

FARMSTEAD NORTH

RESIDENTIAL DEVELOPMENT TURN LANE

CEDAR DRIVE NW

CITY OF OAK GROVE, ANOKA COUNTY, MN

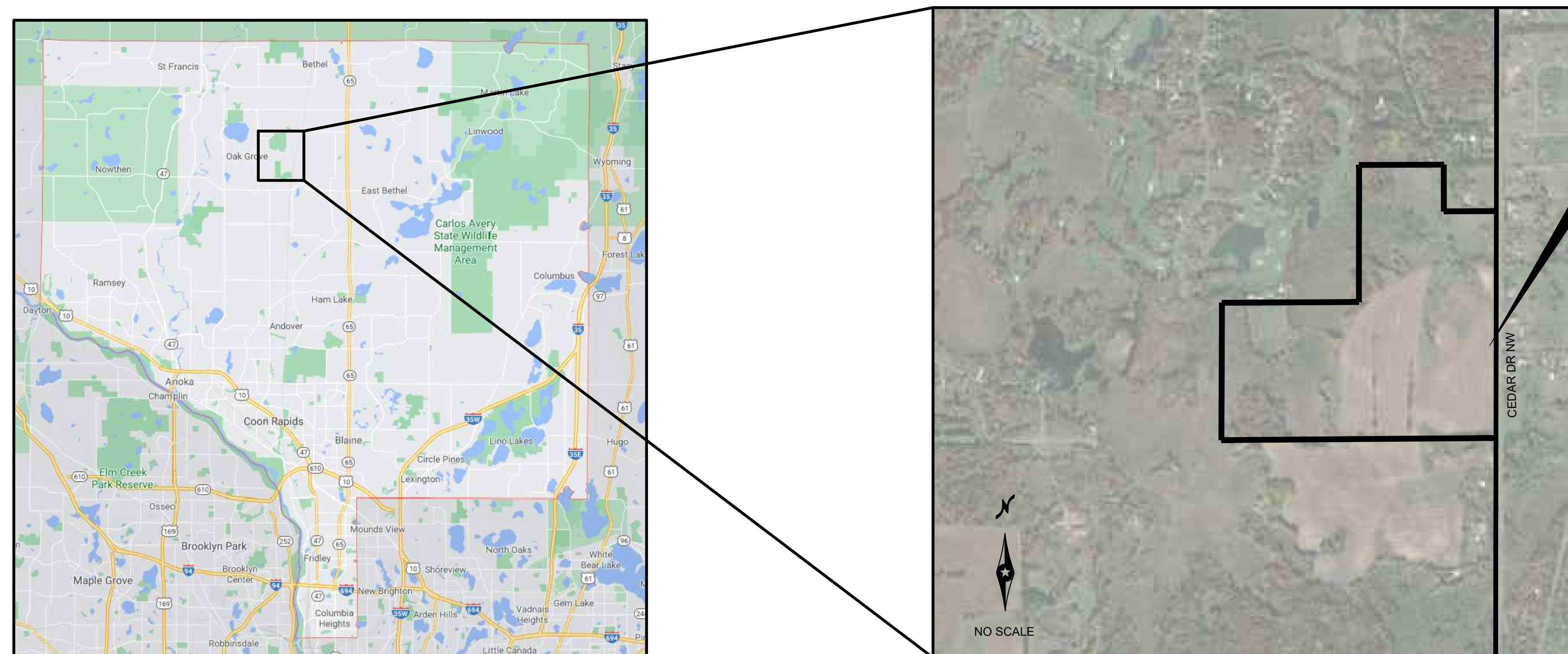
FEBRUARY, 2022

FINAL TURN LANE CONSTRUCTION PLANS

CIVIL & SURVEY PLANS PREPARED BY:



Sheet List Table	
Sheet Number	Sheet Title
C0	Cover
C1	Turn Lane Site & Dimension Plan
C2	Turn Lane Grading Plan
C3	Turn Lane Section Views
C4	Turn Lane Traffic Control Plan
C5	Turn Lane Details
C6	Construction Section Exhibit



PROJECT LOCATION

CIVIL ENGINEER :

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signed: 
Christopher J. Dahn
Date: 02/23/2022 Lic. No. 58628

COUNTY ENGINEER :

This plan has been approved for construction by the Anoka County Engineer. This plan meets current county construction standards.

Signed: _____
Date: 3/1/2022 Lic. No.: 46732

ANOKA COUNTY, MINNESOTA

REV NO.	DATE	DESCRIPTION
1	09/21/2021	REVISION PER CITY REVIEW
2	09/29/2021	REVISION PER PRE-CONSTRUCTION MEETING
3	10/13/2021	REVISIONS FOR TURN / BYPASS LANE
4	11/08/2021	REVISIONS FOR TURN / BYPASS LANE REVIEW
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6	02/01/2022	REVISIONS FOR TURN / BYPASS LANE REVIEW
7	02/23/2022	REVISIONS FOR TURN / BYPASS LANE REVIEW

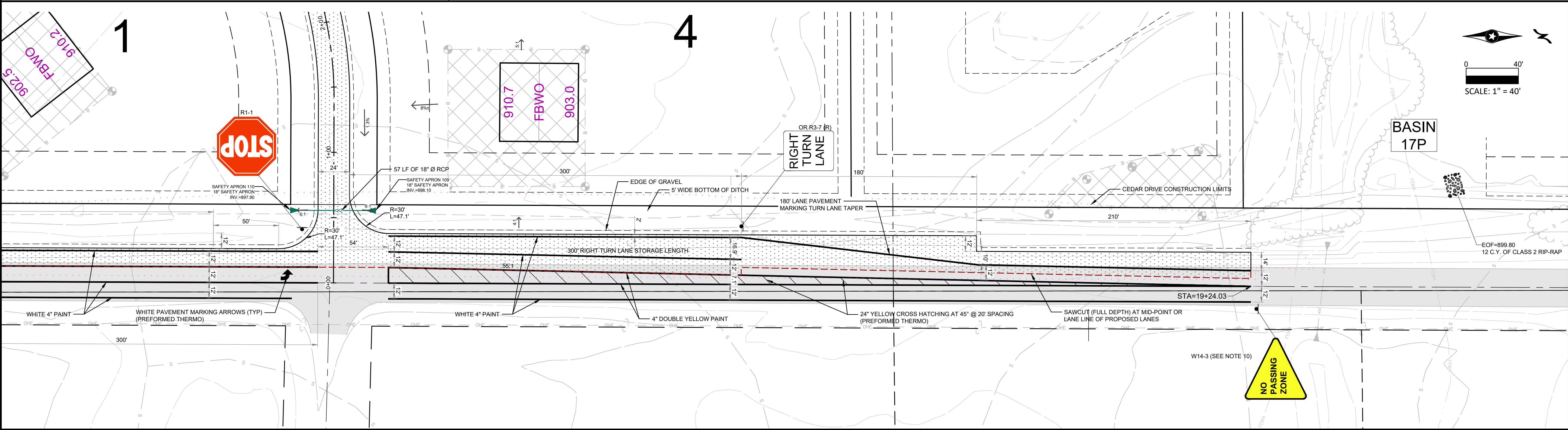
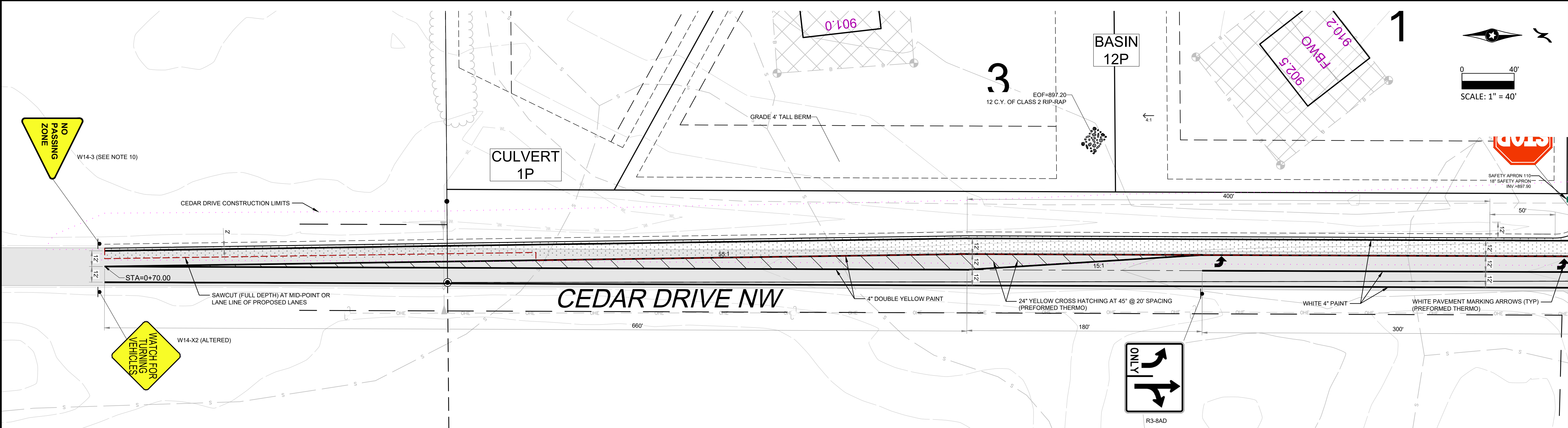
TURN LANE NOTES:

LEGEND:

- SAWCUT LOCATION (FULL DEPTH)
- YELLOW 4" PAVEMENT MARKING & GORE STRIPING
- TURN ARROW (TYPICAL)
- STRAIGHT ARROW (TYPICAL)
- CEDAR DRIVE CONSTRUCTION LIMITS
- PERMANENT SIGNAGE

1. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS IN THE FIELD REPRESENTED WITHIN THE PLANS AS SHOWN AND ALERT THE ENGINEER BEFORE BIDDING THE PROJECT AND BEGINNING CONSTRUCTION.
2. CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES WHICH MAY AFFECT THIS WORK AND NOTIFY THE OWNER OF ANY CHANGES. CONTACT LOCAL UTILITY COMPANIES FOR EXACT LOCATIONS PRIOR TO BIDDING THE PROJECT AND COMMENCING WORK.
3. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT SILT AND DEBRIS RUN-OFF DURING GRADING OPERATIONS (I.E. SILT FENCE, STRAW BALES, ETC.).
4. CONTRACTOR SHALL VERIFY CRITICAL ELEVATIONS TO ENSURE CONFORMANCE WITH GRADING PLAN, PARTICULARLY WITH EXISTING STRUCTURES AND/OR PAVEMENTS TO REMAIN, MEET EXISTING GRADES ALONG STREETS, PROPERTY LINES, AND DRIVEWAY ENTRANCES. RESTORE ALL PAVEMENTS THAT REMAIN TO THEIR ORIGINAL IF NOT BETTER CONDITION. NOTIFY OWNER OF ANY CONFLICTS PRIOR TO BIDDING THE PROJECT.
5. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED.
- SEEDING: 25-141 MIX (59 LB/AC)
MULCH: TYPE 1, DISK ANCHORED
6. LONGITUDINAL PAVEMENT MARKINGS SHALL BE LATEX PAINT. THE TURN ARROWS AND 24" YELLOW CROSS HATCHING SHALL BE PREFORMED THERMO.

7. 2018 MNDOT SPECIFICATION BOOK SHALL BE UTILIZED FOR ANY CONSTRUCTION IN THE COUNTY RIGHT OF WAY.
8. EXISTING CONFLICTING PAVEMENT MARKINGS WILL NEED TO BE REMOVED BEFORE FINAL PERMANENT STRIPING IS PLACED.
9. DURING CONSTRUCTION, CONFLICTING PAVEMENT MARKINGS WILL NEED TO BE COVERED WITH BLACK REMOVABLE LANE TAPE OR WATER BLASTED AND THEN HAVE PAVEMENT MARKINGS INSTALLED FOR TEMPORARY CENTERLINE DURING CONSTRUCTION.
10. ACHD TRAFFIC TO DETERMIN THE LIMITS OF THE NO PASSING ZONE AS A PART OF THE PERMIT PROCESS AND STRIPER SPOTTING.



