Ontario International Airport Connector Project

ONTCONNECTOR

APPENDIX E
CONSTRUCTION METHODS

October 2024

Prepared by:

San Bernardino County Transportation Authority
1170 West Third Street, Second Floor
San Bernardino, CA 92410-1715

TABLE OF CONTENTS

TABLES

FIGURES

ACRONYMS AND ABBREVIATIONS

BMPs	Best Management Practices
Cal/OSHA	California Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CFR	Code of Federal Regulations
EPB	Earth Pressure Balance
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
I-10	Interstate 10
I-15	Interstate 15
MSF	Maintenance and Storage Facility
MWD	Metropolitan Water District of Southern California
NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
OIAA	Ontario International Airport Authority
ONT	Ontario International Airport
Project	Ontario International Airport (ONT) Connector Project
ROW	right-of-way
SBCTA	San Bernardino County Transportation Authority
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
TBM	tunnel boring machine
UPRR	Union Pacific Railroad
USEPA	United States Environmental Protection Agency

1 INTRODUCTION

The purpose of this appendix is to describe the construction methods for the proposed San Bernardino County Transportation Authority (SBCTA) Ontario International Airport (ONT) Connector Project (Project). It presents the anticipated means and methods for the construction activities.

Construction of the Build Alternative would include a tunneling component, vent shaft, maintenance and storage facility (MSF), three stations and associated activities. In addition to adhering to regulatory requirements, development of the Build Alternative would employ conventional construction methods, techniques, and equipment. All work for development of the system would conform to accepted industry specifications and standards, including best management practices (BMPs). The Build Alternative engineering and construction would, at minimum, be completed in conformance with the regulations, guidelines, and criteria listed in the following section.

1.1 FEDERAL REGULATIONS:

- United States Department of Labor, Occupational Safety and Health Administration, 29 Code of Federal Regulations (CFR) 1926 Safety and Health Regulation for Construction;
- Clean Water Act Section 402, National Pollutant Discharge Elimination System (United States Environmental Protection Agency [USEPA] 2021);
- National Fire Protection Association (NFPA) Code 130 Means of Egress (NFPA 2024);
- NFPA 502, Standard for Road Tunnels, Bridges and Other Limited Access Highways (NFPA 2024);
- National Electrical Code (NFPA Code 70) (NFPA 2024);
- Federal Aviation Administration 7460 Obstruction Analysis/Air Space Analysis form;
- Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (FTA 2018);
- Federal Highway Administration (FHWA) NHI-09-010, Technical Manual for Design and Construction of Roads Tunnels-Civil Element (FHWA 2009); and
- National Historic Preservation Act (NHPA), as amended (54 United States Code Section 300101 et seq.), and its implementing regulations (36 CFR Part 800).

1.2 STATE REQUIREMENTS:

- California Division of Occupational Safety and Health (Cal/OSHA), Title 8, Division 1. Department of Industrial Relations, Chapter 4. Division of Industrial Safety (Section 01 35 23, Worksite Safety);
- California Building Code (California Building Standards Commission 2021);

- California Fire Code (California Building Standards Commission 2019);
- California Department of Transportation (Caltrans) Highway Design Manual;
- Caltrans Standard Plans (Caltrans 2018a); and
- Caltrans Standard Specifications (Caltrans 2018b).

1.3 REGIONAL AND LOCAL REQUIREMENTS:

- Metrolink (SCRRA Design) Criteria Manual 2024 (SCRRA 2024);
- ONT Ground Transportation Rules and Regulations (ONT 2018);
- San Bernardino County Department of Public Works, General Permit Conditions and Trench Specifications (San Bernardino County Department of Public Works 2019);
- San Bernardino County Department of Public Works, Standard Plans (San Bernardino County Department of Public Works 2022);
- San Bernardino County Department of Public Works Technical Guidance Document for Water Quality Management Plans (San Bernardino County Department of Public Works 2013);
- Union Pacific Railroad (UPRR) Plan Submittal Guidelines (UPRR 2019); and
- Metropolitan Water District of Southern California (MWD), Guidelines for Improvements and Construction Projects Proposed in the Area of Metropolitan's Facilities and Rights-of-Way (MWD 2018).

