

RESOLUTION NO. 2014-108

AUTHORIZING A MEMORANDUM OF UNDERSTANDING WITH THE BOARD OF PARK COMMISSIONERS OF THE CLEVELAND METROPOLITAN PARK DISTRICT AND THE ROTARY CLUB OF CLEVELAND, OHIO, USA FOR A FEASIBILITY STUDY FOR THE RED LINE GREENWAY MULTI-PURPOSE PATH

WHEREAS, the Rotary Club of Cleveland, Ohio, USA ("Rotary") has maintained the GCRTA West 25th Street Rapid Station site for 37 years on a volunteer basis and, in 2009, developed the idea for a multi-purpose greenway along the GCRTA Red Line called the Red Line Greenway; and

WHEREAS, the GCRTA and Rotary have been examining and reviewing how the Red Line Greenway can become a safe, accessible, and world-class greenway; and

WHEREAS, a feasibility study is necessary to determine if the Red Line Greenway can be safely implemented while providing adequate access and space for GCRTA rail operations; and

WHEREAS, the Cleveland Metropolitan Park District ("CMP") will evaluate and provide criteria regarding the design, construction, maintenance, operations, programming and patrolling of the Red Line Greenway to assist in the Feasibility Study; and

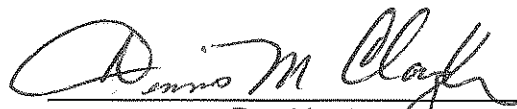
WHEREAS, the Parties shall either share the cost to engage a firm or firms, pursue funding from other resources, or use resources available within their respective organizations to conduct the study.

NOW, THEREFORE, BE IT RESOLVED by the Board of Trustees of the Greater Cleveland Regional Transit Authority, Cuyahoga County, Ohio:

Section 1. That the General Manager/Secretary-Treasurer of the Greater Cleveland Regional Transit Authority be and is hereby authorized to enter into a Memorandum of Understanding with the Board of Park Commissioners of the Cleveland Metropolitan Park District and Rotary for a feasibility study for the Red Line Greenway multi-purpose path.

Section 2. That this resolution shall take effect immediately upon its adoption.

Adopted: October 21, 2014



President

Attested: 

CEO, General Manager/Secretary-Treasurer



Greater Cleveland Regional Transit Authority
STAFF SUMMARY AND COMMENTS

TITLE/DESCRIPTION: CONTRACT: MEMORANDUM OF UNDERSTANDING FOR A FEASIBILITY STUDY FOR THE RED LINE GREENWAY MULTI-PURPOSE PATH VENDOR: BOARD OF PARK COMMISSIONERS OF THE CLEVELAND METROPOLITAN PARK DISTRICT AND THE ROTARY CLUB OF CLEVELAND AMOUNT: N/A	Resolution No.: 2014-108
	Date: October 16, 2014
	Initiator: Programming and Planning
ACTION REQUEST: <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review/Comment <input type="checkbox"/> Information Only <input type="checkbox"/> Other _____	

- 1.0 **PURPOSE/SCOPE:** This action will allow the Authority to enter into a Memorandum of Understanding ("MOU") with the Board of Park Commissioners of the Cleveland Metropolitan Park District ("CMP") and the Rotary Club of Cleveland, Ohio, USA ("Rotary") for a feasibility study for the Red Line Greenway multi-purpose path.

- 2.0 **DESCRIPTION/JUSTIFICATION:** The Red Line Greenway is proposed to begin at the Michael Zone Recreation Center, enter onto GCRTA property at approximately West 41st Street, continue on GCRTA property past the West 25th Street Rapid Station to the Cuyahoga Viaduct transit track bridge, and connect to other regional trails on Franklin Road. This MOU formalizes the scope of the feasibility study and also establishes the roles and responsibilities of each party. If the Greenway is found to be feasible, a separate property agreement would be brought to the Board of Trustees for approval at a future date.

 GCRTA will be responsible for surveying within its property to aid in determining whether the Red Line Greenway path can be built adjacent to the Red Line.

- 3.0 **PROCUREMENT BACKGROUND:** N/A

- 4.0 **DBE/AFFIRMATIVE ACTION BACKGROUND:** N/A


- 5.0 **POLICY IMPACT:** Participating in this agreement demonstrates GCRTA's interest in promoting a network of multi-modal transportation options that complement the existing public transportation system.

- 6.0 **ECONOMIC IMPACT:** The parties of this agreement shall either share the cost to engage a firm or firms, pursue funding from other sources, or use resources available within their respective organizations to conduct the feasibility study.

- 7.0 **ALTERNATIVES:** Reject the Memorandum of Understanding. Rejection of this agreement will inhibit GCRTA from providing direct input into the design of the greenway to ensure that rail operational needs and the needs of GCRTA customers are met.

- 8.0 RECOMMENDATION: The staff recommends that the Memorandum of Understanding be accepted and the resolution passed. This MOU will be presented to the Planning and Development Committee on October 21, 2014 with the recommendation that it be approved for action by the full Board.
- 9.0 ATTACHMENTS: Attachment A - Form of the agreement is attached.

Recommended and certified as appropriate to the availability of funds, legal form and conformance with the Procurement requirements.



CEO, General Manager/Secretary-Treasurer

MEMORANDUM OF UNDERSTANDING

BY AND BETWEEN

THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY

AND

**THE BOARD OF PARK COMMISSIONERS OF THE CLEVELAND
METROPOLITAN PARK DISTRICT**

AND

THE ROTARY CLUB OF CLEVELAND, OHIO, U.S.A.

FOR THE

RED LINE GREENWAY PROJECT FEASIBILITY STUDY

This Memorandum of Understanding (“MOU”) is made as of this _____ day of _____, 2014 (“Effective Date”), by and between the **Greater Cleveland Regional Transit Authority (“GCRTA”)**, with a business address of 1240 West 6th Street, Cleveland, OH 44113, the **Board of Park Commissioners of the Cleveland Metropolitan Park District (“CMP”)**, with a business address of 4101 Fulton Parkway, Cleveland, OH 44144, both of which are political subdivisions of the State of Ohio, and the **Rotary Club of Cleveland, Ohio, U.S.A. (“Rotary”)**, a nonprofit entity organized and existing under the laws of the State of Ohio, with a business address of 1122 Prospect Avenue, Cleveland, OH 44115, collectively “the Parties.”

WHEREAS, Rotary has maintained the GCRTA West 25th Street rapid site for 37 years on a volunteer basis and in 2009, developed the idea for a multi-purpose greenway along the GCRTA Red Line transit rail line (hereinafter, “Red Line Greenway” or “RLG”);

WHEREAS, GCRTA and Rotary have been examining and reviewing how the RLG can become a safe, accessible and world-class greenway;

WHEREAS, the consultant's early design work has resulted in a list of exhibits that form broad and acceptable guidelines to inform the more complete design plans for constructing the RLG (see Exhibit 1) and a Cost and Alignment Analysis (see Exhibit 2); and

WHEREAS, the Parties are interested in securing a more detailed study on the feasibility ("Feasibility Study") of the RLG along the GCRTA Red Line from the southern end of the Cuyahoga Viaduct transit track bridge (at an overlook point over Merwin Avenue) to the Michael Zone Recreation Center located at 6301 Lorain Avenue, Cleveland, OH 44102 .

NOW, THEREFORE, in consideration of the mutual promises, covenants and obligations contained herein, the Parties agree as follows:

Section 1. Project Scope

The purpose of this MOU is to secure the Feasibility Study of the RLG along the GCRTA Red Line transit rail line from the southern end of the Cuyahoga Viaduct transit track bridge to the Michael Zone Recreation Center. A majority of the RLG will be on GCRTA land; however, a short section will be on Ohio Department of Transportation ("ODOT") property bordering GCRTA property along the north side of Interstate 90 from West 41st Street to West 53rd Street. The Parties shall either share the cost to engage a firm or firms, pursue funding from other sources, or use resources available within their respective organizations to conduct the study.

Section 2. Shared versus Non-shared Trails

The Feasibility Study will endeavor to examine whether trails can be designated as shared or non-shared. The Parties acknowledge that wherever possible, GCRTA will maintain its own railroad maintenance access road ("Access Road") between the tracks and the RLG. The Access Road and the RLG will be separated by a six-foot fence. All areas where the trail will not be shared are referred to as "non-shared". Passing from shared to non-shared trails will require gates that lock. A six-foot fence will also be

required to separate areas of shared use from the transit tracks. The Parties will work together to determine the appropriate areas for both shared and non-shared areas with the understanding that GCRTA needs to maximize non-shared facilities while maintaining railroad access, greenway integrity, and adequate width for both.

Section 3. CMP Involvement

CMP is a world-class caretaker of green space throughout Northeast Ohio. CMP will evaluate and provide criteria regarding the design, construction, maintenance, operations, programming, and patrolling of the RLG to assist in the Feasibility Study. If the RLG is determined to be reasonably feasible and, subject to CMP Board approval, CMP will engage in discussions with GCRTA to accept a conveyance of requisite property interest(s) for all GCRTA property needed to maintain and patrol the RLG, according to the terms determined by GCRTA and CMP in a separate agreement.

Section 4. Rotary Ongoing Involvement

Rotary agrees to continue to maintain and develop the RLG site during the feasibility study, and potential design and construction phases. If the RLG is reasonably feasible, the Parties to this MOU will be involved throughout the design process, including being involved in the retention of a professional greenway designer.

Section 5. Funding

The Parties agree to work together to pursue the most appropriate funding options. Any funds raised by Rotary will be maintained in a separate account specifically for use in developing the RLG. Subject to approval of its Board of Trustees, if necessary, GCRTA will fund a boundary survey to define its property limits for a future land-use agreement if the RLG is feasible.

Section 6. Conveyance of Property Interest from GCRTA to CMP

After an agreement is reached on the overall route of the RLG and subject to approval of its Board of Trustees, if necessary, and acceptance of such conveyance by CMP Board, GCRTA will convey to CMP the requisite property interest(s) to all GCRTA property

needed to construct, maintain, and patrol the RLG, for a period to be determined by GCRTA and CMP in a separate agreement.