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7	02/23/2022	REVISIONS FOR TURN / BYPASS LANE REVIEW

DATE: 02/23/2022	DESIGN BY: MJM
DRAWN BY: MJM	CHECKED BY: CJD
DWG FILE: GRADING	FILE NO.: 21-0318.00

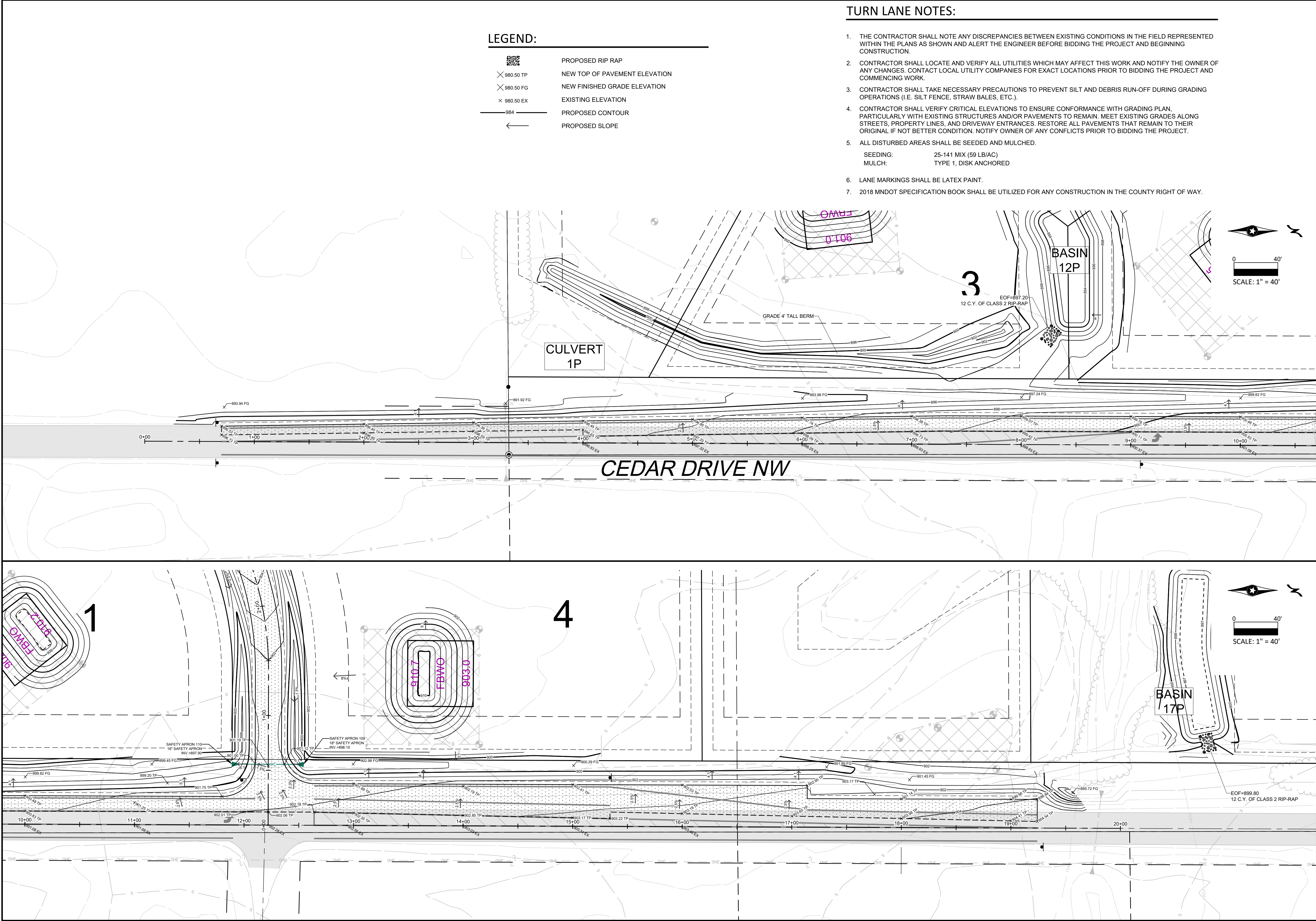
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signed: Christopher J. Dain
Date: 02/23/2022
Lic. No. 58628

BOGART, PEDERSON & ASSOCIATES, INC. LAND SURVEYING ENVIRONMENTAL SERVICES 13076 FIRST STREET BECKER, MN 55008-9322 TEL: 763-262-8822 FAX: 763-262-8844	FARMSTEAD NORTH RESIDENTIAL DEVELOPMENT City of Oak Grove, Anoka County, MN Cedar Dr. NW
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TURN LANE SITE & DIMENSION PLAN

SHEET NO. C1



REV NO.	DATE	DESCRIPTION
1	09/21/2021	REVISION PER CITY REVIEW
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DWG FILE: GRADING	FILE NO.: 21-0318.00