Construction Industry Standard Practices. All construction activities would conform to accepted industry specifications and standards, including BMPs. Construction housekeeping practices are methods that encourage the tidiness of construction sites and reduce construction related nuisances from affecting the general public. Construction Industry Standard Practices are methods considered as components of the Project based on the individual choices of the contractor. Typical Construction Industry Standard Practices may include but are not limited to the following:

- Air Quality and Dust Control
    - Dust Control - Control fugitive dust as required by South Coast Air Quality Management District (SCAQMD). District Rule 403 (SCAQMD 2005);
    - Watering of construction staging sites;
    - Heavy-duty, steel, track-out grates (i.e., rumble plates) would be staged at the entrance of the construction staging areas to capture dirt and soil debris from the wheels of trucks and construction equipment.

- Water Quality
  - Stormwater Pollution Prevention Plan is a site-specific, written document developed to identify potential sources of stormwater pollution at a construction site.
  - A BMP is a method used to prevent or control stormwater runoff and the discharge of pollutants, including sediment, into local waterbodies. Typical Water Quality BMPs include the use of:
    - Covering of stockpiles of earth and other construction related materials to prevent wind or water from transporting site material offsite.
    - Use of swaddles and drain inlet covers to prevent sediments and pollutants from conveying into storm drain systems.
- Traffic Control
  - Notifications of traffic control.
  - Coordination of closures with agencies having jurisdiction.
- Noise
  - Noise blankets to lessen noise between sensitive receptors and construction activities above noise thresholds specified by municipal codes or ordinances.

2 CONSTRUCTION SCENARIO

The Build Alternative would be delivered through a Progressive Design-Build contract in which a contractor is engaged early in the process to develop precise construction means and methods which are coordinated with the final design efforts. In a Progressive Design-Build contract, the contract for design and construction is separated into two distinct phases. The selection of the design-build firm is based primarily on their qualifications and design proposal. Because the design and budget has yet to be determined, construction cost and schedule is not part of the bidding or procurement process. As such, precise details of construction means/methods, and sequencing are not yet fully developed at the Project's current environmental phase. This section describes typical methods and sequencing which are representative of what would be developed in detail by the Design-Builder.

2.1 CONSTRUCTION SEQUENCING

Construction of the Build Alternative is projected to start in 2025 and end in 2031, for approximately 56 months. The preconstruction work contract would include geotechnical and hazardous material field surveys to identify potential hazards and constraints related to the design and construction activities. Construction would commence with site preparation for the construction staging areas and the tunnel boring machine (TBM) launching and receiving pits. After demolition and site clearing, conflicting utilities would be relocated or protected-in-place. Construction would then proceed with temporary roadway reconfiguration or restriping for mass excavation activities related to the proposed cut-and-cover Project elements.

The TBM would be launched from the Cucamonga Metrolink Station to construct the tunnel. Cut-and-cover of excavation, including temporary shoring, and mass excavation would be applied to construct the TBM launching and receiving pits. Generally, stations would be built simultaneously with or following guideway construction. However, construction of the Cucamonga Station may need to occur after the completion of all excavation and in-tunnel work. The sequence of construction activities will be confirmed in a future design phase prior to construction. Mechanical, electrical, plumbing, fire protection, communications, and security systems would be installed after tunnel construction. Ancillary facilities, final roadway reconstruction, and landscaping would typically follow guideway construction.

Most construction activities would occur during daytime hours between 7:00 a.m. and 5:00 p.m. For some specialized construction tasks, including during the TBM excavation, it would be necessary to work continually for 24 hours per day. Depending on the choices of the individual contractor, the following sites are anticipated to be constructed simultaneously: Terminal 2 Station, Terminal 4 Station, Cucamonga Station and the MSF, and the vent shaft. Up to 200 employees composed of construction and engineering staff are anticipated on site during the construction phase.

