

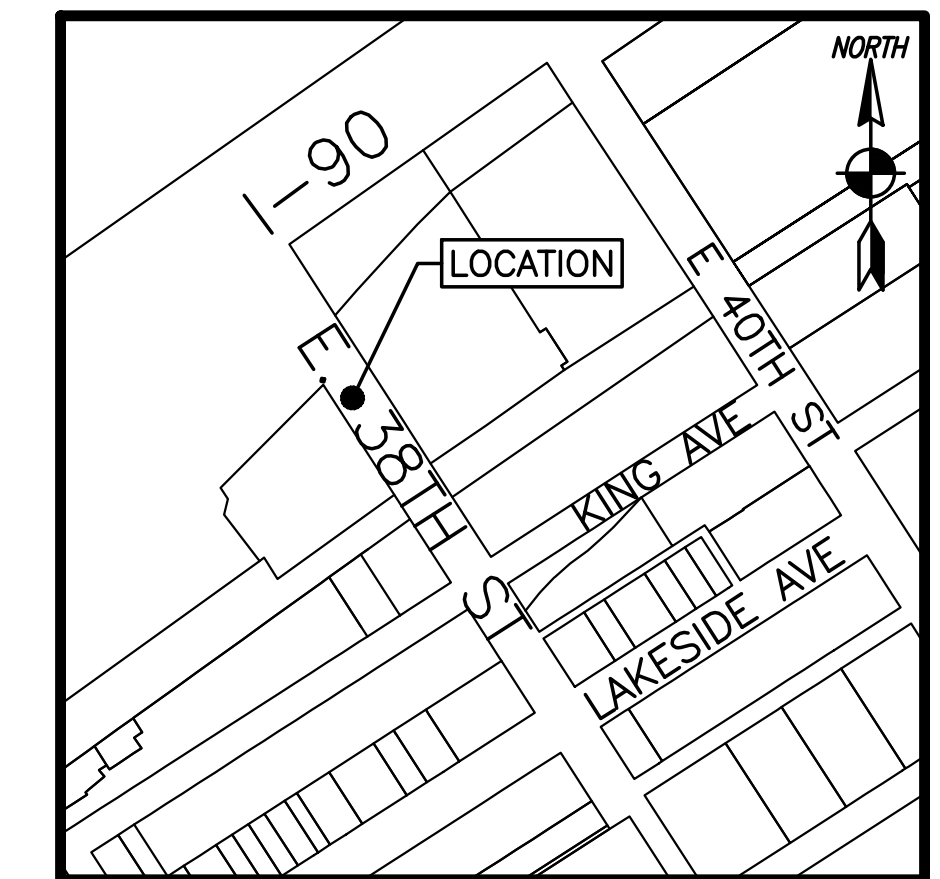
PLAN VIEW

10205008
STATE OF OHIO
EAST 38TH ST

R/W R/W

SOUTH MARGINAL RD

MATCH LINE STA 3+00 - SEE SHEET CE-022

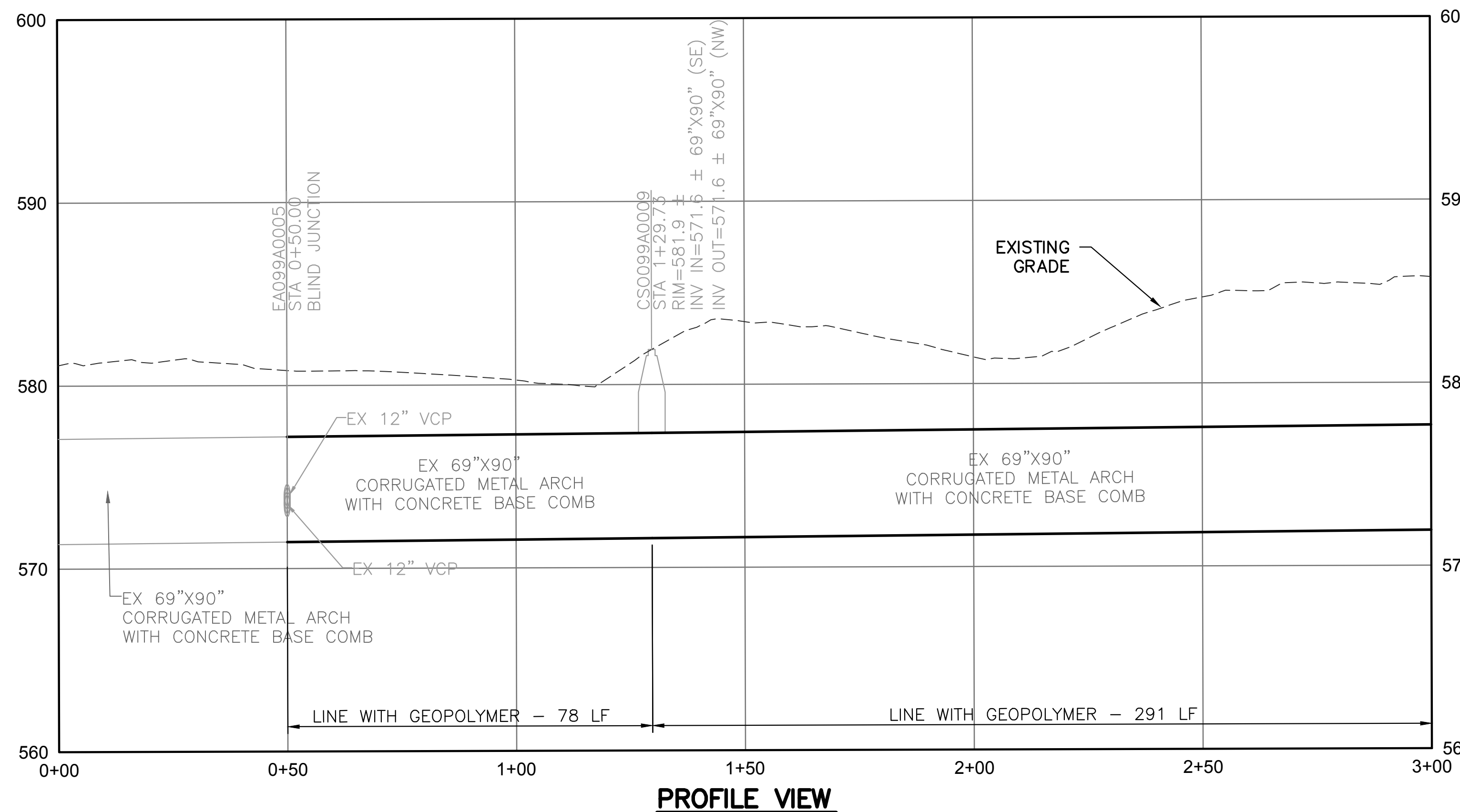


LOCATION MAP
NOT TO SCALE

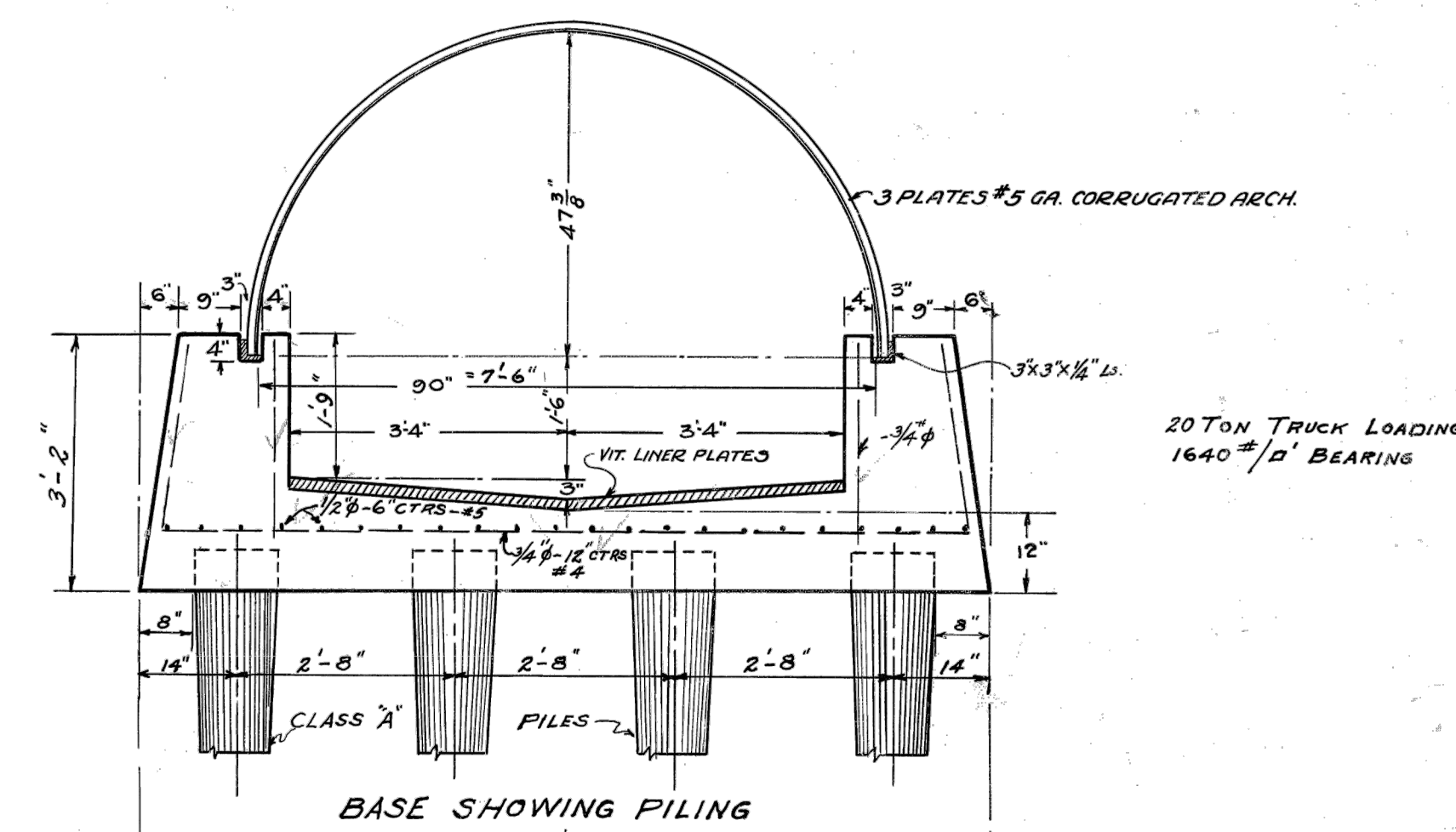
REHABILITATION TABLE	
REHABILITATION ID	REHABILITATION ACTION
CSO099-01	GEOPOLYMER LINE
CSO099-02	HEAVY CLEAN
CSO099-03	GEOPOLYMER LINE
CSO099-04	REMOVE OBSTRUCTION MANHOLE LID
CSO099-05	REMOVE OBSTRUCTION TREE LIMB
CSO099-06	REMOVE OBSTRUCTION MANHOLE RIM
CSO099-07	REMOVE OBSTRUCTION TREE LIMB
CSO099-09	HEAVY CLEAN

GENERAL NOTES:

1. THE LOCATIONS OF THE CITED IMPROVEMENTS ARE APPROXIMATE AND BASED ON THE DISTANCES NOTED IN THE INSPECTION REPORTS. ALIGNMENT AND LENGTHS ARE BASED ON AVAILABLE GIS DATA. REPAIR LENGTHS ARE PROVIDED IN THE QUANTITY SUMMARY TABLE.