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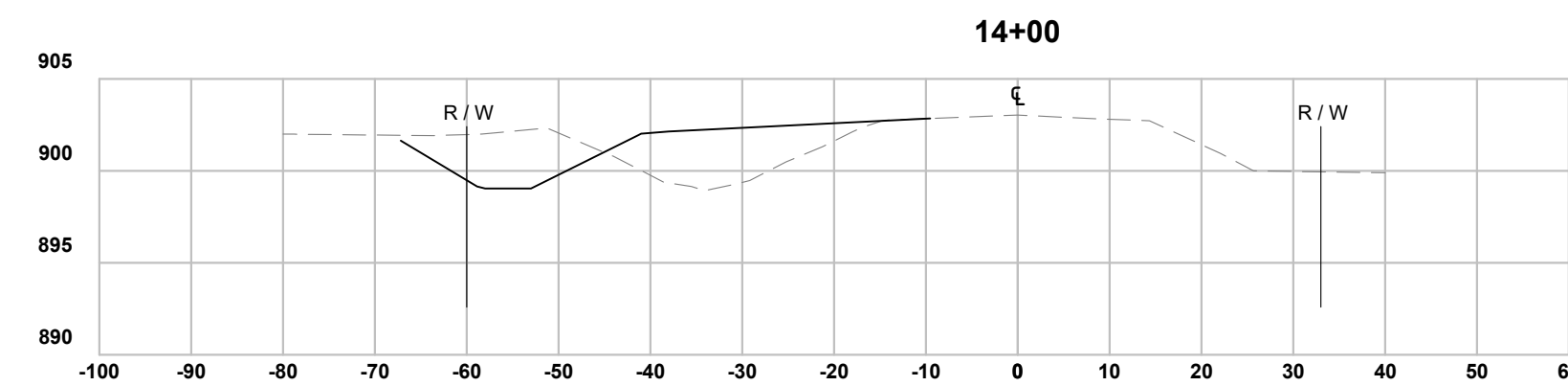
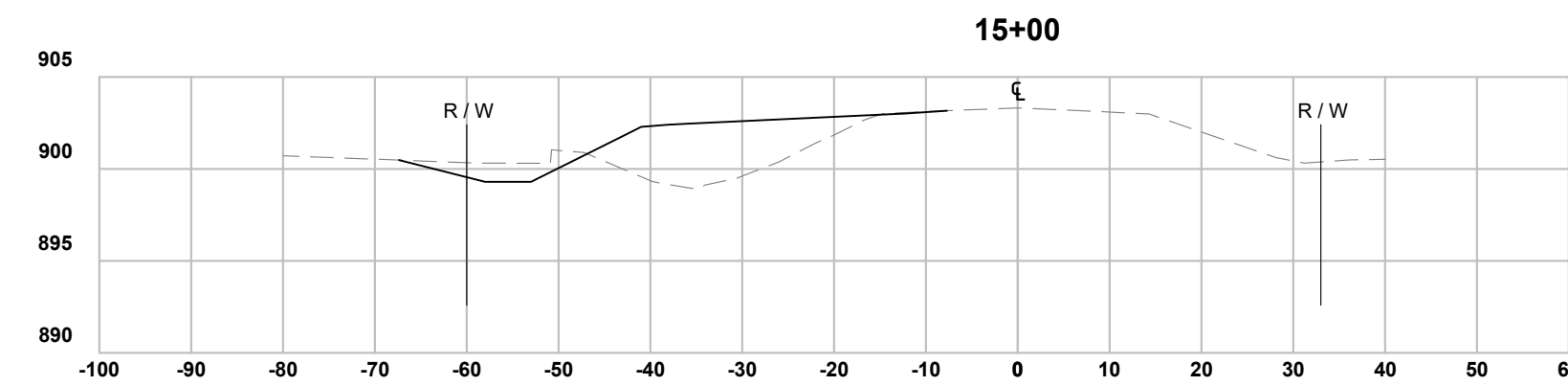
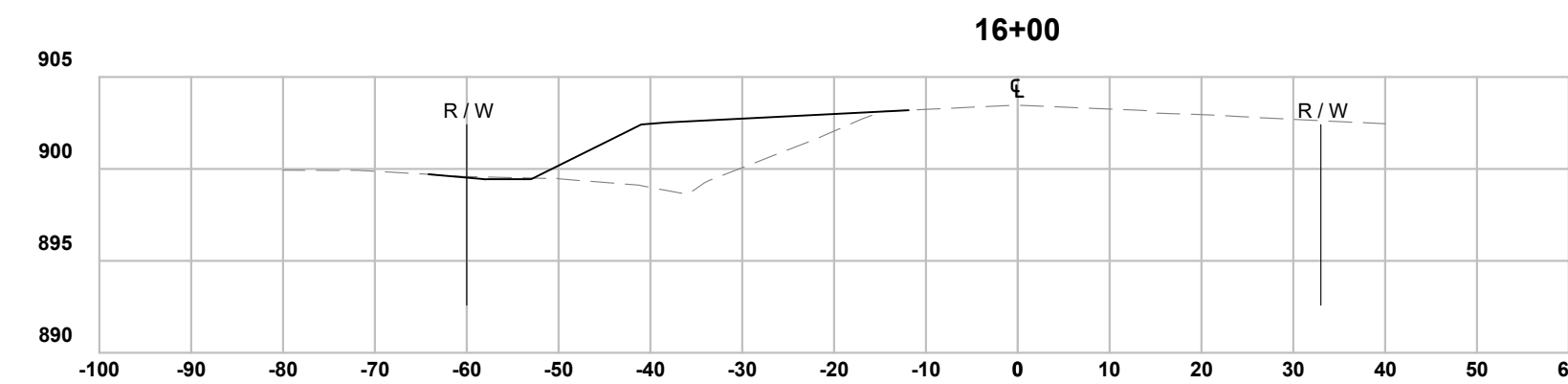
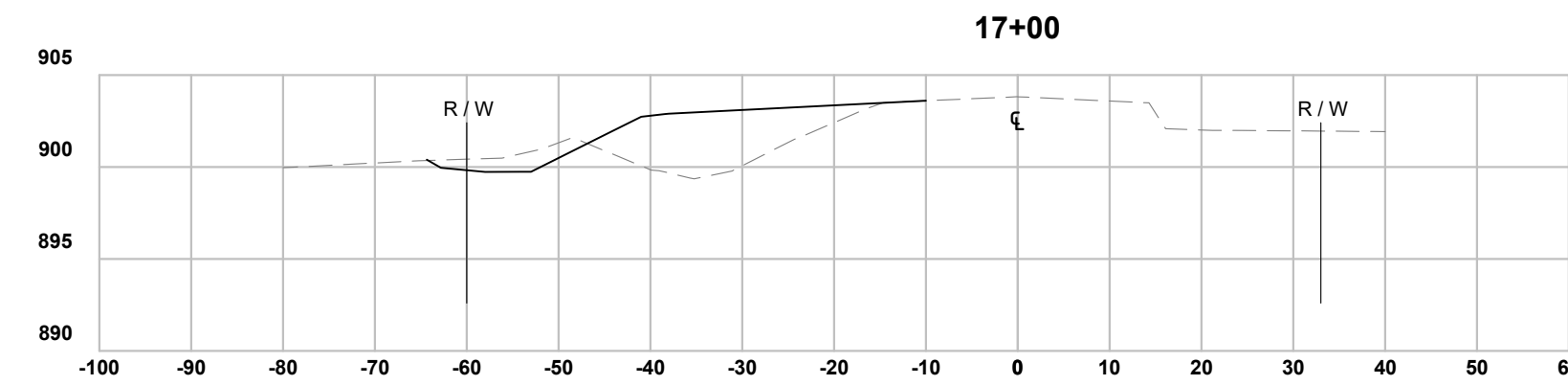
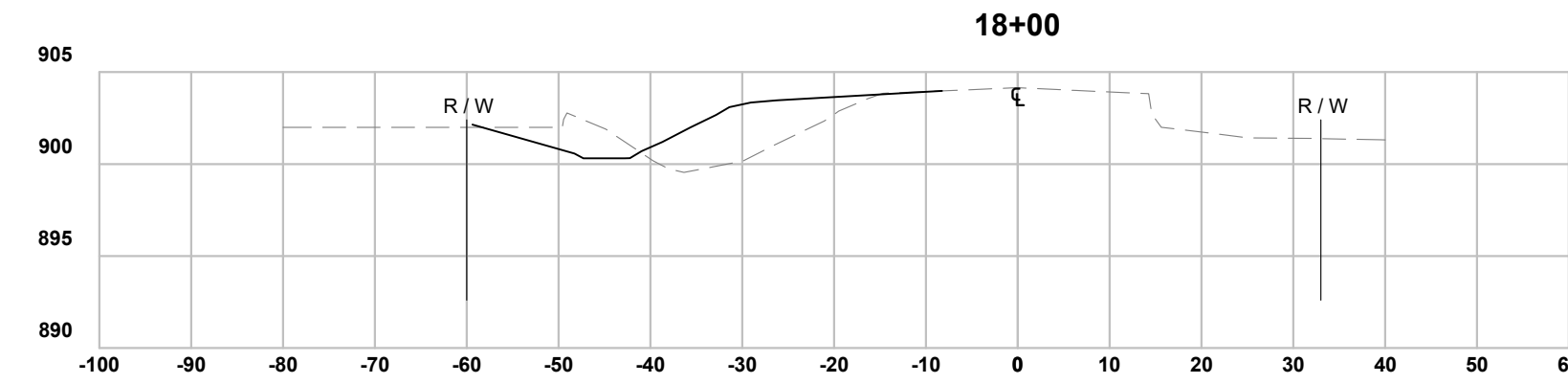
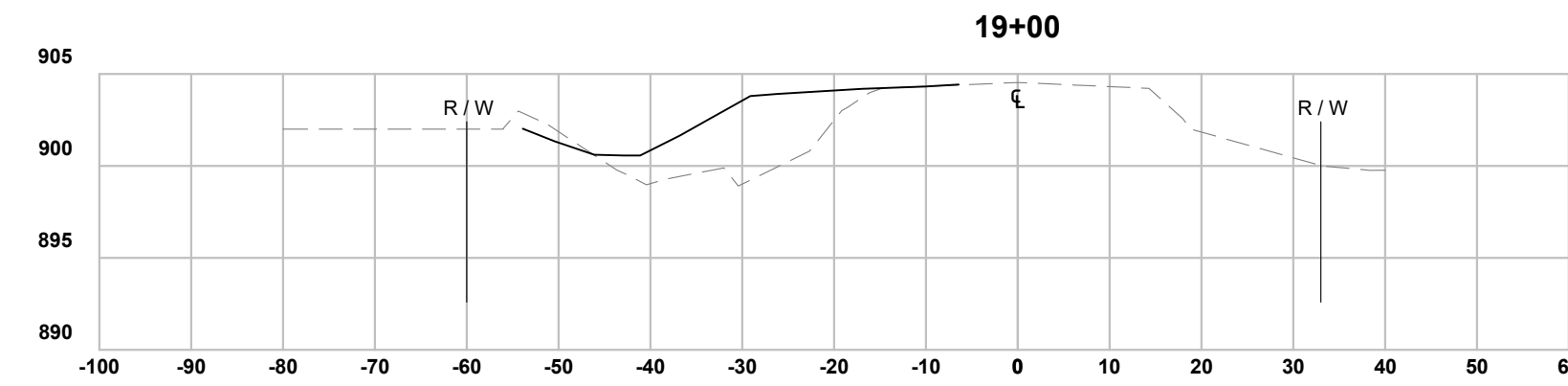
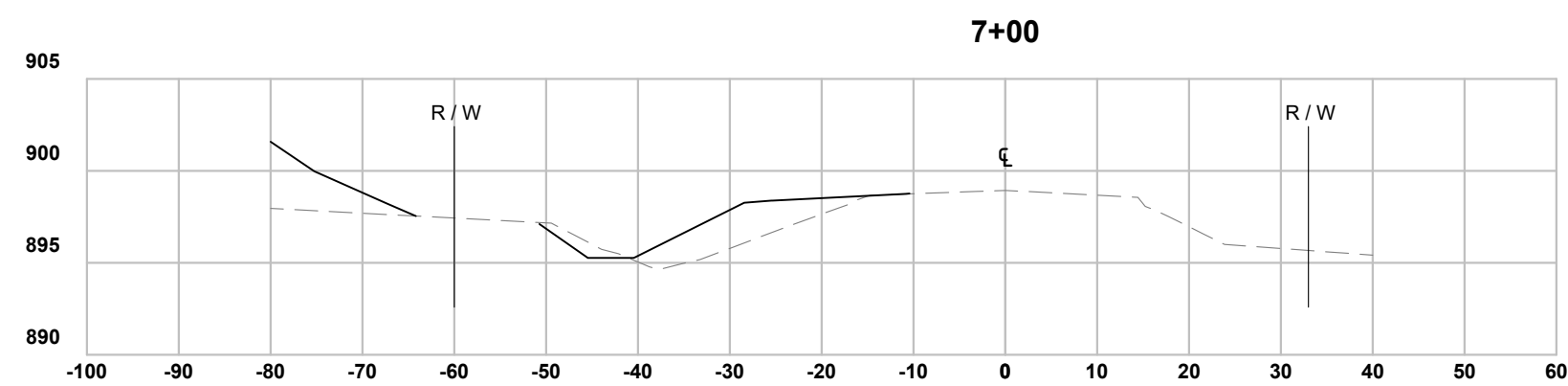
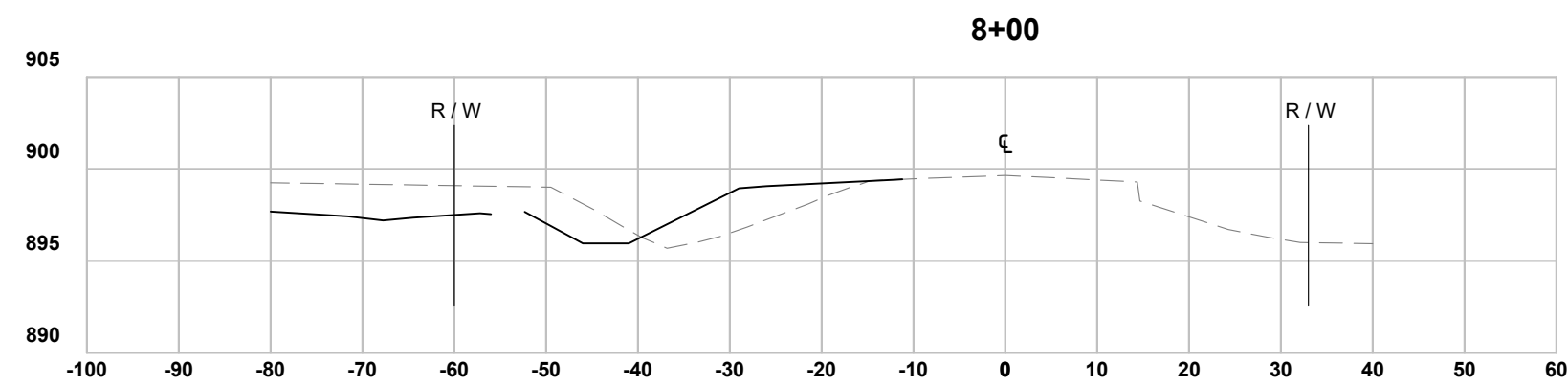
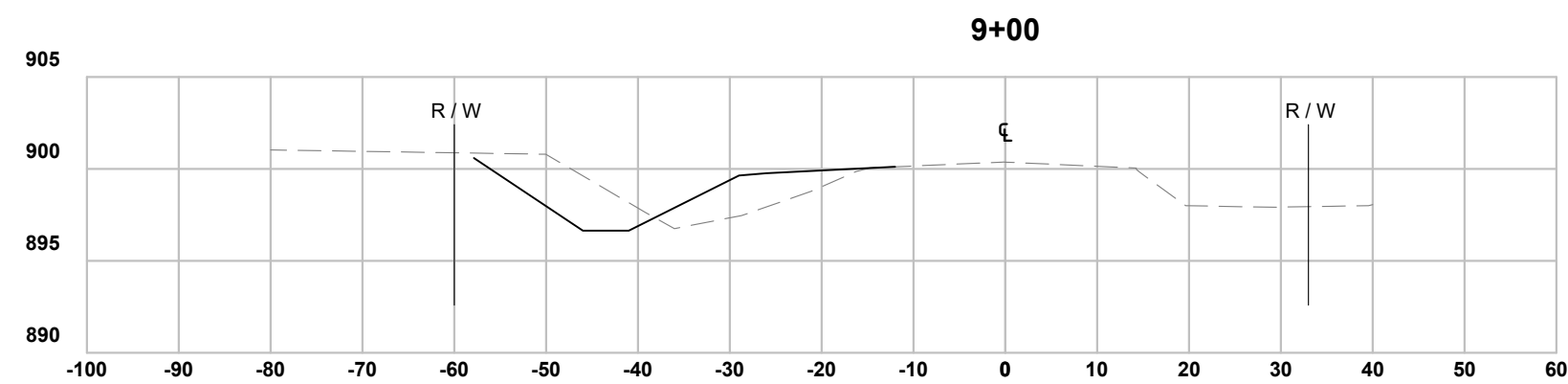
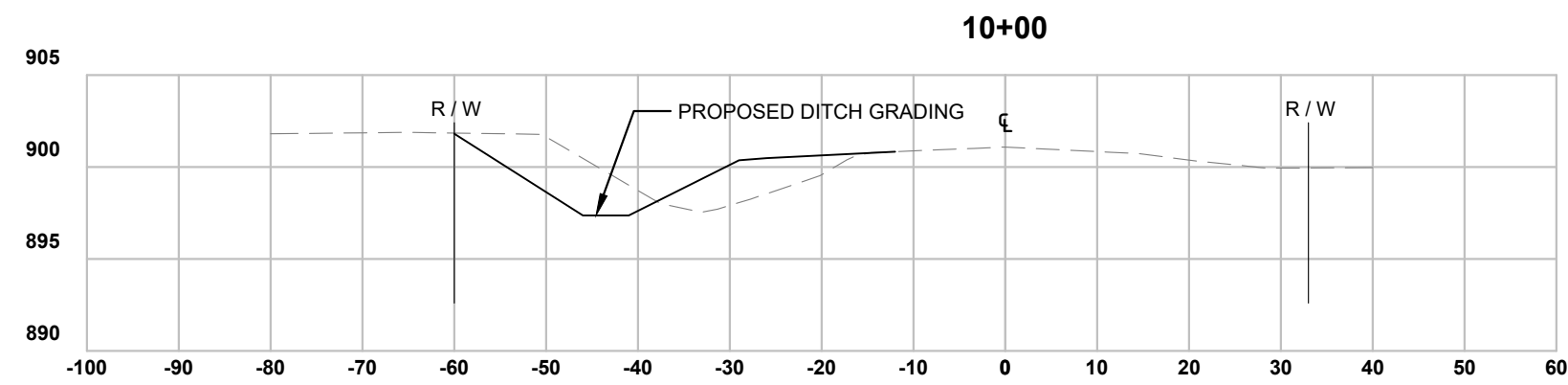
