Lena Kent
General Director, Public Affairs

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740 E. Carnegie Dr.
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February 24, 2026

VIA EMAIL

Ms. Natalie Kuffel
Deputy Director
Governor's Office of Land Use and Climate Innovation
1400 10th Street
Sacramento, CA 95814
Natalie.kuffel@lci.ca.gov

RE: Final Application for the Barstow International Gateway Project as a Transportation-Related Infrastructure Project Under Senate Bill 149

Dear Ms. Kuffel:

BNSF Railway Company (BNSF) is pleased to submit the attached final application for certification of the Barstow International Gateway Project (BIG) as a transportation-related infrastructure project under Senate Bill 149. BIG is a transformative, next-generation rail facility identified by the California State Transportation Agency in the most recent State Rail Plan as a critical investment for the state's freight network. The enclosed materials outline the Project's design, purpose, and compliance with each requirement of Senate Bill 149.

BIG represents a major shift in how goods move through California. By relocating container sorting and processing activities from congested port-adjacent communities to a more suitable location in Barstow, the Project enables a significant mode shift from over-the-road trucking to cleaner, more efficient rail. This shift will reduce truck miles traveled, ease pressure on urban neighborhoods, and deliver substantial economic, environmental, and equity benefits across the region and the state.

BIG directly advances the goals of the Climate Action Plan for Transportation Infrastructure and embodies the State's vision for an integrated, resilient, and low-carbon freight system. The Project represents a $4 billion private investment in California's future—improving supply chain reliability and supporting the transition to a more sustainable freight network. The 2024 State Rail Plan underscores BIG's unique value, noting that it is the first facility of its kind developed by a Class I railroad and will allow containers arriving at the Ports to be efficiently loaded onto trains for inland processing, dramatically reducing the need for truck trips and improving statewide goods movement efficiency.

We appreciate your continued partnership on this urgently needed Project. BIG will serve Californians for decades by strengthening the state's freight infrastructure, supporting climate and air quality goals, and

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delivering long-term economic opportunity. Should you have any questions regarding this letter or the attached final application, please contact me at 909-386-4140.

Sincerely,

Lena Kent
General Director Public Affairs

c: David T. Rankin
Amrit S. Kulkarni
Jennifer Harry

6228487.2

Transportation-Related

Infrastructure Project

Final Application

Barstow International Gateway Project

REVISED:

February 2026

Table of Contents

Figures

Tables

Attachments

1.0 EXECUTIVE SUMMARY

BNSF Railway Company (“BNSF”) submits this Application in accordance with California Public Resources Code (PRC) Division 13, Chapter 7, commencing with Section 21189.80 (aka Senate Bill 149 or SB 149). Specifically, this Application is provided to demonstrate adherence with the provisions of the *Governor’s Guidelines for Infrastructure Projects Seeking Streamlined Judicial Review Under CEQA* and ultimately to support the Governor of California ("Governor") in certifying the Barstow International Gateway Project ("BIG") in the City of Barstow ("City") and all related project approvals as an infrastructure project under PRC Section 21189.81(e), and specifically as a “transportation-related project” under PRC Section 21189.81(g)(1). As set forth herein, BIG meets the statutory criteria for judicial streamlining under this provision.

1.1 Transportation-Related Project

More than 30% of all inbound freight containers in the United States go through the Ports of Los Angeles and Long Beach (collectively, "Ports"), the largest port complex in the Western Hemisphere. Currently, there is a large volume of heavy trucks that transport cargo from the Ports to destinations all over the country. The millions of containers coming into the Ports for transport by truck create storage problems, which result in increased container dwell times and significant truck traffic in and out of the Ports. Because the Ports are surrounded by densely populated areas, many of which are environmental justice/disadvantaged communities (“DACs”), the traffic, pollution, and safety impacts associated with heavy truck-based goods movement are experienced by a very large number of people in these communities. BIG will change this paradigm of goods movement in California by effectuating a mode shift from over-the-road trucking to rail transport at a more suitable location away from dense population centers. In doing so, BIG will result in substantial local, regional, and statewide economic, environmental, and equitable benefits.

As demonstrated herein, as required by PRC Section 21189.81(g)(1), BIG advances the goals related to the Climate Action Plan for Transportation Infrastructure (“CAPTI”) adopted by the California State Transportation Agency (“CalSTA”). In particular, BIG builds toward an integrated, statewide rail and transit network. BIG is a $4 billion private investment that fundamentally aligns with the recently adopted 2024 California State Rail Plan, released January 7, 2025 (“2024 State Rail Plan”). As identified in that Plan, BIG is a critical part of the solution to transform goods movements from the Ports. BIG will speed containers from the Ports by rail to a state-of-the-art facility in Barstow, a key crossroad in the State’s southeast region. As stated in the 2024 State Rail Plan, “The Barstow International Gateway is the first facility of its kind to be developed by a Class I railroad. The facility will provide space to sort the containers that arrive on ships within 130 miles of the Ports. Instead of requiring many truck trips to move the containers to this location, the containers will be expeditiously loaded onto trains regardless of their final destination. Organization of the containers and their contents will take place at a new facility near the location of the long-time classification yard in the Barstow-area desert.” (2024 State Rail Plan, p. 41.) Thus, BIG will take heavy-duty trucks off the road and reduce negative impacts on the densely populated and often disadvantaged communities surrounding the Ports and the greater Los Angeles region. BNSF will also use electric yard equipment at BIG, providing further environmental benefits to the region and to DACs.

1.1.1 No Net Increases of Greenhouse Gas Emissions

BIG advances California’s goals related to climate change. PRC Section 21189.83(b) requires that applicants demonstrate their project does not result in any net additional emission of greenhouse gases

("GHG"). Because BIG is designed to remove thousands of daily trucks off the roadway networks, BIG will not only result in no net increase of GHG but will actually result in net reductions of 36,311$MTCO_2e$ of GHG emissions in its opening year 2028 and 9,751 $MTCO_2e$ of GHG emissions in horizon year 2048. BIG would result in a reduction of 475,811 $MTCO_2e$ over a 20-year period (an average reduction of approximately 23,791 $MTCO_2e$ per year). These substantial decreases also reflect project features such as reductions resulting from zero-emission rail yard equipment and construction and operation of an approximately 140-acre solar farm to support the project.

1.1.2 Disadvantaged Communities

Although BIG will result in unavoidable localized impacts to DACs, BIG includes project components that minimize these impacts including the afore-mentioned zero emission yard equipment, the voluntary replacement of all Tier 0/0+/1+ switcher locomotives with newly-purchased Tier 4 switchers at the unrelated existing Barstow Classification Yard, a dedicated newly-purchased Tier 4 linehaul locomotive fleet for containers moving from the Ports to the BIG IMF, and newly-purchased Tier 4 switchers at BIG. Further, starting in opening year 2028, BNSF would increase the renewable diesel composition within the Ports' existing fueling site from 1 percent to 10 percent, a 900 percent increase in renewable diesel. This would improve the emissions of all BNSF trains fueling at the Ports, including those BNSF trains that would not stop at BIG, reducing emissions and benefiting all of the DACs from the Ports to BIG. Further, as shown in **Attachment 1: BNSF and City of Barstow Letter Agreement Regarding SB 149** to this Application, BNSF has committed to enter into binding and enforceable agreements with the City to implement all feasible mitigation measures imposed pursuant to California Environmental Quality Act ("CEQA"), many of which are designed to minimize localized impacts.

1.1.3 Community Benefits

BIG's investment in Barstow also creates a win for the City, fostering growth and economic opportunities for DACs and the entire area. In partnering together on BIG, the City and BNSF recognize the transformational nature of BIG, which will generate thousands of jobs and establish Barstow as a major transportation and commerce hub. As an economic driver for the region, BIG aligns with and promotes important City long-term planning priorities for housing, school and recreational improvements, enhanced transportation, and job creation. BIG has also generated excitement and keen interest in the local community. BNSF, in partnership with the City, has hosted dozens of community workshops, bringing together more than 100 stakeholders across a variety of interests, including healthcare, real estate, education, small business, youth sports, seniors/veterans, students, and the military.

BIG would bring thousands of direct and indirect jobs to High Desert communities within the City of Barstow and adjacent areas within the County, and reduce commute times for hundreds of local employees. Specifically, BIG would create 11,000 local direct, indirect, and induced jobs, all while keeping the Ports of Los Angeles and Long Beach competitive by locating the first integrated rail and transload complex within 130 miles. At the same time, it would support a robust, reliable, and efficient supply chain that American families and businesses rely on.

From an environmental standpoint, it would significantly reduce port and highway congestion and expedite the transportation of goods from the Ports of Los Angeles and Long Beach via rail, the most environmentally efficient way to move freight. BIG would also reduce environmental and safety impacts on communities in Los Angeles and the Inland Empire by reducing inefficient truck trips. With its location near primarily undeveloped land not adjacent to urbanized areas, it will minimize local community impacts. And by moving freight off the roads and onto rail, BIG reduces passenger vehicle miles traveled

("VMT") and truck miles traveled ("TMT") and improves congestion in heavily urbanized areas near the Ports and on highway systems throughout the region. BIG is anticipated to eliminate approximately 205 million TMT in 2028, 269 million TMT in 2033, and 312 million TMT in 2048. A complete summary of BIG's benefits and environmental mitigation to benefit DACs is included in **Attachment 3: BIG's Public Benefits and BNSF's Commitments to Mitigating Environmental Impacts to Disadvantaged Communities** to this application.

2.0 PROJECT DESCRIPTION AND STATUS

2.1 Project Description Overview

BNSF proposes to invest more than $4 billion to construct BIG–a state-of-the-art master-planned rail facility in Southern California–and the first of its kind being developed by a Class 1 railroad in the United States. This facility will help reduce highway congestion, transform the regional economy, and unlock critical efficiencies to meet our nation's supply chain demands. BIG would be a new integrated rail facility on approximately 4,300 acres on the west side of the City, consisting of a rail yard, intermodal facility, and warehouses for transloading freight from international containers to domestic containers, including an approximate 140-acre, 21 MWh solar farm. BIG, which is strongly supported by the Ports, would allow the direct transfer of containers from ships at the Ports to trains for transport through the Alameda Corridor onto the BNSF mainline up to Barstow.

BNSF seeks approval from the City of the BIG Specific Plan, which would establish site-specific zoning and development standards within the BIG Specific Plan area. The BIG Specific Plan would also establish the development framework for future development within BIG Specific Plan area and serve as the pre-zoning and regulatory requirements for the concurrent annexation of the approximately 2,700-acre portion of the BIG Specific Plan area that is not currently in the City. The BIG Specific Plan includes the statutorily required elements, including a land use plan, a circulation plan, a description of existing and proposed utilities and infrastructure, design guidelines, development standards, and administrative provisions. Upon annexation, the BIG Specific Plan area would be located in the City, as shown on **Figure 2-1: Regional Vicinity Map** and **Figure 2-2: Local Vicinity Map**. These figures include the location of the BIG Specific Plan area and the City's SOI.[1]

Additionally, to serve the proposed rail yard and transload warehouse center, BNSF proposes offsite rail improvements (including lead track extensions), and offsite non-rail improvements (including drainage, utilities, and roadways). The BIG Specific Plan area combined with these offsite improvements, totals approximately 5,000 acres ("Project footprint").

BIG's proposed components are depicted on **Figure 2-3: Barstow International Gateway Conceptual Site Plan**, and offsite improvements are depicted on **Figure 2-4A** through **Figure 2-4C**.

2.1.1 Project Location and Setting

The BIG Specific Plan area includes the rail yard, warehouse center and solar farm and is generally bounded by the Mojave River to the north, Main Street (also referred to as National Trails Highway or Route 66) to the south, Lenwood Road to the east, and Hinkley Road to the west. Most of the Specific Plan area is within unincorporated County lands, while the remainder is within Barstow City limits. The Specific Plan area is generally flat and gradually slopes north to the Mojave River. Offsite improvements are generally within existing BNSF rail and City/County street rights-of-way.

The Specific Plan area is primarily vacant, undeveloped land, which is traversed by an existing BNSF railroad, and which contains scattered residential, commercial, and industrial land uses. This area is mostly devoid of tall vegetation and trees, with structures and other elements of the built environment scattered throughout. Existing land uses within the Project footprint are listed in **Table 2-1: Existing Land Uses**.

[1] The term "sphere of influence" (SOI) means the probable physical boundaries and service area of a City, including both its current boundaries and lands under county jurisdiction that fall between the City limits and the boundary adopted by the Local Agency Formation Commission (LAFCO) representing an area considered for future expansion of the City.

There were approximately 108 dwelling units and approximately 93,724 square feet of non-residential land uses (i.e., commercial and industrial) within the Project footprint; today, only 24 remain, and all former residents have relocated. Additionally, the Specific Plan area includes a private airstrip ("Depue Airport"), which would be demolished and replaced with the proposed solar farm.

Table 2-1: Existing Land Uses

Description	Residential (DU)	Commercial (SF)	Industrial (SF)	Total (DU)	Total (SF)
Existing Land Use	108	85,887	7,837	108	93,724

Regional vehicular access to the Project would be provided by Main Street from the south, I-15 from the southeast, and SR-58 from the east. Local access to BIG would be provided by Lenwood Road and Hinkley Road from the east and west, respectively, in addition to various unpaved roads along Main Street. Regional rail access is provided from the north by BNSF's Mojave subdivision, from the west by BNSF's Cajon subdivision, and from the east by BNSF's Needles subdivision.

