

M E M O R A N D U M



Biological Technical Report

PREPARED FOR: Orange County Transportation Authority
 COPY TO: STV Inc.
 PREPARED BY: CH2M
 DATE: February 7, 2017

This biological technical report documents the results of a biological resources field survey performed by CH2M on behalf of the Orange County Transportation Authority (OCTA) for the Anaheim Canyon Metrolink Station Project in Anaheim, California. This reconnaissance level biological survey was conducted to assess biological/ecological conditions to determine whether sensitive biological resources could potentially be affected by the proposed project.

Project Description

The Anaheim Canyon Station project (Project) proposes a second station track and platform within the existing rail right-of-way and includes associated signal warning devices and street and pedestrian safety improvements to adjacent at-grade crossings without permanently disrupting existing vehicular or rail traffic circulation or requiring land acquisition (Figure 1 – Project Limits, Figure 2 – Project Site Map, and Figure 3 – USGS Map). The most visible improvement will be the construction of a second station track and platform to allow more than one train to serve the station and/or pass through the station area at a time. This will increase the on-time performance and safety of the train operations. The Project will also include fully ADA compliant improvements to the pedestrian circulation elements at the station. The Orange County Transportation Authority (OCTA) is the lead agency for the Project. The design and construction of the Project is planned to be funded through the Congestion Mitigation and Air Quality (CMAQ) Program and Federal Transit Administration (FTA) formula funds 5337 and 5307. In September 2012, the OCTA Board approved the allocation of \$20,051,000 from Federal funds received by the agency to Project.

The Anaheim Canyon Metrolink Station provides commuters with local and community bus routes, Stationlink rail feeder routes, and Anaheim Transit Network (ATN) shuttle services. It is located at 1039 N. Pacific Center Drive in the northeast part of the City of Anaheim. The station is situated within a 100-foot wide OCTA-owned right-of-way along the western edge of the Pacific Center Development south of La Palma Avenue. The current station consists of one platform with shade structures, benches and ticket vending machines. The station is served by a single track. The City has an exclusive use easement with the adjacent Pacific Center landowner for parking which includes 100 spaces in a parking lot located immediately east of the station platform. The station parking lot area also includes four bus bays.

OCTA proposes to construct a second station track and platform to allow more than one train to serve the station and/or pass through the station area at a time. This will increase the on-time performance of train operations and improve operational flexibility. Grade crossing safety will be enhanced by closing or moving driveways away from the crossings; and overall system safety will be enhanced by allowing trains operating in opposing directions to each have their own dedicated track under normal operation, rather than requiring trains moving in opposing directions sharing a single track.

The Project will also include fully ADA compliant improvements to the pedestrian circulation elements at the station.

All improvements will be built within existing OCTA and City of Anaheim public right-of-way, and no disturbance to private parcels or other public property is anticipated to occur, with the exception of reconstruction of several existing parking lot pedestrian ramps to meet ADA compliance, which are located within private property being leased by the City of Anaheim for station parking, as well as for limited temporary construction easements. Temporary construction easements for work adjacent to private property are anticipated where noted below.

The improved Anaheim Canyon Station will remain a multi-modal transit center that accommodates Metrolink commuter rail service, OCTA local and community bus service, Stationlink rail feeder service and Anaheim Resort Transit, along with parking facilities. Key elements of the Project include the following:

- Construction of approximately 3,400 linear feet of new siding track (2nd track) and two new turnouts. In the station area, the new track will be built to the west of the existing single track, then to the north of La Palma Avenue, the new track will transition to be built on the east side of the existing track.
- Establish two new Control Points (CPs) at the new turnouts. Associated railroad signal and communications modifications will be required to accommodate new 2nd track and pedestrian safety improvements at grade crossings.
- Construction of improvements to the existing at-grade crossings of E. La Palma Avenue and Tustin Avenue to accommodate the new 2nd track; including new street improvements, relocation of existing railroad signal warning devices and pedestrian safety improvements. Includes reconstruction and widening of sidewalk elements to accommodate the relocation of the pedestrian grade crossing warning devices, gates and channelization railing.
- Closure of an existing driveway along the north edge of La Palma Avenue, just west of the railroad tracks, to accommodate the second track and provide for grade crossing safety improvements. This work will be within City of Anaheim public right-of-way, however a temporary construction easement is anticipated to be required for this work. This driveway closure will not impact access to the private property, because the property has a main driveway approach from E. La Palma Avenue located approximately 295 feet to the west, which will not be affected by the Project.
- Relocation of an existing driveway along the south edge of Tustin Avenue, just east of the railroad tracks, to accommodate the second track and provide the required area for at-grade crossing safety improvements. This work will be within City of Anaheim public right-of-way, however a temporary construction easement is anticipated to be required for this work and the reconfiguration of parking stalls for no net loss of parking to the private property owner.
- Extension of the existing 510-foot long station platform to meet the current required Metrolink standard platform length of 680 feet, which supports an eight-car train.
- Construction of a new 680-foot long second platform and associated facilities on the west side of the new 2nd track.
- Construction of 832 linear feet of retaining wall west of new platform to accommodate the difference in grade from the top of proposed platform to existing ground and to protect excessive fill over an existing 36-inch SoCal Gas line located within a 10-foot easement along the western boundary of the railroad right-of-way.

- Construction of new ADA-compliant pedestrian pathways and sidewalks to provide pedestrian access between the existing parking lot and proposed second platform.
- Construction of improvements to existing parking lot pedestrian ramps to meet ADA compliance. This work will occur within private property currently being leased by the City of Anaheim for station parking. The project would not improve or expand the parking lot.
- Reconstruction of a portion of the existing sidewalk, curb and gutter and roadway, and associated striping to provide a Class II bike path extension across the railroad grade crossing area, along the south edge of eastbound La Palma Avenue up to Tustin Avenue. This work will be within OCTA right-of-way and City of Anaheim public right-of-way.
- Construction of a bus pad/stop on eastbound La Palma Avenue on the nearside of the railroad grade crossing.
- Relocation of an existing Positive Train Control communications tower located in the area proposed for the new second platform. The new location for the tower will be at the south end of new platform.
- Minor grading and drainage improvements, including a culvert extension to accommodate the second track.
- Relocate one Southern California Edison (SCE) power pole in the south east quadrant of the La Palma Avenue grade crossing, and relocate one SCE power pole guy wire on the east side of the railroad right-of-way between La Palma Avenue and Tustin Avenue.
- Extend to the west of the existing track, two (2) existing 60-inch Reinforced Concrete Pipe with concrete collar just south of the Tustin Avenue grade crossing.

