Culver Line Background

• Line opened in 1933
• Viaduct located between Carroll St. Station and 4th Av – 9th St Station
• High point of structure is 90’ as it spans the Gowanus Canal
• Four tracks – primarily ballast
• Concrete encased steel structure
• Served by F and G Lines
Structural rehabilitation of mile-long Culver Viaduct
Current Conditions - Viaduct

Failed deck waterproofing - Concrete spalling and exposed steel
Current Conditions - Viaduct

At Smith – 9th St. Station
Current Conditions - Signals

4th Avenue Interlocking
Similar Work: Ocean Pkwy. Station
Installation of Deck Slab at Ocean Pkwy.
Installation of Deck Waterproofing at Ocean Pkwy. Station
Installation of New Low-Vibration Track at Ocean Pkwy. Station
Similar Work: Flushing Line
New Switches
Similar Work: Flushing Line
New Switches
Canopy at Smith – 9th Sts. Station
Smith-9th St Station
Station Overview
South Elevation-Night View
Existing Exterior Elevation

4th Avenue Station
Proposed Restoration
• Project Award: Fall 2008
• G extended to Church Av for duration of project
• F Service normal
Culver Viaduct Phase 2A
Approx. 4 Months

- Northbound local track out of service, FG on northbound express track between Church Av and Smith-9 Sts
- Only southbound service to 15-Prospect Park and Fort Hamilton Pkwy
- 4 Av northbound service via temporary platform
- Smith-9 Sts Station closed for station rehab (shuttle bus provided)

Legend

- Platform
- Closed Platform
- Temporary Platform
- Track Out of Service
- Hardrail Connection
- New Switch

To Manhattan

To Coney Island

lower level

upper level

Carroll St

Bergen St

upper level

Northbound local track out of service, FG on northbound express track between Church Av and Smith-9 Sts

Only southbound service to 15-Prospect Park and Fort Hamilton Pkwy

4 Av northbound service via temporary platform

Smith-9 Sts Station closed for station rehab (shuttle bus provided)
Smith-9 Sts Station Rehabilitation
Shuttle Bus During Station Closure

- Northbound Shuttle Bus to 2nd St
- Southbound Shuttle Bus to 4th Av
- Subway Station
- Shuttle Bus Stop
- Shuttle Bus Stop and Terminal
Culver Viaduct Phase 2B
Approx. 8 Months

- FG back on local northbound track, except at Smith-9 Sts
- Service normal south of Smith-9 Sts
- Smith-9 Sts reopened after 5 months of this phase (total closure 9 months)
- Reopened Smith-9 Sts has G-only service northbound via temporary platform and FG service southbound
Culver Viaduct Phase 3A
Approx. 5 Months

- Southbound local track out of service, FG
- Southbound on express track between Smith-9 Sts and Church Av
- Only northbound service to 15 St-Prospect Park and Fort Hamilton Pkwy
- Temporary platforms at Smith-9 Sts and 4 Av for southbound service
- At Smith-9 Sts G-only service southbound

Legend:
- Platform
- Temporary Platform
- Track Out of Service
- Hardrail Connection
- New Switch
Culver Viaduct Phase 3B
Approx. 10 Months

- FG back on local track south of Smith-9 Sts, providing normal service
- Smith-9 Sts G-only service southbound via temporary platform
- Northbound service normal
• FG back on local tracks, serving all stations
• G continues to be extended to Church Av