



Massachusetts Water Resources Authority

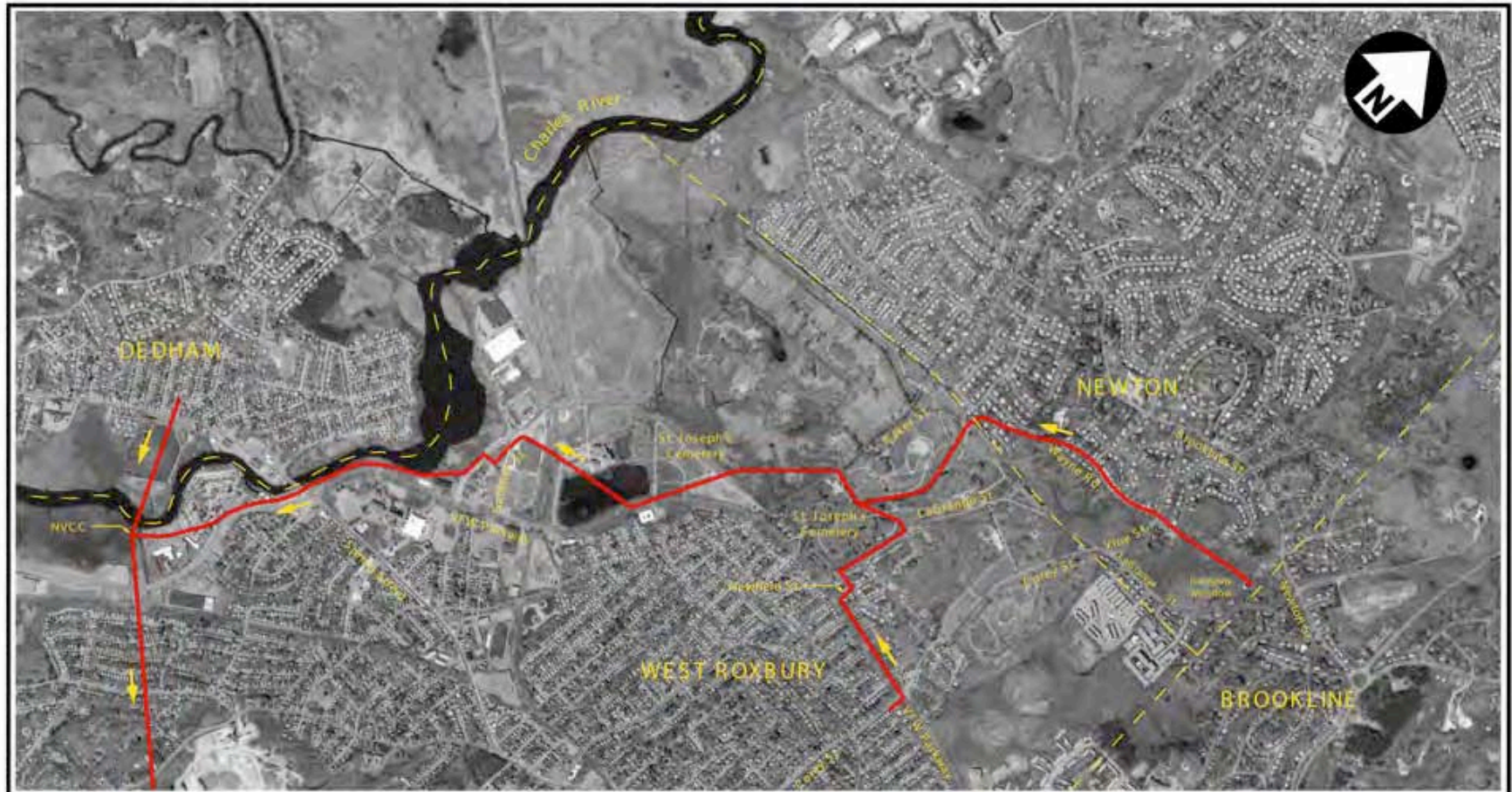
Upper Neponset Valley Replacement Sewer

Project Information

Purpose of Project

- To bring capacity of the 100+ year old sewers up to the level of service the MWRA provides to all member sewer communities.

Existing Upper Neponset Valley Sewers



FAY, SPOFFORD & THORNDIKE

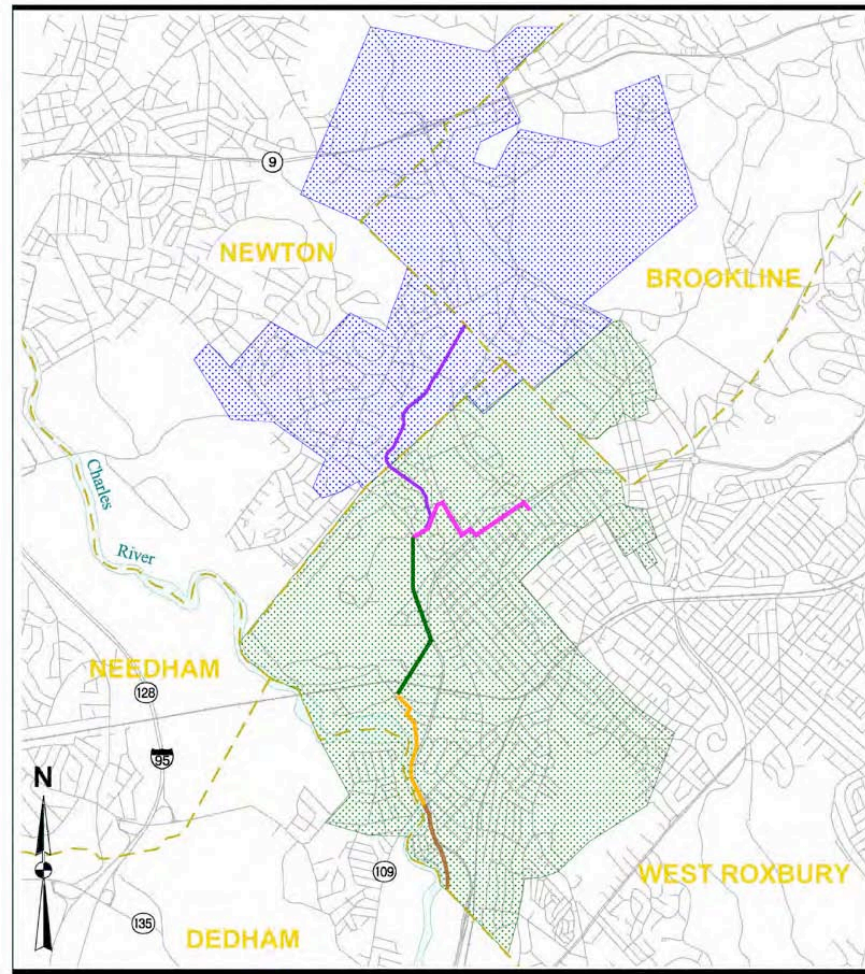
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Massachusetts Water Resources Authority
Upper Neponset Valley Relief Sewer

