Re-Connecting Cleveland: TIGER Project Update
Cleveland Metroparks Board of Park Commissioners - December 14, 2017

Cleveland Metroparks
TIGER TRAILS
DECEMBER 2017 UPDATE

Legend:
- TIGER Grant Funded Trails
- Towpath Trail - Complete
- Towpath Trail - Funded
- Complete Trail
- Funded Trail
- Proposed Trail
- Cleveland Metroparks Trails
- Other Adjacent Trails
- Adjacent Bike Route
- Cleveland Metroparks
- Other Parks & Protected Areas

Miles
0   0.1   0.2   0.3   0.4   0.5

- In July 2016, Cleveland Metroparks was awarded $7.950 million from Transportation Investment Generating Economic Recovery (TIGER) grant program through the USDOT
- Application submitted in partnership with The Trust for Public Land and LAND studio

Cleveland Metroparks **100YEARS**

Cleveland Metroparks

TIGER TRAILS
DECEMBER 2017 UPDATE

- Summary of Project Components
- Work to Date
- Timeline for Anticipated Construction
- Upcoming Work

WENDY PARK BRIDGE
Bridge Span: *500ft*
Construction Start: *Summer 2018*
Completion: *Winter 2019*

WHISKEY ISLAND CONNECTOR
Length: *1.5 miles*
Construction Start: *Summer 2018*
Completion: *Summer 2019*

CANAL BASIN PARK CONNECTOR
Length: *0.27 miles*
Construction Start: *Spring 2018*
Completion: *Spring 2018*

CLEVELAND LAKEFRONT BIKEWAY CONNECTOR
Length: *0.15 miles*
Construction Start: *Spring 2018*
Completion: *Spring 2018*

CLEVELAND LAKEFRONT BIKEWAY

IRISHTOWN BEND

RED LINE GREENWAY
Length: *2.3 miles*
Construction Start: *Spring 2019*
Completion: *Fall 2020*

LAKE ERIE

COAST GUARD STATION
FLATS EASTBANK
WATER TAXI
WATER TAXI
WENDY PARK
FLATS WESTBANK
DOWNTOWN
WAREHOUSE DISTRICT
Superior Ave
CUYAHOGA RIVER
CANAL BASIN PARK
Columbus Rd
RIVERGATE
MERWIN'S WHARF
Lorain Ave
EDGEWATER PARK
EDGEWATER BEACHHOUSE
BATTERY PARK
EDGEWATER
Clifton Blvd
West Blvd
Lake Ave
Detroit Ave
Franklin Blvd
GORDON SQUARE
W.65th St
W.25th St
WESTSIDE MARKET
Abbey Ave
OHIO CITY
Scranton Rd
W.14th St
DETROIT SHOREWAY
Lorain Ave
Fulton Rd
TREMONT
Madison Ave
CUDELL
West Blvd
ZONE RECREATION CENTER

