BOROUGH OF BRIDGEVILLE

PLANNING COMMISSION

Meeting Minutes

July 26, 2021 – 7:30PM

Meeting was held in Council Chambers at the Borough Building, 425 Bower Hill Road and virtually on www.zoom.us. Meeting was called to order at 7:30PM by Ms. Cimarolli.

Present included: Justine Cimarolli, Michael Tolmer, Dale Livingston and Joseph Kauer, Borough Manager / Zoning Officer

Absent: Larry Lennon and Tim Nath

Public comment (on / off agenda) VISITORS PLEASE STATE NAME AND ADDRESS:

Pat DeBlasio, 447 Washington Avenue, stated that working separately and parallel to the planning to address flooding, the Planning Commission should consider accepting proposals to complete and study traffic in the Bower Hill Road corridor from Painters Run Road through the north-end of Washington Avenue to Mayer Street. He added that Bower Hill Road is not walkable.

ADOPTION OF MINUTES:

- **June 28, 2021**
  Motion to adopt the June 28, 2021 meeting minutes as submitted was made by Mr. Livingston, seconded by Mr. Tolmer; motion carried unanimously.

NEW BUSINESS:

1. **McLaughlin Run Flood Control Project**
   a. Engineers John Heyl and Kevin Brett reviewed recently completed and underway flood control projects in Bridgeville. He reviewed the recently removed gravel bars from the Chartiers Creek Back Channel, the Maple Avenue Wall Project, and the work at McLaughlin Run Park that installed the trash rack and lowered the ballfield to capture debris. Mr. Heyl stated that work on the Jane Way project is currently underway and includes repairs to the streambank, construction of an access ramp to keep the Bower Hill Road Bridge clear of debris and installation of a backflow preventor on the storm-sewer outfall.

   Engineers Brett and Heyl reviewed and discussed in great detail the McLaughlin Run Flood Control Project and its various options. Slideshow attached to the minutes.

   A motion was made by Mr. Livingston, seconded by Mr. Tolmer to recommend to Council that Phase 1 be aggressively pursued, including seeking grant funding to implement this part of this long-term flood control plan. It was also recommended to Council, by the Engineer, that regarding Phase 4, an effort be taken to reach out to Upper St. Clair Township officials to initiate discussions for this facility's planning, acquisition and possible construction. Motion carried unanimously.

   The Commission agreed to discuss, study and vet Phases 2 and 3 of the various options and its impacts on the Baldwin Street, Bower Hill and McLaughlin Run Road corridors and neighborhoods.

OLD BUSINESS:

1. **Active Transportation Plan**

Ms. Cimarolli reported that Traffic Planning and Design is now under contract to complete this project, and that the Steering Committee membership is being finalized, project to start late August / early September.

2. **Comprehensive Plan**

Ms. Cimarolli reported that interviews of the four consulting firms is to be completed in August.

Public Comment: None.

ADJOURNMENT:

Motion to adjourn was made by Mr. Nath, seconded by Mr. Tolmer; meeting adjourned at 9:40 PM.

Respectfully submitted,

Joseph Kauer
Borough Manager / Zoning Officer

McLaughlin Run Flood Control Project
Bridgeville Borough

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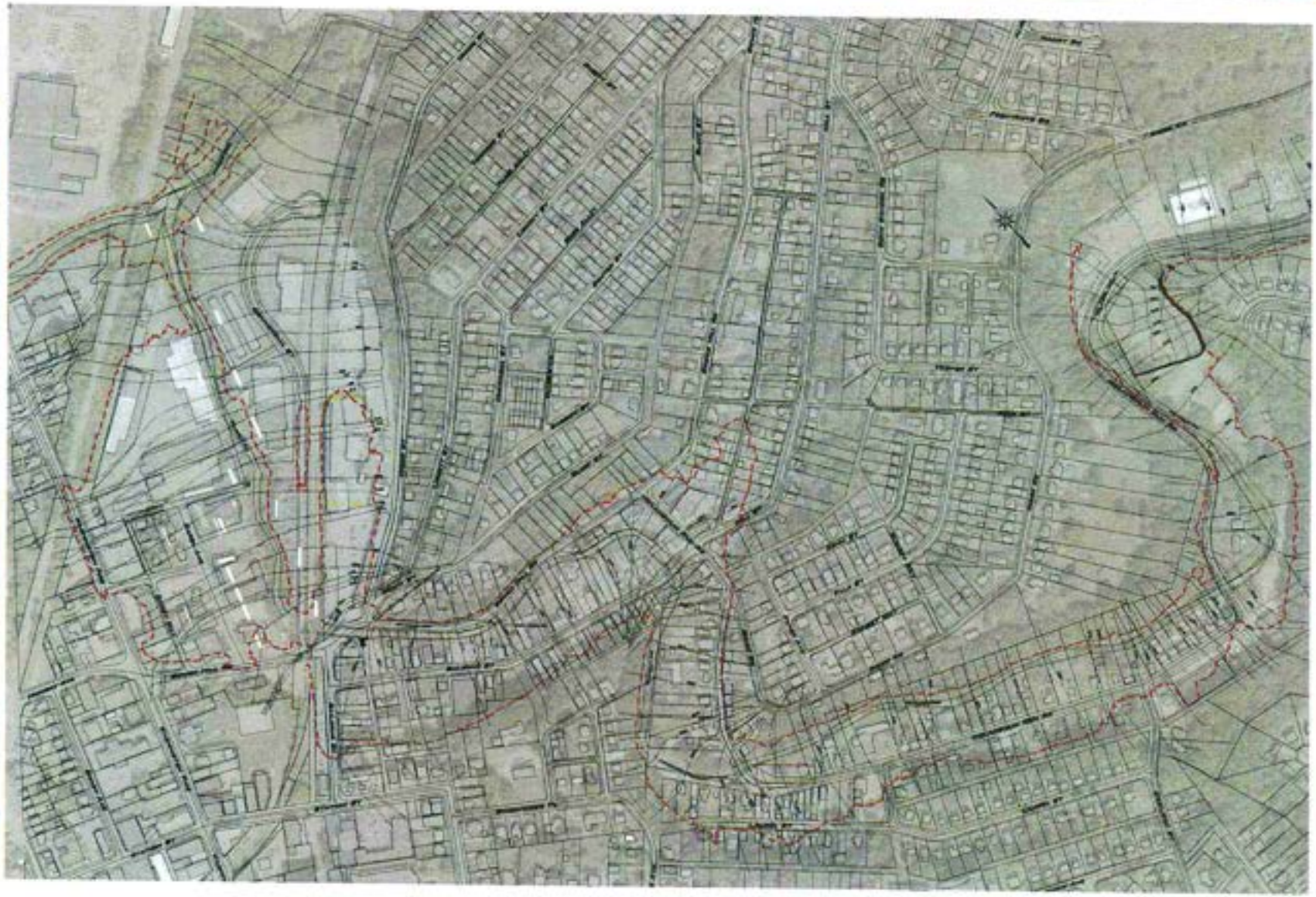
Civil Engineers and Surveyors



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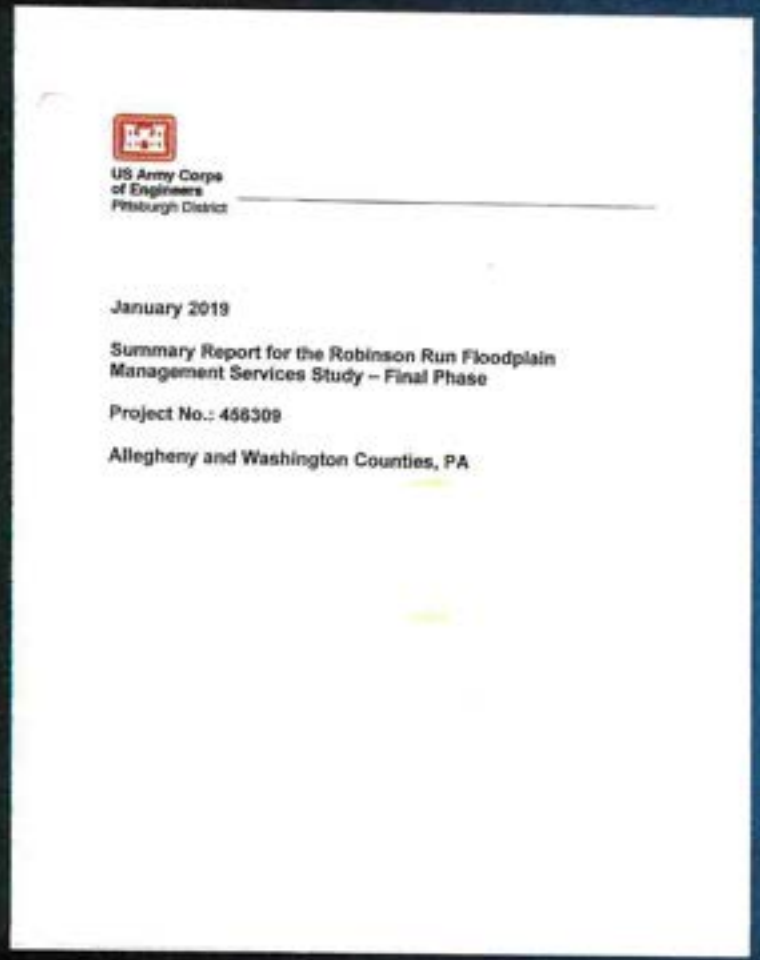
Background



US Army Corps of Engineers
Pittsburgh District

January 2019

Summary Report for the Robinson Run Floodplain Management Services Study – Final Phase

Project No.: 456309

Allegheny and Washington Counties, PA

- As a result of recent flooding the United States Department of the Army Corp of Engineers (USACE) Met with Bridgeville Borough Representatives in 2018 and agreed to perform a study of McLaughlin Run.
- The Study was included in the USACE study dated January 2019.

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Background

PROJECT BACKGROUND – STUDY AREAS

Study Area 2:
McLaughlin Run

US Army Corps of Engineers.

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USACE Results

- Structure Buyout – 16 Structures Not Flooded
- Dredging Channel – 24 Structures Not Flooded
- Detention Basin – 20 Structures Not Flooded
- Bower Hill Bridge Modification – 0 Structures Not Flooded
- Commercial Street Bridge Replacement -4 Structures Not Flooded

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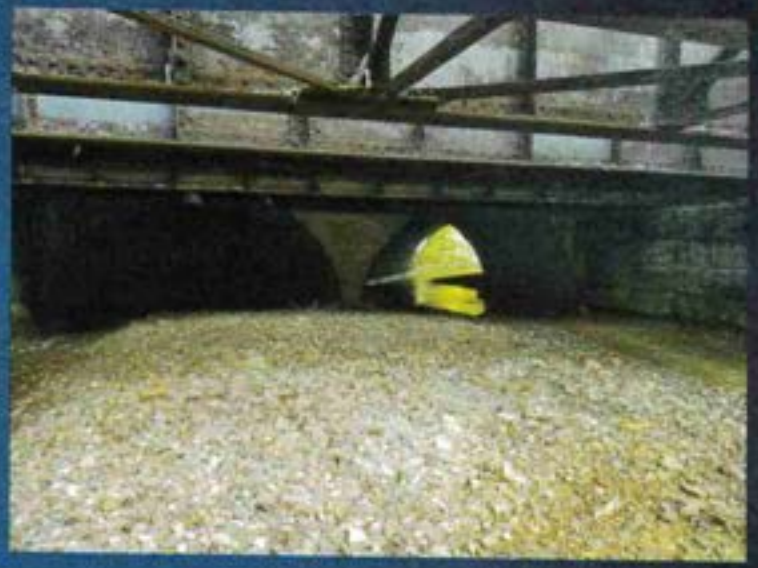
LSSE Alternative Analysis

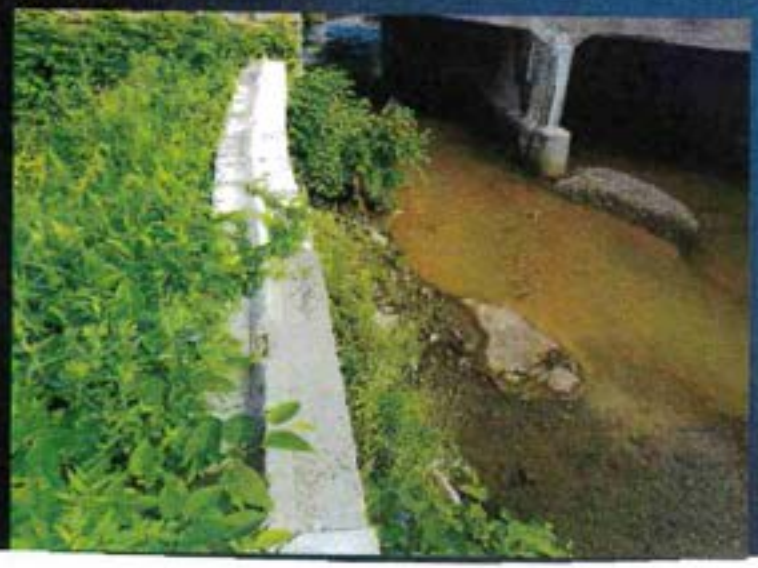
- LSSE reviewed the study prepared by USACE including a detailed review of the model prepared by USACE.
- Reviewed the stream corridor with Borough representatives.
- Identified critical restriction points within the stream channel.
- Developed options for consideration to address all structure flooding along the stream corridor:
  - Construction of Earthen Levees
  - Construction of Structural Levees
  - Bridge Removal & Replacements
  - Flood Control Tunnel
  - Detention Basin

Primary Restrictions

LSSE identified a number of restrictions to McLaughlin Run?