Direction of Flow
Existing Sewer

Existing Sections 530-526 Sewers

Tributary Areas



FAY, SPOFFORD & THORNDIKE

- Municipal Boundaries
- Tributary Area (529-526)
- Tributary Area (530)
- Existing Section 530

- Existing Section 529
- Existing Section 528
- Existing Section 527
- Existing Section 526

Figure 1-1

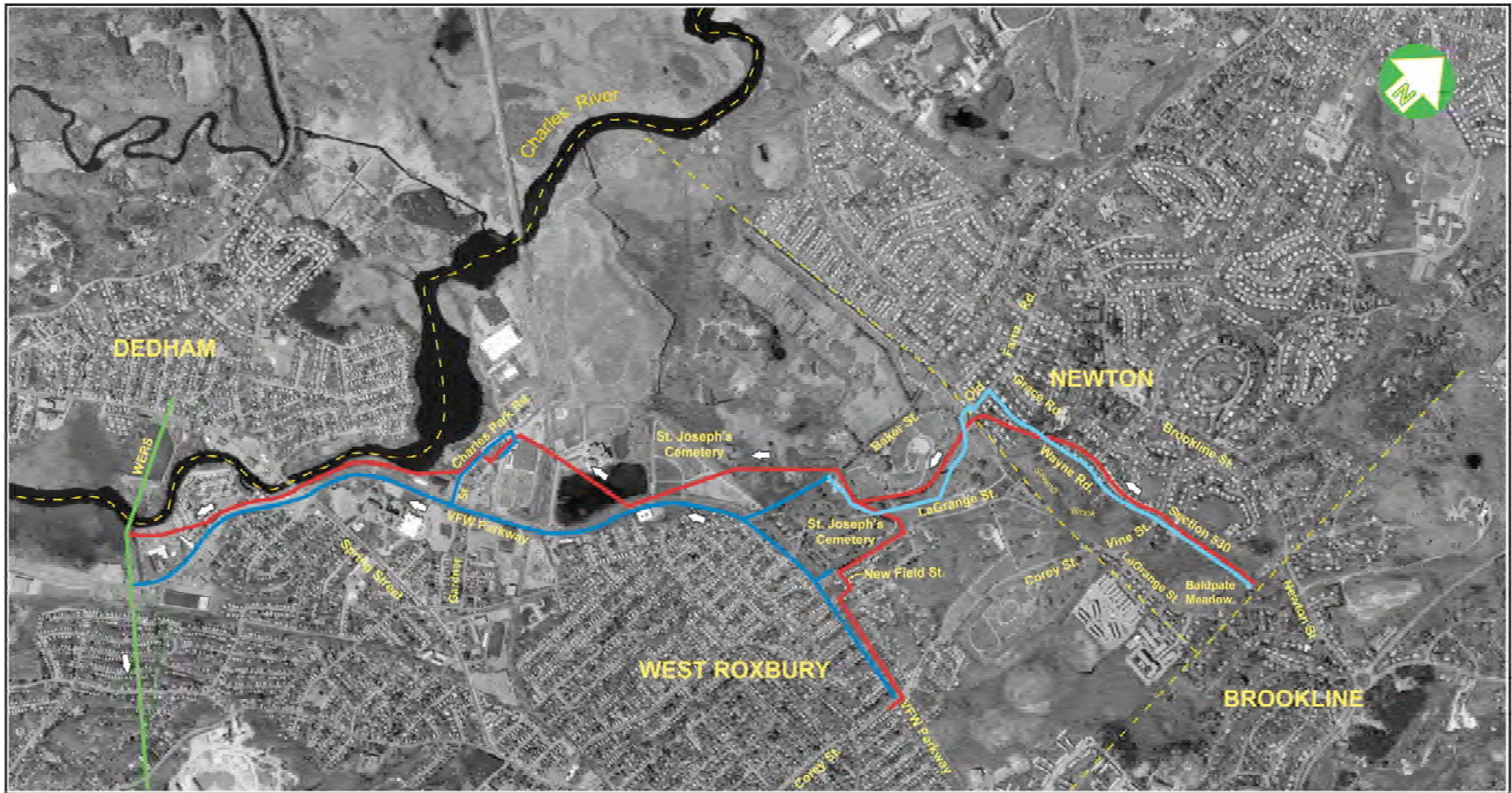
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Massachusetts Water Resources Authority
Upper Neponset Valley Relief Sewer

**Sections 530-526
Tributary Area**


Proposed Sewers




April 2004

 **FAY, SPOFFORD & THORNDIKE**

Approximate Scale: 1"=1200'

 **Massachusetts Water Resources Authority**
Upper Neponset Valley Relief Sewer


- Existing UNVS
- Existing WERS
- Proposed UNVRS- Contract No. 1
- Proposed UNVRS- Contract No. 2
-  Direction of Flow

Proposed UNVRS

MEPA Process

- Executive Office of Environmental Affairs (EOEA) Environmental Impact Review (EIR) Process begun in 1999
- Certificate obtained in 2003
- Directed to avoid or minimize impact to trees
- Concerns voiced to minimize impacts to traffic and avoid detours through residential streets

“The MWRA should pay particular attention to avoiding or minimizing impacts on mature shade trees and traffic flow along the VFW Parkway during construction”



The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Boston, MA 02202

ANSELO PAUL CELLUCCI
GOVERNOR
JANE SWIFT
DEPUTY GOVERNOR
BOB DURAND
SECRETARY

TEL (617) 727-8600
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October 15, 1999

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
SPECIAL PROCEDURE
PHASE 1: ALTERNATIVES ANALYSIS

PROJECT NAME : Upper Neponset Valley Relief Sewer
PROJECT MUNICIPALITY : Boston and Newton
PROJECT WATERSHED : Boston Harbor
DOEA NUMBER : 11928
PROJECT PROPONENT : Massachusetts Water Resources Authority (MWRA)
DATE NOTICED IN MONITOR : September 9, 1999

As Secretary of Environmental Affairs, I hereby determine that the Phase 1; Alternatives Analysis submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

This project involves the construction of new and improved wastewater conveyance facilities to serve parts of West Roxbury, Newton, Brookline, and Dedham. The existing system is subject to wet weather flows that have caused significant flooding problems, including inundation of basements and yards with wastewater.

The Special Procedure developed for MEPA review of this project envisioned that the Phase 1; Alternatives Analysis document would recapitulate the alternative analyses prepared in earlier studies and would identify how the currently proposed routing is superior in function and avoidance of environmental impacts. The Phase 1 document has accomplished this task. I concur with the selection of the combination of Alternative A-4, VFW Interceptor, and Alternative D-4 as the least environmentally damaging alternative and recommend that the proponent proceed to Phase 2 to provide additional environmental analysis on this

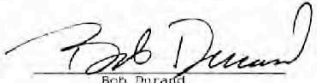
Phase 1 Certificate October 15, 1999

chosen alternative. The MWRA should pay particular attention to avoiding or minimizing impacts on mature shade trees and traffic flow along the VFW Parkway during construction.

