

Village of New Hyde Park Alternative Concepts

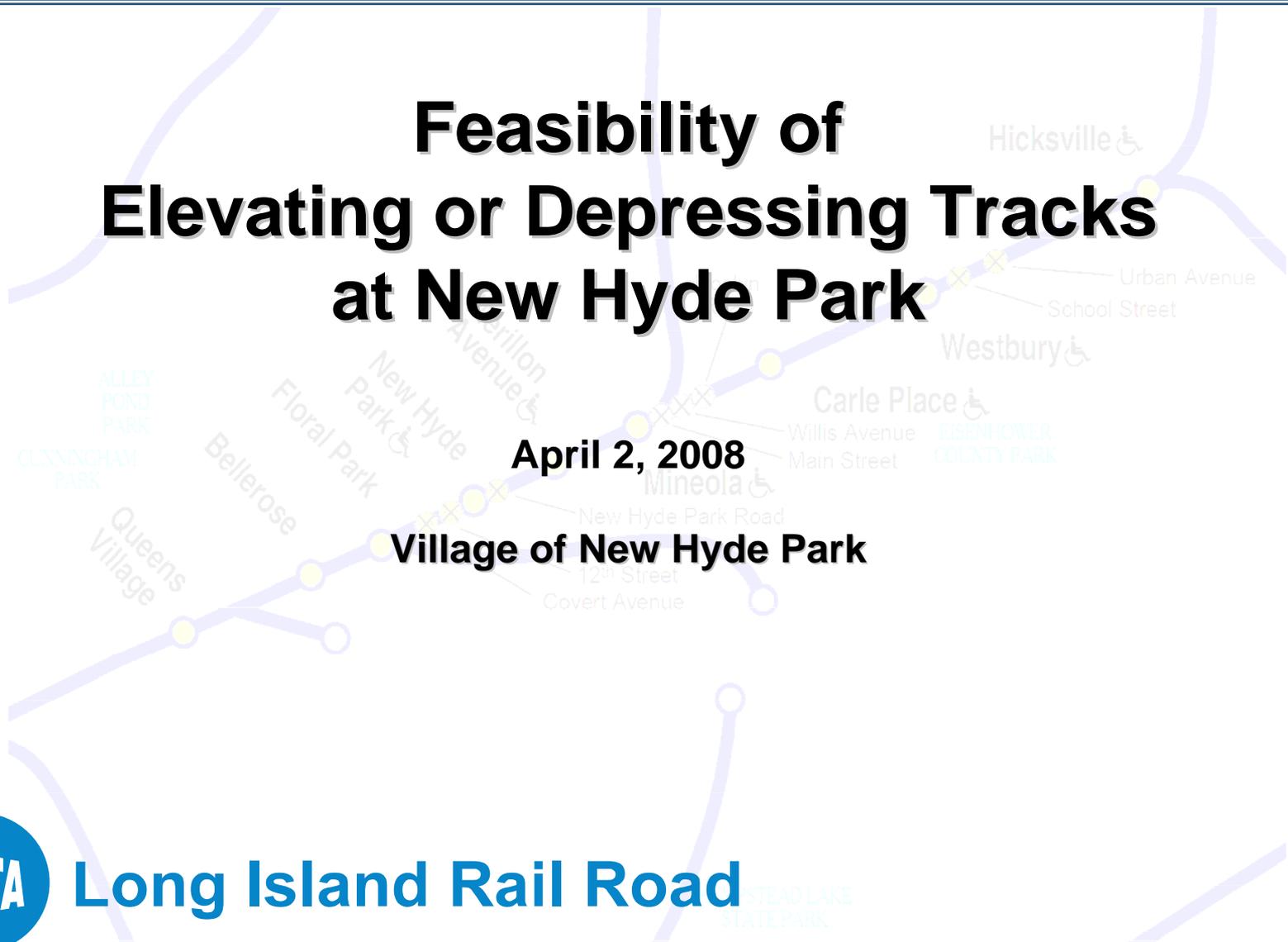
Feasibility of Elevating or Depressing Tracks at New Hyde Park

April 2, 2008

Village of New Hyde Park



Long Island Rail Road



Village of New Hyde Park Alternative Concepts

- **Request**

The Village of New Hyde Park has requested a further analysis of alternative construction concepts.