- Chartiers Creek Back Channel
- Commercial Street Culvert
- Bower Hill Road Bridge
- Baldwin Street Bridge
- Topographic Limitations





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Alternative Option Considerations

- Detention Basin
  - Adequate area is not available within the Borough to provide the storage necessary to eliminate flooding of structures.
  - Looked at properties in upstream community.
- Flood Control Tunnel
  - The property within the Borough that a tunnel would pass through is undermined
  - The flood elevation of the Chartiers Creek back channel would back up the pipe, eliminating available capacity.
- Bower Hill Road Bridge
  - Center column restricts flow captures debris
- Baldwin Street Bridge
  - Opening is restrictive
  - Bridge deck needs raised
- Commercial Street Culvert
  - Culvert has bend in it with center column
  - Sediment deposition
  - Train trestle limits hydraulic performance potential

Option 1

- Phase I – Confluence to Commercial Street
- Phase II – Bower Hill Road to Baldwin Street
- Phase III – Maple Street to McLaughlin Run Park Entrance

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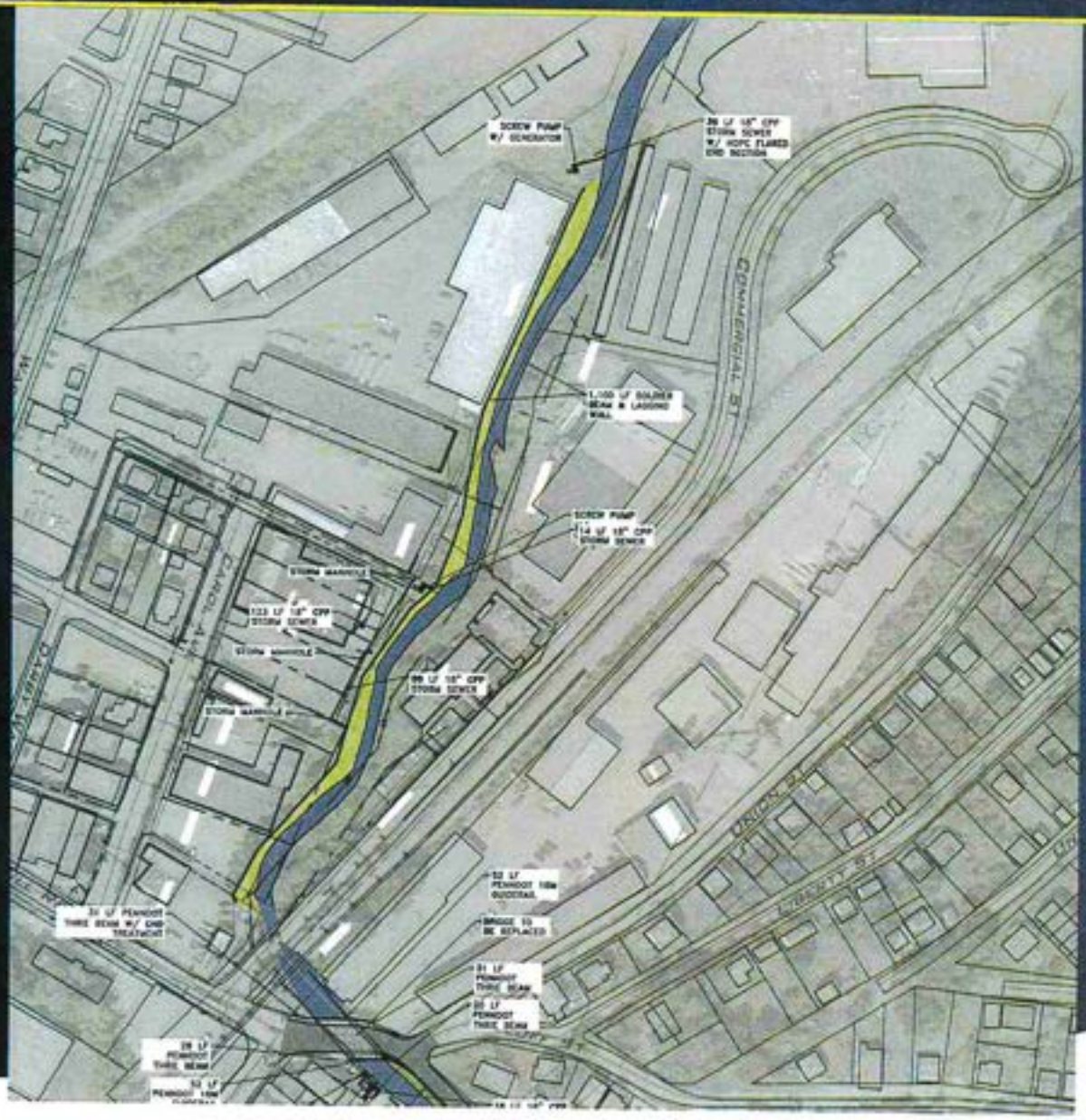
Option 1

- Phase 1
  - Construct a soldier beam and lagging levee wall from north of the roller rink to Commercial Street 1,100 LF.
  - Relocate a section of storm sewer along Carol Avenue
  - Install two screw pumps at the storm sewer discharge points.
  - Reduces risk of stream flooding along Carol Avenue
  - Phase 1 cost $3,930,625

Option 1 – Phase 1



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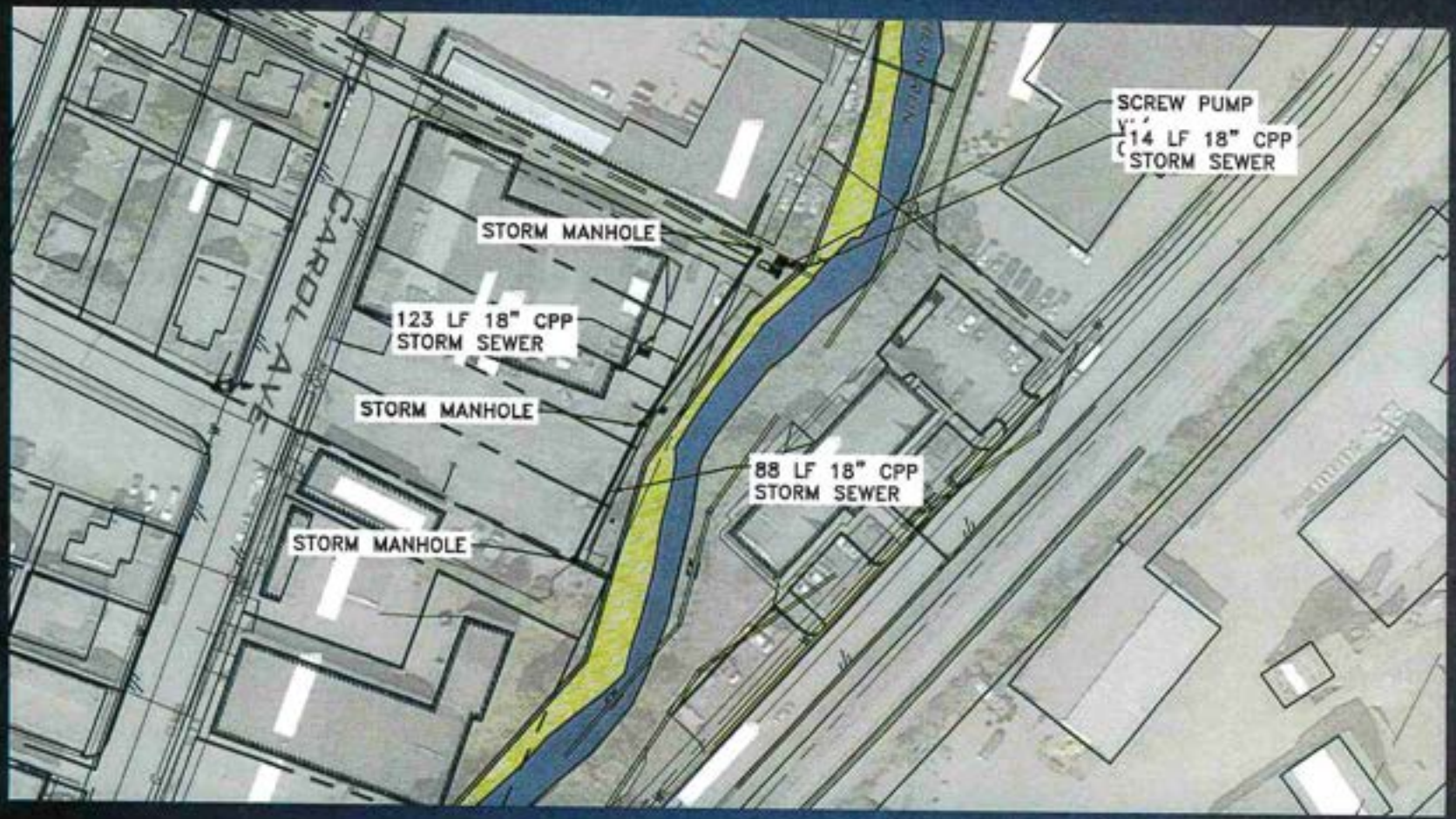
Option 1 – Phase 1



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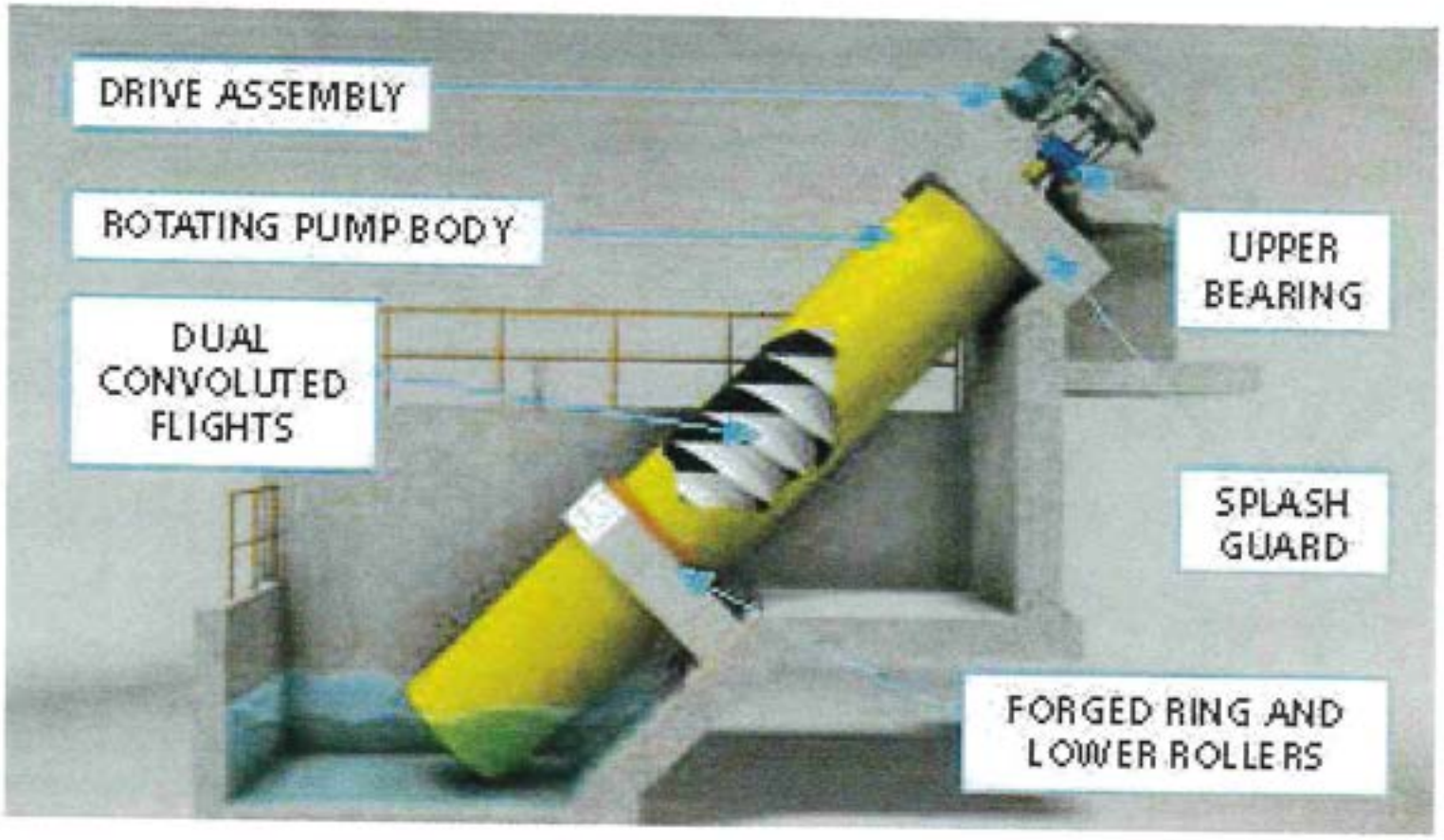
Screw Pump



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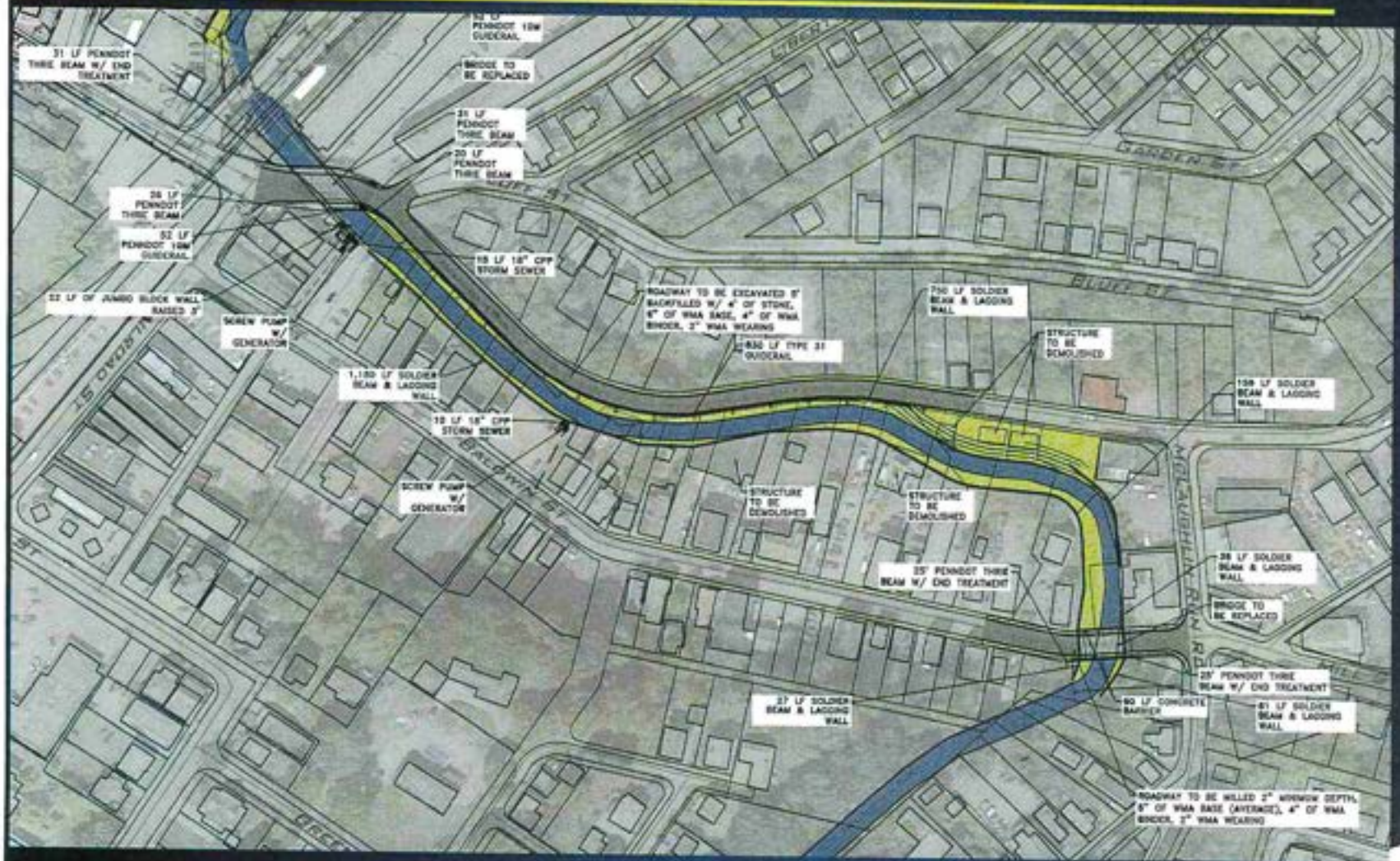
Option 1

- Phase 2
  - Construct a soldier beam and lagging levee wall along left bank from Bower Hill Road Bridge to Baldwin Street 1,180 LF.
  - Remove the sidewalk along Bower Hill Road, construct a soldier beam and lagging levee wall along right bank from Bower Hill Road Bridge to existing residential structures, 830 LF.
  - Construct a soldier beam and lagging levee wall along right bank from residential structure to Baldwin Street 159 LF.
  - Replace Bower Hill Road
  - Replace Bower Hill Road bridge (eliminate center column)
  - Replace Baldwin Street Bridge
  - Install two screw pumps at the storm sewer discharge points.
  - Reduces risk of stream flooding along Baldwin Street/Jane Way Phase 2 cost $15,023,219.
  - Includes Condemning 4 properties.