Biological Resources Study Methods

The biological resources field survey was performed by a qualified CH2M biologists on April 14, 2016. The reconnaissance-level survey was conducted on foot and documented habitat, conducted opportunistic sightings of wildlife species, and determined whether sensitive species were present or potentially present within the project area, shown as the impact limit in Figure 1 - Project Limits. This reconnaissance-level survey was not intended to, and does not, satisfy protocol-level surveys. Historical species occurrences, critical habitat, and mapped wetland were reviewed prior to the field effort (CDFW, 2016; CNPS, 2016; USFWS, 2016a; and USFWS, 2016b).

Ecological Setting

The project corridor is located at the existing Anaheim Canyon Station located at 1039 N. Pacific Center Drive in the City of Anaheim. The project area runs along the existing railroad corridor between East Miraloma Avenue to the north and State Route 91 (Riverside Freeway) to the south. Representative photographs of the project area are provided in Attachment A. USFWS critical habitat was not identified within the project area (USFWS, 2016a).

Vegetation

The project area is entirely developed and is largely devoid of native vegetation. Planted ornamental vegetation and trees are present throughout the project area as well as invasive plants including Russian thistle/tumbleweed (*Salsola tragus*), brome grasses (*Bromus* spp.), and giant cane (*Arundo donax*). During the spring survey grasses and forbs were observed growing within the corridor, although the railroad right-of-way appears to be maintained and does not support established vegetation.

The database review identified a total of 62 special-status plants that are known or have the potential to occur in the regional vicinity of the proposed project (CDFW, 2016 and CNPS, 2016). These species are listed in Table 1 of Attachment B. However, due to development, maintenance, human activity, and lack of habitat, special-status plants are not anticipated in the project area.

Animals

The project area is developed and provides some habitat for urban wildlife. Wildlife observed during the survey included western fence lizard (*Sceloporus occidentalis*), house finch (*Carpodacus mexicanus*), Northern mocking bird (*Mimus polyglottos*), American crow (*Corvus brachyrhynchus*), and a common honey bee (*Apis mellifera*) hive. Burrows were also observed within the project area, and appeared to be created by pocket gopher (*Thomomys* sp.). The project area contains potential nesting habitat for migratory birds, which includes common, non-listed, native species. The Migratory Bird Treaty Act (MBTA) protects the nests of native bird species, including bird species that are common and are not special status. Potential nesting bird habitat within the project area is primarily in trees, and could include buildings (potential nesting area for birds such as swallows and house finches) and the un-paved ground (potential for birds such as killdeer [*Charadrius vociferous*]).

The database review identified a total of 43 special-status animals (4 amphibians, 20 birds, 2 crustaceans, 2 fish, 9 mammals, and 6 reptiles) that are known or have the potential to occur in the regional vicinity of the proposed project (CDFW, 2016). These species are listed in Table 2 of Attachment B. However, due to development, maintenance, human activity, and lack of habitat special-status animals are not anticipated in the project area.

Wetland and Water Resources

Water resources are present in the project vicinity, but are not present within the project area. A lined drainage channel runs parallel to the northern edge of State Route 91, just south of the southern edge of the project area. This drainage is classified as an intermittent riverine feature with artificial substrate by the USFWS National Wetlands Inventory (USFWS, 2016b). The National Wetlands Inventory describes the feature as having surface/flowing water present for extended periods especially early in the growing season, but water is absent by the end of the growing season in most years. This man-made drainage appears to connect freshwater lakes and ponds associated with the Santa Ana River.

The Santa Ana River is approximately a quarter mile south of the project area. The Santa Ana River is channelized in the vicinity of the project with a soil bottom and some wetland vegetation. The river is typically slow moving through the levee system in this section as it flows toward the Pacific Ocean outlet in Newport Beach, California. Several freshwater ponds and lake associated with the river occur in the vicinity of the project. The Santa Ana River Lakes and Anaheim Lake are within a half mile of the project area.

CEQA Checklist

The proposed project would occur in a highly developed urban area. Due to the surrounding land use as well as the absence of natural vegetation communities and wetland resources in the project area there will be no anticipated impacts to biological resources.

IV. BIOLOGICAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Project Impacts

Nesting Birds

Nesting birds will be avoided, therefore no significant impacts to nesting birds are anticipated. Pre-construction surveys for nesting birds are recommended if construction is scheduled between February 1 and September 15.

Jurisdictional Waters

An intermittent riverine feature exists just south of the southern edge of the project area and connects to the Santa Ana River. The intermittent riverine feature and Santa Ana River are jurisdictional, and if they cannot be avoided, permitting for impacts to jurisdictional waterways would need to be obtained. However, it is assumed that jurisdictional waterways will not be entered or disturbed by construction activities. Therefore, no adverse impacts to jurisdictional waters are anticipated.

Avoidance Measures

The following measures are recommended to avoid impacting biological resources:

Avoid Active Avian Nesting Season (February 1 through September 15): Construction will occur outside of the active breeding season (February 1 through September 15) to the extent feasible. If avoiding the active breeding season is not possible a biologist who is experienced in bird identification will conduct preconstruction surveys no more than three days prior to vegetation clearing or ground

disturbing activities to determine the presence of nesting birds protected by the Migratory Bird Treaty Act (MBTA). If birds that are protected by the MBTA are observed nesting within 100 feet of proposed construction activities, the biologist will determine whether or not construction activities could disturb nesting birds. If necessary, the biologist will coordinate with the wildlife agencies and implement appropriate measures (e.g., onsite monitor, timing restriction, chick relocation) to adequately protect the nesting birds.

Construction Best Management Practices (BMPs): BMPs will be implemented to avoid impacts associated with runoff and polluted water entering the Santa Ana River or associated channels. Treatment BMPs will clean runoff water and minimize pollutants from construction.

Permits

With the incorporation of the proposed avoidance measures, no biological resource permits are anticipated.

References

California Department of Fish and Wildlife (CDFW). 2016. California Natural Diversity Database. Nine Quad search: La Habra, Yorba Linda, Prado Dam, Anaheim, Orange, Black Star Canyon, Newport Beach, Tustin, and El Toro. April.

