

Air Quality and Greenhouse Gas Analysis for Anaheim Canyon Metrolink Station Project, Orange County, California

PREPARED FOR: Orange County Transportation
Authority/ Federal Transit
Administration

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1. 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. 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.

2. Affected Environment

2.1 Project Area Setting

The project is located in the City of Anaheim in Orange County, California, within the South Coast Air Basin. The project area is urban and developed, consisting of residential housing, commercial or light industrial facilities, and transportation corridors. The closest residential housing is The Crossing apartment community located west of the station on E. La Palma Avenue. Anaheim Medical Center is approximately 0.2 miles west of the station. The closest school is approximately 1 mile north of the station.

2.2 Air Quality and Attainment Status

The project is located in an area that is designated nonattainment for the ozone (O_3) and particulate matter with diameter equal to or smaller than 2.5 micrometers ($PM_{2.5}$), and is in maintenance for particulate matter with diameters less than or equal to 10 micrometers (PM_{10}), nitrogen dioxide (NO_2), and carbon monoxide (CO) under the National Ambient Air Quality Standards (NAAQS). The area is designated as nonattainment for the California Ambient Air Quality Standards (CAAQS) for O_3 , PM_{10} and $PM_{2.5}$. The area is in attainment or unclassified for all other pollutants under NAAQS and CAAQS (EPA, 2016; ARB, 2016a).

South Coast Air Quality Management District (SCAQMD) operates a network of ambient monitoring stations in the South Coast Air Basin (SCAB), which includes Orange County where the Project is located. The monitoring station closest to the Project area, approximately 6 miles to the southwest, is the West

Pampas Lane Station. The West Pampas Lane Station monitors the concentrations of ozone, CO, NO_x, PM₁₀, and PM_{2.5}. SO₂ concentrations are monitored at this site. The Costa Mesa station located at 2850 Mesa Verde Drive East is the closest station that monitors SO₂ concentrations.

The maximum pollutant levels measured and the number of days each year the ambient concentrations were above the federal and California standards from 2013 to 2015 are presented in Table 2-1. As shown in Table 2-1, ozone concentrations exceeded the federal and California standards during 2 of the last 3 years. The PM₁₀ concentrations also exceeded the 24-hour California standards during the last 3 years. The federal PM₁₀ standard, however, was not exceeded. PM_{2.5} concentrations exceeded the 24-hour federal standard for all 3 years. CO, SO₂, and NO₂ concentrations did not exceed federal or California standards in the 3 years.

Table 2-1 Summary of Maximum Monitored Ambient Air Quality Near the Project Study Area

| Pollutant | Standards/Year | Maximum Concentration (ppm) | | Number of Exceedance | |
|-----------------|----------------|-----------------------------|------------------------|------------------------|--------------------------|
| | | 1 hour | 8 hour | State 1 hour/8 hour | Federal 1 hour/8 hour |
| CO | NAAQS | 35 | 9 | | |
| | CAAQS | 20 | 9 | | |
| | 2013 | 3.1 | 2.2 | | |
| | 2014 | 3.1 | 2.1 | | |
| | 2015 | 3.4 | 2.4 | | |
| Pollutant | Standards/Year | Maximum Concentration (ppm) | | Number of Exceedance | |
| | | 1 hour | 8 hour | State 1 hour/8 hour | Federal 1 hour/8 hour |
| Ozone | NAAQS | NA | 0.07 | | |
| | CAAQS | 0.09 | 0.07 | | |
| | 2013 | 0.084 | 0.070 | | |
| | 2014 | 0.111 | 0.081 | | |
| | 2015 | 0.100 | 0.080 | | |
| Pollutant | Standards/Year | Maximum Concentration (ppm) | | Number of Exceedance | |
| | | 1-hour | Annual Arithmetic Mean | State 1 hour/Annual | Federal 1 hour/Annual |
| NO ₂ | NAAQS | 0.10 | 0.053 | | |
| | CAAQS | 0.18 | 0.03 | | |
| | 2013 | 81.5 | 17 | | |
| | 2014 | 75.8 | 15 | | |
| | 2015 | 59.1 | 15 | | |

