

A RAILSIM TPC run was performed to determine the capacity (minimum headway) improvement achieved by adding both passing sidings. Adding four passing sidings would allow one more non-revenue train to be sent northbound to Waterbury (for an early morning double berth), which would allow an extra southbound morning peak period train to operate. It also would be possible to support hourly service throughout the day to and from Bridgeport Station, with a scheduled meet at the Derby siding.

Combined with a new Devon Station from Alternatives W-12 or W-13, this alternative could also support hourly shuttles in both directions between Waterbury and the New Haven Line via a transfer at Devon Station. As previously noted, the Devon shuttle service could only operate efficiently if the Beacon Falls siding were located south of the station.

The conceptual capital cost for constructing this alternative would be \$64.0 million (2008 dollars).

#### **7.1.4 Station Alternatives**

Station alternatives included on the Long List range from moderate improvements to existing station platforms to the addition of new stations along the corridor. These alternatives are described in the following sections, beginning at the southern end of the corridor and proceeding northward to Waterbury. Platform extensions and relocations are also described above under Alternative W-1, Existing Service with Increased Train Length.

Because the Long List was developed as a first step in identifying those alternatives that would most improve frequency and reliability of rail service for Waterbury Branch customers, the station alternatives discussed below only include improvements that directly affect operations on the branch. Station improvements that improve the customer experience but have no operational implications—for instance, amenities like canopies, benches, bicycle storage, real-time train information—can be integrated into the final design of any station alternative but were not considered here because they do not help differentiate among the Long List of Alternatives under consideration. These improvements, along with station upgrades related to Americans with Disabilities Act (ADA) compliance, will be developed and described in more detail during later phases of the project.

Similarly, these alternatives do not propose any specific transit oriented development (TOD) projects. While opportunities for TOD in the station areas will factor into the screening of station alternatives, implementation of such projects would be up to local municipalities in coordination with CTDOT. Potential TOD opportunities along the branch were identified in a separate *Waterbury Branch Transit Oriented Development Report* in summer 2009.

##### **7.1.4.1 New Station Alternatives**

Two alternatives were developed for a new commuter rail station at the Devon wye, where the Waterbury Branch meets the New Haven Line. This station would provide the ability to increase service to mainline destinations without taking up additional schedule slots on the New Haven Line. In order to capture these potential increased frequency benefits, both Devon Station alternatives would include full signalization and three of the passing sidings described in Alternative W-11: Waterbury, Beacon Falls – South Option, and Derby-Shelton.

With a new station at Devon, hourly shuttle service could be operated between Waterbury and Devon, with shuttles timed to facilitate transfers to and from existing New Haven Line trains. A

Devon Station would also allow Waterbury Branch customers—including those heading northbound to New Haven or Shore Line East destinations—to access mainline trains without first traveling to Bridgeport.

Under both Devon alternatives, existing peak-period through service to Bridgeport and Stamford would remain in place; new shuttle service between Waterbury and Devon would supplement the existing schedule, not replace it. Only those mainline trains timed to connect with Waterbury shuttles would stop at the new Devon Station. In some cases the mainline schedule might need to be adjusted to maintain an hourly connection.

**→ Devon Alternative 1 (W-12)**

This alternative would locate a new Devon Station within the Devon wye, with two side platforms serving Waterbury Branch trains and two side platforms serving New Haven Line trains (Figures 7-9 and 7-10). The southern ends of the two Waterbury platforms would meet the north side New Haven Line platform perpendicularly, enabling Waterbury passengers to walk to the end of the Waterbury platform and then make an across-platform transfer to southbound New Haven Line trains. Passengers would access the northbound New Haven Line platform via an underpass. Vehicle parking accessed via Naugatuck Avenue could be provided south of the mainline and I-95, under and adjacent to the I-95 viaduct.

Constructing a Devon Station in this location would require the relocation of an electrical substation and NRG Energy utilities currently located within the wye.