2. THE REPAIR SITE IS LOCATED IN AN ACTIVE COMBINED SEWER WHICH EXPERIENCES SIGNIFICANT INCREASE IN FLOW DURING WET WEATHER. REPAIR WORK SHALL BE PERFORMED ONLY DURING DRY WEATHER. THE CONTRACTOR SHALL HAVE PROVISIONS/PROCEDURES IN PLACE TO DISMANTLE OR PROTECT THE WORK DURING WET WEATHER. NO ADDITIONAL PAYMENT WILL BE MADE FOR ANY INTERRUPTION OF, OR DAMAGE TO, THE WORK DUE TO WET WEATHER FLOWS.
3. THE CONTRACTOR IS REQUIRED TO BYPASS PUMP/CONTROL ANY DRY WEATHER FLOW IN THE SEWER AND/OR SIDE SEWER CONNECTIONS IN ACCORDANCE WITH SPECIFICATIONS. A WATER CONTROL PLAN SHALL BE SUBMITTED AT LEAST 30 DAYS PRIOR TO THE START OF WORK. THE APPROXIMATE PEAK DRY WEATHER FLOWRATE OF THE SEWER TO BE REPAIRED IS 0.01 MGD.



PROFILE VIEW

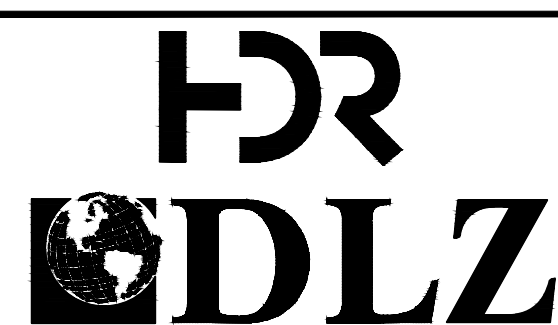
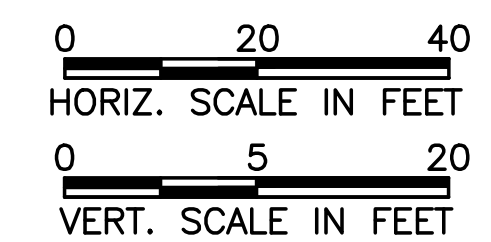


TYPICAL SECTION
CORRUGATED METAL ARCH CULVERT
WITH CONCRETE BASE

NOTE: DETAIL ABOVE IS FROM RECORD DRAWINGS, NOT TO SCALE, AND FOR REFERENCE ONLY

CROSS REFERENCE TABLE	
SHEET NO.	DESCRIPTION
CE-023	SITE PLAN
CE-024	PHOTOS & QUANTITY SUMMARY
CE-025	MAINTENANCE OF TRAFFIC
C-002	GEOPOLYMER LINER DETAILS

