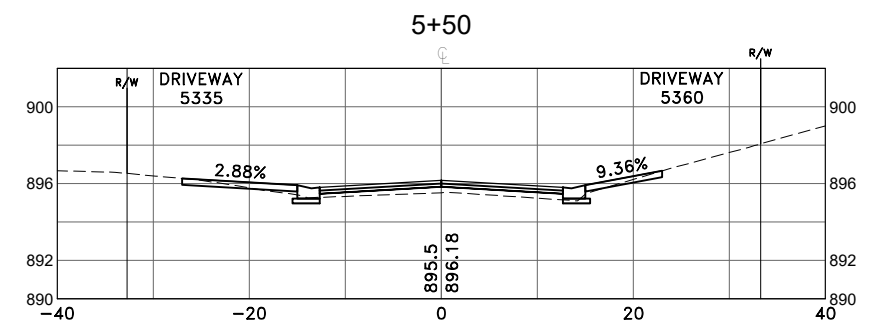
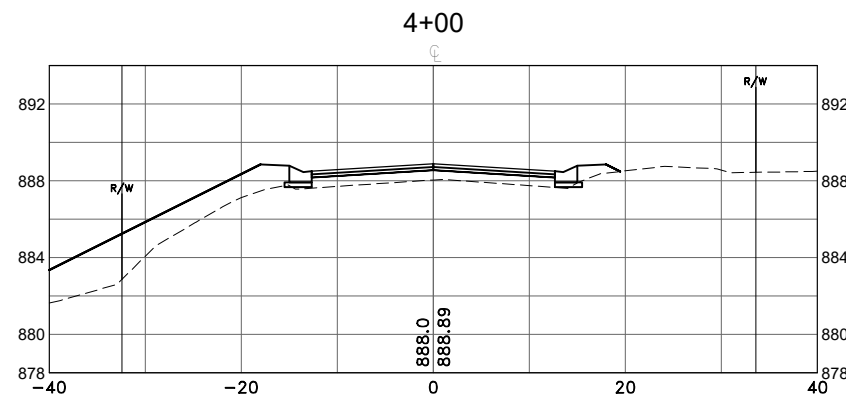
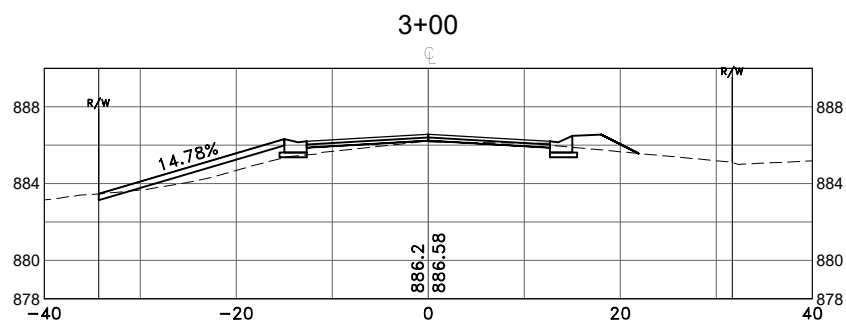
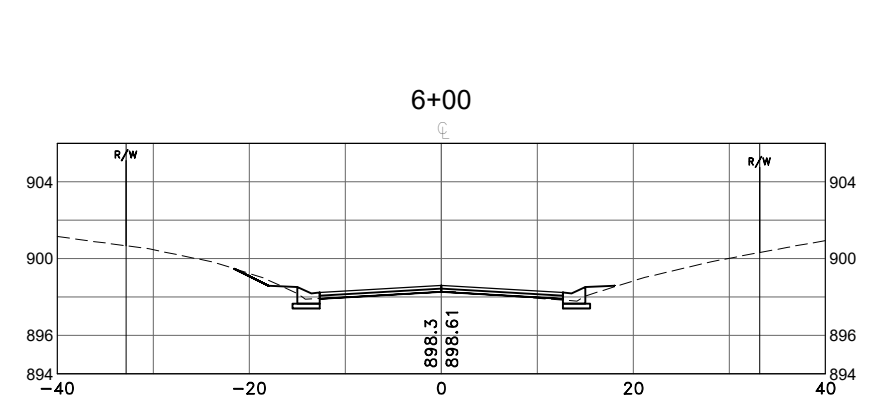
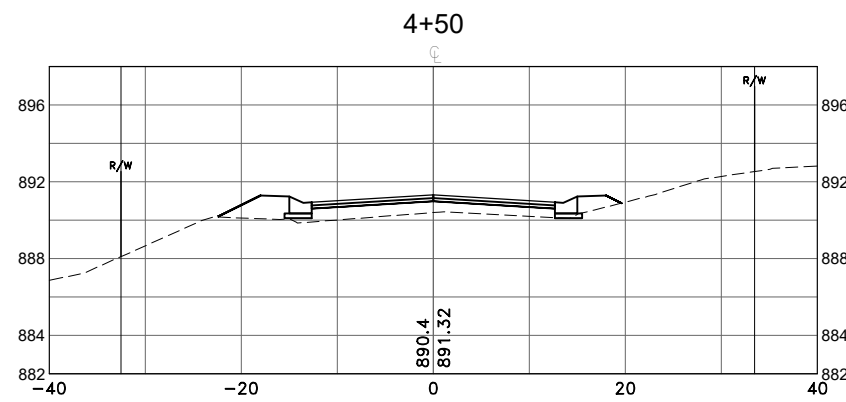
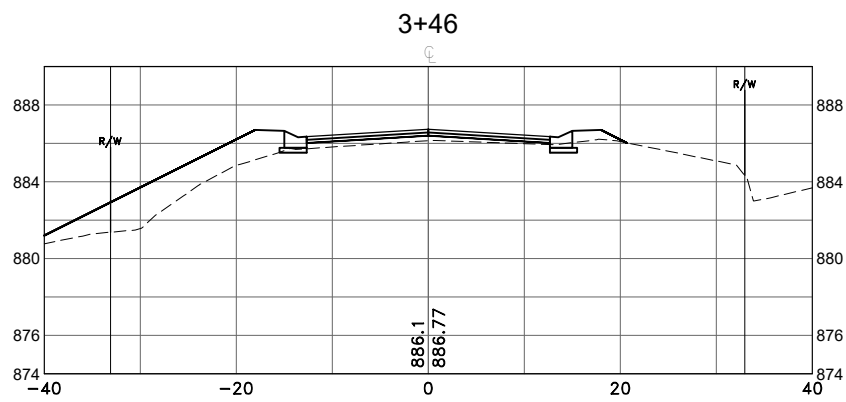
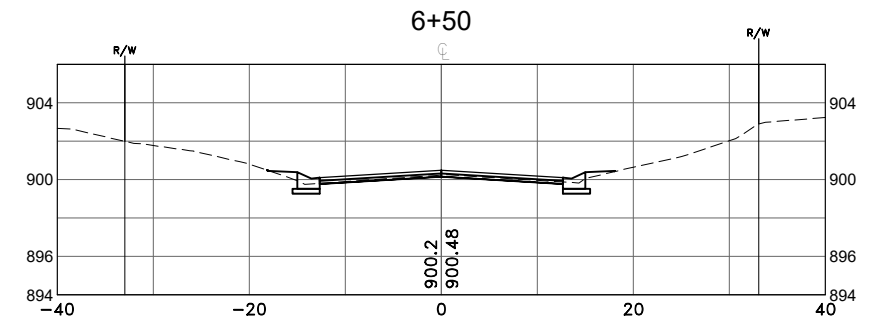
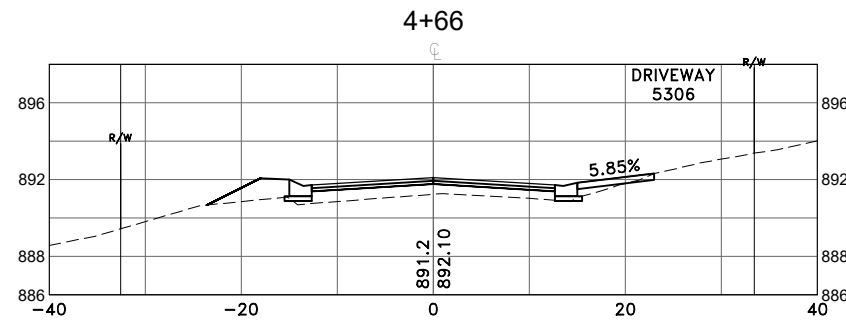
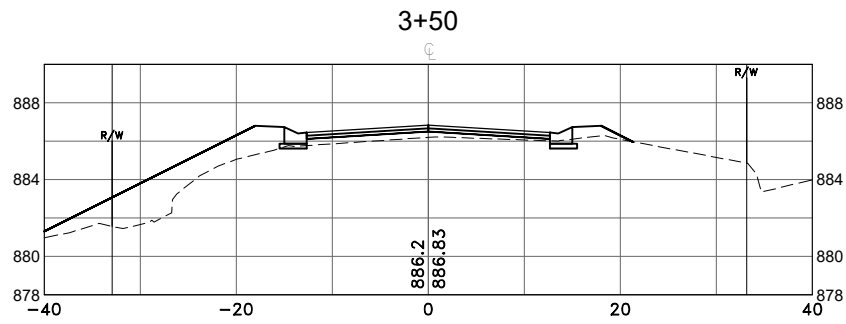
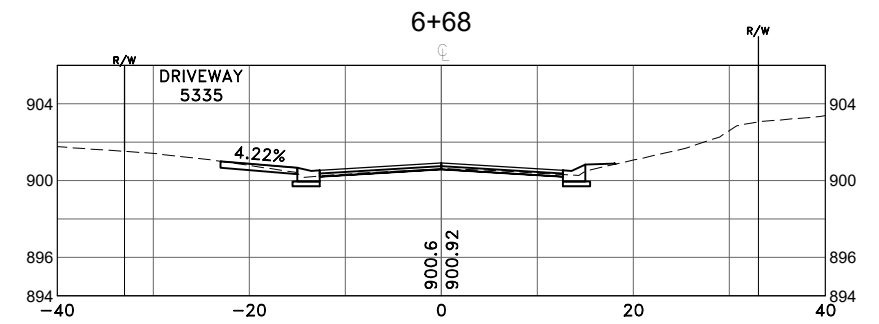
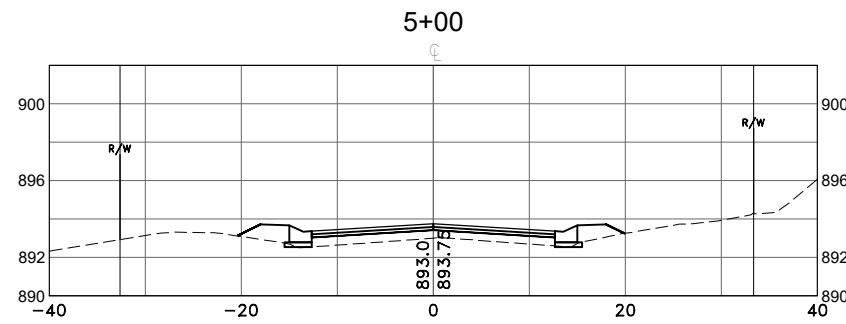
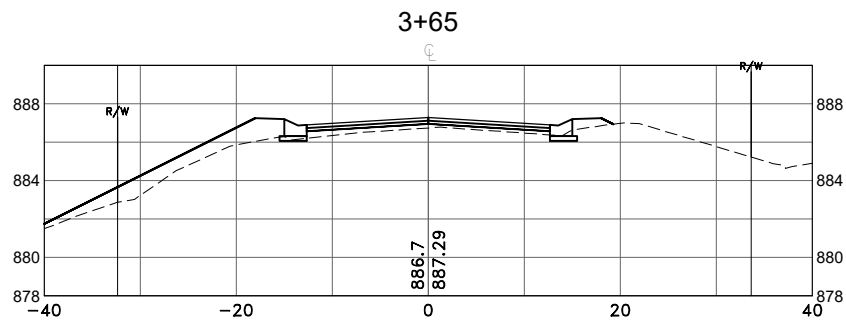
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
BARIUM STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X22  
OF  
X38  
SHEETS

Apr 22, 2024 - 2:52pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



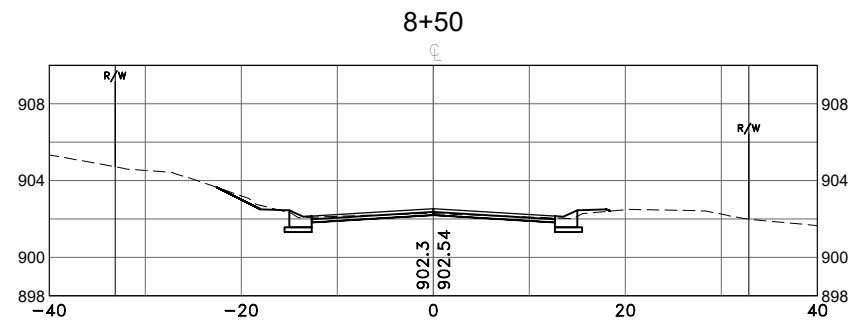
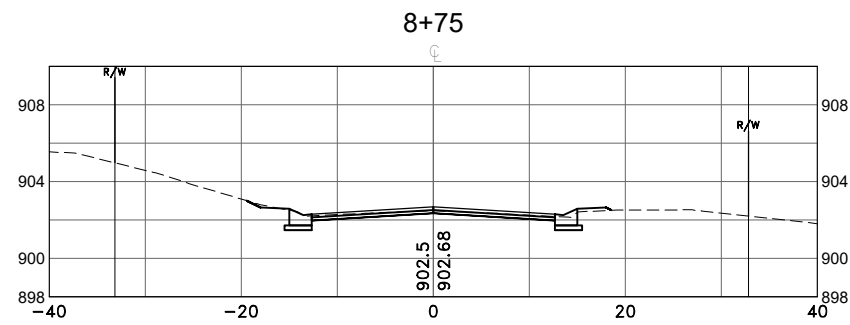
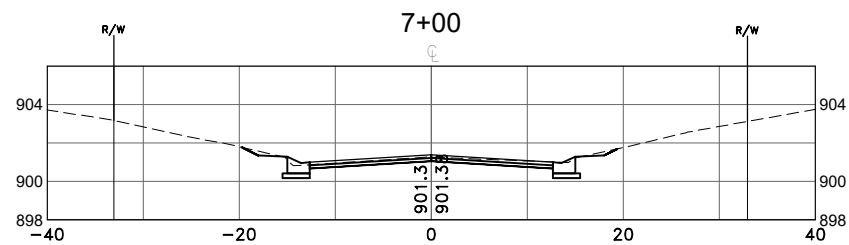
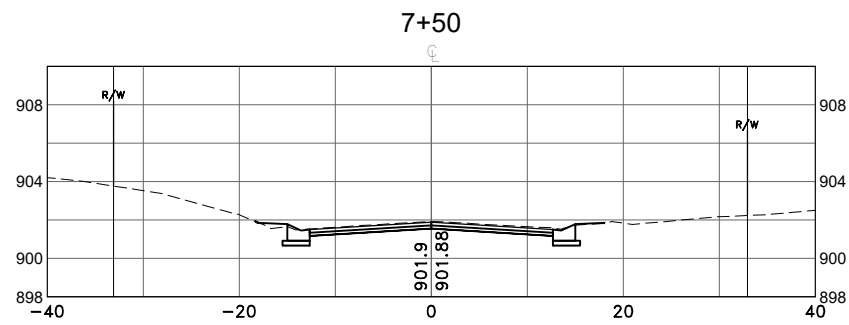
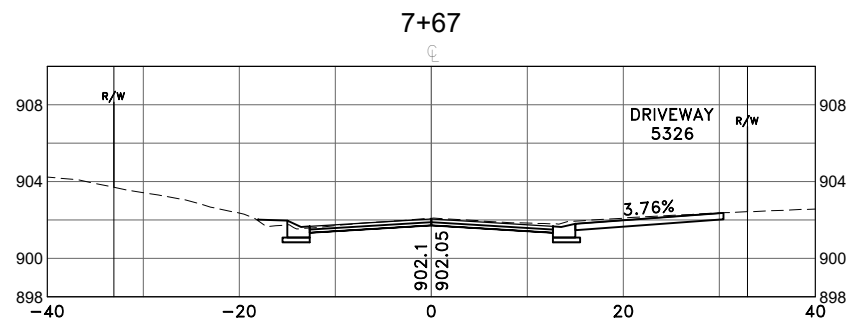
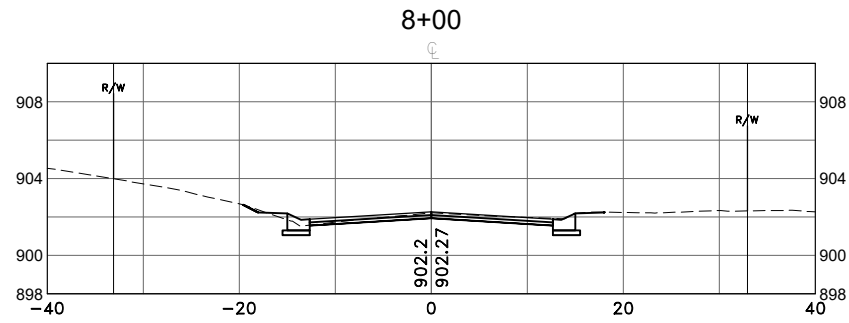
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
180TH AVENUE (WEST)  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X23  
OF  
X38  
SHEETS  
RA3189