Cleveland Metroparks **100YEARS**
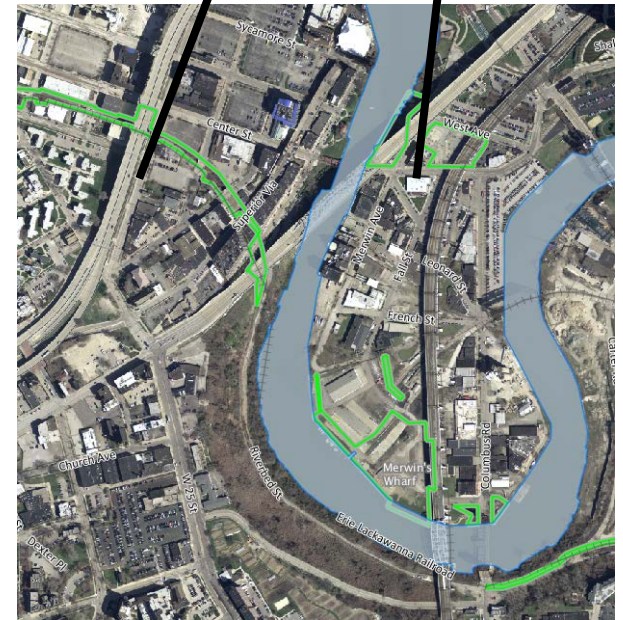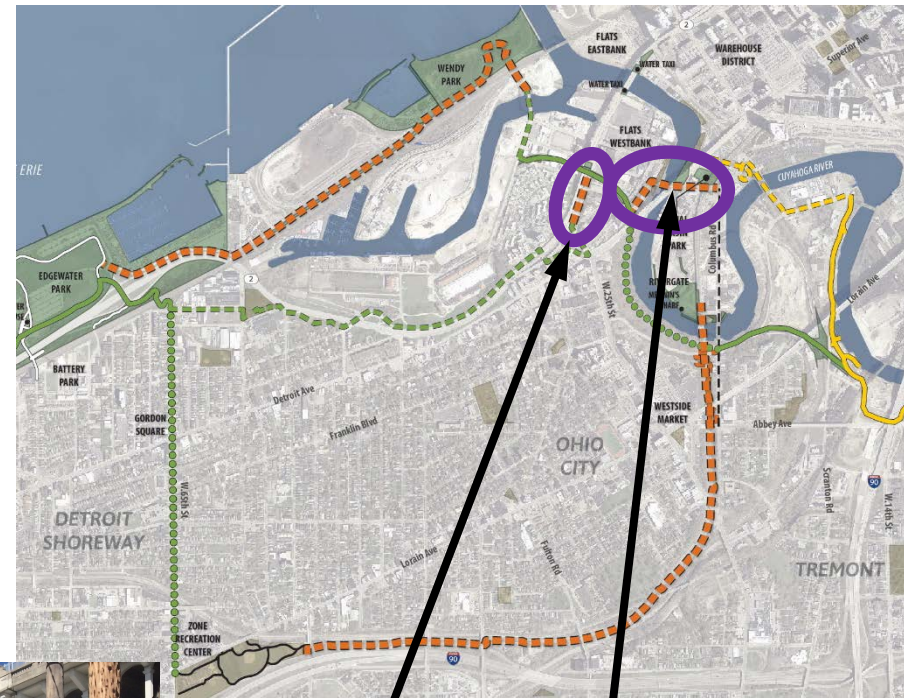
Cleveland Lakefront Bikeway Connector &
Canal Basin Park Connector

<u>Design:</u> Michael Baker International
<u>Status:</u> Design nearing completion
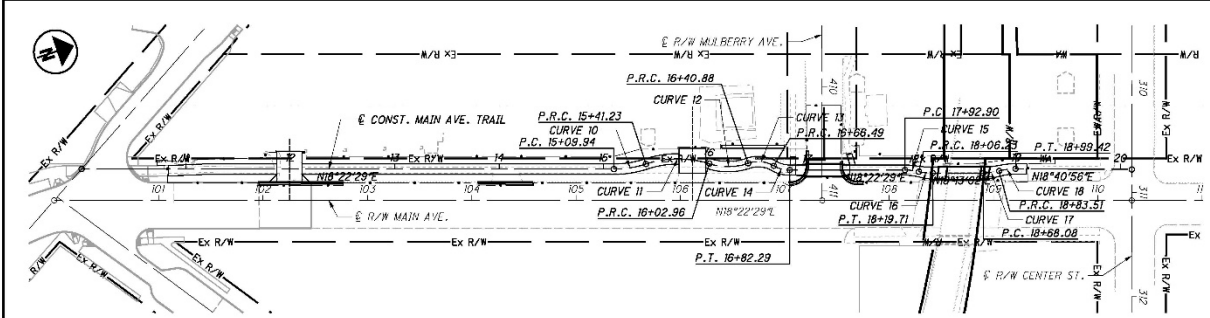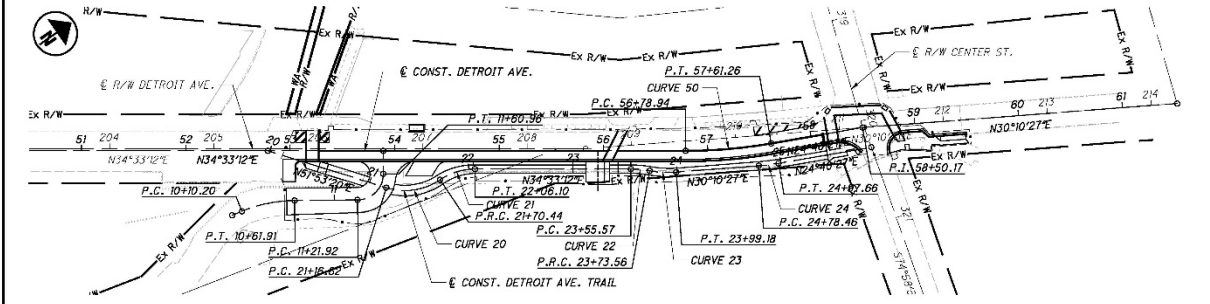<u>Anticipated Construction:</u> Spring 2018-Summer 2018