MH DATA TABLE #			
POINT NO.	NORTHING	EASTING	DESCRIPTION
①	676346.14	2195601.74	CENTER OF MH



REV NO	DATE	ISSUED BY	REMARKS

DESIGNED BY: KDB
 DRAWN BY: MAT
 SHEET CHK'D BY: KDR
 CROSS CHK'D BY: KDB
 APPROVED BY: TGH
 ISSUED DATE: MARCH 2024

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CSO/CULVERT-OUTFALL
INSPECTION AND REPAIR-1

PROJECT NO. 1642

CIVIL
 EASTERLY CSOs - CSO099
 PLAN AND PROFILE
 STA 0+00 TO STA 3+00

WARNING

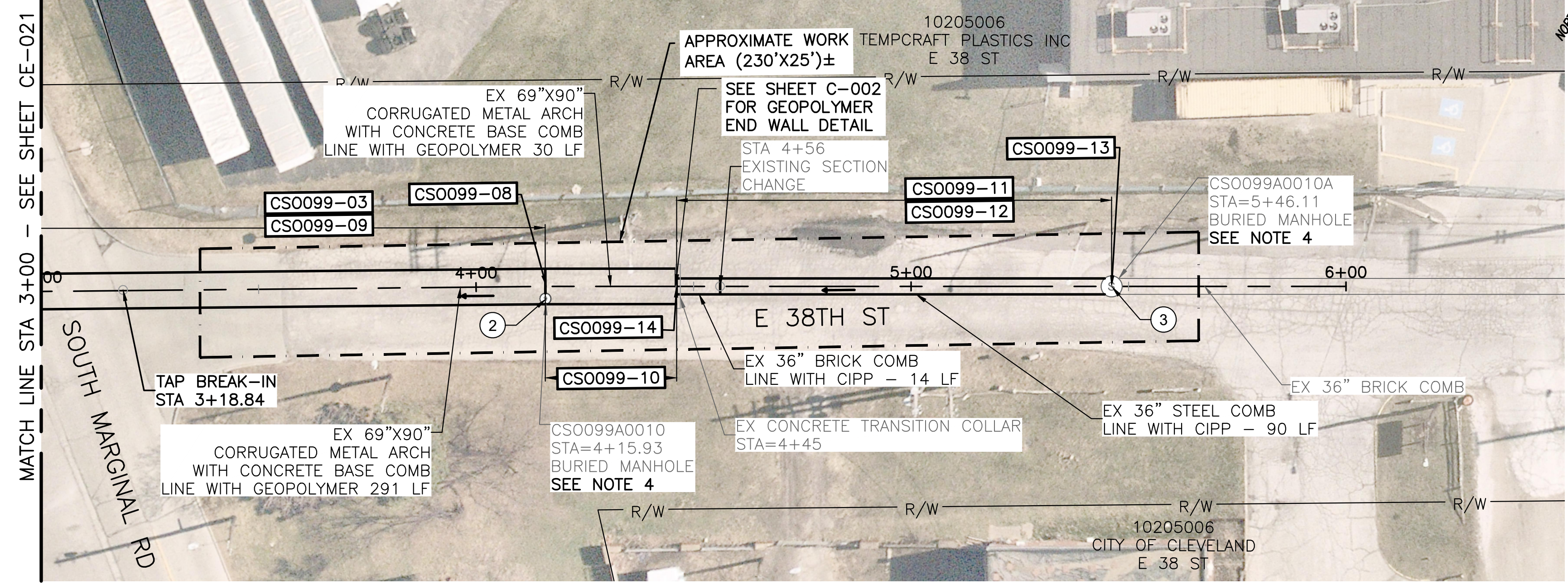
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PROJECT SET: 020 OF 160