Figure 2-1: Regional Vicinity Map

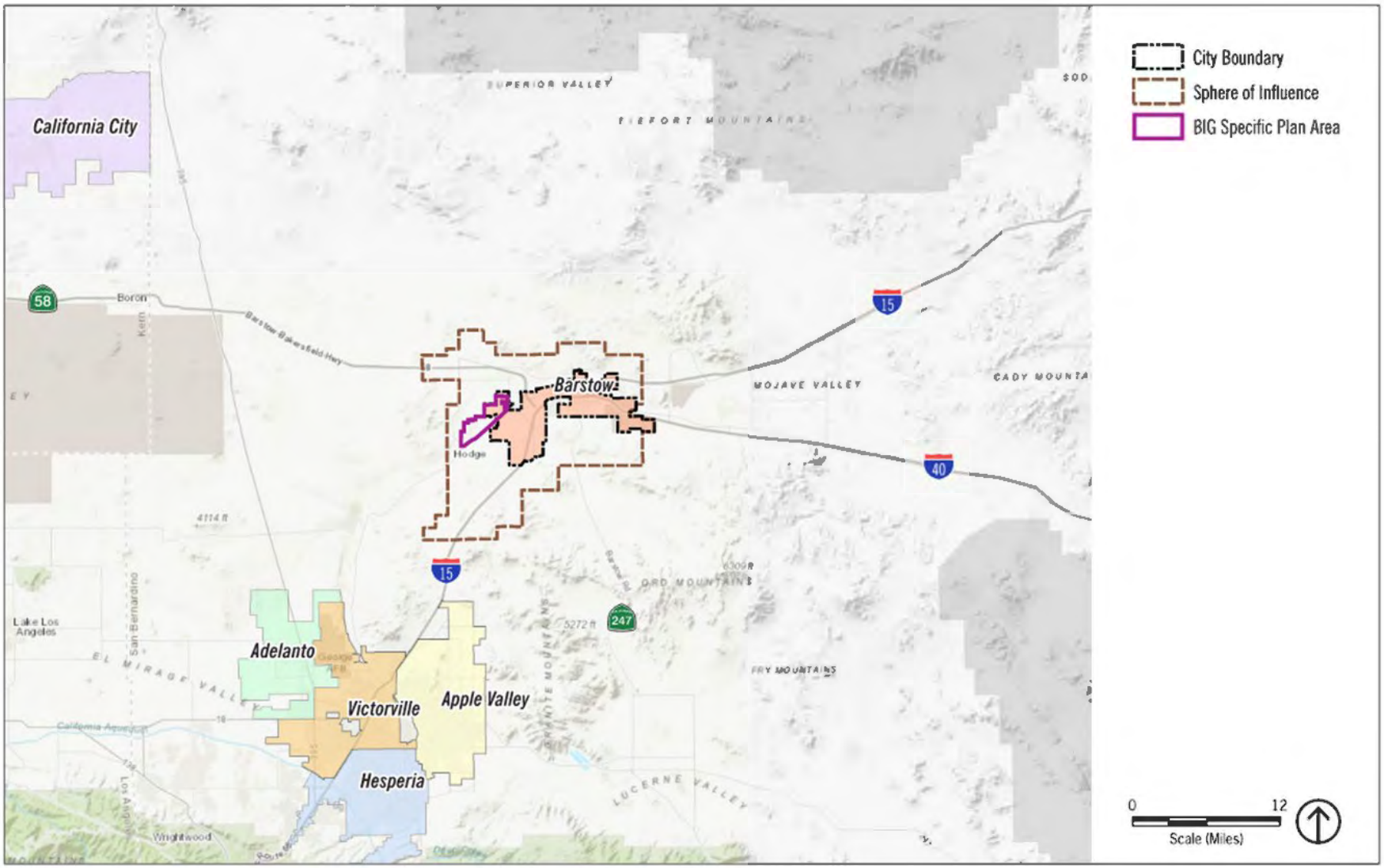


Figure 2-2: Local Vicinity Map

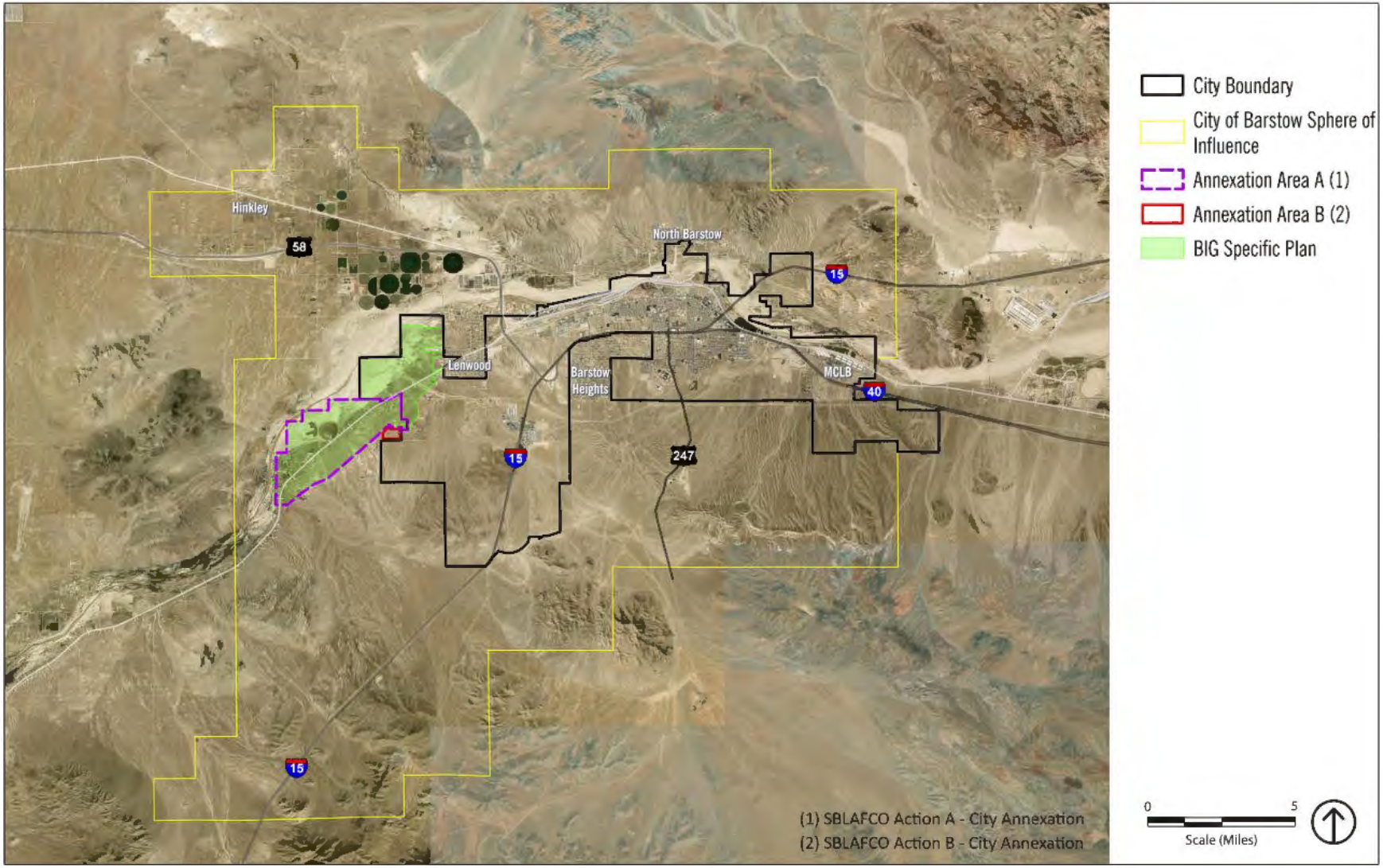


Figure 2-3: Barstow International Gateway Conceptual Site Plan

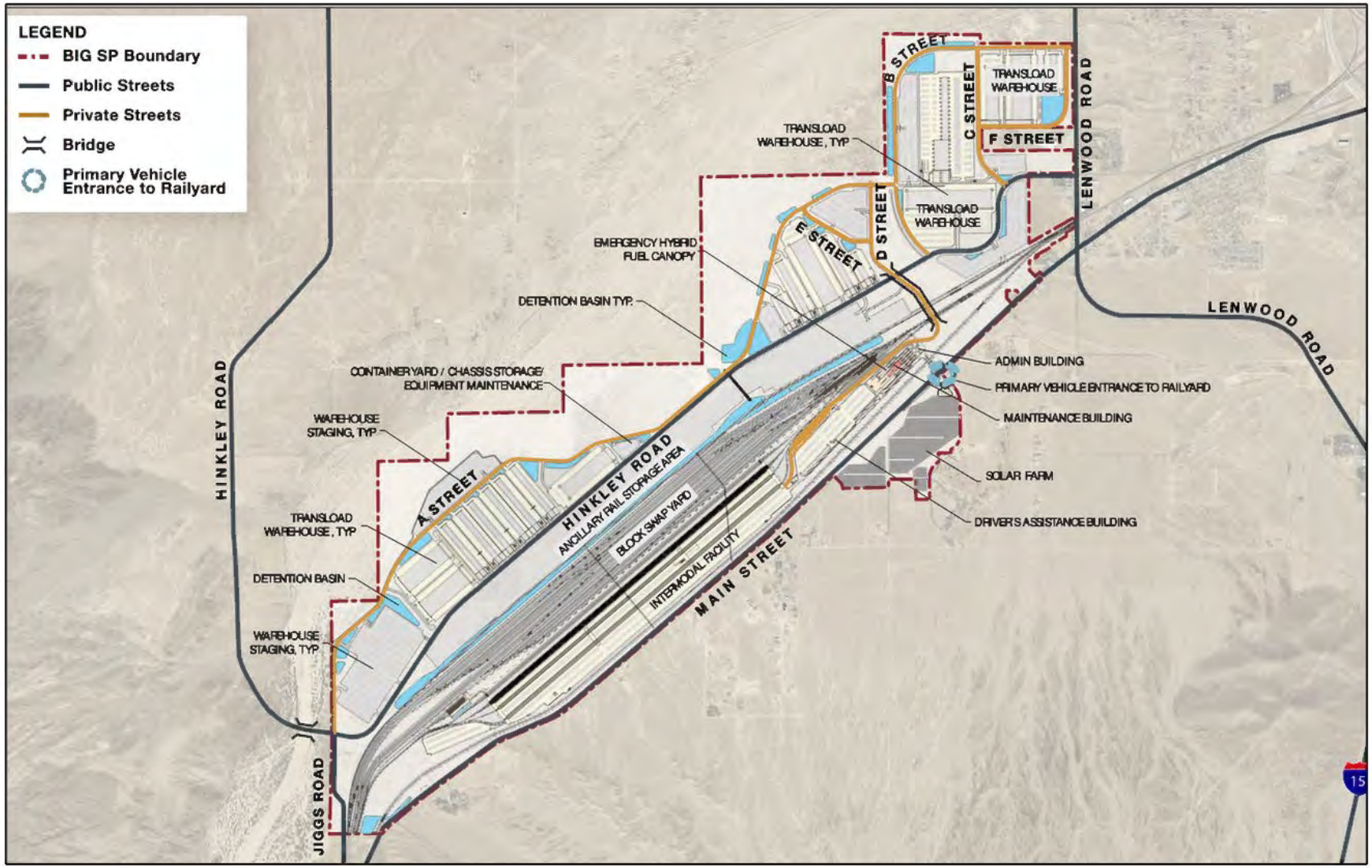


Figure 2-4A: BIG Off-Site Improvements, West

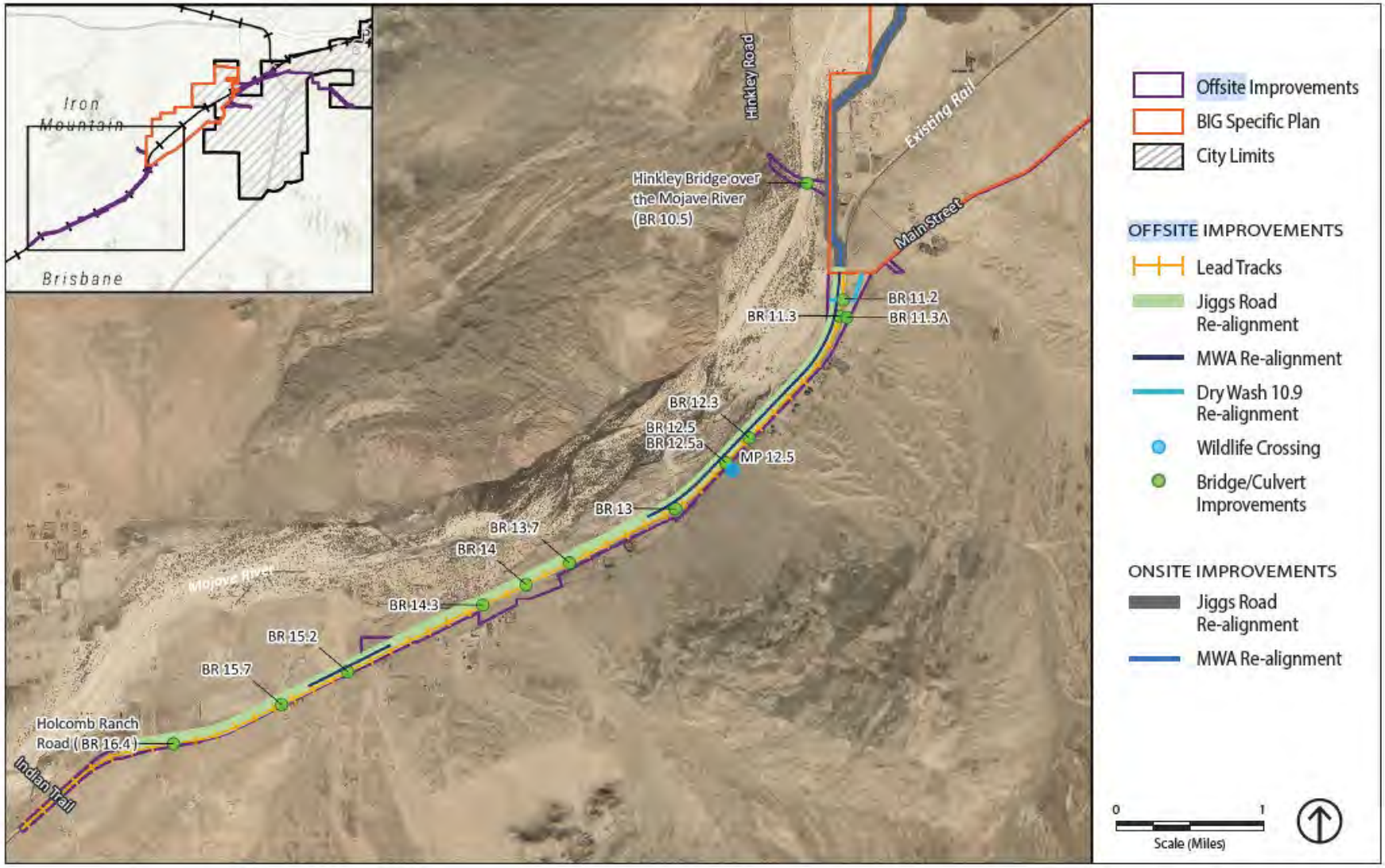


Figure 2-4B: BIG Off-Site Improvements, Central

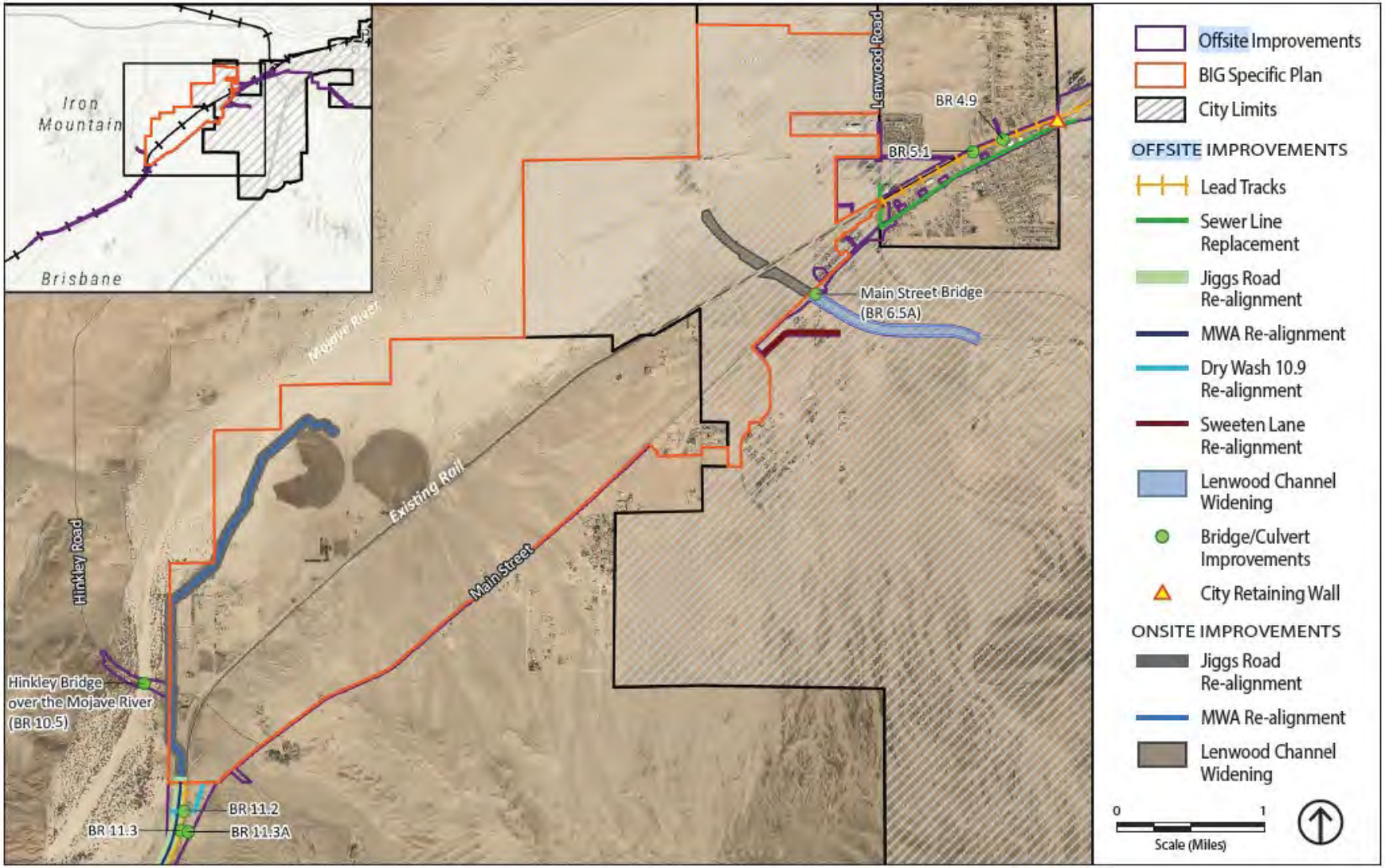
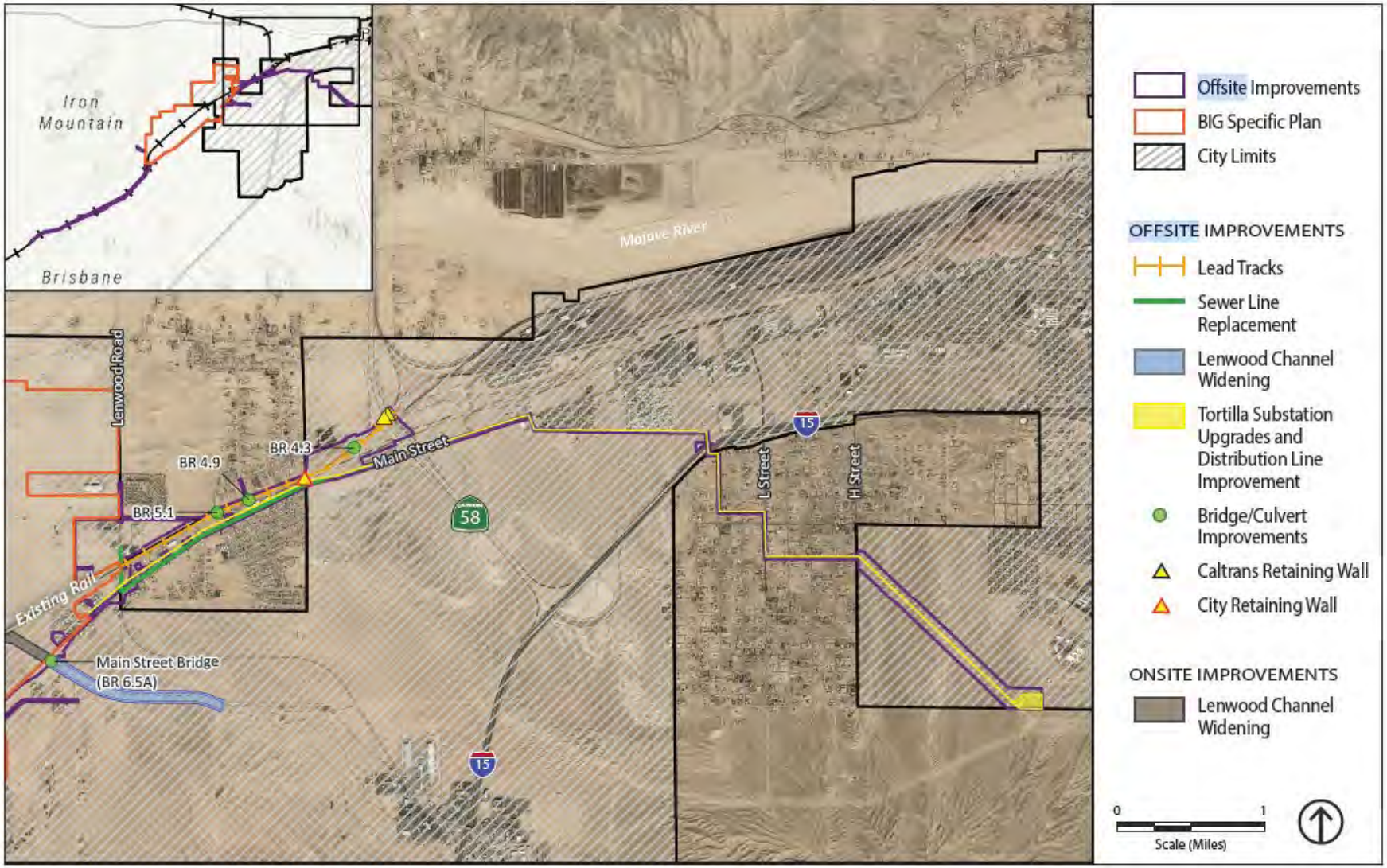


Figure 2-4C: BIG Off-Site Improvements, East



2.2 Project Components

2.2.1 Rail Yard

2.2.1.1 Overview

The rail yard would be generally bound by the existing mainline to the north, Main Street to the south, Lenwood Road to the east, and Hinkley Road to the west. The rail yard would consist of an intermodal facility (IMF), a block swap yard, ancillary rail areas, and mainline improvements, as described below.

BIG's proposed rail yard would operate 24 hours per day, 365 days per year. The rail yard would have approximately 860 employees during Opening Year (2028) and increase to 1,010 in 2033, and then to 1,125 employees during Horizon Year (2048).[2] Employees would be split evenly between three shifts.

2.2.1.2 Intermodal Facility

BIG's IMF is proposed at the southern extent of the BIG Specific Plan area, including the areas for a container yard, chassis storage, and equipment maintenance. BIG's IMF operations would consist of two types: cross-dock intermodal and "other" operations. With regard to the "cross-dock intermodal" operations, BIG's IMF would operate differently than typical intermodal facilities in that almost all the containers processed at the IMF would not arrive or leave externally by heavy-duty trucks. Instead, almost all containers would arrive and leave by train and be processed via BIG's unique "cross-dock intermodal" operation (non-rail movement is detailed in the Draft EIR in the transportation analysis in Section 5.15.8). This involves the transfer of containers between railcars and zero-emission electric hostlers[3] for cross-dock movements to the onsite proposed transload warehouse center, and vice versa. This differs from traditional intermodal facilities, where the primary purpose is to transfer containers from heavy-duty trucks[4] to railcars, and vice versa. As a result, BIG will remove hundreds of thousands of annual truck trips and millions of truck miles from the nation's roads and highways each year of its operations.

BIG's cross-dock operations would be served by a dedicated fleet of Tier 4 linehaul locomotives to move containers between the Ports and the BIG IMF. Further, starting in BIG opening year 2028, BNSF would increase the renewable diesel composition within the Ports' existing fueling site from 1 percent to 10 percent, a 900 percent increase in renewable diesel. This would reduce pollutants from all BNSF trains fueling at the Ports, including those BNSF trains that would not stop at BIG, from the Ports along the rail mainline to BIG, reducing emissions and benefiting all of the communities along that route. "Other" operations at the IMF include bringing containers from other BNSF facilities (as opposed to from the Ports) to BIG for processing[5] to reduce the travel distance/travel time due to traffic conditions that the container would otherwise travel coming to/from other destinations.

Overall, based on industry research, interviews with potential customers, and assessing BIG's benefits to potential users, BNSF anticipates that customers will prefer the BIG IMF's cross-dock intermodal mode because it offers improved speed and reliability and reduced cost of container conveyance compared to the long-distance highway freight conveyance mode.

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[2] A "Horizon Year" is the last year of analysis. BIG's Horizon Year is 20 years after opening.

[3] Electric hostlers are trucks used for moving trailers and containers short distances within freight terminals, rail yards, and warehouses. Electric holsters would not use public roadways outside of the BIG Specific Plan area.

[4] "Heavy-duty" trucks are conventional highway trucks that travel on public roads and carry containers intra- and inter-state. Only a small portion) of the cargo handled by the BIG intermodal facility would arrive by heavy-duty truck.

[5] "other" intermodal operations refer to containers from southern California/Nevada regional truck-borne containers being loaded from heavy-duty trucks onto trains and vice versa.

BIG's IMF would be composed of various components including railroad tracks, cargo handling equipment, an automated gate system, circulation roadways, yard equipment parking, container parking, stormwater detention ponds, electric vehicle charging stations, buildings, and ancillary rail facilities. Containers would be stored in parking spaces and low stacks at the IMF, along with the ancillary rail area, and transload warehouse center (each described further below). Although electric lift equipment would be utilized to the extent commercially feasible within BIG's IMF, a small 5,000-square-foot diesel fuel canopy would be constructed in the electric hostler maintenance area to accommodate fueling of hybrid equipment. Hybrid and diesel equipment would include rubber-tired gantry cranes ("RTGs"), seven air compressors, welders, railcar wheel change machines, and heavy-duty truck transport refrigeration units ("TRUs"). The fuel canopy would be served by a 10,000-gallon unleaded fuel above ground storage tank and a 20,000-gallon diesel fuel above ground storage tank, with both controlled by an electronic fuel control system.

BIG's IMF proposes approximately 150,000 square feet of support buildings and structures, as detailed in Table 2-2: BIG Intermodal Facility Structures.

Table 2-2: BIG Intermodal Facility Structures

Building/Canopy	Square Footage
Administration Building	23,000
Electric Hostler Employee and Maintenance Building	39,000
Drivers Assist Building	5,000
Crane Maintenance Employee and Storage Building	5,000
Crane Maintenance Canopies	22,500
Container Safe Haven Canopies	2,500
Quick Repair Canopy	10,000
Automatic Gate System ("AGS") Kiosk Canopies	20,000
AGS Portals	2,000
Emergency Fuel Station Canopy for Hybrid Vehicles	5,000
Total	*134,000*
Assumed Building Total for Final Design	*150,000*

Note: The square footage described is an estimate and may vary up to 10% depending on the final engineering, therefore, the total square footage for planning purposes is estimated at approximately 150,000 sf.

BIG would seek to convert a portion of the total goods arriving at the Ports to the new cross-dock intermodal mode of transport, reducing trucking and community-related impacts. The use of freight rail is identified in the 2024 State Rail Plan as an important strategy for alleviating congestion on existing highways, which improves fuel economy for on-road vehicles and reduces queuing and stop-and-go conditions, thereby reducing emissions on highways.[6] This can benefit beneficial cargo operators ("BCO") as rail transport can avoid roadway corridor bottlenecks throughout Southern California.[7] Additionally, the rapid boom in e-commerce since the COVID-19 pandemic, coupled with some truck operators leaving California due to new laws on zero-emission fleets, has put a strain on the long-distance truck sector.[8] By

[6] "…in many cases, the most efficient mode to transport freight is rail, and because of this, Caltrans encourages mode shift from over-the-road trucking to the rail system. Shifting freight to rail also frees up additional capacity at airports and on highways, which reduces congestion on those existing facilities and improves the movement of both goods and people… Caltrans will support freight projects that work towards achieving this goal because it reduces maintenance costs on state highways and is more environmentally friendly".

[7] Southern California Association of Governments (SCAG). April 4, 2024. *Connect SoCal 2024: Goods Movement Technical Report*. https://scag.ca.gov/sites/main/files/file-attachments/23-2987-tr-goods-movement-final-040424.pdf?1712261912 (accessed November 2024). See Section 5.4: Freight Corridor Bottleneck Analysis.

[8] Ibid. Page 93.

transporting via rail, BCOs can avoid these potential constraints. For these reasons, the 2024 State Rail Plan specifically identifies BIG as "*the first facility of its kind to be developed by a Class I railroad*" and states that "*[t]he facility will provide the space to sort the containers that arrive on ships approximately 130 miles to the west of the Ports. Instead of requiring many truck trips to move the containers to this location, the containers will be expeditiously loaded onto trains*." (2024 State Rail Plan p. 41.)

2.2.1.3 Block Swap Yard

The block swap yard is proposed within the middle portion of the BIG Specific Plan area. The proposed block swap yard would allow for the transfer of multiple railcars, or "blocks" of intermodal rail cars between trains. A block is defined as rail cars of a similar type moving to a similar destination that are already connected and can be combined with other blocks intended for the same destinations to produce more efficient train movements. The entire block of rail cars would remain coupled together and be moved en-masse, permitting the synchronizing of blocks to their destinations, so that each train would be compiled of rail car blocks travelling to a similar destination. Blocks could be assembled from inbound trains or trains processed at the IMF carrying containers processed at the transload warehouse center. Certain train blocks may stage at the block swap yard until another train arrives with blocks destined for the same or similar destination. The block swap yard would facilitate switching and transfer of lengthy rail car blocks between tracks for assembling departing trains. The rail car blocks within the block swap yard would include containers from BIG's IMF and containers processed at the transload warehouse center, combining as needed based on their destination. By synchronizing trains to their destinations, the block swap yard would improve train efficiency eastbound and westbound.