Apr 22, 2024 - 2:52pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



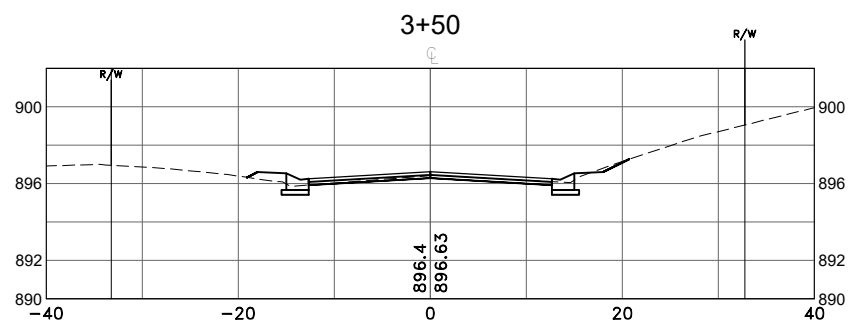
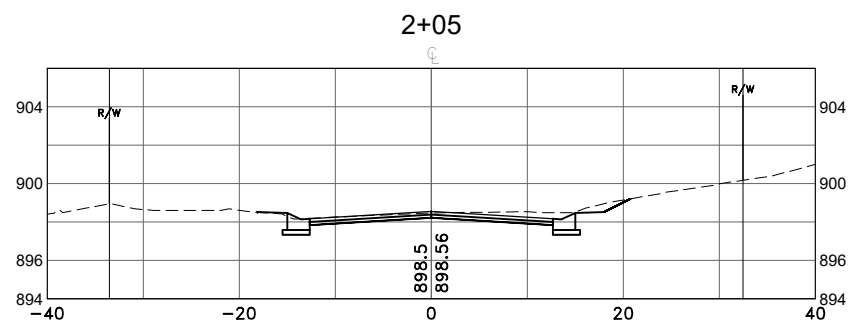
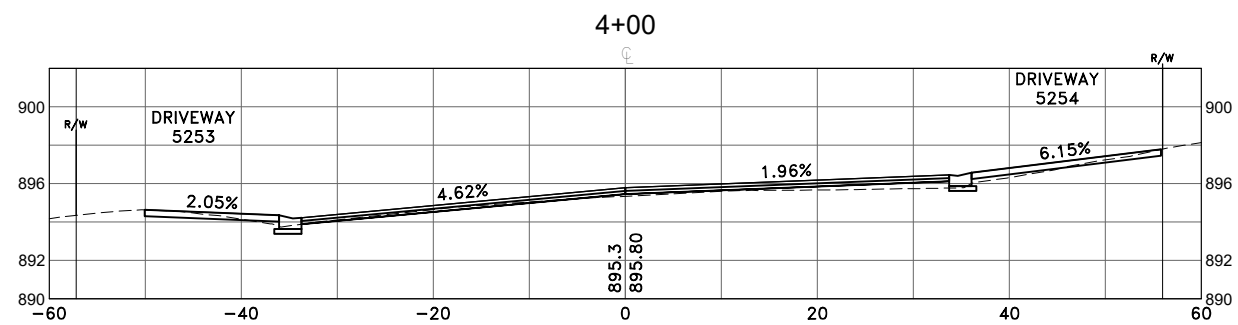
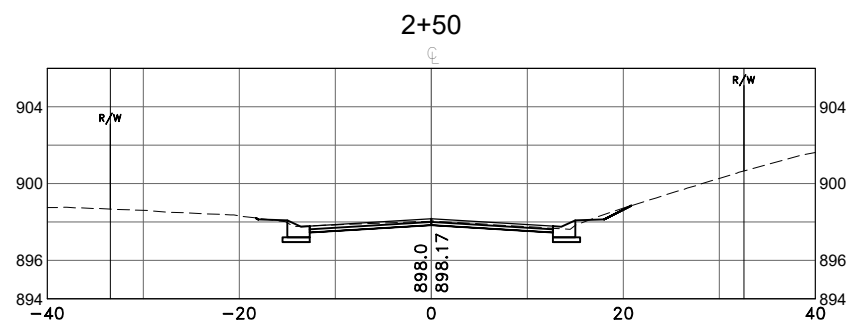
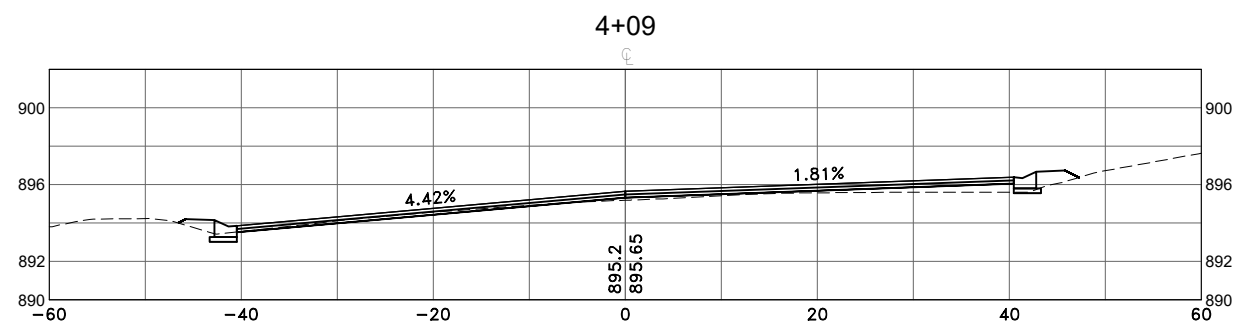
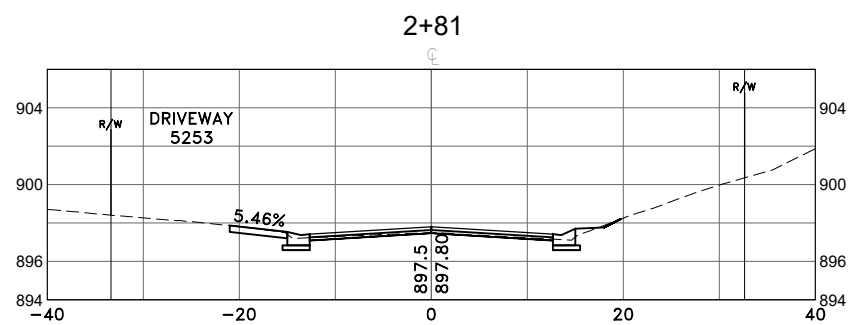
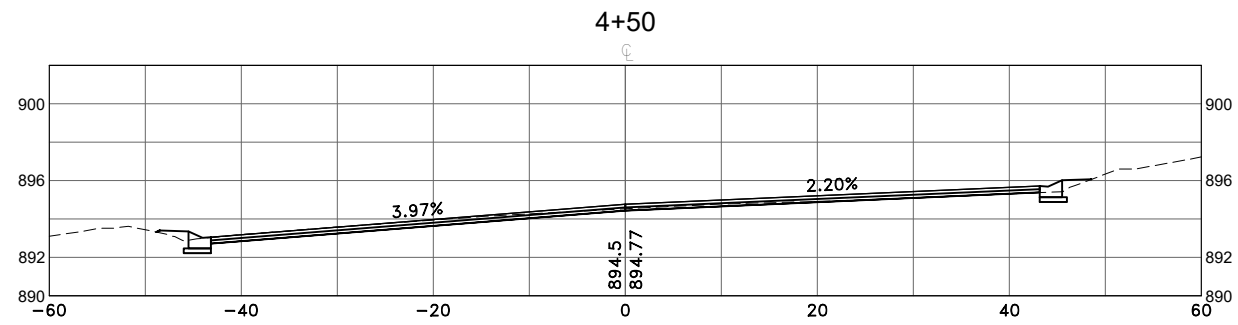
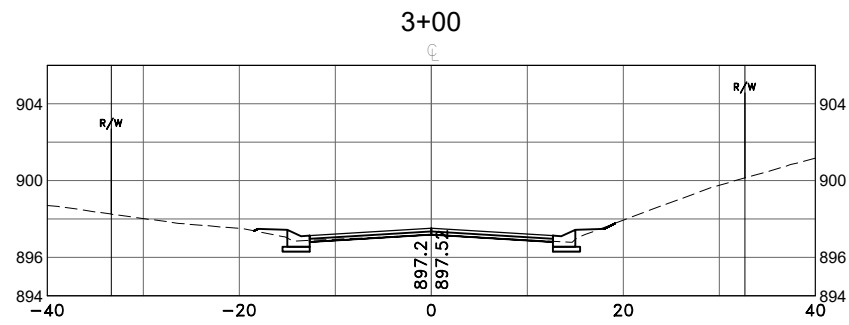
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
180TH AVENUE (WEST)  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
**X24**  
OF  
**X38**  
SHEETS  
RA3189

Apr 22, 2024 - 2:52pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



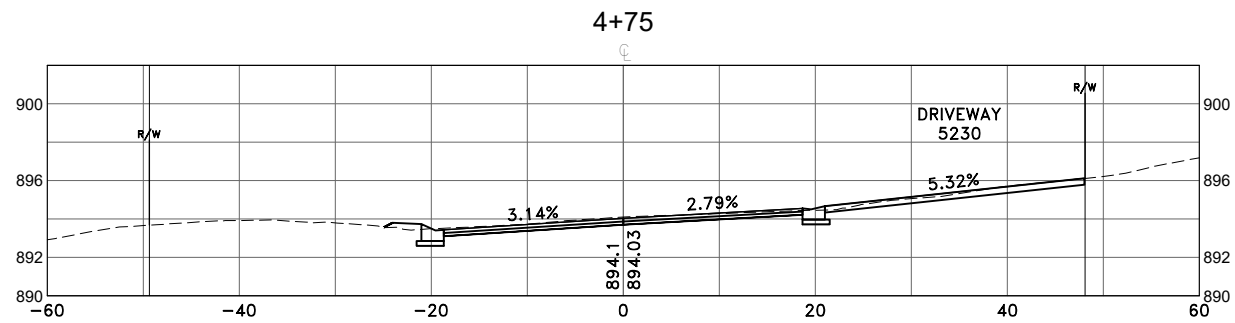
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
180TH AVENUE (EAST)  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X25  
OF  
X38  
SHEETS  
RA3189

Apr 22, 2024 - 2:52pm  
 K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
 TAE  
 DRAWN BY:  
 TAE  
 CHECKED BY:  
 SMN

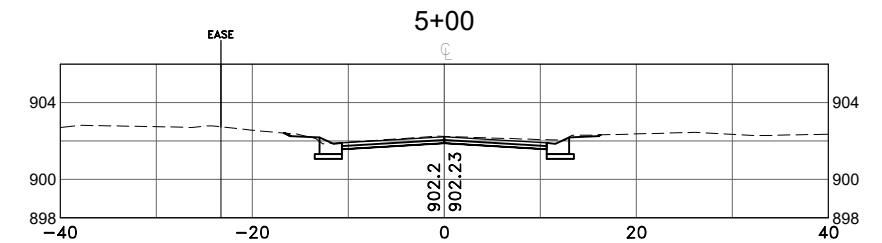
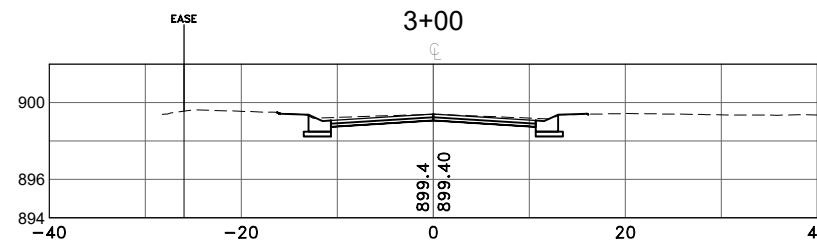
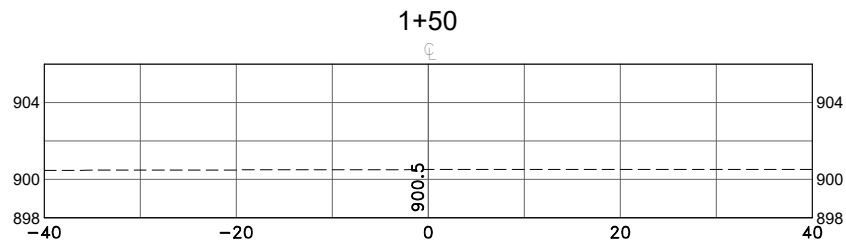
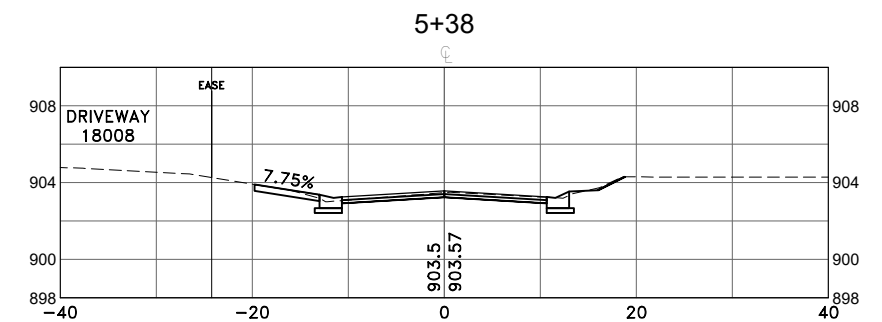
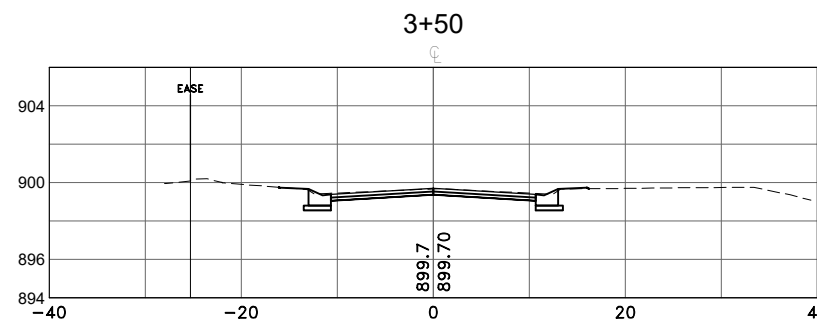
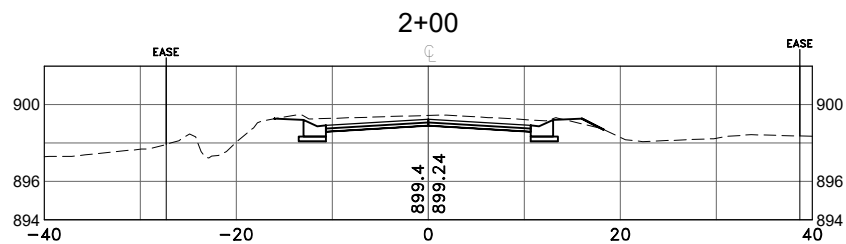
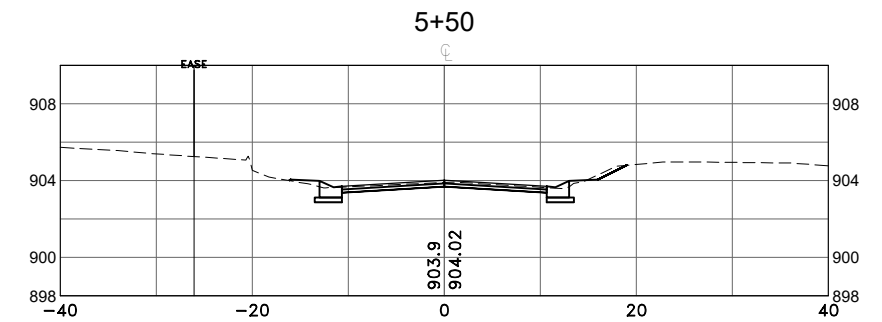
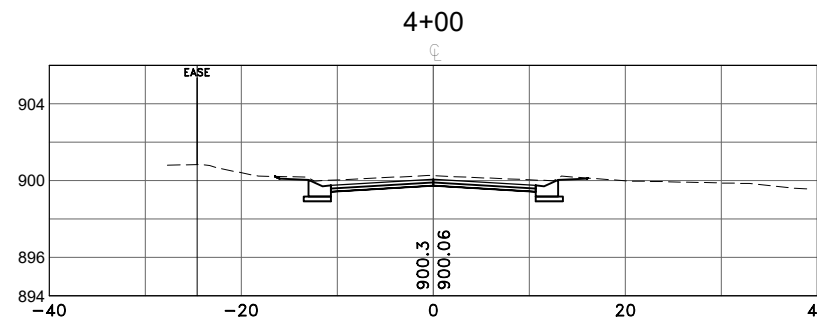
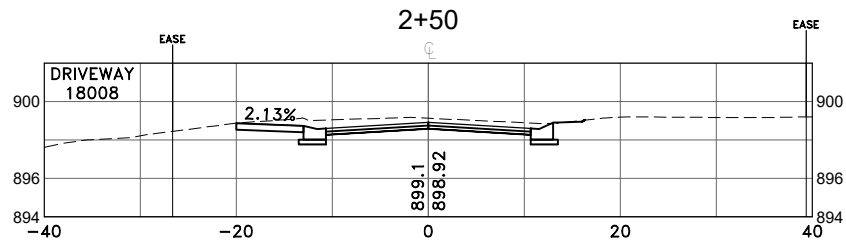
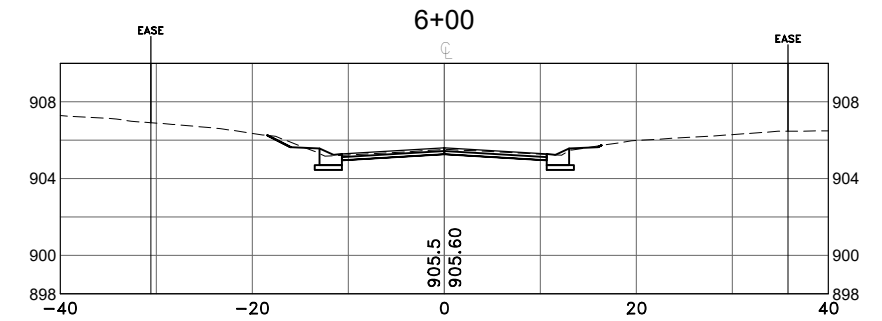
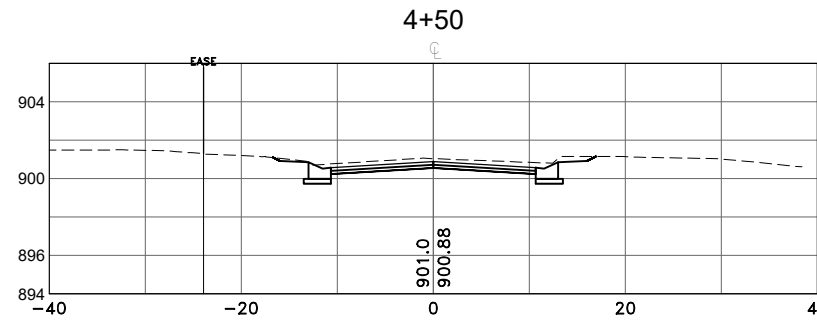
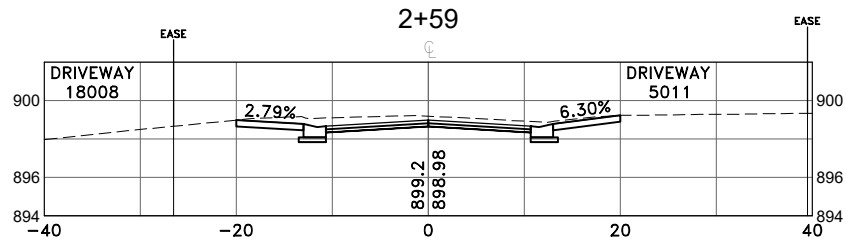
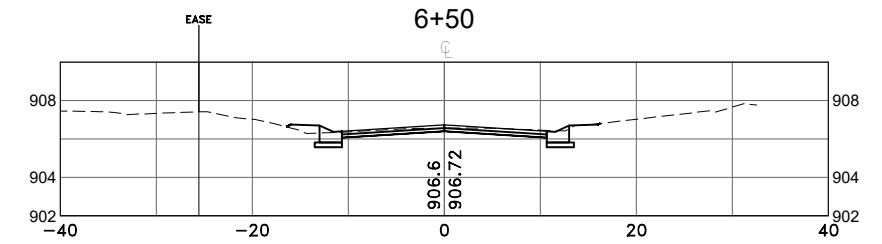
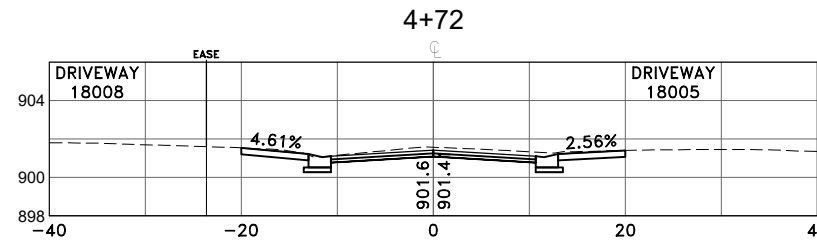
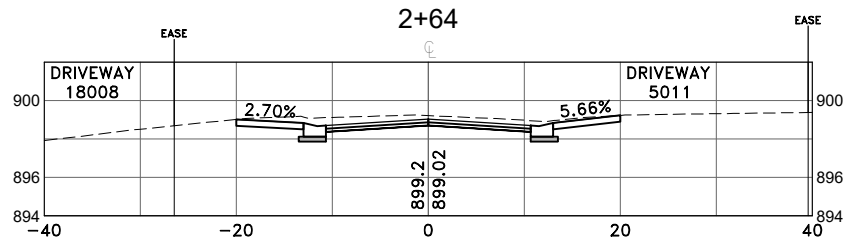