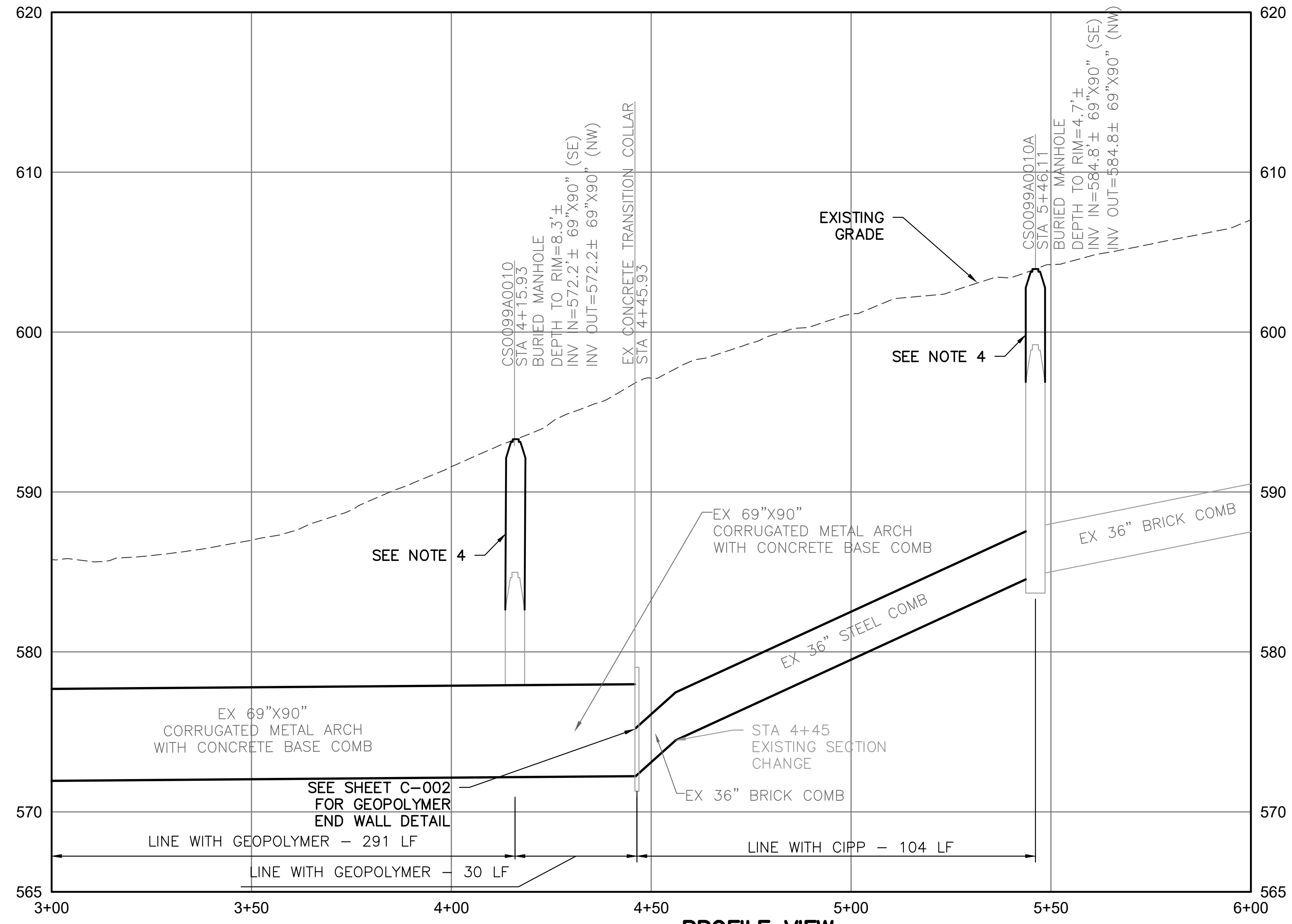
CE SHEET: 006 OF 019

SHEET NO.: **CE-021**

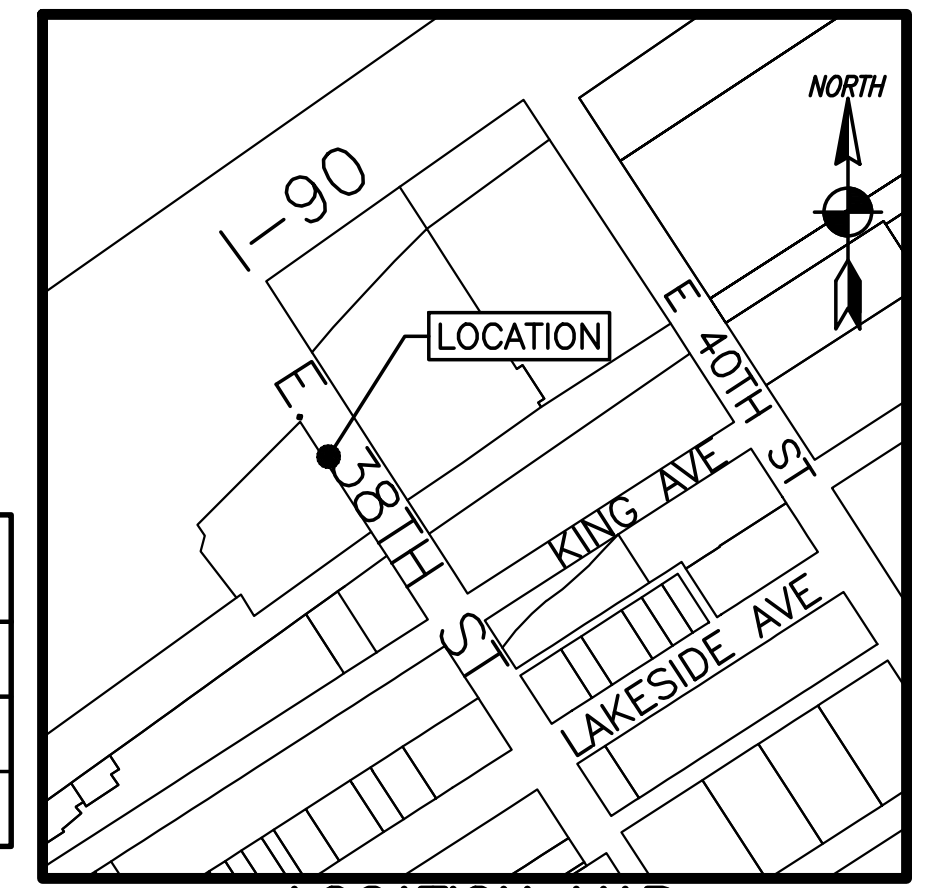
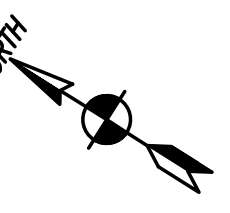
100% DESIGN SUBMITTAL



PLAN VIEW



PROFILE VIEW



LOCATION MAP
NOT TO SCALE

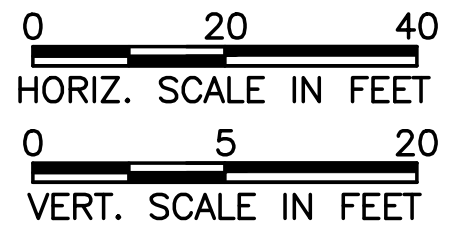
MH DATA TABLE #			
POINT NO.	NORTHING	EASTING	DESCRIPTION
②	676105.33	2195757.23	CENTER OF MH
③	675996.97	2195829.04	CENTER OF MH

GENERAL NOTES:

- THE LOCATIONS OF THE CITED IMPROVEMENTS ARE APPROXIMATE AND BASED ON THE DISTANCES NOTED IN THE INSPECTION REPORTS. ALIGNMENT AND LENGTHS ARE BASED ON AVAILABLE GIS DATA. REPAIR LENGTHS ARE PROVIDED IN THE QUANTITY SUMMARY TABLE.
- THE REPAIR SITE IS LOCATED IN AN ACTIVE COMBINED SEWER WHICH EXPERIENCES SIGNIFICANT INCREASE IN FLOW DURING WET WEATHER. REPAIR WORK SHALL BE PERFORMED ONLY DURING DRY WEATHER. THE CONTRACTOR SHALL HAVE PROVISIONS/PROCEDURES IN PLACE TO DISMANTLE OR PROTECT THE WORK DURING WET WEATHER. NO ADDITIONAL PAYMENT WILL BE MADE FOR ANY INTERRUPTION OF, OR DAMAGE TO, THE WORK DUE TO WET WEATHER FLOWS.
- THE CONTRACTOR IS REQUIRED TO BYPASS PUMP/CONTROL ANY DRY WEATHER FLOW IN THE SEWER AND/OR SIDE SEWER CONNECTIONS IN ACCORDANCE WITH SPECIFICATIONS. A WATER CONTROL PLAN SHALL BE SUBMITTED AT LEAST 30 DAYS PRIOR TO THE START OF WORK. THE APPROXIMATE PEAK DRY WEATHER FLOWRATE OF THE SEWER TO BE REPAIRED IS 0.01 MGD.
- CONTRACTOR SHALL FIELD LOCATE AND EXPOSE BURIED MANHOLE CS0099A0010 AND CS0099A0010A. DEPTH TO RIM IS APPROXIMATELY 8.3 FT FOR CS0099A0010 AND 4.7 FT CS0099A0010A. RECONSTRUCT MANHOLE TO GRADE SEE SHEET C-004 FOR DETAILS. AS BUILT DATA SHALL INCLUDE THE RIM ELEVATION FOR MANHOLES RAISED TO GRADE. RIM ELEVATIONS MAY BE PROVIDED UTILIZING GPS DATA OBTAINED UNDER THE SUPERVISION OF A PROFESSIONAL SURVEYOR REGISTERED IN THE STATE OF OHIO.
- COORDINATE POINTS SHOWN ARE BASED ON APPROXIMATE DISTANCES FROM CCTV FOOTAGE.