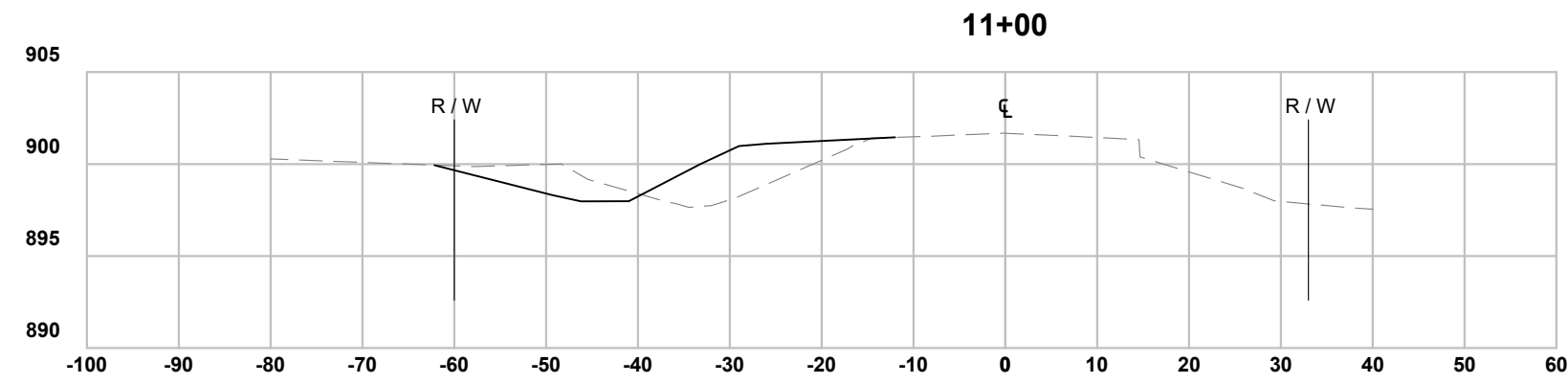
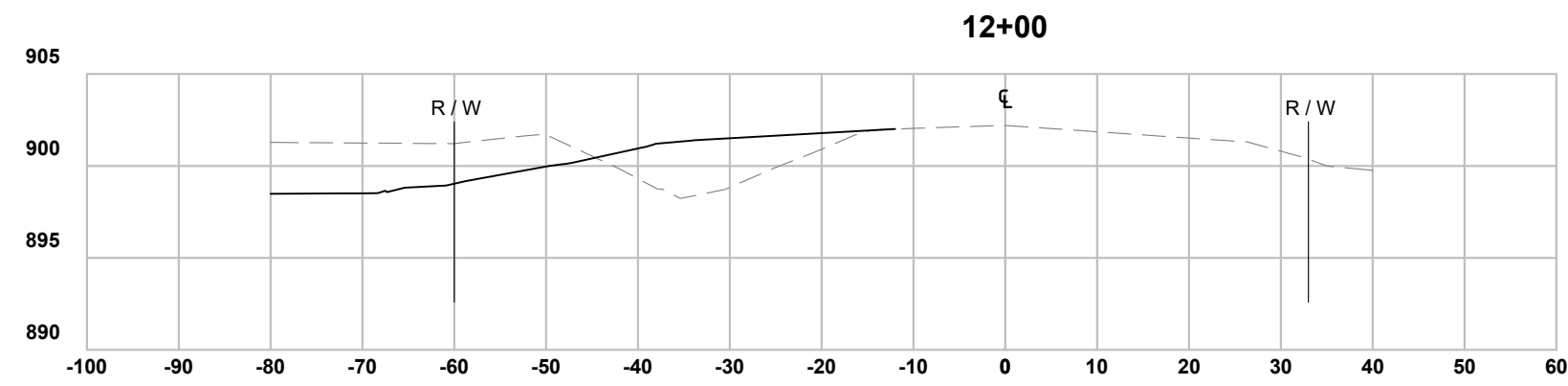
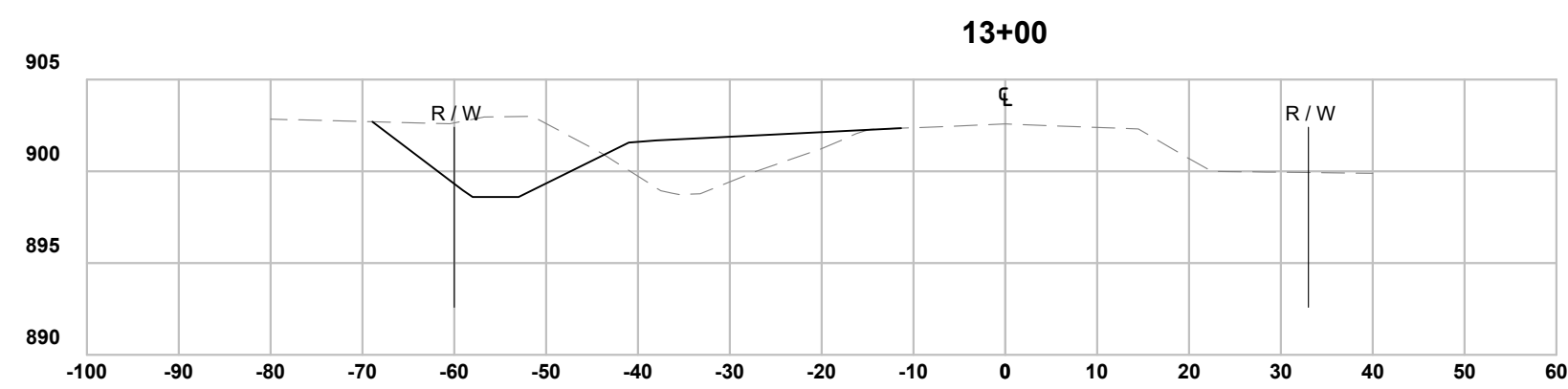
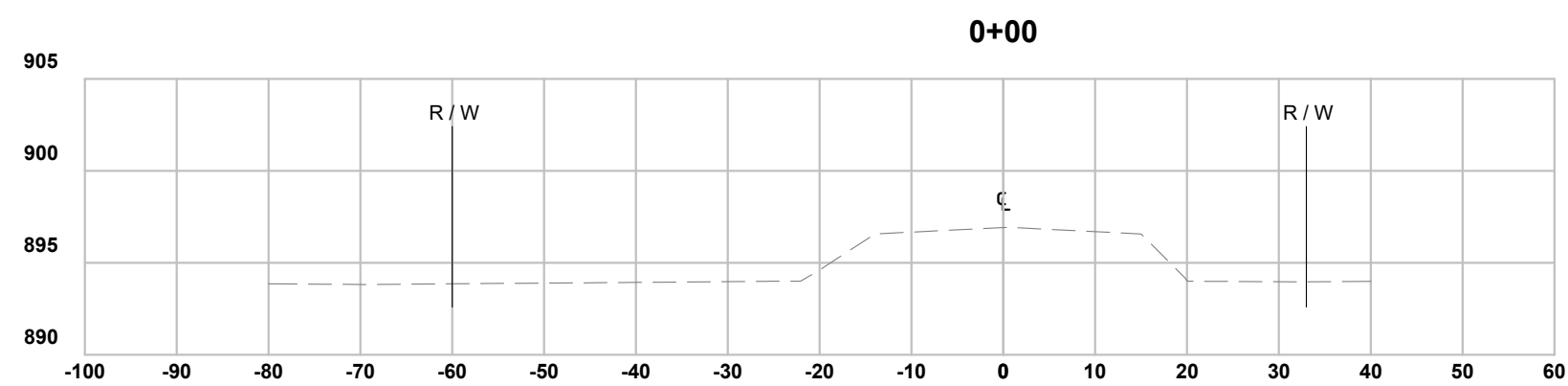
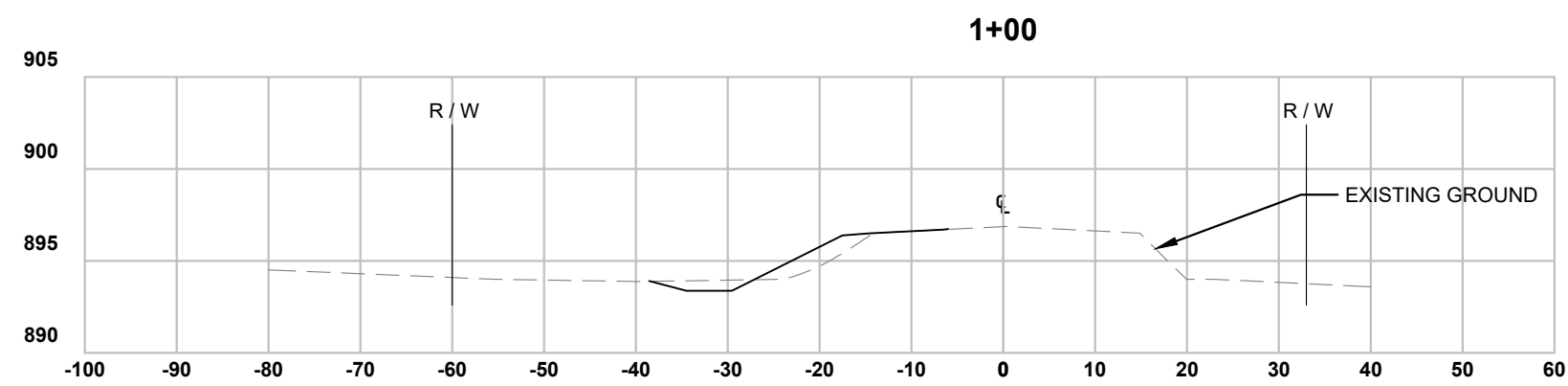
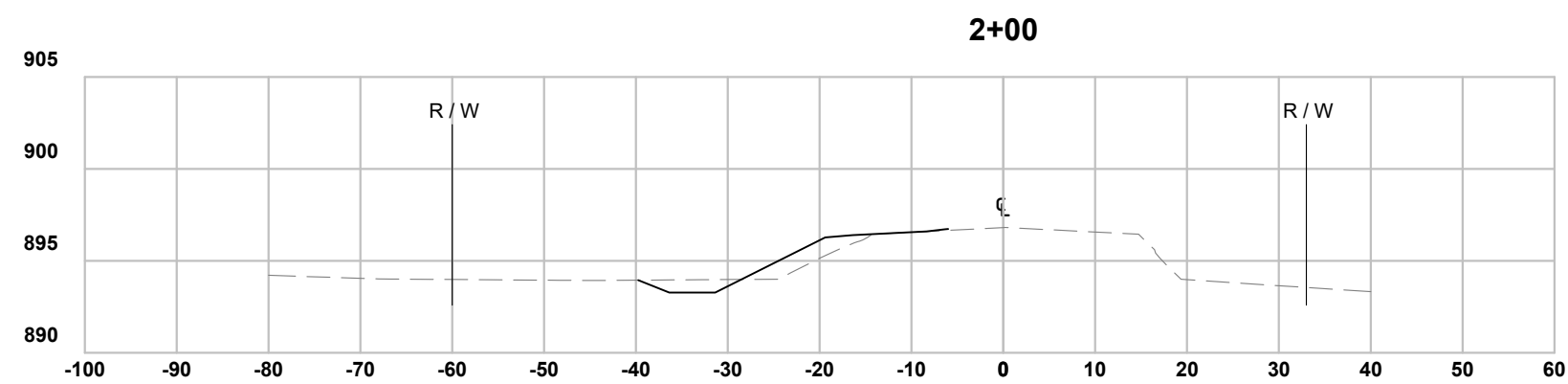
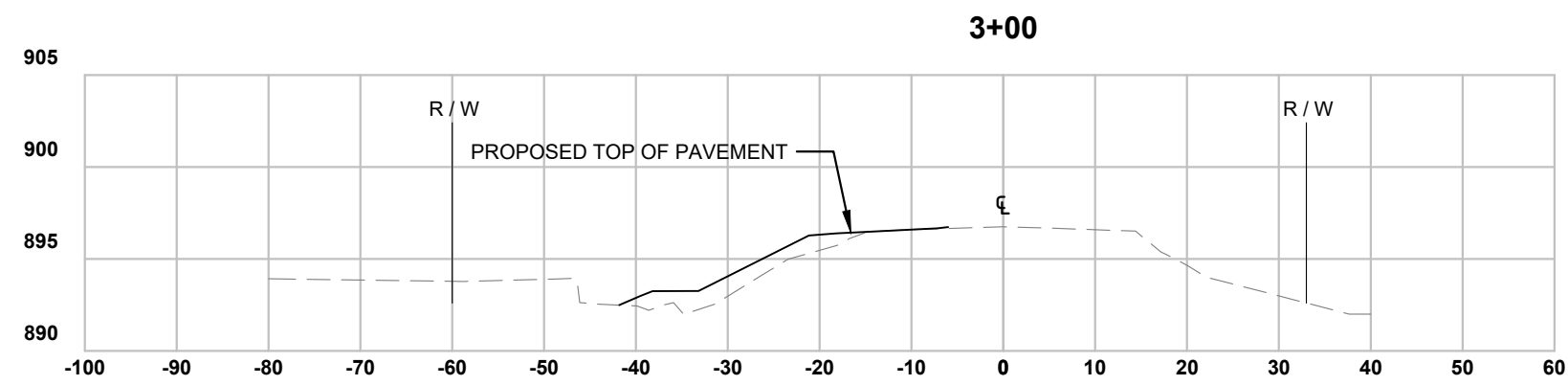
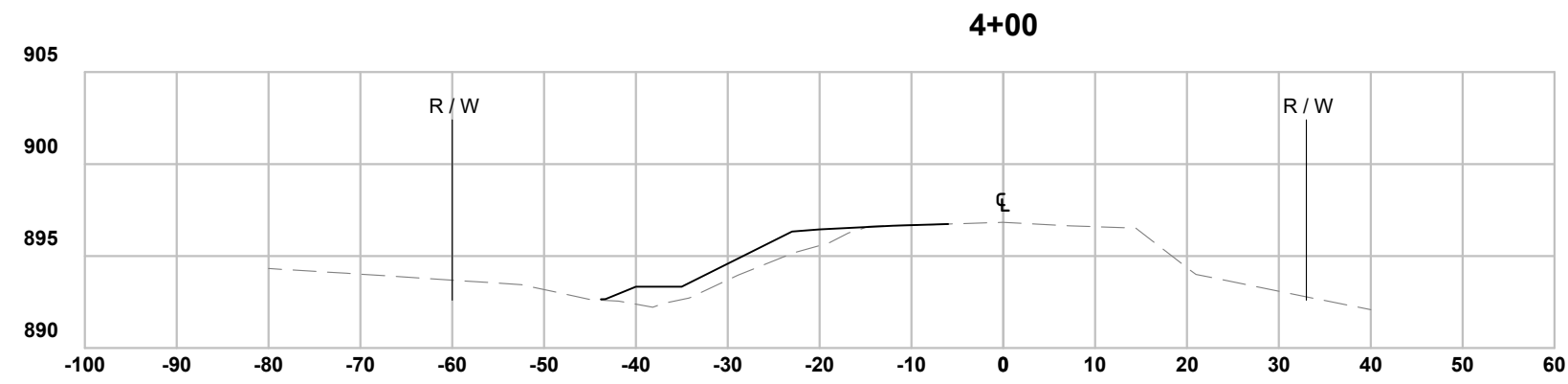
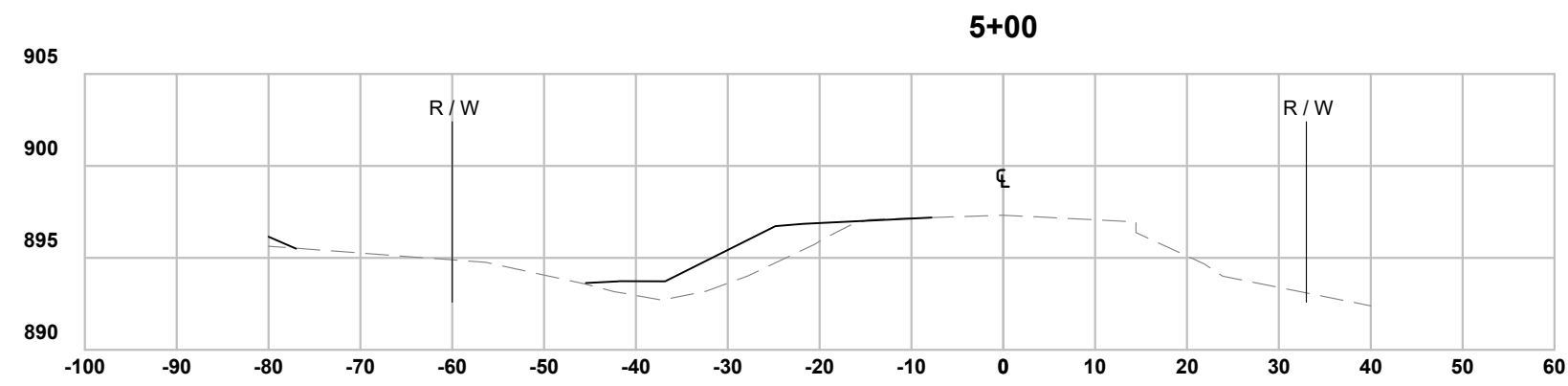
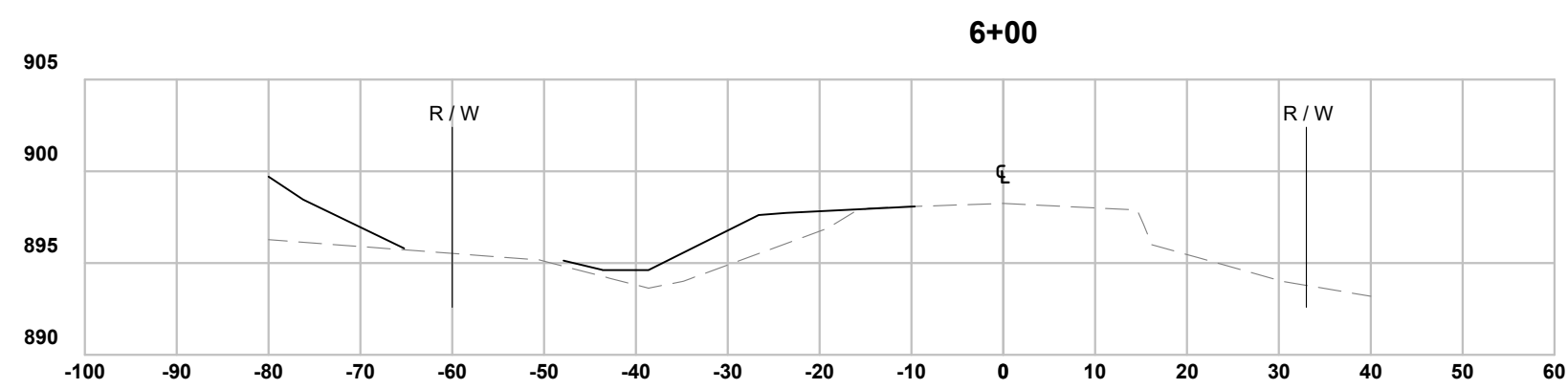
Signed:  Christopher J. Dain
Lic. No. 58628