**Hakanson Anderson**  
 Civil Engineers and Land Surveyors  
 3601 Thurston Ave., Anoka, Minnesota 55303  
 763-427-5860 FAX 763-427-0520  
 www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
 RECONSTRUCTION PROJECT

CROSS SECTIONS  
 180TH AVENUE (EAST)  
 CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
 X26  
 OF  
 X38  
 SHEETS



Apr 22, 2024 - 2:52pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

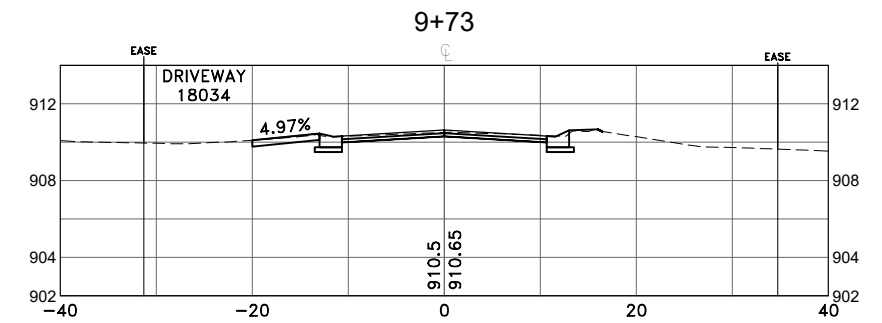
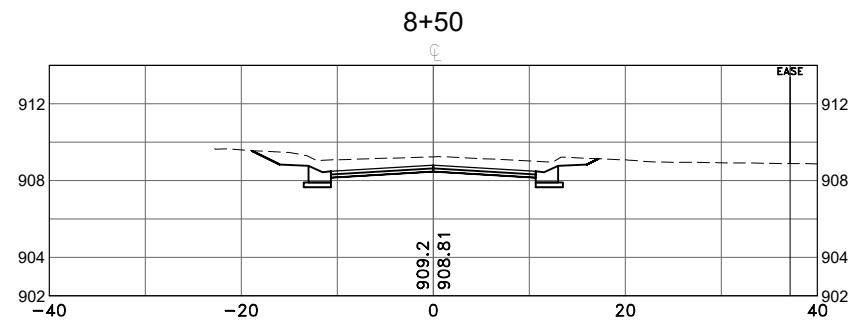
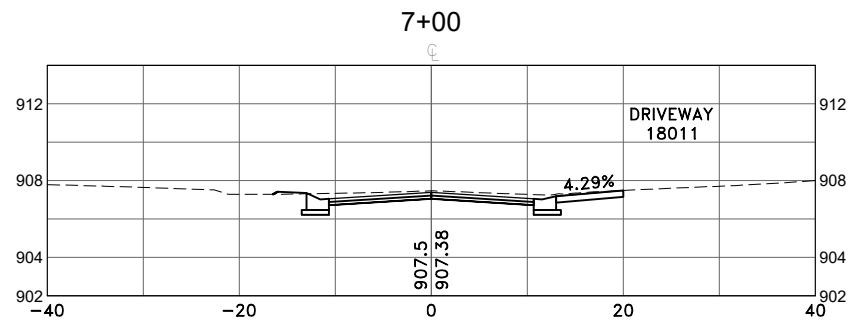
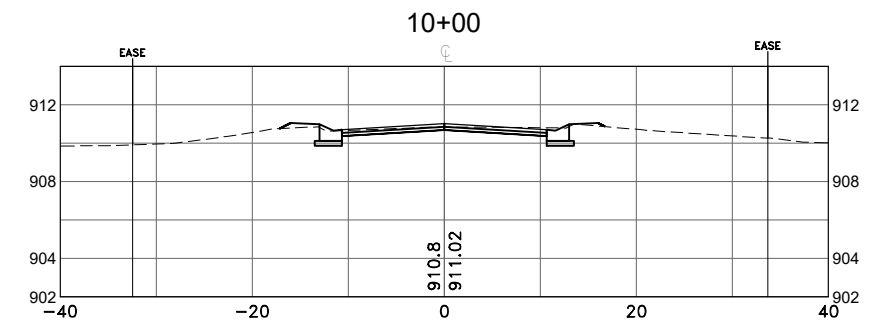
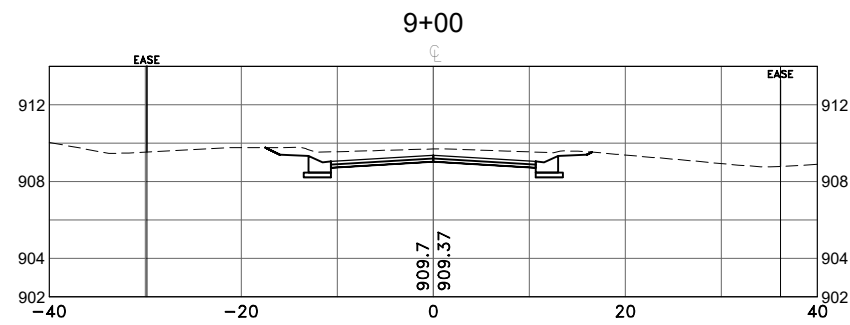
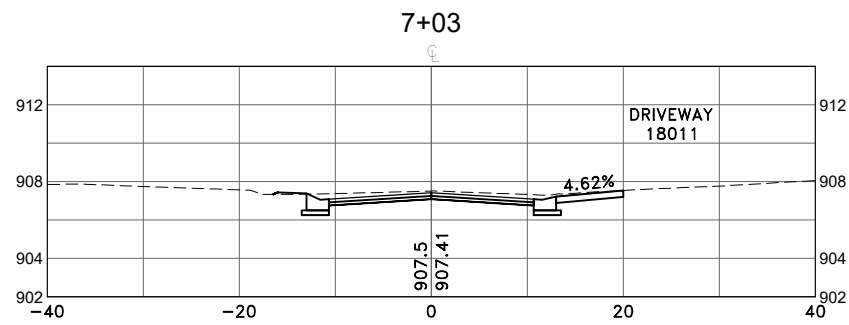
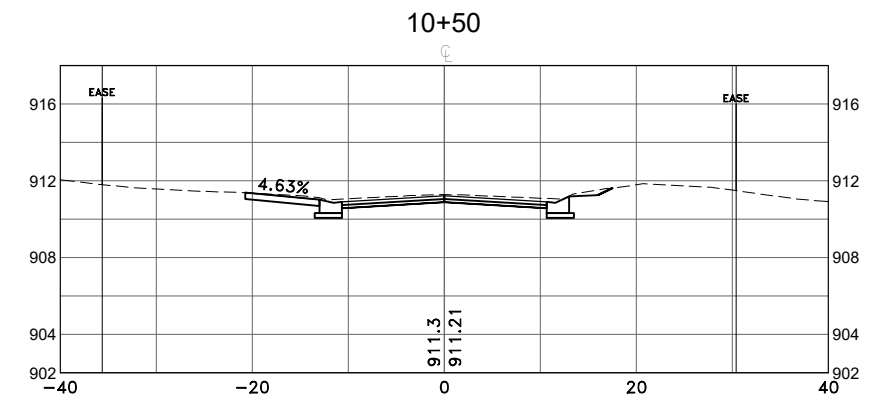
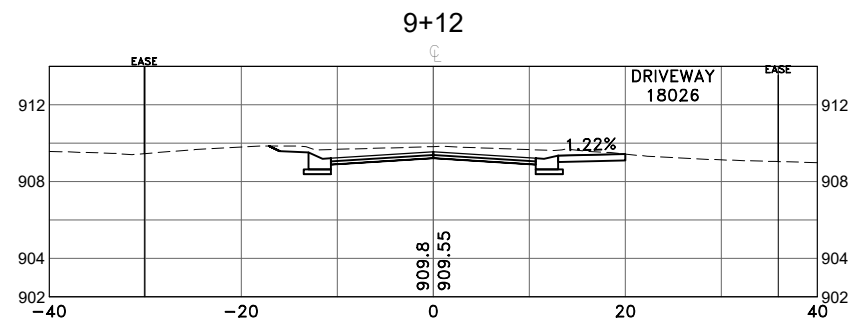
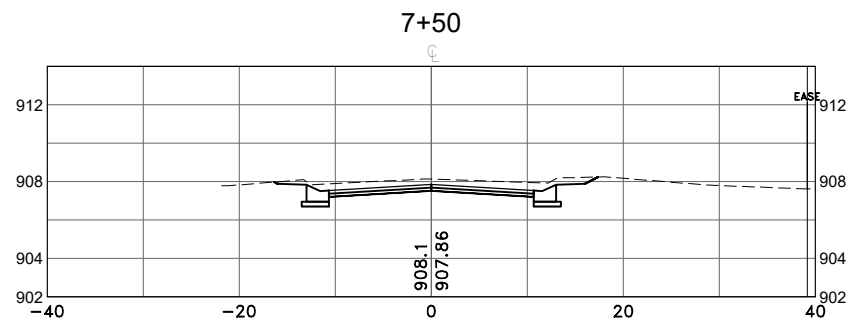
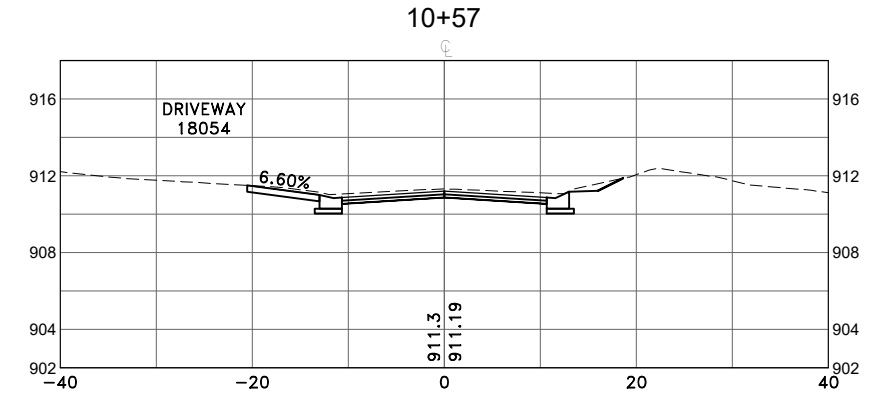
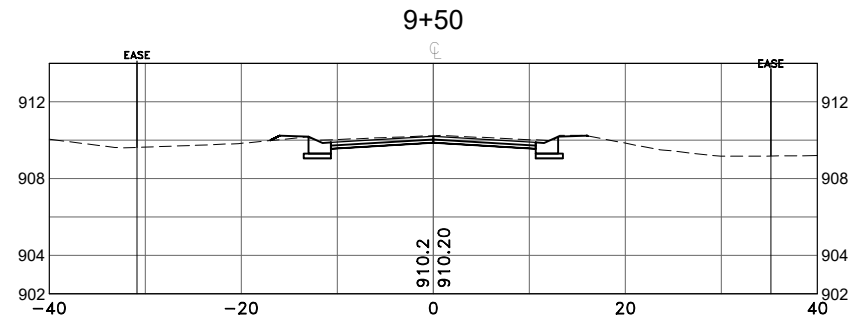
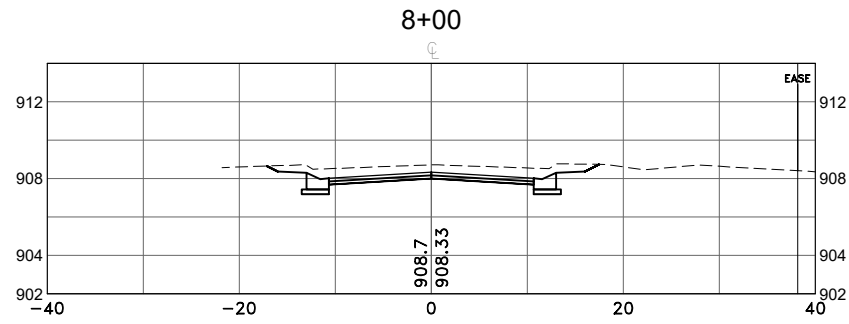


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
WACO STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET X27 OF X38 SHEETS  
RA3189