California Native Plant Society (CNPS). 2016. Rare and Endangered Plant Inventory. Nine Quad search: La Habra, Yorba Linda, Prado Dam, Anaheim, Orange, Black Star Canyon, Newport Beach, Tustin, and El Toro. August.

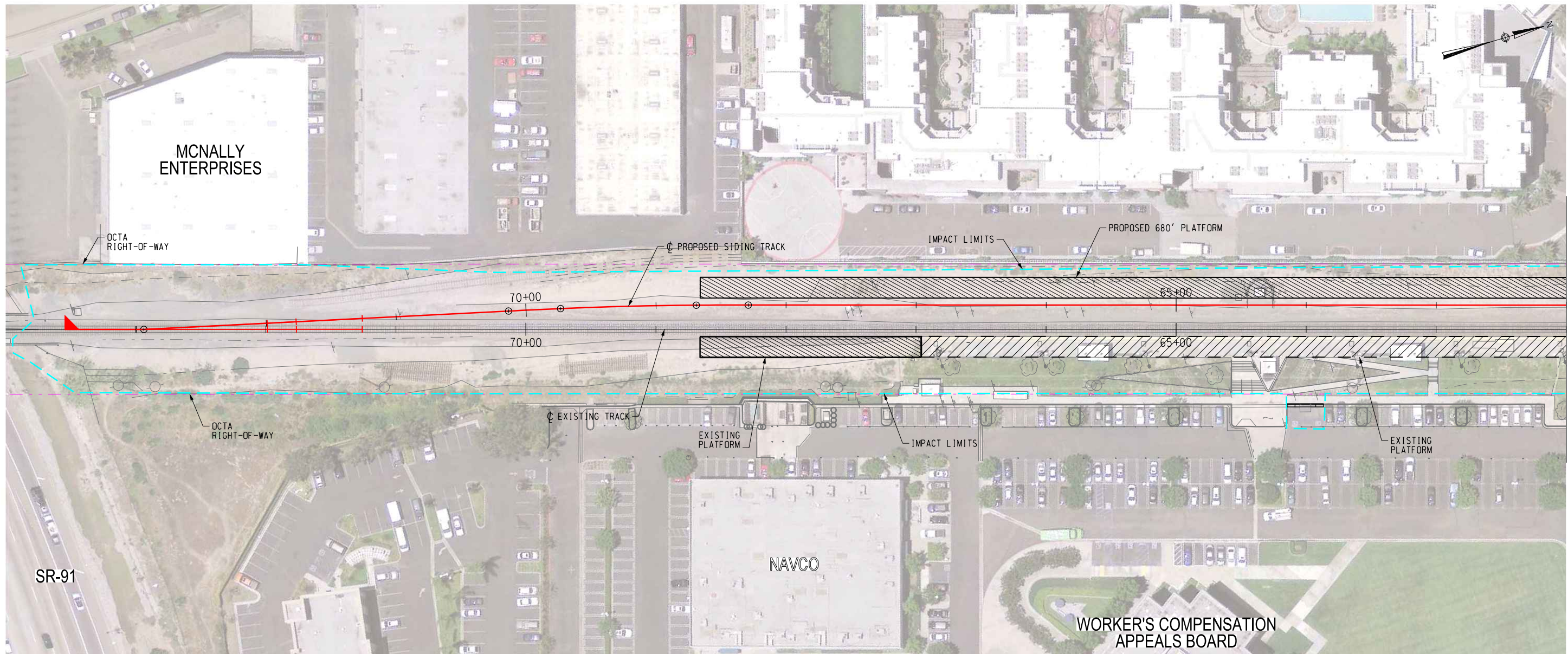
United States Fish and Wildlife Service (USFWS). 2016a. Critical Habitat Portal.
<http://criticalhabitat.fws.gov/crithab>.

United States Fish and Wildlife Service (USFWS). 2016b. National Wetlands Inventory.
<https://www.fws.gov/wetlands/data/mapper.html>.