Mass excavation for cut-and-cover construction at each station and the vent shaft would involve up to 100 haul trucks per day. TBM excavation would involve up to 250 trucks per day to haul spoils (i.e., excavated materials from tunneling). Up to 10 concrete trucks per day are anticipated to construct the permanent access ramps between the tunnel and the at-grade stations. Additionally, up to one truck every 2 hours may be needed for ancillary delivery work. Haul routes would potentially include I-10, North Archibald Avenue, Milliken Avenue, East Airport Drive, Terminal Way, and Guasti Road. The haul route supporting construction at Cucamonga Station would include Milliken Avenue, Azusa Court, and Foothill Boulevard to access I-15. The haul routes supporting the mass excavation and construction of the proposed stations and tunnel are described in further detail in Table 1.

Table 1: Haul Routes for Mass Excavation and Tunneling

Excavation Staging Area	ROW Owner	Location	Haul Route
Terminal 2 Station	Ontario International Airport Authority (OIAA) right-of-way (ROW)	South of East Airport Drive and west of North Archibald Avenue	Interstate 10 (I-10), southbound on North Archibald Avenue, westbound on Terminal Way, northbound on East Terminal Way, eastbound on Airport Drive, northbound on Archibald Avenue, and I-10
Terminal 4 Station	OIAA ROW	South of East Airport Drive and east of North Archibald Avenue	I-10, southbound on Archibald Avenue, eastbound on East Airport Drive, southbound on East Terminal Way, eastbound on Terminal Way, northbound on Archibald Avenue, and I-10
Cucamonga Station	Metrolink ROW	East of Milliken Avenue and north of Azusa Court	Interstate 15 (I-15), westbound on Foothill Boulevard, southbound on Milliken Avenue, westbound on Azusa Court, eastbound on Azusa Court, northbound on Milliken Avenue, eastbound on Foothill Boulevard, and I-15 Alternative Route: I-10, Northbound Milliken Avenue, Westbound 7th Street, Northbound Anaheim Place, Northbound Azusa Court, Southbound Azusa Court, Southbound Anaheim Place, Eastbound 7th Street, Southbound Milliken Avenue, I-10.
Vent Shaft Design Option 2	Caltrans ROW	West of Milliken Avenue on westbound off-ramp	I-10, southbound on Milliken Avenue, eastbound on Guasti Road, Caltrans ROW, westbound on Guasti Road, and I-10
Vent Shaft Design Option 4	Caltrans ROW	West of Milliken Avenue on eastbound on-ramp	I-10, southbound on Milliken Avenue, eastbound on Guasti Road, Caltrans ROW, westbound on Guasti Road, and I-10

Source: AECOM 2022; OIAA 2019; OIAA 2022

2.2 UNDERGROUND GUIDEWAY CONSTRUCTION

2.2.1 Cut-and-Cover Construction

Cut-and-cover activities involve the excavation of a shallow underground guideway from the existing street surface (reference Figure 1). Four cut-and-cover sites would occur at each proposed station and at the vent shaft site. During the construction phase, the cut-and-cover sites at Cucamonga Metrolink Station and Terminal 2 at ONT would be used as the TBM launching and receiving pits. Ultimately, the station cut-and-cover sites would serve as the vehicle ramps for operations where the underground guideway would transition to at-grade. Cut-and-cover activities would include the following:

- Utility relocation or protection in-place and hanging where cut-and-cover method would be used;
- Soldier pile installation involving shoring on both sides of the excavation footprint to support the excavation and roadways;
- Initial excavation from the surface using large excavators. Installation of temporary support of excavation composed of struts and lagging;
- Stockpiling of excavated material that is deemed suitable for reuse as backfill material;
- Excavation of launching and receiving pits;
- Construction of the permanent structures;
- Backfilling of and restoring the surface once the facilities are completed; and
- Install imported fill supported by soldier pile and lagging with permanent retaining walls constructed where the guideway transitions from at-grade to underground.