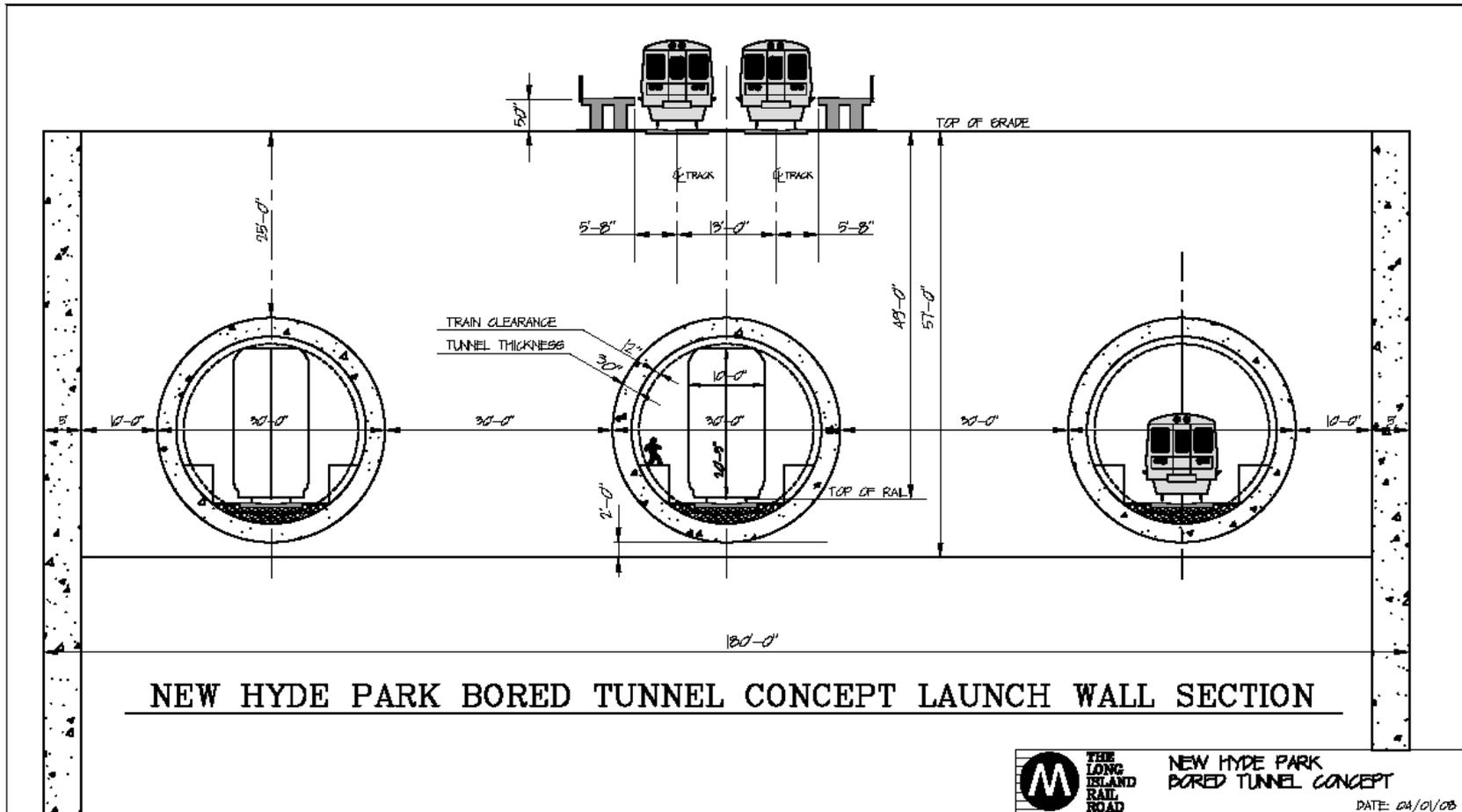
- **Response**

The LIRR has explored the viability of 4 alternative concepts:

1. Bored Tunnel
2. Open Cut Depressed
3. Elevate-In-Place
4. Conventional Elevated

Village of New Hyde Park Alternative Concepts

Bored Tunnel



Village of New Hyde Park Alternative Concepts

Bored Tunnel

Covert Ave approach (artist rendering)