Figures

TO ORANGE, CA
RR WEST

TO RIVERSIDE, CA
RR EAST



MATCH LINE - MTRK 50+00
SEE DRAWING CK-103

LEGEND:
PROJECT FOOTPRINT


FIGURE 1

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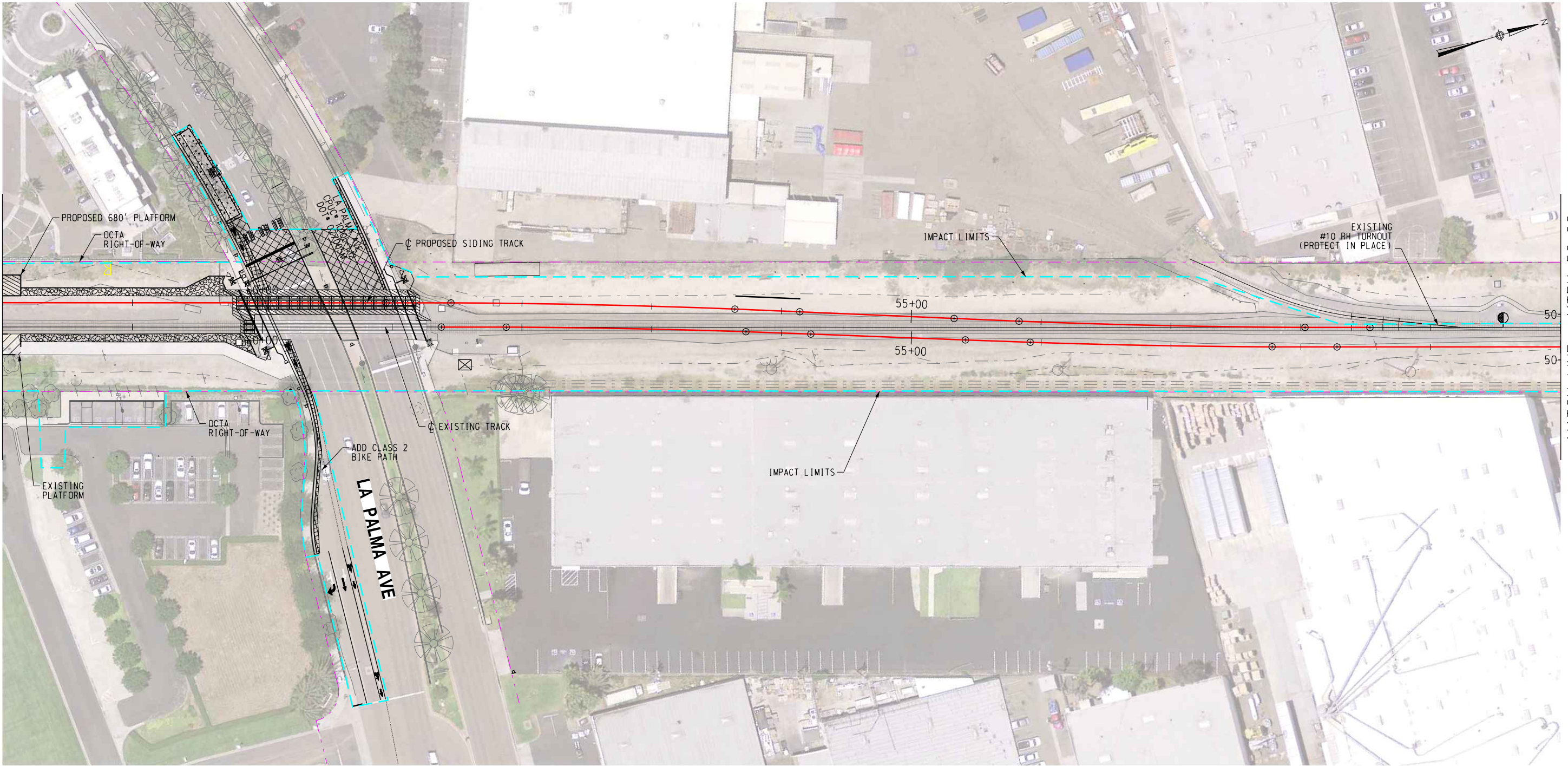
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						<div>DRAWN BY</div> <div>J. GONZALEZ</div>				<div>DRAWING NO.</div> <div>CK-101</div>									
						<div>CHECKED BY</div> <div>A. SOKOL</div>				<div>REVISION</div>		<div>SHEET NO.</div> <div>1 OF 4</div>							
						<div>APPROVED BY</div> <div>A. SOKOL</div>				<div>SCALE</div> <div>AS SHOWN</div>									
						<div>DATE</div> <div>01-20-2017</div>				<div>SUBMITTED:</div> <div>PROJECT MANAGER</div>		<div>APPROVED:</div>		<div>PROJECT LIMITS SHEET 1 OF 4</div>					

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DRAWN BY	J. GONZALEZ
CHECKED BY	A. SOKOL
APPROVED BY	A. SOKOL
DATE	01-20-2017

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SUBMITTED: _____
PROJECT MANAGER

APPROVED: _____

**ANAHEIM CANYON
METROLINK STATION PROJECT**

PROJECT LIMITS
SHEET 2 OF 4

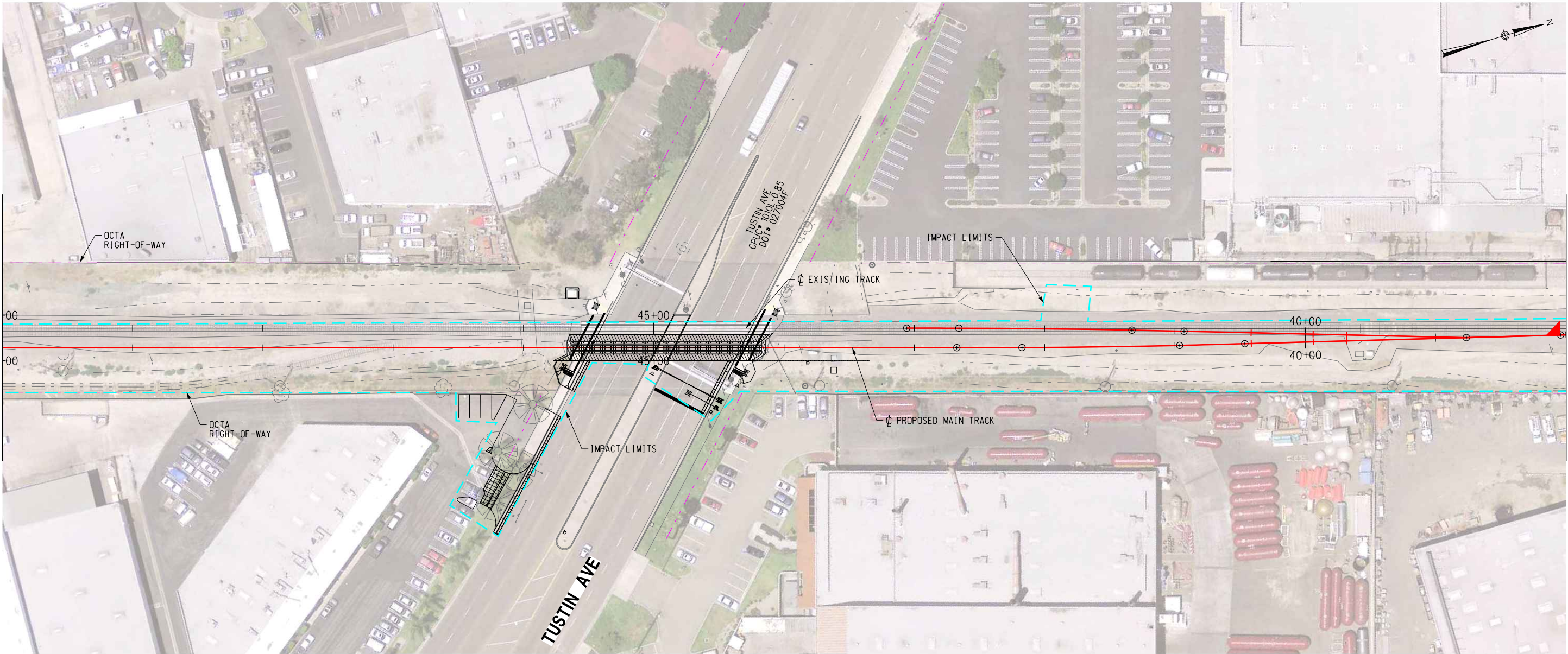
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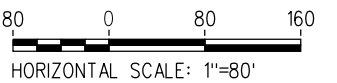
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DATE	01-20-2017

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ORANGE COUNTY
TRANSPORTATION
AUTHORITY