The limits of excavation at Cucamonga Metrolink Station are approximately 400 feet within the existing Cucamonga Metrolink Station parking lot. The excavation limits for Terminal 2 at ONT would occur west of Southwest Way, in a U-shape configuration for over 500-feet. Excavation limits at Terminal 4 at ONT would occur parallel to Southeast Way for approximately 450-feet.

2.2.2 Tunnel

TBMs are large-diameter horizontal drills that continuously excavate circular tunnel sections (Figure 2 and Figure 3). Two types of pressurized-face TBMs—Earth Pressure Balance (EPB) and slurry TBM—are commonly used in the Los Angeles region depending on geologic conditions. Both EPB and slurry TBMs apply a balancing pressure to the excavation face to stabilize the ground and balance the groundwater.

Figure 1: Example of Construction via Cut-and-Cover

Source: AECOM, 2022

Figure 2: Tunnel Boring Machine

Source: AECOM 2022

Figure 3: Example of Bored Tunnel Constructed

Source: AECOM 2022

At the TBM launching site, the staging area would also be used for storage of precast concrete segments, temporary spoil storage, ventilation lines, shaft support (air, water, electricity, spoil hoisting). Tunneling with a slurry TBM would require workshops, mixing and processing slurry for excavation support or tunnel excavation, and post-excavation slurry treatment (separation), which would include filters, centrifuges, and vibrator equipment. During tunneling with an EPB machine, excavated material (spoils) is moved to the rear of the TBM by a screw conveyor and deposited on a conveyor belt. The conveyor belt then transfers the spoils to the launching area or drops the spoils on rail-mounted muck cars hauled by a locomotive operating on temporary rail tracks in the tunnel. At the shaft, the muck cars are lifted out by a crane or hoist, and the material is loaded into trucks or temporarily stockpiled for off-site reuse or disposal. Temporary easements, typically a portion of the sidewalk, traffic lanes, and parking areas, may be required at various locations for staging.

Equipment at the TBM launch site would include trucks, a crane(s), excavators, a grout plant, a compressor plant, a tunnel fan, and cooling towers. The launch area would also store tunnel construction materials (e.g., lining segments, steel, rail, pipe, ducts) and stockpile excavated material. Flat-bed delivery trucks would enter the construction staging sites to deliver construction materials (e.g. lining segments, lumber for formwork or temporary engineering, rebar, etc.). Haul trucks would remove excavated material from the launch site at ONT. Main activities for the bored tunnel construction would consist of the following:

- The design-builder would perform a mass excavation as described in Section 2.2.1 to excavate the launching site for the TBM.
- For each tunnel lining installed, the TBM would be advanced a small distance (4 to 5 feet) using hydraulic jacks, which pushes against the previously installed tunnel lining ring while excavating the material ahead of the TBM; the jacks would be retracted, and another tunnel lining ring would be erected.
- The TBM would be advanced, and the process would be repeated until the entire length of the tunnel has been excavated.
- Excavated material (i.e., spoils or muck) would be removed from the launching pit.
- The TBM would be extracted at the end of the tunnel segment at an extraction pit.
- Transition from at-grade to underground would require temporary support of excavation to build the permanent reinforced concrete retaining wall and structures.
- After a permanent structural facility is built, mechanical, electrical, plumbing, fire protection, communications, and security systems would be installed.

2.3 VENTILATION SHAFT

The vent shaft would consist of both underground and at-grade components. The ventilation shaft measuring approximately 2,000-square feet in size and up to approximately 70-feet in depth would be constructed to provide a means of emergency passenger egress and first responder access.

The underground ventilation shaft would extend to the tunnel level and the surface structures would consist of a one (1) story structure above ground. The ventilation shaft would be installed using a similar construction methodology to that of the tunnel and take approximately 6 months to complete. A drill rig would install up to five piles per day, each 70-feet deep. Piles would be drilled (i.e., no impact driving) as an excavation pre-support. The access shaft would then be excavated and temporarily supported with an internal bracing system that includes the installed piles.