Apr 22, 2024 - 2:52pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

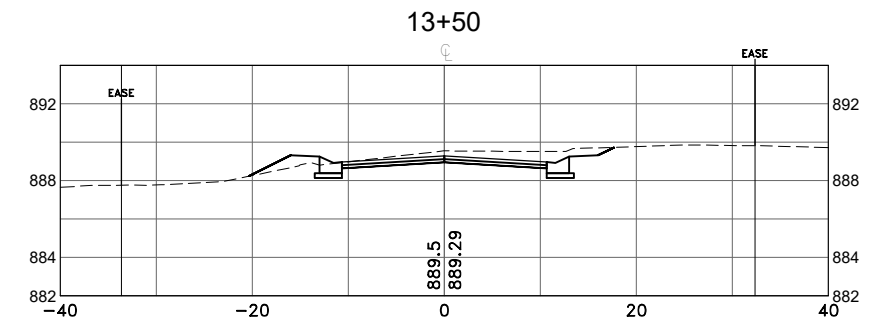
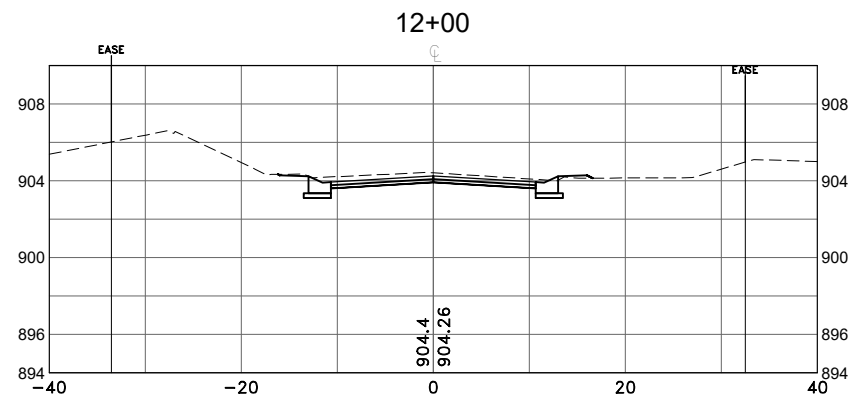
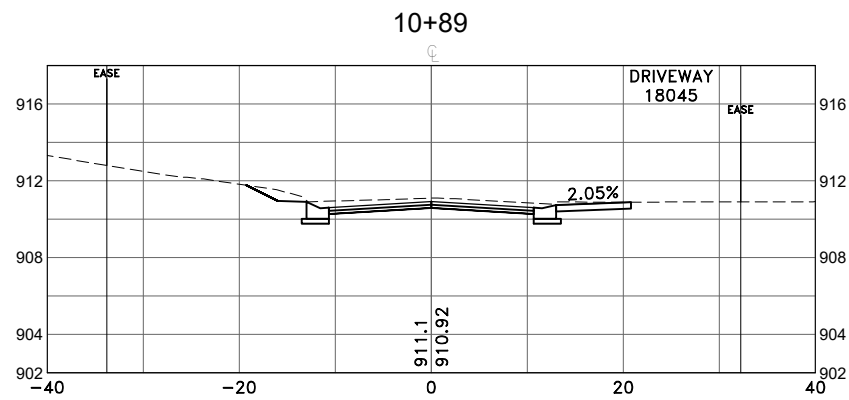
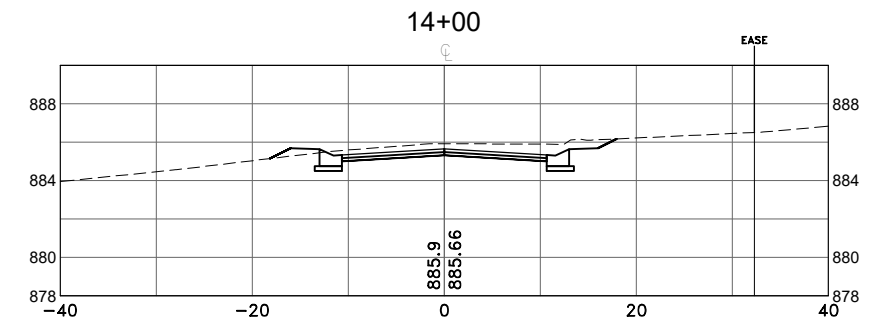
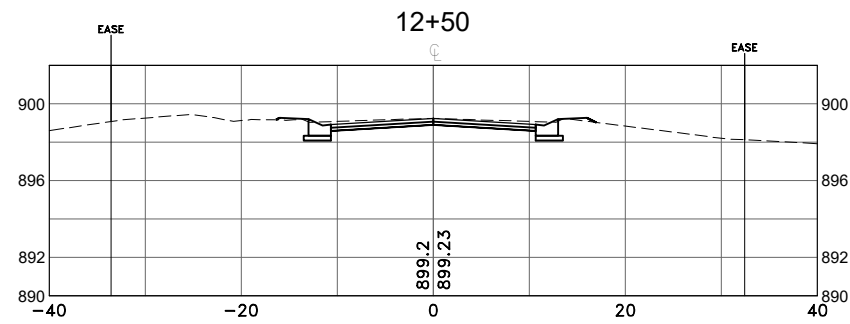
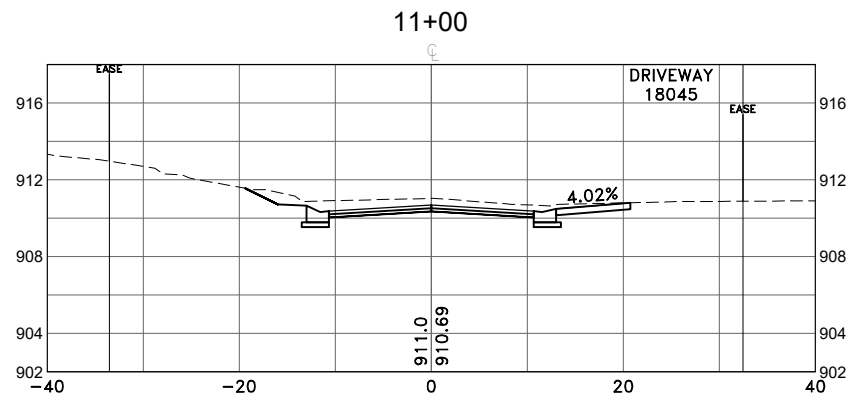
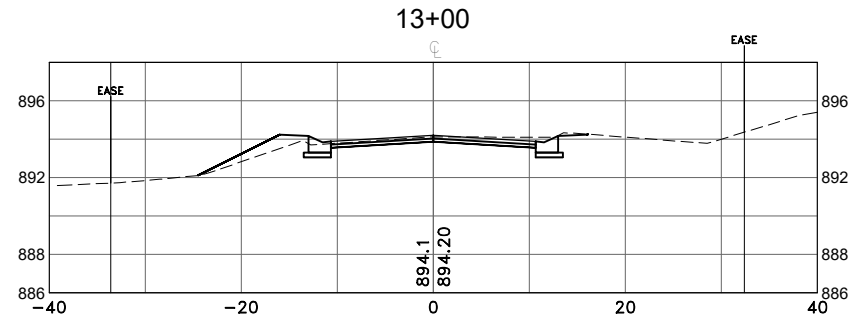
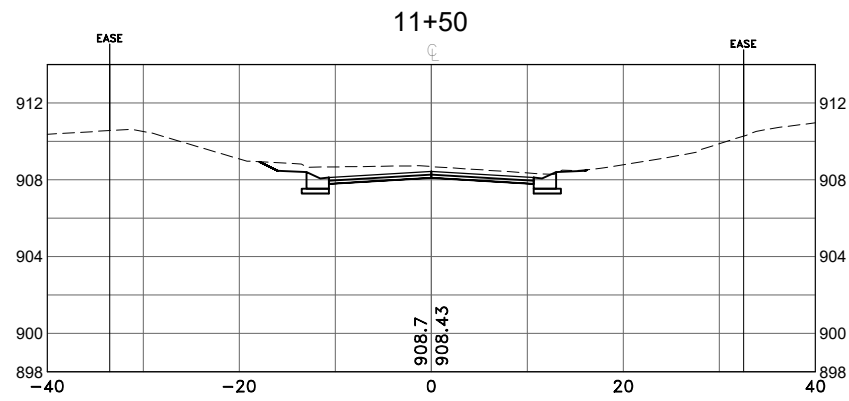


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
WACO STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET X28  
OF X38  
SHEETS  
RA3189



Apr 22, 2024 - 2:53pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

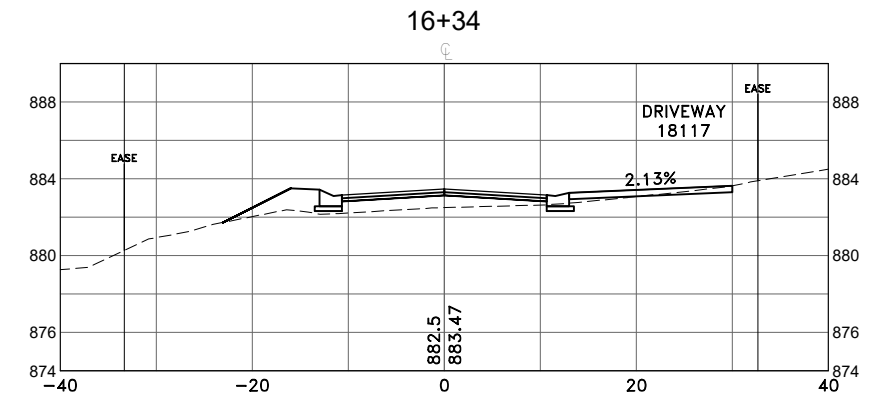
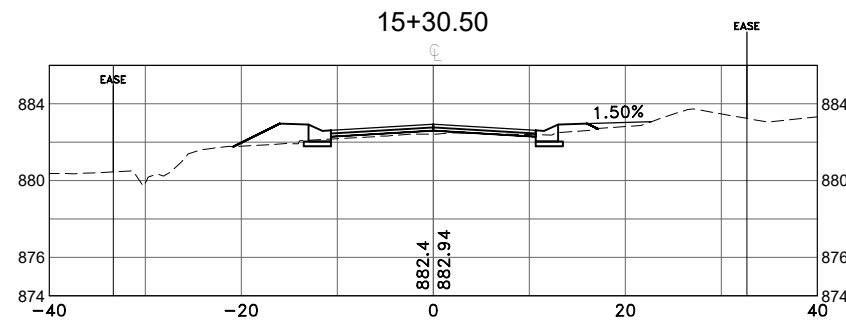
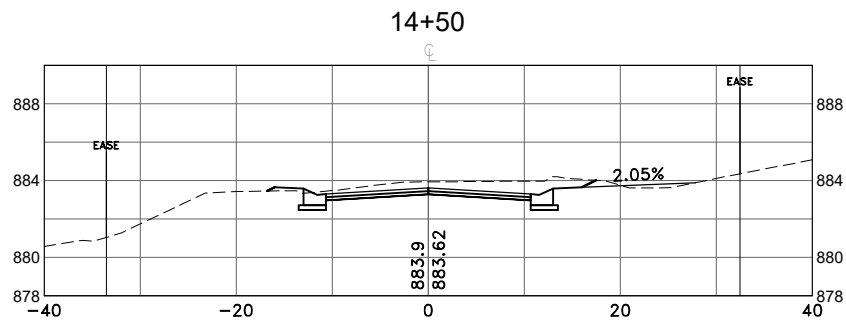
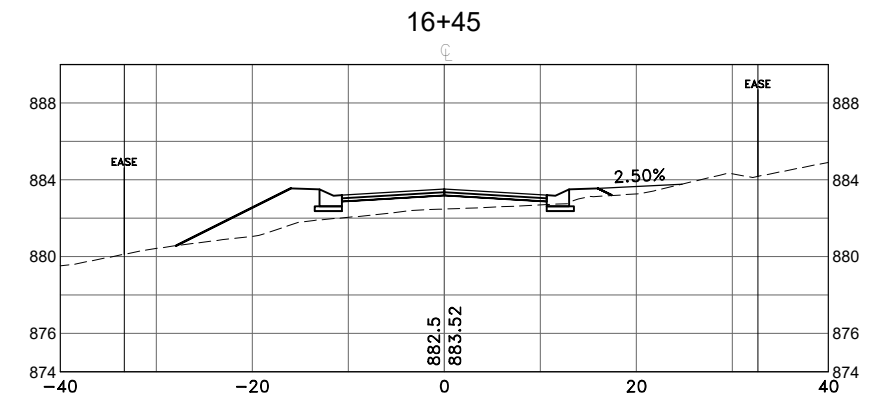
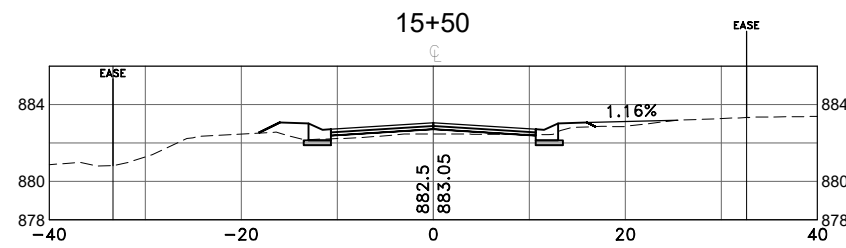
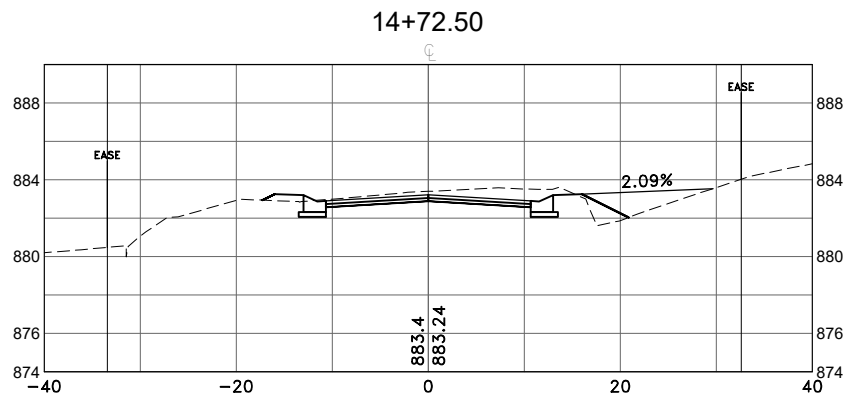
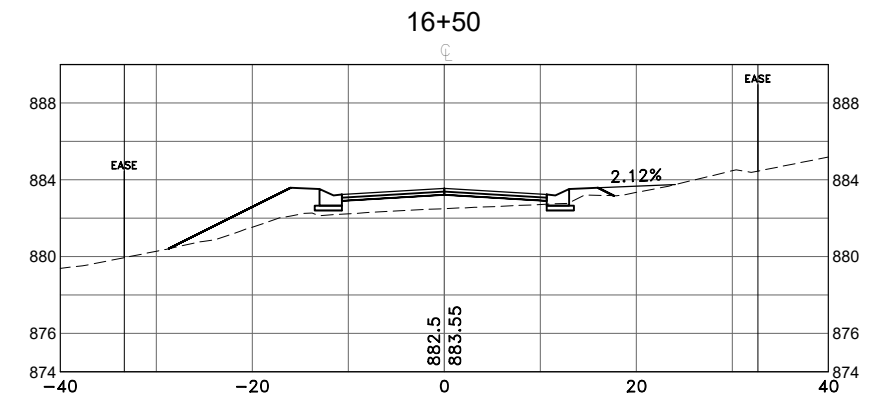
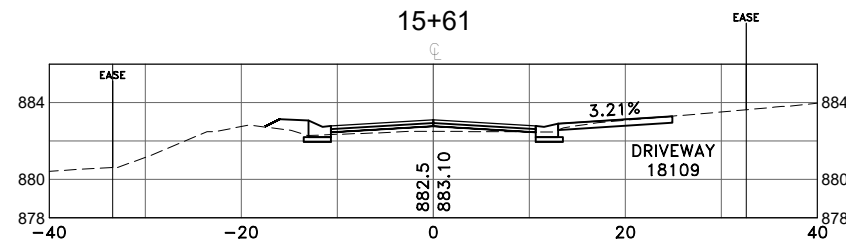
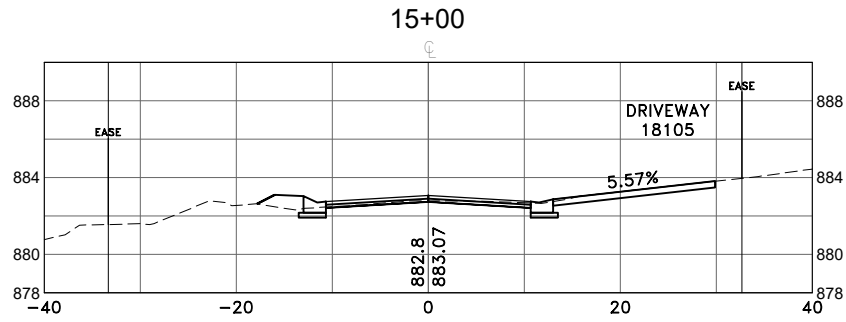
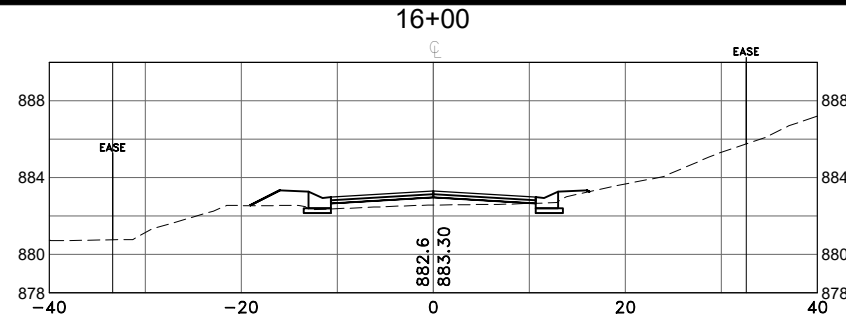
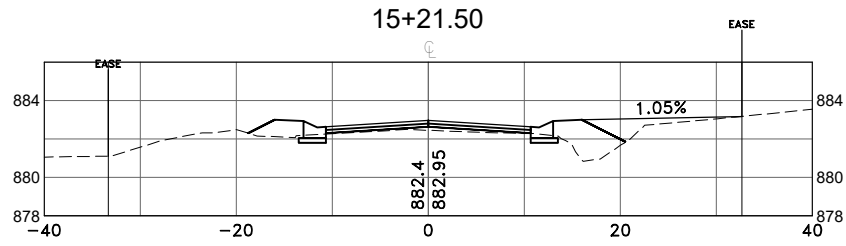


