

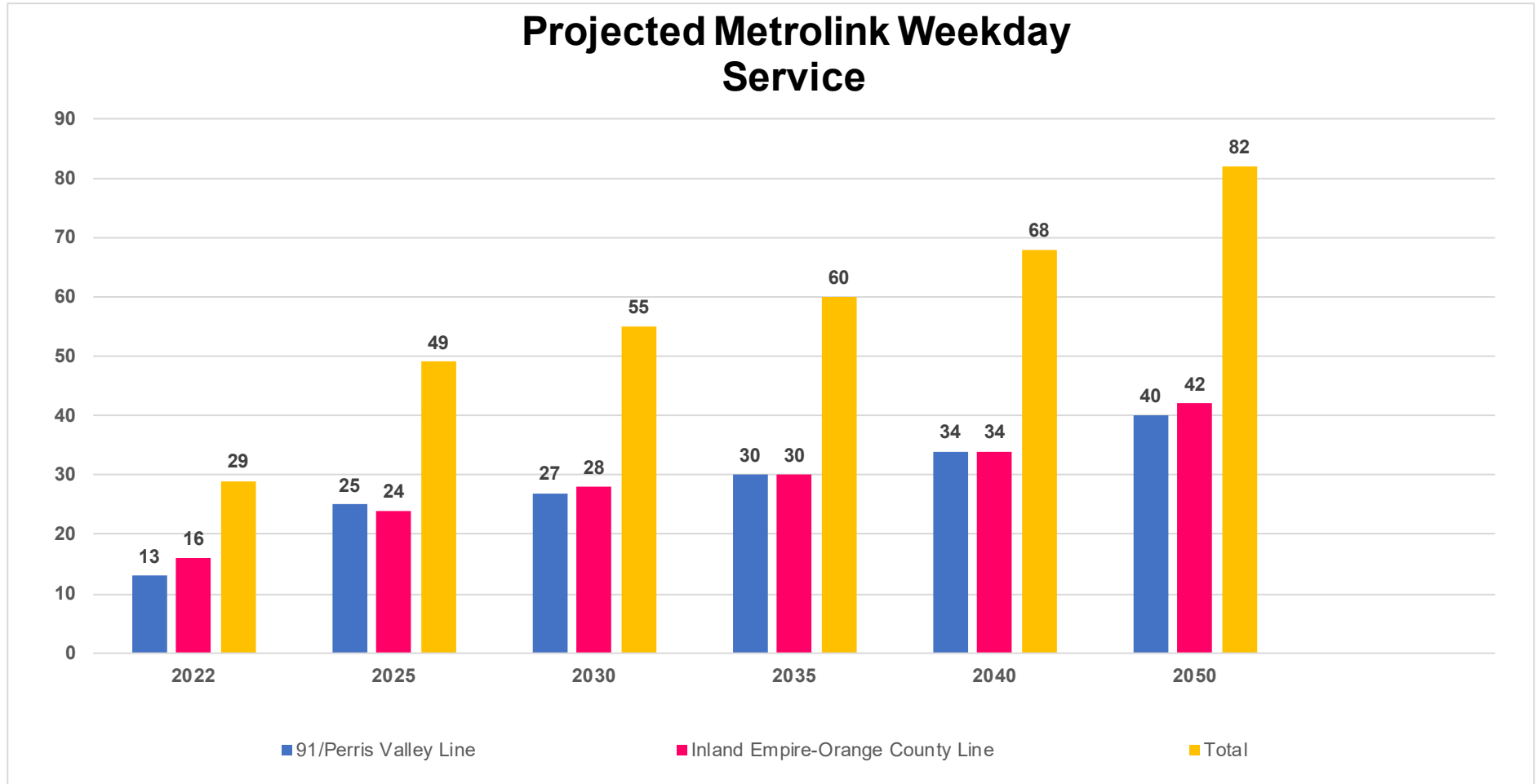
## Appendix D. Environmental Assessment Figures

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# Chapter 1.0. Introduction and Background