This efficiency would aid in making the cross-dock intermodal mode more competitive than truck transport by departing optimized trains. It would also allow for a central consolidation point of containers, enabling trains to build to sufficient volume faster.

2.2.1.4 Ancillary Rail Area

The ancillary rail storage area is north of the existing mainline and would be graded and covered with aggregate to be used for numerous purposes, including a container yard, truck chassis storage, and storage of maintenance equipment. A container yard would support the storage of empty containers awaiting loading while chassis storage would be used to provide parking for empty chassis awaiting use for loading, unloading, or draying of containers. The ancillary rail storage area would also be used for storage of spare parts and equipment for track maintenance, including rail, ties, turnouts, and other track material.

2.2.1.5 Mainline Improvements (Rail)

BIG would retain the existing two rail mainlines within their current alignments ("north mainlines"), except at bridge crossings, which would be upgraded. BIG also proposes to construct two new mainlines ("south mainlines") within the Project footprint, which would traverse the proposed rail yard in an east-west orientation, extending from Lenwood Road on the east to Hinkley Road on the west. During the construction phase, the south mainlines would be used to divert train traffic from the north mainlines while they are upgraded. During BIG operations, half of the trains which would bypass BIG would use the north mainlines and half would use the south mainlines to balance train counts between the mainlines. The upgrades to the north mainlines include upgrading various bridge crossings including replacement of the crossing at Lenwood Channel to accommodate the proposed Lenwood Channel widening; removal of

existing culverts[9] to accommodate proposed culverts for the overall rail yard; and replacement of two structures to meet BNSF standards regarding 50- and 100-year flood conditions.

2.2.2 Transload Warehouse Center

The transload warehouse center is proposed at the northern extent of the BIG Specific Plan area. The transload warehouses would be designed to process the contents of containers from cross-dock intermodal operations, with a small percentage dedicated to processing the contents of containers transported by truck. The transload warehouse center would process almost all of the containers within an onsite "closed loop" operation between BIG's IMF and the transload warehouse center. BNSF would include contractual obligations as a condition of warehouse occupants' use of the land to develop and operate the warehouses that would include volume commitments for long-haul container movements from BIG on BNSF's rail network, utilizing the unique cross-dock intermodal/ closed loop operation with the intermodal facility. The transload warehouse center would include approximately 9.0 million square feet (MSF) of transload warehouses. The transload warehouse center would be fully built during construction, but operations would gradually increase as customers relocate to BIG. Transload warehouse center operations would include approximately 2,767 employees in the Opening Year, increase to 3,660 employees in 2033, and 4,248 employees in the Horizon Year. The "Horizon Year" is the last year of analysis. BIG's Horizon Year is 20 years after opening.

The transload warehouse center would be composed of multiple buildings of various configurations and sizes, depending on the tenant's needs. As such, **Figure 2-3: Barstow International Gateway Conceptual Site Plan** provides a conceptual site plan for illustrative purposes showing potential transload warehouse buildings, locations, and sizes. Final transload warehouse buildings, locations, and sizes may differ from those proposed and would be processed with the City, as development occurs. Each transload warehouse would include container parking/storage areas, employee parking, stormwater/hydrology improvements, and landscaping. Finally, emergency generators are proposed throughout the transload warehouse center to provide electric power in the event of a power outage.

There would also be several areas distributed around the transload warehouse center for staging/overflow parking of containers accessing the transload warehouse center. These warehouse staging areas would be for truck containers only; truck "hoteling"[10] would not occur, as electric hostlers would transfer containers to/from these areas, thus, heavy-duty trucks would not enter or exit these areas.

2.2.3 Utility Improvements

To accommodate the proposed rail yard and transload warehouse center, BIG would require both relocation of existing facilities and construction of new/expanded facilities (i.e., water, wastewater, electric power, natural gas, and telecommunications). The utility improvements proposed within the Project footprint are discussed below.

2.2.3.1 Water

BIG's construction phase water demand includes non-potable water for construction activities and potable water for onsite construction workers. To provide non-potable water during the construction

[9] Culverts are drainage features, typically a pipe or arch, used to convey water under a road or rail tracks.

[10] Truck "hoteling" refers to when a heavy-duty truck parks for the driver to rest within the cab.

phase, up to eight new private onsite temporary groundwater wells would be constructed within BIG's transload warehouse center portion.

Temporary aboveground connections from Golden State Water Company (GSWC) existing mains within Main Street to BIG would be constructed to supply potable water to the construction sites. Additionally, Mojave Water Agency (MWA) owns and operates a 48-inch recharge water line that crosses the Project footprint. BIG proposes to relocate this existing line to the north to avoid conflict with the rail yard and transload warehouse center improvements.

Operational potable water and fire flow water would be provided via direct connections to facilities owned and operated by the GSWC. The transload warehouse center would connect to an existing water main on Jasper Road on the east end of the Project footprint. The rail yard would connect to an existing water main on the east end of the Project footprint near Lenwood Road on the south side of Main Street.

2.2.3.2 Wastewater

BIG's construction-related wastewater generation would be from construction workers. Temporary portable facilities (i.e., portable restrooms and portable handwash stations) would be utilized during the construction phase.

BIG's operational wastewater generation would be from transload warehouse center and rail yard employees, and the rail yard wash bays and track pans. Wastewater generated by BIG would discharge to the City's existing wastewater system via connections located adjacent to the Project footprint, within Main Street and Lenwood Road. The City prepared a wastewater and sewage capacity analysis that shows there is capacity to serve BIG (refer to DEIR Appendix 5.17).

2.2.3.3 Electrical Power

BIG construction activities would generate temporary electric power demand from construction equipment, tools, lighting, and other necessary facilities (e.g., temporary offices). The electric power for construction activities would be supplied through connections to existing Southern California Edison (SCE) facilities.

BIG operations would generate permanent electric power demand from the transload warehouse center (lighting, electric vehicle charging for material handling, and forklifts) and rail yard (lighting, buildings, cranes, and electric hostlers (used to move containers between the rail yard and the transload warehouse center). BIG operational electric power demand would be met through connecting to the SCE Tortilla Substation and supplemented with onsite electrical generation (i.e., an approximately 140-acre, approximately 21 megawatt hours (MWh) solar power generation facility (i.e., solar farm), which is described further below. Additionally, BIG would comply with CALGreen regulations requiring that rooftop solar generation be installed on the industrial warehouse rooftops (Title 24, Section 140.10). Based on 9.0 million square feet of transload warehouse, BIG would include approximately 6.4 megawatts (MW) of rooftop solar generation for Title 24 compliance. Additionally, BIG would install on-site rooftop solar generation beyond Title 24 compliance, totaling approximately 17 megawatts direct current (MWdc) across the 9 million-square-foot warehouse building area.

2.2.3.4 Natural Gas

BIG construction activities would not require the construction of new natural gas facilities, although, protection in place or relocation of existing natural gas facilities would be required to accommodate BIG. BIG does not propose any new natural gas infrastructure for BIG operations. BIG's proposed buildings

(e.g., within the rail yard and transload warehouse center) would use electric power for heating and cooling.

2.2.3.5 Stormwater

To collect stormwater runoff, BIG proposes stormwater basins that would detain any stormwater in excess of pre-development flows. The basins would then discharge to existing drainage ways through stormwater best management practices. BIG would include various outlets to the Mojave River. Exact sizing and locations of transload warehouse center basins would be dependent on final transload warehouse location, layout, and sizing. In addition, Lenwood Channel would be widened by approximately 60 to 100 feet throughout the Specific Plan area for a length of 1.1 miles, continuing off the site south of Main Street for an additional 1 mile. The widened channel would improve flooding compared to existing conditions.

2.2.3.6 Solid Waste

BIG would result in solid waste generation from construction (demolition debris, broken or excess materials, packaging, and other construction waste), as well as during operations from the rail yard and transload warehouse center. BIG's solid waste would be collected within onsite trash bins and be disposed of at the Barstow Sanitary Landfill, with 65 percent being recycled (for instance, demolished concrete foundations can be crushed and reused onsite as aggregate).

2.2.4 Onsite Circulation Improvements

BIG would include various onsite circulation improvements as discussed below.

Hinkley Road Realignment: BIG would vacate Hinkley Road between the south side of the Mojave River Bridge crossing and Main Street, closing the existing at-grade rail crossing. Hinkley Road would be realigned beginning at the south side of the Mojave River bridge crossing to connect through the transload warehouse center to Jasper Road. The existing Hinkley Road Bridge over the Mojave River would be reconstructed to conform to current federal and State standards, as noted above.

Country Club Drive: Country Club Drive would be widened along the solar farm frontage for approximately 400 feet to the proposed realignment of Sweeten Lane. A new stop-controlled intersection is proposed at the Country Club Drive at Sweeten Lane intersection.

Internal Private Roadways: In addition to the realigned public Hinkley Road (discussed above), BIG would include four dedicated internal private roadways for electric hostlers (private streets A, B, D, and E), and two internal private roadways for employee, visitor, and truck access (private streets C and F).

Main Street: Rail yard employees and heavy-duty trucks (only a small percentage of heavy-duty trucks are destined directly for the IMF) would enter BIG's rail yard from a new driveway on Main Street across from Country Club Road.

To accommodate BIG, various on-site public rights-of-way within the current unincorporated San Bernardino County area would also need to be vacated.

2.2.5 Solar Farm

An approximately 140-acre solar farm is proposed south of BIG rail yard, at the southwest corner of the Main Street at Country Club Drive intersection. The solar farm is estimated to generate approximately 21 MWh to serve BIG. The solar farm would include a new substation at the northwest corner to route power from the solar farm to BIG rail yard.

2.2.6 Off-site Improvements

BIG also proposes off-site rail and non-rail improvements, as discussed below.

2.2.6.1 Off-site Rail Improvements

BIG proposes lead track extensions to the east of approximately two miles and lead track extensions to the west of approximately seven miles ("east lead track" and "west lead track"). These off-site rail improvements would be primarily within existing BNSF right-of-way. These improvements would enable trains to safely enter and exit the mainline at mainline speeds, rather than slower "yard" speeds and risk fouling the track.[11] BIG east and west lead tracks would require modifications to existing culverts within the footprint; see also *Stormwater Drainage* discussion below.

2.2.6.2 Off-site Non-Rail Improvements

BIG proposes ancillary and related stormwater drainage, utility (i.e., water, sewer, electric power, natural gas, and telecommunications), and circulation/roadway improvements and modifications, described below.

Water. North of transload warehouse center, an existing Mojave Water Agency 48-inch recharge line would be relocated. The relocated line would stretch along the north side of the transload warehouse center to the west end of the Project footprint, then continue along the north side of the mainline for a total of 8.3 miles.

Wastewater. An existing approximately 27-inch sanitary sewer line is within existing BNSF ROW for approximately 1.6 miles between Lenwood Road and Pettit Road. This line includes multiple north/south lateral connections to serve the land uses between Main Street and the existing BNSF tracks. BIG would relocate this line at Phillips Street south to within Main Street. Additionally, the transload warehouse center will connect to City sewer via a new 27-inch sewer line within Jasper Road extending to north of Paris Avenue.

Electric Power. Electrical demand would be handled through connecting to the Southern California Edison Tortilla Substation, located approximately 0.4 mile south of the Veterans Parkway at Diamond Avenue intersection. Three underground duct banks with electrical conductors would connect BIG to the Tortilla Substation utilizing existing franchise agreements with the City and County on a route following Main Street, Sunrise Road, N Street, and Bonanza Road before utilizing existing easements between Bonanza Road and the substation.

Various off-site existing electric power lines could be relocated, modified, or extended to accommodate BIG improvements.

Natural Gas. Various off-site existing natural gas lines could be relocated to accommodate BIG improvements.

Telecommunications. No off-site telecommunications improvements are proposed. Various minor existing telecommunications lines would be relocated toward the eastern end of the lead track improvements. Existing telecommunications lines passing through the IMF and block swap yard would be relocated to the north side of the Main Street ROW.

[11] "Fouling the track" means the placement of an individual or an item of equipment in such proximity to a track that the individual or equipment could be struck by a moving train or on-track equipment, or in any case is within four feet of the field side of the near running rail (49 CFR Part 214). When a rail network becomes congested, trains can foul the track by moving slower than a train behind them.

Stormwater Drainage. As described above, Lenwood Channel would be widened by 60 to 100 feet for approximately 1.25 miles to the south of the existing mainline to reduce flooding compared to existing conditions. At the Main Street crossing at Lenwood Channel, BIG would replace 0.8-mile of the existing Main Street low water crossing of Lenwood Channel with a bridge and raise and widen the road through this stretch west to the new IMF entrance. These improvements accommodate the City/County master plan and improve flooding compared to existing conditions. At MP 10.5, the existing Hinkley Road Bridge, which the County owns and maintains, is at a narrowed section of the Mojave River and crosses via a concrete pier structure. To maintain a roadway connection to Hinkley Road from the transload warehouse center, BIG proposes to replace the existing bridge with a longer structure to better match the channel width of the Mojave River at that location. The channel beneath, and immediately adjacent to, the existing bridge would be excavated and widened to match the natural channel width more closely. As part of the improvements, the existing at-grade railroad mainline crossing would be abandoned, and vehicles would instead utilize the proposed Hinkley Road extension through the transload warehouse center.

Other. To accommodate wildlife crossings from south of Main Street to the Mojave River without potential conflict with vehicular or train traffic, BIG proposes an underground wildlife crossing under Main Street west of the existing Hinkley Road.

Circulation/Roadway. Various circulation and roadway improvements and modifications are proposed outside the BIG Specific Plan area. Transportation modifications are proposed to improve traffic operations or safety and include modifications such as installing traffic signals, modifying signal timing, striping, and rumble strips, as well as paying fair share costs for future roadway widenings to be completed by others. All the circulation improvements would be permanent, except a temporary Main Street bypass.

2.2.7 Maintenance Activities

While "light maintenance activities"[12] could occur at BIG, major maintenance activities[13] would occur at the existing Barstow classification yard located approximately 0.5-mile distance from the BIG Specific Plan area, thus, requiring short-distance trips via BNSF's existing mainline to and from the existing Barstow classification yard for heavy maintenance. Locomotive trips associated with maintenance activities would be based on the number of linehaul locomotives needed to move trains between the Ports and BIG IMF, and the number of switcher locomotives needed to haul rail cars within BIG IMF and block swap yard.

2.3 Project Construction Activities and Phasing

Construction is anticipated to occur over approximately 34 months. The anticipated construction phase timing is shown in Table 2-3: BIG Construction Schedule. During peak construction periods, work would be underway at several locations within the Project footprint simultaneously, with overlapping construction of various elements. Construction working hours and the number of workers present at any time would vary depending on the activities being performed. BIG construction would require approximately 8,177 construction workers per year.[14]

[12] "Light maintenance activities" means routine locomotive servicing (e.g., window washing, fueling, inspecting fluid levels and topping off fluids, stocking cabins with crew equipment such as water and trash bags, toilet servicing) and minor railcar servicing (e.g., wheel changes, brake and friction shoes, and loose or missing bolts).

[13] "Major maintenance activities" means repair of railing and platform, railcar suspension, hitches, engine, etc.

[14] Based on 23,200 construction worker "job years."

Table 2-3: BIG Construction Schedule

Phase	Approximate Length in Days
South Mainlines	417
Intermodal Facility	515
Block Swap Yard	1,033
North Mainlines	1,033
Transload Warehouse	515
33 kV Distribution Undergrounding	601
Solar Site	344

The vast majority of construction activities would occur during the daytime. However, nighttime construction could occur throughout the Project footprint except where adjacent to sensitive receptors (along the 33kv distribution line). To avoid potential noise and vibration impacts from pile driving, BIG proposes to establish a buffer of 1,800 feet for nighttime pile driving and 500 feet for daytime pile driving from sensitive receptors. Additionally, nighttime construction would be necessary for track work adjacent to the existing mainline where lead tracks would tie into the mainline. All construction activities would occur within the Project footprint.

2.4 Project Status and Schedule

A summary of the Project permits and anticipated schedule is provided below.

2.4.1 Environmental Planning

The City, as the CEQA lead agency, released a Draft Environmental Impact Report (DEIR) on November 13, 2025.

2.4.2 City Approvals

BNSF is requesting approval of a new specific plan to accommodate BIG (“BIG Specific Plan” or “Project”), and a pre-zoning and annexation of the unincorporated portion of the BIG Specific Plan area located in the City’s Sphere of Influence (“SOI”).

Because of the transformational nature of BIG and the need to annex BIG into the City, the City proposed a General Plan Update to effectuate the required project approvals for BIG, as well as to plan for other future development within the City.

The City then evaluated BIG and the General Plan Update in the same EIR. The EIR evaluated BIG at a project level to allow for the required approvals and development of BIG. However, the EIR evaluated the rest of the General Plan Update only at a programmatic level because it is a planning document, and details of other planned development are unknown at this time. The EIR does not analyze any other individual development project other than BIG. Future development in conformance with the General Plan Update (other than BIG) would require a separate CEQA determination and approval process by the City.

2.4.3 Responsible Agency Permitting

2.4.3.1 ACOE, USFWS, CDFW, RWQCB

BNSF continues to make progress on all the Project’s natural resources approvals and permits. BNSF has been coordinating with the Army Corps of Engineers ("ACOE") regarding project related impacts to

jurisdictional waters of the U.S. and the Project's National Environmental Policy Act (NEPA) Environmental Assessment document. BNSF has been coordinating with the California Department of Fish and Wildlife ("CDFW") and the United States Fish and Wildlife Service ("USFWS") regarding species survey protocols, preliminary results, permit submittal requirements and project specific biological mitigation measures. Informal consultation with USFWS on issuance of the Biological Opinion and Take Authorization Statement began in April 2025, with formal consultation expected to start in February 2026. BNSF also anticipates submitting an Incidental Take Permit to CDFW in February 2026. Additionally, BNSF has been consistently coordinating with the Lahontan Regional Water Quality Control Board ("RWQCB") regarding issuance of a Section 401 Water Quality Certification and anticipates application submittal in February 2026.

2.4.3.2 Air District

BIG is located within Mojave Desert Air Quality Management District (MDAQMD). BNSF has been coordinating with the MDAQMD regarding the air quality analysis for the DEIR, including coordination on air quality thresholds, modeling assumptions, and permit conditions, and anticipates submitting the Permit to Construct/Permit to Operate following FEIR certification. The MDAQMD submitted a comment letter on the Draft EIR, stating "The District concurs with the analysis and findings for the BIG project as presented in the draft EIR, including the use of all feasible mitigation and that the project remains significant after all identified feasible mitigation. The project will result in dramatic overall air quality improvement by directly reducing upwind emissions, improving the job/housing balance within the District, and reducing traffic pressure on the critical Cajon Pass Interstate 15 heavy-duty truck and passenger corridor."

2.4.3.3 San Bernardino County LAFCO

Approximately 2,700 acres within BIG's Specific Plan area are currently within unincorporated County lands and would be annexed into the City. BNSF has been coordinating with the San Bernardino County Local Agency Formation Commission ("LAFCO") on annexation application requirements and the proposed annexation boundary and anticipates the City to submit an Annexation application to LAFCO following FEIR certification.

2.4.3.4 Other

Additional permits and approvals are being sought from the respective federal, state, and local agencies, including the County of San Bernardino and City of Barstow. Overall key permitting activities are underway with most key permits expected to be received in 2026.

2.4.4 Engineering

BNSF has completed 60 percent design drawings and is currently working with its design team to prepare 90 percent design drawings.

2.4.5 Land Acquisition

BNSF has acquired approximately 98 percent of BIG's total footprint and is coordinating with the remaining landowners for purchase. BNSF is also coordinating with various landowners within BIG's offsite improvement areas for easement rights for utility or roadway improvements. BNSF conducts regular outreach with all affected landowners to maintain open lines of communication, provide updates on Project schedule and Project facility siting, and receive their feedback on Project activities.

3.0 CONSISTENCY WITH STATUTORY REQUIREMENTS FOR STREAMLINING UNDER SB 149

This chapter summarizes each applicable section of the PRC as amended by Senate Bill 149 and describes how the Project meets the certification requirements. Additional supporting information is provided in **Attachment 1** and **Attachment 2: Barstow International Gateway – SB 149 Greenhouse Gas Emissions Memorandum**, as warranted.

3.1 Transportation-Related Project

PRC Section 21189.81(e) defines the term "infrastructure project" to include a "transportation-related project." Section 21189.81(g)(1) further defines a qualifying transportation project as an infrastructure project that advances one or more of, and does not conflict with, the following goals:

- **(A) Build toward an integrated, statewide rail and transit network.**
- **(B) Invest in networks of safe and accessible bicycle and pedestrian infrastructure.**
- **(C) Include investments in light-, medium-, and heavy-duty zero-emission vehicle infrastructure.**
- **(D) Develop a zero-emission freight transportation system.**
- **(E) Reduce public health and economic harms and maximize community benefits.**
- **(F) Make safety improvements to reduce fatalities and severe injuries of all users towards zero.**
- **(G) Assess and integrate assessments of physical climate risk.**
- **(H) Promote projects that do not significantly increase passenger vehicle travel.**
- **(I) Promote compact infill development while protecting residents and businesses from displacement.**
- **(J) Protect natural and working lands.**

BIG qualifies as a "transportation-related project" under PRC Section 21189.81(g)(1). The project would advance one or more of the following and does not conflict with any of the Section's goals, as described below.