Option 1 – Phase 2



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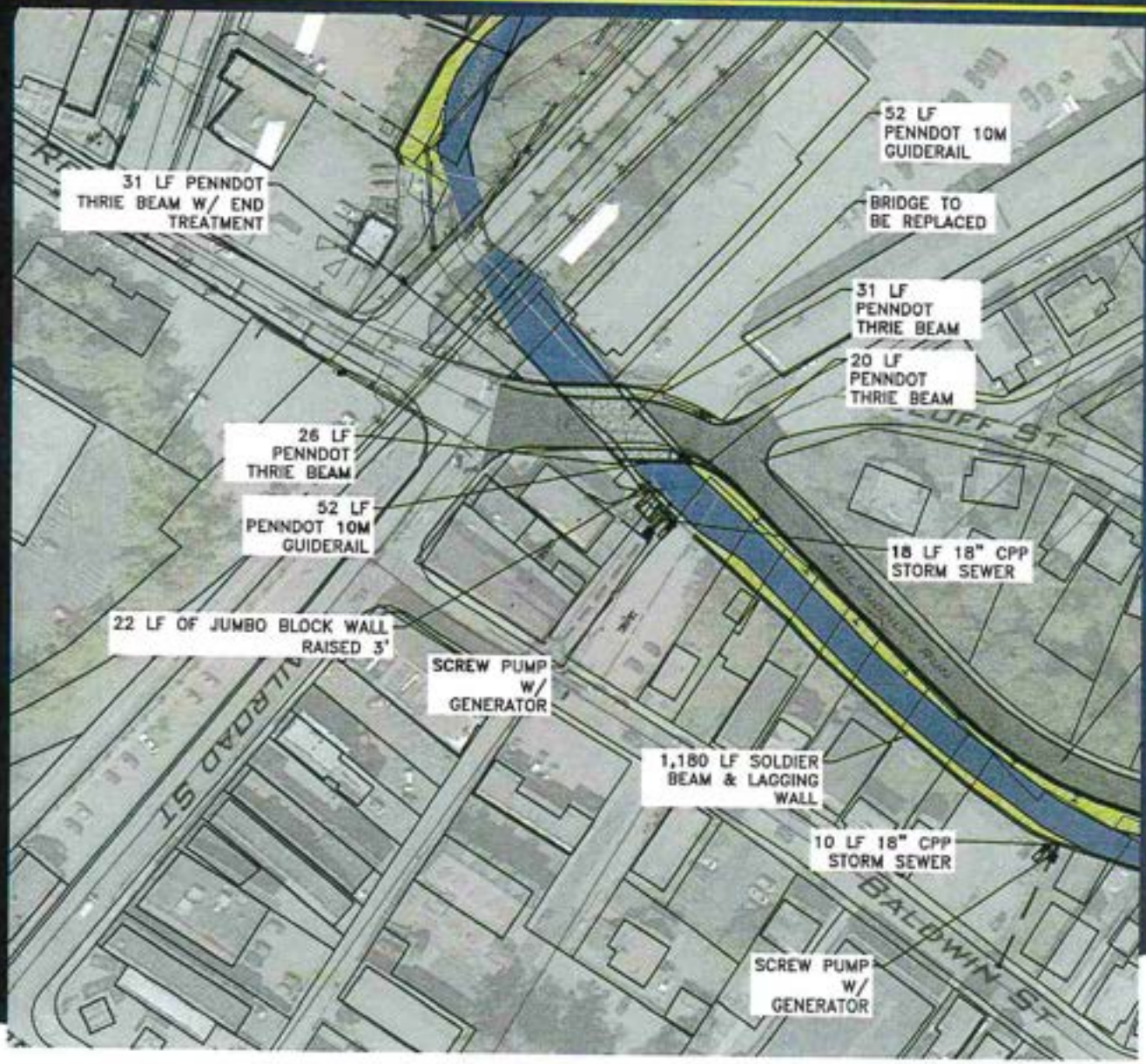
Option 1 – Phase 2



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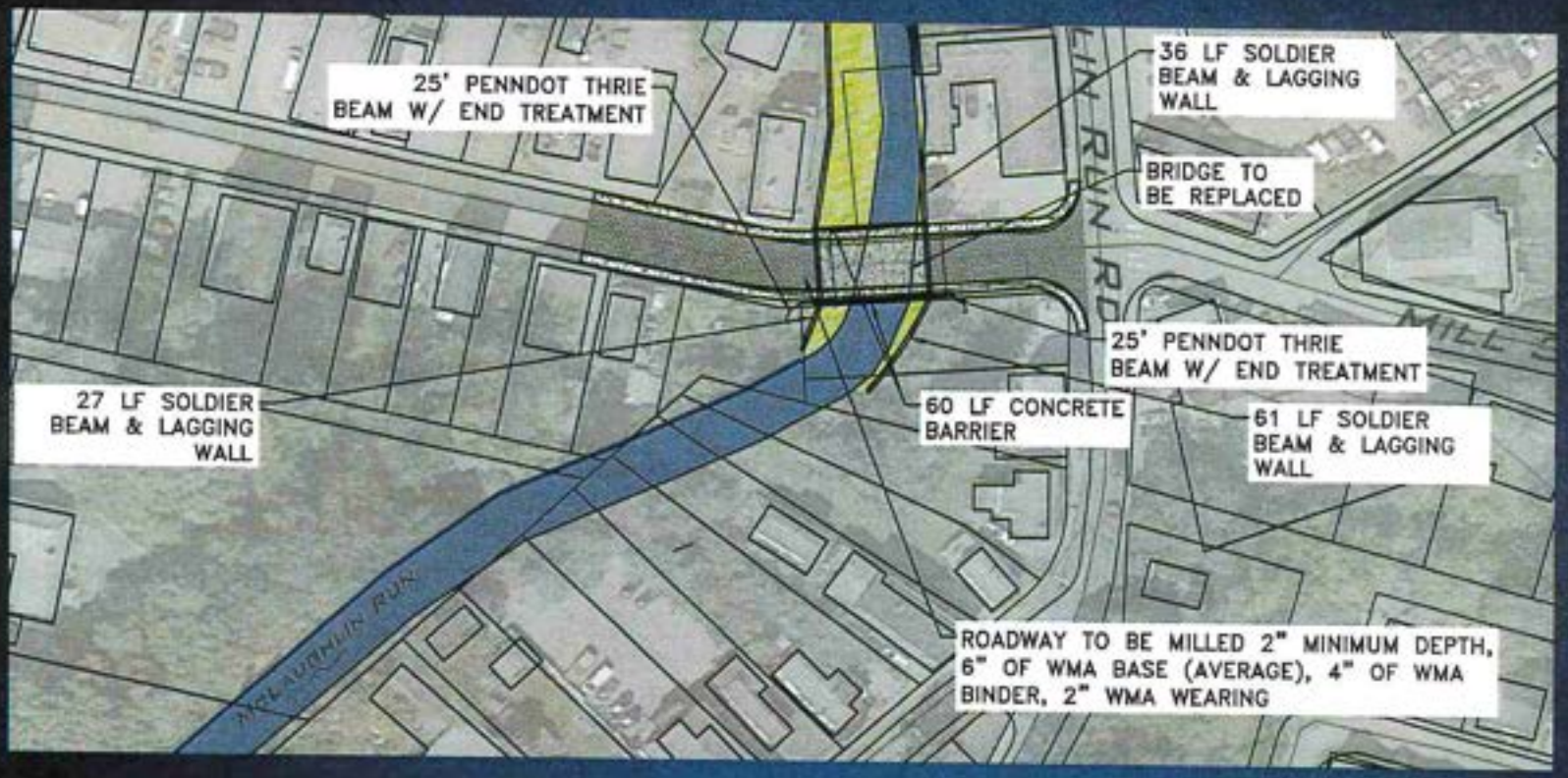
Option 1 – Phase 2



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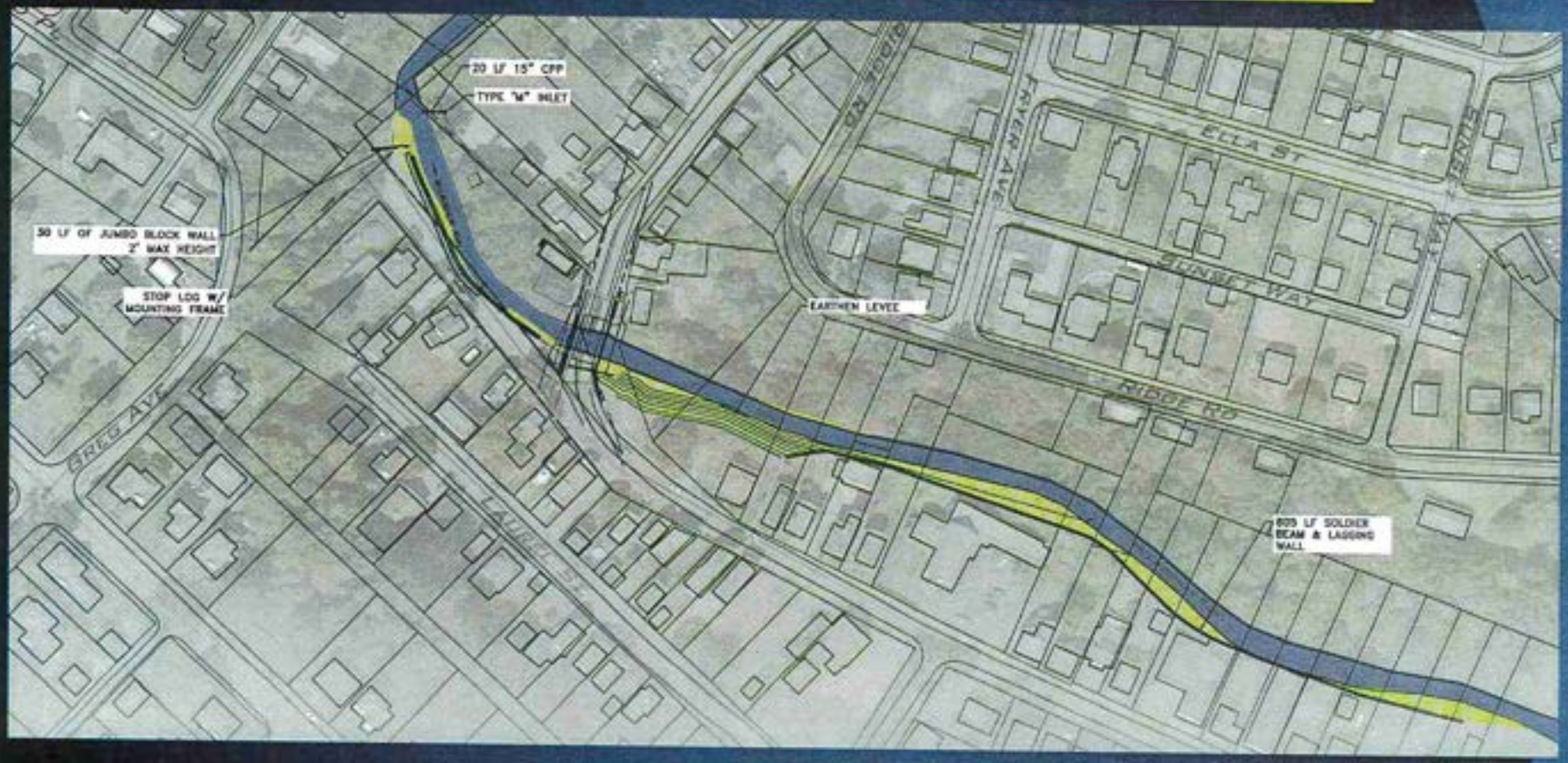
Civil Engineers and Surveyors

Option 1

- Phase 3
  - Construct a soldier beam and lagging levee wall along left bank east of Maple Street 806 LF.
  - Install jumbo block wall with Stop Log access to ramp at end of Maple Street
  - Reduces risk of stream flooding along McLaughlin Run Road
  - Phase 3 cost $2,528,375.

Option 1 – Phase 3



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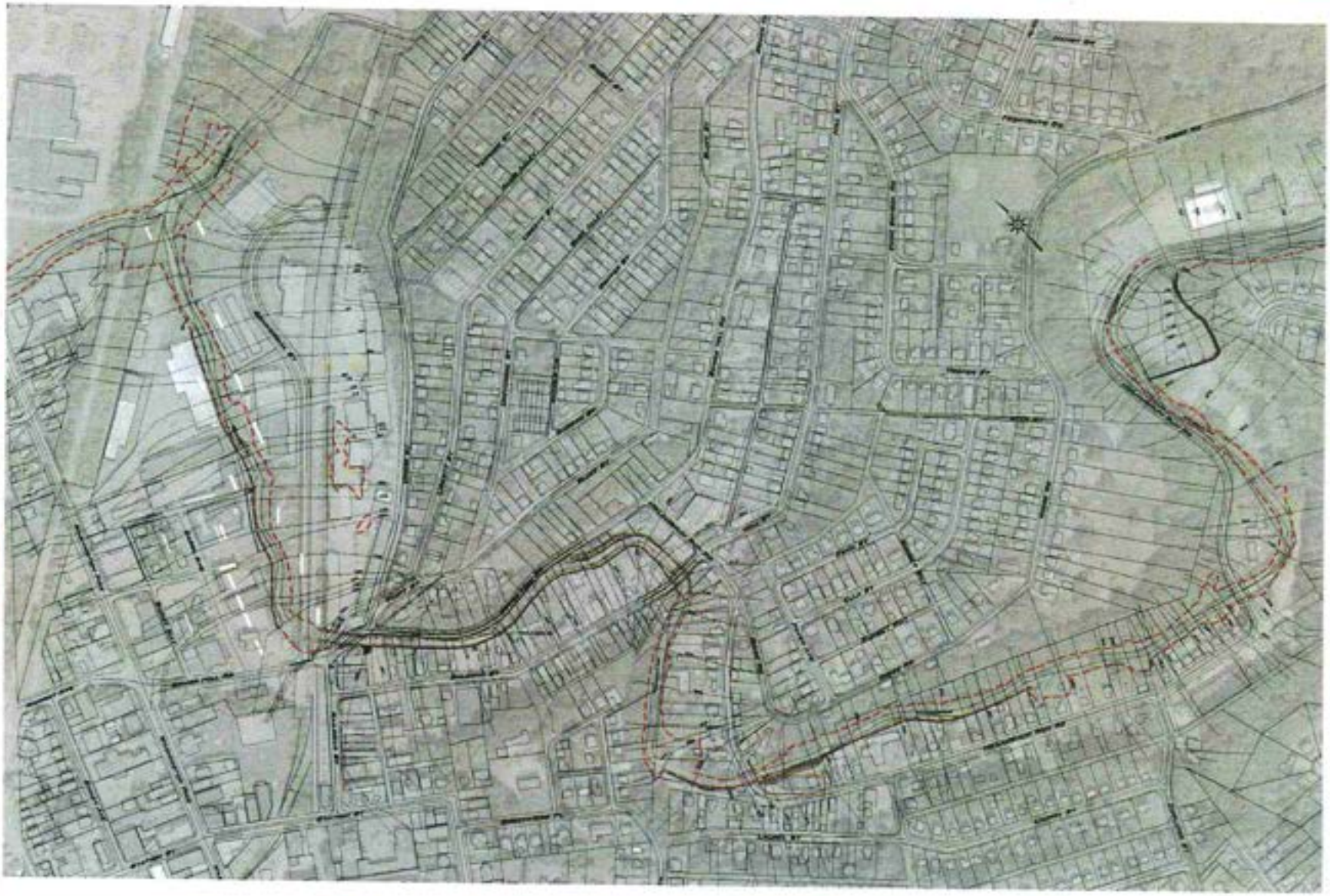

Option 1A

- Phase I – Confluence to Commercial Street
- Phase II – Bower Hill Road to Baldwin Street
- Phase III – Maple Street to McLaughlin Run Park Entrance

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Civil Engineers and Surveyors

Option 1A

- Phase 1
  - Construct a soldier beam and lagging levee wall from north of the roller rink to Commercial Street 1,100 LF.
  - Relocate a section of storm sewer along Carol Avenue
  - Install two screw pumps at the storm sewer discharge points.
  - Replace the Commercial Street Culvert
  - Reduces risk of stream flooding along Carol Avenue
  - Phase 1 cost $5,604,344