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PROJECT MANAGER

APPROVED: _____

ANAHEIM CANYON
METROLINK STATION PROJECT

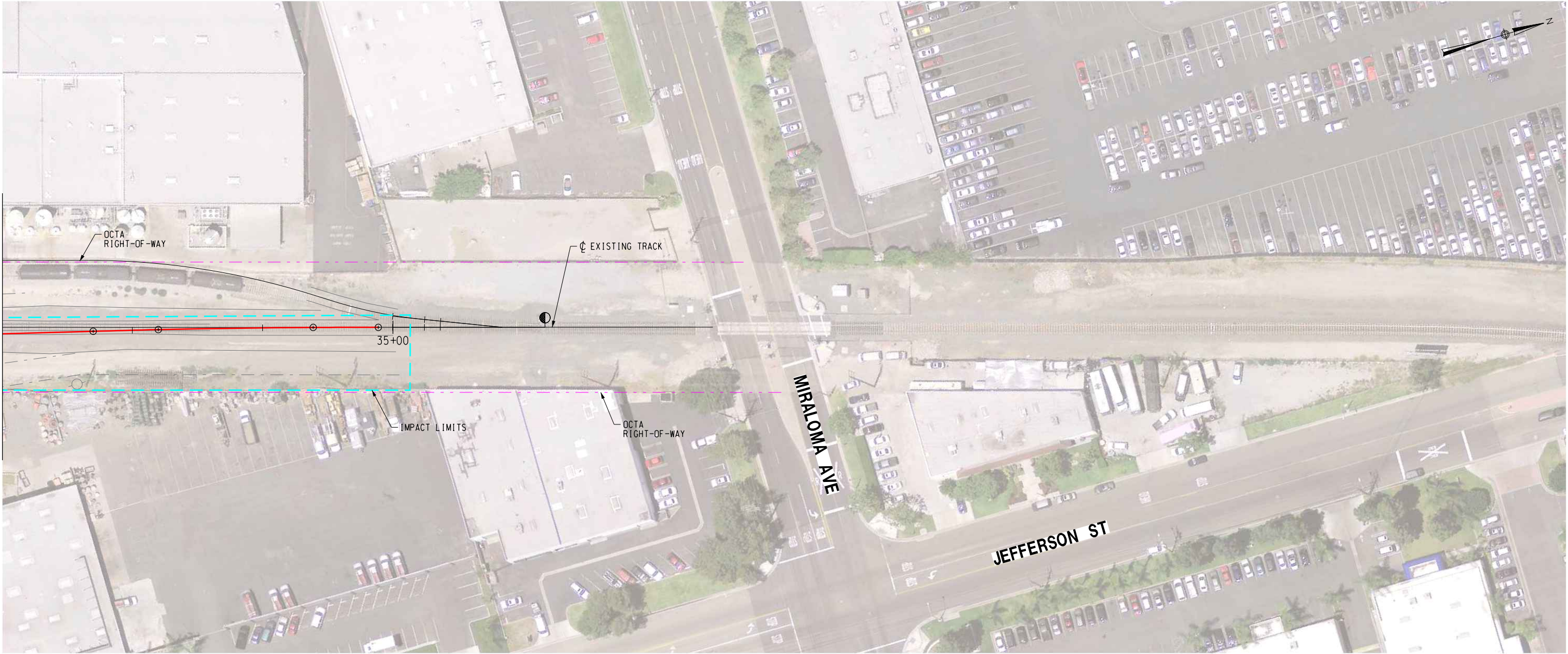
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DESIGNED BY	J. GONZALEZ
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CHECKED BY	A. SOKOL