Table 2-1 Summary of Maximum Monitored Ambient Air Quality Near the Project Study Area

| Pollutant | Standards/Year | Maximum Concentration ($\mu\text{g}/\text{m}^3$) | | Number of Exceedance | |
|-------------------|----------------|--|------------------------|-------------------------|---------------------------|
| | | 24 hour | Annual Arithmetic Mean | State 24 hour/Annual | Federal 24 hour |
| PM ₁₀ | NAAQS | 150 | NA | | |
| | CAAQS | 50 | 20 | | |
| | 2013 | 77 | 25.4 | 1/1 | 0 |
| | 2014 | 85 | 26.8 | 2/1 | 0 |
| | 2015 | 59 | 25.5 | 2/1 | 0 |
| Pollutant | Standards/Year | Maximum Concentration ($\mu\text{g}/\text{m}^3$) | | Number of Exceedance | |
| | | 24 hour | Annual Arithmetic Mean | State Annual | Federal 24 hour/Annual |
| PM _{2.5} | NAAQS | 35 | 12.0 | | |
| | CAAQS | NA | 12 | | |
| | 2013 | 47.7 | 10.1 | 0 | 1/0 |
| | 2014 | 46.5 | 16.1 | 0 | 4/0 |
| | 2015 | 53.8 | 14.8 | 0 | 3/0 |
| Pollutant | Standards/Year | Maximum Concentration (ppm) | | Number of Exceedance | |
| | | 1-hour | 24-hour | State 1-hour/24-hour | Federal 1-hour/24-hour |
| SO ₂ | NAAQS | 0.075 | NA | | |
| | CAAQS | 0.25 | 0.04 | | |
| | 2013 | 4.1 | 1.2 | 0/0 | 0/0 |
| | 2014 | 8.8 | 1.4 | 0/0 | 0/0 |
| | 2015 | 4.5 | 1.1 | 0/0 | 0/0 |

Source: ARB, 2016d. <http://www.arb.ca.gov/adam/topfour/topfourdisplay.php>:

United States Environmental Protection Agency (USEPA) http://www.epa.gov/airquality/airdata/ad_rep_mon.html

Note: Table values as of September 4, 2016

Concentrations of ozone, NO_x, CO, PM₁₀, and PM_{2.5} are from the West Pampas Lane station

SO₂ concentrations are from 2850 Mesa Verde Drive East station.

2.3 GHG Emissions

In the United States, the main source of GHG emissions is electricity generation, followed by transportation. In California, transportation sources (passenger cars, light-duty trucks, other trucks, buses, and motorcycles) make up the largest category of GHG-emitting sources. In 2014, the most recent year for which data are provided, the annual California statewide GHG emissions were 441.5 million metric tons of CO₂-equivalent (ARB, 2016b). The transportation sector accounts for about 36 percent of the statewide GHG emissions inventory. The industrial sector accounts for about 21 percent of the total statewide GHG emissions inventory. The dominant GHG emitted is CO₂, primarily from fossil fuel combustion.

3. Air Quality and GHG Impacts - NEPA

3.1 Long-Term Operational Impacts

Transportation Conformity

Federal Clean Air Act Section 176(c) and transportation conformity rule prohibit the federal agencies from funding, authorizing, or approving plans, programs, or projects that are not conforming to State Implementation Plan (SIP) for achieving the goals of Clean Air Act requirements related to the NAAQS. Conformity requirements apply in nonattainment and maintenance areas for the NAAQS, and only for the specific NAAQS that are or were violated.

The project would have federal funding and is a transit project located in a federal nonattainment area for ozone, and a federal maintenance area for CO. However, this project is exempt from transportation conformity determination. According to 40 CFR 93.126 Table 2: Exempt Projects, a project that is for reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures), or for rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way, is exempt from conformity determination.

Nevertheless, the project will utilize locomotives that comply with the federal and state emission standards. The proposed project is to improve public transit and is consistent with one of the 16 Transportation Control Measures (TCM) under Section 108(f)(1)(A) of the Federal Clean Air Act. The project is listed as a TCM subject to timely implementation and supports the reduction of emissions and assist in meeting SIP requirements. The project (project ID: ORA085004) is included in the project list of the SCAG adopted 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG, 2016a), and is in the EPA/FHWA approved 2015 SCAG Federal Transportation Improvement Program (FTIP) through Amendment 20 and SCAG 2012-2015 RTP through Amendment #2 (SCAG, 2016b). Inclusion of the project in the RTP and TIP demonstrated that the project would be consistent with the regional SIP, and would not cause substantial adverse regional air quality impacts.

CO and PM₁₀/PM_{2.5} Hot Spots:

Although the project is not subject to a conformity determination for CO and PM₁₀/PM_{2.5}, the potential for CO and PM₁₀/PM_{2.5} hot spots were evaluated for the project to demonstrate that the project would not cause new violations or worsen existing violations to the NAAQS and CAAQS for CO and PM₁₀/PM_{2.5}.

In general, CO and PM₁₀/PM_{2.5} hot spots are likely occur at affected intersections with increased traffic congestion and/or at locations with substantial increases in diesel truck traffic. The improvements at the Anaheim Canyon Metrolink station are specific to track and platform improvements. These improvements do not generate new train trips to the project area but allow for improved efficiency of train mobility and service at the station. Further, the project is not anticipated to attract large amounts of diesel vehicles or cause traffic congestion at local intersections near the project, therefore no localized CO and PM₁₀/PM_{2.5} hotspots would not occur at intersections near the station. The project is not expected to cause increase of localized CO and PM₁₀/PM_{2.5} concentrations that cause new violations or worsen the existing violations of CO and PM₁₀/PM_{2.5} NAAQS.

