CITY OF
ANDOVER, MINNESOTA
CONSTRUCTION PLANS
FOR

2026 STREET RECONSTRUCTION
LEEMAN LAKE ESTATES (26–02E)

2026 FULL DEPTH RECLAMATION
173RD AVE NW/NAVAJO ST NW/ 175TH AVE NW (26–11A)
BIRCHWOOD POND (26–11C)
OLD CONSTANCE BLVD (26–11D)

~~2026 MILL & OVERLAY~~
~~GROW OAK VIEW ESTATES (26–12)~~

This project does not abut any County Roads

LEGEND

= CORPORATE LIMITS
= CENTERLINE

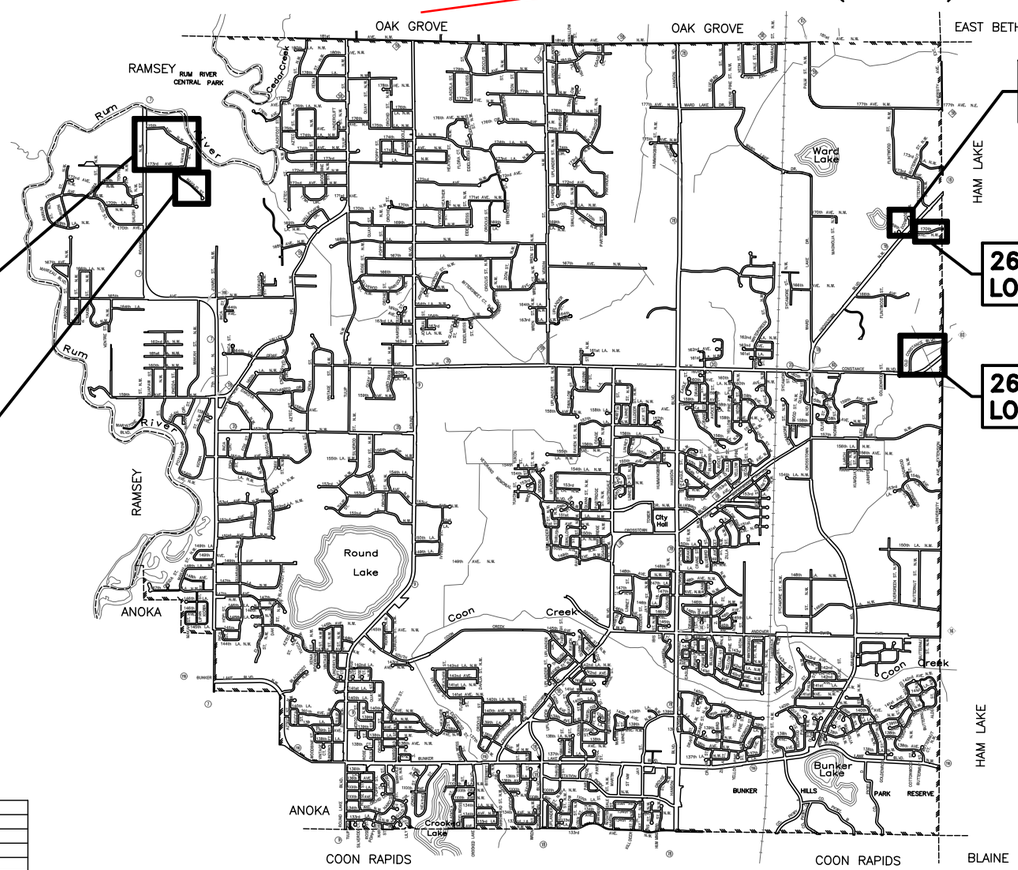
EXISTING

— UGT — = UNDERGROUND TELEPHONE LINE
— UGE — = UNDERGROUND ELECTRIC LINE
— UGE-3 — = UNDERGROUND ELECTRIC 3 PHASE
— P-OH — = OVERHEAD ELECTRIC LINE
— GAS — = GAS MAIN
— PETRO — = GASOLINE MAIN
— UGTV — = UNDERGROUND CABLE TV
— UGFO — = UNDERGROUND FIBER OPTIC LINE
= TELEPHONE/CABLE TV PEDESTAL
= CONTROL CABINET/TRANSFORMER
= SIGN
= R.O.W.
= PROPERTY LINE
= CONCRETE CURB & GUTTER
= CATCH BASIN
= STORM SEWER LINE
= DRAINAGE MANHOLE

PROPOSED

= CONCRETE CURB & GUTTER
= CATCH BASIN
= STORM SEWER LINE
= DRAINAGE MANHOLE

NOTE:
1. THE EXACT LOCATION OF UNDERGROUND UTILITIES SUCH AS GAS, TELEPHONE, FIBER OPTIC, ELECTRIC, CABLE TV, AND PIPE LINES ARE UNKNOWN. THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL (651–454–0002) BEFORE COMMENCING EXCAVATION.
2. THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38–22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES.



26–02E PROJECT LOCATION

26–11A PROJECT LOCATION

26–11C PROJECT LOCATION

26–11D PROJECT LOCATION

~~**26–12 PROJECT LOCATION**~~

NO.	DATE	BY	DESCRIPTION OF REVISIONS

CITY OF ANDOVER
ANDOVER, MINNESOTA

GOVERNING SPECIFICATIONS

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

CITY OF ANDOVER 2026 UTILITY AND STREET CONSTRUCTION SPECIFICATIONS SHALL APPLY.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST MMUTCD, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

INDEX

SHEET	DESCRIPTION
1	TITLE SHEET & LEGEND
2	PROJECT LAYOUT (ALL PROJECTS)
3–4	DETAILS (ALL PROJECTS)
26–02E 2026 STREET RECONSTRUCTION LEEMAN LAKE ESTATES	
5	PROJECT LAYOUT
6	SEQ
7	EARTHWORK SUMMARY
8	CONSTRUCTION NOTES
9	TYPICAL SECTIONS
10	REMOVALS
11–12	PLAN/PROFILES
13	INTERSECTION DETAILS
14	STORM SEWER
26–11A 2026 FULL DEPTH RECLAMATION 173RD AVE NW/NAVAJO ST NW/ 175TH AVE NW	
15	PROJECT LAYOUT
16	SEQ
17	EARTHWORK SUMMARY
18	CONSTRUCTION NOTES
19	TYPICAL SECTIONS
20–21	REMOVALS
22–23	STREET & RESTORATION
24	CULVERT PLAN/PROFILES
26–11C 2026 FULL DEPTH RECLAMATION BIRCHWOOD POND	
25	PROJECT LAYOUT
26	SEQ
27	EARTHWORK SUMMARY
28	CONSTRUCTION NOTES
29	TYPICAL SECTIONS
30	REMOVALS
31	STREET & CULVERT PLAN/PROFILE
26–11D 2026 FULL DEPTH RECLAMATION OLD CONSTANCE BLVD	
32	PROJECT LAYOUT
33	SEQ
34	EARTHWORK SUMMARY
35	CONSTRUCTION NOTES
36	TYPICAL SECTIONS
37	REMOVALS
38–40	PLAN/PROFILES
41	STRIPING
26–12 2026 MILL & OVERLAY GROW OAK VIEW ESTATES	
42	PROJECT LAYOUT
43	SEQ
44	CONSTRUCTION NOTES
45	TYPICAL SECTIONS
46	STREET & STORM SEWER

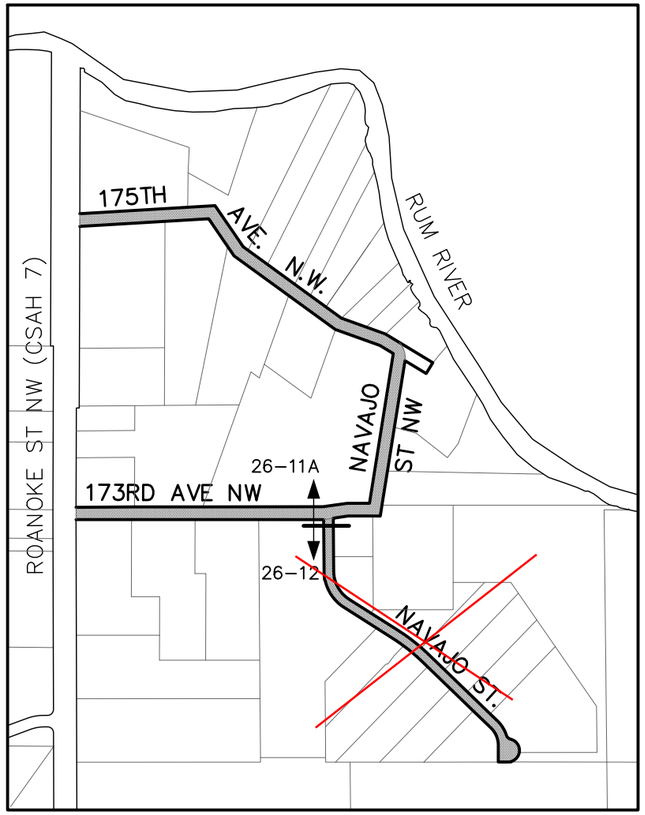
THIS PLAN CONTAINS 46 SHEETS

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

SIGNATURE — DAVID D. BERKOWITZ, PE TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

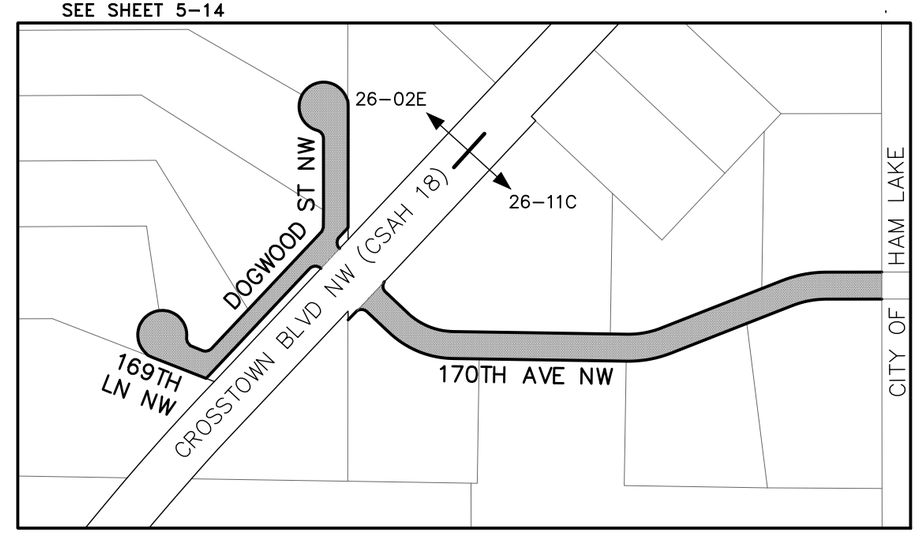
TITLE SHEET & LEGEND

2026 FULL DEPTH RECLAIM
173RD AVE NW/NAVAJO ST NW/175TH AVE NW
(C.P. 26–11A)
SEE SHEET 15–24



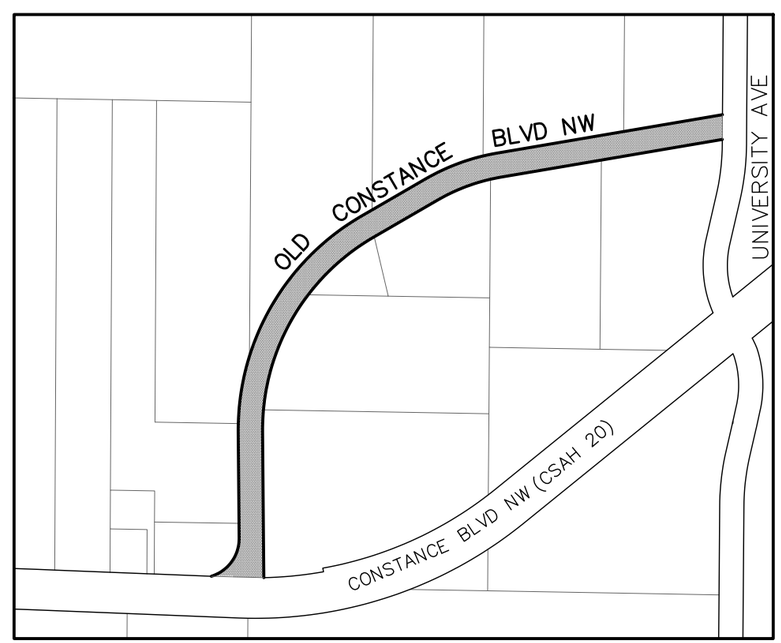
~~**2026 MILL & OVERLAY**~~
~~GROW OAK VIEW ESTATES~~
~~(C.P. 26–12)~~
~~SEE SHEET 42–46~~

2026 STREET RECONSTRUCTION
LEEMAN LAKE ESTATES
(C.P. 26–02E)
SEE SHEET 5–14



2026 FULL DEPTH RECLAMATION
BIRCHWOOD POND
(C.P. 26–11C)
SEE SHEET 25–31

NO SCALE



2026 FULL DEPTH RECLAMATION
OLD CONSTANCE BLVD NW
(C.P. 26–11D)
SEE SHEET 32–41

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

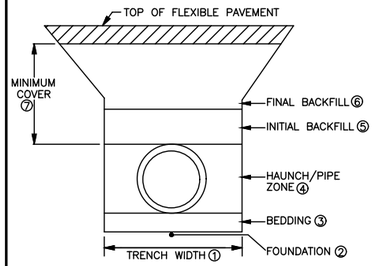
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
SIGNATURE David D. Berkowitz DAVID D. BERKOWITZ TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 STREET RECONSTRUCTION/FDR/MILL & OVERLAY
CITY PROJECTS
26–02E/26–11A/26–11C/26–11D/26–12

PROJECT LAYOUT
SHEET NO. 2 OF 46 SHEETS

HDPE STORM SEWER PIPE INSTALLATION

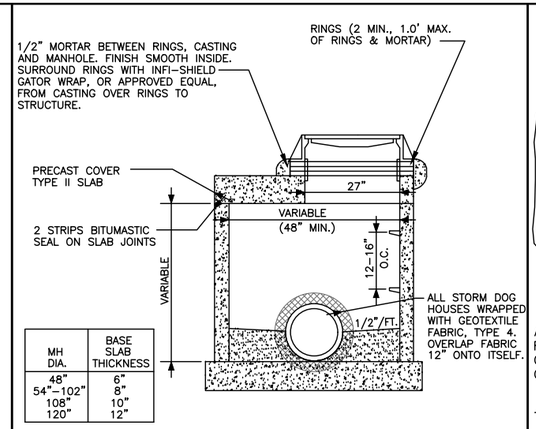


NOMINAL PIPE DIA.	TRENCH WIDTH
12"	30"
15"	35"
18"	40"
24"	47"
30"	57"
36"	65"
42"	72"
48"	80"
60"	87"

① **MINIMUM TRENCH WIDTH:** Minimum trench width shall be 1.25*OD+12" or a minimum of 16" plus the outside diameter, whatever is greater. See table.
② **FOUNDATION:** Areas of unstable trench bottom shall be excavated to a depth determined by the Engineer and replaced with suitable foundation material to meet the requirements of Note 8 below.
③ **BEDDING:** Bedding thickness shall be a minimum of 4" for pipe diameters through 24 inches. Bedding thickness shall be 6" for diameters larger than 24 inches. The material shall meet the requirements of Note 8 below.
④ **HAUNCHING:** This material is placed and compacted evenly on both sides of the pipe, from the top of the bedding elevation to the top of the pipe. The haunch/pipe zone material shall meet the requirements of Note 8 below.
⑤ **INITIAL BACKFILL:** Initial backfill is from the top of the haunch/pipe zone elevation to 6 inches above the top of the pipe. For traffic areas, initial backfill material shall meet the requirements of note 8 below unless roadway embankment requirements supercede.
⑥ **FINAL BACKFILL:** For traffic applications, final backfill material and compaction efforts shall be consistent with the Engineer's parameters for the sub grade of the pavement cross-section which is 95% of Standard Proctor Density from the encasement zone to 3 feet below the surface and 100% of Standard Proctor Density in the upper 3 feet.
⑦ **MINIMUM COVER:** Minimum cover shall be 18" for pipes 12"-42" in diamter and 24" for pipes 48"-60" in diameter for H-25 loadings measured from the bottom of the flexible pavement or top of rigid pavement. Temporary ramping with Class 5 may be needed during construction to maintain cover depths for construction vehicles.
⑧ **FOUNDATION, BEDDING, HAUNCHING, AND INITIAL BACKFILL:** Material meeting and installed per ASTM D2321 Class I, II, or III as approved by the Engineer.

2/25/10

CITY OF ANDOVER — STANDARD DRAWING NO. 106



MH DIA.	BASE SLAB THICKNESS
48"	6"
54"-102"	8"
108"	10"
120"	12"

NOTE: NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON MANHOLE FRAME & COVER AS PER SPECIFICATIONS (1642 B).

STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC, LOCATION AS SHOWN.

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478.

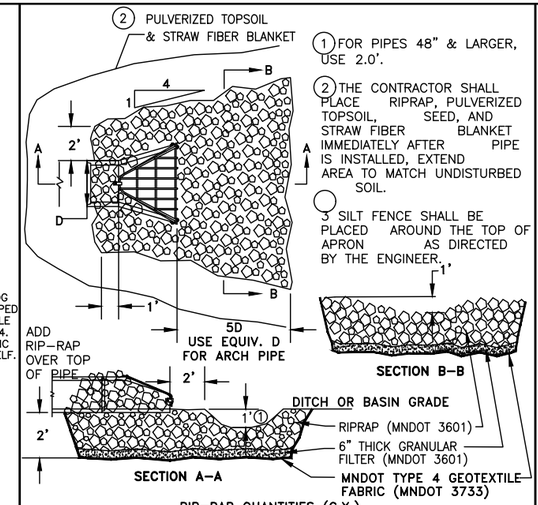
FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH. WRAP OUTSIDE OF DOGHOUSE WITH GEOTEXTILE FABRIC, TYPE 4, OVERLAP FABRIC 12" ONTO ITSELF.

ALL MORTAR SHALL CONFORM TO ASTM C270 AND MEET THE REQUIREMENTS OF MNDOT 2506.2B.

SHALLOW STORM SEWER MANHOLE

12/10/21

CITY OF ANDOVER — STANDARD DRAWING NO. 409E



① FOR PIPES 48" & LARGER, USE 2.0'.

② THE CONTRACTOR SHALL PLACE RIPRAP, PULVERIZED TOPSOIL, SEED, AND STRAW FIBER BLANKET IMMEDIATELY AFTER PIPE IS INSTALLED, EXTEND AREA TO MATCH UNDISTURBED SOIL.

③ SILT FENCE SHALL BE PLACED AROUND THE TOP OF APRON AS DIRECTED BY THE ENGINEER.

RIP-RAP QUANTITIES (C.Y.)

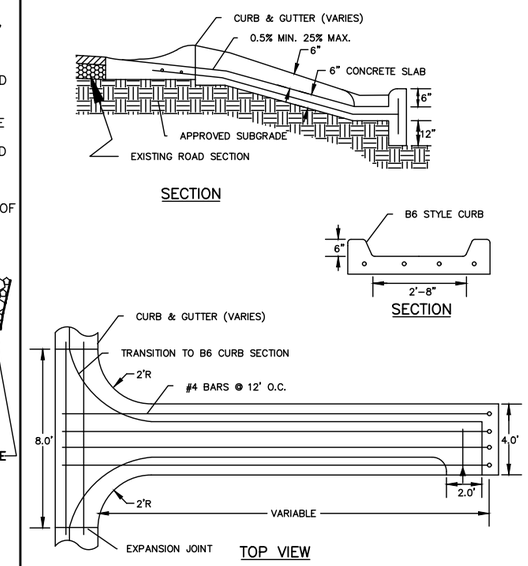
PIPE DIA.	RIP-RAP	PIPE DIA.	RIP-RAP	PIPE DIA.	RIP-RAP
12"	6	24"	14	42"	35
15"	8	27"	17	48"	43
18"	9	30"	21	54"	50
21"	12	36"	28	60"	58

NOTE: REQUIREMENTS FOR RIP-RAP SIZE, THICKNESS, AND GRANULAR FILTER WILL BE DESIGNATED IN THE PLANS. GRANULAR FILTER AND FABRIC ARE INCIDENTAL TO RIP-RAP.

11/17/2020

RIP-RAP AT RCP OUTLETS

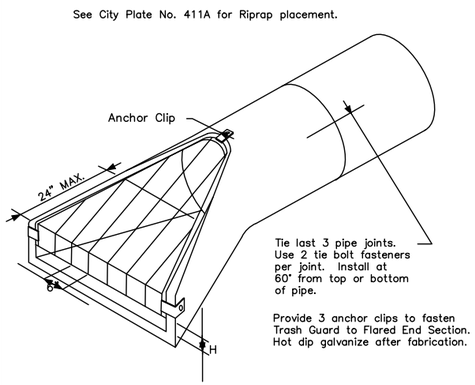
CITY OF ANDOVER — STANDARD DRAWING NO. 411B



CONCRETE SPILLWAY

1/25/13

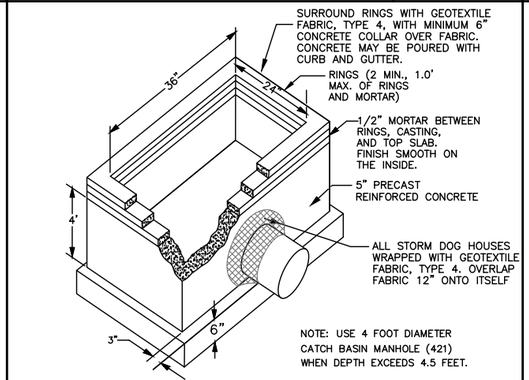
CITY OF ANDOVER — STANDARD DRAWING NO. 412A



FLARED END SECTION

3/4/10

CITY OF ANDOVER — STANDARD DRAWING NO. 419A



NOTES: NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

IN NEW DEVELOPMENTS CAST IRON FRAME AND GRATE CASTINGS TYPE R-3501-TB SHALL BE USED. CAST IRON FRAME AND GRATE CASTINGS TYPE R-3067-V (ON A GRADE) OR R-3067-VB (LOW POINTS) SHALL BE USED IN RECONSTRUCTION AREAS OR AS CALLED OUT IN PLANS.

PRECAST REINFORCED CONCRETE BASE SLAB PER ASTM C478.

FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH. WRAP OUTSIDE OF DOGHOUSE WITH GEOTEXTILE FABRIC, TYPE 4, OVERLAP FABRIC 12" ONTO ITSELF.

ALL MORTAR SHALL CONFORM TO ASTM C270 AND MEET THE REQUIREMENTS OF MNDOT 2506.2B.

DOGHOUSE SHALL BE GROUTED ON BOTH THE OUTSIDE AND INSIDE.

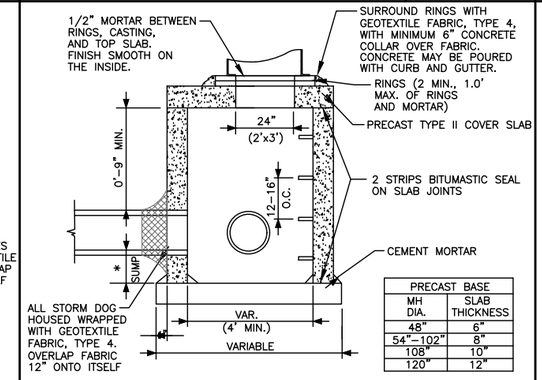
MAXIMUM DIAMETER RCP STORM SEWER PIPE IS 15" ON THE SHORT SIDE AND 18" ON THE LONG SIDE OF CATCH BASIN.

GROUT SUMP TO PIPE INVERT UNLESS A SUMP IS CALLED OUT IN PLANS.

CATCH BASIN, TYPE 420

2/22/16

CITY OF ANDOVER — STANDARD DRAWING NO. 420F



PRECAST BASE	
MH DIA.	SLAB THICKNESS
48"	6"
54"-102"	8"
108"	10"
120"	12"

NOTES: NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

IN NEW DEVELOPMENTS CAST IRON FRAME AND GRATE CASTINGS TYPE R-3501-TB SHALL BE USED. CAST IRON FRAME AND GRATE CASTINGS TYPE R-3067-V (ON A GRADE) OR R-3067-VB (LOW POINTS) SHALL BE USED IN RECONSTRUCTION AREAS OR AS CALLED OUT IN PLANS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM, OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE EASILY ACCESSIBLE.

PRECAST REINFORCED CONCRETE BASE SLAB & COVER SLAB PER ASTM C478.

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, FURNISHED WITH O-RING GASKETS & LUBRICANT.

FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH. WRAP OUTSIDE OF DOGHOUSE WITH GEOTEXTILE FABRIC, TYPE 4, OVERLAP FABRIC 12" ONTO ITSELF.

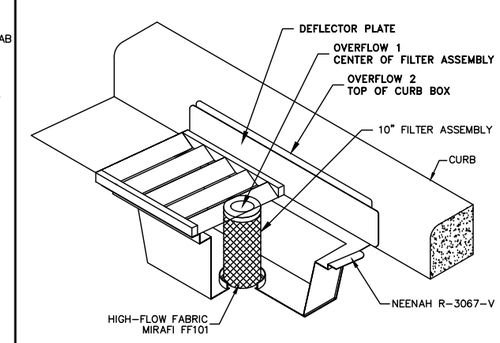
ALL MORTAR SHALL CONFORM TO ASTM C270 AND MEET THE REQUIREMENTS OF MNDOT 2506.2B.

* REFER TO PLANS FOR SUMP DEPTH, IF ANY.

CATCH BASIN/MANHOLE WITH SUMP, TYPE 421

1/10/20

CITY OF ANDOVER — STANDARD DRAWING NO. 421G



WIMCO INLET PROTECTION

N.T.S.

*** OR APPROVED EQUAL ***

1/20/26

CITY OF ANDOVER — STANDARD DRAWING NO. 422

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL — DRAWN JAK — CHECKED DDB

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

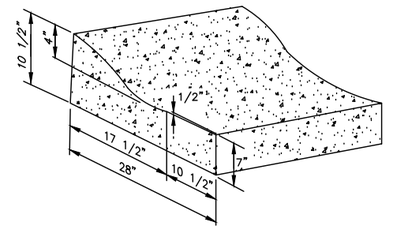
SIGNATURE — DAVID D. BERKOWITZ TYPED OR PRINTED NAME

DATE 3/3/2026 LIC. NO. 26757

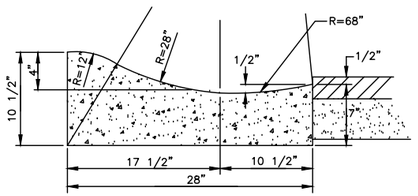
CITY OF ANDOVER

2026 STREET RECONSTRUCTION/FDR/MILL & OVERLAY
CITY PROJECTS
26-02E/26-11A/26-11C/26-11D/26-12

DETAILS



PERSPECTIVE

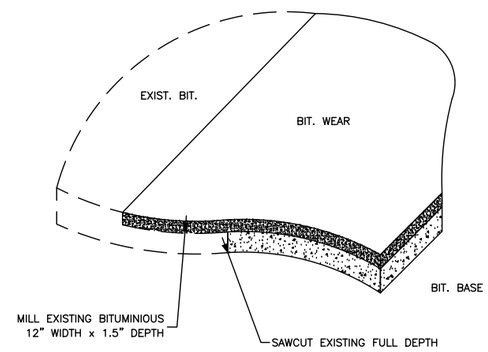


SECTION

SURMOUNTABLE CONCRETE CURB & GUTTER

12/26/00

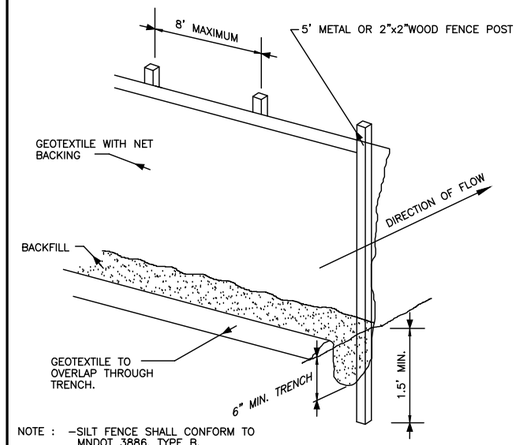
CITY OF ANDOVER — STANDARD DRAWING NO. 501



MATCH EXISTING BITUMINOUS

3/08/09

CITY OF ANDOVER — STANDARD DRAWING NO. 520



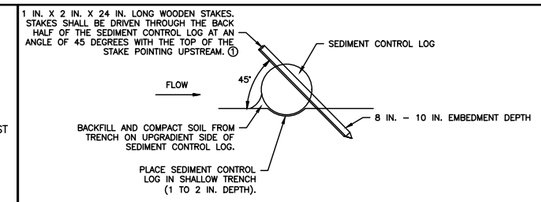
NOTE : –SILT FENCE SHALL CONFORM TO MNDOT 3886, TYPE B.

–FENCING SHALL BE PLACED ALONG CONTOURS OR AS DIRECTED BY ENGINEER.

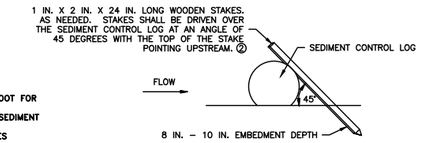
SILT FENCE

12/26/00

CITY OF ANDOVER — STANDARD DRAWING NO. 601



TYPES: STRAW, WOOD FIBER, OR COIR



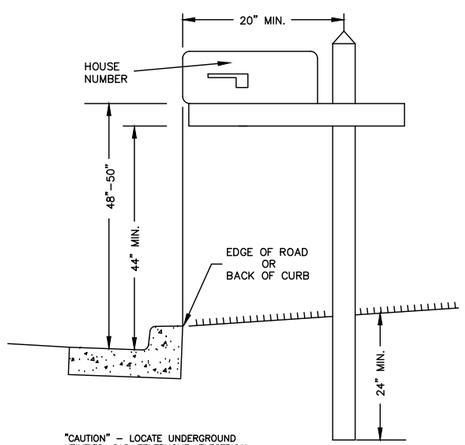
TYPES: WOOD CHIP, COMPOST, OR ROCK

① SPACE BETWEEN STAKES SHALL BE A MAXIMUM OF 1 FOOT FOR DITCH CHECKS OR 2 FEET FOR OTHER APPLICATIONS.
② PLACE STAKES AS NEEDED TO PREVENT MOVEMENT OF SEDIMENT CONTROL LOGS PLACED ON SLOPES OR AS NEEDED DUE TO OTHER FACTORS. STAKES SHALL BE INCIDENTAL.