Launch Box

Vent Plant



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Slurry Wall Construction



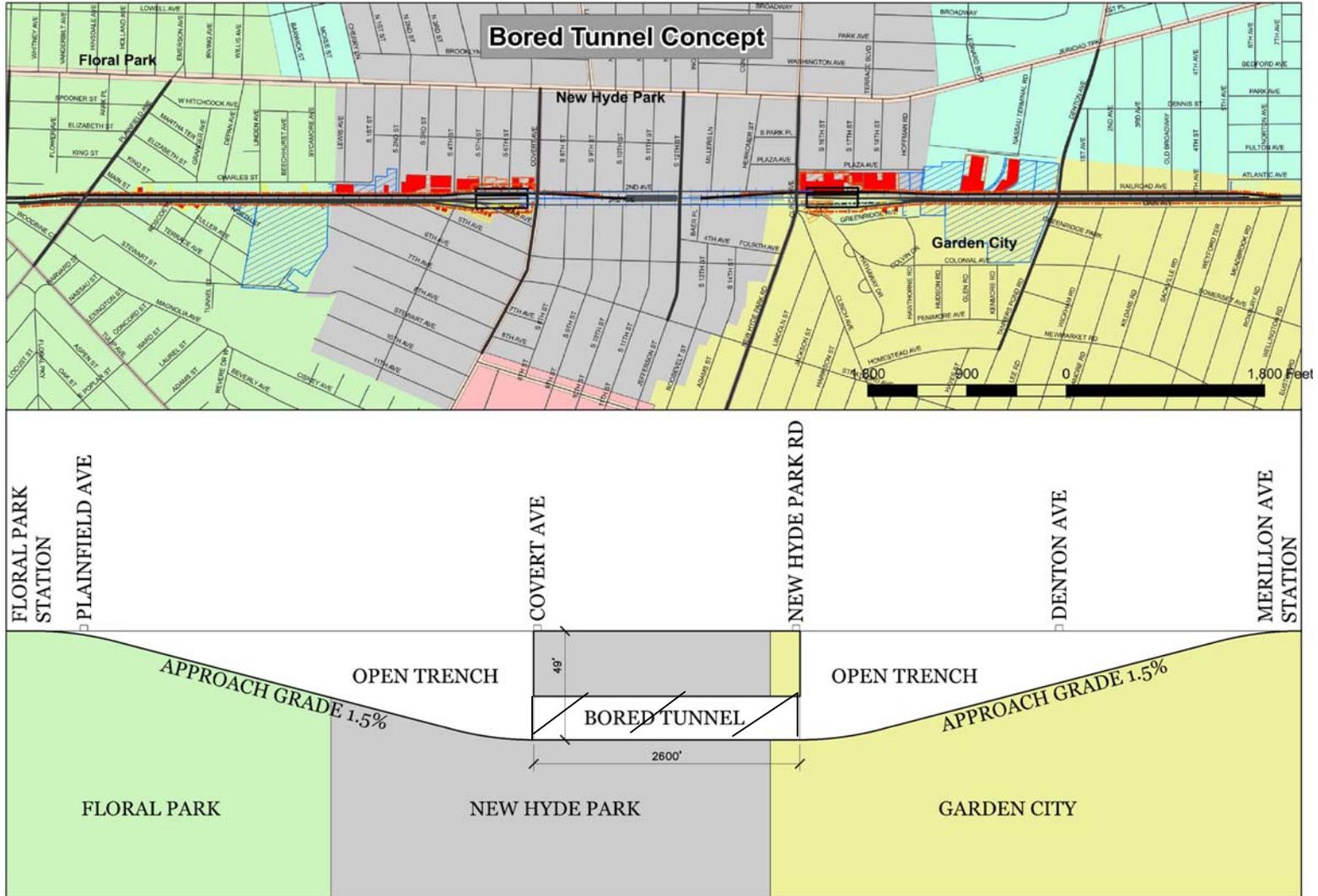
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Slurry Wall Construction