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
WACO STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X29  
OF  
X38  
SHEETS  
RA3189



Apr 22, 2024 - 2:53pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

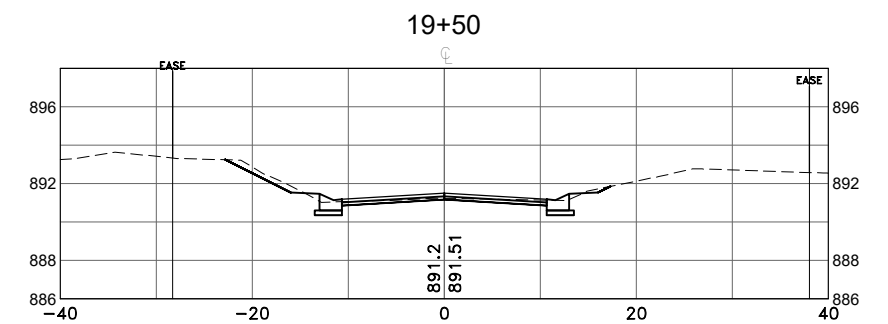
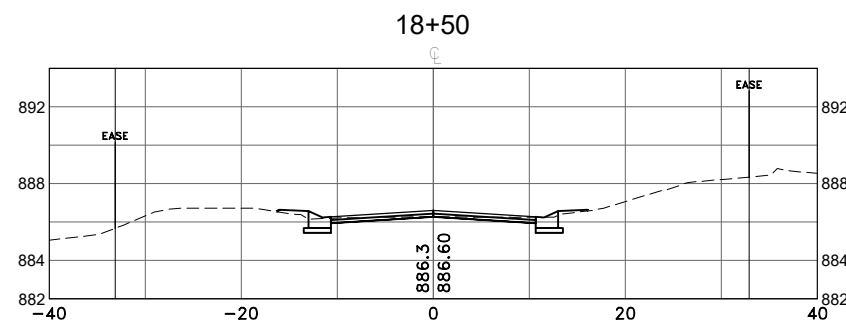
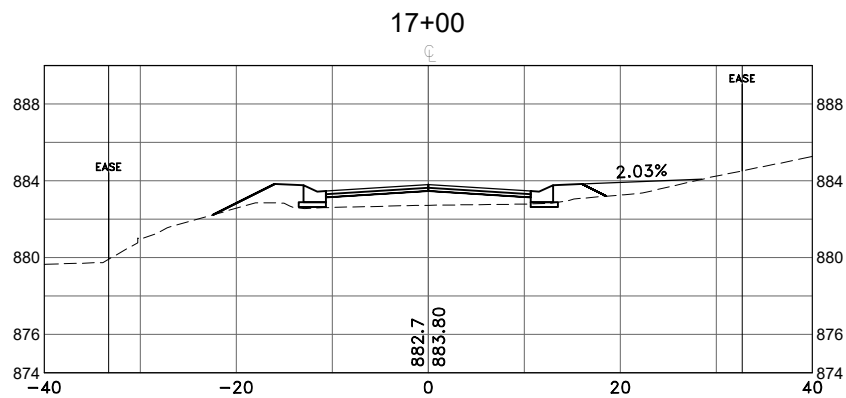
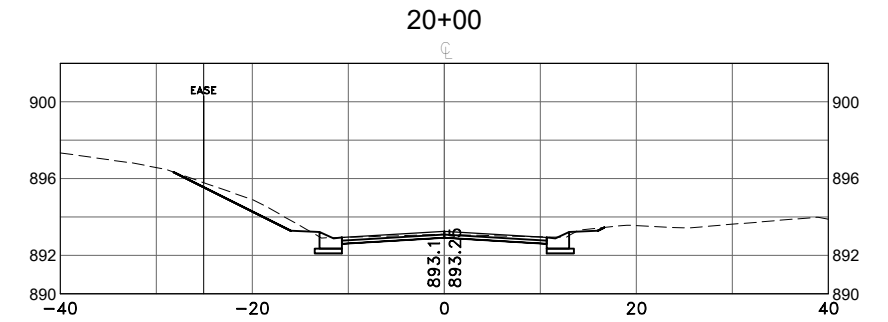
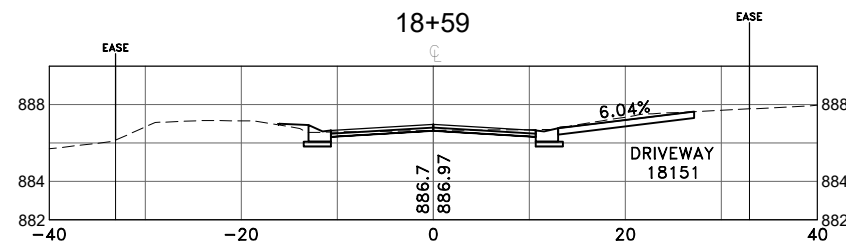
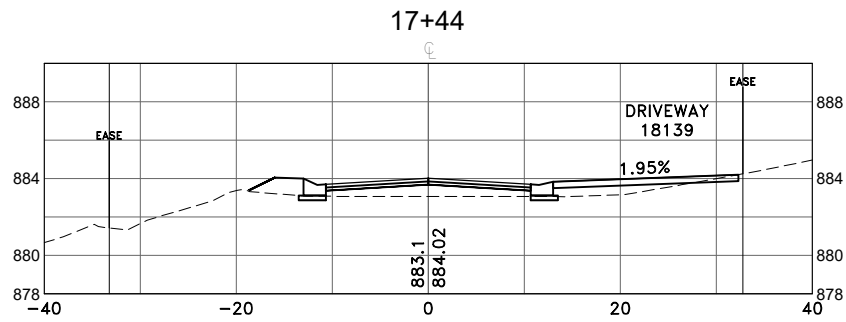
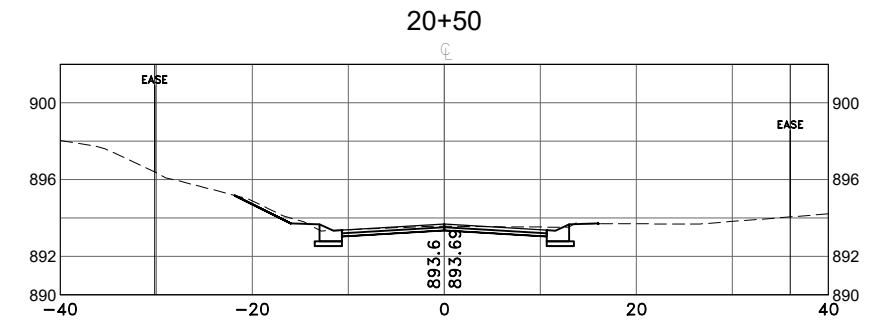
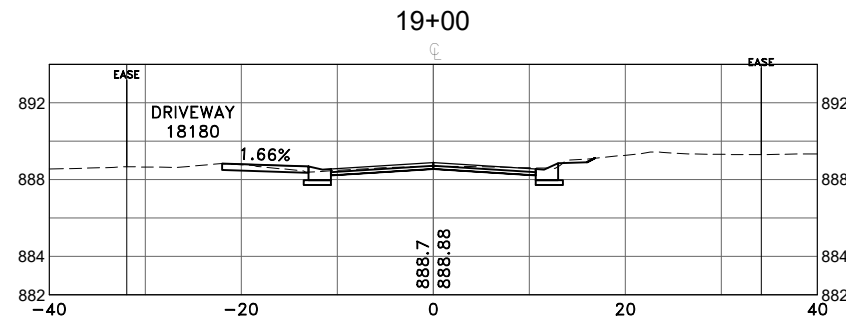
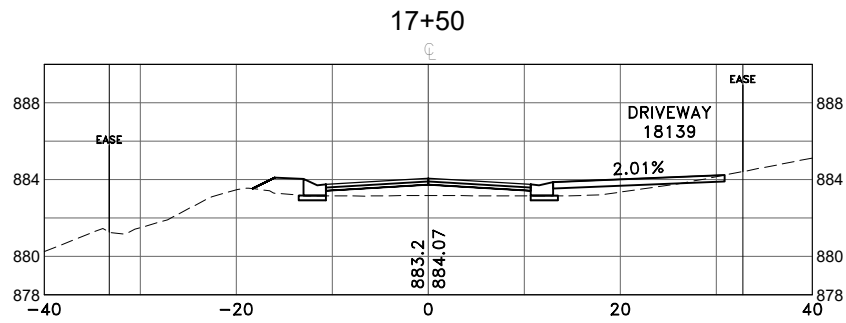
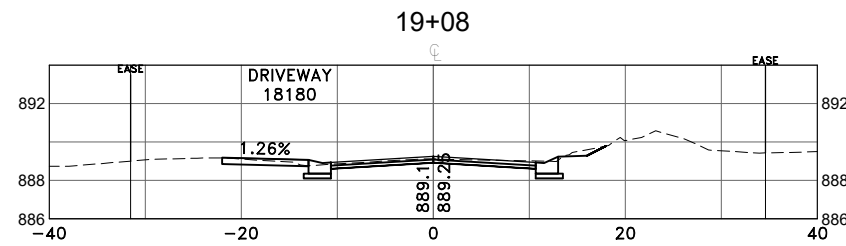
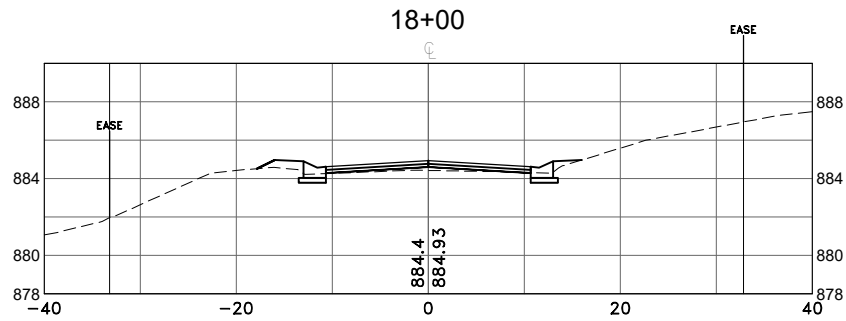


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
WACO STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X30  
OF  
X38  
SHEETS  
RA3189



Apr 22, 2024 - 2:53pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

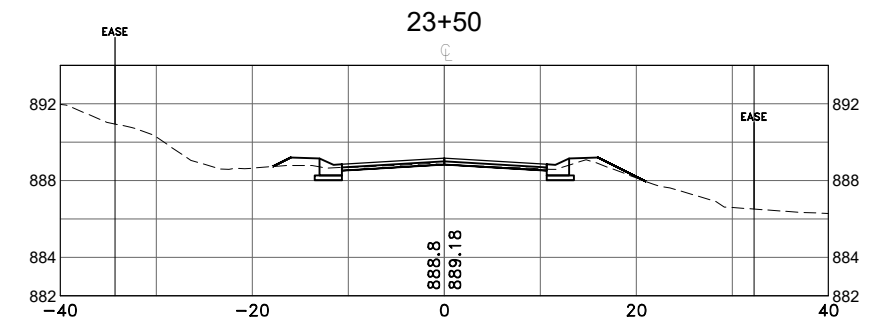
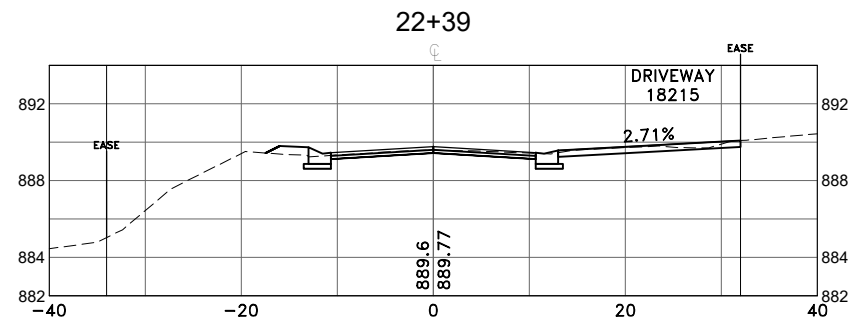
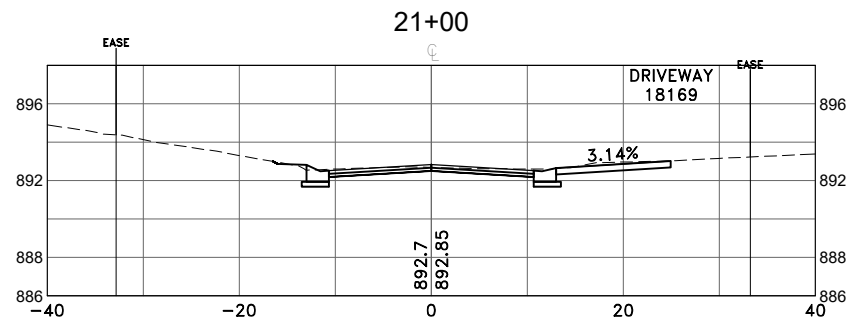
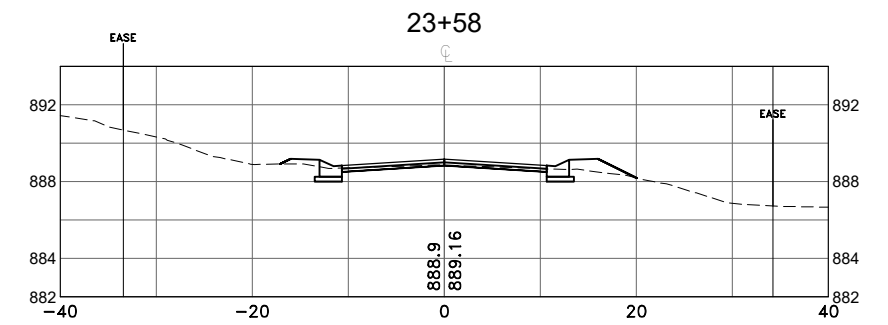
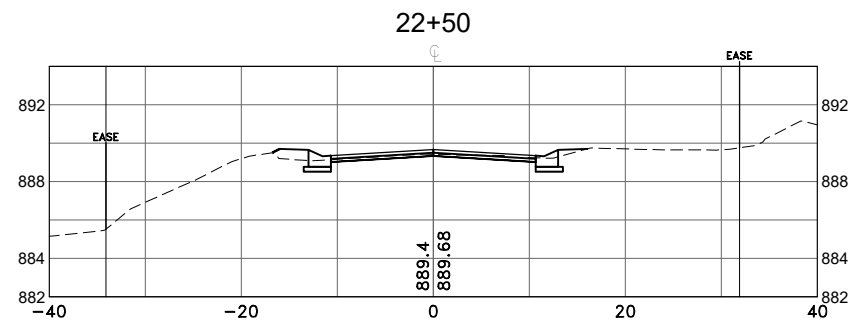
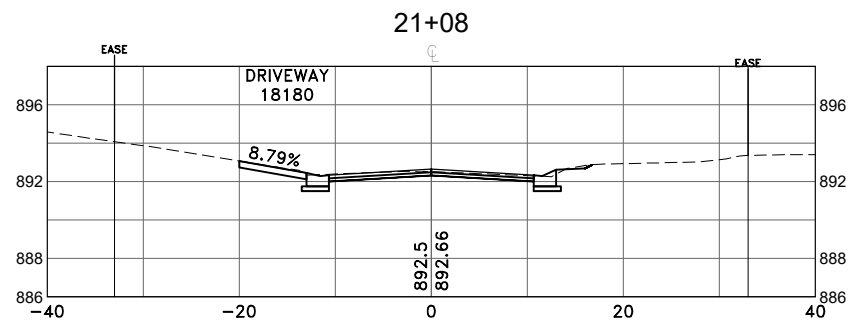
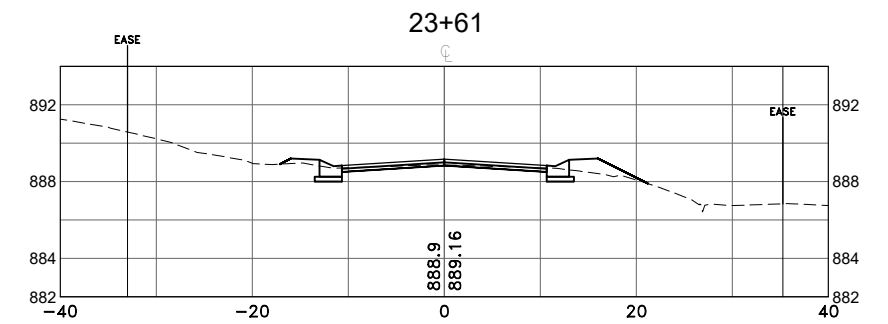
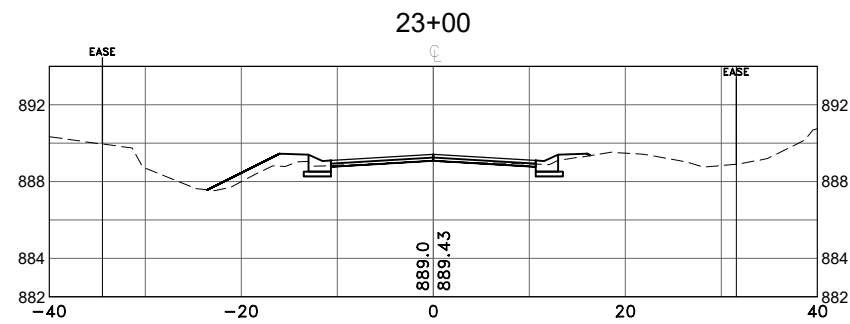
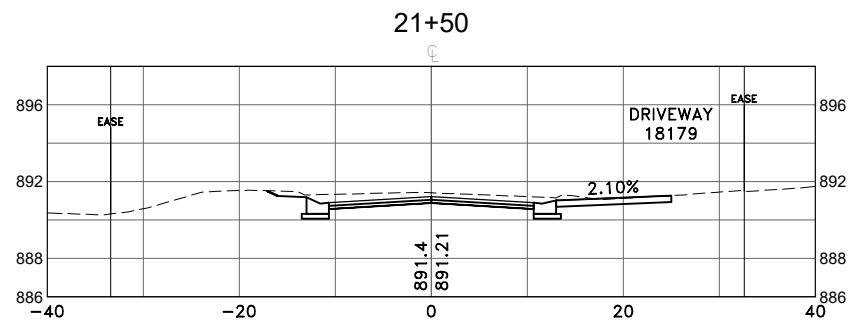
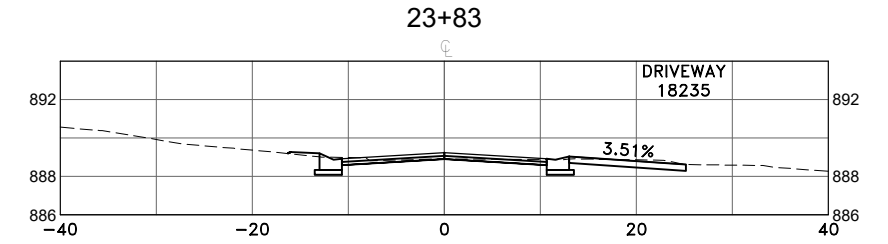
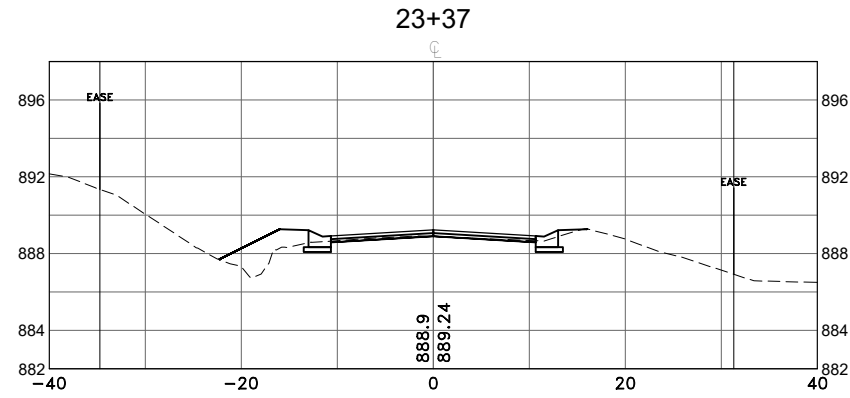
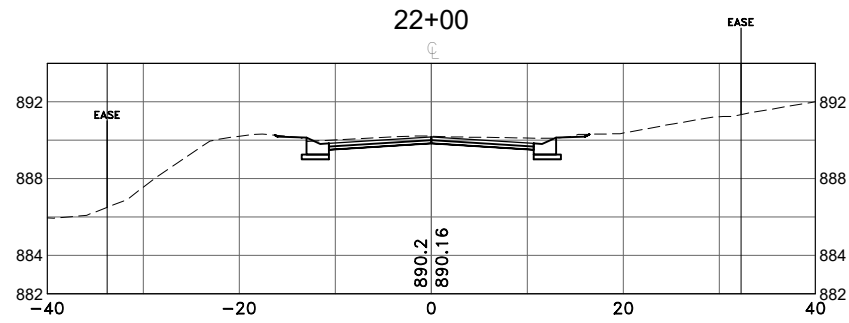