SEDIMENT CONTROL LOGS

1/29/20

CITY OF ANDOVER — STANDARD DRAWING NO. 602



"CAUTION" – LOCATE UNDERGROUND UTILITIES; GAS, TELEPHONE, ELECTRICAL, CABLE TV

HAVE BOX EXTEND AS FAR IN FRONT OF SUPPORT POST AS POSSIBLE (THIS PREVENTS POSSIBLE SNOW PLOW DAMAGE).

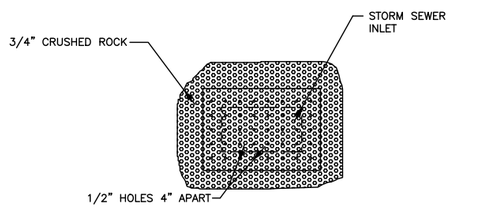
ADDRESS MUST BE ON SIDE OF BOX FROM WHICH CARRIER APPROACHES, IN LETTERS ABOUT ONE INCH HIGH OR ON FRONT WHERE BOXES ARE GROUPED.

BOX MUST BE LOCATED SO CARRIER CAN SERVE WITHOUT LEAVING VEHICLE.

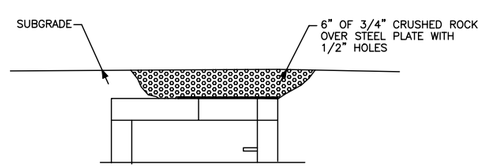
FACE OF MAIL BOX TO LINE UP WITH BACK OF CURB.

3/20/13

CITY OF ANDOVER — STANDARD DRAWING NO. 614A



PLAN



SECTION

ROCK FILTER FOR STORM SEWER INLET

NO SCALE

2/19/09

CITY OF ANDOVER — STANDARD DRAWING NO. 619

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL — DRAWN JAK — CHECKED DDB

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

SIGNATURE David D. Berkowitz — DAVID D. BERKOWITZ TYPED OR PRINTED NAME

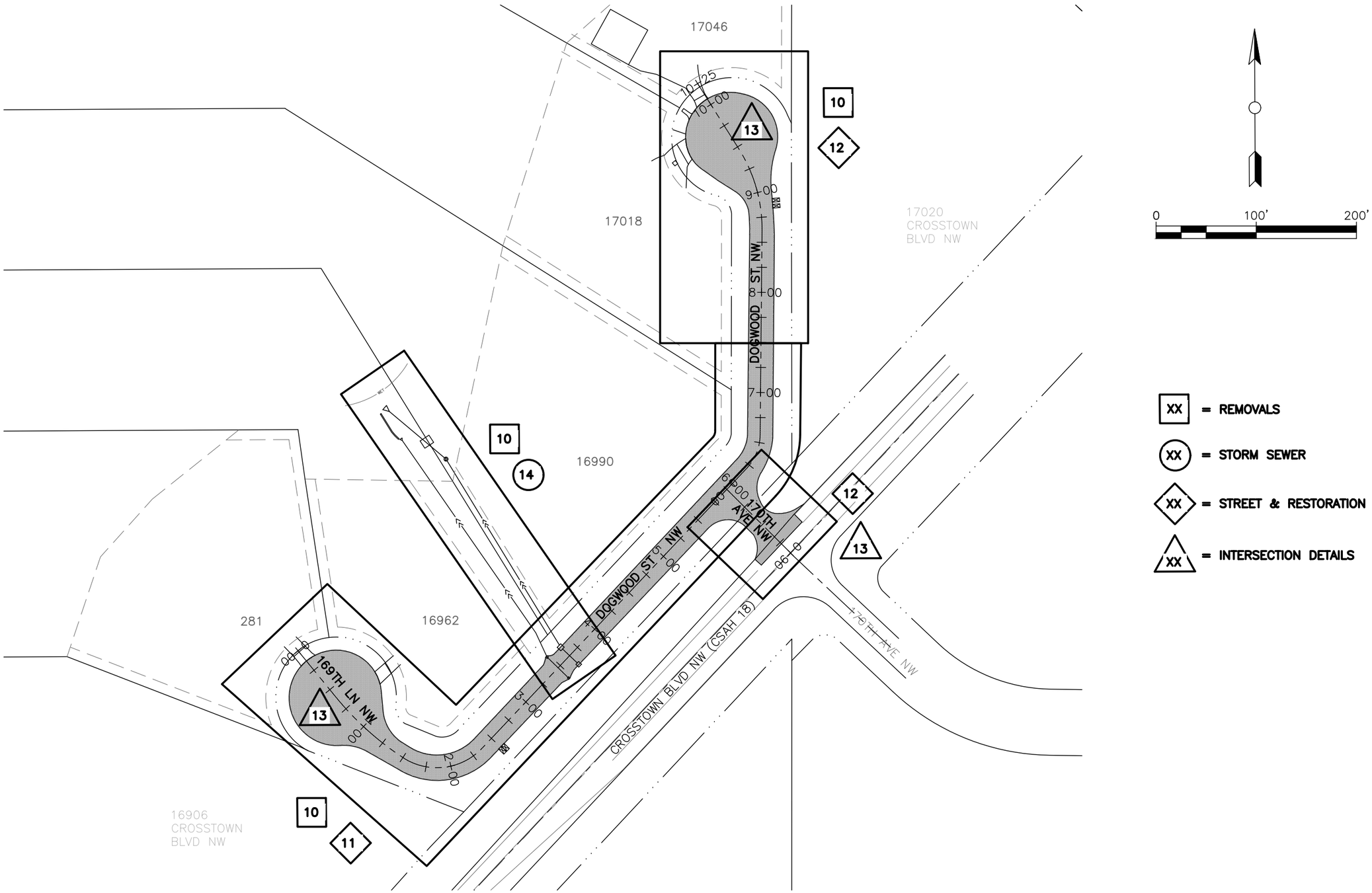
DATE 3/2/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 STREET RECONSTRUCTION/FDR/MILL & OVERLAY
CITY PROJECTS
26–02E/26–11A/26–11C/26–11D/26–12

DETAILS

SHEET NO. 4 OF 46 SHEETS



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

SIGNATURE David D. Berkowitz
DAVID D. BERKOWITZ
TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 STREET RECONSTRUCTION
LEEMAN LAKE ESTATES
CITY PROJECT 26-02E

PROJECT LAYOUT

SHEET NO. 5 OF 46 SHEETS

2026 Street Reconstruction - (Leeman Lake Estates)
City Project: 26-02E
STATEMENT OF ESTIMATED QUANTITIES

NOTES	ITEM NO.		DESCRIPTION	UNIT	TOTAL ESTIMATED PROJECT QUANTITIES EST. QUAN.	ACT. QUAN.
	1	2021.501	Mobilization	LS	1.00	
	2	2101.502	Clearing	EA	14	
	3	2101.502	Grubbing	EA	14	
1	4	2104.502	Salvage Casting (Storm)	EA	2	
	5	2104.502	Remove Drainage Structure	EA	2	
2	6	2104.503	Salvage Timber Landscape Wall	LF	35	
3	7	2104.503	Sawing Concrete Pavement (Full Depth)	LF	40	
3	8	2104.503	Sawing Bit Pavement (Full Depth)	LF	90	
	9	2104.503	Remove Pipe Culvert / Storm Sewer	LF	115	
3	10	2104.518	Remove Concrete Pavement	SF	340	
3	11	2104.518	Remove Bituminous Pavement	SF	480	
4	12	2104.602	Salvage and Reinstall Mailbox	EA	4	
5	13	2105.607	Common Excavation (EV)	CY	290	
6	14	2105.607	Subgrade Excavation (EV)	CY	10	
7	15	2105.607	Salvage Reclaim Material (LV)	CY	20	
8	16	2105.607	Select Granular Borrow (LV)	CY	20	
9	17	2112.519	Subgrade Preparation	RDST	10.2	
10	18	2130.523	Water	MGAL	5	
11	19	2211.509	Aggregate Base Class 5	TN	90	
12	20	2211.607	Place Salvaged Reclaim Material (CV)	CY	10	
	21	2215.504	Full Depth Reclamation	SY	4,080	
	22	2232.504	Mill Bituminous Surface (1.5")	SY	100	
	23	2357.506	Bituminous Material For Tack Coat	Gal	190	
	24	2360.509	Type SP 9.5 Wearing Course Mix (2,C)	TN	370	
13	25	2360.509	Type SP 9.5 Bit Mix for Patching (2,B)	TN	20	
	26	2360.509	Type SP 12.5 Wearing Course Mixture (2,C)	TN	360	
	27	2411.504	Concrete Drainage Flume	SY	7	
14	28	2451.607	Trench Stabilization Material (CV)	CY	5	
	29	2501.502	15" CS Pipe Apron & Grate	EA	1	
	30	2503.503	15" RC Pipe Sewer Des 3006 Class V	LF	25	
	31	2503.602	Bulkhead Storm Sewer	EA	2	
	32	2503.603	15" HDPE Pipe Sewer	LF	300	
	33	2503.603	Clean & Televise Storm Sewer and Culverts	LF	325	
15	34	2504.602	Irrigation System Modifications	EA	20	
	35	2506.502	Casting Assembly - Storm	EA	3	
	36	2506.602	Construct Drainage Structure, Type 409 - 48" Dia.	EA	1	
	37	2506.602	Construct Drainage Structure, Type 420 - 2'x3'	EA	1	
	38	2506.602	Construct Drainage Structure, Type 421 - 48" Dia. w/ 4' Sump	EA	1	
	39	2511.507	Random Riprap Class III	CY	5	
	40	2531.503	Concrete Curb and Gutter Surmountable	LF	2,130	
	41	2531.504	6" Concrete Driveway Pavement	SY	60	
	42	2563.601	Traffic Control	LS	1.00	
	43	2573.502	Storm Drain Inlet Protection	EA	4	
	44	2573.503	Sediment Control Log Type Wood Chip	LF	300	
	45	2573.607	Rock Ditch Check - 1.5" Nom. Diameter	CY	3	
	46	2574.507	Loam Topsoil Borrow (LV)	CY	270	
16	47	2574.508	Fertilizer Type 3	LB	210	
	48	2575.504	Sodding Type Lawn	SY	420	
17	49	2575.504	Rolled Erosion Prevention Category 20	SY	150	
18	50	2575.505	Weed Spraying	ACRE	0.60	
	51	2575.505	Seeding	ACRE	0.60	
	52	2575.508	Hydraulic Mulch Matrix	LB	1,500	
	53	2575.508	Seed Residential Turfgrass	LB	120	

BASIS OF ESTIMATED QUANTITIES		
Bituminous Wear Course	120	#/SY/inch
Bituminous Non-Wear Course	120	#/SY/inch
Aggregate Base, Class 5	110	#/SY/inch
Tack Coat	0.05	Gal/SY
Hydraulic Mulch Matrix	2500	#/acre
Fertilizer Type 3 (Analysis 22-5-10)	350	#/acre
Seed Mixture: Residential Turfgrass	200	#/acre

THE FOLLOWING STANDARD PLATES APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION SHALL APPLY ON THIS PROJECT	
STANDARD PLATES	
PLATE NO.	DESCRIPTION
3123J	METAL APRON FOR C.S. CULVERT
3124B	METAL APRON CONNECTION
8000K	TEMPORARY CHANNELIZERS - TYPE A

C.P. 26-02E Notes:

1 Contractor shall salvage castings and stockpile on-site. Andover Public Works will pick up castings which become property of City of Andover.
2 Salvage timber retaining wall approximately 2 courses tall. Stockpile near removal location for property owner.
3 Regardless of depth.
4 Includes salvage and reinstall of existing mailbox and temporary placement of mailbox in same or each existing location during construction.
5 For all excavation except subgrade excavation. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
6 For excavation beneath reclaimed aggregate base where profile low and/or unsuitable material encountered. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
7 For excavating, hauling/stockpiling reclaim material salvaged for subgrade excavation and/or excess material. Excess property of contractor. See Earthwork Tabulation.
8 Only to be used if sufficient material not generated on-site for subgrade excavation correction and/or if necessary.
9 Includes grading reclaim material from areas of excess to areas requiring material under curb, along shoulder, increased crown, fine grading and compacting reclaimed aggregate base.
10 For dust control only as directed by the engineer. Water to achieve compaction shall be incidental.
11 Item includes furnishing, hauling, placing and compacting. See Earthwork Tabulation.
12 Includes clearing, hauling, placing, grading, compacting salvaged reclaim material in areas of subgrade excavation or correction.
13 Item shall be used for patching of bituminous trails and driveway replacements.
14 Rock shall be 1.5" nominal diameter. Use under utility pipe and structures if water table is high.
15 Based upon number of irrigation heads removed/replaced. Item shall include all items necessary to temporarily cap existing systems, replace damaged heads, reset, adjust systems and return them to pre-project condition or better. Work shall be performed by a licensed irrigation contractor.
16 Analysis 22-5-10.
17 Straw or wood fiber blankets are acceptable alternative. Netting material shall be jute netting.
18 Only to be used if requested by engineer prior to or during site restoration.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME

DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 STREET RECONSTRUCTION
LEEMAN LAKE ESTATES
CITY PROJECT 26-02E

STATEMENT OF ESTIMATED QUANTITIES

EARTH WORK TABLE

City Project 26-02E: Leeman Lake Estates

Aggregate Base Class 7 (Reclaim)			Roadway Length =	1,012 LF
Existing 2" - 2.5" +/- of bituminous and 4" +/- aggregate base based on road cores			Curb Length =	2,130 LF
Reclaim 6"+/- deep (pull some sand into reclaim)				
Salvage Reclaim Material				
Volume of salvaged reclaim material =	0 CY (CV)	6" salvage in areas of subgrade / profile lowering	0 LF x 26' wide	
Volume of salvaged reclaim material =	2 CY (CV)	6" salvage in areas of subgrade correction, if any	5 LF x 26' wide	
Total Salvaged Reclaim =	2 CY (CV)	Available material to be re-used on-site		
Salvaged Reclaim Required				
Volume required in subgrade exc. areas =	0 CY (CV)	5" minimum		
Volume required in subgrade correction Areas =	2 CY (CV)	5" minimum		
Total Salvaged Reclaim / Class 5 Required	2 CY (CV)			
Aggregate Base Class 5 Required				
Volume required for 169th Lane CDS =	38 CY (CV)	Only use if sufficient reclaim not available on site. If sufficient reclaim available, grading part of subgrade prep.		
Volume required for driveway replacements =	5 CY (CV)			
Total Class 5 Required	43 CY (CV)			
Subgrade Excavation				
Volume of subgrade exc. material for profile lowering =	0 CY (EV)			
Volume of subgrade exc. material - correction areas =	10 CY (EV)	Assume 2' depth in correction excavation, if any areas found		
Total Salvaged Reclaim =	10 CY (EV)			
Common Excavation				
Volume of common exc. - driveway removals	3 CY (EV)	Miscellaneous excavation for driveway apron replacements		
Volume of common exc. - behind curb =	280 CY (EV)	Assume 3.5' x curb length x 1'. Dispose unsuitable off-site, use clean material for curb backfill		
Volume of common exc. material - flume daylights =	5 CY (EV)	Excavate end of flume / ditch to drain		
Total Common Excvatation =	288 CY (EV)			
Topsoil Borrow	190 CY (CV)	Curb length x 3' x 0.75' deep. Utilize salvaged common ex. if suitable first. 4" min. in all disturbed areas.		

EARTHWORK SUMMARY**

Salvage Reclaim Material	10 CY (CV)	
Volume of salvaged reclaim	20 CY (LV)	
Place Salvaged Reclaim Material	10 CY (CV)	For replacement of salvaged reclaim in areas of profile lowering or subgrade correction
Volume of salvaged reclaim material to replace =		
Reclaimed Aggregate Base Balance		
Volume of salvaged reclaim material available =	10 CY (CV)	
Volume of required reclaim material =	10 CY (CV)	
Balance of reclaim material =	0 CY (CV)	
	0 CY (LV)	Haul out and dispose of excess. Excess property of contractor
Common Excavation	290 CY (EV)	Haul out and dispose of unsuitable and excess material off-site. Use clean material for curb backfill.
Subgrade Excavation	10 CY (EV)	Haul out and dispose of unsuitable and excess material off-site.
Aggregate Base Class 5	90 Tons	
Topsoil Borrow	190 CY (CV)	
	270 CY (LV)	
Select Granular Borrow	20 CY (LV)	For backfill of subgrade correction if necessary. Only used if sufficient material not available on-site.
Excess Excavation Material to Dispose of Off-Site	230 CY (EV)	Excess reclaim, and assumed 75% of common exc material and subgrade exc material
	300 CY (LV)	

** quantities for pay items are rounded to nearest 10

Swell Factors
EV to LV = 1.3
LV to CV = 1.4
LV to CV = 1.5 (For reclaimed material)
1 CY Class 5 = 2 tons (147 #/CF)

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME

DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 STREET RECONSTRUCTION
LEEMAN LAKE ESTATES
CITY PROJECT 26-02E

EARTHWORK SUMMARY

SHEET NO. 7 OF 46 SHEETS

GENERAL NOTES:

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.
CITY OF ANDOVER 2026 UTILITY AND STREET CONSTRUCTION SPECIFICATIONS SHALL APPLY.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE 38–22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO AND BE INSTALLED IN ACCORDANCE WITH THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD)" AND THE "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL", NEWEST ADDITIONS.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE EXCAVATING CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR IS REQUIRED TO CALL GOPHER ONE CALL AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION. (651–454–2000)

CONSTRUCTION NOTES:

ROAD WORK AHEAD SIGNS SHALL BE MAINTAINED AT ALL INTERSECTING ROADS TO THE PROJECT. TYPE B CHANNELIZERS SHALL BE USED IN ALL NECESSARY LOCATIONS.

CONSTRUCTION SHALL BE STAGED SUCH THAT TRAFFIC IS MAINTAINED AT ALL TIMES. CONTRACTOR SHALL USE FLAG PERSON, IF NEEDED (INCIDENTAL TO TRAFFIC CONTROL).

COMPACTION OF ALL BITUMINOUS MIXTURE SHALL BE BY THE "SPECIFIED DENSITY METHOD" EXCEPT FOR PATCHES AND TRAILS, WHICH SHALL BE BY THE "ORDINARY COMPACTION METHOD".

THE CONTRACTOR SHALL USE FLAG PERSON'S AND APPROPRIATE TRAFFIC CONTROL DEVICES TO DIRECT TRAFFIC AT INTERSECTING COUNTY ROADS. ALL TRAFFIC CONTROL MUST BE ACCEPTABLE TO THE ANOKA COUNTY HIGHWAY DEPARTMENT. CONTRACTOR SHALL APPLY FOR A PERMIT FOR WORKING WITHIN ANOKA COUNTY RIGHT OF WAY. PROVIDE A COPY OF COUNTY PERMIT TO CITY ENGINEER.

ABSENT A ROAD CLOSURE, RECONSTRUCTION SHALL BE PERFORMED IN A MANNER TO ALLOW LOCAL TRAFFIC TO BE MAINTAINED TO A MINIMUM OF HALF THE ROADWAY WIDTH. THE CONTRACTOR SHALL USE FLAG PERSON'S TO DIRECT TRAFFIC AS NEEDED.

CONTRACTOR SHALL PROVIDE 3 DAY NOTICE PRIOR TO POTENTIAL ROAD CLOSURE FOR UNDERGROUND UTILITY CONSTRUCTION. TYPE 3 BARRICADES WITH "ROAD CLOSED" SHALL BE INSTALLED ON BOTH SIDES OF UTILITY CONSTRUCTION ACTIVITY. STAGE CONSTRUCTION TO ALLOW FOR LOCAL RESIDENT ACCESS AS NEEDED.

DURING ALL ASPECTS OF CONSTRUCTION DRIVEWAYS SHALL BE RAMPED WITH GRAVEL IN A TIMELY MANNER TO PROVIDE RESIDENTS ACCESS. UPON THREE DAYS OF CURE, CONC. CURBING AT DRIVEWAYS SHALL BE BACKFILLED & RAMPED WITH GRAVEL TO PROVIDE ACCESS.

DURING THE CONSTRUCTION OF CONC. CURB & DRIVEWAYS, THE CONTRACTOR SHALL COORDINATE WITH ENGINEER TO NOTIFY RESIDENTS OF PENDING CONSTRUCTION ACTIVITY. A THREE DAY NOTICE IS REQUIRED PRIOR TO POURING CONC. CURB & DRIVEWAYS. IMMEDIATELY UPON COMPLETION THE ROADWAY SHALL BE GRADED TO ALLOW RESIDENTS TO PARK ON STREET ADJACENT TO THEIR PROPERTY.

CONCRETE CURBING SHALL BE KNOCKED DOWN AT ALL DRIVEWAY ENTRANCES (INCIDENTAL). CONSTRUCT B618 C&G ON ALL RADII, CATCH BASIN LOCATIONS & ADDITIONAL LOCATIONS AS NOTED ON PLAN. (PAID AS SURMOUNTABLE C&G).

EXISTING MAILBOXES SHALL BE SALVAGED AND REINSTALLED WHERE CALLED OUT IN PLANS. DURING CONSTRUCTION TEMPORARY MAILBOXES SHALL BE PLACED NEAR THE ORIGINAL MAILBOX LOCATION. THE TEMPORARY MAILBOXES SHALL BE MOUNTED ON BARRELS TO BE PORTABLE. PROPERTY OWNER MAY SUPPLY NEW POST AND/OR BOX TO BE PLACED IN THE ORIGINAL LOCATION.

RESIDENTS WILL BE ASKED TO MARK IRRIGATION PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING SYSTEMS. WHERE BOULEVARD IRRIGATION MODIFICATIONS ARE REQUIRED THE IRRIGATION LINES/HEADS SHALL BE REMOVED & DISPOSED. REMAINING LINES SHALL BE PLUGGED & MARKED. ALL REPLACED IRRIGATION LINES/HEADS SHALL BE WITH NEW COMMERCIAL GRADE MATERIALS. CONTRACTOR WILL BE PAID A UNIT PER HEAD REPLACED. EXISTING LOCATIONS SHOWN ON PLANS ARE ONLY SCHEMATIC. ALL WORK SHALL BE BY AN IRRIGATION CONTRACTOR LICENSED TO WORK IN THE CITY OF ANDOVER.

THE CONTRACTOR SHALL PROTECT, SALVAGE AND REPAIR ALL EXISTING LANDSCAPING IN KIND. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

THE FOLLOWING CONSTRUCTION ITEM'S SHALL OCCUR PRIOR TO COMMENCING THE RECLAIMING OPERATION. INSTALL TRAFFIC CONTROL, REMOVE STREET SIGN'S (CITY), INSTALL TEMP. EROSION CONTROL MEASURES, IDENTIFY & CAP IRRIGATION SYSTEMS IN AREAS OF CURB REPLACEMENT, SALVAGE LANDSCAPING, REMOVE EX. & INSTALL TEMP. MAILBOX'S WHERE IDENTIFIED IN PLANS.

EXISTING DRIVEWAYS SHALL BE SAWCUT AS DIRECTED BY ENGINEER, REMOVED AND DISPOSED OF OFF SITE . BITUMINOUS AND CONCRETE DRIVEWAYS SHALL BE REPLACED IN KIND. GRAVEL DRIVEWAYS SHALL BE REPLACED WITH A 10–15' BITUMINOUS APRON. ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITY SHALL BE SAWCUT AND REPAIRED IN KIND AT THE CONTRACTORS EXPENSE.

WHERE SUBGRADE EXCAVATION AND/OR UTILITY WORK OCCURS WITHIN THE ROADWAY THE RECLAIMED BASE SHALL BE SALVAGED & REPLACED PER THE TYPICAL SECTION (INCIDENTAL). THIS WORKSHALL BE DONE IN A MANNER SO RECLAIMED BASE IS NOT CONTAMINATED WITH SPOIL MATERIAL. COMPACTION OF THE RECLAIMED BASE MATERIAL SHALL BE ACHIEVED BY THE PENETRATION INDEX METHOD IN ACCORDANCE WITH MNDOT 2211.3C3. THE BOTTOM OF THE SUBCUTS SHALL BE SHAPED AND COMPACTED BY THE "QUALITY COMPACTION METHOD"

THE CONTRACTOR SHALL STRIP AND STOCKPILE EXISTING TOPSOIL MATERIAL, IF ANY, FOR RE–USE (LITTLE IS EXPECTED). RE–USED TOPSOIL SHALL BE CLEAN WITH NO SOD CHUNKS / EXISTING VEGETATION. TOPSOIL STRIPING, IF ANY, SHALL BE CONSIDERED INCIDENTAL.

SELECT EXCAVATED MATERIALS SHALL BE UTILIZED TO THE FULLEST EXTENT WITHIN THE PROJECT LIMITS TO BACKFILL PROPOSED CURB & GUTTERS. ANY EXCESS MATERIAL, OR MATERIAL WITH DEBRIS / SOD CHUCKS SHALL BE DISPOSED OF OFF–SITE.

EXCAVATION AND DISPOSAL OF SOIL/TURF MATERIAL SHALL BE INCIDENTAL TO REMOVAL PAY ITEMS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL MINIMIZE EXCAVATION AND DISTURBANCE ALONG THE PROJECT CORRIDOR.

ALL DISTURBED AREAS SHALL BE BACKFILLED WITH SALVAGED TOPSOIL, IF ANY. DISTURBED AREAS SHALL BE RESTORED WITH 4" (MINIMUM) TOPSOIL & SOD OR SEED/FERTILIZER/HYDROMULCH (UNMAINTAINED AREAS). ALL RESTORATION SHALL OCCUR WITHIN 7 DAYS OF GRADING COMPLETION. SOIL STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF ROUGH GRADING OR INACTIVITY (INCIDENTAL). RESTORATION WORK SHALL BE COMPLETED PRIOR TO PAVING WEARING COURSE UNLESS OTHERWISE APPROVED BY ENGINEER IN THE FIELD.

ALL EXISTING SIGNS SHALL BE REMOVED AND REPLACED BY THE ANDOVER SIGN DEPARTMENT UNLESS CALLED OUT OTHERWISE IN THE PLANS. COORDINATE WITH MINIMUM 48 HOUR NOTICE WITH ENGINEER IN FIELD.

CONCRETE WASHOUT SHALL BE CONTAINED WITHIN CONCRETE TRUCKS, NOT DISPOSED OF ON–SITE.

CONTRACTOR SHALL SWEEP ALL MATERIAL OFF ADJACENT STREETS DUE TO CONSTRUCTION ACTIVITY, DAILY AS NECESSARY (INCIDENTAL).

INSTALL INLET PROTECTION DEVICES ON ALL STORM SEWER STRUCTURES. PRIOR TO PLACING CASTINGS ON STORM SEWER STRUCTURES THE CONTRACTOR SHALL FOLLOW STANDARD DETAIL IN THE PLANS TO ALLOW FOR INFLOW INTO THE STORM SEWERS. ONCE CASTINGS ARE INSTALLED ON STORM SEWER STRUCTURES THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL STRUCTURES SUCH THAT SEDIMENT IS CAPTURED WITH A HIGH FLOW BYPASS. CLEAN AS NECESSARY.

CONTRACTOR IS REQUIRED TO REPAIR AND MAINTAIN ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES ACCORDING TO THE MPCA BEST MANAGEMENT PRACTICES MANUAL, SWPPP, AND THE MINNESOTA STORM WATER MANUAL (INCIDENTAL).

CONTRACTOR SHALL REMOVE ALL TEMPORARY SEDIMENT CONTROL PRACTICES ONCE VEGETATION IS RE–ESTABLISHED (INCIDENTAL).

REFER TO SWPPP IN PROJECT SPECIFICATION FOR ADDITIONAL CONSTRUCTION/EROSION CONTROL REQUIREMENTS.