The Phase 2 document should also contain an additional analysis of alternatives to the interbasin transfer of wastewater as requested by the Water Resources Commission in its comment letter. The MWRA should consider Inflow/Infiltration removal as an alternative in this analysis.

The Phase 1 document also includes a proposed scope for the Phase 2 document. I have reviewed the proposed scope and I find it adequate to provide the environmental analyses required for the Draft EIR. The Phase 2 document should also provide detailed responses to the issues raised in the attached comment letters, listed below.

October 15, 1999
Date


Bob Durand

Comments received :

Department of Environmental Protection
Water Resources Commission
Boston Redevelopment Authority
Boston Water and Sewer Commission
Boston Environment Department
Wastewater Advisory Committee
Milton Selectmen

BD/rt

Executive Office of Environmental Affairs
October 15, 1999

Boston Redevelopment Authority

September 28, 1999

Boston Redevelopment Authority

Boston's Planning & Economic
Development Office
Thomas H. Merens, Mayor
Charles J. Jones, Chairman
Thomas R. O'Brien, Director
One City Hall Square
Boston, MA 02101-1007
Tel: 617 727 4300
Fax: 617 727 5114

SEP 28 1999

Robert Durand, Secretary
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, MA 02202

Attention: MEPA Unit

RE: EOE #11928 - Upper Neponset Valley Relief Sewer
(Phase I: Alternatives Analysis)

Dear Secretary Durand:

Pursuant to regulations implementing M.G.L., Chapter 30, Sections 62-62H, the Boston Redevelopment Authority (BRA) has reviewed the above-referenced "Phase I: Alternatives Analysis" report and submits the following comments.

The Massachusetts Water Resources Authority (MWRA) has submitted its "Phase I: Alternatives Analysis" report for the Upper Neponset Valley Relief Sewer project in response to the Special Review Procedures established by your office for this project. In compliance with the requirements of the Procedure, this report presents an analysis of alternative alignments for Sections 29 through 26 of the Upper Neponset Valley Sewer, defined as Phase I in the April 1999 Environmental Notification Form, and a proposed scope for a Draft Environmental Impact Report (DEIR) for the overall project as well as an alternative and routing analysis for Phase II, the Section 30 sewer.

The Upper Neponset Valley Sewer is approximately 22,200 feet in length and is located in West Roxbury (Boston) and Newton (and also serves parts of Brookline and Dedham). The proposed project involves repairs to existing sewers and the construction of improved wastewater conveyance facilities to increase the capacity of the sewer line and reduce the frequency of wet-weather related overflows experienced by the affected communities. The Relief Sewer project is to be implemented in two phases.

The subject Alternatives Analysis report describes the several alignment alternatives studied for each of the Sections and their potential impacts. The recommended alignment is a combination of Alternative A-4, VFW Interceptor, and Alternative D-4, and is the same alignment as previously recommended in a 1984 "Facilities Plan and Environmental Information Document." The current, updated study confirms that the earlier recommended alignment is the best, and most cost-effective, option for increasing the capacity of the Sections 29 through 26 sewers. According to the study, this alignment is superior in function and avoidance of environmental impacts, avoiding all cemeteries, MDC parklands, and direct wetland impacts and being located within public rights-of-way (primarily the VFW Parkway). We concur with this determination, with the caveats as noted below.

The major concerns with the selected alignment are the potential impact to the mature oak trees lining the VFW Parkway and direct impacts to the


preserve the trees along the Parkway and their root systems.

"Every effort must be made to protect and preserve the trees along the Parkway and to prevent damage to these significant arboreal resources and their root systems."

Secondly, since the VFW Parkway is a major and heavily-travelled arterial, we would recommend that, to the extent possible, construction work and lane closures be limited to non-peak traffic hours to reduce disruption and potential congestion. Any need for detours, especially through residential streets, should be avoided. Close coordination with the MDC and the Boston Transportation Department (BTD) will be necessary, and the MWRA will need to file a Construction Management Plan with the BTD. In addition, the control and reduction of construction dust and other pollutant emissions will be essential since numerous residences border the Parkway.

With respect to the EIR Scope, both your June 24, 1999 Report is to include an assessment of the potential environmental impacts of the "Proposed Outline for EIR Scope" (page 11). An "Assessment of Impacts" to be related solely to the Section 30 Alternatives Analysis project as a whole should, therefore, be added to the project.

Finally, we wish to reemphasize the importance and necessity and again urge the MWRA to expedite its implementation to the as presented in Attachment 2 of the report seems unnecessary, hope that much of the work, especially those elements which review, could be completed far sooner. The Environmental Notification letter on the Environmental Notification Form and the "Phase I: Alternatives Analysis" report proposed in 1984, but the problem is substantial public health threats have urged you to permit the construction possible, consistent with the requirements of the

Sincerely,

Richard B. Mertens, AICP
Environmental Review Officer

cc: David K. Pottle, P.E.
Project Manager
Engineering & Construction
Massachusetts Water Resources Authority

MERTENS/UpperNeponset.doc

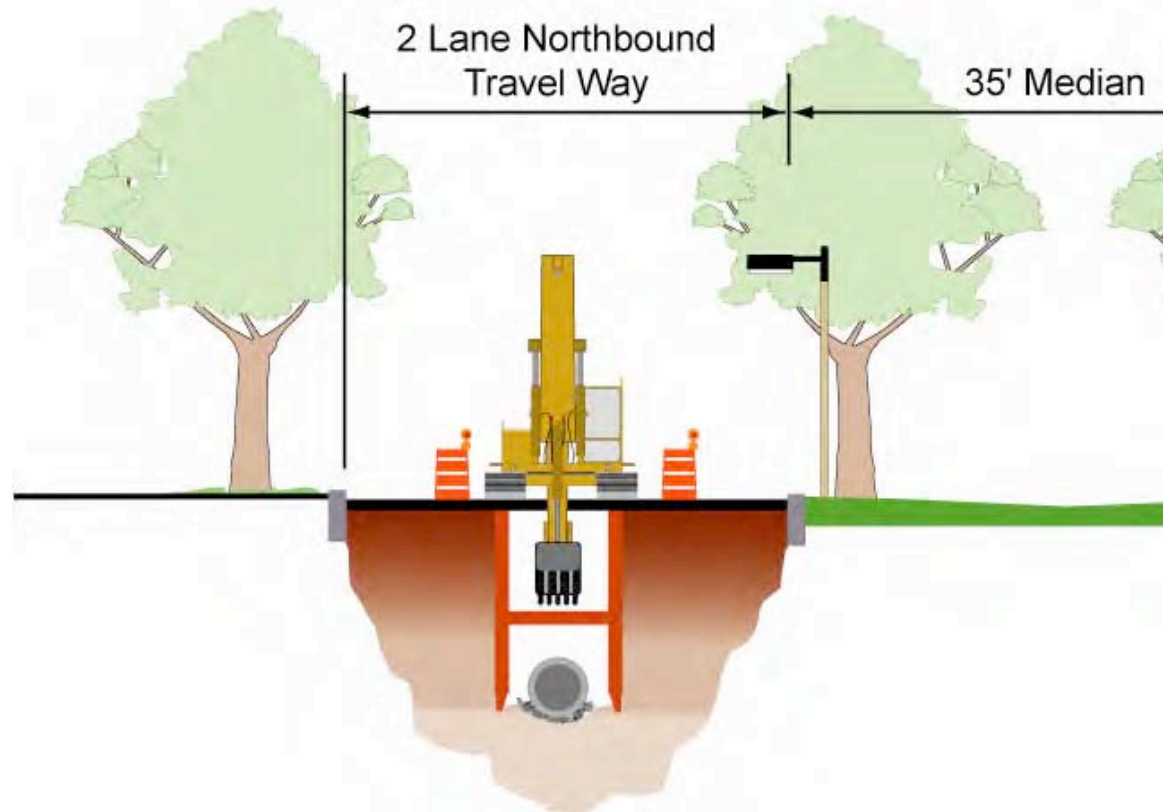
"Secondly, since the VFW Parkway is a major heavily traveled arterial, we would recommend that, to the extent possible, construction work and lane closures be limited to non-peak traffic hours to reduce disruption and potential congestion. Any detours, especially through residential streets, should be avoided."