3.1.1 Build Toward an Integrated, Statewide Rail and Transit Network

BIG would meet this goal, as detailed herein. In January 2025, CalSTA adopted its updated Climate Action Plan for Transportation Infrastructure (CAPTI 2.0, CalSTA, 2025). The CAPTI states that this requirement is "*centered around the existing California State Rail Plan that leverages the California Integrated Travel Project to provide seamless, affordable, multimodal travel options in all contexts, including suburban and rural settings, to all users*." (CAPTI, p. 12.) Alleviating congestion on existing highways which improves fuel economy for on-road vehicles and reduces queuing and stop-and-go conditions, thereby reducing emissions on highways, is an identified goal in the 2024 State Rail Plan, released January 7, 2025, (2024 State Rail Plan). This can benefit BCOs as rail transport can avoid roadway corridor bottlenecks throughout Southern California. The 2024 State Rail Plan states:

> *"As in many cases, the most efficient mode to transport freight is rail, and because of this,* ***Caltrans encourages mode shift from over-the-road trucking to the rail system.*** *Shifting freight to rail also frees up additional capacity at airports and on highways, which reduces congestion on those existing facilities and improves the movement of both goods and people. The rail network is well-connected to the state's harbors and can expedite freight away from the harbor to appropriate,*

*efficient sorting locations**. Caltrans will support freight projects that work towards achieving this goal because it reduces maintenance costs on state highways and is more environmentally friendly. Since California's ports are surrounded by major population centers, efficiently moving freight to sorting locations can also reduce impacts on communities that have been affected by goods movement.** Goods movement, whether by train or truck, can impact the health of communities through accidents, constriction of neighborhood circulation, and pollution from idling diesel engines. In places where rail is the best mode for transporting freight away from harbors, Caltrans will support projects that minimize these community impacts." (2024 State Rail Plan, p. 40 [emphasis added].)*

By removing trucks from roads and highways and siting the facility far from major population centers, BIG advances these goals. The 2024 State Rail Plan then cites to BIG directly stating that it is the:

"type[] of project [that requires] strong partnerships between funding and regulatory agencies, local governments, and private railroads. This type of partnership can meet the needs of freight and passenger rail by developing shared understanding of existing infrastructure, constraints, and future demand:

*While immediately sending trains from the Ports to far-flung locations like the Chicago area is desirable, **containers destined for smaller final destinations create a storage space problem at the ports, where not enough of those containers are available at one time to rapidly assemble a whole two-mile-long train, so the containers must sit near the dock until there are enough to assemble a train**.*

***[BIG] is the first facility of its kind to be developed by a Class I railroad. The facility will provide the space to sort the containers that arrive on ships approximately 130 miles to the west of the Ports. Instead of requiring many truck trips to move the containers to this location, the containers will be expeditiously loaded onto trains.** Organization of the containers and their contents will take place at a new facility near the location of the long-time classification yard in the Barstow-area desert." (2024 State Rail Plan, pp. 41-42 [emphasis added].)*

The 2024 State Rail Plan further states:

"The State supports targeted investments in infrastructure and operations that give freight the capacity needed to support California and the Nation's economy while facilitating efficient passenger rail operations and protecting the health of community members living near freight facilities. Projects with these shared benefits include:

Projects to shorten freight routing and reduce the need for trucking:

- ***Distribute rail freight staging and processing capacity away from the Ports and into parts of California with more space and ability to accommodate freight development.***
- ***Projects to reduce or eliminate the need for drayage moves:***
- *On-dock ship-to-rail projects*
- *Near-dock projects that allow freight to move from ship to rail within the port complex*

Projects to reduce choke-points for freight:

- ***…. Expand yard infrastructure so freight trains don't have to wait for space in the yard on a main line track***

Projects to reduce emissions:

- *Zero-emission locomotive procurements*

- *Projects that reduce choke points (see above)*
- ***Projects that shorten freight routing and reduce the need for trucking*** *(see above)."* (2024 State Rail Plan, p. 47 [emphasis added].)

Finally, the 2024 State Rail Plan states,

> *"[t]he State is pursuing funding and overseeing pathing studies to improve Southern California's multimodal freight network and support a more fluid supply chain beginning at the seaports and extending into the interior of the nation, with an emphasis on optimizing freight rail for inland import/export movements." (2024 State Rail Plan, p. 46.)*

Thus, BIG is specifically identified in the State Rail Plan as advancing this critical CAPTI goal.

3.1.2 Invest in Networks of Safe and Accessible Bicycle and Pedestrian Infrastructure

The CAPTI describes this goal as

> *"[i]nvesting in networks of safe and accessible bicycle and pedestrian infrastructure, particularly by closing gaps on portions of the State Highway System that intersect local active transportation and transit networks or serve as small town or rural main streets, with a focus on investments in low-income and disadvantaged communities throughout the state." (CAPTI, p. 12.)*

Consistent with the policies of the 2024 State Rail Plan, BIG would be built in a primarily low population and undeveloped area, away from major population centers. Additionally, BIG will include new pedestrian/bicycle improvements that serve low-income and DACs in Barstow. Consistent with the City's Circulation Element, BIG proposes to:

- Dedicate right-of-way and install approximately 2 miles (1 mile in each direction) of striped Class II bike lanes and sidewalk improvements along Main Street between Country Club Drive (BIG's driveway) and Lenwood Road, consistent with the City's proposed General Plan and BIG's Specific Plan. This is an improvement over existing conditions (no bike lane is currently installed on this segment of road).
- Dedicate right-of-way along approximately 0.4 mile of Lenwood Road to accommodate future striped Class II bike on Lenwood Rd, along the project frontage, as anticipated by the proposed General Plan.
  - The City has requested that these bike lanes not be implemented at this time because the City has not obtained other required rights-of-way along all of Lenwood Road (BIG would only own intermittent right-of-way fronting Lenwood Road between Hinkley Road/Jasper Road and proposed B Street).
- Construct a new secondary arterial, Hinkley Road, through the project site, which will include approximately 5 miles of multi-use path (16-foot wide, stabilized decomposed granite) and a connection to the new bridge across the Mojave River, which will incorporate pedestrian access. This is consistent with the City's proposed General Plan and BIG's Specific Plan, benefiting both bicycle and pedestrian users.

BIG's proposed bicycle and pedestrian improvements align with the proposed General Plan and other local and regional plans. Refer to Table 25: City and County Bicycle Facilities Map Conflict Evaluation and the text that follows the table of DEIR Appendix 5.15 BIG-1 (page 99) for additional discussion.

The proposed General Plan does not propose the extension of bicycle facilities on Main Street west of Country Club Drive due to limited population west of Country Club Drive.

Based on numerous discussions with the City during the development of the General Plan and BIG Specific Plan, the City provided the following context as it relates to bike lane improvements within the City and in the vicinity of the BIG project: Class II bike lanes are preferred by the City in the rural parts of the City. The City and County would prefer to maintain an emergency shoulder along Main Street for emergency pull-offs and safety, eliminating the potential to add a vertical separation element between the vehicle travel lane and bike lane. Further, due to the sandy desert conditions and lack of street sweeping, it is preferred not to include a vertical separation element between the vehicle travel lane and bike lane so people biking may more readily avoid potential obstacles that may blow into a potential separation element within the bike lane. The City also does not have funding or staffing resources to maintain the additional pavement and features associated with Class I or Class IV bike lanes in the desert environment through more rural parts of the City (such as along the full extent of BIG's frontage). Finally, the City has noted that there is a limited on-road/commuter bicycle community in the desert, with a greater focus on offroad, recreational biking.

In summary, BIG proposes to construct, or dedicate right-of-way for future construction by others, the planned bicycle and pedestrian facilities that are identified in the relevant adopted policies, plans, ordinances, and programs along BIG's Specific Plan area frontage.

Finally, BIG would remove the existing at-grade Hinkley Road rail crossing. At-grade rail crossings are documented to increase vehicular, bicycle, and pedestrian safety concerns, thus, by removing this at-grade crossing, BIG improves vehicular, bicycle, and pedestrian safety. These roadway improvements would improve safety for all road users. Thus, BIG is consistent with and does not conflict with this goal.

3.1.3 Include Investments in Light-, Medium-, and Heavy-Duty Zero-Emission Vehicle Infrastructure

The CAPTI also describes this goal as:

> *"[i]ncluding investments in light, medium, and heavy-duty zero-emission vehicle (ZEV) infrastructure as part of larger transportation projects. Support the innovation in and development of the ZEV market and help ensure ZEVs are accessible to all, particularly to those in more rural or remote communities." (CAPTI, p. 13.)*

BIG will provide ZEV infrastructure to employees, and the warehouses would include truck charging infrastructure in compliance with CalGREEN. Additionally, as part of the project, BIG would use zero-emission rail-mounted gantry cranes, forklifts, top picks/side loaders, and hostlers. BIG's dedicated fleet of electric hostlers (which would serve the intermodal yard and also dray containers to the transload warehouse center) would have electric charging onsite. In addition, BIG provides additional conduit capacity to accommodate additional future electrical infrastructure, which could facilitate charging of zero-emission heavy-duty trucks, should the technology and power supply become available. As the overall purpose of BIG is to facilitate the mode shift from over-the-road trucking to the rail system, BIG supports the intent of this goal.

3.1.4 Develop a Zero-Emission Freight Transportation System

The CAPTI also describes this goal as

> *"[d]eveloping a zero-emission freight transportation system that avoids and mitigates environmental justice impacts, reduces criteria and toxic air pollutants, improves freight's economic competitiveness and efficiency, and integrates multimodal design and planning into infrastructure development on freight corridors." (CAPTI, p. 13.)*

The CAPTI also provides "*a few examples of the various sustainable transportation solutions that CAPTI supports that could be applied in rural settings*" that include:

> *"Improving freight rail lines in major goods movement corridors to support mode shift from truck to zero-emission rail, increase passenger rail service, and **promote zero emission locomotives**." (CAPTI 1.0 (2021), p. 20. [emphasis added].)*

BIG advances this goal by facilitating the transition of goods movement to greater utilization of near-zero and zero-emission technology and cleaner fuels. First, BIG advances this goal by supporting a mode shift from truck to near-zero-emission rail on the freight corridor that minimizes environmental justice impacts of criteria and toxic air pollutants to DACs along the corridor. Specifically, BIG includes a dedicated fleet of Tier 4 linehaul locomotives to move containers between the Ports and the BIG IMF. Further, starting in BIG opening year 2028, BNSF would increase the renewable diesel composition within the Ports' existing fueling site from 1 percent to 10 percent, a 900 percent increase in renewable diesel. This would improve the emissions of all BNSF trains fueling at the Ports, including those BNSF trains that would not stop at BIG. Together, these features will result in a net decrease of diesel particulate matter on the corridor between the Ports and BIG. Additionally, as detailed in **Attachment 5: Memorandum of Understanding between BNSF and Mojave Desert Air Quality Management District** to this Application, BNSF is committing to a pilot project for five hybrid linehaul locomotives. A summary of that project is provided below.

The MDAQMD and BNSF will enter into a Memorandum of Understanding (MOU) reflecting a shared commitment to advancing zero-emission and low-emission freight rail technologies at the proposed BIG project in Barstow, California. This agreement demonstrates a collaborative approach to improving regional air quality, supporting California's climate objectives, and accelerating innovation in freight rail operations.

3.1.4.1 Pilot Project: Demonstration of Advanced Hybrid Locomotive Technology

Consistent with the MOU, BNSF has committed to zero- and near-zero emission freight rail through a phased pilot project focused on real-world demonstration and evaluation.

As part of this pilot, BNSF will test **five hybrid line-haul locomotives** that consume less fuel and generate lower emissions than traditional diesel locomotives during mainline operations. These locomotives also have the ability to operate in **zero-emissions mode during certain yard and terminal activities at the Barstow International Gateway**, delivering localized air-quality benefits for nearby communities, including DACs.

Procurement and locomotive manufacturing activities for the pilot project are expected to occur during Years 2 through 3 following all federal, state, and local approvals for BIG and the conclusion of legal challenge or appeal, reflecting negotiations and locomotive manufacturing timelines. **The hybrid locomotive pilot is anticipated to be fully constructed and operational by approximately Year 4 of BIG operations.** BNSF will purchase five Tier 4 hybrid locomotives, testing two in California (operating between the Ports and the BIG IMF) and three across our rail network in order to evaluate their feasibility for implementation at BIG and in various other topographic and climate conditions outside of California.

Six months after the successful completion of the ten year demonstration project, BNSF will submit a report to the MDAQMD, South Coast Air Quality Management District and the California Air Resources Board evaluating the feasibility of **replacing the locomotive fleet operating between the Ports of Los Angeles and Long Beach and the BIG IMF with Tier 4 hybrid locomotives**, at a potential rate of **up to five locomotives per year**, subject to safety, performance, regulatory approval, and funding considerations.

Implementation of these commitments will be carried out through and enforceable under BNSF's development agreement with the City of Barstow.

3.1.4.2 Battery-Electric Switcher Technology and ABL Coordination

In addition to the hybrid locomotive pilot, BNSF is a partner in the **Alameda Beltline Railway (ABL)**, which is pursuing opportunities to test battery-electric switcher locomotives as part of its proposal to be selected as the San Pedro Bay Ports rail switcher. Through this partnership, BNSF will take an active advisory role in the testing and evaluation of battery-electric switcher technology at the Ports of Los Angeles and Long Beach.

3.1.4.3 Evaluation, Safety, and Transparency

All new locomotive technologies evaluated under the pilot project will be subject to a rigorous, multi-year evaluation process that prioritizes safety, operational reliability, regulatory approval, and economic feasibility. Safety remains BNSF's highest priority, and any technology that presents unacceptable risks to employees, the public, or the rail network would be removed from service.

BNSF will provide regular reporting to the MDAQMD, South Coast Air Quality Management District and the California Air Resources Board to ensure transparency, accountability, and informed decision-making throughout the demonstration process.

3.1.4.4 A Phased and Responsible Path Forward

In recognition of the commitments outlined in the MOU, the MDAQMD will provide a letter of concurrence acknowledging the project's alignment with clean transportation and emissions-reduction goals. The MOU does not obligate any agency to approve future permits or entitlements and does not supersede applicable regulatory requirements.

Together, these commitments represent a balanced, phased approach to advancing cleaner freight rail in the Mojave Desert—one that supports economic growth while meaningfully contributing to California's transition toward a lower-emission transportation future.

3.1.4.5 Zero- and Near-Zero Emissions Design and On-Site Equipment

Additionally, BIG has been designed to significantly reduce emissions at the project footprint by using zero emission and zero emissions equipement and design features, including

- Electric Rail-mounted gantry cranes,
- Hybrid rubber-tired gantry cranes,
- Electric Forklifts, top picks/side loaders,
- Electric Hostlers, and
- Onsite, closed-loop container movement that reduces heavy-duty truck traffic on public roadways.

In order to incorporate the zero and near-zero emissions equipment, the project design has been optimized to reflect existing electrical infrastructure constraints. BIG has been allocated approximately 66 megawatts of peak electricity by Southern California Edison, supplemented by an on-site solar farm, to support electric terminal equipment, battery electric vehicles, building systems, and employee electric vehicle charging. This electrical demand is roughly 10 times that of a typical BNSF railyard facility representing a huge commitment to the use of zero-emission technology, to the maximum extent feasible.

The evaluation of additional zero emission technologies has taken into account the extended timeframes required and uncertainty associated with obtaining transmission level electrical service.

Moreover, BNSF will commit to the voluntary replacement of all of its 15 existing Tier 0/0+/1+ switcher locomotives with six new Tier 4 switchers at the unrelated existing Barstow Classification Yard. These features will minimize environmental justice impacts of diesel emissions, criteria and toxic air pollutants to DACs in and around the City.

3.1.5 Grant Funding

In further support of the State's goal to develop a zero-emission freight transportation system, BNSF has secured and implemented grant funding for zero-emission freight equipment and enabling infrastructure that is directly aligned with CAPTI objectives. Notably, BNSF received funding under California's Zero-Emission and Near Zero-Emission Freight Facilities (ZANZEFF) program to support the deployment of zero-emission and near-zero-emission freight technologies at rail facilities serving major goods movement corridors. Of the $45 million grant, BNSF and its Partners contributed $22.6 million. Under the program, BNSF participated in a multi-equipment demonstration that included a battery-electric locomotive as well as zero- and near-zero-emission cargo-handling equipment such as rubber-tired gantry cranes, hostlers, and side loaders. The demonstration evaluated technical integration, charging requirements, and basic operational performance of zero-emission technologies within an active intermodal rail environment to complete a near-zero-emission goods movement pathway. These investments are intended to reduce diesel particulate matter, criteria pollutants, and GHG emissions from rail yard operations while advancing the commercial readiness of zero-emission freight equipment.

Separately, BNSF has implemented zero-emission hostler conversion projects at its South Seattle facility, replacing conventional diesel-powered hostlers with battery-electric alternatives through public funding partnerships. These projects demonstrate BNSF's active transition away from diesel-powered yard equipment and provide operational experience with zero-emission technologies in active freight rail environments. The emissions reductions achieved through these conversions directly support CAPTI's emphasis on mitigating environmental justice impacts in communities adjacent to freight infrastructure.

In addition, BNSF has installed charging equipment and supporting electrical infrastructure at its San Bernardino and Hobart facilities to enable and service battery-electric hostlers operated by third-party partners. These infrastructure investments are a critical component of enabling zero-emission freight operations, ensuring that electric cargo-handling equipment can be reliably deployed and integrated into high-throughput intermodal facilities. By investing in shared charging and electrical infrastructure, BNSF is supporting broader adoption of zero-emission freight equipment consistent with CAPTI's call for multimodal design and planning on freight corridors.

3.1.5.1 Conclusion

Together, these recently awarded and implemented grant projects demonstrate BNSF's ongoing commitment to developing a zero-emission freight transportation system and provide a proven foundation for the zero- and near-zero-emission features incorporated into BIG. As such, BIG represents a logical and scalable extension of existing, publicly supported investments in zero-emission freight infrastructure and equipment, fully consistent with PRC Section 21189.81 and CAPTI policy goals.

Finally, as described above, BIG is one of the few projects described heavily in the Freight Network Strategy chapter of the just-released 2024 State Rail Plan, and BIG is an important future component of the State's freight network and is consistent with State policy. For all these reasons, BIG advances this goal.

3.1.6 Reduce Public Health and Economic Harms and Maximize Community Benefits

The CAPTI states that

> *"[s]trengthening our commitment to equity by reducing public health and economic harms and maximizing community benefits to disproportionately impacted disadvantaged communities, including low income communities, in urbanized and rural regions, and involve these communities early in decision-making." (CAPTI, p. 13.)*

3.1.6.1 Economic Benefits

BIG will provide significant, long-term economic benefits to disproportionately impacted DACs. BNSF has developed a strong partnership with the City, which includes the City's consideration of a General Plan update to authorize BIG. BNSF has negotiated labor union contracts for BIG with Western States Regional Council of Carpenters, Southern California District Council of Laborers, UA Plumbers and Pipefitters Union, Local 364, International Brotherhood of Electrical Workers Union, Local 477, Sheet Metal Workers Union, Local 105 and District Council of Ironworkers of the State of California and Vicinity. In addition, BNSF has committed that all components of the BIG Project constructed by BNSF will comply with the applicable provisions under Section 1720 of the Labor Code and the Federal Railway Labor Act; see **Attachment 4: BNSF's Commitment to Labor Code Compliance**.

3.1.6.2 Community Engagement and Other Public Benefits

BNSF has demonstrated a strong commitment to community engagement throughout this process. BNSF has also engaged in **extensive community stakeholder meetings and involvement** since the project was announced at the 2022 City of Barstow 75th anniversary celebration, which drew more than 1,500 attendees. Since then, BNSF has hosted more than a dozen community workshops with local residents and community leaders across healthcare, real estate, education, small business, youth sports, seniors/veterans, students, and the military to gather input on the project. Comments included interest in educational and training opportunities for students (such as those currently supported by BNSF at the Barstow Community College) and support for public safety and infrastructure improvements; a summary of comments can be found here: https://barstowchamber.com/big-vision-community-engagement-meetings/. In addition, BNSF has participated in five large public meetings in partnership with the City of Barstow that drew nearly 2,000 attendees in total.

The CEQA process has provided additional opportunities for public engagement. During the Draft EIR comment period, the project received approximately 2,000 comment letters. Of these comment letters, more than 1,500 were support letters. Of the remaining letters, the majority received were from the Helendale/Silver Lakes community, located 11 miles west of Barstow, requesting a grade separation at the existing Vista Road at-grade crossing; a grade separation at this location is a separate and unrelated project being evaluated by the County of San Bernardino. Project related comments raised include air quality, biological impacts, lighting, and noise. BNSF is currently working with the City to review and respond to these comments as part of the final EIR.

BNSF incorporated suggestions received from the community into the development of the project, including significant public safety and infrastructure improvements detailed below. As noted, BNSF and the City are comprehensively responding to each comment received by the community during the Draft EIR comment period. While there is not a separate CBA, BNSF has committed to significant community benefits in response to feedback at the workshops and meetings noted above. A list of the community benefits is provided below. BNSF's commitment to these community benefits are outlined in the (1) Development Agreement (DA) with the City (for benefits within the City or City service areas) (2) Tentative

Map (TM) Conditions (3) Mitigation Monitoring and Reporting Program (MMRP) (4) Cooperative Agreement with Mojave Desert Air Quality District (MDAQMD) and the (5) Memorandum of Understanding (MOU) with MDAQMD:

- Tier 4 Linehaul Locomotives from Ports to BIG's IMF (DA)
- Onsite BIG Tier 4 Switcher Locomotives (DA)
- Use of 10% Renewable Diesel fueling, which will be incorporated in all trains (not just BIG trains), at the Port complex and provides a reduction in pollutants in all communities along the rail mainline from Ports to Barstow (DA)
- Electric Cargo – Handling Equipment (DA)
- Electric Appliances (DA)
- Onsite Solar Generation (DA)
- Safe Haven Canopies (DA)
- Traffic Control Plan (DA)
- Widening Lenwood Channel (TM)
- New Main Street Bridge (TM)
- 33kV electrical extension (TM)
- New Hinkley Road Bridge over the Mojave River and new Hinkley Road (TM)
- Signalized intersections and roadway widening at Main Street/Country Club Road intersection and Hinkley/Lenwood/Jasper Road intersections (TM)
- Water Line extension to the western portion of the City (TM)
- New Sewer lines and Sewer Infrastructure (TM and DA)
- Additional offsite traffic improvements (MMRP)
- Replacement of Tier 0/1 switchers with Tier 4 switchers at the unrelated existing BNSF facility, substantially reducing existing emissions in Barstow (Cooperative Agreement)
- Pilot Project for Tier 4 Hybrid Linehaul locomotives (MOU)
- Purchase of a Quintuple combination pumper fire truck to support City provided fire services throughout the City (DA)
- Purchase of maintenance equipment (i.e., skid steer) to facilitate maintenance of City owned drainage facilities to help prevent flooding (DA)

Additional community benefits that are anticipated to result from BIG:

- Specifically with regard to the Barstow Unified School District (BUSD), BIG is estimated to provide millions in annual tax revenues, directly benefiting disadvantaged communities, since 74% of BUSD are classified as economically disadvantaged (higher than the California and national averages). Moreover, 12.5% of BUSD students experience homelessness during the school year, triple the California rate and quadruple the national rate. In fact, Barstow Unified currently receives some of the weakest ratings statewide in English language arts (ELA), mathematics and

chronic absenteeism. With this influx of funding, BUSD will be able to invest in proven, evidence-based interventions to improve reading and mathematics.