Mobile Source Air Toxics

U. S. EPA identified a set of mobile source air toxics (MSAT) that are known as Priority MSAT that include benzene, formaldehyde, acetaldehyde, acrolein, 1,3-butadiene, naphthalene, polycyclic organic matter, and diesel particulate matter/diesel exhaust organic gases. Among these MSATs, diesel exhaust PM is a growing area of interest.

The potential MSAT effects from construction of the project would be relatively low because the construction is short-term and over a small localized area. The potential long-term MSAT impacts would be from operation of the station and its effects on traffic changes on nearby roadways. The project is not expected to induce additional train trips to the project area, therefore, the project would not result in additional MSAT emissions associated with train trips in the project area. The project is not expected to cause a meaningful change in traffic volumes, especially diesel traffic, near the stations or elsewhere to cause adverse MSAT effects. In addition, MSAT emissions are expected to decrease over time due to nationally mandated cleaner vehicles and fuels (even after accounting for VMT growth), which will result in lower MSAT emissions in the future. As such, because the project is an exempt project per 40 CFR 93.126 and it would have no meaningful MSAT effects. No further MSAT analysis is needed.

3.2 Short-Term Constructions Impacts

During construction, short-term air quality impacts would occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other construction-related activities. Emissions from construction equipment also are expected and would include CO, NO_x, volatile organic compounds (VOCs), directly-emitted PM₁₀ and PM_{2.5}, and MSATs such as diesel PM.

Construction emissions of NO_x, CO, VOCs, SO₂, PM₁₀, and PM_{2.5} from the project were estimated using CalEEMod (CAPCOA, 2013). Project-specific equipment types and daily usages during each phase were based on the current project design and anticipated overall activities. The CalEEMod default horsepower ratings and load factors for the equipment were used in the emissions calculations when project specific data was not readily available.

A summary of the annual and maximum daily construction emissions are shown in Table 3-1. Table 3-1 provides the worst-case daily construction emissions, taking into account the overlapping phases that may occur simultaneously. It is anticipated that due to the limited size of the site, the proposed equipment for the overlapping phases would not operate at the same time. Therefore, the emission calculation approach used to predict maximum daily construction emissions is conservative and actual daily emissions are expected to be lower than those estimated in this analysis.

Table 3-1: Summary of Worst-Case Maximum Construction Daily Emissions

| | VOC | NO _x | CO | SO ₂ | PM ₁₀ | PM _{2.5} |
|-------------------|----------|-----------------|----------|-----------------|------------------|-------------------|
| | Ton/year | Ton/year | Ton/year | Ton/year | Ton/year | Ton/year |
| Construction 2019 | 0.20 | 1.89 | 1.78 | 0.0043 | 0.22 | 0.11 |
| Construction 2020 | 0.071 | 0.56 | 0.83 | 0.0024 | 0.15 | 0.057 |
| | Lb/day | Lb/day | Lb/day | Lb/day | Lb/day | Lb/day |
| Maximum Daily | 8.53 | 81.66 | 65.08 | 0.16 | 6.86 | 4.23 |

The project construction footprint is within the existing station and ROW and construction activities would last for approximately 18 months. The project would use construction vehicles and equipment that meets the federal and state emission standards and fleet requirements. Construction activities would comply with the SCAQMD Rule 403 and would implement BMPs to reduce fugitive dust emissions. Construction emissions from project construction would be temporary and limited to a small footprint within the station area, and would have a less than significant impacts on air quality.

3.3 Greenhouse Gases

The Council on Environmental Quality (CEQ) released final guidance on the consideration of GHG in National Environmental Policy Act (NEPA) documents for all federal actions in August 2016. The final guidance provides a framework for agencies to consider both the effects of a proposed action on climate change, as indicated by its estimated greenhouse gas emissions, and the effects of climate change on a proposed action. However, currently, there is no EPA or FTA approved quantitative GHG emission thresholds applicable to the project for NEPA analysis. GHG impacts to the environment are discussed in Section 4.2, Greenhouse Gas CEQA Checklist.

4. Air Quality and GHG Impacts - CEQA

4.1 Air Quality CEQA Checklist

| Issues: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| <u>III. AIR QUALITY.</u> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

No Impact – Construction impacts of the proposed project would be temporary, and the potential emissions would be negligible compared to the regional emission inventory included in the SIP. In addition, construction of the project would be in compliance with the applicable state and South Coast Air Quality Management District (SCAQMD) regulations and required emission controls which are incorporated in the SIP emission reduction strategy. The number of train trips may increase in future years in comparison to the existing condition due to the projected growth of the region that

is unrelated to the project. However, the project itself does not generate new train trips but allow for improved efficiency of train mobility and service at the station by providing the second track at the station to reduce train idling time. Therefore, the project will be beneficial to air quality and would not be a substantial contribution to the regional emission budget.