Top panel:

€ R/W MULBERRY AVE.
Ex R/W
€ CONST. MAIN AVE. TRAIL
P.R.C. 15+41.23
CURVE 12
P.C. 17+92.90
CURVE 13
CURVE 15
P.R.C. 16+40.88
P.C. 15+09.94
P.R.C. 16+68.49
P.T. 18+99.42
N18°22'29"E
CURVE 11
CURVE 14
CURVE 18
N18°40'56"E
P.R.C. 16+02.96
CURVE 16
CURVE 17
P.R.C. 18+83.51
€ R/W MAIN AVE.
N18°22'29"L
P.C. 18+68.08
P.T. 16+19.71
Ex R/W
P.T. 16+82.29
€ R/W CENTER ST.
Ex R/W

CURVE 1	CURVE 2	CURVE 3
P.I. STA. 15+25.71	P.I. STA. 15+73.11	P.I. STA. 16+22.58
Δ = 17°55'24"	Δ = 35°22'18"	Δ = 36°12'21"
Dc = 57°17'45"	Dc = 57°17'45"	Dc = 95°29'35"
R = 100.00'	R = 100.00'	R = 60.00'
T = 15.77'	T = 31.89'	T = 19.61'
L = 31.28'	L = 61.74'	L = 37.91'
E = 1.24'	E = 4.96'	E = 3.12'

CURVE 4	CURVE 5	CURVE 6
P.I. STA. 16+54.52	P.I. STA. 16+74.58	P.I. STA. 17+99.59
Δ = 48°55'21"	Δ = 30°09'54"	Δ = 12°43'20"
Dc = 190°59'09"	Dc = 190°59'09"	Dc = 95°29'35"
R = 30.00'	R = 30.00'	R = 60.00'
T = 13.65'	T = 8.08'	T = 6.69'
L = 25.62'	L = 15.79'	L = 13.32'
E = 2.96'	E = 1.07'	E = 0.37'

CURVE 7	CURVE 8	CURVE 9
P.I. STA. 18+13.00	P.I. STA. 18+75.85	P.I. STA. 18+91.51
Δ = 12°52'47"	Δ = 14°43'33"	Δ = 15°11'28"
Dc = 95°29'35"	Dc = 95°29'35"	Dc = 95°29'35"
R = 60.00'	R = 60.00'	R = 60.00'
T = 6.77'	T = 7.75'	T = 8.00'
L = 13.49'	L = 15.42'	L = 15.91'
E = 0.38'	E = 0.50'	E = 0.53'

Middle panel:

R/W
Ex R/W
€ R/W CENTER ST.
€ CONST. DETROIT AVE.
P.T. 57+61.26
CURVE 50
€ R/W DETROIT AVE.
P.C. 56+78.94
Ex R/W
P.T. 11+60.98
N30°10'27"E
51   52   54   55   56   57   58   59   60   61
N34°33'12"E   N34°33'12"E
P.C. 10+10.20
N34°33'12"E
P.T. 22+06.10
N30°10'27"E
N24°10'?"E
P.T. 24+07.66
P.T. 10+61.91
CURVE 21
P.R.C. 21+70.44
P.C. 23+55.57
CURVE 24
P.T. 58+50.17
P.C. 11+21.92
CURVE 20
P.C. 23+73.56
CURVE 23
P.T. 23+99.18
P.C. 21+16.62
CURVE 24+78.46
€ CONST. DETROIT AVE. TRAIL