The access shaft would require a staging area. Anticipated equipment at the location would include haul trucks, a drill rig, a crane, an excavator, a wheel loader, a compressor, and a ventilation fan. The staging area would include material storage, stockpiles of excavated material, water treatment, a workshop, a construction office, and employee parking. The staging area would be approximately 27,000-square feet and would be within existing Caltrans ROW.

2.4 OTHER FACILITIES AND CONSTRUCTION ACTIVITIES

2.4.1 Utility Relocation and Installation

Utility relocation work would be required for some Build Alternative elements. Impacted utilities may include storm drains, sanitary sewers, waterlines, overhead power lines, electrical duct banks, lighting, irrigation conduits, fiber optic lines, telephone, and other communication lines. To the extent possible, the guideway has been located to avoid conflicts with the space occupied by major utilities. Nevertheless, in certain instances, the positioning of the guideway, stations, and other facilities would require that conflicting utilities be relocated, modified, or protected-in-place.

Ongoing third-party utility coordination would occur with MWD regarding their 158-inch, reinforced-concrete pipe water line during construction of the tunnel with the TBM. Preliminary utility relocations have been identified at this stage of design and are associated with the vent shaft. A preliminary list includes: Southern California Edison (SCE) power duct bank; Caltrans fiber optic duct bank; and City of Ontario landscape irrigation conduits.

2.4.2 Stations

The stations include the Cucamonga Station, ONT Terminal 2 Station, and ONT Terminal 4 Station. As described in Section 2.2, during the construction phase, the Cucamonga Metrolink Station and Terminal 2 at ONT would be used as the TBM launching and receiving pits. As noted in Section 2.1, generally stations would be built simultaneously with or following guideway construction. However, construction of the Cucamonga Station may need to occur after the completion of all excavation and in-tunnel work. The exact sequence of construction activities will be confirmed in a future design phase prior to construction.

Construction would commence with site preparation for the staging areas and TBM launching and receiving pits. Equipment needs for all three stations would include the following: excavators, backhoes, a vertical conveyor system, a gantry crane, a crawler crane, concrete trucks, haul trucks, a wheel loader, Foamplant, cooling towers, a tunnel fan grout plant, segment cars, and flatcars. Station concrete construction and architectural finish work would occur after tunnel construction is completed. The time of construction would vary depending on the length and design configuration for each structure. Following the mass excavation and grading, the stations would require the installation of the waterproof membrane around the station box. The construction sequence for the station structures would typically commence with construction of the foundation base slab, followed by installation of exterior walls any interior column elements, and pouring of the station roof. Once station structure work is complete, the station excavation would be backfilled, and the permanent roadway would be constructed. Decking removal and surface restoration would then occur. Stations are proposed to be 1 to 2 stories, up to approximately 40-feet in height.

Equipment needs for station construction would include the following: excavators, backhoes, a vertical conveyor system, a gantry crane, a crawler crane, concrete trucks, haul trucks, a wheel loader, Foamplant, cooling towers, a tunnel fan grout plant, segment cars, and flatcars.

2.4.3 Transition Structures

Vehicles arriving or departing the stations would traverse along a transition structure that allows the descent from the surface level to the underground guideway within the bored tunnel. These transition structures consist of U-shaped cast in-place reinforced concrete retaining walls to create a ramp for the guideway to the tunnel level. These trenches would be excavated by a cut-and-cover methodology as described in Section 2.2.1. The design-builder would form the retaining walls cast in structures, install steel reinforcing bars, pour concrete, and strip the forms.