Section 7. Other Parties

In furtherance of the Red Line Greenway, other entities may be consulted or utilized during this project, including but not limited to:

City of Cleveland	L.A.N.D. studio, Inc.
County of Cuyahoga	Northeast Ohio Area Coordinating Agency (NOACA)
Ohio Canal Corridor	Ohio Department of Transportation (ODOT)

Section 8. Compliance with Laws, Rules, and Regulations

All Parties hereto, their employees and any other persons over whom they have control, shall comply with all present and future laws, regulations, and ordinances applicable to the RLG.

Section 9. Notice

All notices or other communications required or appropriate under this MOU shall be hand-delivered, sent by U.S certified mail or delivered by a nationally recognized overnight carrier service, to:

Joseph A. Calabrese, General Manager/CEO
Greater Cleveland Regional Transit Authority
1240 West 6th Street
Cleveland, OH 44113

Brian Zimmerman, Chief Executive Officer
Cleveland Metroparks
4101 Fulton Parkway
Cleveland, OH 44144

(with a copy to)
Chief Legal & Ethics Officer
Cleveland Metroparks
4101 Fulton Parkway
Cleveland, OH 44144

Beverly Ghent-Skrzynski, Executive Director & Secretary
Rotary Club of Cleveland, Ohio, U.S.A.

1122 Prospect Ave
Cleveland, OH 44115

Section 10. Termination

Any of the Parties may withdraw from this MOU upon thirty (30) days advance notice in writing to the other parties. Parties remaining after withdrawal of one of the parties shall determine whether to proceed with the RLG project.

Section 11. Complete MOU

All negotiations, considerations, representations and understandings between the Parties are incorporated herein, and may be modified or altered only by agreement in writing, signed by all Parties to this MOU. Any such amendments shall require approvals of all Parties.

Section 12. No Third Party Beneficiaries

Nothing contained in this MOU shall be construed so as to confer upon any other party the rights of a third-party beneficiary.

Section 13. Agreement Binding Upon Successors

The Parties, respectively, bind themselves, their partners, successors, assigns and legal representatives to the other parties hereto and to partners, successors, assigns and legal representatives of such other parties in respect to covenants, agreements and obligations contained in the MOU. The parties shall not assign this MOU without written consent of the others. If a party attempts to make such assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the MOU.

Section 14. Discrimination Prohibited

The Parties and their successors and assigns, shall not, in the use of the RLG, discriminate against any person or group of persons based upon race, religion, color, sex, sexual orientation, national origin, age disability, ethnic group or Vietnam-era or disabled veteran status, in the, occupancy or enjoyment of the RLG, and shall so bind its

successors and assigns by appropriate agreements and covenants running with the land enforceable by the Parties.

Section 15. Exhibits

All exhibits or other attachments referenced in this MOU are hereby incorporated into this MOU by such reference and are deemed to be an integral part of this MOU.

Exhibit 1 – Conceptual Overall Alignment Documents for Red Line Greenway

Exhibit 2 – Conceptual Opinion of Probable Costs for Red Line Greenway

IN WITNESS WHEREOF, the Parties have executed this Memorandum of Understanding as of the date first written above.

GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY

By: _____

Joseph A. Calabrese, General Manager/CEO

BOARD OF PARK COMMISSIONERS OF THE CLEVELAND METROPOLITAN PARK DISTRICT

By: _____

Brian Zimmerman, Chief Executive Officer

Approved as to legal form:

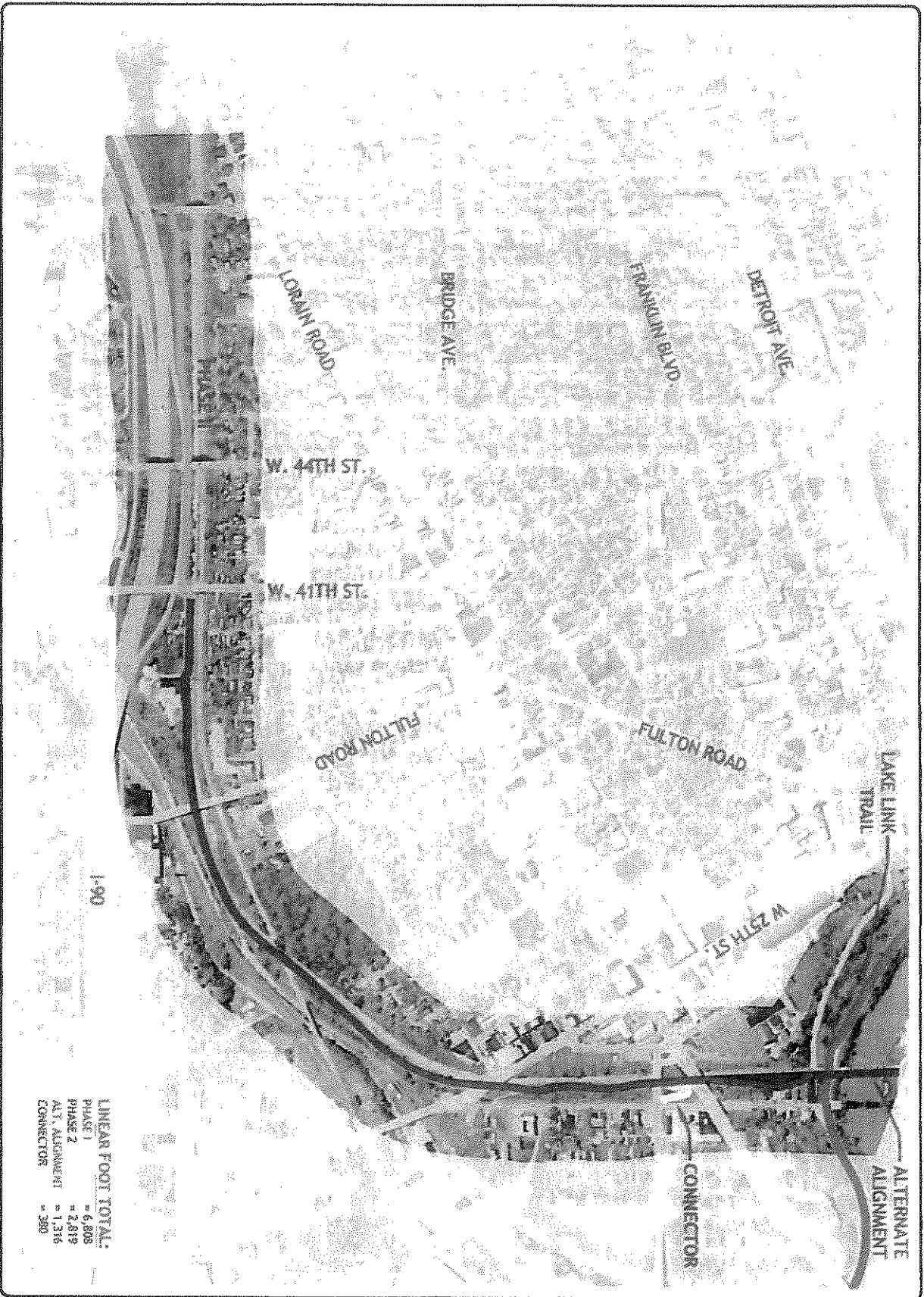


Rosalina M. Fini, Chief Legal & Ethics Officer

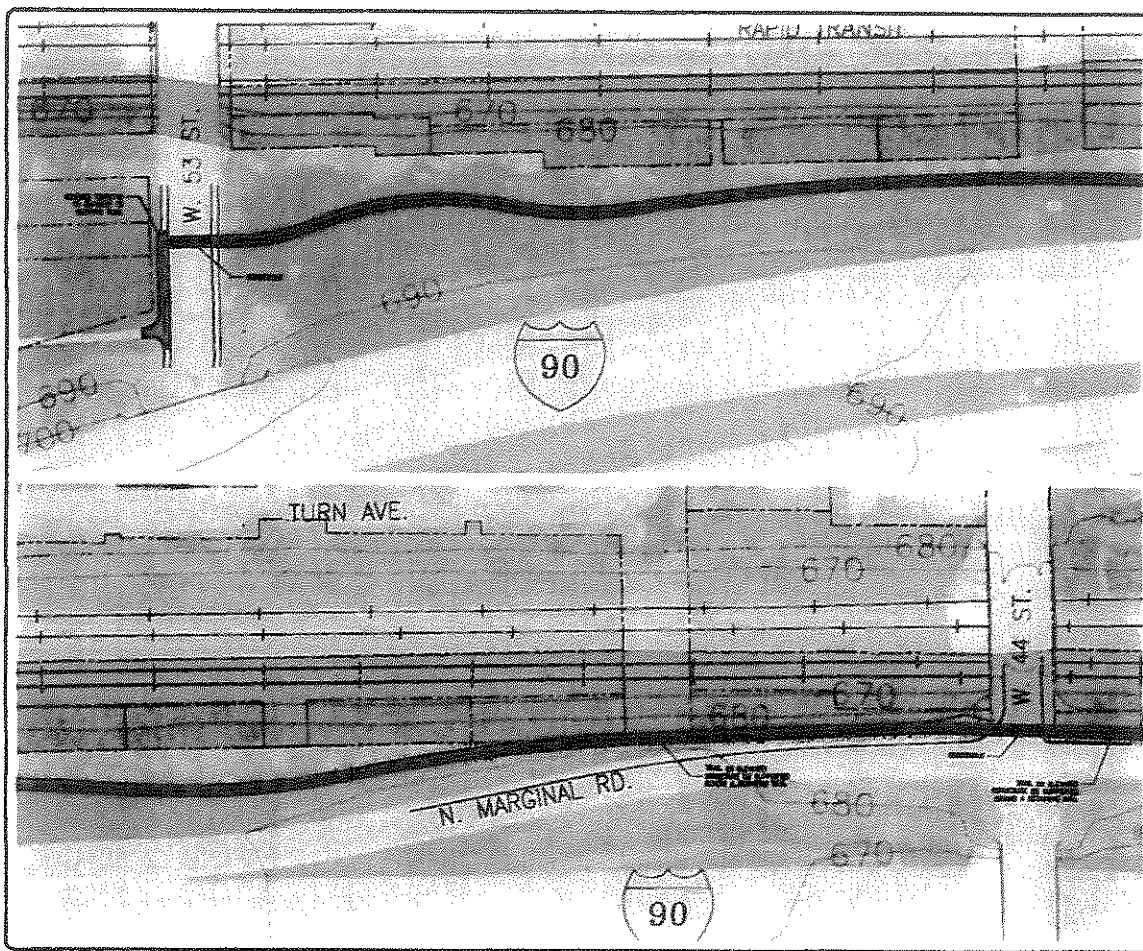
ROTARY CLUB OF CLEVELAND, OHIO, U.S.A.