APPROVED BY	A. SOKOL
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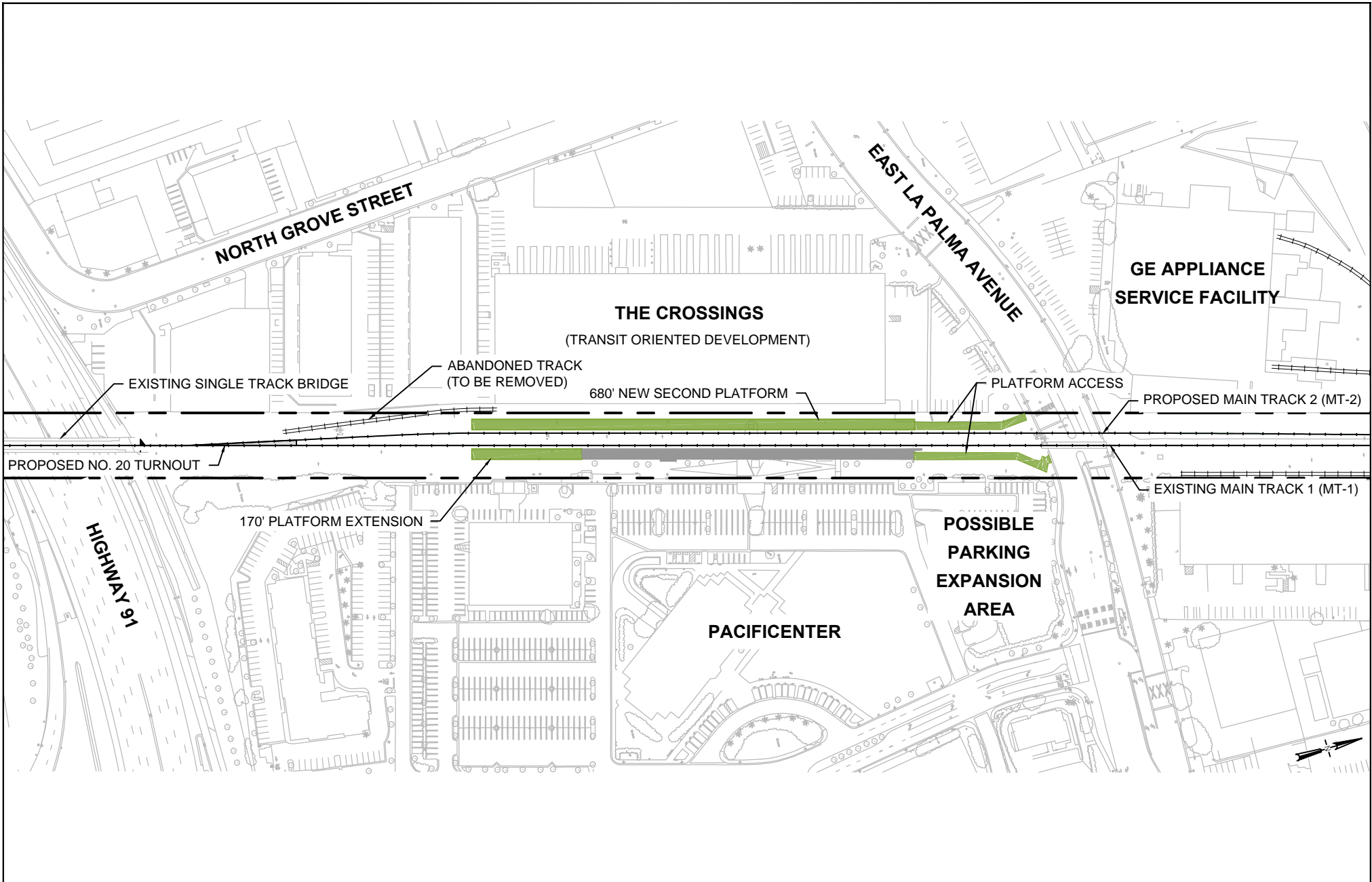
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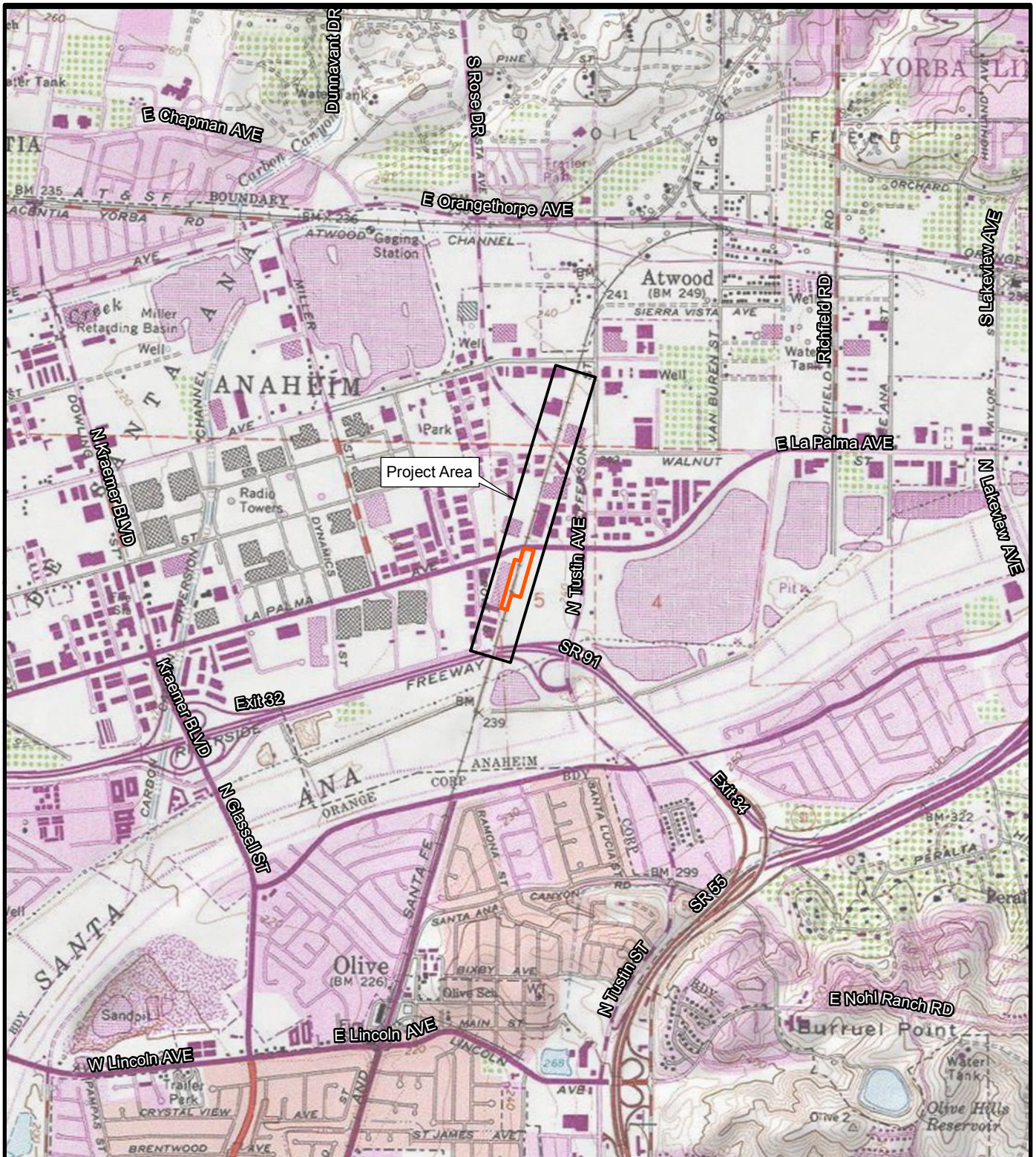
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ANAHEIM CANYON
METROLINK STATION PROJECT