WHEN CONNECTING NEW PAVED SURFACING TO ANY IN–PLACE PAVEMENTS, CUT VERTICALLY TO THE BOTTOM OF THE IN–PLACE PAVEMENTS OR TO THE BOTTOM OF THE NEW SURFACING, WHICHEVER IS DEEPER, THEN AT 2(V):1(H) SLOPE TO THE TOP OF THE SUBGRADE.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

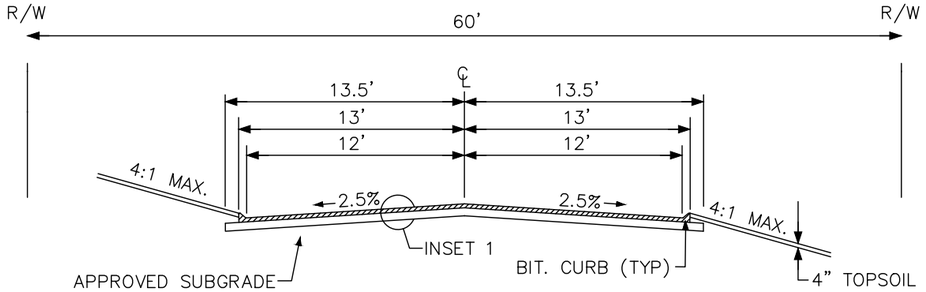
SIGNATURE — DAVID D. BERKOWITZ TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

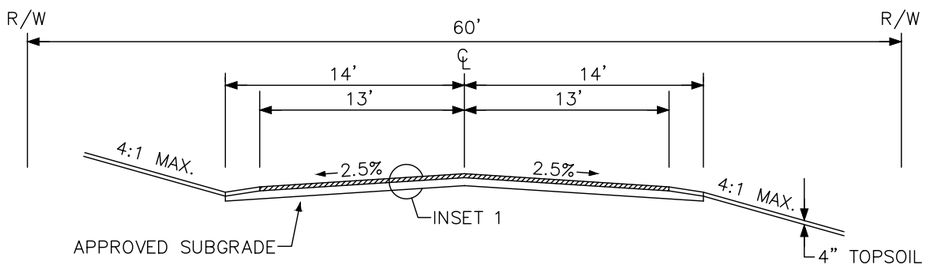
2026 STREET RECONSTRUCTION
LEEMAN LAKE ESTATES
CITY PROJECT 26–02E

CONSTRUCTION NOTES

EXISTING

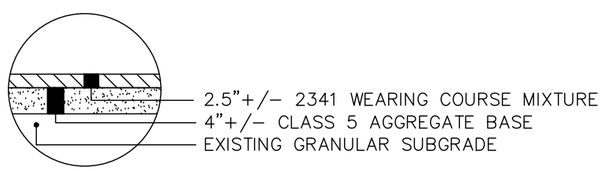


TYPICAL SECTION WITH CURB



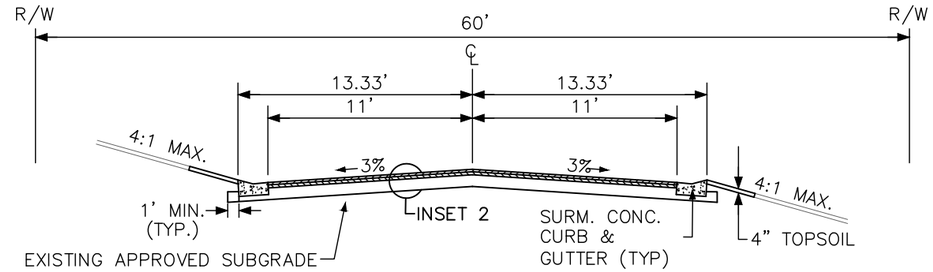
TYPICAL SECTION WITHOUT CURB

170TH AVE NW

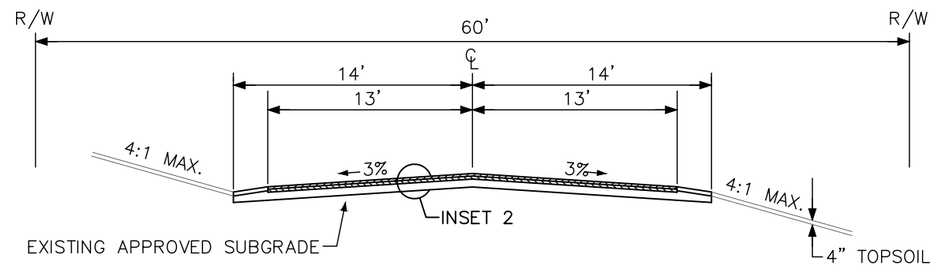


INSET 1

PROPOSED

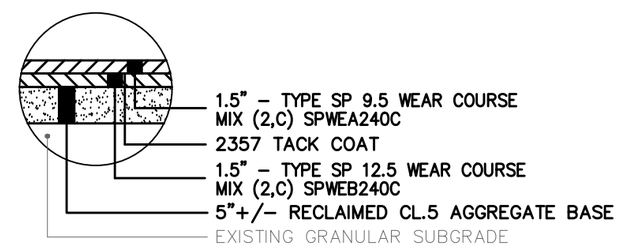


TYPICAL SECTION WITH CURB

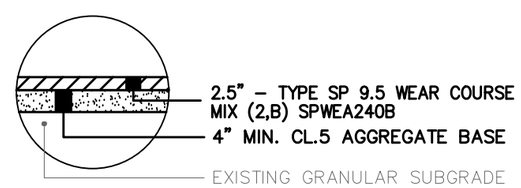


TYPICAL SECTION WITHOUT CURB

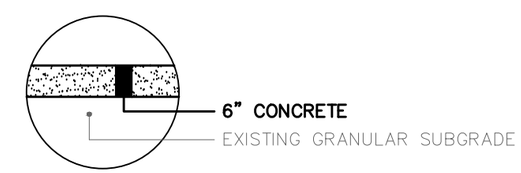
170TH AVE NW



INSET 2



BITUMINOUS DRIVEWAYS



CONCRETE DRIVEWAYS

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

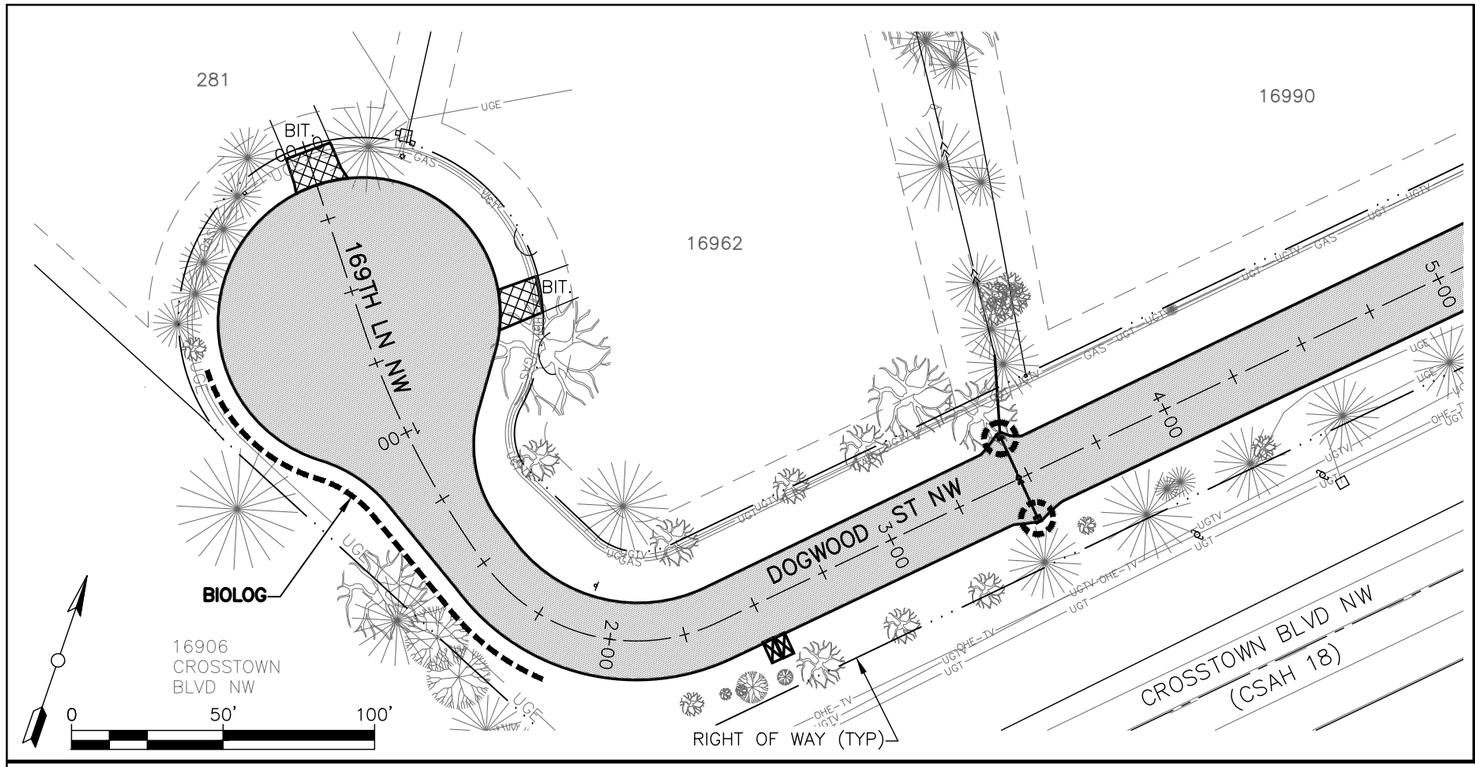
SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME

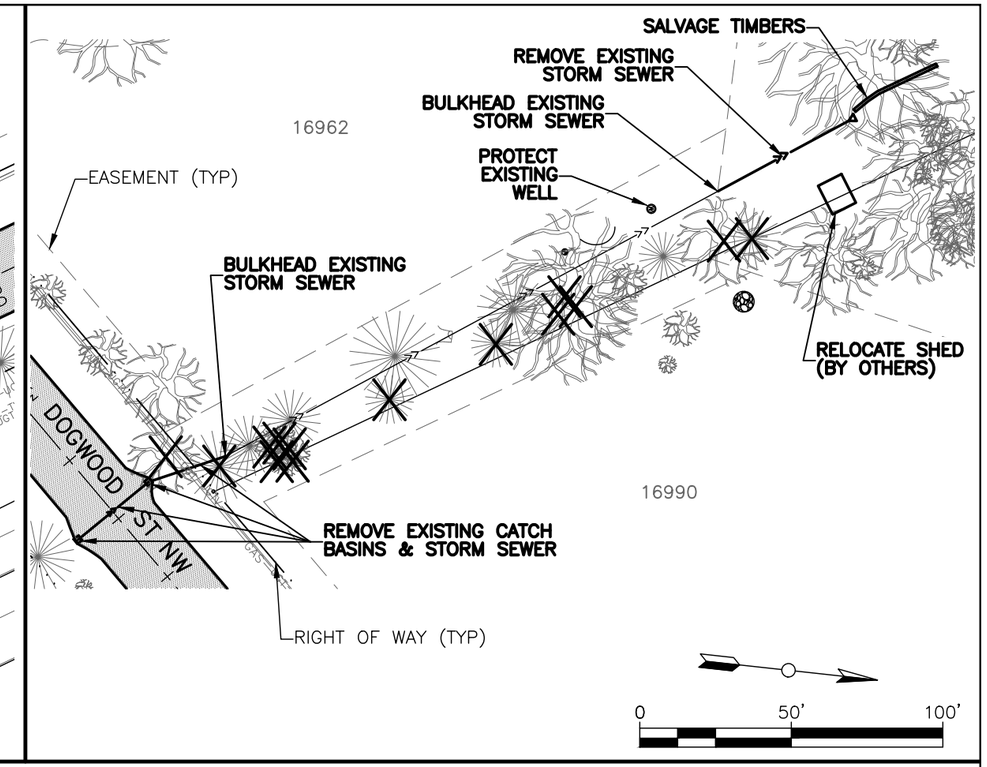
DATE 3/3/2026 LIC. NO. 26757

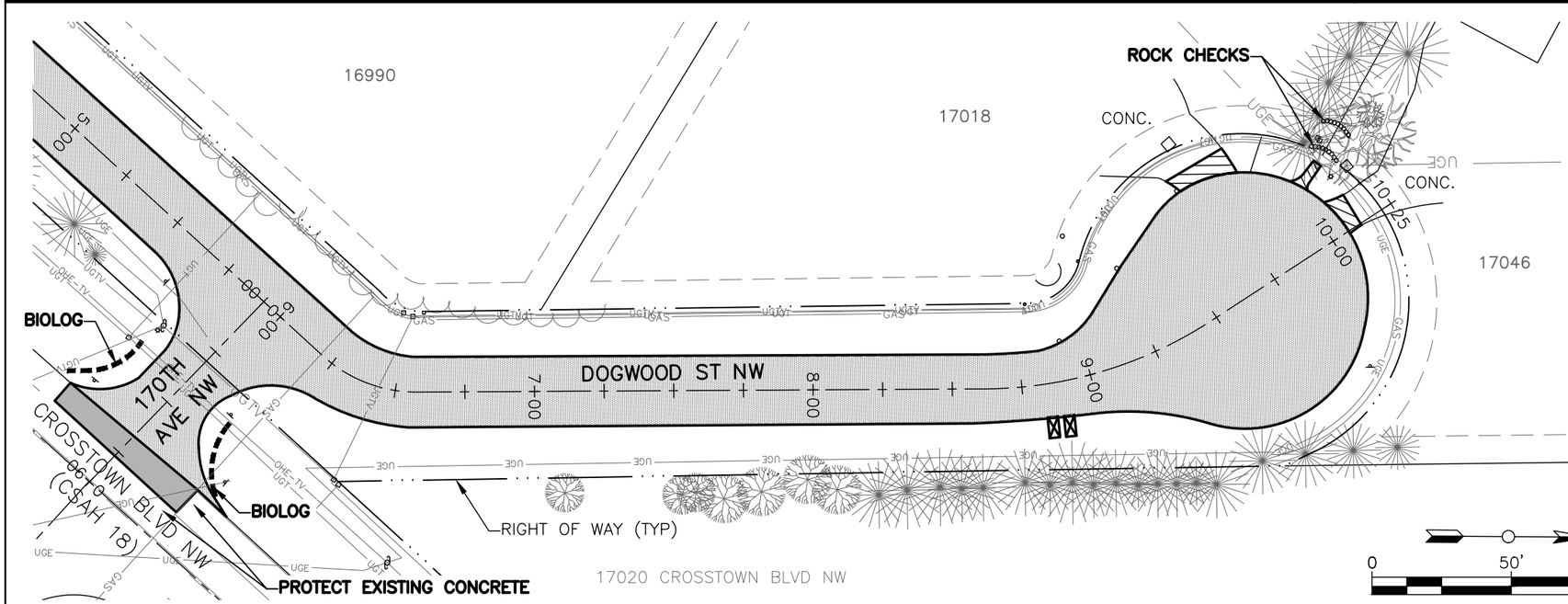
CITY OF ANDOVER

2026 STREET RECONSTRUCTION
LEEMAN LAKE ESTATES
CITY PROJECT 26-02E

TYPICAL SECTIONS







MILL BITUMINOUS (1.5")

RECLAIM BITUMINOUS

SAWCUT & REMOVE BITUMINOUS DRIVEWAY

SAWCUT & REMOVE CONCRETE/DRIVEWAY

SALVAGE/REINSTALL MAILBOX (4)

BIOLOG

INLET PROTECTION

ROCK CHECK

CLEAR & GRUB TREE (14)

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME

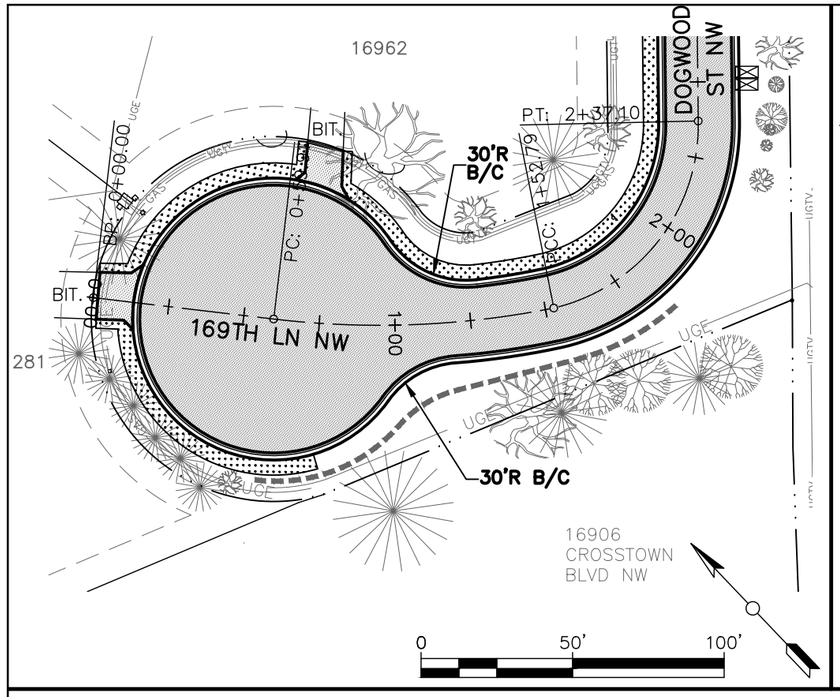
DATE 3/3/2026 LIC. NO. 26757

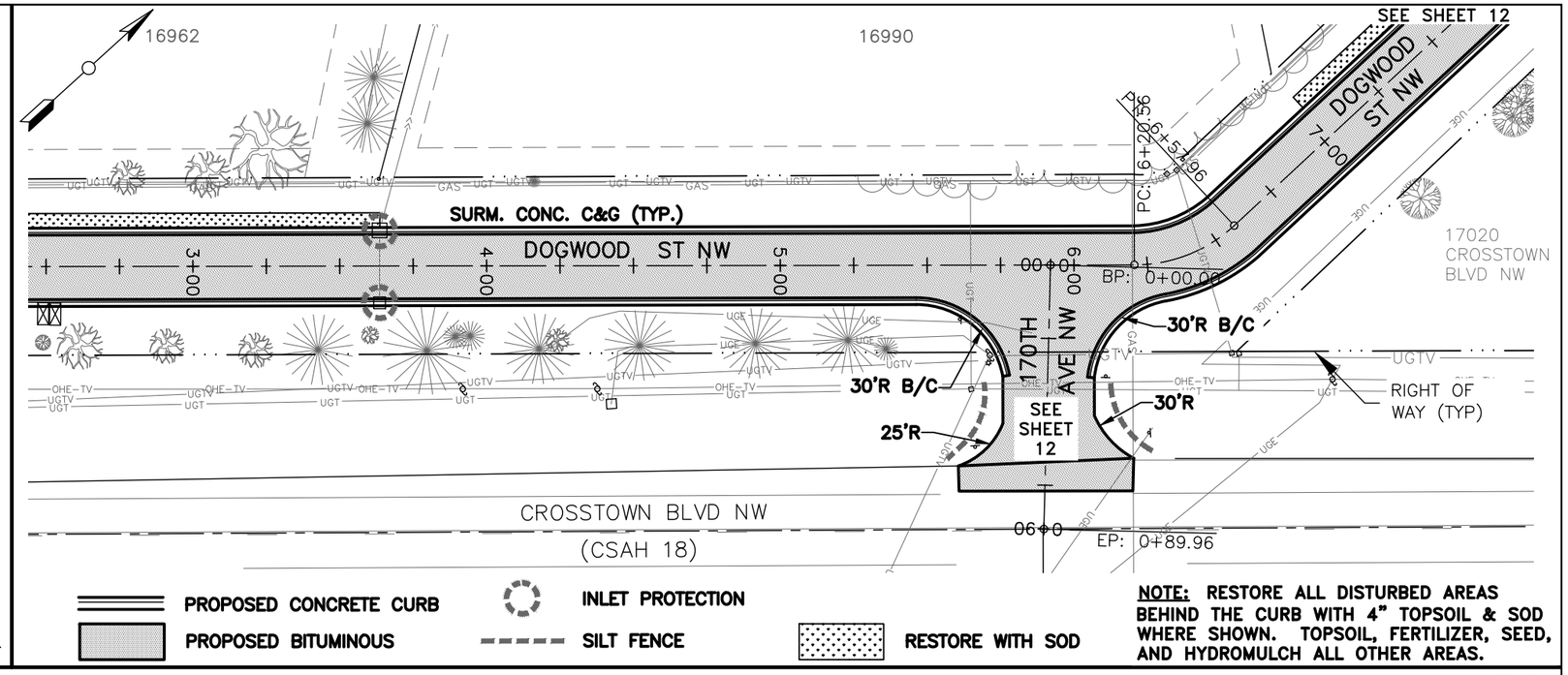
CITY OF ANDOVER

2026 STREET RECONSTRUCTION
LEEMAN LAKE ESTATES
CITY PROJECT 26-02E

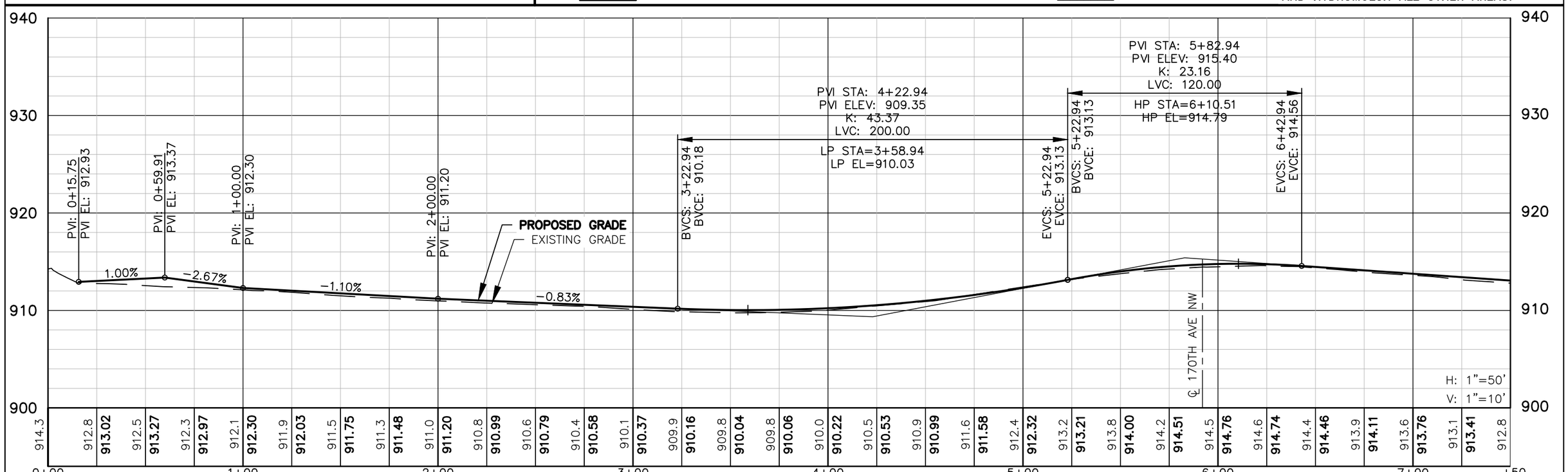
REMOVALS

SHEET NO. 10 OF 46 SHEETS





NOTE: RESTORE ALL DISTURBED AREAS BEHIND THE CURB WITH 4" TOPSOIL & SOD WHERE SHOWN. TOPSOIL, FERTILIZER, SEED, AND HYDROMULCH ALL OTHER AREAS.



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

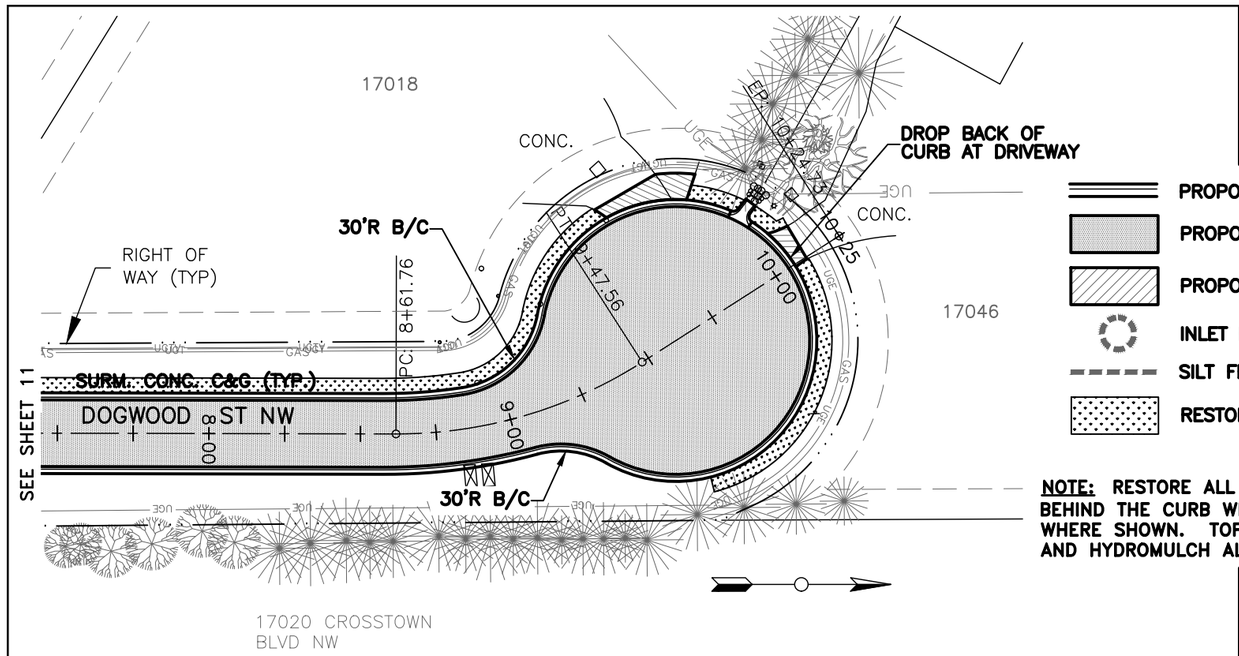
SIGNATURE David D. Berkowitz
DAVID D. BERKOWITZ TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 STREET RECONSTRUCTION
LEEMAN LAKE ESTATES
CITY PROJECT 26-02E

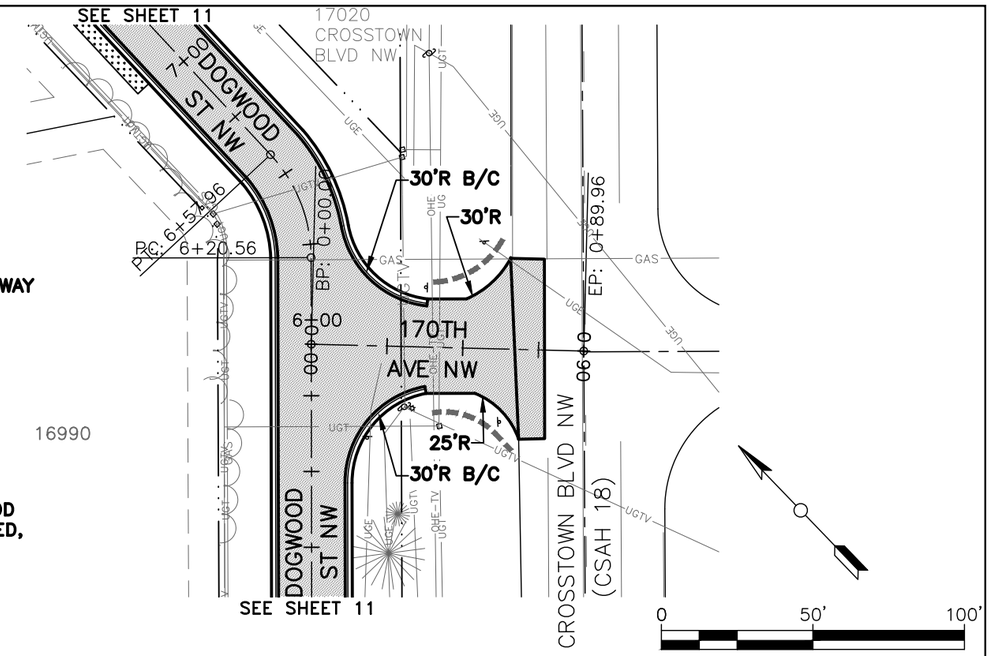
PLAN/PROFILES
169TH LN NW & DOGWOOD ST NW:
0+00 TO 7+50

SHEET NO. 11 OF 46 SHEETS

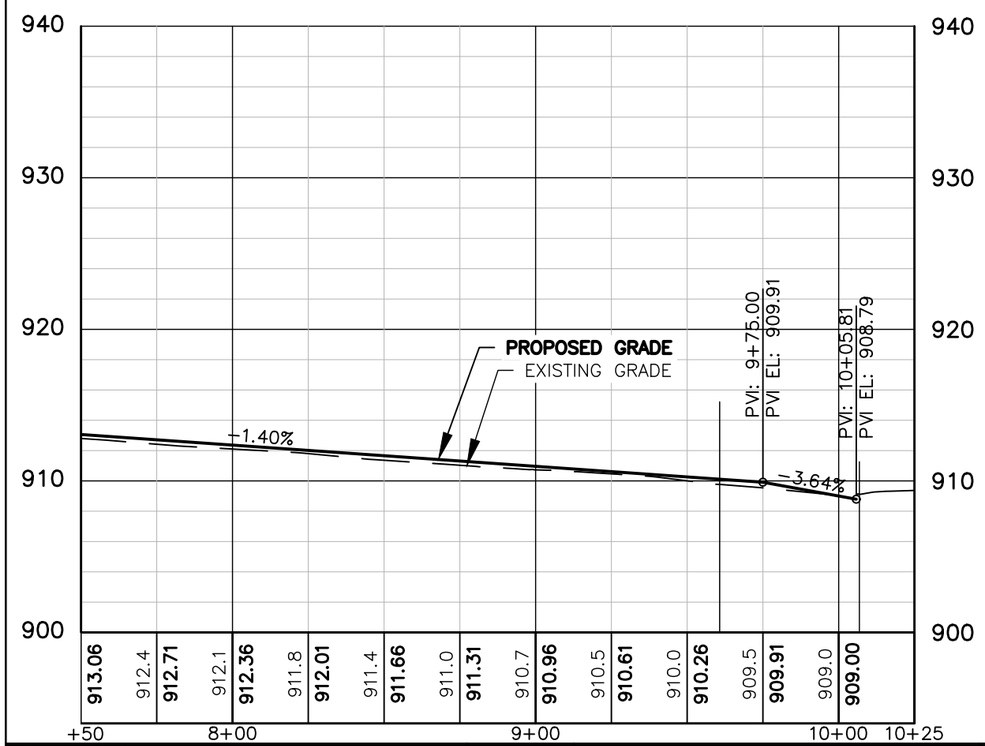


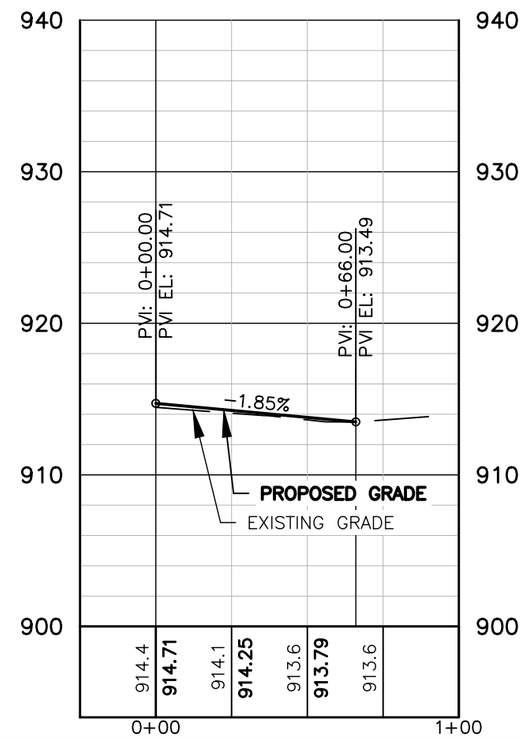
PROPOSED CONCRETE CURB
PROPOSED BITUMINOUS
PROPOSED CONCRETE DRIVEWAY
INLET PROTECTION
SILT FENCE
RESTORE WITH SOD

NOTE: RESTORE ALL DISTURBED AREAS BEHIND THE CURB WITH 4" TOPSOIL & SOD WHERE SHOWN. TOPSOIL, FERTILIZER, SEED, AND HYDROMULCH ALL OTHER AREAS.