Tree Protection

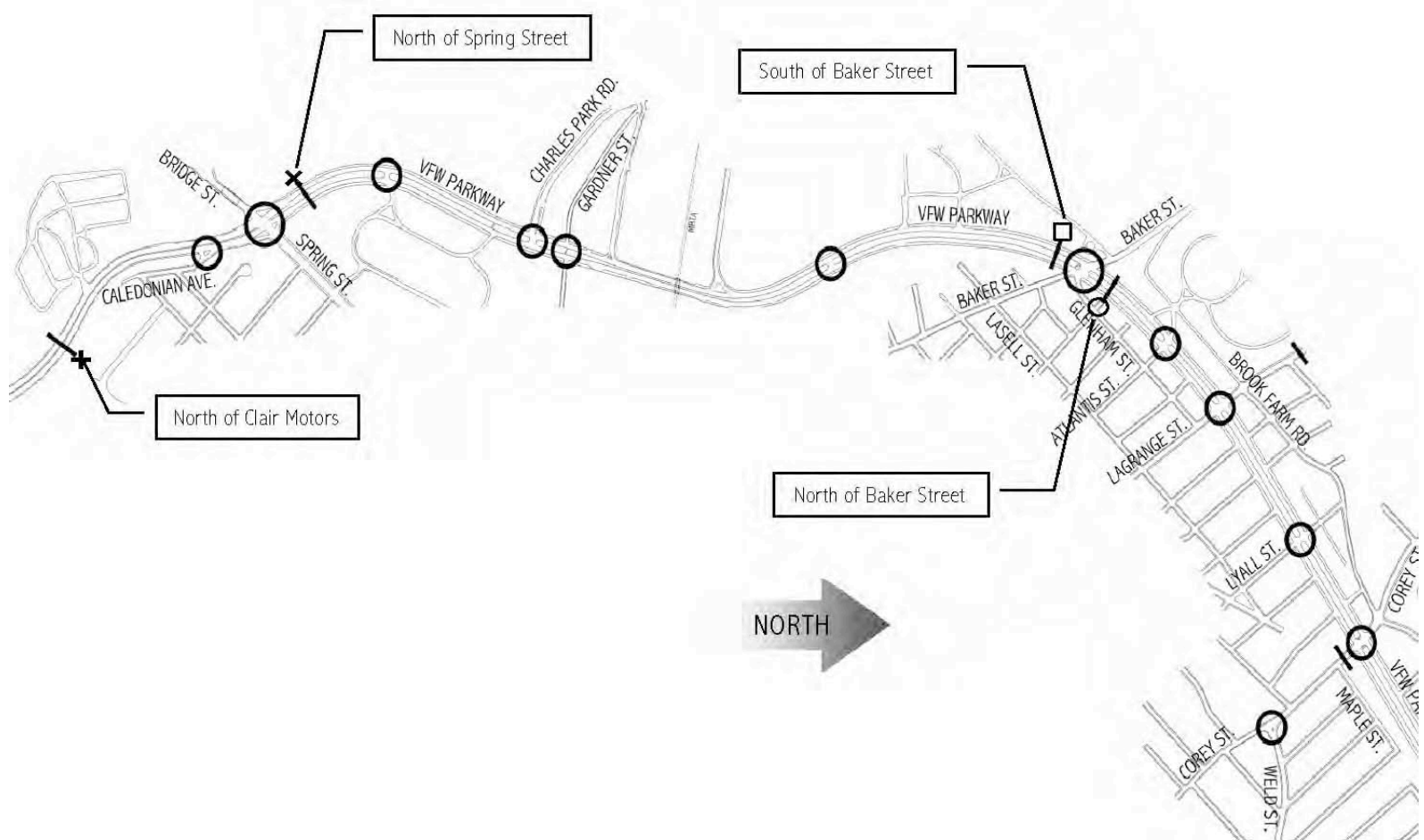
- Over 550 Mature Trees Along VFW Parkway
- DCR Jurisdiction