As discussed in Section 3.1, the proposed project is a TCM that supports the reduction of emissions and assist in meeting SIP requirements. The project demonstrates its consistency with the regional air quality plans and policies by its inclusion in the SCAG's 2016 RTP/SCS (SCAG, 2016a), and the 2015 FTIP, each of which was determined to conform with the SIP, which include the air quality plan in SCAQMD's latest AQMP. Therefore, the project would be consistent with the regional and local air quality planning strategy, will not conflict with or obstruct implementation of the applicable air quality plan, and impacts would be less than significant.

b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact – The proposed project would not be expected to violate any air quality standard or contribute substantially to an existing or projected air quality violation. As discussed in Section 3.1 and in Checklist Question a, the project would not cause meaningful changes to the emissions from trains or vehicle miles traveled (VMT) during its operation. The project has the potential to reduce vehicle and train emissions near the station area by improving the efficiency of train travel and reducing train idling time at the station.

During construction, the project would use construction vehicles and equipment that meet the federal and state emission standards and fleet requirements. Construction activities would comply with the SCAQMD Rule 403 and would implement BMPs to reduce air pollutants emissions. The maximum daily construction emissions, as summarized in Table 4-1, are below the SCAQMD CEQA air quality significance thresholds for each of the pollutants.

Table 4-1: Comparison of Worst-Case Maximum Daily Construction Emissions with SCAQMD Thresholds

| | VOC | NO _x | CO | SO ₂ | PM ₁₀ | PM _{2.5} |
|-------------------------|--------|-----------------|--------|-----------------|------------------|-------------------|
| | lb/day | lb/day | lb/day | lb/day | lb/day | lb/day |
| Maximum Daily Emissions | 8.53 | 81.66 | 65.08 | 0.16 | 6.86 | 4.23 |
| SCAQMD Threshold | 75 | 100 | 550 | 150 | 150 | 55 |

Threshold Source: SCAQMD, 2015.

The project is not expected to have substantial emission increase during project construction or operation to violate any air quality standard or contribute substantially to an existing or projected air quality violation. Therefore, impacts would be less than significant.

c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact – According to the SCAQMD white paper Potential Control Strategies to Address Cumulative Impacts from Air Pollution, Appendix D Cumulative Impact Analysis Requirements Pursuant to CEQA (SCAQMD, 2003), projects that do not have significant impacts individually would generally not be cumulatively significant. Because the project construction and

operation emissions would not cause significant air quality impacts, the cumulative impact from the proposed project would be less than significant.

d. Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact – The proposed project would be located on the existing station and ROW which is surrounded by a mixture of residential, light industrial, and commercial development. Emissions during project construction would be temporary and are limited in a small area at the station. Construction activities will comply with SCAQMD rules on fugitive dust control, and will implement BMP to minimize impacts of air pollution emissions from construction equipment and activities to the nearby sensitive receptors such as the Crossing apartment community. The project will not generate additional train trips of the project area. The improved travel efficiency in the project area would be beneficial to air quality by reducing emissions from idling trains, as discussed in previous sections. Therefore, the proposed project would have a less than significant impact on sensitive receptors.

e. Would the project create objectionable odors affecting a substantial number of people?

Less Than Significant Impact – During project construction, objectionable odors could occur because of diesel-powered equipment operation. Such odors, however, would be short term and limited to the immediate vicinity of the activity. During project operations, odorous emissions from additional train trips would not cause substantial odor effects due to the limited time a train stops at the station. The closest residential receptor is the Crossing apartment community that is already subject to train emissions from the station without the project. Diesel emissions from the existing train travel have not caused significant odor nuisances to nearby residents or workers in the past. During operation, the diesel locomotive emissions near sensitive receptors would be reduced due to the reduce train idling time and the overall improved mobility and service of the station. Therefore, air quality impacts associated with odors during project construction and operations would be less than significant.

4.2 Greenhouse Gases Checklist

| Issues: | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| <u>VII. GREENHOUSE GAS EMISSIONS.</u> Would the project: | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact – The proposed project would result in a short-term increase in GHG emissions, approximately 534 metric tons of CO₂ equivalent, as estimated using CalEEMod, during construction. The project would not increase train trips in the project area, therefore, GHG emissions from locomotives would not increase from the project operation. In addition, the GHG emission would decrease from the improved Metrolink operation efficiency near the project area by providing the second track at the station to reduce train idling time. Therefore, the project would result in a less than significant impact from GHG emissions.