H: 1"=50'
V: 1"=10'





NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

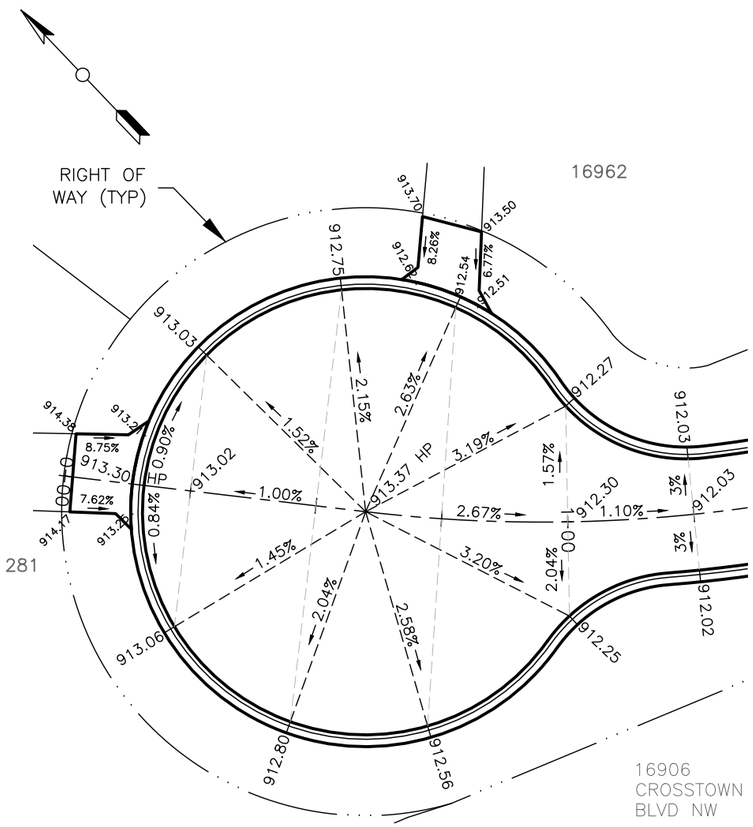
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

SIGNATURE David D. Berkowitz
DAVID D. BERKOWITZ
TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

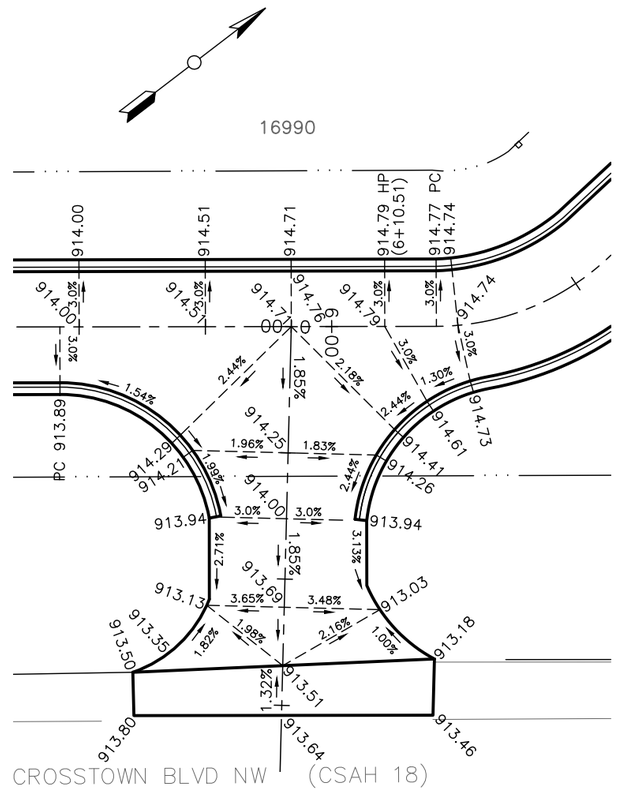
CITY OF ANDOVER

2026 STREET RECONSTRUCTION
LEEMAN LAKE ESTATES
CITY PROJECT 26-02E

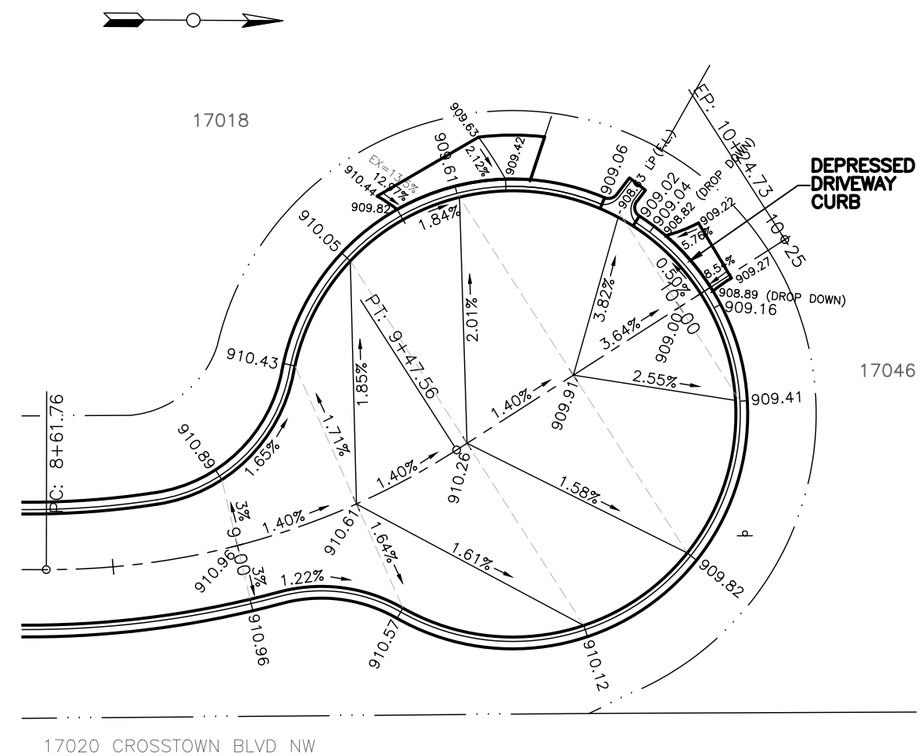
PLAN/PROFILES
DOGWOOD ST NW: 7+50 TO 10+25
& 170TH AVE NW



169TH LN NW CUL DE SAC



170TH LN NW/DOGWOOD ST NW



DOGWOOD ST NW CUL DE SAC

NOTE:
CURB ELEVATIONS ARE TO TOP BACK OF CURB UNLESS NOTED.
STREET ELEVATIONS ARE TO FINISHED GRADE.

0 30' 60'

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME

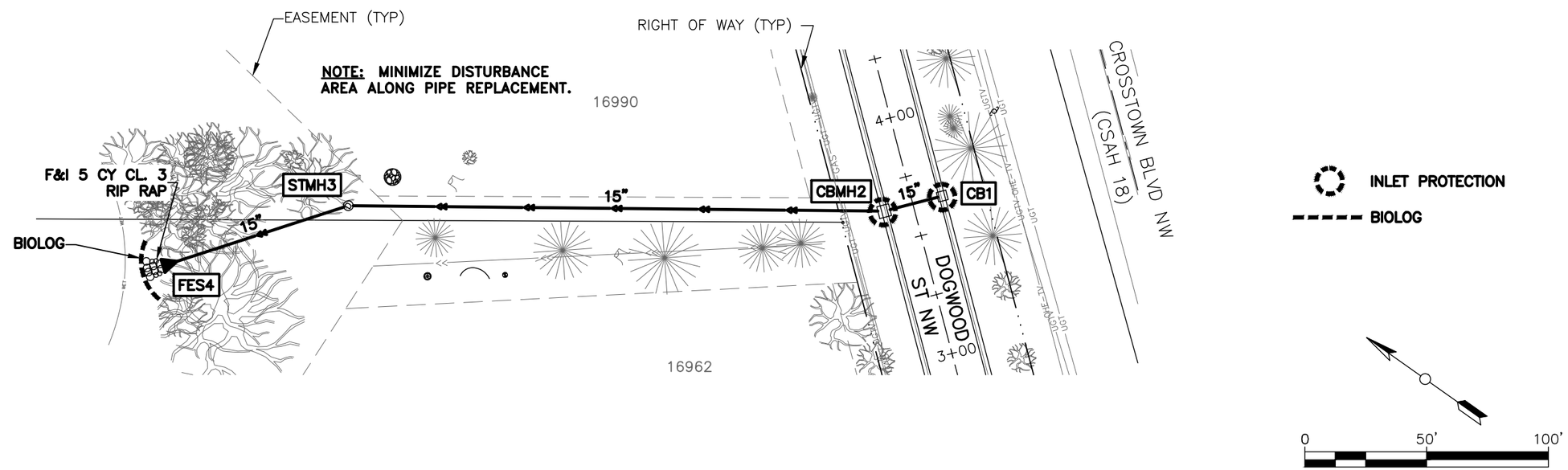
DATE 3/3/2026 LIC. NO. 26757

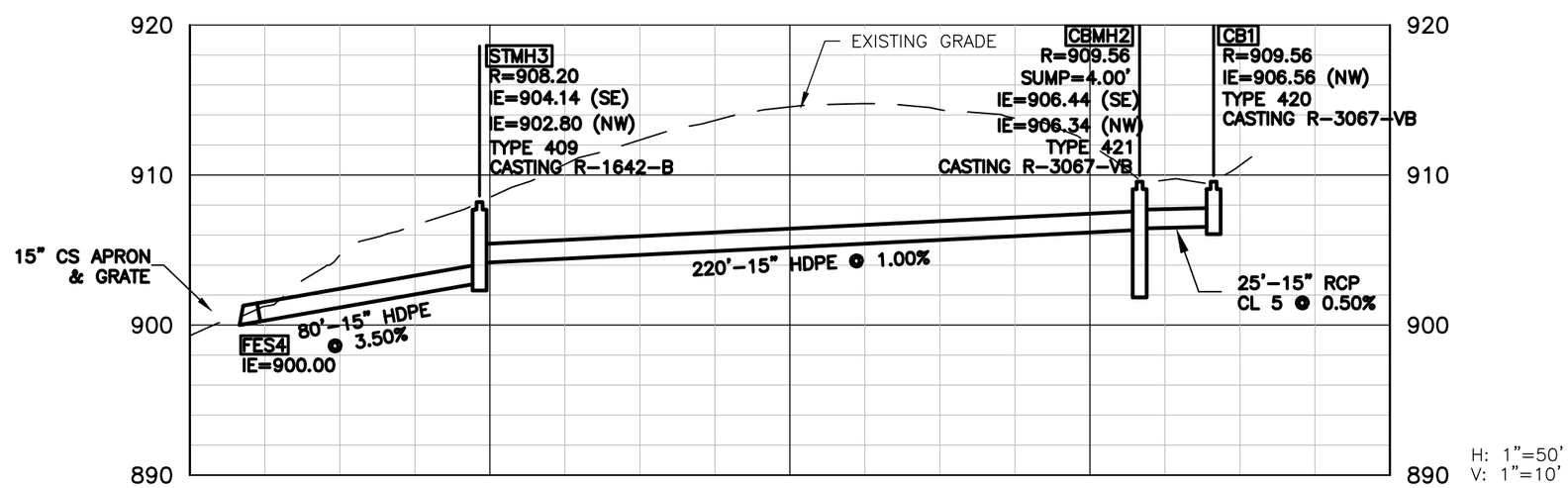
CITY OF ANDOVER

2026 STREET RECONSTRUCTION
LEEMAN LAKE ESTATES
CITY PROJECT 26-02E

INTERSECTION DETAILS

SHEET NO. 13 OF 46 SHEETS





NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME

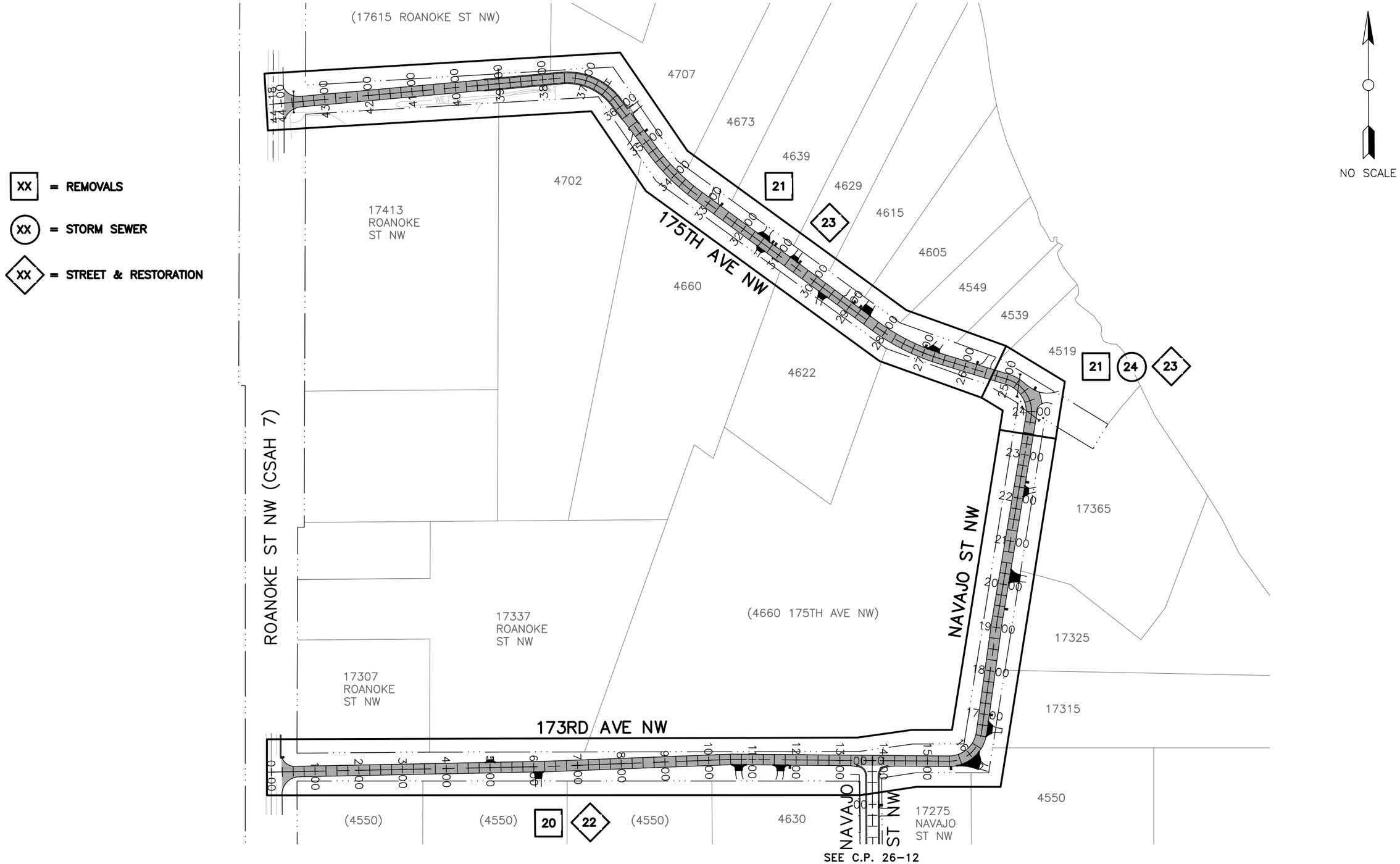
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 STREET RECONSTRUCTION
LEEMAN LAKE ESTATES
CITY PROJECT 26-02E

STORM SEWER

SHEET NO. 14 OF 46 SHEETS



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

SIGNATURE David D. Berkowitz
DAVID D. BERKOWITZ
TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAIM
173RD AVE NW/NAVAJO ST NW/175TH AVE NW
CITY PROJECT 26-11A

PROJECT LAYOUT

SHEET NO. 15 OF 46 SHEETS

2026 Full Depth Reclamation: 173rd Ave / Navajo St / 175th Ave
City Project: 26-11A
STATEMENT OF ESTIMATED QUANTITIES

NOTES	ITEM NO.		DESCRIPTION	UNIT	TOTAL ESTIMATED PROJECT QUANTITIES EST. QUAN.	ACT. QUAN.
	101	2021.501	Mobilization	LS	1.00	
1	102	2104.503	Sawing Bit Pavement (Full Depth)	LF	460	
	103	2104.503	Remove Pipe Culvert / Storm Sewer	LF	110	
1	104	2104.518	Remove Bituminous Pavement	SF	4,160	
2	105	2105.607	Common Excavation (EV)	CY	260	
3	106	2105.607	Subgrade Excavation (EV)	CY	30	
4	107	2105.607	Salvage Reclaim Material (LV)	CY	650	
5	108	2112.519	Subgrade Preparation	RDST	43.8	
6	109	2130.523	Water	MGAL	25	
7	110	2211.509	Aggregate Base Class 5	TN	40	
8	111	2211.607	Place Salvaged Reclaim Material (CV)	CY	40	
	112	2215.504	Full Depth Reclamation	SY	12,280	
	113	2232.504	Mill Bituminous Surface (1.5")	SY	10	
	114	2357.506	Bituminous Material For Tack Coat	Gal	620	
	115	2360.509	Type SP 9.5 Wearing Course Mix (2,C)	TN	1,140	
9	116	2360.509	Type SP 9.5 Bit Mix for Patching (2,B)	TN	130	
	117	2360.509	Type SP 12.5 Wearing Course Mixture (2,C)	TN	1,180	
	118	2501.502	18" RC Pipe Apron & Grate	EA	4	
	119	2501.503	18" RC Pipe Culvert Class V Des 3006	LF	80	
10	120	2503.603	Clean & Televise Storm Sewer and Culverts	LF	104	
11	121	2504.602	Irrigation System Modifications	EA	50	
12	122	2506.602	Mud Existing Casting Rings	EA	2	
13	123	2506.602	Mud Doghouse	EA	2	
	124	2511.507	Random Riprap Class III	CY	5	
	125	2563.601	Traffic Control	LS	1.00	
	126	2573.502	Storm Drain Inlet Protection	EA	2	
	127	2573.503	Sediment Control Log Type Wood Chip	LF	600	
	128	2573.607	Rock Ditch Check - 1.5" Nom. Diameter	CY	5	
	129	2574.507	Loam Topsoil Borrow (LV)	CY	440	
14	130	2574.508	Fertilizer Type 3	LB	350	
15	131	2575.504	Rolled Erosion Prevention Category 20	SY	400	
16	132	2575.505	Weed Spraying	ACRE	1.00	
	133	2575.505	Seeding	ACRE	1.00	
	134	2575.508	Hydraulic Mulch Matrix	LB	2,500	
	135	2575.508	Seed Residential Turfgrass	LB	200	

BASIS OF ESTIMATED QUANTITIES		
Bituminous Wear Course	120	# / SY / inch
Bituminous Non-Wear Course	120	# / SY / inch
Aggregate Base, Class 5	110	# / SY / inch
Tack Coat	0.05	Gal / SY
Hydraulic Mulch Matrix	2500	# / acre
Fertilizer Type 3 (Analysis 22-5-10)	350	# / acre
Seed Residential Turfgrass	200	# / acre

C.P. 26-11A Notes:

1. Regardless of depth.
2. For all excavation except subgrade excavation. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
3. For exc. beneath reclaimed agg. base where profile lowered or unsuitable material encounted. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
4. For excavating/hauling/stockpiling reclaim material salvaged for subgrade exc. and/or excess material. Excess property of contractor. See Earthwork Tabulation.
5. Includes grading reclaim material from areas of excess to areas requiring material (under curb, along shoulder, increased crown), fine grading, and compacting reclaimed agg. base.
6. For dust control only as directed by the engineer. Water to achieve compaction shall be incidental.
7. Item includes furnishing, hauling, placing and compacting. See Earthwork Tabulation.
8. Includes loading/hauling/placing/grading/compacting salvaged reclaim material in areas of subgrade exc. or correction.
9. Item shall be used for patching of bituminous trails and driveway replacements.
10. Only clean and televise RCP culverts. DIP culverts are not to be televised.
11. Based upon number or irrigation heads removed / replaced. Item shall include all items necessary to temporarily cap existing systems, replace damaged lines, heads, adjust systems, and return them to pre-project condition or better. Work shall be performed by a licensed irrigation contractor.
12. Protect casting, touch up mud on existing concrete adjustment rings inside structure.
13. Item shall include regrouting all doghouses within structure. The "Each" item refers to each structure regardless of the number of doghouses in the structure.
14. Analysis 22-5-10.
15. Straw or wood fiber blanket is an acceptable alternative. Netting material shall be jute netting.
16. Only to be used if requested by engineer prior to or during site restoration.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME

DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAIM
173RD AVE NW/NAVAJO ST NW/175TH AVE NW
CITY PROJECT 26-11A

STATEMENT OF ESTIMATED QUANTITIES

EARTH WORK TABLE

City Project 26-11A: 173rd Ave / Navajo St / 175th Ave

Roadway Length (centerline) = 4,375 LF
Curb and Gutter Length (total) = 680 LF

Aggregate Base Class 7 (Reclaim)
Existing 2.5"-3" +/- of bituminous and 5" +/- aggregate base based on road cores
Reclaim 8"+/- deep (pull some sand into reclaim)

Salvage Reclaim Material			
Volume of salvaged reclaim material =	351 CY (CV)	2.75" along 175th Ave (match existing profile grade/curb/driveways)	1655 LF x 25' wide
Volume of salvaged reclaim material =	74 CY (CV)	2.75" tapered to 0" at intersections with CSAH 7 & Navajo St	550 LF x 25' wide
Volume of salvaged reclaim material =	0 CY (CV)	6" salvage in areas of subgrade / profile lowering	0 LF x 25' wide
Volume of salvaged reclaim material =	5 CY (CV)	6" salvage in areas of subgrade correction, if any	10 LF x 25' wide
Total Salvaged Reclaim =	430 CY (CV)	Available material to be re-used on-site	
Salvaged Reclaim Required			
Volume required =	0 CY (CV)	5" minimum - areas of profile grade changes	
Volume required =	29 CY (CV)	Backfill for subgrade correction area (corresponds to assumed correction volume)	
Volume required =	4 CY (CV)	5" minimum - areas of subgrade corrections	
Total Salvaged Reclaim Required	33 CY (CV)		
Aggregate Base Class 5 Required			
Volume required =	16 CY (CV)	Driveways	
Total Class 5 Required	16 CY (CV)		
Subgrade Excavation			
Volume of subgrade exc. =	0 CY (EV)	Areas of lowering of roadway profile	
Volume of subgrade exc. =	29 CY (EV)	Subgrade correction areas. Assume 3' depth in correction excavation, if any areas found	
Total Subgrade Excavation =	29 CY (EV)		
Common Excavation			
Volume of common exc. =	9 CY (EV)	Miscellaneous excavation for driveway apron replacements	
Volume of common exc. =	240 CY (EV)	Shoulders. Excavate 3' wide x 3" deep along bit edge prior to reclaiming.	
Volume of common exc. =	5 CY (EV)	Excavate culvert aprons to drain as necessary	
Total Common Excvatation =	254 CY (EV)		
Topsoil Borrow	310 CY (CV)	Length x 2 x 4' wide x 3" deep. Utilize any salvaged material if suitable. Place with shouldering machine.	

EARTHWORK SUMMARY**

Salvage Reclaim Material	430 CY (CV)	
Volume of salvaged reclaim	650 CY (LV)	
Place Salvaged Reclaim Material		
Volume of salvaged reclaim material to replace =	40 CY (CV)	For replacement of salvaged reclaim in areas of profile lowering or subgrade correction
Reclaimed Aggregate Base Balance		
Volume of salvaged reclaim material available =	430 CY (CV)	
Volume of required reclaim material =	40 CY (CV)	
Balance of reclaim material =	390 CY (CV)	
	590 CY (LV)	Haul out and dispose of excess. Excess property of contractor
Subgrade Excavation	30 CY (EV)	Haul out and dispose of unsuitable and excess material off-site.
Common Excavation	260 CY (EV)	Haul out and dispose of unsuitable and excess material off-site.
Aggregate Base Class 5	40 Tons	
Topsoil Borrow	310 CY (CV)	Place on shoulder with shouldering machine after wear course paved.
	440 CY (LV)	
Excess Excavation Material to Dispose of Off-Site	637 CY (EV)	Excess reclaim, and assumed 85% of common exc material and subgrade exc material
	830 CY (LV)	

** quantities for pay items are rounded to nearest 10

Swell Factors
EV to LV = 1.3
LV to CV = 1.4
LV to CV = 1.5 (For reclaimed material)
1 CY Class 5 = 2 tons (147 #/CF)

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAIM
173RD AVE NW/NAVAJO ST NW/175TH AVE NW
CITY PROJECT 26-11A

EARTHWORK SUMMARY

GENERAL NOTES:

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.
CITY OF ANDOVER 2026 UTILITY AND STREET CONSTRUCTION SPECIFICATIONS SHALL APPLY.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE 38–22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO AND BE INSTALLED IN ACCORDANCE WITH THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD)" AND THE "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL", NEWEST ADDITIONS.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE EXCAVATING CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR IS REQUIRED TO CALL GOPHER ONE CALL AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION. (651–454–2000)

CONSTRUCTION NOTES:

ROAD WORK AHEAD SIGNS SHALL BE MAINTAINED AT ALL INTERSECTING ROADS TO THE PROJECT. TYPE B CHANNELIZERS SHALL BE USED IN ALL NECESSARY LOCATIONS.

CONSTRUCTION SHALL BE STAGED SUCH THAT TRAFFIC IS MAINTAINED AT ALL TIMES. CONTRACTOR SHALL USE FLAG PERSON, IF NEEDED (INCIDENTAL TO TRAFFIC CONTROL).

COMPACTION OF ALL BITUMINOUS MIXTURE SHALL BE BY THE "SPECIFIED DENSITY METHOD" EXCEPT FOR PATCHES AND TRAILS, WHICH SHALL BE BY THE "ORDINARY COMPACTION METHOD".

THE CONTRACTOR SHALL USE FLAG PERSON'S AND APPROPRIATE TRAFFIC CONTROL DEVICES TO DIRECT TRAFFIC AT INTERSECTING COUNTY ROADS. ALL TRAFFIC CONTROL MUST BE ACCEPTABLE TO THE ANOKA COUNTY HIGHWAY DEPARTMENT. CONTRACTOR SHALL APPLY FOR A PERMIT FOR WORKING WITHIN ANOKA COUNTY RIGHT OF WAY. PROVIDE A COPY OF COUNTY PERMIT TO CITY ENGINEER.

ABSENT A ROAD CLOSURE, RECONSTRUCTION SHALL BE PERFORMED IN A MANNER TO ALLOW LOCAL TRAFFIC TO BE MAINTAINED TO A MINIMUM OF HALF THE ROADWAY WIDTH. THE CONTRACTOR SHALL USE FLAG PERSON'S TO DIRECT TRAFFIC AS NEEDED.

CONTRACTOR SHALL PROVIDE 3 DAY NOTICE PRIOR TO POTENTIAL ROAD CLOSURE FOR UNDERGROUND UTILITY CONSTRUCTION. TYPE 3 BARRICADES WITH "ROAD CLOSED" SHALL BE INSTALLED ON BOTH SIDES OF UTILITY CONSTRUCTION ACTIVITY. STAGE CONSTRUCTION TO ALLOW FOR LOCAL RESIDENT ACCESS AS NEEDED.

DURING ALL ASPECTS OF CONSTRUCTION DRIVEWAYS SHALL BE RAMPED WITH GRAVEL IN A TIMELY MANNER TO PROVIDE RESIDENTS ACCESS. UPON THREE DAYS OF CURE, CONC. CURBING AT DRIVEWAYS SHALL BE BACKFILLED & RAMPED WITH GRAVEL TO PROVIDE ACCESS.

DURING THE CONSTRUCTION OF CONC. CURB & DRIVEWAYS, THE CONTRACTOR SHALL COORDINATE WITH ENGINEER TO NOTIFY RESIDENTS OF PENDING CONSTRUCTION ACTIVITY. A THREE DAY NOTICE IS REQUIRED PRIOR TO POURING CONC. CURB & DRIVEWAYS. IMMEDIATELY UPON COMPLETION THE ROADWAY SHALL BE GRADED TO ALLOW RESIDENTS TO PARK ON STREET ADJACENT TO THEIR PROPERTY.

CONSTRUCT B618 C&G ON ALL RADII, CATCH BASIN LOCATIONS & ADDITIONAL LOCATIONS AS NOTED ON PLAN. (PAID AS SURMOUNTABLE C&G).

EXISTING MAILBOXES SHALL BE SALVAGED AND REINSTALLED WHERE CALLED OUT IN PLANS. DURING CONSTRUCTION TEMPORARY MAILBOXES SHALL BE PLACED NEAR THE ORIGINAL MAILBOX LOCATION. THE TEMPORARY MAILBOXES SHALL BE MOUNTED ON BARRELS TO BE PORTABLE. PROPERTY OWNER MAY SUPPLY NEW POST AND/OR BOX TO BE PLACED IN THE ORIGINAL LOCATION.

RESIDENTS WILL BE ASKED TO MARK IRRIGATION PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING SYSTEMS. WHERE BOULEVARD IRRIGATION MODIFICATIONS ARE REQUIRED THE IRRIGATION LINES/HEADS SHALL BE REMOVED & DISPOSED. REMAINING LINES SHALL BE PLUGGED & MARKED. ALL REPLACED IRRIGATION LINES/HEADS SHALL BE WITH NEW COMMERCIAL GRADE MATERIALS. CONTRACTOR WILL BE PAID A UNIT PER HEAD REPLACED. EXISTING LOCATIONS SHOWN ON PLANS ARE ONLY SCHEMATIC. ALL WORK SHALL BE BY AN IRRIGATION CONTRACTOR LICENSED TO WORK IN THE CITY OF ANDOVER.

THE CONTRACTOR SHALL PROTECT, SALVAGE AND REPAIR ALL EXISTING LANDSCAPING IN KIND. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

THE FOLLOWING CONSTRUCTION ITEM'S SHALL OCCUR PRIOR TO COMMENCING THE RECLAIMING OPERATION. INSTALL TRAFFIC CONTROL, REMOVE STREET SIGN'S (CITY), INSTALL TEMP. EROSION CONTROL MEASURES, IDENTIFY & CAP IRRIGATION SYSTEMS IN AREAS OF CURB REPLACEMENT, SALVAGE LANDSCAPING, REMOVE EX. & INSTALL TEMP. MAILBOX'S WHERE IDENTIFIED IN PLANS.

EXISTING DRIVEWAYS SHALL BE SAWCUT AS DIRECTED BY ENGINEER, REMOVED AND DISPOSED OF OFF SITE. BITUMINOUS AND CONCRETE DRIVEWAYS SHALL BE REPLACED IN KIND. GRAVEL DRIVEWAYS SHALL BE REPLACED WITH A 10–15' BITUMINOUS APRON. ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITY SHALL BE SAWCUT AND REPAIRED IN KIND AT THE CONTRACTORS EXPENSE.

WHERE SUBGRADE EXCAVATION AND/OR UTILITY WORK OCCURS WITHIN THE ROADWAY THE RECLAIMED BASE SHALL BE SALVAGED & REPLACED PER THE TYPICAL SECTION (INCIDENTAL). THIS WORKSHALL BE DONE IN A MANNER SO RECLAIMED BASE IS NOT CONTAMINATED WITH SPOIL MATERIAL. COMPACTION OF THE RECLAIMED BASE MATERIAL SHALL BE ACHIEVED BY THE PENETRATION INDEX METHOD IN ACCORDANCE WITH MNDOT 2211.3C3. THE BOTTOM OF THE SUBCUTS SHALL BE SHAPED AND COMPACTED BY THE "QUALITY COMPACTION METHOD"

THE CONTRACTOR SHALL STRIP AND STOCKPILE EXISTING TOPSOIL MATERIAL, IF ANY, FOR RE–USE (LITTLE IS EXPECTED). RE–USED TOPSOIL SHALL BE CLEAN WITH NO SOD CHUNKS / EXISTING VEGETATION. TOPSOIL STRIPING, IF ANY, SHALL BE CONSIDERED INCIDENTAL.

SELECT EXCAVATED MATERIALS SHALL BE UTILIZED TO THE FULLEST EXTENT WITHIN THE PROJECT LIMITS TO BACKFILL PROPOSED CURB & GUTTERS. ANY EXCESS MATERIAL, OR MATERIAL WITH DEBRIS / SOD CHUCKS SHALL BE DISPOSED OF OFF–SITE.