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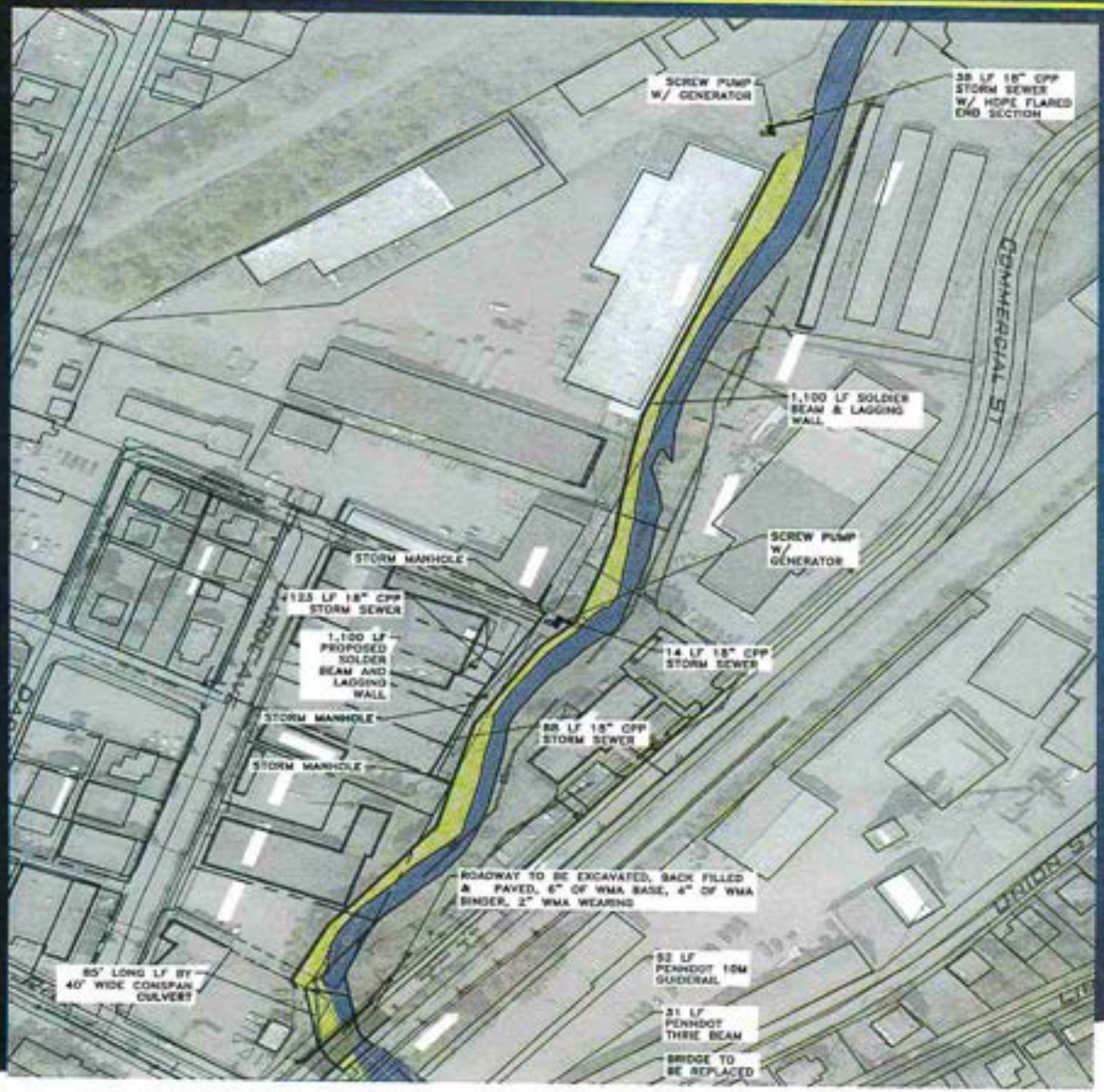
Option 1A – Phase 1



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Option 1A – Phase 1

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Option 1A

- Phase 2
  - Construct a soldier beam and lagging levee wall along left bank from Bower Hill Road Bridge to Baldwin Street 1,180 LF.
  - Remove the sidewalk along Bower Hill Road, construct a soldier beam and lagging levee wall along right bank from Bower Hill Road Bridge to existing residential structures, 830 LF.
  - Construct a soldier beam and lagging levee wall along right bank from residential structure to Baldwin Street 159 LF.
  - Replace Bower Hill Road
  - Replace Bower Hill Road bridge (eliminate center column)
  - Replace Baldwin Street Bridge
  - Install two screw pumps at the storm sewer discharge points.
  - Reduces risk of stream flooding along Baldwin Street/Jane Way Phase 2 cost $15,023,219.
  - Includes Condemning 4 properties.

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Option 1A – Phase 2

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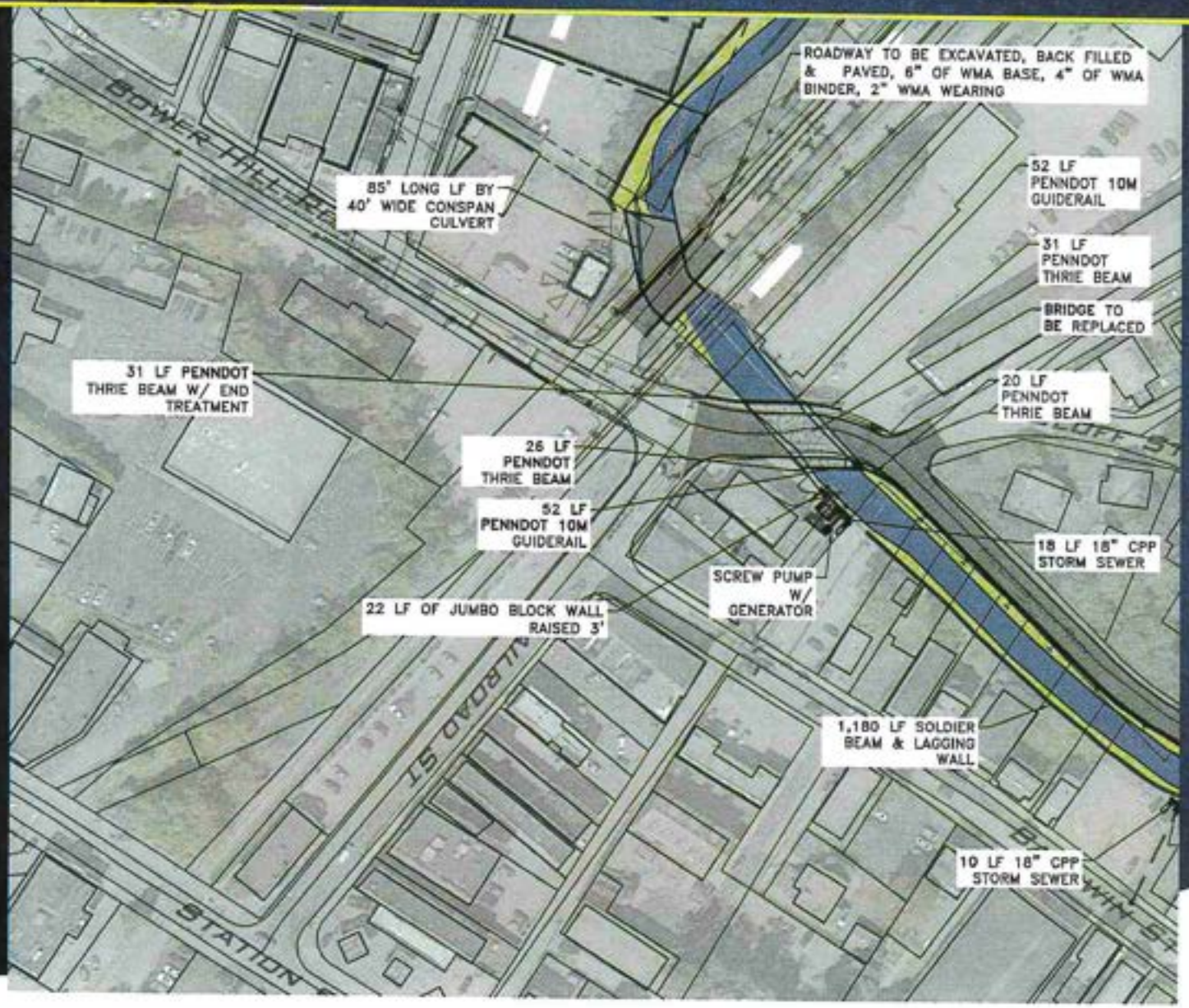
Option 1A – Phase 2



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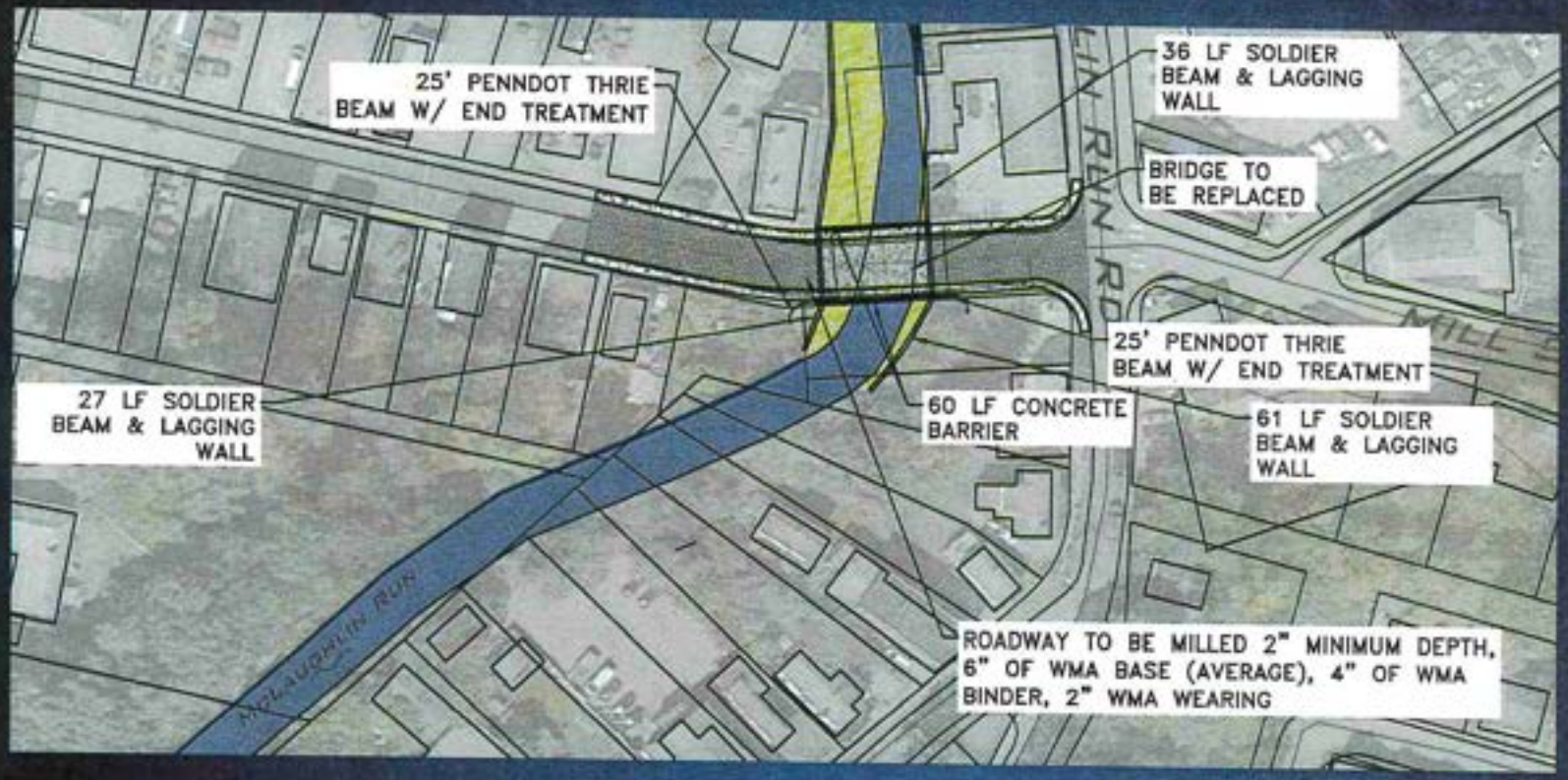
Option 1A – Phase 2



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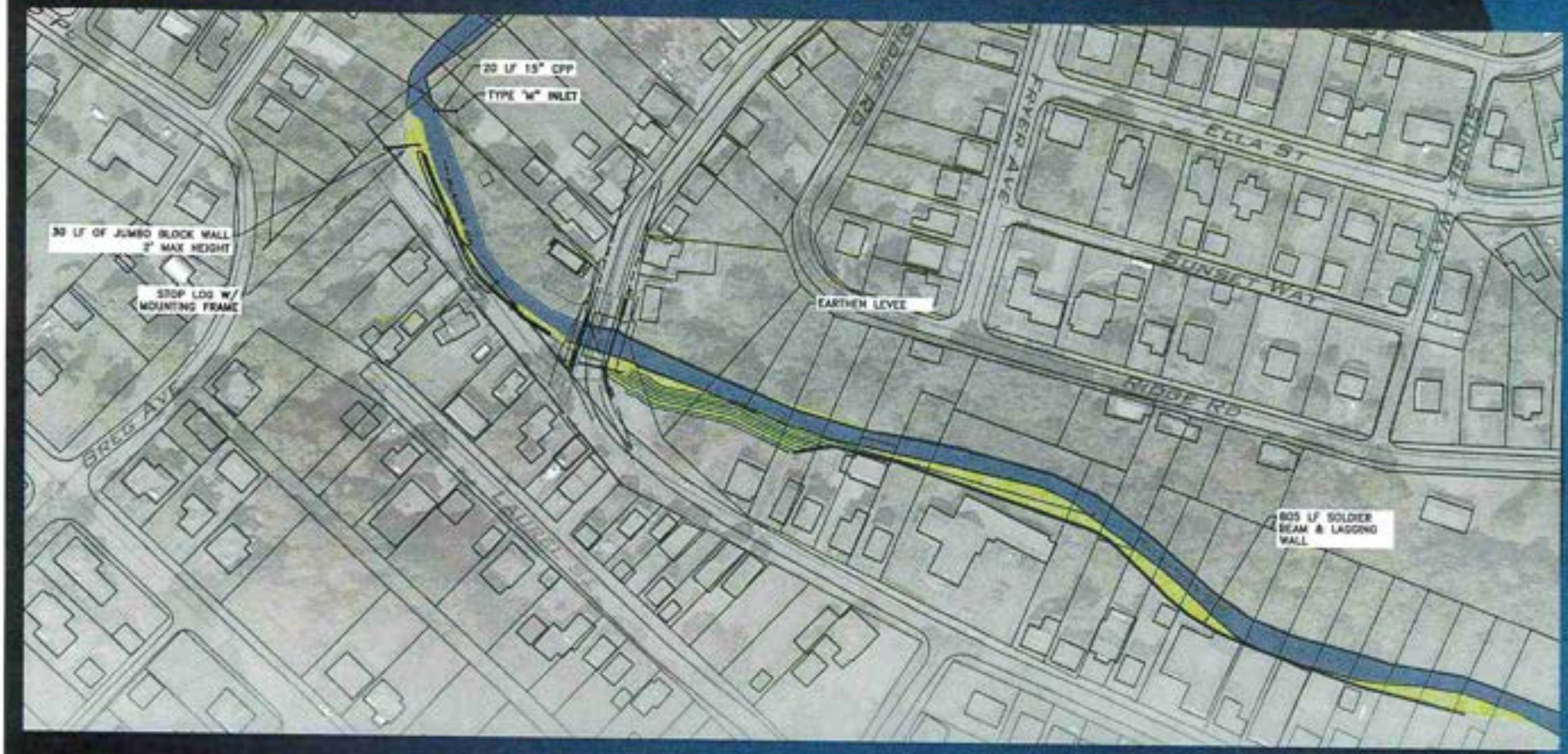
Civil Engineers and Surveyors

Option 1A

- Phase 3
  - Construct a soldier beam and lagging levee wall along left bank east of Maple Street 806 LF.
  - Install jumbo block wall with Stop Log access to ramp at end of Maple Street
  - Reduces risk of stream flooding along McLaughlin Run Road
  - Phase 3 cost $2,528,375.