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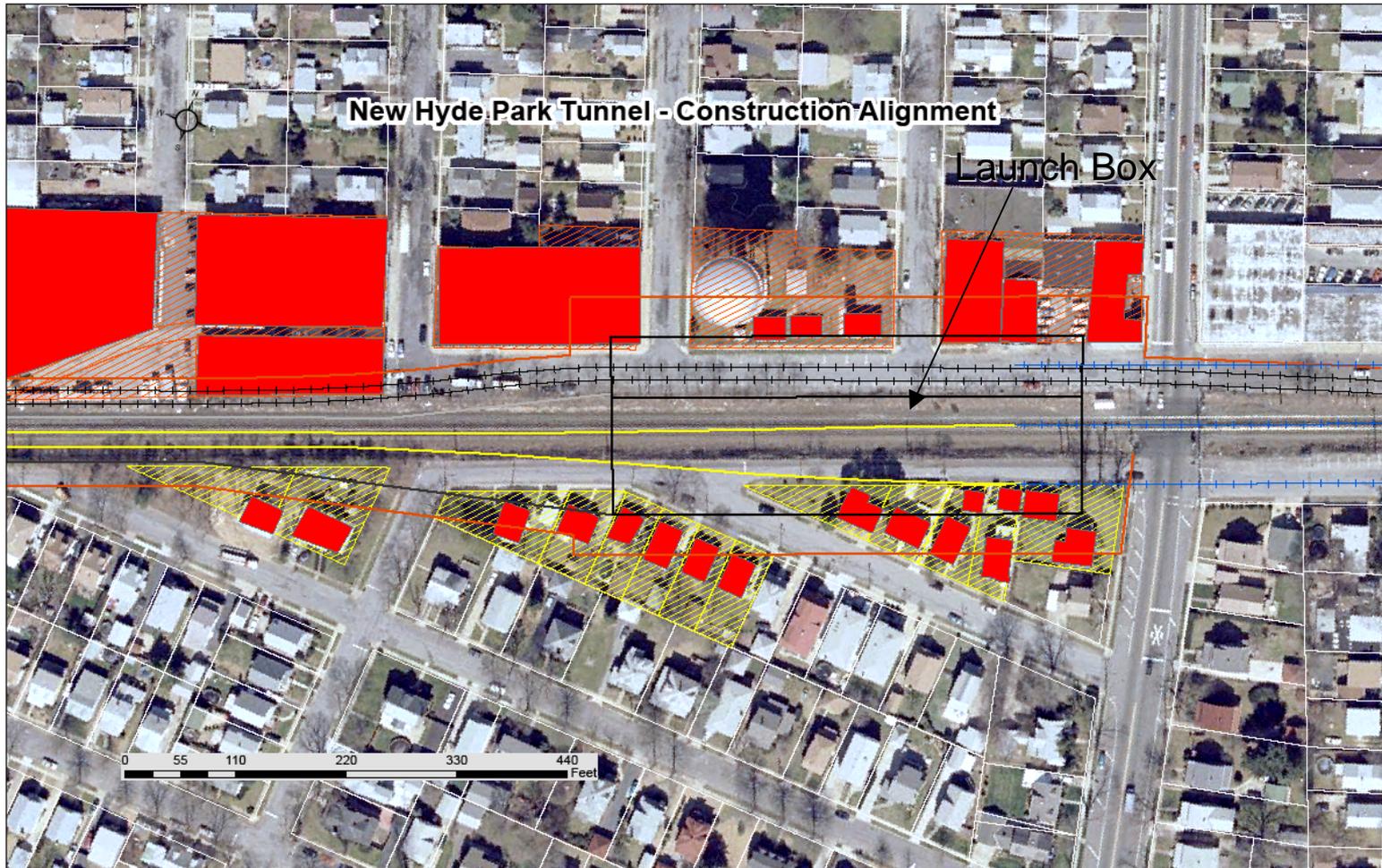
Bored Tunnel



Village of New Hyde Park Alternative Concepts

Bored Tunnel

Sample property impacts



Village of New Hyde Park Alternative Concepts

Bored Tunnel

The railroad equivalent of the
Cyclone



Village of New Hyde Park Alternative Concepts

Bored Tunnel

- **A station at New Hyde Park may not be feasible.**
- **Steep approach grades reduce operating speed, lower capacity, and defeat service reliability goals of Main Line Corridor project.**
- **Detour tracks required around the open trenches and launch boxes.**
- **Substantial impacts to Plainfield Avenue in Floral Park, and Denton Avenue in Garden City.**
- **Large recharge basins required for trench and tunnel drainage.**

Village of New Hyde Park Alternative Concepts

Bored Tunnel (Continued)

- **Substantial LIRR service and community disruption for at least 5 years.**
 - **1 million cubic yards of fill excavated (65,000 tractor trailers.)**
 - **Thousands of tons of construction materials delivered.**
- **Massive and concentrated property impacts to Floral Park, New Hyde Park and Garden City.**
- **Total property impacts: 122 in 2.9 mile analysis area**
 - Partial Residential taking: 59
 - Full Residential taking: 22
 - Partial Commercial/Public taking: 19
 - Full Commercial/Public taking: 22
- **1356% increase over the 9 impacts in LIRR alternative for the same segment.**