EXCAVATION AND DISPOSAL OF SOIL/TURF MATERIAL SHALL BE INCIDENTAL TO REMOVAL PAY ITEMS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL MINIMIZE EXCAVATION AND DISTURBANCE ALONG THE PROJECT CORRIDOR.

ALL DISTURBED AREAS SHALL BE BACKFILLED WITH SALVAGED TOPSOIL, IF ANY. DISTURBED AREAS SHALL BE RESTORED WITH 4" (MINIMUM) TOPSOIL, SEED, FERTILIZER, AND HYDROMULCH. ALL RESTORATION SHALL OCCUR WITHIN 7 DAYS OF GRADING COMPLETION. SOIL STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF ROUGH GRADING OR INACTIVITY (INCIDENTAL). TOPSOIL SHALL BE PLACED WITH A SHOULDERING MACHINE & RESTORATION COMPLETED IN AREAS WITH DITCH SECTIONS AFTER PAVING OF WEAR COURSE UNLESS OTHERWISE APPROVED BY ENGINEER IN THE FIELD.

ALL EXISTING SIGNS SHALL BE REMOVED AND REPLACED BY THE ANDOVER SIGN DEPARTMENT UNLESS CALLED OUT OTHERWISE IN THE PLANS. COORDINATE WITH MINIMUM 48 HOUR NOTICE WITH ENGINEER IN FIELD.

CONCRETE WASHOUT SHALL BE CONTAINED WITHIN CONCRETE TRUCKS, NOT DISPOSED OF ON–SITE.

CONTRACTOR SHALL SWEEP ALL MATERIAL OFF ADJACENT STREETS DUE TO CONSTRUCTION ACTIVITY, DAILY AS NECESSARY (INCIDENTAL).

INSTALL INLET PROTECTION DEVICES ON ALL STORM SEWER STRUCTURES. PRIOR TO PLACING CASTINGS ON STORM SEWER STRUCTURES THE CONTRACTOR SHALL FOLLOW STANDARD DETAIL IN THE PLANS TO ALLOW FOR INFLOW INTO THE STORM SEWERS. ONCE CASTINGS ARE INSTALLED ON STORM SEWER STRUCTURES THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL STRUCTURES SUCH THAT SEDIMENT IS CAPTURED WITH A HIGH FLOW BYPASS. CLEAN AS NECESSARY.

CONTRACTOR IS REQUIRED TO REPAIR AND MAINTAIN ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES ACCORDING TO THE MPCA BEST MANAGEMENT PRACTICES MANUAL, SWPPP, AND THE MINNESOTA STORM WATER MANUAL (INCIDENTAL).

CONTRACTOR SHALL REMOVE ALL TEMPORARY SEDIMENT CONTROL PRACTICES ONCE VEGETATION IS RE–ESTABLISHED (INCIDENTAL).

REFER TO SWPPP IN PROJECT SPECIFICATION FOR ADDITIONAL CONSTRUCTION/EROSION CONTROL REQUIREMENTS.

WHEN CONNECTING NEW PAVED SURFACING TO ANY IN–PLACE PAVEMENTS, CUT VERTICALLY TO THE BOTTOM OF THE IN–PLACE PAVEMENTS OR TO THE BOTTOM OF THE NEW SURFACING, WHICHEVER IS DEEPER, THEN AT 2(V):1(H) SLOPE TO THE TOP OF THE SUBGRADE.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

SIGNATURE — DAVID D. BERKOWITZ TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

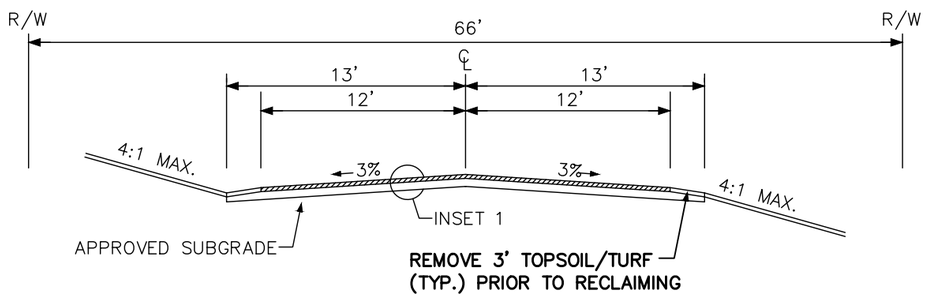
CITY OF ANDOVER

2026 FULL DEPTH RECLAIM
173RD AVE NW/NAVAJO ST NW/175TH AVE NW
CITY PROJECT 26–11A

CONSTRUCTION NOTES

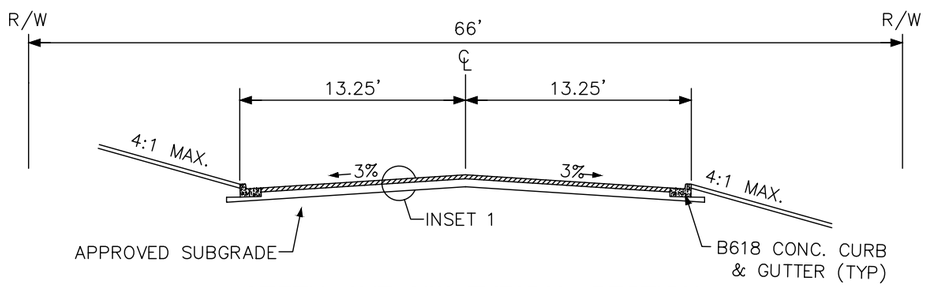
RECLAIM 8" +/- DEPTH OR AS NECESSARY TO PROVIDE A HOMOGENOUS MIXTURE MEETING GRADATION SPEC. IN MNDOT 2215 WITH 100% PASSING THE 3" SIEVE.

EXISTING



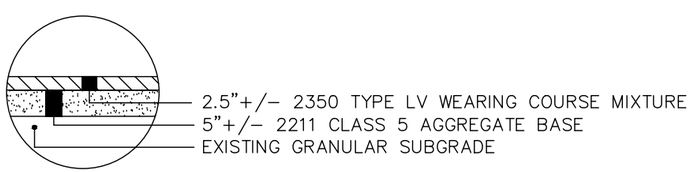
173RD AVE NW/NAVAJO ST NW/175TH AVE NW TYPICAL SECTION

WITHOUT CURB



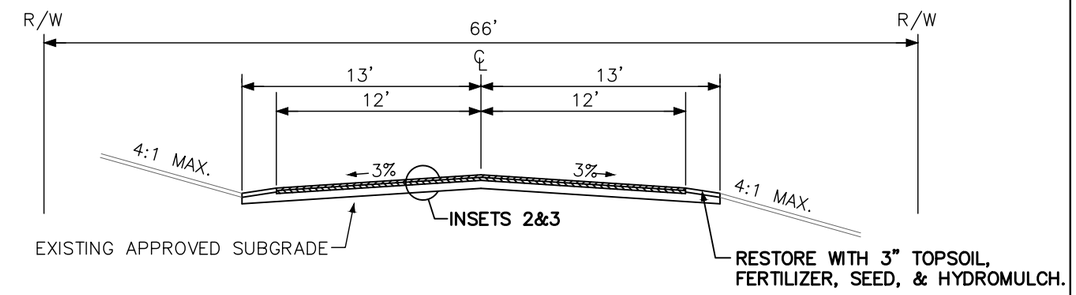
175TH AVE NW TYPICAL SECTION

WITH CURB



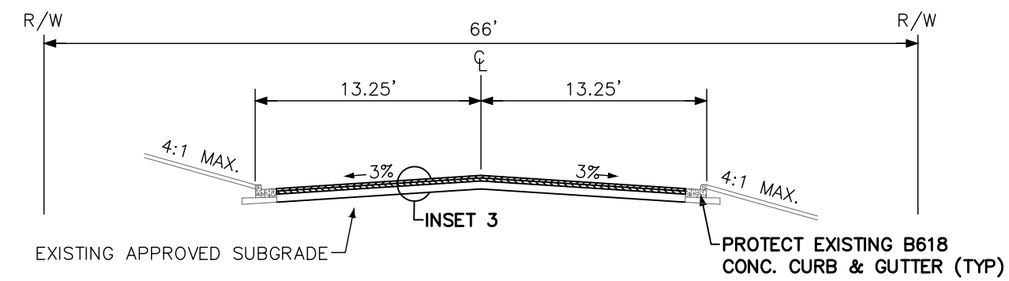
INSET 1

PROPOSED



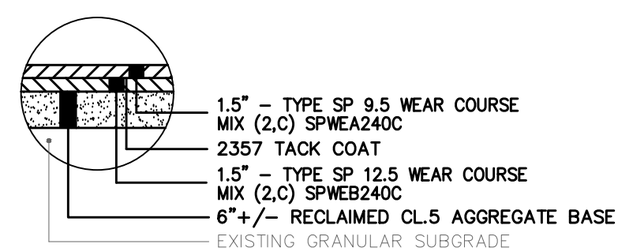
173RD AVE NW/NAVAJO ST NW/175TH AVE NW TYPICAL SECTION

WITHOUT CURB



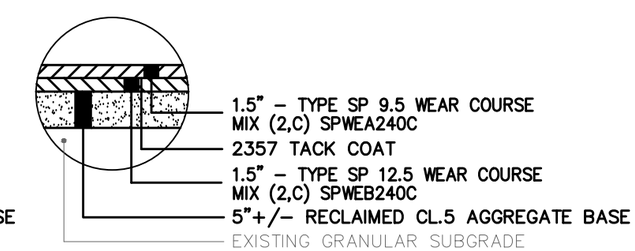
175TH AVE NW TYPICAL SECTION

WITH CURB
(STA 35+40 TO 39+30)



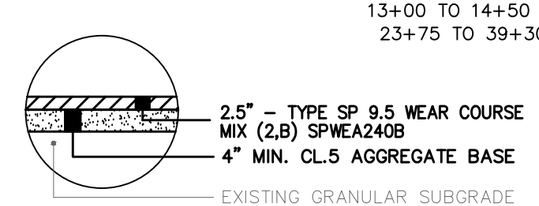
INSET 2

0+24 TO 13+00
14+50 TO 23+75



INSET 3

13+00 TO 14+50 &
23+75 TO 39+30



BITUMINOUS DRIVEWAYS

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

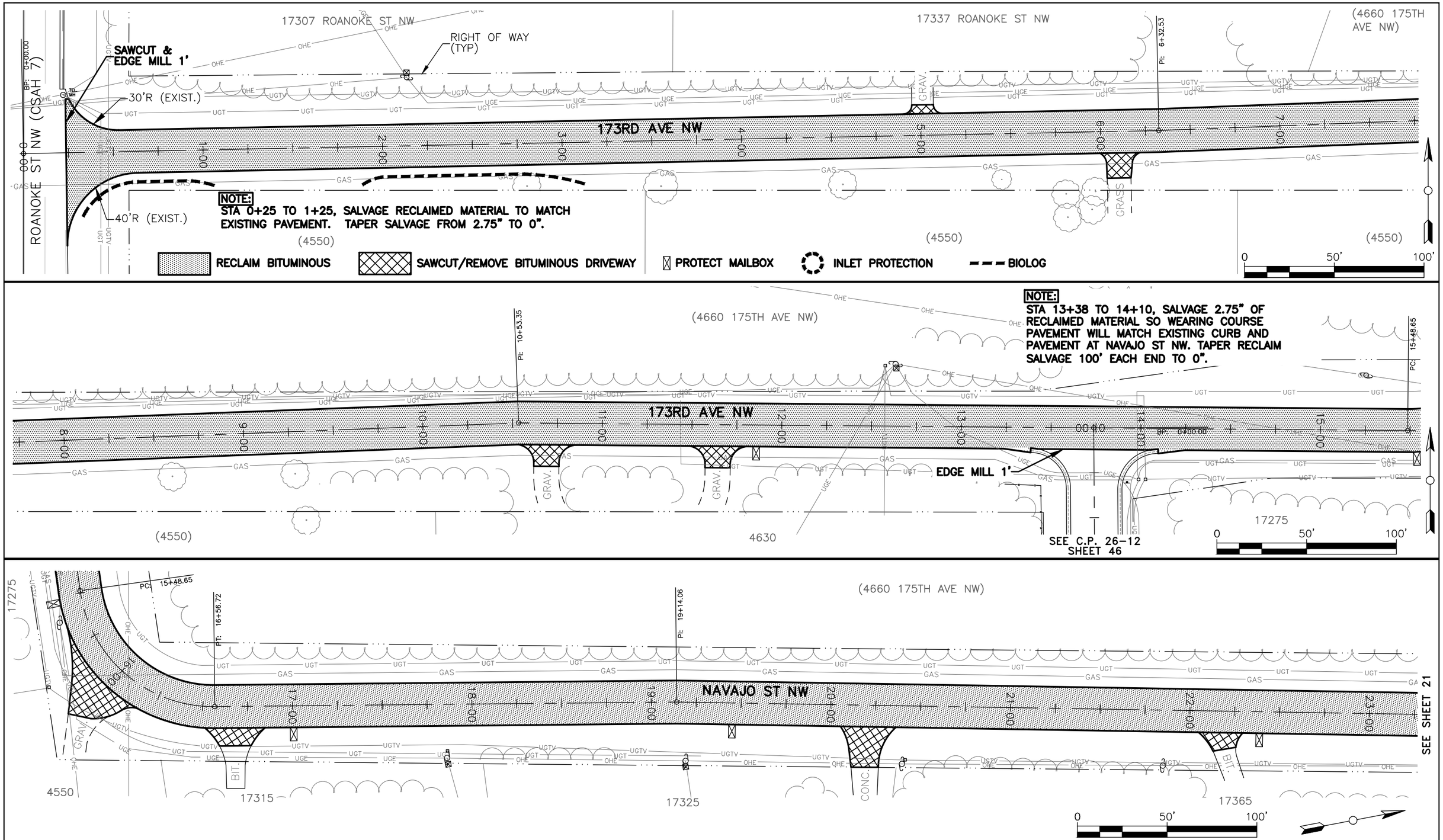
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

SIGNATURE David D. Berkowitz DAVID D. BERKOWITZ TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAIM
173RD AVE NW/NAVAJO ST NW/175TH AVE NW
CITY PROJECT 26-11A

TYPICAL SECTIONS



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

SIGNATURE David D. Berkowitz DAVID D. BERKOWITZ TYPED OR PRINTED NAME

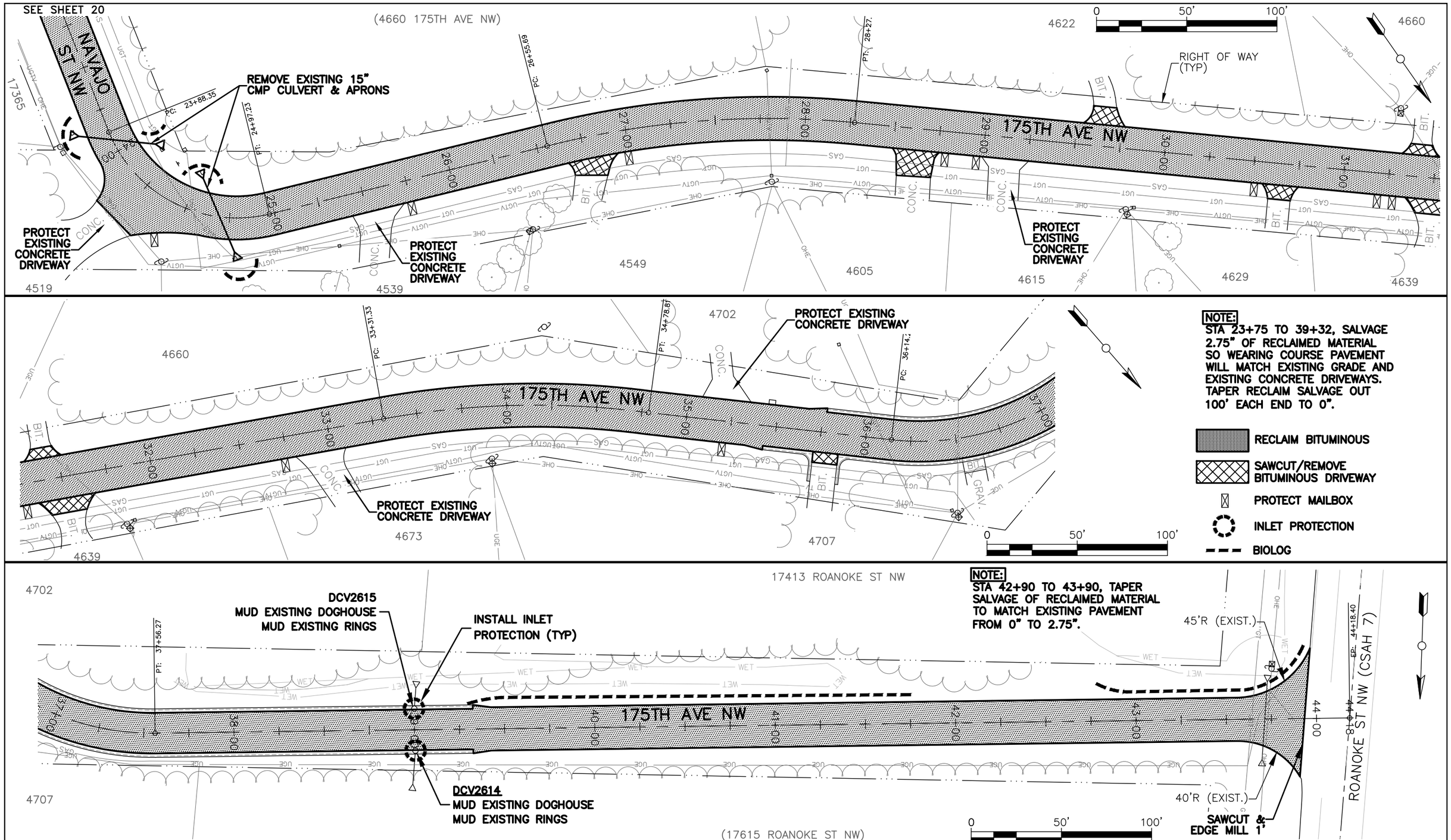
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAIM
173RD AVE NW/NAVAJO ST NW/175TH AVE NW
CITY PROJECT 26-11A

REMOVALS
173RD AVE NW & NAVAJO ST NW
0+24 TO 23+25

SHEET NO. 20 OF 46 SHEETS



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

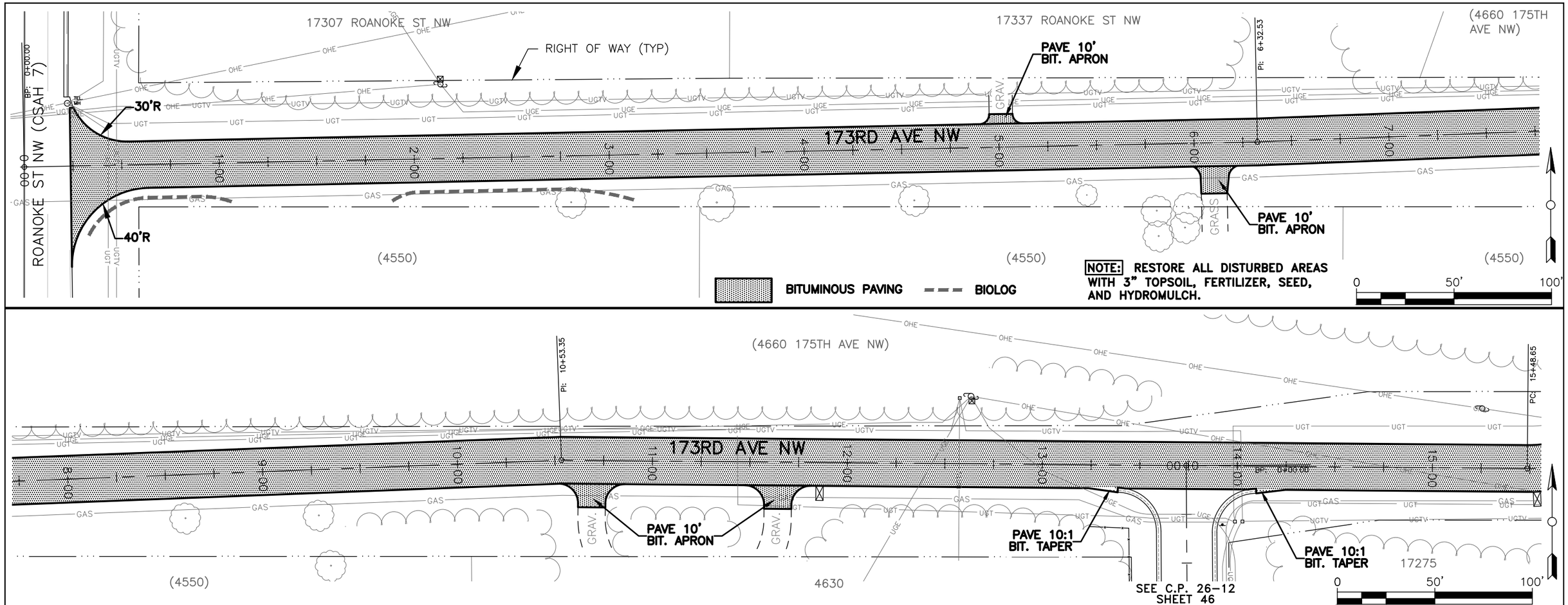
SIGNATURE David D. Berkowitz
DAVID D. BERKOWITZ TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAIM
173RD AVE NW/NAVAJO ST NW/175TH AVE NW
CITY PROJECT 26-11A

REMOVALS
NAVAJO ST NW & 175TH AVE NW
23+25 TO 43+94

SHEET NO. 21 OF 46 SHEETS



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

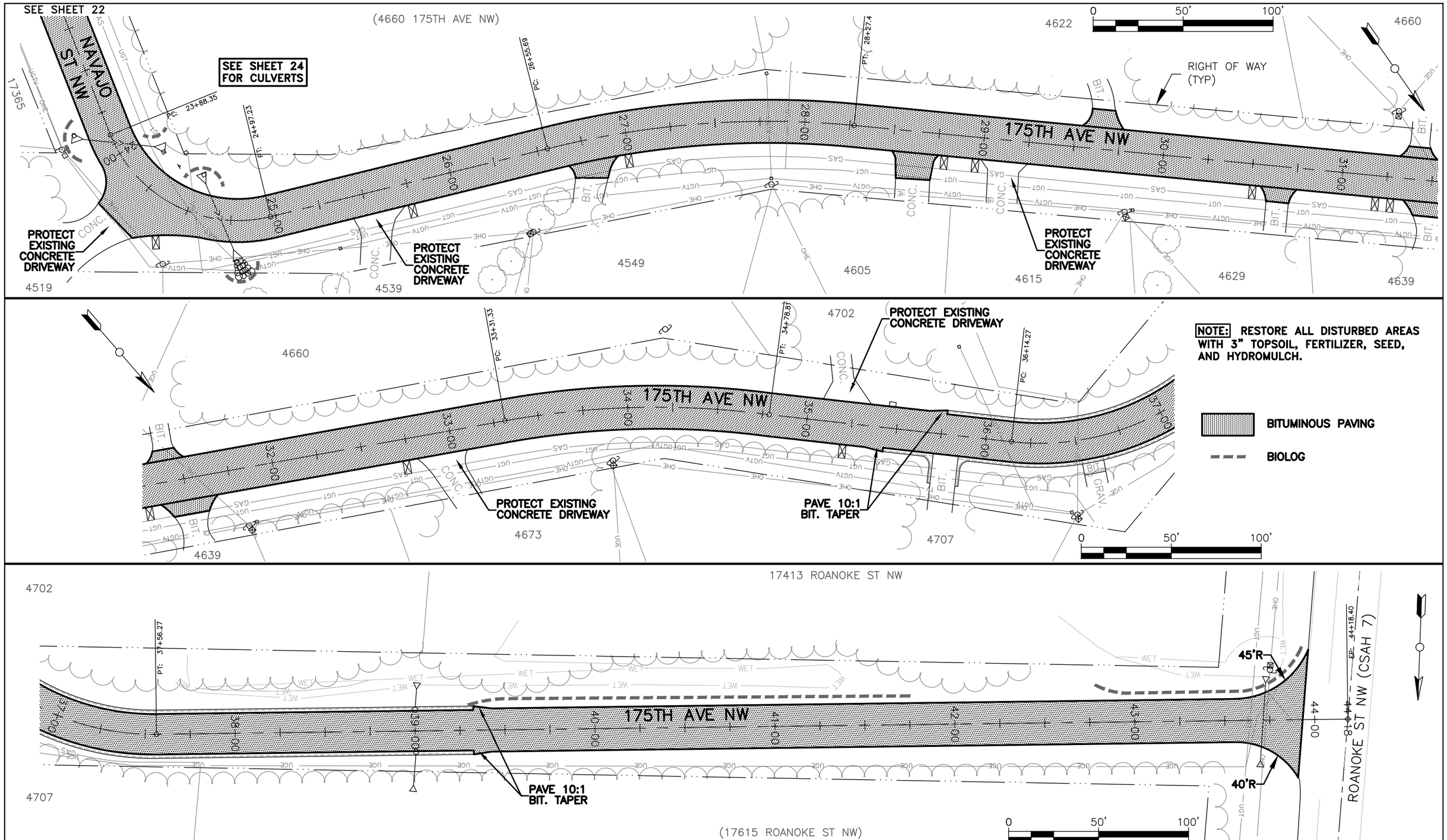
SIGNATURE David D. Berkowitz
DAVID D. BERKOWITZ
TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAIM
173RD AVE NW/NAVAJO ST NW/175TH AVE NW
CITY PROJECT 26-11A

STREET & RESTORATION
173RD AVE NW & NAVAJO ST NW
0+24 TO 23+25

SHEET NO. 22 OF 46 SHEETS



NOTE: RESTORE ALL DISTURBED AREAS WITH 3" TOPSOIL, FERTILIZER, SEED, AND HYDROMULCH.

BITUMINOUS PAVING

BIOLOG

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME

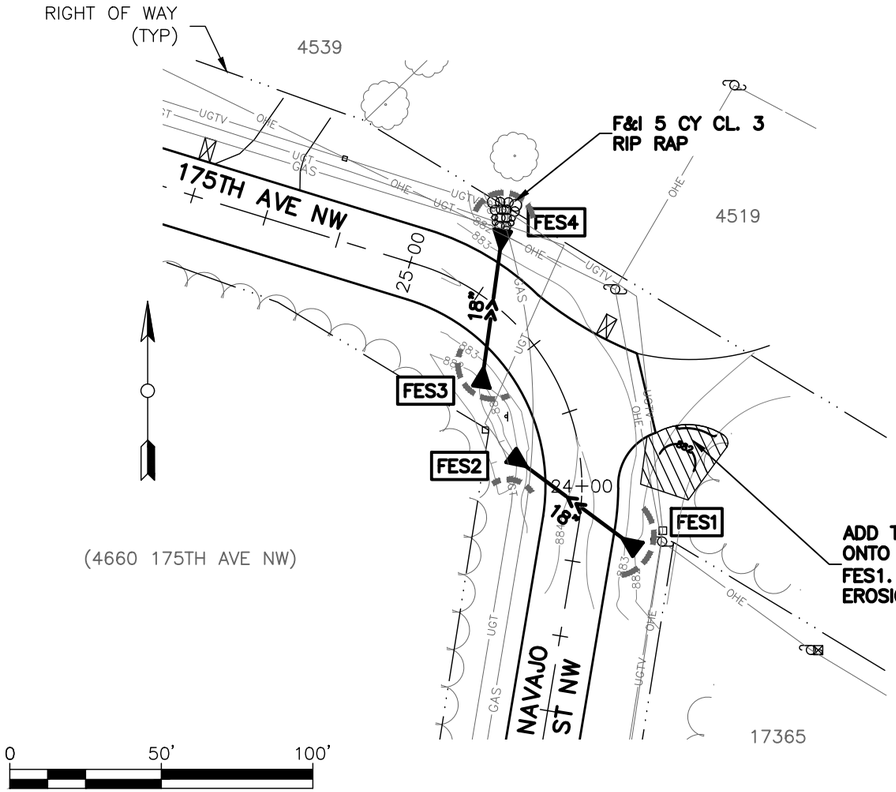
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAIM
173RD AVE NW/NAVAJO ST NW/175TH AVE NW
CITY PROJECT 26-11A

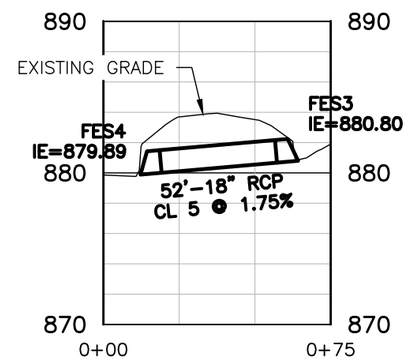
STREET & RESTORATION
NAVAJO ST NW & 175TH AVE NW
23+25 TO 43+94

SHEET NO. 23 OF 46 SHEETS

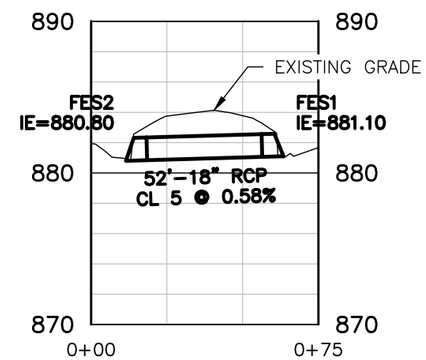


ADD TOPSOIL BERM TO KEEP DITCH FROM OVERFLOWING ONTO DRIVEWAY. GRADE DITCH TO DRAIN FROM BERM TO FES1. RESTORE WITH 4" TOPSOIL, SEED, FERTILIZER, AND EROSION CONTROL BLANKET.