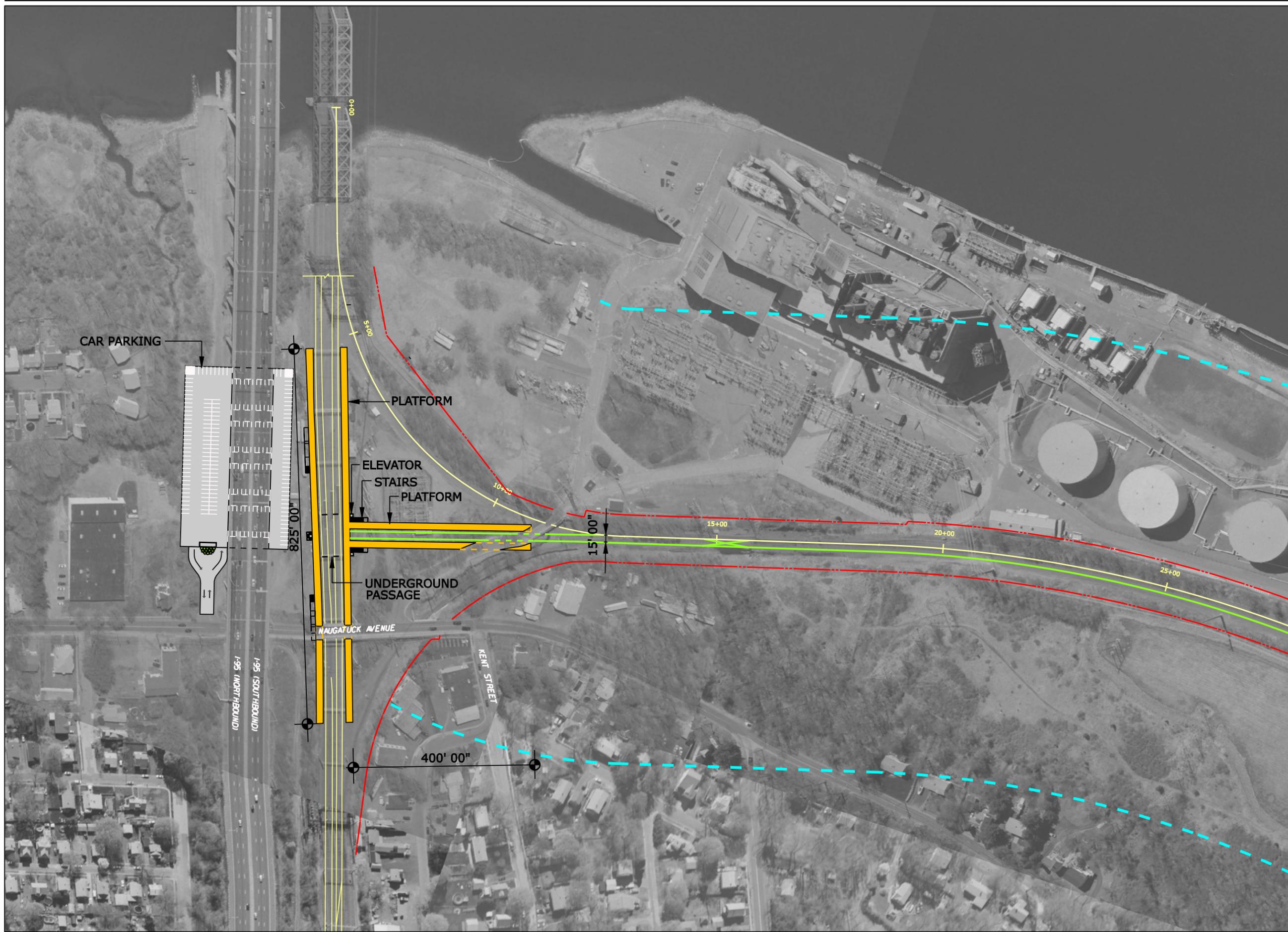
The conceptual capital cost for constructing this alternative would be \$134.0 million (2008 dollars).