CURVE 20	CURVE 21	CURVE 22
P.I. STA. 21+45.49	P.I. STA. 21+88.81	P.I. STA. 23+64.54
Δ = 51°23'19"	Δ = 34°03'11"	Δ = 10°18'10"
Dc = 95°29'35"	Dc = 95°29'35"	Dc = 57°17'45"
R = 60.00'	R = 60.00'	R = 100.00'
T = 28.87'	T = 18.37'	T = 9.02'
L = 53.81'	L = 35.66'	L = 17.98'
E = 6.58'	E = 2.75'	E = 0.41'

CURVE 23	CURVE 24	CURVE 50
P.I. STA. 23+86.44	P.I. STA. 24+88.07	P.I. STA. 57+20.20
Δ = 14°40'55"	Δ = 5°30'00"	Δ = 9°52'45"
Dc = 57°17'45"	Dc = 28°38'52"	Dc = 12°00'00"
R = 100.00'	R = 200.00'	R = 477.46'
T = 12.88'	T = 9.61'	T = 41.27'
L = 25.62'	L = 19.20'	L = 82.33'
E = 0.83'	E = 0.23'	E = 1.78'

Bottom panel:

Ex R/W
€ R/W CENTER ST.
323   324   325   326   327   328   329   330
S88°15'02"E
N59°24'?"E
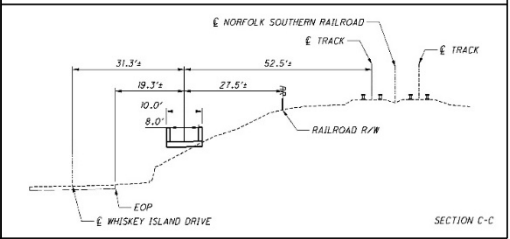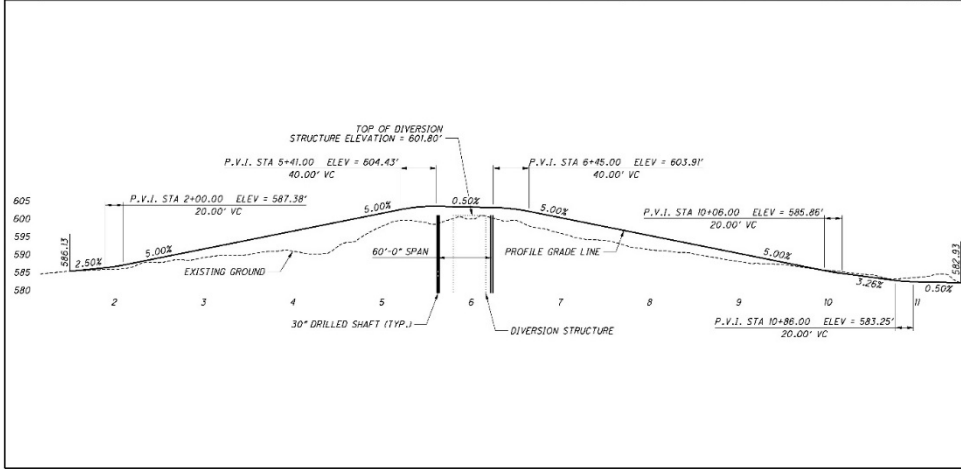
Whiskey Island Connector
Design: E.L. Robinson Engineering
Status: Nearing 30% design
Anticipated Construction: Summer 2018-
Summer 2019
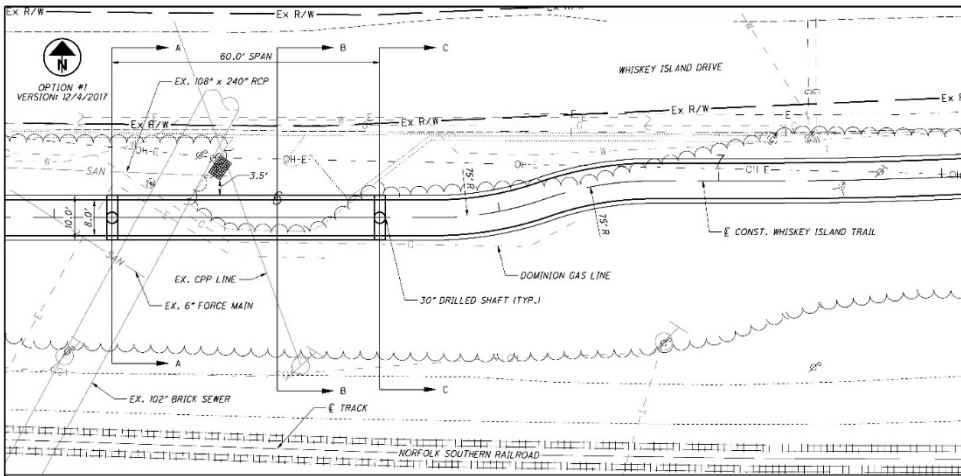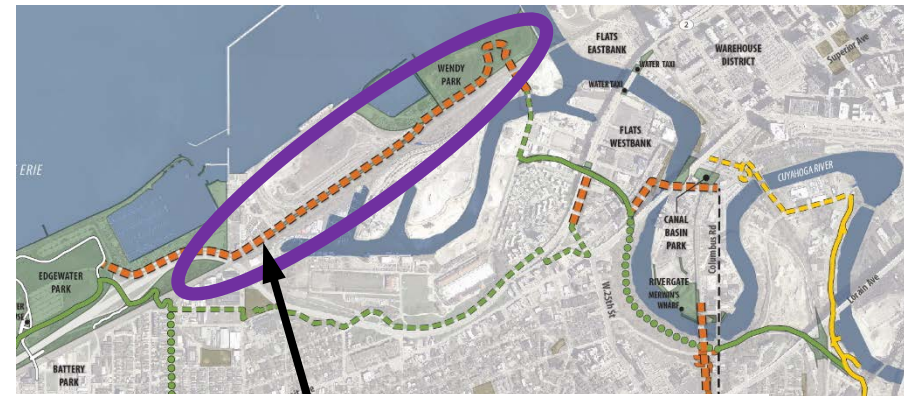
WEST TRAIL SECTION