Date: 02/23/2022

BOGART, PEDERSON & ASSOCIATES, INC. LAND SURVEYING ENVIRONMENTAL SERVICES 13076 FIRST STREET, BECKER, MN 55508-9322 TEL: 763-262-8822 FAX: 763-262-8844	FARMSTEAD NORTH RESIDENTIAL DEVELOPMENT City of Oak Grove, Anoka County, MN Cedar Dr. NW
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TURN LANE GRADING PLAN

SHEET NO. **C2**



SCALE:
HORIZONTAL: 1"=20'
VERTICAL: 1"=10'

DATE:	02/23/2022	REV NO.	DATE	DESCRIPTION
DESIGN BY:	MJM	1	09/21/2021	REVISION PER CITY REVIEW
DRAWN BY:	MJM	2	09/29/2021	REVISION PER PRE-CONSTRUCTION MEETING
CHECKED BY:	CJD	3	10/13/2021	REVISIONS FOR TURN / BYPASS LANE
DWG FILE:	GRADING	4	11/08/2021	REVISIONS FOR TURN / BYPASS LANE REVIEW
FILE NO.:	21-0318.00	5	12/06/2021	REVISIONS FOR TURN / BYPASS LANE REVIEW
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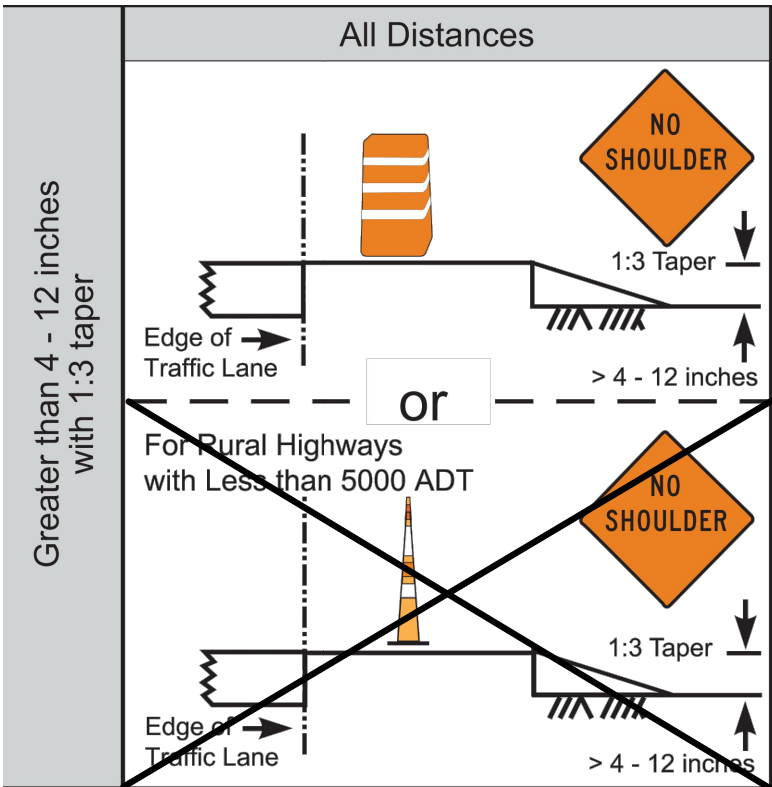


**FARMSTEAD NORTH
RESIDENTIAL DEVELOPMENT**
City of Oak Grove, Anoka County, MN
Cedar Dr. NW

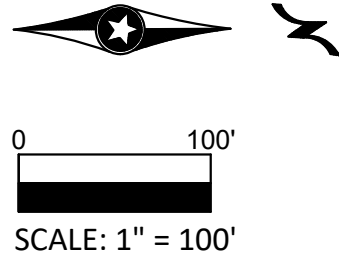
TURN I ANE SECTION VIEWS

SHEET NO

C3



DROPOFF DETAIL

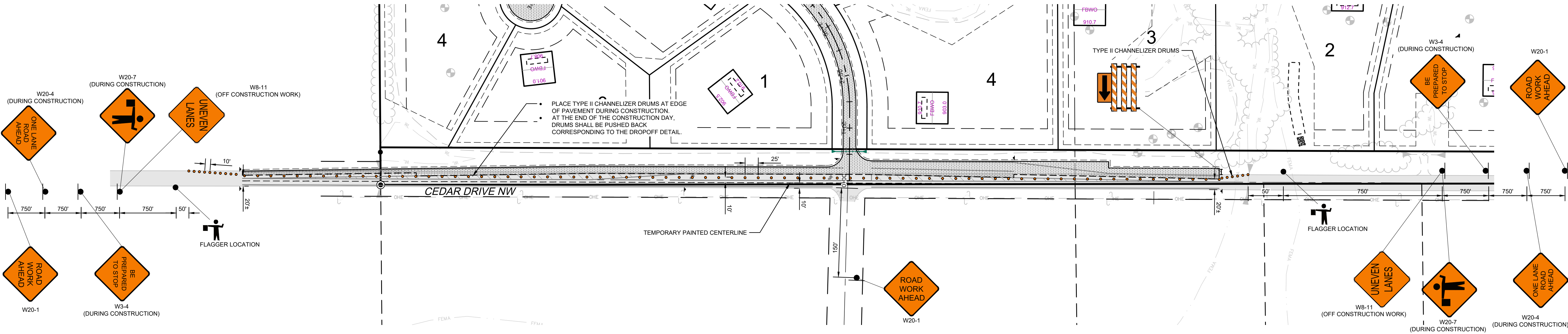


TRAFFIC CONTROL PLAN NOTES:

1. SIGNS TO FOLLOW CONVENTIONAL ROAD SIZINGS (36" X 36" COMMON)
2. TRAFFIC CONTROL SHALL MEET THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL.
3. ALL TEMPORARY TRAFFIC CONTROL SIGNS TO BE ON SKIDS.
4. ADDITIONAL SIGNS AND CHANNELIZERS SHALL BE SUPPLIED AND MOVED BY CONTRACTOR AS NEEDED FOR SAFE ROAD CONSTRUCTION.
5. CONTRACTOR SHALL PROVIDE ADDITIONAL TRAFFIC CONTROL SIGNS, CHANNELIZERS, AND FLAGGERS AS NEEDED.
6. TRAFFIC CONTROL SETUP WITH FLAGGERS DIRECTING TRAFFIC DURING CONSTRUCTION IS REQUIRED. **AT THE END OF EACH CONSTRUCTION DAY**, THE ROAD SECTION SHALL BE BACKFILLED TO ELIMINATE THE LONGITUDINAL DROP OFF AT A 3:1 SLOPE AND ACHIEVE 2'12" WIDE LANES. TEMPORARY PAVEMENT SHALL BE PLACED IF NEEDED TO ACHIEVE A MINIMUM OF 20' OF ASPHALT. SEE DETAIL.
7. EXISTING CONFLICTING PAVEMENT MARKINGS WILL NEED TO BE REMOVED BEFORE FINAL PERMANENT STRIPING IS PLACED.
8. DURING CONSTRUCTION, CONFLICTING PAVEMENT MARKINGS WILL NEED TO BE COVERED WITH BLACK REMOVABLE LANE TAPE OR WATER BLASTED AND THEN HAVE PAVEMENT MARKINGS INSTALLED FOR TEMPORARY CENTERLINE DURING CONSTRUCTION.

LEGEND:

- TYPE II CHANNELIZER DRUMS
- SIGN
- JERSEY BARRIERS (8')



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DATE: 02/23/2022

DESIGN BY: MJM

DRAWN BY: MJM

CHECKED BY: CJD

DWG FILE: SITE BASE

FILE NO.: 21-0310.00

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BOGART, PEDERSON & ASSOCIATES, INC.

LAND SURVEYING
ENVIRONMENTAL SERVICES

13076 FIRST STREET, BECKER, MN 55508-9922
TEL: 763-262-8822 FAX: 763-262-8844

FARMSTEAD NORTH
RESIDENTIAL DEVELOPMENT

City of Oak Grove, Anoka County, MN
Cedar Dr. NW

TURN LANE TRAFFIC CONTROL PLAN

SHEET NO.

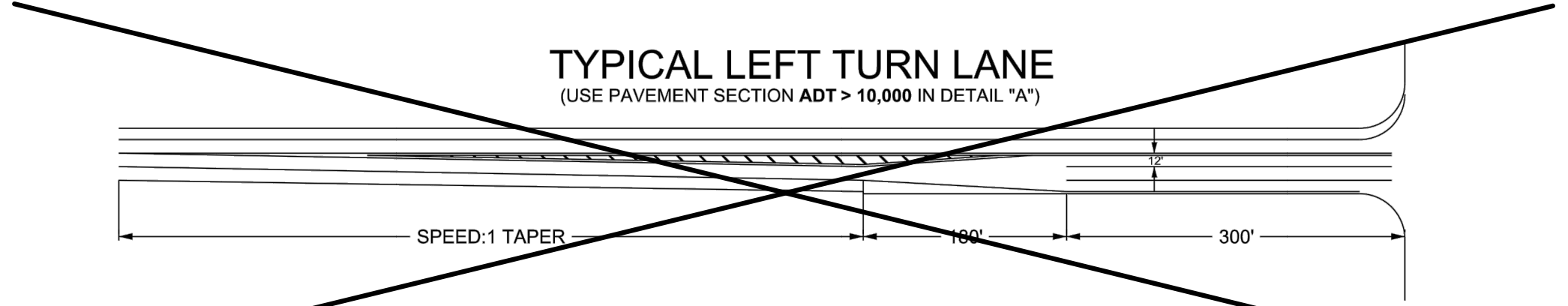
C4

CALL 48 HOURS BEFORE DIGGING:
GOPHER STATE ONE CALL
TWIN CITY AREA 651-454-0002
MINNESOTA TOLL FREE 1-800-252-1166

ANOKA COUNTY HIGHWAY DEPARTMENT

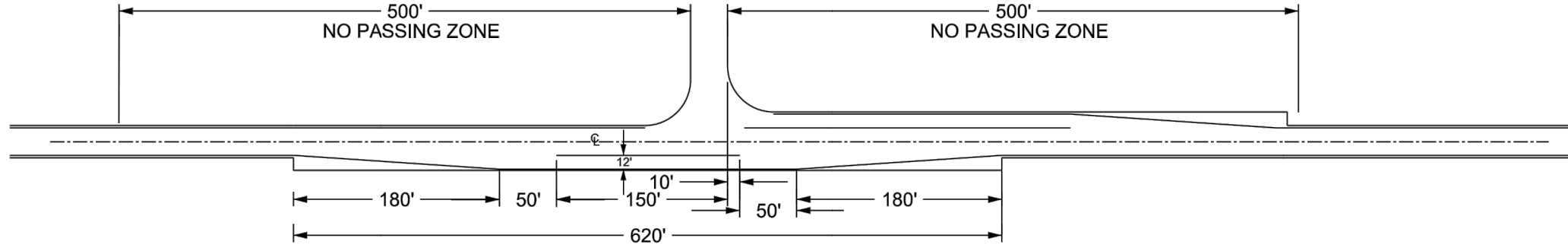
TYPICAL LEFT TURN LANE

(USE PAVEMENT SECTION ADT > 10,000 IN DETAIL "A")

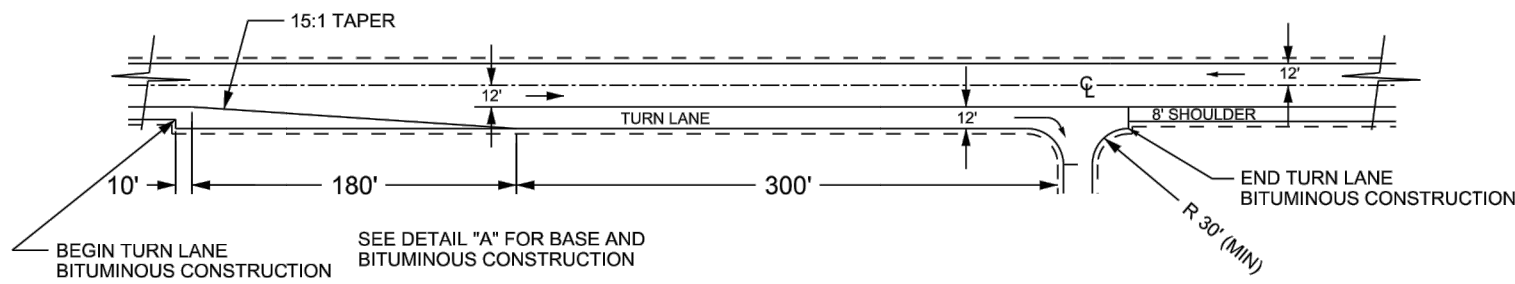


TYPICAL BY-PASS

(USE PAVEMENT SECTION ADT > 10,000 IN DETAIL "A")



TYPICAL RIGHT TURN LANE



ALL DISTURBED SOIL MUST BE SEEDED, MULCHED, AND DISK ANCHORED IN ACCORDANCE WITH MN/DOT STANDARD SPECIFICATIONS. RAPID-DEGRADABLE STRAW BLANKET SHALL BE USED IN AREAS OF HIGH EROSION.

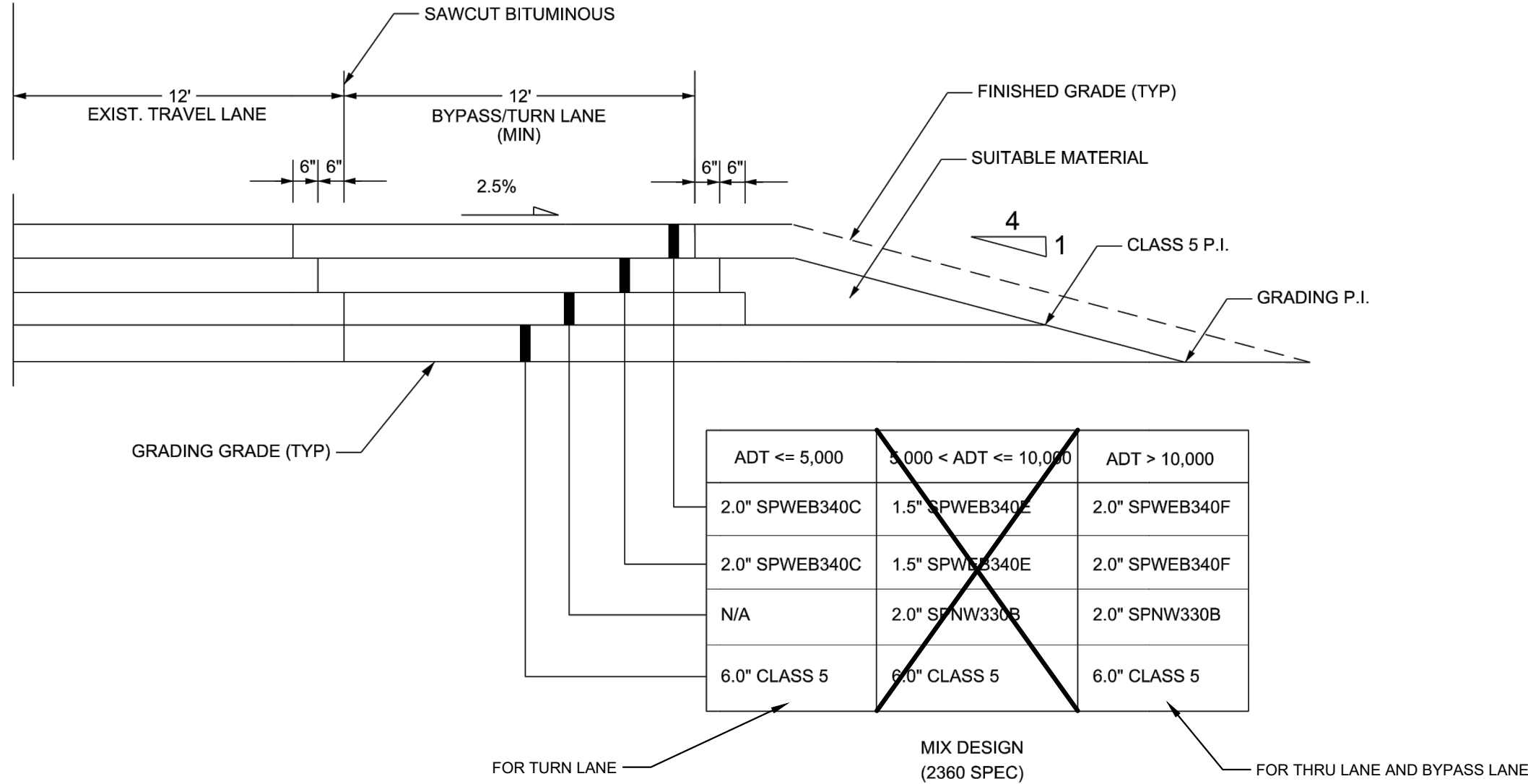


Turn/Bypass Lane Addition
On Existing Highway

NOT TO SCALE

EXHIBIT 1
January 2020

ANOKA COUNTY HIGHWAY DEPARTMENT



	ADT <= 5,000	5,000 < ADT <= 10,000	ADT > 10,000
2.0" SPWEB340C	1.5" SPWEB340E	2.0" SPWEB340F	
2.0" SPWEB340C	1.5" SPWEB340E	2.0" SPWEB340F	
N/A	2.0" SPNW330B	2.0" SPNW330B	
6.0" CLASS 5	6.0" CLASS 5	6.0" CLASS 5	

ALL DISTURBED SOIL MUST BE SEEDED, MULCHED, AND DISK ANCHORED IN ACCORDANCE WITH MN/DOT STANDARD SPECIFICATIONS. RAPID-DEGRADABLE STRAW BLANKET SHALL BE USED IN AREAS OF HIGH EROSION.