**→ Devon Alternative 2 (W-13)**

This alternative would locate a new two-platform Devon Station on the New Haven Line just east of the wye (Figures 7-11 through 7-13). The eastern leg of the wye would need to be shifted slightly eastward and, rather than connecting to the New Haven Line at the present location, would be extended eastward, north of and parallel to the mainline tracks, before connecting to the northernmost mainline track several hundred feet east of the current wye switch. The northern platform would be constructed between this extended Waterbury track and the northernmost existing mainline track, allowing passengers transferring between the Waterbury Branch and southbound New Haven Line trains to make an across-platform transfer.

The second platform would be located south of and parallel to the mainline tracks. Passengers transferring between the Waterbury Branch and northbound New Haven Line trains would move between platforms via an overpass. A Kiss & Ride area accessed from Naugatuck Avenue would be provided on the south side of the station.

Several existing main-to-main crossovers at CP 261 would need to be reconstructed east of their present location in order to create a Devon Station in this location (Figure 7-11). In addition, CP 261 is the location where the New Haven Line transitions from four tracks to three tracks heading east, with the northern two tracks (tracks 3 and 1) merging to a single track. This merger would also need to be reestablished east of its present location, consistent with the present trackwork. However, constructing a Devon Station in this location, where Waterbury



**LEGEND**

- EXISTING R.R. TRACK
- R.O.W.
- RAIL STUDY CORRIDOR
- MILE POST MARKER
- R.R. STRUCTURES, PLATFORMS
- WATERCOURSE
- CHANNEL ENCROACHMENT LINE
- R.R. STATION PARKING
- SIDING/NEW R.R. TRACK