1ST LF RETAINING WALL

32T LF RETAINING WALL

240 LF RETAINING WALL

4-WAY STOP INTERSECTION

ACCESS DRIVE TO YACHT CLUB

EXISTING RAILROAD

CENTRAIL TRAIL SECTION

NEW FENCE LOCATED ALONG EDGE OF EXISTING GRAVEL SERVICE DRIVE

POTENTIAL BIO-RETENTION AREA

EXISTING PEDESTRIAN BRIDGE
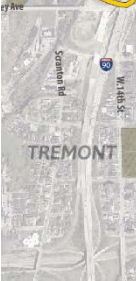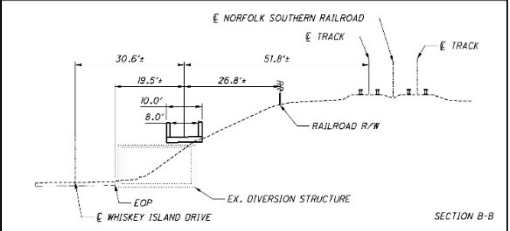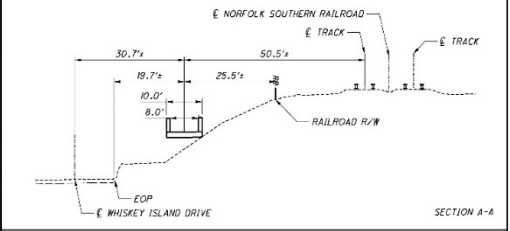
WHISKEY ISLAND DRIVE

EAST TRAIL SECTION

WHISKEY ISLAND STILL & EATERY

WENDY PARK

REDUCED ENTRANCE DRIVE

EXISTING ELECTRICAL TRANSFORMER

EXISTING RAILROAD

CONNECTION TO PROPOSED PEDESTRIAN BRIDGE

WHISKEY ISLAND TRAIL CONNECTOR
TRAIL ALIGNMENT ENLARGEMENT

Cleveland Metroparks

E.L. ROBINSON
ENGINEERING

OHM

Red Line Greenway

Design: Michael Baker International
Status: Nearing 30% design
Anticipated Construction: Spring 2019-
Winter 2020