Proposed Construction

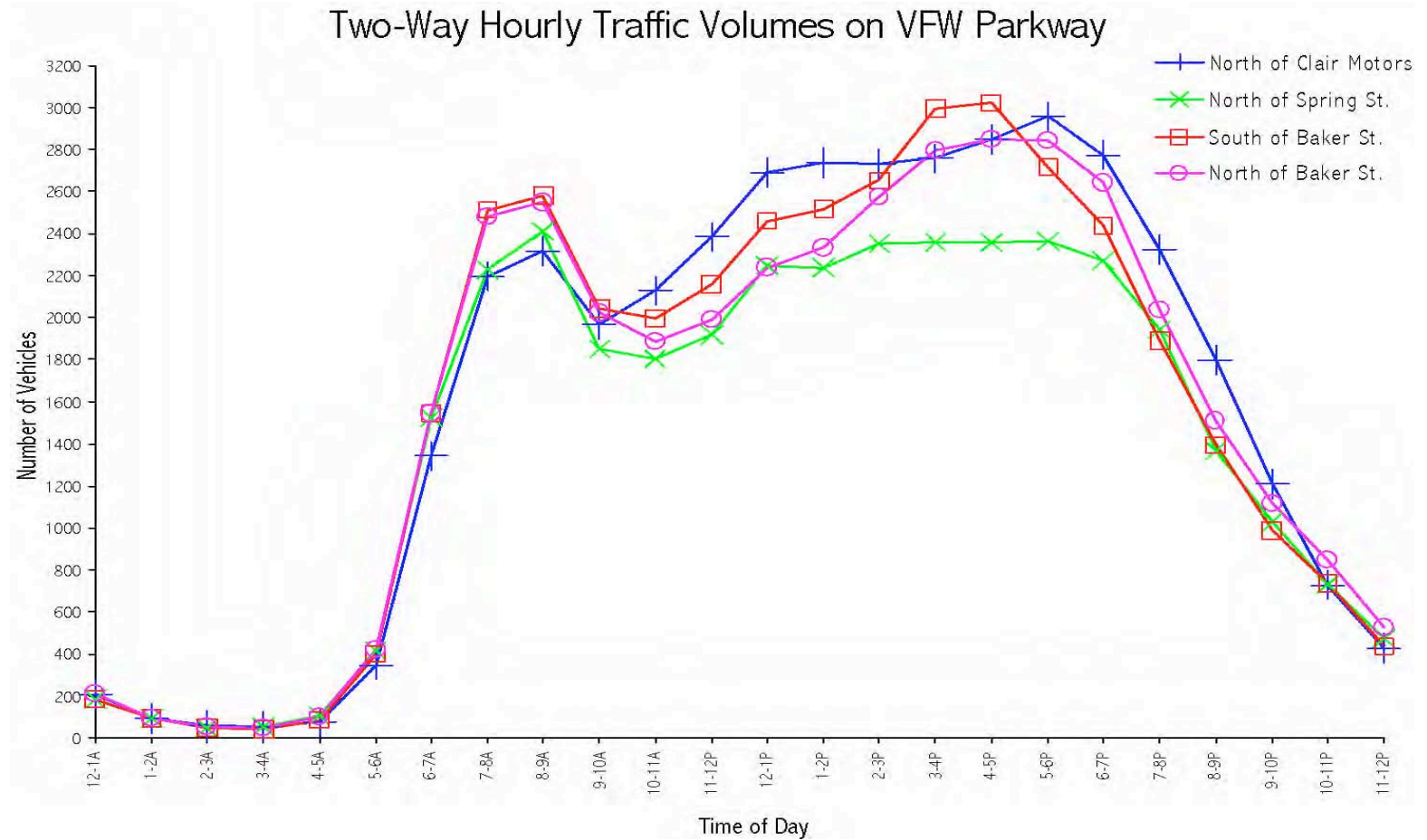


Traffic Volumes



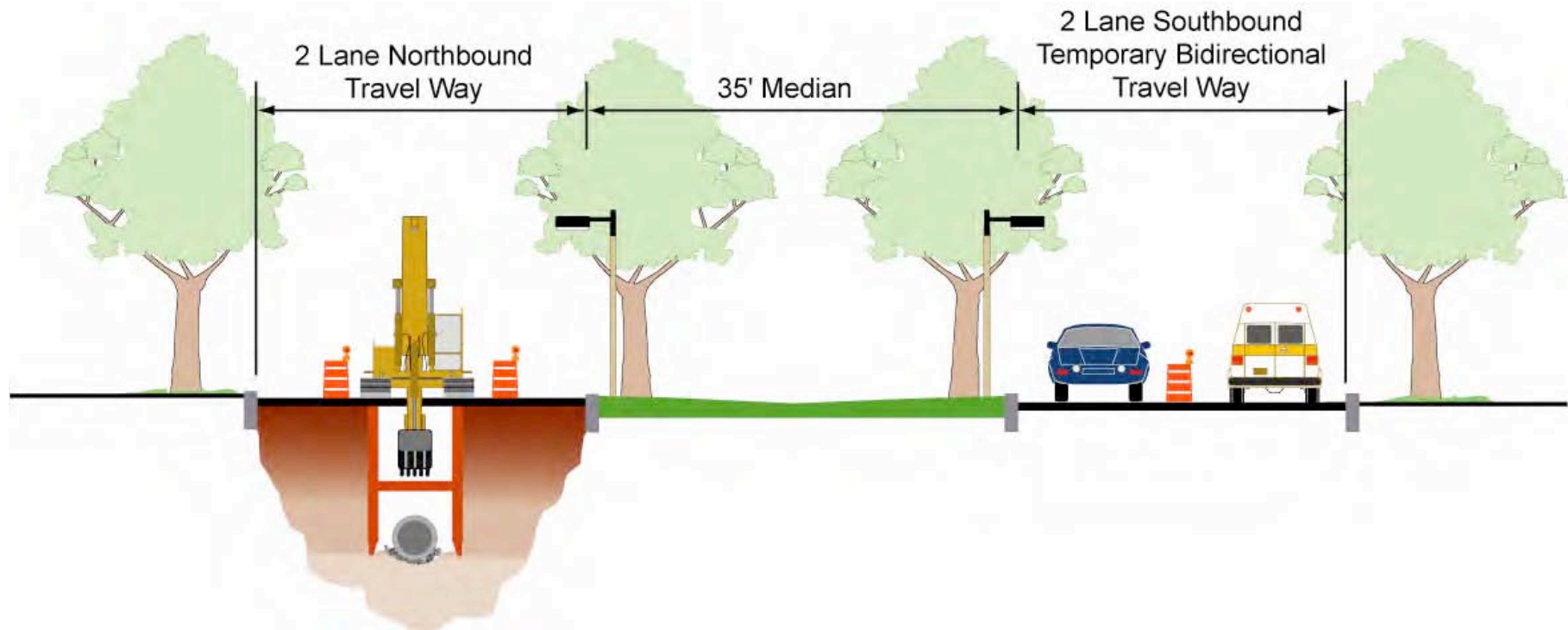
- Automatic traffic recorder and manual turning movement counts were performed to determine volumes along the VFW Parkway