By: _____

Beverly Ghent-Skrzynski, Executive Director & Secretary

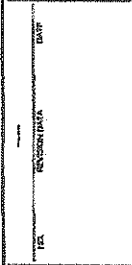


<p>PROJECT NO. 112 DESIGNED BY [signature] CHECKED BY [signature] DATE 11/11/11</p>	<p>LAND STUDIO</p> <p>RED LINE TRAIL CLEVELAND, OHIO</p>		<p>NO. _____</p> <p>REVISION DATE _____</p> <p>DATE _____</p>
	<p>OVERALL ALIGNMENT</p> <p>1 of 8</p>		<p>Environmental Design Group 4400 East 9th Street, Suite 200 Cleveland, OH 44115 Phone: (216) 781-1100 Fax: (216) 781-1101 Email: info@edgdesign.com</p> <p>Environmental Design Group</p> <p>NORTH</p>



Environmental
Design Group
190 East 12th Street, Suite 1117
Cleveland, OH 44115
Tel: 216.464.1111
Fax: 216.464.1112

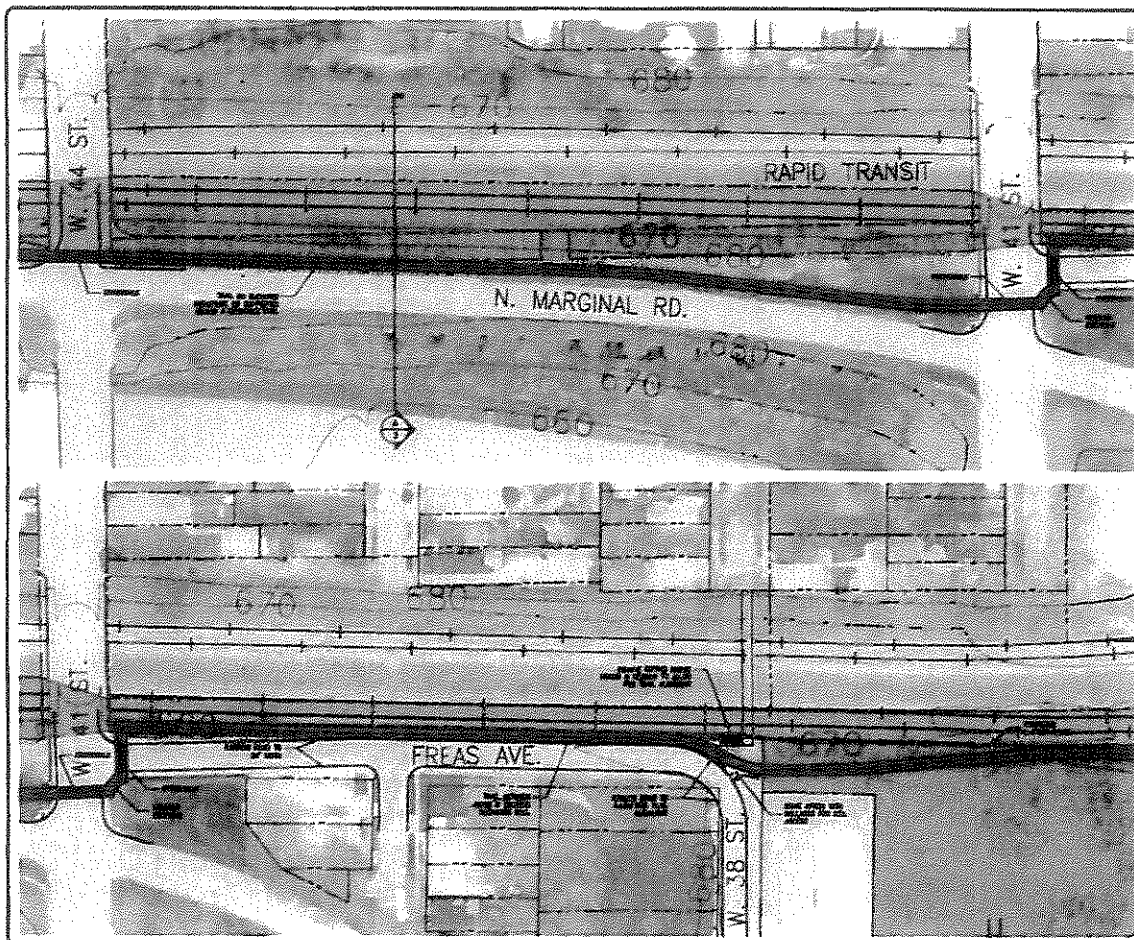
LEGEND
 GCRTA
 North Coast RR
 West Industrial RR
 Proposed Rail Route



LAND STUDIO
RED LINE TRAIN
 CLEVELAND, OHIO

PROJECT NO. 040100-1
 DRAWN BY JSS
 CHECKED BY JSS
 DATE ISSUED 04/20/04

CONCEPTUAL
 ALIGNMENT



Environmental Design Group
 12500 Eastman Ave. Suite 100
 Cleveland, OH 44130
 Phone: (216) 431-1100
 Fax: (216) 431-1101
 www.edg.com

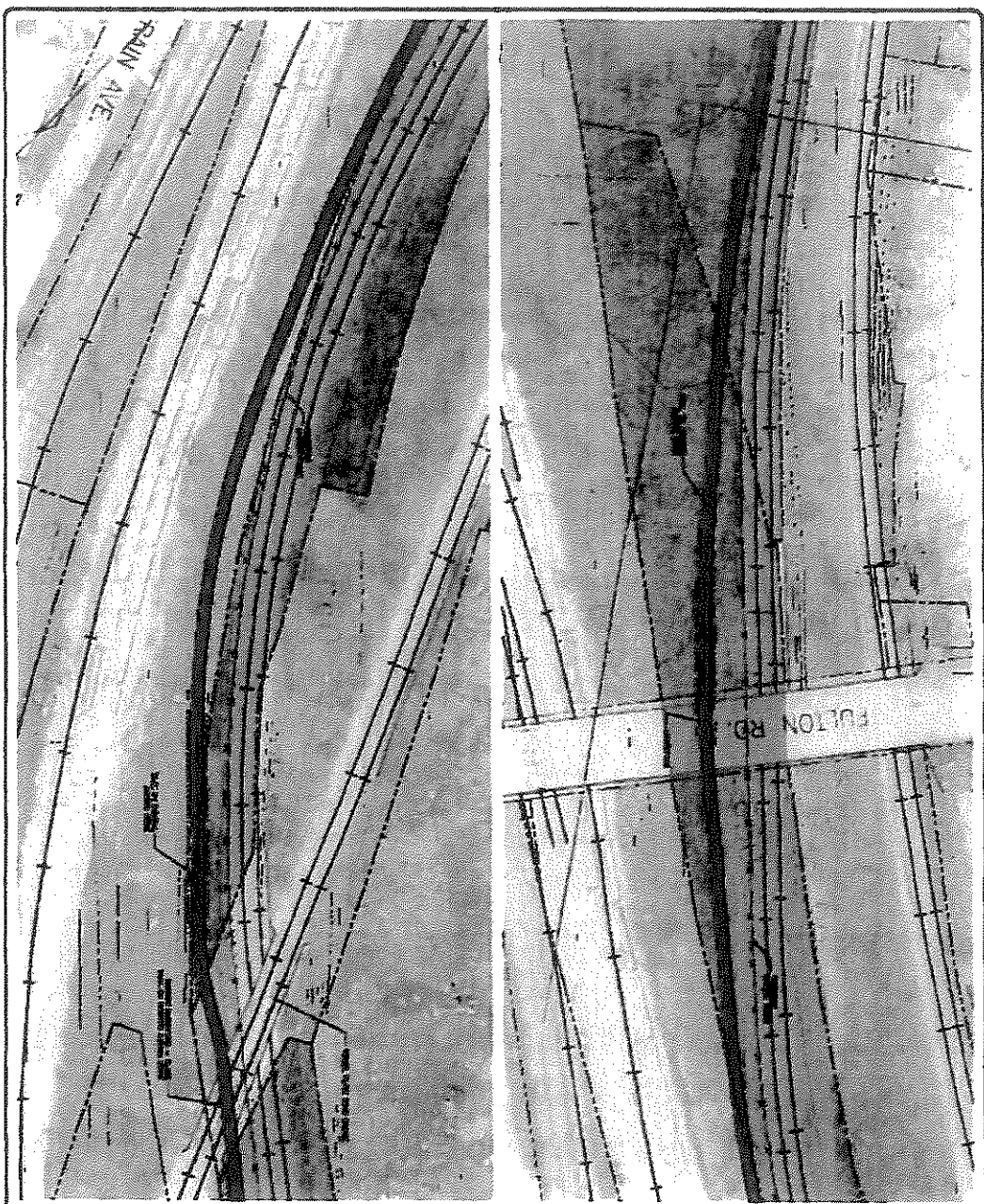
LEGEND
 GCRTA
 North Section RR
 Full Section RR
 Proposed Full Road

DATE	
PROJECT DATA	
15'	