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
WACO STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET X31  
OF X38  
SHEETS  
RA3189



Apr 22, 2024 - 2:53pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



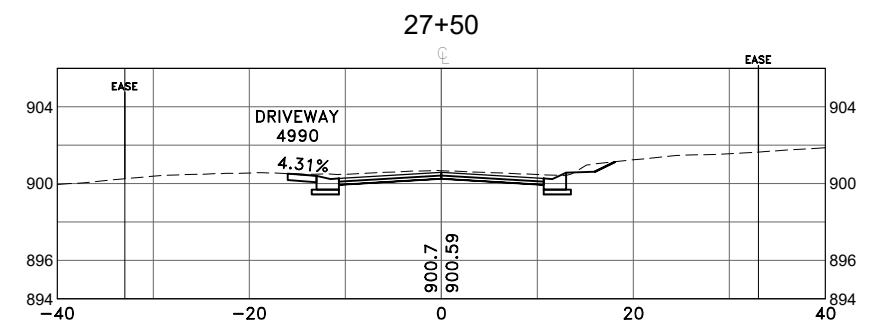
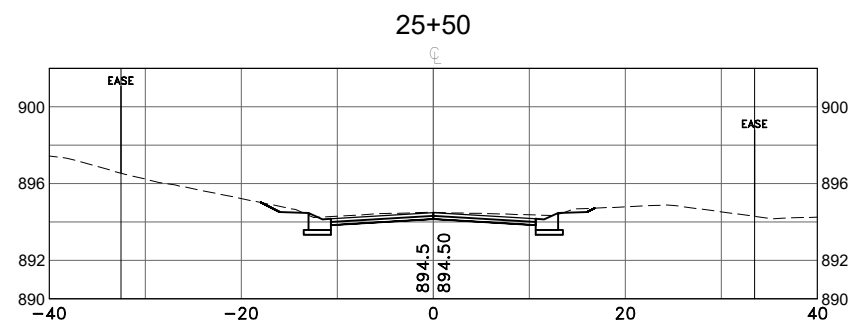
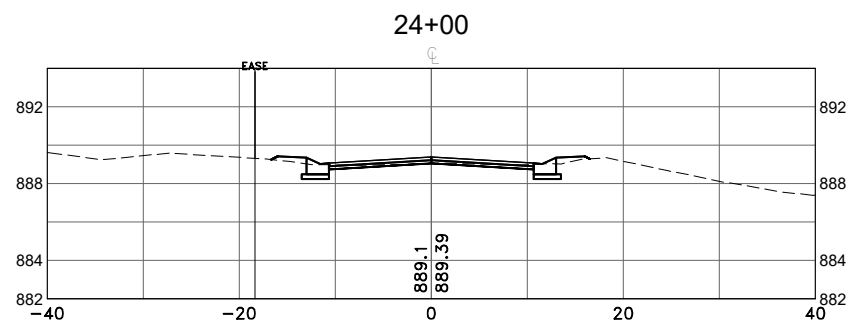
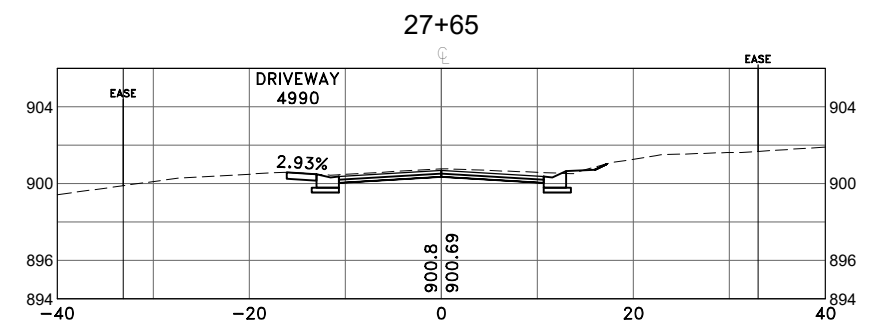
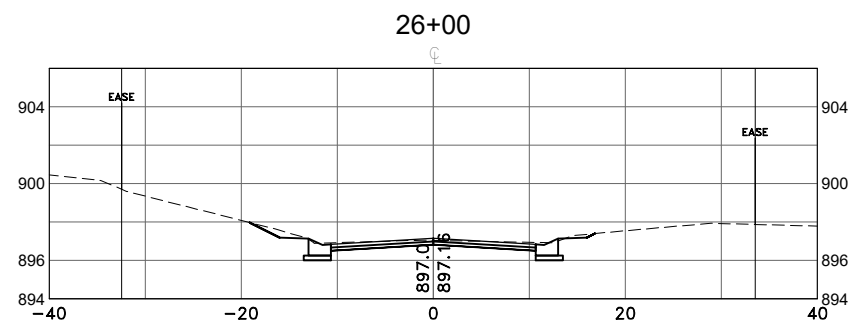
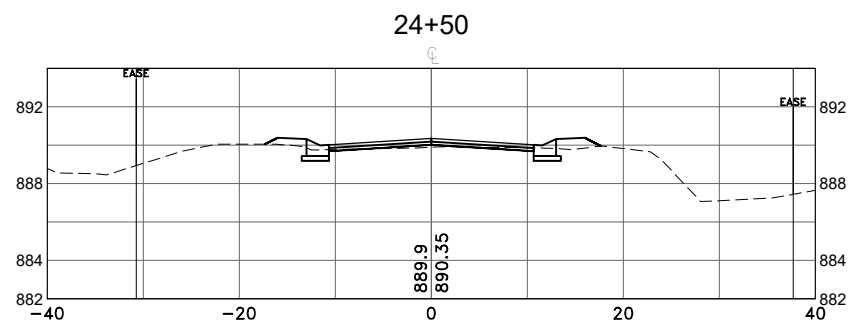
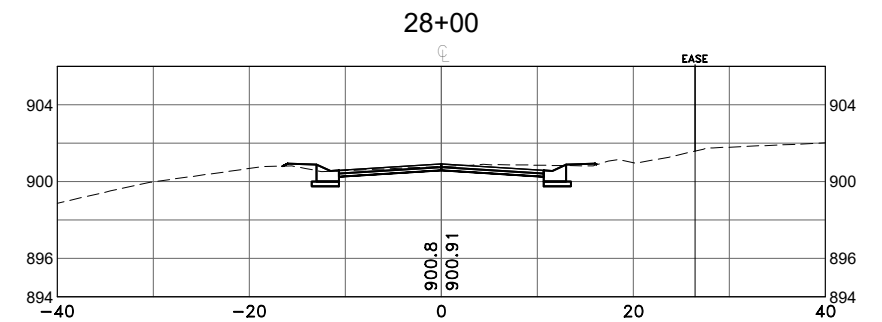
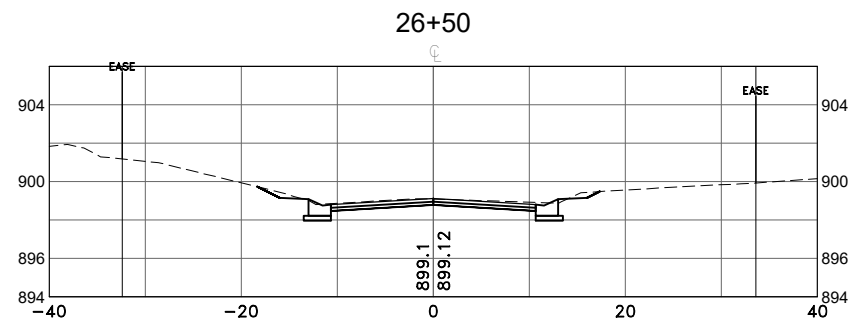
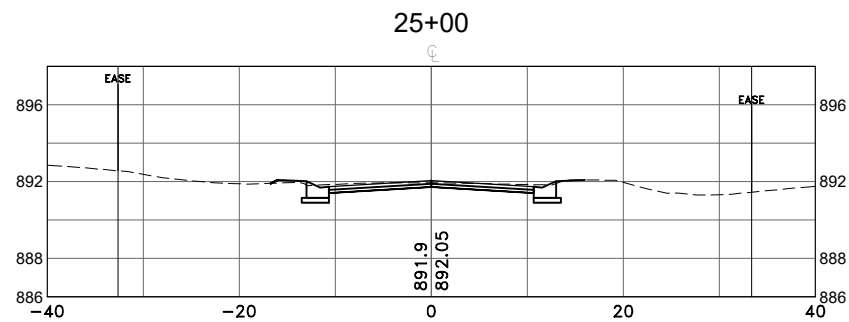
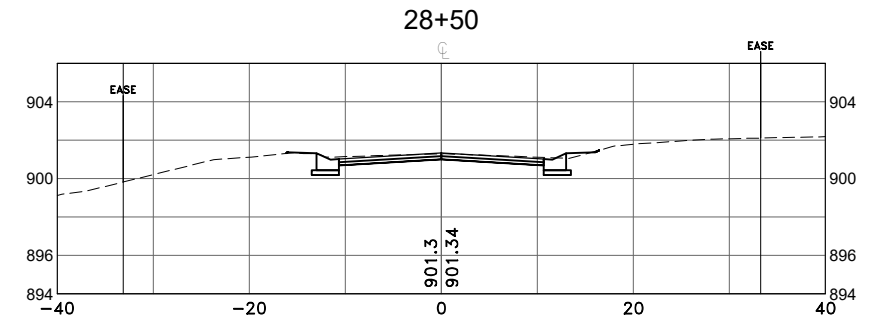
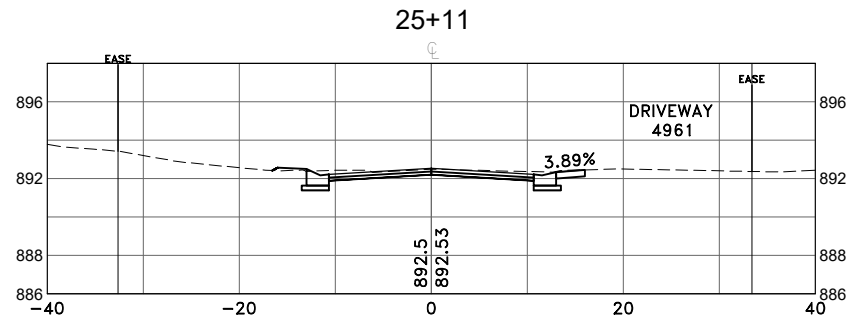
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
WACO STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET X32 OF X38 SHEETS  
RA3189

Apr 22, 2024 - 2:53pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

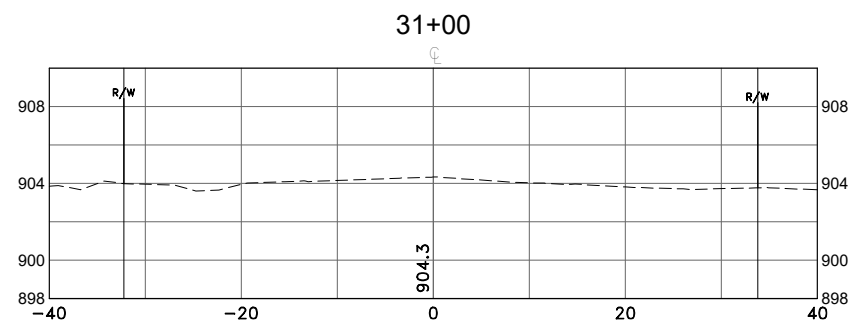
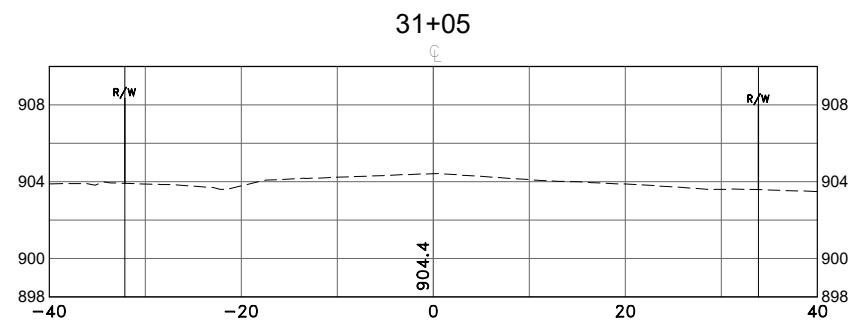
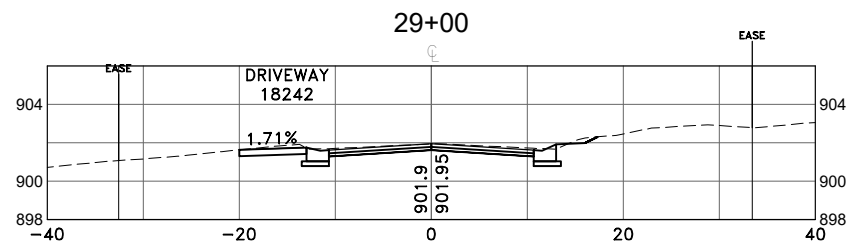
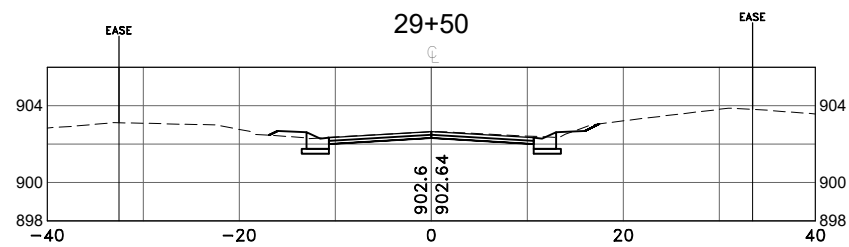
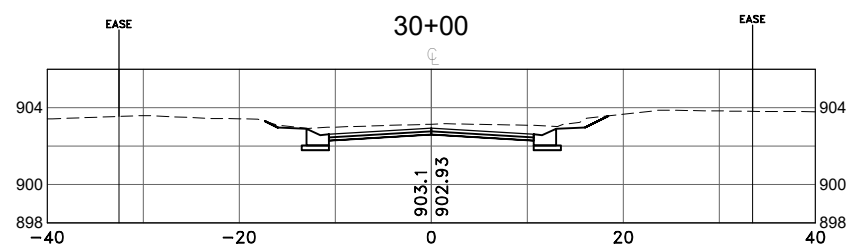
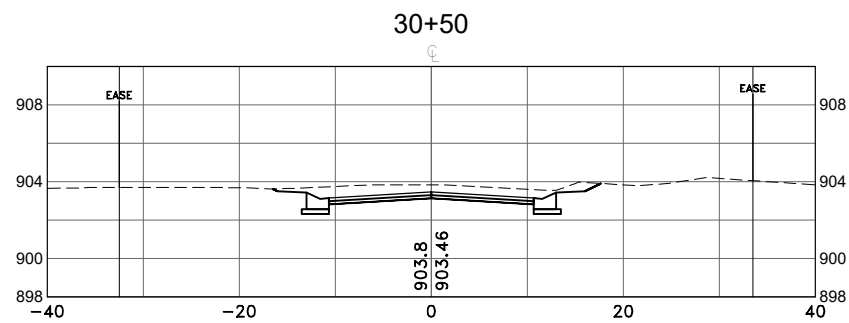
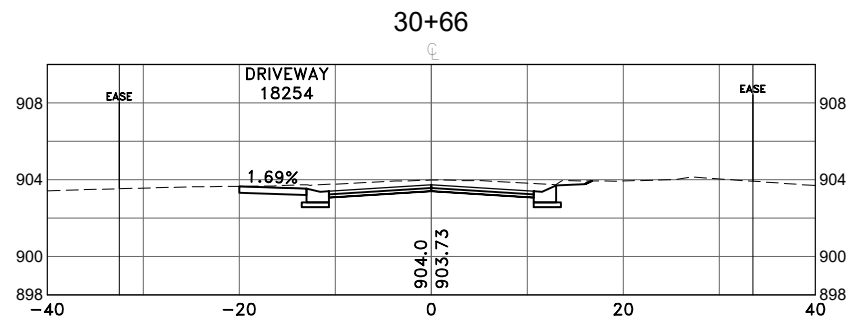