REHABILITATION TABLE	
REHABILITATION ID	REHABILITATION ACTION
CS0099-03	GEOPOLYMER LINE
CS0099-08	RAISE BURIED MH CS0099A0010 TO GRADE
CS0099-09	HEAVY CLEAN
CS0099-10	GEOPOLYMER LINE FROM BRICK TO CMP TRANSITION TO MH
CS0099-11 TO 12	CIPP LINE
CS0099-13	RAISE BURIED MH CS0099A0010A TO GRADE
CS0099-14	END GEOPOLYMER LINING AT WALL

CROSS REFERENCE TABLE	
SHEET NO.	DESCRIPTION
CE-023	SITE PLAN
CE-024	PHOTOS & QUANTITY SUMMARY
CE-025	MAINTENANCE OF TRAFFIC
C-001	CIPP LINER DETAILS
C-002	GEOPOLYMER LINER DETAILS
C-004	MANHOLE RECONSTRUCTION DETAILS



REV NO	DATE	ISSUED BY	REMARKS

DESIGNED BY: KDB
 DRAWN BY: MAT
 SHEET CHK'D BY: KDR
 CROSS CHK'D BY: KDB
 APPROVED BY: TGH
 ISSUED DATE: MARCH 2024

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CSO/CULVERT-OUTFALL INSPECTION AND REPAIR-1

PROJECT NO. 1642

**CIVIL
EASTERLY CSOs - CS0099
PLAN AND PROFILE
STA 3+00 TO STA 6+00**

WARNING
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PROJECT SET: 021 OF 160
 CE SHEET: 007 OF 019
 SHEET NO.: **CE-022**

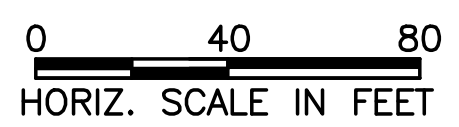
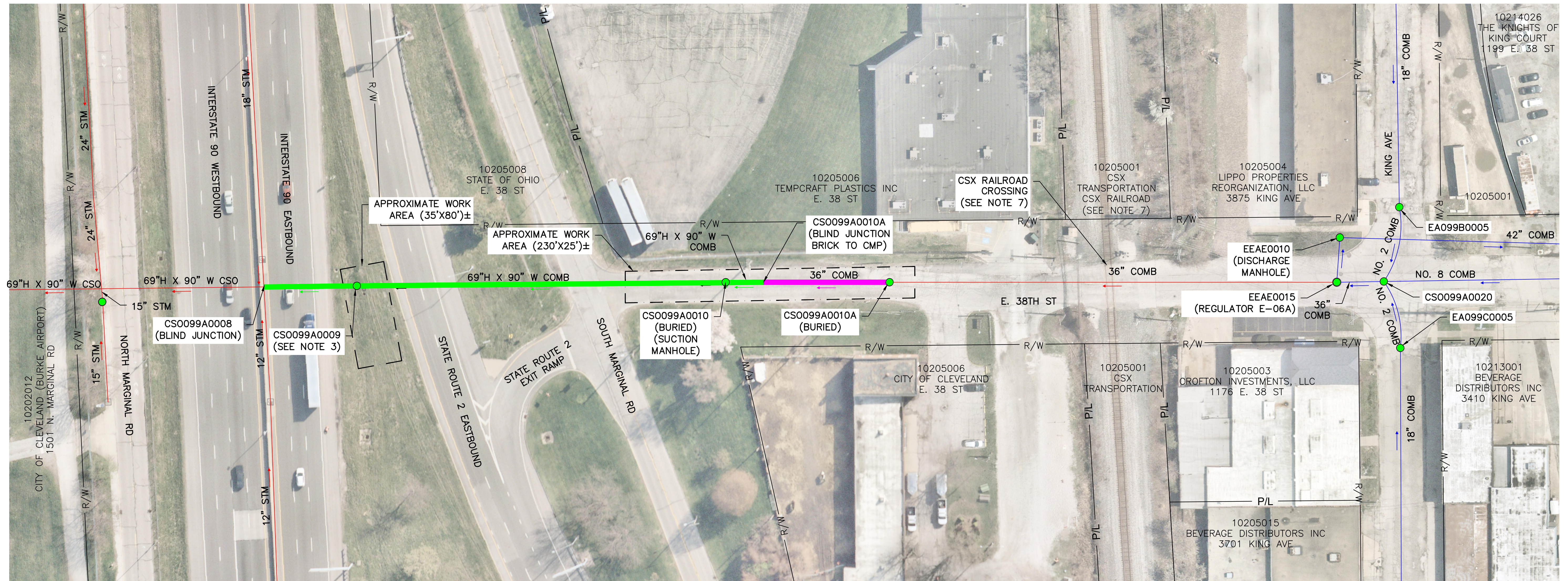
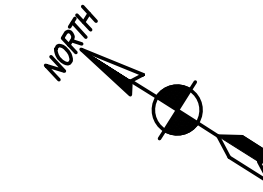
100% DESIGN SUBMITTAL

LEGEND

- MANHOLE
- EXISTING SEWER PIPE
- EXISTING CSO OR STORM PIPE
- SPOT REPAIR
- CIPP LINER
- GEOPOLYMER LINER
- PIPE REPLACEMENT

GENERAL NOTES:

1. CONTRACTOR SHALL UTILIZE MANHOLES WITHIN THE RIGHT-OF-WAY AND KEEP WORK LIMITS WITHIN THE RIGHT-OF-WAY.
2. MANHOLES MAY BE BURIED. SEE PREVIOUS SHEETS.
3. ACCESS TO MH CS0099A0009 IS LOCATED WITHIN ODOT LIMITED ACCESS. REFERENCE ODOT 505 PERMIT FOR RESTRICTIONS.
4. SEE MOT SHEET FOR ROAD CLOSURE DETAILS.
5. THIS SITE PLAN IS PROVIDED FOR INFORMATION TO SHOW LOCATIONS FOR DISCHARGE OF CURE WATER FOR CIPP LINING.
6. CONTRACTOR SHALL NOT DISCHARGE OF CURE WATER TO EXISTING CSO PIPES THAT FLOW TO ENVIRONMENT.
7. CONTRACTOR SHALL COORDINATE WITH RAILROAD SCHEDULE FOR TEMPORARY DISCHARGE LINE ROUTING.
8. CONTRACTOR SHALL MAINTAIN INTERSECTIONS AND DRIVEWAYS WHERE BYPASS LINES CROSS WITH HOSE RAMPS.



**Northeast Ohio
Regional Sewer District**

REV NO	DATE	ISSUED BY	REMARKS

DESIGNED BY: **KDB**
 DRAWN BY: **MAT**
 SHEET CHK'D BY: **KDB**
 CROSS CHK'D BY: **KDB**
 APPROVED BY: **TGH**
 ISSUED DATE: **MARCH 2024**