## Chapter 2.0. Purpose and Need



**Figure D-2. Projected Metrolink Weekday Service**

## Chapter 3.0. Description of Alternatives

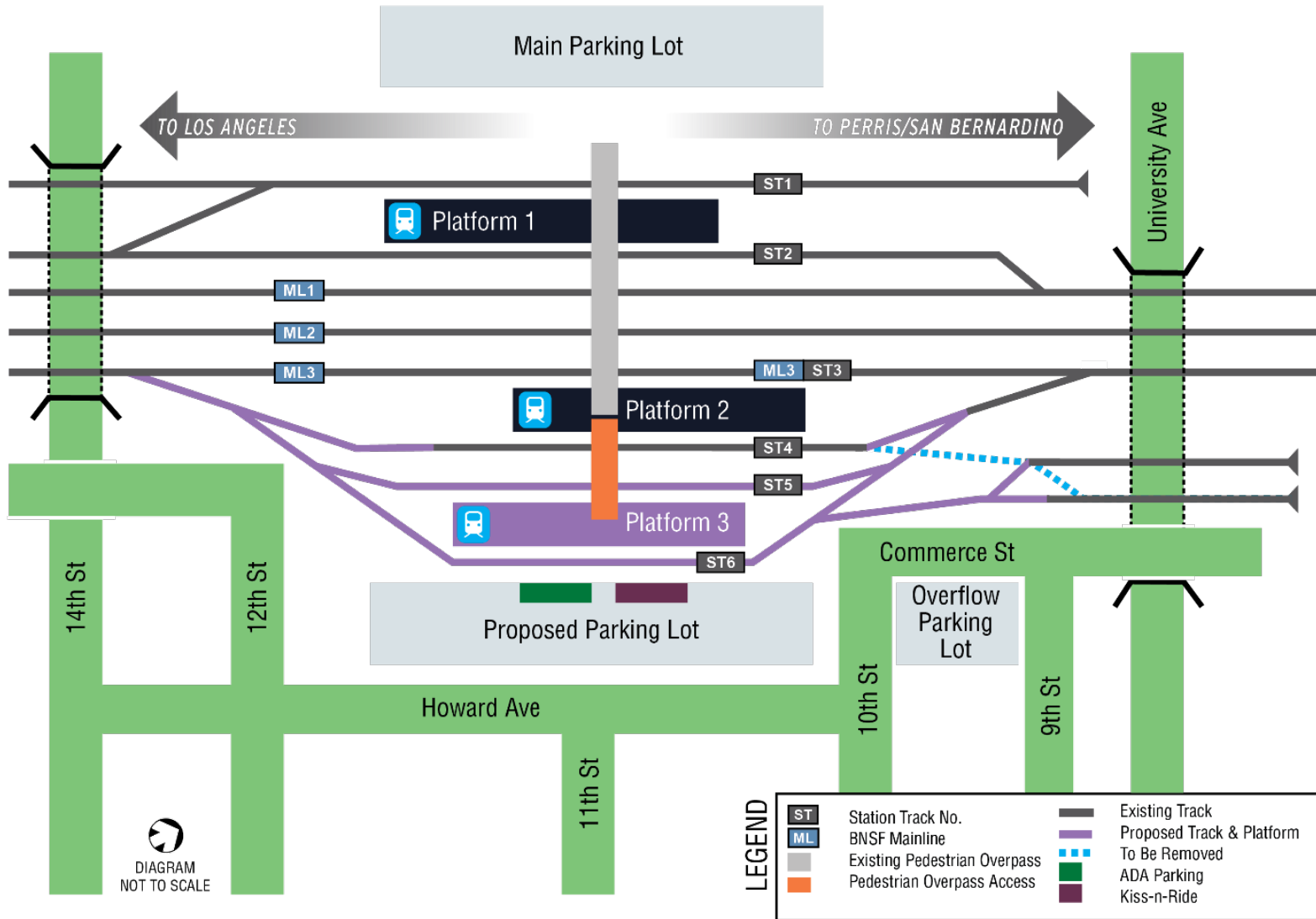


Figure D-3. Build Alternative

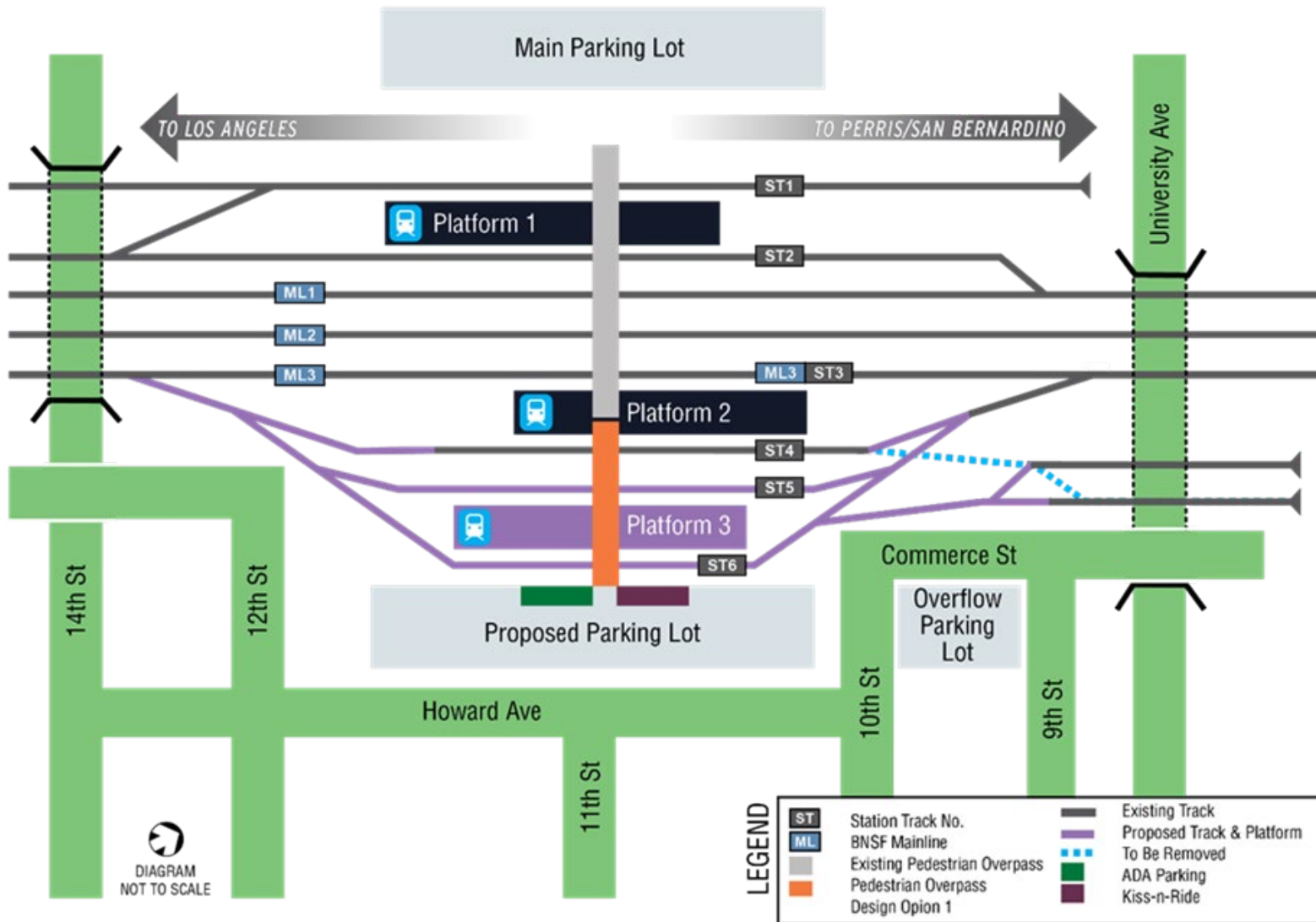


Figure D-4. Build Alternative with Design Option 1

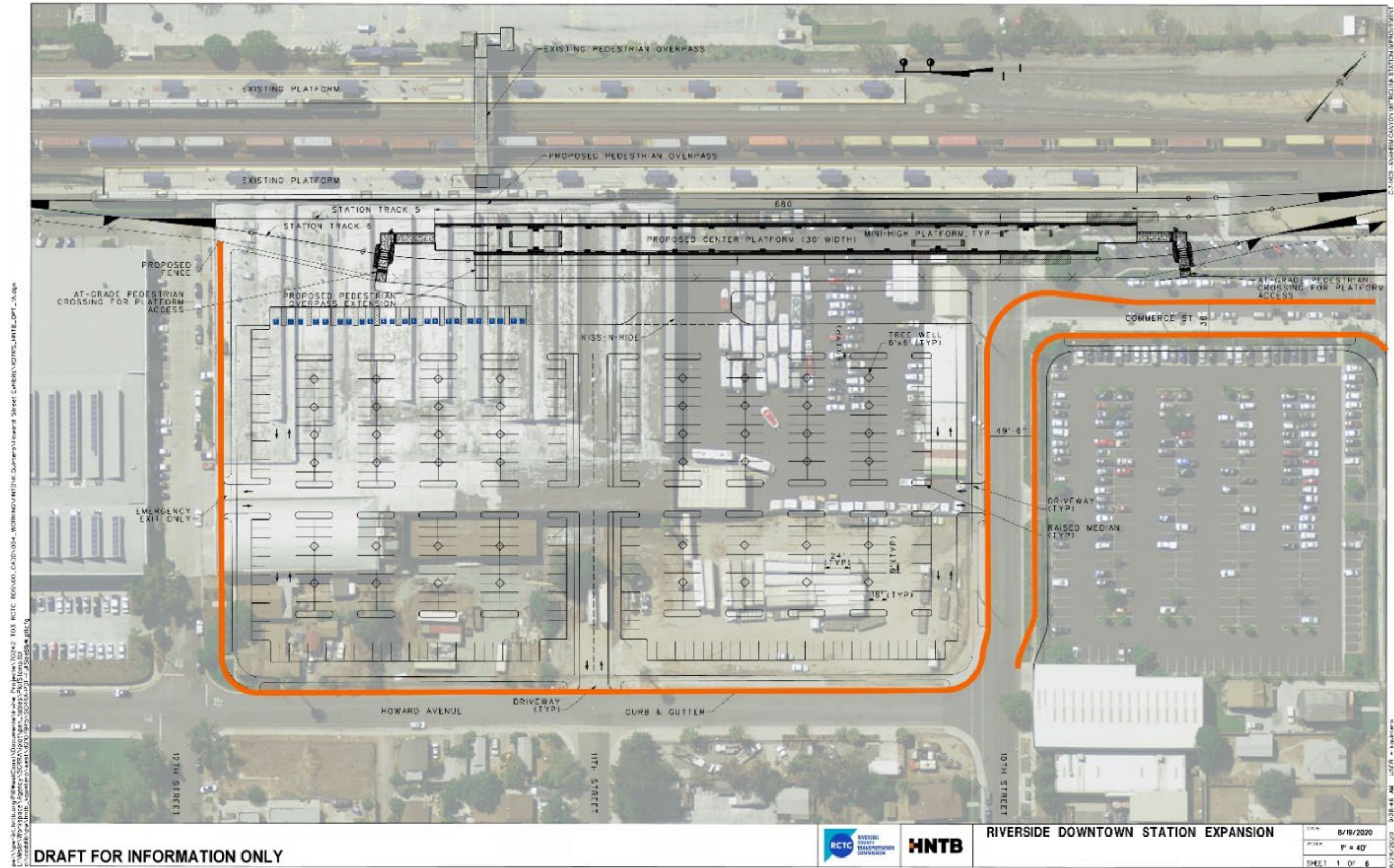