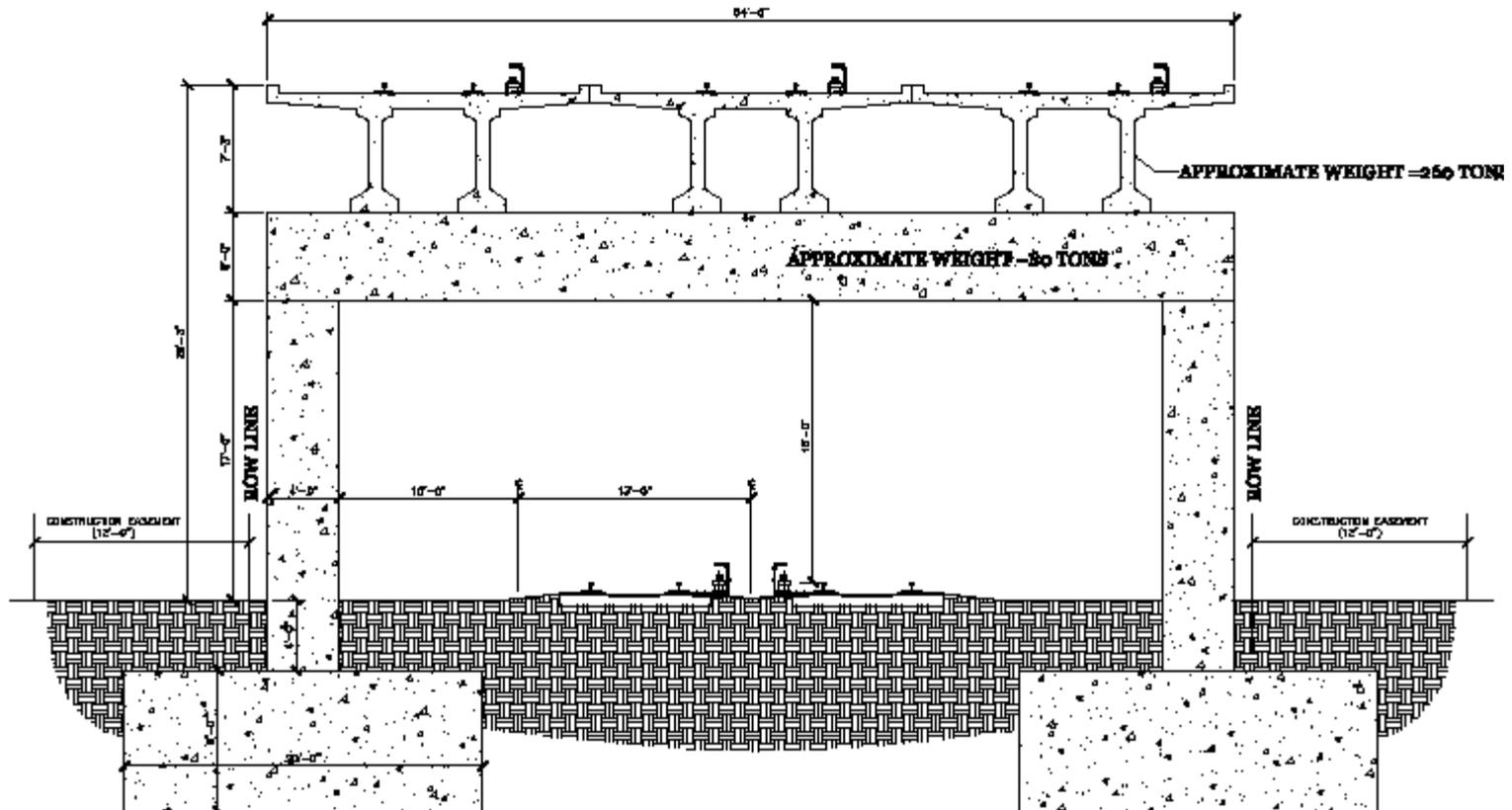
Village of New Hyde Park Alternative Concepts

Open Cut Depressed

- **13,000 feet long open trench from Floral Park to Garden City including approach ramps on east and west sides.**
- **Stations at New Hyde Park and Merillon Avenue would be below grade.**
- **Detour tracks required from Floral Park to Garden City.**
- **Substantial LIRR service and community disruption for 4-5 years.**
- **450,000 cubic yards of fill excavated (30,000 tractor trailers.)**
- **Substantial and concentrated property impacts to Floral Park, New Hyde Park and Garden City.**
- **Total Property Impacts: 125 in 2.9 mile analysis area**
 - Full Residential: 2
 - Partial Residential taking: 75
 - Partial Commercial/Public taking: 18
 - Full Commercial/Public taking: 30
- **1389% increase over the 9 impacts in LIRR alternative for the same segment.**

