

Big Creek / I-71 Relocation & Restoration Initiative

Prepared by

BIG CREEK CONNECTS

March 2015 | Updated October 2024

Big Creek / I-71 Relocation & Restoration Initiative

Project director & principal author:	Bob Gardin – Executive Director, Big Creek Connects (2012-2024) bgardin@bigcreekconnects.org
Project assistance:	Matt Hils – Principal, Behnke Associates (2013-15), Principal, OHM Advisors, (2023-24) Matt Scharver – Watershed Team Leader, Northeast Ohio Regional Sewer District (2013-15)
Technical assistance:	Paul Kovalcik – Stormwater Projects Specialist, Northeast Ohio Regional Sewer District (2013-15)
Map development:	Daniel Meaney – Manager, Information & Research, Cuyahoga County Planning Commission (2013-15, 2023-2024)
Concept plan generation:	Aaron Morford – Board Member, Big Creek Connects (2013-15) Bob Gardin, Executive Director – Big Creek Connects (2023-2024)
Graphic renderings:	Brian Pagnotta – Geographic Information Systems consultant (2014- 15, 2023)
Print layout:	Mary Ellen Stasek – Board Chair, Big Creek Connects (2014-15, 2024)
Funding provided by:	



Published Version 10.4 – March 2015

Updated Version 12.2 – October 2024

A note regarding changes made in this updated version:

After nearly a decade of further analysis and feedback, several changes and additions have been made to the initial 2015 study. Land use conditions and problems are updated, as are existing and potential alternatives to address these challenges. A new concept plan for the Big Creek/I-71 corridor was created. In Concept Plan D, Big Creek is diverted into the historic channel with an all-purpose trail following its length, the same as in the earlier concepts. However, the existing armored channel remains open, not covered with another trail above it. Construction phasing plans for Concept Plan D are included, to better illustrate a potential construction process and funding strategy. Maps, studies, and other data that are placed in the Appendix have been updated. Finally, a summary of the 2016 planning grant that was not awarded is covered, and recommendations for a new planning strategy are given.

EXECUTIVE SUMMARY

The Big Creek / I-71 Relocation and Restoration Initiative looks at a number of environmental, economic, and community challenges and opportunities in the heart of a highly urbanized area straddling the cities of Cleveland and Brooklyn, Ohio. It questions the value of the Denison Avenue partial interchange and proposes removing part of its ramps and opening up land that will allow the stream to be naturalized by re-routing it into much of its historic streambed, thus addressing flooding, erosion and water quality issues and allowing fish passage upstream into the Big Creek Reservation and other areas.

As study progressed, broader transportation, economic, community and land use issues were examined. Industrial, retail and other commercial activity was found to be underperforming, particularly in the industrial areas north of the area of concern in both cities. And, housing in the Stockyards and adjacent Cleveland neighborhoods was found to be distressed, due in part to the lack of community assets found in other neighborhoods. Several alternatives to address many of these issues, both planned and proposed, were examined.

Concept plans were developed in 2015 that propose the stream re-alignment along with expanded recreational space and a trail system that connects the Brookside and Big Creek Reservations to each other and the surrounding communities. Another set of concept plans add a new I-71 interchange at Ridge Road to capitalize on its economic potential and its potential to divert truck traffic away from residential areas. They propose that the interchange would help address issues related to urban sprawl and redirect investment into this urban core.

Land, stream, highway, roadway and trail data based on these concept plans were calculated along with cost estimates. However, there is a need for further study that will:

- Solicit public input
- Assess economic impacts
- Perform traffic modeling, and
- Develop a preferred plan with recommendations

This study acts as the foundation for a planning grant(s) that will address these needs. In March of 2015 the City of Brooklyn applied for funding for this purpose through the Northeast Ohio Coordinating Agency's (NOACA) Transportation for Livable Communities Initiative (TLCI) grant program. Although supported by Cleveland City Council, the request lacked support from the city's Administration and was not awarded. After nearly a decade of further analysis of the land use challenges that remain, and with a new Cleveland administration in place, it was felt that an update of the initial study was warranted.