Figure 7-9:  
Devon Station  
Alternative 1

**CROSSING DATA**

MILE	CROSSING STREET/FEATURE
6.6	UG STAMFORD RD. OD

AG - AT GRADE  
 UG - UNDERGRADE  
 OH - OVERHEAD  
 OPEN DECK

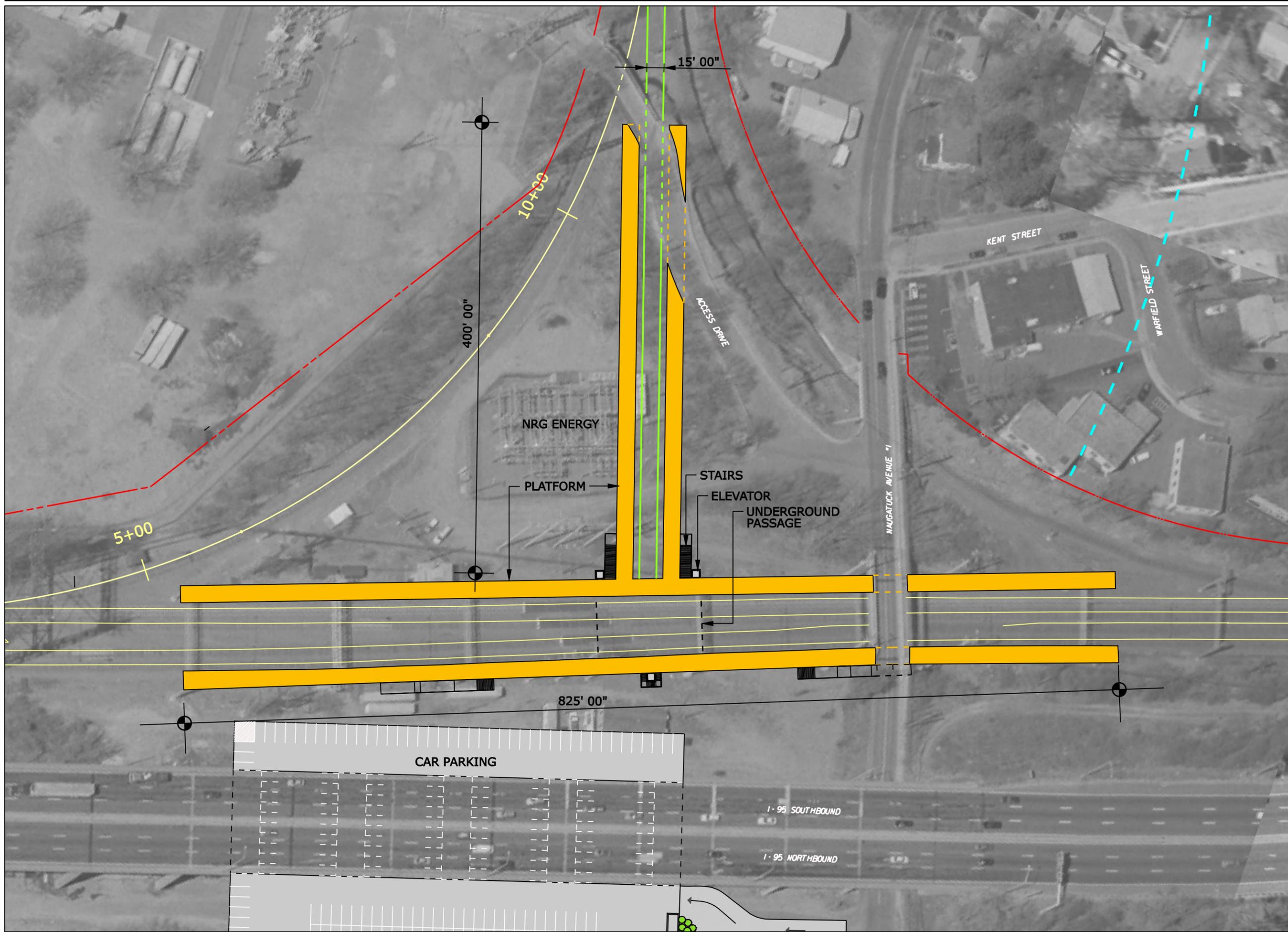


WATERBURY AND NEW CANAAN  
BRANCH LINES  
NEEDS & FEASIBILITY STUDY  
PROJECT NO. 170-2562

WATERBURY BRANCH LINE  
PROPOSED DEVON STATION







- LEGEND**
- EXISTING R.R. TRACK
  - R.O.W.
  - RAIL STUDY CORRIDOR
  - MILE POST MARKER
  - R.R. STRUCTURES, PLATFORMS
  - WATERCOURSE
  - CHANNEL ENCROACHMENT LINE
  - R.R. STATION PARKING
  - SIDING/NEW R.R. TRACK

Figure 7-10:  
Devon Station  
Alternative 1  
Detail

**CROSSING DATA**

MILE	CROSSING STREET/FEATURE
6.6	UG STAMFORD RD. OD

AG - AT GRADE  
 UG - UNDERGRADE  
 OH - OVERHEAD  
 OPEN DECK

**R.R. DEVON STATION  
DETAIL PLAN**



WATERBURY AND NEW CANAAN  
BRANCH LINES  
NEEDS & FEASIBILITY STUDY  
PROJECT NO. 170-2562

WATERBURY BRANCH LINE  
PROPOSED DEVON STATION  
DETAIL PLAN







- LEGEND**
- EXISTING R.R. TRACK
  - R.O.W.
  - RAIL STUDY CORRIDOR
  - MILE POST MARKER
  - R.R. STRUCTURES, PLATFORMS
  - WATERCOURSE
  - CHANNEL ENCROACHMENT LINE
  - R.R. STATION PARKING
  - SIDING/NEW R.R. TRACK