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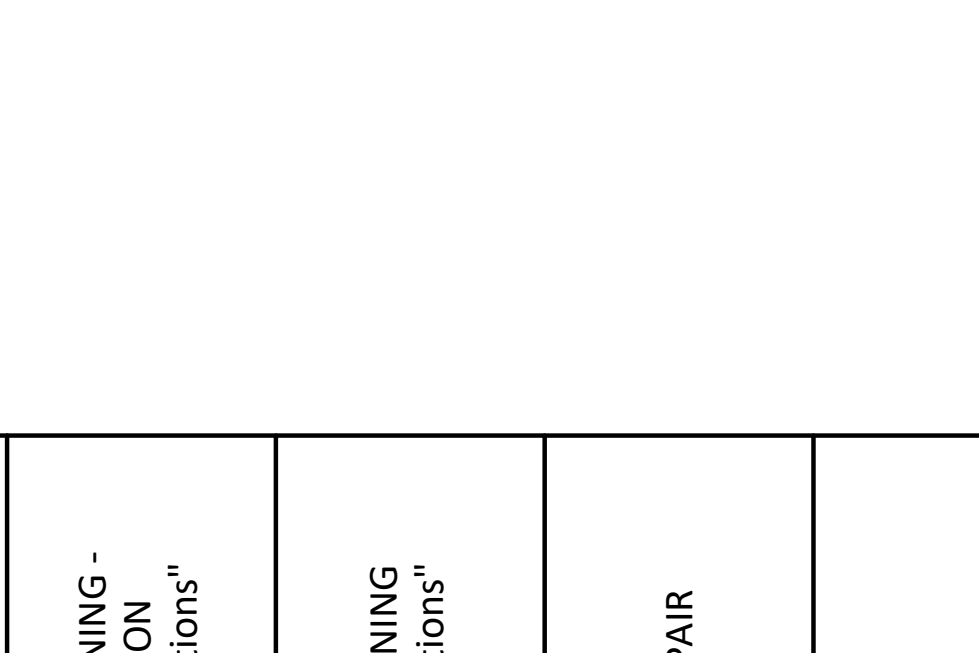
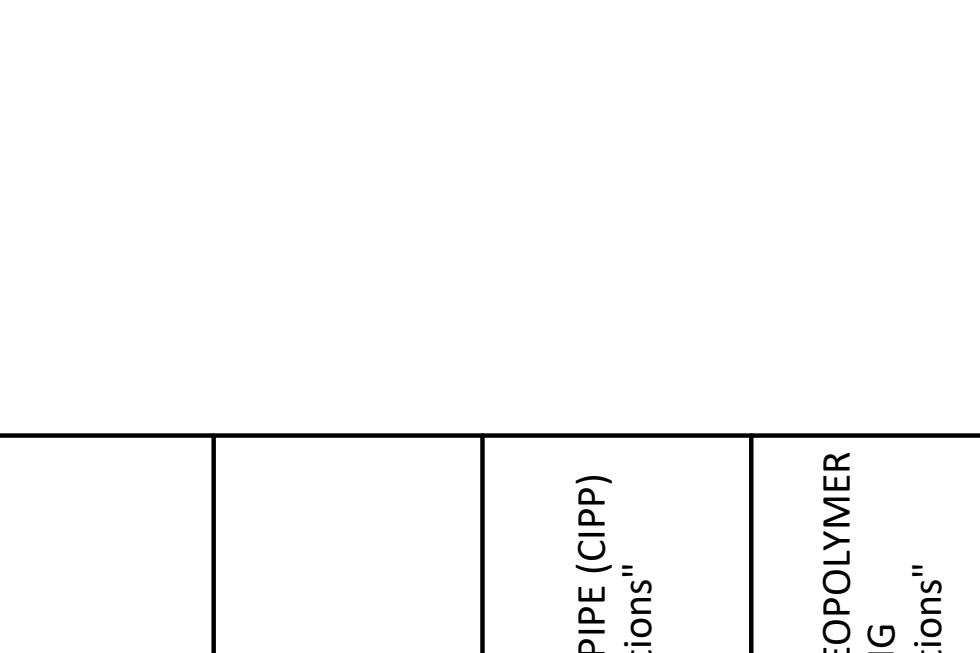
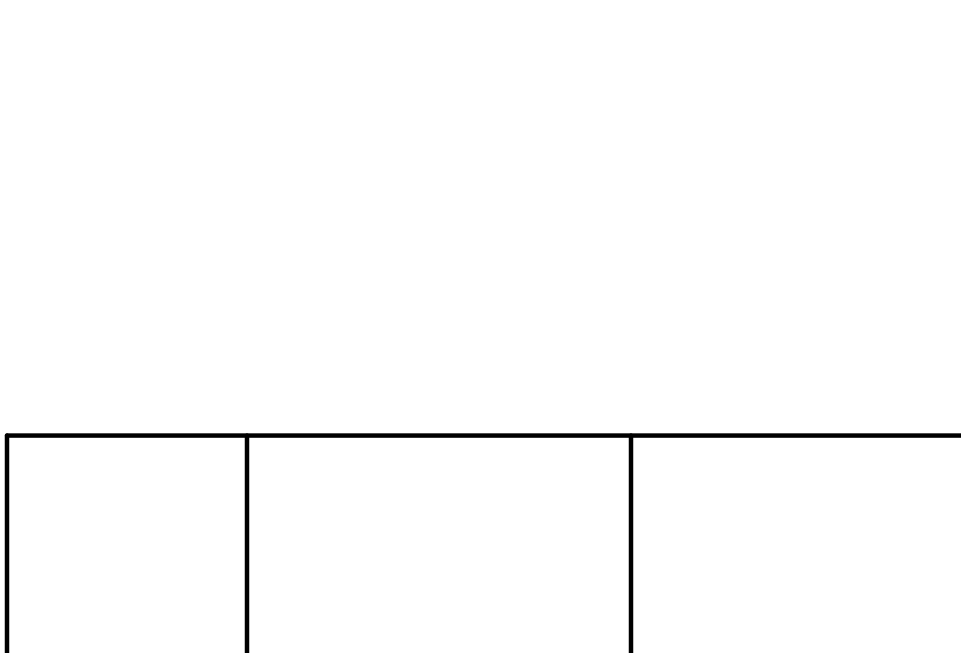
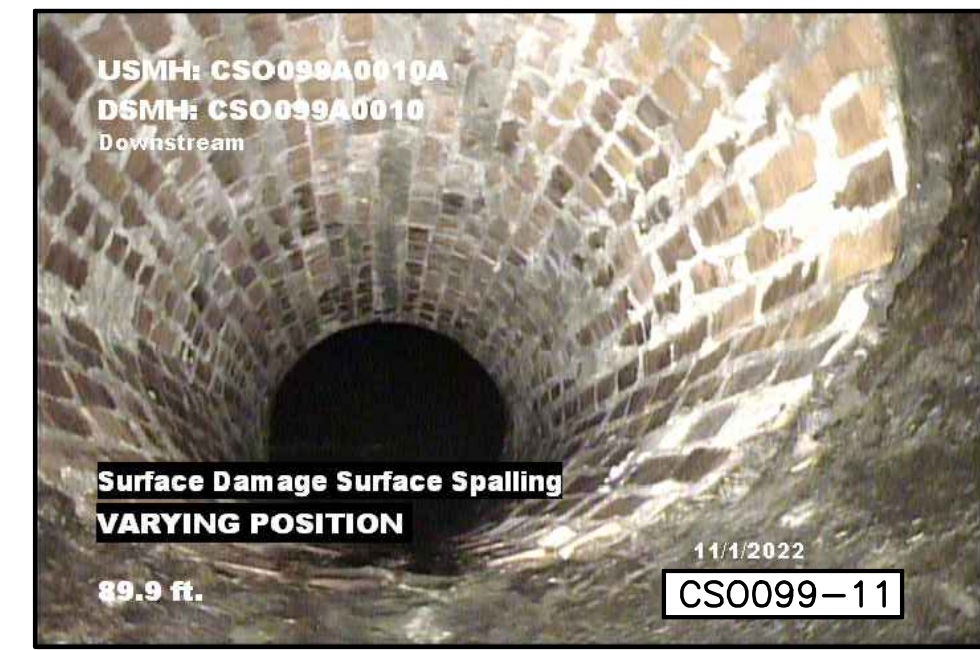
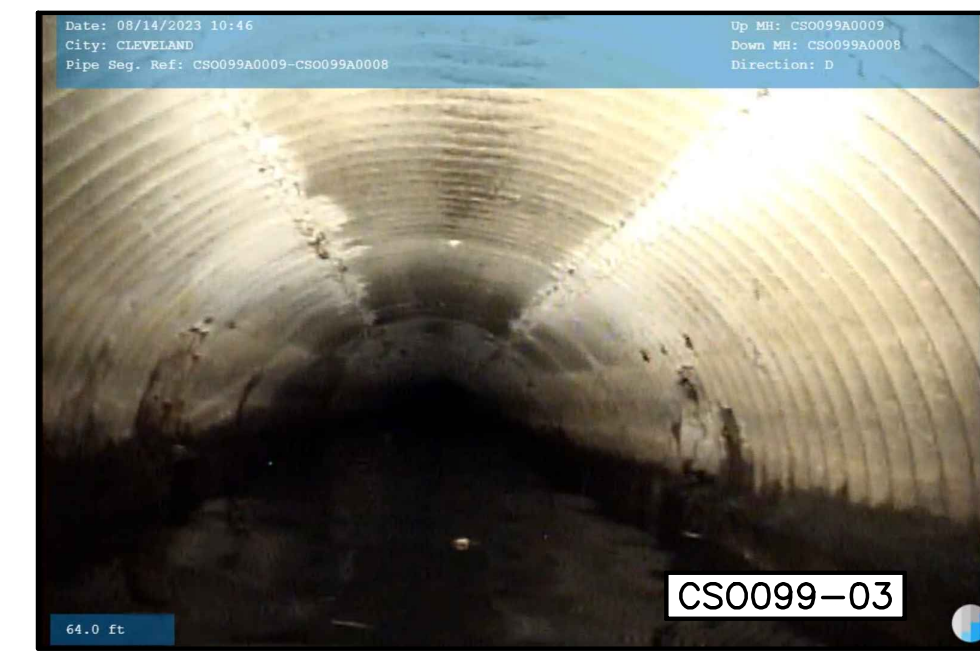
**CSO/CULVERT-OUTFALL
INSPECTION AND REPAIR-1**