FES4 TO FES3

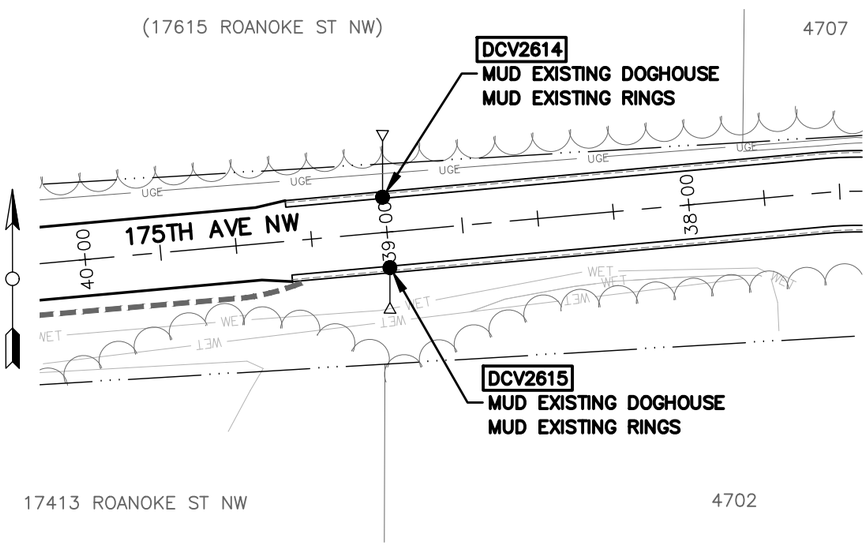


FES2 TO FES1



H: 1"=50'
V: 1"=10'

BIOLOG



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

SIGNATURE — DAVID D. BERKOWITZ TYPED OR PRINTED NAME

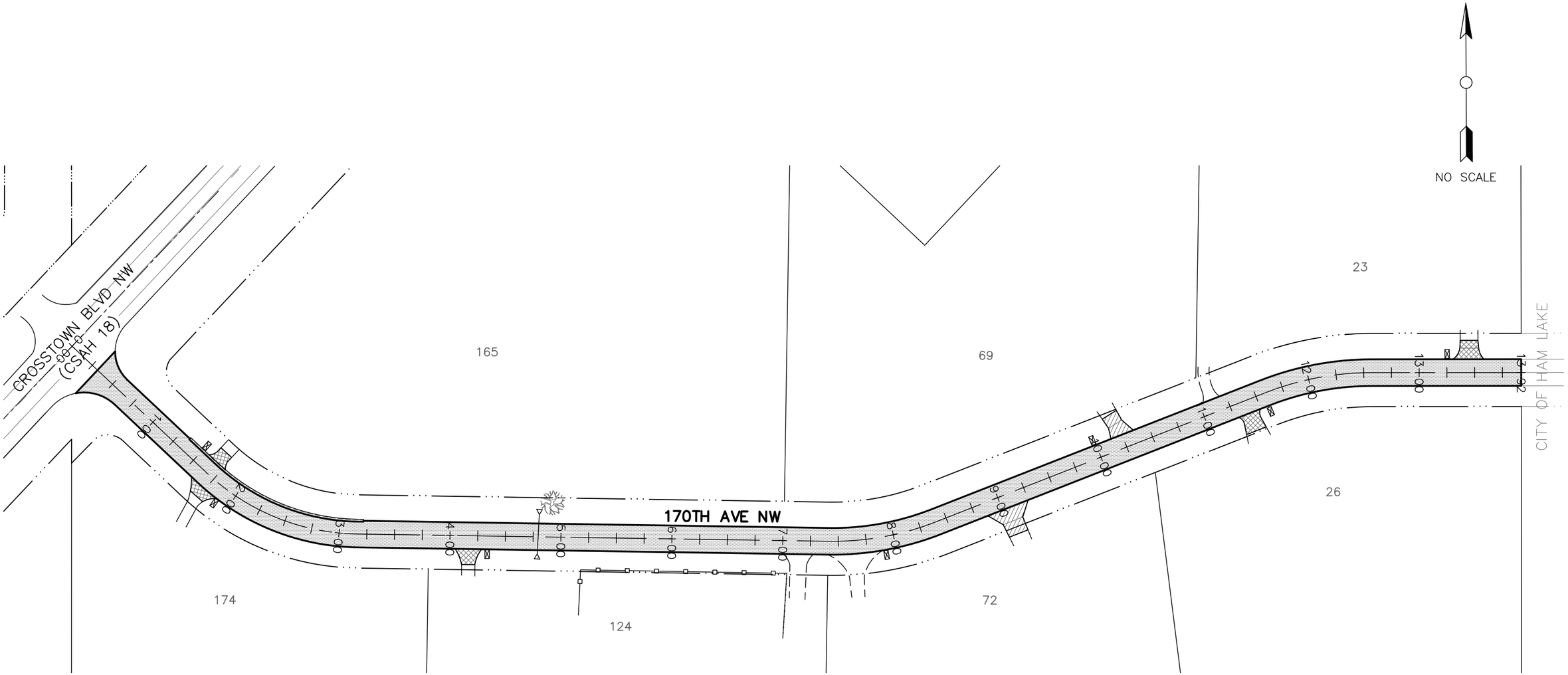
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAIM
173RD AVE NW/NAVAJO ST NW/175TH AVE NW
CITY PROJECT 26-11A

CULVERT PLAN/PROFILES

SHEET NO. 24 OF 46 SHEETS



REMOVALS – SEE SHEET 30

STREET & CULVERT PLAN/PROFILE – SEE SHEET 31

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK

CHECKED DDB

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

SIGNATURE David D. Berkowitz DAVID D. BERKOWITZ TYPED OR PRINTED NAME

DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
BIRCHWOOD POND

CITY PROJECT 26-11C

PROJECT LAYOUT

SHEET NO. 25 OF 46 SHEETS

2026 Full Depth Reclamation: Birchwood Pond
City Project: 26-11C
STATEMENT OF ESTIMATED QUANTITIES

NOTES	ITEM NO.		DESCRIPTION	UNIT	TOTAL ESTIMATED PROJECT QUANTITIES EST. QUAN.	ACT. QUAN.
	201	2021.501	Mobilization	LS	1.00	
1	202	2104.503	Sawing Concrete Pavement (Full Depth)	LF	60	
1	203	2104.503	Sawing Bit Pavement (Full Depth)	LF	250	
	204	2104.503	Remove Curb & Gutter	LF	60	
	205	2104.503	Remove Pipe Culvert / Storm Sewer	LF	50	
1	206	2104.518	Remove Concrete Pavement	SF	630	
1	207	2104.518	Remove Bituminous Pavement	SF	1,520	
2	208	2105.607	Common Excavation (EV)	CY	100	
3	209	2105.607	Subgrade Excavation (EV)	CY	30	
4	210	2105.607	Salvage Reclaim Material (LV)	CY	100	
5	211	2112.519	Subgrade Preparation	RDST	13.7	
6	212	2130.523	Water	MGAL	20	
7	213	2211.509	Aggregate Base Class 5	TN	20	
8	214	2211.607	Place Salvaged Reclaim Material (CV)	CY	40	
	215	2215.504	Full Depth Reclamation	SY	3,830	
	216	2232.504	Mill Bituminous Surface (1.5")	SY	10	
	217	2357.506	Bituminous Material For Tack Coat	Gal	190	
	218	2360.509	Type SP 9.5 Wearing Course Mix (2,C)	TN	360	
9	219	2360.509	Type SP 9.5 Bit Mix for Patching (2,B)	TN	60	
	220	2360.509	Type SP 12.5 Wearing Course Mixture (2,C)	TN	370	
	221	2501.502	18" RC Pipe Apron & Grate	EA	2	
	222	2501.503	18" RC Pipe Culvert Des 3006 Class V	LF	40	
	223	2503.603	Clean & Televise Storm Sewer and Culverts	LF	52	
10	224	2504.602	Irrigation System Modifications	EA	25	
	225	2511.507	Random Riprap Class III	CY	3	
	226	2531.503	Concrete Curb and Gutter B612	LF	60	
	227	2531.504	6" Concrete Driveway Pavement	SY	70	
	228	2563.601	Traffic Control	LS	1.00	
	229	2573.503	Sediment Control Log Type Wood Chip	LF	530	
	230	2574.507	Loam Topsoil Borrow (LV)	CY	170	
11	231	2574.508	Fertilizer Type 3	LB	105	
12	232	2575.504	Rolled Erosion Prevention Category 20	SY	200	
13	233	2575.505	Weed Spraying	ACRE	0.30	
	234	2575.505	Seeding	ACRE	0.30	
	235	2575.508	Hydraulic Mulch Matrix	LB	750	
	237	2575.508	Seed Residential Turfgrass	LB	60	

BASIS OF ESTIMATED QUANTITIES		
Bituminous Wear Course	120	#/SY/inch
Bituminous Non-Wear Course	120	#/SY/inch
Aggregate Base, Class 5	110	#/SY/inch
Tack Coat	0.05	Gal/SY
Hydraulic Mulch Matrix	2500	#/acre
Fertilizer Type 3 (Analysis 22-5-10)	350	#/acre
Seed Residential Turfgrass	200	#/acre

C.P. 26-11C Notes:

1. Regardless of depth.
2. For all excavation except subgrade excavation. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
3. For exc. beneath reclaimed agg. base where profile lowered or unsuitable material encountered. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
4. For excavating/hauling/stockpiling reclaim material salvaged for subgrade exc. and/or excess material. Excess property of contractor. See Earthwork Tabulation.
5. Includes grading reclaim material from areas of excess to areas requiring material (under curb, along shoulder, increased crown), fine grading, and compacting reclaimed agg. base.
6. For dust control only as directed by the engineer. Water to achieve compaction shall be incidental.
7. Item includes furnishing, hauling, placing and compacting. See Earthwork Tabulation.
8. Includes loading/hauling/placing/grading/compacting salvaged reclaim material in areas of subgrade exc. or correction.
9. Item shall be used for patching of bituminous trails and driveway replacements.
10. Based upon number or irrigation heads removed / replaced. Item shall include all items necessary to temporarily cap existing systems, replace damaged lines, heads, adjust systems, and return them to pre-project condition or better. Work shall be performed by a licensed irrigation contractor.
11. Analysis 22-5-10.
12. Straw or wood fiber blanket is an acceptable alternative. Netting material shall be jute netting.
13. Only to be used if requested by engineer prior to or during site restoration.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME

DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
BIRCHWOOD POND
CITY PROJECT 26-11C

STATEMENT OF ESTIMATED QUANTITIES

EARTH WORK TABLE

City Project 26-11C: Birchwood Pond

Aggregate Base Class 7 (Reclaim)			Roadway Length =	1,365 LF
Existing 2.5" +/- of bituminous and 4" +/- aggregate base based on road cores			Existing Curb Length =	200 LF
Reclaim 7"+/- deep (pull some sand into reclaim)				
Salvage Reclaim Material				
Volume of salvaged reclaim material =	0 CY (CV)	6" salvage in areas of subgrade / profile lowering	0 LF x 25' wide	
Volume of salvaged reclaim material =	59 CY (CV)	2.75" Salvaged in curbed area and at each end to match existing bit	LF x 25' wide	
Volume of salvaged reclaim material =	5 CY (CV)	6" salvage in areas of subgrade correction, if any	10 LF x 25' wide	
Total Salvaged Reclaim =	64 CY (CV)	Available material to be re-used on-site		
Salvaged Reclaim Required				
Volume required =	0 CY (CV)	5" minimum - areas of subgrade excavation		
Volume required =	29 CY (CV)	Backfill for subgrade correction area (corresponds to assumed correction volume)		
Volume required =	5 CY (CV)	5"- areas of subgrade corrections		
Total Salvaged Reclaim / Class 5 Required	34 CY (CV)			
Aggregate Base Class 5 Required				
Volume required =	10 CY (CV)	Driveway replacements		
Total Class 5 Required	10 CY (CV)			
Subgrade Excavation				
Volume of subgrade exc. =	0 CY (EV)	Areas of lowering of roadway profile		
Volume of subgrade exc. =	29 CY (EV)	Subgrade correction areas. Assume 3' depth in correction areas, if any found.		
Total Salvaged Reclaim =	29 CY (EV)			
Common Excavation				
Volume of common exc. =	9 CY (EV)	Miscellaneous excavation for driveway apron replacements		
Volume of common exc. =	80 CY (EV)	Excavate 3' wide x 3" deep along existing bit edge prior to reclaiming. Haul out and dispose of material.		
Volume of common exc. =	5 CY (EV)	Excavate culvert aprons to drain as necessary		
Total Common Excvatation =	94 CY (EV)			
Topsoil Borrow	120 CY (CV)	Length x 2 x 4' wide x 3" deep. Utilize any salvaged material if suitable. Place with shouldering machine.		

EARTHWORK SUMMARY**

Salvage Reclaim Material	64 CY (CV)	
Volume of salvaged reclaim	100 CY (LV)	
Place Salvaged Reclaim Material	40 CY (CV)	For replacement of salvaged reclaim in areas of profile lowering or subgrade correction
Volume of salvaged reclaim material to replace =		
Reclaimed Aggregate Base Balance		
Volume of salvaged reclaim material available =	64 CY (CV)	
Volume of required reclaim material =	34 CY (CV)	
Balance of reclaim material =	30 CY (CV)	
	50 CY (LV)	Haul out and dispose of excess. Excess property of contractor
Common Excavation	100 CY (EV)	Haul out and dispose of unsuitable and excess material off-site.
Subgrade Excavation	30 CY (EV)	Haul out and dispose of unsuitable and excess material off-site.
Aggregate Base Class 5	20 Tons	
Topsoil Borrow	120 CY (CV)	Place on shoulder with shouldering machine after wear course paved.
	170 CY (LV)	
Excess Excavation Material to Dispose of Off-Site	150 CY (EV)	Excess reclaim, and assumed 85% of common exc material and subgrade exc material
	200 CY (LV)	

** quantities for pay items are rounded to nearest 10

Swell Factors
EV to LV = 1.3
LV to CV = 1.4
LV to CV = 1.5 (For reclaimed material)
1 CY Class 5 = 2 tons (147 #/CF)

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME

DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
BIRCHWOOD POND
CITY PROJECT 26-11C

EARTHWORK SUMMARY

GENERAL NOTES:

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.
CITY OF ANDOVER 2026 UTILITY AND STREET CONSTRUCTION SPECIFICATIONS SHALL APPLY.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE 38–22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO AND BE INSTALLED IN ACCORDANCE WITH THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD)" AND THE "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL", NEWEST ADDITIONS.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE EXCAVATING CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR IS REQUIRED TO CALL GOPHER ONE CALL AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION. (651–454–2000)

CONSTRUCTION NOTES:

ROAD WORK AHEAD SIGNS SHALL BE MAINTAINED AT ALL INTERSECTING ROADS TO THE PROJECT. TYPE B CHANNELIZERS SHALL BE USED IN ALL NECESSARY LOCATIONS. TRAIL CLOSED SIGNS ON TYPE III BARRICADES SHALL BE PLACED AT ALL LOCATIONS IMPACTED BY PEDESTRIAN RAMP/SIDEWALK/TRAIL IMPROVEMENTS.

CONSTRUCTION SHALL BE STAGED SUCH THAT TRAFFIC IS MAINTAINED AT ALL TIMES. CONTRACTOR SHALL USE FLAG PERSON, IF NEEDED (INCIDENTAL TO TRAFFIC CONTROL).

COMPACTION OF ALL BITUMINOUS MIXTURE SHALL BE BY THE "SPECIFIED DENSITY METHOD" EXCEPT FOR PATCHES AND TRAILS, WHICH SHALL BE BY THE "ORDINARY COMPACTION METHOD".

THE CONTRACTOR SHALL USE FLAG PERSON'S AND APPROPRIATE TRAFFIC CONTROL DEVICES TO DIRECT TRAFFIC AT INTERSECTING COUNTY ROADS. ALL TRAFFIC CONTROL MUST BE ACCEPTABLE TO THE ANOKA COUNTY HIGHWAY DEPARTMENT. CONTRACTOR SHALL APPLY FOR A PERMIT FOR WORKING WITHIN ANOKA COUNTY RIGHT OF WAY. PROVIDE A COPY OF COUNTY PERMIT TO CITY ENGINEER.

ABSENT A ROAD CLOSURE, RECONSTRUCTION SHALL BE PERFORMED IN A MANNER TO ALLOW LOCAL TRAFFIC TO BE MAINTAINED TO A MINIMUM OF HALF THE ROADWAY WIDTH. THE CONTRACTOR SHALL USE FLAG PERSON'S TO DIRECT TRAFFIC AS NEEDED.

CONTRACTOR SHALL PROVIDE 3 DAY NOTICE PRIOR TO POTENTIAL ROAD CLOSURE FOR UNDERGROUND UTILITY CONSTRUCTION. TYPE 3 BARRICADES WITH "ROAD CLOSED" SHALL BE INSTALLED ON BOTH SIDES OF UTILITY CONSTRUCTION ACTIVITY. STAGE CONSTRUCTION TO ALLOW FOR LOCAL RESIDENT ACCESS AS NEEDED.

DURING ALL ASPECTS OF CONSTRUCTION DRIVEWAYS SHALL BE RAMPED WITH GRAVEL IN A TIMELY MANNER TO PROVIDE RESIDENTS ACCESS. UPON THREE DAYS OF CURE, CONC. CURBING AT DRIVEWAYS SHALL BE BACKFILLED & RAMPED WITH GRAVEL TO PROVIDE ACCESS.

DURING THE CONSTRUCTION OF CONC. CURB & DRIVEWAYS, THE CONTRACTOR SHALL COORDINATE WITH ENGINEER TO NOTIFY RESIDENTS OF PENDING CONSTRUCTION ACTIVITY. A THREE DAY NOTICE IS REQUIRED PRIOR TO POURING CONC. CURB & DRIVEWAYS. IMMEDIATELY UPON COMPLETION THE ROADWAY SHALL BE GRADED TO ALLOW RESIDENTS TO PARK ON STREET ADJACENT TO THEIR PROPERTY.

CONCRETE CURBING SHALL BE KNOCKED DOWN AT ALL DRIVEWAY ENTRANCES (INCIDENTAL). CONSTRUCT B618 C&G ON ALL RADII, CATCH BASIN LOCATIONS & ADDITIONAL LOCATIONS AS NOTED ON PLAN. (PAID AS SURMOUNTABLE C&G).

EXISTING MAILBOXES SHALL BE SALVAGED AND REINSTALLED WHERE CALLED OUT IN PLANS. DURING CONSTRUCTION TEMPORARY MAILBOXES SHALL BE PLACED NEAR THE ORIGINAL MAILBOX LOCATION. THE TEMPORARY MAILBOXES SHALL BE MOUNTED ON BARRELS TO BE PORTABLE. PROPERTY OWNER MAY SUPPLY NEW POST AND/OR BOX TO BE PLACED IN THE ORIGINAL LOCATION.

RESIDENTS WILL BE ASKED TO MARK IRRIGATION PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING SYSTEMS. WHERE BOULEVARD IRRIGATION MODIFICATIONS ARE REQUIRED THE IRRIGATION LINES/HEADS SHALL BE REMOVED & DISPOSED. REMAINING LINES SHALL BE PLUGGED & MARKED. ALL REPLACED IRRIGATION LINES/HEADS SHALL BE WITH NEW COMMERCIAL GRADE MATERIALS. CONTRACTOR WILL BE PAID A UNIT PER HEAD REPLACED. EXISTING LOCATIONS SHOWN ON PLANS ARE ONLY SCHEMATIC. ALL WORK SHALL BE BY AN IRRIGATION CONTRACTOR LICENSED TO WORK IN THE CITY OF ANDOVER.

THE CONTRACTOR SHALL PROTECT, SALVAGE AND REPAIR ALL EXISTING LANDSCAPING IN KIND. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

THE FOLLOWING CONSTRUCTION ITEM'S SHALL OCCUR PRIOR TO COMMENCING THE RECLAIMING OPERATION. INSTALL TRAFFIC CONTROL, REMOVE STREET SIGN'S (CITY), INSTALL TEMP. EROSION CONTROL MEASURES, IDENTIFY & CAP IRRIGATION SYSTEMS IN AREAS OF CURB REPLACEMENT, SALVAGE LANDSCAPING, REMOVE EX. & INSTALL TEMP. MAILBOX'S WHERE IDENTIFIED IN PLANS.

MACHINE CURB ON STRETCHES OVER 100'. ALSO, SALVAGE AND INSTALL MAILBOXES IN AREAS WHERE THERE WILL BE MACHINE CURB.

EXISTING DRIVEWAYS SHALL BE SAWCUT AS DIRECTED BY ENGINEER, REMOVED AND DISPOSED OF OFF SITE . BITUMINOUS AND CONCRETE DRIVEWAYS SHALL BE REPLACED IN KIND. GRAVEL DRIVEWAYS SHALL BE REPLACED WITH A 10–15' BITUMINOUS APRON. ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITY SHALL BE SAWCUT AND REPAIRED IN KIND AT THE CONTRACTORS EXPENSE.

WHERE SUBGRADE EXCAVATION AND/OR UTILITY WORK OCCURS WITHIN THE ROADWAY THE RECLAIMED BASE SHALL BE SALVAGED & REPLACED PER THE TYPICAL SECTION (INCIDENTAL). THIS WORKSHALL BE DONE IN A MANNER SO RECLAIMED BASE IS NOT CONTAMINATED WITH SPOIL MATERIAL. COMPACTION OF THE RECLAIMED BASE MATERIAL SHALL BE ACHIEVED BY THE PENETRATION INDEX METHOD IN ACCORDANCE WITH MNDOT 2211.3C3. THE BOTTOM OF THE SUBCUTS SHALL BE SHAPED AND COMPACTED BY THE "QUALITY COMPACTION METHOD"

THE CONTRACTOR SHALL STRIP AND STOCKPILE EXISTING TOPSOIL MATERIAL, IF ANY, FOR RE–USE (LITTLE IS EXPECTED). RE–USED TOPSOIL SHALL BE CLEAN WITH NO SOD CHUNKS / EXISTING VEGETATION. TOPSOIL STRIPING, IF ANY, SHALL BE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.

SELECT EXCAVATED MATERIALS SHALL BE UTILIZED TO THE FULLEST EXTENT WITHIN THE PROJECT LIMITS TO BACKFILL PROPOSED CURB & GUTTERS. ANY EXCESS MATERIAL, OR MATERIAL WITH DEBRIS / SOD CHUCKS SHALL BE DISPOSED OF OFF–SITE.

EXCAVATION AND DISPOSAL OF SOIL/TURF MATERIAL SHALL BE INCIDENTAL TO REMOVAL PAY ITEMS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL MINIMIZE EXCAVATION AND DISTURBANCE ALONG THE PROJECT CORRIDOR.

ALL DISTURBED AREAS SHALL BE BACKFILLED WITH SALVAGED TOPSOIL, IF ANY. DISTURBED AREAS SHALL BE RESTORED WITH TOPSOIL, FERTILIZER, SEED, & HYDRAULIC MULCH MATRIX. ALL RESTORATION SHALL OCCUR WITHIN 7 DAYS OF GRADING COMPLETION. SOIL STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF ROUGH GRADING OR INACTIVITY (INCIDENTAL). TOPSOIL SHALL BE PLACED WITH A SHOULDERING MACHINE & RESTORATION COMPLETED IN AREAS WITH DITCH SECTIONS AFTER PAVING OF WEAR COURSE UNLESS OTHERWISE APPROVED BY THE ENGINEER IN THE FIELD.

ALL EXISTING SIGNS SHALL BE REMOVED AND REPLACED BY THE ANDOVER SIGN DEPARTMENT UNLESS CALLED OUT OTHERWISE IN THE PLANS. COORDINATE WITH MINIMUM 48 HOUR NOTICE WITH ENGINEER IN FIELD.

CONCRETE WASHOUT SHALL BE CONTAINED WITHIN CONCRETE TRUCKS, NOT DISPOSED OF ON–SITE.

CONTRACTOR SHALL SWEEP ALL MATERIAL OFF ADJACENT STREETS DUE TO CONSTRUCTION ACTIVITY, DAILY AS NECESSARY (INCIDENTAL).

CONTRACTOR IS REQUIRED TO REPAIR AND MAINTAIN ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES (INCIDENTAL).

CONTRACTOR SHALL REMOVE ALL TEMPORARY SEDIMENT CONTROL PRACTICES ONCE VEGETATION IS RE–ESTABLISHED (INCIDENTAL).

REFER TO SWPPP IN PROJECT SPECIFICATION FOR ADDITIONAL CONSTRUCTION/EROSION CONTROL REQUIREMENTS.

WHEN CONNECTING NEW PAVED SURFACING TO ANY IN–PLACE PAVEMENTS, CUT VERTICALLY TO THE BOTTOM OF THE IN–PLACE PAVEMENTS OR TO THE BOTTOM OF THE NEW SURFACING, WHICHEVER IS DEEPER, THEN AT 2(V):1(H) SLOPE TO THE TOP OF THE SUBGRADE.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

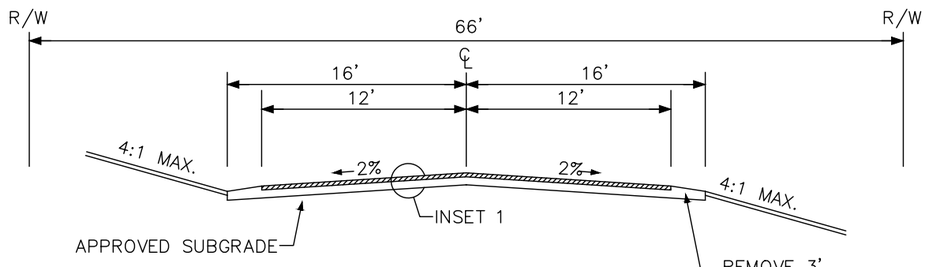
SIGNATURE David D. Berkowitz
DAVID D. BERKOWITZ
TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

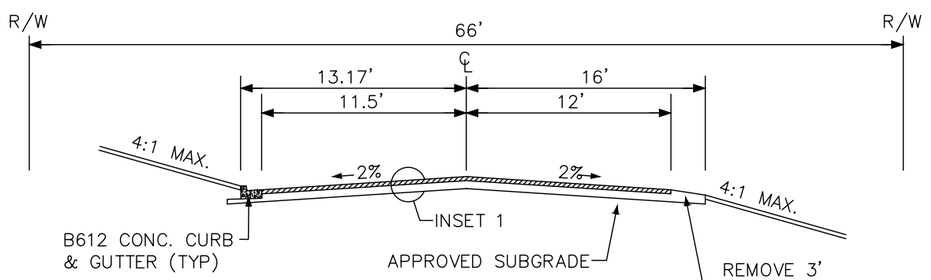
2026 FULL DEPTH RECLAMATION
BIRCHWOOD POND
CITY PROJECT 26–11C

CONSTRUCTION NOTES

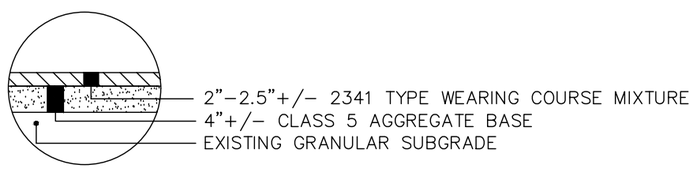
EXISTING



TYPICAL SECTION
0+31 TO 1+31 & 3+21 TO 13+92



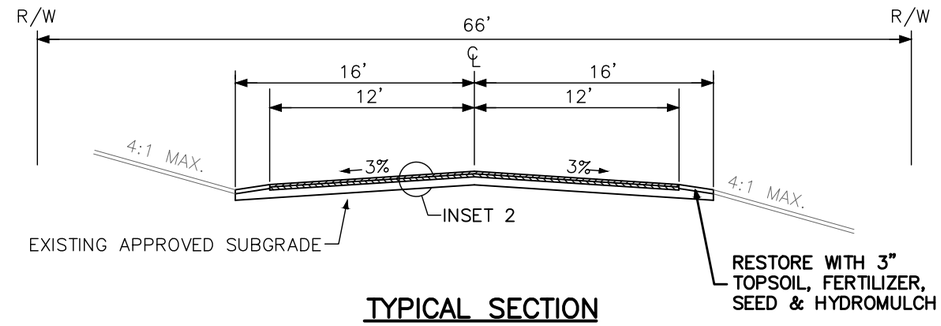
TYPICAL SECTION
1+31 TO 3+21



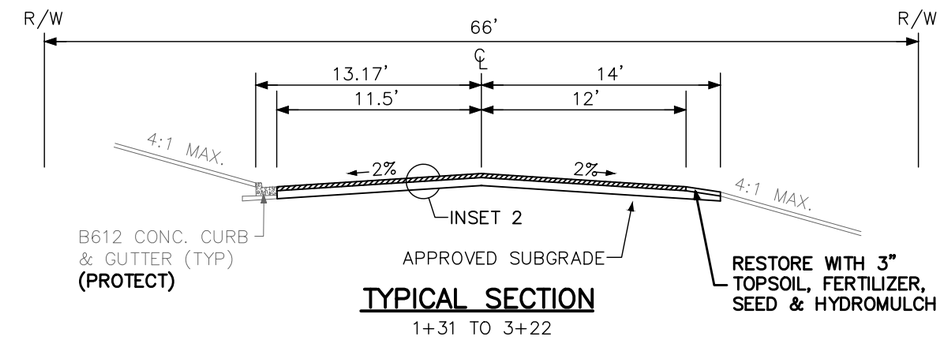
INSET 1

NOTE:
RECLAIM 7" +/– DEPTH OR AS NECESSARY TO PROVIDE A HOMOGENOUS MIXTURE MEETING GRADATION SPECIFICATION IN MnDOT 2215 WITH 100% PASSING A 3" SIEVE.