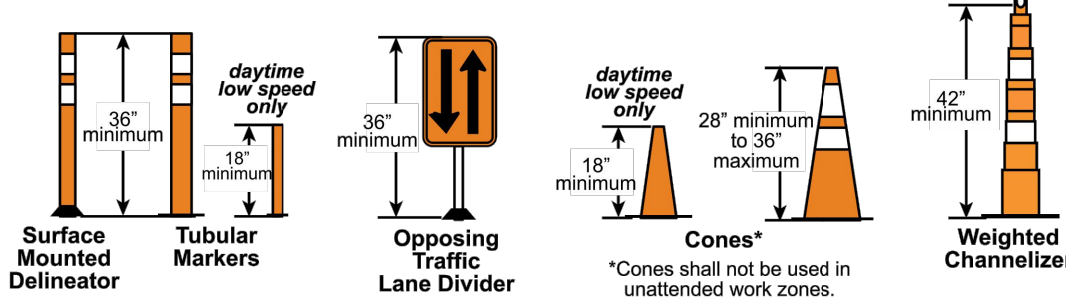
Base and Bituminous Construction Detail

NOT TO SCALE

DETAIL A
September 2019

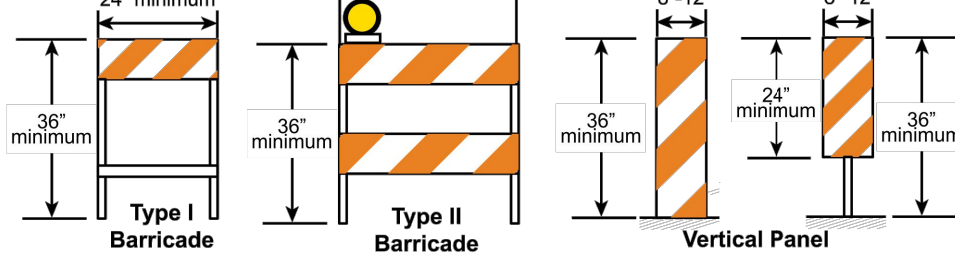
TYPE A CHANNELIZERS

- Type A channelizing devices are typically used in attended Temporary Traffic Control zones.



TYPE B CHANNELIZERS

- Channelizers used on high speed roadways shall have a minimum of 270 square inches of retroreflective area facing road users.
- Orange diagonals shall slope down toward the traffic side.
- Type B channelizing devices shall be used if the Temporary Traffic Control zone will be installed for more than 12 hours or if it is left unattended. Weighted channelizers may be used in lieu of a Type B channelizer with the permission of the road authority.
- Type A Flashing Warning Lights may be used - place on the side with traffic.



TYPE C CHANNELIZER

- Orange diagonals shall slope down toward the traffic side.
- Signs mounted on Type III barricades should not cover more than 50 percent of the top two rails or 33 percent of the total area of the three rails.
- Type A Flashing Warning Lights may be used - place on the side with traffic.

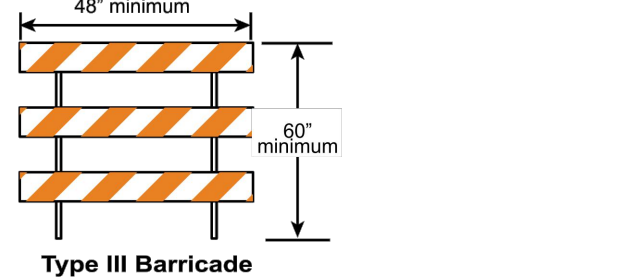
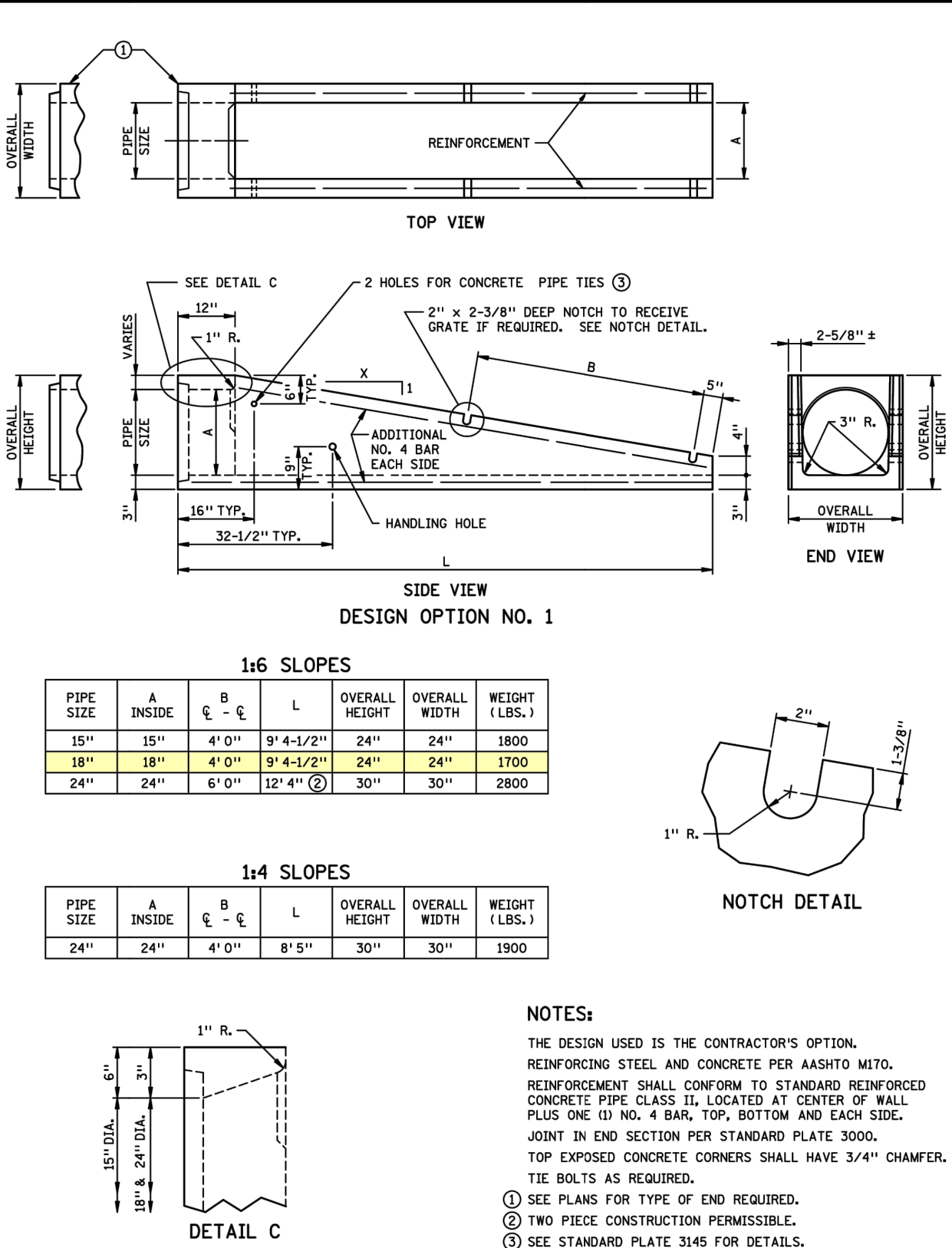


Figure 6F-7 Channelizing Devices

December, 2019

6F-32



PIPE SIZE	A INSIDE	B - C	L	OVERALL HEIGHT	OVERALL WIDTH	WEIGHT (LBS.)
15"	15"	4' 0"	9' 4-1/2"	24"	24"	1800
18"	18"	4' 0"	9' 4-1/2"	24"	24"	1700
24"	24"	6' 0"	12' 4"	30"	30"	2800

PIPE SIZE	A INSIDE	B - C	L	OVERALL HEIGHT	OVERALL WIDTH	WEIGHT (LBS.)
24"	24"	4' 0"	8' 5"	30"	30"	1900

NOTES:

- THE DESIGN USED IS THE CONTRACTOR'S OPTION. REINFORCING STEEL AND CONCRETE PER AASHTO M170.
- REINFORCEMENT SHALL CONFORM TO STANDARD REINFORCED CONCRETE PIPE CLASS II, LOCATED AT CENTER OF WALL PLUS ONE (1) NO. 4 BAR, TOP, BOTTOM AND EACH SIDE.
- JOINT IN END SECTION PER STANDARD PLATE 3000. TOP EXPOSED CONCRETE CORNERS SHALL HAVE 3/4" CHAMFER.
- TIE BOLTS AS REQUIRED.
- SEE PLANS FOR TYPE OF END REQUIRED.
- TWO PRECAST CONSTRUCTION PERMISSIBLE.
- SEE STANDARD PLATE 3145 FOR DETAILS.