2.4.4 Construction Staging Areas

Construction staging areas would be used to store building materials and construction equipment, assemble the TBM, temporarily store excavated materials, and serve as temporary field offices for the contractor. Heavy-duty, steel, track-out grates (i.e., rumble plates) would be staged at the entrance of the construction staging areas to capture dirt and soil debris from the wheels of trucks and construction equipment. BMPs would minimize a public nuisance that can result from soil and mud tracks on the public roadway. For security purposes, construction staging areas would be equipped with fences, lighting, security cameras, and guards to prevent vandalism and theft. Each of the three proposed stations and the access shaft would require a construction staging area as described as follows:

- Staging at the proposed Cucamonga Station and MSF would require approximately 3.2 acres.
- Staging at the proposed ONT Terminal 2 Station would require approximately 3.4 acres.
- Staging at the proposed ONT Terminal 4 Station would require approximately 3.2 acres.
- Staging at the access shaft would require approximately 0.62 acres. Work would encroach into the Caltrans ROW.

Staging areas supporting the underground segment would require additional space to accommodate activities including, but not limited to, tunneling, assembling, launching, and extraction of the TBM. Anticipated equipment at each location would include haul trucks, a drill rig, a crane, an excavator, a wheel loader, a compressor, and a ventilation fan. Each staging area would include material storage, stockpiles of excavated material, water treatment, a workshop, a construction office, and employee parking. No road closures would be needed at construction staging locations. However, construction activities and movement of equipment and materials may temporarily affect driveways and drive lane aisles at the Cucamonga Metrolink Station, and ONT parking lots.

2.4.5 Maintenance and Storage Facility

The proposed Cucamonga Station includes a MSF to store and maintain vehicles. The MSF would be approximately 18,000 square feet in size and. would be constructed adjacent to the Cucamonga Station. Construction of the MSF would involve construction of trackwork, a building, and fences. Initially, demolition, site preparation, and grading would be conducted, followed by utility installation and building construction as trackwork progresses. MSF construction would be finished by the addition of fencing, paving, and landscaping. Equipment needs for pre-construction, site preparation, track and building construction and operating systems installation would include the following: haul trucks, concrete trucks, dozers, excavators, cranes, drill rigs, and flatbed trucks, as well as worker vehicles. Construction at this location would require approximately 3.2 acres, and approximately 170 parking spaces would be temporarily unavailable at the Cucamonga Metrolink Station parking lot. Construction activities would occur for up to 37 months. No road closures are anticipated for MSF construction staging. However, construction activities and movement of equipment and materials may temporarily affect driveways and drive lane aisles at the Cucamonga Metrolink Station parking lot.

2.4.6 Roadway Reconstruction

Where applicable, existing curbs, gutters, sidewalks, landscaping, and structures would need to be demolished, and utilities would need to be relocated. As noted, in Section 2.4.1, discussion of utility relocation is ongoing with utility service providers. Further, the exact existing street elements such as curbs, gutters, sidewalks and landscaping will be confirmed in a future design phase prior to construction. Equipment typically involved in demolition includes crawler cranes, crawler dozers/loaders, pavement breakers, rubber-tired loader/bob cats, trucks, excavator, backhoes, generator/compressors, and water trucks for dust control.

Additionally, as applicable, construction of new curb and gutter, sidewalks, roadway re-pavement would then proceed followed by the installation of lighting, signage, striping, and landscaping as necessary. Equipment used for construction would include excavators, small bulldozers, compactors, graders, transit mix concrete trucks, concrete pumping equipment, pavers, and rollers.

3 REFERENCES

California Building Standards Commission. 2019. California Fire Code. Available at: https://up.codes/viewer/california/ca-fire-code-2019. Accessed June 15, 2022.

California Building Standards Commission. 2021. 2019 California Building Code, Title 24. Available at: https://codes.iccsafe.org/content/CABCV12019JUL21S/cover. Accessed June 15, 2022.

California Department of Transportation (Caltrans). 2018a. Standard Plans. Available at: https://dot.ca.gov/-/media/dot-media/programs/design/documents/2018-std-plns-for-web-a11y.pdf. Accessed June 15, 2022.