During Interstate 71's construction in the 1960's the "Parma Freeway" was planned to combine with I-71 in the Big Creek valley in a "weave-free, braided-type interchange". In order to make room for this extensive infrastructure, the land above the natural meander of the creek was cut and leveled, the railroad line was moved southward and Big Creek was placed in a concrete-lined channel parallel to it. A drop structure or "spillway" was constructed in Brookside Park to make up for the 29' elevation difference due to the loss of the stream's natural meander. The planned freeway alignment north to I-90 was eventually abandoned and left the Denison Access ramps that remain to this day.

Each concept plan in this study proposes constructing two pairs of short bridges to allow Big Creek to leave its one mile concrete channel and meander north under the railroad and highway into much of its original

stream bed. The stream will then bridge back under the freeway and railroad and re-connect with its existing stream bed in Brookside Reservation, just down-stream from the drop structure.

In addition to restoring the hydrology and ecology of Big Creek, an extensive recreational trail network could be realized, following the new stream alignment, and connecting the Brookside and Big Creek Reservations with each other and the surrounding communities.

Concept Plan A proposes the removal of most of the Denison Access ramps without a new interchange in an alternate location. Combined with relocating the Cleveland Police firing range, over 70 acres of underutilized land north of I-71 could be opened up to potential environmental remediation and recreational use. The concept plan envisions:

- 30 acres stream/floodplain
- 35 acres recreational space
- 5 acres roadways, parking
- 1 mile new access roads/parkway
- Over 3 miles new all-purpose trails

Taken together, these changes could significantly alter the neighborhood character, housing value, and quality of life of residents in the Stockyards and adjacent neighborhoods.

Concept Plans B–D, in addition to the above features, propose a new interchange at Ridge Road to capitalize on its economic potential and its potential to divert truck traffic away from residential areas.