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
182ND LANE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
**X33**  
OF  
**X38**  
SHEETS



Apr 22, 2024 - 2:53pm K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

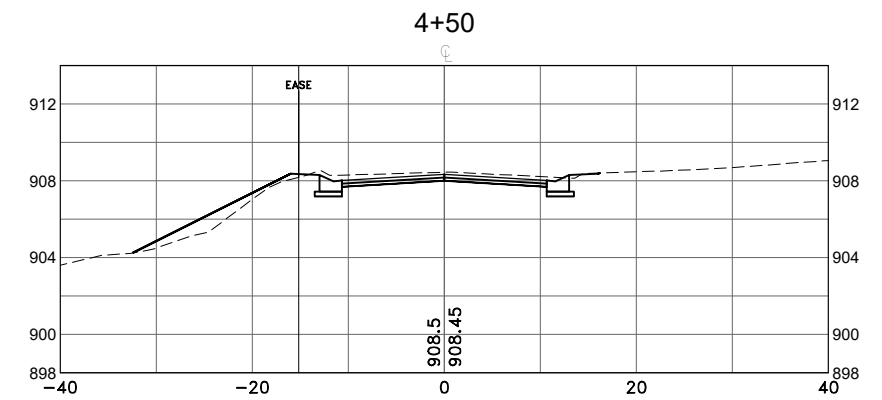
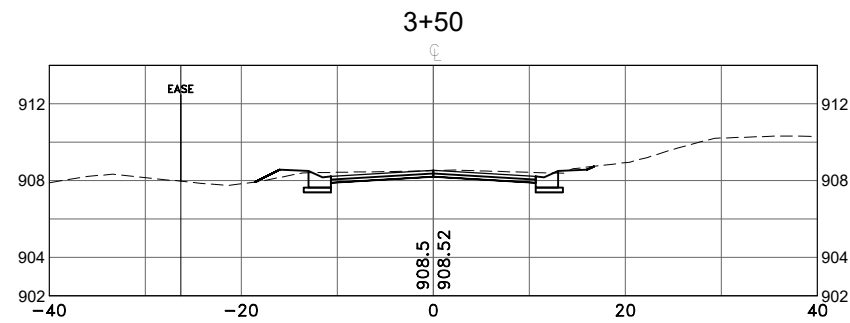
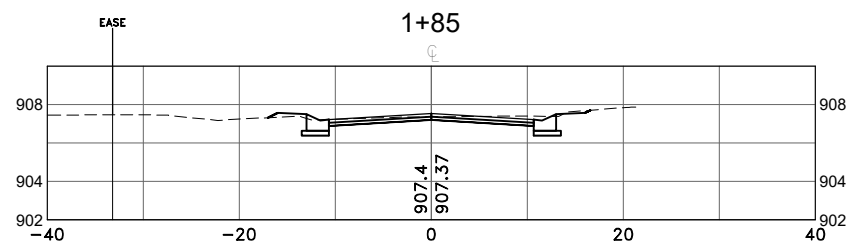
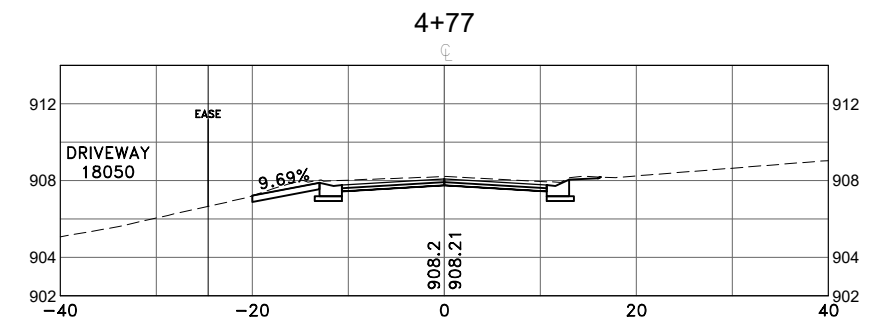
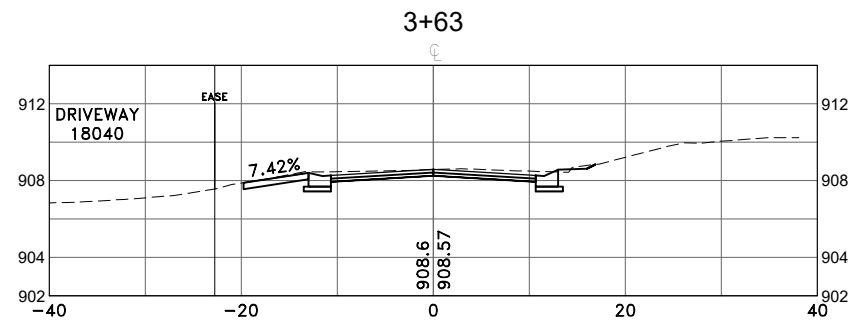
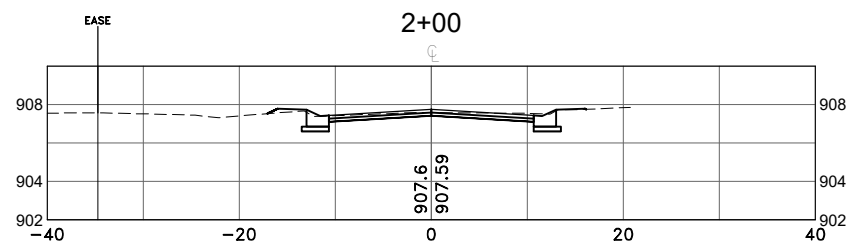
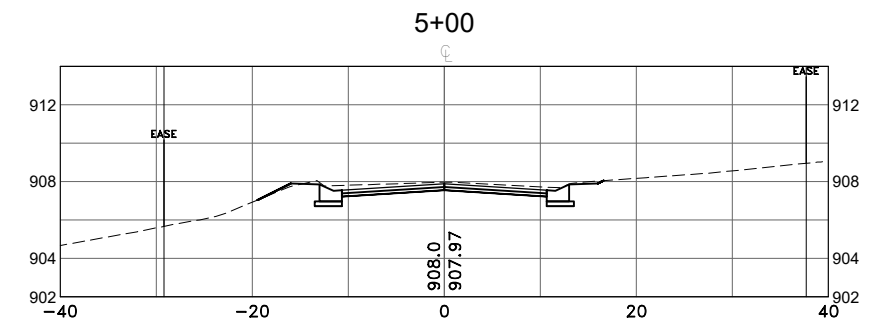
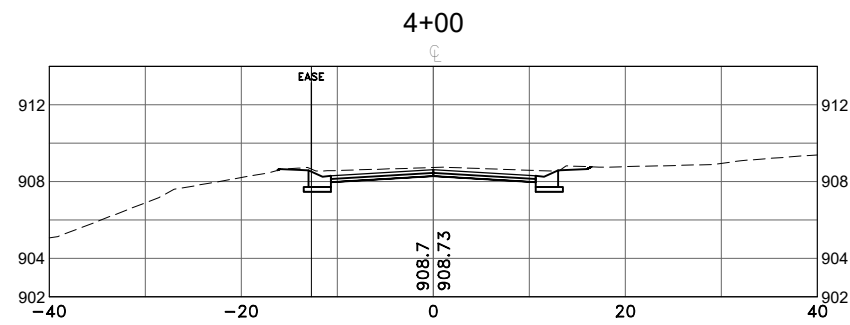
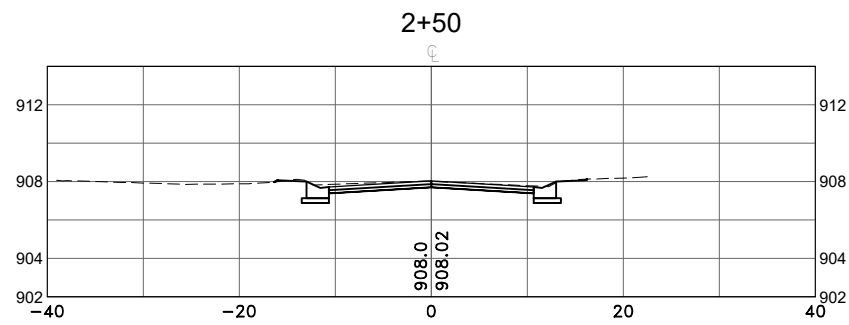
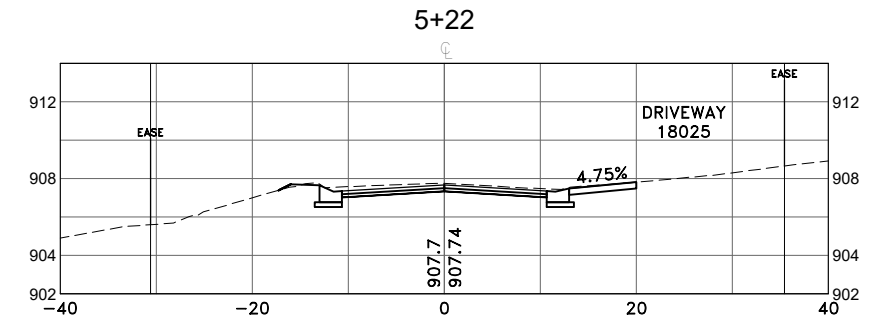
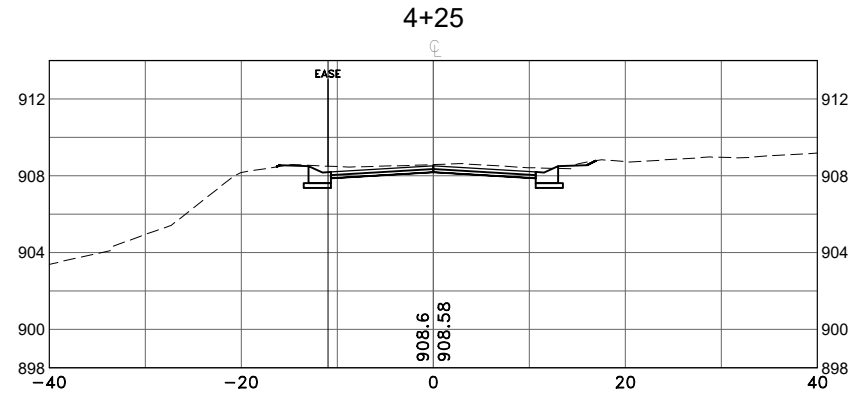
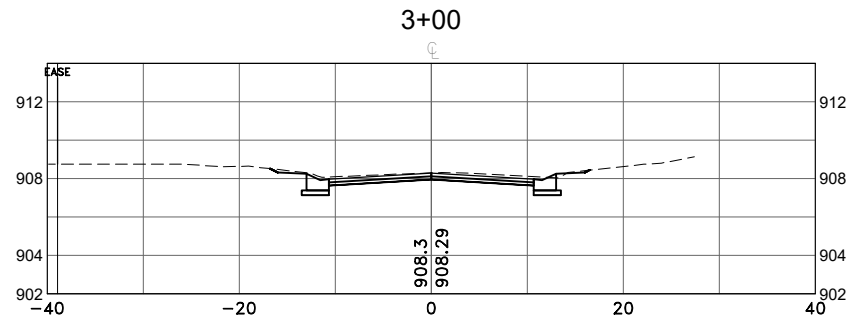


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
VENTRE STREET  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X34  
OF  
X38  
SHEETS