LAND STUDIO
 RED LINE TRAIL
 CLEVELAND, OHIO

PROJECT NO.	13090-010
DESIGNED BY	***
DRAWN BY	***
CHECKED BY	***
DATE PLOTTED	2008/08/04 09:00

CONCEPTUAL ALIGNMENT
 3 OF 8



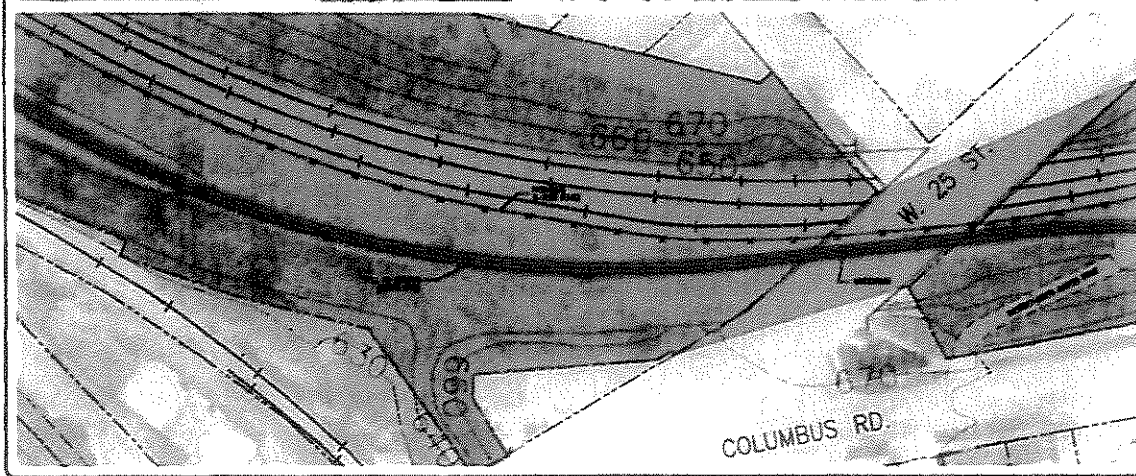
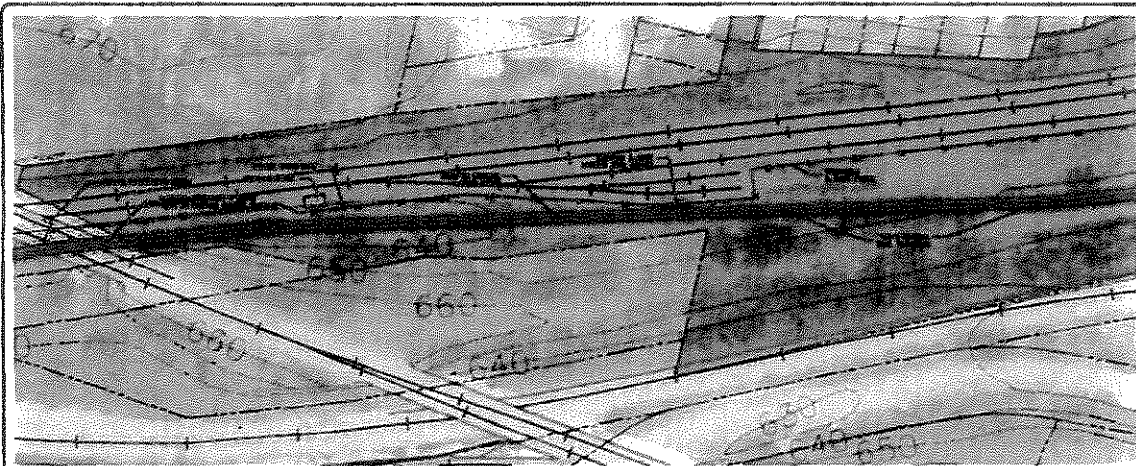
PREPARED BY
 LAND STUDIO
 11111 LEXINGTON AVENUE
 SUITE 200
 CLEVELAND, OHIO 44130
 TEL: (216) 434-1111
 FAX: (216) 434-1112
 WWW.LANDSTUDIO.COM

LAND STUDIO
RED LUXURY TRAIL
 CLEVELAND, OHIO

NO.	REVISION DATA	DATE

LEGEND
 --- EXISTING
 --- PROPOSED
 --- FUTURE
 --- UTILITIES
 --- EASEMENTS
 --- OTHER

4 of 8



Environmental
Design Group
125 South Avenue, Suite 100
Cleveland, OH 44115
Tel: (216) 421-1234
Fax: (216) 421-1235

LEGEND

- CONTA
- North Service RR
- Penn Industrial RR
- Proposed Trail Road

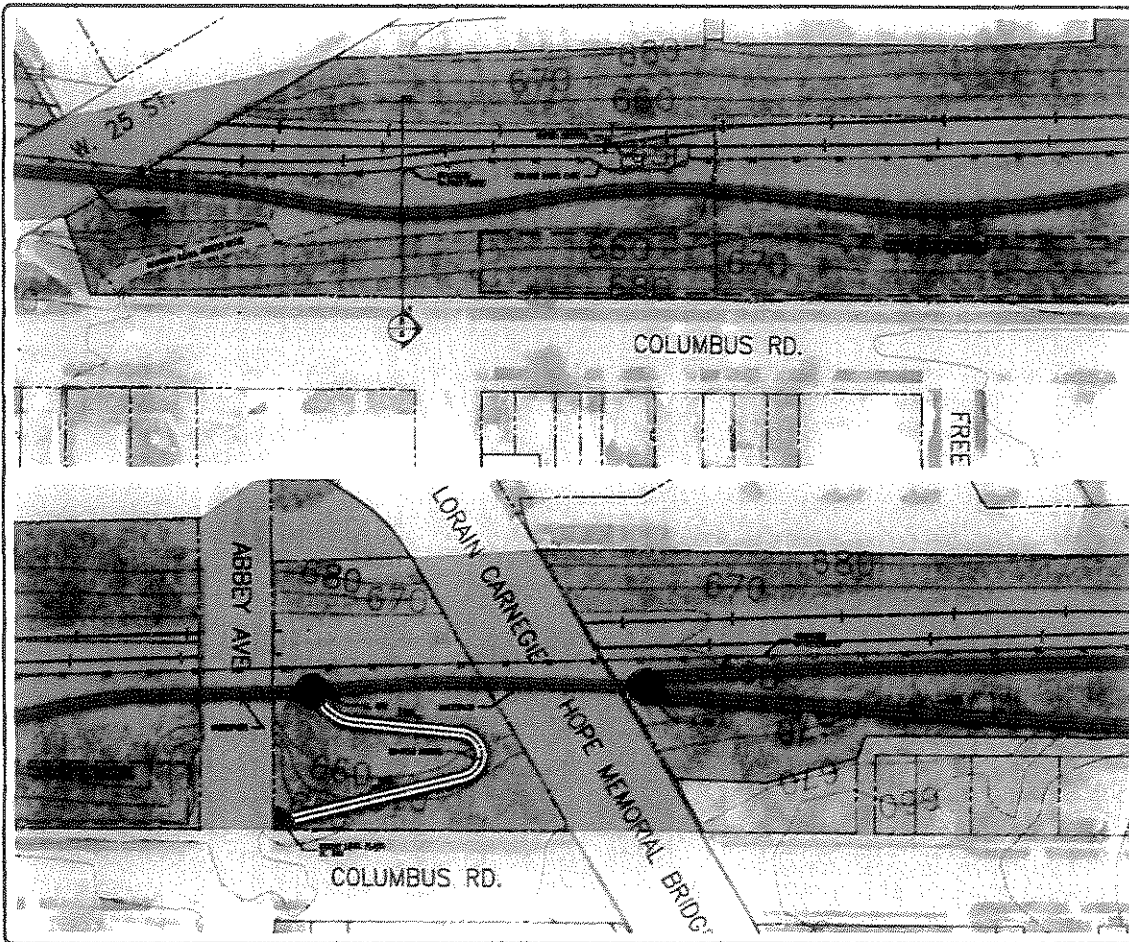


LAND STUDIO
RED HIRE TEAM
CLEVELAND, OHIO

PROJECT NO.	12-070-040
DATE	04/01/04
DRAWN BY	MM
CHECKED BY	MM
DATE	04/01/04

CONCEPTUAL
ALIGNMENT

5 of 8



Environmental Design Group
 1000 Lakeside Blvd., Suite 1000
 Cleveland, OH 44115
 Tel: (216) 526-1000
 Fax: (216) 526-1001

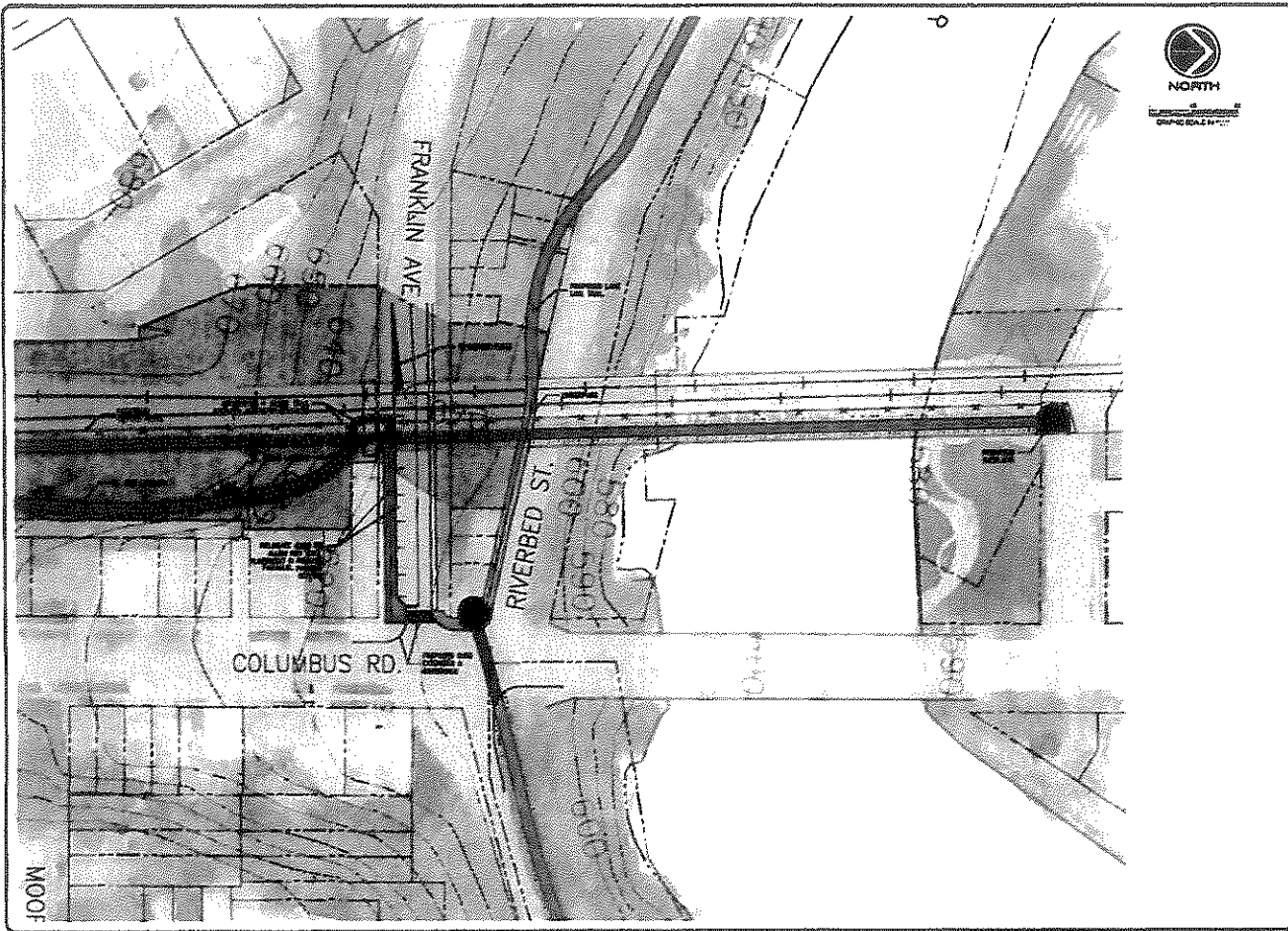
LEGEND
 DASHED LINE
 Existing Railroad RR
 Solid Line
 Proposed Trail Route