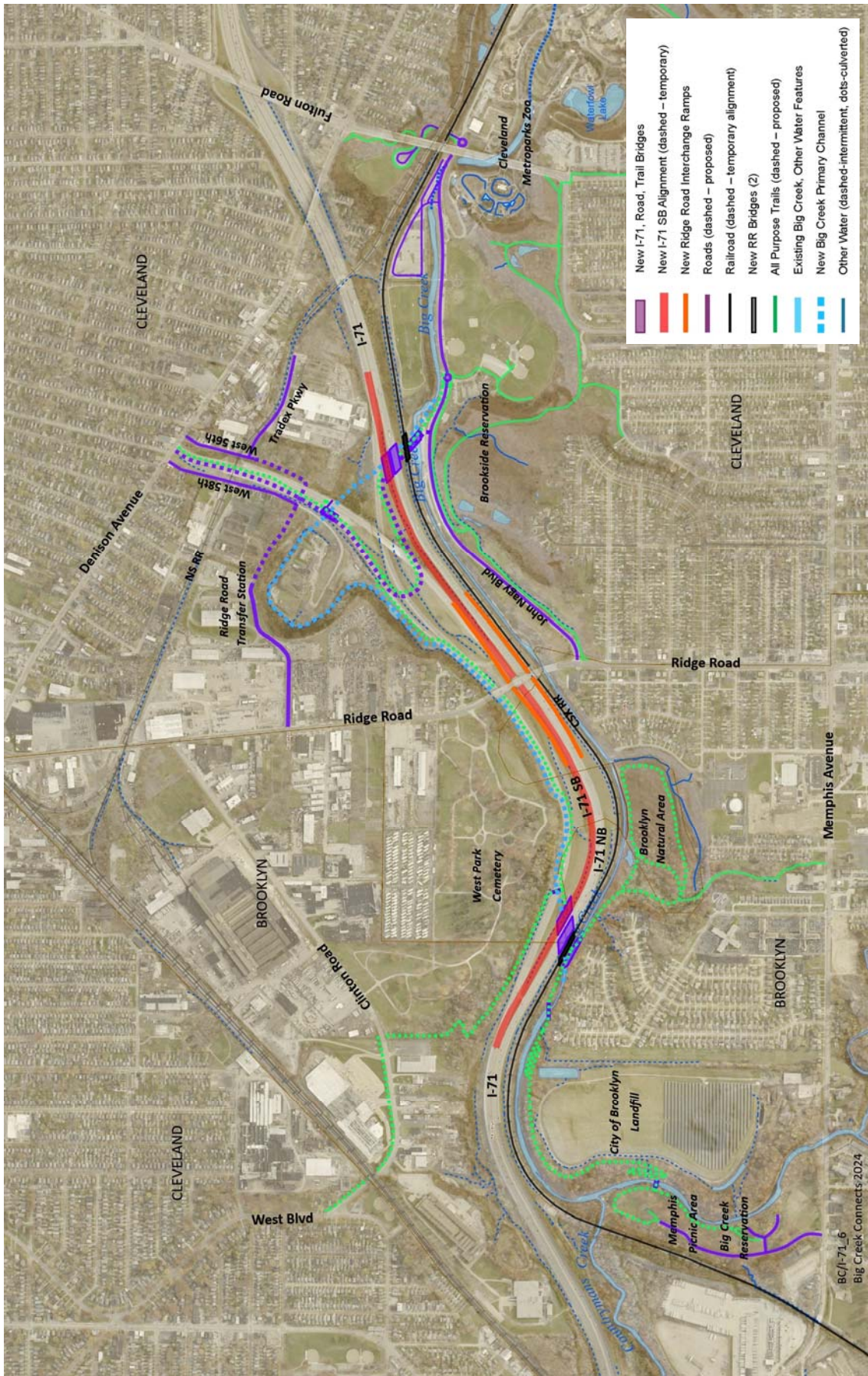
Although a full interchange may be more valuable than the existing partial interchange, concerns were raised that the loss of the I-71 Denison Access ramps may cause a burden to industrial and commercial activity currently dependent on it.

This led to the development of three concept plans that build on a previously proposed idea of constructing a connector road from the Denison Access ramps to Ridge Road utilizing the existing road network within the Ridge Road [Waste] Transfer Station. Three alternatives to make the connection are illustrated in Concept Plans C-1, C-2, and C-3.

In this updated version of the study, a new Concept Plan D was developed that adopts elements of the earlier concept plans while providing greater detail of creek, bridge, road and trail alignments. Also developed were seven construction phasing plans, to better illustrate a potential construction process and funding strategy.

In 2015 Big Creek Connects estimated land, stream, highway, roadway and trail data based on Concept Plans A–C-3. These figures were further defined and cost estimates were calculated by one of the private consulting firms providing pro-bono services for this study. A contingency of 30% was figured into the costs. However, the calculations did not consider potential land acquisition, environmental remediation, wetland construction, facility re-location or landscaping costs. The total budget for each concept ranged from \$83,130,000 for Concept A to \$115,900,000 for Concept C-3. Updated cost estimates would need to be made for these concepts, the new Concept Plan D, or any newly designed concept plans

A TLCI Planning Grant or other funding strategy could further evaluate this initiative with input from the public and develop a preferred plan that could include a planning level cost estimate, a phasing/implementation strategy and identify funding sources.