STA. 311+90 TO STA. 312+80
CUT WALL
AREA = 630 SF
MAX HEIGHT = 11'
APPROXIMATE COST = $160,000±

STA. 310+00 TO STA. 311+00
FILL WALL
AREA = 460 SF
MAX HEIGHT = 7'
APPROXIMATE COST = $115,000±

STA. 308+50 TO STA. 309+95
CUT WALL
AREA = 470 SF
MAX HEIGHT = 6'
APPROXIMATE COST = $120,000±
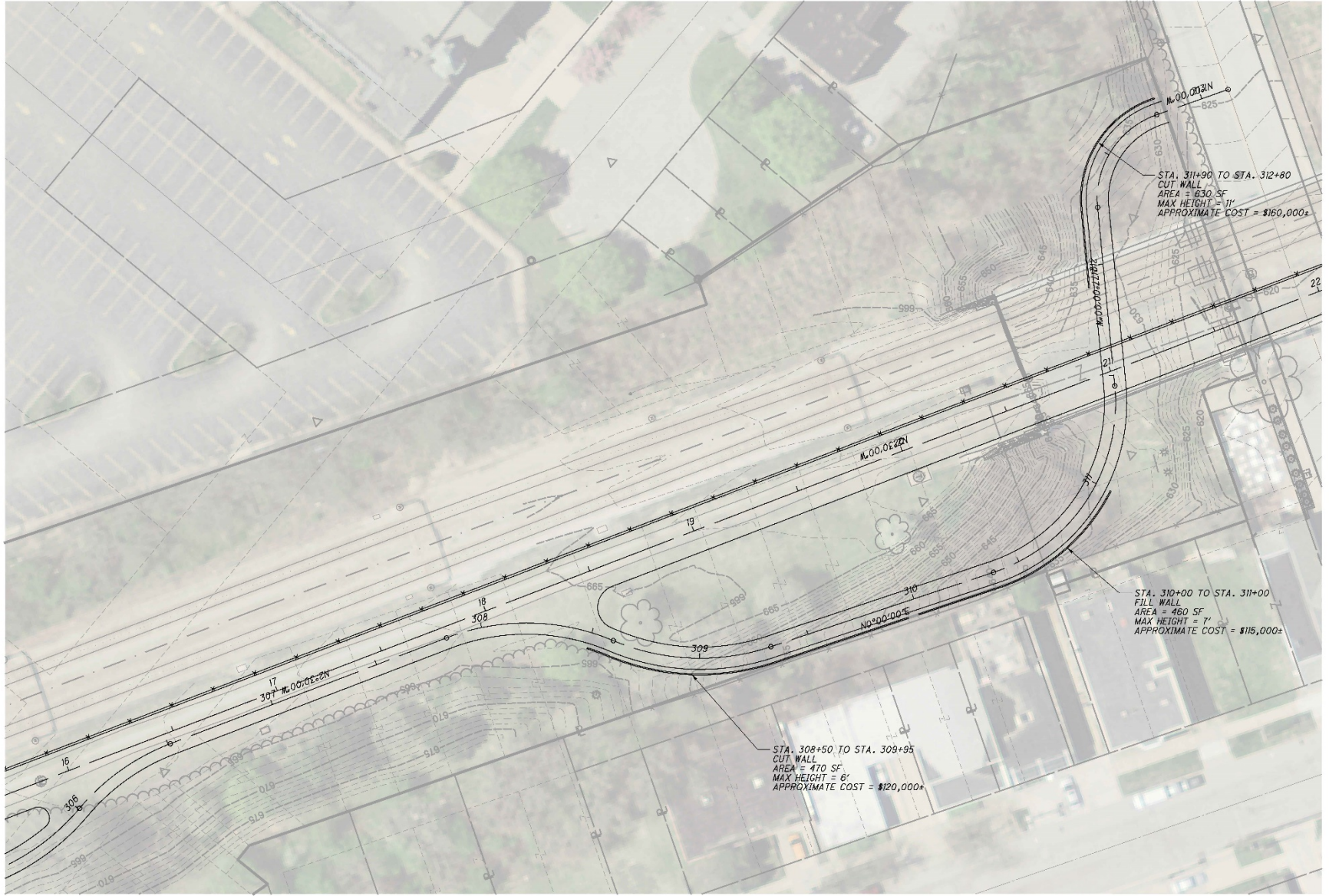
PLAN
FRANKLIN AVE. CONNECTOR – 8.33% PROFILE