Figure D-5. Build Alternative with Parking Option 1A

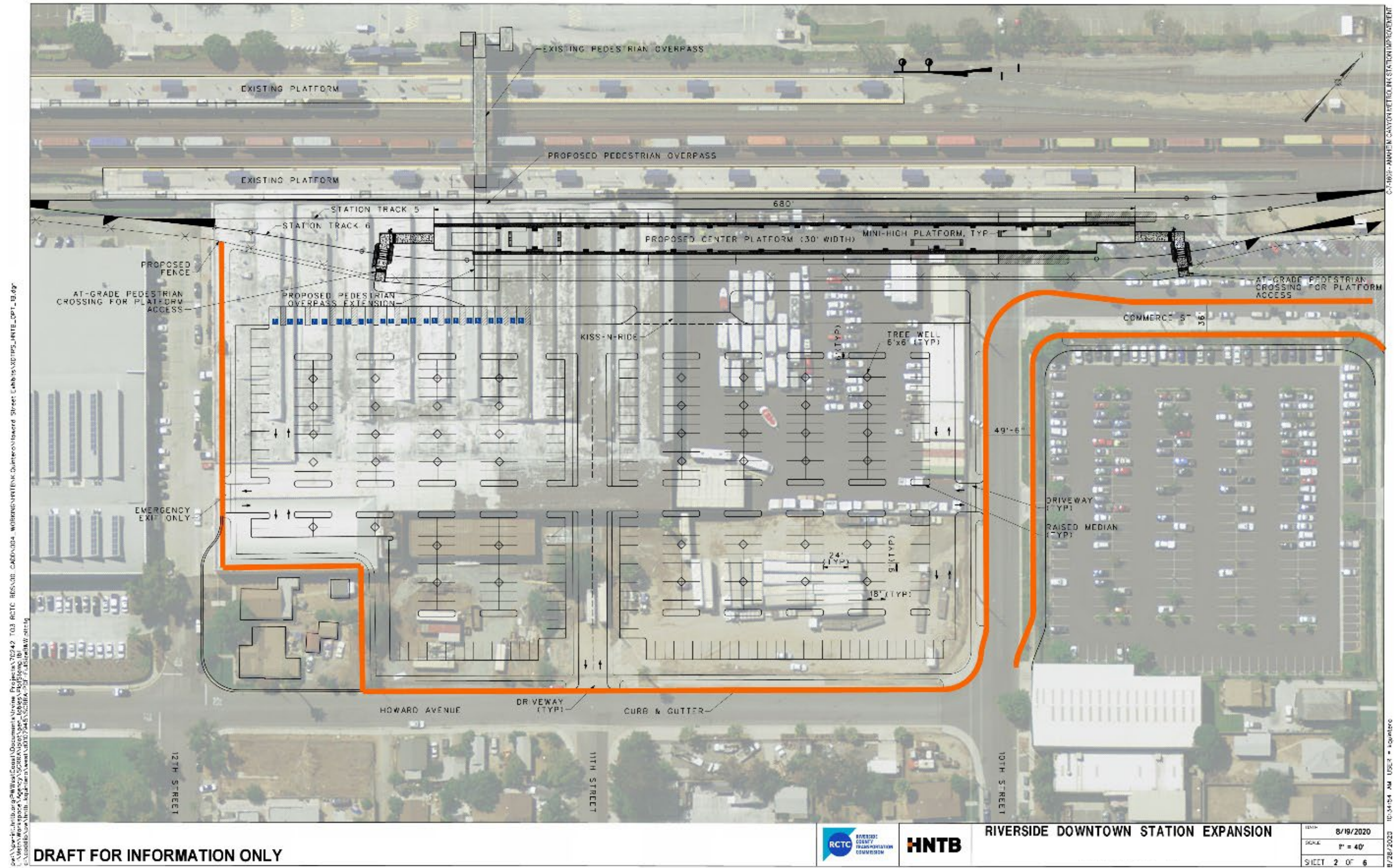


Figure D-6. Build Alternative with Parking Option 1B



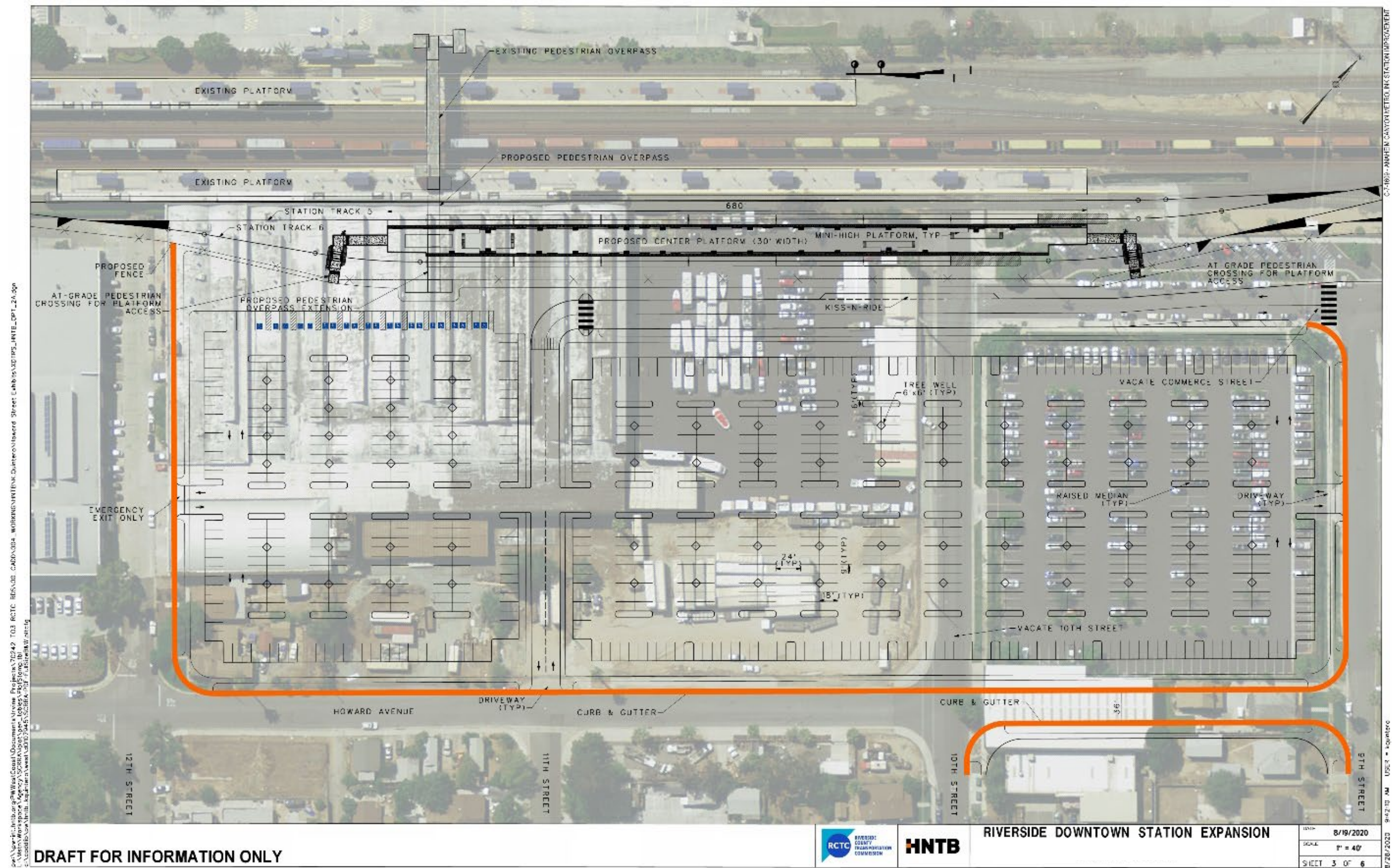


Figure D-7. Build Alternative with Parking Option 2A

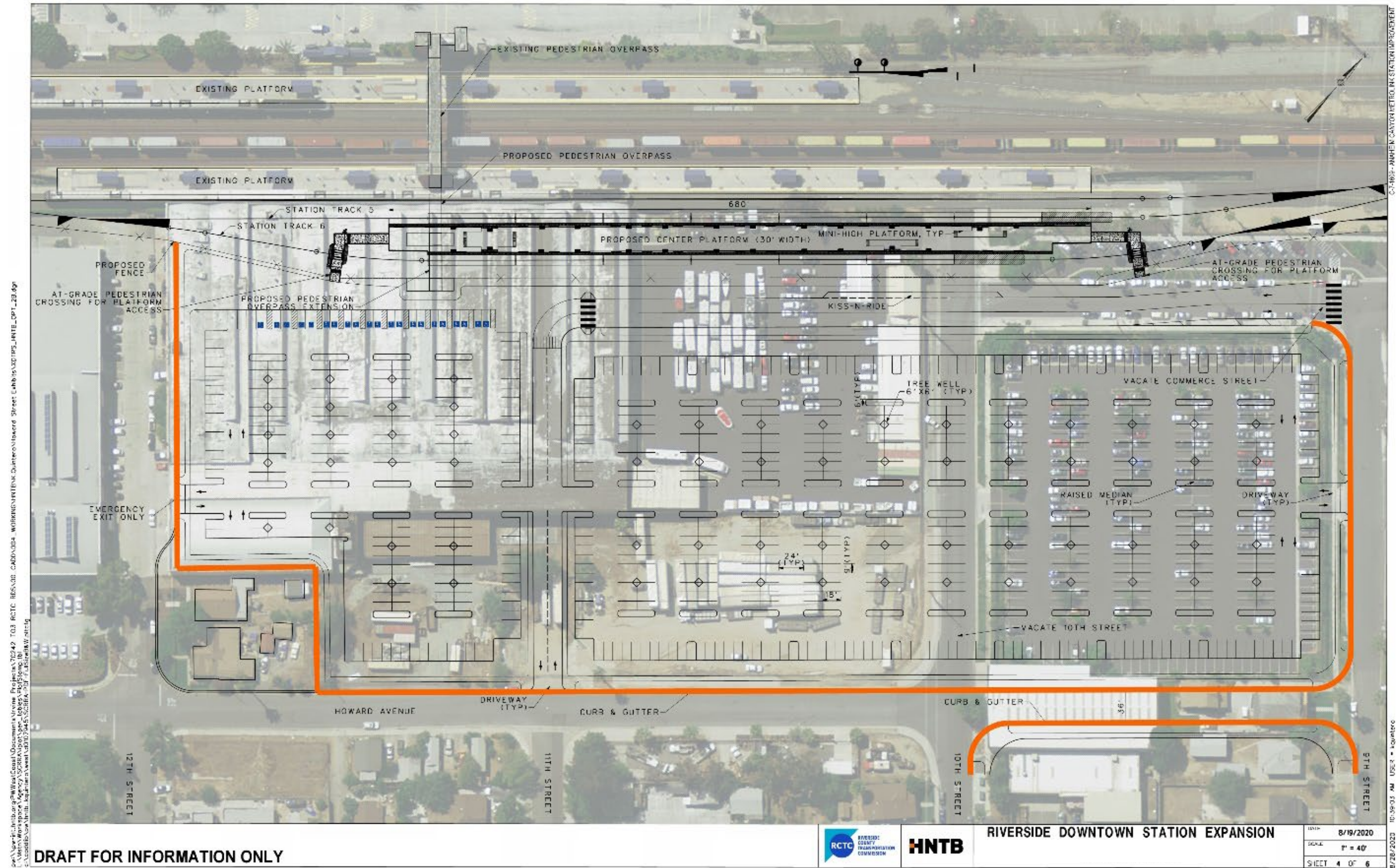


Figure D-8. Build Alternative with Parking Option 2B

