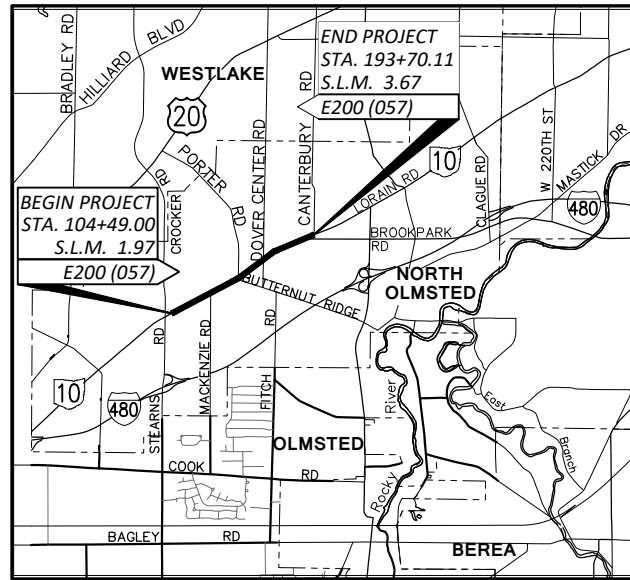


# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

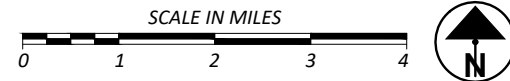
## CUY - SR 10 - 01.97 (LORAIN ROAD)

### CITY OF NORTH OLMSTED CUYAHOGA COUNTY



LOCATION MAP

LATITUDE: N 41° 24' 47" LONGITUDE: W 81° 55' 43"



PORTION TO BE IMPROVED	-----	
INTERSTATE HIGHWAY	-----	
FEDERAL ROUTES	-----	
STATE ROUTES	-----	
OTHER ROADS	-----	

**DESIGN DESIGNATION:**

CURRENT ADT (2026)	19,440
DESIGN YEAR ADT (2046)	19,440
DESIGN HOURLY VOLUME (2046)	1,799
DIRECTIONAL DISTRIBUTION	55%
TRUCKS (24 HOUR B&C)	583
DESIGN SPEED	35 MPH
LEGAL SPEED	35 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	PRINCIPAL ARTERIAL OTHER
NHS PROJECT	YES

**DESIGN EXCEPTIONS:**

NONE

**ADA DESIGN WAIVER:**

NOT REQUIRED

**INDEX OF SHEETS:**

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FEDERAL PROJECT NUMBER

E200057

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

THIS PROJECT WILL REHABILITATE LORAIN ROAD (SR-10) FROM 600 FEET EAST OF STEARNS ROAD TO CANTERBURY ROAD IN NORTH OLMSTEAD. REHABILITATION WILL INCLUDE INSTALLATION OF AN ASPHALT CONCRETE OVERLAY, FULL AND PARTIAL DEPTH PAVEMENT REPAIRS, CURB, WALK AND DRIVE APRON REPAIRS, AS NEEDED, AND INSTALLATION OF ADA COMPLIANT CURB RAMPS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	N/A
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	N/A
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A*
*ROUTINE MAINTENANCE PROJECT	

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

John Picuri, P.E., P.S.  
District 12 Deputy Director

Pamela Boratyn  
Director, Department of Transportation

**UNDERGROUND UTILITIES**  
Contact Two Working Days Before You Dig

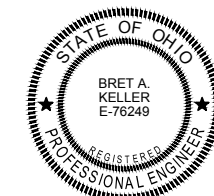
OHIO811, 8-1-1, or 1-800-362-2764  
(Non-members must be called directly)

PLANS PREPARED BY

CHAGRIN VALLEY ENGINEERING, LTD.  
Creative Engineers. Intelligent Solutions.  
22999 Forbes Road, Suite B Cleveland, Ohio 44146-5667  
Phone • 440.439.1999 Fax • 440.439.1969 www.cvelimited.com

OHIO DEPARTMENT OF TRANSPORTATION STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS	
NUMBER	DATE	NUMBER	DATE	NUMBER	DATE	NUMBER	DATE	NUMBER	DATE	NUMBER	DATE
BP-2.1	01-21-22	MT-95.31	07-18-25	HL-30.11	01-16-26			800	01-16-26		
BP-2.2	01-16-26	MT-95.32	07-18-25					821	04-20-12		
BP-2.5	01-16-26	MT-95.50	07-21-17	TC-16.22	01-16-26			832	07-18-25		
BP-3.1	01-19-24	MT-97.10	07-18-25	TC-21.21	07-18-25			875	01-17-25		
BP-5.1	01-16-26	MT-97.12	01-16-26	TC-22.20	07-18-25			921	07-19-24		
BP-7.1	01-16-26	MT-99.20	04-19-19	TC-71.10	01-16-26						
		MT-101.60	01-17-25	TC-74.10	01-16-26			1035	01-15-16		
CB-3	01-16-26	MT-101.90	07-17-20	TC-81.22	01-16-26			1055	07-15-22		
CB-3A	01-16-26	MT-102.20	04-19-19	TC-83.20	01-16-26			1041	01-20-23		
		MT-105.10	01-17-20	TC-83.30	01-16-26			1126	01-16-26		
DM-1.1	01-17-25	MT-110.10	07-19-13	TC-85.10	01-16-26						
DM-1.2	01-17-25	MT-120.00	01-16-26	TC-85.20	04-21-23						
DM-4.4	01-15-16										
MH-3	07-19-24										

ENGINEERS SEAL



TITLE SHEET

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.  
22999 FORBES ROAD, UNIT B  
CLEVELAND, OHIO 44146  
PHONE: (440) 439-1999  
FAX: (440) 439-1969

DESIGNER

SAF

REVIEWER

BAK 03/20/26

PROJECT ID

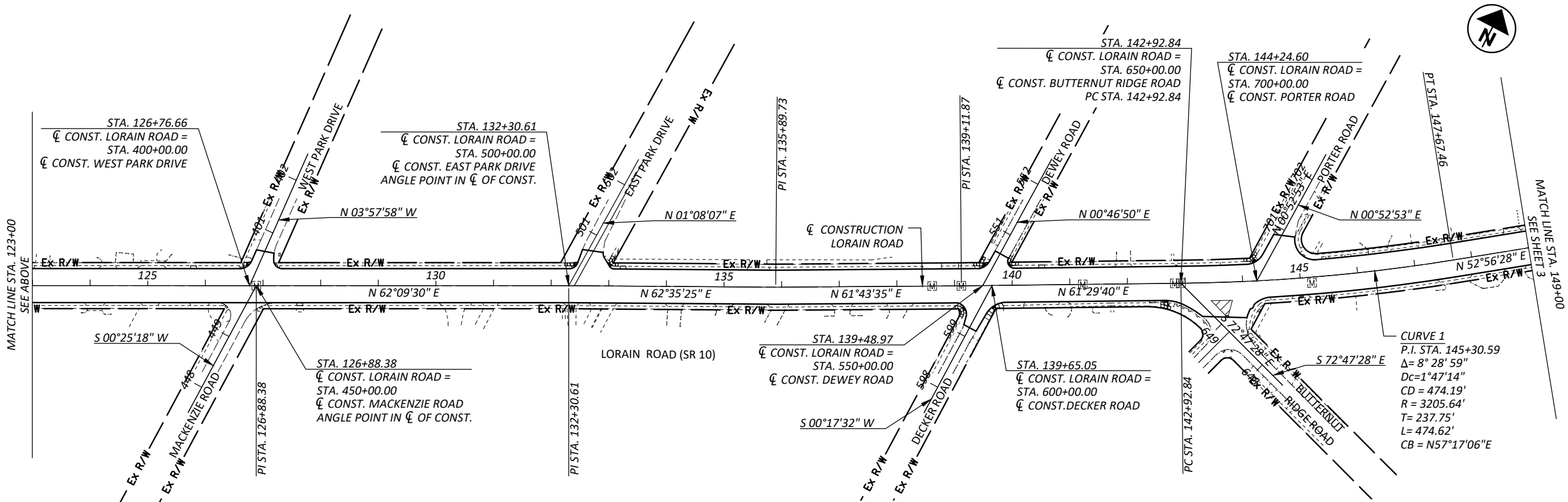
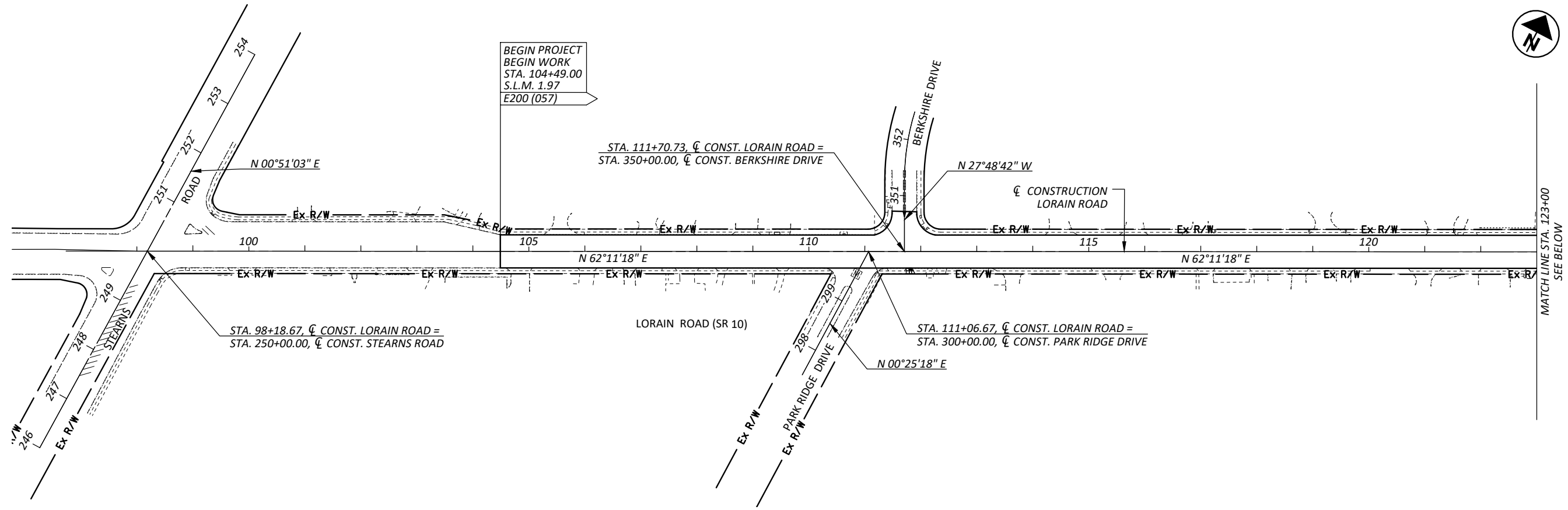
107287

SHEET TOTAL

1 | 79

CUY-10-01.97

MODEL: GT001 DATE: 3/20/2026 TIME: 4:15:03 PM USER: Sarah Flis P:\24288 Lorain Road Resurfacing\107287\400-Engineering\Roadway\Sheets\107287\_GT001.dwg

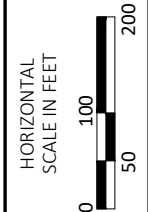
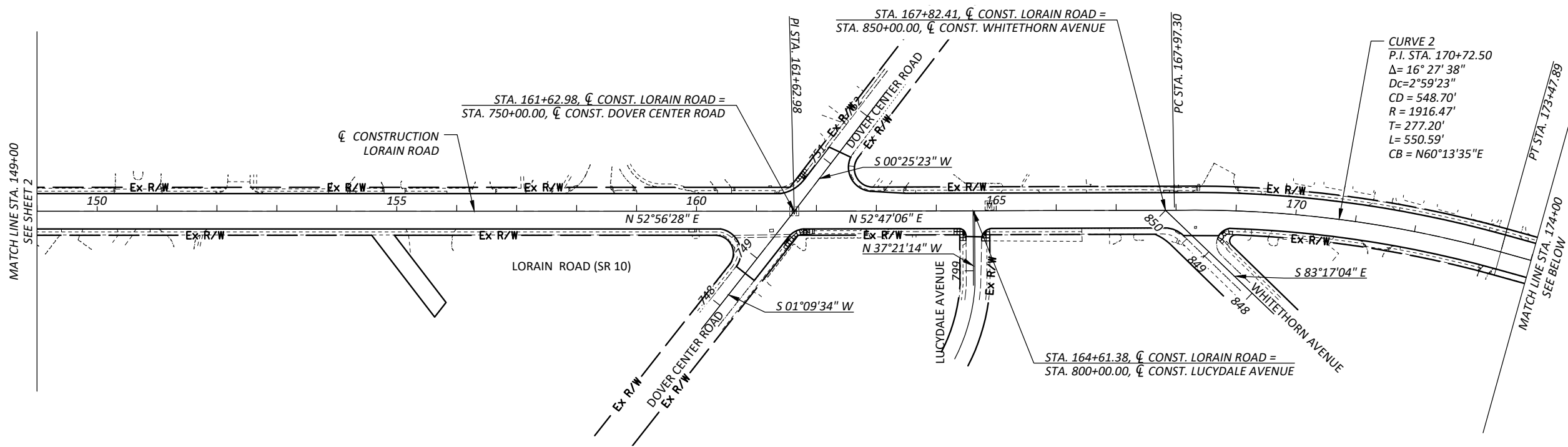


HORIZONTAL SCALE IN FEET

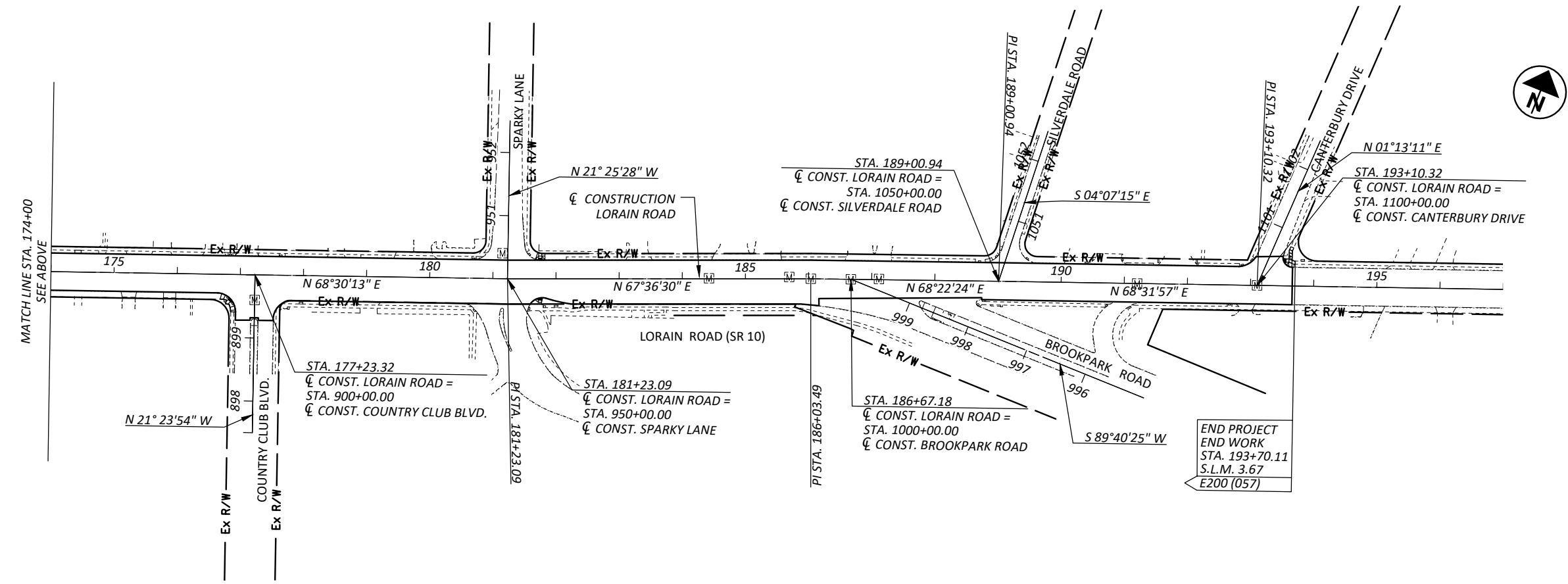


**SCHEMATIC PLAN**  
**STA. 98+18.67 TO STA. 149+00.00**

DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
2	79



**SCHEMATIC PLAN**  
STA. 149+00.00 TO STA. 197+00.00



END PROJECT  
END WORK  
STA. 193+70.11  
S.L.M. 3.67  
E200 (057)

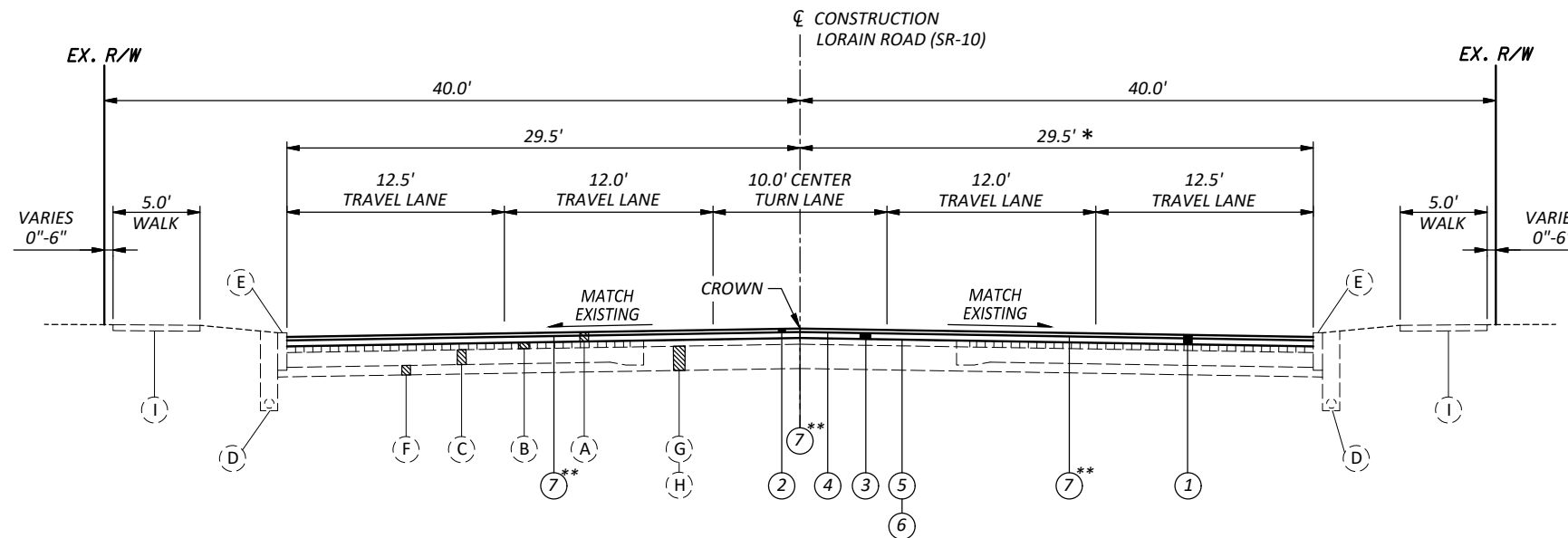
DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
3	79

**EXISTING LEGEND:**

- (A) ASPHALT OVERLAY (VARIES 2-1/2" TO 4"-1/2")
- (B) 4" BRICK PAVERS
- (C) CONCRETE BASE (10"±)
- (D) EX. UNDERDRAIN
- (E) EX. CURB
- (F) EX. SUBBASE
- (G) ASPHALT PAVEMENT (12"±)
- (H) ASPHALT OVER CONCRETE PAVEMENT (12"±)
- (I) EX. CONCRETE WALK

**PROPOSED LEGEND:**

- (1) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (3"±)
- (2) ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M (1.25"), AS PER PLAN
- (3) ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22 (1.75")
- (4) ITEM 407 - NON-TRACKING TACK COAT (0.055 GAL/SQ.YD)
- (5) ITEM 422 - AGGREGATE, SINGLE CHIP SEAL, TYPE A
- (6) ITEM 422 - EMULSION, CHIP SEAL
- (7) ITEM 875 - LONGITUDINAL JOINT ADHESIVE
- (8) ITEM 202 - PAVEMENT REMOVED
- (9) ITEM 305 - 9" CONCRETE BASE, CLASS QC 1P
- (10) ITEM 653- TOPSOIL FURNISHED AND PLACED (24")
- (11) ITEM 609 - CURB, TYPE 2-B



**LORAIN ROAD (RESURFACING)**  
STA. 104+49.00 TO STA. 193+66.00

\* VARIES FROM 29.5' TO 40.0'  
STA. 176+65.14 TO STA. 177+82.35  
VARIES FROM 30.7' TO 40.0'  
STA. 181+83.67 TO STA. 182+23.83

**SECTION APPLIES:**

STA. 104+49.00	TO STA. 110+28.37	=	579.37'	STA. 163+48.63	TO STA. 164+38.38	=	89.75'
STA. 110+28.37	TO STA. 111+28.08	=	99.71' (PARKRIDGE DRIVE INTERSECTION)	STA. 164+38.38	TO STA. 164+92.60	=	54.22' (LUCYDALE AVENUE INTERSECTION)
STA. 111+28.08	TO STA. 112+25.49	=	97.41' (BERKSHIRE DRIVE INTERSECTION)	STA. 164+92.60	TO STA. 167+80.80	=	288.20'
STA. 112+25.49	TO STA. 126+24.14	=	1,398.65'	STA. 167+80.80	TO STA. 168+90.49	=	109.69' (WHITEHORN AVENUE INTERSECTION)
STA. 126+24.14	TO STA. 127+32.54	=	108.40' (MACKENZIE ROAD & WEST PARK ROAD INTERSECTION)	STA. 168+90.49	TO STA. 176+65.14	=	774.65'
STA. 127+32.54	TO STA. 132+30.61	=	498.07'	STA. 176+65.14	TO STA. 177+82.35	=	117.21' (COUNTY CLUB BOULEVARD INTERSECTION)
STA. 132+30.61	TO STA. 133+07.94	=	77.33' (EAST PARK DRIVE INTERSECTION)	STA. 177+82.35	TO STA. 180+52.74	=	270.39'
STA. 133+07.94	TO STA. 139+05.26	=	597.32'	STA. 180+52.74	TO STA. 182+23.83	=	171.09' (SPARKY LANE INTERSECTION)
STA. 139+05.26	TO STA. 140+04.48	=	99.22' (DECKER ROAD & DEWEY ROAD INTERSECTION)	STA. 182+23.83	TO STA. 185+79.85	=	356.02'
STA. 140+04.48	TO STA. 142+63.30	=	258.82'	STA. 185+79.85	TO STA. 188+74.48	=	294.63' (BROOKPARK ROAD INTERSECTION)
STA. 142+63.30	TO STA. 145+27.88	=	264.58' (BUTTERNUT RIDGE ROAD & PORTER ROAD INTERSECTION)	STA. 188+74.48	TO STA. 189+61.40	=	86.92' (SILVERDALE ROAD INTERSECTION)
STA. 145+27.88	TO STA. 160+40.16	=	1,512.28'	STA. 189+61.40	TO STA. 192+81.23	=	319.83'
STA. 160+40.16	TO STA. 163+48.63	=	308.47' (DOVER CENTER ROAD INTERSECTION)	STA. 192+81.23	TO STA. 193+66.00	=	84.77' (CANTERBURY DRIVE INTERSECTION)
				TOTAL = 8,917'			

**NOTES:**

PAVEMENT WILL BE REPLACED ALONG THE CORRIDOR AS INDICATED ON THE PLAN SHEETS AND AS DIRECTED BY THE ENGINEER.  
\*\*APPLY LONGITUDINAL JOINT ADHESIVE ON ALL COLD LONGITUDINAL CONSTRUCTION JOINTS.

TYPICAL SECTION

CUY-10-01.97

MODEL: GY001A DATE: 3/20/2026 TIME: 2:46:05 PM USER: Sarah Filis  
P:\24288 Lorain Road Resurfacing\107287\400-Engineering\Roadway\Sheets\107287\_GY001.dwg

DESIGN AGENCY



CHAGRIN VALLEY ENGINEERING, LTD.  
22999 FORBES ROAD, UNIT B  
CLEVELAND, OHIO 44146  
PHONE: (440) 439-1999  
FAX: (440) 439-1969

DESIGNER

SAF

REVIEWER

BAK 03/20/26

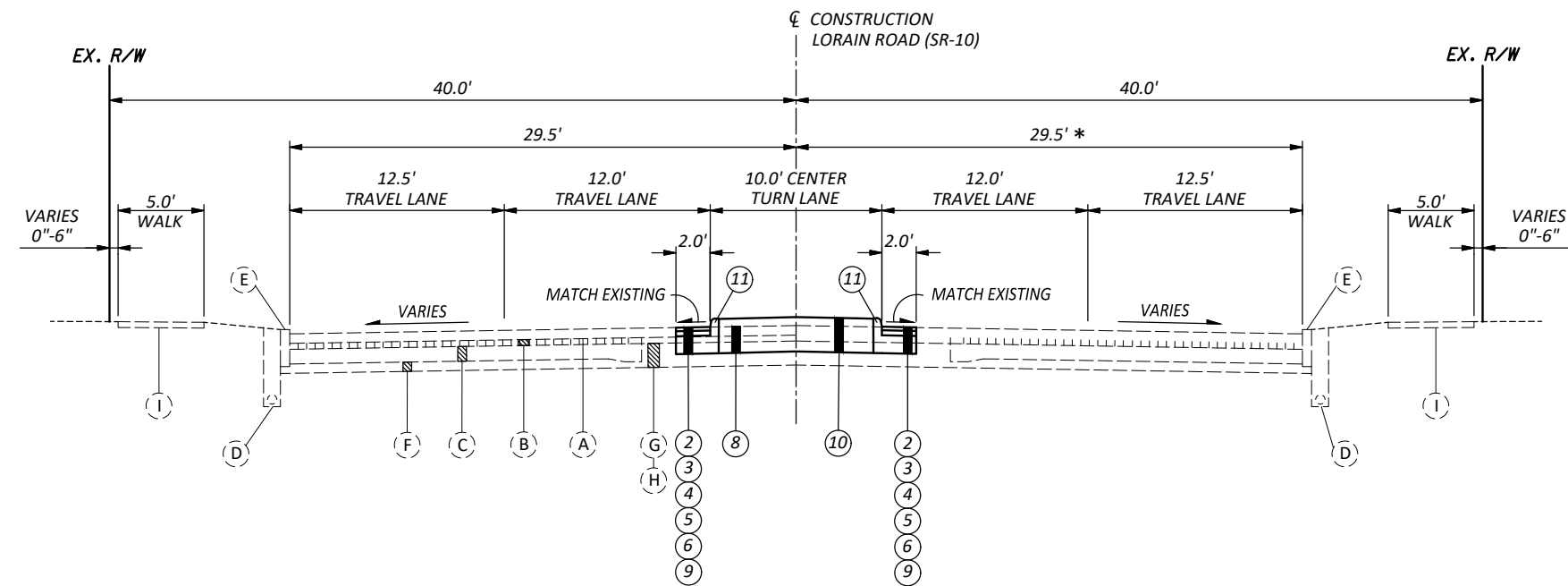
PROJECT ID

107287

SHEET TOTAL

4 | 79

FOR LEGEND SEE SHEET 4.



LORAIN ROAD - RAISED MEDIAN ISLAND  
STA. 152+76.50 TO STA. 154+30.50

DESIGN AGENCY



DESIGNER

SAF

REVIEWER

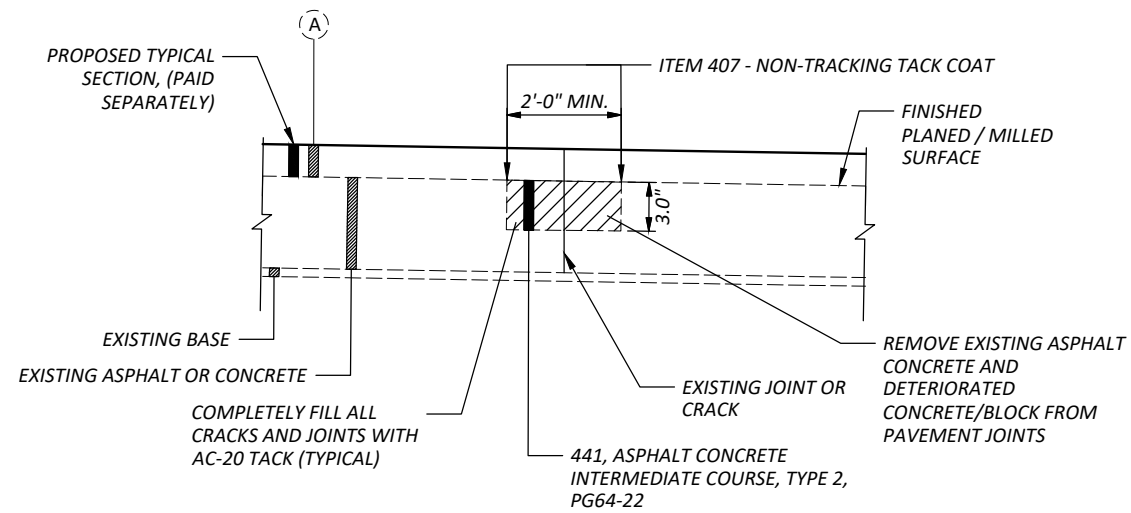
BAK 03/20/26

PROJECT ID

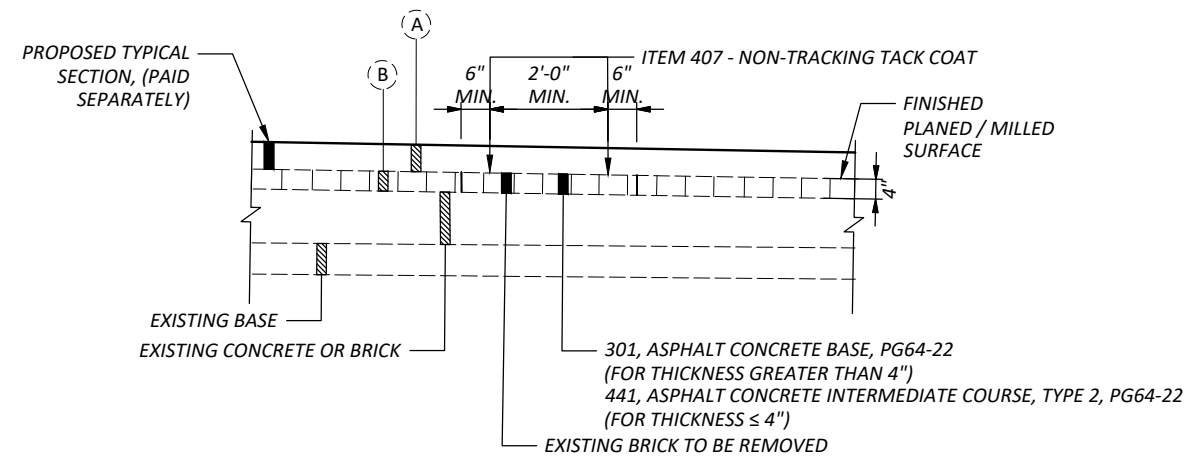
107287

SHEET TOTAL

5 | 79



ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN A  
 ASPHALT OR CONCRETE BASE  
 NOT TO SCALE



ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN B  
 BRICK BASE REMOVED  
 NOT TO SCALE

NOTES:

1. SAW CUT INCLUDED WITH PAVEMENT REMOVAL AND REPLACEMENT AND REPAIRS.

2. ALL ITEMS SHOWN IN THE DETAILS ON THIS SHEET ARE INCLUDED IN THE PAVEMENT REPAIR ITEM ITSELF. WITH THE EXCEPTION OF THE PROPOSED TYPICAL SECTION ITEMS SHOWN ON SHEET 4, NO ADDITIONAL COSTS WILL BE PAID FOR THE INCLUDED ITEMS.

DESIGN AGENCY



CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

DESIGNER

SAF

REVIEWER

BAK 03/20/26

PROJECT ID

107287

SHEET TOTAL

6 | 79

**GENERAL**

**UTILITIES**

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

**SEWER**  
CITY OF NORTH OLMSTED  
ATTN.: JEFF FILARSKI, CITY ENGINEER  
CHARGIN VALLEY ENGINEERING, LTD  
22999 FORBES ROAD, STE B  
CLEVELAND, OHIO 44416  
PHONE: (440) 439-1999  
EMAIL: FILARSKI@NORTH-OLMSTED.COM

**TELECOMMUNICATIONS**  
AT&T OHIO  
ATTN.: JAMES JANIS  
13630 LORAIN AVENUE, 2ND FLOOR  
CLEVELAND, OHIO 44111-3436  
PHONE: (216) 476-6142  
EMAIL: PJ8191@ATT.COM

NORTHEAST OHIO REGIONAL SEWER DISTRICT  
ATTN: ROBERT STOERKEL  
3900 EUCLID AVENUE  
CLEVELAND, OHIO 44115  
PHONE: (216) 881-6600 EXT. 6802  
EMAIL: STOERKELR@NEORS.DORG

CHARTER COMMUNICATIONS  
ATTN.: GARY NAUMANN  
8179 DOW CIRCLE  
STRONGSVILLE, OHIO 44136  
PHONE: (216) 575-8016, EXT. 5033  
EMAIL: GARY.NAUMEN@CHARTER.COM

**WATER**  
CITY OF CLEVELAND DIVISION OF WATER  
ATTN.: FRED ROBERTS  
1201 LAKESIDE AVENUE  
CLEVELAND, OHIO 44114  
PHONE: (216) 664-2444 EXT. 75590  
EMERGENCY DISPATCH  
PHONE: (216) 664-3060  
INSPECTION  
PHONE: (216) 664-2342  
EMAIL: FRED\_ROBERTS@CLEVELANDWATER.COM

EVERSTREAM  
ATTN.: GIO REILLO  
1228 EUCLID AVENUE, STE 250  
CLEVELAND, OHIO 44115  
PHONE: (216) 905-0780  
EMAIL: GREILLO@EVERSTREAM.NET

**GAS**  
ENBRIDGE GAS, FORMALLY DEO  
SEND PLANS, DESIGN CORRESPONDENCE,  
AND CONSTRUCTION CORRESPONDENCE TO:  
RELOCATION@DOMINIONENERGY.COM  
320 SPRINGSIDE DRIVE, SUITE 320  
ATTN: 2nd Floor Relocation Design  
AKRON, OHIO 44333  
PHONE: (330) 664-2409

MCI/VERIZON  
ATTN: AL GUEST  
120 RAVINE STREET  
AKRON, OHIO 44303  
PHONE: (330) 622-5967  
EMAIL: ALLAN.QUEST@VERIZON.COM

BREEZELINE (FORMERLY WOW)  
ATTN: JOSE DIAZ  
CONSTRUCTION COORDINATOR-WEST SIDE  
105 BLAZE INDUSTRIAL PKWY  
BEREA, OHIO 44017  
CELL: (216) 385-3901  
EMAIL: JDIAZ@BREEZELINE.COM

**ELECTRIC**  
ILLUMINATING COMPANY (CEI)  
ATTN.: JOHN ZASSICK  
6896 MILLER ROAD, SUITE 101  
BRECKSVILLE, OHIO 44141  
PHONE: (440) 546-8706  
EMAIL: JMZASSICK@FIRSTENERGYCORP.COM

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

**GCRTA COORDINATION NOTES**

THE CONTRACTOR SHALL NOTIFY IN WRITING THE GCRTA AT LEAST FOURTEEN (14) CALENDAR DAYS PRIOR TO THE START OF CONSTRUCTION. AND AT LEAST SEVEN (7) CALENDAR DAYS BEFORE IMPLEMENTING ANY SUBSTANTIAL CHANGE IN TRAFFIC PATTERN OR CLOSING ANY STREET OR PORTION THEREOF TO TRAFFIC.

CONTRACTOR IS TO MAINTAIN ACCESS TO BUS STOP LOCATIONS. IF NECESSARY, THE CONTRACTOR SHALL WORK WITH GCRTA TO ESTABLISH AN APPROVED TEMPORARY BUS STOP LOCATION. GCRTA WILL PROVIDE AND POST THE APPROPRIATE TEMPORARY BUS SIGN SIGNAGE.

THE CONTRACTOR SHALL NOTIFY GCRTA AT LEAST FIVE (5) BUSINESS DAYS IN ADVANCE OF CONSTRUCTION COMPLETION SO THAT PERMANENT BUS STOP SIGNS CAN BE RE-INSTALLED BY GCRTA.

**GCRTA COORDINATION NOTES (CONTINUED)**

CONTRACTOR MAY NOT REMOVE ANY BUS STOP SIGNS WITHOUT PRIOR AUTHORIZATION FROM GCRTA.

THE FOLLOWING IS A LIST OF CONTACT INFORMATION FOR GCRTA NOTIFICATIONS:

- CENTRAL COMMUNICATIONS: 216-566-5135, MONITORED 24/7
- TONY RICHARDSON, SERVICE QUALITY, ARICHARDSON@GCRTA.ORG
- HOWARD WESLEY, SERVICE QUALITY, HWESLEY@GCRTA.ORG
- AVERY RODGERS, SERVICE QUALITY, ARODGER@GCRTA.ORG
- ROBERT FLEIG, PUBLIC INFORMATION OFFICER, ROBERT.FLEIG@GCRTA.ORG
- MARK RODRIGUEZ, SERVICE QUALITY OFFICE MANAGER, MARK.RODRIGUEZ@GCRTA.ORG
- JOEL FREILICH, SERVICE MANAGEMENT, JFREILICH@GCRTA.ORG
- JEFFREY MACKO, SERVICE MANAGEMENT, JMACKO@GCRTA.ORG

**LOCAL LAWS, ORDINANCES, AND REGULATIONS**

IN ACCORDANCE WITH SECTION 107.01 OF THE GENERAL PROVISIONS, THE CONTRACTOR SHALL STAY FULLY INFORMED OF ALL LOCAL LAWS, ORDINANCES, REGULATIONS, ORDERS, AND DECREES THAT AFFECT THE WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBSERVE AND COMPLY WITH ALL SUCH LAWS, ORDINANCES, REGULATIONS, ORDERS, AND DECREES AT NO ADDITIONAL COST TO THE PROJECT/CITY.

**CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES**

AT PROJECT LOCATIONS WHERE THE CONTRACTOR IS WORKING ADJACENT TO PROPERTY OR SERVICES OF UTILITY COMPANIES SUCH AS, BUT NOT LIMITED TO, POWER, TELECOMMUNICATIONS, GAS, ETC. WORK SHALL NOT COMMENCE UNTIL ARRANGEMENTS FOR PROPER PROTECTION OF SUCH FACILITIES HAVE BEEN MADE, AS DIRECTED BY 107.16 OF THE ODOT CMS.

**WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION, AND OPERATION (INCLUDING ERECTION, MAINTENANCE AND REMOVAL) OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS, EXCEPT WHERE OTHERWISE NOTED, SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS. IT IS ANTICIPATED THAT ALL WORK WILL BE PERFORMED WITHIN THE EXISTING RIGHT OF WAY ALONG LORAIN ROAD, AS SHOWN ON THE PLANS.

AT VARIOUS LOCATIONS ALONG THE LORAIN ROAD CORRIDOR PRIVATE PROPERTY FENCING AND LANDSCAPE RETAINING WALLS ARE LOCATED ADJACENT TO THE EXISTING RIGHT OF WAY AND SIDEWALK BUT MAY OR MAY NOT BE DEPICTED ON THE PLANS. THE FENCING SHALL NOT BE DISTURBED UNLESS DIRECTED BY THE ENGINEER. IF DAMAGED THE FENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

**STATIONING AND LOCATIONS**

STATIONING AND LOCATIONS INDICATED ON THESE PLANS ARE APPROXIMATE. ALL LOCATIONS AND ITEMS CALLED OUT BY STATION ARE SUBJECT TO ADJUSTMENT IN THE FIELD "AS DIRECTED BY THE ENGINEER" AT NO ADDITIONAL COST.

**EXISTING TYPICAL SECTIONS**

EXISTING TYPICAL SECTIONS HAVE BEEN DEVELOPED FROM SITE MEASUREMENTS, PAVEMENT CORES AND RECORD PLANS AND ARE BELIEVED TO REPRESENT THE WIDTH AND COMPOSITION OF THE EXISTING PAVEMENT, BUT THE CITY OF NORTH OLMSTED DOES NOT GUARANTEE THE ACCURACY OF SAME AND SIDE ROAD PAVEMENT TYPES MAY DIFFER.

**CONTINGENCY QUANTITIES**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL SUBSIDIARY AGREEMENT GOVERNING COMPLETION OF THIS PROJECT.

**COOPERATION BETWEEN CONTRACTORS**

IT IS ANTICIPATED THAT OTHER CONTRACTORS WILL BE WORKING ON PROJECTS ADJACENT TO OR WITHIN THE LIMITS OF THIS PROJECT, EITHER FOR THE CITY OR FOR OTHER PUBLIC AGENCIES. THE CITY WILL BE RESURFACING DOVER CENTER ROAD IN 2026. THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS OPERATIONS, INCLUDING PROVISIONS FOR THE MAINTENANCE OF TRAFFIC, WITH THE CONTRACTORS OF OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THIS CONTRACT INCLUDING BUT NOT LIMITED TO NEORS, CWD, ENBRIDGE GAS, FIRST ENERGY, BREEZELINE, CHARTER COMMUNICATIONS, AT&T, ODOT CONTRACTORS, ETC.

**ITEM 619 - FIELD OFFICE, TYPE B, AS PER PLAN**

THE FIELD OFFICE SHALL, IN ADDITION TO THE ITEMS LISTED IN ITEM 619, BE FURNISHED WITH TWO CELLULAR TELEPHONES.

THE CONTRACTOR'S INSURANCE SHALL INCLUDE A RIDER FOR COVERAGE OVER ANY ODOT PROPERTY INSIDE THE FIELD OFFICE WHICH MAY BECOME DAMAGED OR STOLEN.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR THIS ITEM:

ITEM 619 - FIELD OFFICE, TYPE B, AS PER PLAN 12 MNTH

**CONSTRUCTION NOISE**

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION -TYPE DEVICES DURING THE HOURS OF 9 PM TO 7 AM MONDAY-SATURDAY, AND 9 PM TO 10 AM SUNDAY, UNLESS OTHERWISE APPROVED BY THE MUNICIPALITY. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

**CONTRACTOR WORK HOURS**

THE CONTRACTOR SHALL RESTRICT HIS WORKING HOURS TO THOSE PERMITTED BY LOCAL OR OTHER APPLICABLE ORDINANCE, LAWS AND REGULATIONS UNLESS A WRITTEN VARIANCE HAS BEEN ACCEPTED FROM THE APPROPRIATE GOVERNING AUTHORITIES.

**ENBRIDGE GAS, FORMERLY DOMINION EAST OHIO - PIPELINE PROTECTION**

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LATERAL AND SUBJACENT SUPPORT OF DOMINION'S PIPELINE(S), IN COMPLIANCE TO 29 CFR, PART 1926, SUBPART P, (SAFE EXCAVATION & SHORING). ONE-FOOT MINIMUM VERTICAL AND HORIZONTAL CLEARANCE MUST BE MAINTAINED BETWEEN DOMINION EAST OHIO'S (DEO) EXISTING PIPELINE(S) AND ALL OTHER IMPROVEMENTS. EXTREME CARE SHOULD BE TAKEN NOT TO HARM ANY DEO FACILITY (PIPELINES, ETC.) OR APPURTENANCE (PIPE COATING, TRACER WIRE, CATHODIC PROTECTION TEST STATION WIRES & DEVICES, VALVE BOXES, ETC.). DEO FACILITIES MUST BE PROTECTED WITH A TARP DURING BRIDGE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE AND LIABLE FOR ENSURING THAT ALL DEO EXISTING FACILITIES, ABOVE AND BELOW GROUND, REMAIN UNDAMAGED, ACCESSIBLE AND IN WORKING ORDER. THE CROSSING OF DEO'S PIPELINE WITH ANOTHER STEEL FACILITY MAY CREATE A POTENTIAL CORROSION ISSUE FOR THE PROPOSED FACILITY AND EXISTING DEO FACILITY. PLEASE CONTACT DOMINION'S CORROSION DEPARTMENT: DAVE CUTLIP (330-266-2121), RICK MCDONALD (330-266-2122), OR AL HUMRICHOUER (330-478-3757).

DEO = THE EAST OHIO GAS COMPANY  
DBA DOMINION EAST OHIO, 1-800-362-7557


**CONSTRUCTION NOTIFICATION**

THE CONTRACTOR SHALL ADVISE THE PROJECT ENGINEER A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, LANE CLOSURE AND ROAD CLOSURE. THE PROJECT ENGINEER WILL FORWARD THE INFORMATION TO THE CITY AND LOCAL OFFICIALS RESPONSIBLE FOR THE PUBLIC NOTIFICATION.

GENERAL NOTES

CUY-10-01.97

MODEL: G:\001A DATE: 3/20/2026 TIME: 3:21:35 PM USER: Sarah Filis P:\24288 Lorain Road Resurfacing\107287\400-Engineering\Roadway\Sheets\107287\_GN001.dwg

DESIGN AGENCY  
  
 CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

DESIGNER  
 SAF

REVIEWER  
 BAK 03/20/26

PROJECT ID  
 107287

SHEET TOTAL  
 7 | 79

**GENERAL (CONTINUED)**

**ELEVATION DATUM AND SURVEYING PARAMETERS**

USE THE FOLLOWING HORIZONTAL POSITIONING AND VERTICAL POSITIONING PARAMETERS FOR ALL SURVEYING:

HORIZONTAL COORDINATES ARE TO BE PROJECT GROUND COORDINATES EXPRESSED IN U.S. SURVEY FEET BASED ON THE OHIO COUNTY COORDINATE SYSTEM, CUYAHOGA COUNTY (CUI-LDP) AND REFERENCE THE NORTH AMERICAN DATUM OF 1983 (NAD83(2011)) USING THE GRS 80 ELLIPSOID. THE PROJECTION SCALE FACTOR FOR CUYAHOGA COUNTY IS 1.000029.

VERTICAL CONTROL IS TO BE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88, GEOID 18)

**ROADWAY**

**ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN**

**623.08 CONSTRUCTION LAYOUT STAKING.**

1. ALL HORIZONTAL CONTROL AND, IF NECESSARY, VERTICAL CONTROL REQUIRED FOR THE COMPLETE LAYOUT AND PERFORMANCE OF THE WORK UNDER THIS CONTRACT SHALL BE DONE BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE AND MAY BE PERIODICALLY REVIEWED BY THE ENGINEER. ANY INSPECTION OR REVIEWING OF THE CONTRACTOR'S LAYOUT BY THE ENGINEER AND THE ACCEPTANCE OF ALL OR ANY PART OF IT SHALL NOT RELIEVE THE CONTRACTOR OF HIS/HER RESPONSIBILITY TO PRODUCE THE PROPER WORK DIMENSIONS, GRADES AND ELEVATIONS. THE REQUIREMENTS OF SECTION 107.10 OF ODOT'S CMS ALSO APPLY.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND, IF APPLICABLE, ALL GRADES, LINES AND LEVELS AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS, AND HE/SHE SHALL REPORT ANY ERRORS OR INCONSISTENCIES IN THE ABOVE TO THE ENGINEER BEFORE COMMENCING WORK OR ORDERING ANY MATERIAL.
3. THE CONTRACTOR SHALL MARK (PAINT) OR STAKE THE PROJECT STATION NUMBERS AT INTERVALS OF 50 FEET (OR LESS AS DIRECTED OR APPROVED BY THE ENGINEER) BEFORE COMMENCING THE WORK.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL STAKES AND MARKS AND SHALL REPLACE THEM AT HIS/HER EXPENSE IF THEY ARE DAMAGED, LOST, DISPLACED, OR REMOVED. THE CONTRACTOR SHALL USE COMPETENT PERSONNEL AND SUITABLE EQUIPMENT FOR THE LAYOUT WORK REQUIRED AND SHALL PROVIDE THAT IT IS DONE UNDER THE SUPERVISION OF A REGISTERED SURVEYOR.

**623.11 BASIS OF PAYMENT.**

PAYMENT WILL BE MADE UNDER:

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN LS

**ITEM 202 - WALK REMOVED, AS PER PLAN  
ITEM 202 - CURB REMOVED, AS PER PLAN**

ALL REMOVAL ITEMS THAT IMPACT PAVEMENT, DRIVES, WALKS, CURB OR OTHER HARD SURFACES SHALL INCLUDE THE COST FOR FULL-DEPTH SAW CUTTING, AND ALL ADDITIONAL EQUIPMENT, MATERIAL AND LABOR TO PERFORM THE WORK. SAW CUTTING SHALL BE PERFORMED AT THE NEAREST EXISTING JOINT, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

WORK UNDER THESE ITEMS SHALL INCLUDE REMOVAL OF ASPHALT, CONCRETE, BRICK, GROUT, GRANITE OR SANDSTONE BLOCK, AND/OR OTHER MATERIALS TO THE TOP OF THE EXISTING CUSHION/SAND BASE COURSE. NO SEPARATE PAYMENT WILL BE MADE FOR DIFFERENT TYPES OF MATERIAL.

ITEM 202 - CURB REMOVED, AS PER PLAN, SHALL INCLUDE ALL TYPES OF CURB INCLUDING BUT NOT LIMITED TO TYPE 2, TYPE 2A, TYPE 2B, TYPE 6, ETC. NO SEPARATE PAYMENT WILL BE MADE FOR VARYING CURB TYPES. ITEM 202 - CURB REMOVED, AS PER PLAN, SHALL ALSO INCLUDE THE REMOVAL AND REPLACEMENT OF ANY ADJACENT PAVEMENT BASE TO FACILITATE CURB REPLACEMENT AS DETAILED IN THESE PLANS.

ITEM 202 - WALK REMOVED, AS PER PLAN, SHALL INCLUDE THE REMOVAL OF ALL SIDEWALK MARKED FOR REMOVAL ON THE PLAN SHEETS OR AS DIRECTED BY THE ENGINEER WITHIN THE PROJECT LIMITS. IN SOME AREAS ALONG LORAIN ROAD THE TREELAWN OR SPACE BEHIND THE EXISTING SIDEWALK HAS BEEN PAVED USING A VARIETY OF MATERIALS (CONCRETE, ASPHALT, AGGREGATE, PAVERS, BRICKS, STONES, ETC.) AND SHALL BE INCIDENTAL TO ITEM 202 WALK REMOVED, AS PER PLAN, UNLESS OTHERWISE QUANTIFIED. THE LIMITS FOR REMOVAL SHALL BE AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

**ITEM 608 - 4" CONCRETE WALK, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF ITEM 608 AND THE CONCRETE SPECIFICATIONS ON THESE PLANS, THE FOLLOWING SHALL APPLY:

THIS ITEM INTENDED FOR USE AS DIRECTED BY THE ENGINEER, TO REMOVE AND REPLACE STRUCTURALLY DEFICIENT SIDEWALK AND TO CORRECT TRIPPING HAZARDS. AREAS WHERE THIS APPLIES WILL INCLUDE ANY NECESSARY CONCRETE SIDEWALK ADJACENT TO INTERSECTION CORNERS WHERE NEW ADA CURB RAMPS ARE BEING INSTALLED. SPECIFIC LOCATIONS ARE NOT SHOWN IN THE PLANS, BUT AN ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ALL CONCRETE FOR ITEM 608 - 4" CONCRETE WALK, AS PER PLAN SHALL HAVE A 2" COMPACTED SCREENING BED WHICH MEETS THE REQUIREMENTS 703.10 (LIMITED TO CRUSHED STONE). THE COST OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 - 4" CONCRETE WALK, AS PER PLAN.

PER 608.03(C), IT IS REQUIRED THAT 1/2 INCH THICK EXPANSION JOINT MATERIAL (705.03) BE INSTALLED BETWEEN THE WALK AND THE BACK OF CURB OR ANY OTHER FIXED OBJECT, IN ADDITION TO THE LOCATIONS SPECIFIED UNDER 608.03(C). TRANSVERSE EXPANSION JOINTS SHALL BE CONSTRUCTED AT INTERVALS OF NOT MORE THAN 25 TO 30 FEET UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE EXPANSION JOINT FILLER (705.03) SHALL BE PLACED AT THE TRANSVERSE EXPANSION JOINTS FOR THE FULL DEPTH/WIDTH OF THE CONCRETE WALK AND SHALL BE TRULY NORMAL TO GRADE. THE TOP 1/2 INCH OF THE EXPANSION JOINT PLACED BETWEEN THE WALK AND THE BACK OF CURB SHALL BE SEALED WITH 705.04 JOINT SEALER.

UNLESS OTHERWISE REQUIRED BY MUNICIPAL STANDARDS/ORDINANCES, THE FINAL SURFACE SHALL BE TEXTURED BY USE OF AN ACCEPTED BROOM SO AS TO PRODUCE A UNIFORM, GRITTY, TRANSVERSE TEXTURE, AFTER WHICH, THE CONTRACTOR IS REQUIRED TO RETRACE THE PREVIOUSLY FORMED JOINTS AND OUTSIDE EDGES OF THE WALK (I.E. PICTURE FRAME)

IN LOCATIONS WHERE DRIVEWAY APRONS ARE REMOVED AND WALK INSTALLED; ITEM 304 - AGGREGATE BASE, AS PER PLAN WILL BE PLACED TO BRING EXCAVATION TO GRADE.

A MINIMUM 4' WIDE ACCESSIBLE ROUTE WITH A MAXIMUM 1.56% CROSS SLOPE SHALL BE PROVIDED FOR ALL WALK REPLACEMENT AREAS. WALK SHALL MAINTAIN POSITIVE DRAINAGE TO THE STREET UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

TOPSOIL, SEEDING AND MULCHING REQUIRED ADJACENT TO THE 4" CONCRETE WALK CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. SEEDING MIX SHALL CONFORM TO ODOT CMS 659.08 HIGH QUALITY SEEDS, CLASS I.

THE COST OF THE MATERIAL AND LABOR ASSOCIATED WITH THE ABOVE WORK IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 - 4" CONCRETE WALK, AS PER PLAN.

**PROTECTION OF RIGHT-OF-WAY LANDSCAPING**

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEERS FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL. THE CONSTRUCTION LIMITS ARE GENERALLY IDENTIFIED AS THE BACK OF WALK ALONG LORAIN ROAD.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS AS DEFINED ABOVE WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

GENERAL NOTES

CUY-10-01.97

MODEL: GN001B DATE: 3/20/2026 TIME: 2:46:17 PM USER: Sarah Filis  
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DESIGN AGENCY



DESIGNER SAF

REVIEWER

BAK 03/20/26

PROJECT ID

107287

SHEET TOTAL

8 | 79

**ROADWAY (CONTINUED)**

**ITEM 608 - CURB RAMP, AS PER PLAN**

ALL APPLICABLE PROVISIONS OF ITEM 608 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

**608.01 DESCRIPTION.**

THIS WORK SHALL CONSIST OF CONSTRUCTING AMERICAN WITH DISABILITIES ACT (ADA) COMPLIANT CURB RAMPS IN ACCORDANCE WITH ODOT'S STANDARD CONSTRUCTION DRAWING BP-7.1 (EXCEPT AS MODIFIED HEREIN) AT THE LOCATIONS SHOWN ON THE PLANS OR AT LOCATIONS DETERMINED BY THE ENGINEER.

**608.07 CURB RAMPS.**

THE ENGINEER WILL DETERMINE THE EXACT LOCATIONS AND APPROPRIATE CURB RAMP DESIGNS TO BE CONSTRUCTED. EXISTING CURB RAMPS THAT ARE NOT AFFECTED BY THE CONSTRUCTION AND ARE CURRENTLY ADA COMPLIANT NEED NOT BE REPLACED. AT THE COMPLETION OF THE PROJECT ALL CURB RAMPS WITHIN THE PROJECT LIMITS SHALL BE ADA COMPLIANT.

NO ELEVATION DATA IS PROVIDED IN THE PLANS FOR CURB RAMP CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CURB RAMP LAYOUT IN ACCORDANCE WITH ODOT SCD BP-7.1. THE CONTRACTOR SHALL NOT PLACE ANY CONCRETE UNTIL THE CURB RAMP LAYOUT HAS BEEN APPROVED BY THE ENGINEER. THE LAYOUT SHALL PROVIDE THE ENGINEER WITH WITH ALL NECESSARY SLOPES AND WIDTHS FOR APPROVAL.

WHERE PHYSICALLY FEASIBLE, AS DETERMINED BY THE ENGINEER, PROVIDE 3:1 FLARED SIDES IN LIEU OF RETURNED CURBS.

THE ENGINEER AND CITY SHALL CAREFULLY CONSIDER POTENTIAL IMPACTS TO UTILITIES AND ADJACENT PROPERTY OWNERS WHEN DETERMINING THE EXACT CURB RAMP LOCATIONS AND DESIGNS.

TOPSOIL, SEEDING AND MULCHING REQUIRED ADJACENT TO THE CURB RAMP CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. SEEDING MIX SHALL CONFORM TO ODOT CMS 659.08 HIGH QUALITY SEEDS, CLASS I.

THICKNESS OF THE CURB RAMP WALK AND CONCRETE BASE BENEATH THE DETECTABLE WARNINGS SHALL BE A MINIMUM OF SIX (6) INCHES. IN ADDITION, A TWO (2) INCH COMPACTED SCREENINGS BED, AS SPECIFIED UNDER "ITEM 608 - 4" CONCRETE WALK, AS PER PLAN", SHALL BE FURNISHED AND PLACED BENEATH ALL CURB RAMP AREAS.

**608.09 BASIS OF PAYMENT.**

PAYMENT WILL BE MADE UNDER ITEM 608 - CURB RAMP, AS PER PLAN (SF).

THE PER SF PAYMENT FOR CURB RAMPS SHALL ALSO INCLUDE THICKENING THE CONCRETE WALK TO SIX (6) INCHES AND THE REPLACEMENT OF ADJACENT CURB.

PAYMENT FOR FURNISHING AND PLACING THE TWO (2) INCH COMPACTED SCREENINGS BED IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 - CURB RAMP, AS PER PLAN WHICH IS MEASURED THROUGH ALL CURB RAMP AREAS.

**WATER SUPPLY**

WATER WILL BE SUPPLIED TO THE CONTRACTOR AT THE NEAREST HYDRANT. THE COST OF THE WATER SUPPLY AND PERMIT FEES FOR SAME SHALL BE PAID BY THE CONTRACTOR. THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMIT FROM THE CITY OF CLEVELAND WATER DEPARTMENT.

THE CONTRACTOR WILL BE REQUIRED TO PROVIDE APPROVED STANDARD TIGHT HOSE AND FITTINGS WITH WHICH TO MAKE CONNECTIONS TO HYDRANTS AND OUTLETS. NO IMPROPER, WASTEFUL, OR UNDUE USE OF WATER WILL BE PERMITTED.

THE CURRENT CLEVELAND WATER DEPARTMENT PERMITS, FEES AND CHARGES REQUIRED CAN BE FOUND AT WWW.CLEVELANDWATER.COM/CONSTRUCTION/CONSTRUCTION-FEES.

**UNSUITABLE SUBGRADE MATERIAL**

WHERE UNSUITABLE SUBGRADE MATERIAL IS ENCOUNTERED, IT SHALL BE REMOVED TO THE DEPTH DETERMINED BY THE ENGINEER AND REPLACED IN SIX (6) INCH MAXIMUM (LOOSE DEPTH) MECHANICALLY COMPACTED LAYERS. SUITABLE EMBANKMENT MATERIAL (204.02) REQUIRED TO REPLACE THE UNDERCUT SUBGRADE SHALL, TO THE EXTENT POSSIBLE, EXHIBIT THE SAME PHYSICAL PROPERTIES AS THE ADJACENT SOUND SUBGRADE MATERIALS. HOWEVER, USE OF SLAG, IN ANY FORM, IS NOT PERMITTED.

REMOVAL OF UNSUITABLE SUBGRADE SHALL BE PAID UNDER ITEM 204 - EXCAVATION OF SUBGRADE. THE COST OF FURNISHING AND COMPACTING SUITABLE EMBANKMENT MATERIAL IN PLACE SHALL BE PAID FOR UNDER ITEM 204 - GRANULAR MATERIAL, TYPE B.

THE FOLLOWING ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER, ARE CARRIED TO THE GENERAL SUMMARY FOR THIS WORK AND PAYMENT IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR:

ITEM 204 - EXCAVATION OF SUBGRADE	25 CY
ITEM 204 - GRANULAR MATERIAL, TYPE B	25 CY

**EXISTING DRIVE AND/OR DRIVE APRON REMOVAL/REPLACEMENT**

THE PROPOSED LOCATIONS AND LIMITS OF DRIVE AND/OR DRIVE APRON REMOVALS/REPLACEMENTS ARE NOT SHOWN ON THE PLANS. THE LIMITS OF CONTINGENCY DRIVE AND/OR DRIVE APRON REMOVALS/REPLACEMENTS REQUIRED TO FACILITATE ADJACENT PAVEMENT, CURB, TYPE 6, UNDERDRAIN OR SIDEWALK WORK NOT SHOWN ON THE PLANS SHALL BE AS DIRECTED BY THE ENGINEER. CONTINGENCY QUANTITIES ARE PROVIDED HEREIN FOR REPAIRS TO ABUTTING DRIVE APRONS, DRIVES AND PARKING LOT AREAS UNAVOIDABLY DAMAGED, AS DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE DESIGNATED PORTIONS OF EXISTING DRIVES AND/OR DRIVE APRONS PER 202.05 OR 203.04(E), AS APPLICABLE, AND BY METHODS THAT WILL NOT DISTURB, DAMAGE OR UNDERMINE THE ADJACENT PAVEMENT, CURB, SIDEWALK OR THE PORTIONS OF EXISTING DRIVES/DRIVE APRONS INTENDED TO REMAIN IN PLACE. ANY ADJACENT FACILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE, AS DETERMINED BY THE ENGINEER, AND WHICH ARE NOT OTHERWISE DESIGNATED FOR REPLACEMENT, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, ALL AT THE DIRECTION OF THE ENGINEER.