- Barstow Community College will also receive millions in estimated annual tax revenue, helping to fulfill its goal of assisting in training students for jobs in the High Desert (including at BIG). With existing support from BNSF, Barstow Community College is already preparing local students through specialized welding training, modern technology programs (including an FAA-certified drone program), mechanical and electrical skills and industrial electrical maintenance. Tax revenue generated by BIG will supplement these existing programs by adding new programs aligned with industry standards to meet specific employer needs.
- Tax revenue generated by BIG will support additional staffing for firefighters beyond what is needed to service BIG, providing a citywide benefit of additional firefighters.
- Tax revenue generated by BIG will support additional staffing for police beyond what is needed to service BIG, providing a citywide benefit of additional police officers.

BNSF commits to continuing community involvement in the public process that, as the CAPTI states, "*elevates community voices" and "create[s] pathways to give communities most impacted by transportation investments a meaningful voice in transportation planning and program development*." (CAPTI 1.0 (2021), p. 26.) BNSF also has jobs-training at the nearby Barstow Community College and, with BIG, would be able to provide stable jobs to the surrounding DACs.

3.1.6.3 Public Health

Additionally, BIG would **minimize public health impacts** through the inclusion of emissions-reducing project components, including proven zero-emission technologies to address public health concerns of noise and air emissions related to the development of BIG.

First, on a regional scale, BNSF has made voluntary commitments that will significantly reduce the pollutants related to **existing** emission sources, effectively reducing cancer risks from those sources. Reductions in **existing** emissions sources include the following:

- BNSF has voluntarily agreed to retire all existing Tier 0/0+/1+ switcher locomotives at its existing Barstow Classification Yard and replace them with six newly-purchased Tier 4 switcher locomotives. These locomotives would be newly-purchased Tier 4 locomotives, not pulled from BNSF's existing national fleet. These changes at the Barstow Yard will bring immediate and measurable air quality benefits to the community.
- Starting in BIG opening year 2028, BNSF would increase the renewable diesel composition within the Ports' existing fueling site from 1 percent to 10 percent, a 900 percent increase in renewable diesel. This would reduce pollutants from all BNSF trains fueling at the Ports, including those BNSF trains that would not stop at BIG, from the Ports along the rail mainline to BIG, reducing emissions and benefiting all of the communities along that route.

In addition to the reductions to existing emissions sources, BIG's on-site implementation of advanced and zero-emission technologies include the following important commitments that address air quality and noise concerns:

- A dedicated fleet of newly purchased Tier 4 (cleanest-available) linehaul locomotives to operate between the ports and BIG, as well as newly purchased Tier 4 switcher locomotives to operate at BIG.

- BNSF also will voluntarily replace its existing Tier 0/0+/1+ switcher locomotives at its unrelated existing Barstow Railyard and replace with Tier 4 switchers, as described above.
- BIG would also use zero-emission rail-mounted gantry cranes, forklifts, top picks/side loaders, and hostlers. Containers would be transported between the rail yard and transload warehouse center using only electric hostlers, rather than heavy-duty trucks, and only via an onsite/private closed loop roadway to minimize local roadway traffic. Utilizing zero-emission operational equipment not only eliminates emissions, but it also provides a substantial reduction in noise generation as compared to the equivalent engine noise generated by diesel equipment.
- BIG will produce approximately 21-MWh from an on-site solar farm and approximately 6.4 MWh from rooftop solar on the transload warehouse center buildings. The solar farm would include a new substation at the northwest corner of the solar farm to route power from the solar farm to the BIG rail yard. Additionally, BIG would install on-site rooftop solar generation beyond Title 24 compliance, or approximately 17 megawatts direct current (MWdc) for the total 9 million-square-foot warehouse building area. Beyond what was analyzed in the DEIR, BNSF will commit to installing solar panels on the solar-ready canopies in the Intermodal employee parking lot, further increasing our commitment to solar beyond Title 24 requirements.
- BNSF has included all applicable and feasible measures listed in the FTA manual for BIG railyard noise and all noise measures listed in the California Attorney General's guidance on warehouse projects.
- The construction contractor will also prepare a detailed Traffic Control Plan (TCP) in close consultation with the City to minimize the construction-related impacts on adjoining and nearby roadway, bicycle, and pedestrian facilities.

Finally, BNSF is committing to a pilot project for five hybrid linehaul locomotives, reflecting a shared commitment to advancing zero-emission and low-emission freight rail technologies at BIG. In addition to the hybrid locomotive pilot, BNSF is a partner in the Alameda Beltline Railway (ABL), which is pursuing opportunities to test battery-electric switcher locomotives as part of its proposal to be selected as the San Pedro Bay Ports rail switcher. Through this partnership, BNSF will take an active advisory role in the testing and evaluation of battery-electric switcher technology at the Ports of Los Angeles and Long Beach. These pilot projects demonstrate a collaborative approach to improving regional air quality, supporting California's climate objectives, and accelerating innovation in freight rail operations. They are a significant contribution to the important goal of developing clean technology that could be commercially available, at scale, in the future, with the potential, if successful, to deliver additional future benefits in the corridor and in Barstow.

All these features will result in a significant reduction of emissions of criteria pollutants and toxic air contaminants associated with the operations of BIG and reduce air quality impacts to DACs. Further, BIG will include all feasible mitigation that further helps to minimize impacts to DACs per SB 149 requirements.

CEQA requires the adoption of a Mitigation, Monitoring and Reporting Program (MMRP) at the time of project approval, which includes specific mitigation to reduce emissions and pollutants. The MMRP will be enforced by the City as a condition of approval. See **Attachment 3** for a summary of the MMRP. A complete MMRP will be included as part of the FEIR and adopted by the City as part of the project approvals.

Overall, BIG advances this goal.

3.1.7 Make Safety Improvements to Reduce Fatalities and Severe Injuries of all Users Towards Zero

The CAPTI describes this criterion as

> *"[m]aking safety improvements to reduce fatalities and severe injuries of all users towards zero on our roadways, railways and transit systems by focusing on context appropriate speeds, prioritizing vulnerable user safety to support mode shift, designing roadways to accommodate for potential human error and injury tolerances, and ultimately implementing a safe systems approach." (CAPTI, p. 13)*

3.1.7.1 Proposed Improvements

BIG furthers this goal with public safety improvements, including the following:

- Elimination of the existing at-grade rail crossing at Hinkley Road (in furtherance of California Public Utilities Commission [CPUC]/Federal Railroad Administration [FRA] goals to remove at-grade rail crossings, given at-grade crossings are documented to increase vehicular, bicycle, and pedestrian safety concerns, thus, by removing this at-grade crossing, BIG improves safety to all users);
- Replacing the Main Street/Lenwood Channel low-water crossing with a bridge structure;
- Floodway improvements to Lenwood Channel;
- Floodway improvements to the Hinkley Road/Mojave River crossing consisting of a bridge replacement; and
- Realigning Sweeten Lane to remove a currently acute turning angle onto Main Street, reducing safety risks.

The existing Main Street roadway crossing at the Lenwood Channel has resulted in fatalities in recent years due to flooding. BIG's improvements at the Lenwood Channel would dramatically reduce flooding risk and improve access to and from DACs.

Additionally, BIG also will implement several improvements identified in the San Bernardino County Local Road Safety plan (LRSP):

- As part of BIG's frontage improvements, it would repaint the north edge-line and centerline with 6" retroreflective lane markings and install rumble strips and pavement reflectors on the north edge-line and centerline.
- On Main Street between Castle Court and Country Club Drive, BIG would also repaint the south edge-line with 6" retroreflective lane markings and install rumble strips and pavement reflectors. The proposed rumble strips and improved lane markings are expected to reduce crash rates. While crash rates are dependent on many factors, the LRSP notes that rumble strips have an average crash reduction factor of 15%-20%, and lane marking improvements have an average crash reduction factor of 25%.
- Main Street between the Mojave River Bridge and Amarylis Avenue is noted as a collision hot spot in the LRSP. As noted in Transportation Modification (TM) 11, BIG proposes to implement the relevant engineering countermeasures recommended in the LRSP along the BIG Specific Plan area's Main Street frontage to improve safety:
  - TM-11: Main Street between western BIG site limit and Country Club Drive: As part of BIG's frontage improvements, repaint the north edge-line and centerline with 6" retroreflective

lane markings and install rumble strips and pavement reflectors on the north edge-line and centerline. On Main Street between Castle Court and Country Club Drive, also repaint the south edge-line with 6" retroreflective lane markings and install rumble strips and pavement reflectors.

Finally, in general, the removal of heavy-duty trucks from local roadways and highways would contribute to improving the overall safety of transportation networks. In total, BIG's circulation and hydrology improvements would reduce safety risks from accidents and flooding.

3.1.7.2 Monitoring

BNSF would monitor and track safety before and after the construction of the facility and elimination of the at-grade rail crossing:

- BNSF reports to the FRA all at-grade rail crossing incidents. The FRA compiles the data provided by BNSF and other sources and maintains the Accident Prediction System (APS), which estimates the annual accidents at an at-grade crossing based on the previous five years of accident data and the average daily traffic on the at-grade crossing. The Hinkley Road at-grade crossing had two accidents involving vehicles within the past five years, and the FRA APS estimates that the crossing will have 0.21 accidents each year, or, over the 20-year analysis horizon, a total of four accidents. Thus, BIG would prevent an estimated four accidents with this removal of this at-grade crossing.
- Incident data on California roadways is tracked by several agencies such as California Highway Patrol (through the Statewide Integrated Traffic Records System, SWITRS https://www.chp.ca.gov/programs-services/services-information/switrs-statewide-integrated-traffic-records-system/) and the California Department of Transportation (Caltrans, through the Strategic Highway Safety Plan, SHSP https://shsp.dot.ca.gov/). As a result, BNSF does not track safety data on California roadways separately.

3.1.8 Assess and Integrate Assessments of Physical Climate Risk

The CAPTI Investment Framework includes Guiding Principles for the State's transportation infrastructure investments, including one that states *"[a]ssessing physical climate risk as standard practice for transportation infrastructure projects to enable informed decision-making, especially in communities that are most vulnerable to climate-related health and safety risks."* (CAPTI, p. 13.) Further, the Governor's Office of Land Use and Climate Innovation's (LCI) SB 149's guidance asks, "*Does the project address emerging climate vulnerabilities and help adapt to a more resilient transportation system? If so, how?"* (LCI, p. 9)

BNSF prepared a Climate Resiliency Memorandum (**Attachment 6**) that documents the potential impacts from climate change and how BIG's design considers these impacts for climate resiliency. In summary, the memorandum identifies temperature changes (warming), precipitation changes, and wildfire as the primary climate-related effects and hazards that could potentially be applicable to BIG. The memorandum identifies various design, construction and operational measures that can be implemented to minimize and avoid potential risks. BIG will incorporate nearly all of these measures, including, but not limited to:

- Installing a solar facility and emergency generators to provide power in the event of a grid power outage.
- Designing and locating infrastructure to avoid future flood potential.

- Constructing stormwater infiltration basins throughout the BIG footprint and drainage outlets to the Mojave River that would be designed for 100-year flood events. In total, BIG proposes 14 detention ponds throughout the BIG footprint providing 165 acre-feet of storage volume, which would accommodate the 100-year flood conditions.
- Replacement and widening of the Hinkley Bridge over the Mojave River, which helps reduce velocity of waters as they flow northeast toward Barstow, reducing potential impacts from flooding at the bridge crossing.
- Construction of a new bridge at Main Street/Lenwood channel to facilitate 100-year flood conditions, in addition to widening of the Lenwood channel.
- BNSF maintains fire suppression equipment on-site which would help minimize the effects of a wildfire.
- Adjusting the timing of track installation and maintenance projects to address the potential for "sun kinks," i.e., the warping, expansion, and contraction of tracks. By servicing tracks in temperate months, tracks can be more resistant to sun kinks than when installed in the hottest and coldest months. In addition, BNSF's continuously welded rail procedures will further mitigate the risk for sun kinks.
- Incorporating state-of-the-art solutions to reduce the thermal effects of pavement by predominantly using "white" concrete pavement rather than "black" asphalt pavement, which reduces the heat island effect and avoids increased rutting potential during periods of high temperatures. Rigid concrete pavement also lasts longer and requires less future maintenance.
- Working with federal and State forestry services on prevention programs that clear rights-of-way grasses, brush, and trees to reduce the risk of fire damage. BNSF has a robust vegetation control program.
- RTG crane maintenance facilities include canopies, which are beneficial to the environment and worker safety during high heat.

3.1.9 Promote Projects That do not Significantly Increase Passenger Vehicle Travel

The CAPTI describes this goal as

> *"[p]romoting projects that do not significantly increase passenger vehicle travel, particularly in congested urbanized settings where other mobility options can be provided and where projects are shown to induce significant auto travel. These projects should generally aim to reduce VMT and not induce significant VMT growth." (CAPTI, p. 13.)*

3.1.9.1 VMT Methodology

State guidance regarding VMT modeling directs practitioners to use the lead agency's "choice of methodology to analyze [VMT] impacts" (see the State of California Governor's Office of Land Use and Climate Innovation (formerly the Office of Planning and Research) Technical Advisory on Evaluating Transportation Impacts under CEQA, page 3 at https://lci.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf).

VMT for BIG was calculated using the SBTAM+, the latest version of the San Bernardino Transportation Analysis Model, which is the preferred model for both local and regional agencies (see San Bernardino County Transportation Impact Study Guidelines, https://www.sbcounty.gov/uploads/DPW/docs/Traffic-Study-Guidelines.pdf and City of Barstow Resolution No. 5219-2025).

The State of California does not explicitly require VMT analysis for heavy-duty trucks (referred to as truck miles travelled, or TMT) pursuant to guidance from the Technical Advisory on Evaluating Transportation Impacts in CEQA (see page 3 at https://lci.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf). Therefore, there is no specific State model to compare with the BIG TMT analysis.

3.1.9.2 Results

BIG would provide jobs closer to home for people who live in Barstow and other High Desert residents, as reflected in BIG's VMT analysis. BIG's Home-Based Work VMT per Worker is forecast to be less than the citywide average Home-Based Work VMT per Worker under Horizon Year 2048 conditions. Therefore, BIG would have a less than significant VMT impact according to the City's Project Threshold. Additionally, the citywide total daily VMT per service population[15] is forecast to be lower with BIG than the No BIG baseline under the Horizon Year 2048 conditions due to improving the job/housing balance within the high desert. Therefore, BIG would have a less than significant cumulative VMT impact according to the City's Cumulative Threshold.

Furthermore, BIG would decrease heavy TMT nationally by hundreds of millions of miles per year. Detailed BIG TMT calculations are included in the DEIR. BIG is anticipated to eliminate approximately 205 million TMT in 2028, 269 million TMT in 2033, and 312 million TMT in 2048. Note that these are net TMT reductions. See **Attachment 2**.

BIG therefore advances this goal by reducing both passenger VMT and TMT and improving congestion in heavily urbanized areas near the Ports and on highway systems throughout the region.

3.1.10 Promote Compact Infill Development While Protecting Residents and Businesses from Displacement

The CAPTI describes this goal as:

> *"[p]romoting compact infill development while protecting residents and businesses from displacement by funding transportation projects that support housing for low-income residents near job centers, provide walkable communities, and address affordability to reduce the housing-transportation cost burden and auto trips." (CAPTI, p. 17.)*

Further, LCI's SB 149 Guidance asks:

> *"Does the project promote the development of infill housing within existing communities? How does the project address direct and indirect displacement risk of existing residents and businesses? Does the project in any way impact or threaten the conversion of natural and working lands? Please provide any available documentation to support claims." (LCI, p. 9)*

3.1.10.1 Displacement and Relocation

Although BIG is sited primarily on undeveloped land, BIG would result in the displacement of people and housing through the acquisition and subsequent removal of 108 dwelling units (DU) (approximately 325 persons) and approximately 93,724 square feet (SF) of non-residential land uses. Only 22 DUs remain for removal. Of the 22 units, 11 are vacant and in various stages of the demolition process.

Given the magnitude of BIG, the number of displaced residents is relatively small, and the majority of BIG is planned on vacant land. With current vacancies within the City of approximately 8.7 percent (835 DU),

[15] VMT per service population is a broader term covers several metrics, including Home-Based Work VMT per Worker.

BIG is not anticipated to require the development of replacement housing elsewhere, and displaced persons are provided with relocation assistance.

BNSF pursued voluntary purchase and sale agreements with property owners, with valuations based on Member Appraisal Institute (MAI) appraisals. BNSF paid above fair market value for all acquired properties. Based on the above-market compensation to property owners, and the vacancy rates within the City, displaced residents would be able to purchase or rent an in-kind property.

The acquisitions process typically took between 6-12 months with BNSF also providing no-cost leasebacks to residential occupants on an as-requested basis, providing substantial time for residents to find another property to relocate. Eligible occupants are provided relocation assistance, which includes advisory assistance, moving expenses and replacement housing assistance. BNSF itself did not relocate residents but did engage a consultant to provide relocation services to many of those whose properties were acquired. Although BNSF does not have access to information on where residents relocated, BNSF understands that the majority of residents relocated elsewhere within the Barstow area, while some took the opportunity to move elsewhere. The remaining 11 have leasebacks in place that will expire between 4/1/26-5/31/26.

A limited number of properties may result in condemnation; however, BNSF would only enter condemnation if all reasonable attempts to acquire the property were unsuccessful. Preliminarily, the limited number of parcels that would undergo condemnation are vacant and undeveloped.

As of January 2026, BNSF owns approximately 98 percent of the parcels within the Project footprint.

Therefore, displaced residents were fairly compensated for their properties, given substantial time to relocate, and provided relocation assistance based on eligibility.

3.1.10.2 Promotion of Infill Development

BIG promotes infill development and takes advantage of existing infrastructure by maximizing the utilization of existing on-dock and Alameda Corridor industrial capacity. In addition, California's 2024 State Rail Plan notes that expansion of freight facilities farther away from dense disadvantaged communities, like those near the Ports, is one of the key outcomes of Caltrans-supported freight rail projects. BIG accomplishes this by locating its 4,500-acre facility on BNSF's existing mainline on the west side of Barstow, outside its population core, while still successfully lowering the transportation cost burden on the Barstow community, consistent with infill development practices.

BIG directly promotes infill development by lowering the transportation cost burden on the Barstow area community by establishing a high number of quality jobs closer to existing high desert housing (as evidenced in the VMT modeling included in Appendix 5.15 BIG-1, Section 7.1 of the DEIR), reducing the need for Barstow area residents to commute longer distances to jobs as is often the practice currently. In addition, Barstow has existing housing vacancies that will reduce the number of units needing to be constructed to support the new jobs (utilizing existing housing supply as a first choice directly promotes infill), and it has significant land within the city boundaries zoned for housing construction in the future.

For the above reasons, BIG advances this goal.

3.1.11 Protect Natural and Working Lands

The CAPTI describes this goal as

> *"[p]rotecting natural and working lands from conversion to more intensified uses and enhance biodiversity by supporting local and regional conservation planning that focuses development*

where it already exists and align transportation investments with conservation priorities to reduce transportation's impact on the natural environment." (CAPTI, p. 13.)

3.1.11.1 Important Farmland

Approximately 313 acres of agricultural land exist within the approximately 5,000-acre Project footprint. One area of agricultural land consists of small-scale livestock, crops, grazing areas with one associated single-family residential dwelling unit, and the existing BNSF right-of-way; however, none of the lands within the BIG Specific Plan area are currently under agricultural use.

To determine the potential significance of BIG's conversion of agricultural land to non-agricultural use, a draft land evaluation site assessment (LESA) was completed as outlined by the California Department of Conservation and is included as Appendix 5.2 BIG-1 of the DEIR. A LESA is a point-based rating system that evaluates the agricultural value of land and assesses the potential environmental impacts of converting agricultural land to non-agricultural lands. Based on the LESA's findings and DEIR impact analysis, BIG would not result in any significant impacts regarding the conversion of farmland to non-agricultural use. Furthermore, BIG is not located on lands earmarked for agricultural conservation. Therefore, BIG does not conflict with this goal.

3.1.11.2 Conservation of Lands

Both on-site and off-site areas are proposed for conservation as part of BIG's compensatory mitigation plan, subject to CDFW's review and approval. BIG is proposing to CDFW that over 6,600 acres of land be placed under a conservation easement. Of the over 6,600 acres, 545 acres are proposed to be on-site in the Mojave River Buffer Area. As a result, the proposed on-site conservation area is over 10% of the total project footprint. The total proposed area for conservation is approximately 133% of the entire BIG footprint. The conservation easement would be held by a CDFW recognized conservation bank. Proof of the easement would be provided to CDFW.

3.1.11.3 Wildlife Crossings

BNSF conducted a year-long wildlife movement study and the results indicated that wildlife species move within and across the proposed BIG footprint, utilizing existing corridors such as Lenwood Channel, the Hinkley Road bridge along the Mojave River, and various culverts and span bridges along the proposed southwest lead track extension.

A location near Milepost 12.5 along the southwestern lead track extension was found to be the most suitable for a wildlife movement structure. This area of the BIG project is within an "Irreplaceable and Essential Corridor," as mapped by the BIOS Terrestrial Connectivity Areas of Conservation Emphasis and was proposed based on site constraints, wildlife movement data, direct coordination and a site visit with CDFW staff, and engineering feasibility.