Apr 22, 2024 - 2:53pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN

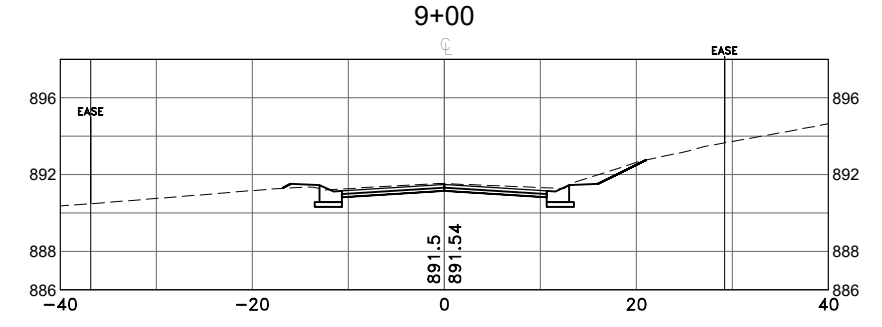
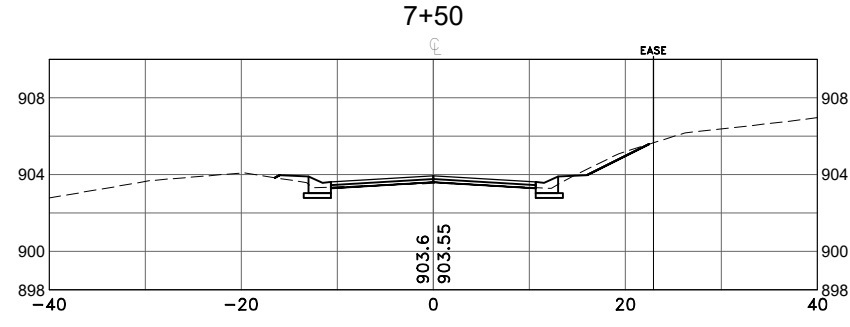
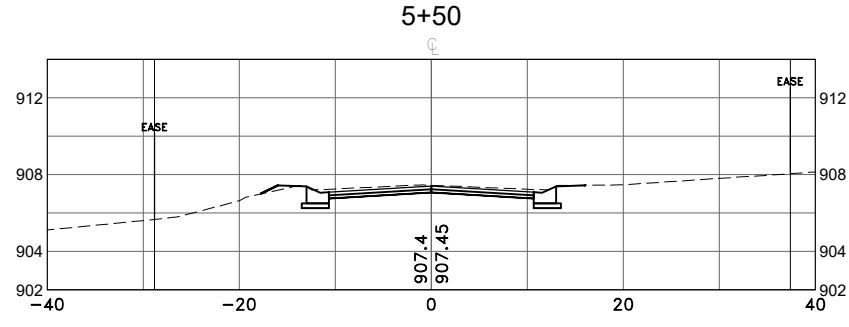
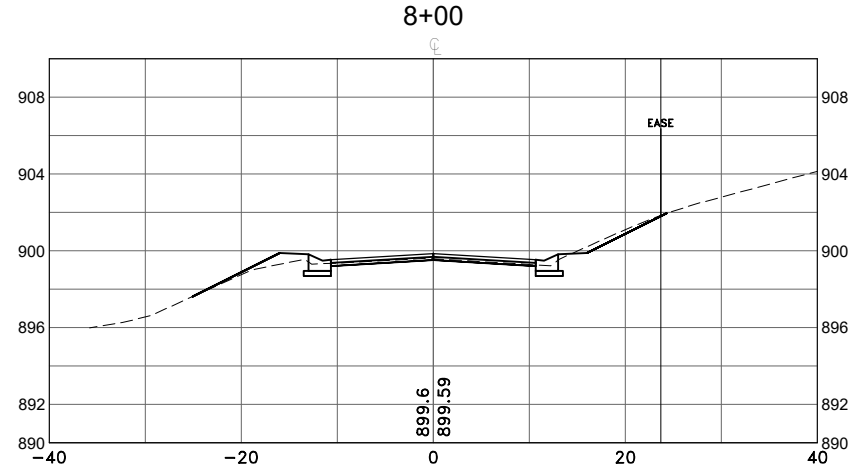
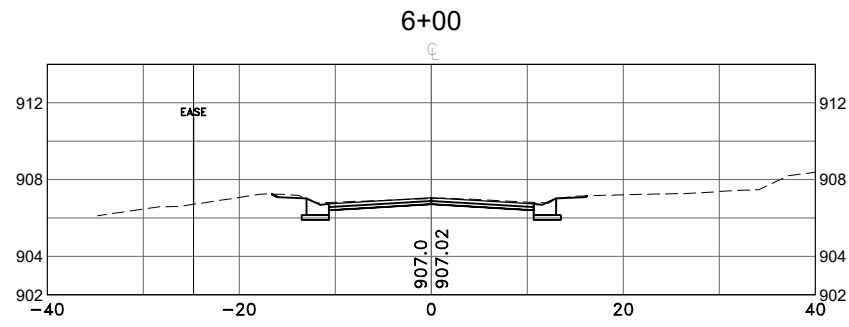
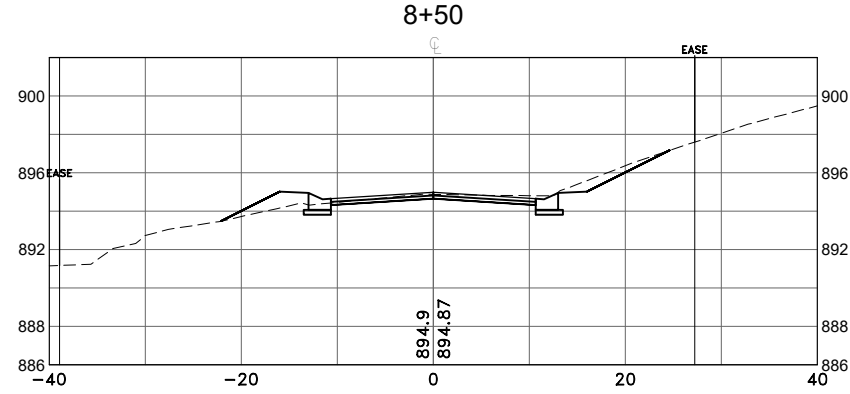
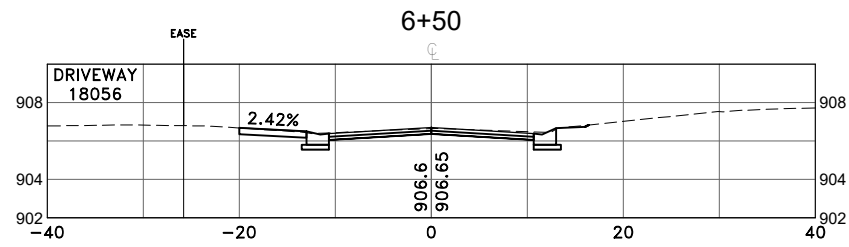
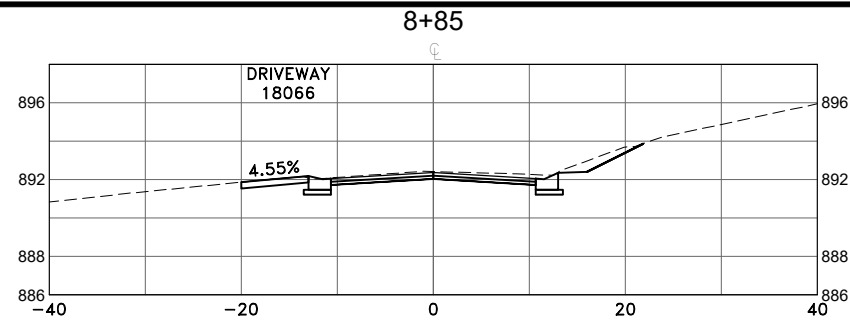
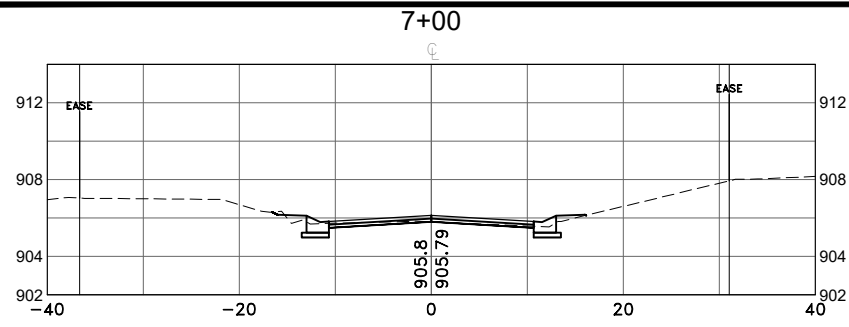


**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
WACO DRIVE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X35  
OF  
X38  
SHEETS



Apr 22, 2024 - 2:53pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg

DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



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

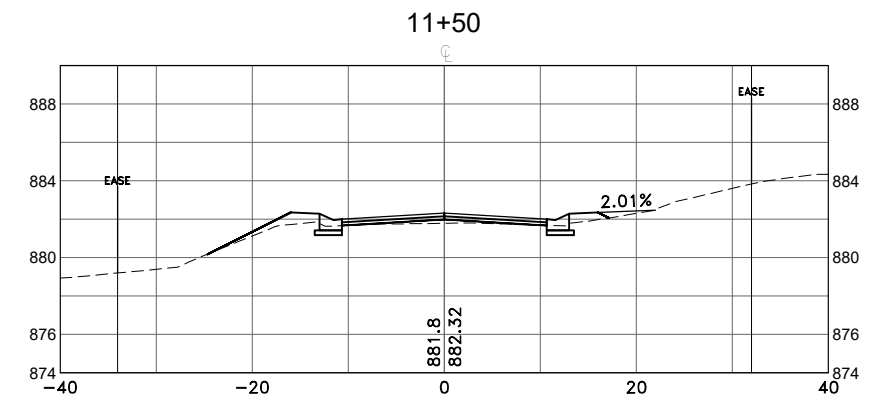
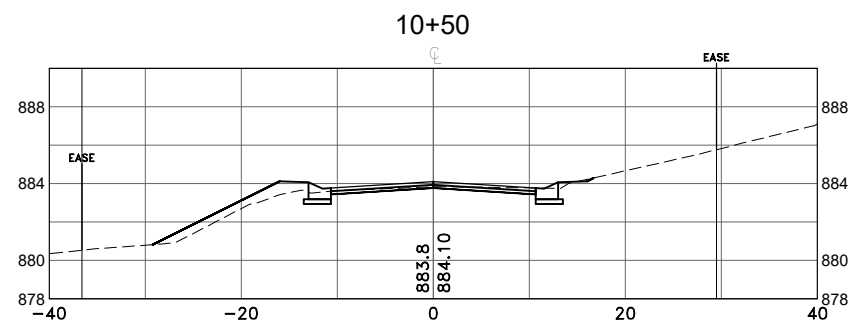
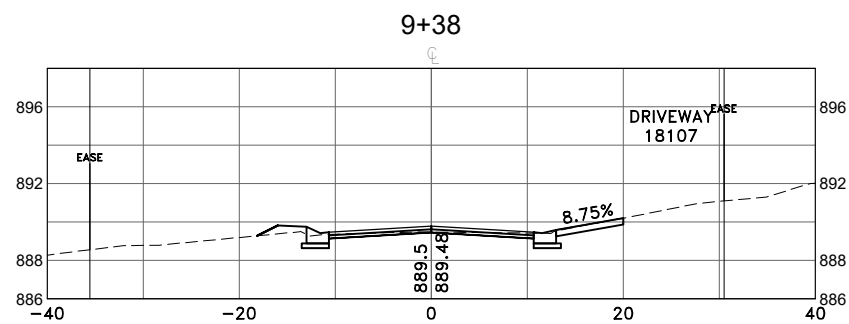
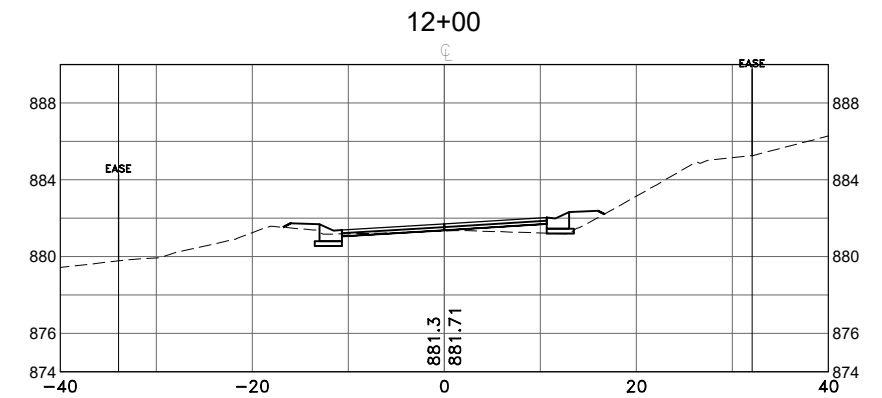
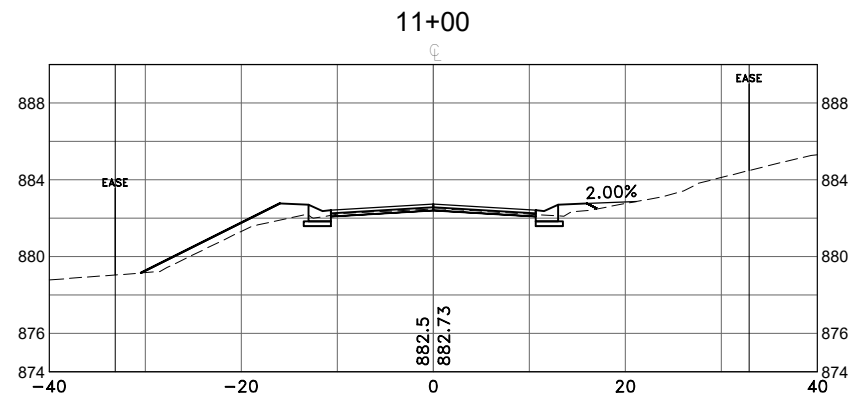
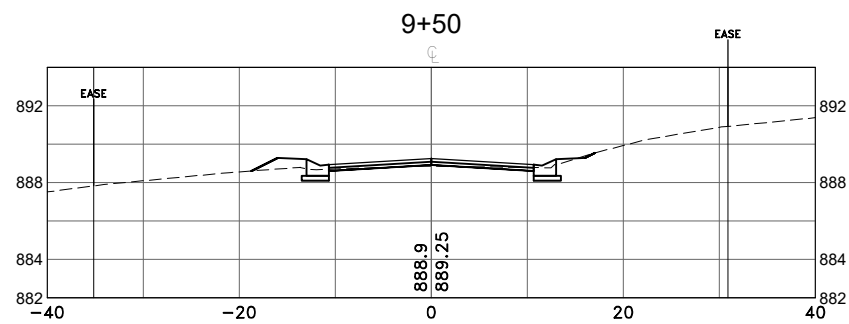
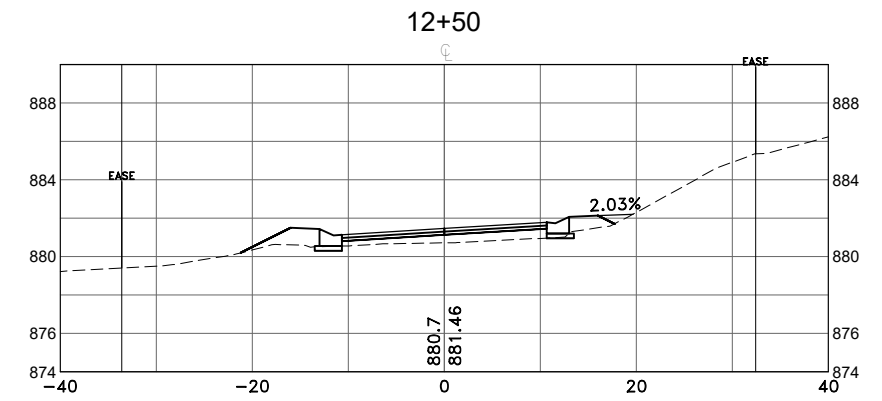
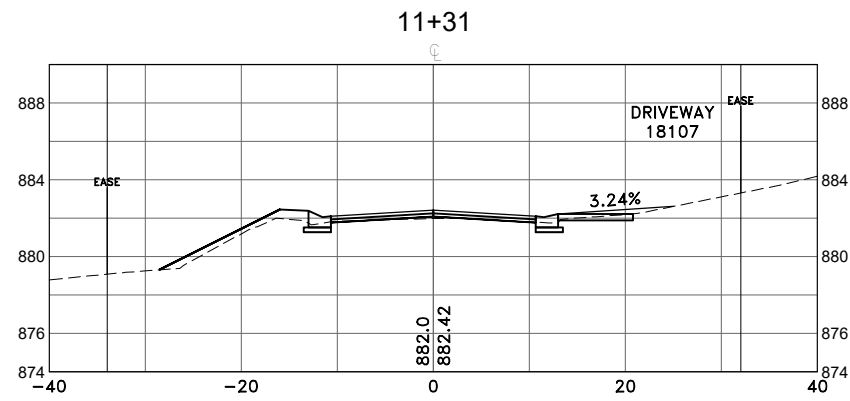
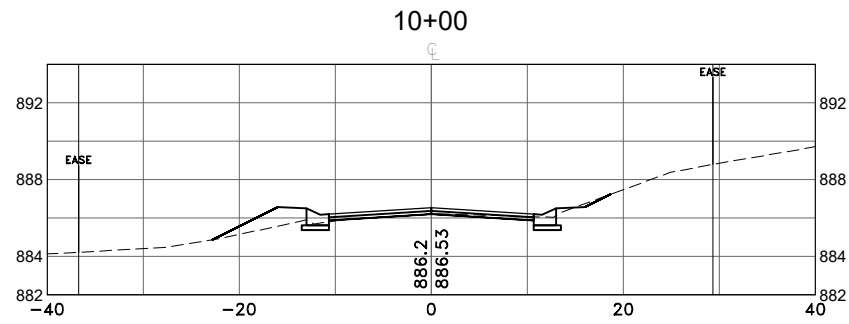
NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
WACO DRIVE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X36  
OF  
X38  
SHEETS

RA3189

Apr 22, 2024 - 2:53pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY:  
TAE  
DRAWN BY:  
TAE  
CHECKED BY:  
SMN



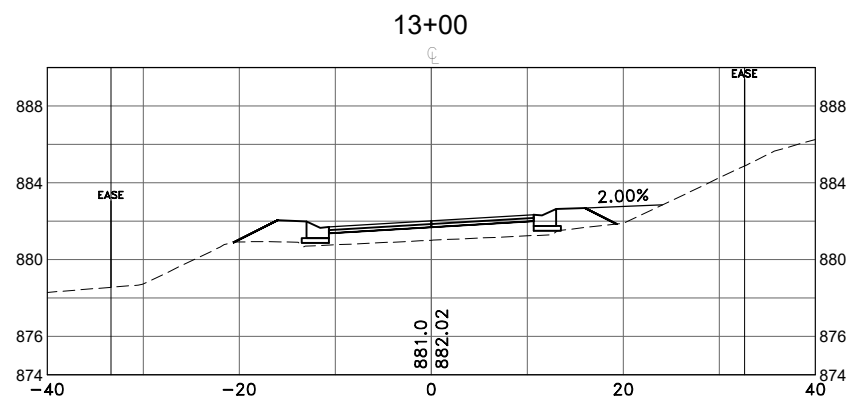
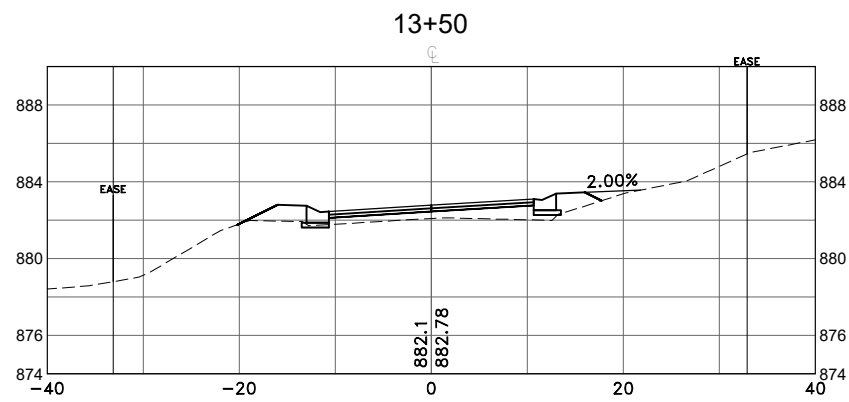
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
WACO DRIVE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X37  
OF  
X38  
SHEETS

Apr 22, 2024 - 2:53pm  
K:\MUNICIPAL\RA3189\ENGINEERING\BASE DWG\RA3189\_BA.dwg



DATE	REVISION

DESIGNED BY: TAE
DRAWN BY: TAE
CHECKED BY: SMN



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

NORTHEAST RAMSEY STREET  
RECONSTRUCTION PROJECT

CROSS SECTIONS  
WACO DRIVE  
CITIES OF RAMSEY AND NOWTHEN, MINNESOTA

SHEET  
X38  
OF  
X38  
SHEETS