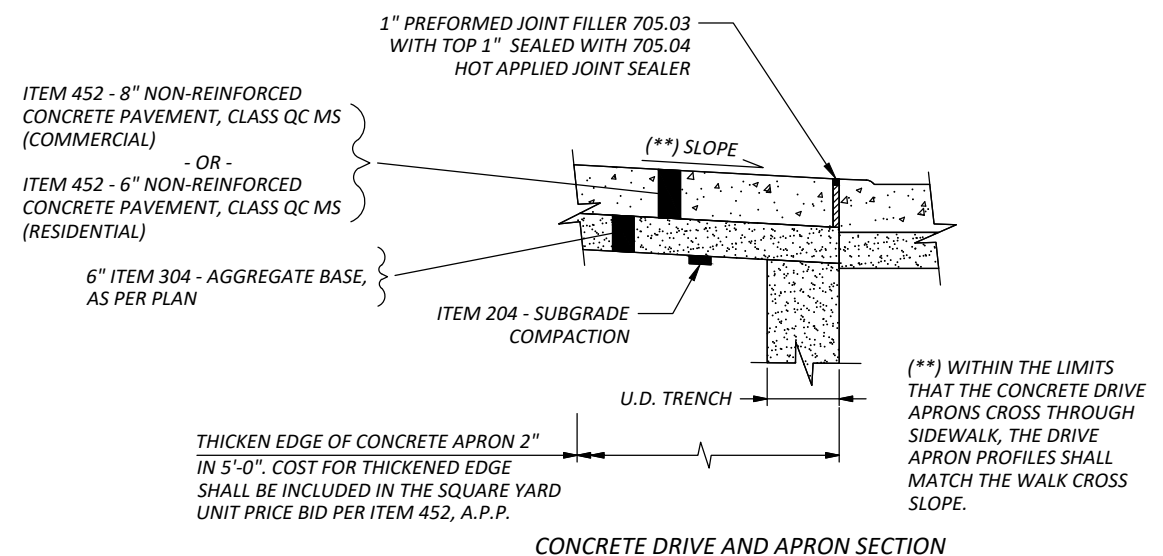
CONFIGURATIONS AND COMPOSITIONS OF COMPLETELY REPLACED AND PARTIALLY REPLACED DRIVES/DRIVE APRONS SHALL GENERALLY MATCH THE EXISTING, AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL STAGE HIS/HER OPERATIONS SUCH THAT THE MAXIMUM OUT OF SERVICE TIME FOR ANY RESIDENTIAL DRIVE IS THREE (3) DAYS. THE CONTRACTOR SHALL NOTIFY EACH RESIDENT OF ANY RESTRICTED ACCESS TO THEIR PROPERTY NO LATER THAN ONE (1) WEEK IN ADVANCE. ACCESS TO COMMERCIAL AND HANDICAP PROPERTY SHALL BE MAINTAINED AT ALL TIMES.

TOPSOIL, SEEDING AND MULCHING REQUIRED ADJACENT TO THE DRIVE/DRIVE APRON CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. SEEDING MIX SHALL CONFORM TO ODOT CMS 659.08 HIGH QUALITY SEEDS, CLASS I.

THE FOLLOWING CONTINGENCY QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 202 - PAVEMENT REMOVED	1240 SY
ITEM 203 - EXCAVATION	207 CY
ITEM 204 - SUBGRADE COMPACTION	1240 SY
ITEM 304 - AGGREGATE BASE, AS PER PLAN	207 CY
ITEM 452 - 6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	40 SY
ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	1200 SY



CUY-10-01.97

MODEL: GN001.C DATE: 3/20/2026 TIME: 2:46:19 PM USER: Sarah Filis  
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GENERAL NOTES

DESIGN AGENCY	<b>CVE</b>
DESIGNER	SAF
REVIEWER	BAK
PROJECT ID	03/20/26
SHEET	107287
TOTAL	9   79

**ROADWAY (CONTINUED)**

**ITEM 623 - MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN**  
**ITEM 623 - MONUMENT, MISC.: CUYAHOGA COUNTY MONUMENT BOX**  
**ITEM 623 - MONUMENT, MISC.: CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1**

WHERE, AS DETERMINED BY THE ENGINEER, EXISTING MONUMENT BOXES ARE SUITABLE FOR REUSE, THEY SHALL REMAIN UNDISTURBED IN PLACE OR, IF/WHERE REQUIRED, THEY SHALL SIMPLY BE ADJUSTED TO GRADE.

FOR ALL REFERENCES "CUYAHOGA COUNTY MONUMENT BOX", "CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1" AND CUYAHOGA COUNTY STANDARD CONSTRUCTION DRAWING "MB-1C" SEE DETAILS ON SHEET 72.

EXISTING MONUMENT BOXES THAT ARE SUITABLE FOR REUSE, MAY BE ADJUSTED USING "ADJUSTING RINGS" AS DETAILED ON THE MB-1C. EXISTING MONUMENT BOXES THAT ARE DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR REUSE SHALL BE REMOVED AND REPLACED WITH A CUYAHOGA COUNTY MONUMENT BOX AS DETAILED ON THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING MB-1C, SET TO GRADE.

CARE AND/OR PROTECTIVE MEASURES SHALL BE EMPLOYED BY THE CONTRACTOR TO AVOID DAMAGE OR DISRUPTION OF EXISTING MONUMENTS DURING THE MONUMENT BOX ADJUSTMENT OR REMOVAL AND REPLACEMENT OPERATIONS AND ALL OTHER OPERATIONS IN THE PROXIMITY OF SAID MONUMENTS. THOSE MONUMENTS THAT ARE DISPLACED OR DAMAGED DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REMOVED AND REPLACED WITH A TYPE 1 CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY UNDER THE SUPERVISION OF A LICENSED SURVEYOR, ALL AT THE CONTRACTOR'S EXPENSE. WHERE NO EXISTING MONUMENTS ARE FOUND WITHIN SAID MONUMENT BOXES OR WHERE MONUMENTS ARE DISPLACED OR DAMAGED AT NO FAULT OF THE CONTRACTOR, THEY SHALL BE PLACED OR REPLACED IN ACCORDANCE WITH "ITEM 623 - MONUMENT, MISC.: CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1", AS SPECIFIED BELOW; ALL AT THE DIRECTION OF THE ENGINEER.

WHERE DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE THE EXISTING MONUMENT ASSEMBLY IN ITS ENTIRETY AND SHALL INSTALL, EXCEPTING THE "MONUMENT PIN," THE ENTIRE MONUMENT ASSEMBLY, INCLUDING THE BOX AS DETAILED ON THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING MB-1C. INSTALLATION SHALL BE SUCH THAT WHEN THE CONTRACTOR PLACES THE "MONUMENT PIN", IT CAN BE CENTERED IN THE BOX. PAYMENT FOR THE ABOVE WORK SHALL BE MADE UNDER ITEM 623 - MONUMENT, MISC.: CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1.

EXISTING CONCRETE (BLOCK-OUT) PAVEMENT REMOVED SHALL BE REPLACED USING MEDIUM-SETTING CONCRETE (CLASS QC MS) PER 499.03 OF THE SPECIFICATIONS. ALL WORK SHALL BE PERFORMED AT THE DIRECTION OF THE ENGINEER. PAYMENT FOR THE ABOVE SHALL BE MADE AT THE PER EACH CONTRACT UNIT PRICE BID FOR "ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN," " ITEM 623 - MONUMENT, MISC.: CUYAHOGA COUNTY MONUMENT BOX" OR "ITEM 623 - MONUMENT, MISC.: CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1".

MONUMENTS SHALL BE LEFT UNDISTURBED UNTIL THE ENGINEER HAS CHECKED/VERIFIED THE REFERENCES PROVIDED BY THE CONTRACTOR'S SURVEYOR. IN ALL CASES THE CONTRACTOR SHALL CONTACT THE ENGINEER NO LESS THAN TWO (2) WEEKS PRIOR TO THE DISTURBANCE OF ANY EXISTING MONUMENTS.

THE FOLLOWING QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 623 - MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN	17 EACH
ITEM 623 - MONUMENT, MISC.: CUYAHOGA COUNTY MONUMENT BOX	5 EACH
ITEM 623 - MONUMENT, MISC.: CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1	5 EACH

**ITEM 623 - MONUMENT MISC.: MONUMENT REFERENCING**

THIS ITEM SHALL CONSIST OF LOCATING AND REFERENCING ALL EXISTING ROADWAY AND/OR CENTERLINE MONUMENTS WITHIN THE LIMITS OF THE PROPOSED WORK FOR THE PURPOSES OF RESETTling/REESTABLISHING THEIR EXACT LOCATION IN THE EVENT THEY ARE DISPLACED OR DAMAGED DURING CONSTRUCTION. ALL WORK SHALL BE PERFORMED UNDER THE SUPERVISION OF A LICENSED SURVEYOR PROVIDED BY THE CONTRACTOR AND SHALL BE COMPLETED PRIOR TO THE START OF ANY PROXIMATE GRADING, PAVING OR OTHER SUCH OPERATIONS.

A THOROUGH SEARCH SHALL BE MADE TO LOCATE THE MONUMENTS WITHIN THE LIMITS OF THE PROPOSED WORK. UPON LOCATING THE EXISTING MONUMENTS, THE MONUMENT PINS/POINTS SHALL BE CAREFULLY EXPOSED AND REFERENCED TO NO LESS THAN THREE (3) PERMANENT OBJECTS. ANY EXISTING MONUMENTS THAT MIGHT REQUIRE REPLACEMENT SHALL BE NOTED. THE REFERENCES ALONG WITH ALL NOTATIONS SHALL BE DELIVERED TO THE ENGINEER IMMEDIATELY UPON COMPLETION. ADJUSTMENTS OR REPLACEMENTS OF MONUMENT BOXES OR ASSEMBLIES MAY NOT COMMENCE UNTIL THE REFERENCES HAVE BEEN CHECKED/VERIFIED AND APPROVED BY THE ENGINEER.

THE PER EACH UNIT PRICE PAYMENT FOR THIS WORK SHALL INCLUDE LOCATING THE MONUMENTS, CAREFULLY CLEANING OUT THE MONUMENT BOXES AND/OR EXPOSING THE MONUMENT PINS/POINTS, REFERENCING THE MONUMENTS AND ALL RELATED NOTATION.

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED IN THE GENERAL SUMMARY FOR ALL MONUMENTS KNOWN TO EXIST OR INITIALLY FOUND/ENCOUNTERED WITHIN THE PROPOSED WORK LIMITS:

ITEM 623 - MONUMENT MISC.: MONUMENT REFERENCING	17 EACH
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**EXISTING WALK REMOVAL/REPLACEMENT**

APPROXIMATE LOCATIONS FOR THE REQUIRED REMOVAL/REPLACEMENT OF EXISTING WALK IS NOT SHOWN ON THE PLAN. THE LIMITS OF CONTINGENCY WALK REMOVALS/REPLACEMENTS REQUIRED TO FACILITATE ADJACENT PAVEMENT, CURB, UNDERDRAIN, DRIVE APRON OR CURB RAMP WORK NOT SHOWN ON THE PLANS SHALL BE AS DIRECTED BY THE ENGINEER. WALK REMOVAL / REPLACEMENT LIMITS SHALL TYPICALLY EXTEND TO THE NEAREST EXISTING WALK JOINT/DIVISION LINE UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE EXACT LOCATIONS AND LIMITS OF EXISTING WALK REMOVAL / REPLACEMENT SHALL BE ESTABLISHED AND DESIGNATED BY THE ENGINEER. AEROSOL SPRAY PAINT FOR OUTLINING SHALL BE PROVIDED BY THE CONTRACTOR.

EXISTING WALK SHALL BE REMOVED AND DISPOSED OF PER 202.05 AND IN A MANNER THAT WILL NOT DISTURB, DAMAGE OR UNDERMINE ADJACENT WALK, CURB, DRIVES OR DRIVE APRONS INTENDED TO REMAIN IN PLACE. ANY ADJACENT FACILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE, AS DETERMINED BY THE ENGINEER, AND WHICH ARE NOT OTHERWISE DESIGNATED FOR REPLACEMENT, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, ALL AT THE DIRECTION OF THE ENGINEER.

REPLACEMENT WALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH "ITEM 608 - 4" CONCRETE WALK, AS PER PLAN" (SEE PLAN NOTE).

IN ADDITION TO THE REQUIREMENTS OF 608, AT VARIOUS LOCATIONS ALONG THE CORRIDOR CURB RAMPS ARE BEING REPLACED ADJACENT TO A VARIETY OF HARD SURFACES INCLUDING ASPHALT SIDEWALK, BRICK PAVERS, COLORED AND STAMPED CONCRETE WALK. THE CONTRACTOR IS REQUIRED TO INSTALL ADA COMPLIANT CURB RAMPS, WHICH MAY EXTEND BEYOND THE LIMITS SHOWN ON THE PLANS OR HAVE ADDITIONAL IMPACTS TO ADJACENT HARD SURFACES NOT NOTED ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING THESE HARD SURFACES IN-KIND, TO THE EXTENT POSSIBLE. PRIOR TO IMPACTING HARD SURFACE MATERIALS, OTHER THAN CONCRETE SIDEWALK, THE CONTRACTOR SHALL MARK THE IMPACTED AREA AND OBTAIN APPROVAL FROM THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THE TYPE OF MATERIAL DISTURBED AND FOR PROVIDING THE ENGINEER WITH A SPECIFICATION FOR A REPLACEMENT HARD SURFACE TO MATCH THE EXISTING HARD SURFACE.

PAYMENT FOR THE ACTUALLY COMPLETED AND ACCEPTED QUANTITIES OF THE ABOVE WORK SHALL BE MADE AT THE CONTRACT UNIT PRICE BID FOR:

ITEM 202 - WALK REMOVED , AS PER PLAN	SF
ITEM 608 - 4" CONCRETE WALK, AS PER PLAN	SF
ITEM 608 - WALKWAY, MISC.: PAVER REPLACEMENT	SF
ITEM 608 - WALKWAY MISC.: COLORED & STAMPED CONCRETE WALK	SF

AREAS OF WALK REMOVED / REPLACED TO FACILITATE CURB AND/OR UNDERDRAIN WORK SHALL NOT GENERALLY EXCEED TWO (2) FEET BEYOND THE BACK OF CURB. THIS WORK SHALL INCLUDE THE COST OF ANY SAW CUTS AND PRE-MOLDED JOINT FILLER REQUIRED BY THE ENGINEER TO COMPLETE THIS WORK.

TOPSOIL, SEEDING AND MULCHING REQUIRED ADJACENT TO THE WALK REPLACEMENT CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. SEEDING MIX SHALL CONFORM TO ODOT CMS 659.08 HIGH QUALITY SEEDS, CLASS I.

THE FOLLOWING CONTINGENCY QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 202 - WALK REMOVED, AS PER PLAN	4,459 SF
ITEM 608 - 4" CONCRETE WALK, AS PER PLAN	4,159 SF
ITEM 608 - WALKWAY, MISC.: PAVER REPLACEMENT	150 SF
ITEM 608 - WALKWAY, MISC.: COLORED & STAMPED CONCRETE WALK	150 SF

GENERAL NOTES

CUY-10-01.97

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DESIGN AGENCY



DESIGNER  
SAF

REVIEWER

BAK 03/20/26

PROJECT ID

107287

SHEET TOTAL

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**ROADWAY (CONTINUED)**

**CURB REMOVED AND REPLACED**

DEFECTIVE, BROKEN OR OUT-OF-LINE SECTIONS OF CURB SHALL BE REMOVED AND REPLACED WITH CONCRETE CURB. THE COST OF REMOVING CURB SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID PER FOOT FOR ITEM 202 - CURB REMOVED, AS PER PLAN.

CURB SHALL BE REMOVED AND DISPOSED OF PER 202.05 IN A MANNER AND BY METHODS THAT WILL NOT DISTURB, DAMAGE OR UNDERMINE ADJACENT PAVEMENT, WALK, DRIVE APRONS OR CURB INTENDED TO REMAIN IN PLACE. ANY ADJACENT FACILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE, AS DETERMINED BY THE ENGINEER, AND WHICH ARE NOT OTHERWISE DESIGNATED FOR REPLACEMENT, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE; ALL AT THE DIRECTION OF THE ENGINEER.

IN LIEU OF INSTALLING EXPANSION JOINT MATERIAL PER BP-5.1, THOROUGHLY SEAL (705.04) THE ABUTTING JOINT WHEN CURB IS PLACED ADJACENT TO EXISTING PAVEMENT.

TOPSOIL, SEEDING AND MULCHING REQUIRED ADJACENT TO THE CURB REPLACEMENT CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. SEEDING MIX SHALL CONFORM TO ODOT CMS 659.08 HIGH QUALITY SEEDS, CLASS I.

THE FOLLOWING ESTIMATED QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 202 - CURB REMOVED, AS PER PLAN	3500 FT
ITEM 609 - CURB, TYPE 6, AS PER PLAN	3500 FT

**ITEM 608 - 6" CONCRETE WALK, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF ITEM 608 AND THE CONCRETE SPECIFICATIONS ON THESE PLANS, THE FOLLOWING SHALL APPLY:

THIS ITEM IS INTENDED FOR USE AS DIRECTED BY THE ENGINEER, TO PROVIDE TRANSIT WAITING AREAS.

ADDITIONAL PROPOSED SIDEWALK AREAS HAVE BEEN MARKED ON THE PLANS AS "TRANSIT WAITING AREAS" THESE ARE AREAS OF NEW SIDEWALK INTENDED TO SERVE AS A PAVED WAITING AREA AT BUS STOP LOCATIONS. SIDEWALK IN THESE AREAS SHOULD BE INSTALLED AS CLOSELY AS PRACTICAL TO BUS STOP SIGNS ALONG THE CORRIDOR AND THE ENGINEER MAY MOVE THE LOCATION DEPICTED ON THE PLANS TO ENHANCE THE PLACEMENT OF THE WAITING AREA WITH RESPECT TO THE BUS STOP SIGN. IT IS EXPECTED THAT 415 SF OF THE ITEM 608 - 6" CONCRETE WALK, AS PER PLAN LISTED BELOW WILL BE USED TO FOR TRANSIT WAITING AREA INSTALLATION.

ALL CONCRETE FOR ITEM 608 - 6" CONCRETE WALK, AS PER PLAN SHALL HAVE A 2" COMPACTED SCREENING BED WHICH MEETS THE REQUIREMENTS 703.10 (LIMITED TO CRUSHED STONE). THE COST OF ALL LABOR, MATERIALS, EXCAVATION AND EQUIPMENT REQUIRED TO BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 - 6" CONCRETE WALK, AS PER PLAN.

PER 608.03(C), IT IS REQUIRED THAT 1/2 INCH THICK EXPANSION JOINT MATERIAL (705.03) BE INSTALLED BETWEEN THE WALK AND THE BACK OF CURB OR ANY OTHER FIXED OBJECT, IN ADDITION TO THE LOCATIONS SPECIFIED UNDER 608.03(C). TRANSVERSE EXPANSION JOINTS SHALL BE CONSTRUCTED AT INTERVALS OF NOT MORE THAN 25 TO 30 FEET UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE EXPANSION JOINT FILLER (705.03) SHALL BE PLACED AT THE TRANSVERSE EXPANSION JOINTS FOR THE FULL DEPTH/WIDTH OF THE CONCRETE WALK AND SHALL BE TRULY NORMAL TO GRADE. THE TOP 1/2 INCH OF THE EXPANSION JOINT PLACED BETWEEN THE WALK AND THE BACK OF CURB SHALL BE SEALED WITH 705.04 JOINT SEALER.

THE FINAL SURFACE SHALL BE TEXTURED BY USE OF AN ACCEPTED BROOM SO AS TO PRODUCE A UNIFORM, GRITTY, TRANSVERSE TEXTURE, AFTER WHICH, THE CONTRACTOR IS REQUIRED TO RETRACE THE PREVIOUSLY FORMED JOINTS AND OUTSIDE EDGES OF THE WALK (I.E. PICTURE FRAME)

A MINIMUM 4' WIDE ACCESSIBLE ROUTE WITH A MAXIMUM 1.56% CROSS SLOPE SHALL BE PROVIDED FOR ALL WALK REPLACEMENT AREAS. WALK SHALL MAINTAIN POSITIVE DRAINAGE TO THE STREET UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

TOPSOIL, SEEDING AND MULCHING REQUIRED ADJACENT TO SIDEWALK CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. SEEDING MIX SHALL CONFORM TO ODOT CMS 659.08 HIGH QUALITY SEEDS, CLASS 1.

THE COST OF THE MATERIAL AND LABOR ASSOCIATED WITH THE ABOVE WORK IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 - 6" CONCRETE WALK, AS PER PLAN.

THE FOLLOWING CONTINGENCY QUANTITY IS PROVIDED IN THE GENERAL SUMMARY FOR ADDITIONAL SIDEWALK REMOVAL AND REPLACEMENT DEEMED NECESSARY BY THE ENGINEER TO ACHIEVE ADA COMPLIANCE:

ITEM 202 - WALK REMOVED, AS PER PLAN	65 SF
ITEM 608 - 6" CONCRETE WALK, AS PER PLAN	415 SF

**EROSION CONTROL**

**ITEM 832 - EROSION CONTROL, AS PER PLAN**

SEDIMENTATION IMPACTS SHALL BE KEPT TO A MINIMUM THROUGH THE USE OF BEST MANAGEMENT PRACTICES FOR SOIL EROSION AND SEDIMENTATION CONTROL.

ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SPECIFIED HEREIN OR DIRECTED BY THE ENGINEER SHALL BE IN PLACE PRIOR TO ANY EXCAVATION, GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. THESE CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND THE AREA IS STABILIZED AS ACCEPTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED FOR TEMPORARY SEDIMENT AND EROSION CONTROL (TSEC) IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF ODOT SUPPLEMENTAL SPECIFICATION 832:

ITEM 832 - EROSION CONTROL, AS PER PLAN	5,000 EACH
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GENERAL NOTES

CUY-10-01.97

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DESIGN AGENCY



DESIGNER  
SAF

REVIEWER

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PROJECT ID

107287

SHEET TOTAL

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**DRAINAGE**

**REVIEW OF DRAINAGE FACILITIES**

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE, THE ENGINEER AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE ENGINEER.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT OR 611 STRUCTURE ITEMS.

**ITEM SPECIAL - MISCELLANEOUS METAL**

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 611 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM SPECIAL - MISCELLANEOUS METAL 48,320 LB

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.

**EXISTING UNDERDRAINS**

IT IS INTENDED NOT TO DISTURB THE EXISTING UNDERDRAINS DURING THE CURB AND PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS. ANY EXISTING UNDERDRAIN DAMAGED DURING THE REMOVAL OF EXISTING CURB AND PAVEMENT DUE TO THE CARELESSNESS OF THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.

EXISTING UNDERDRAINS WHICH THE ENGINEER DETERMINES ARE ADVERSELY AFFECTED (THROUGH NO FAULT OF THE CONTRACTOR) BY THE CONSTRUCTION OF THIS IMPROVEMENT OR ARE FOUND TO BE OTHERWISE UNSUITABLE SHALL BE REMOVED AND REPLACED, IN KIND (INCLUDING ALL NECESSARY BENDS OR BRANCHES), AT THE SAME TRENCH WIDTH AND DEPTH, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.

GRANULAR BACKFILL MATERIAL SHALL BE LIMITED TO LIMESTONE.

THE COST FOR REMOVAL AND DISPOSAL OF EXISTING UNDERDRAIN PIPE/OUTLET PIPE IS INCLUDED UNDER THESE ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC 500 FT  
ITEM 611 - 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS 100 FT

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

**BICYCLE-SAFE CATCH BASIN GRATES**

EXISTING CATCH BASINS SHALL BE MODIFIED BY REPLACING THE EXISTING GRATES WITH BICYCLE SAFE GRATES. SPECIFIC LOCATIONS HAVE NOT BEEN IDENTIFIED IN THE PLANS AND SHALL BE LEFT TO THE DISCRETION OF THE ENGINEER. PAYMENT FOR THE ABOVE WORK SHALL BE INCLUDED IN ITEM SPECIAL - MISCELLANEOUS METAL.

**ITEM 611 AND 638 - STRUCTURES ADJUSTED (RECONSTRUCTED) TO GRADE, AS PER PLAN**

611.10 DRAINAGE STRUCTURE CONSTRUCTION. STRUCTURES SHALL BE ADJUSTED OR RECONSTRUCTED TO GRADE USING CLAY BRICKS (704.01), CLASS QC MS CONCRETE AS NECESSARY, AND BY RESETTING THE EXISTING FRAME IN A BED OF CLASS QC MS CONCRETE. NO GRADE RINGS OR METAL ADJUSTING RINGS (CASTINGS) ARE PERMITTED. MAXIMUM CONCRETE MORTAR THICKNESS IS 1-1/2".

ALL EXISTING PRECAST SANITARY MANHOLES WILL BE ADJUST TO GRADE OR RECONSTRUCTED TO GRADE BY THE CITY OF NORTH OLMSSTED.

ITEM 611 - STRUCTURE ADJUST TO GRADE OR RECONSTRUCT TO GRADE WORK SHALL, WHERE REQUIRED, INCLUDE THE REMOVAL AND REPLACEMENT OF ANY EXISTING CONCRETE BLOCKOUT CURB AND/OR PAVEMENT USING MEDIUM SET (CLASS QC MS) CONCRETE. TO FACILITATE REMOVAL, THE BLOCKOUT PAVEMENTS SHALL BE SAWED FULL DEPTH (PER 255.03) ALONG THE LIMITS OF THEIR REMOVAL UNLESS OTHERWISE DESIGNATED/DIRECTED BY THE ENGINEER. UNLESS OTHERWISE APPROVED/DIRECTED BY THE ENGINEER, BLOCKOUT PAVEMENT AND LOAD TRANSFER DEVICES SHALL BE REPLACED/INSTALLED AS DIRECTED BY THE ENGINEER. UNLESS OTHERWISE DIRECTED/APPROVED BY THE ENGINEER, REPLACE EXCAVATED SUBBASE AND SUBGRADE MATERIALS BELOW THE PROPOSED BLOCKOUT PAVEMENT WITH "ITEM 304 - AGGREGATE BASE, AS PER PLAN" EXCEPT THE USE OF FOUNDRY SAND IS STRICTLY PROHIBITED. ALL COSTS ASSOCIATED WITH THE BLOCKOUT REMOVALS/REPLACEMENTS SHALL BE CONSIDERED INCIDENTAL TO THE PER EACH BID ITEMS.

ALL EXISTING CASTINGS FOR STRUCTURES TO BE ADJUSTED OR RECONSTRUCTED TO GRADE SHALL BE FILED CHECKED AT THE TIME OF CONSTRUCTION AND MARKED SUITABLE FOR SALVAGE AND REUSE OR REPLACED AS DIRECTED BY THE ENGINEER. UNLESS OTHERWISE INDICATED ON THE PLAN, REPLACEMENT CASTINGS ARE PAID UNDER ITEM SPECIAL - MISCELLANEOUS METAL.

THE FOLLOWING GUIDELINES WERE USED TO DETERMINE THE SPECIFIC PLAN LOCATIONS/QUANTITIES OF THE ITEM 611 ADJUST TO GRADE OR RECONSTRUCT TO GRADE WORK:

- 1. "ADJUST TO GRADE, AS PER PLAN" INCLUDES ALL WORK SPECIFIED IN 611.10 (D) AS NECESSARY TO RAISE THE EXISTING/NEW CASTING NO MORE THAN ONE (1) FOOT FROM ITS EXISTING ELEVATION OR TO LOWER THE EXISTING/NEW CASTING NO MORE THAN SIX (6) INCHES FROM ITS EXISTING ELEVATION. IN ADDITION, THIS ITEM INCLUDES ANY SUPPORTING WALL REPAIR WORK NECESSARY, UP TO SIX (6) INCHES BELOW THE TOP OF THE EXISTING SUPPORTING WALL.

PAYMENT WILL BE MADE UNDER THE APPROPRIATE STRUCTURE (ITEM 611) ADJUSTED TO GRADE, AS PER PLAN.

- 2. "RECONSTRUCT TO GRADE, AS PER PLAN" INCLUDES ALL WORK SPECIFIED IN 611.10 (C) AND ALSO INCLUDES EXISTING/NEW CASTINGS RAISED MORE THAN ONE (1) FOOT FROM THEIR EXISTING ELEVATION OR LOWERED MORE THAN SIX (6) INCHES FROM THEIR EXISTING ELEVATION.

THE WORK LIMIT SHALL BE SPECIFIED BY THE ENGINEER AND PAYMENT WILL BE MADE UNDER THE APPROPRIATE STRUCTURE (ITEM 611) RECONSTRUCTED TO GRADE, AS PER PLAN.

BASED ON THE ABOVE GUIDELINES, THE ENGINEER WILL EXAMINE EACH STRUCTURE TO ASSURE THAT THE APPROPRIATE ITEM 611 ADJUST TO GRADE OR RECONSTRUCT TO GRADE WORK IS PERFORMED.

**ITEM 611 AND 638 - STRUCTURES ADJUSTED (RECONSTRUCTED) TO GRADE, AS PER PLAN (CONTINUED)**

"RECONSTRUCT TO GRADE, AS PER PLAN" WORK SHALL NOT BE PERFORMED UNLESS SPECIFICALLY INDICATED IN THE PLANS OR OTHERWISE ORDERED BY THE ENGINEER. ANY SUCH WORK MADE NECESSARY DUE TO THE CONTRACTOR'S NEGLIGENT OPERATIONS, AS DETERMINED BY THE ENGINEER, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

THE FOLLOWING CONTINGENCY QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN 18 EACH  
ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN 18 EACH  
ITEM 611 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN 7 EACH  
ITEM 611 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN 21 EACH  
ITEM 638 - VALVE BOX ADJUSTED TO GRADE, AS PER PLAN 88 EACH  
ITEM 638 - WATER WORK MISC: WATER MANHOLE ADJUSTED TO GRADE 1 EACH

**ITEM 611 - 12" CONDUIT, TYPE B, AS PER PLAN A**  
**ITEM 611 - 15" CONDUIT, TYPE B, AS PER PLAN**

THE REMOVAL OF PAVEMENT, CURB, APRONS, SIDEWALK AND UNDERDRAIN SHALL BE INCLUDED AND PAID FOR UNDER THIS ITEM. WORK INCLUDES THE REMOVAL, INCLUDING SAWCUTTING OF ASPHALT, CONCRETE, BRICK AND/OR OTHER MATERIALS TO INSTALL THE 12" & 15" CONDUITS. NO SEPARATE PAYMENT WILL BE MADE FOR DIFFERENT TYPES OF MATERIAL OR VERIFYING TYPES OF CURB. THE LIMITS OF THE REMOVAL SHALL BE PER THE ASSOCIATED NOTES IN THE PLANS AND DIRECTED BY THE ENGINEER.

THE RESTORATION OF THE 12" AND 15" CONDUIT TRENCH SHALL BE PAID FOR BY BID ITEMS IN THE CONTRACT. THESE ITEMS INCLUDE BUT ARE NOT LIMITED TO ODOT 204, 253, 304, 452,605, 608 & 609. ALL REMOVAL AND REPLACEMENT WORK SHALL BE PER THE RESPECTIVE NOTES IN THE PLANS INCLUDING ITEM 202 - WALK REMOVED, AS PER PLAN, ITEM 202 - CURB REMOVED, AS PER PLAN, ITEM 608 - 4" CONCRETE WALK, AS PER PLAN, EXISTING DRIVE AND/OR DRIVE APRON REMOVAL/REPLACEMENT, EXISTING WALK REMOVAL/REPLACEMENT, CURB REMOVED AND REPLACED AND EXISTING UNDERDRAINS.

THE INSTALLATION OF THE 12" & 15" CONDUIT, TYPE B FROM STRUCTURE D-3 TO D-2 SHALL BE COMPLETED PRE-PHASE IN SECTION 2. DURING THIS PHASE TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWINGS MT-95.31 OR MT-97.10, AS APPROPRIATE. A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES. THE MOT FOR THIS WORK WILL REMAIN IN PLACE DURING THE DURATION OF THE INSTALLATION. THE WORK TO INSTALL THE 12" CONDUIT AND ASSOCIATED STRUCTURES FROM D-1 TO D-2 AND D-2 TO D-4 SHALL BE DONE DURING SECTION 2 - PHASE 1.

INCLUDED IN THE INSTALLATION OF THE 12" & 15" CONDUIT, TYPE B FROM D-3 TO D-2 IS THE PLACEMENT AND COMPACTION OF 12" OF ODOT 301 TO BE INSTALLED FLUSH WITH THE EXISTING PAVEMENT TO TEMPORARY CAP THE TRENCH. ALL COSTS FOR THE ASPHALT CAP SHALL BE INCLUDED IN THIS ITEM.

**ITEM 611 - 12" CONDUIT, TYPE B, AS PER PLAN B**

THE REMOVAL OF PAVEMENT, CURB, APRONS, SIDEWALK AND UNDERDRAIN SHALL BE INCLUDED AND PAID FOR UNDER THIS ITEM. WORK INCLUDES THE REMOVAL, INCLUDING SAWCUTTING OF ASPHALT, CONCRETE, BRICK AND/OR OTHER MATERIALS TO INSTALL THE 12" CONDUIT. NO SEPARATE PAYMENT WILL BE MADE FOR DIFFERENT TYPES OF MATERIAL OR VERIFYING TYPES OF CURB. THE LIMITS OF THE REMOVAL SHALL BE PER THE ASSOCIATED NOTES IN THE PLANS AND DIRECTED BY THE ENGINEER.

THE RESTORATION OF THE 12" CONDUIT TRENCH SHALL BE PAID FOR BY BID ITEMS IN THE CONTRACT. THESE ITEMS INCLUDE BUT ARE NOT LIMITED TO ODOT 204, 253, 304, 452,605, 608 & 609. ALL REMOVAL AND REPLACEMENT WORK SHALL BE PER THE RESPECTIVE NOTES IN THE PLANS INCLUDING ITEM 202 - WALK REMOVED, AS PER PLAN, ITEM 202 - CURB REMOVED, AS PER PLAN, ITEM 608 - 4" CONCRETE WALK, AS PER PLAN, EXISTING DRIVE AND/OR DRIVE APRON REMOVAL/REPLACEMENT, EXISTING WALK REMOVAL/REPLACEMENT, CURB REMOVED AND REPLACED AND EXISTING UNDERDRAINS.

THE WORK TO INSTALL THE 12" CONDUIT AND ASSOCIATED STRUCTURES FROM D-5 TO D-6 SHALL BE DONE DURING SECTION 2 - PHASE 1.

PROVIDE CLASS V REINFORCED CONCRETE PIPE, IN ACCORDANCE WITH 706.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, AT THE LOCATIONS INDICATED IN THE PLANS.

THE CLASS V REINFORCED CONCRETE PIPE, LABOR, EQUIPMENT, AND ALL INCIDENTALS NECESSARY TO COMPLETE THE WORK ARE INCLUDED IN THIS ITEM.

GENERAL NOTES

CUY-10-01.97

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DESIGN AGENCY



DESIGNER

SAF

REVIEWER

BAK 03/20/26

PROJECT ID

107287

SHEET TOTAL

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**PAVEMENT**

**ASPHALT CONCRETE SURFACE COURSE SEALING REQUIREMENTS**

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED ON SCD BP-3.1 AND IN 401.15, THE CONTRACTOR SHALL SEAL THE FOLLOWING LOCATIONS:

- ALL CASTINGS INCLUDING BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS, CURB INLETS.
- BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE APPROACHES.
- BUTT JOINT BETWEEN PAVED SHOULDER AND DRIVEWAY ASPHALT AND TAPERED EDGE WHEN FEATHERING TO AN EXISTING ASPHALT DRIVEWAY.
- PERIMETER OF ALL PAVEMENT REPAIRS OR OTHER ASPHALT INLAYS WHEN PAVEMENT REPAIRS/INLAYS ARE NOT OVERLAID WITH AN ASPHALT CONCRETE SURFACE COURSE.
- ALL COLD LONGITUDINAL JOINTS BETWEEN PAVED SHOULDERS AND GUARDRAIL ASPHALT.
- ALL TRANSVERSE JOINTS LOCATED WITHIN THE CONCRETE CURB AND GUTTER.
- LONGITUDINAL JOINT FOUND BETWEEN THE SURFACE COURSE AND THE EDGE OF THE CONCRETE CURB AND GUTTER.

THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2-3 INCHES.

ANY ADDITIONAL COSTS ASSOCIATED WITH THE WORK IDENTIFIED IN THIS NOTE SHALL BE INCLUDED IN THE APPROPRIATE ASPHALT CONCRETE SURFACE COURSE ITEM OF WORK.

**ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN**

WHEN THIS ITEM IS CALLED FOR ON THE PLANS OR IN THE PROPOSAL, ALL APPLICABLE PROVISIONS OF ITEM 251, AS SET FORTH IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL APPLY EXCEPT AS MODIFIED HEREIN. SEE SHEET 6 FOR DETAIL.

**251.02 REMOVAL OF EXISTING PAVEMENT.**

APPROVED REMOVAL METHODS SHALL SATISFACTORILY ESTABLISH A NEAT VERTICAL FACE ALONG THE ENTIRE PERIMETER OF THE REPAIR AREA IN ORDER TO SUBSEQUENTLY PERMIT THE PROPER PLACEMENT AND COMPACTION OF THE ASPHALT CONCRETE PATCHING MATERIAL. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, REMOVAL DEPTHS SHALL FOLLOW THE DETAIL PROVIDED ON SHEET 6.

**251.04 METHOD OF MEASUREMENT.**

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER SQUARE YARD FOR ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN A	1,435 SY
ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN B	2,700 SY

**PROFILE AND ALIGNMENT**

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY WITH A UNIFORM THICKNESS OF 3 INCHES AS SHOWN ON THE TYPICAL SECTIONS.

**ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M, AS PER PLAN**

USE OF RECLAIMED ASPHALT CONCRETE PAVEMENT IS LIMITED TO A MAXIMUM OF 10%.

THE COARSE VIRGIN AGGREGATE SHALL BE A BLEND OF SIXTY PERCENT (60%) MINIMUM AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO WITH THE REMAINING PERCENTAGE COMPRISED OF CRUSHED CARBONATE STONE (CCS).

PRIOR TO PRODUCING THE ASPHALT CONCRETE FOR THIS CONTRACT, SUBMIT A JOB MIX FORMULA (JMF) FOR APPROVAL BY THE ENGINEER. USE A JMF THAT MEETS ALL REQUIREMENTS ESTABLISHED IN THE CONTRACT AND HAS PREVIOUSLY BEEN APPROVED FOR USE ON ODOT WORK. WHERE NO PREVIOUSLY APPROVED (BY ODOT) JMF IS AVAILABLE, DEVELOP A JMF MEETING ALL CRITERIA ESTABLISHED IN THE CONTRACT AND HAVE IT REVIEWED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY PRIOR TO SUBMISSION TO THE ENGINEER. THE INDEPENDENT TESTING LABORATORY SHALL HAVE APPROPRIATELY APPROVED PERSONNEL AND TESTING EQUIPMENT PER ODOT SUPPLEMENT 1041. ALL COST ASSOCIATED WITH THE ABOVE SHALL BE INCLUDED IN THE CUBIC YARD COST OF THE ASPHALT CONCRETE BID ITEM.

SAMPLING FOR VERIFICATION ACCEPTANCE (403.06.A) SHALL BE PERFORMED IN ACCORDANCE WITH ODOT SUPPLEMENT 1035.

UNLESS OTHERWISE DIRECTED/APPROVED BY THE ENGINEER, CONDUCT DENSITY GAUGE QUALITY CONTROL TESTING ON THE ITEM 441 ASPHALT CONCRETE SURFACE COURSE MAT ACCORDING TO ODOT SUPPLEMENT 1055 REGARDLESS OF THE NUMBER OF LANES OR LENGTH OF CONTINUOUS PAVING.

**ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN**

THE CONTRACTOR SHALL SCHEDULE HIS/HER OPERATIONS SUCH THAT THE PROPOSED ASPHALT CONCRETE INTERMEDIATE COURSE IS PLACED WITHIN SEVEN (7) DAYS OF THE PAVEMENT PLANING. AT THE FOLLOWING INTERSECTIONS: PORTER ROAD/BUTTERNUT RIDGE ROAD, DOVER CENTER ROAD, GREAT NORTHERN MALL ENTRANCE, AND BROOKPARK ROAD, A BEVELED EDGE SHALL BE INCORPORATED WITH THE PLANING OPERATIONS.

THE EXISTING ASPHALT OVERLAY SHALL BE REMOVED TO A MAXIMUM DEPTH OF 3". THE CONTRACTOR SHALL NOT REMOVE THE ENTIRE WEARING COURSE TO THE BRICK OR CONCRETE BASE.

**ITEM 304 - AGGREGATE BASE, AS PER PLAN**

MATERIAL FURNISHED FOR THIS ITEM SHALL BE LIMITED TO CRUSHED CARBONATE STONE.

**ITEM 253 - PAVEMENT REPAIR, AS PER PLAN**

PROVISIONS OF ITEM 253 SHALL APPLY EXCEPT AS MODIFIED OR APPENDED HEREIN.

**253.02 - REMOVAL OF EXISTING PAVEMENT.**

THE ENGINEER WILL DESIGNATE THE LOCATION AND LIMITS OF AREAS TO BE REPAIRED UNDER THIS ITEM ONLY AFTER HE/SHE HAS DETERMINED THAT THE REPAIR CANNOT BE MADE UNDER "ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN", WHERE APPLICABLE. THE DEPTH OF REMOVAL SHALL BE DETERMINED BY THE ENGINEER. THE PAVEMENT SHALL BE REMOVED IN A MANNER SUCH THAT NEAT VERTICAL FACES ARE ESTABLISHED FOR THE ENTIRE PERIMETER OF THE REPAIR AREA. ANY METHOD REQUIRED TO ESTABLISH THE NEAT VERTICAL FACE (INCLUDING SAW CUTTING) SHALL BE INCLUDED IN THE COST OF THIS ITEM.

**253.04 - METHOD OF MEASUREMENT.**

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER CUBIC YARD FOR ITEM 253 - PAVEMENT REPAIR, AS PER PLAN.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN	1,100 CY
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**ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS I, CLASS QC MS, AS PER PLAN**

WHEN THIS ITEM IS CALLED FOR ON THE PLANS OR IN THE PROPOSAL, ALL APPLICABLE PROVISIONS OF ITEM 255, AS SET FORTH IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL APPLY EXCEPT AS MODIFIED HEREIN.

**255.04 CORRECTION OF DISTURBED SUBBASE AND SUBGRADE.**

SUITABLE SUBBASE DISTURBED IN AREAS WHERE CONCRETE PAVEMENT IS REMOVED SHALL BE SHAPED AND RECOMPACTED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST. UNSUITABLE SUBBASE, AS DETERMINED BY THE ENGINEER, SHALL BE REMOVED AND REPLACED WITH "ITEM 304 - AGGREGATE BASE, AS PER PLAN" TO THE DEPTH OF ADJACENT SUBBASE.

WHERE UNSUITABLE SUBGRADE MATERIAL IS ENCOUNTERED, IT SHALL BE REMOVED TO THE DEPTH DETERMINED BY THE ENGINEER, AND REPLACED IN EIGHT (8) INCH MAXIMUM (LOOSE DEPTH) MECHANICALLY COMPACTED LAYERS. SUITABLE EMBANKMENT MATERIAL (204.02) REQUIRED TO REPLACE THE UNDERCUT SUBGRADE SHALL, TO THE EXTENT POSSIBLE, EXHIBIT THE SAME PHYSICAL PROPERTIES AS THE ADJACENT SOUND SUBGRADE MATERIALS. HOWEVER, USE OF SLAG, IN ANY FORM, IS NOT PERMITTED. ALL EXPOSED OR RECONSTRUCTED SUBGRADE SOILS SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER.

REMOVAL AND DISPOSAL OF UNSUITABLE SUBBASE OR SUBGRADE MATERIAL SHALL BE CONSIDERED INCIDENTAL TO ITEM 255 AND NO SEPARATE PAYMENT WILL BE MADE.

**255.07 WEARING COURSE REPLACEMENT.**

MATERIAL FOR ANY ASPHALT CONCRETE OVERLAYS SHALL BE PAID FOR SEPARATELY AND BE AS DETAILED/SPECIFIED ELSEWHERE IN THE PLANS.

**255.09 METHOD OF MEASUREMENT.**

THE REPLACEMENT MATERIAL FOR UNSUITABLE SUBGRADE MATERIAL SHALL BE FURNISHED, PLACED, MEASURED AND PAID FOR IN ACCORDANCE WITH ITEM 204 - GRANULAR EMBANKMENT, AS PER PLAN. THE REPLACEMENT MATERIAL FOR UNSUITABLE SUBBASE SHALL BE FURNISHED, PLACED, MEASURED AND PAID FOR IN ACCORDANCE WITH ITEM 304 - AGGREGATE BASE, AS PER PLAN.

**255.10 BASIS FOR PAYMENT.**

PAYMENT FOR ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN IS FULL COMPENSATION FOR FURNISHING ALL MATERIALS AND LABOR PER 255.10 AND AS SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO PAVEMENT REMOVAL, SUBBASE/SUBGRADE CORRECTION AND/OR REMOVAL, AS NECESSARY, FURNISHING AND PLACING DOWELS, TIE BARS, MESH AND THE CLASS QC MS CONCRETE.

THE FOLLOWING ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER, ARE CARRIED TO THE GENERAL SUMMARY FOR THIS WORK AND PAYMENT IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR:

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 1, CLASS QC MS, AS PER PLAN	100 SY
ITEM 255 - FULL DEPTH PAVEMENT SAWING	250 FT
ITEM 204 - GRANULAR EMBANKMENT, AS PER PLAN	12 CY
ITEM 204 - GEOTEXTILE FABRIC	50 SY
ITEM 204 - GEOGRID	50 SY
ITEM 304 - AGGREGATE BASE, AS PER PLAN	17 CY

GENERAL NOTES

CUY-10-01-97

MODEL: GN001G DATE: 3/20/2026 TIME: 2:46:25 PM USER: Sarah Flis P:\24288 Lora\in Road Resurfacing\107287\400-Engineering\Roadway\Sheets\107287\_GN001.dwg

DESIGN AGENCY



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DESIGNER  
SAF

REVIEWER  
BAK 03/20/26

PROJECT ID  
107287

SHEET TOTAL  
13 | 79

**TRAFFIC CONTROL**

**INSTALLATION OF PERMANENT PAVEMENT MARKINGS (ITEMS 646/644)**

THE CONTRACTOR MAY REDUCE THE NUMBER OF THROUGH TRAFFIC LANES BY 50%, AS DIRECTED BY THE ENGINEER, IN ORDER TO REMOVE PAVEMENT MARKINGS OR WORK ZONE PAVEMENT MARKINGS, AND INSTALL PERMANENT PAVEMENT MARKINGS. HE/SHE SHALL LIMIT THE AFOREMENTIONED CLOSURE TO BETWEEN THE HOURS OF 9:00 A.M. AND 3:00 P.M. UNLESS OTHERWISE APPROVED BY THE ENGINEER.

THE FOLLOWING QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY, AS ESTIMATES OF THE TYPE AND QUANTITY OF THE VARIOUS PAVEMENT MARKINGS TO BE INSTALLED UNDER ITEMS 646 AND 644:

ITEM 644 - CHANNELIZING LINE, 8"	1,701 FT
ITEM 644 - STOP LINE	964 FT
ITEM 644 - CROSSWALK LINE, 12"	366 FT
ITEM 644 - TRANSVERSE/DIAGONAL LINE	157 FT
ITEM 644 - ISLAND MARKING	60 SF
ITEM 644 - SCHOOL SYMBOL MARKING, 120"	2 EACH
ITEM 644 - LANE ARROW	62 EACH
ITEM 644 - DOTTED LINE, 4"	153 FT
ITEM 646 - EDGE LINE, 4"	0.02 MILE
ITEM 646 - LANE LINE, 4"	3.38 MILE
ITEM 646 - CENTER LINE	2.61 MILE

PAYMENT SHALL BE BASED IN THE MEASUREMENT OF THE FINAL QUANTITIES INSTALLED. ANY INTERIM CLASS III WORK ZONE PAVEMENT MARKINGS REQUIRED WILL BE INCLUDED IN THE UNIT PRICE BID OF THE PERTINENT 646 OR 644 ITEMS.

**LAYOUT OF PAVEMENT MARKINGS**

ALTHOUGH PERMANENT PAVEMENT MARKINGS ARE TO BE INSTALLED AT THE END OF CONSTRUCTION, PAVEMENT MARKING PLAN SHEETS HAVE NOT BEEN INCLUDED IN THE CONTRACT PLANS. IN LIEU OF A PAVEMENT MARKING PLAN, THE CONTRACTOR SHALL, PRIOR TO THE START OF CONSTRUCTION, PREPARE AN INVENTORY AND LOG OF ALL EXISTING PAVEMENT MARKINGS, INCLUDING LANE WIDTHS, NO PASSING ZONES, AND CHANNELIZATIONS, FOR USE IN RESTORING THE MARKINGS AT THE END OF CONSTRUCTION. HE/SHE SHALL DELIVER TWO (2) COPIES OF THE INVENTORY AND LOG TO THE ENGINEER BEFORE BEGINNING ANY PAVEMENT REMOVALS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF THE VARIOUS FINAL PAVEMENT MARKINGS, INCLUDING LOCATION OF NO PASSING ZONES, CENTER LINES, LANE LINES, AND EDGE LINES ON THE FINAL SURFACE COURSE, IN ACCORDANCE WITH SECTION 641.06.

UNLESS DIRECTED OTHERWISE BY THE ENGINEER, THE FINAL PAVEMENT MARKINGS SHALL BE RESTORED IN THEIR ORIGINAL PATTERNS AND LOCATIONS. NOTE THAT THE CONSTRUCTION OF ADA COMPLIANT CURB RAMPS MAY NECESSITATE ADJUSTMENT OF THE CROSSWALK AND/OR STOP BAR LOCATIONS, ALL AS DIRECTED BY THE ENGINEER.

THE COST OF LOGGING AND PREMARKING SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS PAVEMENT MARKING ITEMS. NO SEPARATE PAYMENT WILL BE MADE.

**ITEM 644 - CROSSWALK LINE, AS PER PLAN**

THIS ITEM SHALL MEET THE REQUIREMENTS OF ITEM 644 IN THE CMS AND THE FOLLOWING.

CROSSWALKS AT THE FOLLOWING LOCATIONS SHALL BE LADDER STYLE:

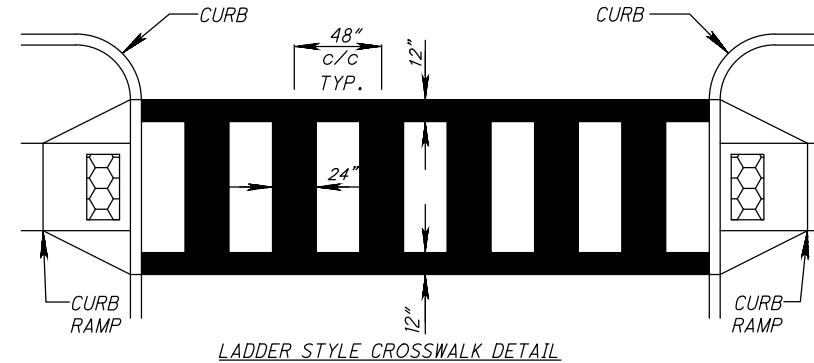
- PARK RIDGE DRIVE/BERKSHIRE DRIVE
- MACKENZIE ROAD/WEST PARK DRIVE
- PORTER ROAD/BUTTERNUT RIDGE ROAD
- DOVER CENTER ROAD
- WHITETHORN AVENUE
- COUNTRY CLUB BOULEVARD
- SPARKY LANE
- SILVERDALE ROAD
- CANTERBURY DRIVE

SEE LADDER STYLE DETAIL ON THIS SHEET FOR DIMENSIONS OF TRANSVERSE LINES. LADDER MARKING SHALL BE PLACED FOR THE FULL WIDTH OF THE CROSSWALK.

PAYMENT FOR LADDER MARKINGS SHALL BE CONSIDERED INCIDENTAL TO AND INCLUDED WITH PAYMENT FOR ITEM 644 - CROSSWALK LINE, AS PER PLAN. PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THE WORK.

THE FOLLOWING QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY:

ITEM 644 - CROSSWALK LINE, 12", AS PER PLAN	3,209 FT
ITEM 644 - CROSSWALK LINE, 24", AS PER PLAN	3,200 FT



**ENVIRONMENTAL**

**ENVIRONMENTAL COMMITMENTS**

THE FOLLOWING ENVIRONMENTAL COMMITMENTS SHALL BE MET DURING CONSTRUCTION:

- 1.) ALL WORK SHALL BE COMPLETED WITHIN THE EXISTING RIGHT-OF-WAY.
- 2.) NO WORK SHALL BE PERFORMED IN STREAMS OR WETLANDS.
- 3.) NO TREES SHALL BE REMOVED.

**TRAFFIC SIGNALS**

**ITEM 625 - PULL BOX, MISC.: ADJUST TO GRADE**

THIS ITEM OF WORK CONSISTS OF ADJUSTING EXISTING TRAFFIC PULL BOXES TO GRADE. THIS INCLUDES THE REMOVAL OF EXISTING AGGREGATE, THE RESHAPING OF THE EXISTING AGGREGATE OR THE ADDITION OF AGGREGATE TO ADJUST THE EXISTING PULL BOX TO THE REQUIRED GRADE.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER CMS ITEM 625, "PULL BOX, MISC.: ADJUST TO GRADE" FOR EACH PULL BOX ADJUSTED TO GRADE WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIAL AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKING MANNER.

ITEM 625 - PULL BOX, MISC.: ADJUST TO GRADE	6 EACH
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DESIGNER

SAF

REVIEWER

BAK 03/20/26

PROJECT ID

107287

SHEET TOTAL

14 | 79

**MAINTENANCE OF TRAFFIC**

**ITEM 614 - MAINTAINING TRAFFIC**

THROUGH TRAFFIC SHALL BE MAINTAINED AT ALL TIMES IN ACCORDANCE WITH SECTION 614 AND THE DETAILS AND NOTES ON STANDARD CONSTRUCTION DRAWINGS MT-97.10 AND MT-97.11.

THE LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE KEPT TO A MINIMUM CONSISTENT WITH THE SPECIFICATION REQUIREMENTS FOR PROTECTION OF COMPLETED PAVEMENT COURSES, AND SHALL BE AT THE APPROVAL OF THE ENGINEER.

THE CONTRACTOR SHALL MAINTAIN SAFE AND SATISFACTORY ACCESS TO ABUTTING PROPERTY. THE CONTRACTOR SHALL MAINTAIN ADEQUATE PEDESTRIAN WALKS AT ALL INTERSECTIONS, INCLUDING ASPHALT CONCRETE WALKS, WHERE DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL DIVERT TRAFFIC FROM NORMAL CHANNELS BY PLASTIC DRUMS, FLASHING ARROW BOARDS COMPLYING WITH SS821.

ALL CONSTRUCTION TRAFFIC CONTROL DEVICES USED FOR THIS PROJECT SHALL CONFORM TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR, EXCEPT AS NOTED BELOW.

THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY SAFEGUARDS, SUCH AS TYPE III BARRICADES, LIGHTING, FLAGGERS, AND SUCH OTHER TRAFFIC CONTROL DEVICES AS PROVIDED IN ITEM 614, MAINTAINING TRAFFIC, SO AS TO AVOID DAMAGE AND/OR INJURY TO VEHICLES AND PERSONS USING THE ROADWAY DURING CONSTRUCTION.

EXISTING TRAFFIC CONTROL DEVICES (SIGNS AND/OR TRAFFIC SIGNALS), LOCATED WITHIN THE WORK AREA, WHICH ARE REQUIRED FOR INTERIM OR PERMANENT TRAFFIC CONTROL, SHALL BE RELOCATED TO POINTS APPROVED BY THE ENGINEER. APPROPRIATE TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED, IN COMPLIANCE WITH THE OMUTCD, AT ALL TIMES WHILE TRAFFIC IS MAINTAINED. THE COST OF RELOCATION, IF REQUIRED, SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

THE LENGTH AND DURATION OF LANE CLOSURES AND/OR TRAFFIC RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. THE INTENT IS TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

TEMPORARY RAMPING USING ITEM 410 - TRAFFIC COMPACTED SURFACE, TYPE A OR B, AS PER PLAN AND ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE CONSIDERED INCIDENTAL TO ITEM 614 - MAINTAINING TRAFFIC.

**ESTIMATED QUANTITIES FOR MAINTAINING TRAFFIC**

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC:

IN LIEU OF USING PORTABLE CHANGEABLE MESSAGE SIGN AT THE BEGIN AND END OF PROJECT, CONTRACTOR SHALL INSTALL SIGNAGE NOTIFYING MOTORISTS OF PROJECT START AND ESTIMATED DURATION AS APPROVED BY THE ENGINEER. THIS SIGNAGE SHALL BE CONSIDERED INCIDENTAL TO ITEM 614 - MAINTAINING TRAFFIC.

ITEM 614 - WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT	2.56 MILE
ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT	5.19 MILE
ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE 1	0.61 MILE
ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT	6.16 MILE
ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 4", 740.06, TYPE 1	0.94 MILE
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	4381 FT
ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT	1269 FT
ITEM 614 - WORK ZONE ARROW, CLASS I, 642 PAINT	159 EACH
ITEM 614 - WORK ZONE ARROW, CLASS I, 740.06, TYPE 1	5 EACH
ITEM 614 - WORK ZONE ISLAND MARKING, CLASS I	120 SF
ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	158 FT
ITEM 616 - WATER	10 MGAL
ITEM 616 - CALCIUM CHLORIDE	1 TON

THE CONTRACTOR SHALL INSTALL CLASS I WORK ZONE PAVEMENT MARKINGS (FULL PATTERN, FULL RATE), PER 614.11.F.3, AS AN INTERIM PAVEMENT MARKING ON SECTION 1 FOR OVER THE WINTER.

ITEM 614 - WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT	1.90 MILE
ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT	1.57 MILE
ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT	0.02 MILE
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	564 FT
ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT	320 FT
ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	1468 FT
ITEM 614 - WORK ZONE ARROW, CLASS I, 642 PAINT	31 EACH
ITEM 614 - WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	158 FT
ITEM 614 - WORK ZONE ISLAND MARKING, CLASS I	30 SF

THE CONTRACTOR SHALL INSTALL CLASS III WORK ZONE PAVEMENT MARKINGS (FULL PATTERN, LOW RATE), PER 614.11.F.3, AS AN INTERIM PAVEMENT MARKING FOR SECTION 2. THE FINAL EPOXY/THERMOPLASTIC PAVEMENT MARKINGS MUST BE INSTALLED WITHIN 30 DAYS OF INSTALLING ANY REQUIRED CLASS III WORK ZONE PAVEMENT MARKINGS AFTER FINAL ASPHALT CONCRETE SURFACE COURSE.

ITEM 614 - WORK ZONE LANE LINE, CLASS III, 4", 642 PAINT	1.67 MILE
ITEM 614 - WORK ZONE CENTER LINE, CLASS III, 642 PAINT	1.24 MILE
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	1138 FT
ITEM 614 - WORK ZONE STOP LINE, CLASS III, 642 PAINT	721 FT
ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS III, 12", 642 PAINT	2097 FT
ITEM 614 - WORK ZONE ARROW, CLASS III, 642 PAINT	31 EACH
ITEM 614 - WORK ZONE DOTTED LINE, CLASS III, 4", 642 PAINT	153 FT
ITEM 614 - WORK ZONE ISLAND MARKING, CLASS III, 642 PAINT	30 SF

**NOTIFICATION**

THE CONTRACTOR SHALL NOTIFY IN WRITING THE FOLLOWING AGENCIES AT LEAST TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION, AND AT LEAST 72 HOURS BEFORE IMPLEMENTING ANY SUBSTANTIAL CHANGE IN TRAFFIC PATTERN OR CLOSING ANY STREET TO TRAFFIC:

- THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
- THE UNITED STATES POSTAL SERVICE, NORTH OLMSTED BRANCH
- THE NORTH OLMSTED BOARD OF EDUCATION
- THE CITY OF NORTH OLMSTED POLICE, FIRE AND SERVICE DEPARTMENTS

**CONSTRUCTION TRAFFIC**

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE LOCAL ENFORCEMENT AUTHORITY.

**CONSTRUCTION WARNING SIGNS**

IMMEDIATELY PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL THE CONSTRUCTION WARNING SIGNS.

AS A MINIMUM, G20-1 SIGNS FACING TRAFFIC ENTERING THE PROJECT, AND G20-2 SIGNS FACING TRAFFIC LEAVING THE PROJECT, SHALL BE PLACED AS SHOWN IN THE OMUTCD. ADDITIONAL G20-1 SIGNS SHALL BE PLACED AFTER EACH MAJOR INTERSECTION, IN BOTH DIRECTIONS, AND AFTER EACH SUSPENSION AND RESUMPTION OF WORK.

ADDITIONALLY, A W20-1 SIGN SHALL BE PLACED ON EACH INTERSECTING STREET A MINIMUM OF 200 FEET IN ADVANCE OF THE PROJECT, AND ON THE APPROACHES TO THE PROJECT A MINIMUM OF 500 FEET IN ADVANCE OF THE WORK LIMITS. G20-2 SIGNS SHALL ALSO BE INSTALLED ON EACH MAJOR INTERSECTING STREET, FACING TRAFFIC LEAVING THE PROJECT, A MINIMUM OF 200 FEET FROM THE PROJECT.

THE TRAFFIC CONTROL DEVICES SHOWN ON MT-97.10 AND MT-97.11 (MT-95.31 AND MT-95.32) SHALL BE IN ADDITION TO THOSE INDICATED ABOVE. IF DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL ALSO INSTALL W8-11 "UNEVEN LANES", W8-7 "LOOSE GRAVEL", AND/OR W21-2 "FRESH OIL/TAR" SIGNS.

FLUORESCENT ORANGE TYPE G SIGN SHEETING SHALL BE USED FOR ALL DETOUR AND CONSTRUCTION WARNING SIGNS.

**TEMPORARY RAMPING OF VERTICAL SURFACES**

IN ORDER TO PROVIDE FOR LOCAL ACCESS, LONGITUDINAL VERTICAL FACES ABUTTING DRIVES SHALL BE TEMPORARILY RAMPED. TRANSVERSE VERTICAL FACES SHALL BE TEMPORARILY RAMPED A MINIMUM OF TEN (10) FEET IN LENGTH AND TRAFFIC SHALL BE WARNED WITH W8-1 "BUMP" SIGNS IN ADVANCE OF THE RAMPED AREAS.

ALL CASTINGS ENCOUNTERED SHALL BE SET TO GRADE AND PAID FOR UNDER VARIOUS ITEMS DESCRIBED ELSEWHERE IN THE GENERAL NOTES OR SPECIFICATIONS. THE CASTING ELEVATION DIFFERENTIAL SHALL NOT BE GREATER THAN ONE (1) INCH WHEN EXPOSED TO TRAFFIC.

ALL TEMPORARY RAMPING SHALL BE INSTALLED, AT THE DIRECTION OF THE ENGINEER, USING ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC. ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE INCIDENTAL TO ITEM 614 - MAINTAINING TRAFFIC.