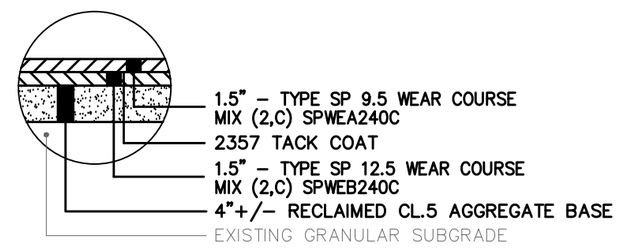
PROPOSED



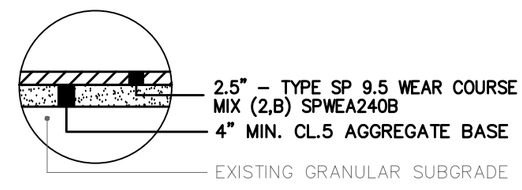
TYPICAL SECTION
0+31 TO 1+31 & 3+22 TO 13+92



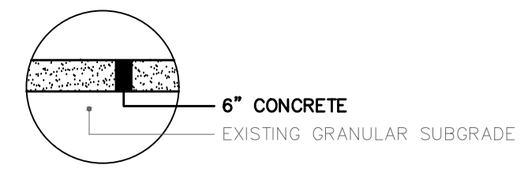
TYPICAL SECTION
1+31 TO 3+22



INSET 2



BITUMINOUS DRIVEWAYS



CONCRETE DRIVEWAYS

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE David D. Berkowitz DAVID D. BERKOWITZ TYPED OR PRINTED NAME

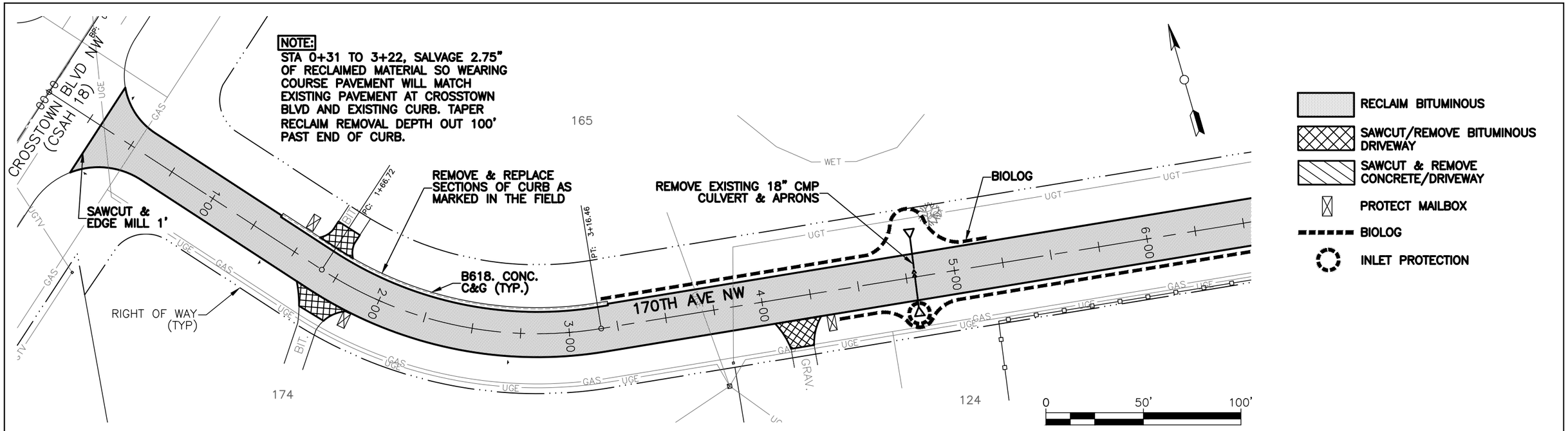
DATE 3/3/2026 LIC. NO. 26757

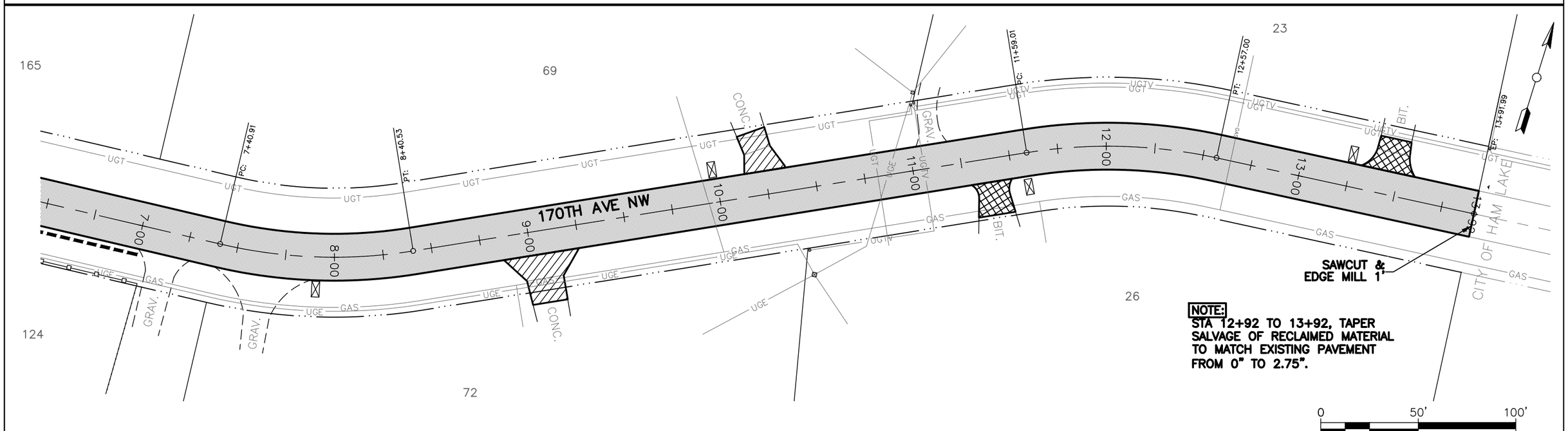
CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
BIRCHWOOD POND
CITY PROJECT 26–11C

TYPICAL SECTIONS

SHEET NO. 29 OF 46 SHEETS





NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

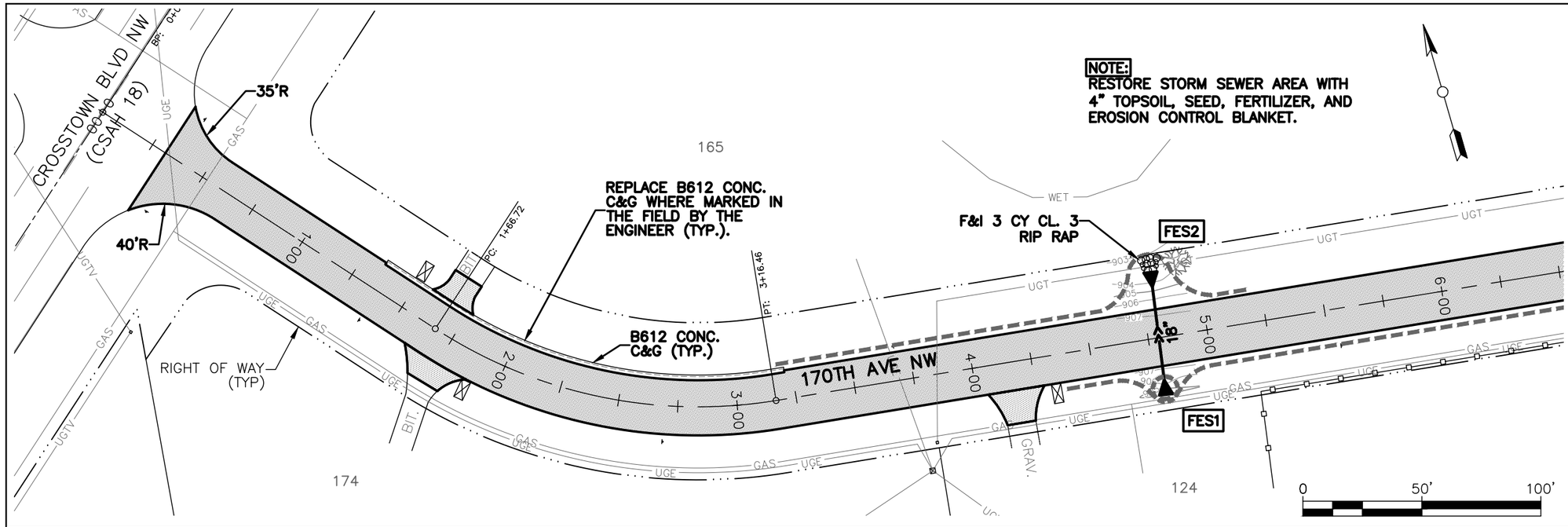
SIGNATURE David D. Berkowitz
DAVID D. BERKOWITZ
TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

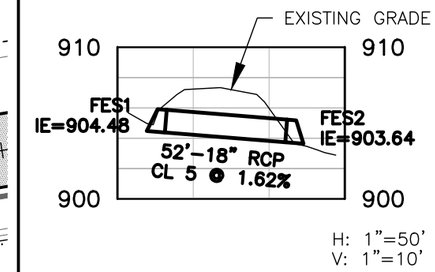
CITY OF ANDOVER

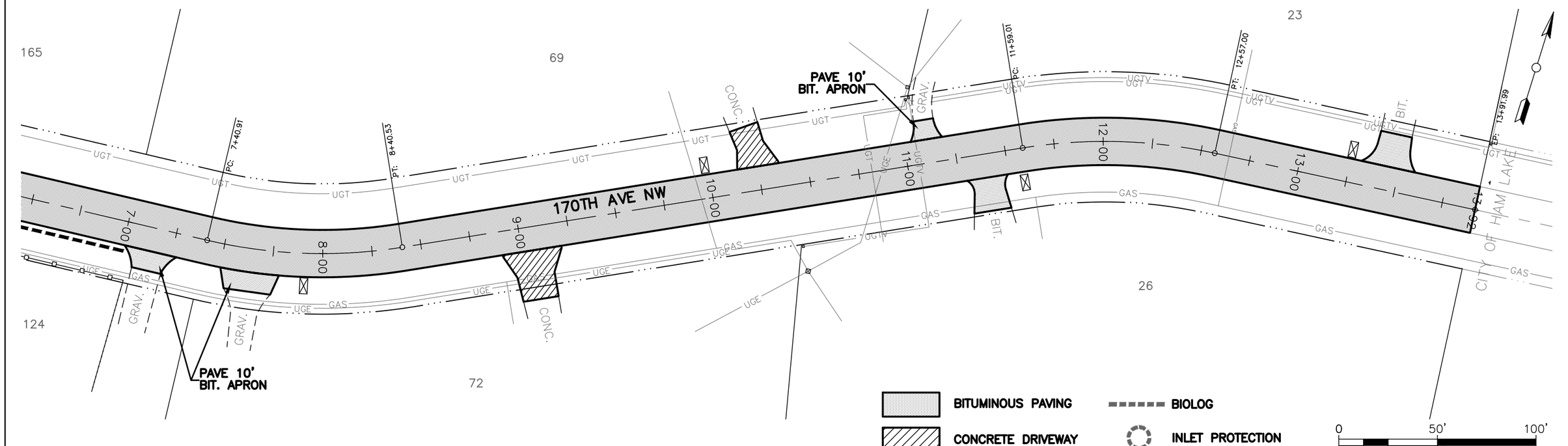
2026 FULL DEPTH RECLAMATION
BIRCHWOOD POND
CITY PROJECT 26-11C

REMOVALS

SHEET NO. 30 OF 46 SHEETS







NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

SIGNATURE David D. Berkowitz DAVID D. BERKOWITZ TYPED OR PRINTED NAME

DATE 3/3/2026 LIC. NO. 26757

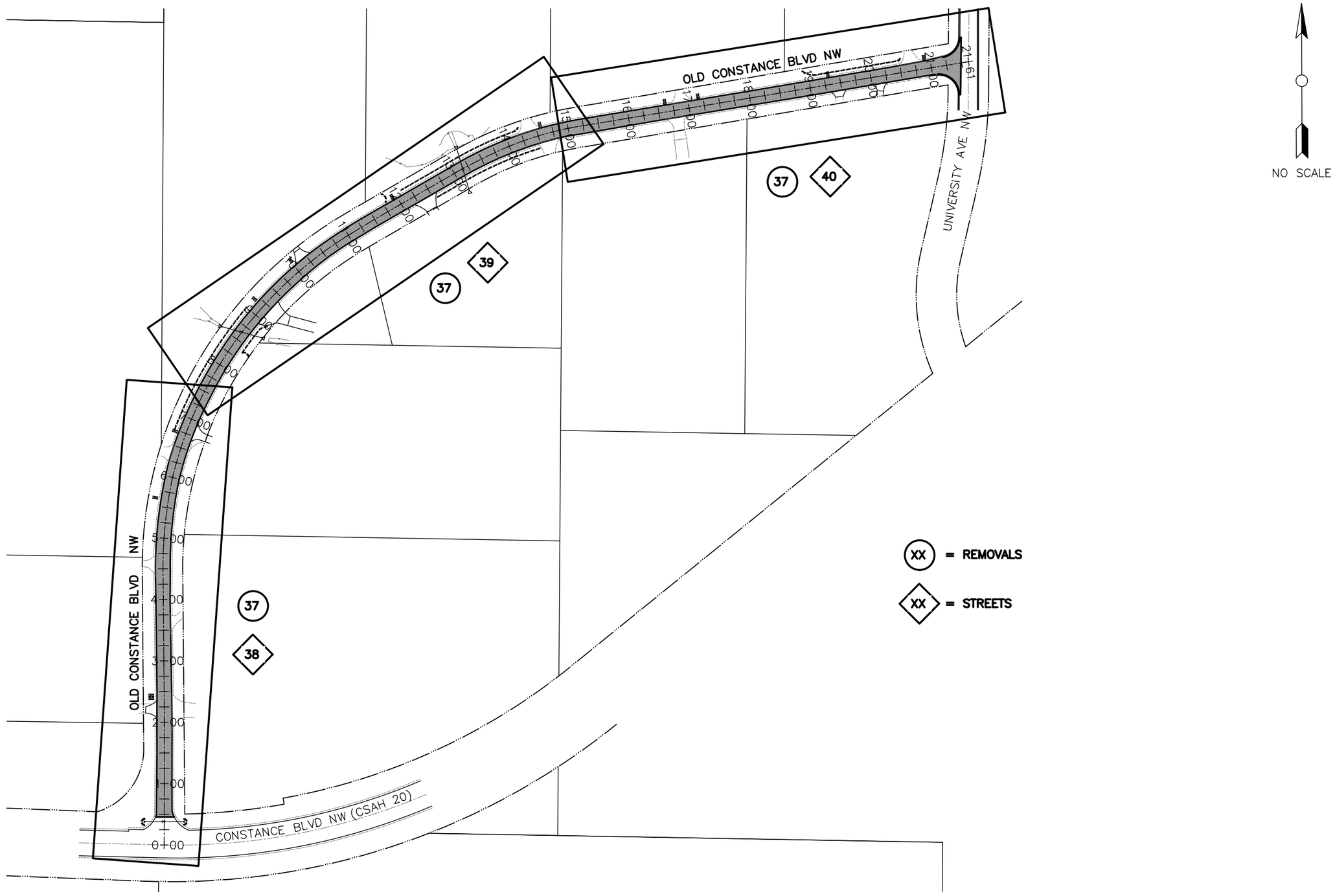
CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION – BIRCHWOOD POND

CITY PROJECT 26-11C

STREET & CULVERT PLAN/PROFILE

SHEET NO. 31 OF 46 SHEETS



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

SIGNATURE David D. Berkowitz
DAVID D. BERKOWITZ
TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
OLD CONSTANCE BLVD NW
CITY PROJECT 26-11D

PROJECT LAYOUT

SHEET NO. 32 OF 46 SHEETS

2026 Full Depth Reclamation: Old Constance Blvd
City Project: 26-11D
STATEMENT OF ESTIMATED QUANTITIES

NOTES	ITEM NO.		DESCRIPTION	UNIT	TOTAL ESTIMATED PROJECT QUANTITIES EST. QUAN.	ACT. QUAN.
	301	2021.501	Mobilization	LS	1.00	
1	302	2104.503	Sawing Bit Pavement (Full Depth)	LF	320	
1	303	2104.518	Remove Bituminous Pavement	SF	2,450	
2	304	2104.602	Salvage and Reinstall Mailbox	EA	13	
3	305	2105.607	Common Excavation (EV)	CY	140	
4	306	2105.607	Subgrade Excavation (EV)	CY	20	
5	307	2105.607	Salvage Reclaim Material (LV)	CY	690	
6	308	2112.519	Subgrade Preparation	RDST	21.1	
7	309	2130.523	Water	MGAL	15	
8	310	2211.509	Aggregate Base Class 5	TN	110	
9	311	2211.607	Place Salvaged Reclaim Material (CV)	CY	20	
	312	2215.504	Full Depth Reclamation	SY	5,910	
	313	2232.504	Mill Bituminous Surface (1.5")	SY	20	
	314	2357.506	Bituminous Material For Tack Coat	Gal	290	
	315	2360.509	Type SP 9.5 Wearing Course Mix (2,C)	TN	550	
10	316	2360.509	Type SP 9.5 Bit Mix for Patching (2,B)	TN	120	
	317	2360.509	Type SP 12.5 Wearing Course Mixture (2,C)	TN	570	
11	318	2504.602	Irrigation System Modifications	EA	5	
	319	2563.601	Traffic Control	LS	1.00	
	320	2573.503	Sediment Control Log Type Wood Chip	LF	900	
	321	2574.507	Loam Topsoil Borrow (LV)	CY	260	
12	322	2574.508	Fertilizer Type 3	LB	175	
13	323	2575.505	Weed Spraying	ACRE	0.50	
	324	2575.505	Seeding	ACRE	0.50	
	325	2575.508	Hydraulic Mulch Matrix	LB	1,250	
	326	2575.508	Seed Residential Turfgrass	LB	100	
	327	2582.503	4" Solid Line Paint	LF	4,150	
	328	2582.503	4" Double Solid Line Paint	LF	2,100	

BASIS OF ESTIMATED QUANTITIES		
Bituminous Wear Course	120	#/SY/inch
Bituminous Non-Wear Course	120	#/SY/inch
Aggregate Base, Class 5	110	#/SY/inch
Tack Coat	0.35	Gal/SY
Hydraulic Mulch Matrix	2500	#/acre
Fertilizer Type 3 (Analysis 22-5-10)	350	#/acre
Seed Residential Turfgrass	200	#/acre

C.P. 26-11D Notes:

1. Regardless of depth.
2. Includes salvage and reinstall of existing mailbox, and temporary placement of mailbox in barrel at each existing location during construction.
3. For all excavation except subgrade excavation. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
4. For exc. beneath reclaimed agg. base where profile lowered or unsuitable material encounted. Dispose excess and/or unsuitable material off-site. See Earthwork Tabulation.
5. For excavating/hauling/stockpiling reclaim material salvaged for subgrade exc. and/or excess material. Excess property of contractor. See Earthwork Tabulation.
6. Includes grading reclaim material from areas of excess to areas requiring material (under curb, along shoulder, increased crown), fine grading, and compacting reclaimed agg. base.
7. For dust control only as directed by the engineer. Water to achieve compaction shall be incidental.
8. Item includes furnishing, hauling, placing and compacting. See Earthwork Tabulation.
9. Includes loading/hauling/placing/grading/compacting salvaged reclaim material in areas of subgrade exc. or correction.
10. Item shall be used for patching of bituminous trails and driveway replacements.
11. Based upon number or irrigation heads removed / replaced. Item shall include all items necessary to temporarily cap existing systems, replace damaged lines, heads, adjust systems, and return them to pre-project condition or better. Work shall be performed by a licensed irrigation contractor.
12. Analysis 22-5-10.
13. Only to be used if requested by engineer prior to or during site restoration.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME

DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
OLD CONSTANCE BLVD NW
CITY PROJECT 26-11D

STATEMENT OF ESTIMATED QUANTITIES

EARTH WORK TABLE

City Project 26-11D: Old Constance Blvd

Aggregate Base Class 7 (Reclaim) Roadway Length = 2,105 LF

Existing 3.5"-6" +/- of bituminous and 6" +/- aggregate base based on existing typical section
Reclaim 10"-12"+/- deep

Salvage Reclaim Material				
Volume of salvaged reclaim material =	0	CY (CV)	7" salvage in areas of subgrade / profile lowering	0 LF x 25' wide
Volume of salvaged reclaim material =	3	CY (CV)	7" salvage in areas of subgrade correction, if any	5 LF x 25' wide
Volume of salvaged reclaim material =	451	CY (CV)	2.75" salavage over entire reclaimed area	
Total Salvaged Reclaim =	454	CY (CV)	Available material to be re-used on-site	
Salvaged Reclaim Required				
Volume required =	0	CY (CV)	5" minimum - areas of subgrade excavation	
Volume required =	14	CY (CV)	Backfill for subgrade correction area (corresponds to assumed correction volume)	
Volume required =	2	CY (CV)	5"- areas of subgrade corrections	
Total Salvaged Reclaim / Class 5 Required	16	CY (CV)		
Aggregate Base Class 5 Required				
Volume required =	51	CY (CV)	Driveway replacements	
Total Class 5 Required	51	CY (CV)		
Subgrade Excavation				
Volume of subgrade exc. =	0	CY (EV)	Areas of lowering of roadway profile	
Volume of subgrade exc. =	14	CY (EV)	Subgrade correction areas. Assume 3' depth in correction areas, if any found.	
Total Salvaged Reclaim =	14	CY (EV)		
Common Excavation				
Volume of common exc. =	17	CY (EV)	Miscellaneous excavation for driveway apron replacements	
Volume of common exc. =	120	CY (EV)	Excavate 3' wide x 3" deep along existing bit edge prior to reclaiming. Haul out and dispose of material.	
Total Common Excvatation =	137	CY (EV)		
Topsoil Borrow	180	CY (CV)	Length x 2 x 4' wide x 3" deep. Utilize any salvaged material if suitable. Place with shouldering machine.	

EARTHWORK SUMMARY**

Salvage Reclaim Material	454	CY (CV)	
Volume of salvaged reclaim	690	CY (LV)	
Place Salvaged Reclaim Material	20	CY (CV)	For replacement of salvaged reclaim in areas of profile lowering or subgrade correction
Reclaimed Aggregate Base Balance			
Volume of salvaged reclaim material available =	454	CY (CV)	
Volume of required reclaim material =	16	CY (CV)	
Balance of reclaim material =	438	CY (CV)	
	660	CY (LV)	Haul out and dispose of excess. Excess property of contractor
Common Excavation	140	CY (EV)	Haul out and dispose of unsuitable and excess material off-site.
Subgrade Excavation	20	CY (EV)	Haul out and dispose of unsuitable and excess material off-site.
Aggregate Base Class 5	110	Tons	
Topsoil Borrow	180	CY (CV)	Place on shoulder with shouldering machine after wear course paved.
	260	CY (LV)	
Excess Excavation Material to Dispose of Off-Site	580	CY (EV)	Excess reclaim, and assumed 85% of common exc material and subgrade exc material
	760	CY (LV)	

** quantities for pay items are rounded to nearest 10

Swell Factors
EV to LV = 1.3
LV to CV = 1.4
LV to CV = 1.5 (For reclaimed material)
1 CY Class 5 = 2 tons (147 #/CF)

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE DAVID D. BERKOWITZ TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
OLD CONSTANCE BLVD NW
CITY PROJECT 26-11D

EARTHWORK SUMMARY

SHEET NO. 34 OF 46 SHEETS

GENERAL NOTES:

THE 2025 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.
CITY OF ANDOVER 2026 UTILITY AND STREET CONSTRUCTION SPECIFICATIONS SHALL APPLY.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF ASCE 38–22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO AND BE INSTALLED IN ACCORDANCE WITH THE "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD)" AND THE "TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL", NEWEST ADDITIONS.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE EXCAVATING CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR IS REQUIRED TO CALL GOPHER ONE CALL AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION. (651–454–2000)

CONSTRUCTION NOTES:

ROAD WORK AHEAD SIGNS SHALL BE MAINTAINED AT ALL INTERSECTING ROADS TO THE PROJECT. TYPE B CHANNELIZERS SHALL BE USED IN ALL NECESSARY LOCATIONS.

CONSTRUCTION SHALL BE STAGED SUCH THAT TRAFFIC IS MAINTAINED AT ALL TIMES. CONTRACTOR SHALL USE FLAG PERSON, IF NEEDED (INCIDENTAL TO TRAFFIC CONTROL).

COMPACTION OF ALL BITUMINOUS MIXTURE SHALL BE BY THE "SPECIFIED DENSITY METHOD" EXCEPT FOR PATCHES AND TRAILS, WHICH SHALL BE BY THE "ORDINARY COMPACTION METHOD".

THE CONTRACTOR SHALL USE FLAG PERSON'S AND APPROPRIATE TRAFFIC CONTROL DEVICES TO DIRECT TRAFFIC AT INTERSECTING COUNTY ROADS. ALL TRAFFIC CONTROL MUST BE ACCEPTABLE TO THE ANOKA COUNTY HIGHWAY DEPARTMENT. CONTRACTOR SHALL APPLY FOR A PERMIT FOR WORKING WITHIN ANOKA COUNTY RIGHT OF WAY. PROVIDE A COPY OF COUNTY PERMIT TO CITY ENGINEER.

ABSENT A ROAD CLOSURE, RECONSTRUCTION SHALL BE PERFORMED IN A MANNER TO ALLOW LOCAL TRAFFIC TO BE MAINTAINED TO A MINIMUM OF HALF THE ROADWAY WIDTH. THE CONTRACTOR SHALL USE FLAG PERSON'S TO DIRECT TRAFFIC AS NEEDED.

CONTRACTOR SHALL PROVIDE 3 DAY NOTICE PRIOR TO POTENTIAL ROAD CLOSURE FOR UNDERGROUND UTILITY CONSTRUCTION. TYPE 3 BARRICADES WITH "ROAD CLOSED" SHALL BE INSTALLED ON BOTH SIDES OF UTILITY CONSTRUCTION ACTIVITY. STAGE CONSTRUCTION TO ALLOW FOR LOCAL RESIDENT ACCESS AS NEEDED.

DURING ALL ASPECTS OF CONSTRUCTION DRIVEWAYS SHALL BE RAMPED WITH GRAVEL IN A TIMELY MANNER TO PROVIDE RESIDENTS ACCESS. UPON THREE DAYS OF CURE, CONC. CURBING AT DRIVEWAYS SHALL BE BACKFILLED & RAMPED WITH GRAVEL TO PROVIDE ACCESS.

DURING THE CONSTRUCTION OF CONC. CURB & DRIVEWAYS, THE CONTRACTOR SHALL COORDINATE WITH ENGINEER TO NOTIFY RESIDENTS OF PENDING CONSTRUCTION ACTIVITY. A THREE DAY NOTICE IS REQUIRED PRIOR TO POURING CONC. CURB & DRIVEWAYS. IMMEDIATELY UPON COMPLETION THE ROADWAY SHALL BE GRADED TO ALLOW RESIDENTS TO PARK ON STREET ADJACENT TO THEIR PROPERTY.

CONSTRUCT B618 C&G ON ALL RADII, CATCH BASIN LOCATIONS & ADDITIONAL LOCATIONS AS NOTED ON PLAN. (PAID AS SURMOUNTABLE C&G).

EXISTING MAILBOXES SHALL BE SALVAGED AND REINSTALLED WHERE CALLED OUT IN PLANS. DURING CONSTRUCTION TEMPORARY MAILBOXES SHALL BE PLACED NEAR THE ORIGINAL MAILBOX LOCATION. THE TEMPORARY MAILBOXES SHALL BE MOUNTED ON BARRELS TO BE PORTABLE. PROPERTY OWNER MAY SUPPLY NEW POST AND/OR BOX TO BE PLACED IN THE ORIGINAL LOCATION.

RESIDENTS WILL BE ASKED TO MARK IRRIGATION PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING SYSTEMS. WHERE BOULEVARD IRRIGATION MODIFICATIONS ARE REQUIRED THE IRRIGATION LINES/HEADS SHALL BE REMOVED & DISPOSED. REMAINING LINES SHALL BE PLUGGED & MARKED. ALL REPLACED IRRIGATION LINES/HEADS SHALL BE WITH NEW COMMERCIAL GRADE MATERIALS. CONTRACTOR WILL BE PAID A UNIT PER HEAD REPLACED. EXISTING LOCATIONS SHOWN ON PLANS ARE ONLY SCHEMATIC. ALL WORK SHALL BE BY AN IRRIGATION CONTRACTOR LICENSED TO WORK IN THE CITY OF ANDOVER.

THE CONTRACTOR SHALL PROTECT, SALVAGE AND REPAIR ALL EXISTING LANDSCAPING IN KIND. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

THE FOLLOWING CONSTRUCTION ITEM'S SHALL OCCUR PRIOR TO COMMENCING THE RECLAIMING OPERATION. INSTALL TRAFFIC CONTROL, REMOVE STREET SIGN'S (CITY), INSTALL TEMP. EROSION CONTROL MEASURES, IDENTIFY & CAP IRRIGATION SYSTEMS IN AREAS OF CURB REPLACEMENT, SALVAGE LANDSCAPING, REMOVE EX. & INSTALL TEMP. MAILBOX'S WHERE IDENTIFIED IN PLANS.

EXISTING DRIVEWAYS SHALL BE SAWCUT AS DIRECTED BY ENGINEER, REMOVED AND DISPOSED OF OFF SITE. BITUMINOUS AND CONCRETE DRIVEWAYS SHALL BE REPLACED IN KIND. GRAVEL DRIVEWAYS SHALL BE REPLACED WITH A 10–15' BITUMINOUS APRON. ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITY SHALL BE SAWCUT AND REPAIRED IN KIND AT THE CONTRACTORS EXPENSE.

WHERE SUBGRADE EXCAVATION AND/OR UTILITY WORK OCCURS WITHIN THE ROADWAY THE RECLAIMED BASE SHALL BE SALVAGED & REPLACED PER THE TYPICAL SECTION (INCIDENTAL). THIS WORKSHALL BE DONE IN A MANNER SO RECLAIMED BASE IS NOT CONTAMINATED WITH SPOIL MATERIAL. COMPACTION OF THE RECLAIMED BASE MATERIAL SHALL BE ACHIEVED BY THE PENETRATION INDEX METHOD IN ACCORDANCE WITH MNDOT 2211.3C3. THE BOTTOM OF THE SUBCUTS SHALL BE SHAPED AND COMPACTED BY THE "QUALITY COMPACTION METHOD"

THE CONTRACTOR SHALL STRIP AND STOCKPILE EXISTING TOPSOIL MATERIAL, IF ANY, FOR RE–USE (LITTLE IS EXPECTED). RE–USED TOPSOIL SHALL BE CLEAN WITH NO SOD CHUNKS / EXISTING VEGETATION. TOPSOIL STRIPING, IF ANY, SHALL BE CONSIDERED INCIDENTAL.

SELECT EXCAVATED MATERIALS SHALL BE UTILIZED TO THE FULLEST EXTENT WITHIN THE PROJECT LIMITS TO BACKFILL PROPOSED CURB & GUTTERS. ANY EXCESS MATERIAL, OR MATERIAL WITH DEBRIS / SOD CHUCKS SHALL BE DISPOSED OF OFF–SITE.

EXCAVATION AND DISPOSAL OF SOIL/TURF MATERIAL SHALL BE INCIDENTAL TO REMOVAL PAY ITEMS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL MINIMIZE EXCAVATION AND DISTURBANCE ALONG THE PROJECT CORRIDOR.

ALL DISTURBED AREAS SHALL BE BACKFILLED WITH SALVAGED TOPSOIL, IF ANY. DISTURBED AREAS SHALL BE RESTORED WITH 4" (MINIMUM) TOPSOIL, SEED, FERTILIZER, AND HYDROMULCH. ALL RESTORATION SHALL OCCUR WITHIN 7 DAYS OF GRADING COMPLETION. SOIL STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF ROUGH GRADING OR INACTIVITY (INCIDENTAL). TOPSOIL SHALL BE PLACED WITH A SHOULDERING MACHINE & RESTORATION COMPLETED IN AREAS WITH DITCH SECTIONS AFTER PAVING OF WEAR COURSE UNLESS OTHERWISE APPROVED BY ENGINEER IN THE FIELD.

ALL EXISTING SIGNS SHALL BE REMOVED AND REPLACED BY THE ANDOVER SIGN DEPARTMENT UNLESS CALLED OUT OTHERWISE IN THE PLANS. COORDINATE WITH MINIMUM 48 HOUR NOTICE WITH ENGINEER IN FIELD.

CONCRETE WASHOUT SHALL BE CONTAINED WITHIN CONCRETE TRUCKS, NOT DISPOSED OF ON–SITE.

CONTRACTOR SHALL SWEEP ALL MATERIAL OFF ADJACENT STREETS DUE TO CONSTRUCTION ACTIVITY, DAILY AS NECESSARY (INCIDENTAL).