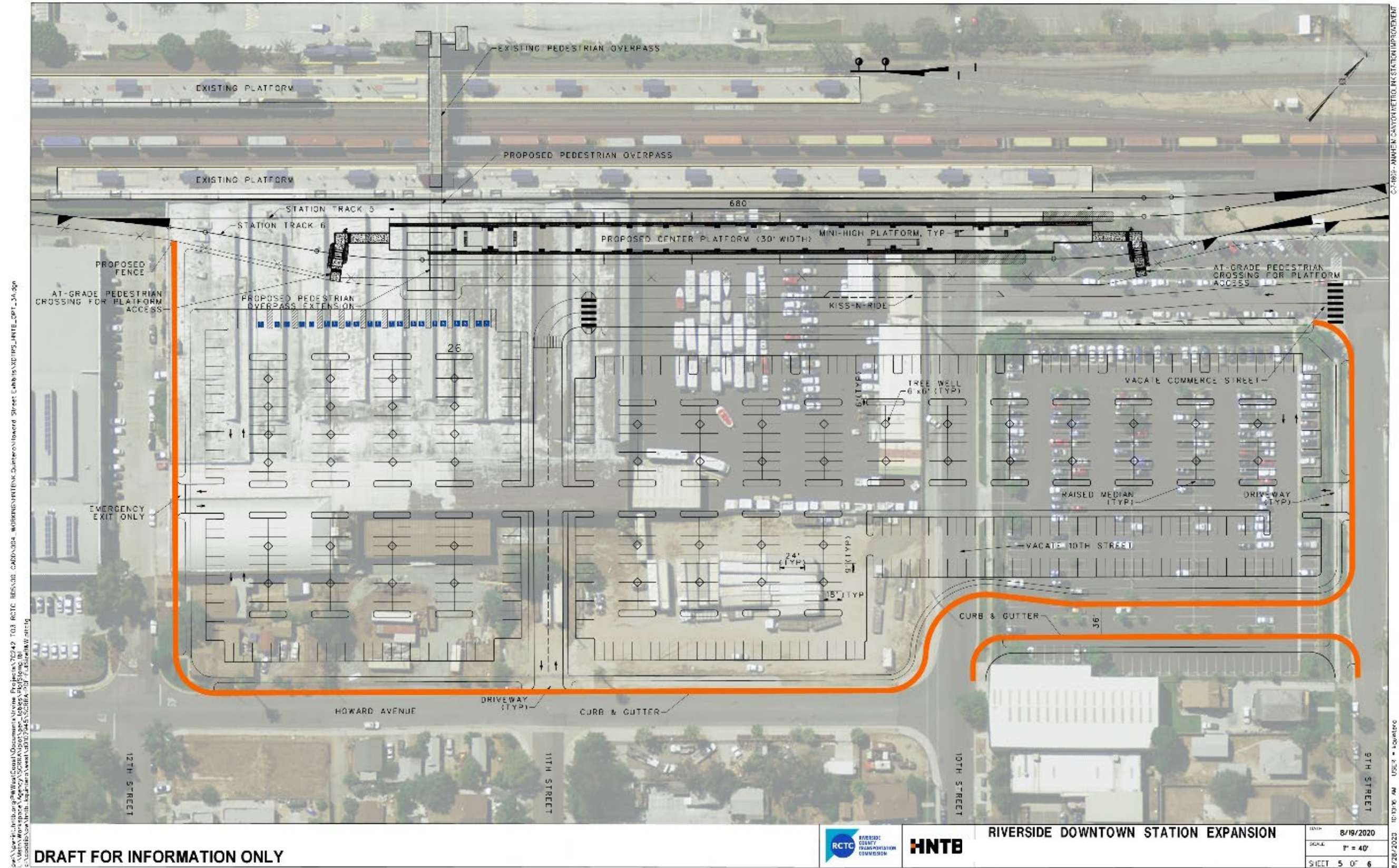


Figure D-9. Build Alternative with Parking Option 3A

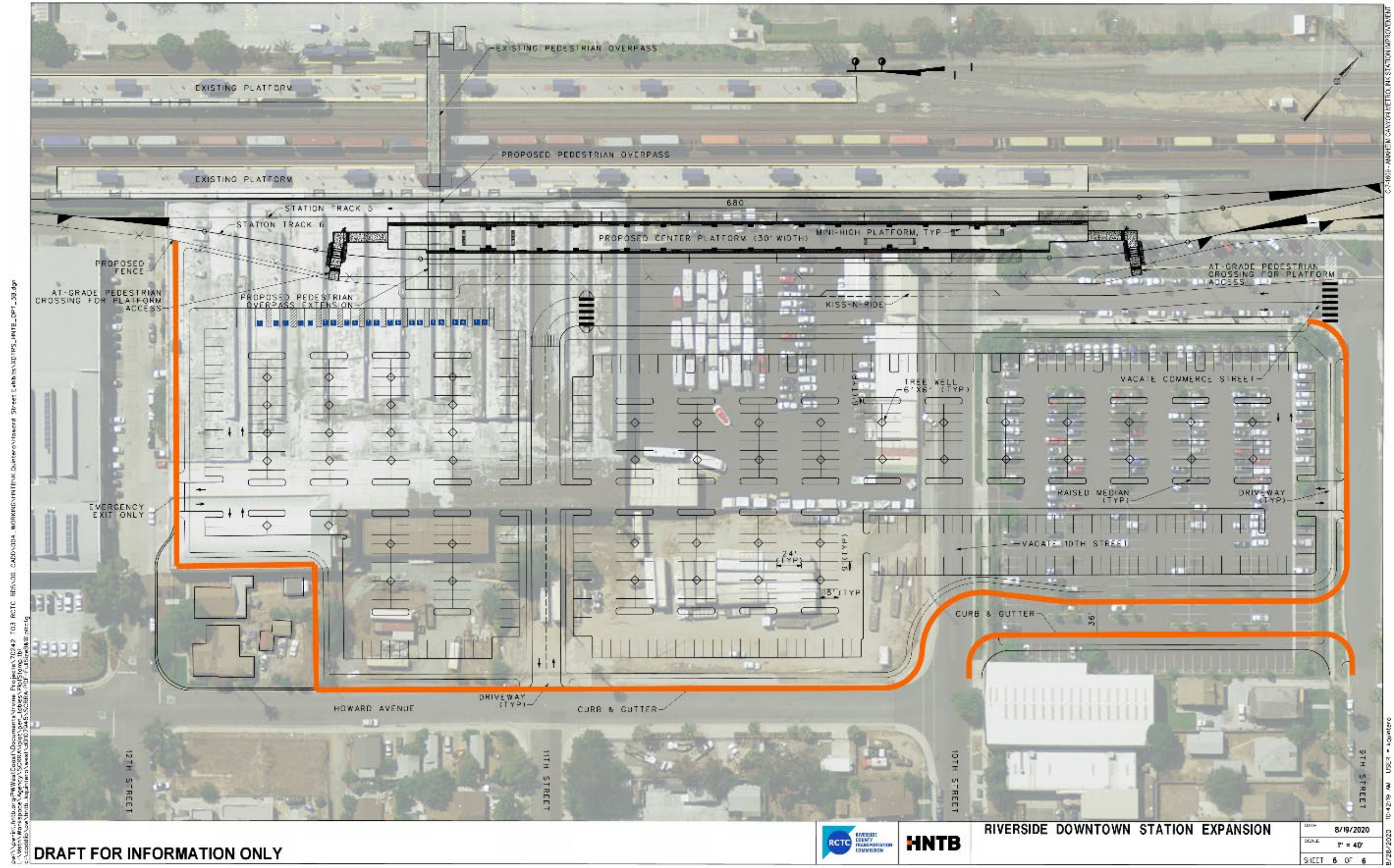
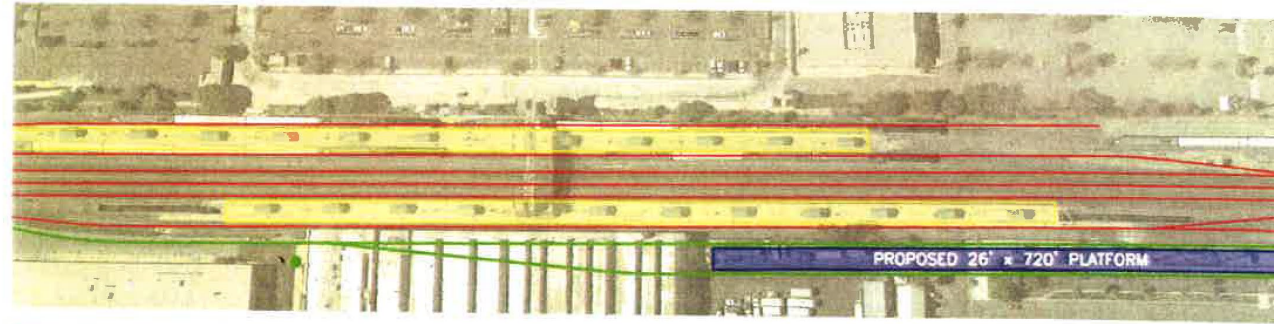
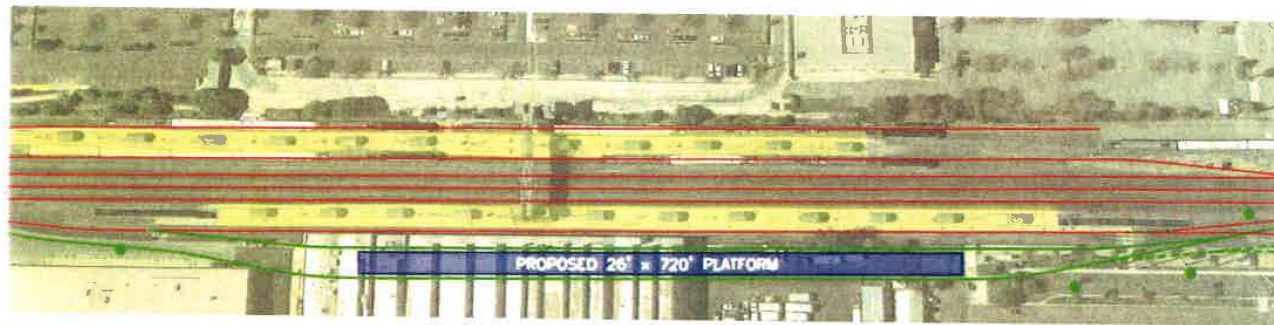


Figure D-10. Build Alternative with Parking Option 3B

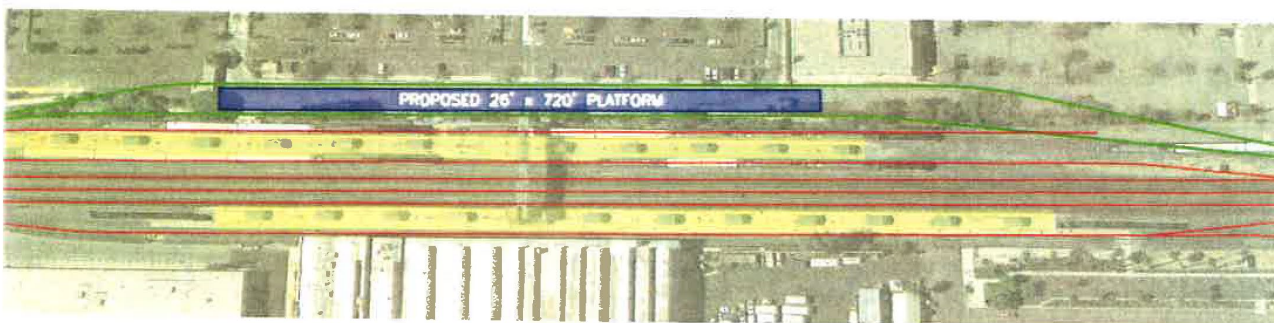
**Alternative 1** focused on adding additional platform capacity on the east side of the station with the new platform adjacent to, but slightly north of, the existing platform. This alternative provided the capacity required while minimizing impact to BNSF, but presented impacts to passenger accessibility and convenience. Locating the station platform further north required two pedestrian crossings between platforms, thus lengthening the time it would take to transfer between services.



**Alternative 2** shifts the platform further south, providing improved passenger accessibility by allowing for the existing pedestrian bridge to potentially be extended. This alternative also limits impact to BNSF but creates sufficient impact in requiring multiple property acquisitions, including the solar panel manufacturer just south of the station. This was identified as an unacceptable impact in the initial alternatives development and eliminated this alternative from further consideration.