CUY-10-01-97

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MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY



DESIGNER  
SAF

REVIEWER  
BAK 03/20/26

PROJECT ID  
107287

SHEET TOTAL  
15 | 79

**MAINTENANCE OF TRAFFIC (CONTINUED)**

**ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE**

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) MAY BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

LEOS SHALL NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 400 HOUR

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

**CONSTRUCTION ADJACENT TO DRIVES**

ACCESS TO COMMERCIAL AND HANDICAP PROPERTY SHALL BE MAINTAINED AT ALL TIMES. IN ADDITION, THE CONTRACTOR SHALL MAKE REASONABLE PROVISIONS TO ALLOW RESIDENTIAL ACCESS AT ALL TIMES OR OTHERWISE ALLOW RESIDENTS TO PARK SAFELY WITHIN THE PROJECT WORK LIMITS WHEN ACCESS IS NOT POSSIBLE; ALL AT THE APPROVAL/DIRECTION OF THE ENGINEER. THE MAXIMUM OUT OF SERVICE TIME FOR ANY RESIDENTIAL DRIVE SHALL BE SEVEN (7) DAYS. THE PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO MAINTAIN COMMERCIAL, HANDICAP AND RESIDENTIAL ACCESS AND/OR SAFE PARKING AREAS FOR RESIDENTS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR "ITEM 614 - MAINTAINING TRAFFIC"; EXCEPT FOR THE SEPARATELY ESTIMATED ITEMS/QUANTITIES ADDITIONALLY PROVIDED IN THE PLANS FOR MAINTAINING TRAFFIC (ACCESS).

THE CONTRACTOR SHALL PLAN/STAGE ALL WORK TO MAINTAIN SAFE ACCESS TO COMMERCIAL AND HANDICAP PROPERTY AT ALL TIMES AND TO MAINTAIN SAFE ACCESS TO RESIDENTIAL PROPERTY OR PROVIDE SAFE PARKING WITHIN REASONABLE PROXIMITY TO RESIDENTIAL PROPERTY WHEN ACCESS IS UNAVAILABLE. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A PLAN FOR THE APPROVAL OF THE ENGINEER WHICH DETAILS HIS/HER STRATEGY FOR THE MAINTENANCE OF SAFE ACCESS AS DESCRIBED ABOVE TO COMMERCIAL, HANDICAP AND RESIDENTIAL PROPERTY AND/OR FOR ALLOWING RESIDENTS TO PARK SAFELY WITHIN THE PROJECT LIMITS WHEN ACCESS IS NOT POSSIBLE. EXCEPT AS NOTED ABOVE, ALL ASSOCIATED COSTS SHALL BE INCLUDED UNDER "ITEM 614 - MAINTAINING TRAFFIC".

**SIDE STREET CLOSURE LIMITATION**

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON THE FOLLOWING STREETS:

- DEWEY ROAD
SILVERDALE ROAD
BUTTERNUT RIDGE ROAD
DOVER CENTER ROAD
COUNTRY CLUB BOULEVARD
SPARKY LANE/GREAT NORTHERN SHOPPING CENTER
BROOKPARK ROAD

OTHER INTERSECTING STREETS MAY BE CLOSED FOR A PERIOD NOT TO EXCEED SEVEN CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED TO AN ADJACENT STREET AT THE APPROVAL OF THE ENGINEER. NO TWO ADJACENT STREETS SHALL BE CLOSED SIMULTANEOUSLY.

LIQUIDATED DAMAGES SHALL BE ASSESSED IN ACCORDANCE WITH SECTION 108.07 FOR EACH CALENDAR DAY THAT ANY INTERSECTING STREET REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ALL CLOSED STREETS SHALL BE BARRICADED AT THE WORK LIMITS WITH GATES AND BARRICADES PER MT-101.60 AND SIGNED WITH A "ROAD CLOSED" (R11-2) SIGN MOUNTED ON THE BARRICADES. IN ADDITION, A "ROAD CLOSED (WITH DISTANCE)" (W 20-3) SIGN SHALL BE INSTALLED AT THE FIRST INTERSECTION BEYOND THE WORK, AND/OR WHERE SHOWN ON THE PLANS. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND REMOVE ALL SIGNS AND BARRICADES REQUIRED FOR THIS PURPOSE.

**WINTER TRAFFIC LIMITATION**

UNLESS OTHERWISE APPROVED BY THE ENGINEER, ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC BETWEEN NOVEMBER 15 AND APRIL 15. NOVEMBER 15 SHALL BE CONSIDERED TO CONSTITUTE AN INTERIM COMPLETION DATE AND LIQUIDATED DAMAGES SHALL BE ASSESSED IN ACCORDANCE WITH ODOT CMS 108.07.

**CONSTRUCTION SEQUENCE**

THE REHABILITATION OF LORAIN ROAD WITHIN THE LIMITS OF THIS PROJECT SHALL BE ACCOMPLISHED IN CONSTRUCTION SECTIONS THAT CAN BE COMPLETED WITHIN THE CONSTRUCTION SEASONS.

THE SURFACE COURSE ASPHALT MUST BE PLACED AND ALL LANES OPEN TO TRAFFIC BETWEEN NOVEMBER 15 AND APRIL 15. NORMAL VEHICULAR TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BEYOND THE WORK LIMITS OF THE SECTION CURRENTLY UNDER CONSTRUCTION.

**CONSTRUCTION PHASING**

SECTION 1 SHALL CONSIST OF ALL WORK OF LORAIN ROAD FROM THE EASTERN JOINT OF THE STEARNS ROAD INTERSECTION TO STA. 152+00 (EAST OF THE BUTTERNUT RIDGE ROAD INTERSECTION) INCLUDING ALL INTERSECTIONS AND ASPHALT SURFACE COURSE. INTERIM COMPLETION DATE OF NOVEMBER 15TH.

- PRE-PHASE - WORK CONSISTING OF ADJUSTED AND/OR RECONSTRUCTING TO GRADE EXISTING CATCH BASINS AND INLETS IN THE EASTBOUND CURB LANE TO PREPARE FOR PHASE 1 WORK AS DIRECTED IN THE FIELD BY THE ENGINEER. DURING THIS PHASE, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MT-95.31 OR MT-97.10, AS APPROPRIATE.
PHASE 1 - WORK CONSISTING FROM THE EASTERN JOINT OF THE STEARNS ROAD INTERSECTION TO STA. 152+00 (EAST OF THE BUTTERNUT RIDGE ROAD INTERSECTION) ON THE NORTHERN PORTION OF LORAIN ROAD - A MINIMUM OF THREE LANES OF TRAFFIC WILL BE MAINTAINED. ONE EACH IN THE EASTBOUND AND WESTBOUND DIRECTION AND A TWO-WAY LEFT TURN LANE OR DEDICATED LEFT TURN LANE AT SIGNALIZED INTERSECTIONS ON THE EXISTING PAVEMENT.
PHASE 2 - WORK CONSISTING FROM THE EASTERN JOINT OF THE STEARNS ROAD INTERSECTION TO STA. 152+00 (EAST OF THE BUTTERNUT RIDGE ROAD INTERSECTION) ON THE SOUTHERN PORTION OF LORAIN ROAD - A MINIMUM OF THREE LANES OF TRAFFIC WILL BE MAINTAINED. ONE EACH IN THE EASTBOUND AND WESTBOUND DIRECTION AND A TWO-WAY LEFT TURN LANE OR DEDICATED LEFT TURN LANE AT SIGNALIZED INTERSECTIONS ON THE COMPLETED INTERMEDIATE COURSE.
PHASE 3 SHALL CONSIST OF ALL REMAINING WORK IN THE CENTER LANE OF LORAIN ROAD - A MINIMUM OF FOUR LANES OF TRAFFIC TWO EASTBOUND AND TWO WESTBOUND SHALL BE MAINTAINED ON THE COMPLETED INTERMEDIATE COURSE.

SECTION 2 SHALL CONSIST OF ALL WORK OF LORAIN ROAD FROM STA. 152+00 (EAST OF THE BUTTERNUT RIDGE ROAD INTERSECTION) TO CANTERBURY ROAD INCLUDING ALL INTERSECTIONS AND ASPHALT SURFACE COURSE. COMPLETION DATE OF AUGUST 13TH.

- PRE-PHASE - WORK CONSISTING OF THE INSTALLATION OF 12" AND 15" CONDUIT FROM D-3 TO D-2 AND THE ADJUSTING AND/OR RECONSTRUCTING TO GRADE EXISTING CATCH BASINS AND INLETS IN THE EASTBOUND CURB LANE TO PREPARE FOR PHASE 1 WORK AS DIRECTED IN THE FIELD BY THE ENGINEER. DURING THIS PHASE, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MT-95.31 OR MT-97.10, AS APPROPRIATE. A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.
PHASE 1 - WORK CONSISTING FROM STA. 152+00 (EAST OF THE BUTTERNUT RIDGE ROAD INTERSECTION) TO CANTERBURY ROAD ON THE NORTHERN PORTION OF LORAIN ROAD, INCLUDING 12" CONDUIT INSTALLATION FROM D-1 TO D-2, D-2 TO D-4 AND D-5 TO D-6 - A MINIMUM OF THREE LANES OF TRAFFIC WILL BE MAINTAINED. ONE EACH IN THE EASTBOUND AND WESTBOUND DIRECTION AND A TWO-WAY LEFT TURN LANE OR DEDICATED LEFT TURN LANE AT SIGNALIZED INTERSECTIONS ON THE EXISTING PAVEMENT.
PHASE 2 - WORK CONSISTING FROM STA. 152+00 (EAST OF THE BUTTERNUT RIDGE ROAD INTERSECTION) TO CANTERBURY ROAD ON THE SOUTHERN PORTION OF LORAIN ROAD - A MINIMUM OF THREE LANES OF TRAFFIC WILL BE MAINTAINED. ONE EACH IN THE EASTBOUND AND WESTBOUND DIRECTION AND A TWO-WAY LEFT TURN LANE OR DEDICATED LEFT TURN LANE AT SIGNALIZED INTERSECTIONS ON THE COMPLETED INTERMEDIATE COURSE.
PHASE 3 SHALL CONSIST OF ALL REMAINING WORK IN THE CENTER LANE OF LORAIN ROAD - A MINIMUM OF FOUR LANES OF TRAFFIC TWO EASTBOUND AND TWO WESTBOUND SHALL BE MAINTAINED ON THE COMPLETED INTERMEDIATE COURSE.

**PHASED CONSTRUCTION**

ALL WORK IN A GIVEN PHASE, INCLUDING SUCH ITEMS AS BASE REPAIR, ASPHALT CONCRETE COURSES, ADJUSTMENT OF CASTINGS, SIDEWALKS, DRIVEWAY REPAIRS, GUARDRAIL, AND TRAFFIC SIGNS AND SIGNALS SHALL BE COMPLETED PRIOR TO BEGINNING THE NEXT PHASE, WITH THE EXCEPTION OF THE ITEM 441 SURFACE COURSE, FINAL PAVEMENT MARKINGS, AND ANY SIGNS OR SIGNALS WHICH CONFLICT WITH THE MAINTENANCE OF TRAFFIC PLANS.

AT THE END OF THE LAST PHASE (IN ANY CONSTRUCTION SECTION), THE 407 TACK COAT AND THE SURFACE COURSE SHALL BE INSTALLED ACROSS THE ENTIRE PAVEMENT WIDTH, AND LANDSCAPING/EROSION CONTROL, WORK ZONE PAVEMENT MARKINGS IN SECTION 1 AND FINAL PAVEMENT MARKINGS IN SECTION 2, AND THE BALANCE OF THE SIGNS AND SIGNALS SHALL BE INSTALLED. DURING THIS PHASE, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MT-95.31, MT-95.32, MT-97.10, OR MT-97.11, AS APPROPRIATE.

CUY-10-01-97

MODEL: G:\001J DATE: 6/18/2016 TIME: 11:00:01 AM USER: Sarah Flis P:\24288 Lorain Road Resurfacing\107287\400-Engineering\Roadway\Sheets\107287\_GN001.dwg

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY: CHAGRIN VALLEY ENGINEERING, LTD.
DESIGNER: SAF
REVIEWER: BAK
PROJECT ID: 107287
SHEET TOTAL: 16 | 79

**MAINTENANCE OF TRAFFIC (CONTINUED)**

**MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION**

INCIDENTAL TO THE REQUIREMENTS FOR MAINTAINING TRAFFIC IN ACCORDANCE WITH CMS 614.03, THE EXISTING TRAFFIC SIGNALS AT THE LOCATIONS LISTED IN THIS NOTE SHALL BE TEMPORARILY MAINTAINED AS NOTED BELOW FOR ALL CONSTRUCTION PHASES. IT IS THE INTENT UNDER THIS ITEM OF WORK TO MODIFY ONLY THOSE SIGNALS THAT ARE NECESSARY TO IMPROVE TRAFFIC FLOW FOR THE VARIOUS PHASES OF WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MODIFICATIONS TO THE TRAFFIC SIGNALS AS DIRECTED BY THE ENGINEER. THESE MODIFICATIONS SHALL INCLUDE THE FOLLOWING:

1. CHANGING OF SIGNAL PHASING
2. CHANGING OF SIGNAL TIMING
3. COVERING SIGNAL HEADS DUE TO PHASING CHANGES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE MODIFICATIONS FROM THE TIME HIS/HER OPERATIONS FIRST DISTURB THE TRAFFIC PATTERNS UNTIL THE TRAFFIC PATTERNS HAVE BEEN RETURNED TO THEIR PRE-CONSTRUCTION CONDITIONS AND THE WORK HAS BEEN ACCEPTED. IT IS THE INTENT OF THIS PLAN TO MODIFY THE SIGNALS ONLY BY CHANGING EXISTING SIGNAL TIMING, CHANGING EXISTING SIGNAL PHASING AND/OR COVERING EXISTING SIGNAL HEADS DUE TO PHASING CHANGES. ANY ADDITIONAL CONTROLLER HARDWARE NECESSARY TO PERFORM SIGNAL TIMING AND/OR PHASING CHANGES WILL BE THE RESPONSIBILITY OF THE CITY.

ANY COSTS FOR THE INSTALLATION OF ANY TEMPORARY SIGNAL HEADS AND/OR THE RELOCATION OF EXISTING SIGNAL HEADS NECESSARY TO PROVIDE A MINIMUM OF TWO TRAFFIC SIGNAL HEADS OVER THE PORTION OF THE ROADWAY USED BY EACH DIRECTION OF TRAFFIC, AS SHOWN ON THE PLANS SHALL BE INCLUDED IN THE LUMP SUM COST BID FOR ITEM 614 - MAINTAINING TRAFFIC, AND NOT AS PART OF THIS ITEM OF WORK.

IF THE ENGINEER DETERMINES THAT A SIGNAL REQUIRES A TIMING AND/OR PHASING CHANGE, THE CONTRACTOR SHALL CONTACT THE CITY OF NORTH OLMSTED TRAFFIC CONTROL SUPERVISOR AT 440-777-4155 TO ARRANGE FOR THE CHANGE(S). THE CITY SHALL BE GIVEN AT LEAST FIVE WORKING DAYS NOTICE PRIOR TO IMPLEMENTATION OF ANY PHASING CHANGES. THE CITY WILL PERFORM THE WORK WITH ITS OWN FORCES (OR WITH ITS OWN CONTRACTOR) AT THE CONTRACTOR'S EXPENSE.

THE NORMAL MAINTENANCE OF EXISTING TRAFFIC SIGNALS SHALL BE THE RESPONSIBILITY OF THE CITY. OUTAGES WHICH OCCUR DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IF POLES, SIGNAL HEADS, AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED DUE TO THE CONTRACTOR'S NEGLIGENCE, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHOUT UNDUE DELAY, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENTS AS SOON THEREAFTER AS POSSIBLE, AT NO ADDITIONAL COST.

ONCE THE PROJECT (OR A PHASE) IS COMPLETE, AND THE ROAD REOPENED TO FULL WIDTH, THE CONTRACTOR SHALL ARRANGE WITH THE CITY TO REVERT ALL ADJUSTED SIGNAL PHASING AND TIMING BACK TO THE PRE-CONSTRUCTION SETTINGS.

ANY TIME THE CONTRACTOR MUST ENTER A SIGNAL CONTROLLER TO ADJUST SIGNAL TIMING AND/OR SIGNAL PHASING, AND/OR COVER A SIGNAL HEAD OR HEADS AT AN INTERSECTION DUE TO A PHASING CHANGE, SHALL CONSTITUTE PAYMENT ON AN EACH BASIS UNDER THIS ITEM OF WORK. ALL WORK NECESSARY TO IMPLEMENT A PHASING CHANGE, SUCH AS TIMING AND PHASING CHANGES IN THE CONTROLLER, SIGNAL HEAD ADJUSTMENTS, COVERING SIGNAL HEADS, ETC., SHOULD BE DONE CONCURRENTLY, AND WILL BE CONSIDERED AS ONE OCCURRENCE FOR THE PURPOSES OF PAYMENT UNDER THIS ITEM. HOWEVER, MULTIPLE ENTRIES INTO THE SAME CONTROLLER SHALL BE PAID FOR EACH TIME THE CONTROLLER IS SUBSEQUENTLY ENTERED AT THE DIRECTION OF THE ENGINEER TO ADJUST TIMING AND OR PHASING. ALL COSTS INCLUDING MATERIALS, LABOR, EQUIPMENT, ETC., RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

DESIGN AGENCY

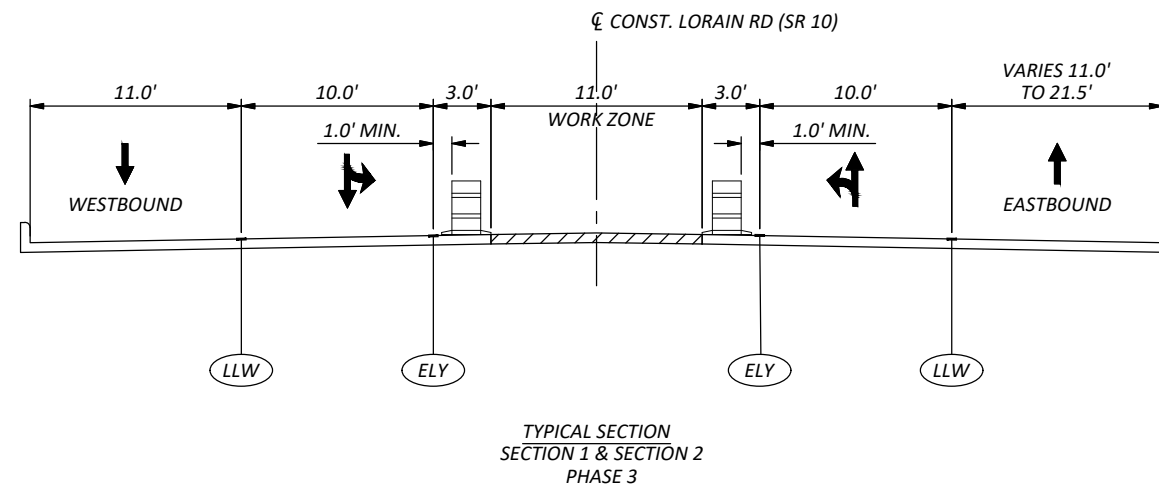
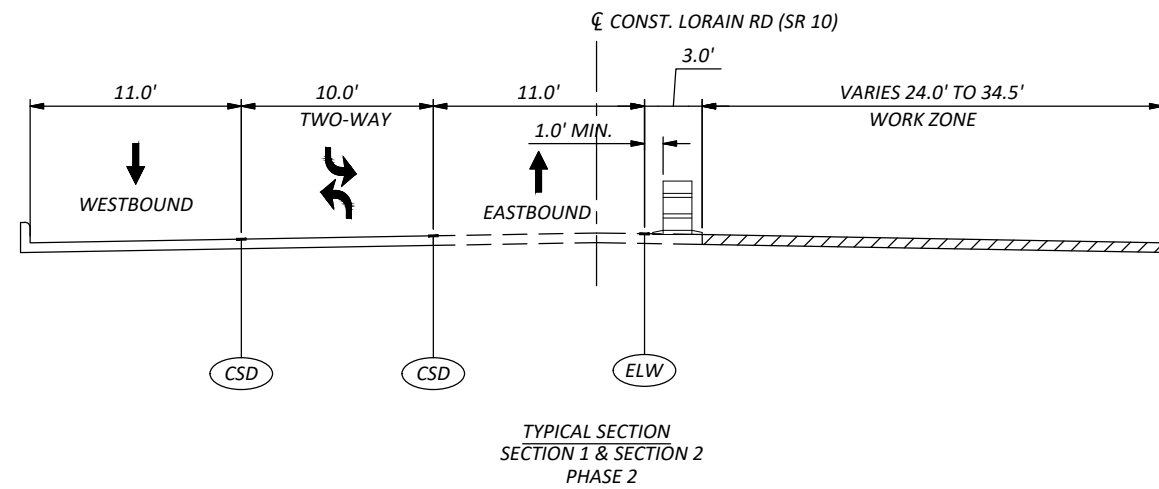
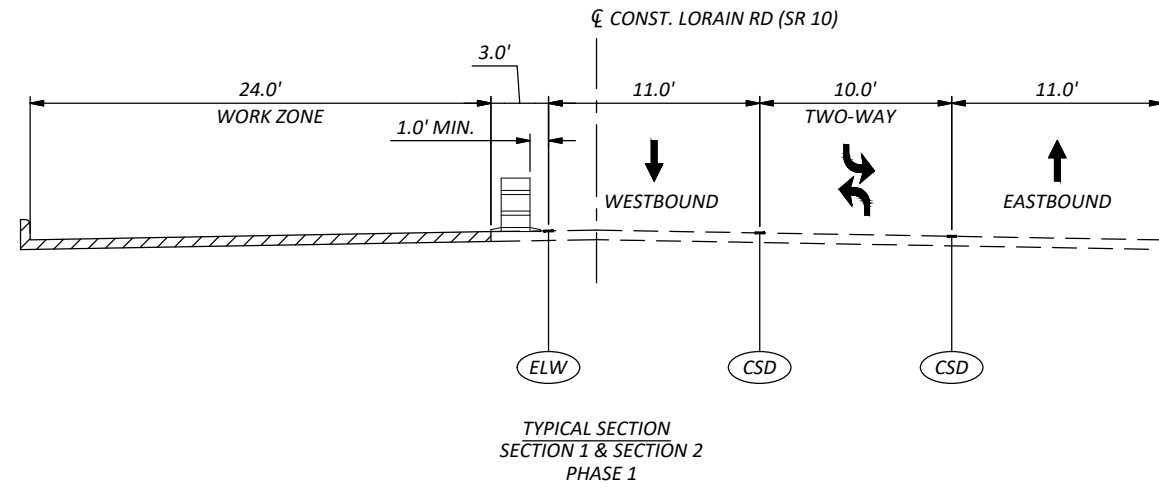


DESIGNER  
SAF

REVIEWER  
BAK 03/20/26

PROJECT ID  
107287

SHEET	TOTAL
17	79



LEGEND			
	AREA UNDER CONSTRUCTION		ITEM 614 - WORK ZONE CENTER LINE, SOLID AND BROKEN, CLASS 1 (YELLOW)
	EXISTING PAVEMENT		ITEM 614 - WORK ZONE EDGE LINE, CLASS 1 (WHITE)
	CONSTRUCTED PAVEMENT		ITEM 614 - WORK ZONE LANE LINE, CLASS 1 (WHITE)
	DIRECTION OF TRAVEL		ITEM 614 - WORK ZONE EDGE LINE, CLASS 1 (YELLOW)

**NOTES:**

- DAILY LANE CLOSURE IS PERMITTED ON PHASE 3 EXCEPT BETWEEN THE HOURS OF 6AM - 9AM AND 3PM - 6PM

DESIGN AGENCY

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 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
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 FAX: (440) 439-1969

DESIGNER

CJD

REVIEWER

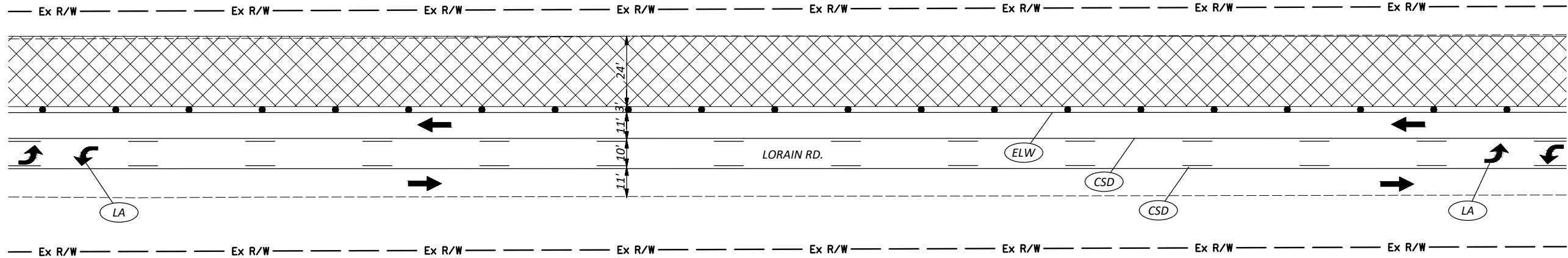
BAK 03/20/26

PROJECT ID

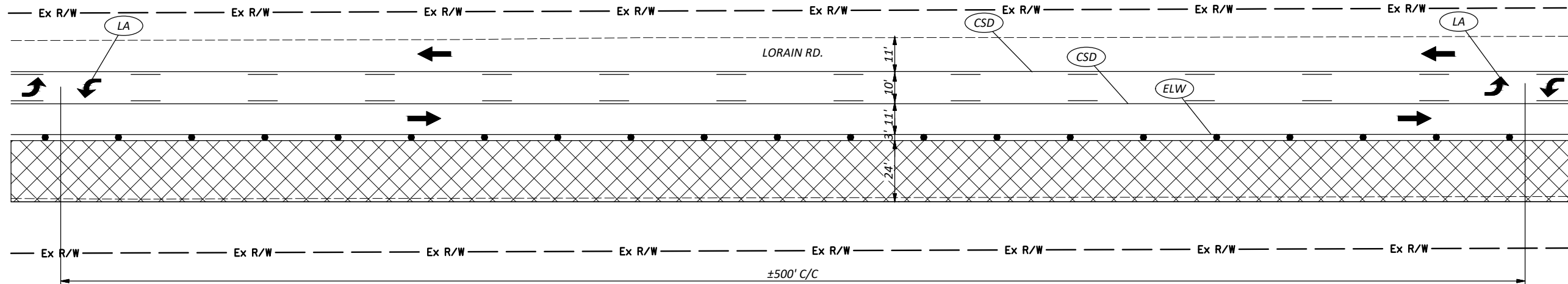
107287

SHEET TOTAL

18 | 79

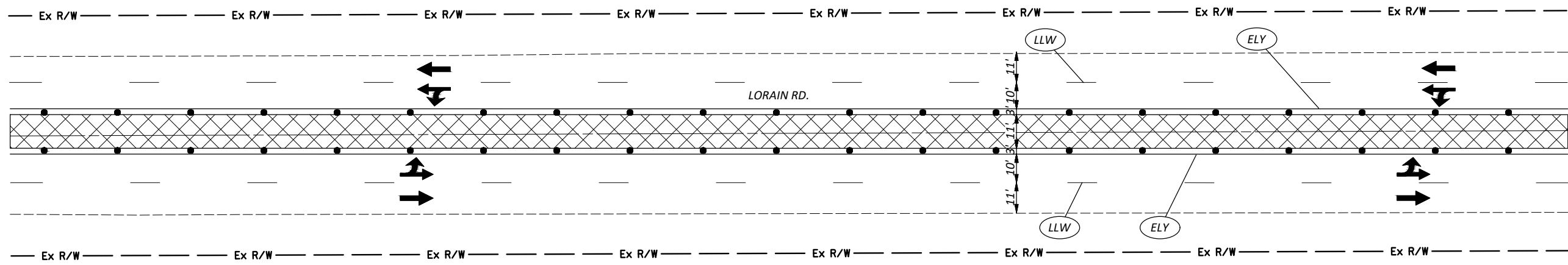


PHASE 1 LORAIN ROAD TYPICAL DETAIL



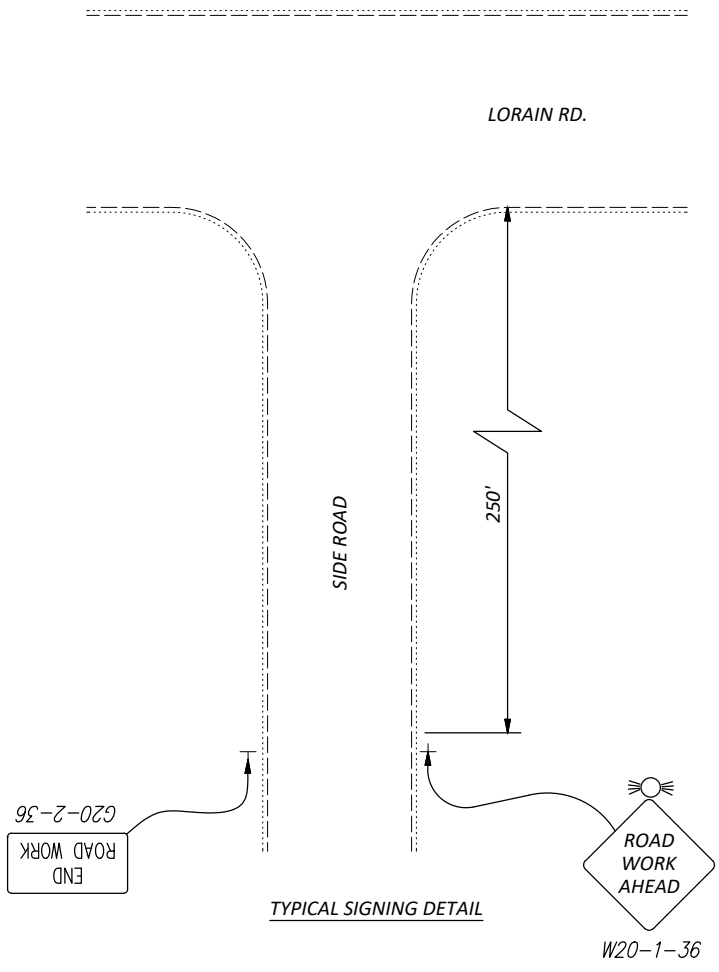
PHASE 2 LORAIN ROAD TYPICAL DETAIL

LEGEND			
	AREA UNDER CONSTRUCTION		ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1
	DIRECTION OF TRAVEL		ITEM 614 - WORK ZONE CENTERLINE, CLASS 1 (YELLOW)
	CONSTRUCTION DRUMS @ 25' C/C		ITEM 614 - WORK ZONE CENTER LINE, SOLID AND BROKEN, CLASS 1 (YELLOW)
	TYPE A WARNING LIGHT		ITEM 614 - WORK ZONE EDGE LINE, CLASS 1 (WHITE)
	FLASHING ARROW BOARD		ITEM 614 - WORK ZONE LANE LINE, CLASS 1 (WHITE)
	WORK ZONE SIGN & POST		ITEM 614 - WORK ZONE LANE ARROW, CLASS 1 (WHITE)
	EXISTING PAVEMENT MARKING TO BE REMOVED		ITEM 614 - WORK ZONE STOP LINE, CLASS 1 (WHITE)

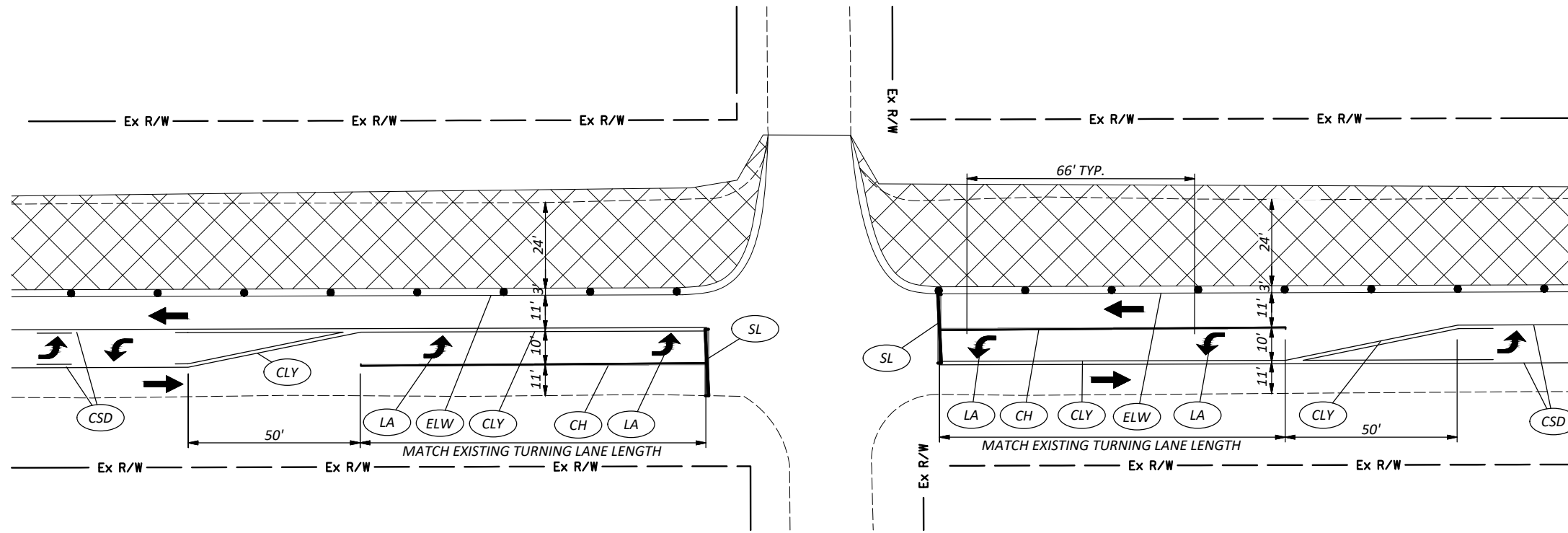


PHASE 3 LORAIN ROAD TYPICAL DETAIL

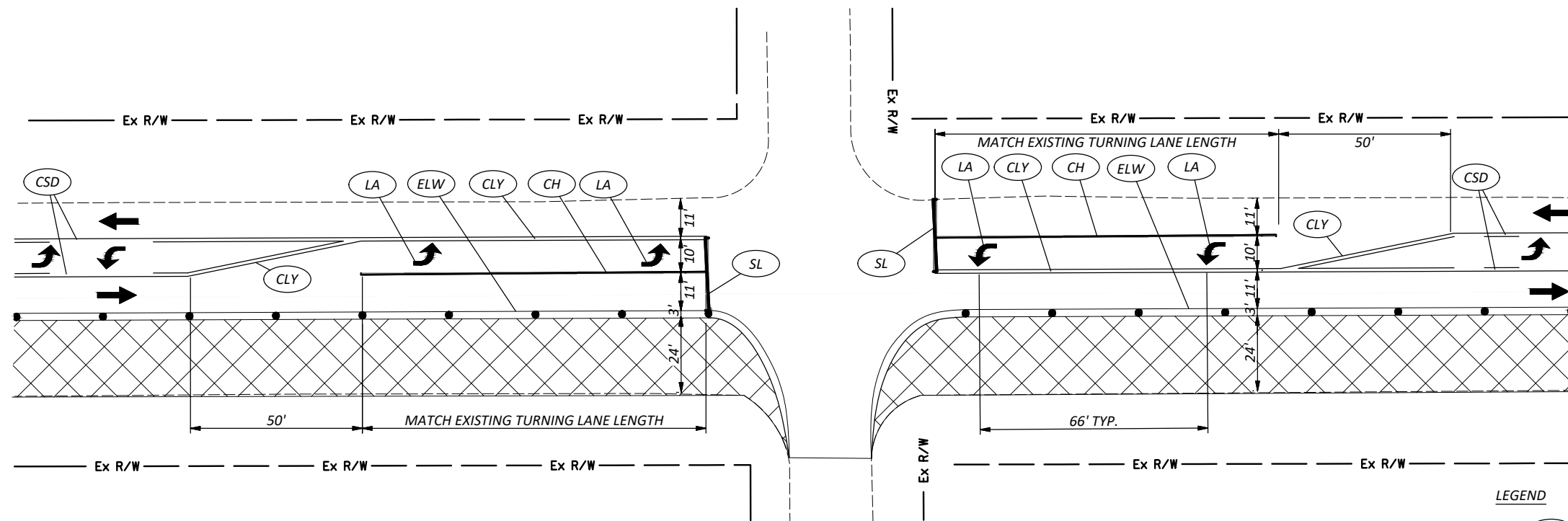
NOTES:  
 1. DAILY LANE CLOSURE IS PERMITTED ON PHASE 3, EXCEPT BETWEEN THE HOURS OF 6AM-9AM AND 3PM-6PM.



LEGEND			
	AREA UNDER CONSTRUCTION		ITEM 614 - WORK ZONE EDGE LINE, CLASS 1 (YELLOW)
	DIRECTION OF TRAVEL		ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1
	CONSTRUCTION DRUMS @ 25' C/C		ITEM 614 - WORK ZONE CENTERLINE, CLASS 1 (YELLOW)
	TYPE A WARNING LIGHT		ITEM 614 - WORK ZONE CENTER LINE, SOILD AND BROKEN, CLASS 1 (YELLOW)
	FLASHING ARROW BOARD		ITEM 614 - WORK ZONE EDGE LINE, CLASS 1 (WHITE)
	WORK ZONE SIGN & POST		ITEM 614 - WORK ZONE LANE LINE, CLASS 1 (WHITE)
	EXISTING PAVEMENT MARKING TO BE REMOVED		ITEM 614 - WORK ZONE LANE ARROW, CLASS 1 (WHITE)
			ITEM 614 - WORK ZONE STOP LINE, CLASS 1 (WHITE)

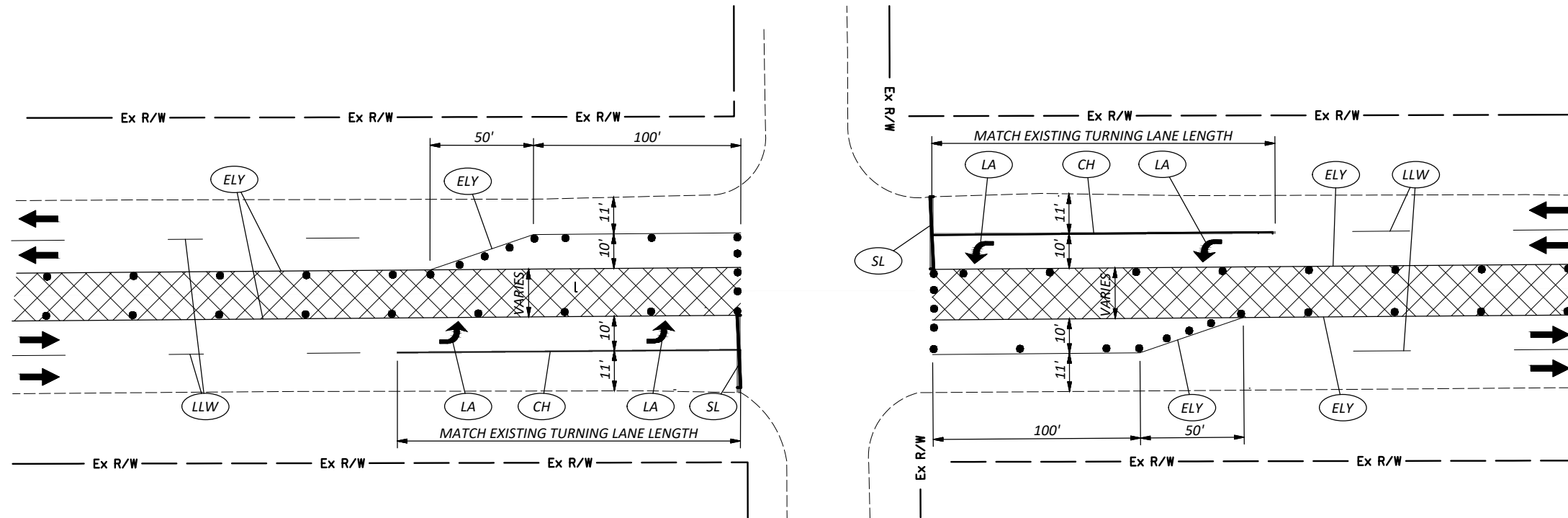


PHASE 1 TYPICAL SIGNALIZED INTERSECTION DETAIL



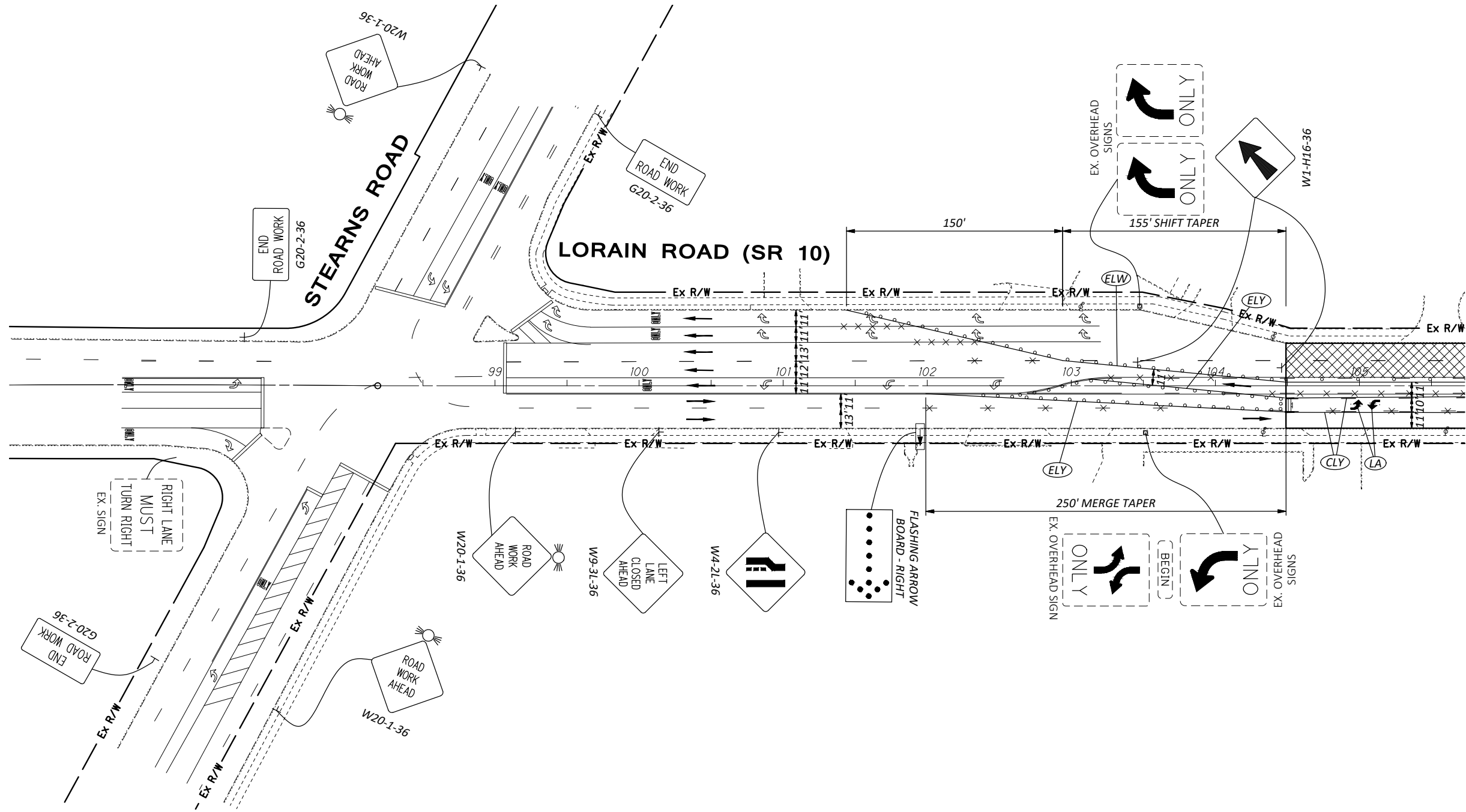
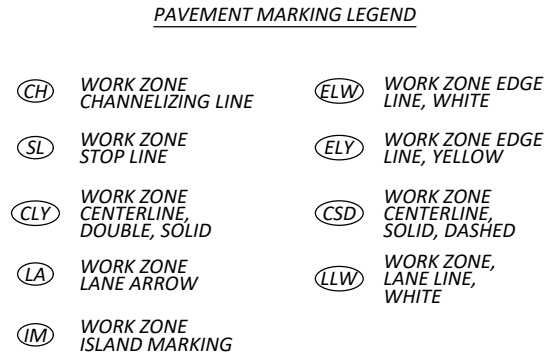
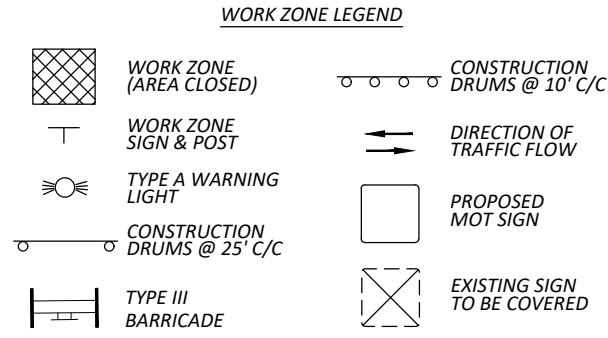
PHASE 2 TYPICAL SIGNALIZED INTERSECTION DETAIL

LEGEND			
	AREA UNDER CONSTRUCTION		ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1
	DIRECTION OF TRAVEL		ITEM 614 - WORK ZONE CENTERLINE, CLASS 1 (YELLOW)
	CONSTRUCTION DRUMS @ 25' C/C		ITEM 614 - WORK ZONE CENTERLINE, SOLID AND BROKEN, CLASS 1 (YELLOW)
	TYPE A WARNING LIGHT		ITEM 614 - WORK ZONE EDGE LINE, CLASS 1 (WHITE)
	FLASHING ARROW BOARD		ITEM 614 - WORK ZONE LANE LINE, CLASS 1 (WHITE)
	WORK ZONE SIGN & POST		ITEM 614 - WORK ZONE LANE ARROW, CLASS 1 (WHITE)
	EXISTING PAVEMENT MARKING TO BE REMOVED		ITEM 614 - WORK ZONE STOP LINE, CLASS 1 (WHITE)












PHASE 3 TYPICAL SIGNALIZED INTERSECTION DETAIL









LEGEND			
	AREA UNDER CONSTRUCTION		ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS 1
	DIRECTION OF TRAVEL		ITEM 614 - WORK ZONE CENTERLINE, CLASS 1 (YELLOW)
	CONSTRUCTION DRUMS @ 25' C/C		ITEM 614 - WORK ZONE CENTER LINE, SOLID AND BROKEN, CLASS 1 (YELLOW)
	TYPE A WARNING LIGHT		ITEM 614 - WORK ZONE EDGE LINE, CLASS 1 (WHITE)
	FLASHING ARROW BOARD		ITEM 614 - WORK ZONE LANE LINE, CLASS 1 (WHITE)
	WORK ZONE SIGN & POST		ITEM 614 - WORK ZONE LANE ARROW, CLASS 1 (WHITE)
	EXISTING PAVEMENT MARKING TO BE REMOVED		ITEM 614 - WORK ZONE STOP LINE, CLASS 1 (WHITE)

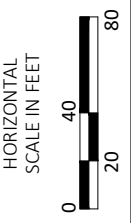
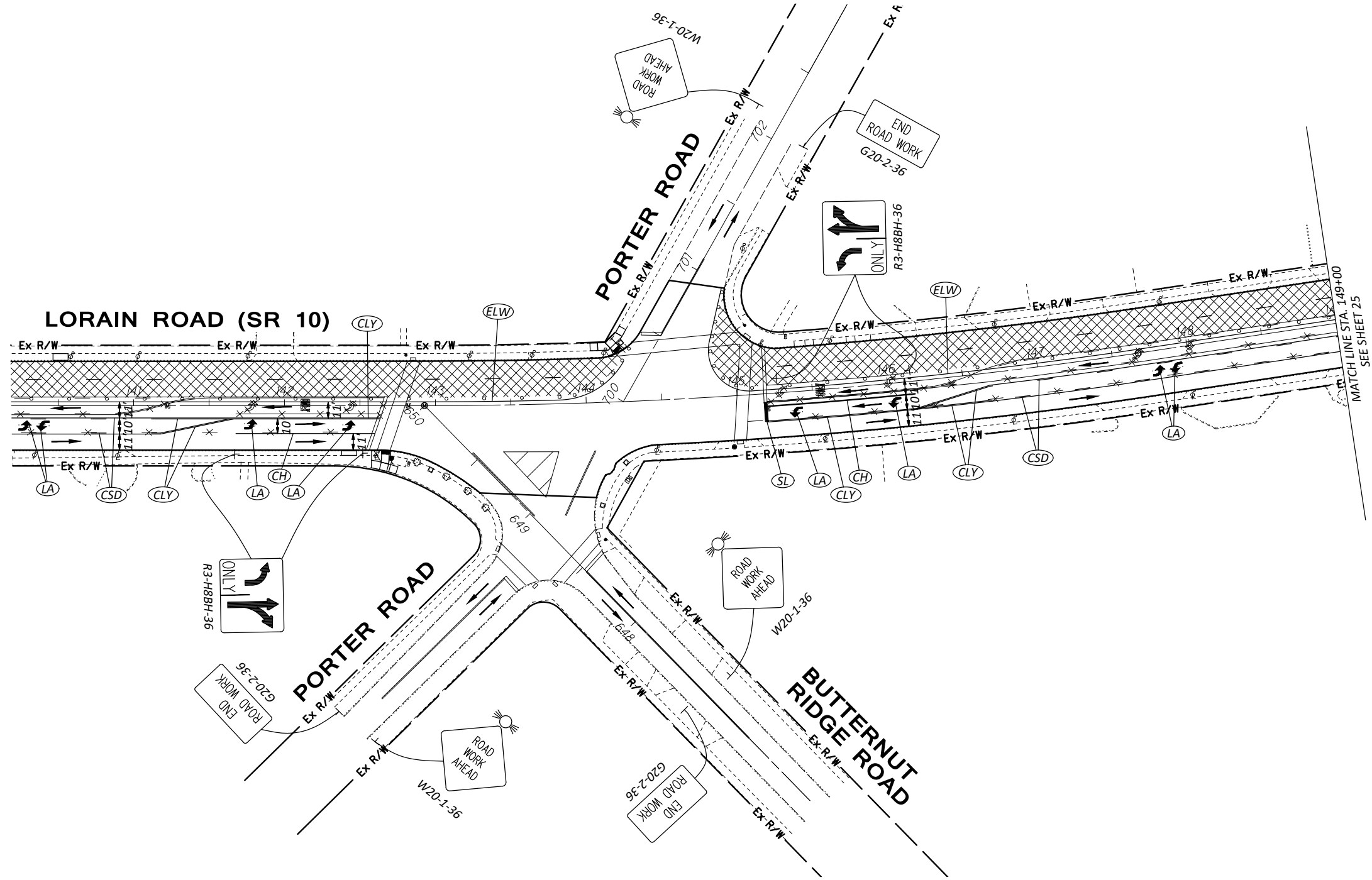


LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 1 - PHASE 1

DESIGN AGENCY	
DESIGNER	SAF
REVIEWER	SAF
PROJECT ID	BAK 03/20/26
SHEET	107287
TOTAL	23
	79

WORK ZONE LEGEND	
	WORK ZONE (AREA CLOSED)
	WORK ZONE SIGN & POST
	TYPE A WARNING LIGHT
	CONSTRUCTION DRUMS @ 25' C/C
	TYPE III BARRICADE
	CONSTRUCTION DRUMS @ 10' C/C
	DIRECTION OF TRAFFIC FLOW
	PROPOSED MOT SIGN
	EXISTING SIGN TO BE COVERED

PAVEMENT MARKING LEGEND			
	WORK ZONE CHANNELIZING LINE		WORK ZONE EDGE LINE, WHITE
	WORK ZONE STOP LINE		WORK ZONE EDGE LINE, YELLOW
	WORK ZONE CENTERLINE, DOUBLE, SOLID		WORK ZONE CENTERLINE, SOLID, DASHED
	WORK ZONE LANE ARROW		WORK ZONE, LANE LINE, WHITE



LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 1 - PHASE 1

DESIGN AGENCY



CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

DESIGNER

SAF

REVIEWER

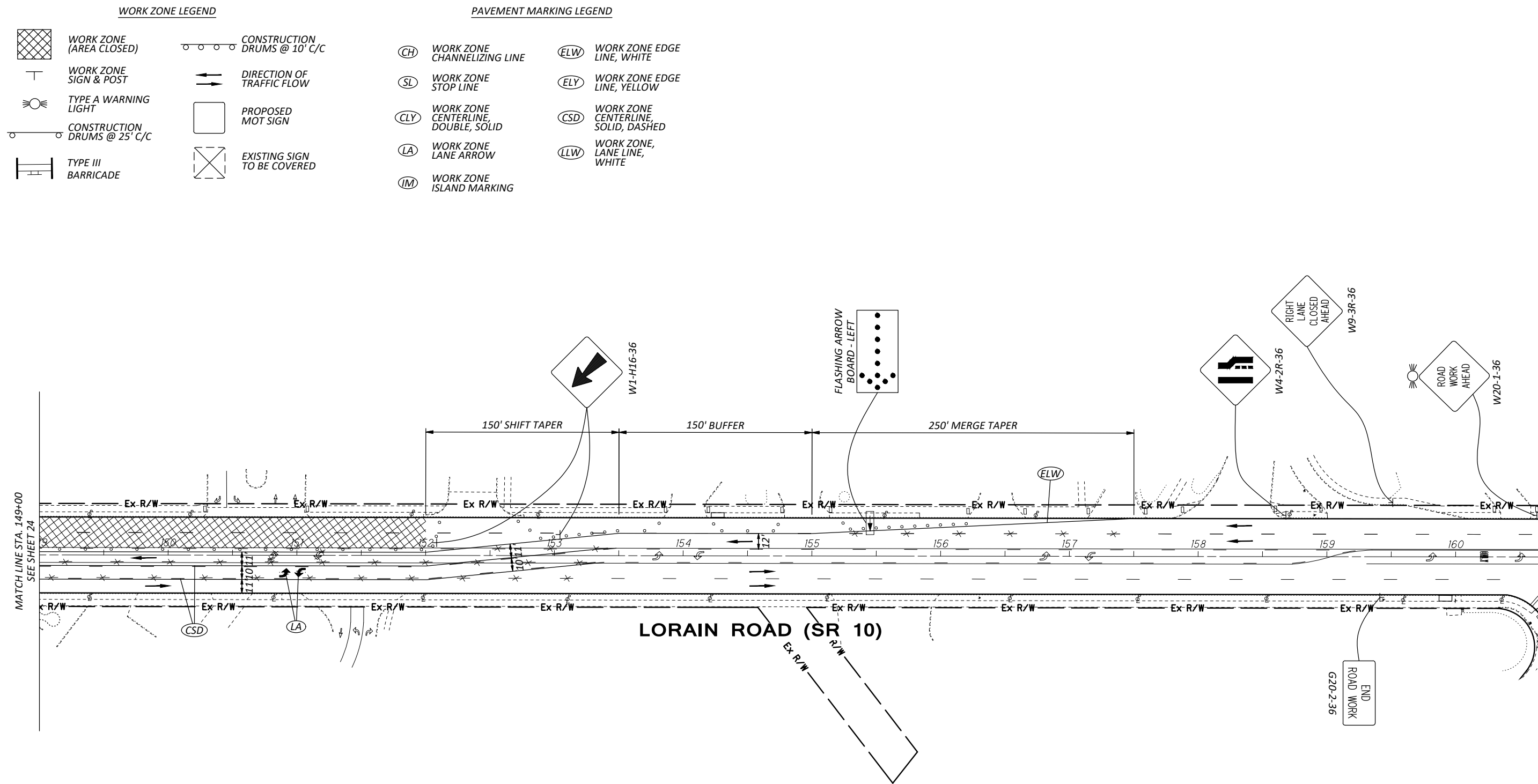
BAK 03/20/26

PROJECT ID

107287

SHEET TOTAL

24 79

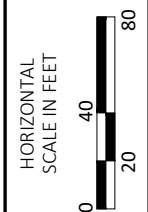


**WORK ZONE LEGEND**

- WORK ZONE (AREA CLOSED)
- WORK ZONE SIGN & POST
- TYPE A WARNING LIGHT
- CONSTRUCTION DRUMS @ 25' C/C
- TYPE III BARRICADE
- CONSTRUCTION DRUMS @ 10' C/C
- DIRECTION OF TRAFFIC FLOW
- PROPOSED MOT SIGN
- EXISTING SIGN TO BE COVERED

**PAVEMENT MARKING LEGEND**

- WORK ZONE CHANNELIZING LINE
- WORK ZONE STOP LINE
- WORK ZONE CENTERLINE, DOUBLE, SOLID
- WORK ZONE LANE ARROW
- WORK ZONE ISLAND MARKING
- WORK ZONE EDGE LINE, WHITE
- WORK ZONE EDGE LINE, YELLOW
- WORK ZONE CENTERLINE, SOLID, DASHED
- WORK ZONE, LANE LINE, WHITE

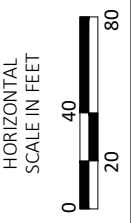


**LORAIN ROAD - MAINTENANCE OF TRAFFIC  
SECTION 1 - PHASE 1**

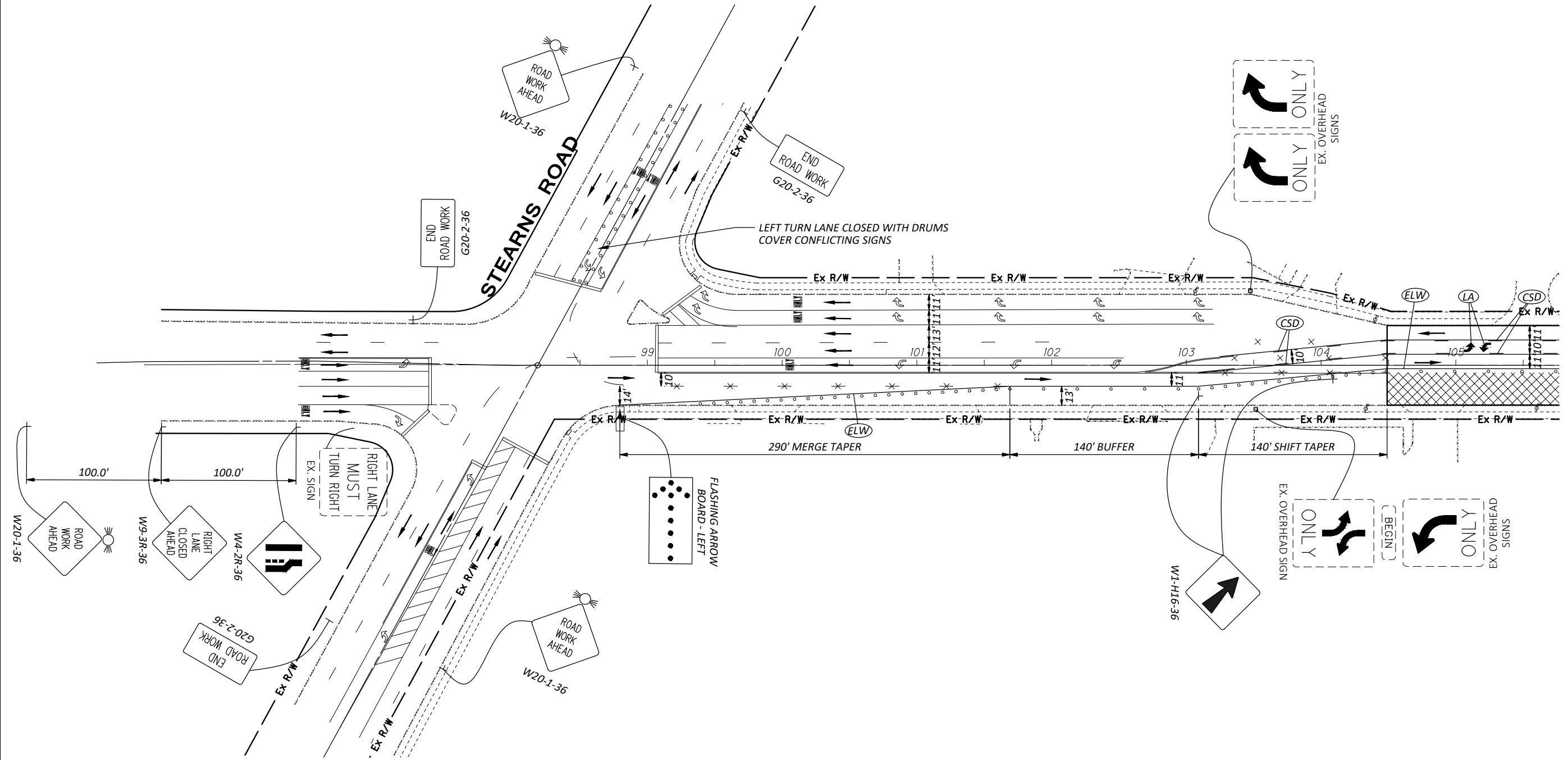
DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
25	79

WORK ZONE LEGEND	
	WORK ZONE (AREA CLOSED)
	WORK ZONE SIGN & POST
	TYPE A WARNING LIGHT
	CONSTRUCTION DRUMS @ 25' C/C
	TYPE III BARRICADE
	CONSTRUCTION DRUMS @ 10' C/C
	DIRECTION OF TRAFFIC FLOW
	EXISTING SIGN TO BE COVERED
	PROPOSED MOT SIGN










PAVEMENT MARKING LEGEND	
	WORK ZONE CHANNELIZING LINE (CH)
	WORK ZONE STOP LINE (SL)
	WORK ZONE CENTERLINE, DOUBLE, SOLID (CLY)
	WORK ZONE LANE ARROW (LA)
	WORK ZONE EDGE LINE, WHITE (ELW)
	WORK ZONE EDGE LINE, YELLOW (ELY)
	WORK ZONE CENTERLINE, SOLID, DASHED (CSD)
	WORK ZONE, LANE LINE, WHITE (LLW)