Traffic Volumes

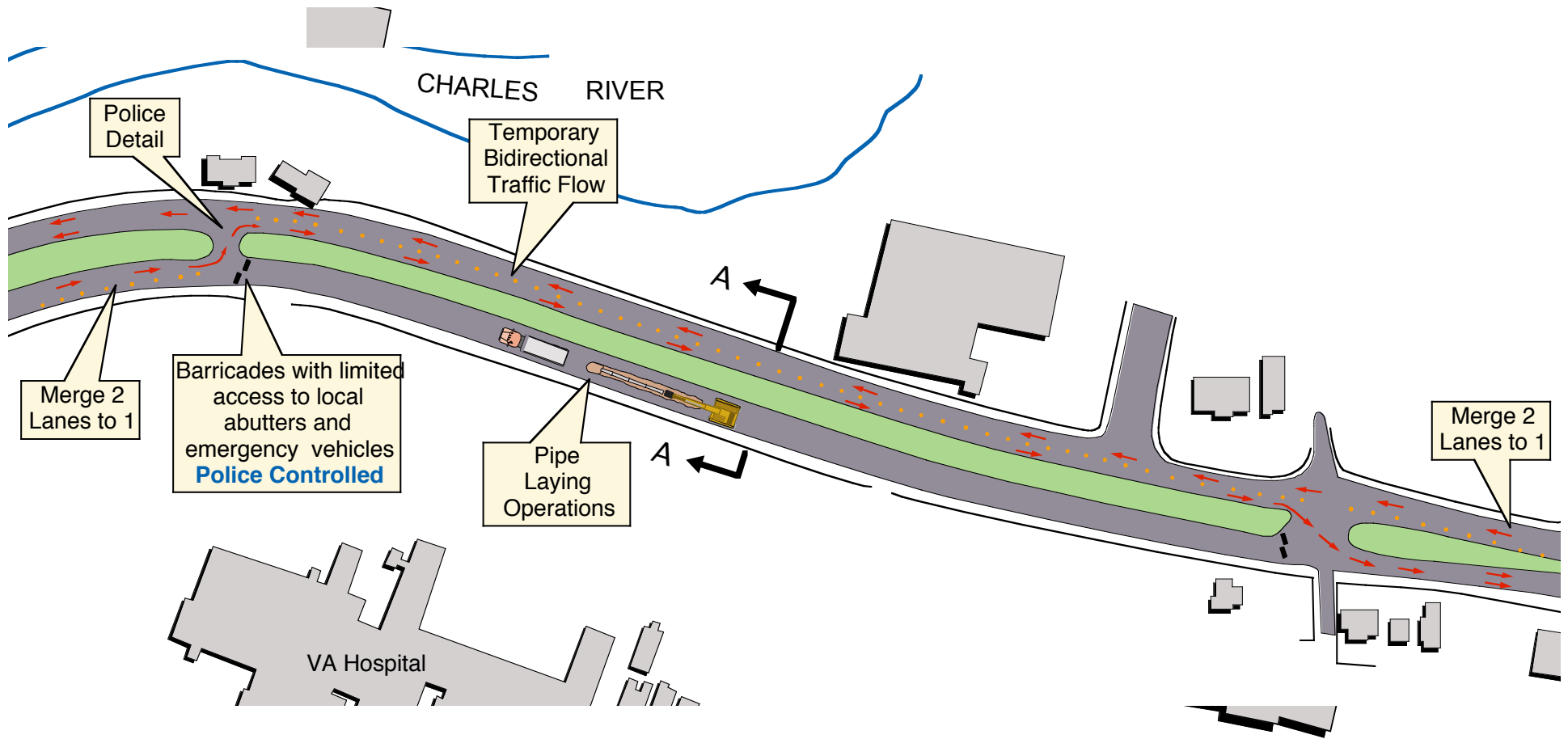


- Even distribution of traffic throughout the day

Proposed Construction

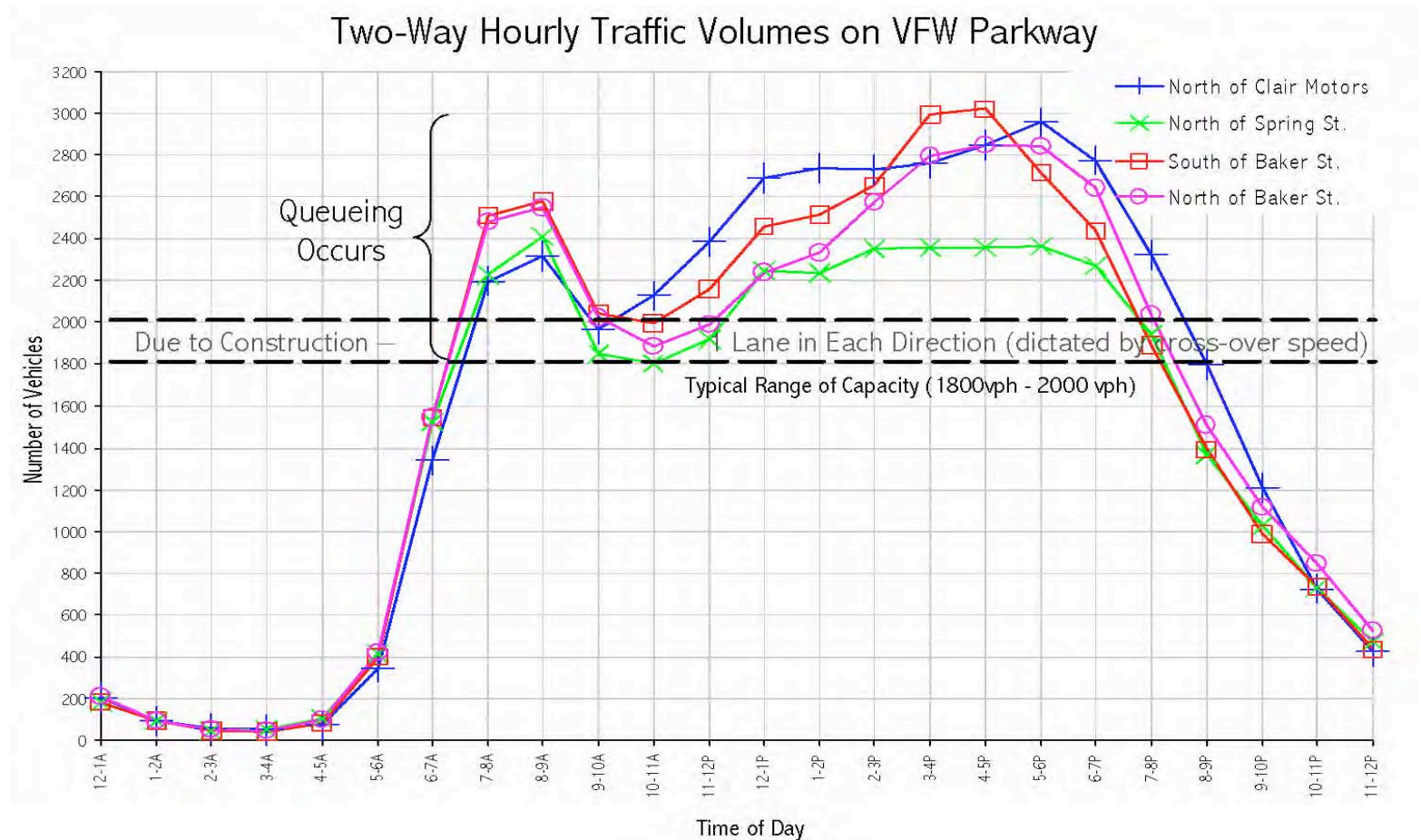


Construction Work Zones



- Traffic lane shift through existing median breaks

Traffic Volumes



- One lane for Northbound traffic and one for Southbound traffic will reduce capacity and cause significant backups for daytime construction

Noise Analysis

- Sound radiates from construction site
- Sound decreases with distance from construction
- Circle of sound moves at the rate of construction

