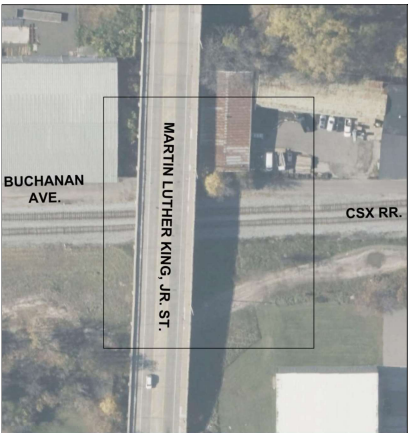


**PROJECT LOCATION MAP**  
**GENERAL VIEW**

PLOT INFO: Z:\2024\2417\HICAD\SUPPORT\RR CROSSING\CSX\CSX.MLK PROJECT LOCATION MAP.DWG LAYOUT: 1 DATE: 10/29/2024 TIME: 5:13:53 PM USER: MWHCH

Page 3 of 5



**PROJECT LOCATION MAP**  
**BLOWUP VIEW**  
SCALE: 1"=100'

OWNER: CITY OF GRAND RAPIDS  
CITY: GRAND RAPIDS  
COUNTY: KENT  
STATE: MICHIGAN

EXHIBIT A



**PROJECT LOCATION MAP**  
**INTERMEDIATE VIEW**  
SCALE: 1"=200'

02/04/2025

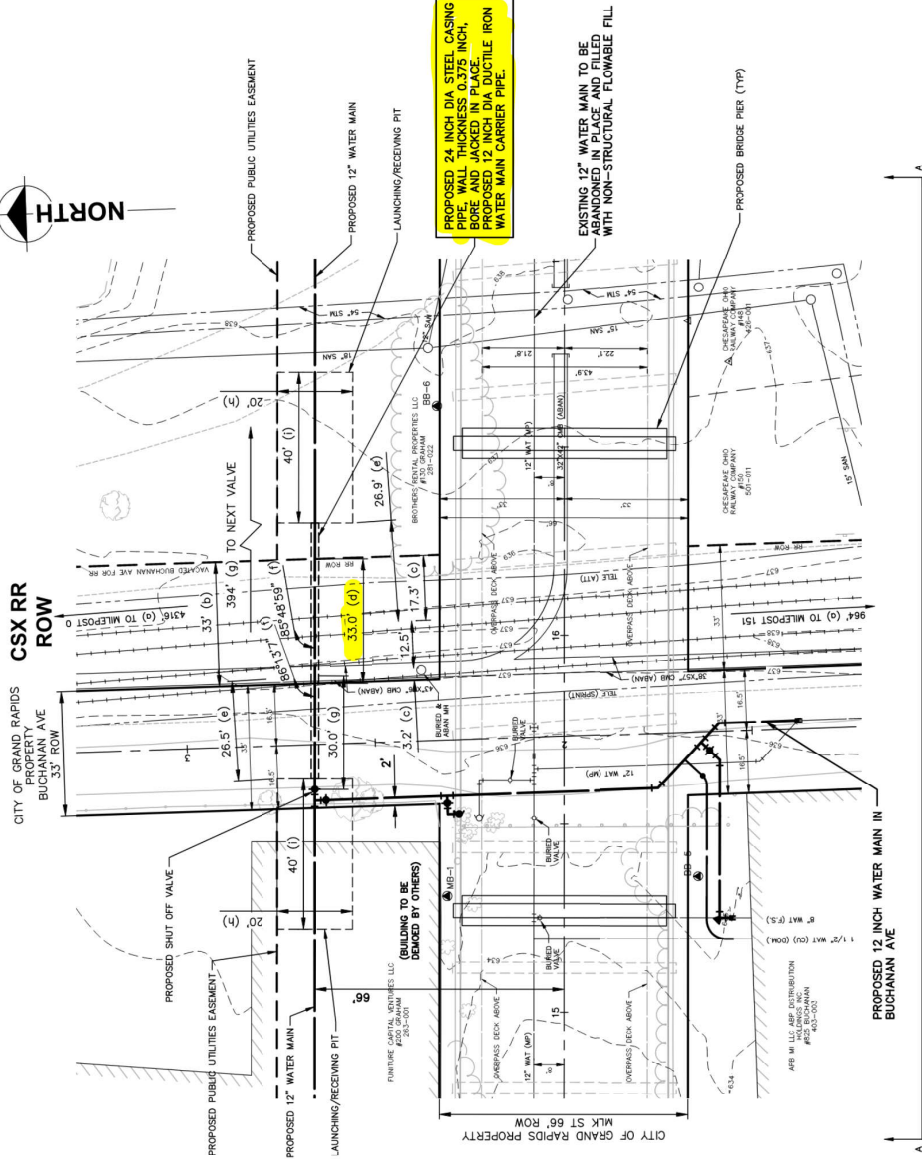
PROJECT NO.	240709
FIGURE NO.	1
25	

**City of Grand Rapids**  
CSX Railroad & Martin Luther King, Jr. St.  
**Water Main Relocation in Public Easement (SW)**  
**Along Martin Luther King, Jr. Boulevard**

Hard copy is intended to be 11"x17" when printed. *Series(s)* indicated and graphic quality may not be accurate for any other size.