Overview

Figure 23: Concept Plan D – Overview

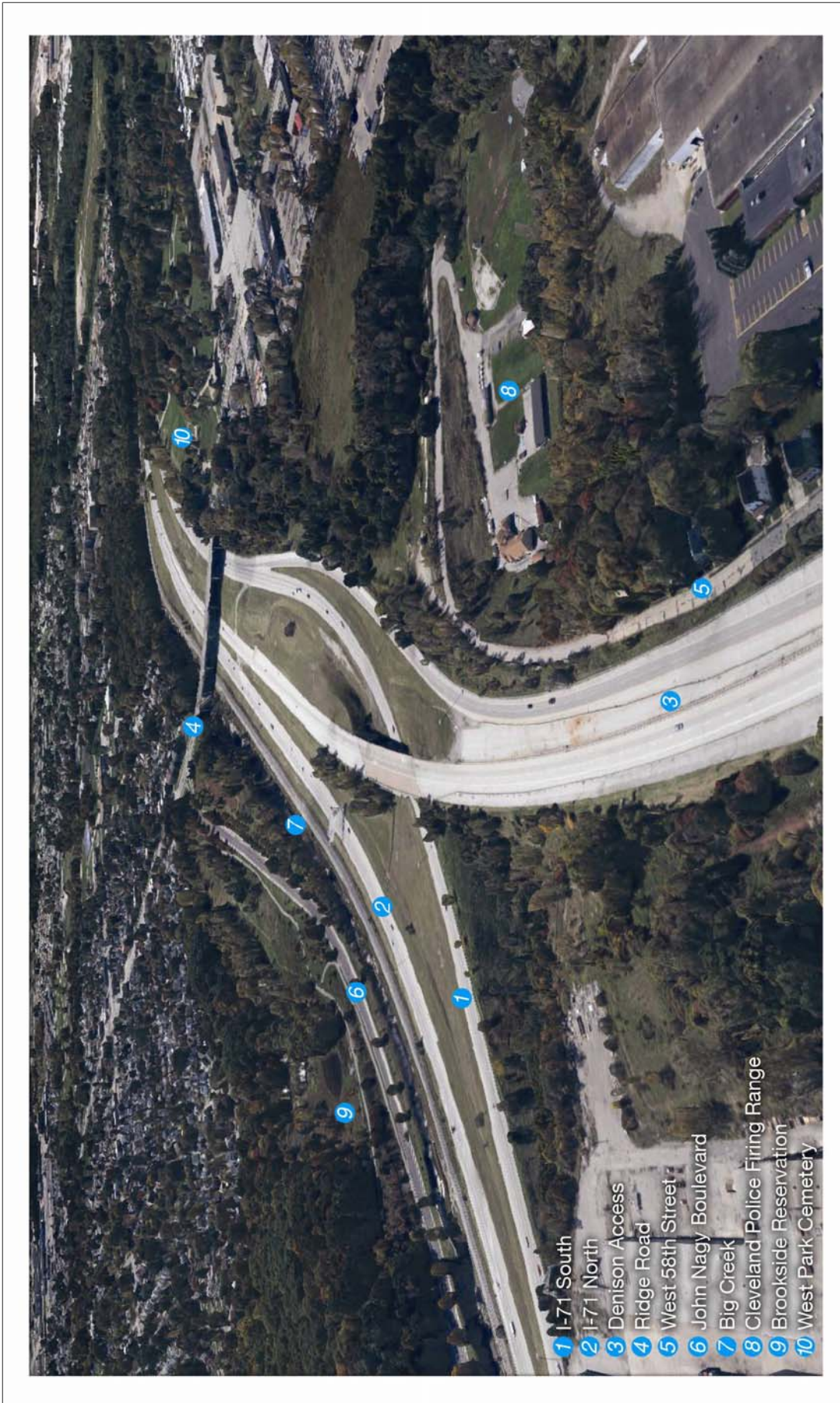


Figure 31: Southwest Aerial rendering – Existing



- 1 Relocated I-71 Southbound
- 2 Big Creek Relocation
- 3 All Purpose Trail Above Former Creek
- 4 Modified Drop Structure
- 5 Ridge Road Interchange
- 6 Denison Avenue Entrance
- 7 Greening of Remaining Exit Ramp
- 8 Baseball Diamonds (shown) or Floodplain
- 9 Event Site / Other
- 10 Brookside Reservation
- 11 West Park Cemetery

Figure 32: Southwest Aerial rendering – Proposed