PROJECT NO. 1642

**CIVIL
EASTERLY CSOs - CS0099
SITE PLAN**

WARNING
 0 1/2 1
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PROJECT SET: 022 OF 160
 CE SHEET: 008 OF 019
 SHEET NO.: **CE-023**



SHEET NO.	PHOTO REFERENCE	VIDEO DISTANCE BY ASSET ID	VIDEO DIRECTION	"CURED-IN-PLACE PIPE (CIPP) See Specifications"	"SPRAY-IN-PLACE GEOPOLYMER PIPE LINING See Specifications"	"SEWER CLEANING - OBSTRUCTION See Specifications"	"HEAVY CLEANING See Specifications"	SPECIAL REPAIR	COMMENTS
		CS0099A0009-CS0099A0008		LF	LF	EACH	CY	EACH	GEOPOLYMER SPRAY-IN-PLACE LINE. HEAVY CLEAN
CE-021	CS0099-01	0-78	DS		78				GEOPOLYMER LINE
CE-021	CS0099-02	0-78	DS				25		HEAVY CLEAN
		CS0099A0010-CS0099A0009							GEOPOLYMER SPRAY-IN-PLACE LINE. HEAVY CLEAN
CE-021	CS0099-03	0-291	US		291				GEOPOLYMER LINE
CE-021	CS0099-04	4	US			1			REMOVE OBSTRUCTION MANHOLE LID
CE-021	CS0099-05	6	US			1			REMOVE OBSTRUCTION TREE LIMB
CE-021	CS0099-06	69	US			1			REMOVE OBSTRUCTION MANHOLE RIM
CE-021	CS0099-07	143	US			1			REMOVE OBSTRUCTION TREE LIMB
CE-021	CS0099-09	0-291	US				70		HEAVY CLEAN
		TRANSITION-CS0099A0010							GEOPOLYMER SPRAY-IN-PLACE LINE
CE-022	CS0099-10	0-30	DS		30				GEOPOLYMER LINE FROM BRICK TO CMP TRANSITION TO MH
		CS0099A0010A-TRANSITION							CIPP LINE 36". NOTE SIGNIFICANT GRADE CHANGE DOWN AT 90'
CE-022	CS0099-08	291	US					1	RAISE BURIED MH CS0099A0010 TO GRADE
CE-022	CS0099-11 TO 12	0-104	DS	104					NOTE: USMH CS0099A0010A IS BURIED UNDER ASPHALT
CE-022	CS0099-13	104	DS					1	RAISE BURIED MH CS0099A0010A TO GRADE
SUBTOTAL				104	400	4	95	2	