Figure 7-11:  
Devon Station  
Alternative 2

**CROSSING DATA**

MILE	CROSSING STREET/FEATURE
6.66	UG STAMFORD RD. 00

AG - AT GRADE  
 UG - UNDERGRADE  
 OH - OVERHEAD  
 OPEN DECK



WATERBURY AND NEW CANAAN  
BRANCH LINES  
NEEDS & FEASIBILITY STUDY  
PROJECT NO. 170-2562

WATERBURY BRANCH LINE  
NEW DEVON R.R. STATION  
ALTERNATIVE - 2







- LEGEND**
- EXISTING R.R. TRACK
  - R.O.W.
  - RAIL STUDY CORRIDOR
  - MILE POST MARKER
  - R.R. STRUCTURES, PLATFORMS
  - WATERCOURSE
  - CHANNEL ENCROACHMENT LINE
  - R.R. STATION PARKING
  - SIDING/NEW R.R. TRACK

Figure 7-12:  
Devon Station  
Alternative 2  
Detail

**CROSSING DATA**

MILE	CROSSING STREET/FEATURE
6.16	UG STAMFORD RD. OD

AG - AT GRADE  
 UG - UNDERGRADE  
 OH - OVERHEAD  
 OPEN DECK



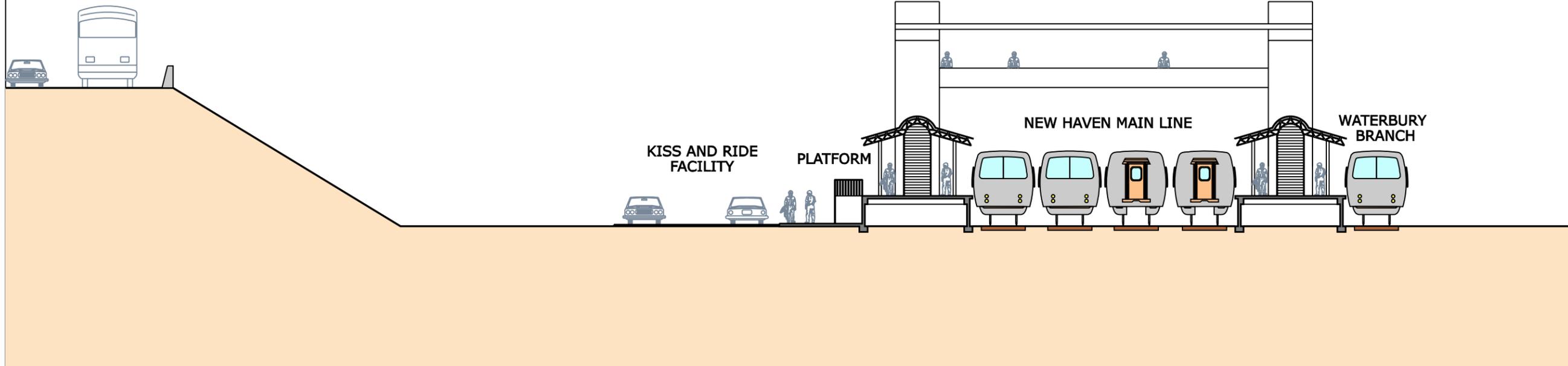
WATERBURY AND NEW CANAAN  
BRANCH LINES  
NEEDS & FEASIBILITY STUDY  
PROJECT NO. 170-2562

WATERBURY BRANCH LINE  
NEW DEVON R.R. STATION  
ALTERNATIVE - 2  
DETAIL PLAN





INTERSTATE - 95



SECTION A-A

SCALE IN FEET  
 0 10 20

WATERBURY AND NEW CANAAN  
 BRANCH LINES  
 NEEDS & FEASIBILITY STUDY  
 PROJECT NO. 170-2562

WATERBURY BRANCH LINE  
 NEW DEVEON R.R. STATION  
 SECTIONS



PARSONS

Figure 7-13:  
 Devon Station  
 Alternative 1  
 Section