Option 1A – Phase 3



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Civil Engineers and Surveyors

Option 2

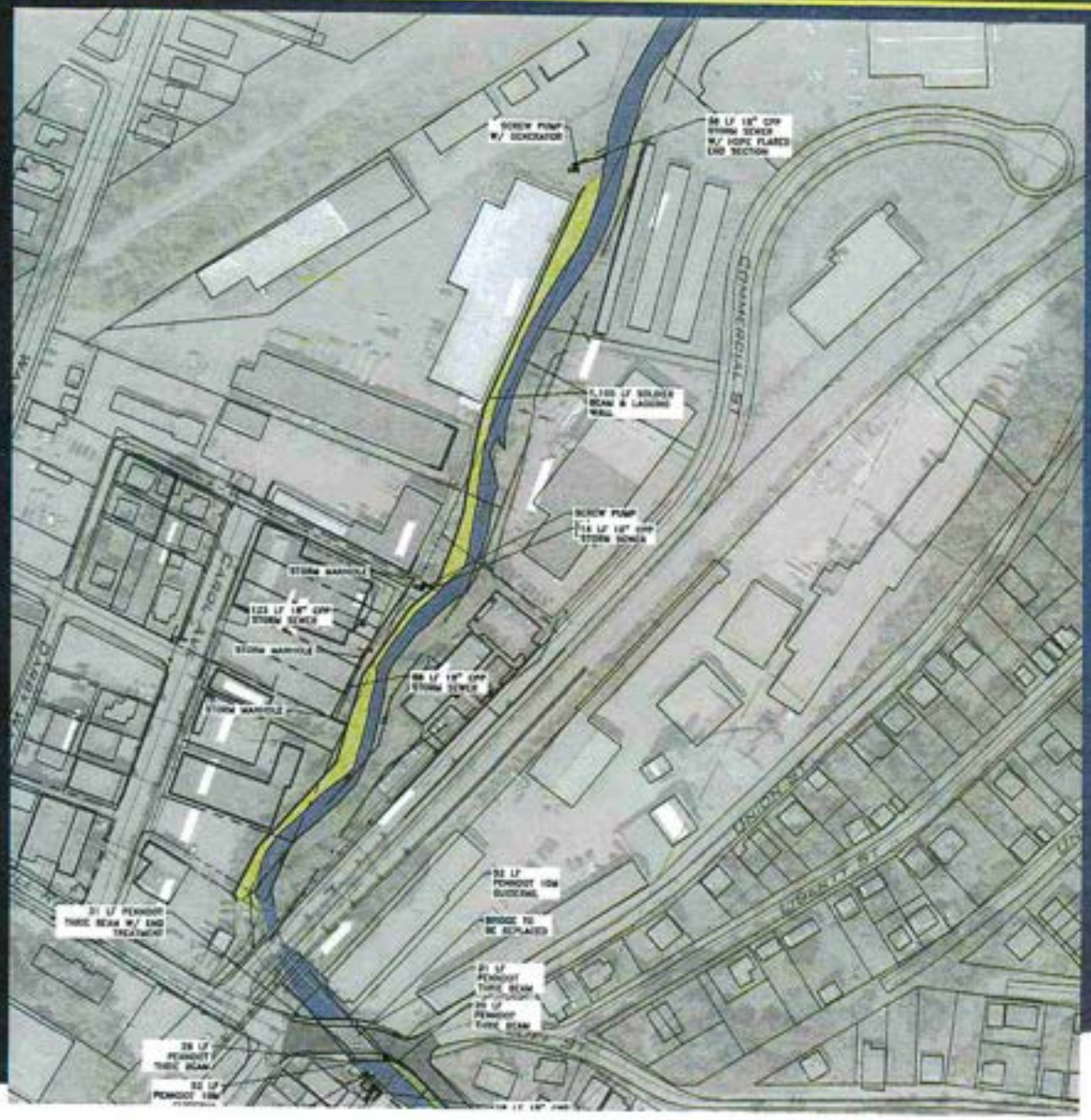
- Phase I – Confluence to Commercial Street
- Phase II – Bower Hill Road to Baldwin Street
- Phase III – Maple Street to McLaughlin Run Park Entrance

Lennon, Smith, Souleret Engineering, Inc.
Civil Engineers and Surveyors

Option 2

- Phase 1
  - Construct a soldier beam and lagging levee wall from north of the roller rink to Commercial Street 1,100 LF.
  - Relocate a section of storm sewer along Carol Avenue
  - Install two screw pumps at the storm sewer discharge points.
  - Reduces risk of stream flooding along Carol Avenue
  - Phase 1 cost $3,930,625

Option 2 – Phase 1



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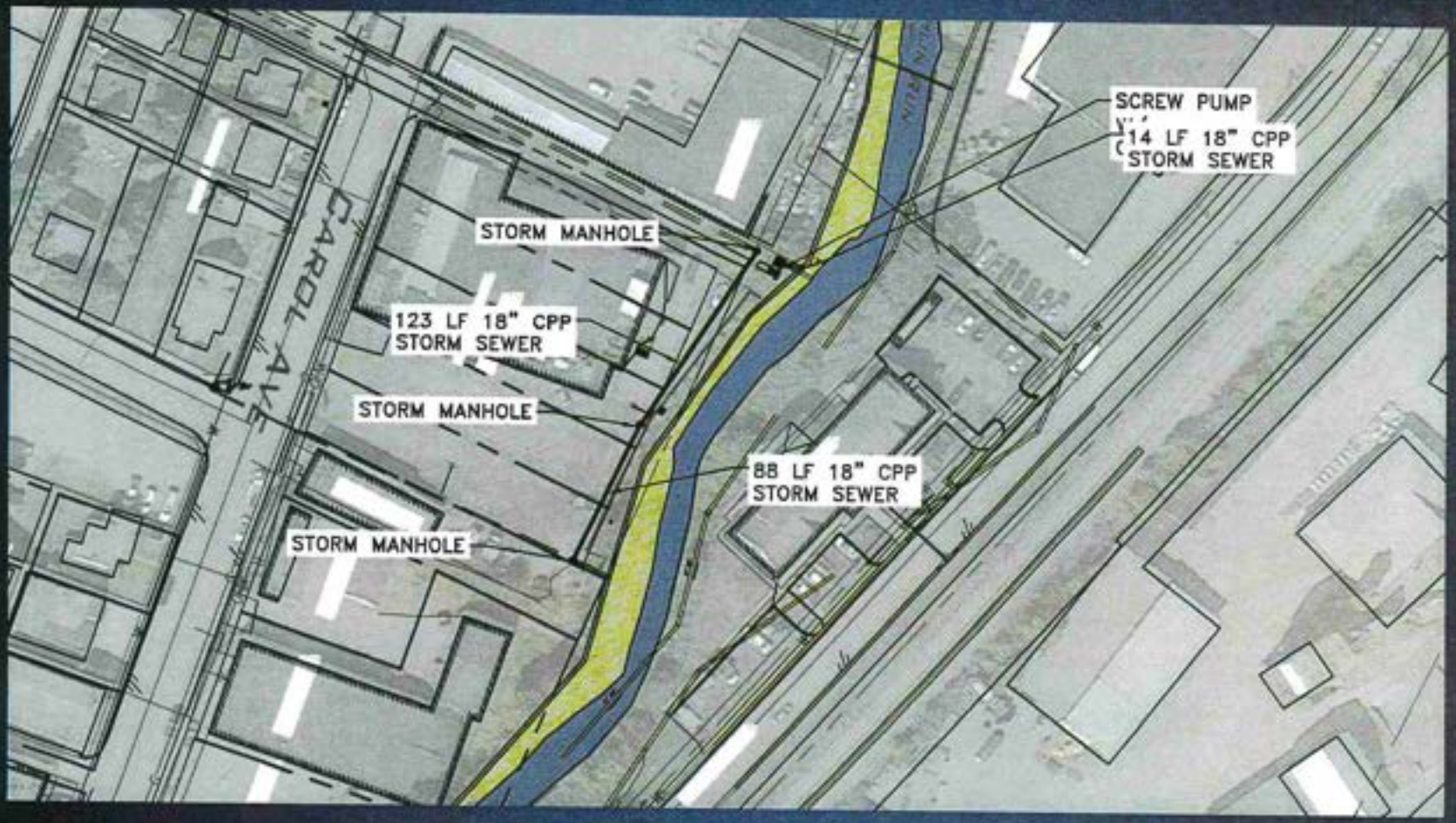
Option 2 – Phase 1



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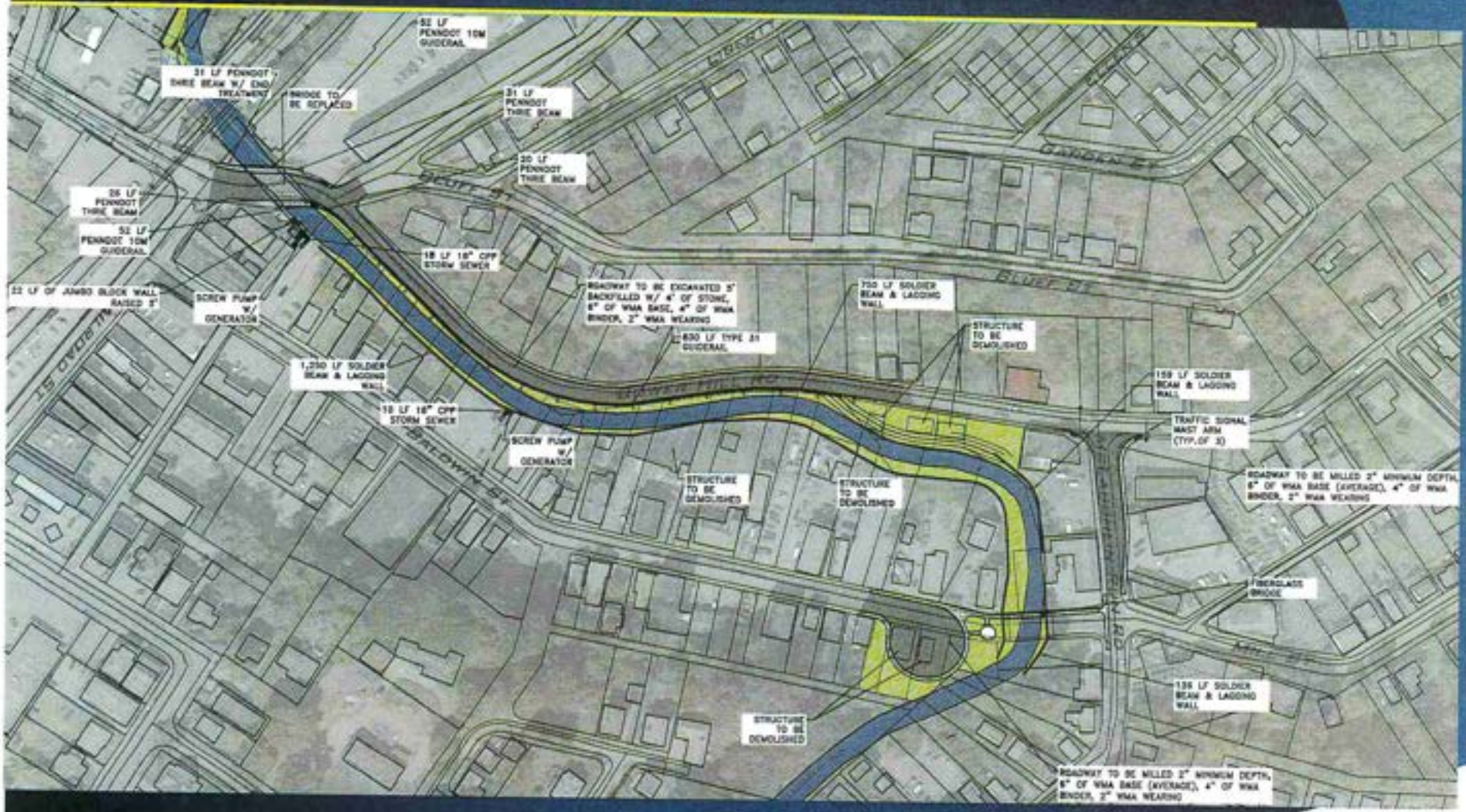
Civil Engineers and Surveyors

Option 2

- Phase 2
  - Construct a soldier beam and lagging levee wall along left bank from Bower Hill Road Bridge to Baldwin Street 1,180 LF.
  - Remove the sidewalk along Bower Hill Road, construct a soldier beam and lagging levee wall along right bank from Bower Hill Road Bridge to existing residential structures, 830 LF.
  - Construct a soldier beam and lagging levee wall along right bank from residential structure to Baldwin Street 159 LF.
  - Replace Bower Hill Road
  - Replace Bower Hill Road bridge (eliminate center column)
  - Remove Baldwin Street Bridge & install a fiberglass pedestrian bridge.
  - Install Cul-De-Sac on Baldwin Street.
  - Construct turning lanes on McLaughlin Run Road.
  - Install two screw pumps at the storm sewer discharge points.
  - Reduces risk of stream flooding along Baldwin Street/Jane Way Phase 2 cost $13,223,912.
  - Includes condemning 6 properties.