PROJECT LIMITS
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CONTRACT NO.	C-4-1977
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LEGEND:

 Station Area Boundary



BASE MAP SOURCE:
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Scale In Feet

OCTA

Anaheim Metrolink
Station Project
Anaheim, California

FIGURE 2
USGS QUAD MAP

PN: 674694

DATE: 8/5/2016

CREATED BY: SA

REVIEWED BY: AW

ch2m

Attachment A

Representative Photographs

Representative Photographs



Photograph 1

Undeveloped Area of Anaheim Canyon Station Parking Lot



Photograph 2
View of Anaheim Canyon Station from La Palma Avenue Facing Southwest



Photograph 3
View of Project Area between La Palma Avenue and Tustin Avenue Facing Northeast



Photograph 4
View of Project Area between La Palma Avenue and Tustin Avenue Facing North

Attachment B

Historical Species Occurrences

Table 1*Historical Occurrences of Special-Status Plants in the Regional Vicinity of the Proposed Project.*

Scientific Name	Common Name	Status	Habitat
<i>Abronia maritima</i>	red sand-verbena	4.2	Coastal dunes.
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	1B.1	Chaparral, coastal scrub, desert dunes.
<i>Aphanisma blitoides</i>	aphanisma	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub.
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	FE 1B.1	Chaparral, coastal scrub, valley and foothill grassland.
<i>Atriplex coulteri</i>	Coulter's saltbush	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland.
<i>Atriplex pacifica</i>	south coast saltscale	1B.2	Coastal scrub, coastal bluff scrub, playas, coastal dunes.
<i>Atriplex parishii</i>	Parish's brittlescale	1B.1	Vernal pools, chenopod scrub, playas.
<i>Atriplex serenana</i> var. <i>davidsonii</i>	Davidson's saltscale	1B.2	Coastal bluff scrub, coastal scrub.
<i>Baccharis malibuensis</i>	Malibu baccharis	1B.1	Coastal scrub, chaparral, cismontane woodland, riparian woodland.
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	FT SE 1B.1	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools.
<i>Calandrinia breweri</i>	Brewer's calandrinia	4.2	Sandy or loamy, disturbed sites and burns in chaparral and coastal scrub.
<i>Calochortus catalinae</i>	Catalina mariposa lily	4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland.
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest.
<i>Calochortus weedii</i> var. <i>intermedius</i>	intermediate mariposa-lily	1B.2	Coastal scrub, chaparral, valley and foothill grassland.
<i>Calystegia felix</i>	lucky morning-glory	3.1	Meadows and seeps, riparian scrub.
<i>Camissoniopsis lewisii</i>	Lewis' evening-primrose	3	Sandy or clay soils in coastal bluff scrub, cismontane woodlands, coastal dunes, coastal scrub, valley and foothill grassland.
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	1B.1	Marshes and swamps (margins), valley and foothill grassland, vernal pools.
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	1B.1	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland.
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's-beak	FE	Coastal salt marsh, coastal dunes.

Table 1*Historical Occurrences of Special-Status Plants in the Regional Vicinity of the Proposed Project.*

Scientific Name	Common Name	Status	Habitat
		SE 1B.2	
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower	FC SE 1B.1	Coastal scrub, valley and foothill grassland.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	long-spined spineflower	1B.2	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools.
<i>Convolvulus simulans</i>	small-flowered morning-glory	4.2	Clay and serpentinite seeps in chaparral (openings), coastal scrub, and valley and foothill grasslands.
<i>Deinandra paniculata</i>	paniculate tarplant	4.2	Usually vernal mesic, sometimes sandy coastal scrub, valley and foothill grasslands, and vernal pools.
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE SE 1B.1	Sandy soils in chaparral, cismontane woodlands, and coastal scrub (alluvial fan).
<i>Dudleya multicaulis</i>	many-stemmed dudleya	1B.2	Chaparral, coastal scrub, valley and foothill grassland.
<i>Dudleya stolonifera</i>	Laguna Beach dudleya	FT ST 1B.1	Rocky chaparral, cismontane woodlands, coastal scrub, and valley and foothill grasslands.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woollystar	FE SE 1B.1	Coastal scrub, chaparral.
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	FE SE 1B.1	Vernal pools, coastal scrub, valley and foothill grassland.
<i>Harpagonella palmeri</i>	Palmer's grapplinghook	4.2	Clay; open grassy areas within shrubland in chaparral, coastal scrub, and valley and foothill grasslands.
<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Los Angeles sunflower	1A	Marshes and swamps (coastal salt and freshwater).
<i>Hesperocyparis forbesii</i>	Tecate cypress	1B.1	Closed-cone coniferous forest, chaparral.
<i>Hordeum intercedens</i>	vernal barley	3.2	Coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), and vernal pools.
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	1B.1	Chaparral, cismontane woodland, coastal scrub.
<i>Isocoma menziesii</i> var. <i>decumbens</i>	decumbent goldenbush	1B.2	Coastal scrub, chaparral
<i>Juglans californica</i>	Southern California black walnut	4.2	Alluvial chaparral, cismontane woodland, coastal scrub, and riparian woodlands.

Table 1*Historical Occurrences of Special-Status Plants in the Regional Vicinity of the Proposed Project.*

Scientific Name	Common Name	Status	Habitat
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	southwestern spiny rush	4.2	Coastal dunes (mesic), meadows and seeps (alkaline seeps), and marshes and swamps (coastal salt).
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	1B.1	Coastal salt marshes, playas, vernal pools.
<i>Lepechinia cardiophylla</i>	heart-leaved pitcher sage	1B.2	Closed-cone coniferous forest, chaparral, cismontane woodland.
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	4.3	Chaparral, coastal scrub.
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	ocellated Humboldt lily	4.2	Openings in chaparral, cismontane woodlands, coastal scrub, lower montane coniferous forests, and riparian woodlands.
<i>Monardella australis</i> ssp. <i>jokerstii</i>	Jokerst's monardella	1B.1	Lower montane coniferous forest, chaparral.
<i>Monardella hypoleuca</i> ssp. <i>intermedia</i>	intermediate monardella	1B.3	Chaparral, cismontane woodland, lower montane coniferous forest (sometimes).
<i>Nama stenocarpa</i>	mud nama	2B.2	Marshes and swamps.
<i>Nasturtium gambelii</i>	Gambel's water cress	FE ST 1B.1	Marshes and swamps.
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	1B.1	Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps.
<i>Nemacaulis denudata</i> var. <i>denudata</i>	coast woolly-heads	1B.2	Coastal dunes.
<i>Nolina cismontana</i>	chaparral nolina	1B.2	Chaparral, coastal scrub.
<i>Orcuttia californica</i>	California Orcutt grass	FE SE 1B.1	Vernal pools.
<i>Penstemon californicus</i>	California beardtongue	1B.2	Chaparral, lower montane coniferous forest, pinyon and juniper woodland.
<i>Pentachaeta aurea</i> ssp. <i>allenii</i>	Allen's pentachaeta	1B.1	Valley and foothill grasslands, coastal scrub.
<i>Phacelia hubbyi</i>	Hubby's phacelia	4.2	Gravelly, rocky, and/or talus in chaparral, coastal scrub, and valley and foothill grasslands.
<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i>	south coast branching phacelia	3.2	Sandy, sometimes rocky soils in chaparral, coastal dunes, coastal scrub, and marshes and swamps (coastal salt).
<i>Pickeringia montana</i> var. <i>tomentosa</i>	woolly chaparral-pea	4.3	Gabbroic, granitic, clay in chaparral.
<i>Polygala cornuta</i> var. <i>fishiae</i>	Fish's milkwort		Chaparral, cismontane woodlands, and riparian woodlands.