California Department of Transportation (Caltrans). 2018b. Standard Specifications. Available at: https://dot.ca.gov/-/media/dot-media/programs/design/documents/f00203402018stdspecs-a11y.pdf. Accessed October 10, 2022.

Federal Highway Administration (FHWA). 2009. FHWA NHI-09-010, Technical Manual for Design and Construction of Roads Tunnels-Civil Element. Available at: https://www.fhwa.dot.gov/bridge/tunnel/pubs/nhi09010/tunnel_manual.pdf. Accessed October 10, 2022.

Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed on: June 15, 2022.

Metropolitan Water District of Southern California (MWD). (2018). Guidelines for Improvements and Construction Projects Proposed in the Area of Metropolitan's Facilities and Rights-of-Way. Available at: https://www.mwdh2o.com/media/17779/471_guidelines_development.pdf. Accessed on: June 15, 2022.

National Fire Protection Association (NFPA). 2024. List of Codes and Standards. Available at: https://www.nfpa.org/For-Professionals/Codes-and-Standards/List-of-Codes-and-Standards#aq=%40culture%3D%22en%22&cq=%40tagtype%3D%3D(%22Standards%20Development%20Process%22)%20%20&numberOfResults=12&sortCriteria=%40computedproductid%20ascending%2C%40productid%20ascending. Accessed June 26, 2024.

Ontario International Airport (ONT). 2018. Ontario International Airport (ONT) Ground Transportation Rules and Regulations. Available at: https://www.flyontario.com/sites/default/files/airport_ground_transportation_rules_and_regulations_november_2018_revision_0.pdf. Accessed June 15, 2022.

Ontario International Airport Authority (OIAA). 2019. Strategic Assessment Ontario International Airport Final Report.

Ontario International Airport Authority (OIAA). 2022. Ontario International Airport Calendar May YTD. Available at: https://www.flyontario.com/sites/default/files/ont_airport_statistics_-_may_2022.pdf. Accessed June 15, 2022.

San Bernardino Associated Governments (SANBAG). 2014. Ontario Airport Rail Access Study. Southern California Regional Rail Authority (SCRRA or Metrolink) (2021). SCRRA Design) Criteria Manual. Available at: https://metrolinktrains.com/globalassets/about/engineering/scrra_design_criteria_manual.pdf. January. Accessed June 15, 2022.

San Bernardino County Department of Public Works. 2013. Technical Guidance Document for Water Quality Management Plans. Available at: https://www.sbcounty.gov/uploads/DPW/docs/SantaAnaRiver-WQMP-Final-June2013.pdf. Accessed June 15, 2022.

San Bernardino County Department of Public Works. 2019. General Permit Conditions and Trench Specifications. Available at: https://www.sbcounty.gov/uploads/DPW/docs/General-Permit-Conditions-and-Trench-Specifications-September-1-2019.pdf. Accessed June 15, 2022.

San Bernardino County Department of Public Works. 2022. County Standard Plans. Available at: https://lus.sbcounty.gov/land-development-home/county-standards/. Accessed June 15, 2022.

South Coast Air Quality Management District (SCAQMD). 2005. Rule 403 Fugitive Dust. Available at: https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf?sfvrsn=4. Accessed on May 2, 2024.

Southern California Regional Rail Authority (SCRRA). 2024. Metrolink (SCRRA Design) Criteria Manual 2024. Available at: https://metrolinktrains.com/globalassets/about/engineering/scrra_design_criteria_manual.pdf. Accessed October 3, 2024.

Union Pacific Railroad (UPRR). 2019. UPRR Plan Submittal Guidelines. Available at: https://www.up.com/cs/groups/public/@uprr/@customers/@industrialdevelopment/@operationsspecs/@specifications/documents/up_pdf_nativedocs/pdf_up_pub_guidelines.pdf. Accessed June 15, 2022.

United States Environmental Protection Agency. 2021. National Pollutant Discharge Elimination System (NPDES). Available at: https://www.epa.gov/npdes. Accessed June 15, 2022.