Option 2 – Phase 2



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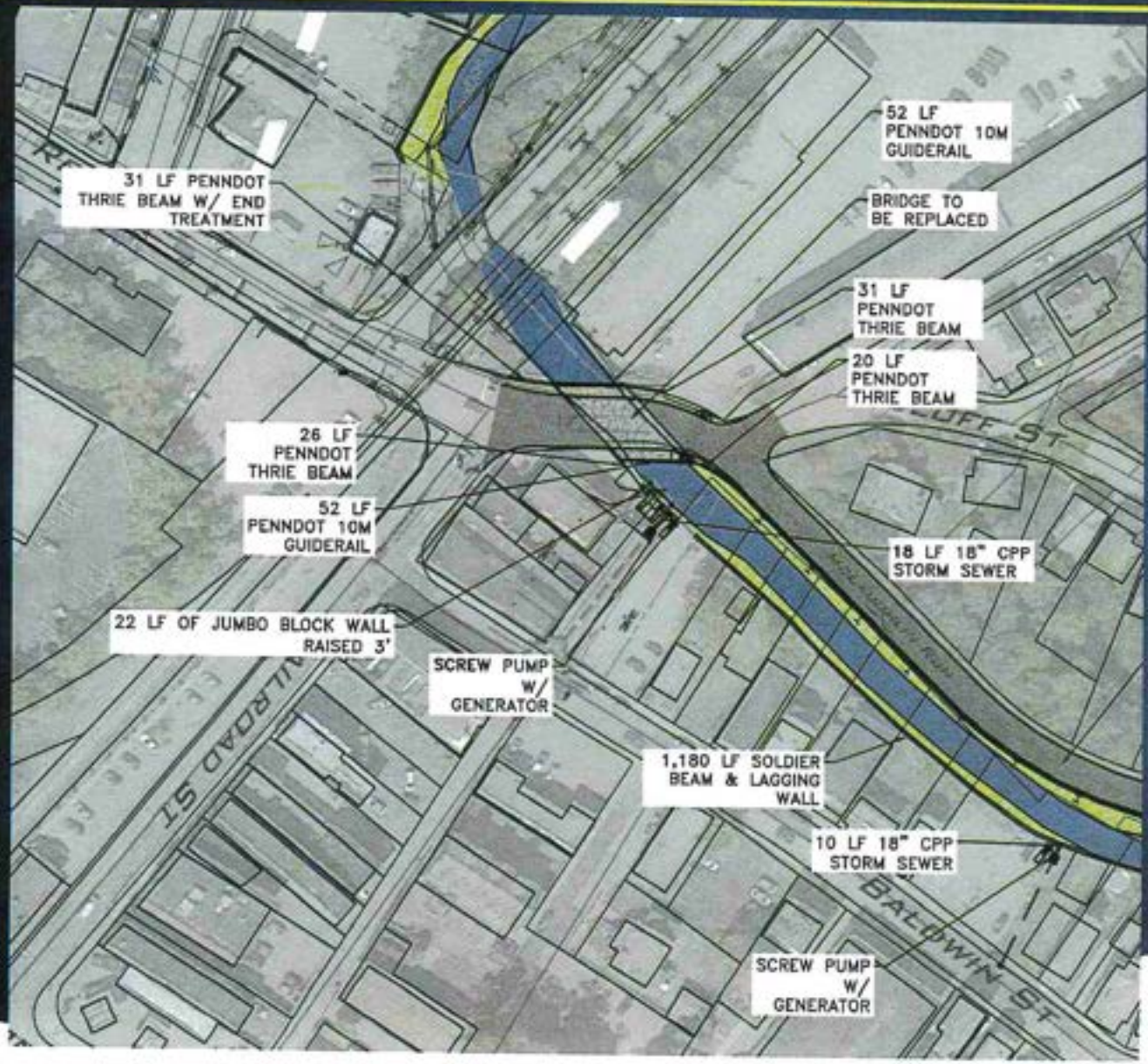
Option 2 – Phase 2



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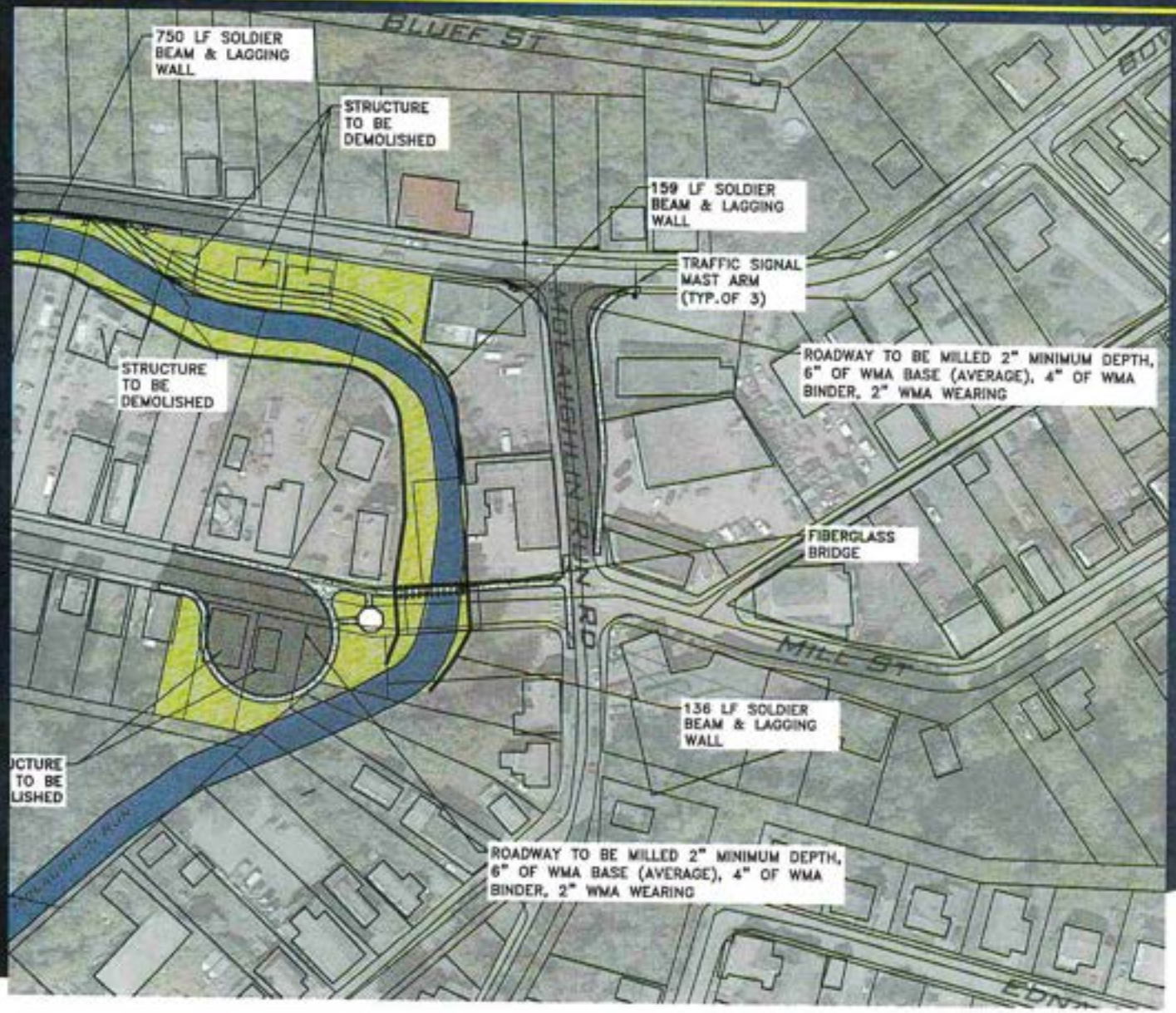
Option 2 – Phase 2



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Option 2

- Phase 3
  - Construct a soldier beam and lagging levee wall along left bank east of Maple Street 806 LF.
  - Install jumbo block wall with Stop Log access to ramp at end of Maple Street
  - Reduces Risk stream flooding along McLaughlin Run Road
  - Phase 3 cost $2,528,375.

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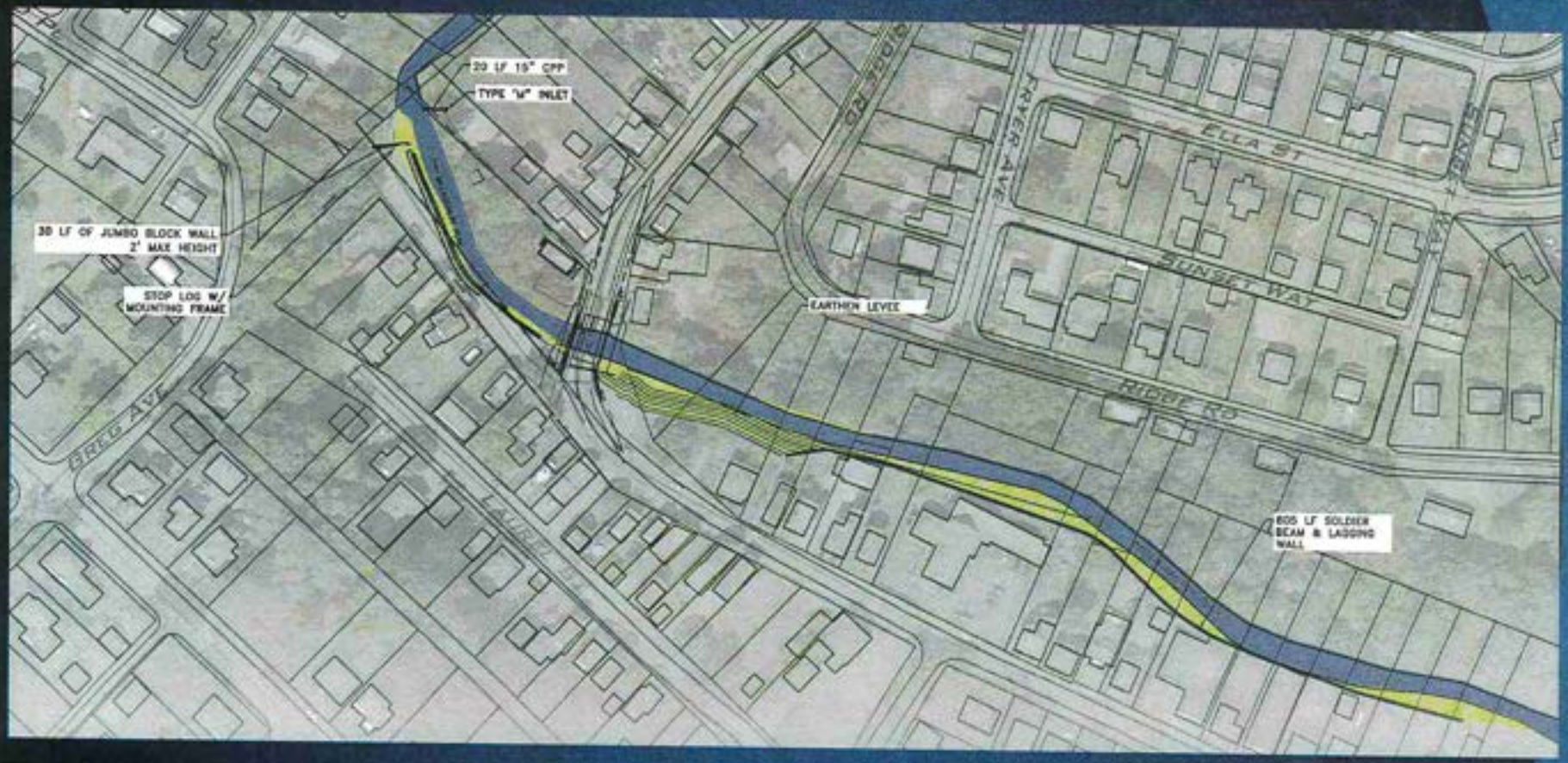
Option 2 – Phase 3



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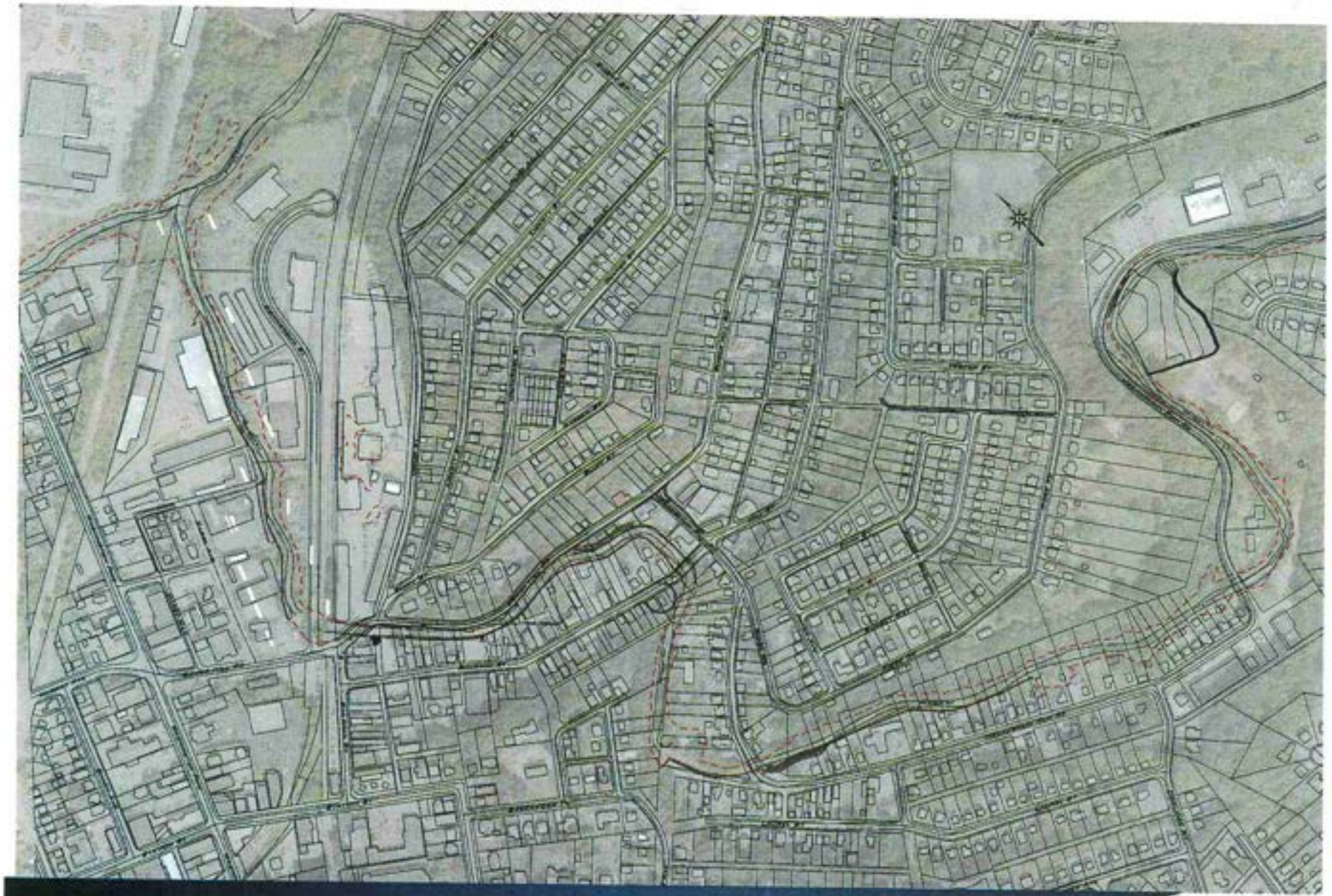

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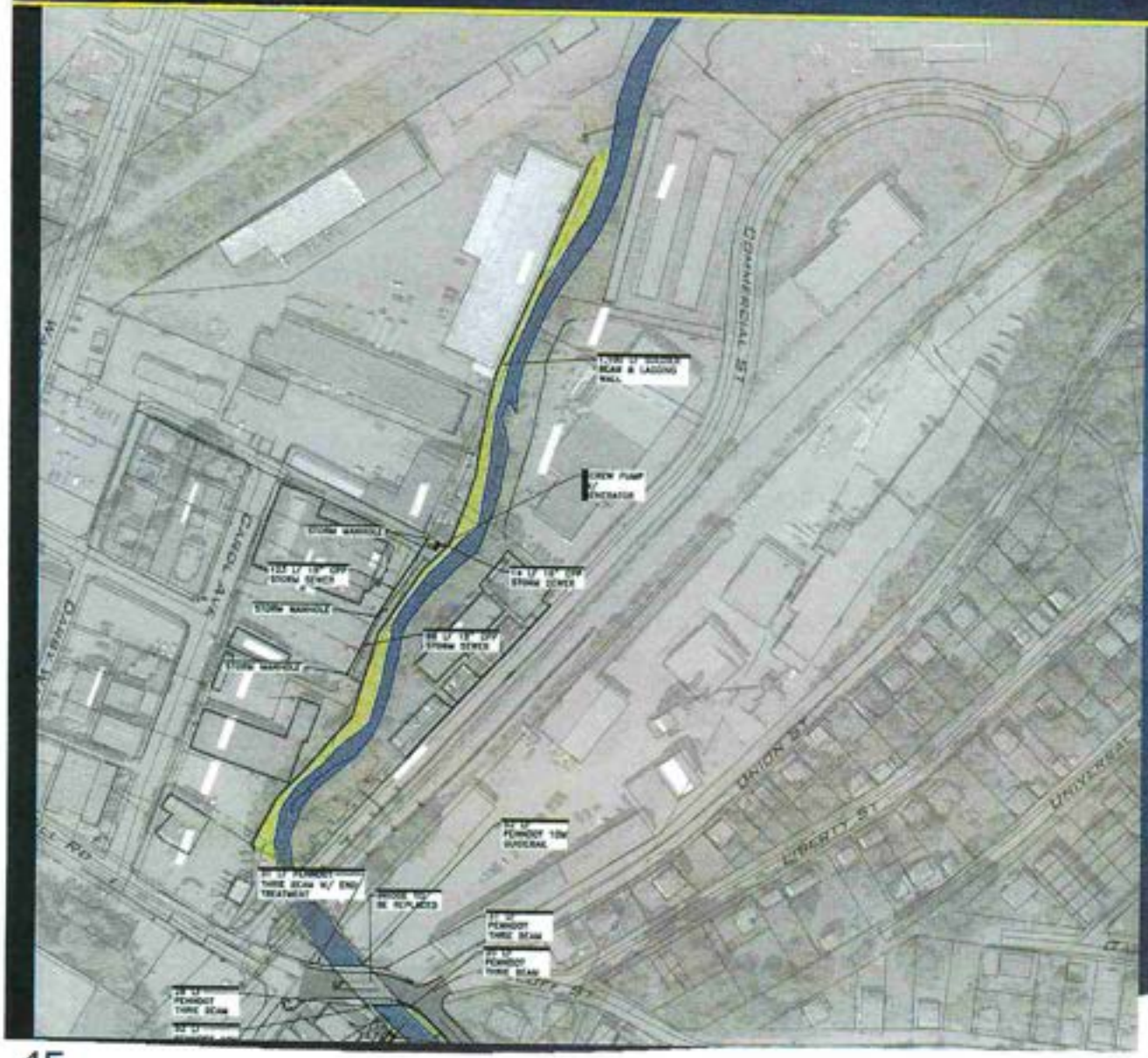
Option 3