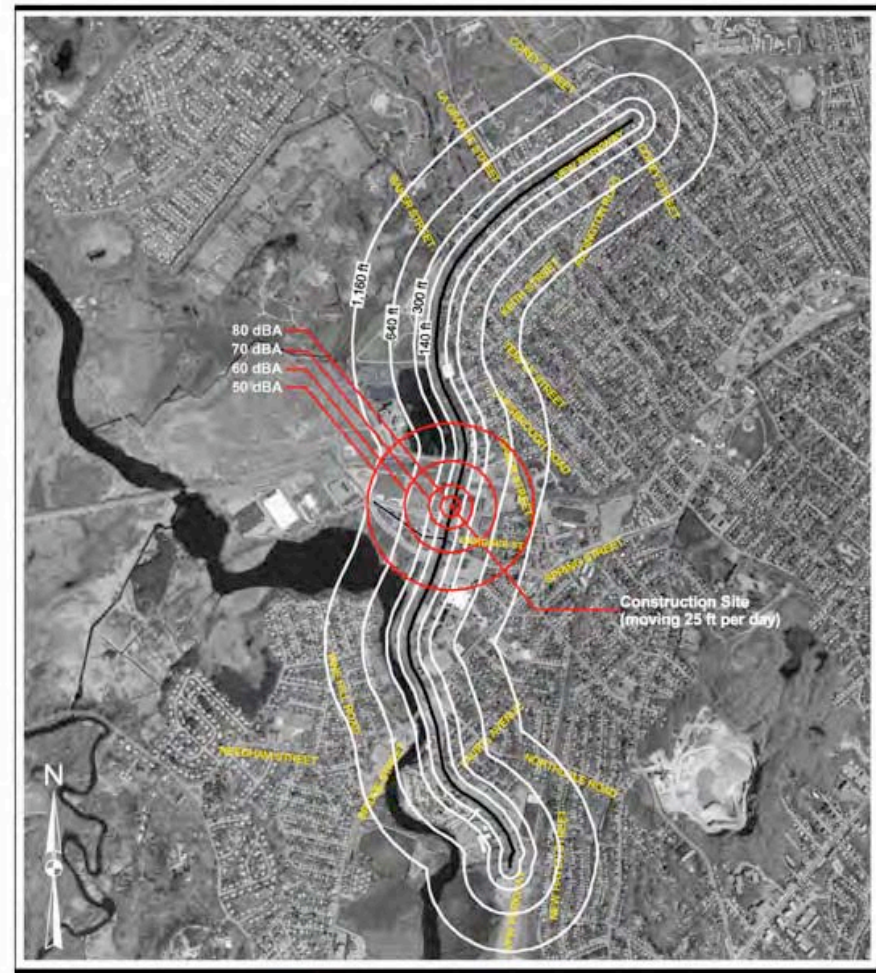


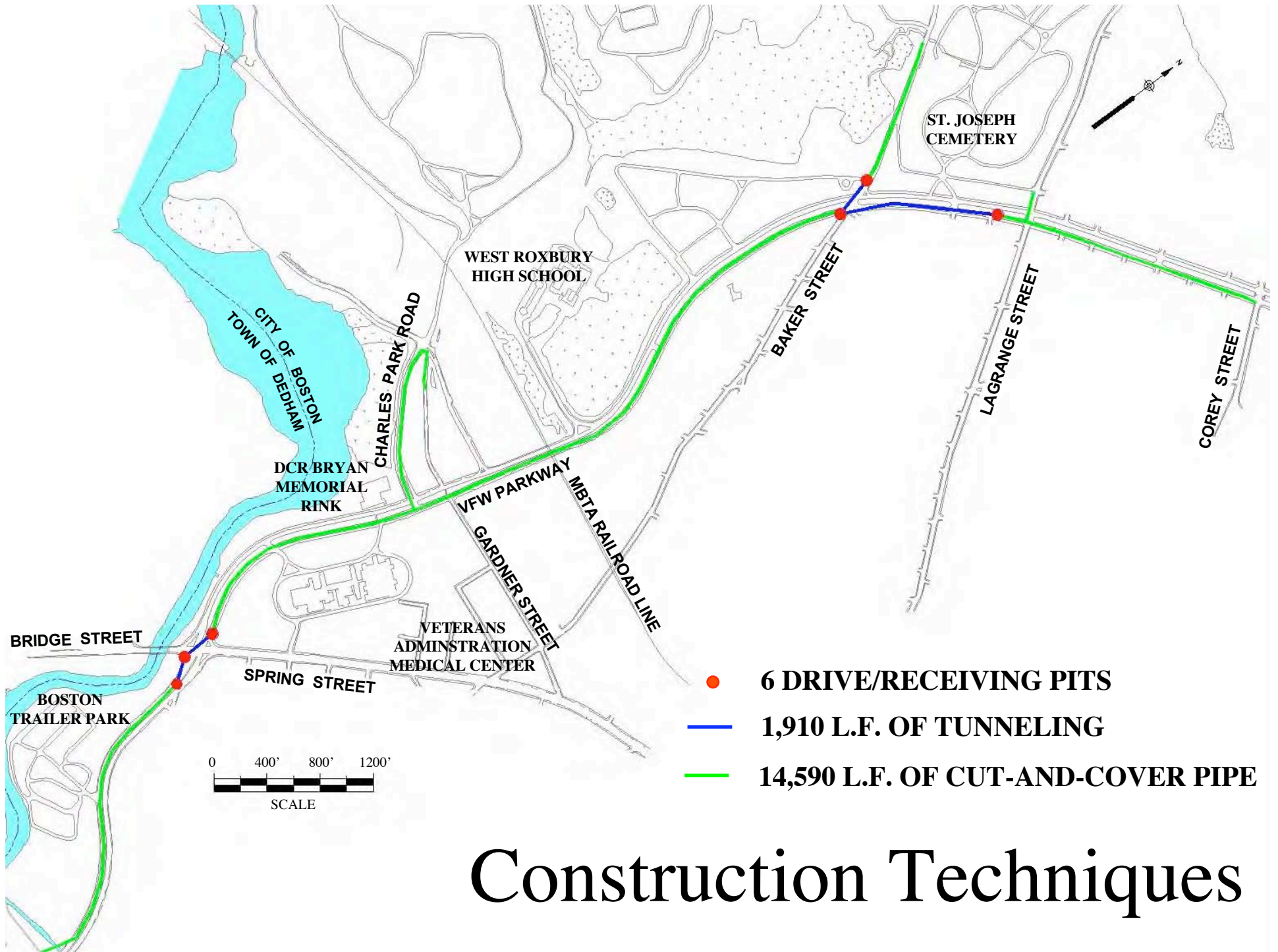
Figure 7-13

Approximate Scale: 1" = 1,625'