NO.	DATE

LAND STUDIO
RED LINE TRAIL
 CLEVELAND, OHIO

PROJECT NO. 10-01-0471
 DRAWN BY: [blank]
 CHECKED BY: [blank]
 DATE: [blank]

CONCEPTUAL ALIGNMENT



Environmental Design Group
 12100 East 12th Street, Suite 100
 Cleveland, Ohio 44115
 Phone: (216) 431-1210
 Fax: (216) 431-1211
 www.edg.com

LEGEND

CGRTA

North Eastern RR

Area Industrial RR

Proposed Trail Route

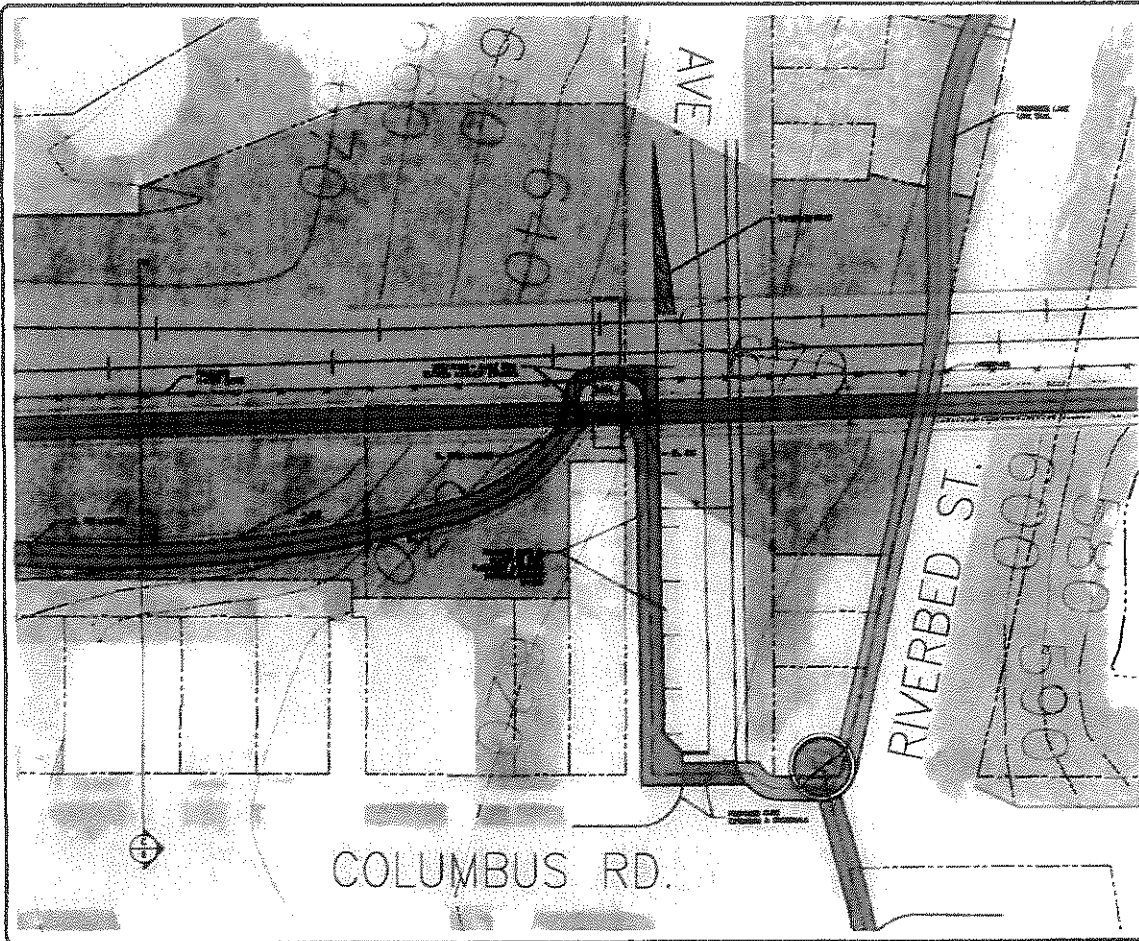
NO.	DESCRIPTION	DATE

LAND STUDIO
RED LINE TRAIL
 CLEVELAND, OHIO

PROJECT NO.	110254-00
DESIGNED BY	EDG
CHECKED BY	EDG
DATE REVISION	200802260001

CONCEPTUAL ALIGNMENT

7 of 8



Environmental Design Group
 2500 East 17th Street, Suite 100
 Cleveland, Ohio 44115
 Phone: 216.763.1100
 Fax: 216.763.1101

LEGEND
 CDRTA
 Norfolk Southern RR
 Fara Industrial RR
 Proposed Third Phase



LAND STUDIO
RED LONE TERN
 CLEVELAND, OHIO

PROJECT NO. 040471
 DRAWING NO. 010
 CHECKED BY 010
 DATE 02/20 04/22/2006/010

CONCEPTUAL ALIGNMENT ENLARGEMENT

CONCEPTUAL OPINION OF PROBABLE COSTS
RED LINE TRAIL



APRIL 19, 2013

PHASE I		Aggregate Trail	Asphalt Trail
SECTION	DESCRIPTION	TOTAL COST	TOTAL COST
1	Franklin Avenue to Abby Avenue	\$1,201,176.68	\$1,237,935.43
2	Abby Avenue to W. 25th Street	\$398,788.19	\$441,374.16
3	W. 25th Street to Fulton Road	\$970,269.77	\$1,072,828.89
4	Fulton Road to W. 41st Street	\$606,259.50	\$658,074.54
PHASE I TOTAL		\$3,176,494.15	\$3,410,213.02
PHASE II			
5	W. 41st Street to W. 44th Street	\$730,701.49	\$742,954.40
6	W. 44th Street to Michael Zone Recreation Center	\$893,986.85	\$938,809.21
PHASE II TOTAL		\$1,624,688.33	\$1,681,763.62
ALTERNATE ALIGNMENT			
7	Lorain Carnegie Hope Memorial Bridge to GCRTA Viaduct stopping above Marwin Avenue	\$377,309.79	\$422,919.62
ALTERNATE ALIGNMENT TOTAL		\$377,309.79	\$422,919.62
GRAND TOTAL		\$5,178,492.28	\$5,514,896.26