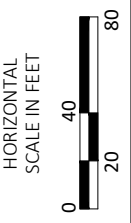
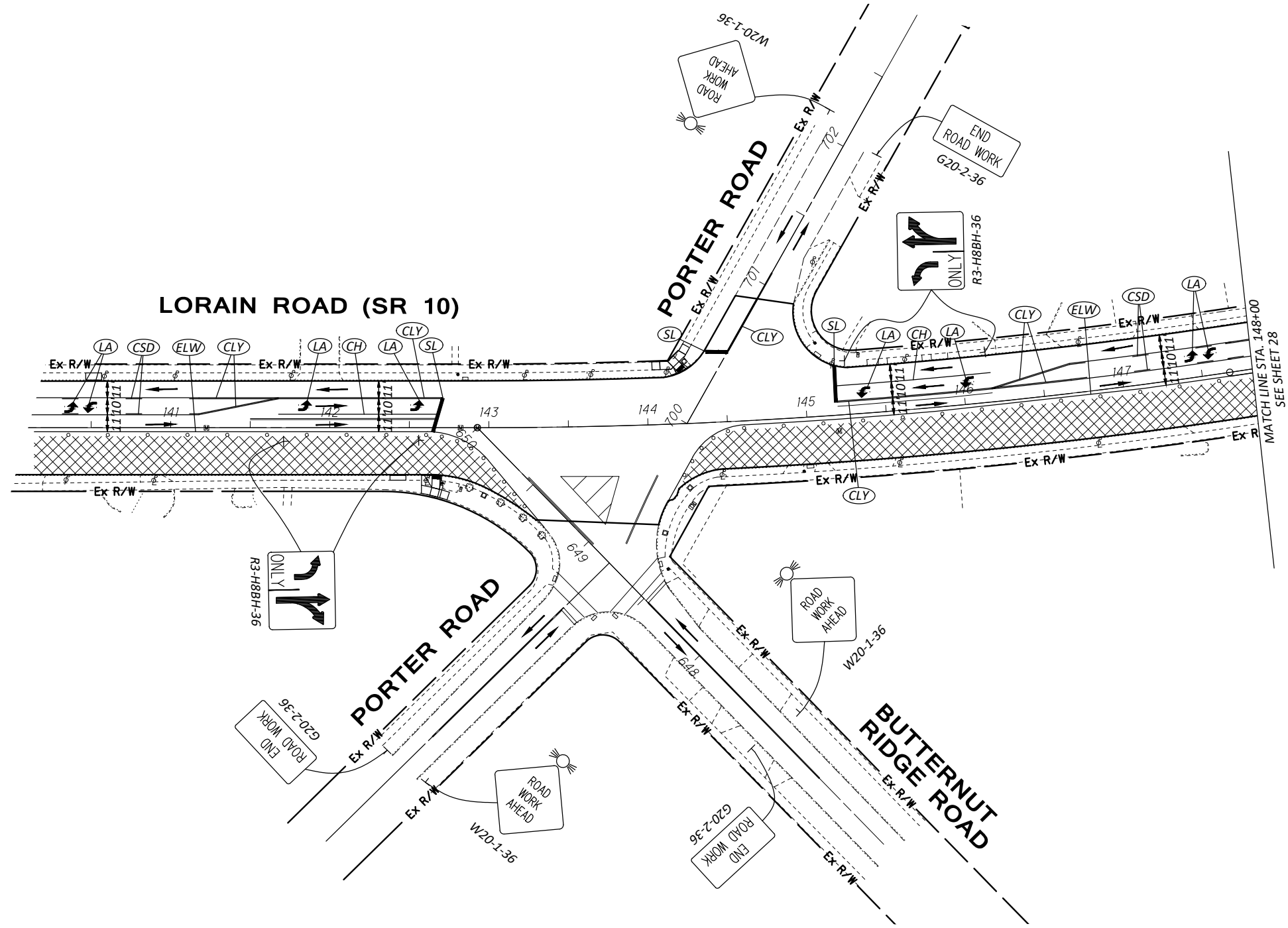
LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 1 - PHASE 2



DESIGN AGENCY	
DESIGNER	SAF
REVIEWER	BAK
PROJECT ID	03/20/26
SHEET	107287
TOTAL	26
	79

WORK ZONE LEGEND	
	WORK ZONE (AREA CLOSED)
	WORK ZONE SIGN & POST
	TYPE A WARNING LIGHT
	CONSTRUCTION DRUMS @ 25' C/C
	TYPE III BARRICADE
	CONSTRUCTION DRUMS @ 10' C/C
	DIRECTION OF TRAFFIC FLOW
	PROPOSED MOT SIGN
	EXISTING SIGN TO BE COVERED

PAVEMENT MARKING LEGEND			
	WORK ZONE CHANNELIZING LINE		WORK ZONE EDGE LINE, WHITE
	WORK ZONE STOP LINE		WORK ZONE EDGE LINE, YELLOW
	WORK ZONE CENTERLINE, DOUBLE, SOLID		WORK ZONE CENTERLINE, SOLID, DASHED
	WORK ZONE LANE ARROW		WORK ZONE, LANE LINE, WHITE



LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 1 - PHASE 2

DESIGN AGENCY



CHAGRIN VALLEY  
 ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

DESIGNER

SAF

REVIEWER

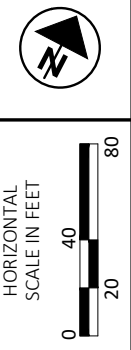
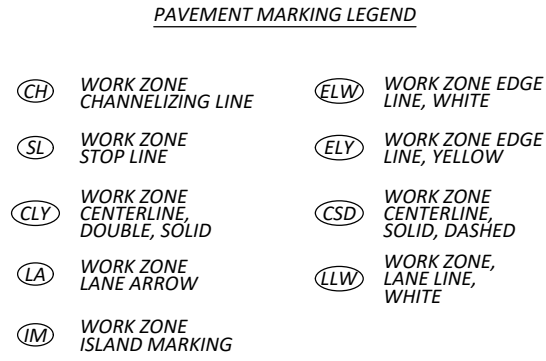
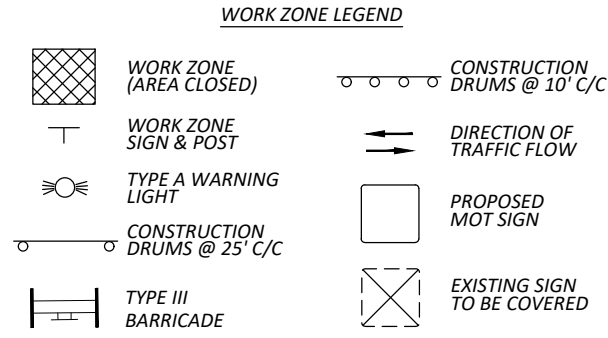
BAK 03/20/26

PROJECT ID

107287

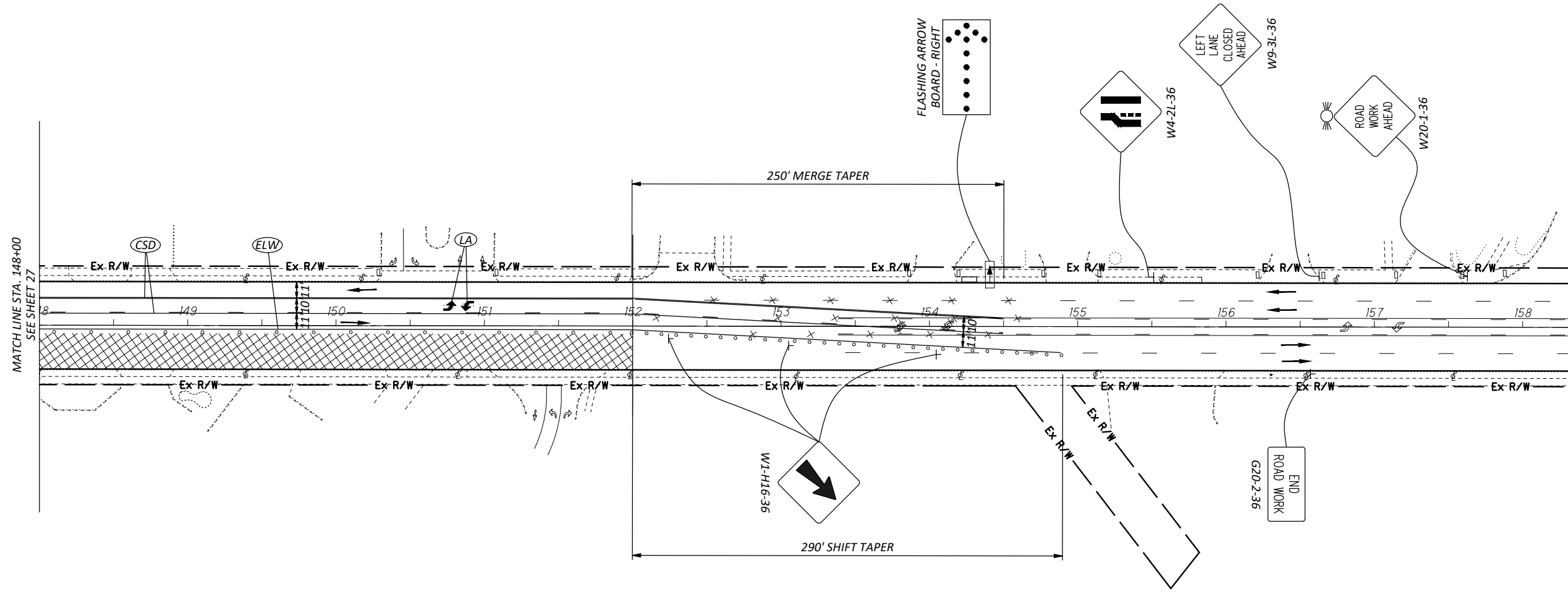
SHEET TOTAL










27 79











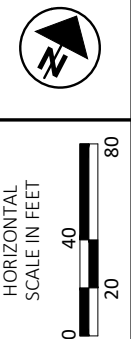
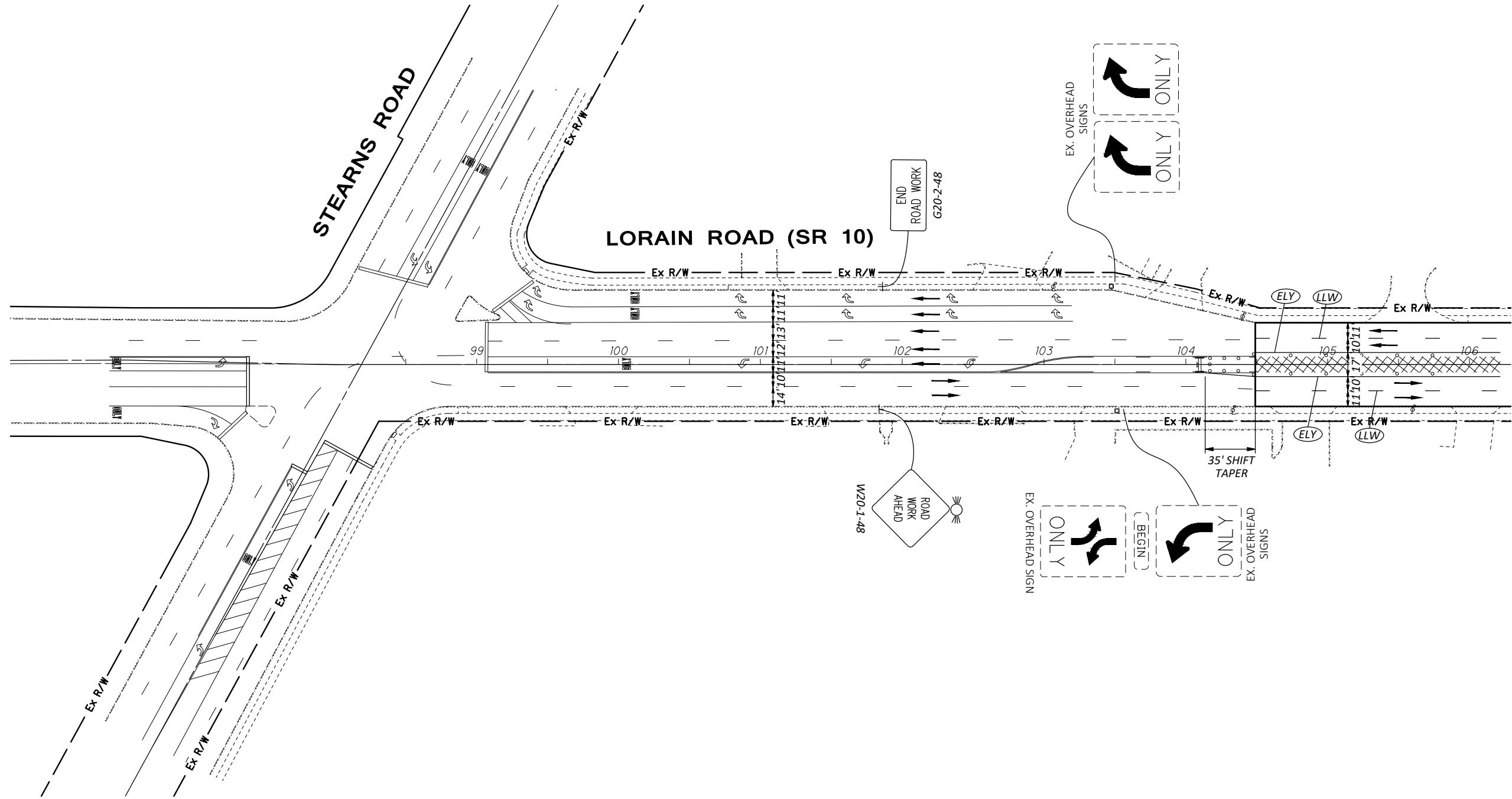
LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 1 - PHASE 2

DESIGN AGENCY	
DESIGNER	SAF
REVIEWER	BAK
PROJECT ID	107287
SHEET	28
TOTAL	79



WORK ZONE LEGEND	
	WORK ZONE (AREA CLOSED)
	WORK ZONE SIGN & POST
	TYPE A WARNING LIGHT
	CONSTRUCTION DRUMS @ 25' C/C
	TYPE III BARRICADE
	CONSTRUCTION DRUMS @ 10' C/C
	DIRECTION OF TRAFFIC FLOW
	PROPOSED MOT SIGN
	EXISTING SIGN TO BE COVERED

PAVEMENT MARKING LEGEND			
	WORK ZONE CHANNELIZING LINE		WORK ZONE EDGE LINE, WHITE
	WORK ZONE STOP LINE		WORK ZONE EDGE LINE, YELLOW
	WORK ZONE CENTERLINE, DOUBLE, SOLID		WORK ZONE CENTERLINE, SOLID, DASHED
	WORK ZONE LANE ARROW		WORK ZONE, LANE LINE, WHITE



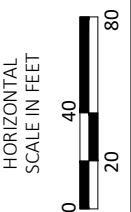
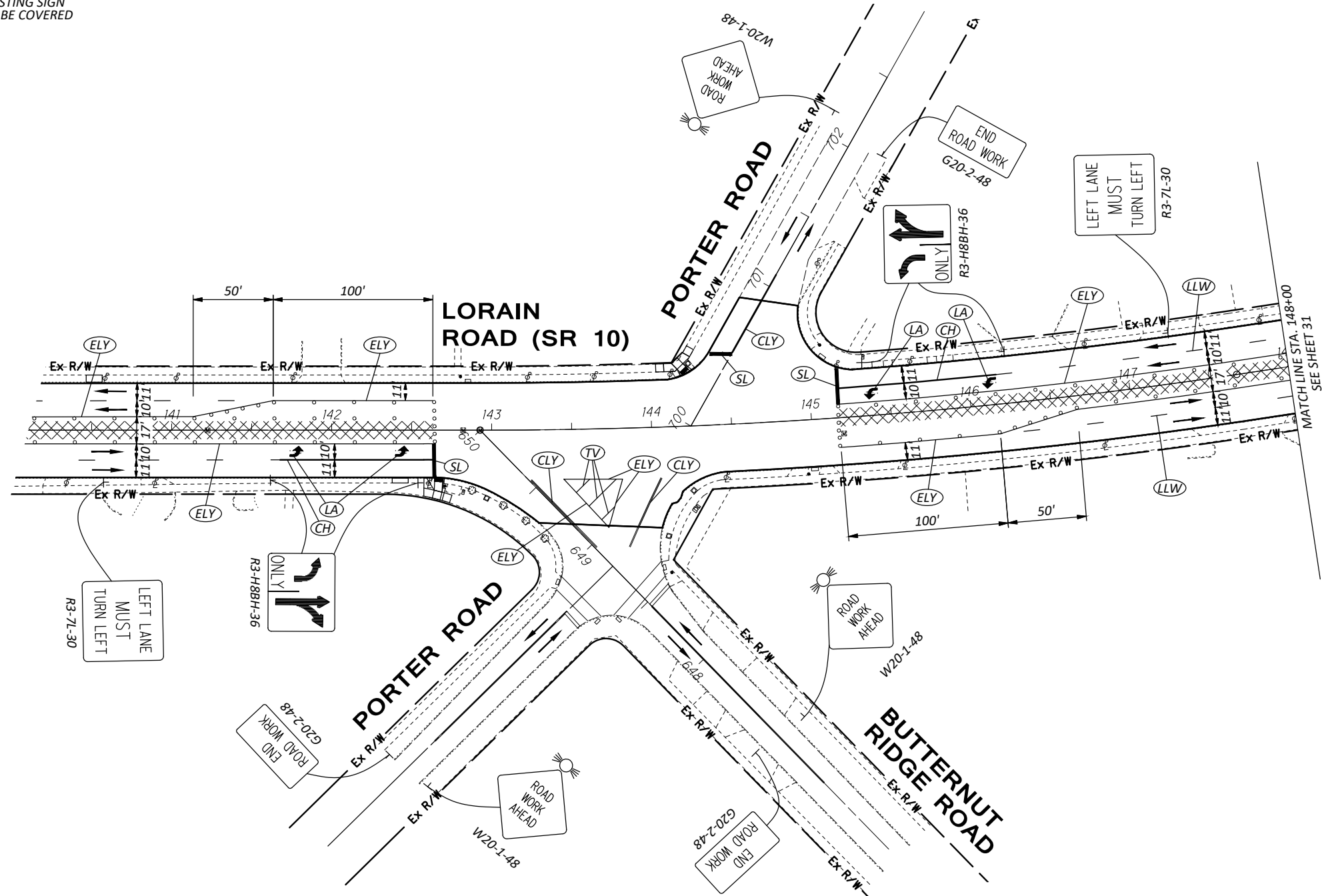
LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 1 - PHASE 3

DESIGN AGENCY	
DESIGNER	SAF
REVIEWER	BAK
PROJECT ID	107287
SHEET	29
TOTAL	79

CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

WORK ZONE LEGEND	
	WORK ZONE (AREA CLOSED)
	WORK ZONE SIGN & POST
	TYPE A WARNING LIGHT
	CONSTRUCTION DRUMS @ 25' C/C
	TYPE III BARRICADE
	TYPE III BARRICADE
	CONSTRUCTION DRUMS @ 10' C/C
	DIRECTION OF TRAFFIC FLOW
	PROPOSED MOT SIGN
	EXISTING SIGN TO BE COVERED
	EXISTING SIGN TO BE COVERED

PAVEMENT MARKING LEGEND			
	WORK ZONE CHANNELIZING LINE		WORK ZONE EDGE LINE, WHITE
	WORK ZONE STOP LINE		WORK ZONE EDGE LINE, YELLOW
	WORK ZONE CENTERLINE, DOUBLE, SOLID		WORK ZONE CENTERLINE, SOLID, DASHED
	WORK ZONE LANE ARROW		WORK ZONE, LANE LINE, WHITE
	WORK ZONE TRANSVERSE LINE		



LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 1 - PHASE 3

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
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 FAX: (440) 439-1969

DESIGNER

SAF

REVIEWER






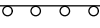



BAK 03/20/26









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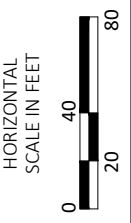
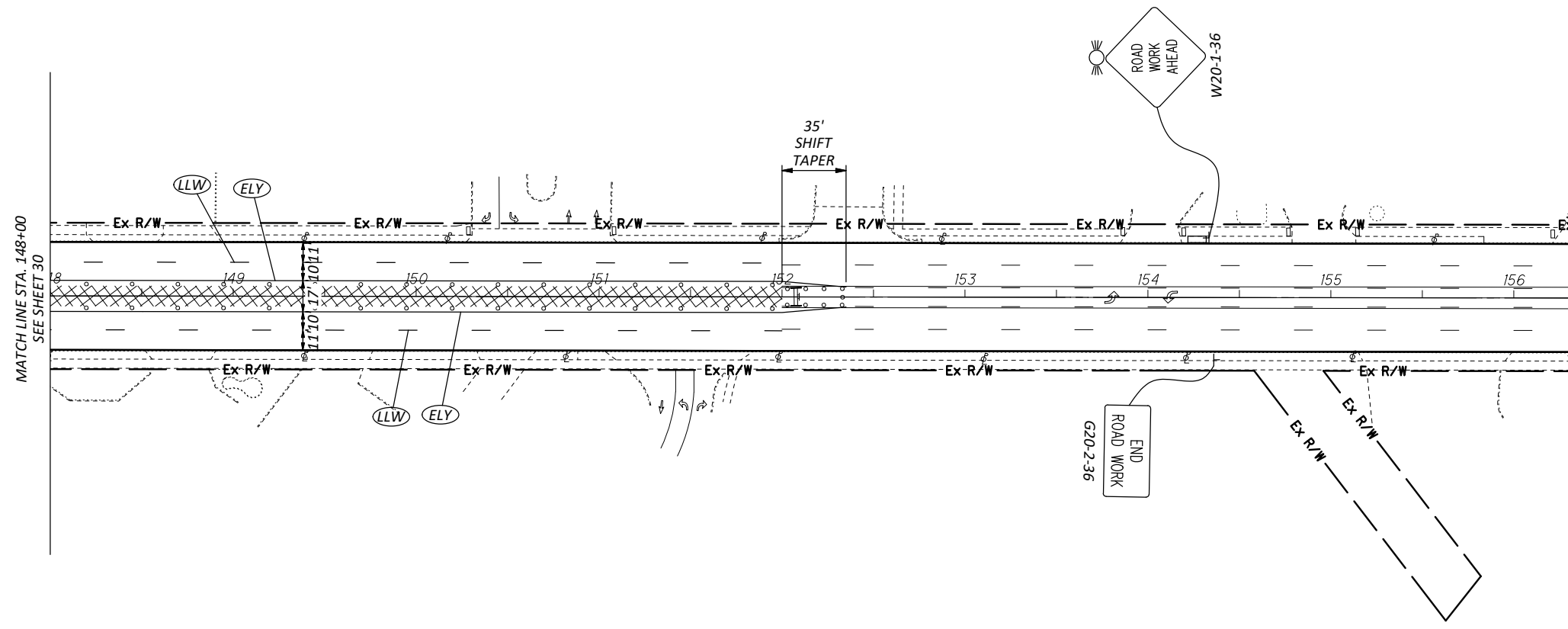
107287

SHEET TOTAL

30 79

WORK ZONE LEGEND	
	WORK ZONE (AREA CLOSED)
	WORK ZONE SIGN & POST
	TYPE A WARNING LIGHT
	CONSTRUCTION DRUMS @ 25' C/C
	TYPE III BARRICADE
	CONSTRUCTION DRUMS @ 10' C/C
	DIRECTION OF TRAFFIC FLOW
	PROPOSED MOT SIGN
	EXISTING SIGN TO BE COVERED

PAVEMENT MARKING LEGEND			
	WORK ZONE CHANNELIZING LINE		WORK ZONE EDGE LINE, WHITE
	WORK ZONE STOP LINE		WORK ZONE EDGE LINE, YELLOW
	WORK ZONE CENTERLINE, DOUBLE, SOLID		WORK ZONE CENTERLINE, SOLID, DASHED
	WORK ZONE LANE ARROW		WORK ZONE, LANE LINE, WHITE



LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 1 - PHASE 3

DESIGN AGENCY



CHAGRIN VALLEY  
 ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969










DESIGNER  
 SAF

REVIEWER  
 BAK 03/20/26










PROJECT ID  
 107287

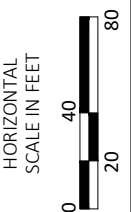
SHEET	TOTAL
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**WORK ZONE LEGEND**

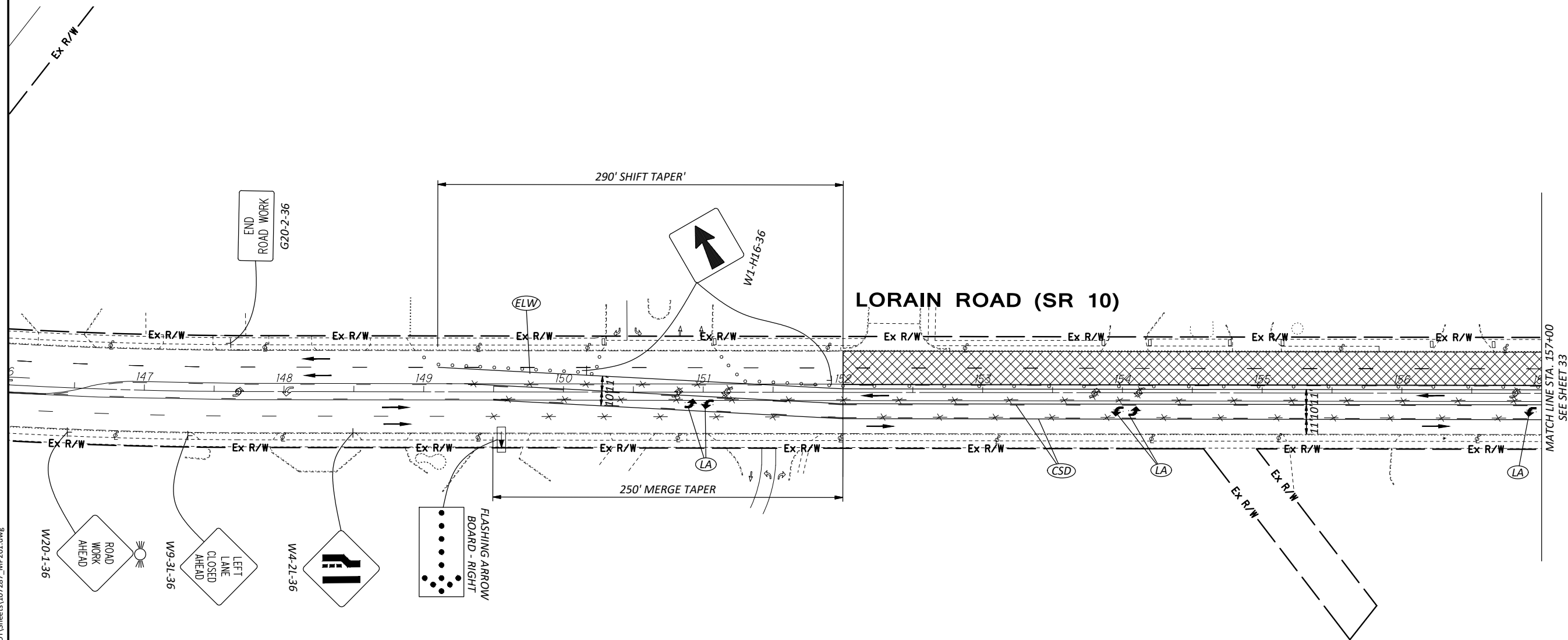
-  WORK ZONE (AREA CLOSED)
-  WORK ZONE SIGN & POST
-  TYPE A WARNING LIGHT
-  CONSTRUCTION DRUMS @ 25' C/C
-  TYPE III BARRICADE
-  CONSTRUCTION DRUMS @ 10' C/C
-  DIRECTION OF TRAFFIC FLOW
-  PROPOSED MOT SIGN
-  EXISTING SIGN TO BE COVERED

**PAVEMENT MARKING LEGEND**










-  WORK ZONE CHANNELIZING LINE
-  WORK ZONE STOP LINE
-  WORK ZONE CENTERLINE, DOUBLE, SOLID
-  WORK ZONE LANE ARROW
-  WORK ZONE ISLAND MARKING
-  WORK ZONE EDGE LINE, WHITE
-  WORK ZONE EDGE LINE, YELLOW
-  WORK ZONE CENTERLINE, SOLID, DASHED
-  WORK ZONE, LANE LINE, WHITE












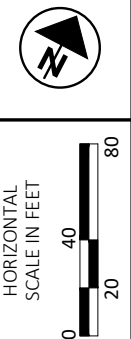
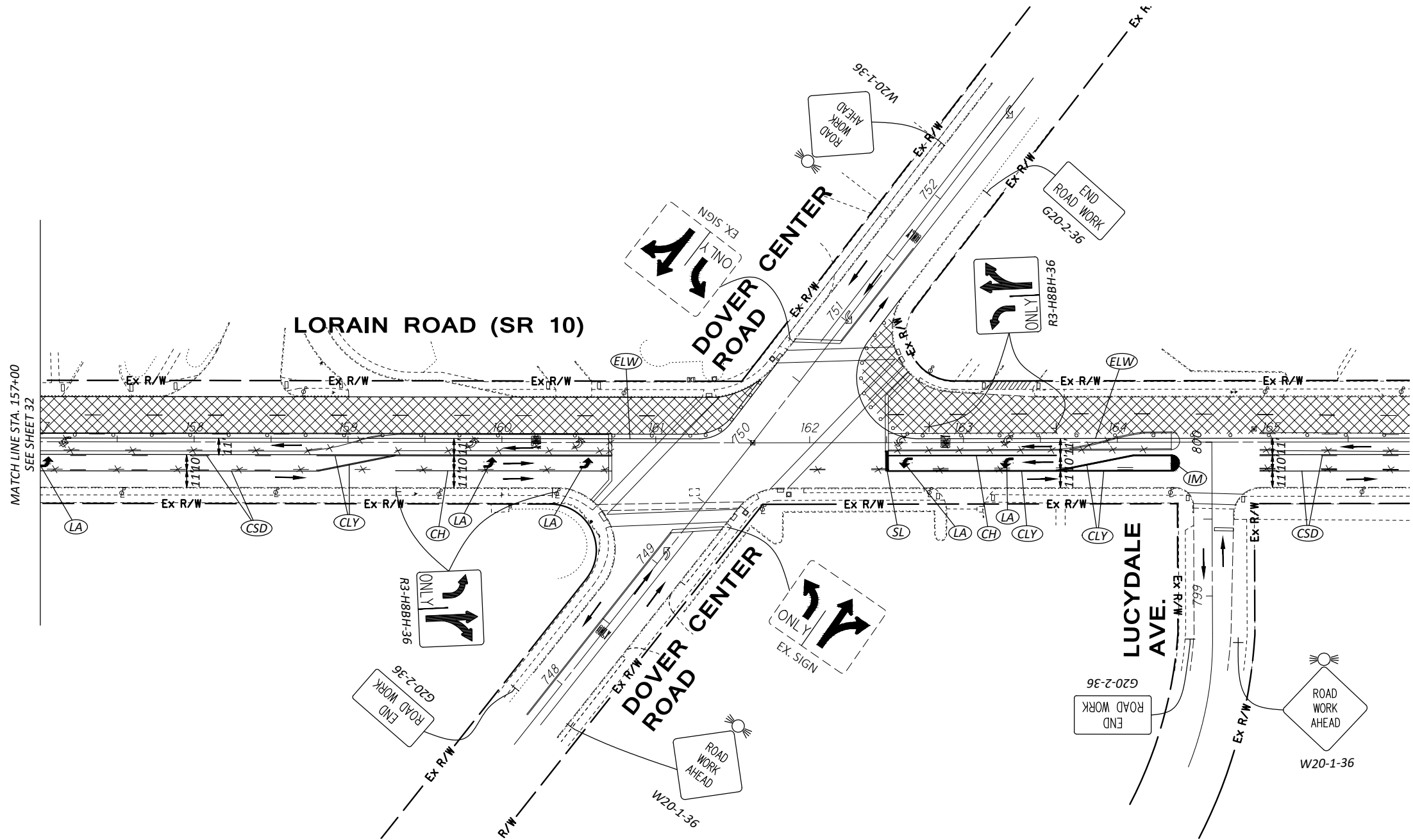
LORAIN ROAD - MAINTENANCE OF TRAFFIC  
SECTION 2 - PHASE 1



DESIGN AGENCY	
	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
32	79










WORK ZONE LEGEND	
	WORK ZONE (AREA CLOSED)
	WORK ZONE SIGN & POST
	TYPE A WARNING LIGHT
	CONSTRUCTION DRUMS @ 25' C/C
	TYPE III BARRICADE
	CONSTRUCTION DRUMS @ 10' C/C
	DIRECTION OF TRAFFIC FLOW
	PROPOSED MOT SIGN
	EXISTING SIGN TO BE COVERED









PAVEMENT MARKING LEGEND			
	WORK ZONE CHANNELIZING LINE		WORK ZONE EDGE LINE, WHITE
	WORK ZONE STOP LINE		WORK ZONE EDGE LINE, YELLOW
	WORK ZONE CENTERLINE, DOUBLE, SOLID		WORK ZONE CENTERLINE, SOLID, DASHED
	WORK ZONE LANE ARROW		WORK ZONE, LANE LINE, WHITE
	WORK ZONE ISLAND MARKING		

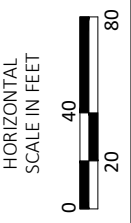
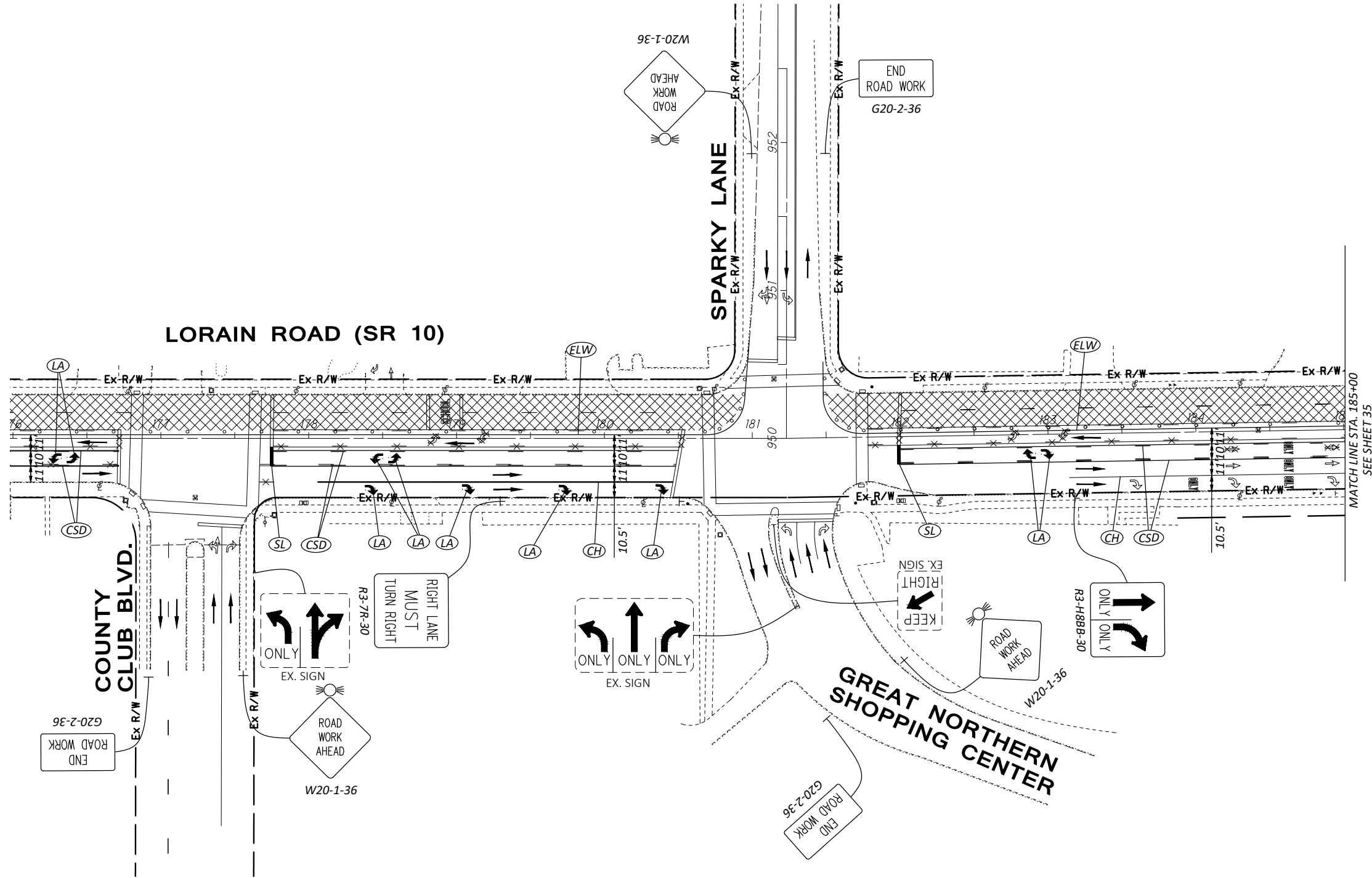


LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 2 - PHASE 1

DESIGN AGENCY	
	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
33	79

WORK ZONE LEGEND	
	WORK ZONE (AREA CLOSED)
	WORK ZONE SIGN & POST
	TYPE A WARNING LIGHT
	CONSTRUCTION DRUMS @ 25' C/C
	TYPE III BARRICADE
	CONSTRUCTION DRUMS @ 10' C/C
	DIRECTION OF TRAFFIC FLOW
	PROPOSED MOT SIGN
	EXISTING SIGN TO BE COVERED

PAVEMENT MARKING LEGEND			
	WORK ZONE CHANNELIZING LINE		WORK ZONE EDGE LINE, WHITE
	WORK ZONE STOP LINE		WORK ZONE EDGE LINE, YELLOW
	WORK ZONE CENTERLINE, DOUBLE, SOLID		WORK ZONE CENTERLINE, SOLID, DASHED
	WORK ZONE LANE ARROW		WORK ZONE, LANE LINE, WHITE



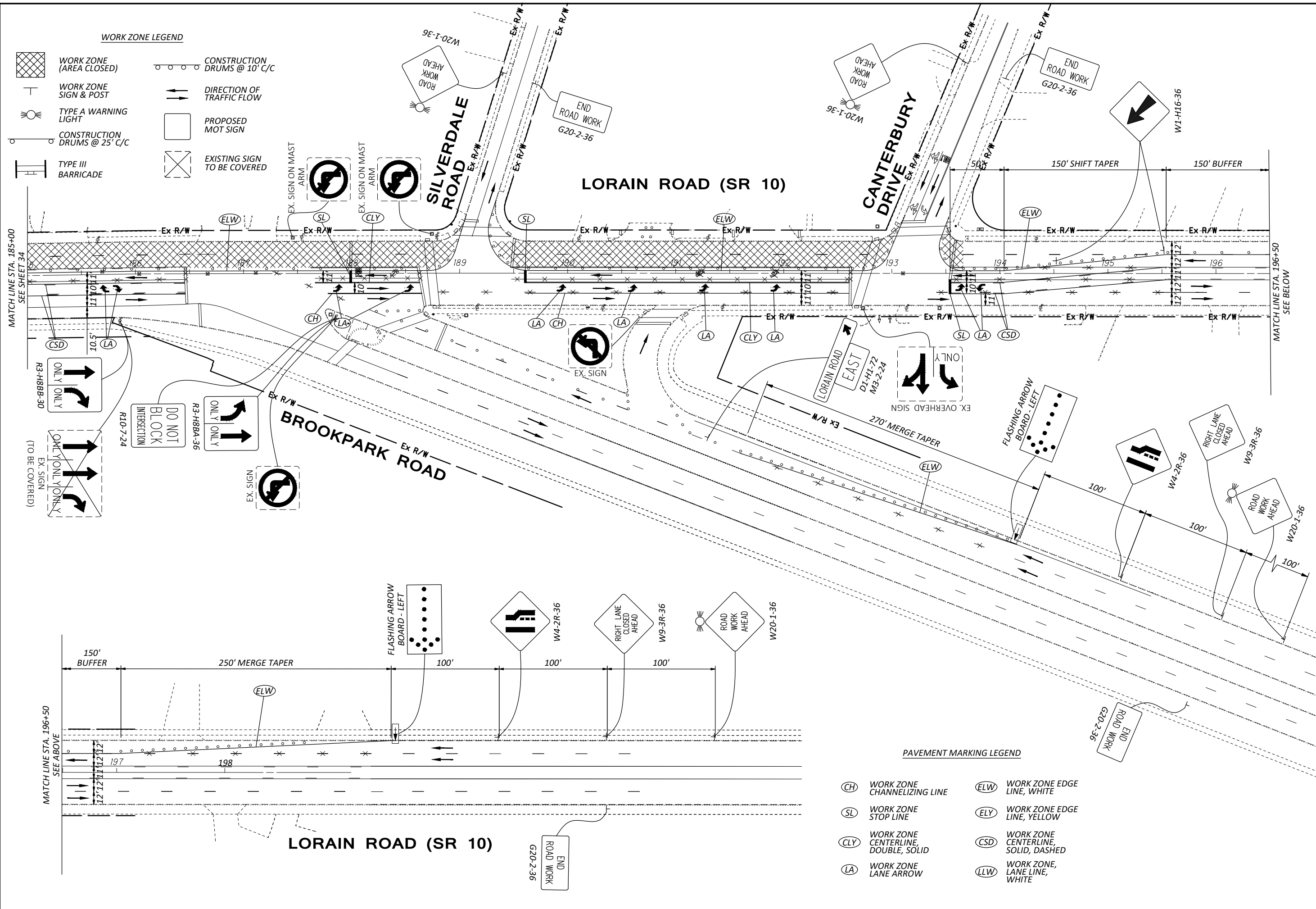
LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 2 - PHASE 1

DESIGN AGENCY	
DESIGNER	SAF
REVIEWER	BAK
PROJECT ID	107287
SHEET TOTAL	34 79

CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

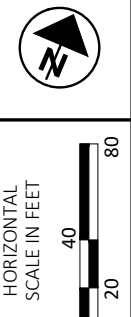
**WORK ZONE LEGEND**

- |  |                              |  |                              |
|--|------------------------------|--|------------------------------|
|  | WORK ZONE (AREA CLOSED)      |  | CONSTRUCTION DRUMS @ 10' C/C |
|  | WORK ZONE SIGN & POST        |  | DIRECTION OF TRAFFIC FLOW    |
|  | TYPE A WARNING LIGHT         |  | PROPOSED MOT SIGN            |
|  | CONSTRUCTION DRUMS @ 25' C/C |  | EXISTING SIGN TO BE COVERED  |
|  | TYPE III BARRICADE           |  |                              |



**PAVEMENT MARKING LEGEND**

- |  |                                     |  |                                     |
|--|-------------------------------------|--|-------------------------------------|
|  | WORK ZONE CHANNELIZING LINE         |  | WORK ZONE EDGE LINE, WHITE          |
|  | WORK ZONE STOP LINE                 |  | WORK ZONE EDGE LINE, YELLOW         |
|  | WORK ZONE CENTERLINE, DOUBLE, SOLID |  | WORK ZONE CENTERLINE, SOLID, DASHED |
|  | WORK ZONE LANE ARROW                |  | WORK ZONE, LANE LINE, WHITE         |



**LORAIN ROAD - MAINTENANCE OF TRAFFIC  
SECTION 2 - PHASE 1**










DESIGN AGENCY  
  
 CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969









DESIGNER  
 SAF

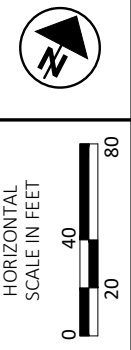
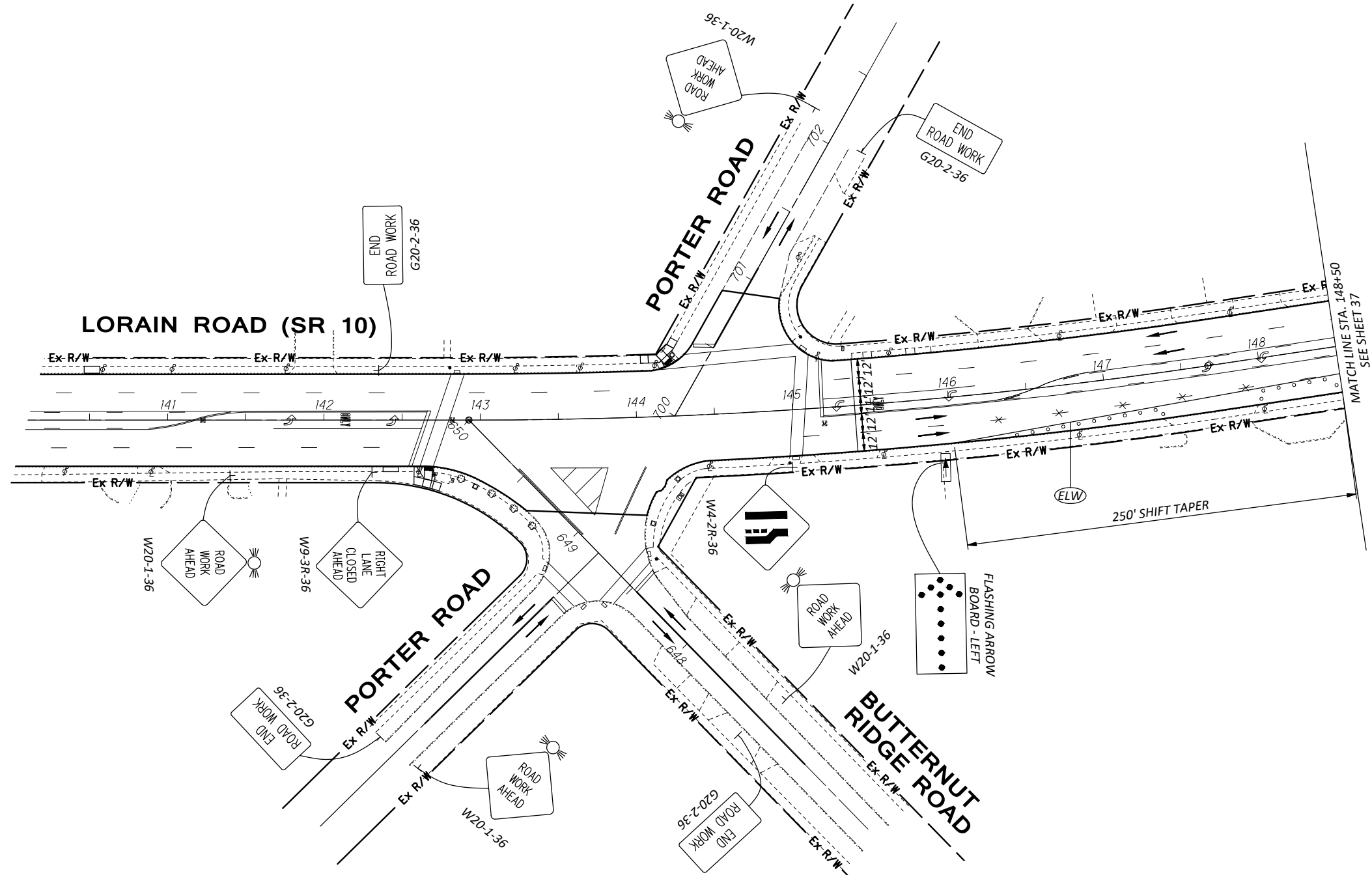
REVIEWER  
 BAK 03/20/26

PROJECT ID  
 107287

SHEET TOTAL  
 35 79

WORK ZONE LEGEND	
	WORK ZONE (AREA CLOSED)
	WORK ZONE SIGN & POST
	TYPE A WARNING LIGHT
	CONSTRUCTION DRUMS @ 25' C/C
	TYPE III BARRICADE
	CONSTRUCTION DRUMS @ 10' C/C
	DIRECTION OF TRAFFIC FLOW
	PROPOSED MOT SIGN
	EXISTING SIGN TO BE COVERED

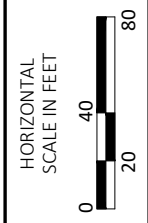
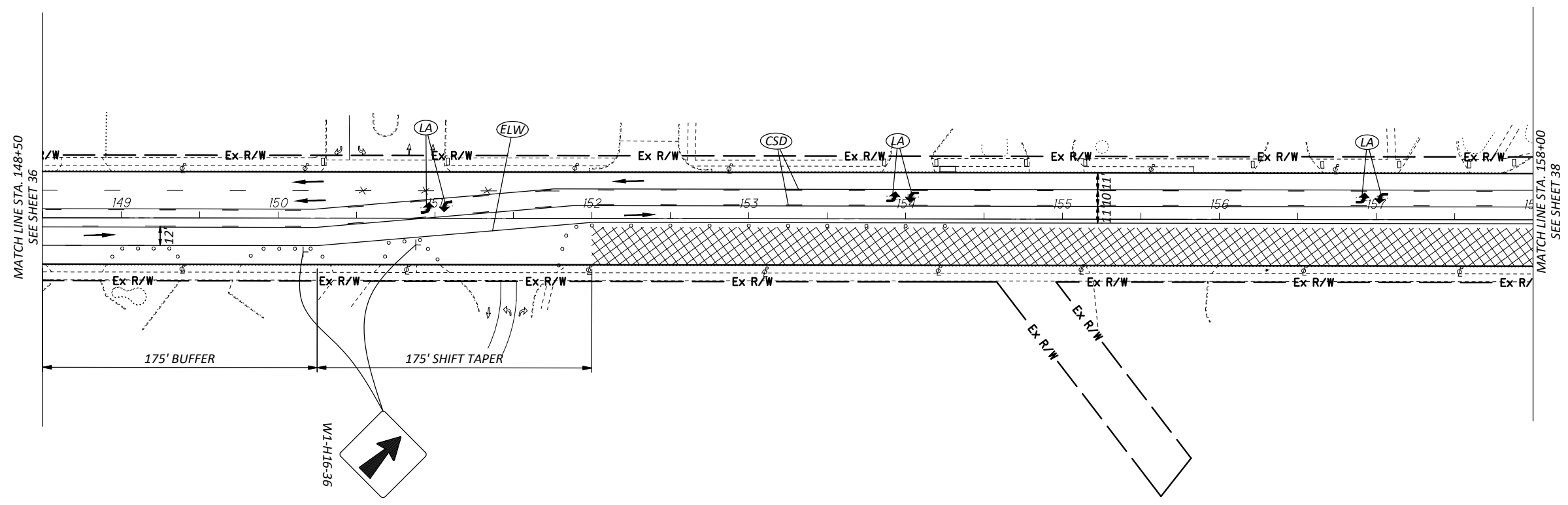
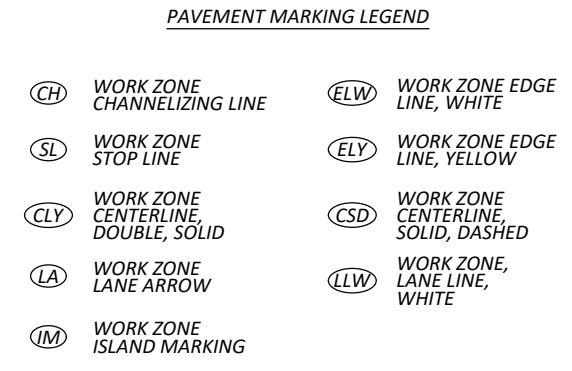
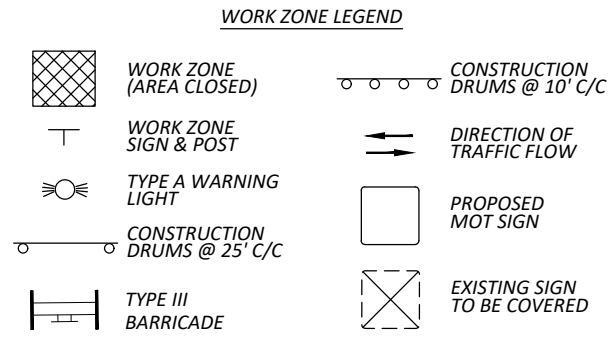
PAVEMENT MARKING LEGEND			
	WORK ZONE CHANNELIZING LINE		WORK ZONE EDGE LINE, WHITE
	WORK ZONE STOP LINE		WORK ZONE EDGE LINE, YELLOW
	WORK ZONE CENTERLINE, DOUBLE, SOLID		WORK ZONE CENTERLINE, SOLID, DASHED
	WORK ZONE LANE ARROW		WORK ZONE, LANE LINE, WHITE



LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 2 - PHASE 2

DESIGN AGENCY	
DESIGNER	SAF
REVIEWER	BAK
PROJECT ID	107287
SHEET	36
TOTAL	79

CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969



LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 2 - PHASE 2

DESIGN AGENCY



DESIGNER

SAF

REVIEWER










BAK 03/20/26










PROJECT ID

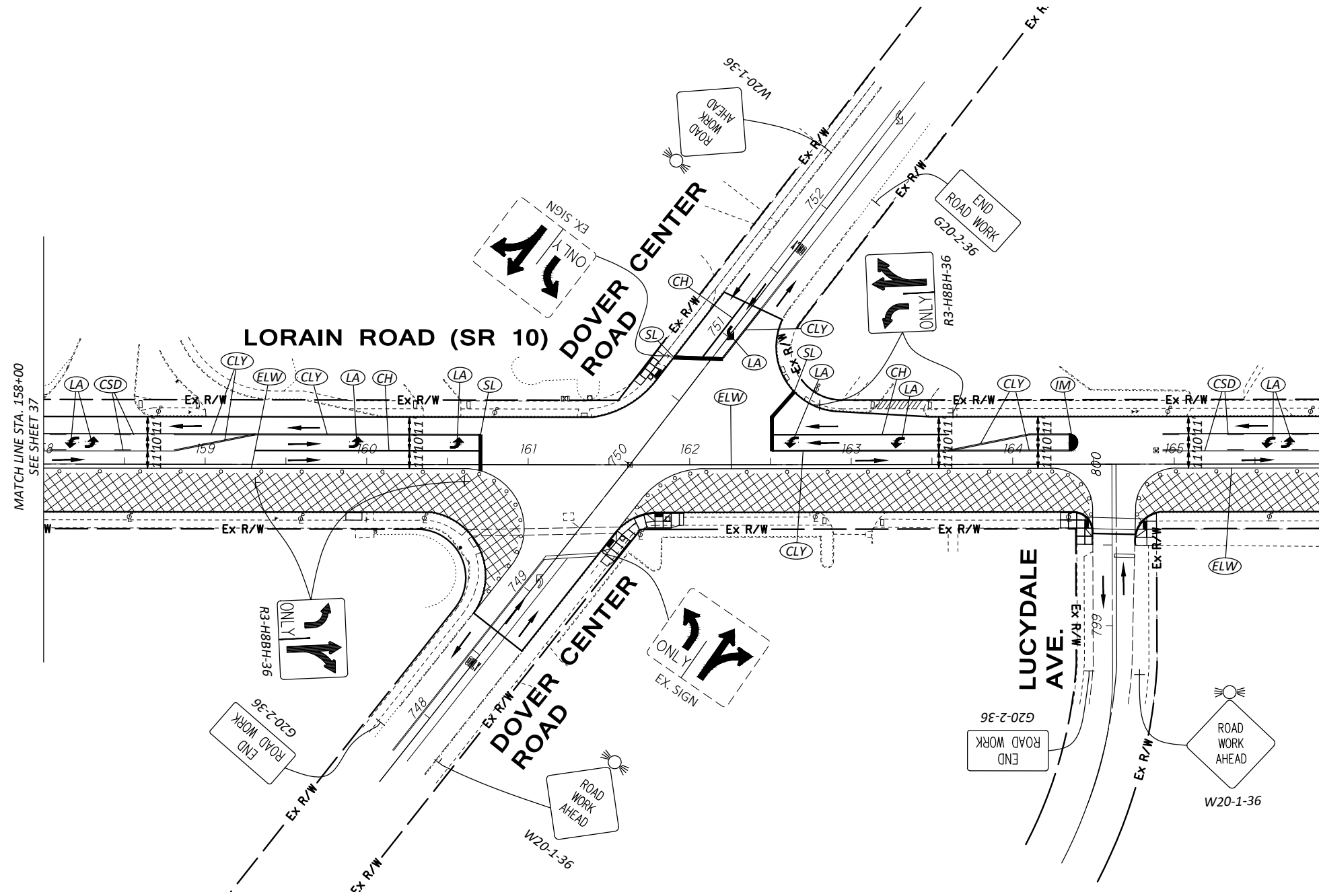
107287

SHEET TOTAL

37 79

WORK ZONE LEGEND	
	WORK ZONE (AREA CLOSED)
	WORK ZONE SIGN & POST
	TYPE A WARNING LIGHT
	CONSTRUCTION DRUMS @ 25' C/C
	TYPE III BARRICADE
	CONSTRUCTION DRUMS @ 10' C/C
	DIRECTION OF TRAFFIC FLOW
	PROPOSED MOT SIGN
	EXISTING SIGN TO BE COVERED










PAVEMENT MARKING LEGEND			
	WORK ZONE CHANNELIZING LINE		WORK ZONE EDGE LINE, WHITE
	WORK ZONE STOP LINE		WORK ZONE EDGE LINE, YELLOW
	WORK ZONE CENTERLINE, DOUBLE, SOLID		WORK ZONE CENTERLINE, SOLID, DASHED
	WORK ZONE LANE ARROW		WORK ZONE, LANE LINE, WHITE
	WORK ZONE ISLAND MARKING		











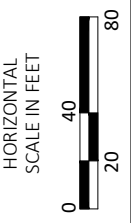
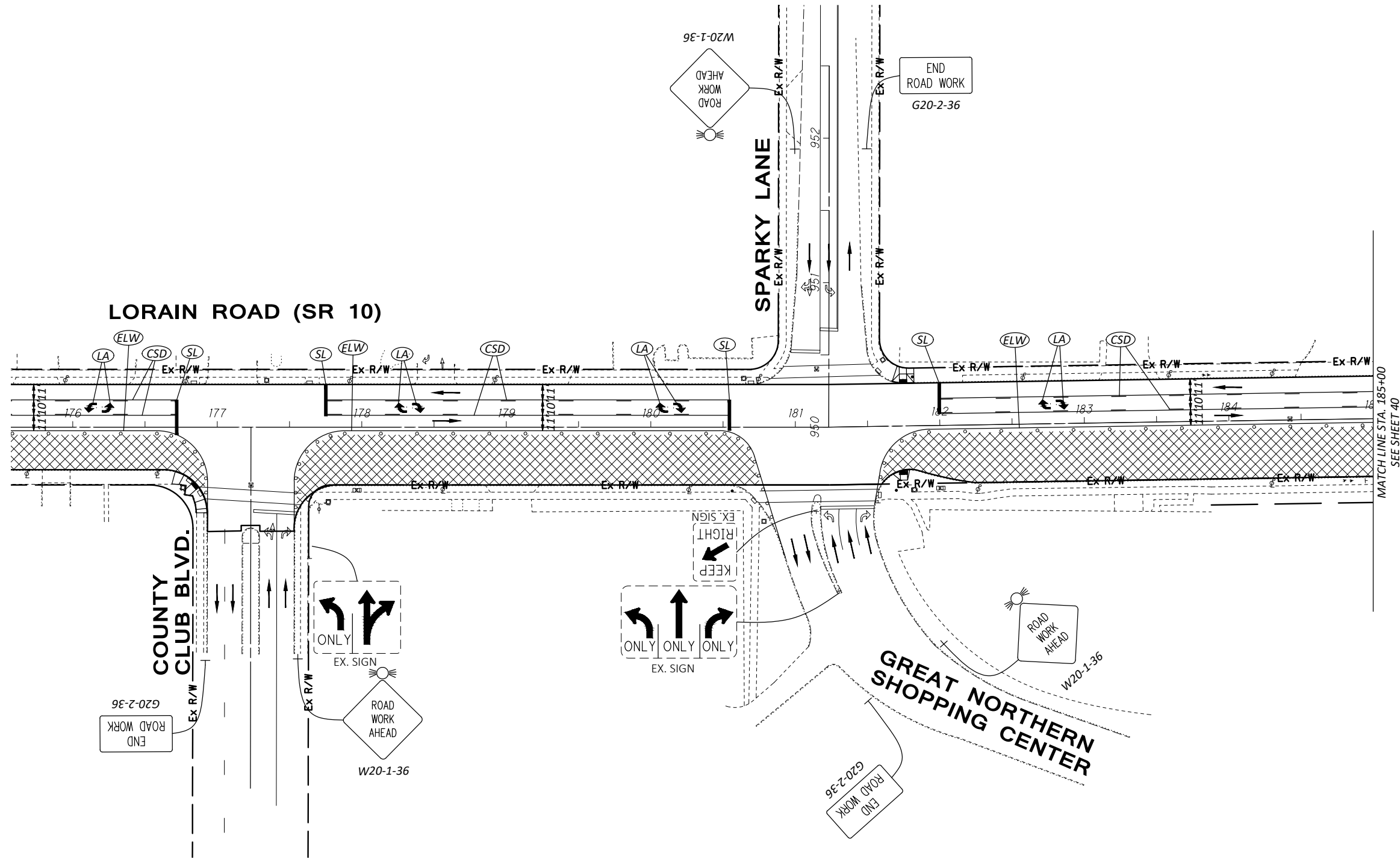
LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 2 - PHASE 2

DESIGN AGENCY	
DESIGNER	SAF
REVIEWER	BAK
PROJECT ID	107287
SHEET TOTAL	38 79

CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

WORK ZONE LEGEND	
	WORK ZONE (AREA CLOSED)
	WORK ZONE SIGN & POST
	TYPE A WARNING LIGHT
	CONSTRUCTION DRUMS @ 25' C/C
	TYPE III BARRICADE
	CONSTRUCTION DRUMS @ 10' C/C
	DIRECTION OF TRAFFIC FLOW
	PROPOSED MOT SIGN
	EXISTING SIGN TO BE COVERED

PAVEMENT MARKING LEGEND			
	WORK ZONE CHANNELIZING LINE		WORK ZONE EDGE LINE, WHITE
	WORK ZONE STOP LINE		WORK ZONE EDGE LINE, YELLOW
	WORK ZONE CENTERLINE, DOUBLE, SOLID		WORK ZONE CENTERLINE, SOLID, DASHED
	WORK ZONE LANE ARROW		WORK ZONE, LANE LINE, WHITE



LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 2 - PHASE 2

DESIGN AGENCY



DESIGNER  
 SAF

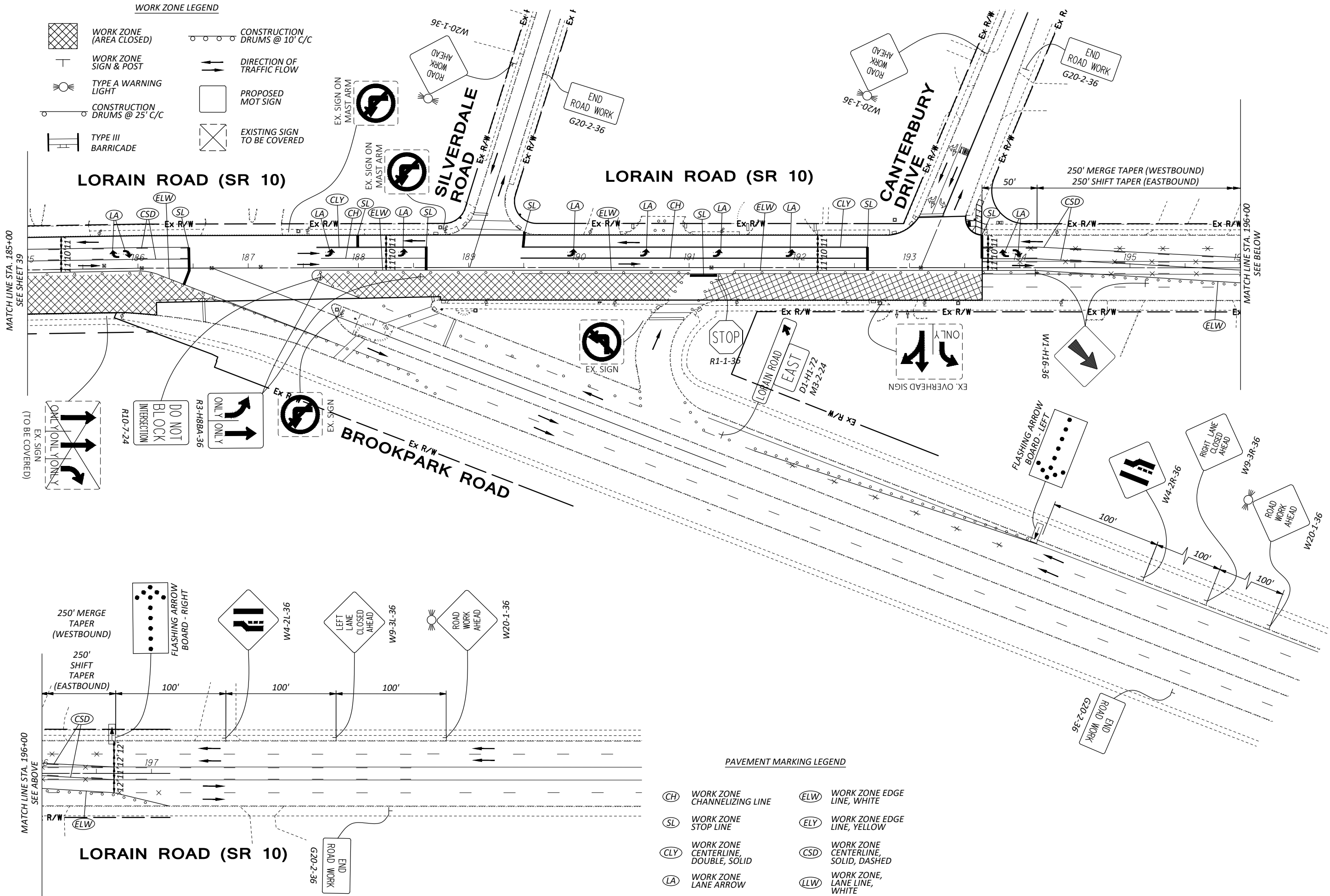
REVIEWER  
 BAK 03/20/26

PROJECT ID  
 107287

SHEET	TOTAL
39	79

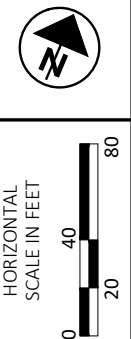
**WORK ZONE LEGEND**

- WORK ZONE (AREA CLOSED)
- WORK ZONE SIGN & POST
- TYPE A WARNING LIGHT
- CONSTRUCTION DRUMS @ 25' C/C
- TYPE III BARRICADE
- CONSTRUCTION DRUMS @ 10' C/C
- DIRECTION OF TRAFFIC FLOW
- PROPOSED MOT SIGN
- EXISTING SIGN TO BE COVERED



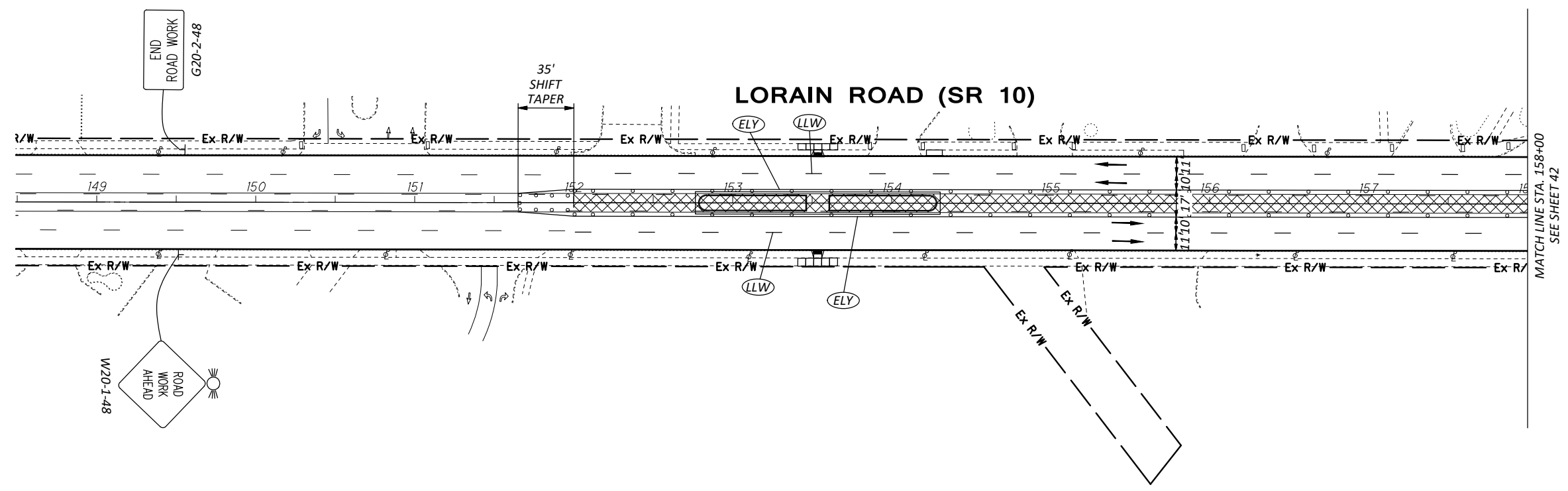
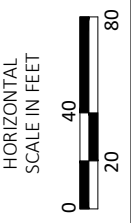
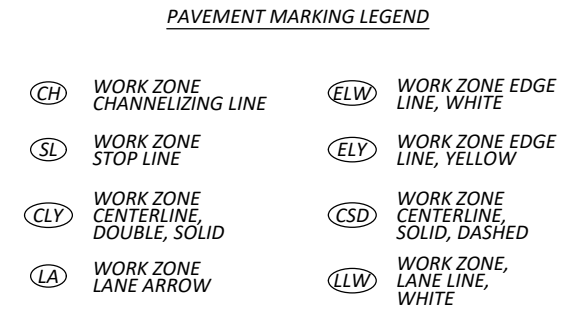
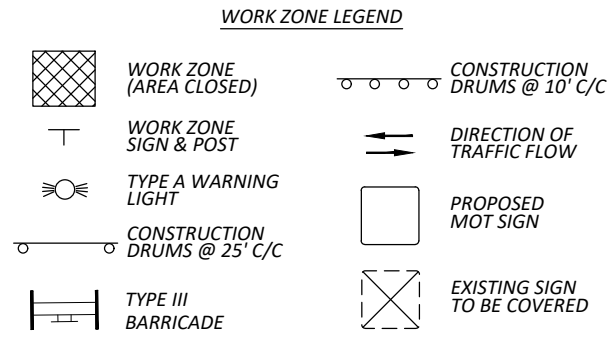
**PAVEMENT MARKING LEGEND**

- WORK ZONE CHANNELIZING LINE
- WORK ZONE STOP LINE
- WORK ZONE CENTERLINE, DOUBLE, SOLID
- WORK ZONE LANE ARROW
- WORK ZONE EDGE LINE, WHITE
- WORK ZONE EDGE LINE, YELLOW
- WORK ZONE CENTERLINE, SOLID, DASHED
- WORK ZONE, LANE LINE, WHITE












**LORAIN ROAD - MAINTENANCE OF TRAFFIC  
SECTION 2 - PHASE 2**









DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
40	79

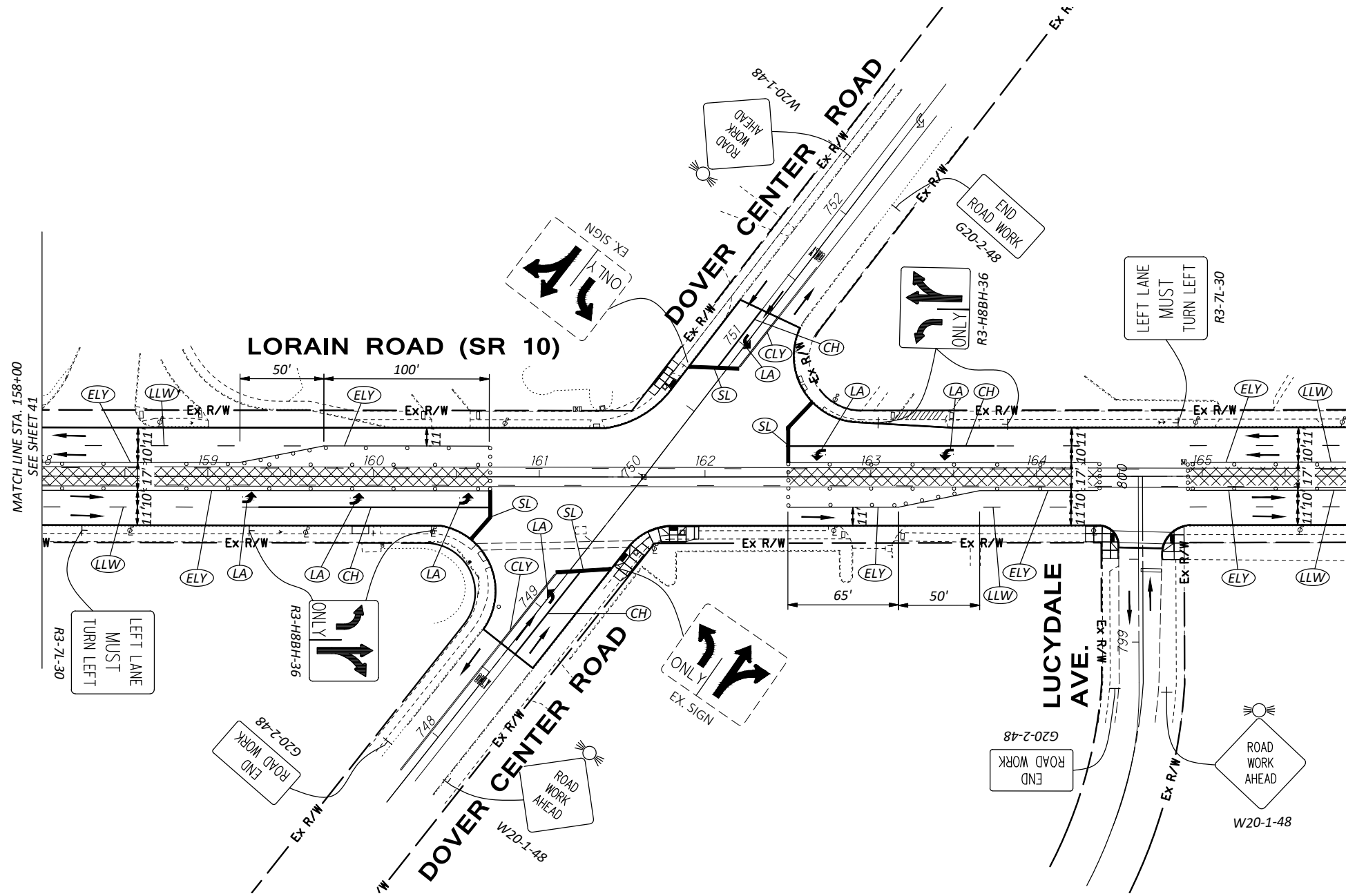


LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 2 - PHASE 3

DESIGN AGENCY	
DESIGNER	SAF
REVIEWER	BAK
PROJECT ID	107287
SHEET TOTAL	41 79

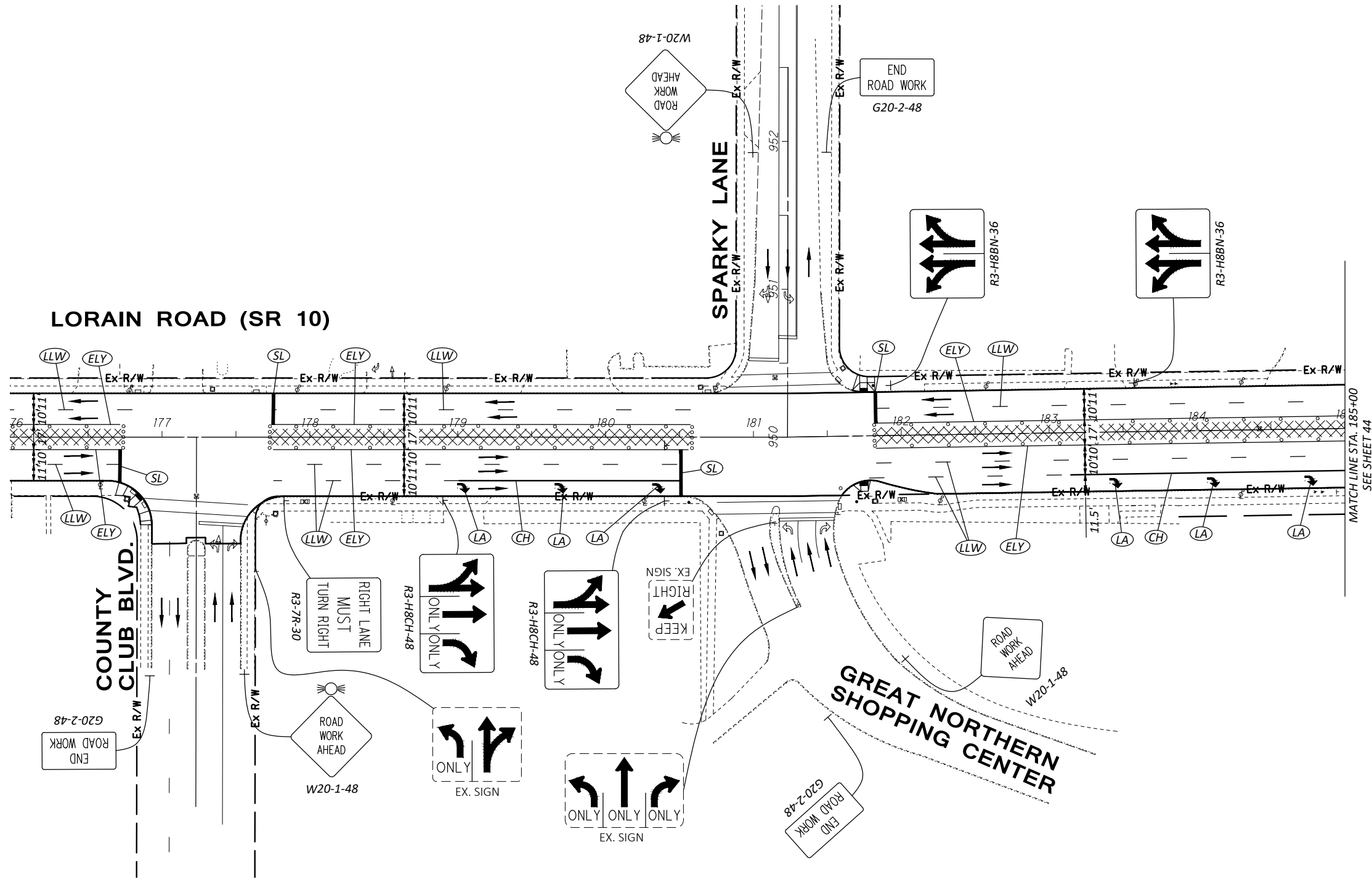
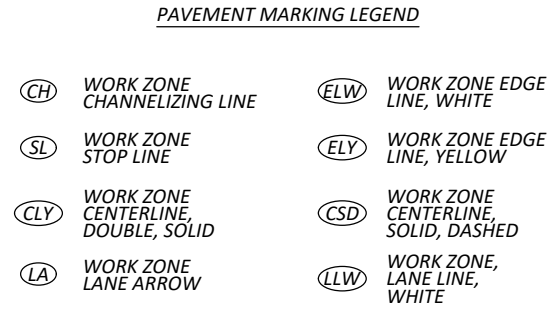
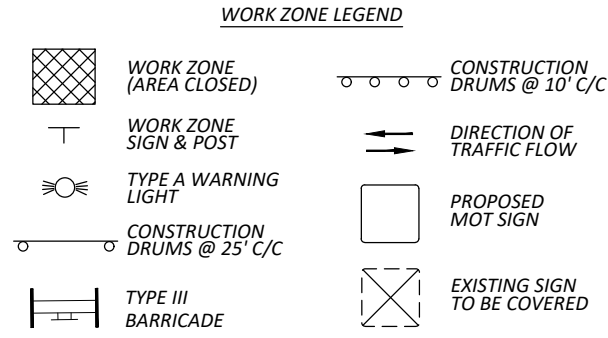
WORK ZONE LEGEND	
	WORK ZONE (AREA CLOSED)
	WORK ZONE SIGN & POST
	TYPE A WARNING LIGHT
	CONSTRUCTION DRUMS @ 25' C/C
	TYPE III BARRICADE
	CONSTRUCTION DRUMS @ 10' C/C
	DIRECTION OF TRAFFIC FLOW
	PROPOSED MOT SIGN
	EXISTING SIGN TO BE COVERED

PAVEMENT MARKING LEGEND			
	WORK ZONE CHANNELIZING LINE		WORK ZONE EDGE LINE, WHITE
	WORK ZONE STOP LINE		WORK ZONE EDGE LINE, YELLOW
	WORK ZONE CENTERLINE, DOUBLE, SOLID		WORK ZONE CENTERLINE, SOLID, DASHED
	WORK ZONE LANE ARROW		WORK ZONE, LANE LINE, WHITE



LORAIN ROAD - MAINTENANCE OF TRAFFIC  
 SECTION 2 - PHASE 3

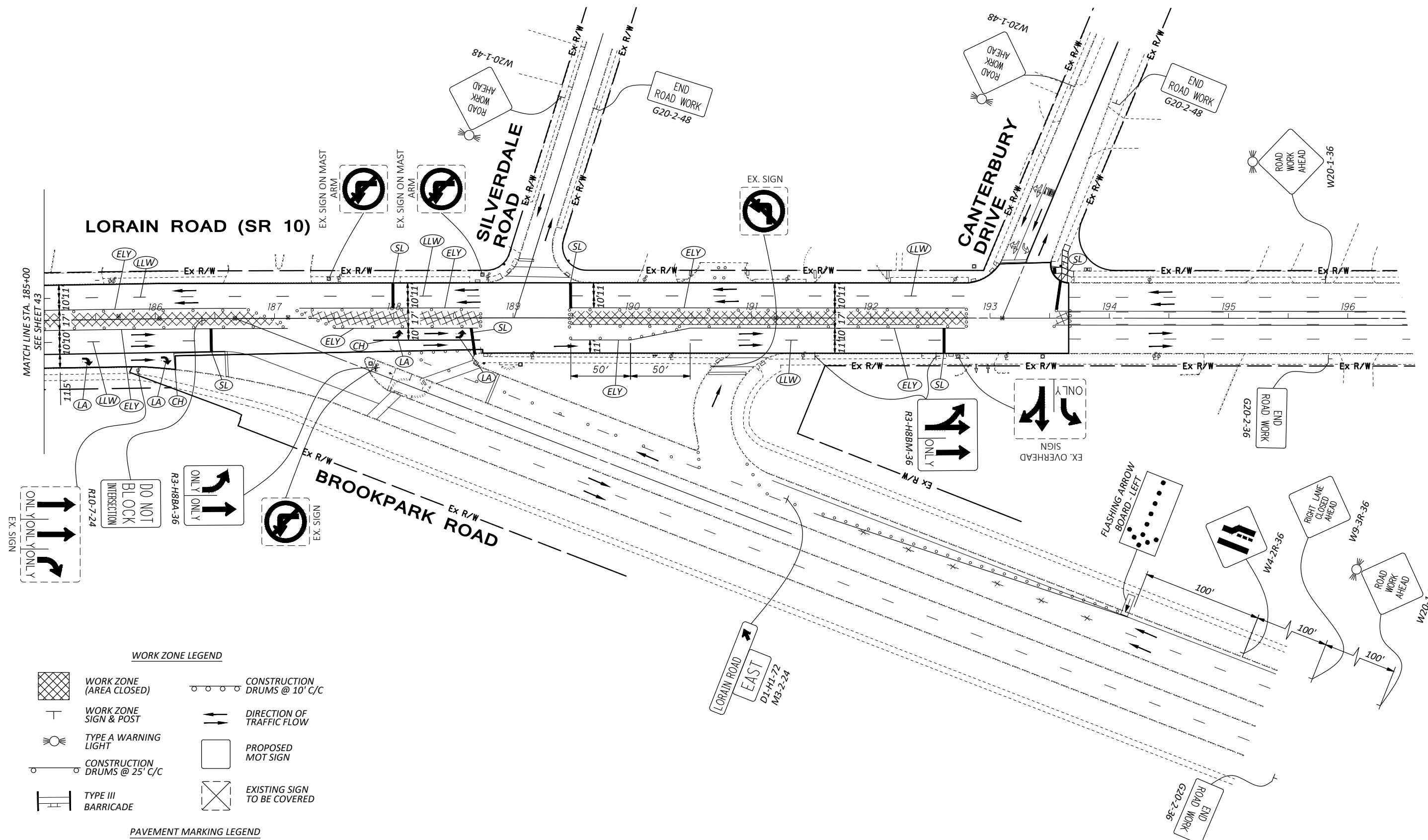
DESIGN AGENCY	
DESIGNER	SAF
REVIEWER	BAK
PROJECT ID	107287
SHEET	42
TOTAL	79



LORAIN ROAD - MAINTENANCE OF TRAFFIC  
SECTION 2 - PHASE 3

DESIGN AGENCY	
DESIGNER	SAF
REVIEWER	BAK
PROJECT ID	107287
SHEET TOTAL	43 79

CHAGRIN VALLEY ENGINEERING, LTD.  
22999 FORBES ROAD, UNIT B  
CLEVELAND, OHIO 44146  
PHONE: (440) 439-1999  
FAX: (440) 439-1969



**WORK ZONE LEGEND**

- |  |                              |  |                              |
|--|------------------------------|--|------------------------------|
|  | WORK ZONE (AREA CLOSED)      |  | CONSTRUCTION DRUMS @ 10' C/C |
|  | WORK ZONE SIGN & POST        |  | DIRECTION OF TRAFFIC FLOW    |
|  | TYPE A WARNING LIGHT         |  | PROPOSED MOT SIGN            |
|  | CONSTRUCTION DRUMS @ 25' C/C |  | EXISTING SIGN TO BE COVERED  |
|  | TYPE III BARRICADE           |  |                              |

**PAVEMENT MARKING LEGEND**

- |  |                                     |  |                                     |
|--|-------------------------------------|--|-------------------------------------|
|  | WORK ZONE CHANNELIZING LINE         |  | WORK ZONE EDGE LINE, WHITE          |
|  | WORK ZONE STOP LINE                 |  | WORK ZONE EDGE LINE, YELLOW         |
|  | WORK ZONE CENTERLINE, DOUBLE, SOLID |  | WORK ZONE CENTERLINE, SOLID, DASHED |
|  | WORK ZONE LANE ARROW                |  | WORK ZONE, LANE LINE, WHITE         |



**LORAIN ROAD - MAINTENANCE OF TRAFFIC  
SECTION 2 - PHASE 3**

DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
44	79

REF. NO.	SHEET NUMBER															PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET								
	7	8	9	10	11	12	13	14	15	16	49	50	51	76	79	01/NHS	02/NHS	03/SAF														
1			1240														1240	240	202	23000	1480	SY	ROADWAY									
2				4459	65												8412		202	30001	8412	SF	PAVEMENT REMOVED					8,10,11				
3					3500												3950		202	32001	3950	FT	WALK REMOVED, AS PER PLAN					8,11				
4													12				12		202	35100	12	FT	CURB REMOVED, AS PER PLAN									
5			207														207		203	10000	207	CY	PIPE REMOVED, 24" DIAMETER AND UNDER									
6			1240														1240		204	10000	1240	SY	EXCAVATION									
7			25														25		204	13000	25	CY	SUBGRADE COMPACTION									
8							12										12		204	21001	12	CY	EXCAVATION OF SUBGRADE									
9			25														25		204	30010	25	CY	GRANULAR EMBANKMENT, AS PER PLAN					13				
10							50										50		204	50000	50	SY	GRANULAR MATERIAL, TYPE B									
11							50										50		204	51000	50	SY	GEOTEXTILE FABRIC									
12				4159													4159		608	10001	4159	SF	GEOGRID					8,10				
13					415												415		608	13001	415	SF	4" CONCRETE WALK, AS PER PLAN					11				
14												3790					3790		608	52001	3790	SF	6" CONCRETE WALK, AS PER PLAN					9				
15				150													150		608	98000	150	SF	CURB RAMP, AS PER PLAN					10				
16				150													150		608	98000	150	SF	WALKWAY, MISC.: PAVER REPLACEMENT									
17				17												17	623	39501	623	39501	17	EACH	WALKWAY, MISC.: COLORED & STAMPED CONCRETE WALK					10				
18				5													5	40900	623	40900	5	EACH	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN					10				
19				5													5	40900	623	40900	5	EACH	MONUMENT, MISC.: CUY COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1					10				
20				17												17	623	40900	623	40900	17	EACH	MONUMENT, MISC.: CUY COUNTY MONUMENT BOX					10				
21														90			90		653	10000	90	CY	MONUMENT, MISC.: MONUMENT REFERENCING					10				
																							TOPSOIL FURNISHED AND PLACED									
22					5000												5000		832	30001	5000	EACH	EROSION CONTROL					11				
																							EROSION CONTROL, AS PER PLAN									
23						500											500		605	14020	500	FT	DRAINAGE									
24						100											100		611	00510	100	FT	6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC									
25													235				235		611	04401	235	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS					12				
26													71				71		611	04401	71	FT	12" CONDUIT, TYPE B, AS PER PLAN A					12				
27													12				12		611	05901	12	FT	12" CONDUIT, TYPE B, AS PER PLAN B					12				
28													4				4		611	98180	4	EACH	15" CONDUIT, TYPE B, AS PER PLAN					12				
29														4			4		611	98180	4	EACH	CATCH BASIN, NO. 3A									
30							18							18			18		611	98631	18	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN					12				
31							18							18			18		611	98635	18	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN					12				
32													1				1		611	99574	1	EACH	MANHOLE, NO. 3									
33							7							7			7		611	99655	7	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN					12				
34															21		21		611	99661	21	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN					12				
35															48320		48320		SPECIAL	61199820	48320	LB	MISCELLANEOUS METAL					12				
																							PAVEMENT									
36							1435										1435		251	01001	1435	SY	PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN A					13				
37							2700										2700		251	01001	2700	SY	PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN B					13				
38							1100								1100		1100		253	02001	1100	CY	PAVEMENT REPAIR, AS PER PLAN					13				
39													62674				62674		254	01001	62674	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN					13				
40															100		100		255	15001	100	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN					13				
41															250		250		255	20000	250	FT	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, TYPE 1, CLASS QC MS, AS PER PLAN									
42															224		224		304	20001	224	CY	FULL DEPTH PAVEMENT SAWING									
43															23		23		305	13010	23	SY	AGGREGATE BASE, AS PER PLAN					13				
44															3453		3448		407	20000	3453	GAL	9" CONCRETE BASE, CLASS QC 1P									
45															62765		62674		91	422	11000	SY	NON-TRACKING TACK COAT									
46															25106		25069		37	422	25000	GAL	AGGREGATE, SINGLE CHIP SEAL, TYPE A									
47															2180		2176		4	441	50101	CY	EMULSION, CHIP SEAL									
48															3052		3047		5	441	50300	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN					13				
49															40		40		452	10050	40	SY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22									
50															1200		1200		452	12050	1200	SY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS									
51															297				609	16000	297	FT	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS									
52															28		3528		609	26001	3528	FT	CURB, TYPE 2-B									
															5796		5796		875	10000	5796	LB	CURB, TYPE 6, AS PER PLAN					11				
																							LONGITUDINAL JOINT ADHESIVE									

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

SAF

REVIEWER

BAK 03/20/26

PROJECT ID

107287

SHEET TOTAL

45 79



REF. NO.	SHEET NUMBER															PARTICIPATION			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
	7	8	9	10	11	12	13	14	15	16	49	50	51	76	79	01/NHS	02/NHS	03/SAF						
<b>MAINTENANCE OF TRAFFIC (CONT.)</b>																								
108									6.76							6.76			614	21100	6.76	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
109									0.61							0.61			614	21200	0.61	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I	
110									1.24							1.24			614	21550	1.24	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
111									6.18							6.18			614	22100	6.18	MILE	WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT	
112									0.94							0.94			614	22200	0.94	MILE	WORK ZONE EDGE LINE, CLASS I, 4", 740.06, TYPE I	
113									4945							4945			614	23200	4945	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
114									1138							1138			614	23680	1138	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	
115									153							153			614	24610	153	FT	WORK ZONE DOTTED LINE, CLASS III, 4", 642 PAINT	
116									316							316			614	25200	316	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT	
117									1589							1589			614	26200	1589	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
118									721							721			614	26610	721	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
119									1468							1468			614	27050	1468	FT	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	
120									2097							2097			614	27250	2097	FT	WORK ZONE CROSSWALK LINE, CLASS III, 12", 642 PAINT	
121									190							190			614	30200	190	EACH	WORK ZONE ARROW, CLASS I, 642 PAINT	
122									5							5			614	30400	5	EACH	WORK ZONE ARROW, CLASS I, 740.06, TYPE I	
123									31							31			614	30650	31	EACH	WORK ZONE ARROW, CLASS III, 642 PAINT	
124									150							150			614	32700	150	SF	WORK ZONE ISLAND MARKING, CLASS I	
125									30							30			614	32800	30	SF	WORK ZONE ISLAND MARKING, CLASS III, 642 PAINT	
126									10							10			616	10000	10	MGAL	WATER	
127									1							1			616	20000	1	TON	CALCIUM CHLORIDE	
<b>INCIDENTALS</b>																								
128																LS			614	11000	LS	-	MAINTAINING TRAFFIC	
129	12															12			619	16011	12	MNTH	FIELD OFFICE, TYPE B, AS PER PLAN	7
130		LS														LS			623	10001	LS	-	CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	8
131																LS			624	10000	LS	-	MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY  
  
 CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

DESIGNER  
 SAF

REVIEWER  
 BAK 03/20/26

PROJECT ID  
 107287


SHEET TOTAL  
 47 79

CUY-10-01-97

MODEL: G50018 DATE: 3/20/2026 TIME: 2:49:09 PM USER: Sarah Filis  
 P:\24288 Lorain Road Resurfacing\107287\400-Engineering\Roadway\Sheets\107287\_G5001.dwg

SHEET NO.	STATION TO STATION		SIDE	WORK	LENGTH (L) FT	AVERAGE PAVEMENT WIDTH (W) FT	MAINLINE SURFACE AREA (A1) SF	INTERSECTION MAINLINE SURFACE AREA (A2) SF	INTERSECTION RETURN SURFACE AREA (A3) SF	202	254	305	407	422	422	441	441	609	875						
										PAVEMENT REMOVED	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	9" CONCRETE BASE, CLASS QC 1P	NON-TRACKING TACK COAT	AGGREGATE, SINGLE CHIP SEAL, TYPE A	EMULSION, CHIP SEAL	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22	CURB, TYPE 2-B	LONGITUDINAL JOINT ADHESIVE						
	SY	SY								SY	GAL	SY	GAL	CY	CY	FT	LB								
FROM	TO					LxW OR *CADD	LxW OR *CADD	CADD	A1/9	(A1 OR A2 OR A3)/9	(A1*(9/12))/27	((A1 OR A2 OR A3)/9)*0.055	(A1 OR A2 OR A3)/9	((A1 OR A2 OR A3)/9)*0.4	((A1 OR A2 OR A3*(1.25/12))/27	((A1 OR A2 OR A3*(1.75/12))/27			(L*3)/5 OR (L*4)/5 OR (L*5)/5						
52	LORAIN RD MAINLINE 104+49.00 111+17.39		RT/LT	ASPHALT	668.39	59.00	39435.01																		
52	BERSHIRE DR INT. 111+17.39 112+25.49		RT/LT LT	ASPHALT - MAINLINE ASPHALT - L RETURN	108.10	59.00		6377.90																	
52-54	LORAIN RD MAINLINE 112+25.49 126+60.99		RT/LT	ASPHALT	1435.50	59.00	84694.50																		
54	WEST PARK DR INT. 126+60.99 127+32.54		RT/LT LT	ASPHALT - MAINLINE ASPHALT - L RETURN	71.55	59.00		4221.45																	
54-55	LORAIN RD MAINLINE 127+32.54 132+30.61		RT/LT	ASPHALT	498.07	59.00	29386.13																		
55	EAST PARK DR INT. 132+30.61 133+07.94		RT/LT LT	ASPHALT - MAINLINE ASPHALT - L RETURN	77.33	59.00		4562.47																	
55	LORAIN RD MAINLINE 133+07.94 139+05.26		RT/LT	ASPHALT	597.32	59.00	35241.88																		
55	DECKER RD/DEWEY RD INT. 139+05.26 140+04.48		RT/LT RT LT	ASPHALT - MAINLINE ASPHALT - R RETURN ASPHALT - L RETURN	99.22	59.00		5853.98																	
55-56	LORAIN RD MAINLINE 140+04.48 142+63.30		RT/LT	ASPHALT	258.82	59.00	15270.38																		
56	BUTTERNUT RIDGE RD/PORTER RD INT. 142+63.30 145+27.88		RT/LT RT LT	ASPHALT - MAINLINE ASPHALT - R RETURN ASPHALT - L RETURN	264.58	59.00		15610.22																	
56-58	LORAIN RD MAINLINE 145+27.88 160+40.16		RT/LT	ASPHALT	1512.28	59.00	89224.52																		
57	LORAIN RD MAINLINE 152+76.50 154+30.50		LT/RT	RAISED MEDIAN ISLAND			2156.00																		
57	LORAIN RD MAINLINE 152+76.50 153+46.50		LT/RT	RAISED MEDIAN ISLAND			310.73																		
57	LORAIN RD MAINLINE 153+46.50 153+60.50		LT/RT	RAISED MEDIAN ISLAND			196.00																		
57	LORAIN RD MAINLINE 153+60.50 154+30.50		LT/RT	RAISED MEDIAN ISLAND			310.73																		
58	DOVER CENTER RD INT. 160+40.16 163+48.63		RT/LT RT LT	ASPHALT - MAINLINE ASPHALT - R RETURN ASPHALT - L RETURN	308.47	59.00		18199.73																	
<b>SUBTOTAL THIS SHEET (CARRIED TO SHEET 49)</b>										239.56	41371.52	22.70	2280.44	41462.36	16584.95	1439.65	2015.52	296.28	3745.46						

PAVEMENT CALCULATIONS

DESIGN AGENCY  
  
 CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

DESIGNER  
 SAF

REVIEWER  
 BAK 03/20/26

PROJECT ID  
 107287

SHEET TOTAL  
 48 79

CUY-10-01.97

MODEL: G5001C DATE: 3/20/2026 TIME: 2:49:11 PM USER: Sarah Filis  
P:\24288 Lorain Road Resurfacing\107287\400-Engineering\Roadway\Sheets\107287\_G5001.dwg

SHEET NO.	STATION TO STATION		SIDE	WORK	LENGTH (L) FT	AVERAGE PAVEMENT WIDTH (W) FT	MAINLINE SURFACE AREA (A1) SF	INTERSECTION MAINLINE SURFACE AREA (A2) SF	INTERSECTION RETURN SURFACE AREA (A3) SF	202	254	305	407	422	422	441	441	609	875					
										PAVEMENT REMOVED	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	9" CONCRETE BASE, CLASS QC 1P	NON-TRACKING TACK COAT	AGGREGATE, SINGLE CHIP SEAL, TYPE A	EMULSION, CHIP SEAL	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64-22	CURB, TYPE 2-B	LONGITUDINAL JOINT ADHESIVE					
										SY	SY	SY	GAL	SY	GAL	CY	CY	FT	LB					
FROM	TO					LxW OR *CADD	LxW OR *CADD	CADD	A1/9	(A1 OR A2 OR A3)/9	(A1*(9/12))/27	((A1 OR A2 OR A3)/9)*0.055	(A1 OR A2 OR A3)/9	((A1 OR A2 OR A3)/9)*0.4	((A1 OR A2 OR A3*(1.25/12))/27)	((A1 OR A2 OR A3*(1.75/12))/27)								
58-59	LORAIN RD MAINLINE 163+48.63 164+38.38		RT/LT	ASPHALT	89.75	59.00	5295.25																	
59	LUCYDALE AVE INT. 164+38.38		RT/LT RT	ASPHALT - MAINLINE ASPHALT - R RETURN	54.22	59.00		3198.98		588.36			32.36	588.36	235.34	20.43	28.60						53.85	
59	LORAIN RD MAINLINE 164+92.60		RT/LT	ASPHALT	288.20	59.00	17003.80			1889.31			103.91	1889.31	755.72	65.60	91.84						172.92	
59	WHITETHORN AVE INT. 167+80.80		RT/LT RT	ASPHALT - MAINLINE ASPHALT - R RETURN	109.69	59.00		6471.71		719.08			39.55	719.08	287.63	24.97	34.96						87.75	
59-60	LORAIN RD MAINLINE 168+90.49		RT/LT	ASPHALT	774.65	59.00	45704.35			5078.26			279.30	5078.26	2031.30	176.33	246.86						464.79	
60	COUNTRY CLUB BLVD INT. 176+65.14		RT/LT RT	ASPHALT - MAINLINE ASPHALT - R RETURN	117.21	59.00		6915.39		768.38			42.26	768.38	307.35	26.68	37.35						93.77	
60	LORAIN RD MAINLINE 177+82.35		RT/LT	ASPHALT	376.79	69.50	26,186.91*			2909.66			160.03	2909.66	1163.86	101.03	141.44						301.43	
60	LORAIN RD MAINLINE 181+59.14 181+83.67		RT/LT	ASPHALT	24.53		1518.90			168.77			9.28	168.77	67.51	5.86	8.20						19.62	
60-61	LORAIN RD MAINLINE 181+83.67 182+23.83		RT/LT	ASPHALT	40.16	64.85	2604.38			289.38			15.92	289.38	115.75	10.05	14.07						32.13	
61	LORAIN RD MAINLINE 182+23.83 185+87.92		RT/LT	ASPHALT	364.09	69.50	25304.25			2811.58			154.64	2811.58	1124.63	97.62	136.67						291.27	
61	LORAIN RD MAINLINE 185+87.92 186+16.72		RT/LT	ASPHALT	28.80	70.80	2039.04			226.56			12.46	226.56	90.62	7.87	11.01						23.04	
61	LORAIN RD MAINLINE 186+16.72 188+74.48		RT/LT	ASPHALT	257.76	58.25	15014.52			1668.28			91.76	1668.28	667.31	57.93	81.10						154.66	
61-62	LORAIN RD MAINLINE 188+74.48 192+81.23		RT/LT	ASPHALT	406.75	59.00	23998.25			2666.47			146.66	2666.47	1066.59	92.59	129.62						244.05	
62	CANTERBURY DR INT. 192+81.23 193+66.00		RT/LT LT	ASPHALT - MAINLINE ASPHALT - L RETURN	84.77	59.00		5001.43		555.71			30.56	555.71	222.29	19.30	27.01						67.82	
SUBTOTALS THIS SHEET											21301.94		1171.60	21301.94	8520.76	739.67	1035.50					2050.48		
SUBTOTALS FROM SHEET (48)										239.56	41371.52	22.70	2280.44	41462.36	16584.95	1439.65	2015.52	296.28	3745.46					
TOTALS CARRIED TO GENERAL SUMMARY										240	62674	23	3453	62765	25106	2180	3052	297	5796					

PAVEMENT CALCULATIONS

DESIGN AGENCY  
  
CHAGRIN VALLEY ENGINEERING, LTD.  
22999 FORBES ROAD, UNIT B  
CLEVELAND, OHIO 44146  
PHONE: (440) 439-1999  
FAX: (440) 439-1969

DESIGNER  
SAF  
REVIEWER  
BAK 03/20/26  
PROJECT ID  
107287  
SHEET TOTAL  
49 79

SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	202	202	608	609													
					WALK REMOVED, AS PER PLAN	CURB REMOVED, AS PER PLAN	CURB RAMP, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	SF	FT	SF	FT									
63	CR1	BERKSHIRE DR	111+81.43	RT	125.19	10.6	125.19														
63	CR2	WEST PARK DR	126+73.84	LR	97.76	15.74	99.05														
64	CR3	EAST PARK DR	132+41.15	LT	129.99	14.56	117.99	5.35													
64	CR4	EAST PARK DR	133+00.03	LT	193.59	11.54	138.45														
64	CR5	DECKER RD	139+16.67	RT	197.31	14.93	142	6.71													
64	CR6	DEWEY RD	139+53.75	LT	188.71	20.04	202.17														
64	CR7	DECKER RD	139+66.94	RT	227.69	32.53	219.61														
64	CR8	DEWEY RD	139+94.34	LT	144.57	23.45	137.78	2.78													
65	CR9	BUTTERNUT RIDGE RD	142+66.96	RT	181.51	12.77	180.47														
65	CR10	PORTER RD	144+22.38	LT	197.99	13.93	171.93	5.56													
66	CR11	LORAIN ROAD	153+53.50	LT	98.63	8	124.54														
66	CR12	LORAIN ROAD	153+53.50	RT	125.01	8	155.92														
67	CR13	DOVER CENTER RD	161+50.18	RT	181	16	215.71														
67	CR14	DOVER CENTER RD	161+81.03	RT	241.17	31.29	273.61														
67	CR15	DOVER CENTER RD	161+81.36	LT	161.69	9.8	136.46	3.3													
68	CR16	LUCYDALE AVE	164+46.69	RT	253.12	34.95	253.12														
68	CR17	LUCYDALE AVE	164+80.95	RT	199.07	26.39	199.07														
68	CR18	WHITETHORN AVE	168+78.15	RT	211.84	24.97	214														
69	CR19	COUNTRY CLUB BLVD	176+85.23	RT	245.92	67.08	244.23														
69	CR20	GREAT NORTHERN	181+74.55	RT	52.37	11.95	52.37														
69	CR21	SPARKY LN	181+74.98	LT	136.69	15.27	136.69														
70	CR22	CANTERBURY DR	193+53.17	LT	296.75	25.46	249.54	3.89													
<b>TOTAL CARRIED TO GENERAL SUMMARY</b>					<b>3888</b>	<b>450</b>	<b>3790</b>	<b>28</b>													

CURB RAMP SUBSUMMARY

DESIGN AGENCY



DESIGNER

SAF

REVIEWER

BAK 03/20/26

PROJECT ID

107287

SHEET TOTAL

50 79

SHEET NO.	REFERENCE NO.	STATION		SIDE	202	611	611	611	611	611											
		FROM	TO		PIPE REMOVED, 24" DIAMETER AND UNDER FT	12" CONDUIT, TYPE B, AS PER PLAN A FT	12" CONDUIT, TYPE B, AS PER PLAN B FT	15" CONDUIT, TYPE B, AS PER PLAN FT	CATCH BASIN, NO. 3A EACH	MANHOLE, NO. 3 EACH											
61	D-1	186+53.29	187+85.72	LT		132			1												
61	D-2	187+85.72	187+85.72	LT/RT		53			1												
61	D-3	187+79.72	187+91.72	RT	12			12		1											
61	D-4	187+85.72	188+35.78	LT		50			1												
62	D-5	190+42.82	191+13.33	LT			71		1												
<b>TOTAL CARRIED TO GENERAL SUMMARY</b>					12	235	71	12	4	1											

DRAINAGE SUBSUMMARY

DESIGN AGENCY  
  
 CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

DESIGNER  
 SAF

REVIEWER  
 BAK 03/20/26

PROJECT ID  
 107287

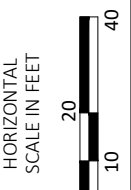
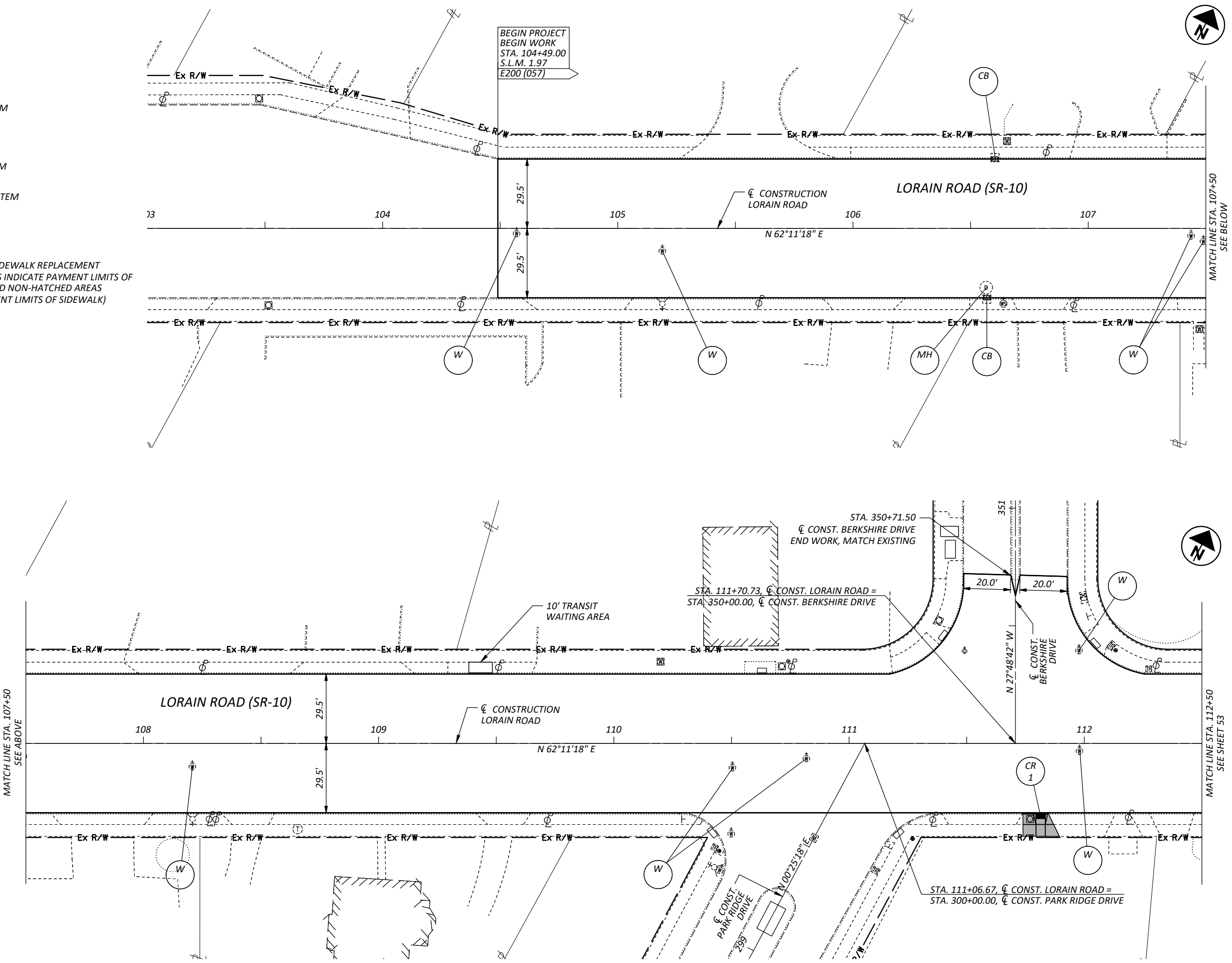
SHEET TOTAL  
 51 79

LEGEND:

- CURB RAMP
- MANHOLE ITEM
- CATCH BASIN ITEM
- WATER ITEM
- MONUMENT ITEM
- TRAFFIC SIGNAL ITEM
- DRAINAGE ITEM

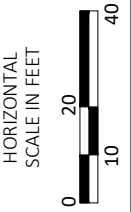
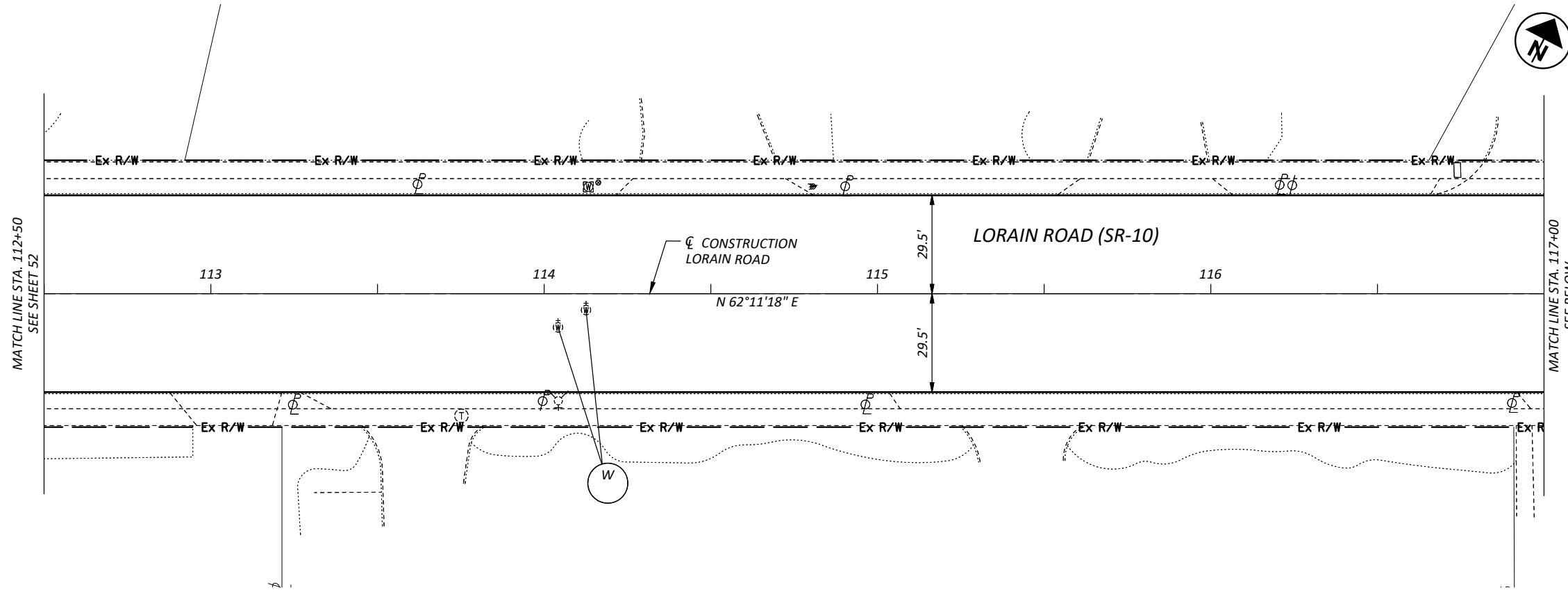
CURB RAMP & SIDEWALK REPLACEMENT  
 (HATCHED AREAS INDICATE PAYMENT LIMITS OF CURB RAMPS AND NON-HATCHED AREAS INDICATE PAYMENT LIMITS OF SIDEWALK)

WALK REMOVED

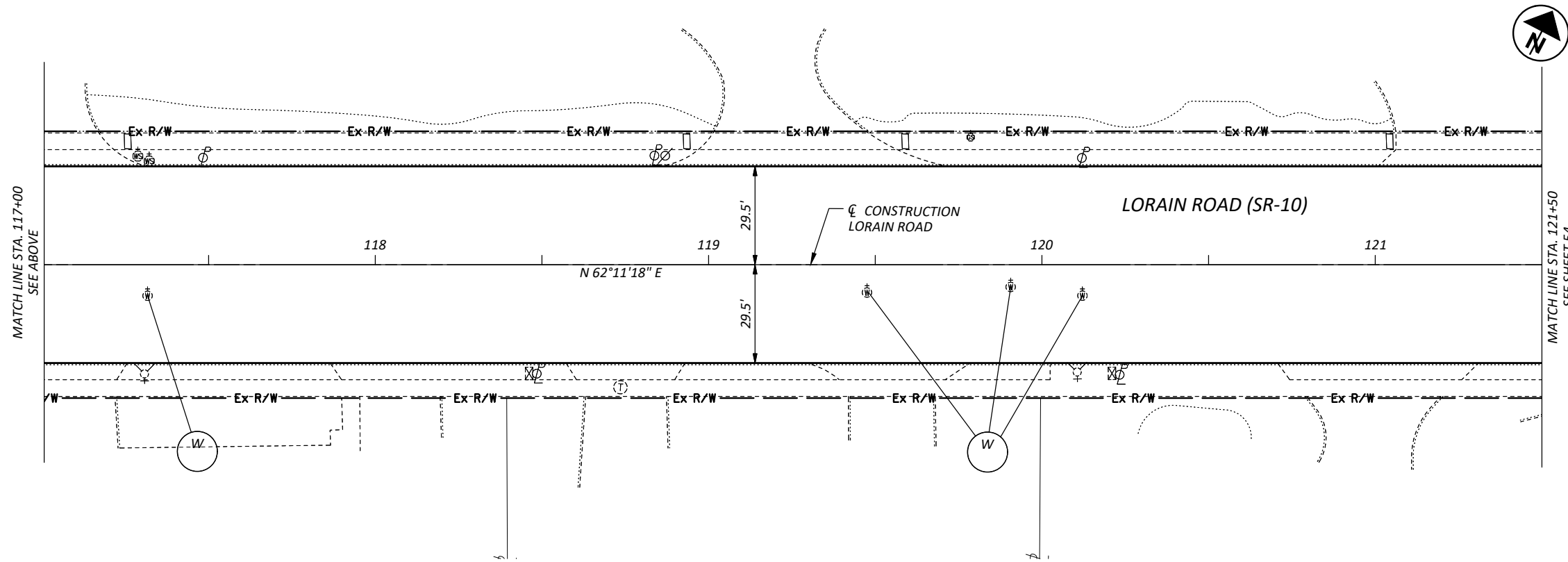


PLAN - LORAIN ROAD  
 STA. 103+00 TO STA. 112+50

DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	SAF
REVIEWER	BAK
PROJECT ID	107287
SHEET TOTAL	52 / 79



- NOTES:
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMPS PER ODOT STANDARD CONSTRUCTION DRAWING BP-7.1. ALL RAMPS MUST BE ADA COMPLIANT.
  3. FOR LEGEND SEE SHEET 52.



PLAN - LORAIN ROAD  
 STA. 112+50 TO STA. 121+50

DESIGN AGENCY



DESIGNER

SAF

REVIEWER

BAK 03/20/26

PROJECT ID

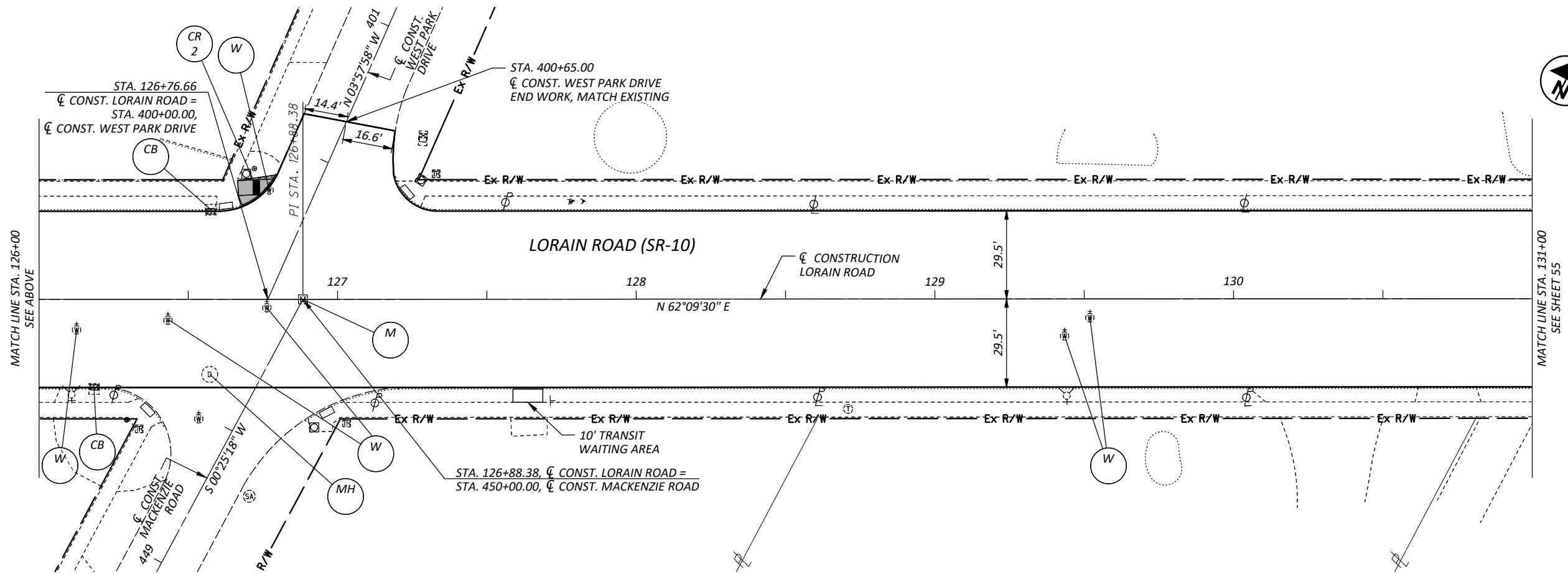
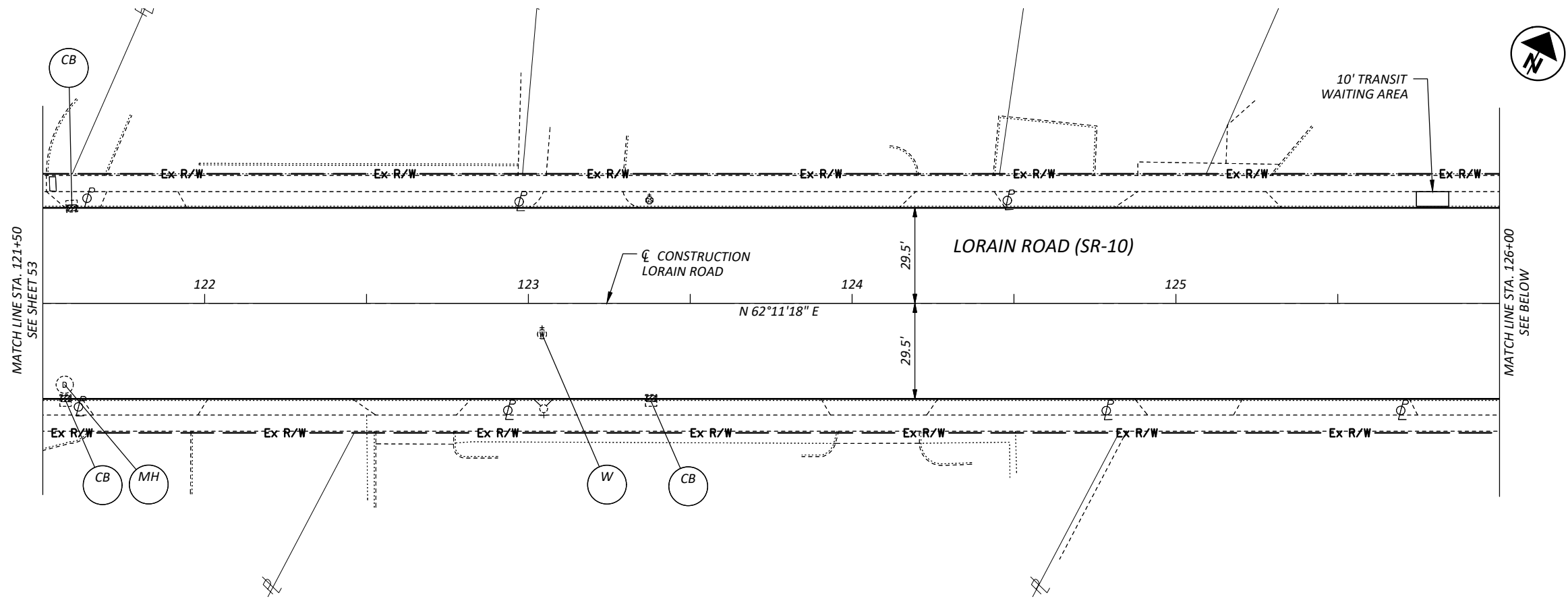
107287

SHEET TOTAL

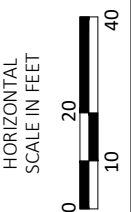
53 79

CUY-10-01.97

MODEL: GP001C DATE: 3/20/2026 TIME: 2:49:51 PM USER: Sarah Filis  
P:\24288 Lorain Road Resurfacing\107287\400-Engineering\Roadway\Sheets\107287\_GP001.dwg



- NOTES:**
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMPS PER ODOT STANDARD CONSTRUCTION DRAWING BP-7.1. ALL RAMPS MUST BE ADA COMPLIANT.
  3. FOR LEGEND SEE SHEET 52.