- Phase I – Confluence to Commercial Street
- Phase II – Bower Hill Road to Baldwin Street
- Phase III – Maple Street to McLaughlin Run Park Entrance

Option 3

- Phase 1
  - Construct a soldier beam and lagging levee wall from north of the roller rink to Commercial Street 1,100 LF.
  - Relocate a section of storm sewer along Carol Avenue
  - Install two screw pumps at the storm sewer discharge points.
  - Reduces Risk of stream flooding along Carol Avenue
  - Phase 1 cost $3,930,625

Option 3 – Phase 1



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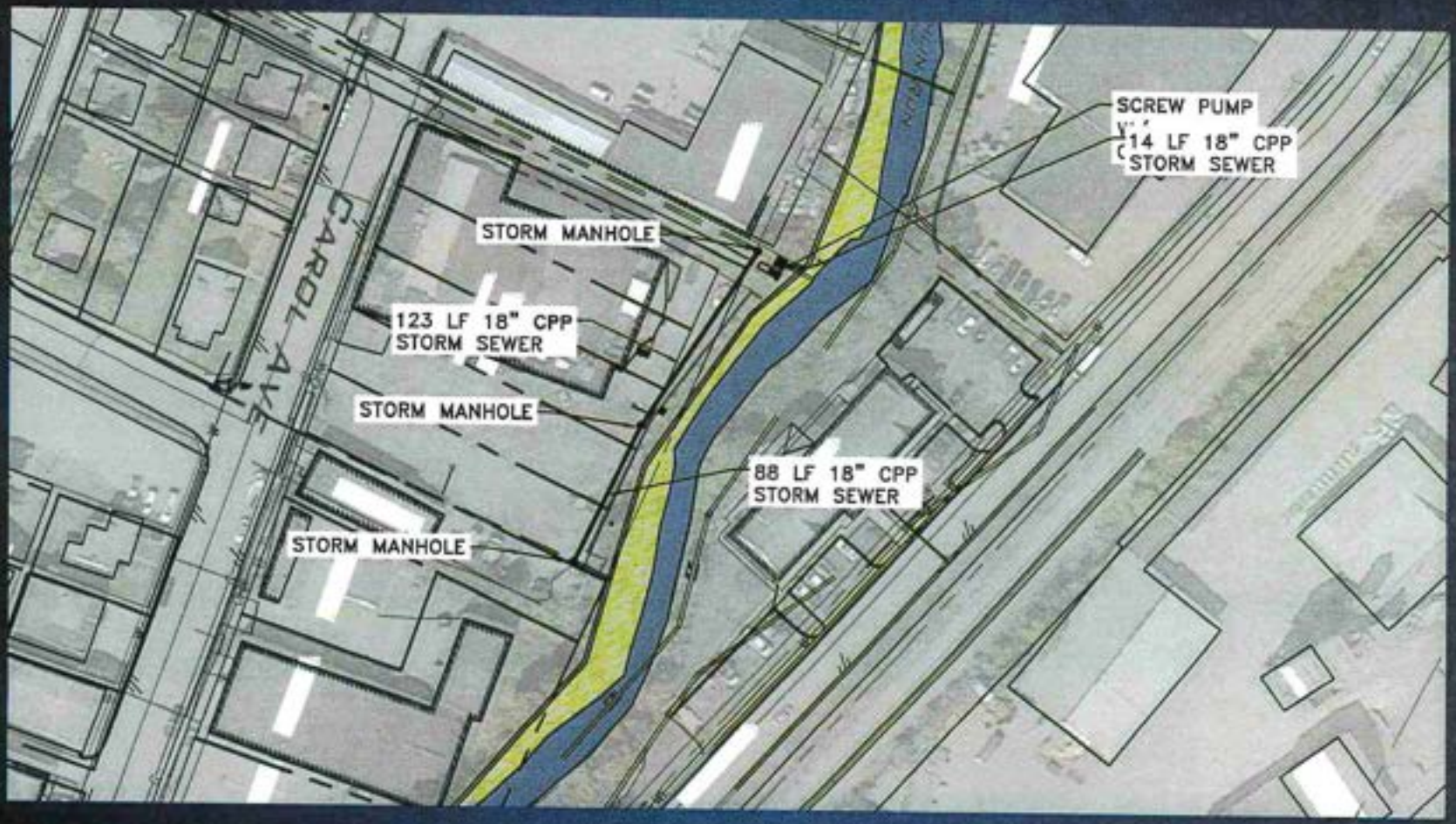
Option 3 – Phase 1



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Option 3

- Phase 2
  - Remove Bower Hill Road from Railroad Street to McLaughlin Run Road.
  - Reconfigure the intersection of Baldwin Street, Bower Hill Road and Railroad Street to create a plus intersection.
  - Replace and reduce the size of Bower Hill Road bridge (eliminate center column)
  - Replace Baldwin Street Bridge
  - Reconfigure the intersection of Baldwin Street and McLaughlin Run Road including replacing the traffic signal with a round about.
  - Construct an earthen levee on the left bank of McLaughlin Run from Baldwin Street to Railroad Street.
  - Create a vegetated riparian buffer along McLaughlin Run
  - Install two screw pumps at the storm sewer discharge points.
  - Reduces risk of stream flooding along Baldwin Street/Jane Way Phase 2 cost $16,900,431.
  - Includes Condemning 37 properties.

Option 3 – Phase 2

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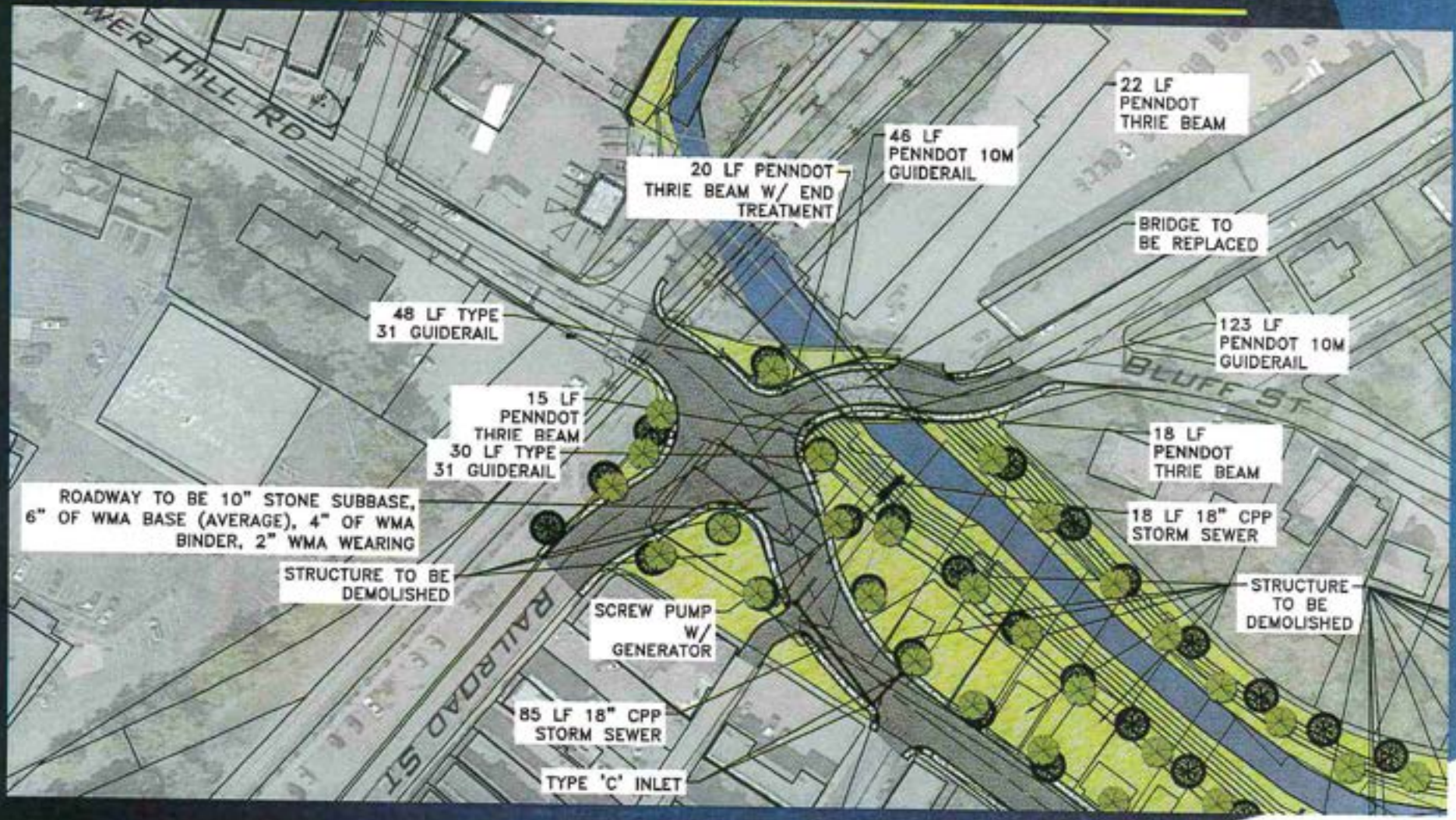
Option 3 – Phase 2



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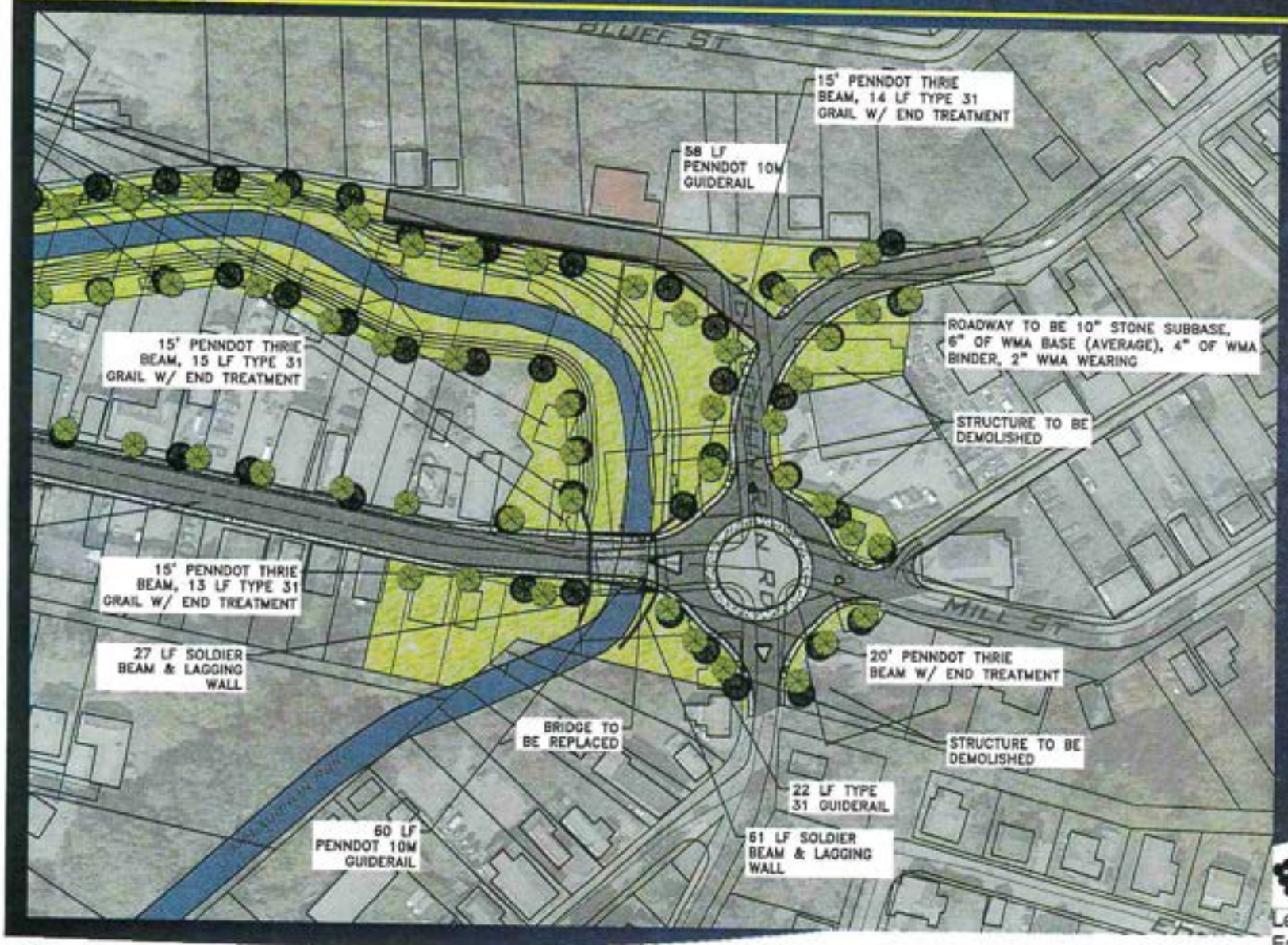
Option 3 – Phase 2



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Civil Engineers and Surveyors

Option 3

- Phase 3
  - Construct a soldier beam and lagging levee wall along left bank east of Maple Street 806 LF.
  - Install jumbo block wall with Stop Log access to ramp at end of Maple Street
  - Reduces risk of stream flooding along McLaughlin Run Road
  - Phase 3 cost $2,528,375.