b. Would the project conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

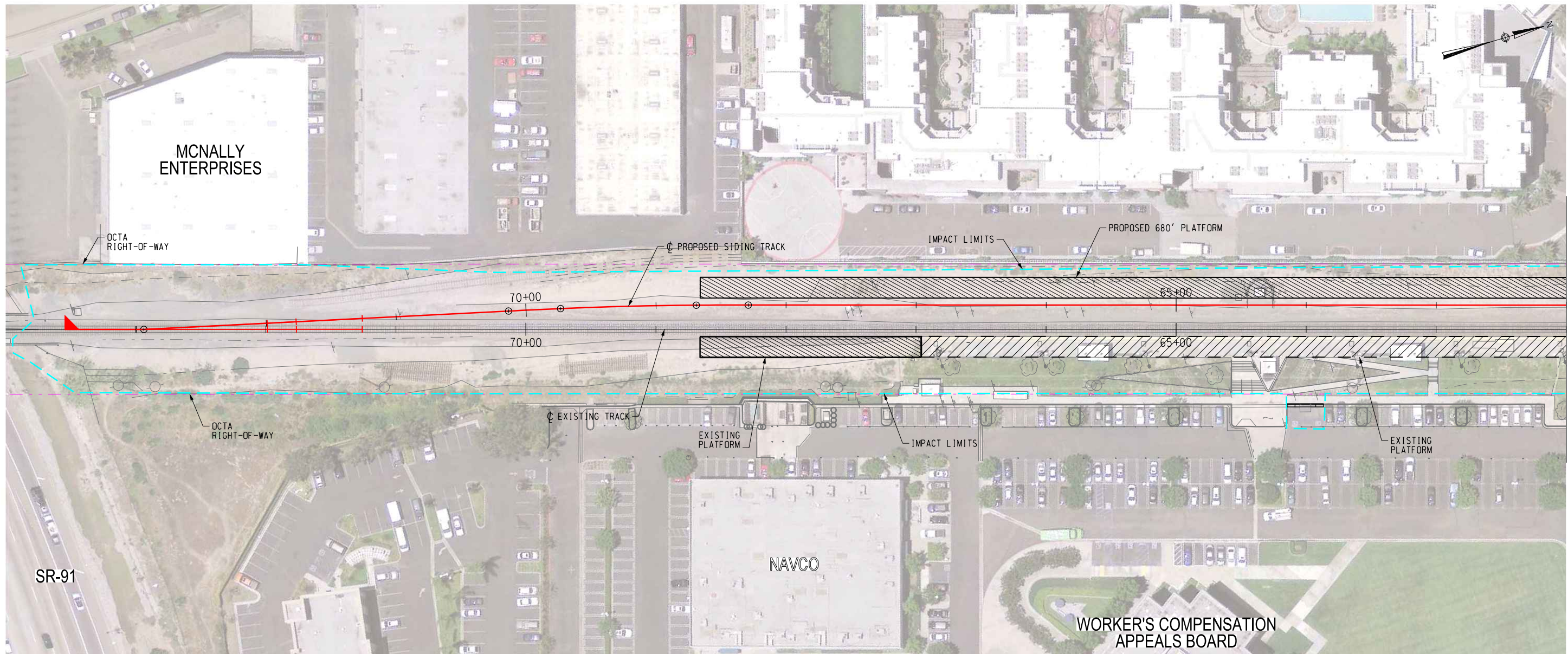
No Impact – The proposed project would not conflict with any applicable plan, policy, or regulation adopted to reduce GHG emissions. SB 375, also known as the Sustainable Communities and Climate Protection Act, requires each the State’s federally-designated MPO, including the SCAG, to develop a Sustainable Community Strategy (SCS) or an Alternative Planning Strategy (APS) that meets the regional GHG emission reduction targets for passenger vehicles set by the ARB. The target set for the SCAG region are 8% decrease in 2020 and a 13% decrease in 2035 relative to 2005 levels. On June 28, 2016, ARB determined that the SCAG’s 2016 RTP/SCS would achieve the GHG emissions reduction targets that the ARB established for the region for 2020 and 2035 (ARB, 2016c). As part of the projects listed in the RTP/SCS, the proposed project complies with the regional GHG emission reduction plan and strategy.

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TO ORANGE, CA
RR WEST

TO RIVERSIDE, CA
RR EAST



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

LEGEND:
PROJECT FOOTPRINT

FIGURE 1

80 0 80 160
HORIZONTAL SCALE: 1"=80'

NOT FOR CONSTRUCTION

INFORMATION CONFIDENTIAL:
All plans, drawings, specifications, and/or information furnished herewith shall remain the property of the Southern California Regional Rail Authority and shall be held confidential; and shall not be used for any purpose not provided for in agreements with the Southern California Regional Rail Authority.