RED LINE TRAIL
CONCEPTUAL OPINION OF PROBABLE COSTS
APRIL 10, 2013



1 - Franklin Avenue to Abbey Avenue

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1	Site Preparation/Demolition				
	A. Clearing and Grubbing	2.3	AC	\$4,000.00	\$9,200.00
	B. Construction Fencing	300	LF	\$3.50	\$1,050.00
	C. Asphalt & Concrete Pavement Removal	430	SY	\$9.00	\$3,870.00
	D. Concrete Crosswalk Pavement Removal	1	SY	\$0.00	\$0.00
	E. Concrete Curb Removal	325	LF	\$16.00	\$5,200.00
	F. Saw Cut Pavement	325	LF	\$8.00	\$2,600.00
	Subtotal				\$19,920.00
2	Earthwork				
	A. Excavation/Embankment	26500	CY	\$15.00	\$397,500.00
	Subtotal				\$397,500.00
3	Erosion Control				
	A. Silt Fence	1180	LF	\$3.50	\$4,130.00
	B. Erosion Control Measures	1	LS	\$10,000.00	\$10,000.00
	C. Slope Matting	5200	SY	\$3.50	\$18,200.00
	Subtotal				\$32,330.00
4	Pavement				
	A. Subgrade Preparation	1556	SY	\$1.50	\$2,334.00
	B. 10' Asphalt Pavement	1167	SY	\$38.00	\$44,346.00
	C. Concrete Pavement	3700	SF	\$8.00	\$29,600.00
	D. Decorative Concrete Node Pavement	1740	SF	\$12.00	\$20,880.00
	E. Geogrid	1556	SY	\$8.00	\$12,448.00
	Subtotal				\$119,608.00
5	At Grade Crossings & Road Markings				
	A. Crosswalk Striping Only	60	LF	\$12.50	\$750.00
	B. Restripe Road	380	LF	\$6.00	\$2,280.00
	C. 10' Curb Ramps w/ Trunc. Domes	1	EA	\$2,200.00	\$2,200.00
	Subtotal				\$5,230.00
6	Utilities				
	A. Light Pole Relocation	1	EA	\$2,500.00	\$2,500.00
	B. Adjust Utilities to Grade	1	LS	\$5,000.00	\$5,000.00
	C. Relocate Sign	1	EA	\$500.00	\$500.00
	D. Electric Distribution & Connections	1	LS	\$20,000.00	\$20,000.00
	E. 25' Light Pole with LED Fixture & Base (100' O.C.)	10	EA	\$4,200.00	\$42,000.00
	F. Sconce LED Fixtures for Under Bridge (4 per bridge)	12	EA	\$850.00	\$10,200.00
	G. Underground Electric Conduit & Wire	1000	LF	\$35.00	\$35,000.00
	Subtotal				\$117,700.00
7	Site Amenities				
	A. Bollards	2	EA	\$800.00	\$1,600.00
	B. Removable Bollards	1	EA	\$1,200.00	\$1,200.00
	C. Cellular Retaining Wall (Green Wall)	850	FF	\$42.50	\$36,125.00
	D. Trail Signage	1180	LF	\$1.50	\$1,770.00
	E. 6' Black Vinyl Chain Link Security Fence w/ Barbed Wire	900	LF	\$60.00	\$54,000.00
	F. 6' Black Vinyl Chain Link Security Gates (Double Swing)	1	EA	\$5,000.00	\$5,000.00
	G. Bench (500' O.C.)	3	EA	\$2,500.00	\$7,500.00
	H. Trash Receptacle (500' O.C.)	3	EA	\$1,500.00	\$4,500.00
	Subtotal				\$111,695.00
8	Landscape				
	A. Trusside Seeding and Fine Grading	700	SY	\$1.20	\$840.00
	B. Seeding and Fine Grading	4000	SY	\$1.20	\$4,800.00
	C. Slope Stabilization #2 Cont. Shrubs (5' O.C.)	1520	EA	\$25.00	\$38,000.00
	D. Slope Stabilization Trees (1' Cal., 30' O.C.)	42	EA	\$275.00	\$11,550.00
	E. Trees (3" Cal., 1 per 50LF)	20	EA	\$450.00	\$9,000.00
	Subtotal				\$64,190.00
9	Construction Survey & Layout				
	A. Survey & Layout	1	LS	\$10,000.00	\$10,000.00
	B. Traffic Control & Maintenance	1	LS	\$3,000.00	\$3,000.00
	Subtotal				\$13,000.00
	TOTAL				\$194,418.00
	A. Contingency (15%)				\$29,162.70
	B. General Conditions (5%)				\$9,720.90
	C. Bonds & Insurances (3%)				\$5,832.54
	D. Mobilization/Demobilization (1.5%)				\$2,916.27
	E. Design & Documents (15%)				\$29,162.70
	GRAND TOTAL with Asphalt Trail				\$271,153.41
-	Replace Asphalt Trail Pavement with Aggregate				
	B. 10' Asphalt Pavement	1167	SY	\$38.00	\$44,346.00
	C. 10' Aggregate Pavement	1167	SY	\$16.00	\$18,672.00
	Subtotal				\$63,018.00
	TOTAL				\$334,171.41
	A. Contingency (15%)				\$50,125.71
	B. General Conditions (5%)				\$16,708.57
	C. Bonds & Insurances (3%)				\$10,023.13
	D. Mobilization/Demobilization (1.5%)				\$4,912.57
	E. Design & Documents (15%)				\$50,125.71
	GRAND TOTAL with Aggregate Trail				\$456,067.00

assumptions

earthwork contains no berms

REDLINE TRAIL
 CONCEPTUAL OPINION OF PROBABLE COSTS
 APRIL 19, 2017



2 - Abbey Avenue to W. 25th Street

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1	Site Preparation/Demolition				
	A. Clearing and Grubbing	1.0	AC	\$4,000.00	\$4,000.00
	B. Construction Fencing		LF	\$3.50	\$0.00
	C. Asphalt & Concrete Pavement Removal		SY	\$6.00	\$0.00
	D. Concrete Curb/Pavement Removal		SY	\$60.00	\$0.00
	E. Concrete Curb Removal		LF	\$10.00	\$0.00
	F. Saw Cut Pavement		LF	\$8.00	\$0.00
	Subtotal				\$4,000.00
2	Earthwork				
	A. Excavation/Embankment	1500	CY	\$10.00	\$15,000.00
	Subtotal				\$15,000.00
3	Erosion Control				
	A. Silt Fence	1216	LF	\$3.50	\$4,256.00
	B. Erosion Control Measures	1	LS	\$5,000.00	\$5,000.00
	Subtotal				\$9,256.00
4	Pavement				
	A. Subgrade Preparation	1892	SY	\$1.50	\$2,838.00
	B. 10' Asphalt Pavement	1352	SY	\$38.00	\$51,376.00
	C. Concrete Pavement		SF	\$8.00	\$0.00
	D. Decorative Concrete Node Pavement		SF	\$12.00	\$0.00
	E. Geogrid	1892	SY	\$6.00	\$11,352.00
	Subtotal				\$65,566.00
5	At Grade Crossings & Road Markings				
	A. Crosswalk Striping Only		LF	\$12.50	\$0.00
	B. Restripe Road		LF	\$5.00	\$0.00
	C. 10' Curb Ramps w/ Trunc. Domes		EA	\$2,200.00	\$0.00
	Subtotal				\$0.00
6	Utilities				
	A. Light Pole Relocation		EA	\$2,500.00	\$0.00
	B. Adjust Utilities to Grade		LS	\$2,500.00	\$0.00
	C. Relocate Sign		EA	\$500.00	\$0.00
	D. Electric Distribution & Connections	1	LS	\$10,000.00	\$10,000.00
	E. 25' Light Pole with LED Fixture & Base (100' O.C.)	12	EA	\$4,200.00	\$50,400.00
	F. Sconce LED Fixtures for Under Bridge (4 per bridge)	4	EA	\$850.00	\$3,400.00
	G. Underground Electric Conduit & Wire	1216	LF	\$35.00	\$42,560.00
	Subtotal				\$106,360.00
7	Site Amenities				
	A. Bollards		EA	\$800.00	\$0.00
	B. Removable Bollards		EA	\$1,200.00	\$0.00
	C. Cellular Retaining Wall (Green Wall)		FF	\$42.50	\$0.00
	D. Trail Signage	1216	LF	\$1.50	\$1,824.00
	E. 6' Black Vinyl Chain Link Security Fence w/ Barbed Wire	1200	LF	\$60.00	\$72,000.00
	F. 6' Black Vinyl Chain Link Security Gates (Double Swing)	1	EA	\$5,000.00	\$5,000.00
	G. Bench (500' O.C.)	3	EA	\$2,500.00	\$7,500.00
	H. Trash Receptacle (500' O.C.)	3	EA	\$1,500.00	\$4,500.00
	Subtotal				\$90,824.00
8	Landscape				
	A. Trailside Seeding and Fine Grading	850	SY	\$1.20	\$1,020.00
	B. Seeding and Fine Grading		SY	\$1.20	\$0.00
	C. Trees (3" Cal., 1 per 50LF)	25	EA	\$450.00	\$11,250.00
	Subtotal				\$12,270.00
9	Construction Survey & Layout				
	A. Survey & Layout	1	LS	\$5,000.00	\$5,000.00
	B. Traffic Control & Maintenance		LS	\$3,000.00	\$0.00
	Subtotal				\$5,000.00
	TOTAL				\$308,276.00
	A. Contingency (15%)				\$46,241.40
	B. General Conditions (5%)				\$17,725.87
	C. Bonds & Insurances (3%)				\$10,655.52
	D. Mobilization/Demobilization (1.5%)				\$5,317.76
	E. Design & Documents (15%)				\$53,177.61
	GRAND TOTAL with Asphalt Trail				\$441,574.16
	Replace Asphalt Trail Pavement with Aggregate				
	B. 10' Asphalt Pavement	1352	SY	-\$38.00	-\$51,376.00
	C. 10' Aggregate Pavement	1352	SY	\$18.00	\$24,336.00
	Subtotal				-\$27,040.00
	TOTAL				\$414,534.16
	A. Contingency (15%)				\$62,180.12
	B. General Conditions (5%)				\$20,726.71
	C. Bonds & Insurances (3%)				\$12,436.03
	D. Mobilization/Demobilization (1.5%)				\$6,218.01
	E. Design & Documents (15%)				\$62,180.12
	GRAND TOTAL with Aggregate Trail				\$518,175.15