A proposed wildlife crossing structure design was drafted based on the results of the desktop analysis, the wildlife movement camera study, and feedback from CDFW. The wildlife crossing includes two components: a crossing beneath National Trails Highway and a separate crossing beneath the BNSF rail line. The two crossings will allow wildlife to move between the Mojave River corridor and the large expanse of natural landscape south of BIG by traveling under the BNSF rail line and under National Trails Highway. Directional fencing leading to the wildlife crossing structures was also incorporated into the project design to support the structure's ability to facilitate wildlife movement.

While the wildlife crossing at Milepost 12.5 is the only proposed dedicated structure designed for the project, it is not the only movement corridor available for wildlife within BIG. The wildlife movement study

results showed medium-sized mammals like coyote and desert kit fox utilizing the existing Lenwood Channel to move north towards the Mojave River. Both the Milepost 12.5 structure and the existing Lenwood Channel will provide pathways that facilitate wildlife movement across BIG both locally and regionally. The proposed wildlife crossing at Milepost 12.5, as well as the improvements to the Lenwood Channel, are fully funded by BNSF, without request for reimbursement through City, State or Federal funding.

Moreover, as described above, BIG advances the 2024 State Rail Plan goal of locating freight activities away from heavily urbanized areas near the Ports. Overall, BIG does not conflict with this goal.

3.2 Public Works

PRC section 21189.81(g)(2) states that transportation-related projects "are public works for the purposes of Section 1720 of the Labor Code and shall comply with the applicable provisions of Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 of the Labor Code."

The Project is a public works project for purposes of Section 1720 of the Labor Code and BNSF will comply with the applicable provisions of Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 of the Labor Code.

3.3 Cost of the Record of Proceedings

PRC Section 21189.86(k) states that project applicant must agree "to pay the costs of preparing the record of proceedings for the project concurrent with the review and consideration of the project under this division, in a form and manner specified by the lead agency for the project."

See **SB 149 Application for Certification for Barstow International Gateway Project** (**Attachment 1**).

3.4 Record of Proceedings Provisions

PRC Section 21189.86 states that for a project for which environmental review has commenced, the applicant must demonstrate "that the record of proceedings is being prepared in accordance with Section 21189.86."

The environmental review for BIG has commenced and the City of Barstow is working to ensure compliance with the provisions of Section 21189.86 as expeditiously as possible. The City issued a DEIR for the Project on November 13, 2025.

As the environmental review for the Project has commenced, the City has carefully reviewed the requirements in Senate Bill 149 and PRC Section 21189.86 and is working to gather the complete record of proceedings and make the record available on its website as quickly as possible. For any new record of proceeding materials from the effective date of the legislation, the City will comply with PRC Section 21189.86. For documents occurring prior to the date of the legislation, the City is compiling the record of proceedings and making the record available on its website as quickly as possible but no later than by the date of the Governor's certification. All references cited in the DEIR that are not protected by copyright restrictions will be available in an electronic format by contacting the City directly.

3.5 No Net Increase of Greenhouse Gas Emissions

PRC Section 21189.83(b) states that the Governor may certify a project as a transportation-related project for purposes of this chapter only if the Governor finds that project must not result in any additional net emissions of GHGs, excluding GHGs from employee transportation.

The **Barstow International Gateway – SB 149 Greenhouse Gas Emissions Memorandum** (Kimley-Horn, 2025) was prepared to demonstrate that BIG meets the "no net increase" GHG emissions reduction requirements established under Senate Bill (SB) 149. The memorandum is included as **Attachment 2** to this Application, and the findings are summarized below.

BIG construction will generate temporary construction-related GHG emissions, principally from exhaust from heavy-duty construction equipment and motor vehicle operation. As noted in Table 5.8-11 of the Draft EIR, BIG's total construction GHG emissions are estimated to be 154,212 $MTCO_2e$. As shown in Table 1 of **Attachment 2**, BIG would result in a net reduction of 95,484 $MTCO_2e$, thus, BIG's operations would entirely offset the construction GHG emissions within less than 2 years.

Additionally, operational GHG emissions would occur over the life of BIG. GHG emissions would result from direct sources such as BIG generated vehicular traffic, locomotive activity, cargo handling equipment, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, the energy required to convey water to, and wastewater from BIG, the GHG emissions associated with solid waste generated from BIG, and any fugitive refrigerants from air conditioning or refrigerators (although refrigerated warehouses would not be permitted within the BIG Specific Plan, the analysis conservatively estimated a minimal amount of refrigerated trucks to be conservative, as refrigerated containers could be transported on trains). However, BIG is designed to eliminate thousands of truck trips a day and millions of truck miles annually from the nation's roads and highways. Because of these direct GHG emissions reductions, BIG would result in a net GHG emissions reduction under the unmitigated project condition for each of the analysis years and, accordingly, meets the GHG requirements for transportation-related projects under SB 149 without mitigation. **Table 3-1: BIG Unmitigated GHG Emissions** below provides a summary of unmitigated GHG emissions for the Project in 2028, 2033 and 2048. Additionally, BIG would result in a net unmitigated reduction of 475,811 MTCO2e over a 20-year period (a reduction of approximately 23,791 MTCO2e per year).

Table 3-1: BIG Unmitigated GHG Emissions

Emissions Source	2028 $MTCO_2e$[1]	2033 $MTCO_2e$[1]	2048 $MTCO_2e$[1]
Total Unmitigated Construction and Operational Emissions (BIG and Corridor)	289,876	348,396	363,187
Existing Barstow Yard Switcher Replacement	-522	-522	-522
Net Unmitigated BIG GHG Emissions with Existing Barstow Yard Switcher Replacement	289,353	347,874	362,644
Net Reduction in GHG emissions from National Network Truck Miles Traveled Reduction	-325,664	-376,761	-372,415
Net GHG emissions from BIG (unmitigated)	-36,311	-28,887	-9,751

Notes:

1. Totals may not add up due to rounding.

BIG would include other project components that help to reduce criteria pollutant emissions and promote renewable energy and energy conservation that will have the additional benefit of further decreasing GHG emissions.

The project components are summarized in **Table 3-2: Summary of GHG Emission Reducing Design Components** below and discussed in more detail in **Attachment 3**.

Table 3-2: Summary of GHG Emission Reducing Design Components

Locality of Emissions Reductions	GHG Reducing Design Components
Offsite - Vicinity of the Project Site, Mojave Air Basin	Update Existing Barstow Railyard Switchers. Prior to operations, BNSF will voluntarily retire all existing Tier 0/0+/1+ switcher locomotives at the unrelated existing Barstow Classification Yard, and in their place add six Tier 4 switcher locomotives.
Offsite – Ports; South Coast, Mojave Air Basins; Project Site	Renewable Diesel: Increase composition from 1% to 10% within the Port's existing fueling system.
Project Site	Electric Cargo-Handling Equipment: Zero-emissions rail-mounted gantry cranes, forklifts, top picks/side loaders, and hostlers.
Project Site	Require All-Electric Development: For transload warehouses, BIG would use all-electric appliances and end uses instead of natural gas.
Solar	An approximately 140-acre, approximately 21 (MW), approximately 6.4 MW of rooftop solar generation for Title 24 compliance, and approximately 17 MW beyond Title 24 compliance.

3.6 Disadvantaged Communities

PRC Section 21189.82(c)(1) states that an applicant for certification of an infrastructure project under this chapter must avoid or minimize significant environmental impacts in any disadvantaged community.

PRC Section 21189.82(c)(2) states that if measures are required pursuant to this division to mitigate significant environmental impacts in a disadvantaged community, mitigate those impacts consistent with this division, including Section 21002. Mitigation measures required under this subdivision shall be undertaken in, and directly benefit, the affected community.

PRC Section 21189.82(c)(3) indicates that if measures are required to mitigate significant impacts in a disadvantaged community, then the applicant must enter into a binding and enforceable agreement to comply with this subdivision in its application to the Governor and to the lead agency prior to the agency's certification of the environmental impact report for the project.

This section examines the Project's potential significant environmental impacts to DACs in the vicinity of the Project footprint (Mojave Desert Air Basin [MDAB]) and along the rail corridor between the Ports and BIG (South Coast Air Basin [SCAB]). According to CalEnviroScreen, the Project footprint and the surrounding residences are in Census Tract 6071011800, which is within the 62nd percentile based CalEnivroScreen indicators (Office of Environmental Health and Hazard Assessment [OEHHA], ND). An area with a high score is one that experiences a higher pollution burden and has a greater percentage of sensitive populations (based on various socioeconomic factors) than areas with low scores.[16]

Based on OEHHA mapping, the Project footprint is adjacent to SB 535 designated DACs in Census Tracts 6071009400, 6071009500, 6071011700, and 6071011900 (OEHHA, 2022). These tracts include much of the City of Barstow to the east, Hinkley Valley to the north and Brisbane Valley to the south. California SB 535 prioritizes Assembly Bill 32 cap-and-trade program funds to projects that provide a benefit to DACs

[16] CalEPA designated lands under the control of federally recognized tribes as DACs on CalEnviroScreen in 2022. CalEnviroScreen was updated in May 2024 with additional tribal lands, based on consultations that occurred in 2023 and 2024. Source: https://calepa.ca.gov/wp-content/uploads/2022/05/Updated-Disadvantaged-Communities-Designation-DAC-May-2022-Eng.a.hp_-1.pdf; https://oehha.ca.gov/calenviroscreen/sb535.

as identified by the OEHHA mapping. SB 535 does not include project specific requirements or prohibit developments in proximity to a designated DAC community.

Furthermore, many DACs are located within the Portside communities and near warehouses within Los Angeles County and the Inland Empire, along the Corridor within the SCAB. Reducing TMT throughout the SCAB will result in positive benefits to air quality, as the Project would result in reduced criteria pollutants (nitrogen oxides [NOx], sulfur dioxide [SO_2], particulate matter [$PM]_{10}$, and $PM_{2.5}$), particularly DPM.

3.6.1 Binding Commitment to Mitigate Impacts to DACs to the Extent Feasible

The following subsections discuss BIG's impacts to air quality and noise, BIG's community engagement thus far, and BIG's benefits to DACs. Finally, this subsection describes BNSFs commitment to enter into a binding and enforceable agreement with the City regarding the BNSF Commitments listed in **Attachment 3** *(BIG's Public Benefits and BNSF Commitments to Mitigating Environmental Impacts and to Disadvantaged Communities)*, and the Mitigation Measures shown in the table in **Attachment 3**. BNSF's commitment is included as **Attachment 1**.

3.6.1.1 Air Quality

BIG Footprint (MDAB)

Dispersion modeling shows that BIG will not result in significant unavoidable localized impacts to DACs in the vicinity of the Project footprint as a result of emissions of criteria pollutants for most pollutants. Unmitigated emissions from BIG operations would only exceed the NAAQS and CAAQS for NO_2 (1-hour) in 2048. BIG operations would include Tier 4 locomotives, renewable diesel fuels, and electric cargo handling equipment. Additionally, BIG operations would be required to implement **MM BIG AQ-7** through **MM BIG AQ-14**, which require on-site sweeping of paved areas, renewable diesel for RTG cranes, truck idling limits and truck route signage, Tier 4 emergency backup generators, and truck efficiency measures such as compliance with CARB's Carl Moyer Efficiency Program and U.S. EPA's Smart Way Program, electric landscaping equipment, electric truck charging stations, and future EV charging infrastructure. Implementation of mitigation would minimize operational emissions. Operational concentrations of criteria pollutants in proximity to the BIG footprint would not exceed the NAAQS or CAAQS in any of the analysis years with implementation of **MM BIG AQ-7** through **MM BIG AQ-14**.

The DEIR also examined toxic air contaminant (TAC) emissions associated with BIG and potential impacts to sensitive receptors within proximity to the BIG footprint. Unmitigated and mitigated construction risk would exceed the 10 in one million incremental threshold at residential and worker receptors. unmitigated risk would be minimized with **MM BIG AQ-3** through **MM BIG AQ-6**, which would reduce construction exhaust emissions (i.e., DPM) by requiring Tier 4 offroad equipment, renewable diesel, newer model year on-road construction trucks, and the minimization of batch plant emissions. Construction carcinogenic risk would remain above the 10 in one million threshold despite the implementation of mitigation measures. Unmitigated operational emissions would exceed the MDAQMD threshold of 10 in one million at the Maximally Exposed Individual Resident (MEIR). These impacts would be reduced with implementation of **LOR AQ-3**, which minimizes construction idling. **MM BIG AQ-8** through **MM BIG AQ-14** would reduce health risks from BIG operations.

Rail Corridor Concentrations

In addition to the BIG footprint, localized effects of BIG-related Corridor emissions and the associated increases in criteria pollutants were modeled for a worst-case segment in the SCAB and two segments in the MDAB near BIG. The analyzed segments include one location in the SCAB (based on the source

receptor area [SRA] with the highest background concentration) and two locations in the MDAB (one west of BIG and one east of BIG).

SCAB

Dispersion modeling of off-site BIG operational emissions was performed to assess impacts to air concentrations along the rail corridor within the SCAB. The segment modeled is located within SRA 12, which has been identified as the worst-case railroad segment because it has the highest background concentrations. Unmitigated BIG operational emissions would not exceed the NAAQS and CAAQS for any modeled criteria pollutant in any analysis year.

The DEIR also examined TAC emissions associated with BIG and potential impacts to sensitive receptors within proximity to the rail corridor. BIG would not increase particulate matter pollutant emissions in the Corridor within the SCAB. DPM is the primary TAC of concern because it is the most potent TAC emitted from diesel exhaust and includes hundreds of chemicals. BIG would reduce PM_{10} (DPM) emissions in the Corridor. BIG's DPM emissions reduction occurs from using dedicated Tier 4 locomotives to transport containers between the Ports and BIG's IMF, using Tier 4 switcher locomotives, and modifying the fuel blend used within the Ports' existing fueling site to use up to ten percent renewable diesel. Therefore, BIG would improve DPM emissions in the Corridor and would result in a beneficial impact. Thus, there is no potential cancer risk, hazard index, or cancer burden impacts in the Corridor west of BIG.

MDAB

Dispersion modeling of off-site BIG operational emissions was performed to assess impacts to air concentrations along the rail corridor west of the BIG footprint to the Silver Lakes Community and east of BIG to the state line. These segments are located closest to sensitive receptors that are not adjacent to the BIG footprint (although the Silver Lakes Community itself lies outside an SB 535 designated DAC, the census tracts directly adjacent to the south and east constitute DACs). Unmitigated BIG operational emissions would not exceed the NAAQS or CAAQS in any of the analysis years within the MDAB within these Corridor study areas. Additionally, BIG would not increase particulate matter pollutant emissions in the Corridor within the MDAB.

Conclusion

BIG would reduce TMT nationally, throughout California, and specifically within both the SCAB and the MDAB, which in turn would result in reductions in criteria pollutants within numerous DACs, as in alignment with the 2024 State Rail Plan.

Furthermore, BNSF will commit to the following project components that will avoid or minimize impacts to DACs near the footprint and along the corridor, including:

- **Tier 4 Linehaul Locomotives**. Cross-dock intermodal containers (i.e., those taken by rail from the Ports to BIG) would be transported using a dedicated fleet of Tier 4 linehaul locomotives. These locomotives would be newly-purchased Tier 4 locomotives, not pulled from BNSF's existing national fleet.
- **Renewable Diesel**. Starting in BIG opening year 2028, BNSF would increase the renewable diesel composition within the Ports' existing fueling site from 1 percent to 10 percent, a 900 percent increase in renewable diesel. This would improve the emissions of all BNSF trains fueling at the Ports, including those BNSF trains that would not stop at BIG.

- **Tier 4 Switcher Locomotives**. All BIG switcher locomotives would be Tier 4. These locomotives would be newly-purchased Tier 4 locomotives, not pulled from BNSF's existing national fleet.
- **Update Existing Barstow Railyard Switchers.** Prior to operations, BNSF will voluntarily retire all existing Tier 0/0+/1+ switcher locomotives at the unrelated existing Barstow Classification Yard, and in their place add six Tier 4 switcher locomotives. These locomotives would be newly-purchased Tier 4 locomotives, not pulled from BNSF's existing national fleet.
- **Electric Cargo-Handling Equipment**. BIG would use zero-emission rail-mounted gantry cranes, forklifts, top picks/side loaders, and hostlers. Containers would be transported between the rail yard and transload warehouse center using only electric hostlers, rather than heavy-duty trucks, and only via an onsite/private closed loop roadway to minimize local roadway traffic.

Further, as provided in **Attachment 1**, BNSF commits that it will mitigate significant environmental impacts in DACs subject to the feasibility limitation in PRC Section 21002, and, further, that such mitigation measures shall be undertaken in, and directly benefit, the affected community.

3.6.1.2 Noise

BIG construction noise levels were analyzed in full detail in the DEIR, which disclosed potential impacts and feasible mitigation measures to avoid or minimize potentially significant noise impacts. BIG would result in a significant and unavoidable impact concerning noise during 33 kV electrical line construction due to temporary noise barrier infeasibility and nighttime construction noise even with mitigation measures. Further, BIG operational noise would result in a significant and unavoidable impact because long-term operational noise levels would exceed applicable exterior/interior noise standards and/or result in a substantial noise increase at nearby sensitive receptors. BIG would result in a less than significant impact concerning vibration due to distance from nearby receptors.

BIG would incorporate Mitigation Measure **BIG NOI-1**, which requires the preparation of a Construction Noise Logistics Plan to reduce night-time construction noise levels. While the incorporation of Mitigation Measure NOI-1 would reduce nighttime construction noise levels to the extent feasible, the precise details regarding the proposed schedule, duration/hours, equipment type/quantity, and specific location of construction for nighttime construction activities are unknown at this time. Therefore, despite the incorporation of noise reduction, nighttime construction noise levels at nearby sensitive receptors could still exceed the FTA's threshold for residential uses.

Operational noise levels with the Project (exterior and interior) generally would be reduced through Mitigation Measure BIG NOI-2, which requires construction of noise barriers to reduce noise levels below either the City/County noise standard and/or the incremental (or substantial increase) standard for many sensitive receptors. However, MM BIG NOI-2 would not reduce long-term BIG noise levels at all sensitive receptors below applicable exterior/interior noise standards and/or would result in a substantial noise increase compared to No BIG conditions.

As provided in **Attachment 1**, BNSF commits that it will mitigate significant impacts in DACs subject to the feasibility limitation in PRC Section 21002, and, further, that such mitigation measures shall be undertaken in, and directly benefit, the affected community.

3.6.1.3 Community Engagement

In support of its intent to minimize impacts on DACs, BNSF has implemented a robust public engagement program composed of engagement beyond what is required under CEQA, focused meetings with key

stakeholder groups, and also through on-line and digital engagement and community workshops with the public at large. Details of each of these are summarized below.

Following the announcement of the Barstow International Gateway (BIG) project in October 2022, BNSF, in partnership with the City of Barstow and the Barstow Chamber of Commerce, hosted 13 small community workshops, bringing together more than 100 stakeholders across a variety of interests, including healthcare, real estate, education, small business, youth sports, seniors/veterans, students, and the military to hear their thoughts. Participants in these groups were generally supportive of the project and felt that it would bring significant positive benefits to Barstow, including increased revenue, population growth, well-paid/living wage jobs, and economic development, with a commensurate opportunity for improvements in services, schools, and opportunities for residents. In addition, participants cited the chance to improve Barstow's reputation and encourage younger residents to stay in the community. A summary of these engagement workshops is included below:

- November 3, 2022 – Health Care: San Bernardino County Department of Public Health, Barstow Community Hospital, City of Barstow, Mercy Air, Choice Medical Group
- November 17, 2022 – Public Safety: Barstow Fire Department, San Bernardino County Fire Department, Watchmen Patrol, California Highway Patrol, Barstow Police Department, Barstow Sheriffs' Department, Heritage Victor Valley Medical Group
- November 30, 2022 – Real Estate: Arca Rentals, Cornerstone Development, Coldwell Banker, Oasis Realty, Rentsource, HMS Realty, Dee-Lux Realty
- December 7, 2022 – Education: Barstow Community College, Excelsior, Helendale School District, Barstow Unified School District, Victor Valley College
- December 14, 2022 – Homelessness: New Hope Village, New Life Fellowship, Desert Sanctuary, Help Outreach, Barstow Community College, City of Barstow, St. Joseph Adult Services, San Bernardino County Board of Supervisors staff
- January 23, 2023 – Small Business: Barstow Chamber of Commerce, CT Sales, Studio 841, McCoy's, Furniture Outlet, Mojave Auto, Firestone, Stewart's Tax
- February 2, 2023 – Lenwood Businesses: Quality Life, Best Western Desert Villas, Best Western Hotel, Outlets at Barstow, Union Bank, Hinkley Valley Farms, B&E Dairy
- February 5, 2023 – Marine Corps Logistics Base (key base staff)
- February 15, 2023 – Youth Sports: Barstow Youth Sports Coalition, Barstow Baseball, Barstow Youth Soccer, Barstow City Department of Parks & Recreation, Little League Softball, Trin'Naz Helping Hands
- February 23, 2023 – Silver Valley (inc. Yermo, Daggett, Newberry Springs): San Bernardino County Sheriff's Department, Daggett Community Services Department, Yermo Community Services Department, Newberry Springs Fire Department, Jamco Supply
- March 30, 2023 – Ministerial: Crossroads Assembly, New Life, Hi Desert Word Center, Victory Outreach, First Baptist Church of Barstow
- April 4, 2023 – Seniors & Veterans: Barstow Senior Center, numerous retired citizens
- April 6, 2023 – Fort Irwin (key base staff)

The key questions raised during these meetings are summarized and posted to the Barstow Chamber of Commerce page (BIG Vision: Community Engagement Meetings - Barstow Chamber).