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

30%
SUBMITTAL
NOT FOR CONSTRUCTION

 **METROLINK®**
 **100 Years**
 **ORANGE COUNTY
TRANSPORTATION
AUTHORITY**
SUBMITTED: _____ PROJECT MANAGER
APPROVED: _____

**ANAHEIM CANYON
METROLINK STATION PROJECT**
PROJECT LIMITS
SHEET 1 OF 4

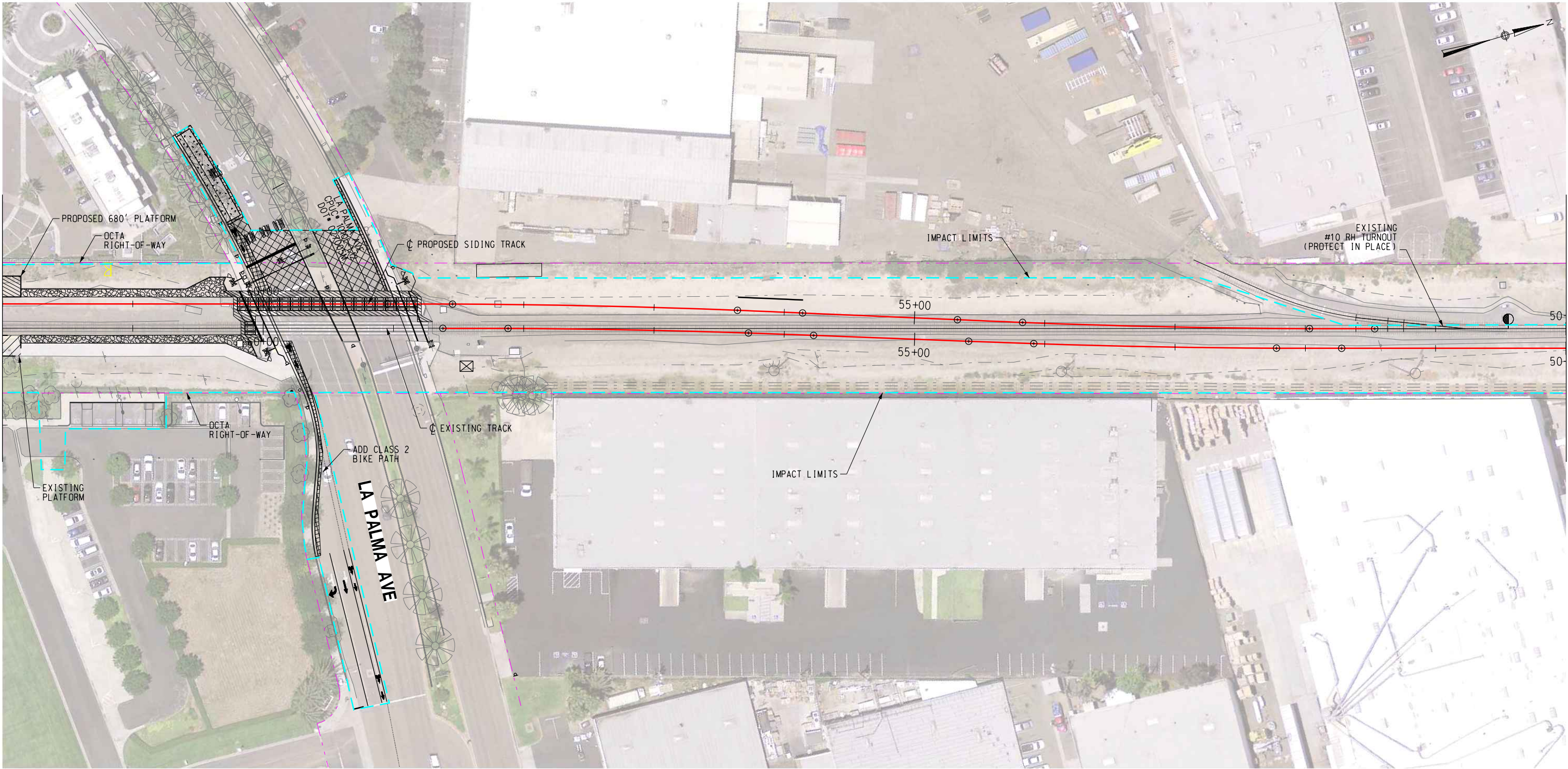
CONTRACT NO. C-4-1977
DRAWING NO. CK-101
REVISION SHEET NO.
1 OF 4
SCALE AS SHOWN

TO ORANGE, CA
RR WEST

TO RIVERSIDE, CA
RR EAST

MATCH LINE - MTRK 62+00
SEE DRAWING CK-101

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



LEGEND:
PROJECT FOOTPRINT

80 0 80 160
HORIZONTAL SCALE: 1"=80'

gonzajj

1/4/2017 11:17:52 AM

| | | | | | | |
|----------------------|--|------|------|----|------|------|
| NOT FOR CONSTRUCTION | | REV. | DATE | BY | SUB. | APP. |
| | | | | | | |

INFORMATION CONFIDENTIAL:
All plans, drawings, specifications, and/or information furnished herewith shall remain the property of the Southern California Regional Rail Authority and shall be held confidential; and shall not be used for any purpose not provided for in agreements with the Southern California Regional Rail Authority.