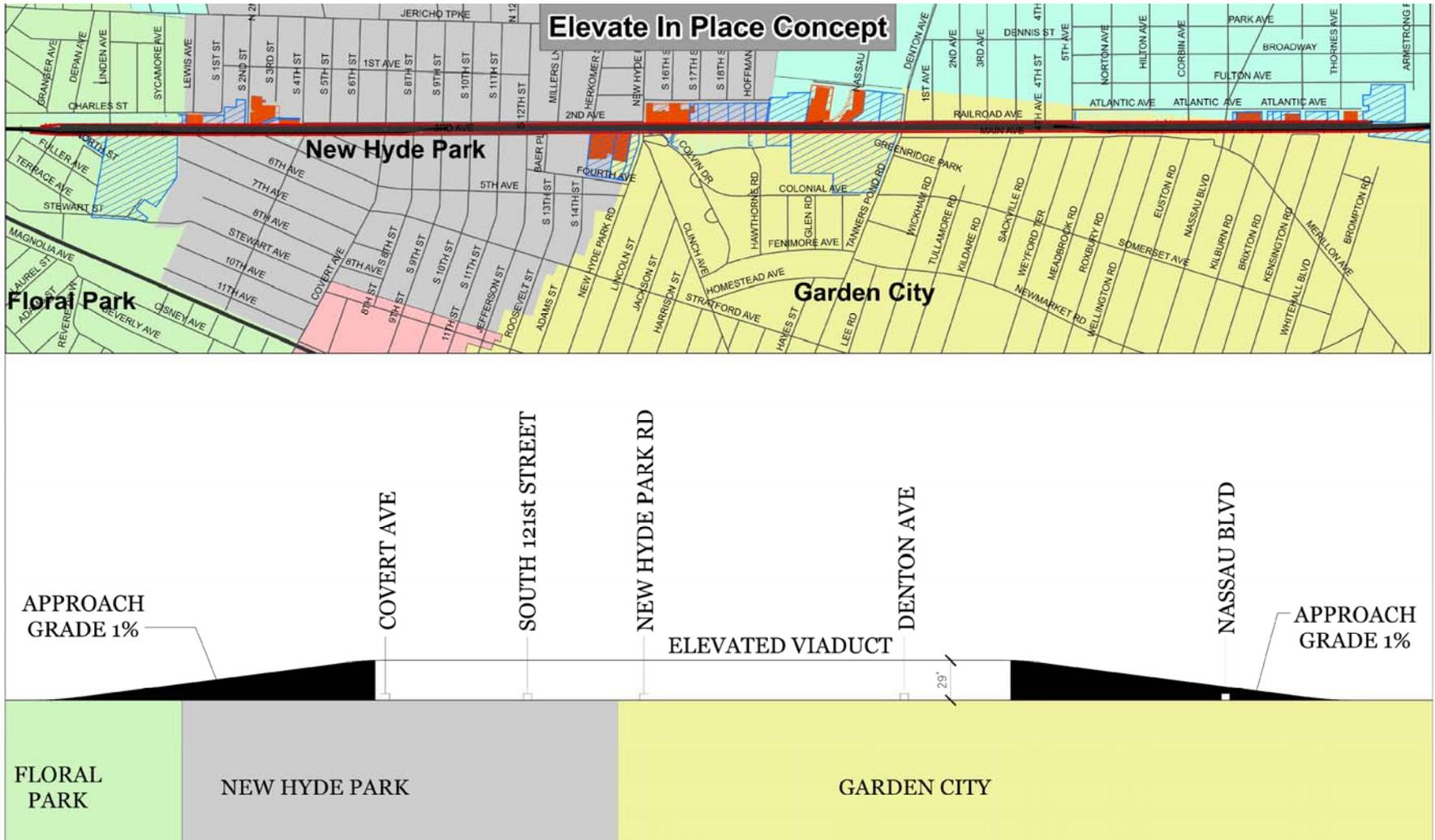
Village of New Hyde Park Alternative Concepts