Northeast Ohio Regional Sewer District

REV NO	DATE	ISSUED BY	REMARKS

DESIGNED BY: KDB
 DRAWN BY: MAT
 SHEET CHK'D BY: KDR
 CROSS CHK'D BY: KDB
 APPROVED BY: TGH
 ISSUED DATE: MARCH 2024

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CSO/CULVERT-OUTFALL INSPECTION AND REPAIR-1

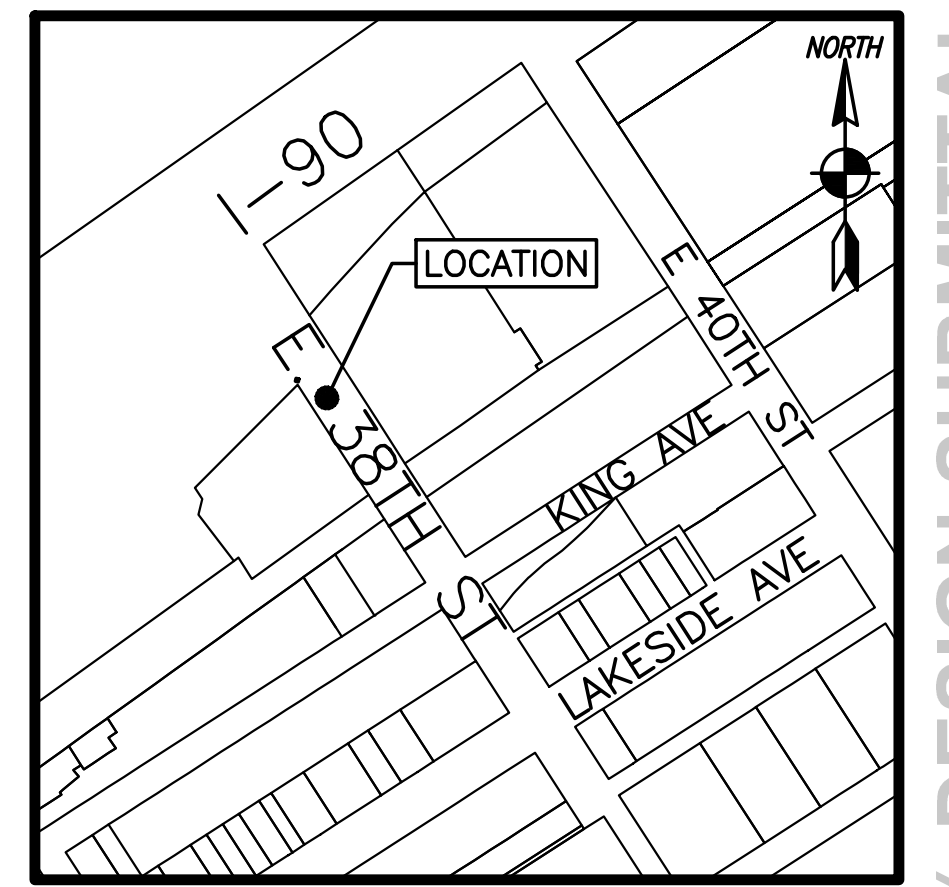
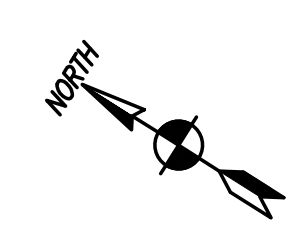
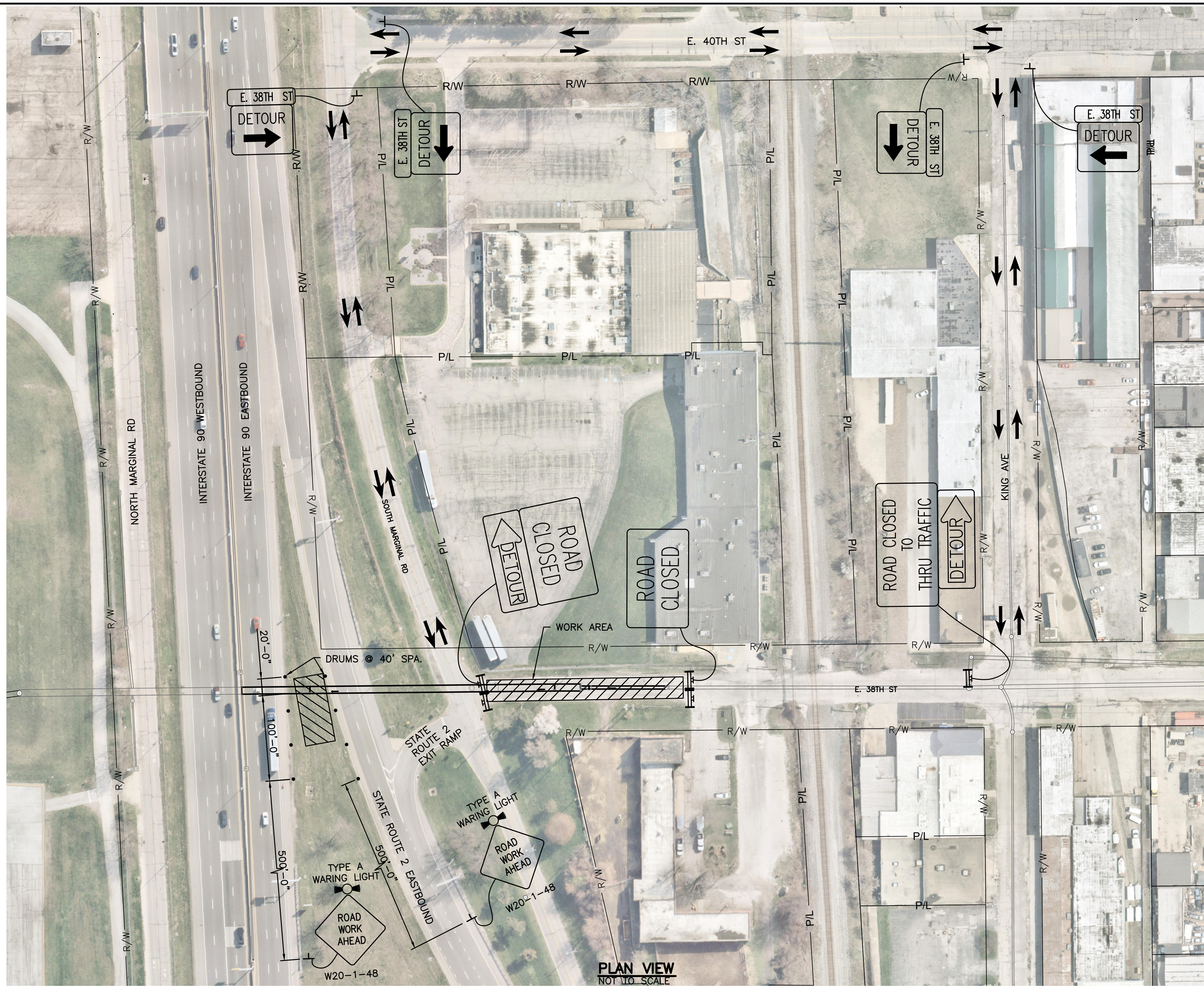
PROJECT NO. 1642

CIVIL EASTERLY CSOs - CS0099 PHOTOS & QUANTITY SUMMARY

WARNING

 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PROJECT SET: 023 OF 160
 CE SHEET: 009 OF 019
 SHEET NO.: **CE-024**



LOCATION MAP
NOT TO SCALE

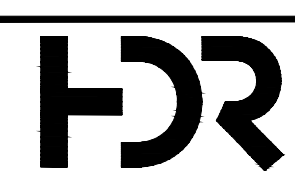
GENERAL NOTES:

1. MAINTENANCE OF TRAFFIC PLANS SHALL BE IN ACCORDANCE WITH THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION (ODOT), CONSTRUCTION AND MATERIAL SPECIFICATIONS (CM&S), 2019, AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), CURRENT EDITION.
2. MINIMUM DISTANCE BETWEEN SIGNS AND DISTANCE IN ADVANCE OF CONSTRUCTION ACTIVITIES SHALL BE AS REQUIRED BY OMUTCD.
3. ALL TYPE III BARRICADES, "ROAD CLOSED AHEAD" AND "ROAD WORK AHEAD" SIGNS SHALL HAVE TYPE A FLASHING WARNING LIGHTS.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL COMMERCIAL AND RESIDENTIAL PROPERTIES THROUGHOUT CONSTRUCTION.
5. DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE OWNER. IT IS THE INTENT 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 OWNER, WILL NOT BE PERMITTED.
6. TO MINIMIZE TRAFFIC CONTROL DISTURBANCES, CONTRACTOR TO SUBMIT PHASING/STAGING SCHEDULE FOR APPROVAL PRIOR TO START OF CONSTRUCTION INCLUDING COORDINATION WITH THE OHIO DEPARTMENT OF TRANSPORTATION, FOR APPROVAL OF ACCESS PERMITS TO WORK WITHIN SR-2 AND I-90.

LEGEND:

- TYPE III BARRICADE
- WORK ZONE (AREA OF CLOSURE)
- DETOUR ROUTE
- CONSTRUCTION DRUMS
- WORK ZONE SIGN
- PROPOSED WORK ZONE SIGN

PLAN VIEW
NOT TO SCALE



Northeast Ohio Regional Sewer District

REV NO	DATE	ISSUED BY	REMARKS

DESIGNED BY: LAL/SVK
 DRAWN BY: VKN
 SHEET CHK'D BY: LAG
 CROSS CHK'D BY: LAL
 APPROVED BY: JSC
 ISSUED DATE: MARCH 2024

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CSO/CULVERT-OUTFALL INSPECTION AND REPAIR-1

PROJECT NO. 1642

**CIVIL
EASTERLY CSOs - CSO099
MAINTENANCE OF TRAFFIC**

WARNING



IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PROJECT SET: 024 OF 160

CE SHEET: 010 OF 019

SHEET NO.: **CE-025**