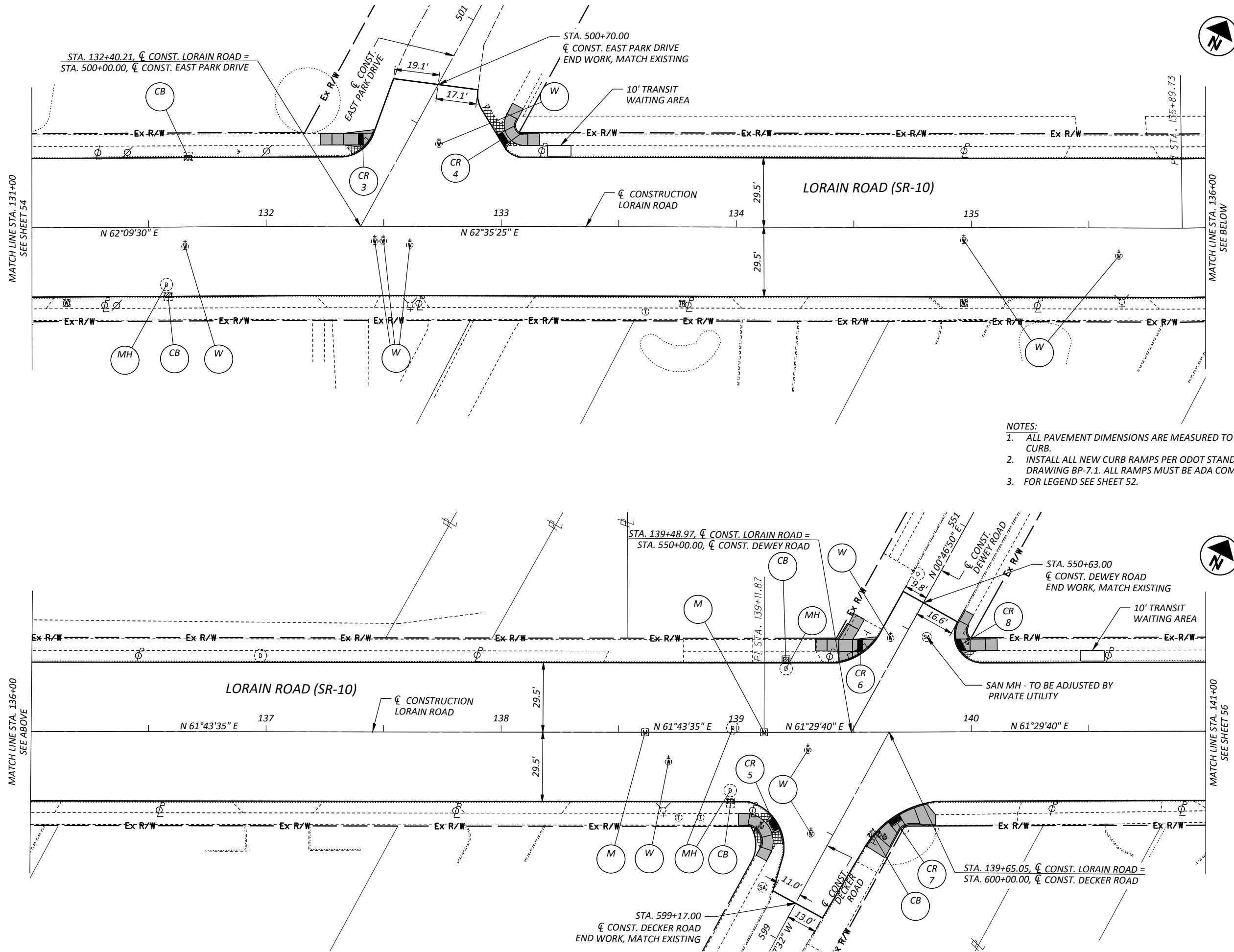


**PLAN - LORAIN ROAD**  
STA. 121+50 TO STA. 131+00

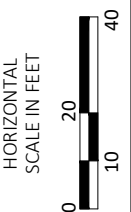
DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
54	79

CUY-10-01.97

MODEL: GP001D DATE: 3/20/2026 TIME: 2:49:58 PM USER: Sarah Filis  
P:\24288 Lorain Road Resurfacing\107287\400-Engineering\Roadway\Sheets\107287\_GP001.dwg



- NOTES:
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMP PER ODOT STANDARD CONSTRUCTION DRAWING BP-7.1. ALL RAMP MUST BE ADA COMPLIANT.
  3. FOR LEGEND SEE SHEET 52.

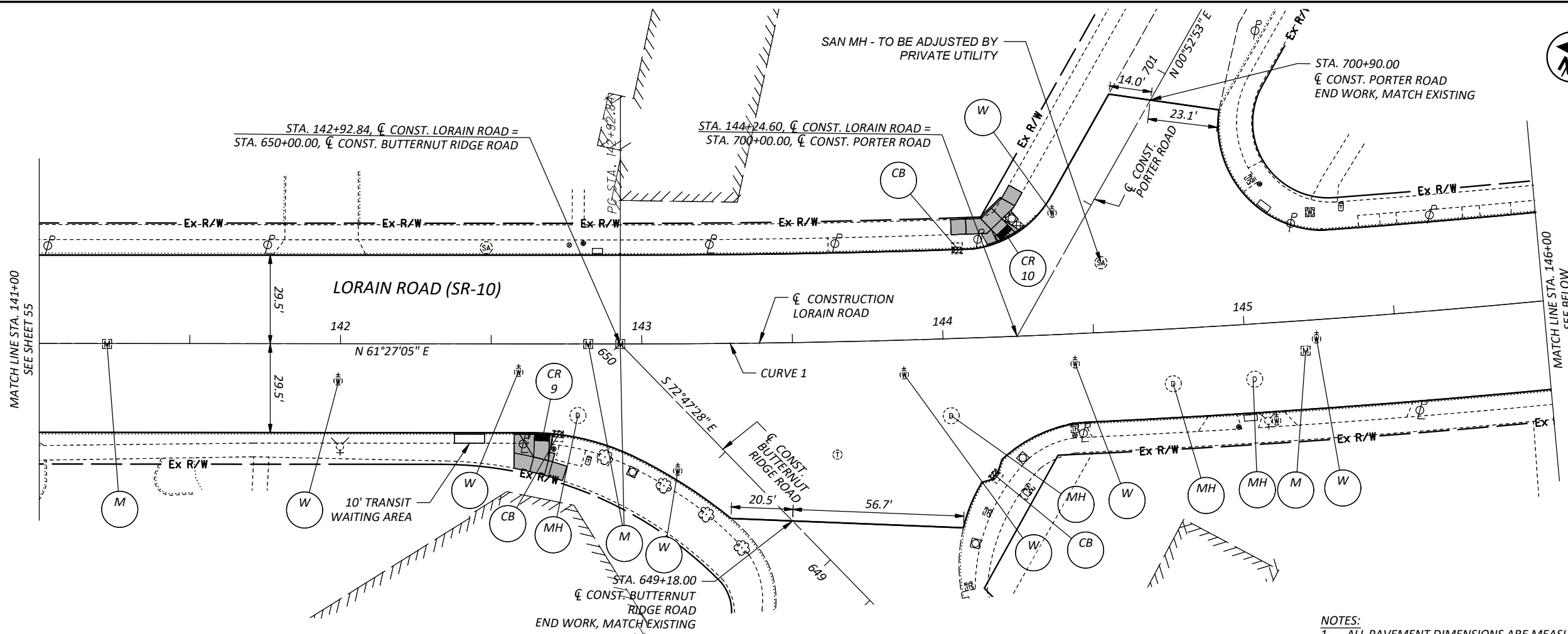


PLAN - LORAIN ROAD  
STA. 131+00 TO STA. 141+00

DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
55	79

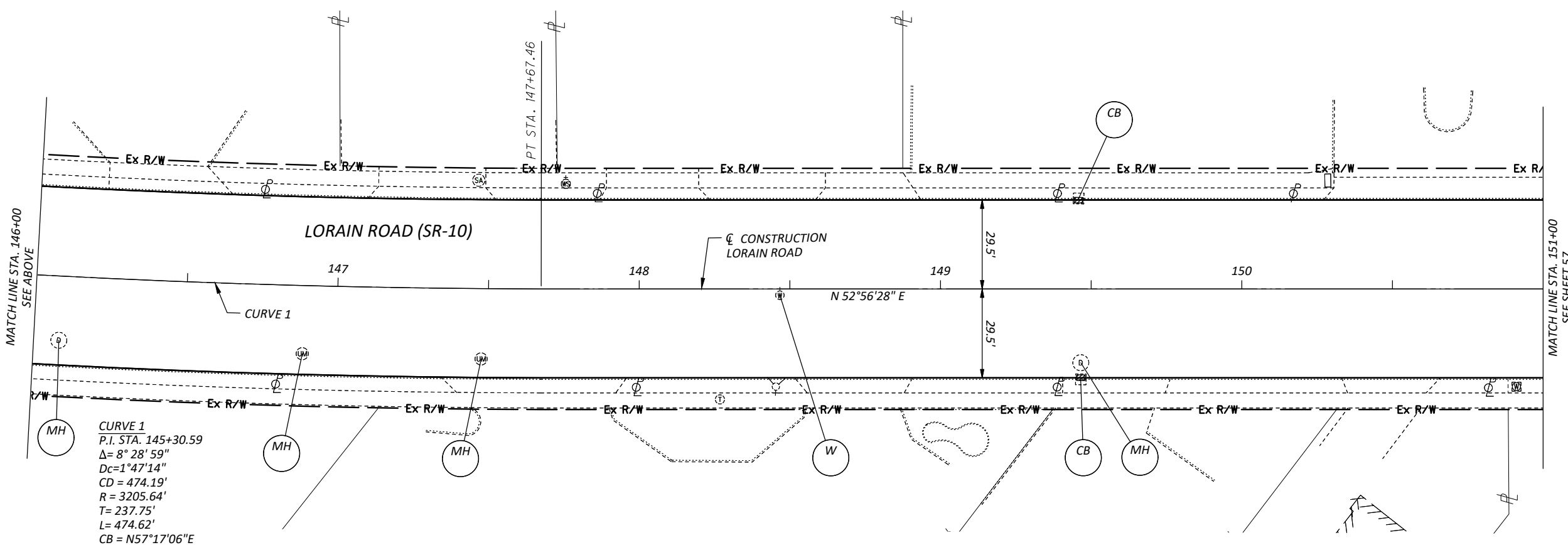
CUY-10-01.97

MODEL: GP001E DATE: 3/20/2026 TIME: 2:50:06 PM USER: Sarah Filis  
P:\24288 Lorain Road Resurfacing\107287\400-Engineering\Roadway\Sheets\107287\_GP001.dwg



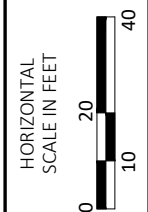
**CURVE 1**  
 P.I. STA. 145+30.59  
 $\Delta = 8^\circ 28' 59''$   
 $D_c = 1^\circ 47' 14''$   
 $CD = 474.19'$   
 $R = 3205.64'$   
 $T = 237.75'$   
 $L = 474.62'$   
 $CB = N57^\circ 17' 06'' E$

- NOTES:**
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMPS PER ODOT STANDARD CONSTRUCTION DRAWING BP-7.1. ALL RAMPS MUST BE ADA COMPLIANT.
  3. FOR LEGEND SEE SHEET 52.



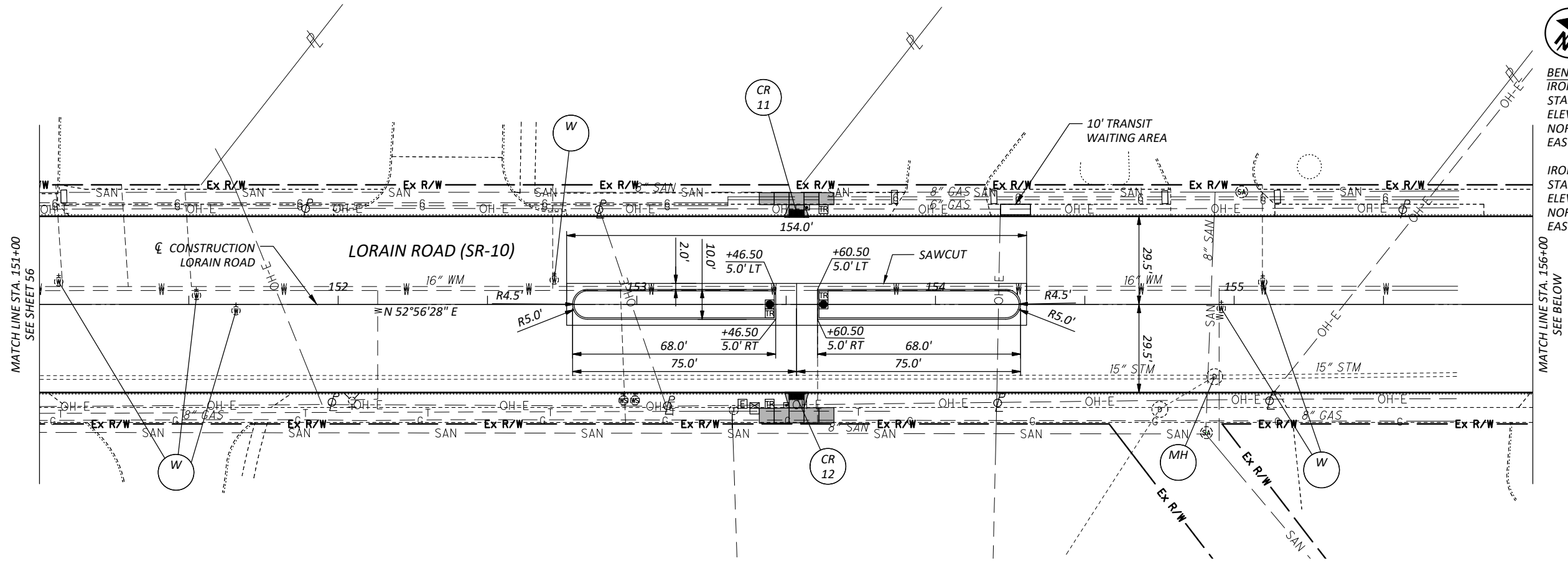
**CURVE 1**  
 P.I. STA. 145+30.59  
 $\Delta = 8^\circ 28' 59''$   
 $D_c = 1^\circ 47' 14''$   
 $CD = 474.19'$   
 $R = 3205.64'$   
 $T = 237.75'$   
 $L = 474.62'$   
 $CB = N57^\circ 17' 06'' E$

**BENCHMARK #1**  
 IRON PIN SET  
 CONTROL POINT #104  
 STA. 150+22.08, 38.11' LT  
 ELEVATION: 775.50  
 NORTHING: 637133.039  
 EASTING: 2125729.620



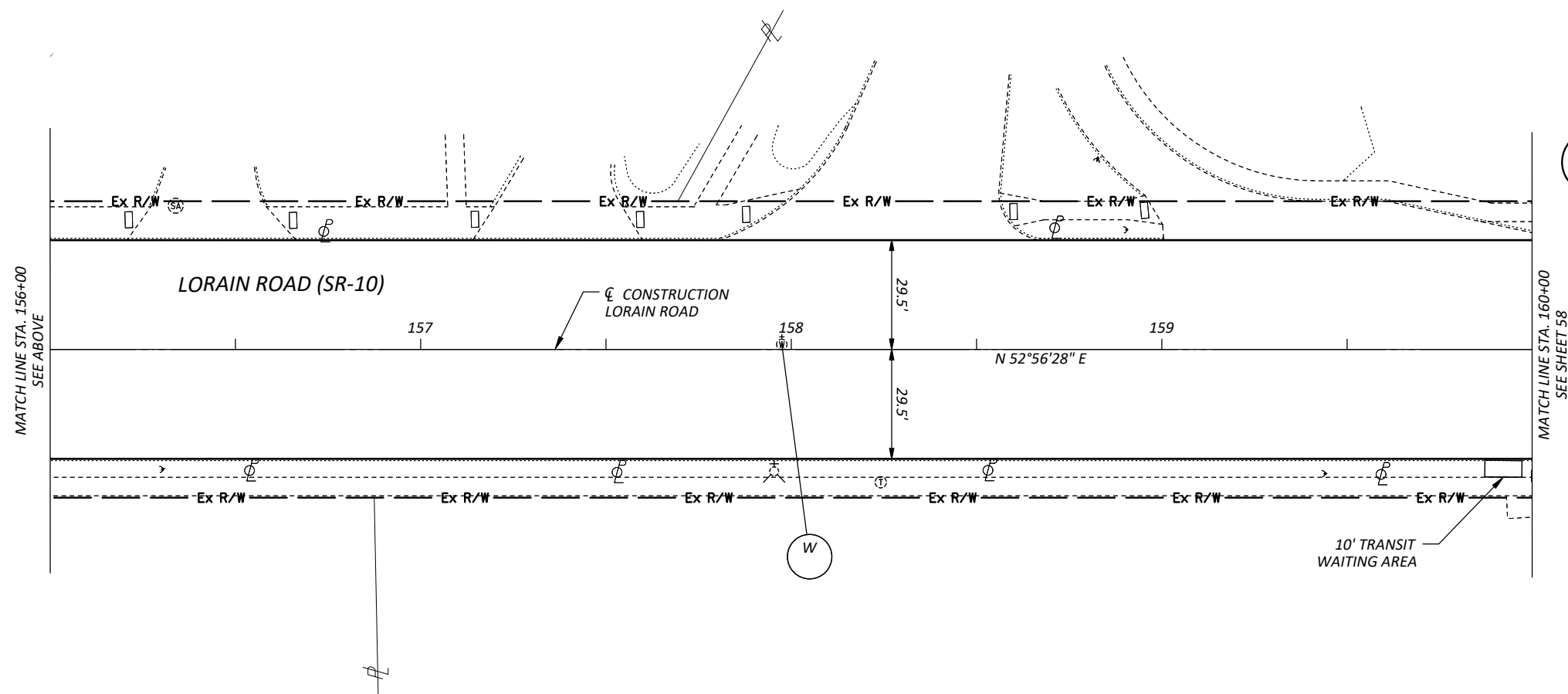
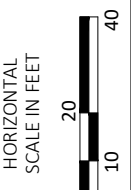
**PLAN - LORAIN ROAD**  
**STA. 141+00 TO STA. 151+00**

DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD.	
22999 FORBES ROAD, UNIT B	
CLEVELAND, OHIO 44146	
PHONE: (440) 439-1999	
FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
56	79



**BENCHMARKS**  
 IRON PIN SET  
 STA. 150+22.08, 38.11' LT  
 ELEVATION: 775.50  
 NORTHING: 637133.039  
 EASTING: 2125729.620

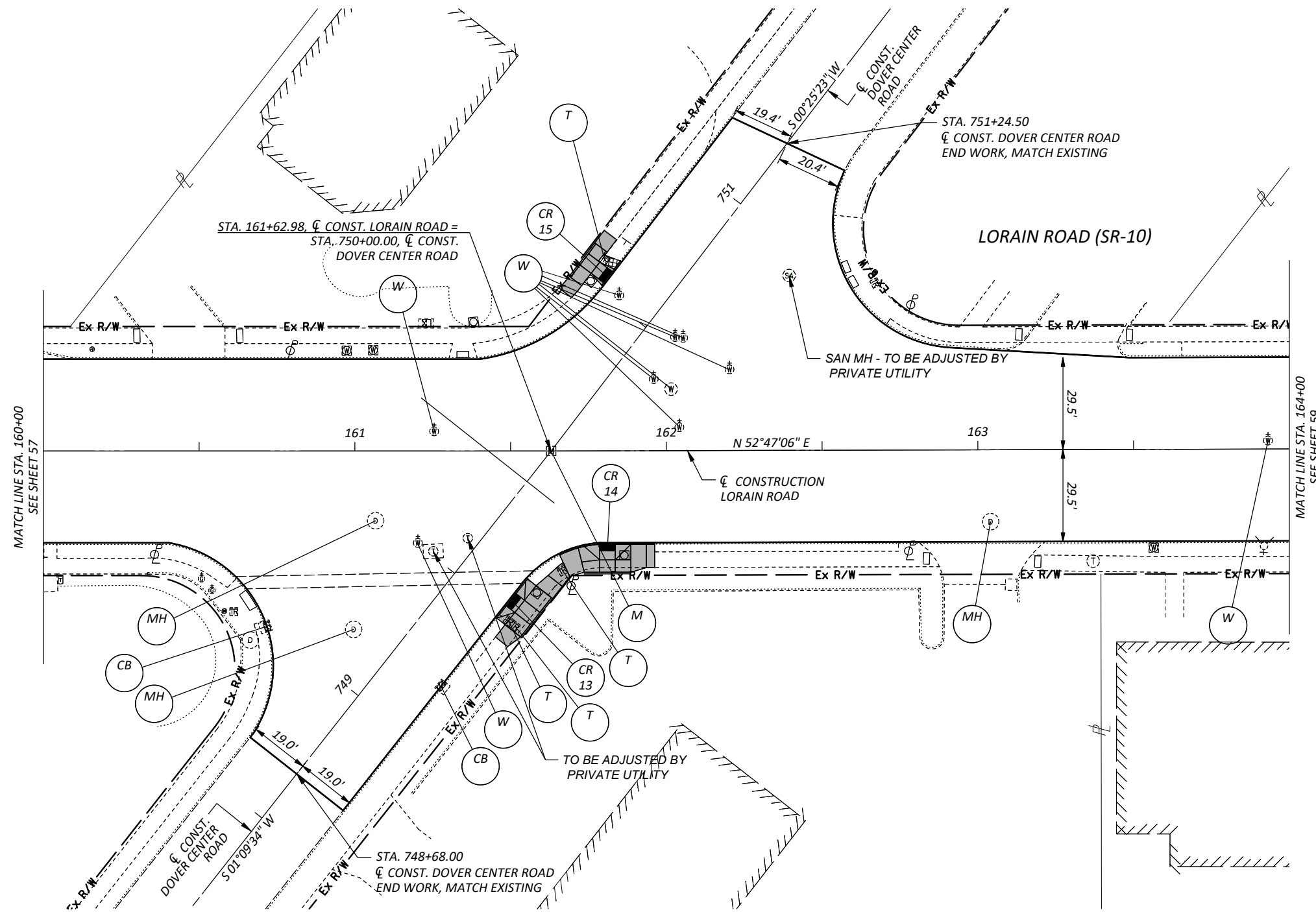
IRON PIN SET  
 STA. 155+05.91, 41.93' RT  
 ELEVATION: 771.68  
 NORTHING: 637360.736  
 EASTING: 2126163.954



- NOTES:**
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMPS PER ODOT STANDARD CONSTRUCTION DRAWING BP-7.1. ALL RAMPS MUST BE ADA COMPLIANT.
  3. FOR LEGEND SEE SHEET 52.

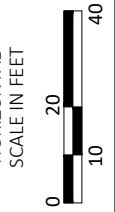
**PLAN - LORAIN ROAD**  
 STA. 151+00 TO STA. 160+00

DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
57	79



**NOTES:**

1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
2. INSTALL ALL NEW CURB RAMPS PER ODOT STANDARD CONSTRUCTION DRAWING BP-7.1. ALL RAMPS MUST BE ADA COMPLIANT.
3. FOR LEGEND SEE SHEET 52.



**PLAN - LORAIN ROAD  
 STA. 160+00 TO STA. 164+00**

DESIGN AGENCY

**eve**  
 CHAGRIN VALLEY  
 ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

DESIGNER

SAF

REVIEWER

BAK 03/20/26

PROJECT ID

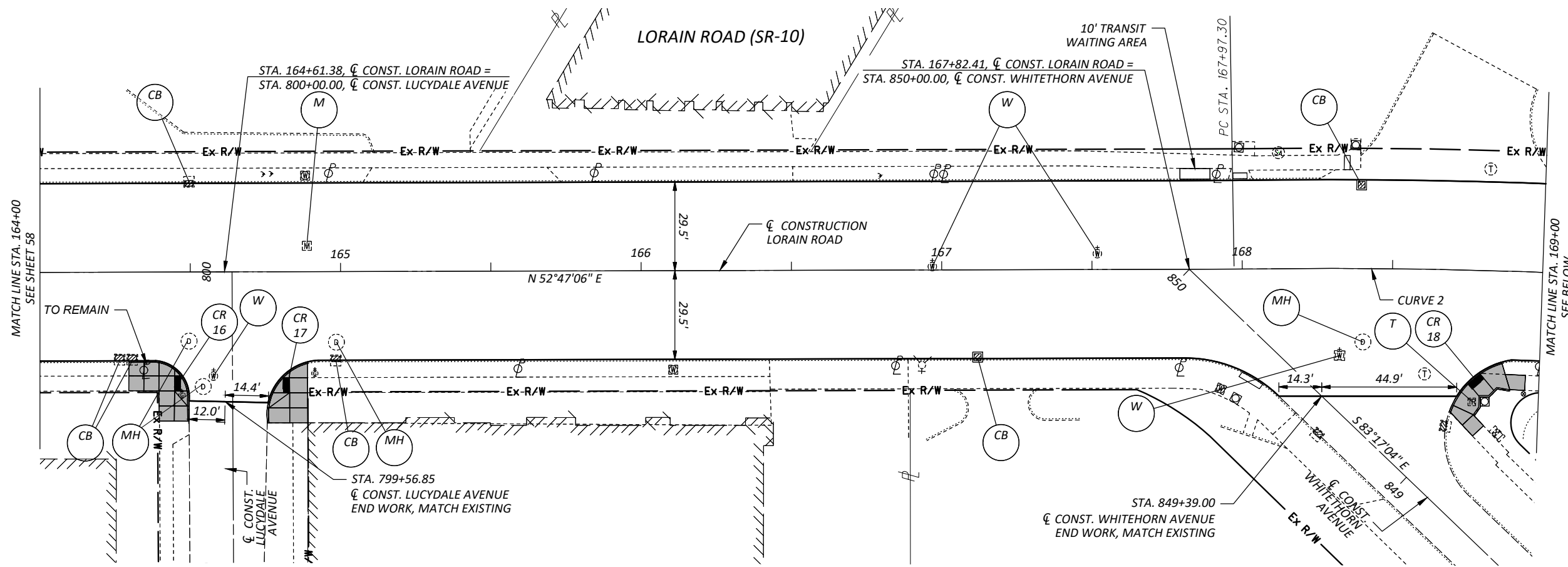
107287

SHEET TOTAL

58 | 79

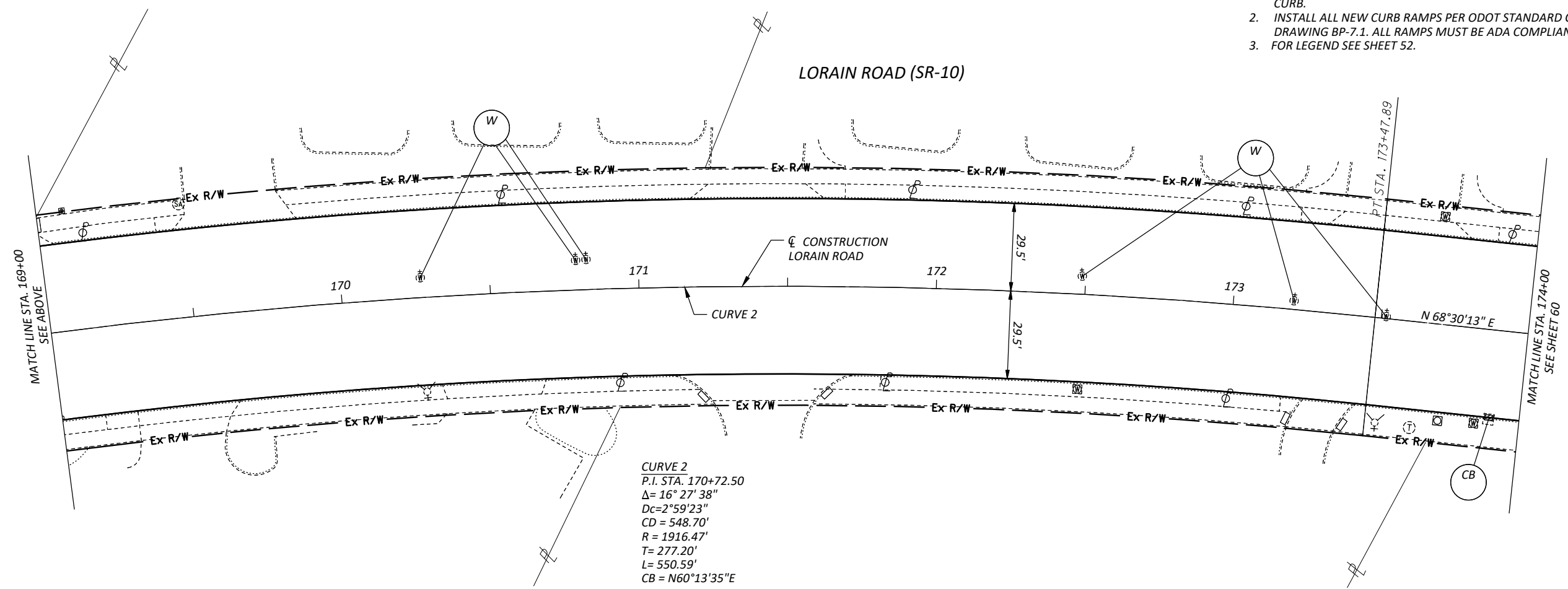
CUY-10-01.97

MODEL: GP001H DATE: 3/20/2026 TIME: 2:50:22 PM USER: Sarah Filis  
P:\24288 Lorain Road Resurfacing\107287\400-Engineering\Roadway\Sheets\107287\_GP001.dwg

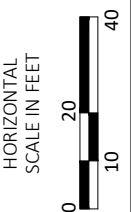


CURVE 2  
 P.I. STA. 170+72.61  
 $\Delta = 16^\circ 27' 38''$   
 $Dc = 2^\circ 59' 23''$   
 $CD = 548.70'$   
 $R = 1916.47'$   
 $T = 277.20'$   
 $L = 550.59'$   
 $CB = N60^\circ 13' 35'' E$

- NOTES:  
 1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.  
 2. INSTALL ALL NEW CURB RAMPS PER ODOT STANDARD CONSTRUCTION DRAWING BP-7.1. ALL RAMPS MUST BE ADA COMPLIANT.  
 3. FOR LEGEND SEE SHEET 52.



CURVE 2  
 P.I. STA. 170+72.50  
 $\Delta = 16^\circ 27' 38''$   
 $Dc = 2^\circ 59' 23''$   
 $CD = 548.70'$   
 $R = 1916.47'$   
 $T = 277.20'$   
 $L = 550.59'$   
 $CB = N60^\circ 13' 35'' E$



PLAN - LORAIN ROAD  
 STA. 164+00 TO STA. 174+00

DESIGN AGENCY



DESIGNER

SAF

REVIEWER

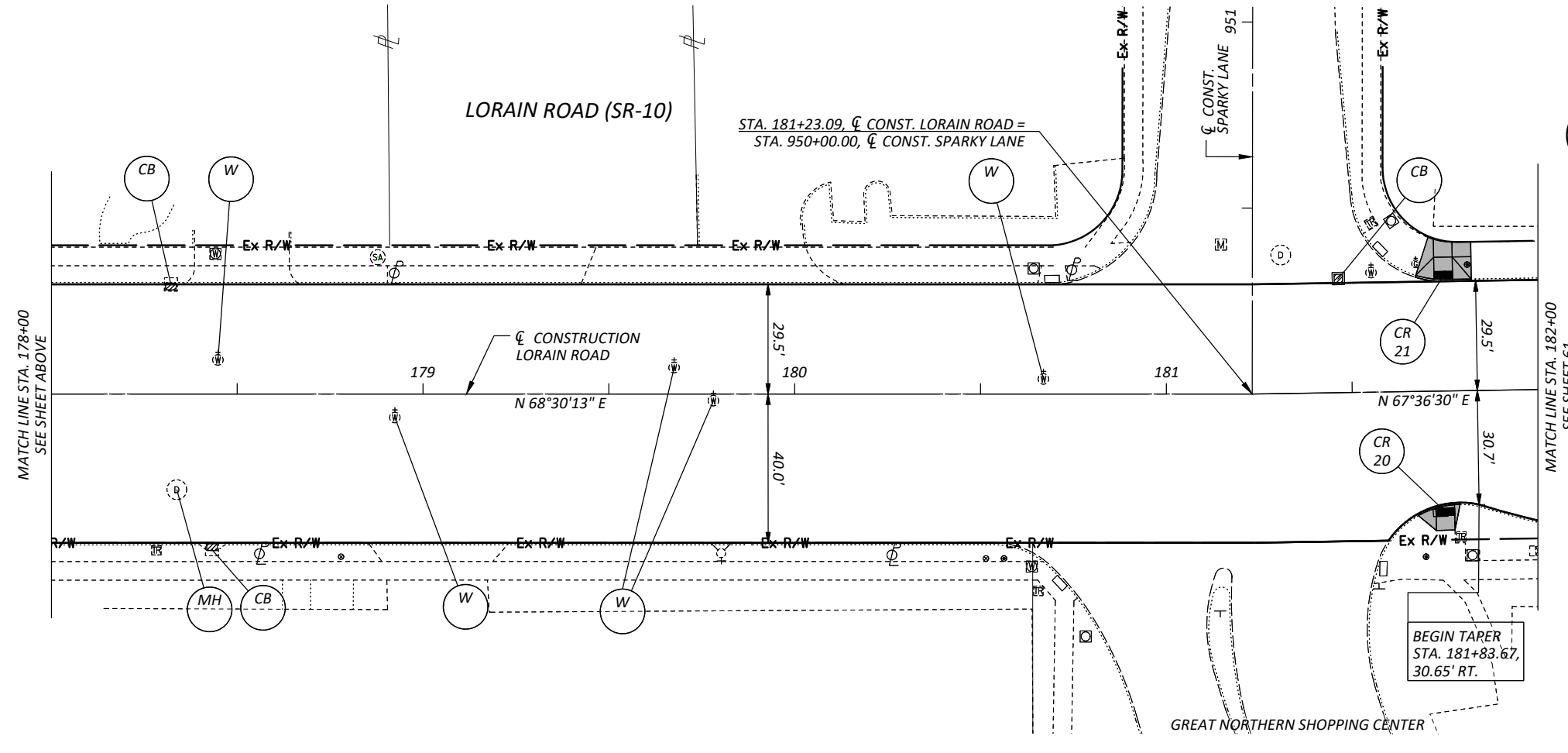
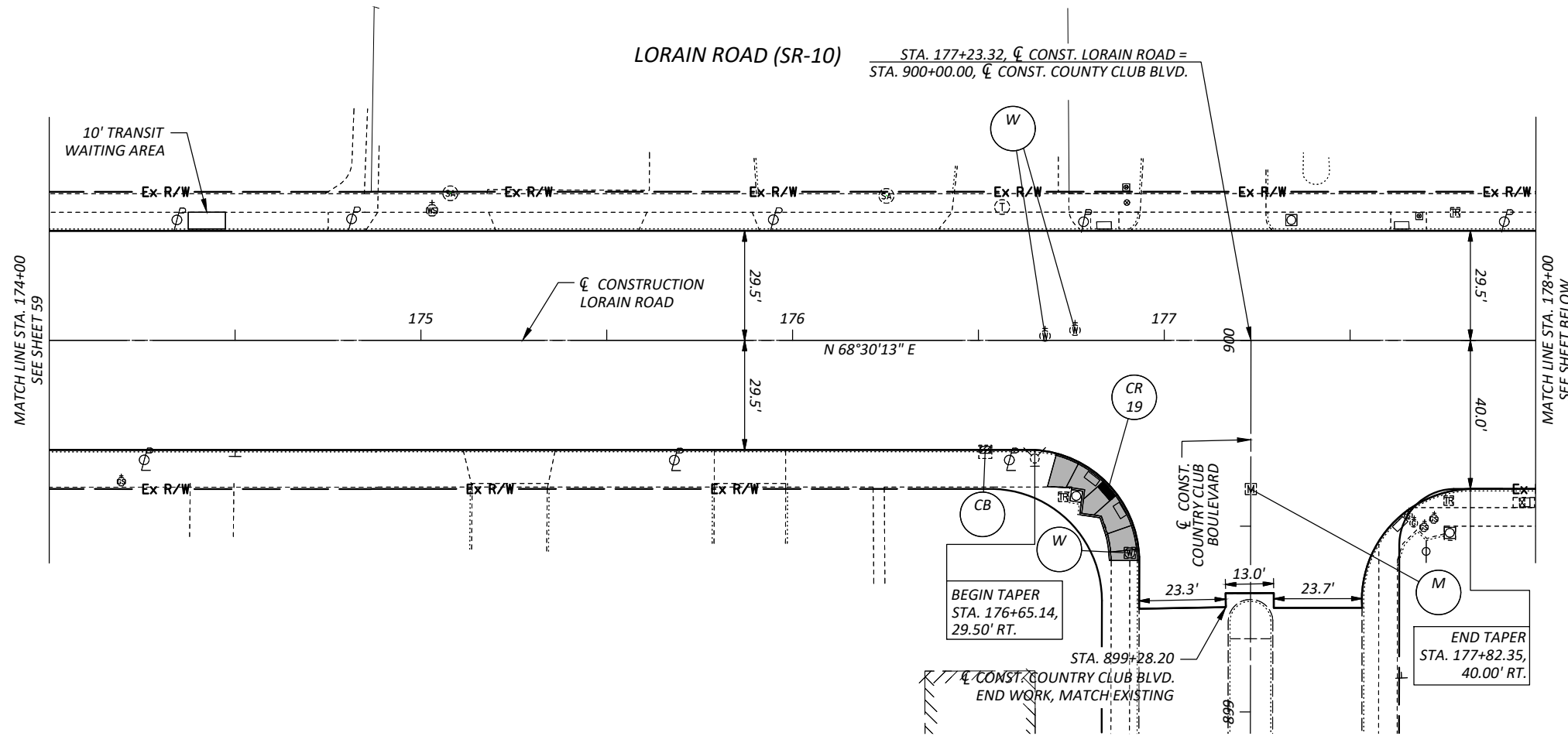
BAK 03/20/26

PROJECT ID

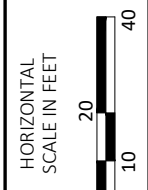
107287

SHEET TOTAL

59 79

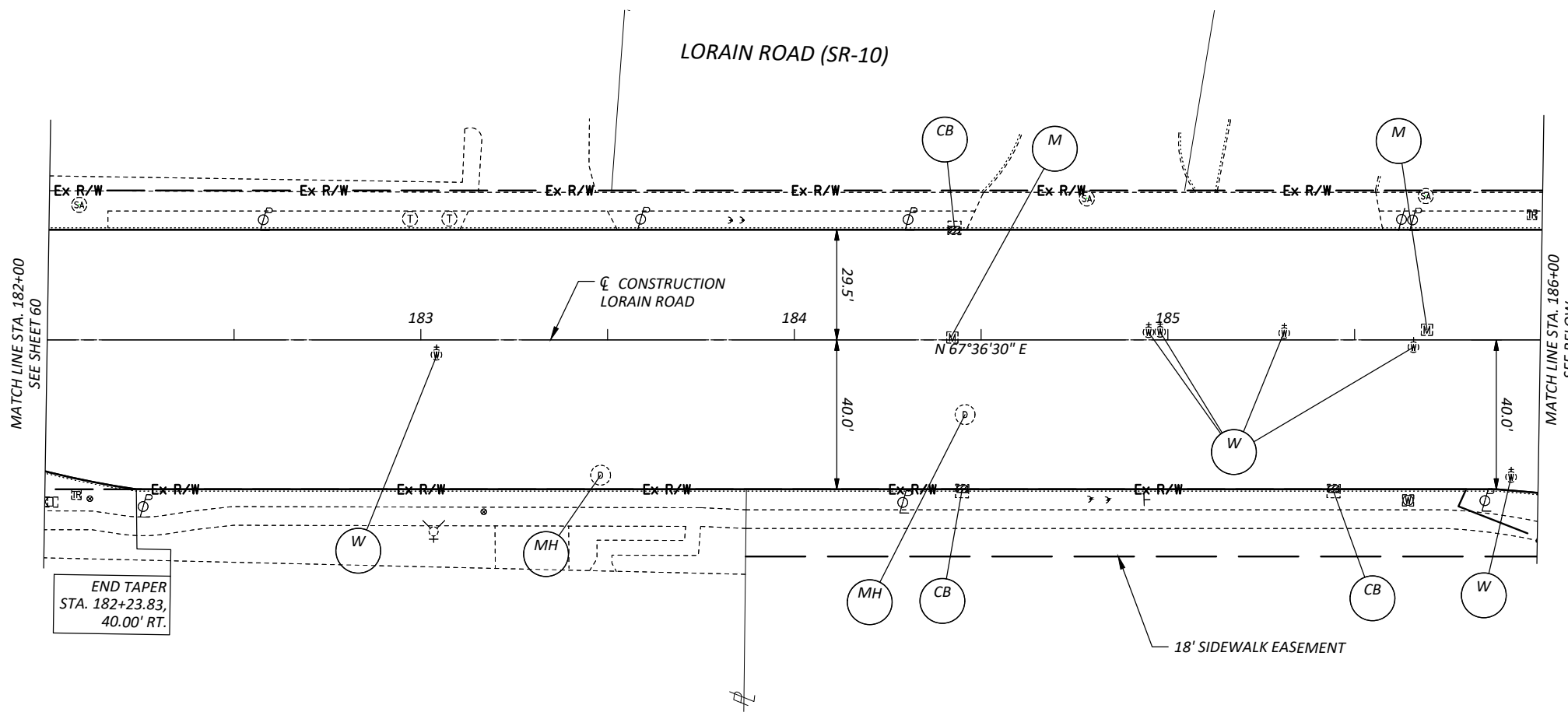


- NOTES:**
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMPS PER ODOT STANDARD CONSTRUCTION DRAWING BP-7.1. ALL RAMPS MUST BE ADA COMPLIANT.
  3. FOR LEGEND SEE SHEET 52.



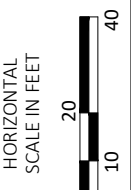
**PLAN - LORAIN ROAD**  
**STA. 174+00 TO STA. 182+00**

DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
60	79



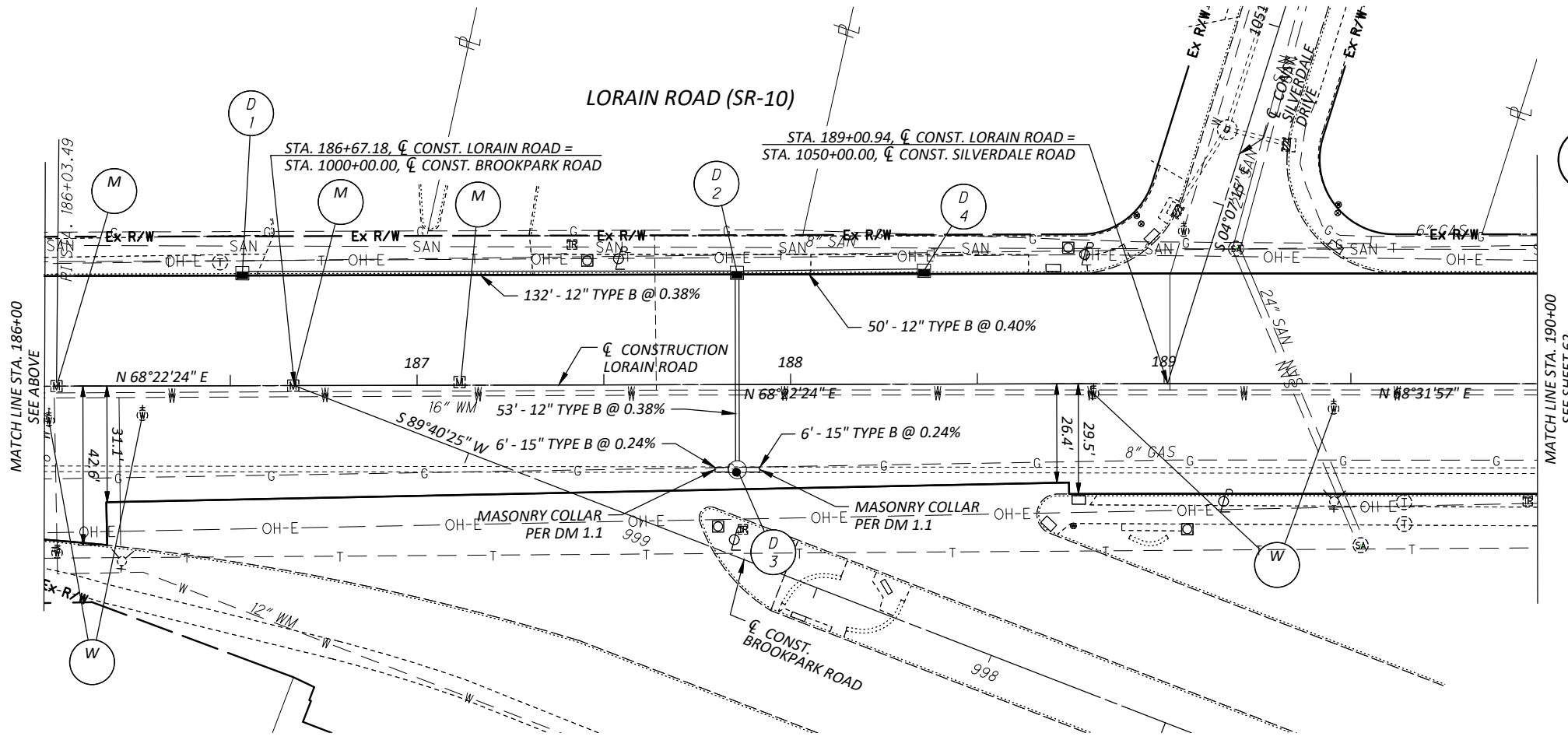
**BENCHMARKS**  
 IRON PIN SET  
 STA. 180+53.76, 33.47' LT  
 ELEVATION: 757.49  
 NORTHING: 638736.084  
 EASTING: 2128288.972

IRON PIN SET  
 STA. 186+44.82, 49.00' RT  
 ELEVATION: 756.80  
 NORTHING: 638883.038  
 EASTING: 2129392.239



**PLAN - LORAIN ROAD**  
 STA. 182+00 TO STA. 190+00

- NOTES:**
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMPS PER ODOT STANDARD CONSTRUCTION DRAWING BP-7.1. ALL RAMPS MUST BE ADA COMPLIANT.
  3. FOR LEGEND SEE SHEET 52.



**D 1** STA. 186+53.29, 30.11' LT.  
 PROP. CB-3A  
 GRATE = 755.90  
 INV. 12" E = 752.00

**D 2** STA. 187+85.72, 29.90' LT.  
 PROP. CB-3A  
 GRATE = 755.50  
 INV. 12" W = 751.50  
 INV. 12" E = 751.50  
 INV. 12" S = 751.50

**D 3** STA. 187+85.72, 22.79' RT.  
 PROP. STM. MH  
 RIM = 756.28  
 INV. 12" N = 751.30  
 INV. 15" W = 751.05  
 INV. 15" E = 751.05

**D 4** STA. 188+35.78, 30.34' LT.  
 PROP. CB-3A  
 GRATE = 755.60  
 INV. 12" W = 751.70

DESIGN AGENCY



DESIGNER

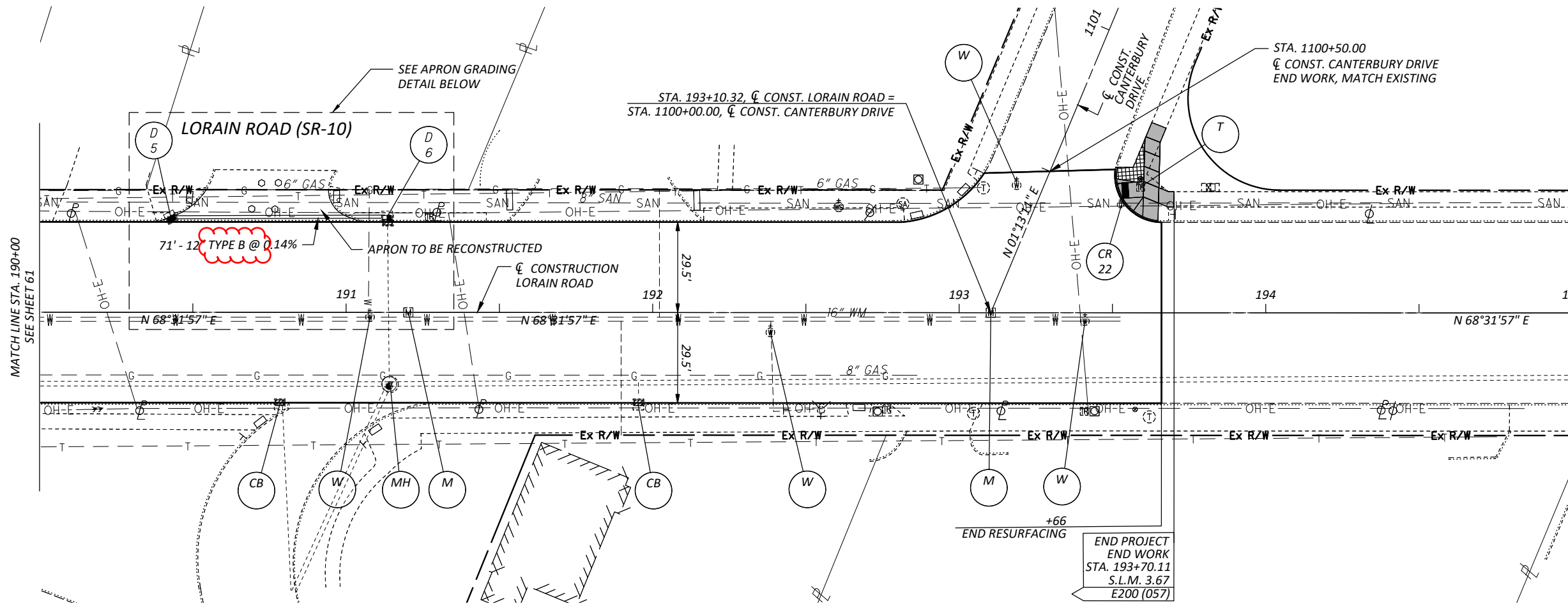
REVIEWER

PROJECT ID

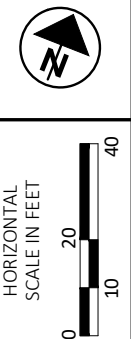
SHEET TOTAL

107287

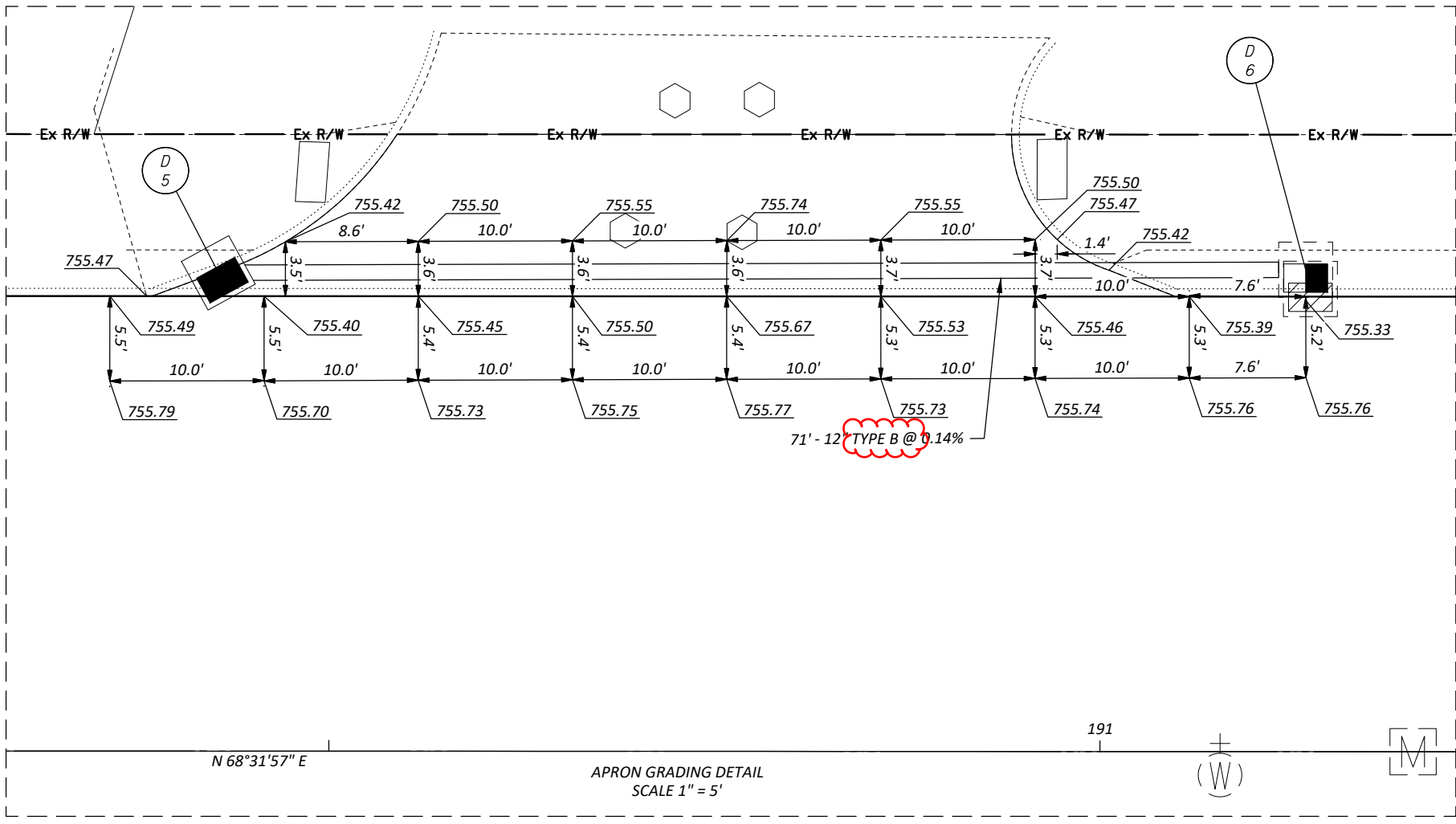
61 | 79



**BENCHMARKS**  
 IRON PIN SET  
 STA. 192+14.05, 39.39' RT  
 ELEVATION: 755.77  
 NORTHING: 639100.910  
 EASTING: 2129392.239



MATCH LINE STA. 190+00  
 SEE SHEET 61



- NOTES:**
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMPS PER ODOT STANDARD CONSTRUCTION DRAWING BP-7.1. ALL RAMPS MUST BE ADA COMPLIANT.
  3. FOR LEGEND SEE SHEET 52.

**D 5** STA. 190+42.82, 31.01' LT.  
 PROP. CB-3A  
 GRATE = 755.35  
 INV. 12" E = 751.90

**D 6** STA. 191+13.33, 31.24' LT.  
 EX. CATCH BASIN  
 ADJUST TO GRADE  
 GRATE = 756.05  
 WINDOW = 755.33  
 GRATE = 756.05  
 INV. 12" W = 751.80

**PLAN - LORAIN ROAD**  
 STA. 190+00 TO STA. 195+00

DESIGN AGENCY  
  
 CHAGRIN VALLEY  
 ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

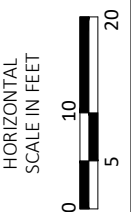
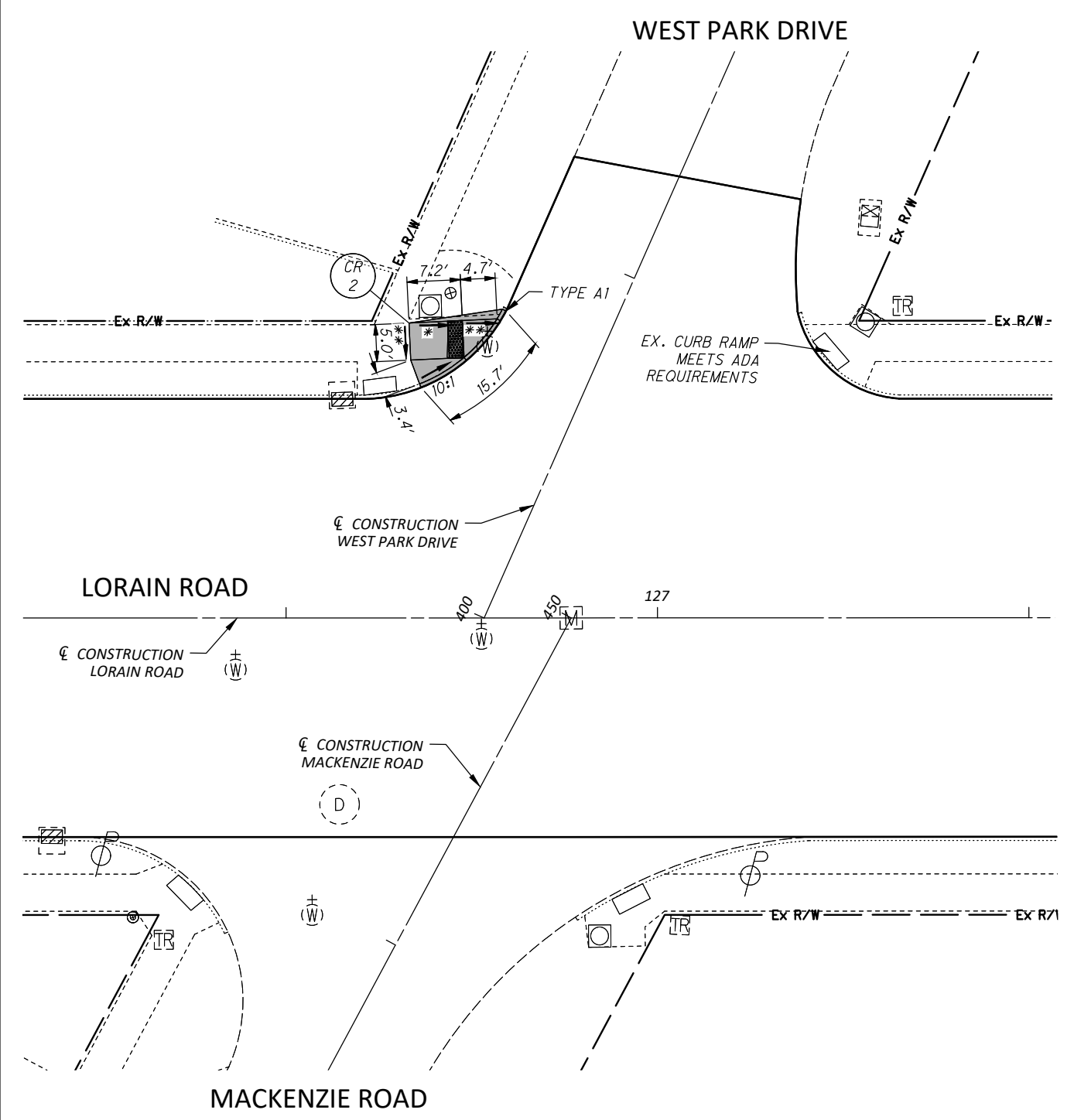
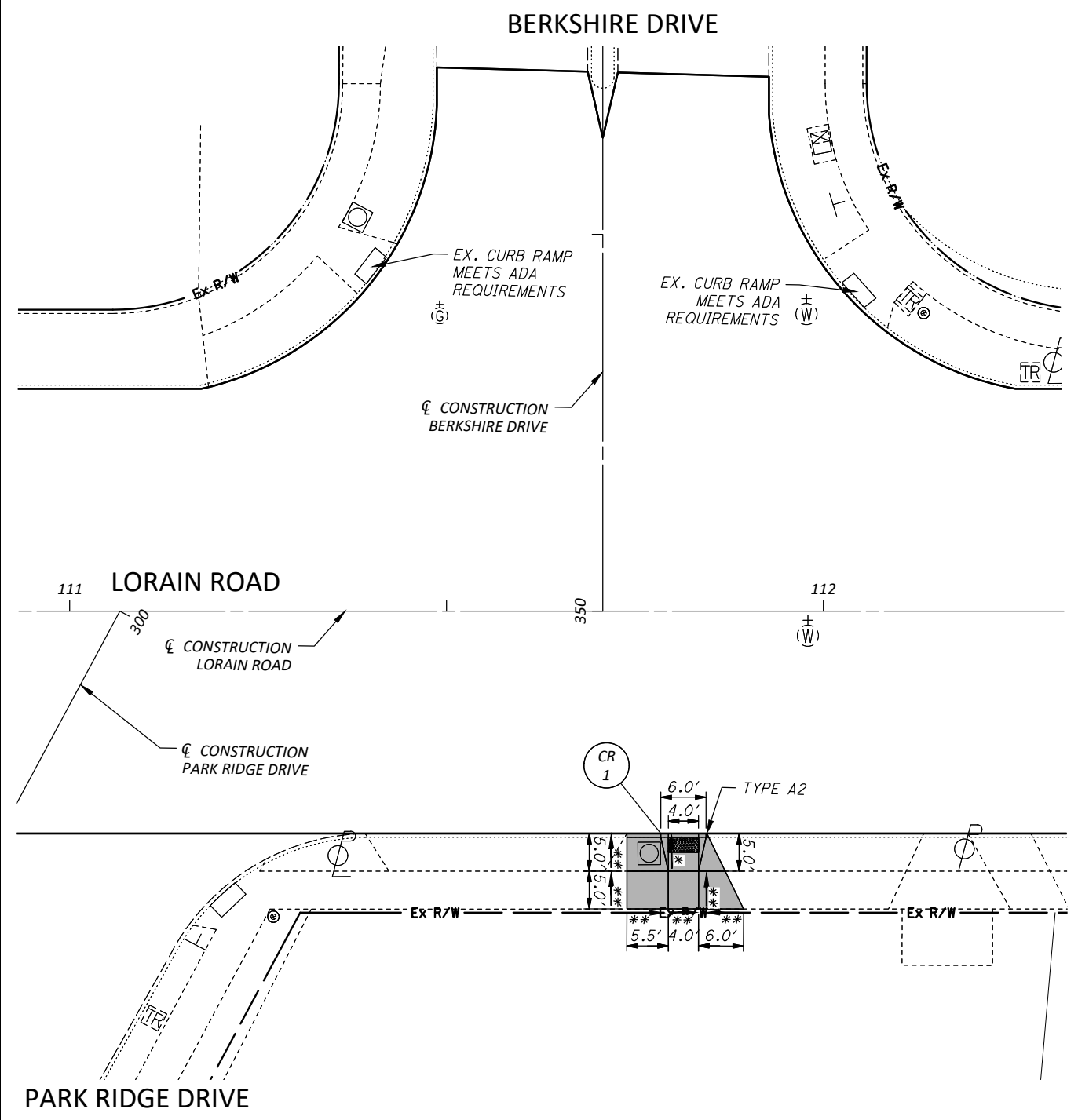
DESIGNER  
 SAF

REVIEWER  
 BAK 03/20/26

PROJECT ID  
 107287

SHEET TOTAL  
 62 79

⊠ WALK REMOVED  
 \* 13:1 MAX.  
 \*\* 64:1 MAX.