Elevate-in-Place



Village of New Hyde Park Alternative Concepts

Elevate in Place



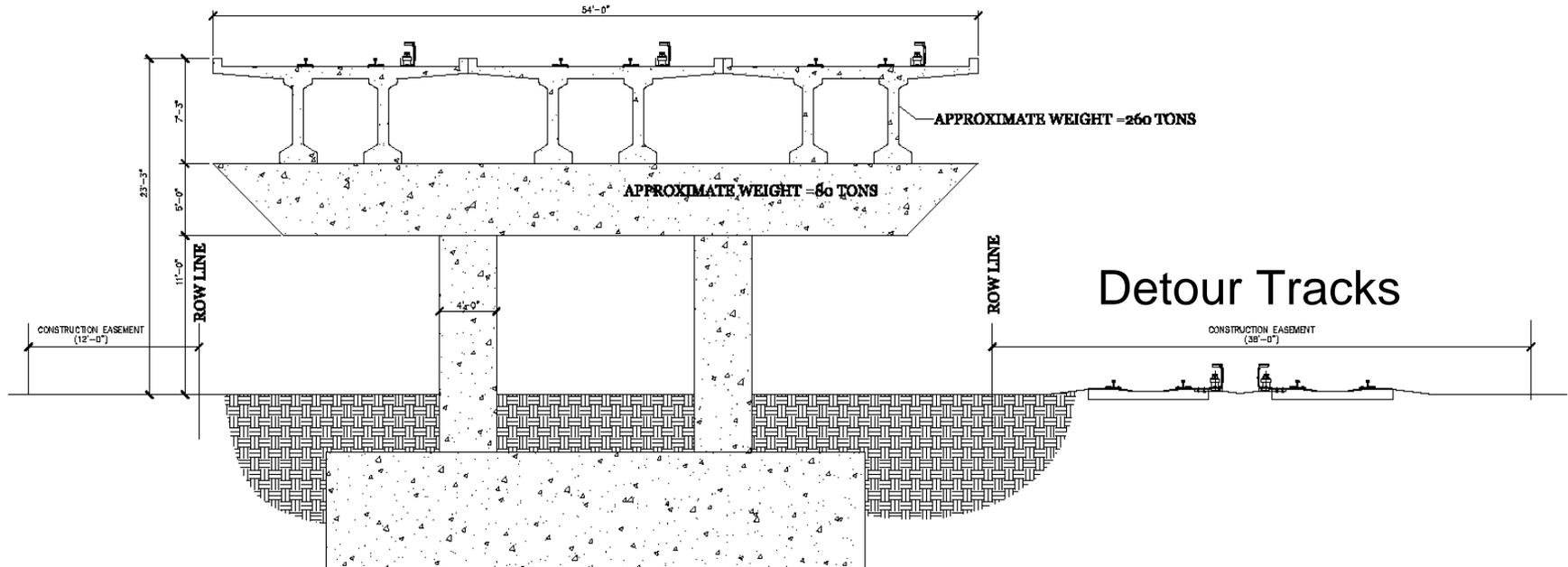
Village of New Hyde Park Alternative Concepts

Elevate-in-Place

- **No known similar project ever attempted.**
- **Unacceptable safety risk to railroad operations and customers.**
- **Potentially uninsurable construction project.**
- **Detour tracks required at each end of viaduct in both Floral Park and Garden City**
- **Substantial LIRR service and community disruption for 3-4 years**
 - Heavy duty construction equipment and 15-story high cranes.
- **Substantial and concentrated property impacts to Floral Park, New Hyde Park and Garden City.**
- **Total Property Impacts: 108 in 2.9 mile analysis area.**
 - Partial Residential taking: 60
 - Full Residential taking: 0
 - Partial Commercial/Public taking: 12
 - Full Commercial/Public taking: 36
- **1200% increase over the 9 impacts in LIRR alternative for the same segment.**