assumptions

RED LINE TRAIL
 CONCEPTUAL OPINION OF PROBABLE COSTS
 APRIL 19, 2011



3 - W. 25th Street to Fulton Road

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1	Site Preparation/Demolition				
	A. Clearing and Grubbing	4.1	AC	\$4,000.00	\$16,400.00
	B. Construction Fencing		LF	\$3.50	\$0.00
	C. Asphalt & Concrete Pavement Removal		SY	\$9.00	\$0.00
	D. Fence Removal		LF	\$5.00	\$0.00
	E. Saw Cut Pavement		LF	\$5.00	\$0.00
	Subtotal				\$16,400.00
2	Earthwork				
	A. Excavation/Embankment	3800	CY	\$10.00	\$38,000.00
	Subtotal				\$38,000.00
3	Erosion Control				
	A. Silt Fence	2930	LF	\$3.50	\$10,255.00
	B. Erosion Control Measures	1	LS	\$10,000.00	\$10,000.00
	Subtotal				\$20,255.00
4	Pavement				
	A. Subgrade Preparation	4556	SY	\$1.50	\$6,837.00
	B. 10' Asphalt Pavement	3256	SY	\$38.00	\$123,728.00
	C. Geogrid	4556	SY	\$8.00	\$27,348.00
	D. Concrete Sidewalk Replacement		SF	\$8.00	\$0.00
	E. Concrete Curb		LF	\$20.00	\$0.00
	Subtotal				\$157,913.00
5	At Grade Crossings & Road Markings				
	A. 10' Curb Ramps w/ Trunc. Domes		EA	\$2,200.00	\$0.00
	Subtotal				\$0.00
6	Utilities				
	A. Power Pole Relocation		EA	\$5,000.00	\$0.00
	B. BioSwale Precast Concrete Weir (25' O.C.)		EA	\$2,000.00	\$0.00
	C. BioSwale 4" HDPE Underdrain		LF	\$5.00	\$0.00
	D. Electric Distribution & Connections	1	LS	\$20,000.00	\$20,000.00
	E. 25' Light Pole with LED Fixture & Base (100' O.C.)	29	EA	\$4,200.00	\$121,800.00
	F. Sconce LED Fixtures for Under Bridge (4 per bridge)	4	EA	\$850.00	\$3,400.00
	G. Underground Electric Conduit & Wire	2930	LF	\$35.00	\$102,550.00
	Subtotal				\$247,750.00
7	Site Amenities				
	A. Bollards		EA	\$800.00	\$0.00
	B. Removable Bollards		EA	\$1,200.00	\$0.00
	C. Trail Signage	2930	LF	\$1.50	\$4,395.00
	D. 6' Black Vinyl Chain Link Security Fence w/ Barbed Wire	2945	LF	\$60.00	\$176,700.00
	E. 6' Black Vinyl Chain Link Security Gates (Double Swing)	2	EA	\$5,000.00	\$10,000.00
	F. Bench (500' O.C.)	6	EA	\$2,500.00	\$15,000.00
	G. Trash Receptacle (500' O.C.)	6	EA	\$1,500.00	\$9,000.00
	Subtotal				\$219,095.00
8	Landscape				
	A. Trailside Seeding and Fine Grading	2000	SY	\$1.20	\$2,400.00
	B. Lawn Seeding and Fine Grading	20000	SY	\$1.20	\$24,000.00
	C. Trees (3" Cal., 1 per 50LF)	50	EA	\$450.00	\$22,500.00
	Subtotal				\$48,900.00
9	Construction Survey & Layout				
	A. Survey & Layout	1	LS	\$5,000.00	\$5,000.00
	B. Traffic Control & Maintenance		LS	\$3,000.00	\$0.00
	Subtotal				\$8,000.00
	TOTAL				\$749,413.00
	A. Contingency (15%)				\$112,366.95
	B. General Conditions (5%)				\$43,085.50
	C. Bonds & Insurances (3%)				\$25,851.30
	D. Mobilization/Demobilization (1.5%)				\$12,925.85
	E. Design & Documents (15%)				\$120,256.40
	GRAND TOTAL with Asphalt Trail				\$1,073,828.85
	Replace Asphalt Trail Pavement with Aggregate				
	B. 10' Asphalt Pavement	3256	SY	-\$38.00	-\$123,728.00
	C. 10' Aggregate Pavement	3256	SY	\$16.00	\$52,096.00
	Subtotal				-\$71,632.00
	TOTAL				\$977,691.00
	A. Contingency (15%)				\$101,652.15
	B. General Conditions (5%)				\$38,986.88
	C. Bonds & Insurances (3%)				\$23,370.00
	D. Mobilization/Demobilization (1.5%)				\$11,660.00
	E. Design & Documents (15%)				\$118,899.97
	GRAND TOTAL with Aggregate Trail				\$978,269.77

assumptions

trail can be placed to avoid power poles

RED LINE TRAIL
CONCEPTUAL OPINION OF PROBABLE COSTS
APRIL 19, 2012



4 - Fulton Road to W. 41st Street

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1	Site Preparation/Demolition				
	A. Clearing and Grubbing	1.20	AC	\$4,000.00	\$4,800.00
	B. Construction Fencing	800	LF	\$3.50	\$2,800.00
	C. Asphalt & Concrete Pavement Removal	503	SY	\$9.00	\$4,527.00
	D. Concrete Slab Removal	1	LS	\$5,000.00	\$5,000.00
	E. Concrete Curb Removal	287	LF	\$10.00	\$2,870.00
	F. Saw Cut Pavement	290	LF	\$5.00	\$1,450.00
	Subtotal				\$20,757.00
2	Earthwork				
	A. Excavation/Embankment	2100	CY	\$10.00	\$21,000.00
	Subtotal				\$21,000.00
3	Erosion Control				
	A. SB Fence	1505	LF	\$3.50	\$5,267.50
	B. Erosion Control Measures	1	LS	\$10,000.00	\$10,000.00
	Subtotal				\$15,267.50
4	Pavement				
	A. Subgrade Preparation	2303	SY	\$1.50	\$3,454.50
	B. 10' Asphalt Pavement	1845	SY	\$38.00	\$69,810.00
	C. Geogrid	2303	SY	\$8.00	\$18,424.00
	D. Road Asphalt Pavement	350	SY	\$65.00	\$22,750.00
	E. Pedestrian Bridge Slab Replacement	1	LS	\$20,000.00	\$20,000.00
	F. 5' Concrete Sidewalk Replacement	560	SF	\$8.00	\$4,480.00
	G. Concrete Apron Replacement	300	SF	\$10.00	\$3,000.00
	Subtotal				\$130,918.50
5	At Grade Crossings & Road Markings				
	A. Curbwalk Striping Only	50	LF	\$12.50	\$625.00
	B. Restripe Road	1	LF	\$5.00	\$5.00
	C. 10' Curb Ramps w/ Trunc. Domes	2	EA	\$2,200.00	\$4,400.00
	Subtotal				\$7,030.00
6	Utilities				
	A. Power Pole Relocation	5	EA	\$5,000.00	\$25,000.00
	B. Adjust Utilities to Grade	1	LS	\$5,000.00	\$5,000.00
	C. Electric Distribution & Connections	1	LS	\$10,000.00	\$10,000.00
	D. 25' Light Pole with LED Fixture & Base (100' O.C.)	15	EA	\$4,200.00	\$63,000.00
	E. Sconce LED Fixtures for Under Bridge (4 per bridge)		EA	\$850.00	\$0.00
	F. Underground Electric Conduit & Wire	1480	LF	\$35.00	\$51,800.00
	Subtotal				\$154,800.00
7	Site Amenities				
	A. Bollards	8	EA	\$800.00	\$4,800.00
	B. Removable Bollards	4	EA	\$1,200.00	\$4,800.00
	C. Trail Signage	1505	LF	\$1.50	\$2,257.50
	D. 6' Black Vinyl Chain Link Security Fence w/ Barbed Wire	871	LF	\$60.00	\$52,260.00
	E. Bench (500' O.C.)	3	EA	\$2,500.00	\$7,500.00
	F. Trash Receptacle (500' O.C.)	3	EA	\$1,500.00	\$4,500.00
	Subtotal				\$76,917.50
8	Landscape				
	A. Trailside Seeding and Fine Grading	1200	SY	\$1.20	\$1,440.00
	B. Lawn Seeding and Fine Grading	5800	SY	\$1.20	\$6,960.00
	C. Trees (3" Cal., 1 per 50LF)	30	EA	\$450.00	\$13,500.00
	Subtotal				\$21,900.00
9	Construction Survey & Layout				
	A. Survey & Layout	1	LS	\$10,000.00	\$10,000.00
	B. Traffic Control & Maintenance	1	LS	\$5,000.00	\$5,000.00
	Subtotal				\$15,000.00
	TOTAL				\$429,679.50
	A. Contingency (15%)				\$64,451.93
	B. General Conditions (5%)				\$21,483.98
	C. Bonds & Insurance (3%)				\$12,890.39
	D. Mobilization/Demobilization (1.5%)				\$6,445.19
	E. Design & Documents (15%)				\$64,451.93
	GRAND TOTAL with Asphalt Trail				\$589,003.94
-	Replace Asphalt Trail Pavement with Aggregate				
	B. 10' Asphalt Pavement	1845	SY	-\$38.00	-\$69,810.00
	C. 10' Aggregate Pavement	1845	SY	\$16.00	\$29,520.00
	Subtotal				-\$40,290.00
	TOTAL				\$548,713.94
	A. Contingency (15%)				\$82,307.09
	B. General Conditions (5%)				\$27,435.97
	C. Bonds & Insurance (3%)				\$16,461.52
	D. Mobilization/Demobilization (1.5%)				\$8,230.76
	E. Design & Documents (15%)				\$82,307.09
	GRAND TOTAL with Aggregate Trail				\$665,259.35

assumptions

Metal-Matrix Inc. will provide their own separate access drive

RED LINE TRAIL
 CONCEPTUAL OPINION OF PROBABLE COSTS
 APRIL 19, 2013



5 - W. 41st Street to W. 44th Street

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1	Site Preparation/Demolition				
	A. Clearing and Grubbing	1.0	AC	\$4,000.00	\$4,000.00
	B. Construction Fencing	804	LF	\$3.50	\$2,814.00
	C. Asphalt & Concrete Pavement Removal	60	SY	\$9.00	\$540.00
	Subtotal				\$7,354.00
2	Earthwork				
	A. Excavation/Embankment	525	CY	\$10.00	\$5,250.00
	Subtotal				\$5,250.00
3	Erosion Control				
	A. Silt Fence	804	LF	\$3.50	\$2,814.00
	B. Erosion Control Measures	1	LS	\$5,000.00	\$5,000.00
	Subtotal				\$7,814.00
4	Pavement				
	A. Subgrade Preparation	545	SY	\$1.50	\$817.50
	B. 10' Asphalt Pavement	389	SY	\$38.00	\$14,782.00
	C. Geogrid	545	SY	\$6.00	\$3,270.00
	D. Widened Concrete Sidewalk	560	SF	\$8.00	\$4,480.00
	E. Concrete Apron Replacement	300	SF	\$10.00	\$3,000.00
	Subtotal				\$26,349.50
5	At Grade Crossings & Road Markings				
	A. Crosswalk Striping Only	84	LF	\$12.50	\$1,050.00
	B. 10' Curb Ramps w/ Trunc. Domes	3	EA	\$2,200.00	\$6,600.00
	Subtotal				\$7,650.00
6	Utilities				
	A. Adjust Utilities to Grade	1	LS	\$5,000.00	\$5,000.00
	B. Electric Distribution & Connections	1	LS	\$10,000.00	\$10,000.00
	C. 25' Light Pole with LED Fixture & Base (100' O.C.)	8	EA	\$4,200.00	\$33,600.00
	D. Sconce LED Fixtures for Under Bridge (4 per bridge)		EA	\$850.00	\$0.00
	E. Underground Electric Conduit & Wire	804	LF	\$35.00	\$28,140.00
	Subtotal				\$76,740.00
7	Site Amenities				
	A. Bollards	6	EA	\$800.00	\$4,800.00
	B. Removable Bollards	3	EA	\$1,200.00	\$3,600.00
	C. Trail Signage	804	LF	\$1.50	\$1,206.00
	D. Wooden Boardwalk w/ Railing	444	LF	\$800.00	\$355,200.00
	E. Bench (500' O.C.)	2	EA	\$2,500.00	\$5,000.00
	F. Trash Receptacle (500' O.C.)	2	EA	\$1,500.00	\$3,000.00
	Subtotal				\$372,806.00
8	Landscape				
	A. Trailside Seeding and Fine Grading	1500	SY	\$1.20	\$1,800.00
	B. Trees (3' Cal., 1 per 50LF)	7	EA	\$450.00	\$3,150.00
	Subtotal				\$4,950.00
9	Construction Survey & Layout				
	A. Survey & Layout	1	LS	\$5,000.00	\$5,000.00
	B. Traffic Control & Maintenance	1	LS	\$5,000.00	\$5,000.00
	Subtotal				\$10,000.00
	TOTAL				\$518,913.50
	A. Contingency (15%)				\$77,837.03
	B. General Conditions (5%)				\$29,837.53
	C. Bonds & Insurances (3%)				\$17,902.52
	D. Mobilization/Demobilization (1.5%)				\$8,951.26
	E. Design & Documents (15%)				\$89,512.58
	GRAND TOTAL with Asphalt Trail				\$742,954.40
-	Replace Asphalt Trail Pavement with Aggregate				
	B. 10' Asphalt Pavement	389	SY	-\$38.00	-\$14,782.00
	C. 10' Aggregate Pavement	389	SY	\$16.00	\$6,224.00
	Subtotal				-\$8,558.00
	TOTAL				\$610,355.90
	A. Contingency (15%)				\$76,553.33
	B. General Conditions (5%)				\$29,345.44
	C. Bonds & Insurances (3%)				\$17,607.26
	D. Mobilization/Demobilization (1.5%)				\$8,803.63
	E. Design & Documents (15%)				\$88,036.32
	GRAND TOTAL with Aggregate Trail				\$730,701.49