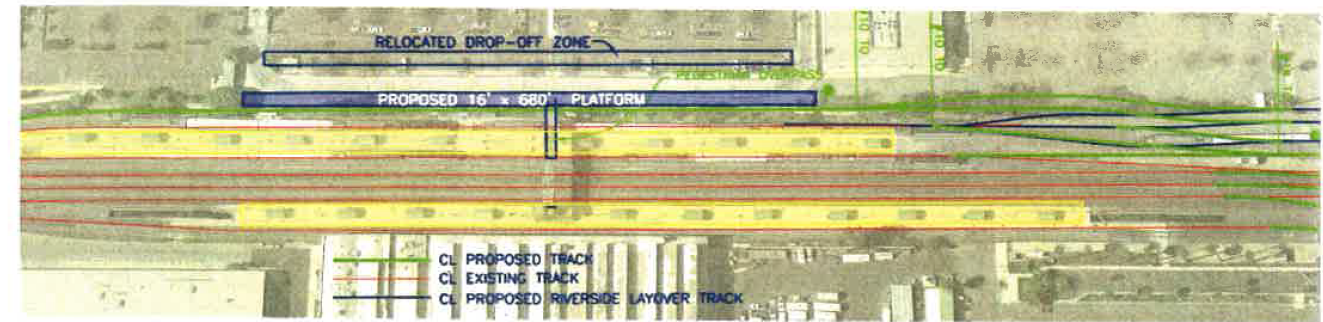


**Alternative 3** provided convenient passenger access and minimized any impacts to adjacent businesses by constructing the additional tracks and platform on RCTC-owned property on the west side of the station. However, to provide the 91/PV Line and IEOC Line trains access to this platform would require additional crossovers to be constructed on the BNSF mainline between the Riverside Downtown Station and CP Highgrove. This alternative was not supported by BNSF, due to the addition of these crossovers and was subsequently screened out. Furthermore, this alternative would require removing new projects already designed or under construction to improve bus connectivity and layover capacity on the west side of the station. This was not favored by RCTC staff.

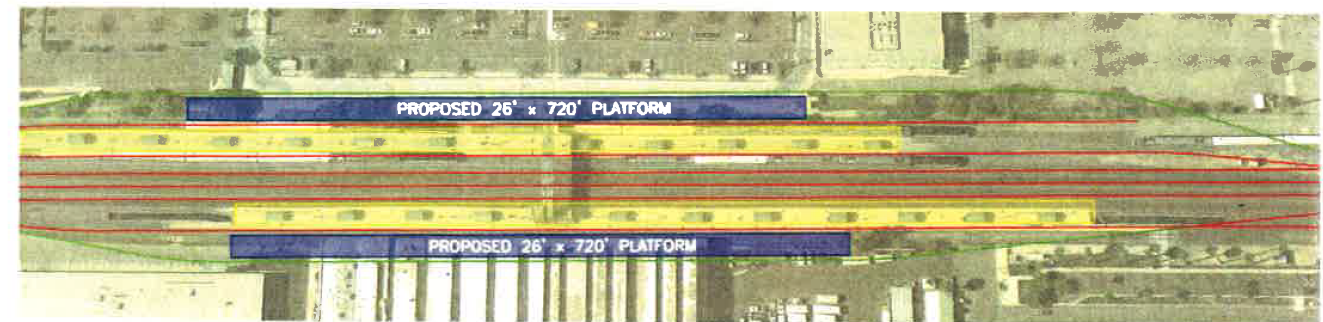


**Alternative 4** looked at minimizing the need for property acquisitions by shifting the track usage of the BNSF mainline to the west. This alternative was creative in that it increased the off-mainline capacity of the existing east platform by shifting the BNSF mainline over using a series of reversing curves. To replace the lost platform capacity on the west side of the station, a platform track with side platform was envisioned that tied into both the realigned the BNSF mainline and the existing storage tracks. A benefit of the side platform is that it required less property to construct at 16 feet (versus 26-30 feet for a center platform). While this alternative reduced the need for property acquisitions and the need to construct additional crossovers on

the BNSF mainline between the station and Highgrove, it required a significant amount of trackwork, a new railroad bridge over 14th Street, and the extension of the two current storage tracks (converted to mainline tracks) across Mission Inn Avenue at-grade. In the evaluation, the complexity of all of this special trackwork, the required involvement of the CPUC to approve a new at-grade crossing, and the significant involvement required of BNSF to make it happen offset the benefit of reducing the amount of property required.



With **Alternative 5**, the intent was to split the difference, providing additional capacity on both the west and east sides of the station. While this did minimize impacts to adjacent properties and BNSF, while also maintaining passenger accessibility, it still required removing the existing RCTC projects on the west side of the station as well as the construction of a new pedestrian bridge over the tracks, since the proposed new platform would be located where the west elevators and security tower are.



**Alternative 6** extended the station's existing footprint to the south and does require a partial or complete property acquisition of the former tank assembly building. While modification or removal of the building is required, this alternative preserves the solar panel manufacturing business to the south and requires only minimal property acquisition, adjacent to this business. Passenger accessibility is maintained via the proposed extension of the existing pedestrian bridge, impact is minimized to BNSF operations, and layover capacity is maintained and expanded to the north of the station.



In summary, following an exhaustive process reviewing a series of alternative concepts in partnership with RCTC during WSP's preparation of the PSR. Alternative 6 was identified as the preferred alternative for expansion of the Riverside Downtown Station, because it met the most criteria, including the capacity for additional growth. Exhibit O9 summarizes each alternative against the project criteria.

Figure D-11. Project Definition Report Alternatives