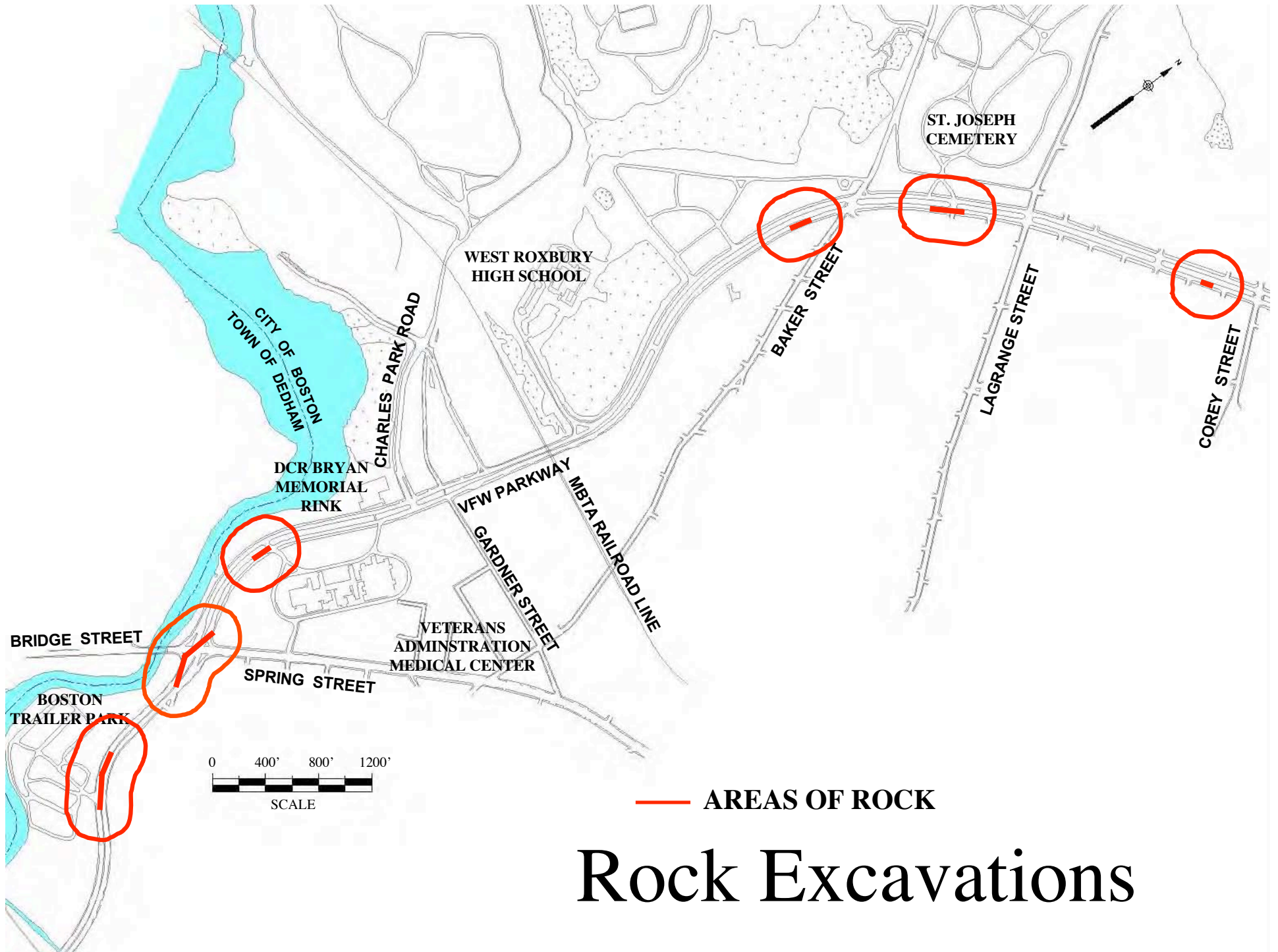


Massachusetts Water Resources Authority
Upper Neponset Valley Relief Sewer

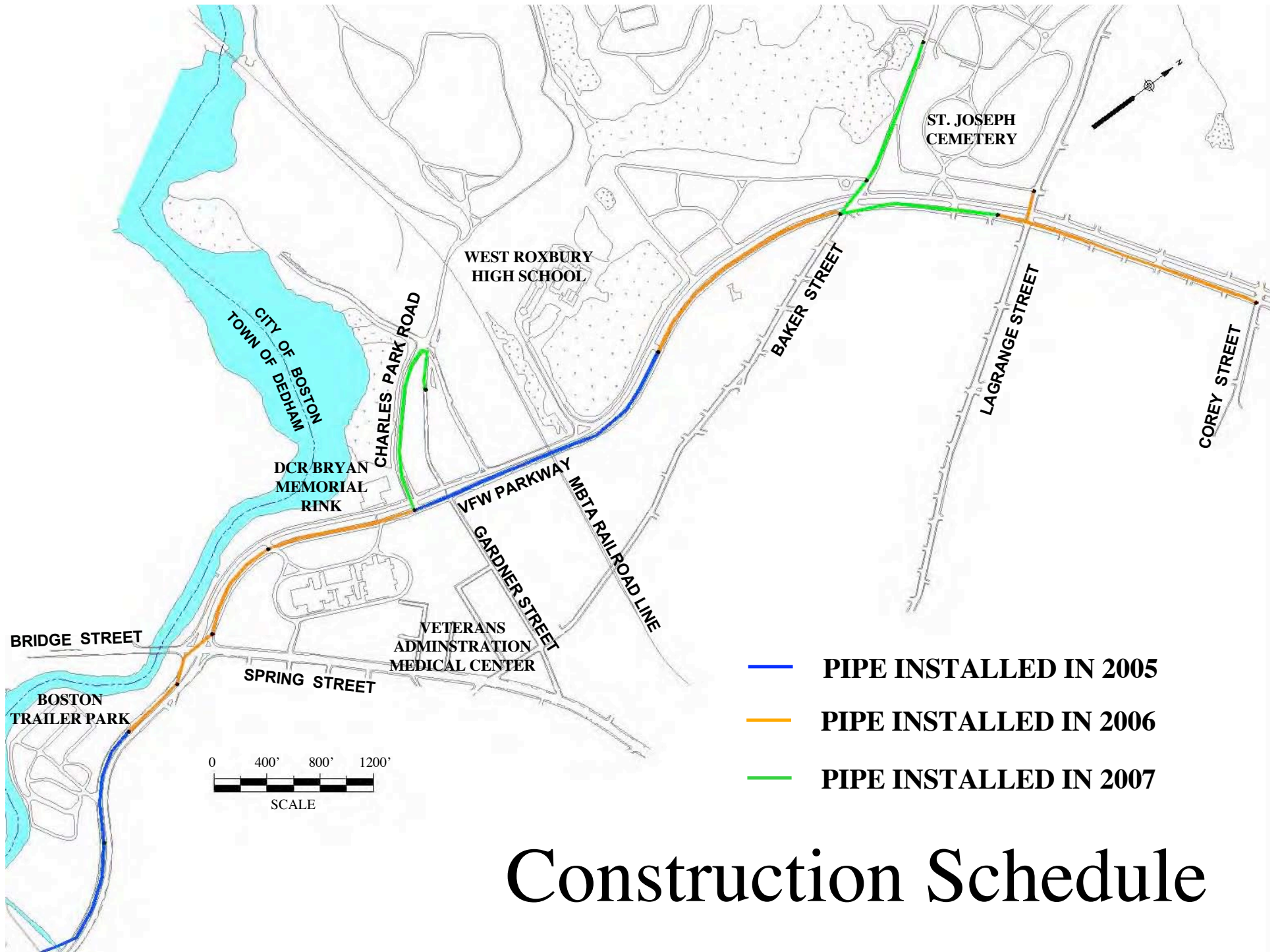
**Projected Outdoor dBA Noise
Contours During Trench
Construction Activity**



Construction Techniques



Rock Excavations



Construction Schedule