APPROVED SEPT. 19, 2000

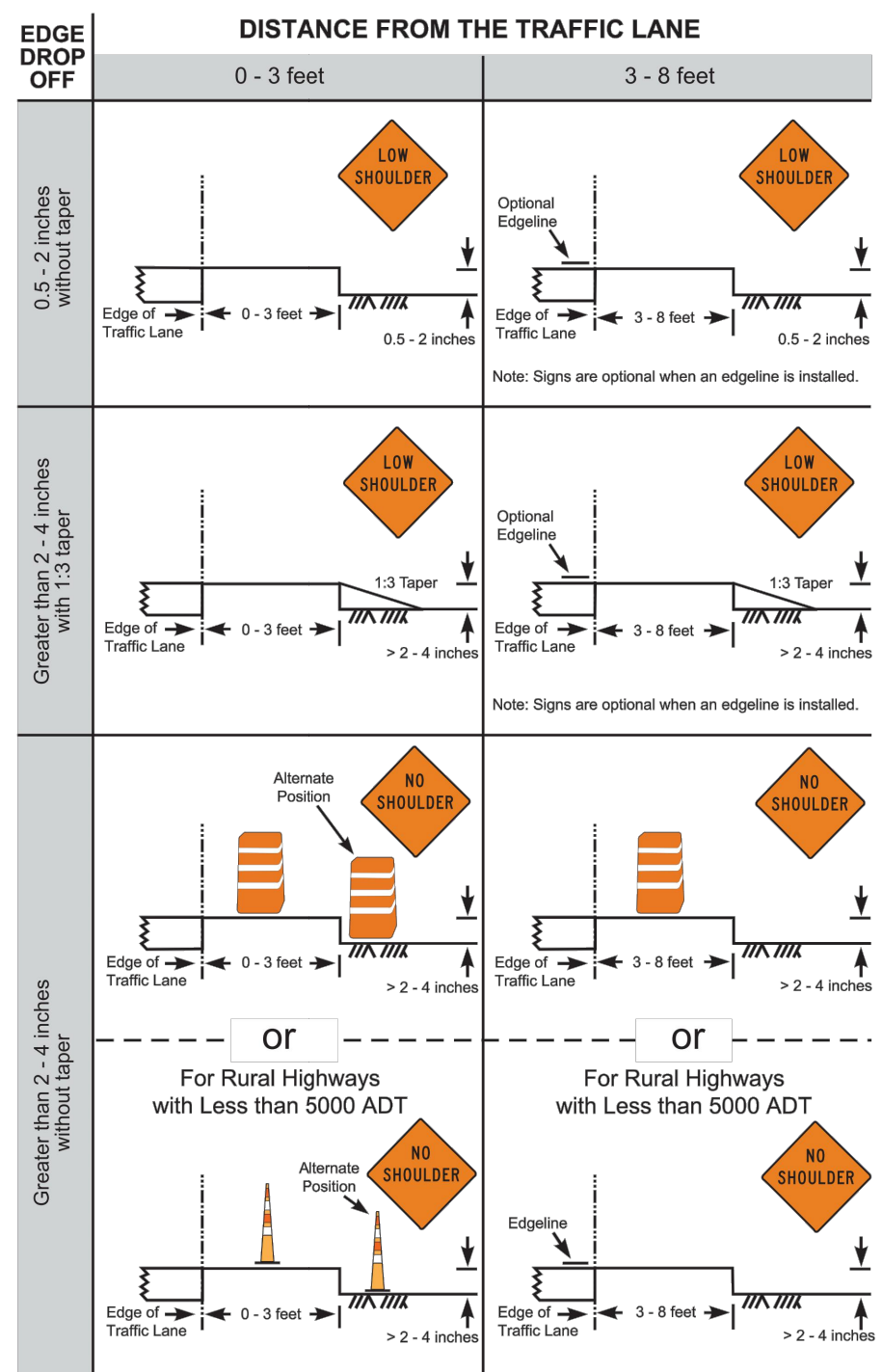
STATE DESIGN ENGINEER

STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION
PRECAST CONCRETE SAFETY APRON
(DESIGN OPTION NO. 1)

SPECIFICATION REFERENCE
2501
REVISED 3-22-2013 M.J.E.
STANDARD PLATE
3022C
1 OF 3

Field Manual

January 2018

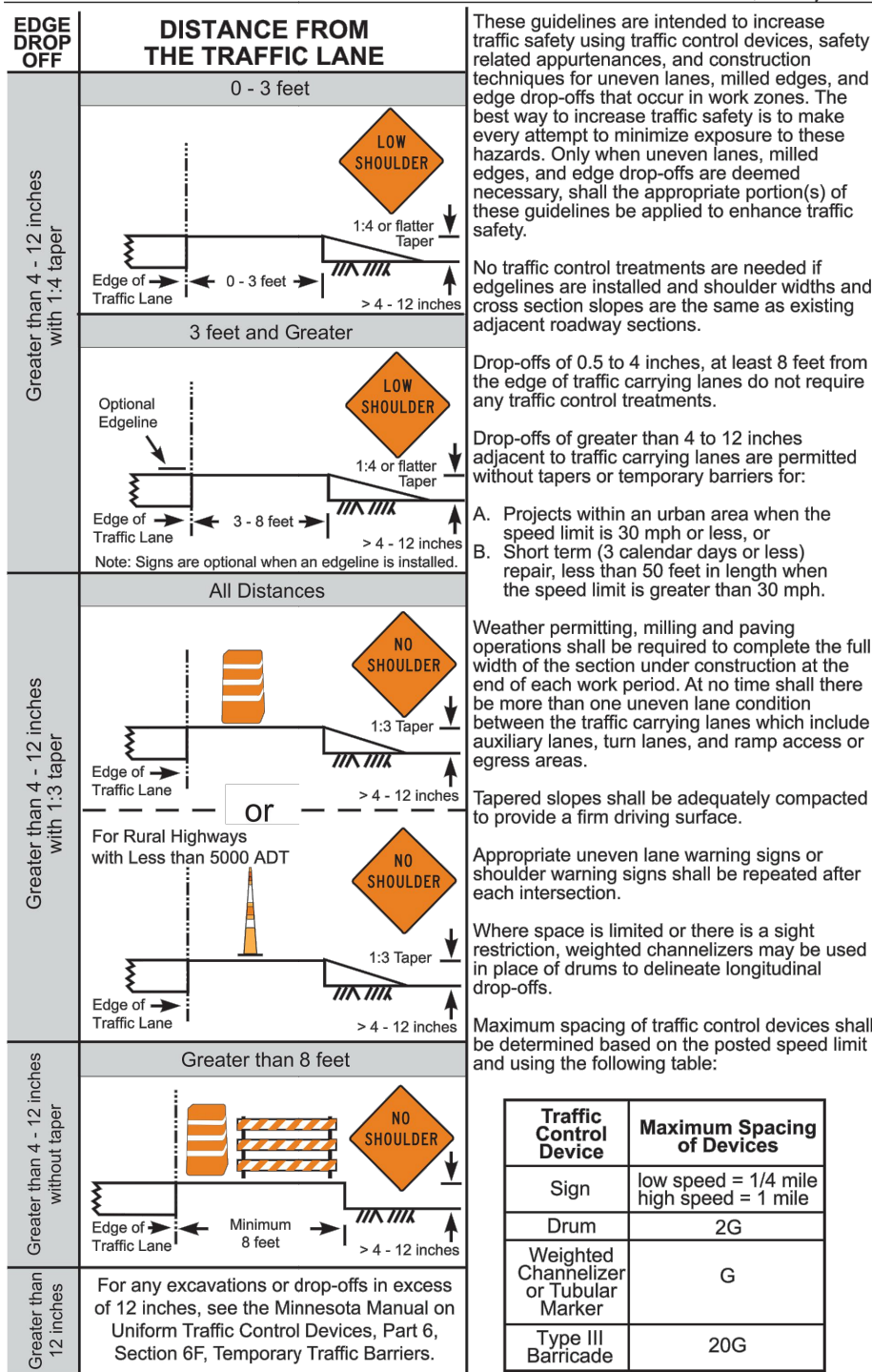


Longitudinal Drop-off Guidelines, cont.
Figure 6K-7

6K-ak

Field Manual

January 2018



Longitudinal Drop-off Guidelines, cont.
Figure 6K-7

6K-al

DESCRIPTION

DATE

REV NO.

DATE

DESIGN BY:

DRAWN BY:

CHECKED BY:

DWG FILE:

FILE NO.:

DATE

DESIGN BY:

DRAWN BY:

CHECKED BY:

DWG FILE:

FILE NO.:

DATE

DESIGN BY:

DRAWN BY:

CHECKED BY:

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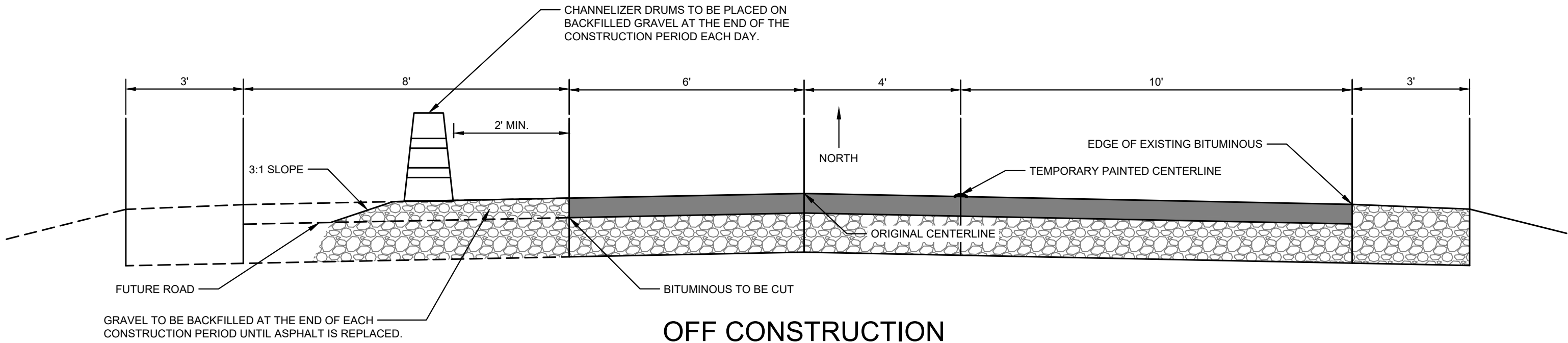
FARMSTEAD NORTH
RESIDENTIAL DEVELOPMENT
City of Oak Grove, Anoka County, MN
Cedar Dr. NW

TURN LANE DETAILS

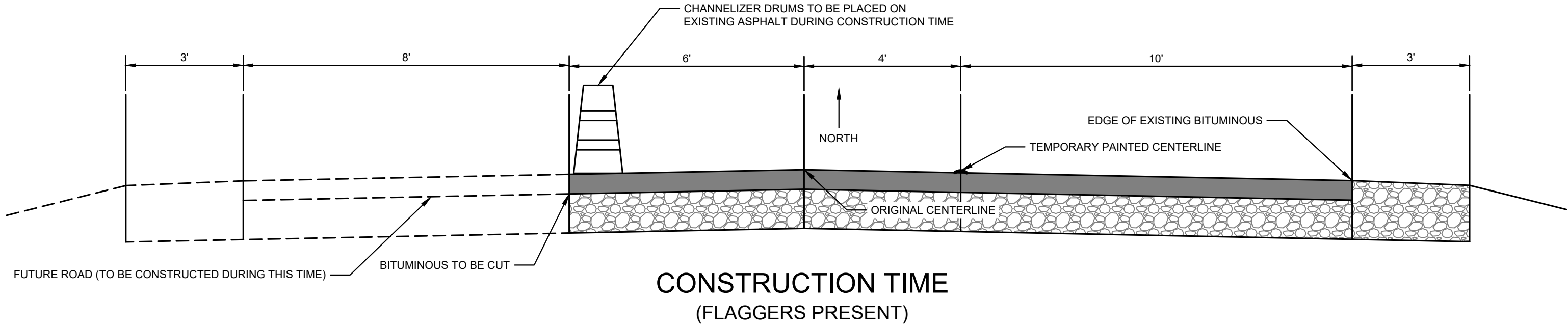
SHEET NO.

C5

FARMSTEAD NORTH
RESIDENTIAL DEVELOPMENT
TURN LANE TRAFFIC CONTROL SECTION EXHIBIT



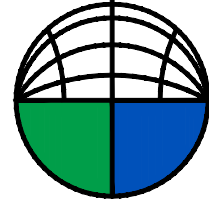
NOTE: THE SECTIONS ARE LOCATED AT THE THINNEST PORTION OF THE ROAD LOCATED AT THE START AND END OF THE NEW TURN LANE CONSTRUCTION.



SHEET NO.

C6

FARMSTEAD NORTH
RESIDENTIAL DEVELOPMENT
City of Oak Grove, Anoka County, MN
Cedar Dr. NW
CONSTRUCTION SECTION EXHIBIT



**BOGART, PEDERSON
& ASSOCIATES, INC.**
LAND SURVEYING
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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signed:
Christopher J. Dahn
Date: 02/23/2022 Lic. No. 58628

DATE: 02/23/2022
DESIGN BY: MJM
DRAWN BY: MJM
CHECKED BY: CJD
DWG FILE: SITE BASE
FILE NO.: 21-0318.00

REV NO.	DATE	DESCRIPTION
1	09/21/2021	REVISION PER CITY REVIEW
2	09/29/2021	REVISION PER PRE-CONSTRUCTION MEETING
3	10/13/2021	REVISIONS FOR TURN / BYPASS LANE
4	11/08/2021	REVISIONS FOR TURN / BYPASS LANE REVIEW
5	12/06/2021	REVISIONS FOR TURN / BYPASS LANE REVIEW
6	02/01/2022	REVISIONS FOR TURN / BYPASS LANE REVIEW
7	02/23/2022	REVISIONS FOR TURN / BYPASS LANE REVIEW