INSTALL INLET PROTECTION DEVICES ON ALL STORM SEWER STRUCTURES. PRIOR TO PLACING CASTINGS ON STORM SEWER STRUCTURES THE CONTRACTOR SHALL FOLLOW STANDARD DETAIL IN THE PLANS TO ALLOW FOR INFLOW INTO THE STORM SEWERS. ONCE CASTINGS ARE INSTALLED ON STORM SEWER STRUCTURES THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL STRUCTURES SUCH THAT SEDIMENT IS CAPTURED WITH A HIGH FLOW BYPASS. CLEAN AS NECESSARY.

CONTRACTOR IS REQUIRED TO REPAIR AND MAINTAIN ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES ACCORDING TO THE MPCA BEST MANAGEMENT PRACTICES MANUAL, SWPPP, AND THE MINNESOTA STORM WATER MANUAL (INCIDENTAL).

CONTRACTOR SHALL REMOVE ALL TEMPORARY SEDIMENT CONTROL PRACTICES ONCE VEGETATION IS RE–ESTABLISHED (INCIDENTAL).

REFER TO SWPPP IN PROJECT SPECIFICATION FOR ADDITIONAL CONSTRUCTION/EROSION CONTROL REQUIREMENTS.

WHEN CONNECTING NEW PAVED SURFACING TO ANY IN–PLACE PAVEMENTS, CUT VERTICALLY TO THE BOTTOM OF THE IN–PLACE PAVEMENTS OR TO THE BOTTOM OF THE NEW SURFACING, WHICHEVER IS DEEPER, THEN AT 2(V):1(H) SLOPE TO THE TOP OF THE SUBGRADE.

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

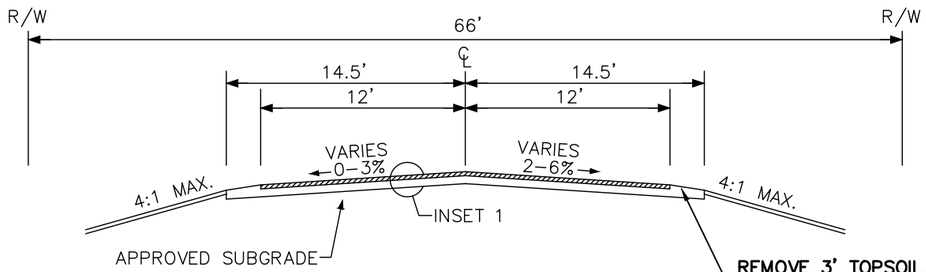
SIGNATURE — DAVID D. BERKOWITZ TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
OLD CONSTANCE BLVD NW
CITY PROJECT 26–11D

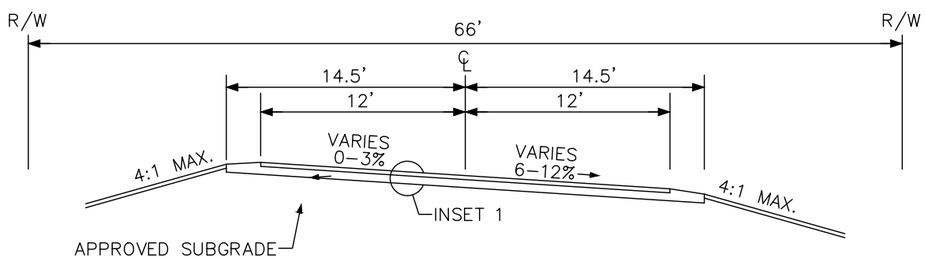
CONSTRUCTION NOTES

EXISTING



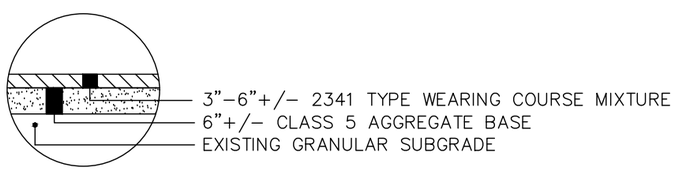
TYPICAL SECTION

0+45 TO 4+50 & 16+50 TO 21+49



TYPICAL SECTION

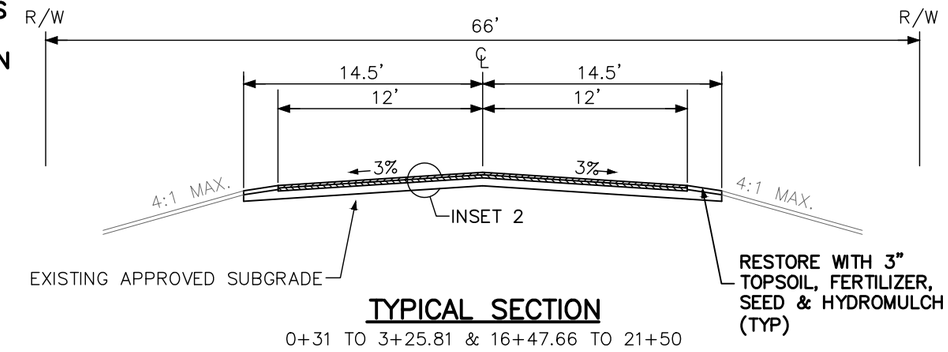
4+50 TO 16+50



INSET 1

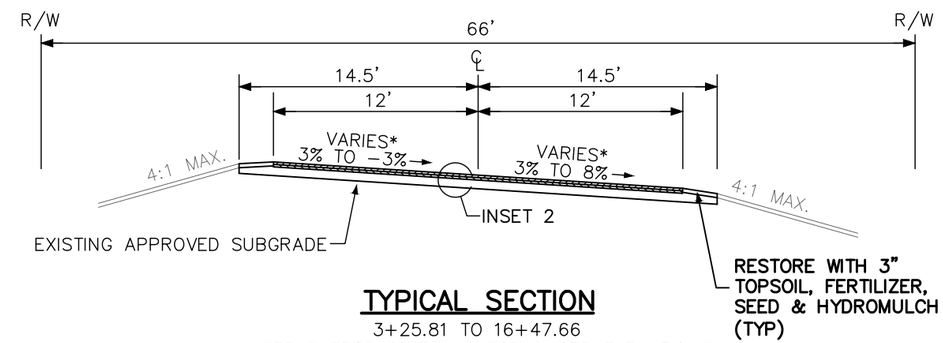
NOTE:
RECLAIM 12" +/– DEPTH OR AS NECESSARY TO PROVIDE A HOMOGENOUS MIXTURE MEETING GRADATION SPECIFICATION IN MnDOT 2215 WITH 100% PASSING A 3" SIEVE.

PROPOSED



TYPICAL SECTION

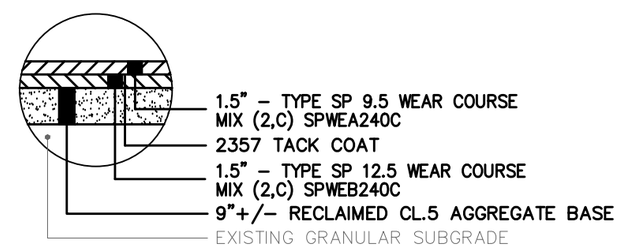
0+31 TO 3+25.81 & 16+47.66 TO 21+50



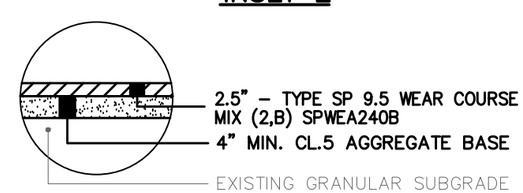
TYPICAL SECTION

3+25.81 TO 16+47.66

* SEE SHEETS 38 TO 40 FOR SUPER ELEVATIONS



INSET 2



BITUMINOUS DRIVEWAYS

NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE David D. Berkowitz DAVID D. BERKOWITZ TYPED OR PRINTED NAME

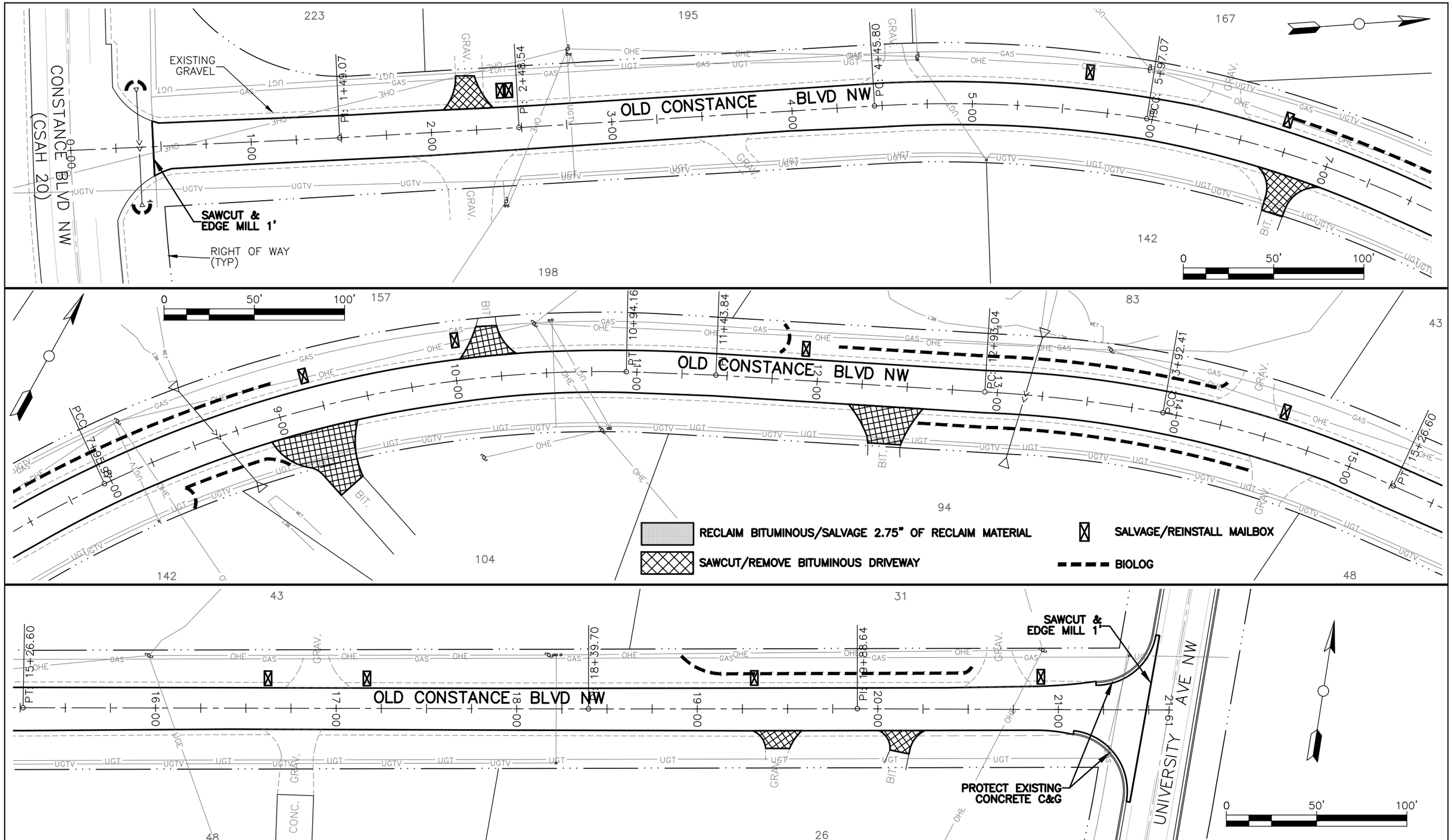
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
OLD CONSTANCE BLVD NW
CITY PROJECT 26–11D

TYPICAL SECTIONS

SHEET NO. 36 OF 46 SHEETS



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE David D. Berkowitz DAVID D. BERKOWITZ TYPED OR PRINTED NAME

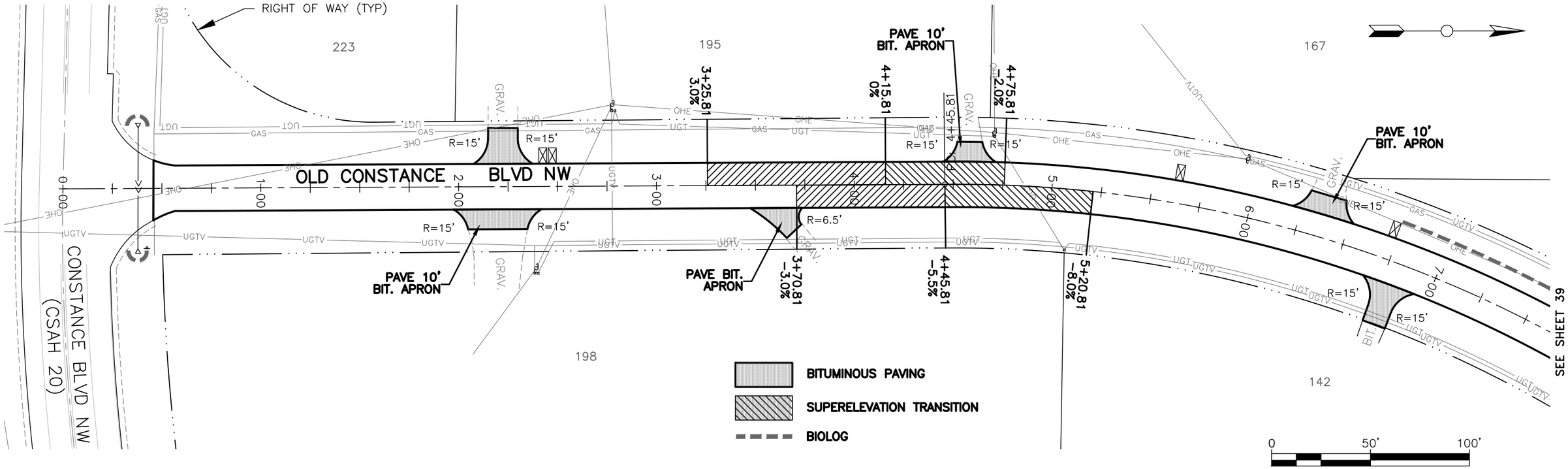
DATE 3/3/2026 LIC. NO. 26757

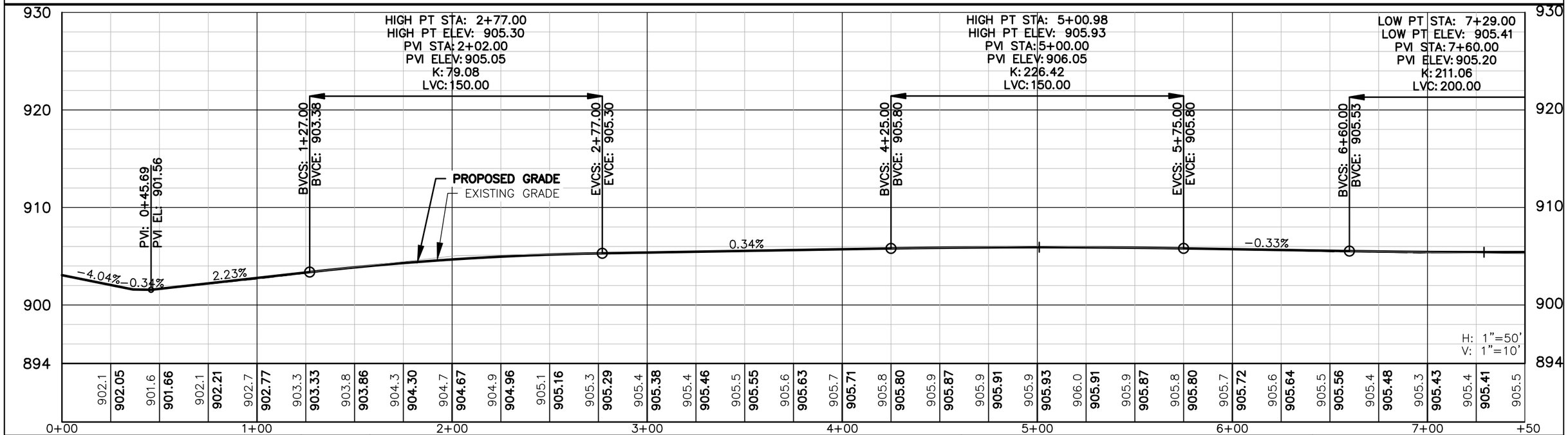
CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
OLD CONSTANCE BLVD NW
CITY PROJECT 26-11D

REMOVALS

SHEET NO. 37 OF 46 SHEETS





NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

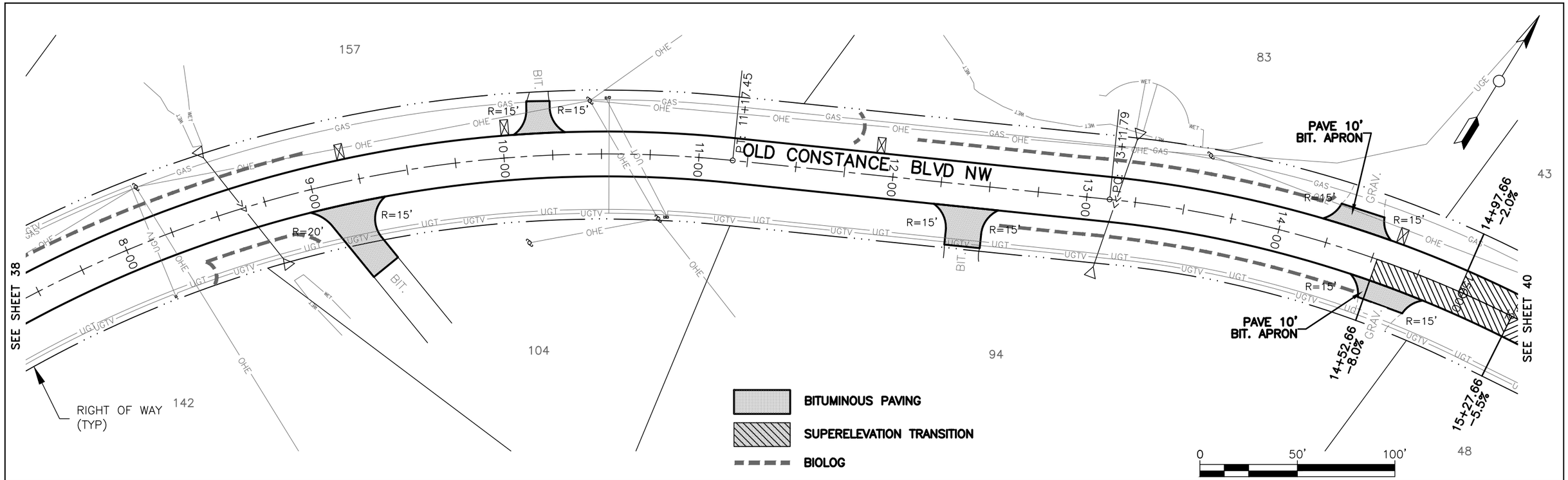
SIGNATURE David D. Berkowitz
DAVID D. BERKOWITZ
TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

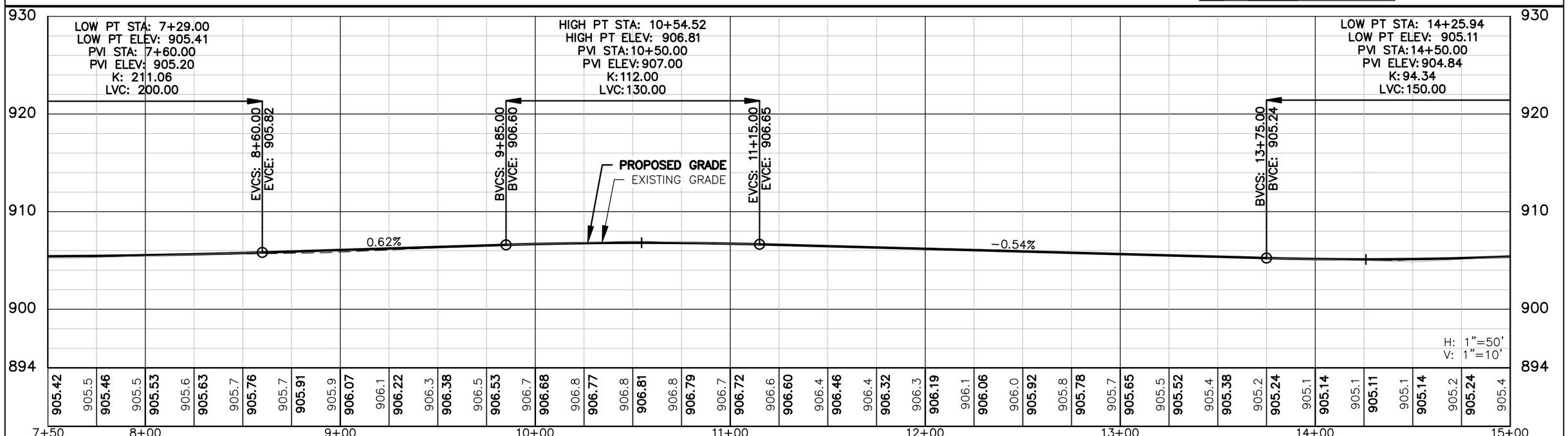
CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
OLD CONSTANCE BLVD NW
CITY PROJECT 26-11D

PLAN/PROFILE
0+00 TO 7+50

SHEET NO. 38 OF 46 SHEETS





NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

SIGNATURE David D. Berkowitz DAVID D. BERKOWITZ TYPED OR PRINTED NAME

DATE 3/3/2026 LIC. NO. 26757

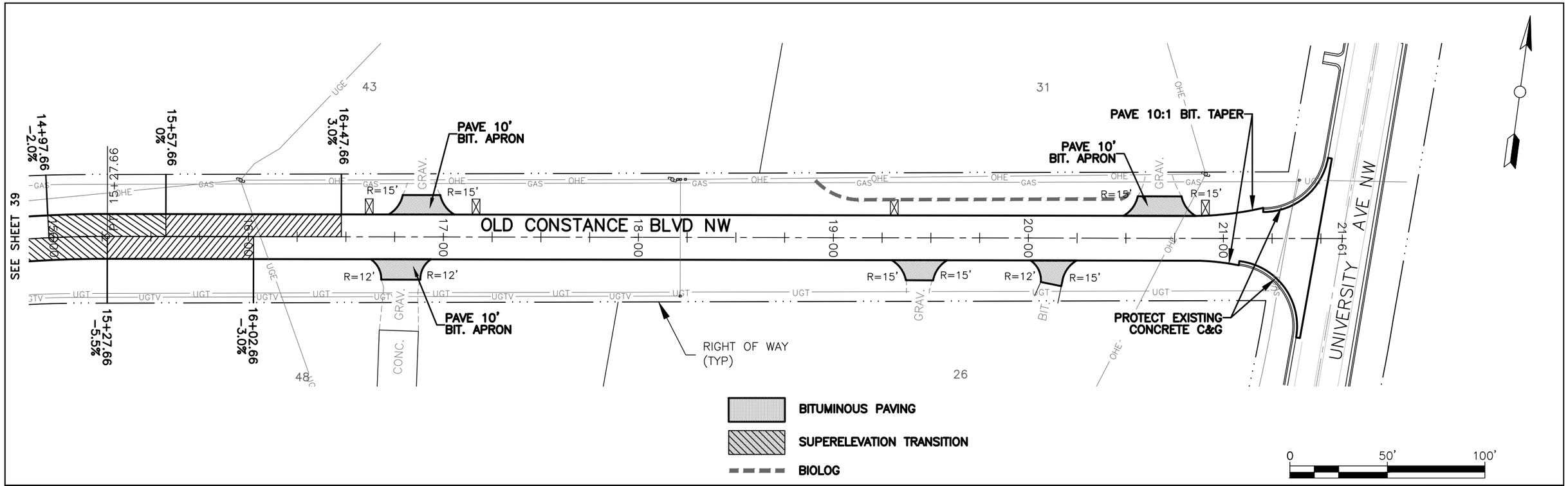
CITY OF ANDOVER

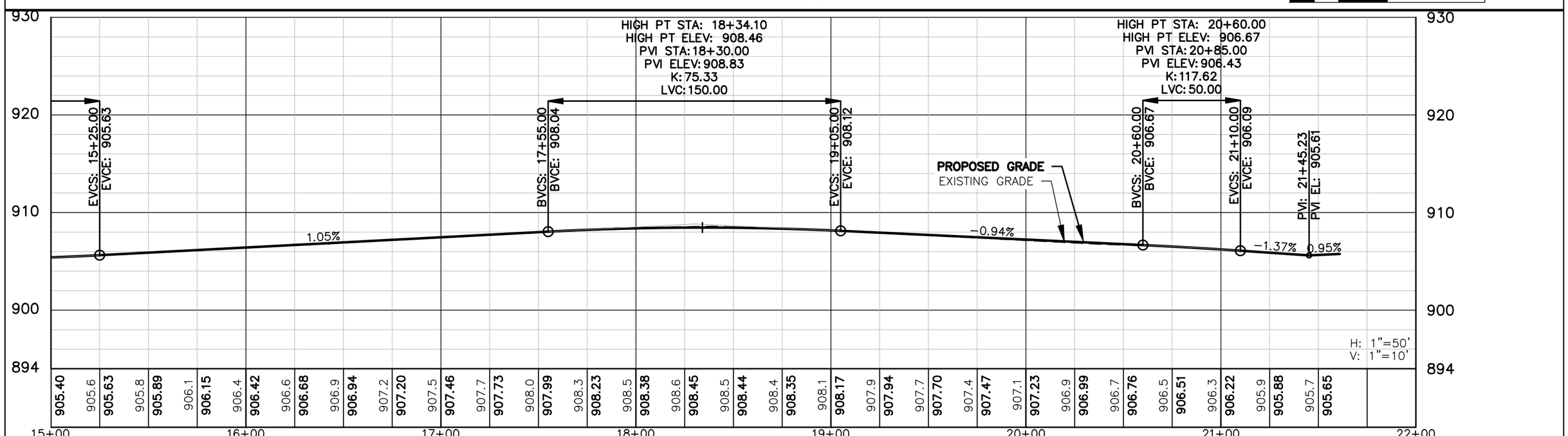
2026 FULL DEPTH RECLAMATION
OLD CONSTANCE BLVD NW

CITY PROJECT 26-11D

PLAN/PROFILE
7+50 TO 15+00

SHEET NO. 39 OF 46 SHEETS





NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK CHECKED DDB

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

SIGNATURE David D. Berkowitz DAVID D. BERKOWITZ TYPED OR PRINTED NAME

DATE 3/3/2026 LIC. NO. 26757

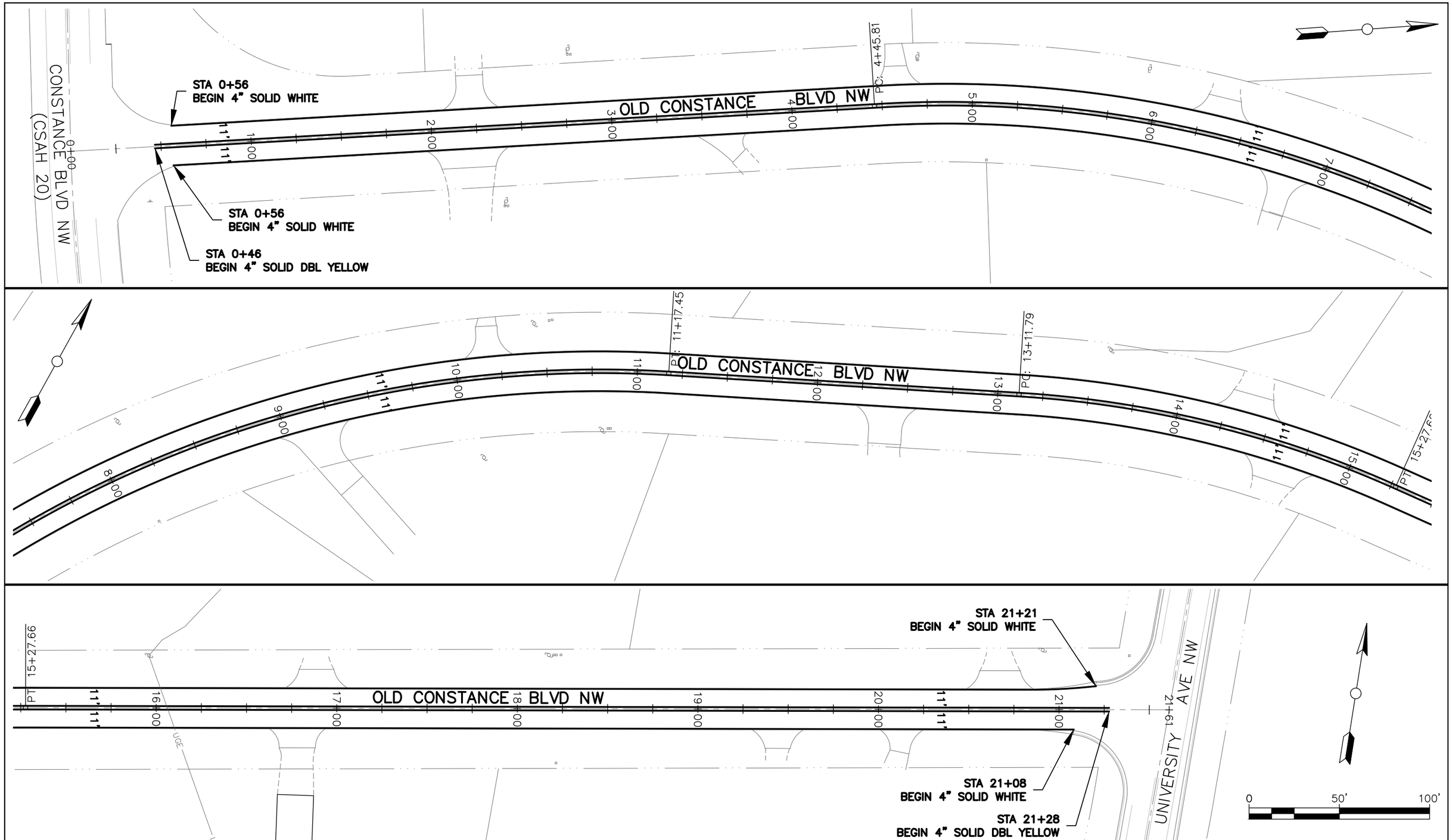
CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
OLD CONSTANCE BLVD NW

CITY PROJECT 26-11D

PLAN/PROFILE
15+00 TO 21+61

SHEET NO. 40 OF 46 SHEETS



NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGNED JJL DRAWN JAK
CHECKED DDB

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

SIGNATURE David D. Berkowitz
DAVID D. BERKOWITZ
TYPED OR PRINTED NAME
DATE 3/3/2026 LIC. NO. 26757

CITY OF ANDOVER

2026 FULL DEPTH RECLAMATION
OLD CONSTANCE BLVD NW
CITY PROJECT 26-11D

STRIPING

SHEET NO. 41 OF 46 SHEETS