assumptions

RED LINE TRAIL
 CONCEPTUAL OPINION OF PROBABLE COSTS
 APRIL 19, 2013



6 - W. 44th Street to Michael Zone Recreation Center

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1	Site Preparation/Demolition				
	A. Clearing and Grubbing	1.50	AC	\$4,000.00	\$6,000.00
	B. Construction Fencing	1711	LF	\$3.50	\$5,988.50
	Subtotal				\$11,988.50
2	Earthwork				
	A. Excavation/Embankment	1800	CY	\$10.00	\$18,000.00
	Subtotal				\$18,000.00
3	Erosion Control				
	A. Silt Fence	1711	LF	\$3.50	\$5,988.50
	B. Erosion Control Measures		LS	\$5,000.00	\$0.00
	Subtotal				\$5,988.50
4	Pavement				
	A. Subgrade Preparation	1992	SY	\$1.50	\$2,988.00
	B. 10' Asphalt Pavement	1423	SY	\$38.00	\$54,074.00
	C. Geogrid	1992	SY	\$6.00	\$11,952.00
	D. Widened Concrete Sidewalk	1100	SF	\$8.00	\$8,800.00
	E. Concrete Apron Replacement		SF	\$10.00	\$0.00
	Subtotal				\$77,814.00
5	At Grade Crossings & Road Markings				
	A. Crosswalk Striping Only	170	LF	\$12.50	\$2,125.00
	B. 10' Curb Ramps w/ Trunc. Domes	3	EA	\$2,200.00	\$6,600.00
	Subtotal				\$8,725.00
6	Utilities				
	A. Adjust Utilities to Grade	1	LS	\$5,000.00	\$5,000.00
	B. Electric Distribution & Connections	1	LS	\$20,000.00	\$20,000.00
	C. 25' Light Pole with LED Fixture & Base (100' O.C.)	17	EA	\$4,200.00	\$71,400.00
	D. Underground Electric Conduit & Wire	1711	LF	\$35.00	\$59,885.00
	Subtotal				\$156,285.00
7	Site Amenities				
	A. Bollards	6	EA	\$800.00	\$4,800.00
	B. Removable Bollards	3	EA	\$1,200.00	\$3,600.00
	C. Trail Signage	1711	LF	\$1.50	\$2,566.50
	D. Wooden Boardwalk w/ Railing	416	LF	\$800.00	\$332,800.00
	E. Bench (500' O.C.)	3	EA	\$2,500.00	\$7,500.00
	F. Trash Receptacle (500' O.C.)	3	EA	\$1,500.00	\$4,500.00
	Subtotal				\$355,766.50
8	Landscape				
	A. Trailside Seeding and Fine Grading	1200	SY	\$1.20	\$1,440.00
	B. Trees (3" Cal., 1 per 50LF)	26	EA	\$450.00	\$11,700.00
	Subtotal				\$13,140.00
9	Construction Survey & Layout				
	A. Survey & Layout	1	LS	\$5,000.00	\$5,000.00
	B. Traffic Control & Maintenance	1	LS	\$3,000.00	\$3,000.00
	Subtotal				\$8,000.00
	TOTAL				\$655,707.50
	A. Contingency (15%)				\$98,356.13
	B. General Conditions (5%)				\$37,703.18
	C. Bonds & Insurances (3%)				\$22,621.91
	D. Mobilization/Demobilization (1.5%)				\$11,310.95
	E. Design & Documents (15%)				\$113,109.54
	GRAND TOTAL with Asphalt Trail				\$938,809.21
	Replace Asphalt Trail Pavement with Aggregate				
	B. 10' Asphalt Pavement	1423	SY	-\$38.00	-\$54,074.00
	C. 10' Aggregate Pavement	1423	SY	\$16.00	\$22,768.00
	Subtotal				-\$31,306.00
	TOTAL				\$624,401.50
	A. Contingency (15%)				\$93,660.23
	B. General Conditions (5%)				\$35,903.09
	C. Bonds & Insurances (3%)				\$21,541.85
	D. Mobilization/Demobilization (1.5%)				\$10,770.93
	E. Design & Documents (15%)				\$107,709.26
	GRAND TOTAL with Aggregate Trail				\$893,986.85

assumptions

RED LINE TRAIL
 CONCEPTUAL OPINION OF PROBABLE COSTS
 APRIL 19, 2013



7 - Lorain Carnegie Hope Memorial Bridge Stopping above Merwin Avenue

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
1	Site Preparation/Demolition				
	A. Clearing and Grubbing	1.0	AC	\$4,000.00	\$4,000.00
	B. Construction Fencing	1300	LF	\$3.50	\$4,550.00
	Subtotal				\$8,550.00
2	Earthwork				
	A. Excavation/Embankment		CY	\$10.00	\$0.00
	Subtotal				\$0.00
3	Erosion Control				
	A. Silt Fence	1300	LF	\$3.50	\$4,550.00
	B. Erosion Control Measures		LS	\$5,000.00	\$0.00
	Subtotal				\$4,550.00
4	Pavement				
	A. Subgrade Preparation	2023	SY	\$1.50	\$3,034.50
	B. 10' Asphalt Pavement	1448	SY	\$38.00	\$55,024.00
	C. Geogrid	2023	SY	\$6.00	\$12,138.00
	D. Decorative Concrete Overlook Pavement	660	SF	\$12.00	\$7,920.00
	Subtotal				\$78,116.50
5	At Grade Crossings & Road Markings				
	A. 10' Curb Ramps w/ Trunc. Domes		EA	\$2,200.00	\$0.00
	Subtotal				\$0.00
6	Utilities				
	A. Light Pole Relocation		EA	\$2,500.00	\$0.00
	B. Electric Distribution & Connections	1	LS	\$20,000.00	\$20,000.00
	C. 25' Light Pole with LED Fixture & Base (100' O.C.)	13	EA	\$4,200.00	\$54,600.00
	D. Underground Electric Conduit & Wire	1300	LF	\$35.00	\$45,500.00
	Subtotal				\$120,100.00
7	Site Amenities				
	A. Bollards		EA	\$800.00	\$0.00
	B. Removable Bollards		EA	\$1,200.00	\$0.00
	C. Trail Signage	1300	LF	\$1.50	\$1,950.00
	D. 6' Black Vinyl Chain Link Security Fence w/ Barbed Wire	780	LF	\$60.00	\$46,800.00
	E. 6' Black Vinyl Chain Link Security Gates (Double Swing)	1	EA	\$5,000.00	\$5,000.00
	F. Bench (500' O.C.)	3	EA	\$2,500.00	\$7,500.00
	G. Trash Receptacle (500' O.C.)	3	EA	\$1,500.00	\$4,500.00
	Subtotal				\$65,750.00
8	Landscape				
	A. Trailside Seeding and Fine Grading	1050	SY	\$1.20	\$1,260.00
	B. Trees (3" Cal., 1 per 50LF)	26	EA	\$450.00	\$11,700.00
	Subtotal				\$12,960.00
9	Construction Survey & Layout				
	A. Survey & Layout	1	LS	\$5,000.00	\$5,000.00
	B. Traffic Control & Maintenance		LS	\$3,000.00	\$0.00
	Subtotal				\$5,000.00
	TOTAL				\$295,386.50
	A. Contingency (15%)				\$44,307.98
	B. General Conditions (5%)				\$14,769.33
	C. Bonds & Insurances (3%)				\$8,861.60
	D. Mobilization/Demobilization (1.5%)				\$4,430.80
	E. Design & Documents (15%)				\$44,307.98
	GRAND TOTAL with Asphalt Trail				\$422,919.62
--	Replace Asphalt Trail Pavement with Aggregate				
	B. 10' Asphalt Pavement	1448	SY	-\$38.00	-\$55,024.00
	C. 10' Aggregate Pavement	1448	SY	\$16.00	\$23,168.00
	Subtotal				-\$31,856.00
	TOTAL				\$263,530.50
	A. Contingency (15%)				\$39,529.58
	B. General Conditions (5%)				\$13,176.53
	C. Bonds & Insurances (3%)				\$7,906.42
	D. Mobilization/Demobilization (1.5%)				\$3,952.96
	E. Design & Documents (15%)				\$39,529.58
	GRAND TOTAL with Aggregate Trail				\$377,309.79

assumptions