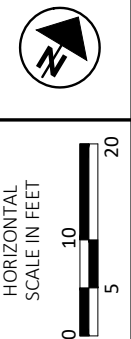
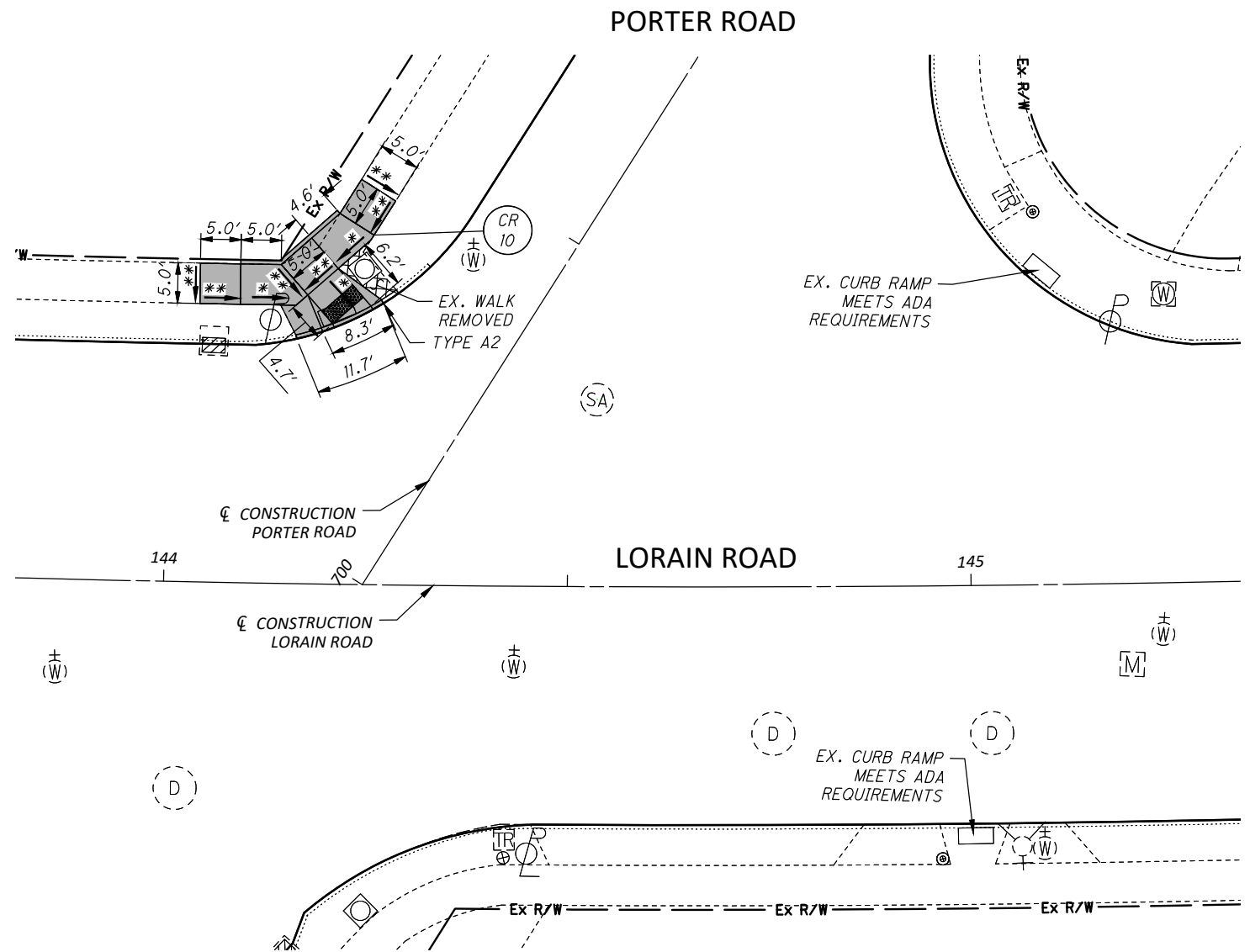
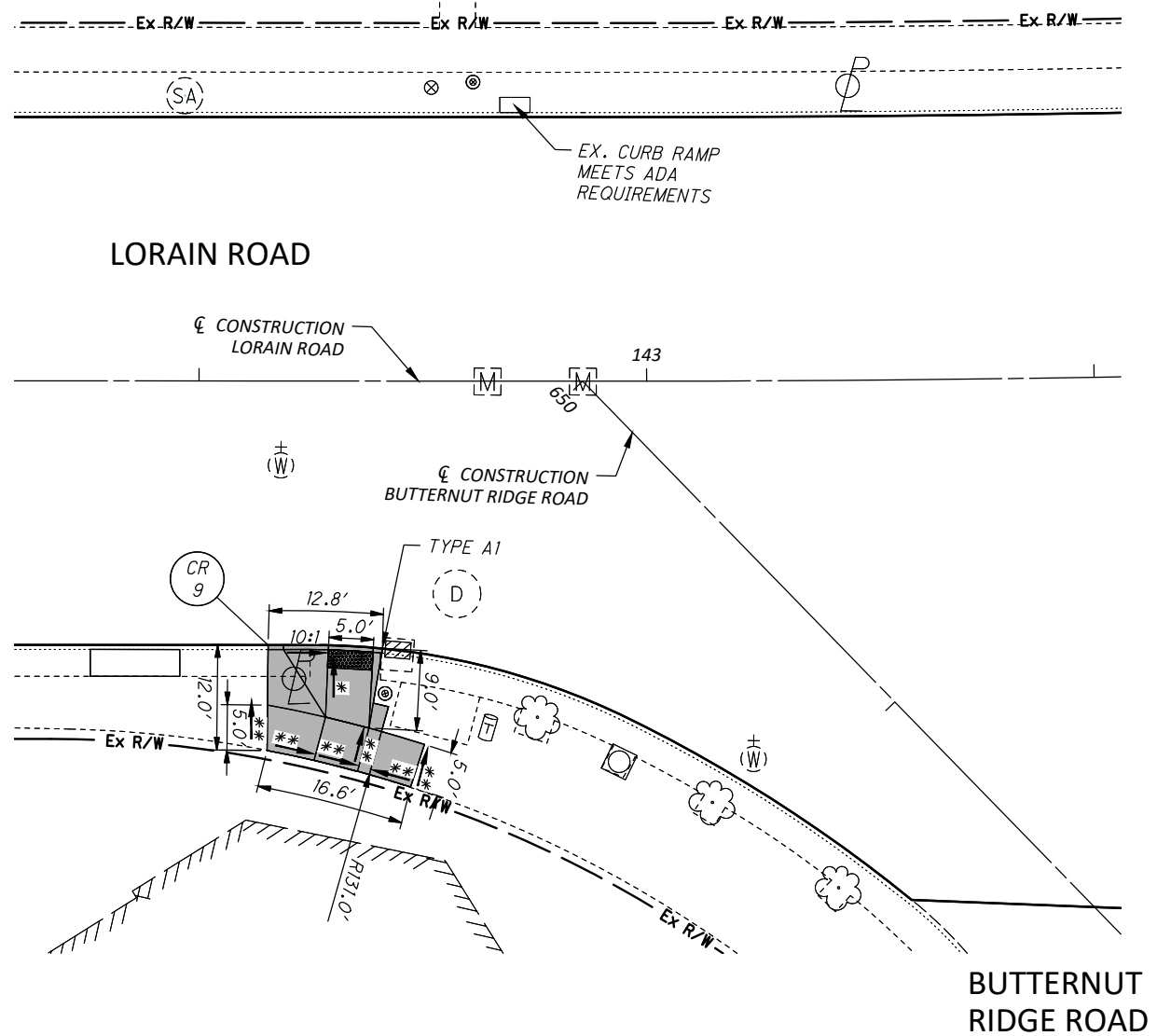


CURB RAMP DETAILS  
 PARK RIDGE DR., BERKSHIRE DR. & MACKENZIE ROAD

DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
63	79



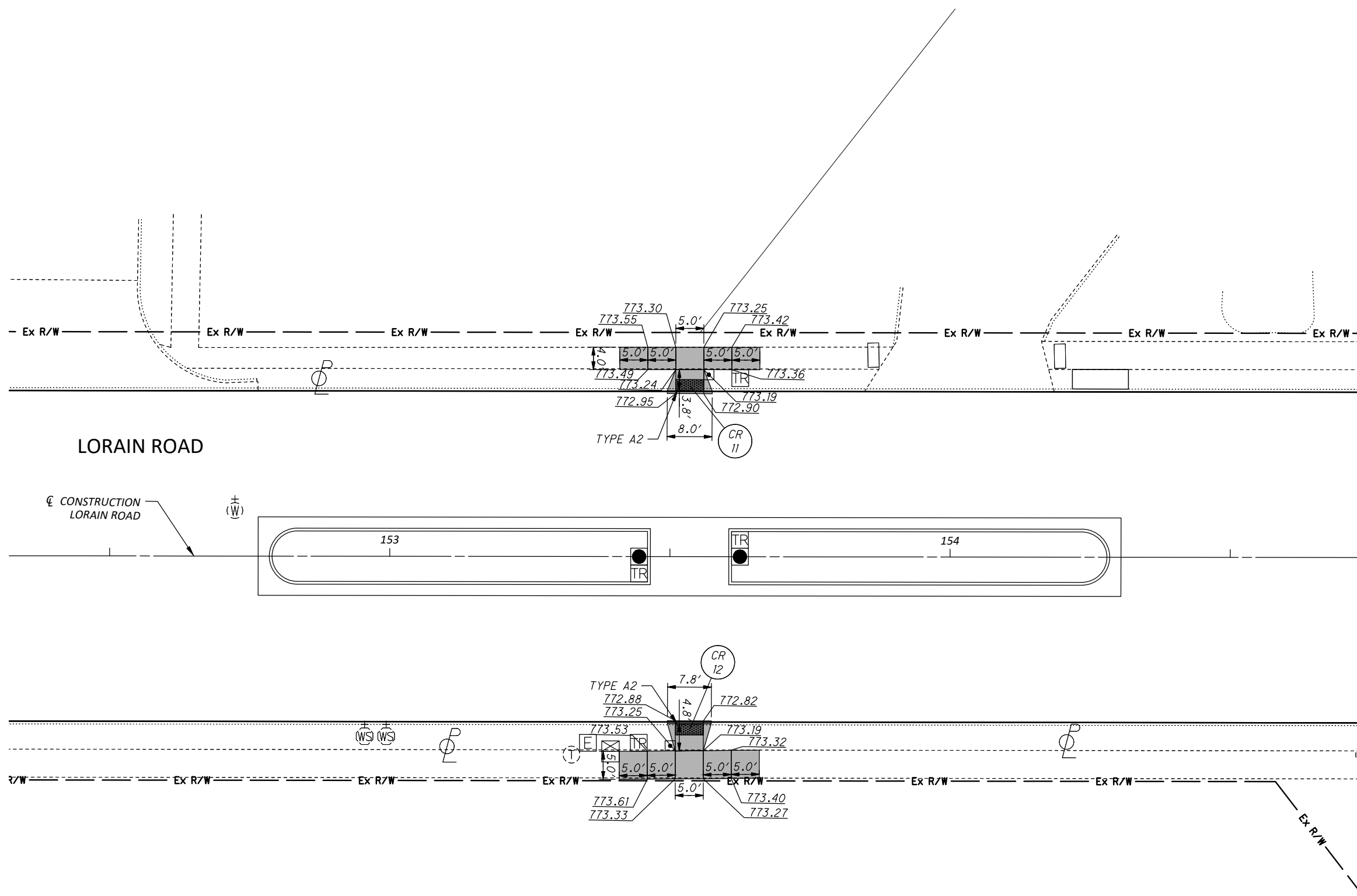
- ⊗ WALK REMOVED
- \* 13:1 MAX.
- \*\* 64:1 MAX.



CURB RAMP DETAILS  
 BUTTERNUT RIDGE RD. & PORTER RD.

DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
65	79

WALK REMOVED  
\* 13:1 MAX.  
\*\* 64:1 MAX.



CURB RAMP DETAILS  
LORAIN ROAD

DESIGN AGENCY

**eve**  
CHAGRIN VALLEY  
ENGINEERING, LTD.  
22999 FORBES ROAD, UNIT B  
CLEVELAND, OHIO 44146  
PHONE: (440) 439-1999  
FAX: (440) 439-1969

DESIGNER  
SAF

REVIEWER

BAK 03/20/26

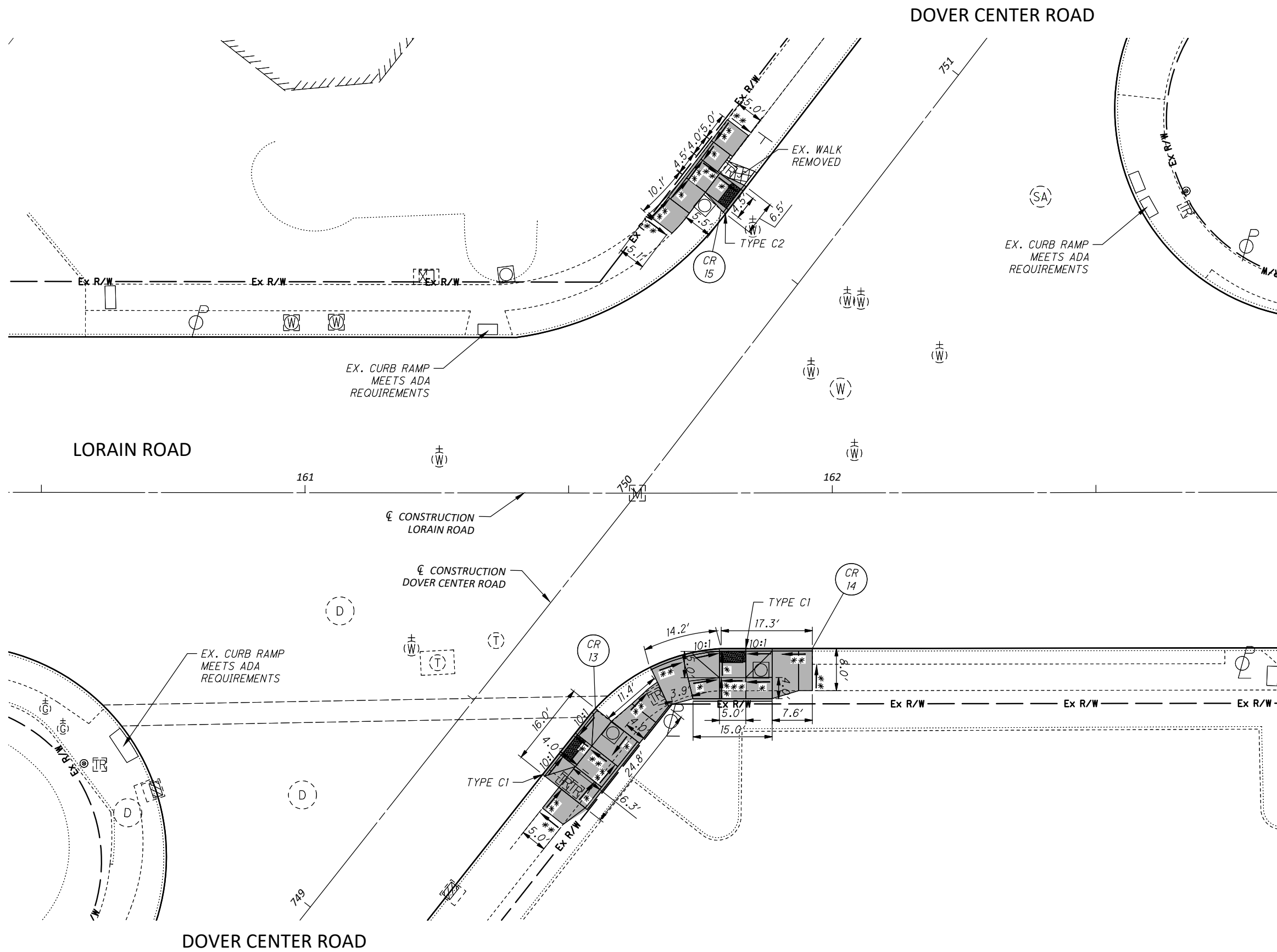
PROJECT ID  
107287

SHEET TOTAL  
66 79

CUY-10-01.97

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P:\24288 Lorain Road Resurfacing\107287\400-Engineering\Roadway\Sheets\107287\_G1001E.dwg

WALK REMOVED  
\* 13:1 MAX.  
\*\* 64:1 MAX.



HORIZONTAL SCALE IN FEET  
0 5 10 20

CURB RAMP DETAILS  
DOVER CENTER RD.

DESIGN AGENCY

**CVE**  
CHAGRIN VALLEY  
ENGINEERING, LTD.  
22999 FORBES ROAD, UNIT B  
CLEVELAND, OHIO 44146  
PHONE: (440) 439-1999  
FAX: (440) 439-1969

DESIGNER

SAF

REVIEWER

BAK 03/20/26

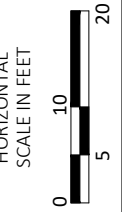
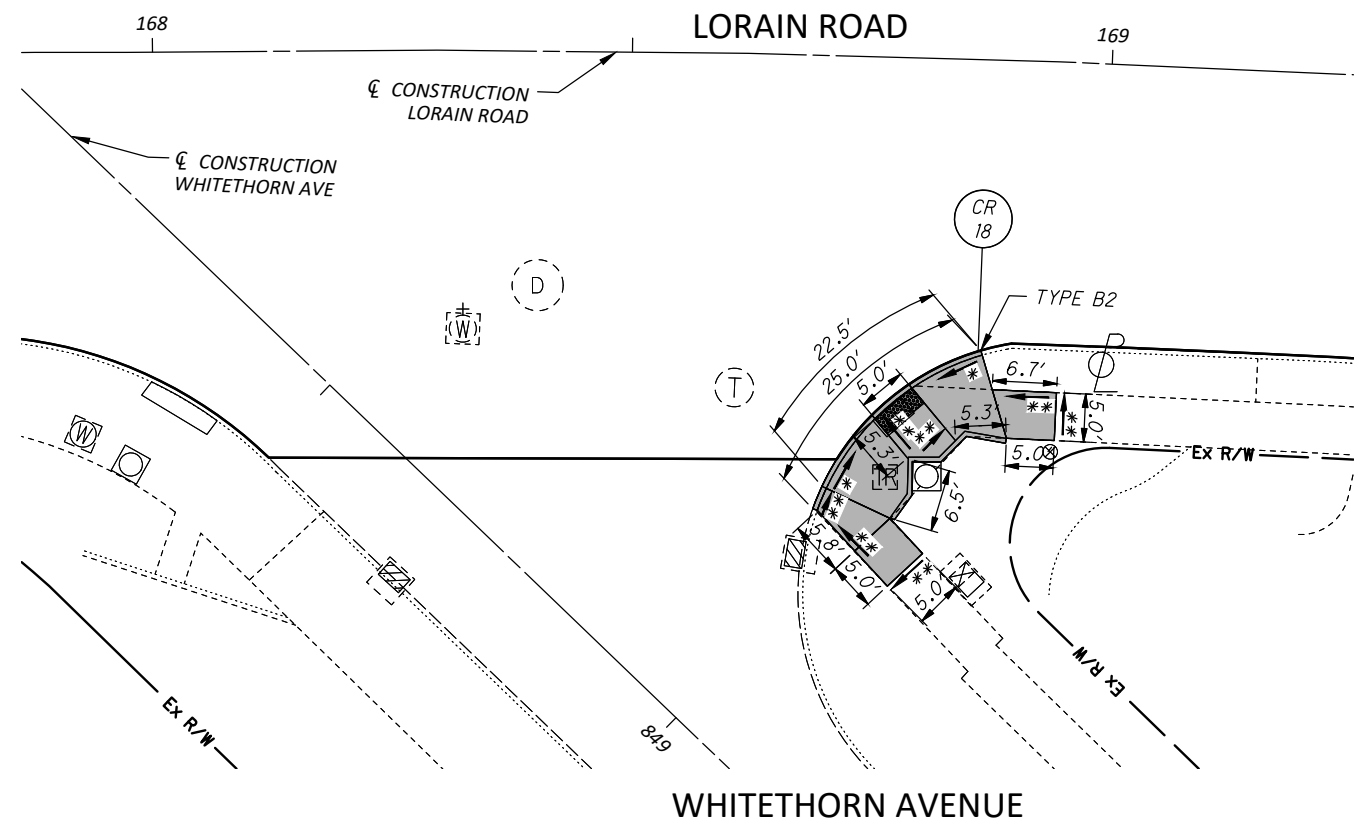
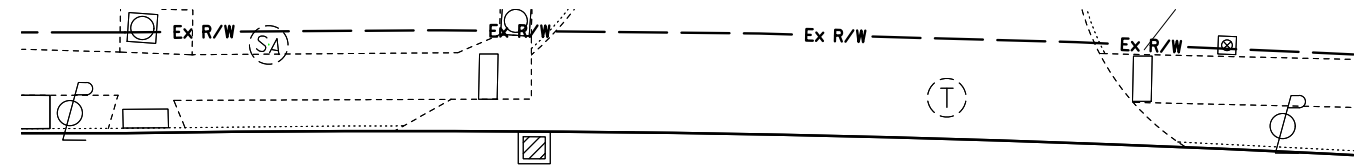
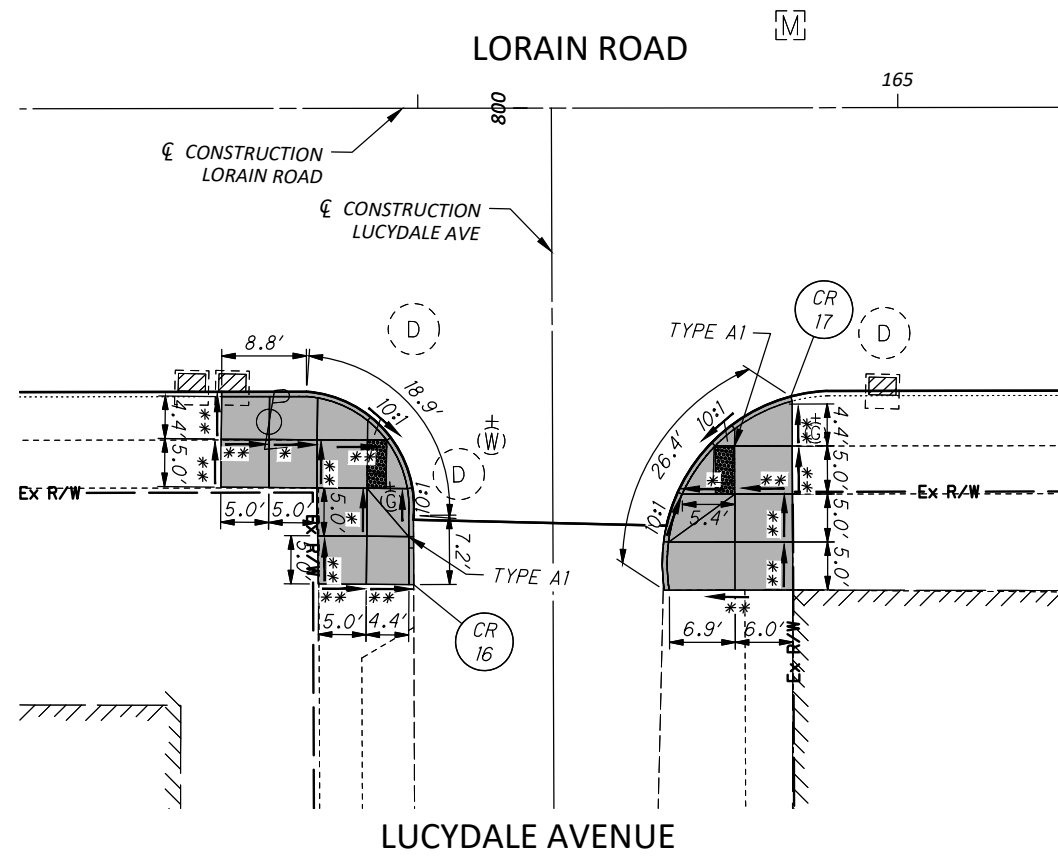
PROJECT ID

107287

SHEET TOTAL

67 79

- ☒ WALK REMOVED
- \* 13:1 MAX.
- \*\* 64:1 MAX.



**CURB RAMP DETAILS**  
**LUCYDALE AVE. & WHITEHORN AVE.**

DESIGN AGENCY

**eve**  
 CHAGRIN VALLEY  
 ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

DESIGNER

SAF

REVIEWER

BAK 03/20/26

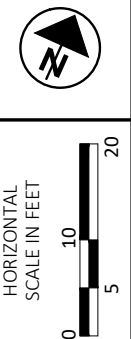
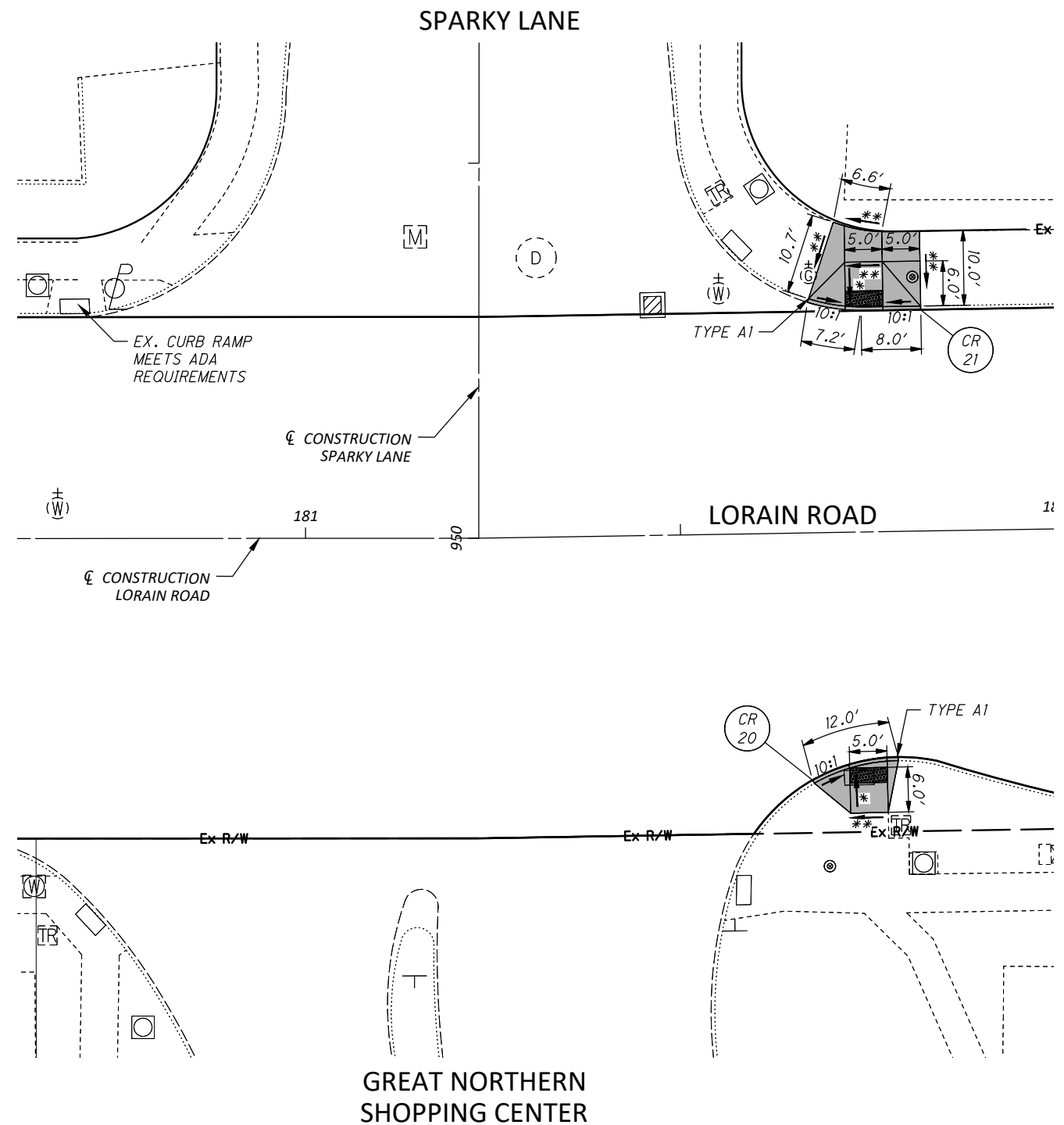
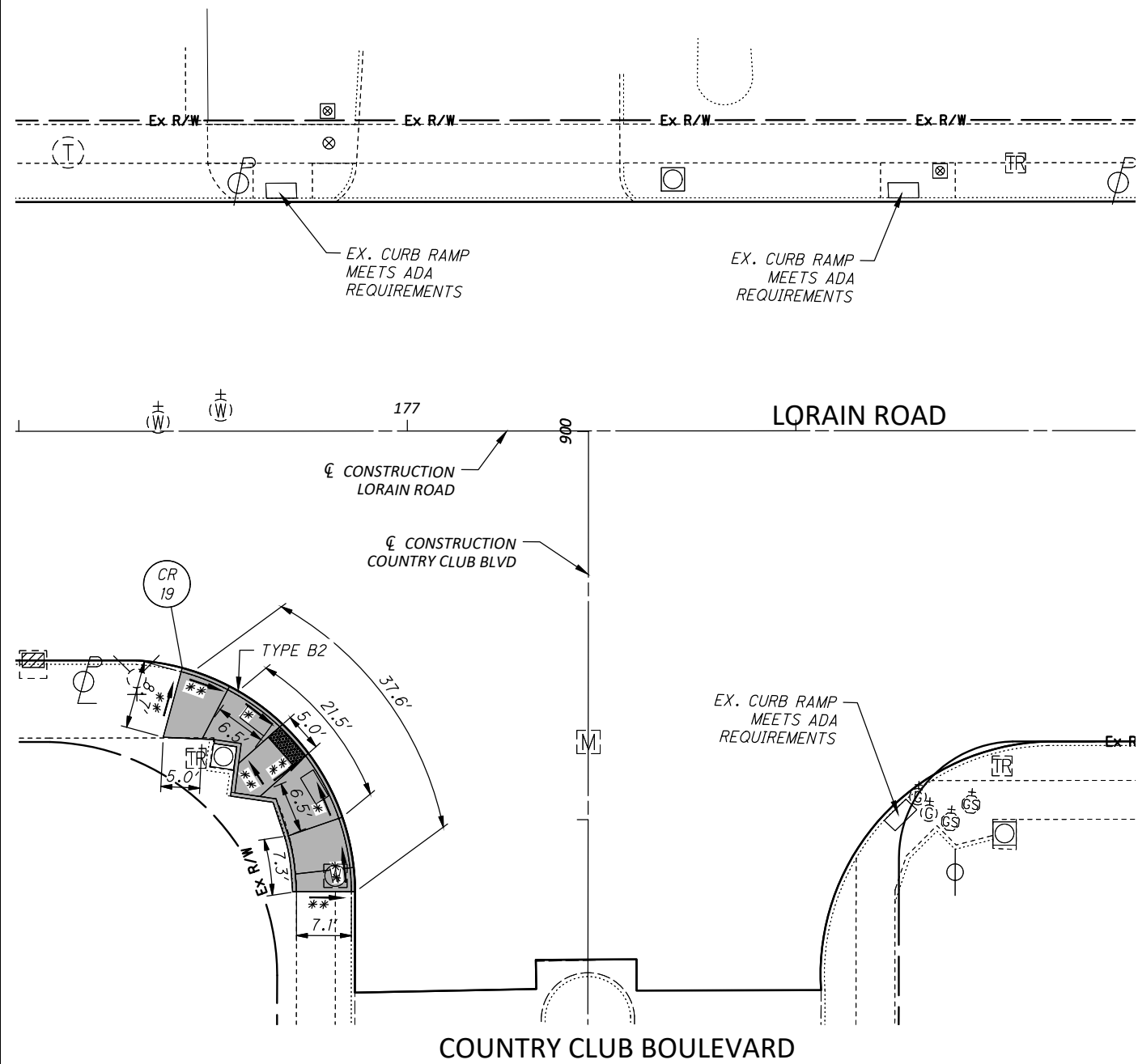
PROJECT ID

107287

SHEET TOTAL

68 79

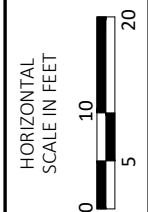
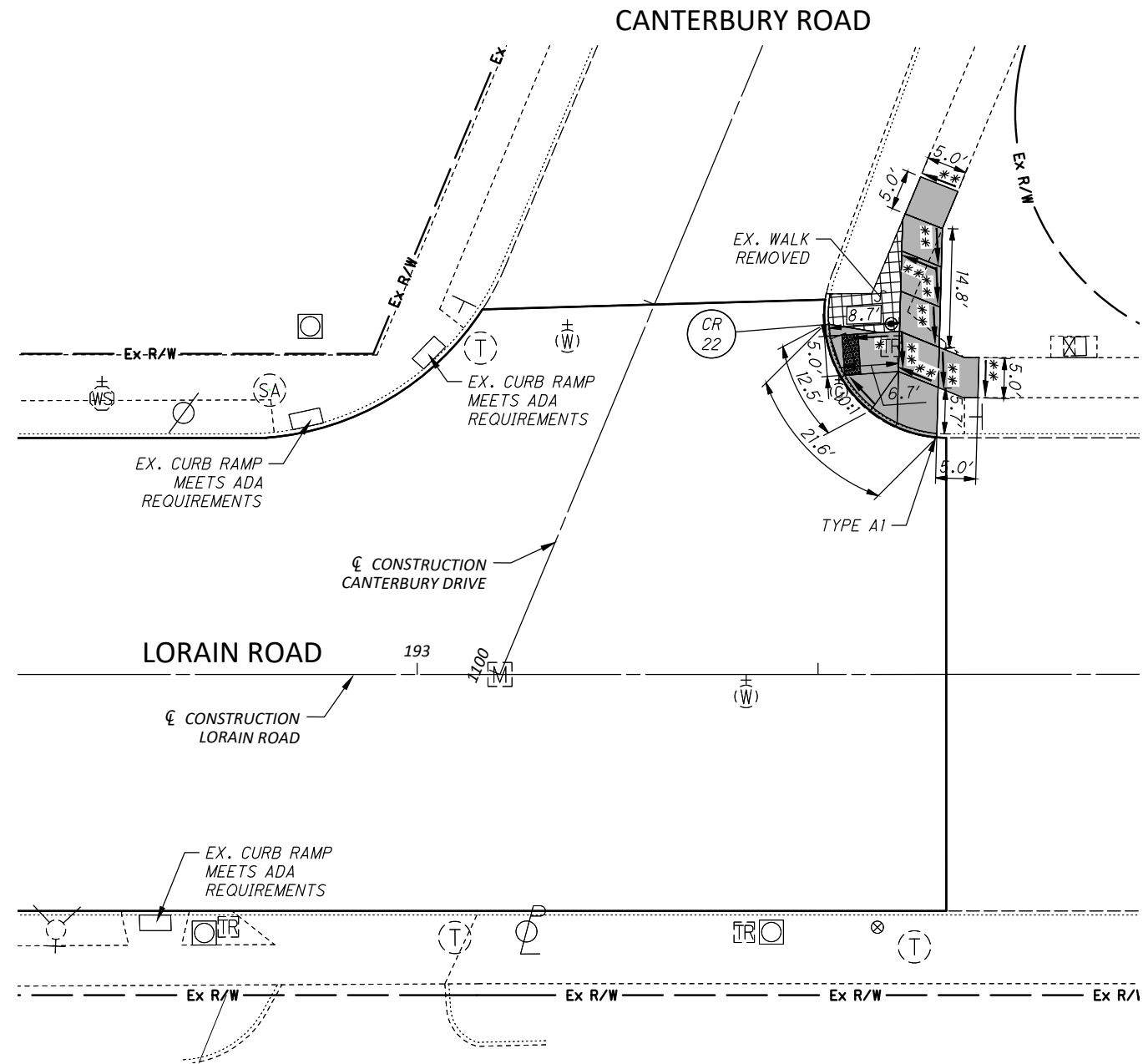
⊠ WALK REMOVED  
 \* 13:1 MAX.  
 \*\* 64:1 MAX.



CURB RAMP DETAILS  
 COUNTRY CLUB BLVD. & SPARKY LANE

DESIGN AGENCY	
CHAGRIN VALLEY ENGINEERING, LTD. 22999 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 439-1999 FAX: (440) 439-1969	
DESIGNER	
SAF	
REVIEWER	
BAK 03/20/26	
PROJECT ID	
107287	
SHEET	TOTAL
69	79

- ☒ WALK REMOVED
- \* 13:1 MAX.
- \*\* 64:1 MAX.



CURB RAMP DETAILS  
CANTERBURY ROAD

DESIGN AGENCY

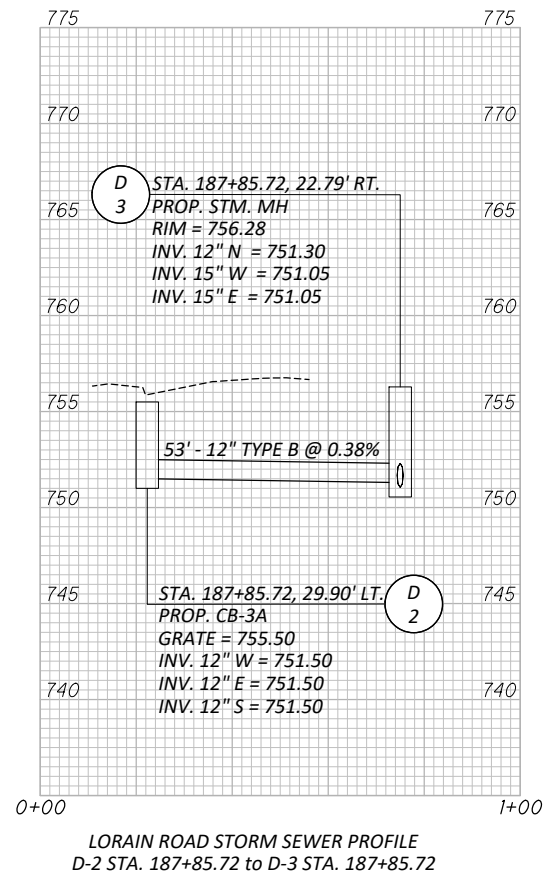
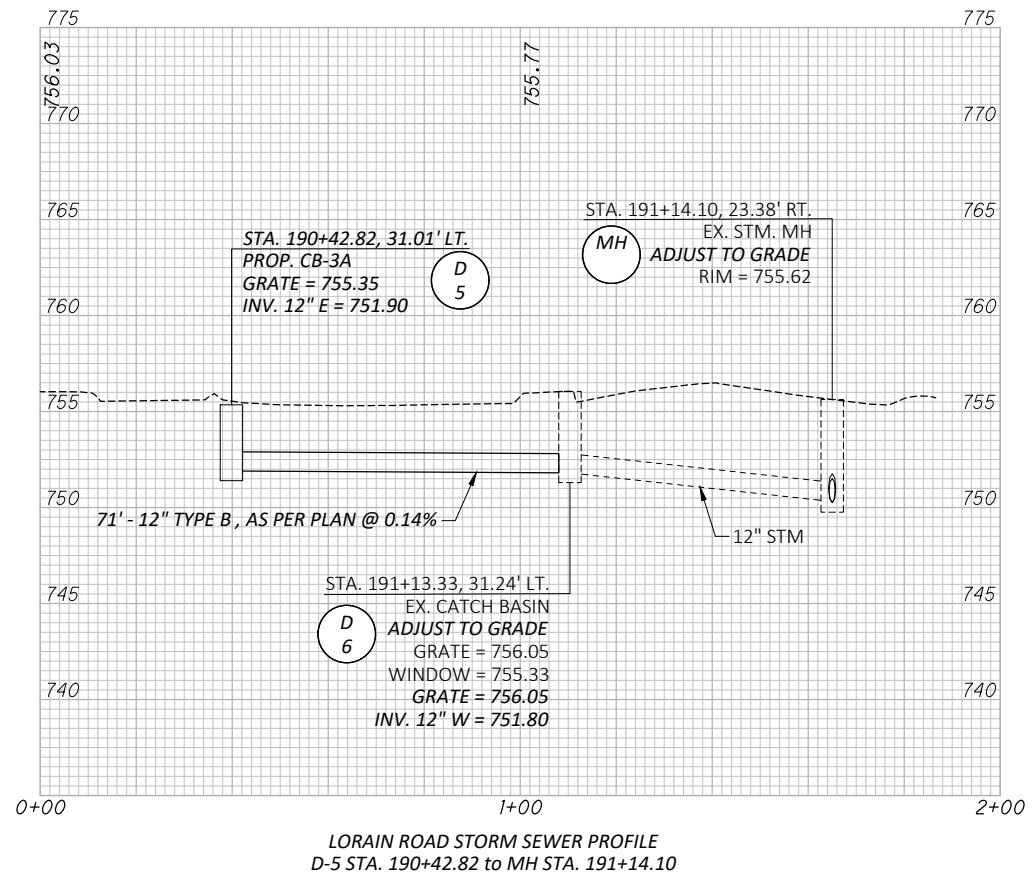
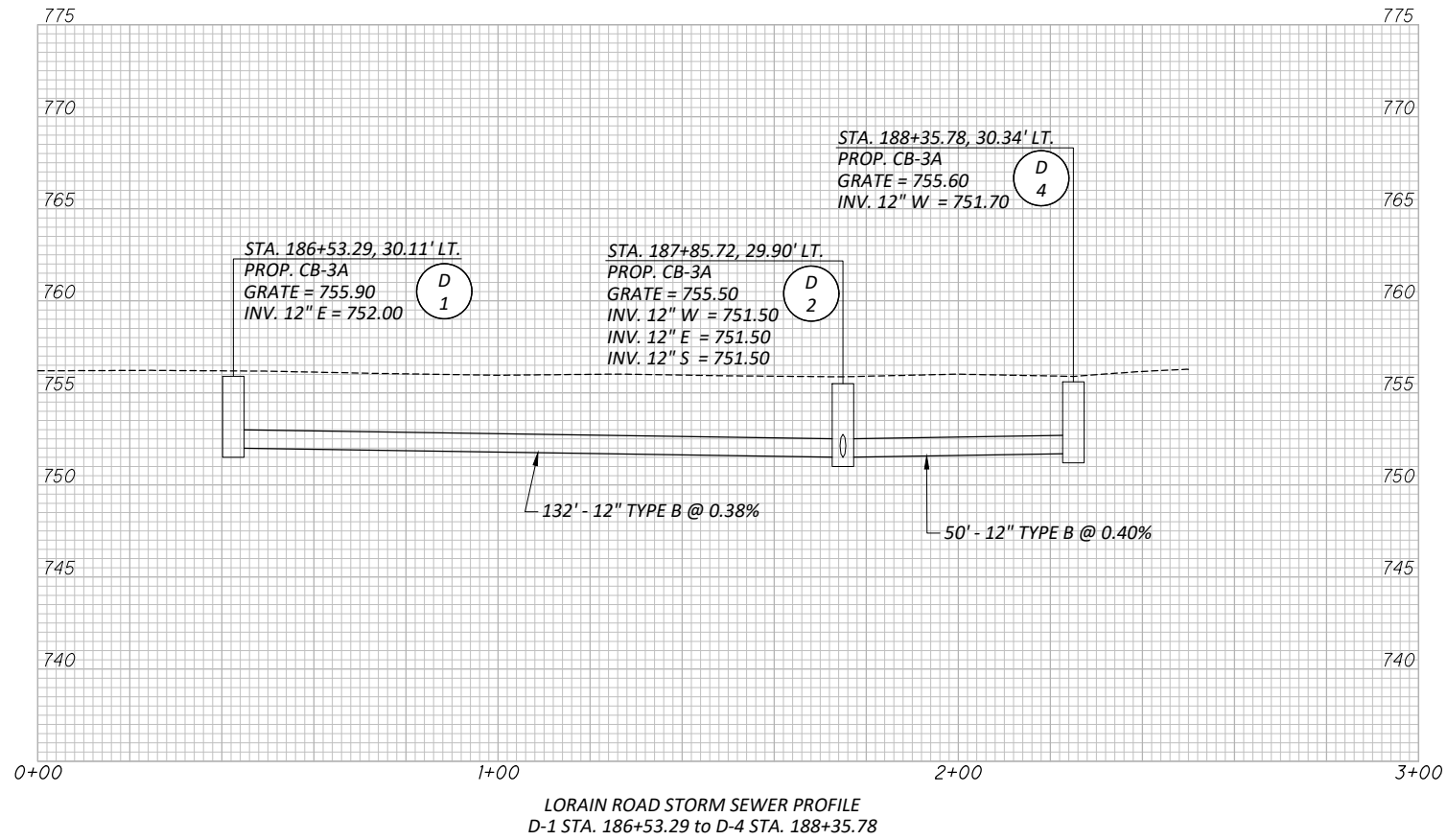
**eve**  
 CHAGRIN VALLEY  
 ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969

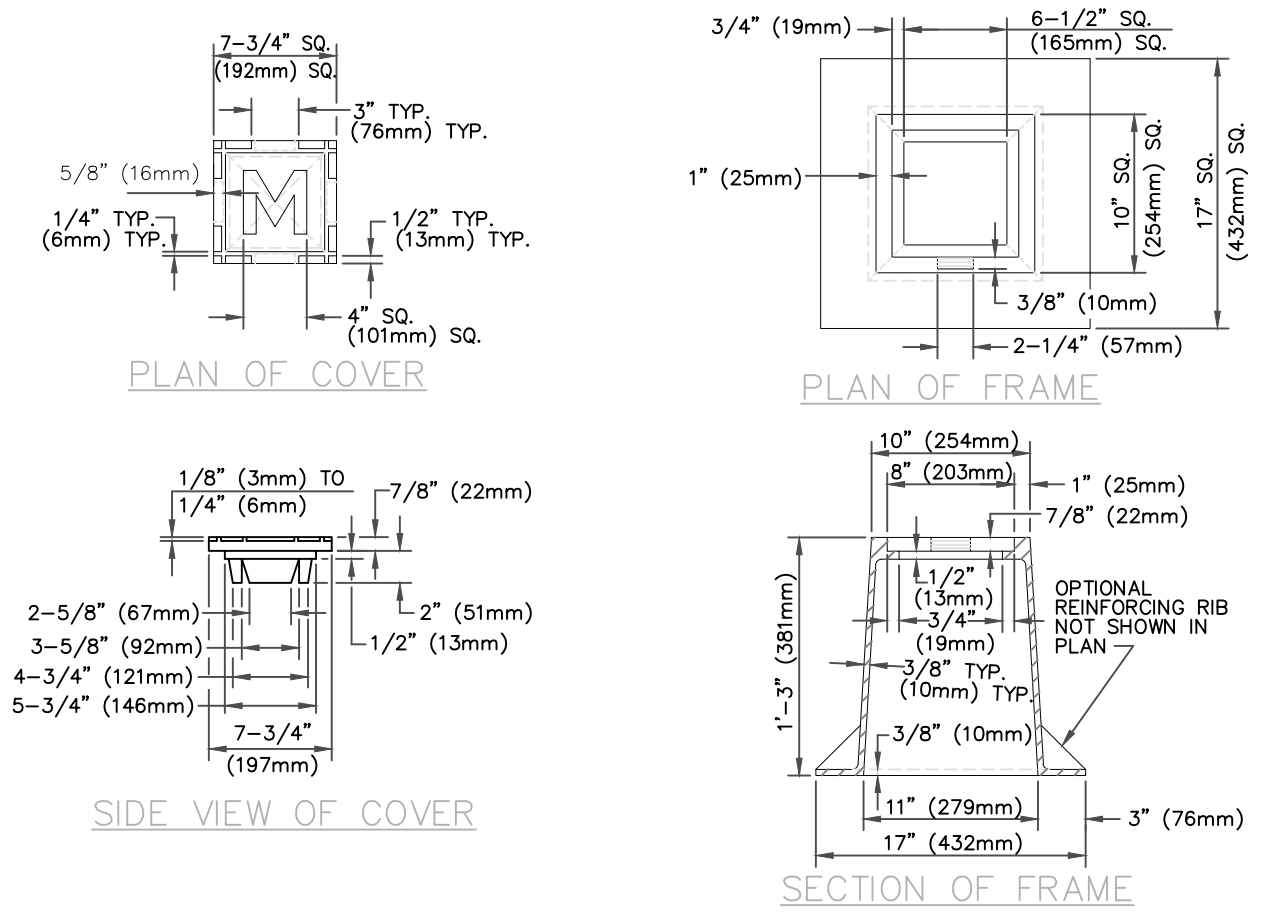
DESIGNER  
 SAF

REVIEWER  
 BAK 03/20/26

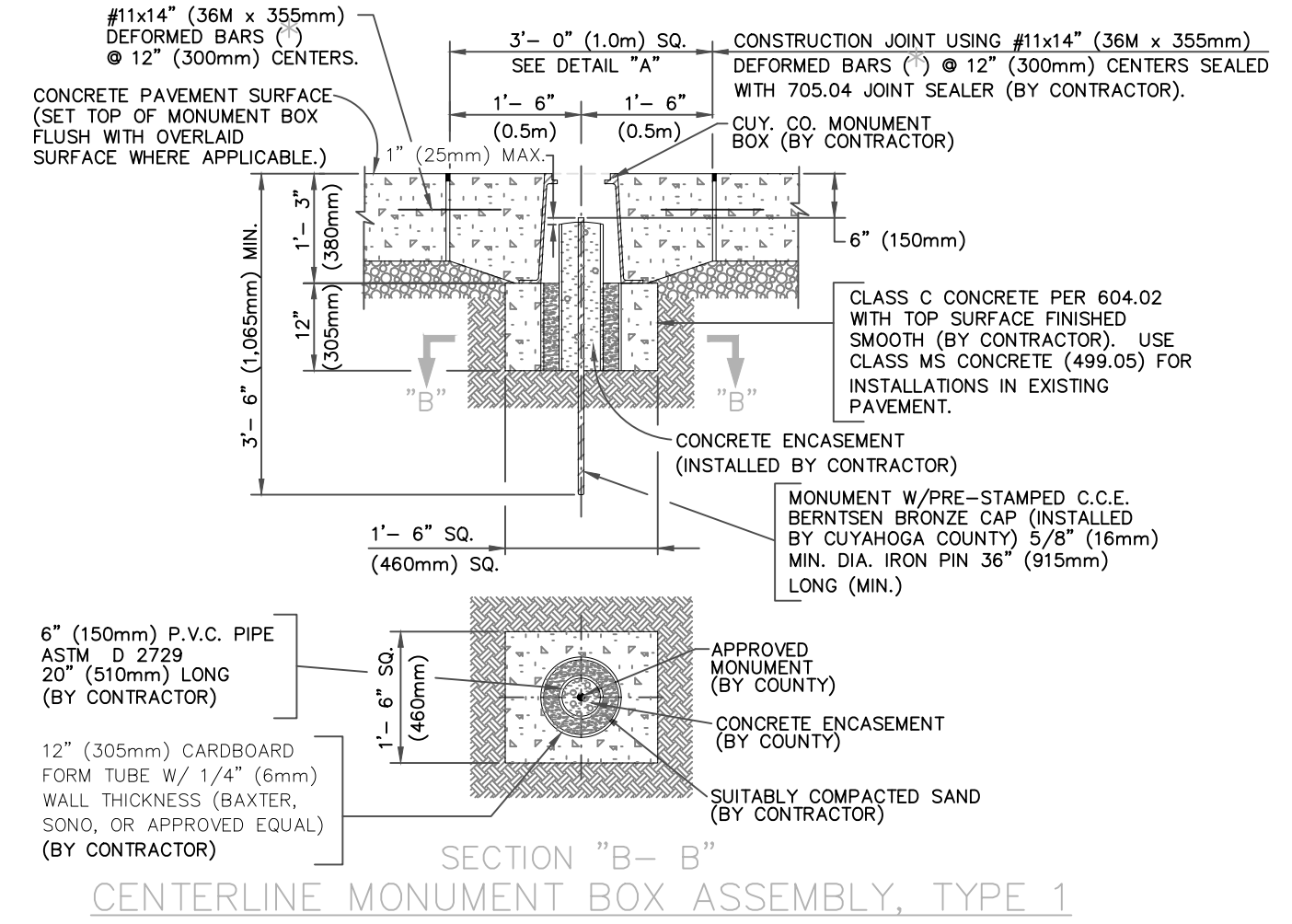
PROJECT ID  
 107287

SHEET	TOTAL
70	79

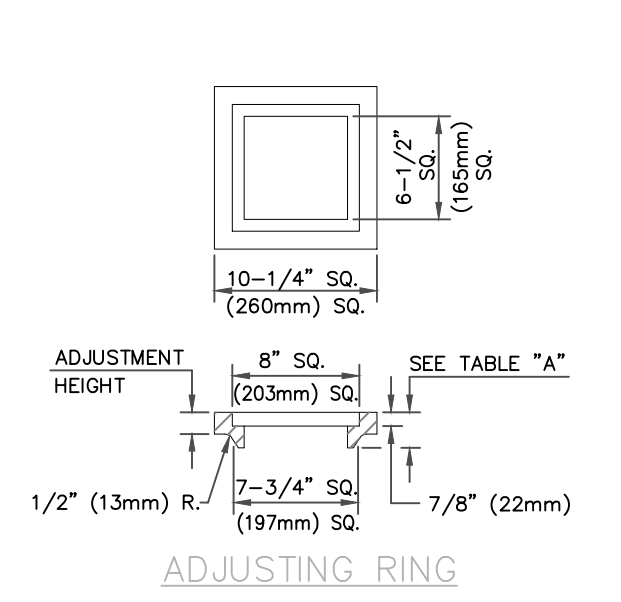




**MONUMENT BOX**

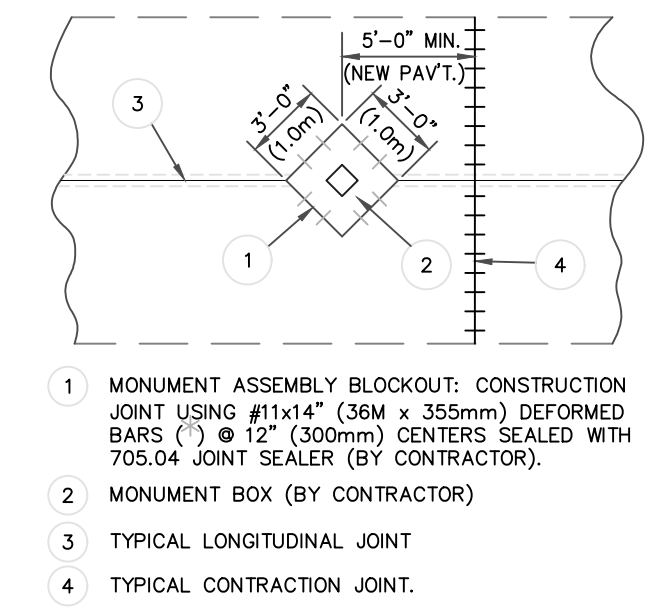


**SECTION "B-B"**  
**CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1**



**NOTE:** ADJUSTING RING IS TO BE TACK WELDED TO THE FRAME BY AT LEAST TWO (2) POINTS OF AN APPROVED METHOD.

ADJUSTMENT HEIGHT	DIMENSION "A"	MINIMUM WEIGHTS
1-1/8" (29mm)	2" (51mm)	14-LBS. (6.4kg)
1-1/2" (38mm)	2-3/8" (60mm)	20-LBS. (9.1kg)
2-1/2" (64mm)	3-3/8" (86mm)	27-LBS. (12.2kg)
3" (76mm)	3-7/8" (98mm)	30-LBS. (13.6kg)
3-1/2" (89mm)	4-3/8" (111mm)	32-LBS. (14.5kg)



**NOTES**

CASTINGS SHALL MINIMALLY MEET THE REQUIREMENTS OF 604.02-711.12, A.S.T.M. A 48, CLASS 35B GRAY IRON.  
 THE ASSEMBLY SHALL BE ESSENTIALLY THE SAME AND EQUALLY AS STRONG AS THOSE SHOWN HEREON.  
 TOTAL MINIMUM WEIGHT = 110 LBS. (50 kg)

PROVIDED THEY COMPLY WITH THE SPECIFICATIONS, DETAILS, DIMENSIONS AND MINIMUM WEIGHT,  
 NEENAH NO.NF-0000T04,  
 EAST JORDAN NO. 8365  
 OR APPROVED EQUAL CASTINGS ARE ACCEPTABLE.

BEARING AREAS SHALL BE FINISHED AS TO PROVIDE A FIRM AND EVEN SEAT. NO PROJECTION SHALL EXIST ON THE BEARING AREAS AND THE COVER SHALL SEAT IN ITS FRAME WITHOUT ROCKING.

PRIOR TO CONSTRUCTION OF PAVEMENT, THE FRAME SHALL BE SET TO GRADE IN SUCH A MANNER THAT WILL PREVENT ANY PAVEMENT MATERIAL FROM ENTERING THE CASTING.

CONTACT CUYAHOGA COUNTY ENGINEER'S SURVEY OFFICE AT (216) 348-3846 AT LEAST TWO (2) WEEKS PRIOR TO THE DISTURBANCE OF ANY EXISTING MONUMENTS.

ALL MONUMENTS ARE TO BE SET UNDER THE DIRECTION OF A REGISTERED SURVEYOR. (REF. O.A.C. 4733-37-03)

WHERE CLEVELAND REGIONAL GEODETIC SURVEY (C.R.G.S.) MONUMENT ASSEMBLIES ARE MARKED ON THE PLANS TO BE REMOVED, THE CONTRACTOR SHALL CAREFULLY REMOVE AND STORE THE MONUMENT CASTINGS AND BRONZE C.R.G.S. MARKERS FOR SALVAGE BY THE COUNTY. THE CONTRACTOR SHALL ALSO NOTIFY THE REGIONAL GEODETIC SURVEY OFFICE AT (216) 348-3846, SO THAT THE MONUMENT CASTINGS AND BRONZE C.R.G.S. MARKERS MAY BE PICKED UP. PAYMENT SHALL BE MADE UNDER ITEM 202-MONUMENT ASSEMBLY REMOVED, C.R.G.S. MONUMENT.

**PAY ITEMS: (SEE PLAN NOTES)**

- ITEM 202- MONUMENT ASSEMBLY REMOVED, C.R.G.S. MONUMENT
- ITEM 604- CUYAHOGA COUNTY MONUMENT BOX
- ITEM 604- CUYAHOGA COUNTY CENTERLINE MONUMENT BOX ASSEMBLY, TYPE 1
- ITEM 604- MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN (ADJUSTING RING MAY BE USED ONLY WHEN EXISTING MONUMENT BOX CONFORMS TO MB-1C AND IS SUITABLE FOR REUSE)

**LEGEND**

- CONCRETE, CLASS "C" (499)
- COMPACTED SAND (703.02) MANUFACTURED FROM STONE
- SUBBASE/AGGREGATE BASE PER THE PLANS.
- UNDISTURBED EARTH OR SUITABLE BACKFILL AND FIRM FOUNDATION IN ACCORDANCE WITH 604.04 AND TO THE SATISFACTION OF THE ENGINEER.

CUYAHOGA COUNTY ENGINEER		DESIGN AGENCY
MONUMENTS, MONUMENT BOX AND TYPE 1 CENTERLINE MONUMENT BOX ASSEMBLY		
DATE	12-02-97	CHAGRIN VALLEY ENGINEERING, LTD.
	12-07-99	22999 FORBES ROAD, UNIT B
	10-29-01	CLEVELAND, OHIO 44146
	08-20-03	PHONE: (440) 439-1999
	08-08-05	FAX: (440) 439-1969
	10-10-08	DESIGNER
CONSTRUCTION DRAWING	MB-1C	REVIEWER
		SAF
		BAK 03/20/26
		PROJECT ID
		107287
		SHEET TOTAL
		72   79

**TRAFFIC SIGNAL NOTES**

**POWER SUPPLY FOR TRAFFIC SIGNALS**

ELECTRICAL POWER SHALL BE OBTAINED FROM FIRST ENERGY AT THE LOCATION INDICATED ON THE PLANS. POWER SUPPLIED SHALL BE 120 VOLTS.

THE CONTRACTOR WILL BE RESPONSIBLE FOR REQUESTING AND SCHEDULING ANY INSPECTIONS THE POWER COMPANY MAY REQUIRE FOR THE POWER SERVICE HOOK UP. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE POWER COMPANY FOR THE ELECTRICAL SERVICE CONNECTION. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR SPLICE POWER CABLE INTO THE POWER COMPANY'S CIRCUITS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS AND THE PAYING OF ALL FEES. THE CONTRACTOR SHALL PAY ALL POWER CHARGES UNTIL THE SIGNALS ARE ACCEPTED BY THE MAINTAINING AGENCY.

**SIGNAL ACTIVATION**

PRIOR TO ACTIVATING THE NEW TRAFFIC SIGNAL TO STOP-AND-GO MODE AND/OR REMOVING THE EXISTING TRAFFIC SIGNAL FROM SERVICE, ALL ITEMS IN THE PROPOSED SIGNAL PLAN SHALL BE FULLY COMPLETED, (I.E., VEHICLE DETECTION, PEDESTRIAN SIGNAL HEADS, ETC). IF THERE ARE CONSTRUCTABILITY ISSUES (I.E., ROADWAY WIDENING, ETC.) THAT PREVENT THE SIGNAL FROM BEING COMPLETED PRIOR TO ACTIVATION, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. THE ENGINEER WILL THEN REVIEW, APPROVE OR REJECT PROPOSALS TO ACTIVATE THE TRAFFIC SIGNAL PRIOR TO COMPLETION.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 10 WORKING DAYS PRIOR TO SCHEDULING THE FINAL INSPECTION OF THE SIGNAL INSTALLATION. FINAL INSPECTION IS NOT CONSIDERED COMPLETE UNTIL DESIGNATED DISTRICT TRAFFIC PERSONNEL INSPECT THE TRAFFIC SIGNAL AND ISSUE WRITTEN APPROVAL. IF ISSUES ARE FOUND DURING THE FINAL INSPECTION THAT EFFECT THE SAFETY OF THE TRAVELING PUBLIC AND/OR THE EFFICIENCY OF THE INTERSECTION, THE SIGNAL SHALL NOT BE ACTIVATED ON THE PROPOSED DATE. ANY PUNCH LIST ITEMS THAT ARE FOUND SHALL BE CORRECTED AND REINSPECTED BY DISTRICT TRAFFIC PERSONNEL PRIOR TO FINAL ACCEPTANCE. THE CITY OF NORTH OLMDSTED SHALL ONLY ASSUME DAY TO DAY MAINTENANCE OF THE TRAFFIC SIGNAL AFTER FINAL WRITTEN ACCEPTANCE HAS BEEN ISSUED.

**ITEM 630 - SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN**

FLAT SHEET SIGNS SHALL BE RIGIDLY ATTACHED TO TRAFFIC SIGNAL MAST ARMS WITH THE SIGN CENTERED VERTICALLY WITH THE ARM, USING THE SIGN BRACKET DETAIL ON STANDARD CONSTRUCTION DRAWING TC-16.22, OR ANOTHER METHOD OF RIGID ATTACHMENT AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ENSURE THAT THE SIGN FACE IS MOUNTED PERPENDICULAR (90 DEGREES) TO THE DIRECTION OF TRAFFIC.

PAYMENT FOR "ITEM 630 - SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN" SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH. PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND ALL PARTS NECESSARY TO ATTACH ONE SIGN.

**TRENCHING UNDER EXISTING PAVED SURFACES**

WHERE CONDUIT FOR NEW TRAFFIC SIGNALS OR TRAFFIC SIGNAL INTERCONNECTION IS TO BE INSTALLED IN TRENCHES UNDER EXISTING SIDEWALK, DRIVE APRONS OR CURB RAMPS, THE EXISTING SIDEWALK AND/OR CURB RAMPS SHALL BE REMOVED UNDER ITEM 202 - WALK REMOVED, AND NEW SIDEWALK, DRIVE APRONS AND CURB RAMPS SHALL BE INSTALLED UNDER THE APPROPRIATE PAVING ITEMS. SIDEWALK SHALL BE REMOVED AND INSTALLED IN WHOLE SLABS. PAYMENT FOR THE TRENCHING NECESSARY TO INSTALL THE CONDUIT WILL BE PAID UNDER ITEM 625 - TRENCH, RATHER THAN ITEM 625 - TRENCH IN PAVED AREA, TYPE A. THE COST OF REMOVAL AND RESTORATION OF THE PAVEMENT WILL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE REMOVAL AND PAVING ITEMS. NO ADDITIONAL COMPENSATION SHALL BE MADE TO THE CONTRACTOR UNDER ITEM 625 TO PERFORM THIS WORK.