RED LINE
GREENWAY

HORIZONTAL
SCALE IN FEET

DRAWN JTH
CHECKED DAB

10/20/2017 10:23:46 AM
joseph.hogan
...\04804_Frank'r_v3.dgn

Wendy Park Bridge

Design: KS Associates

Status: 50% design; revisions

Anticipated Construction: Summer 2018-Winter 2019

Estimated Cost $8M - $10M

1,318,000 lb steel @ $4/lb
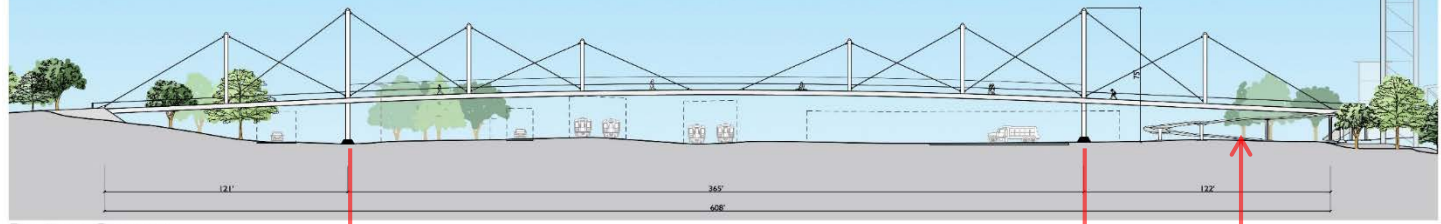
Previous Concept

Estimated Cost $6M

814,000 lb steel @ $2.75/lb

Shortened Main Span from 365' to 250'

Changes to main structural members

Changed approach ramp from steel to earth w/walls

Shortened Overall Length from 608' to 504'
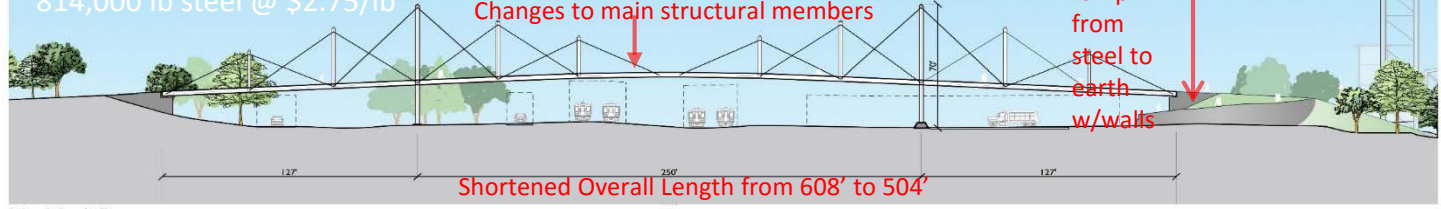
Modified Concept