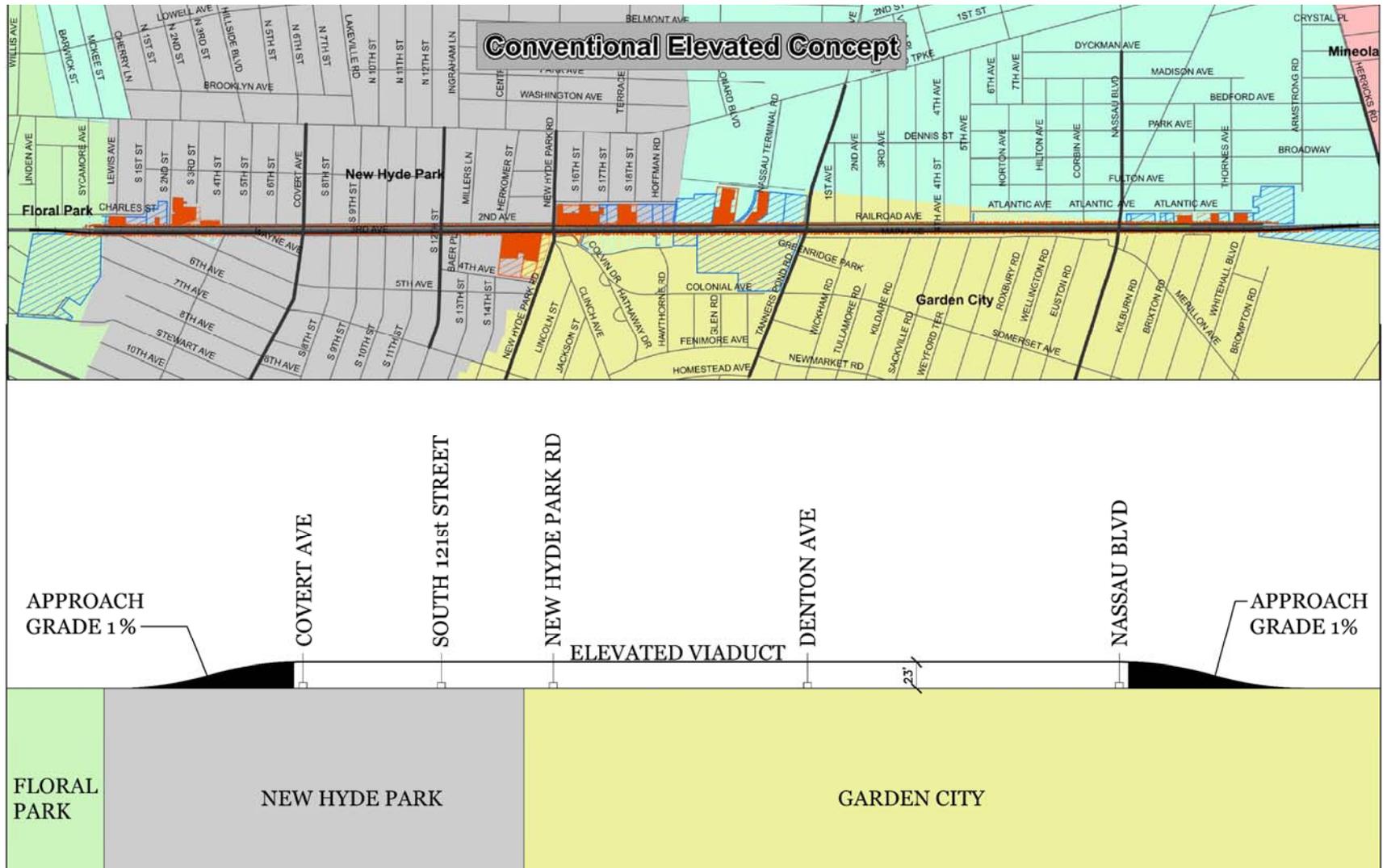
Village of New Hyde Park Alternative Concepts

Conventional Elevated



Village of New Hyde Park Alternative Concepts

Conventional Elevated



Village of New Hyde Park Alternative Concepts

Conventional Elevated

- **12,000 feet long viaduct from Floral Park to Garden City, including approach ramps on east and west sides.**
- **Stations at New Hyde Park and Merillon Avenue would be elevated.**
- **Detour tracks required from Floral Park to Garden City.**
- **Substantial LIRR service and community disruption for 3-4 years**
 - Heavy duty construction equipment and 15-story high cranes
- **Substantial and concentrated property impacts to Floral Park, New Hyde Park and Garden City.**
- **Total Property Impacts: 81 in 2.9 mile analysis area**
 - Partial Residential taking: 35
 - Full Residential taking: 0
 - Partial Commercial/Public taking: 28
 - Full Commercial/Public taking: 18
- **900% increase over the 9 impacts in LIRR alternative for the same segment.**

Main Line Corridor Improvements Project

New Hyde Park Road Grade Crossing Elimination



Main Line Corridor Improvements Project

Roslyn Road Grade Crossing Elimination



Main Line Corridor Improvements Project

LIRR Current proposed alternative:

- **Total Property Impacts: 9 over 2.9 mile analysis area**
 - Full Residential taking: 0
 - Partial Residential taking: 0
 - Partial Commercial/Public taking: 3 (1 New Hyde Pk, 2 Garden City)
 - Full Commercial/Public taking: 6 (1 New Hyde Pk, 5 Garden City)
- **Note: LIRR will include the grade crossing elimination of Covert Avenue at the request of the Village of New Hyde Park**
- **Covert Avenue Grade Crossing Elimination Property Impacts:**
 - Full Residential taking: 5
 - Partial Residential taking: 2
 - Partial Commercial/Public taking: 1
 - Full Commercial/Public taking: 2

Concept Comparisons

Property Impacts