**UNDERDRAINS FOR PULL BOXES**

UNDERDRAINS FOR PULL BOXES SHALL BE USED AS DIRECTED BY THE ENGINEER AND SHALL BE PROVIDED WHEN THE LENGTH REQUIRED FOR A SATISFACTORY OUTLET DOES NOT EXCEED APPROXIMATELY 40 FEET. THE COST OF UNDERDRAINS FOR PULL BOXES SHALL BE CONSIDERED INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE PER EACH "ITEM 625 - PULL BOX, 725.08, 18" AND ITEM 625 - PULL BOX, 725.08, 24"."

**WORK INSPECTION**

THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH 72 HOURS NOTICE OF ANY SIGNAL WORK TO BE PERFORMED AT THE INTERSECTION SITE(S) SO THAT INSPECTION SERVICES CAN BE SUPPLIED.

**ITEM 625 - UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN**

THE LOCATION OF CONDUIT IN TRENCH SHALL BE MARKED BY THE USE OF A CONTINUOUS IDENTIFYING TAPE BURIED IN THAT TRENCH ABOVE THE CONDUIT LINE. IN ADDITION TO THE REQUIREMENTS OF 625.20 AND 725.22, THE TAPE SHALL BE RED WITH THE WORDS "ELECTRIC" PRINTED IN BLACK LETTERS ON ONE SIDE ONLY.

THE CONTRACTOR SHALL BURY THE TAPE IN THE TRENCH WITH ONE STRIP PLACED APPROXIMATELY DOWN THE CENTER LINE AND 6" TO 10" BELOW THE FINAL GRADE. THE TAPE SHALL BE "TERRA TAPE", "ALLEN SYSTEM'S", OR AN EQUAL AS APPROVED BY THE ENGINEER IN ADVANCE.

PAYMENT FOR "ITEM 625 - UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN" WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER FOOT, COMPLETE AND IN PLACE.

**ITEM 632 - SIGNAL SUPPORT, TYPE TC-81.22, AS PER PLAN**

SIGNAL POLES AND MAST ARMS SHALL COMPLY WITH 732.11, EXCEPT THAT THE POLES SHALL BE SINGLE SECTION TRUE CONTINUOUS TAPERED TUBES, AND MAST ARMS SHALL BE ONE OR TWO SECTION TRUE CONTINUOUS TAPERED TUBES, AS SHOWN ON STANDARD CONSTRUCTION DRAWING TC-81.22. THE USE OF STRAIGHT SECTIONS WITH A TAPER EFFECT ACCOMPLISHED BY THE USE OF REDUCERS WILL NOT BE PERMITTED.

PEDESTRIAN SIGNAL HEAD BRACKET ARMS SHALL BE ATTACHED TO THE POLES BY UTILIZING ONE AND ONE HALF INCH (1-1/2") BLIND HALF COUPLINGS WELDED INTO THE POLE PRIOR TO GALVANIZING. FIELD INSTALLATION OF WIRING HOLES FOR PEDESTRIAN SIGNALS WILL NOT BE PERMITTED.

POLES SHALL NOT BE ORDERED UNTIL FOUNDATION TEST HOLES HAVE BEEN COMPLETED AND PROPOSED FOUNDATION LOCATIONS HAVE BEEN CONFIRMED TO BE CLEAR OF ALL UNDERGROUND CONFLICTS.

PAYMENT FOR "ITEM 632 - SIGNAL SUPPORT, TYPE TC-81.22, AS PER PLAN" SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH.

**ITEM 632 - SIGNALIZATION, MISC.: FOUNDATION TEST HOLE**

FOUNDATION TEST HOLES SHALL BE EXCAVATED PRIOR TO THE IMPLEMENTATION OF PHASE 1 TO DETERMINE A VIABLE LOCATION FOR THE PROPOSED SIGNAL POLES. THE TEST HOLES SHALL BE BACKFILLED TO THE BOTTOM OF EXISTING BASE PAVEMENT AND CAPPED WITH CONCRETE TO THE EXISTING ROADWAY SURFACE. IF UNDERGROUND OBSTRUCTIONS ARE ENCOUNTERED THAT PRECLUDE THE USE OF THE STANDARD OR ALTERNATE FOUNDATION DESIGNS, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH COMPLETE INFORMATION REGARDING THE OBSTRUCTION, INCLUDING TYPE (I.E. UTILITY), SIZE, DEPTH, AND LATERAL CLEARANCES TO THE SIDES OF THE FOUNDATION EXCAVATION.

THE CONTRACTOR SHALL BE COMPENSATED FOR EACH FOUNDATION HOLE THAT MUST BE ABANDONED. PAYMENT FOR ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, AND OTHER INCIDENTALS, INCLUDING 703.11 STRUCTURAL BACKFILL TYPE 1, COMPACTING, AND SURFACE RESTORATION, SHALL BE AT THE CONTRACT UNIT PRICE BID FOR EACH "ITEM 632 - SIGNALIZATION, MISC.: FOUNDATION TEST HOLE" FOR THE NUMBER EXCAVATED AND BACKFILLED.

**ITEM 632 - PEDESTRIAN PUSHBUTTON, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF 632 AND 732.06, PROVIDE PEDESTRIAN PUSHBUTTONS WITH THE FOLLOWING FEATURES:

FURNISH PUSHBUTTONS THAT ARE RATED AS WATERPROOF AND WHICH INCORPORATE A SOLID NEOPRENE RUBBER GASKET TO SEAL ITSELF AGAINST MOISTURE.

FURNISH PUSHBUTTONS THAT ARE PRESSURE ACTIVATED AND WHICH INCORPORATE A PIEZO DRIVEN SOLID STATE SWITCH, TWO TONE ACTIVATION BEEP AND LED INDICATOR THAT MOMENTARILY FLASHES. PUSHBUTTONS SHALL BE TACTILE, RAISED ARROW TYPE.

SEAL THE PUSHBUTTON HOUSING TO THE SIGNAL SUPPORT, PEDESTAL, OR POLE WITH CLEAR SILICONE.

PUSHBUTTONS SHALL BE FEDERAL YELLOW IN COLOR.

ALL LABOR, EQUIPMENT, MATERIALS, TOOLS, AND INCIDENTALS SHALL BE INCLUDED IN THE CONTRACT BID PRICE PER EACH "ITEM 632 - PEDESTRIAN PUSHBUTTON, AS PER PLAN" WIRED, TESTED, AND ACCEPTED.

**GUARANTEE**

THE CONTRACTOR SHALL GUARANTEE THAT THE TRAFFIC CONTROL SYSTEM INSTALLED AS PART OF THIS CONTRACT SHALL OPERATE SATISFACTORILY FOR A PERIOD OF 180 DAYS FOLLOWING COMPLETION OF THE 10-DAY PERFORMANCE TEST. IN THE EVENT OF UNSATISFACTORY OPERATION, THE CONTRACTOR SHALL CORRECT FAULTY INSTALLATIONS, MAKE REPAIRS AND REPLACE DEFECTIVE PARTS WITH NEW PARTS OF EQUAL OR BETTER QUALITY.

EQUIPMENT, MATERIAL AND LABOR COSTS INCURRED IN CORRECTING AN UNSATISFACTORY OPERATION SHALL BE BORNE BY THE CONTRACTOR.

THE GUARANTEE SHALL COVER THE FOLLOWING ITEMS OF THE TRAFFIC CONTROL SYSTEM:

- CONTROLLERS AND ASSOCIATED EQUIPMENT
- DETECTOR UNITS
- INTERCONNECTION ITEMS, LED LAMP UNITS, AND
- ALL NEWLY INSTALLED EQUIPMENT

CUSTOMARY MANUFACTURER'S GUARANTEES FOR THE FOREGOING ITEMS AND ALL OTHER TRAFFIC CONTROL ITEMS SHALL BE TURNED OVER TO THE MAINTAINING AGENCY FOLLOWING ACCEPTANCE OF THE EQUIPMENT.

THE COST OF GUARANTEEING THE TRAFFIC CONTROL SYSTEM WILL BE INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE OF THE VARIOUS ITEMS MAKING UP THE SYSTEM.

**ITEM 625 - GROUND ROD, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF 625.16, A SEVEN (7) STRAND, NO. 4 AWG COPPER WIRE SHALL BE FURNISHED AND INSTALLED FROM THE TOP OF THE GROUND ROD AND ATTACHED TO THE NEUTRAL BAR IN THE CONTROLLER CABINET.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH.

**ITEM 633 - UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF C&MS 633 AND 733, AN ETHERNET ENABLED, DOUBLE CONVERSION POWER CONDITIONER WITH TRANSFER SWITCH SHALL BE FURNISHED AND INSTALLED.

THE UPS CABINET SHALL INCLUDE A GENERATOR POWER PANEL WITH A HEAVY-DUTY POWER RELAY VERSUS THE LINE VOLTAGE GENERATOR SWITCH. THE GENERATOR INLET SHALL BE A RECESSED PANEL WITH A DOOR THAT IS FLUSH WITH THE EXTERNAL SIDE OF THE UPS CABINET. IT SHALL INCLUDE A RECESSED PLUG, AUTOMATIC TRANSFER SWITCH AND A DOOR THAT SECURELY CLOSES OVER THE POWER CORD.

THE UPS OUTPUT NOTIFICATIONS FOR ON BATTERY, BATTERY 2-HOUR TIMER, AND LOW BATTERY SHALL BE WIRED INTO THE TRAFFIC SIGNAL CABINET BACK PANEL TO PROVIDE SPECIAL STATUS ALARMS FOR EACH OUTPUT INTO THE SIGNAL CONTROLLER.

THIS ITEM SHALL INCLUDE A RED LED STATUS INDICATOR LAMP TO ALLOW MAINTENANCE PERSONNEL AND LAW ENFORCEMENT TO QUICKLY ASSESS WHETHER A TRAFFIC SIGNAL CABINET IS BEING POWERED BY A UPS. THE LED HOUSING SHALL BE NEMA 4X, IP65 OR IP66, RATED FOR OUTDOOR USE AND BE TAMPER/ SHATTER RESISTANT. IT SHALL BE A DOMED ENCLOSURE CONTAINING A RED LENS WITH LED THAT IS VISIBLE FROM 100 FOOT MINIMUM. THE ENCLOSURE AND LED MODULE SHOULD BE PLACED AND CENTERED ON THE TOP SURFACE OF THE UPS CABINET AND SEALED FROM WATER INTRUSION. IT SHOULD BE WIRED USING MINIMUM 20GA STRANDED, INSULATED HOOKUP WIRE TO THE STATUS RELAY OUTPUTS OF THE UPS. THE WIRES SHALL BE TERMINATED BY LUGS AT THE DISPLAY END AND PERMANENTLY LABELED "BACKUP POWER STATUS DISPLAY," WITH WIRE POLARITY INDICATED.

THE RED LED SHALL ONLY ILLUMINATE TO INDICATE THE CABINET IS OPERATING UNDER UPS BACKUP POWER (THE "BACKUP" OPERATING CONDITION). THIS ITEM INCLUDES PROGRAMMING THE UPS STATUS RELAY OUTPUTS TO PRODUCE THE LAMP STATUS DISPLAYS. THESE STATUS DISPLAYS WILL BE SOLID 100% DUTY CYCLE (NOT FLASHING) DISPLAYS. THE OPERATING VOLTAGE OF THE LED LAMP SHALL BE 120V AC UNLESS OTHERWISE INDICATED.

ALL LABOR, EQUIPMENT, MATERIALS, TOOLS, AND INCIDENTALS SHALL BE INCLUDED IN THE CONTRACT BID PRICE PER EACH ITEM 633 - UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN WIRED, TESTED, AND ACCEPTED.

CUY-10-01-97

MODEL: CNO01 DATE: 3/20/2026 TIME: 4:08:41 PM USER: Sarah Flis P:\24288 Lora\in Road Resurfacing\107287\400-Engineering\Signals\Sheets\107287\_CNO01.dwg

TRAFFIC SIGNAL NOTES

DESIGN AGENCY  
**CVE**  
CHAGRIN VALLEY ENGINEERING, LTD.  
22999 FORBES ROAD, UNIT B  
CLEVELAND, OHIO 44146  
PHONE: (440) 439-1999  
FAX: (440) 439-1969  
DESIGNER  
CID  
REVIEWER  
BAK 03/20/26  
PROJECT ID  
107287  
SHEET TOTAL  
73 | 79

**TRAFFIC SIGNAL NOTES (CONTINUED)**

**GROUNDING AND BONDING**

THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) AND THE TC SERIES OF STANDARD CONSTRUCTION DRAWINGS ARE MODIFIED AS FOLLOWS:

- A. ALL METALLIC PARTS CONTAINING ELECTRICAL CONDUCTORS SHALL BE PERMANENTLY JOINED TO FORM AN EFFECTIVE GROUND FAULT CURRENT PATH BACK TO THE GROUNDED CONDUCTOR IN THE POWER SERVICE DISCONNECT SWITCH. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN METALLIC CONDUITS (725.04) IN ADDITION TO THE CONDUCTORS SPECIFIED AND BOND THE CONDUIT TO THIS GROUNDING CONDUCTOR.
  - B. WHEN AN EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED IN PLASTIC CONDUIT (725.05), THE INSTALLATION SHALL INCLUDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN ADDITION TO THE CONDUCTORS SPECIFIED.
  - C. METALLIC CONDUIT CARRYING THE LOOP WIRES FROM IN THE PAVEMENT TO THE PULL BOX SPLICE LOCATION WILL ONLY BE BONDED AT THE PULL BOX END, AND WILL NOT CONTAIN AN EQUIPMENT GROUNDING CONDUCTOR.
  - D. IF MULTIPLE CONDUIT RUNS BEGIN AND END AT THE SAME POINTS, ONLY ONE EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED.
  - E. IF AN EQUIPMENT GROUNDING CONDUCTOR IS NEEDED IN CONDUIT BETWEEN SIGNALIZED INTERSECTIONS FOR UNDERGROUND INTERCONNECT CABLE, THE GROUNDING SYSTEM FOR EACH SIGNALIZED INTERSECTION WILL BE SEPARATED ABOUT MIDWAY BETWEEN THE INTERSECTIONS.
  - F. THE MESSENGER WIRE AT SIGNALIZED INTERSECTIONS WILL BE USED AS THE CONDUCTIVE PATH FROM CORNER TO CORNER IF CONDUIT IS NOT PROVIDED UNDER THE ROADWAY. WHEN CONDUIT CONNECTS THE CORNERS OF AN INTERSECTION, AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE USED IN THE CONDUIT.
2. CONDUITS.
- A. THE 725.04 CONDUIT SHALL HAVE GROUNDING BUSHINGS INSTALLED AT ALL TERMINATION POINTS. THE BUSHING MATERIAL SHALL BE COMPATIBLE WITH GALVANIZED STEEL CONDUIT AND THE GROUNDING LUG MATERIAL SHALL BE COMPATIBLE FOR USE WITH COPPER WIRE. THREADED OR COMPRESSION TYPE BUSHINGS MAY BE USED.
  - B. THE 725.05 CONDUIT SHALL HAVE THE INSIDE AND OUTSIDE DIAMETERS OF THE CONDUIT DEBURRED AT ALL TERMINATION POINTS.
  - C. BOTH ENDS OF METALLIC CONDUIT SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.
  - D. METALLIC CONDUIT MAY BE BONDED TO METALLIC BOXES THROUGH THE USE OF CONDUIT FITTINGS UL APPROVED FOR THIS TYPE OF CONNECTION, WITH THE BOX BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.
3. WIRE FOR GROUNDING AND BONDING.
- A. USE INSULATED, COPPER WIRE FOR THE EQUIPMENT GROUNDING CONDUCTOR. BONDING JUMPERS IN BOXES AND ENCLOSURES MAY BE BARE OR INSULATED COPPER WIRE. WIRE SIZE SHALL BE AS FOLLOWS:
    - I. USE 4 AWG BETWEEN THE POWER SERVICE AND SUPPORTS, POLES, PEDESTALS, CONTROLLER OR FLASHER CABINETS.
    - II. USE A MINIMUM 8 AWG BETWEEN LOOP DETECTOR PULL BOXES AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.a.i ABOVE.
    - III. USE A MINIMUM 8 AWG BETWEEN THE "PREPARE TO STOP WHEN FLASHING" INSTALLATION (INCLUDING SUPPORT) AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.a.i ABOVE.
    - IV. THE INSULATION SHALL BE GREEN OR GREEN WITH YELLOW STRIPE(S). FOR 4 AWG OR LARGER, INSULATION MAY ALSO BE BLACK WITH GREEN TAPE/LABELS INSTALLED AT ALL ACCESS POINTS.
  - B. IN A HIGHWAY LIGHTING SYSTEM, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE THE SAME WIRE SIZE AS THE DUCT CABLE OR DISTRIBUTION CABLE CIRCUIT CONDUCTORS, WITH THE MINIMUM CONDUCTOR SIZE OF 4 AWG. BONDING JUMPERS WILL BE MINIMUM SIZE 4 AWG.

**GROUNDING AND BONDING (CONTINUED)**

4. GROUND ROD.
- A. A 3/4-INCH SCHEDULE 40 PVC CONDUIT WILL BE USED IN FOUNDATIONS AND CONCRETE WALLS FOR THE GROUNDING CONDUCTOR (GROUND WIRE) RACEWAY TO THE GROUND ROD. SHOULD METALLIC CONDUIT BE USED, BOTH ENDS OF THE CONDUIT SHALL BE BONDED TO THE GROUNDING CONDUCTOR.
  - B. THE TYPICAL GROUNDING CONDUCTOR (GROUND WIRE) SHALL BE 4 AWG INSULATED, COPPER.
5. THE GREEN CONDUCTOR IN SIGNAL CABLES (CONDUCTOR #4) SHALL NOT BE USED TO SUPPLY POWER TO A SIGNAL INDICATION. IT WILL BE CONNECTED TO THE SIGNAL BODY AS AN EQUIPMENT GROUND IN ALUMINUM HEADS AND IT WILL BE UNUSED IN PLASTIC HEADS. UNUSED CONDUCTORS SHALL BE GROUNDED IN THE CABINET. TYPICAL USE OF CONDUCTORS IS AS FOLLOWS:
- | COND. NO. | COLOR              | VEHICLE SIGNAL   | PEDESTRIAN SIGNAL |
|-----------|--------------------|------------------|-------------------|
| 1         | BLACK              | GREEN BALL       | #1 WALK           |
| 2         | WHITE              | AC NEUTRAL       | AC NEUTRAL        |
| 3         | RED                | RED BALL         | #1 DW/FDW         |
| 4         | GREEN              | EQUIPMENT GROUND | EQUIPMENT GROUND  |
| 5         | ORANGE             | YELLOW BALL      | #2 DW/FDW         |
| 6         | BLUE               | GREEN ARROW      | #2 WALK           |
| 7         | WHITE/BLACK STRIPE | YELLOW ARROW     | NOT USED          |
6. POWER SERVICE AND DISCONNECT SWITCH.
- A. AT THE POWER SERVICE LOCATION, THE GROUNDING CONDUCTOR (GROUND WIRE) FROM THE DISCONNECT SWITCH NEUTRAL (AC-) BAR TO THE GROUND ROD SHALL BE A CONTINUOUS, UNSPLICED CONDUCTOR. IF SPLICED, IT SHALL BE AN EXOTHERMIC WELD BUTT SPLICE.
  - B. THE SERVICE NEUTRAL (AC-) SHALL ONLY BE CONNECTED TO GROUND AT THE PRIMARY POWER SERVICE DISCONNECT SWITCH.
    - I. NEMA CONTROLLER CABINETS: IF A POWER SERVICE DISCONNECT SWITCH IS LOCATED BEFORE THE CONTROLLER CABINET, THE NEUTRAL (AC-) AND THE GROUNDING BARS IN THE CONTROLLER CABINET SHALL NOT BE CONNECTED TOGETHER AS SHOWN IN NEMA TS-2, FIGURE 5-4.
    - II. IF SECONDARY DISCONNECT SWITCHES ARE CONNECTED AFTER THE PRIMARY DISCONNECT SWITCH, THE NEUTRAL (AC-) SHALL ONLY BE GROUNDED AT THE PRIMARY SWITCH. EQUIPMENT GROUNDING CONDUCTORS SHALL BE BROUGHT TO THE PRIMARY SWITCH, BUT SHALL BE GROUNDED AT BOTH SECONDARY AND PRIMARY SWITCHES.
7. PAYMENT - ALL MATERIALS AND WORK REQUIRED TO COMPLETE THE EFFECTIVE GROUND FAULT CURRENT PATH SYSTEM ARE INCIDENTAL TO THE CONDUCTORS INSTALLED BY CONTRACT.

**ITEM 632 - PEDESTRIAN SIGNAL HEAD (LED), TYPE 2D, COUNTDOWN, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF CMS 632 AND 732, THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

1. SIGNAL HEADS AND VISORS SHALL BE CONSTRUCTED OF POLYCARBONATE PLASTIC AND MEET ITE SPECIFICATIONS.
2. PIPE, SPACERS AND FITTINGS CONSTRUCTED OF POLYCARBONATE PLASTIC MAY BE USED IN LIEU OF GALVANIZED STEEL OR ALUMINUM.
3. PROPER EXTERIOR COLORS SHALL BE OBTAINED BY USE OF COLORED PLASTIC MATERIAL RATHER THAN PAINTING.

ODOT WILL MEASURE "PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN" BY THE NUMBER OF COMPLETE UNITS FURNISHED AND INSTALLED, AND WILL INCLUDE ALL SUPPORT AND MOUNTING HARDWARE, CLOSURE CAPS, AND LAMPS AS SPECIFIED.

**ITEM 633 - CABINET FOUNDATION, AS PER PLAN  
ITEM 633 - CONTROLLER WORK PAD, AS PER PLAN**

THE SIZE OF THE CABINET FOUNDATION AND THE CONTROLLER WORK PAD SHALL BE INCREASED TO ACCOMMODATE THE PROPOSED CONTROLLER CABINET WITH UNINTERRUPTIBLE POWER SUPPLY FROM THOSE SHOWN ON ODOT STANDARD CONSTRUCTION DRAWING TC-83.20. THE CONTRACTOR SHALL PROVIDE A SCHEMATIC OF THE FOUNDATION AND CONTROLLER WORK PAD TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTING. ALL OTHER DETAILS SHALL BE AS SHOWN ON TC-83.20.

**ITEM 632 - SIGNALIZATION MISC.: PEDESTRIAN HYBRID BEACON**

IN ADDITION TO THE REQUIREMENTS OF CMS 632 AND 732, THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

SIGNAL SECTIONS:

1. THE PEDESTRIAN HYBRID BEACONS SHALL CONSIST OF 3 SECTIONS SIGNAL HEADS STACKED WITH TWO SECTIONS ON TOP AND ONE CENTERED BELOW. THE TWO ON THE TOP SHALL BE 12" RED AND THE ONE ON THE BOTTOM SHALL BE 12" YELLOW. SIGNAL HEADS AND VISORS SHALL BE CONSTRUCTED OF POLYCARBONATE PLASTIC AND MEET ITE SPECIFICATIONS.
2. PIPE, SPACERS AND FITTINGS CONSTRUCTED OF POLYCARBONATE PLASTIC MAY BE USED IN LIEU OF GALVANIZED STEEL OR ALUMINUM.
3. GLASS LENSES SHALL BE USED FOR ANY LENSES NOT USING AN LED LAMP.

MOUNTING HARDWARE:


4. ALL SIGNAL HEADS SHALL BE RIGIDLY MOUNTED TO THE MAST ARM WITH THE RED LENS LOCATED IN FRONT OF THE MAST ARM.
5. ALL UPPER SIGNAL SUPPORT HARDWARE AND PIPING UP TO AND INCLUDING THE WIRE INLET FITTING SHALL BE FERROUS METAL FOR SIGNAL DISPLAYS OF TWO OR MORE SECTIONS.
6. THE ENTRANCE FITTING SHALL BE OF THE TRI-STUD DESIGN WITH SERRATED RINGS IN ORDER TO ACHIEVE POSITIVE LOCKING.

ODOT WILL MEASURE "SIGNALIZATION MISC.: PEDESTRIAN HYBRID BEACON" BY THE NUMBER OF COMPLETE UNITS FURNISHED AND INSTALLED, AND WILL INCLUDE ALL SUPPORT AND MOUNTING HARDWARE, DISCONNECT HANGERS, CLOSURE CAPS, DIMMERS, AND LAMPS AS SPECIFIED.

TRAFFIC SIGNAL NOTES

CUY-10-01.97

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P:\24288 Lora\in Road Resurfacing\107287\400-Engineering\Signals\Sheets\107287\_CN001.dwg  
DATE: 3/20/2026 TIME: 4:08:41 PM USER: Sarah Ellis

DESIGN AGENCY	
	
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DESIGNER	CJD
REVIEWER	BAK
PROJECT ID	03/20/26
SHEET	107287
TOTAL	74
	79

**TRAFFIC SIGNAL NOTES (CONTINUED)**

**ITEM 633 - CONTROLLER ITEM, MISC.: CONTROLLER, ACTUATED, 8 PHASE, SOLID STATE DIGITAL MICROPROCESSOR**

THE CONTRACTOR SHALL FURNISH AND INSTALL AN ACTUATED 8 PHASE DIGITAL MICROPROCESSOR CONTROLLER AND BASE MOUNTED CABINET AND ALL OTHER ACCESSORIES THAT ARE NECESSARY TO MAKE THE CONTROLLER FUNCTIONAL AND OPERATIONAL AS SHOWN IN THE PLANS.

THE CONTROLLER ASSEMBLY SHALL INCLUDE A NEMA TS2 TYPE A2 CONTROLLER UNIT, NEMA TS2 TYPE 2 CONFIGURATION 4 (16 POSITION) TERMINALS AND FACILITIES AND A NEMA TS2 TYPE 16 MALFUNCTION MANAGEMENT UNIT COMPLETE IN A NEMA TS1 CABINET ASSEMBLY. THE CONTROLLER UNIT SHALL INCLUDE A 10/100BASE-T ETHERNET PORT AND DATA-KEY.

THE CONTROLLER SHALL BE COMPLETELY COMPATIBLE WITH THE CITY OF NORTH OLMSTED CLOSED LOOP SYSTEM AND SHALL INCLUDE ALL COMMUNICATION AND INTERFACE EQUIPMENT NECESSARY TO TRANSMIT AND RECEIVE ALL REQUIRED PATTERN AND COMMAND DATA BETWEEN THE CENTRAL OFFICE COMPUTER, THE SYSTEM MASTER, AND THE LOCAL CONTROLLER.

THE CONTROLLER AND CABINET SHALL HAVE THE FOLLOWING FEATURES:

1) THE FOLLOWING SWITCHES SHALL BE MOUNTED ON THE SWITCH PANEL IN THE CABINET:

- A) RUN / STOP TIME
- B) CONTROLLER TIMER POWER
- C) COORDINATION/FREE
- D) DETECTOR TEST
- E) FLASH CONTROL

2) THE FOLLOWING SWITCHES SHALL BE ACCESSIBLE VIA A POLICE PANEL DOOR

- A) SIGNAL SHUTDOWN
- B) FLASH CONTROL
- C) MANUAL PUSHBUTTON AND TEN FOOT (10') EXTENSION CORD
- D) AUTOMATIC/MANUAL TRANSFER

3) A SERVICE LAMP WITH DOOR ACTIVATED ON/OFF SWITCH.

2) THE LOAD SWITCHES SHALL PROVIDE INPUT AND OUTPUT INDICATIONS.

3) THE CABINET EXTERIOR SHALL BE ALUMINUM COLORED AND THE INTERIOR SHALL BE WHITE.

6) A BROADBAND CELLULAR MODEM COMPLETELY WIRED TO REPORT CABINET FAILURES, DETECTOR FAILURES, AND TRAFFIC COUNTS AT ALL LOCATIONS SHOWN IN THE PLANS WHERE THERE IS A COMMUNICATION CONNECTION FROM THE ANTENNA TO THE MODEM.

7) AN INCANDESCENT LAMP IN A GOOSENECK FIXTURE WITH MANUAL ON/OFF SWITCH.

8) BACK PANEL SHALL BE A 16 POSITION CONTINUOUS BACK PANEL.

9) ONE SPARE 2" CONDUIT TO THE CLOSEST PULLBOX. (PAYMENT FOR THE UNDERGROUND 2" CONDUIT SHALL BE INCIDENTAL TO THIS ITEM.)

10) INSTALL ONE SEPARATE 2" CONDUIT FOR POWER AND ONE SEPARATE 2" CONDUIT FOR INTERCONNECT CABLE FROM CONTROLLER FOUNDATION TO SOURCE OF POWER SERVICE. (PAYMENT FOR THE UNDERGROUND 2" CONDUIT SHALL BE INCIDENTAL TO THIS ITEM.)

11) LIGHTNING PROTECTION

THE CONTRACTOR SHALL FURNISH A CABINET PLAN SHOWING COMPONENT PLACEMENT, FOR APPROVAL BY THE ENGINEER AND MAINTAINING AGENCY.

PRIOR TO ACCEPTANCE, THE CONTRACTOR SHALL CERTIFY IN WRITING THAT THE MALFUNCTION MANAGEMENT UNIT HAS BEEN TESTED BY AN AUTOMATIC MONITOR TESTER, AND THAT NO CONFLICTS EXIST IN THE PROPER OPERATION OF THE CONTROLLER.

PAYMENT FOR "ITEM 633 - CONTROLLER ITEM, MISC.: CONTROLLER, ACTUATED, 8 PHASE, SOLID STATE DIGITAL MICROPROCESSOR" SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH. PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, TESTING, CERTIFICATIONS, AND OTHER INCIDENTALS NECESSARY TO FURNISH THE CONTROLLER, COMPLETE IN PLACE, INCLUDING ALL CONNECTIONS MADE AND WIRING COMPLETE, TESTED, AND ACCEPTED.

**VEHICULAR SIGNAL HEAD VERTICAL CLEARANCES**

PRIOR TO ACCEPTANCE BY THE CITY, PROVIDE DOCUMENTATION TO THE PROJECT ENGINEER SHOWING THE ACTUAL MEASURED VERTICAL CLEARANCES OF ALL VEHICULAR SIGNAL HEADS.

SHOULD THE VERTICAL CLEARANCE OF ANY VEHICULAR SIGNAL HEAD BE LESS THAN THE ALLOWED MINIMUM, ADJUST EACH NON-CONFORMING SIGNAL HEAD UNTIL THE MINIMUM CLEARANCE CRITERION IS MET, AND RE-DOCUMENT THE MEASUREMENT.

THE COSTS ASSOCIATED WITH MEASURING THE VERTICAL CLEARANCES ARE INCIDENTAL TO THE PROJECT, AND ANY COSTS FOR ADJUSTMENTS WILL BE BORNE BY THE CONTRACTOR.

**ITEM 632 - POWER SERVICE, AS PER PLAN**

FURNISH POWER SERVICE PER CMS SECTION 632.24 AND STANDARD CONSTRUCTION DRAWING TC-83.10 WITH THE FOLLOWING EXCEPTIONS:

1. ALL POWER SERVICES SHALL BE METERED. THE METER SHALL HAVE A LEVER OPERATED BYPASS.
2. SUPPLY THE NECESSARY METER BASE.
3. MOUNT THE METER BASE NO MORE THAN FIVE (5) FEET HIGH FROM THE GROUND TO THE CENTER OF THE METER BASE.
4. MOUNT THE METER AND DISCONNECT SWITCH AS DETAILED ON THIS SHEET. FIELD ADJUSTMENTS MAY BE MADE IN MOUNTING THE METER AND DISCONNECT SWITCH WITH THE APPROVAL OF THE ENGINEER. ALL ITEMS INSTALLED ON CONTROLLER CABINETS SHALL BE PAINTED TO MATCH THE CONTROLLER CABINET.

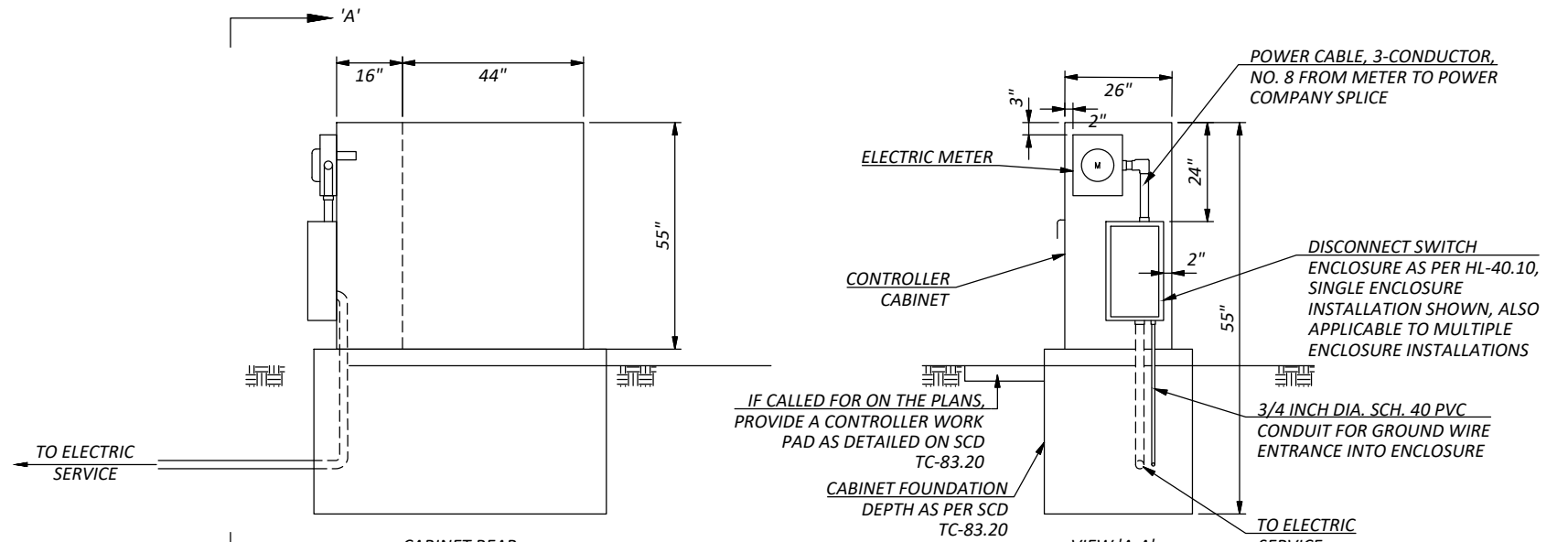
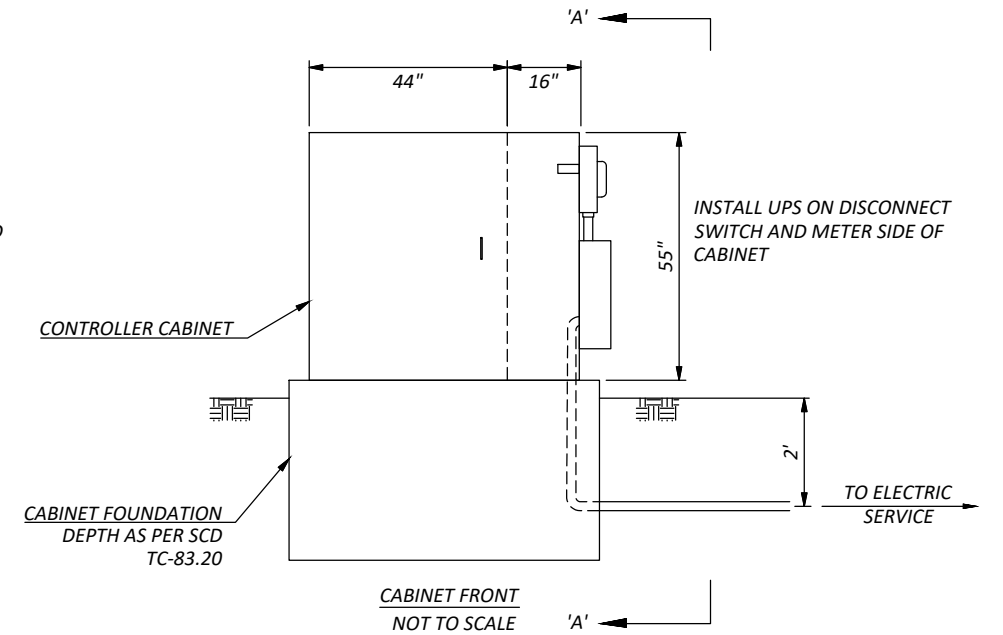
USE 3-CONDUCTOR NO. 8 AWG CABLE FROM THE POWER COMPANY SPLICE TO THE METER, AND 2-CONDUCTOR NO. 8 AWG CABLE FROM THE METER TO THE CONTROLLER CABINET.

FURNISH PADLOCK KEYED TO THE CITY MASTER WITH THE DISCONNECT SWITCH ENCLOSURE.

CONTACT THE METER SECTION OF THE POWER COMPANY FOR INFORMATION REGARDING THE METER BASE INSTALLATION PRIOR TO ORDERING POLES. FURNISH A CERTIFIED INSPECTION REPORT TO THE POWER COMPANY, AND ARRANGE FOR THE ELECTRICAL SERVICE CONNECTION. DO NOT, UNDER ANY CIRCUMSTANCES, SPLICE THE POWER CABLE INTO THE POWER COMPANY'S CIRCUITS.

OBTAIN ANY NECESSARY PERMITS, AND PAY ALL REQUIRED FEES. PAY ALL POWER CHARGES UNTIL THE CITY ACCEPTS THE INSTALLATION.

THE COST OF ALL NECESSARY INSPECTIONS SHALL BE CONSIDERED INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE PER EACH "ITEM 632 - POWER SERVICE, AS PER PLAN."



STYLE	WIDTH (IN.)	DEPTH (IN.)	FOUNDATION CONCRETE (CU. YD.)
TS-2	69	36	2.16

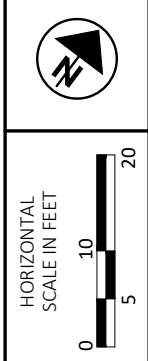
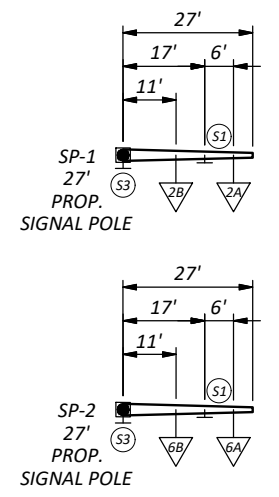
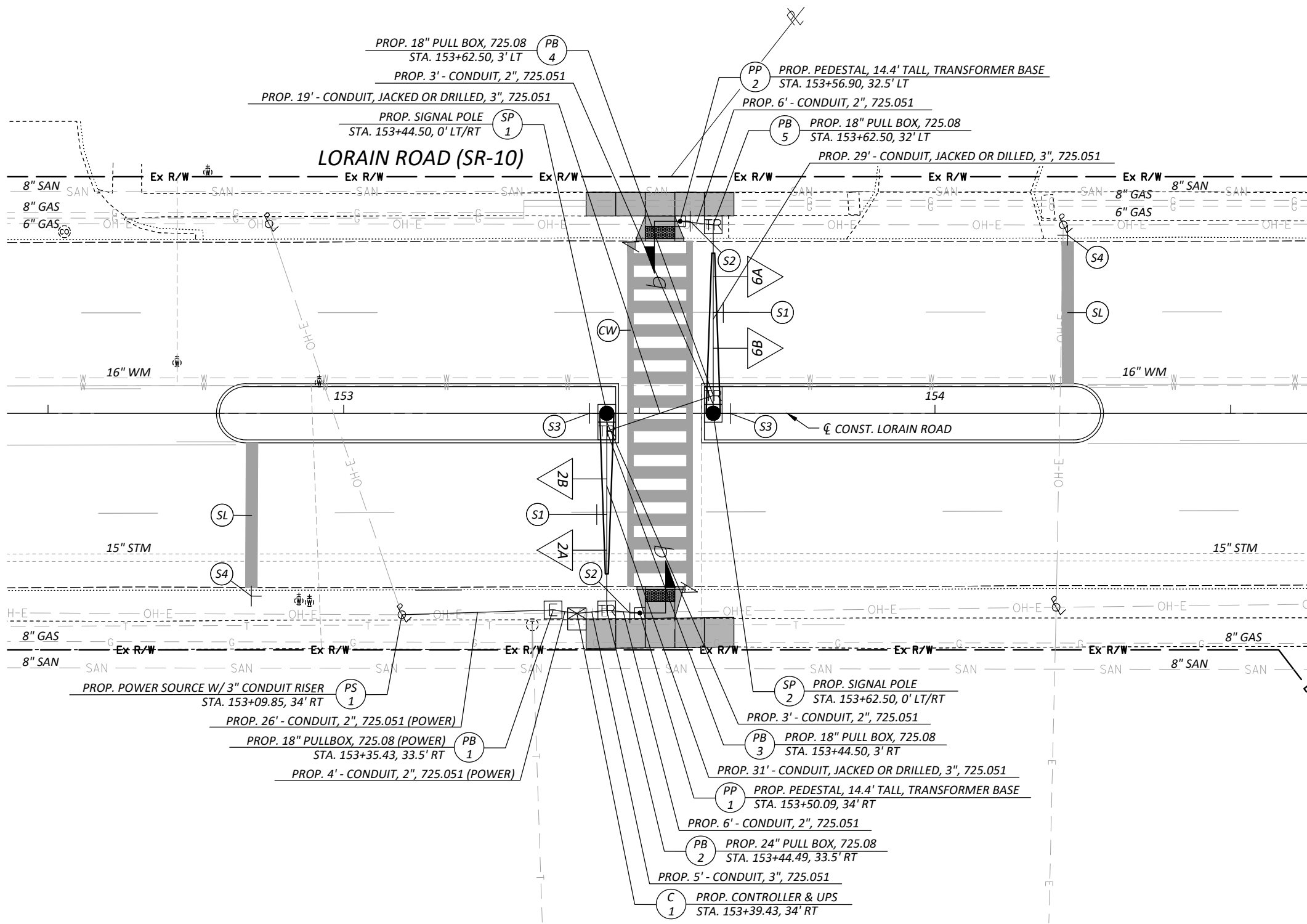
IF CALLED FOR ON THE PLANS, PROVIDE A CONTROLLER WORK PAD AS DETAILED ON SCD TC-83.20

CUY-10-01.97  
 MODEL: C:\001B DATE: 3/20/2026 TIME: 4:08:41 PM USER: Sarah.Fillis  
 P:\24288 LoraIn Road Resurfacing\107287\400-Engineering\Signals\107287\_CN001.dwg

TRAFFIC SIGNAL NOTES

DESIGN AGENCY  
  
 CHAGRIN VALLEY ENGINEERING, LTD.  
 22999 FORBES ROAD, UNIT B  
 CLEVELAND, OHIO 44146  
 PHONE: (440) 439-1999  
 FAX: (440) 439-1969  
 DESIGNER  
 CJD  
 REVIEWER  
 BAK 03/20/26  
 PROJECT ID  
 107287  
 SHEET TOTAL  
 75 79





**LEGEND**

- PROPOSED PEDESTRIAN HYBRID BEACON
- PROPOSED SIGNAL POLE
- PROPOSED PEDESTAL
- PROPOSED PEDESTRIAN SIGNAL WITH PUSHBUTTON
- PROPOSED CONTROLLER WITH UNINTERRUPTIBLE POWER SUPPLY
- CROSSWALK LINE
- STOP LINE

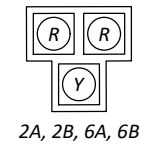
**SUMMARY OF WORK**

- INSTALL THE FOLLOWING:
- 5 NEW PULL BOXES
- 1 NEW CONTROLLER & UPS
- 2 NEW SIGNAL POLES
- 2 NEW PEDESTALS, 14.4' TALL
- 4 NEW PEDESTRIAN HYBRID BEACONS
- 2 NEW PEDESTRIAN SIGNAL HEADS
- 2 NEW PEDESTRIAN PUSH BUTTONS
- NEW CONDUIT AND WIRING

**PULLBOX TABLE**

PULL BOX #	STATION	SIDE	OFFSET	SIZE (IN.)
1	153+35.43	RT	33.5'	18 (POWER)
2	153+44.49	RT	33.5'	24
3	153+44.50	RT	3'	18
4	153+62.50	LT	3'	18
5	153+62.50	LT	32'	18

**PROPOSED PEDESTRIAN HYBRID BEACON**



**PROPOSED PEDESTRIAN SIGNALS**



**PROPOSED SIGNS**

R10-23A-24  
S1

W11-2-36  
W16-7PL-24  
S2

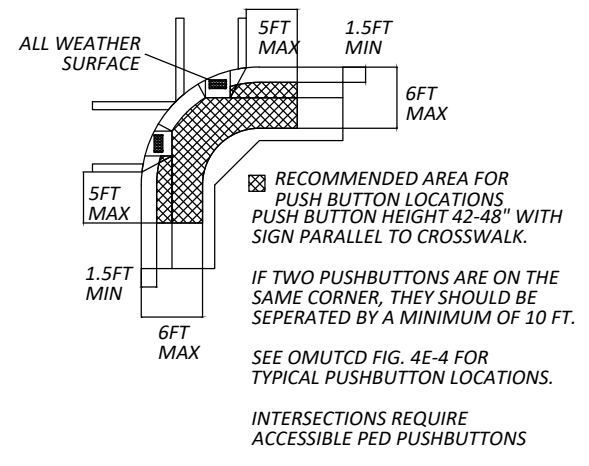
R10-6a-24  
S4

R10-3e  
9" X 15"  
S3

R10-3e  
9" X 15"  
S3

TO BE MOUNTED ABOVE PEDESTRIAN PUSHBUTTONS

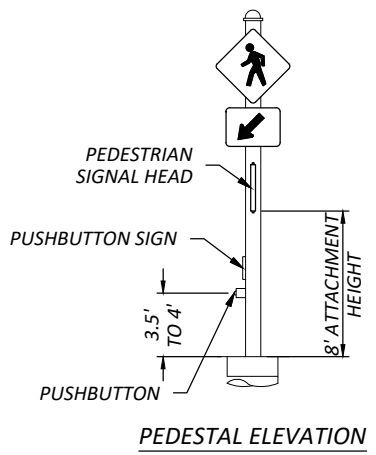
**ADA PUSHBUTTON & STRUCTURE DIAGRAM**



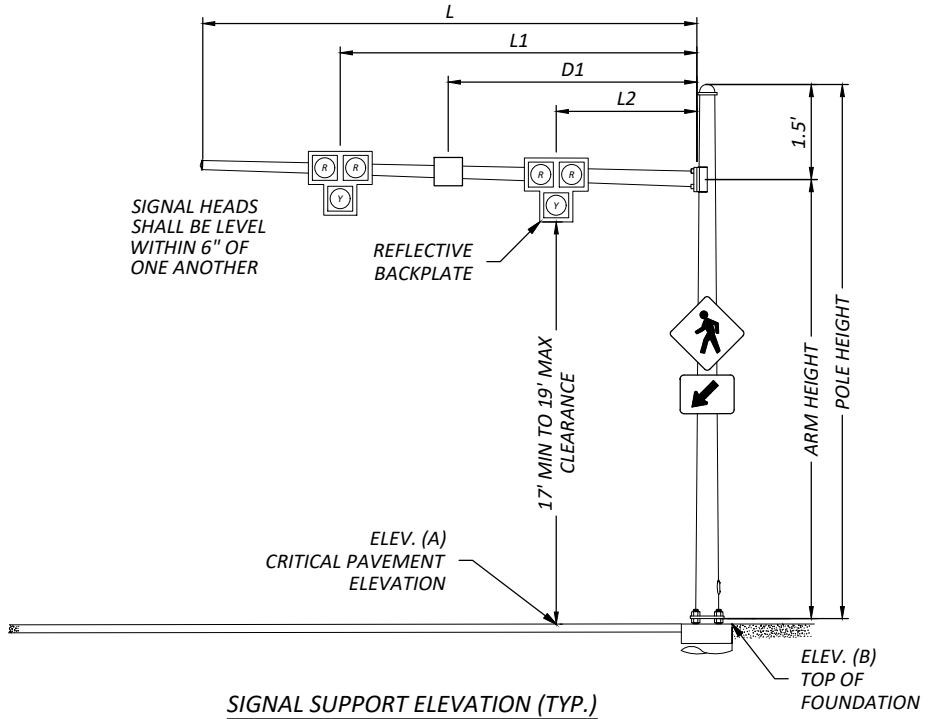
**TRAFFIC SIGNAL PLAN  
 LORAIN ROAD - MIDBLOCK CROSSING (PHB)**

**FIELD WIRING HOOK-UP CHART**

SIGNAL HEAD	INDICATION	FIELD TERMINAL	FLASH
2A, 2B (EB)	R R	φ2R	DARK
	Y	φ2Y	
6A, 6B (WB)	R R	φ6R	DARK
	Y	φ6Y	



**PEDESTAL ELEVATION**

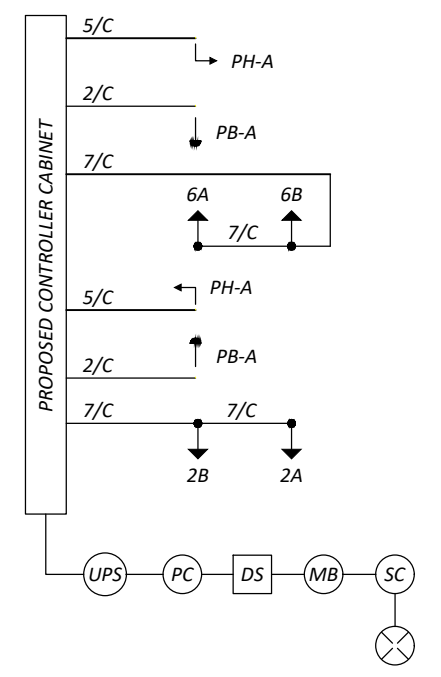


**SIGNAL SUPPORT ELEVATION (TYP.)**

**LEGEND**

- ➔ PROPOSED PEDESTRIAN HYBRID BEACON
- ⌞ PROPOSED PEDESTRIAN SIGNAL HEAD
- ➔ PROPOSED PEDESTRIAN PUSH BUTTON
- 2/C 2 CONDUCTOR, NO. 14 AWG (LEAD-IN CABLE)
- 5/C SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
- 7/C SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
- ⊗ PROPOSED POWER SOURCE
- PC PROPOSED POWER CABLE, 2 CONDUCTOR, NO. 6 AWG
- MB PROPOSED METER BASE
- UPS PROPOSED UNINTERRUPTIBLE POWER SUPPLY
- SC PROPOSED SERVICE CABLE, 3 CONDUCTOR, NO. 6 AWG
- DS PROPOSED SIGNAL DISCONNECT SWITCH

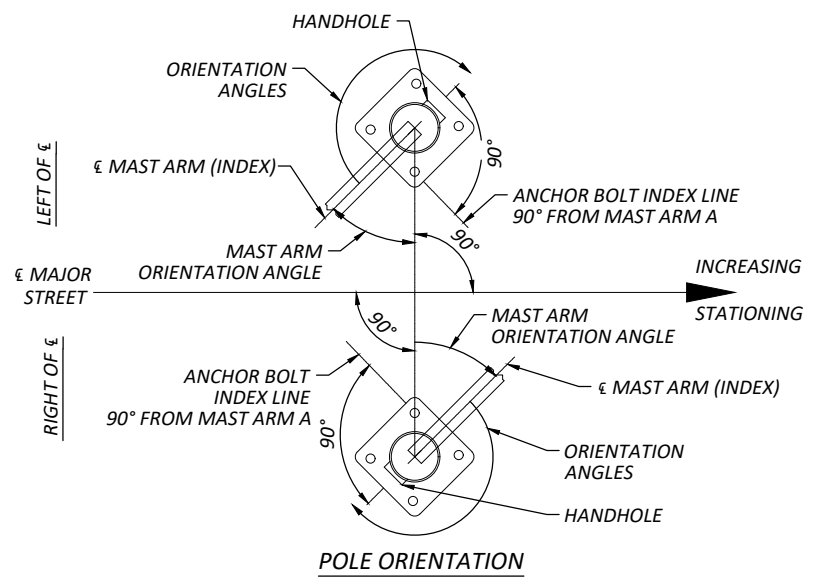
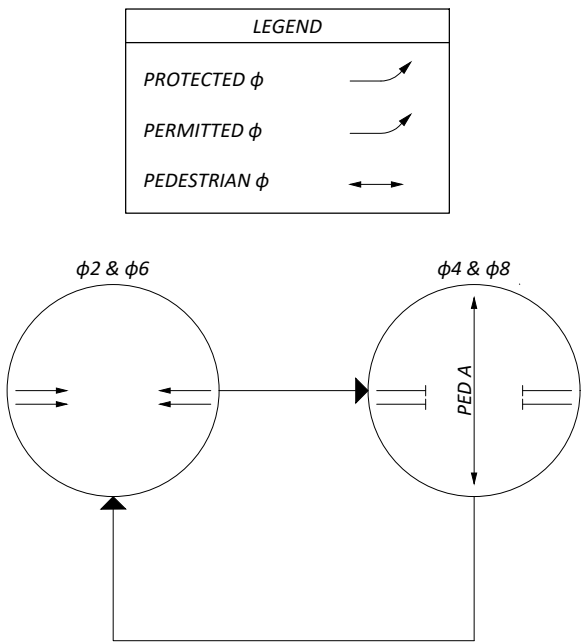
**WIRING DIAGRAM**



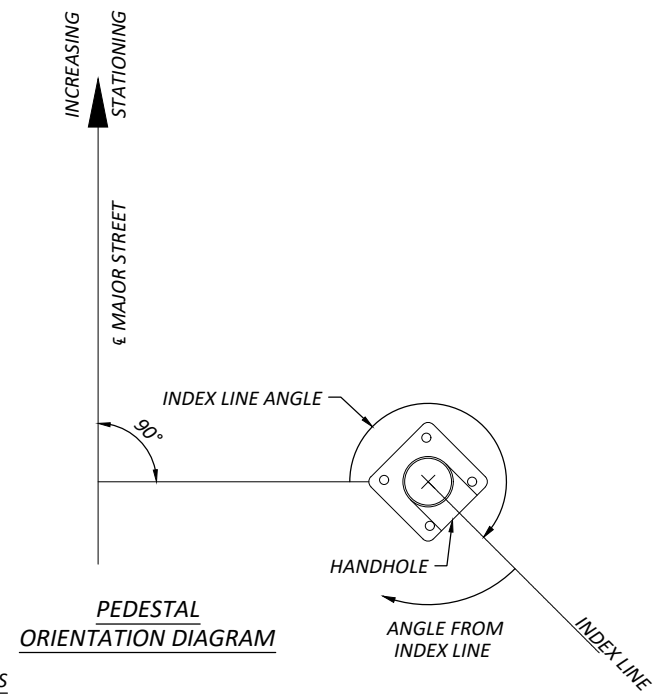
**OPERATIONAL DIAGRAM & TIMING CHART**

TRAFFIC SIGNAL HEAD	PEDESTRIAN SIGNAL HEAD	SIGNAL TIME (SEC.)
DARK	DON'T WALK	-
FLASHING YELLOW	DON'T WALK	12
STEADY YELLOW	DON'T WALK	4.0
STEADY RED	DON'T WALK	1.0
STEADY RED	WALK	7
ALTERNATING RED	FLASHING HAND COUNTDOWN TIMER	17
DARK	DON'T WALK	20

**PHASING DIAGRAM**



**POLE ORIENTATION**



**PEDESTAL ORIENTATION DIAGRAM**

**NOTES**

- ALL ANGLES MEASURED CLOCKWISE

**NOTES**

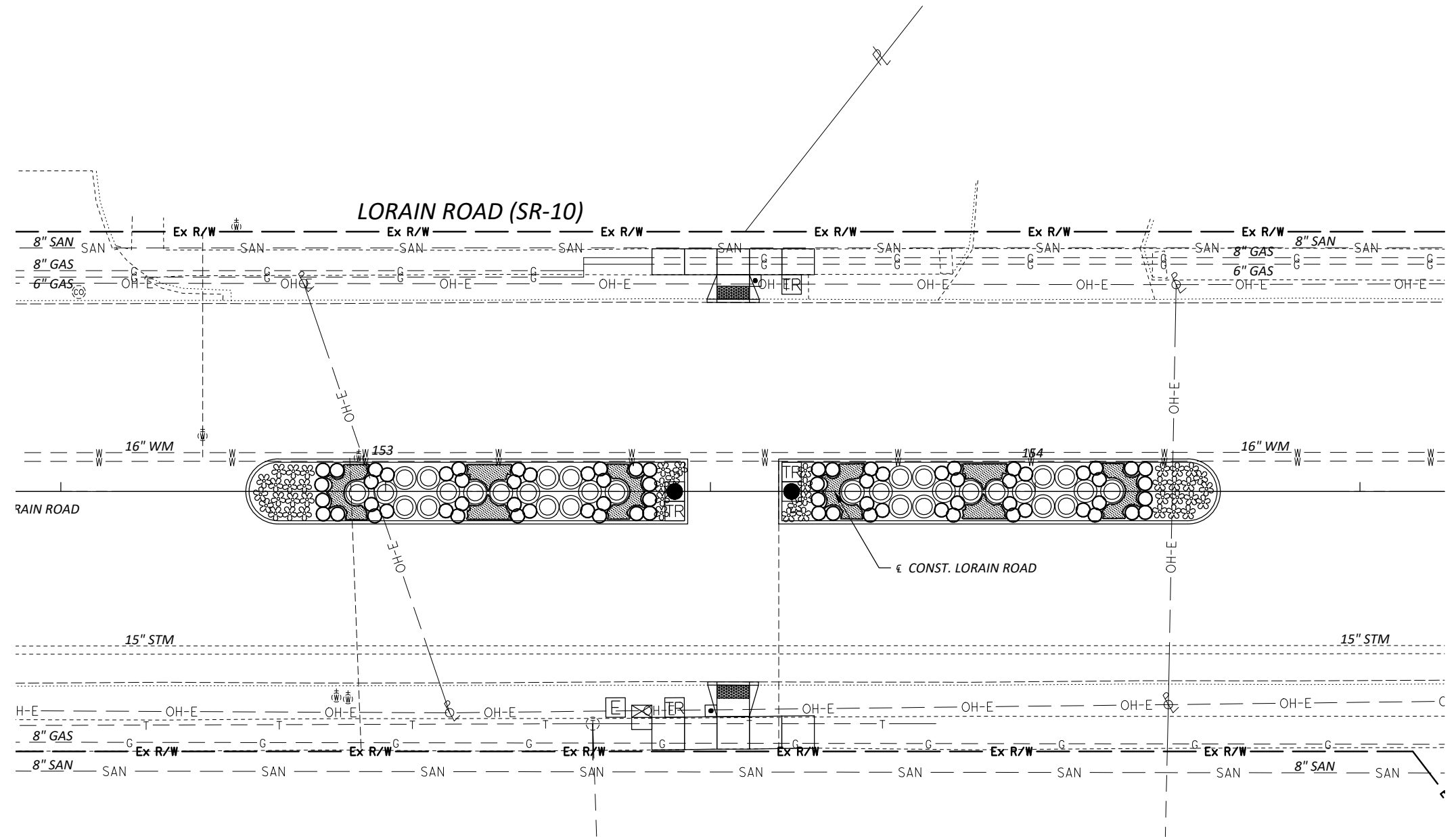
- ALL ANGLES MEASURED CLOCKWISE
- INDEX LINE GOES THROUGH THE CENTER OF THE HANDHOLE

**MAST ARM TABLE**

SUPPORT NO.	STATION	OFFSET	ELEVATION		DESIGN TYPE	DESIGN NO.	SIGNAL SUPPORT DETAILS					ORIENTATION ANGLES FROM MAST ARM A						
			A (Pavt. Elev.)	B (Top of Found.)			POLE HEIGHT	ARM HEIGHT	L	L1	L2	D1	D2	MAST ARM A ANGLE	PEDESTRIAN SIGNAL	PEDESTRIAN PUSHBUTTON	HANDHOLE	
							FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG
SP-1	153+44.50	0.0' LT/RT	773.13	774.00	TC-81.22	4	21.5	20	27	23	11	17	-	180	-	-	270	
SP-2	153+62.50	0.0' LT/RT	773.10	773.84	TC-81.22	4	21.5	20	27	23	11	17	-	180	-	-	270	
PP-1	153+50.09	34.0' RT	-	773.51	PED	-	14.4	-	-	-	-	-	-	-	180	180	270	
PP-2	153+56.90	32.5' LT	-	773.45	PED	-	14.4	-	-	-	-	-	-	-	180	180	270	

LEGEND

- NEPETA X FAASSENII 'WALKERS LOW' (WALKERS LOW CATMINT), NO. 2
- ⊙ RHUS AROMATICA 'GRO-LOW' (GRO-LOW SUMAC), 24" SPREAD
- ⊗ HEMEROCALLIS 'GOING BANANAS' (GOING BANANAS DAYLILY), NO. 2
- ▨ LIRIOPE MUSCARI 'ROYAL PURPLE' (ROYAL PURPLE LILY TURF), NO. 1



LOCATION	STATION		SIDE	653	661	661	661	661	661
	FROM	TO		TOPSOIL FURNISHED AND PLACED CY	MULCH CY	PERENNIALS, HEMEROCALLIS 'GOING BANANAS' (GOING BANANAS DAYLILY), NO. 2 CONT. EACH	PERENNIALS, NEPETA X FAASSENII 'WALKERS LOW' (WALKERS LOW CATMINT), NO. 2 CONT. EACH	PERENNIALS, LIRIOPE MUSCARI 'ROYAL PURPLE' (ROYAL PURPLE LILY TURF), NO. 1 CONT. EACH	DECIDUOUS SHRUB, 12" HEIGHT, RHUS AROMATICA 'GRO-LOW' (GRO-LOW SUMAC) EACH
LORAIN RD RAISED MEDIAN ISLAND	152+79.00	153+46.00	LT/RT	45	8	21	36	60	16
LORAIN RD RAISED MEDIAN ISLAND	153+61.00	154+28.00	LT/RT	45	8	21	36	60	16
<b>TOTAL CARRIED TO GENERAL SUMMARY</b>				<b>90</b>	<b>16</b>	<b>42</b>	<b>72</b>	<b>120</b>	<b>32</b>



LANDSCAPING DETAILS  
LORAIN ROAD

DESIGN AGENCY



DESIGNER

SAF

REVIEWER

BAK 03/20/26

PROJECT ID

107287

SHEET TOTAL

79 79

CUY-10-01.97

MODEL: PD002 DATE: 3/20/2026 TIME: 4:24:45 PM USER: Sarah.Fils  
P:\24288 Lorain Road Resurfacing\107287\400-Engineering\Sheets\107287\_PD002.dwg