Railroad Coordination
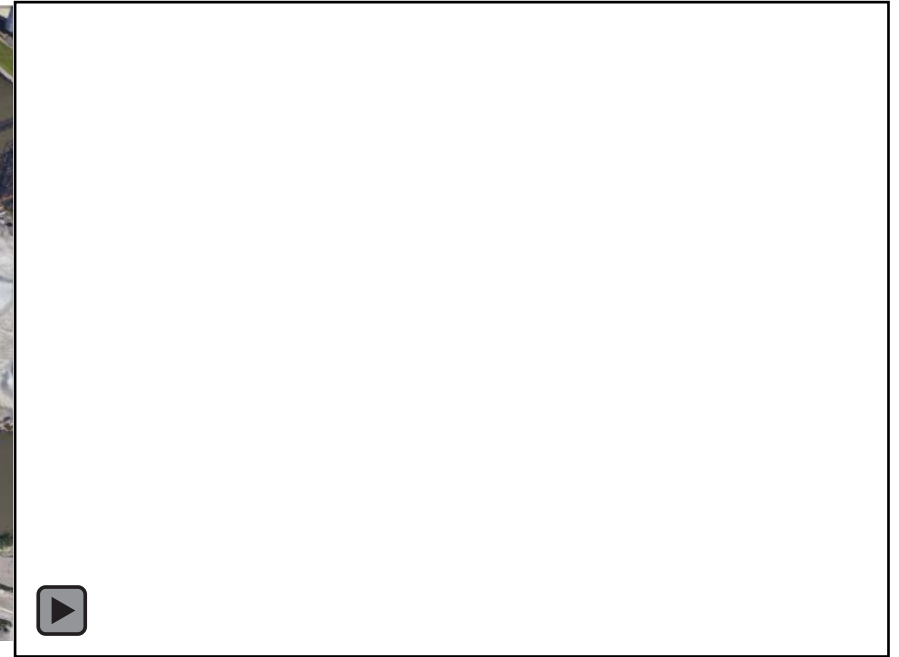
Bridge Pier Design Analysis
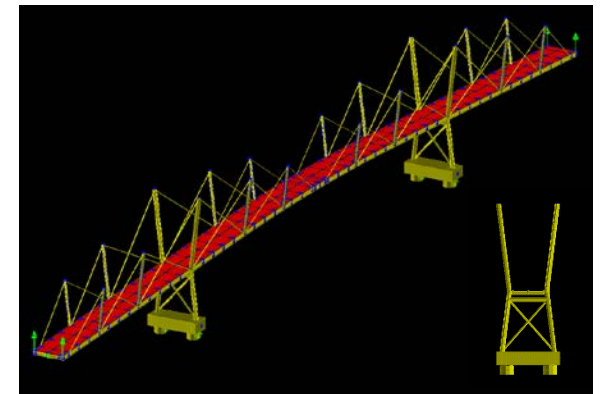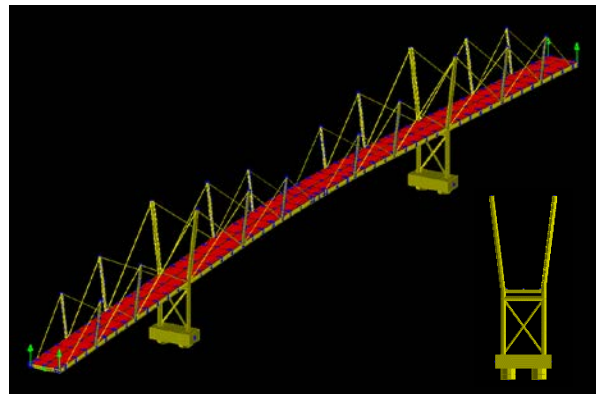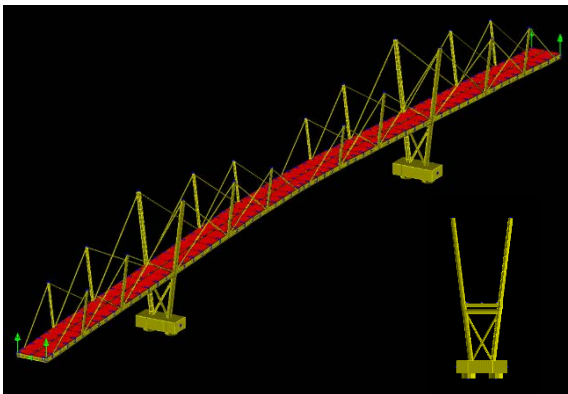
Wind Loading and Vibration

RWDI Wind Tunnel
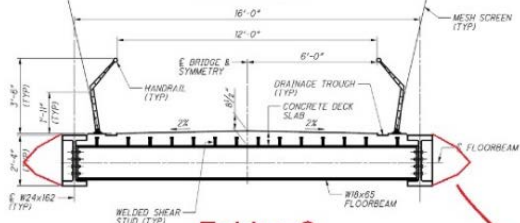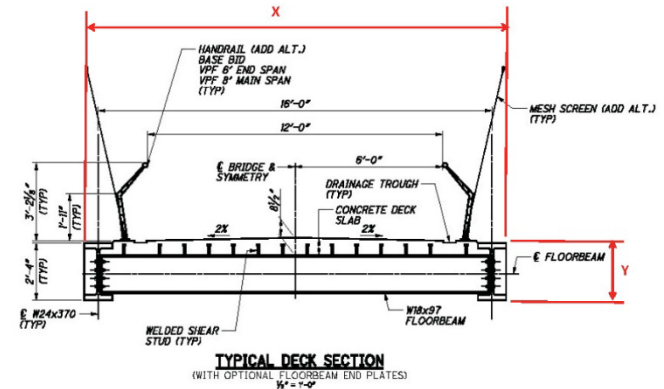
Fairing Analysis

Slenderness Ratio Analysis