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

30%
SUBMITTAL
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**METROLINK®**



SUBMITTED: _____
PROJECT MANAGER

APPROVED: _____

**ANAHEIM CANYON
METROLINK STATION PROJECT**

PROJECT LIMITS
SHEET 2 OF 4

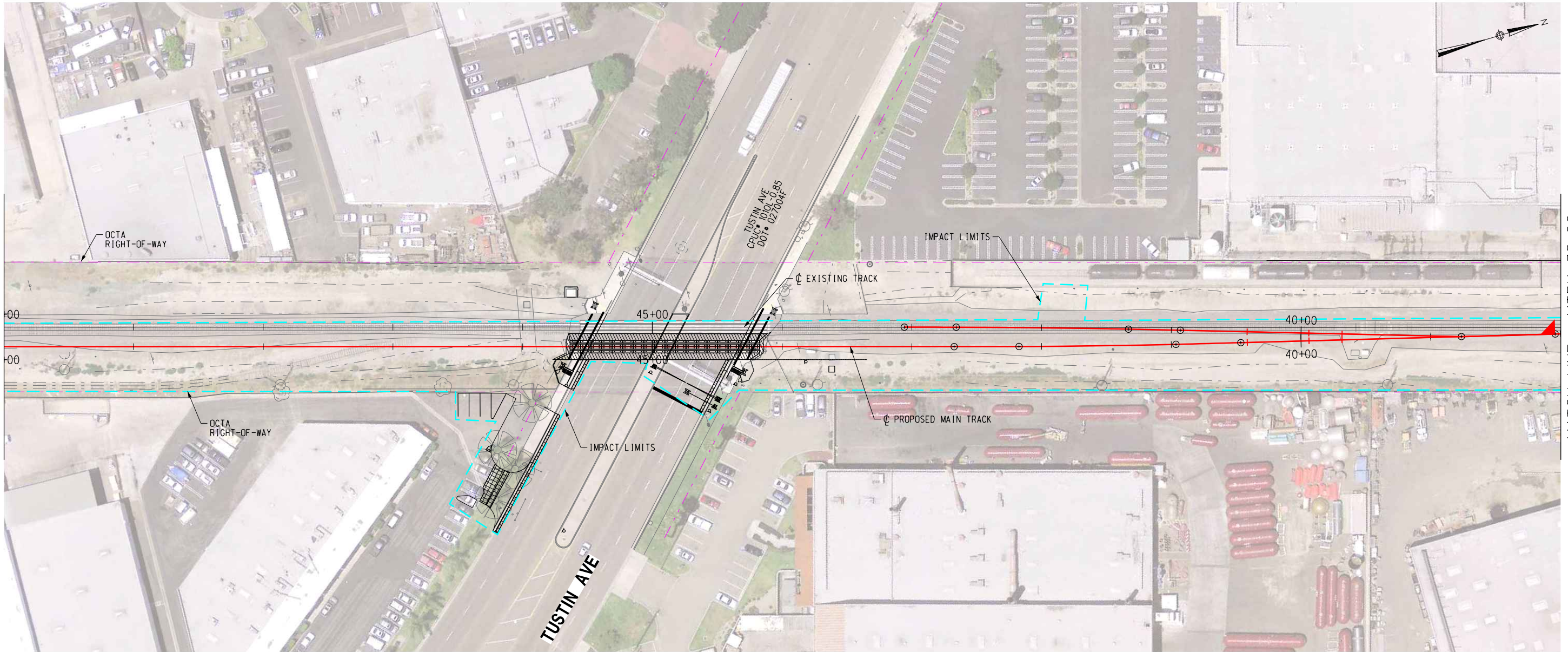
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|--------------|-----------|
| CONTRACT NO. | C-4-1977 |
| DRAWING NO. | CK-102 |
| REVISION | SHEET NO. |
| | 2 OF 4 |
| SCALE | AS SHOWN |

TO ORANGE, CA
RR WEST

TO RIVERSIDE, CA
RR EAST

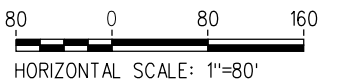
MATCH LINE - MTRK 50+00
SEE DRAWING CK-102

MATCH LINE - MTRK 38+00
SEE DRAWING CK-104



LEGEND:

PROJECT FOOTPRINT -----



| | | | | | | | |
|----------------------|------|----|--|-----|--|-----|--|
| NOT FOR CONSTRUCTION | | BY | | SUB | | APP | |
| | | | | | | | |
| REV. | DATE | | | | | | |

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| DATE | 01-20-2017 |

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ORANGE COUNTY
TRANSPORTATION
AUTHORITY