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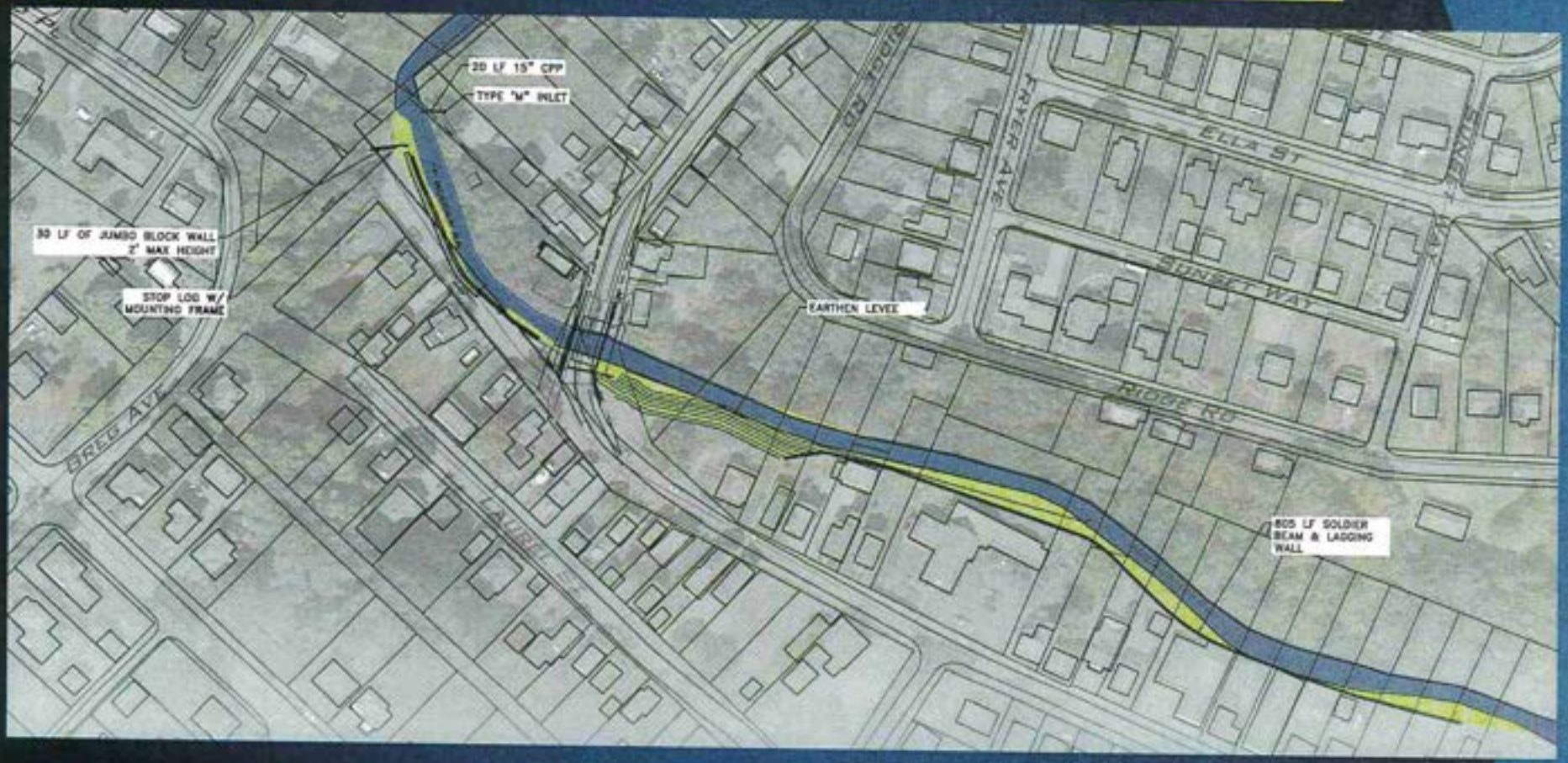
Option 3 – Phase 3



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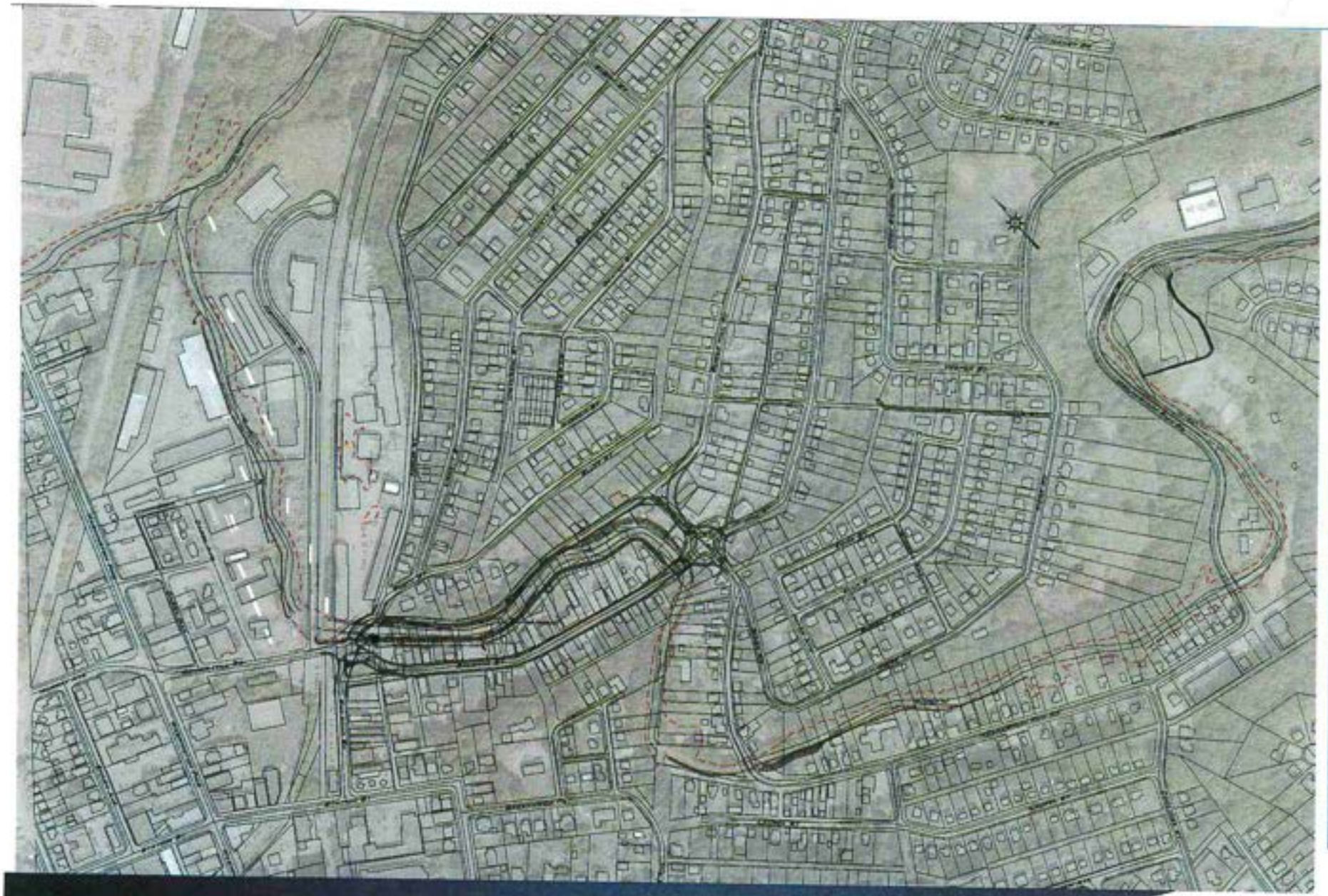
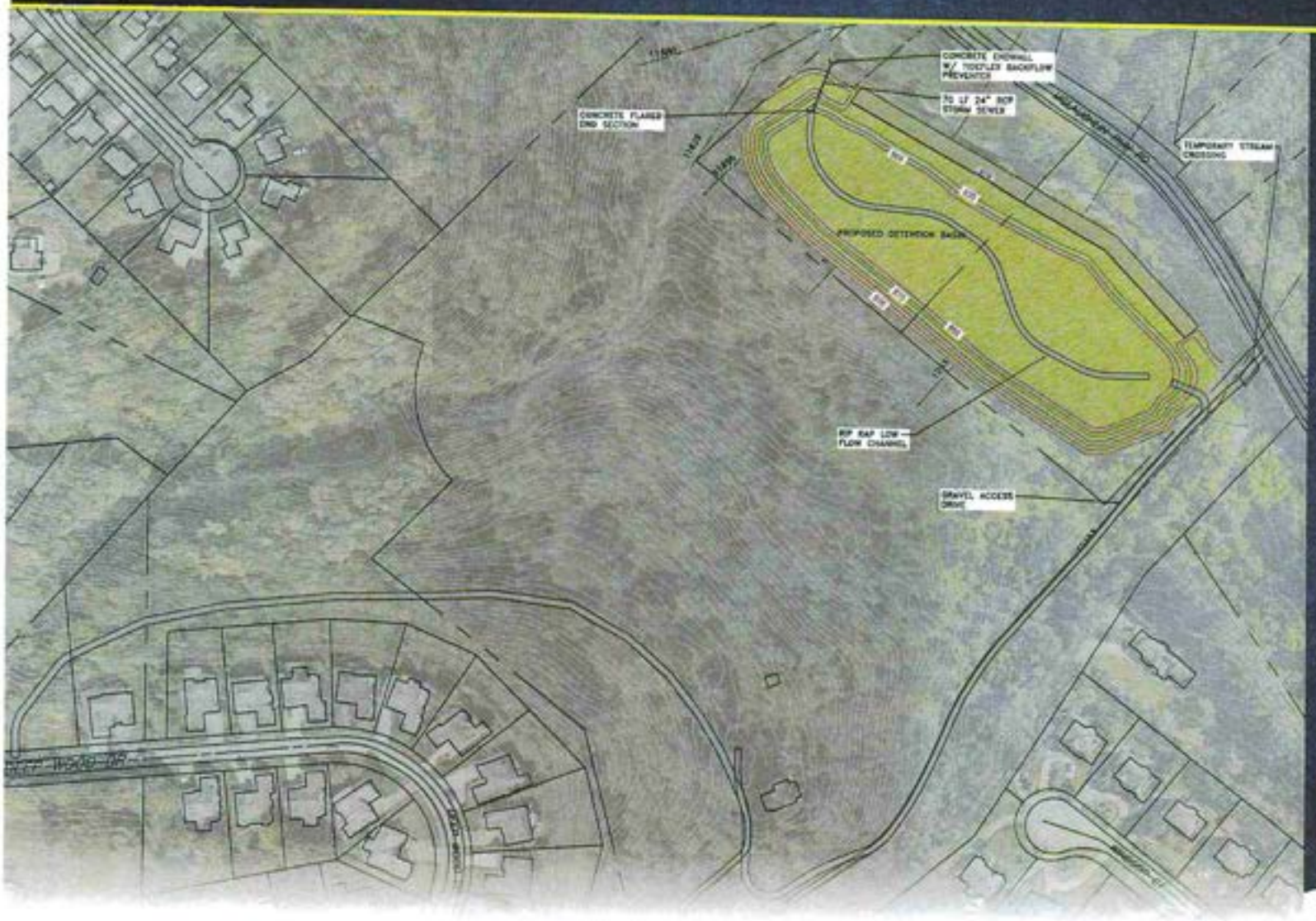


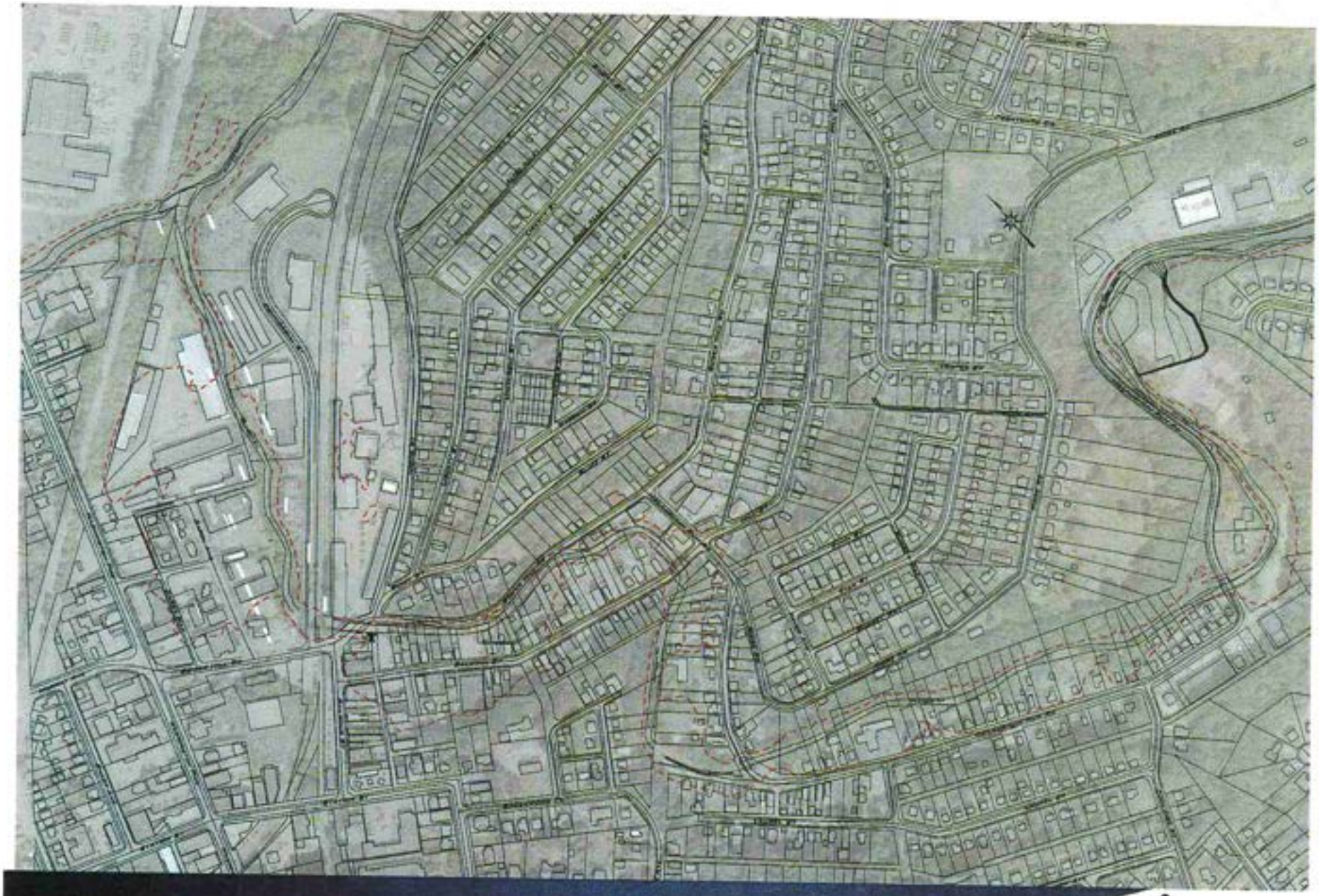
Option 4

- Construction of a 9.5 Acre-FT offline detention facility in Upper St. Clair.

Option 4



Lennon, Smith, Souleret Engineering, Inc.
Civil Engineers and Surveyors



Option Comparison

- Option 1 - $21,482,219; 4 Properties Condemned; 6 structures demolished; Reduce the risk of flooding 171 Structures.
- Option 1A - $23,155,938; 4 Properties Condemned; 6 structures demolished; Reduce the risk of flooding 171 Structures.
- Option 2 - $19,682,913; 6 Properties Condemned; 6 structures demolished; Reduce the risk of flooding 169 Structures.
- Option 3 - $23,359,431; 37 Properties Condemned; 27 structures demolished; Reduce the risk of flooding 147 Structures.
- Option 4 - $3,870,375; 2 Properties Condemned; Reduce the risk of flooding 79 Structures.

Potential Funding

- USACOE – Section 219 Environmental Infrastructure Grant (Currently Not Open)
- USACOE – Section 7001 Grant (Currently Not Open)
- FEMA – Mitigation Assistance (Currently Not Open)
- CFA Act 13 – Flood Mitigation Program (Currently Not Open)
- CFA - PA Small Water and Sewer Program (Currently Not Open)
- CFA - H2O PA (Currently Not Open)
- DCED – PA Infrastructure Bank (Loan for Bridges)
- Allegheny County GEDF (Currently Not Open)