Table 1*Historical Occurrences of Special-Status Plants in the Regional Vicinity of the Proposed Project.*

Scientific Name	Common Name	Status	Habitat
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	2B.2	Riparian woodland, cismontane woodland, coastal scrub, chaparral.
<i>Quercus engelmannii</i>	Engelmann oak	4.2	Chaparral, cismontane woodland, riparian woodland, and valley and foothill grasslands.
<i>Romneya coulteri</i>	Coulter's matilija poppy	4.2	Often in burns in chaparral and coastal scrub.
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	1B.2	Marshes and swamps (assorted shallow freshwater).
<i>Senecio aphanactis</i>	chaparral ragwort	2B.2	Chaparral, cismontane woodland, coastal scrub.
<i>Sidalcea neomexicana</i>	Salt Spring checkerbloom	2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub.
<i>Suaeda esteroa</i>	estuary seablite	1B.2	Marshes and swamps.
<i>Symphyotrichum defoliatum</i>	San Bernardino aster	1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.

Sources:

California Department of Fish and Wildlife – Natural Diversity Database Nine Quad Search for La Habra, Yorba Linda, Prado Dam, Anaheim, Orange, Black Star Canyon, Newport Beach, Tustin, and El Toro (CDFW, 2016).

California Native Plant Society – Rare and Endangered Plant Inventory Nine Quad search for La Habra, Yorba Linda, Prado Dam, Anaheim, Orange, Black Star Canyon, Newport Beach, Tustin, and El Toro (CNPS, 2016).

Status Codes:

FE – Federally-listed Endangered

FT – Federally-listed Threatened

FC – Federal Candidate for Listing

SE – State Listed Endangered

ST – State Listed Threatened

SSC – State Species of Special Concern

California Native Plant Society Rare Plant Rank:

1B – Plants Rare, Threatened, or Endangered in California and Elsewhere

2B – Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3 – Plants About Which More Information is Needed - A Review List

4 – Plants of Limited Distribution - A Watch List

.1 – Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 – Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3 – Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Table 2*Historical Occurrences of Special-Status Animals in the Regional Vicinity of the Proposed Project.*

Scientific Name	Common Name	Status	Habitat
Amphibians			
<i>Anaxyrus californicus</i>	arroyo toad	FE SSC	Semi-arid regions near washes or intermittent streams, including valley-foothill, desert riparian, and desert wash.
<i>Lithobates pipiens</i>	northern leopard frog	SSC	Native range is east of Sierra Nevada-Cascade Crest. Near permanent or semi-permanent water in a variety of habitats.
<i>Spea hammondi</i>	western spadefoot	SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.
<i>Taricha torosa</i>	Coast Range newt	SSC	Coastal drainages from Mendocino County to San Diego County.
Birds			
<i>Agelaius tricolor</i>	tricolored blackbird	SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California.
<i>Ammodramus savannarum</i>	grasshopper sparrow	SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes.
<i>Aquila chrysaetos</i>	golden eagle	FP	Rolling foothills, mountain areas, sage-juniper flats, and desert.
<i>Asio otus</i>	long-eared owl	SSC	Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses.
<i>Athene cunicularia</i>	burrowing owl	SSC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.
<i>Buteo swainsoni</i>	Swainson's hawk	ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.
<i>Campylorhynchus brunneicapillus sandiegensis</i>	coastal cactus wren	SSC	Southern California coastal sage scrub.
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT SSC	Sandy beaches, salt pond levees and shores of large alkali lakes.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.
<i>Elanus leucurus</i>	white-tailed kite	FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland.
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE SE	Riparian woodlands in Southern California.
<i>Haliaeetus leucocephalus</i>	bald eagle	SE FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within one mile of water.

Table 2

Historical Occurrences of Special-Status Animals in the Regional Vicinity of the Proposed Project.

Scientific Name	Common Name	Status	Habitat
<i>Icteria virens</i>	yellow-breasted chat	SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	ST FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays.
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	SE	Inhabits coastal salt marshes, from Santa Barbara south through San Diego County.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT SSC	Obligate, permanent resident of coastal sage scrub below 2500 feet in Southern California.
<i>Rallus longirostris levipes</i>	light-footed clapper rail	TE SE FP	Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation.
<i>Riparia riparia</i>	bank swallow	ST	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert.
<i>Sternula antillarum browni</i>	California least tern	FE SE FP	Nests along the coast from San Francisco Bay south to northern Baja California.
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE SE	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 feet.
Crustaceans			
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE	Endemic to vernal pools in San Diego and Orange County mesas.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	Endemic in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.
Fish			
<i>Catostomus santaanae</i>	Santa Ana sucker	FT	Endemic to Los Angeles Basin south coastal streams.
<i>Rhinichthys osculus</i> ssp. 3	Santa Ana speckled dace	SSC	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system.
Mammals			
<i>Antrozous pallidus</i>	pallid bat	SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.
<i>Choeronycteris mexicana</i>	Mexican long-tongued bat	SSC	Occasionally found in San Diego County, which is on the periphery of their range.
<i>Eumops perotis californicus</i>	western mastiff bat	SSC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral.

Table 2*Historical Occurrences of Special-Status Animals in the Regional Vicinity of the Proposed Project.*

Scientific Name	Common Name	Status	Habitat
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	SSC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County.
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	SSC	Variety of arid areas in Southern California; including pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.
<i>Nyctinomops macrotis</i>	big free-tailed bat	SSC	Low-lying arid areas in Southern California.
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE SSC	Inhabits the narrow coastal plains from the Mexican border north to El Segundo, Los Angeles County.
<i>Sorex ornatus salicornicus</i>	southern California saltmarsh shrew	SSC	Coastal marshes in Los Angeles, Orange and Ventura counties.
<i>Taxidea taxus</i>	American badger	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.
Reptiles			
<i>Aspidoscelis hyperythra</i>	orangethroat whiptail	SSC	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats.
<i>Crotalus ruber</i>	red-diamond rattlesnake	SSC	Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains.
<i>Emys marmorata</i>	western pond turtle	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches; usually with aquatic vegetation, below 6000 ft elevation.
<i>Phrynosoma blainvillii</i>	coast horned lizard	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.
<i>Salvadora hexalepis virgulata</i>	coast patch-nosed snake	SSC	Brushy or shrubby vegetation in coastal Southern California.
<i>Thamnophis hammondi</i>	two-striped gartersnake	SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.

Source:

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