PROPOSED WATER MAIN RELOCATION IN PUBLIC EASEMENT  
ALONG MARTIN LUTHER KING, JR. ST - PLAN VIEW



- (a) Distance from crossing to nearest actual milepost (\_\_\_ feet from MP \_\_\_). OR: Distance from crossing to centerline of nearest public road intersection (include DOT Crossing #)
- (b) Width of CSX R/W
- (c) Distance from centerline of track to R/W
- (d) Total length of pipe on CSX R/W [See CSXT Pipeline Spec. page 13, C, i, ii]
- (e) Distance from centerline of nearest track to face of pits or poles at a 90 degree angle to the track(s)
- (f) Angle of crossing [See CSXT Pipeline Spec. page 5, B, ii]
- (g) IF CONTENTS UNDER PRESSURE: Distance of shut-off valves from centerline of nearest track (min. 2,000' from nearest track on each side of R/W) [See CSXT Pipeline Spec. page 20, I, ii]
- (h) Width of Launching/Receiving Pit
- (i) Length of Launching/Receiving Pit

KEEP THE BORE PITS  
OUTSIDE CSX ROW AND  
TREL LINE

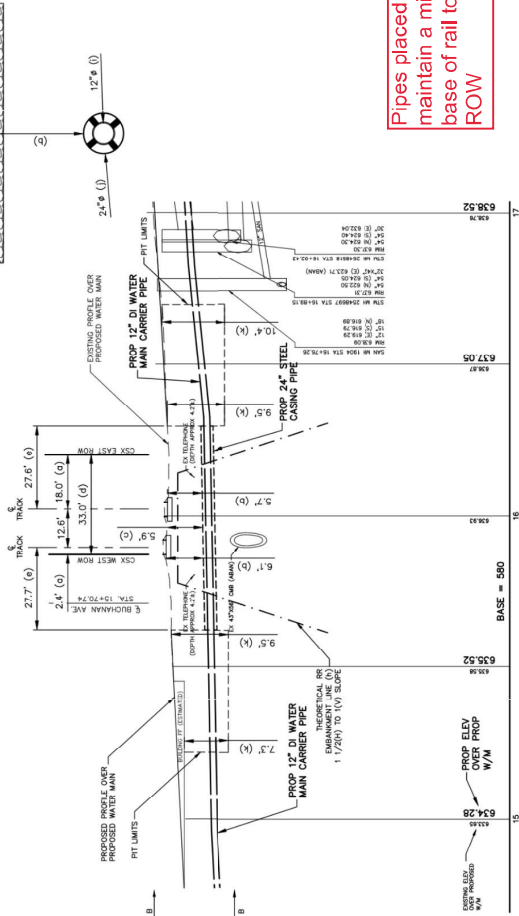


Engineers | Architects | Scientists | Constructors

Location:	CITY OF GRAND RAPIDS, MICHIGAN				
Latitude:	42.9487672				
Longitude:	-85.6724138				
Drawing No.:	1		Sheet	1	of 2
Drawing Date:	10/31/2024		Last Revised:		
Drawing Scale:	1	Inches =	20	Feet	

PROPOSED WATER MAIN RELOCATION IN PUBLIC EASEMENT  
ALONG MARTIN LUTHER KING, JR. ST - PROFILE VIEW A-A

PIPELINE CROSS-SECTION  
VIEW B-B



NOTES:  
REFER TO HDD INTERIM GUIDELINES AND ENGINEERING SPECIFICATIONS IN THE APPLICATION PACKAGE FOR ADDITIONAL INFORMATION AND GUIDANCE.  
LOCATE CSX'S SIGNAL FACILITIES AND/OR WARNING DEVICES AT PROPOSED FACILITY CROSSING LOCATIONS, INTERSECTIONS, FLASHERS, GATES AND SHOW CLEARANCES.  
CASING PIPE ENDS MUST BE SEALED, IF APPLICABLE. HDPE DR II OR BETTER MUST BE USED.  
YOUR DRAWING MUST SHOW ALL SETS OF TRACKS PRESENT AT THE PROPOSED UTILITY CROSSING LOCATION  
CSX BORE PLAN TEMPLATE AND FRACTION MITIGATION PLAN TO BE SUBMITTED TO CSX FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION

Pipes placed under CSXT track(s) shall maintain a minimum distance of 5.5 feet from base of rail to top of pipe through entire CSX ROW



Engineers | Architects | Scientists | Constructors

Location:	MLK Jr. St - Grand Rapids, MI
Latitude:	N 42.56 : 55
Longitude:	W 85.40 : 20 : 69
Drawing No.:	2
Sheet:	2 of 2
Drawing Date:	10/31/24
Revised:	/ /
Drawing Scale:	V 1 Inches = 10 Feet
Drawing Scale:	H 1 Inches = 20 Feet

PIPELINE CONTENT DETAILS

Commodity Description:	Water Main
Maximum Operating Pressure:	
Is Commodity Flammable:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
CARRIER/CASING PIPE DETAILS	
Carrier Pipe	
Pipe Material:	Steel - Grade B
Material Specifications & Grade:	ASTM A-139
Specified Minimum Yield Strength:	42,000 psi
Nominal Size Outside Diameter (inches):	24"
Wall Thickness (inches):	0.375"
Type of Seam:	N/A
Type of Joints:	Gasket Bell & Spigot
Tunnel Liner Plates Required:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Cathodic Protection:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Protective Coating:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Temp. Track Support or Rip-Rap Req.:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Must Describe & Show on Dwg.	

Letter	Description
(a)	Distance from centerline of track to CSX R/W
(b)	Distance from base-of-rail to top-of-casing
(c)	Distance from base-of-ditch to top-of-casing
(d)	Total length of pipe on CSX R/W
(e)	Distance from centerline of nearest track to face of pile at a 90 degree angle to the track(s)
(f)	Distance from top-of-vent pipe to ground surface (if minimum required)
(g)	Distance from centerline of track to vent pipe at a 90 degree angle to the track(s)
(h)	Theoretical Embankment Line: Starts 12' from centerline of track, and extends away from track at a slope of 1.5' over and 1' down.
(i)	Carrier pipe diameter
(j)	Casing pipe diameter
(k)	Depth of Launching/Receiving Pit