SUBMITTED: _____
PROJECT MANAGER

APPROVED: _____

**ANAHEIM CANYON
METROLINK STATION PROJECT**

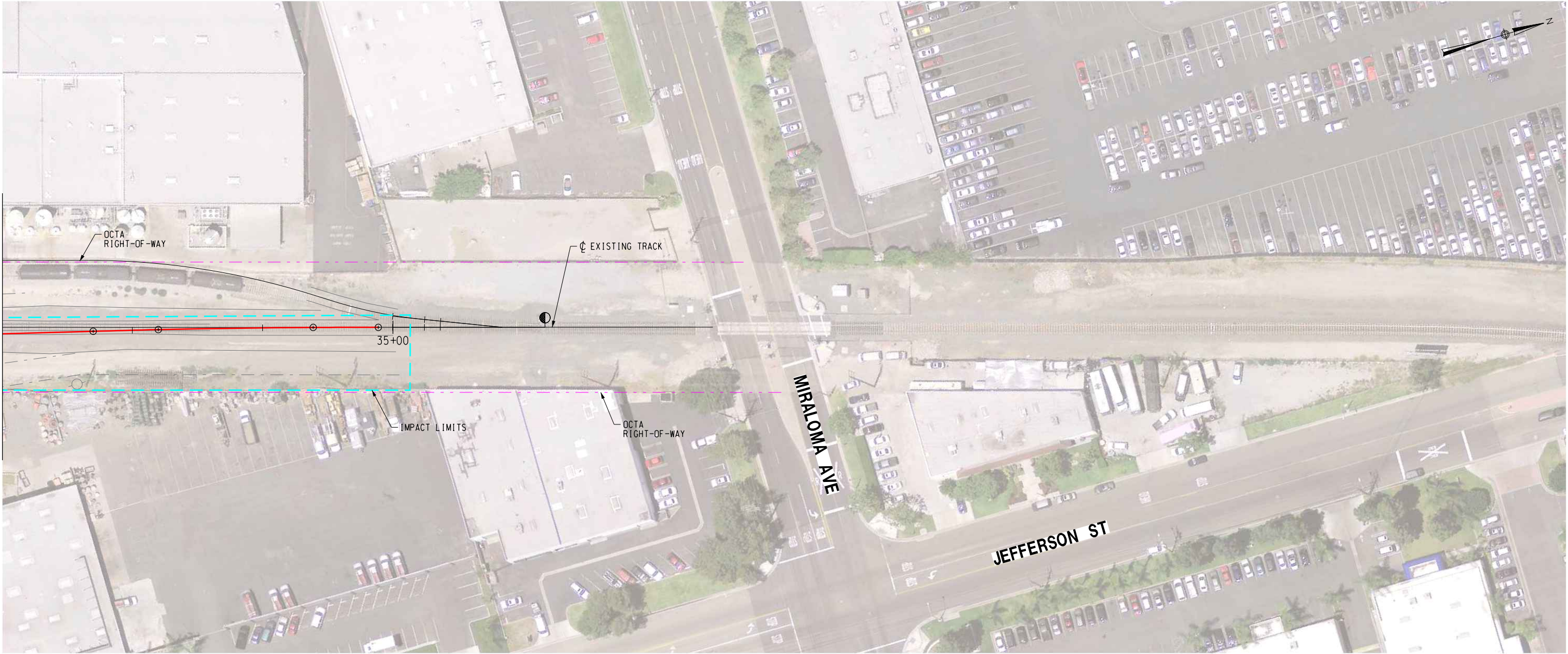
PROJECT LIMITS
SHEET 3 OF 4

| | |
|--------------|-----------|
| CONTRACT NO. | C-4-1977 |
| DRAWING NO. | CK-103 |
| REVISION | SHEET NO. |
| | 3 OF 4 |
| SCALE | AS SHOWN |

TO ORANGE, CA
RR WEST

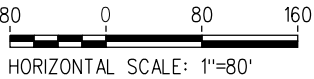
TO RIVERSIDE, CA
RR EAST

MATCH LINE - MTRK 38+00
SEE DRAWING CK-103



LEGEND:

PROJECT FOOTPRINT



| | | | | | | | |
|----------------------|------|----|--|-----|--|-----|--|
| NOT FOR CONSTRUCTION | | BY | | SUB | | APP | |
| | | | | | | | |
| REV. | DATE | | | | | | |

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TRANSPORTATION
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SUBMITTED: _____
PROJECT MANAGER

APPROVED: _____

ANAHEIM CANYON
METROLINK STATION PROJECT

PROJECT LIMITS
SHEET 4 OF 4

| | |
|--------------|-----------|
| CONTRACT NO. | C-4-1977 |
| DRAWING NO. | CK-104 |
| REVISION | SHEET NO. |
| | 4 OF 4 |
| SCALE | AS SHOWN |