Additionally, BNSF hosted or attended public meetings to provide updates to key stakeholders and members of the public:

- February 28, 2023 - Barstow Chamber of Commerce Movers & Shakers meeting at Barstow College
- March 16, 2023 – High Desert Real Estate Symposium at Victor Valley College
- March 22, 2023 – Board members of local agencies and community groups at Barstow College's Black Box
- April 4, 2023 - Mojave Water Agency – Technical Advisory Committee presentation (via Zoom) was recorded and then shared on Channel 6
- July 18, 2023 – Helendale Community Services District Town Hall Meeting at Silver Lakes Club House
- March 14, 2024 – High Desert Real Estate Symposium at Victor Valley College
- July 10, 2024 – Greater High Desert Chamber of Commerce at the Victorville Conference Center
- November 19, 2025 – Meeting with Sylvan area residents at the Hinkley Community Center
- March 13, 2025 – Barstow Unified School District
- March 20, 2025 – High Desert Economic and Real Estate Symposium

Finally, BNSF initiated community engagement through the following additional means and methods:

- Digital updates: Posting to various websites for community awareness and updates. At each of these websites, any member of the public can view project updates and sign up for email alerts:
  - Dedicated project website: https://bnsfbig.com/
  - Barstow Chamber of Commerce: https://barstowchamber.com/bnsf-barstow-international-gateway-project-updates/
  - BNSF California: https://bnsfcalifornia.com/projects/barstow-international-gateway-big/
- Community update presentations: BNSF, together with City staff, hosted multiple townhalls at the Barstow College Performing Arts Center that were advertised to and open to the public, to provide updates on BIG's design and timing.
  - April 26, 2023 – (First) BIG Barstow Town Hall Meeting
  - October 3, 2024 – (Second) BIG Barstow Town Hall Meeting. More than 300 community members attended this meeting.
  - March 20, 2025 – (Third) BIG Barstow Town Hall Meeting
  - September 4, 2025 – (Fourth) BIG Barstow Town Hall Meeting

During all the above meetings, BNSF staff were available for questions and provided opportunities for community members to sign up for updates or meet with BNSF staff individually for further questions.

In addition to the community engagement initiated by BNSF, additional outreach was conducted in partnership with the City, in compliance with the CEQA, and consisted of the following activities:

- Notice of Preparation (NOP): The NOP was published for a 40-day public review period (February 15, 2024, through March 26, 2024). The NOP was posted to the City's website, mailed to all property owners within 300' of the BIG Specific Plan, mailed to all responsible agencies, and posted in the Victorville Daily Press. All agency and public comments (43 total) were reviewed by BNSF and City and incorporated into BIG's environmental analysis and design where appropriate.
- Scoping Meeting: BNSF, together with City staff, hosted a Scoping Meeting on March 13, 2024, where approximately 200 community members attended to learn about BIG and provide any comments, concerns, or questions.
- Draft Environmental Impact Report: The DEIR was circulated for an initial 54-day public review beginning November 13, 2025, which is more than the 45-days required by CEQA. The notice of availability was published to the City's website and social media accounts and was provided electronically to all responsible agencies and persons or groups that requested to be included in notices. Following requests from some agencies and the public, the City granted a one-week extension to public review (total of 60 days), and public review concluded on January 12, 2026. The City and BNSF are currently reviewing the comments received on the DEIR and are preparing the Final EIR, estimated to be complete late spring/early summer.

3.6.1.4 Benefits to Disadvantaged Communities

BIG is anticipated to result in benefits in surrounding DACs. An Economic and Fiscal Analysis was completed for the project (AECOM, 2025), which is included as Appendix 5.11 BIG-1 of the DEIR as well. The analysis results show substantial direct, indirect, and induced economic benefits to the City of Barstow and County of San Bernardino. Both construction impacts and cumulative economic impacts over 20 years of future operations were estimated for jobs, earning, total sales/output within each geography. For the **construction period, direct, indirect and induced impacts** estimated for the City of Barstow and County of San Bernardino include about 34,100 jobs, $2.9 billion in earnings, and about $7.1 billion total sales/output. The cumulative economic impacts (direct, indirect and induced) within the City of Barstow over 20 years of future operations are estimated to be: 6,000 new jobs, $938,709,000 in earnings and $2,963,972,000 in total sales and output; while the County as whole is expected to gain 11,000 new jobs, $1.5 billion in earnings and $4.4 billion in total sales and output.

In addition to the economic benefits detailed above, BIG would result in other non-economic benefits, including:

- Replacement of the 15 existing Tier 0/0+/1+ switchers at the unrelated existing Barstow Classification Yard with 6 newly-purchased Tier 4 switcher locomotives would reduce diesel particulate matter (DPM) and criteria pollutant emissions in the vicinity of the Barstow Yard and within the City. This would result in overall improvements in air quality in the DACs referenced above.
- The reduction in TMT would reduce emissions of DPM, all criteria pollutants, and GHGs within the corridor (Ports to BIG) and surrounding DACs, and within the State and County overall.
- Improved Lenwood Channel (approximately doubling its width) to reduce existing flooding that occurs in the City's western portion.
- Improved safety and access related to replacement of the Hinkley Road bridge over Mojave River.

- Removal of Hinkley Road at-grade crossing, improving safety.
- Removing low water crossing for Main Street over Lenwood Channel, improving safety and access during storm events, replacing with bridge.
- Various other local roadway circulation improvements within and outside the Project footprint to improve traffic flow, safety, and emergency access, including:
  - A private maintenance road alongside the mainline to provide maintenance and emergency responder access to the tracks, generally from just east of Indian Trail to Hinkley Road.
  - New traffic signals at several intersections: Lenwood Road & High Desert, Main Street & Petit Road, Lenwood Road & Love's Travel Stop Driveway, and Lenwood Road & Truck Freightliner Service Point Driveway
  - Multiple signal timing optimizations for existing and/or future year with Project conditions
  - Roadway re-stripings
  - Fair-share payments toward four roadway widenings
  - The installation of bikeways between Country Club Drive and Lenwood Channel Bridge; the Lenwood Road Bridge; and between Lenwood Channel Bridge and Lenwood Road

3.6.1.5 Binding and Enforceable Agreement for Mitigating Significant Impacts on Disadvantaged Communities

As part of the CEQA process, the City is required to adopt all feasible mitigation measures needed to reduce or eliminate significant impacts. **Attachment 1** sets forth BNSF's commitment regarding implementation of mitigation measures and other commitments under SB 149, which shall be undertaken in, and directly benefit, the affected community.

4.0 REFERENCES

AECOM. (2025). *Economic Impact Analysis, Barstow International Gateway*.

BNSF Railway. (2025). *Barstow International Gateway Community Outreach*.

BNSF Railway. (2025). *Market Benefits of the Barstow International Gateway*.

California Department of Transportation. (2024). *2018 California State Rail Plan*. Retrieved from: https://dot.ca.gov/-/media/dot-media/programs/rail-mass-transportation/documents/california-state-rail-plan/2024-ca-state-rail-plan-a11y.pdf (Accessed June 2025).

California Governor's Office of Land Use and Climate Innovation (previously Governor's Office of Planning and Research). (2024). *Governor's Guidelines for Infrastructure Improvement Projects Seeking Streamlines Judicial Review under CEQA.*

California Governor's Office of Land Use and Climate Innovation (previously Governor's Office of Planning and Research). (Nd). *Judicial Streamlining Criteria Checklist*. California State Transportation Agency. (2025). *Climate Action Plan for Future Transportation Infrastructure*.

City of Barstow. (2025). *Draft Environmental Impact Report for the Barstow International Gateway Project*.

Kimley-Horn. (2026). *Barstow International Gateway: Climate Resiliency Memorandum*.

Southern California Association of Governments (SCAG). April 4, 2024. *Connect SoCal 2024: Goods Movement Technical Report*. https://scag.ca.gov/sites/main/files/file-attachments/23-2987-tr-goods-movement-final-040424.pdf?1712261912 (accessed November 2024). See Section 5.4: Freight Corridor Bottleneck Analysis.

United States Department of Transportation. February 1, 2017. *Traffic Congestion and Reliability: Linking Solutions to Problems, 2017*. https://ops.fhwa.dot.gov/congestion_report_04/chapter4.htm (accessed November 2024).

Attachment 1

BNSF and City of Barstow Letter Agreement Regarding SB 149

Jill Mulligan
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Chief Legal Officer

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February 17, 2026

City of Barstow
220 East Mountain View St.
Suite A
Barstow, CA 92311
Attention: Rochelle Clayton,
City Manager

RE: BNSF and City of Barstow Letter Agreement Regarding SB 149

Dear Ms. Clayton,

This letter agreement between BNSF Railway Company ("BNSF") and the City of Barstow, California ("City") is in support of BNSF's application to the Governor for certification of the proposed Barstow International Gateway ("BIG" or "Project") under Senate Bill 149 ("SB 149") as an infrastructure project, specifically as a "transportation-related project" under Public Resources Code Section 21189.81(g).

SB 149 amended the California Environmental Quality Act ("CEQA") to provide judicial streamlining benefits for an infrastructure project that is certified by the Governor because it meets certain requirements. BNSF submits this letter for the sole purpose of acknowledging that, in the event BNSF accepts the Governor's certification, receives and accepts all requisite approvals, and decides to implement BIG, BNSF intends to comply with certain obligations under Public Resources Code Section 21189.82(c), Public Resources Code Section 21189.83(b), and Public Resources Code Section 21189.86(k) that are required to qualify the Project for the Governor's certification under SB 149 ("SB 149 Obligations"). To that end, this letter: (1) documents BNSF's intention to enter into certain binding and enforceable agreements with the City to comply with certain of the SB 149 Obligations; (2) identifies each party's specific role in implementing the SB 149 Obligations; and (3) acknowledges that both Parties understand their respective obligations for purposes of SB 149. In doing so, the Parties acknowledge that the SB 149 Obligations are not fully established at this time and this letter does not constitute BNSF's acquiescence to any future SB 149 Obligation purported to be imposed by the Governor, the City or any other entity. Nothing in this letter commits BNSF to any SB 149 Obligation or any requirement under CEQA or any other law unless and until BNSF (i) accepts the Governor's certification, (ii) receives and accepts all requisite approvals, and (iii) decides to implement BIG.

The City, as lead agency under CEQA, is preparing the Environmental Impact Report ("EIR"). Because of the transformational nature of BIG, the City proposed a General Plan Update to effectuate the required project approvals for BIG, as well as to plan for other future development within the City. The City is

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evaluating BIG and the General Plan Update in the same EIR. The Draft EIR, released in November 2025, evaluated BIG at a project level to allow for the required approvals and development of BIG. However, the EIR evaluated the rest of the General Plan Update only at a programmatic level because it is a planning document. The EIR does not analyze any other individual development project other than BIG. Rather, any future development contemplated by the General Plan Update (other than BIG) would require a separate CEQA determination and approval process by the City.

In connection with certification and development of BIG under SB 149:

- BNSF and the City acknowledge that the Project has not yet been approved by the City, and this letter does not, and will not, obligate the City to recommend or approve any discretionary permit or necessary approval to effectuate the development of BIG, including the General Plan Update, a mutually acceptable development agreement, or subdivision maps, or the certification of an EIR, and that BNSF, at any time and in its sole discretion, may decide not to accept certification under SB 149, accept Project approvals, or develop BIG.

- In the event BNSF accepts the Governor's certification, BNSF agrees that it will enter into a binding and enforceable agreement with the City, prior to the City's certification of the Final EIR, that, if BIG is approved and BNSF decides to implement BIG, BNSF will comply with Public Resources Code Section 21189.82(c) by (a) avoiding or minimizing significant environmental impacts in disadvantaged communities; (b) if measures are required under CEQA to mitigate significant environmental impacts in a disadvantaged community, mitigating those impacts in compliance with CEQA; and (c) undertaking such measures in, and directly benefiting, the affected community. BNSF will comply with Code Section 21189.82(c) by agreeing to the BNSF Commitments listed in Attachment 3 (*BIG's Public Benefits and BNSF Commitments to Mitigating Environmental Impacts and to Disadvantaged Communities*), and the Mitigation Measures shown in the table in Attachment 3, to the SB 149 Application. Such BNSF Commitments and Mitigation Measures will be conditions of approval of the Project, and those conditions will be fully enforceable by the City, or other agency designated by the City, for the life of the obligation.

- As detailed in Attachment 2 (*Barstow International Gateway – SB 149 Greenhouse Gas Emissions Memorandum*) to the SB 149 Application, and in the Draft EIR, BIG, if approved and implemented, will result in a direct net reduction of greenhouse gas ("GHG") emissions. As a result, there are no net additional GHG emissions from BIG requiring mitigation under Public Resources Code Section 21189.83(b).

- In the event BNSF accepts the Governor's certification, BNSF and the City also agree that, if BIG is approved and BNSF decides to implement BIG, the BNSF Commitments and Mitigation Measures detailed in Attachment 3 to the SB 149 Application will be conditions of approval of the

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Chief Legal Officer

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Project, and those conditions will be fully enforceable by the City, or other agency designated by the City, for the life of the obligation.

- As required by Public Resources Code Section 21189.86(k), BNSF also agrees to pay the costs of preparing the record of proceedings for the Project concurrent with review and consideration of the Project under this division, in a form and manner specified by the City. The cost of preparing the record of proceedings for the Project shall not be recoverable from the plaintiff or petitioner before, during, or after any litigation. The City also commits, in collaboration with BNSF, to comply with the record of proceedings requirements in Public Resources Code Section 21189.86.

Notwithstanding the foregoing, the Parties acknowledge that the City reserves the City Council's full discretion and retains its legal authority, under applicable CEQA and other state and local law, to evaluate and approve, modify or deny the Project, and that BNSF, at any time and in its sole and absolute discretion, may decide not to accept certification under SB 149, accept requisite approvals for BIG, or develop BIG.

BNSF RAILWAY COMPANY

By: _____

Jill Mulligan,
Executive Vice President &
Chief Legal Officer

CITY OF BARSTOW

By: _____

Rochelle Clayton,
City Manager

6401763.1

Attachment 2

Barstow International Gateway – SB 149 Greenhouse Gas Emissions Memorandum

Barstow International Gateway

SB 149 Greenhouse Gas Emissions Analysis

January 30, 2026

TABLE OF CONTENTS

Tables

PURPOSE AND CONCLUSIONS

The purpose of this memorandum is to demonstrate that the proposed Barstow International Gateway Project (BIG or Project) meets the greenhouse gas (GHG) emissions reduction requirements established under Senate Bill 149 signed by Governor Newsom on July 10, 2023 (SB 149). SB 149 extended the expedited litigation benefits from the *Jobs and Economic Improvement Through Environmental Leadership Act of 2021* to "transportation-related" infrastructure projects that "build toward an integrated, statewide rail and transit network." Under SB 149, applicants must demonstrate their project, through direct reductions of emissions, achieves net zero GHG emissions reductions or commits to mitigating the emissions to net zero through offsets.

This memorandum has been prepared to document that the unmitigated Project would achieve a net reduction in GHG emissions through direct emissions reductions in each analysis year, as summarized in **Table 1: Summary of Unmitigated BIG Project's Annual GHG Emissions Reductions**. **Table 1** shows the annual emissions reductions. Although the annual emissions reductions are shown for the Opening Year, Interim Year, and Horizon Year, these emissions reductions would occur each year of BIG operations; see **Appendix A** of **Appendix 5.1 BIG-1** of the Draft EIR for emissions output files.

Table 1: Summary of Unmitigated and Mitigated BIG Project's Annual GHG Emissions Reductions

Emissions Type	Source	Opening Year 2028 MTCO2e	Interim Year 2033 MTCO2e	Horizon Year 2048 MTCO2e
Unmitigated Emissions	Construction emissions (amortized, unmitigated)[1]	8,385	8,385	8,385
Unmitigated Emissions	Operational emissions (unmitigated)	281,491	340,011	354,802
Unmitigated Emissions	Existing Barstow Yard Switcher Replacement[2]	-522	-522	-522
Unmitigated Emissions	BIG Total GHG emissions (unmitigated)	289,353	347,874	362,644
Mitigated Emissions	Construction emissions (amortized, mitigated) [1]	5,140	5,140	5,140
Mitigated Emissions	Operational emissions (mitigated)	225,562	285,152	304,761
Mitigated Emissions	Existing Barstow Yard Switcher Replacement	-522	-522	-522
Mitigated Emissions	BIG Total GHG emissions (mitigated)	230,180	289,770	309,379
Net Emissions	Net Reduction in GHG emissions from National Network Truck Miles Traveled Reduction	-325,664	-376,761	-372,415
Net Emissions	Net GHG emissions from BIG (unmitigated)	-36,311	-28,887	-9,751
Net Emissions	Net GHG emissions from BIG (Mitigated)	-95,484	-86,991	-63,036

1. Construction-related GHG emissions are amortized over 30 years (the conservative operational life of a project). Specifically, total construction emissions are divided by 30 and added to the annual operational emissions to allow for the inclusion of temporary construction emissions into the long-term operational impacts.
2. BNSF will commit to the voluntary replacement of all of its 15 existing Tier 0/0+/1+ switcher locomotives with six new Tier 4 switchers at the unrelated existing Barstow Classification Yard under a Memorandum of Understanding (MOU) with the Mojave Desert Air Quality Management District.

As noted in Table 5.8-11 of the Draft EIR, BIG's total construction GHG emissions are estimated to be 154,212 $MTCO_2e$. As shown in the table above, BIG would result in a net reduction of 95,484 $MTCO_2e$, thus, BIG's operations would entirely offset the construction GHG emissions within less than 2 years.

Mobile sources of GHG emissions from worker vehicle trips and truck trips were calculated using vehicles miles traveled (VMT) and truck miles traveled (TMT) estimates and appropriate emission factors from the California Air Resources Board (CARB) Emissions FACtors 2021 (EMFAC) model. It should be noted that the modeling **underestimates** the GHG emissions reductions because EMFAC2021 emissions projections assumed implementation of the Advanced Clean Truck (ACT), which requires manufacturers to sell increasing percentages of zero-emission vehicles. This regulation was disapproved by Congressional Resolution H.J. Res 87, respectively, signed by the President on June 12, 2025. This resolution nullifies the ACT which had been authorized by U.S. EPA waiver under the federal Clean Air Act. In October 2025, CARB released off-model adjustment factors for reactive organic gases (ROG), nitrogen oxides (NO_X) and particulate matter to remove emissions benefits of the disapproved regulations. Off-model adjustment factors for GHG emissions have not yet been provided. CARB plans to release in early 2026 an updated version of the EMFAC that removes the emissions benefits of the targeted regulations. This analysis conservatively does not apply the EMFAC off-model adjustment factors. Applying EMFAC off-model adjustment factors would increase BIG's GHG emissions reductions.

PROJECT SUMMARY

BIG's integrated rail facility encompasses approximately 4,300 acres and is located in the City of Barstow and unincorporated territory in the County of San Bernardino. Specifically, the facility is bound by the Mojave River to the north, Main Street (also referred to as National Trails Highway or Route 66) to the south, Lenwood Road to the east, and Hinkley Road to the west. Additionally, to serve the proposed integrated rail facility, BIG will include offsite rail and non-rail improvements. The Project Footprint (integrated rail facility and offsite improvements) encompasses approximately 5,000 acres. Under existing conditions, the Project Footprint is primarily vacant undeveloped land, which contains scattered residential, commercial, and industrial land uses, as well as an existing BNSF railroad.

Rail Yard

The rail yard would consist of an intermodal facility (i.e., where cross-dock intermodal operations and other intermodal facility operations would occur and where support intermodal facility uses would be located), a block swap yard, and ancillary rail areas (i.e., container yard, chassis storage, and ancillary rail storage area), as described below.

BIG's intermodal facility operations would consist of two types: cross-dock intermodal and "other" operations, as described below. With regard to the "cross-dock intermodal" operations, BIG's intermodal facility would operate differently than typical intermodal facilities in that almost all of the containers processed at BIG intermodal facility would not arrive or leave externally by heavy-duty trucks. Instead, almost all containers would arrive and leave by train and be processed via BIG's unique "cross-dock intermodal" operation. This involves the transfer of containers between railcars and zero-emission cargo

handling equipment and electric hostlers[1] for cross-dock movements to the onsite proposed transload warehouse center, and vice versa. The electric hostlers would be used to transport containers within the rail yard, and between the rail yard and transload warehouse center. The electric hostlers would be zero-emission and would not leave BIG. This differs from traditional intermodal facilities where the primary purpose is to transfer containers from heavy-duty trucks to railcars, and vice versa. In addition to zero emission hostlers, BIG would use zero-emission rail-mounted gantry cranes, forklifts, top picks/side loaders, and hostlers. Containers would be transported between the rail yard and transload warehouse center using only electric hostlers, rather than heavy-duty trucks, and only via an onsite/private closed loop roadway to minimize local roadway traffic.

As a result, BIG will remove hundreds of thousands of annual truck trips and millions of truck miles from the nation's roads and highways each year of its operations; see **Table 2: Annual Truck Trips and Truck Miles Traveled Removed from National Road Network by BIG**.

Table 2: Annual Truck Trips and Truck Miles Traveled Removed from National Road Network by BIG

Year	Opening Year 2028	Interim Year 2033	Horizon Year 2048
Net Annual TMT within National Network (miles)	-204,815,923	-269,821,531	-312,777,935
Net Annual Truck Trips	-379,970	-509,572	-573,581

Source: Kimley-Horn and Associates, Inc., CEQA Assessment – VMT Analysis, Active Transportation, and Public Transit Analysis, November 2025.

BIG's intermodal facility would be composed of various components including railroad tracks, cargo handling equipment, an automated gate system, circulation roadways, yard equipment parking, container parking, stormwater detention ponds, electric vehicle charging stations, and buildings and ancillary rail facilities. Containers would be stored in parking spaces and low stacks at the intermodal facility, along with the ancillary rail area, and transload warehouse center (each described further below). Although electric lift equipment would be utilized to the extent commercially feasible within BIG's intermodal facility, a small 5,000-square-foot diesel fuel canopy would be constructed in the electric hostler maintenance area to accommodate fueling of hybrid equipment. Hybrid and diesel equipment would include rubber-tired gantry cranes ("RTGs"), seven air compressors, welders, railcar wheel change machines, and heavy-duty truck transport refrigeration units ("TRUs"). The fuel canopy would be served by a 10,000-gallon unleaded fuel above ground storage tank and a 20,000-gallon diesel fuel above ground storage tank, with both controlled by an electronic fuel control system. Emergency diesel generators are proposed at various locations across the rail yard. In addition, starting in BIG opening year 2028, BNSF would increase the renewable diesel composition within their existing southern California fueling sites, including the existing fueling sites at the Ports and Barstow classification yard from 1 percent to 10 percent, a 900-percent increase in renewable diesel. This would improve the emissions of all BNSF trains fueling at the Ports, including those BNSF trains that would not stop at BIG.

BIG's intermodal facility proposes approximately 134,000 square feet of support buildings and structures, as detailed in **Table 3: BIG Intermodal Facility Structures**. As described below, final building sizes may vary slightly, this analysis conservatively analyzes up to 150,000 square feet of support buildings and structures.

Table 3: BIG Intermodal Facility Structures

Building/Canopy	Square Footage
Administration Building	23,000
Electric Hostler Employee and Maintenance Building	39,000

[1] Electric hostlers are trucks used for moving trailers and containers short distances within freight terminals, rail yards, and warehouses. Electric holsters would not use public roadways outside of BIG footprint.

Building/Canopy	Square Footage
Drivers Assist Building	5,000
Crane Maintenance Employee and Storage Building	5,000
Crane Maintenance Canopies	22,500
Container Safe Haven Canopies	2,500
Quick Repair Canopy	10,000
Automatic Gate System Kiosk Canopies	20,000
Automatic Gate System Portals	2,000
Emergency Fuel Station Canopy for Hybrid Vehicles	5,000
Total	134,000
Assumed Building Total for Final Design	150,000

Note: The square footage described is an estimate and may vary up to 10 percent depending on the final engineering; therefore, the total square footage for planning purposes is estimated at approximately 150,000 square feet.

The proposed block swap yard would allow for the transfer of multiple railcars, or "blocks" of intermodal rail cars between trains. A block is defined as rail cars of a similar type moving to a similar destination that are already connected and can be combined with other blocks of rail cars intended for the same destinations to produce more efficient train movements. By synchronizing trains to their destinations, the block swap yard would improve train efficiency eastbound and westbound.

While the block swap yard would change the number of trains that would arrive or depart BIG by optimizing for end destinations, it would not increase the number of containers. BIG's intermodal facility would, through the cross-dock intermodal operation, add a new volume to the BNSF network, totaling approximately 3.2 trains per day on average in 2028, approximately 4.3 trains per day on average in 2033, and approximately 4.9 trains per day on average in 2048. These train counts include eastbound and westbound trains, and as described elsewhere, trains between the Ports and the BIG intermodal facility would be comprised of dedicated Tier 4 locomotives.

The ancillary rail storage area would be used for numerous purposes, including a container yard, truck chassis storage, and storage of maintenance equipment. A container yard would support the storage of empty containers awaiting loading while chassis storage would be used to provide parking for empty chassis awaiting use for loading, unloading, or drying of containers. The ancillary rail storage area would also be used for storage of spare parts and equipment for track maintenance, including rail, ties, turnouts, and other track material.

Mainline Improvements (Rail)

BIG would retain the existing two rail mainlines within their current alignments ("north mainlines"), except at bridge crossings, which would be upgraded. BIG also proposes to construct two new mainlines ("south mainlines") within the Project footprint, which would traverse the proposed rail yard in an east-west orientation, extending from Lenwood Road on the east to Hinkley Road on the west. During the construction phase, the south mainlines would be used to divert train traffic from the north mainlines while they are upgraded. During BIG operations, half of the trains which would bypass BIG would use the north mainlines and half would use the south mainlines to balance train counts between the mainlines. BIG would also upgrade various bridge crossings including replacement of the crossing at Lenwood Channel to accommodate the proposed Lenwood Channel widening; removal of existing culverts[2] to accommodate proposed culverts for the overall rail yard; and replacement of two structures to meet BNSF standards regarding 50- and 100-year flood conditions.

[2] Culverts are drainage features, typically a pipe or arch, used to convey water under a road or rail tracks.

Transload Warehouse Center

The transload warehouses would be designed to process the contents of containers from cross-dock intermodal operations, with a small percentage dedicated to processing the contents of containers transported by truck. The transload warehouse center would process almost all of the containers within an onsite "closed loop" operation between BIG's intermodal facility and the transload warehouse center. The transload warehouse center would include approximately 9.0 million square feet (MSF) of transload warehouses. Each transload warehouse would include container parking/storage areas, employee parking, stormwater/hydrology improvements, and landscaping. Finally, emergency generators are proposed throughout the transload warehouse center to provide electric power in the event of a power outage.

Solar Farm

A solar farm consisting of approximately 140 acres is proposed to serve BIG. The solar farm is estimated to generate approximately 21 megawatt-hours (MWh). The solar farm would include a new substation at the northwest corner to route power from the solar farm to BIG rail yard. The solar farm would be fenced to prevent trespass and would include internal roadways for maintenance vehicles.

Solar farm maintenance would consist of cleaning, inspecting, and replacing solar panels, equipment, and other system components. Maintenance trips associated with these activities would be limited to trucks transporting materials, equipment, and supplies to and from the farm. To maintain uninterrupted power generation for BIG, maintenance activities would occur incrementally. The solar farm would also require vegetative maintenance (e.g., mowing and weeding, and other grass control measures).

Maintenance Activities

While "light maintenance activities"[3] could occur at BIG, major maintenance activities[4] would still occur at the existing Barstow classification yard, thus, requiring short-distance trips via BNSF's existing mainline to and from the existing Barstow classification yard for heavy maintenance. Locomotive trips associated with maintenance activities would be based on the number of linehaul locomotives needed to move trains between the Ports and BIG intermodal facility, and the number of switcher locomotives needed to haul rail cars within BIG intermodal facility and block swap yard.

Natural Gas

BIG construction activities would not require construction of new natural gas facilities, although protection in place or relocation of existing natural gas facilities would be required to accommodate BIG.

Barstow Yard Switcher Elimination and Replacement

Prior to operations, BNSF would voluntarily retire all existing Tier 0/0+/1+ switcher locomotives at the unrelated existing Barstow Classification Yard, and in their place add six Tier 4 switcher locomotives.

[3] "Light maintenance activities" means routine locomotive servicing (e.g., window washing, fueling, inspecting fluid levels and topping off fluids, stocking cabins with crew equipment such as water and trash bags, toilet servicing) and minor railcar servicing (e.g., wheel changes, brake and friction shoes, and loose or missing bolts).

[4] "Major maintenance activities" means repair of railing and platform, railcar suspension, hitches, engine, etc.

METHODOLOGY

Construction

Construction is anticipated to occur over approximately 34 months. Construction emissions can vary substantially from day to day, depending on the level of activity, and the specific type of equipment used. Construction emissions result from on-site and off-site activities. On-site construction emissions principally consist of exhaust emissions from the load factors and hours of use of heavy-duty construction equipment and motor vehicle operation. Off-site construction emissions are caused by motor vehicle exhaust from vendor delivery vehicles and worker trips. Additionally, off-site emissions would occur from trains hauling construction materials (e.g., ballast, rails, railroad ties, etc.) from locations within California and outside of California. The construction emissions account for the total emissions that would occur in and out of the State. Total construction emissions are modeled based on the below assumptions, then amortized over a 30-year period and added to operational emissions.[5]

GHG emissions from BIG demolition and construction were calculated using emission factors from CARB's OFFROAD model. The use of emission rates from the OFFROAD models reflects the recommendation of CARB to capture the latest off-road construction assumptions. OFFROAD default load factors (the ratio of average equipment horsepower utilized to maximum equipment horsepower) and useful life parameters were used for emission estimates. Mobile-source emissions from worker vehicle trips and truck trips were calculated using VMT and TMT estimates and appropriate emission factors from CARB's EMission FACtors 2021 (EMFAC) model.[6]

Construction Schedule

Construction is anticipated to occur over approximately 34 months. The anticipated construction phase is shown in **Table 4: Construction Schedule**. During peak construction periods, work would be under way at several locations within the Project Footprint simultaneously, with overlapping construction of various elements.

[5] Construction-related GHG emissions are amortized over the operational life of a project, typically defined as 30 years. Specifically, total construction emissions are divided by 30 and added to the annual operational emissions. The amortization approach allows for the inclusion of temporary construction emissions into the long-term operational impacts. This approach was developed by the South Coast AQMD, which recommends amortizing construction emissions over the life of the project, defined as 30 years, and adding the amortized construction emissions to operational emissions to estimate yearly emissions from the project (South Coast AQMD, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, 2008 and South Coast AQMD, Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13, 2009).

[6] EMFAC2021 emissions projections assumed implementation of the Advanced Clean Truck (ACT) Regulation and the Heavy-Duty Low NO_X Omnibus Regulation. These regulations were disapproved by Congressional Resolutions H.J. Res 87 and H.J. Res 89, respectively. The resolutions were signed by the President on June 12, 2025. These resolutions, along with H.J. Res. 88 (revoking the Advanced Clean Cars II Regulation [federal light-duty vehicle GHG standards]), nullify California regulations that had been authorized by U.S. EPA waivers under the Clean Air Act. CARB released off-model adjustment factors for ROG, NO_X and particulate matter to remove emissions benefits of the disapproved regulations. Off-model adjustment factors for GHG emissions have not yet been provided. CARB plans to release in early 2026 an updated version of the EMFAC that removes the emissions benefits of the targeted regulations. This analysis conservatively does not apply the EMFAC off-model adjustment factors. Applying EMFAC off-model adjustment factors would increase BIG's GHG emissions reductions.

Table 4: Construction Schedule

Location	Phase	Approximate Number of Days
South Main Lines	Demolition, Site Preparation, and Mobilization	39
South Main Lines	Mass Grading	220
South Main Lines	Bridges and Box Culverts	248
South Main Lines	Fine Grading/Place Subballast	25
South Main Lines	Track and Signal Construction	151
Intermodal Facility	Demolition, Site Preparation, and Mobilization	39
Intermodal Facility	Mass Grading	165
Intermodal Facility	Drainage and Underground	333
Intermodal Facility	Bridges and Box Culverts	333
Intermodal Facility	Fine Grading/Place Subballast	165
Intermodal Facility	Buildings/Pavement	361
Intermodal Facility	Track and Signal Construction	319
Block Swap Yard	Demolition, Site Preparation, and Mobilization	39
Block Swap Yard	Mass Grading	109
Block Swap Yard	Drainage and Underground	277
Block Swap Yard	Bridges and Box Culverts	277
Block Swap Yard	Fine Grading/Place Subballast	361
Block Swap Yard	Track and Signal Construction	389
North Main Lines	Demolition, Site Preparation, and Mobilization	39
North Main Lines	Mass Grading	109
North Main Lines	Bridges and Box Culverts	109
North Main Lines	Fine Grading/Place Subballast	53
North Main Lines	Track and Signal Construction	179
Transload Warehouse Construction	Warehouse Construction	319
Transload Warehouse Construction	Civil Site Improvements	263
33 kV Distribution	33 kV Distribution	601
Solar Site	Solar Site	344

Sources: Project construction schedule provided by TranSystems/Burns & McDonnell.

Construction Equipment

BIG construction would involve the use of off-road construction equipment, heavy-duty trucks, and locomotives for delivery of bulk materials, which produce diesel exhaust. Vendor delivery vehicles and worker commute trips would generate vehicle exhaust.

Construction emissions are estimated by assuming construction occurs at the earliest feasible date (i.e., a conservative estimate of construction activities) and applying off-road, fugitive dust, and on-road emissions factors from CARB's OFFROAD model. The anticipated construction equipment is shown in **Table 5: Construction Equipment**. All equipment in Table 5 is assumed to be Tier 4 except for track laying machines, articulated trucks, auger borers, tampers, and regulators.

Table 5: Construction Equipment

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
South Main Demolition, Site Preparation, Mobilization (34 days)	Dozers	1	8	367	0.40
South Main Demolition, Site Preparation, Mobilization (34 days)	Dump Trucks	5	10	376	0.38
South Main Demolition, Site Preparation, Mobilization (34 days)	Excavators	1	3	36	0.38
South Main Demolition, Site Preparation, Mobilization (34 days)	Generators	4	2	14	0.74
South Main Demolition, Site Preparation, Mobilization (34 days)	Loaders	1	3	150	0.36
South Main Demolition, Site Preparation, Mobilization (34 days)	Scrapers	2	10	423	0.48
South Main Demolition, Site Preparation, Mobilization (34 days)	Water Trucks	2	4	376	0.38
South Main Mass Grading (190 days)	Dozers	4	10	367	0.40
South Main Mass Grading (190 days)	Dump Trucks	275	10	376	0.38
South Main Mass Grading (190 days)	Excavators	2	10	36	0.38
South Main Mass Grading (190 days)	Generators	4	2	14	0.74
South Main Mass Grading (190 days)	Graders	1	10	148	0.41
South Main Mass Grading (190 days)	Grapple/Pump Trucks	1	1	376	0.38

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
South Main Mass Grading (190 days)	Loaders	2	10	150	0.36
South Main Mass Grading (190 days)	Rollers	1	1	36	0.38
South Main Mass Grading (190 days)	Scrapers	4	10	423	0.48
South Main Mass Grading (190 days)	Water Trucks	20	10	376	0.38
South Main Bridges and Box Culverts (214 days)	Auger Boring Machine	1	3	83	0.50
South Main Bridges and Box Culverts (214 days)	Cranes	1	7	367	0.29
South Main Bridges and Box Culverts (214 days)	Dozers	1	3	190	0.40
South Main Bridges and Box Culverts (214 days)	Dump Trucks	3	10	376	0.38
South Main Bridges and Box Culverts (214 days)	Excavators	2	10	236	0.38
South Main Bridges and Box Culverts (214 days)	Generators	4	2	20	0.74
South Main Bridges and Box Culverts (214 days)	Graders	1	3	250	0.41
South Main Bridges and Box Culverts (214 days)	Grapple/Pump Trucks	3	8	376	0.38
South Main Bridges and Box Culverts (214 days)	Light Carts/Generator Sets	8	8	20	0.74
South Main Bridges and Box Culverts (214 days)	Loaders	2	10	265	0.36
South Main Bridges and Box Culverts (214 days)	Rollers	1	3	150	0.38
South Main Bridges and Box Culverts (214 days)	Skid Steers	1	4	90	0.37

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
South Main Bridges and Box Culverts (214 days)	Water Trucks	20	10	376	0.38
South Main Fine Grading/Place Subballast (22 days)	Dozers	4	10	367	0.40
South Main Fine Grading/Place Subballast (22 days)	Generators	4	2	14	0.74
South Main Fine Grading/Place Subballast (22 days)	Graders	8	10	148	0.41
South Main Fine Grading/Place Subballast (22 days)	Rollers	8	10	36	0.38
South Main Fine Grading/Place Subballast (22 days)	Water Trucks	20	10	376	0.38
South Main Track and Signal Equipment (130 days)	Cranes	1	5	367	0.29
South Main Track and Signal Equipment (130 days)	Dozers	1	3	190	0.40
South Main Track and Signal Equipment (130 days)	Dump Trucks	3	10	376	0.38
South Main Track and Signal Equipment (130 days)	Excavators	2	10	236	0.38
South Main Track and Signal Equipment (130 days)	Generators	4	2	20	0.74
South Main Track and Signal Equipment (130 days)	Grapple/Pump Trucks	4	10	376	0.38
South Main Track and Signal Equipment (130 days)	Light Carts/Generator Sets	8	8	20	0.74
South Main Track and Signal Equipment (130 days)	Loader/Swing Loaders	3	10	265	0.36
South Main Track and Signal Equipment (130 days)	Regulators	1	2	82	0.42
South Main Track and Signal Equipment (130 days)	Skid Steers	1	4	90	0.37

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
South Main Track and Signal Equipment (130 days)	Track Laying Machines	1	3	525	0.42
South Main Track and Signal Equipment (130 days)	Tampers	1	2	89	0.36
South Main Track and Signal Equipment (130 days)	Water Trucks	2	10	376	0.38
Intermodal Facility Demolition, Site Preparation, Mobilization (34 days)	Dozers	7	10	419	0.40
Intermodal Facility Demolition, Site Preparation, Mobilization (34 days)	Dump Trucks	36	10	376	0.38
Intermodal Facility Demolition, Site Preparation, Mobilization (34 days)	Excavators	3	10	450	0.38
Intermodal Facility Demolition, Site Preparation, Mobilization (34 days)	Loaders	3	10	360	0.36
Intermodal Facility Demolition, Site Preparation, Mobilization (34 days)	Generators	4	2	20	0.74
Intermodal Facility Demolition, Site Preparation, Mobilization (34 days)	Scrapers	11	10	1,051	0.48
Intermodal Facility Demolition, Site Preparation, Mobilization (34 days)	Water Trucks	2	4	376	0.38
Intermodal Facility Drainage and Underground (286 days)	Crane	1	6	367	0.29
Intermodal Facility Drainage and Underground (286 days)	Dump Trucks	23	10	376	0.38
Intermodal Facility Drainage and Underground (286 days)	Excavators	7	10	236	0.38
Intermodal Facility Drainage and Underground (286 days)	Generators	4	2	20	0.74

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
Intermodal Facility Drainage and Underground (286 days)	Loaders	9	10	265	0.36
Intermodal Facility Drainage and Underground (286 days)	Trencher	1	9	115	0.50
Intermodal Facility Drainage and Underground (286 days)	Water Trucks	2	10	376	0.38
Intermodal Facility Bridges and Box Culverts (286 days)	Auger Boring Machine	1	8	83	0.50
Intermodal Facility Bridges and Box Culverts (286 days)	Cranes	3	10	367	0.29
Intermodal Facility Bridges and Box Culverts (286 days)	Dozer	1	8	190	0.40
Intermodal Facility Bridges and Box Culverts (286 days)	Dump Trucks	7	10	376	0.38
Intermodal Facility Bridges and Box Culverts (286 days)	Excavator	5	10	236	0.38
Intermodal Facility Bridges and Box Culverts (286 days)	Generators	4	2	20	0.74
Intermodal Facility Bridges and Box Culverts (286 days)	Grader	2	8	250	0.41
Intermodal Facility Bridges and Box Culverts (286 days)	Light Carts	8	8	20	0.74
Intermodal Facility Bridges and Box Culverts (286 days)	Loaders	4	10	265	0.36
Intermodal Facility Bridges and Box Culverts (286 days)	Pump Truck	1	6	376	0.38
Intermodal Facility Bridges and Box Culverts (286 days)	Roller	1	8	150	0.38
Intermodal Facility Bridges and Box Culverts (286 days)	Skid steers	2	10	90	0.37
Intermodal Facility Bridges and Box Culverts (286 days)	Water Trucks	2	10	376	0.38

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
Intermodal Facility Fine Grading/Place Subballast (142 days)	Dozers	5	10	190	0.40
Intermodal Facility Fine Grading/Place Subballast (142 days)	Generators	4	2	20	0.74
Intermodal Facility Fine Grading/Place Subballast (142 days)	Graders	10	10	250	0.41
Intermodal Facility Fine Grading/Place Subballast (142 days)	Rollers	10	10	150	0.38
Intermodal Facility Fine Grading/Place Subballast (142 days)	Water Trucks	20	10	376	0.38
Intermodal Facility Buildings/ Pavement (310 days)	Auger Boring Machine	1	4	83	0.50
Intermodal Facility Buildings/ Pavement (310 days)	Backhoe	1	4	84	0.37
Intermodal Facility Buildings/ Pavement (310 days)	Crane	1	7	367	0.29
Intermodal Facility Buildings/ Pavement (310 days)	Dozer	1	10	100	0.40
Intermodal Facility Buildings/ Pavement (310 days)	Dump Trucks	4	10	376	0.38
Intermodal Facility Buildings/ Pavement (310 days)	Excavator	2	10	36	0.38
Intermodal Facility Buildings/ Pavement (310 days)	Generators	4	2	20	0.74
Intermodal Facility Buildings/ Pavement (310 days)	Grader	1	10	250	0.41
Intermodal Facility Buildings/ Pavement (310 days)	Light Carts	8	8	20	0.74
Intermodal Facility Buildings/ Pavement (310 days)	Loader	2	10	150	0.36
Intermodal Facility Buildings/ Pavement (310 days)	Pump Truck	1	3	376	0.38

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
Intermodal Facility Buildings/ Pavement (310 days)	Roller	1	10	136	0.38
Intermodal Facility Buildings/ Pavement (310 days)	Skid steers	2	10	90	0.37
Intermodal Facility Buildings/ Pavement (310 days)	Water Trucks	1	10	376	0.38
Intermodal Facility Track and Signal (274 days)	Crane	1	9	367	0.29
Intermodal Facility Track and Signal (274 days)	Dozer	1	4	190	0.40
Intermodal Facility Track and Signal (274 days)	Dump Trucks	2	10	376	0.38
Intermodal Facility Track and Signal (274 days)	Excavator	2	10	236	0.38
Intermodal Facility Track and Signal (274 days)	Generators	4	2	20	0.74
Intermodal Facility Track and Signal (274 days)	Grapple Truck	1	1	376	0.38
Intermodal Facility Track and Signal (274 days)	Light Carts	8	8	20	0.74
Intermodal Facility Track and Signal (274 days)	Loader	2	10	265	0.36
Intermodal Facility Track and Signal (274 days)	Regulator	1	3	82	0.42
Intermodal Facility Track and Signal (274 days)	Skid Steer	1	1	90	0.37
Intermodal Facility Track and Signal (274 days)	Swing Loader	1	4	265	0.36
Intermodal Facility Track and Signal (274 days)	Tamper	1	3	89	0.36
Intermodal Facility Track and Signal (274 days)	Track Laying Machine	1	4	525	0.42

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
Intermodal Facility Track and Signal (274 days)	Water Trucks	1	10	376	0.38
Block Swap Yard Demolition, Site Preparation, Mobilization (34 days)	Dozer	19	10	419	0.40
Block Swap Yard Demolition, Site Preparation, Mobilization (34 days)	Dump Truck	101	10	376	0.38
Block Swap Yard Demolition, Site Preparation, Mobilization (34 days)	Excavator	7	10	450	0.38
Block Swap Yard Demolition, Site Preparation, Mobilization (34 days)	Generators	4	2	20	0.74
Block Swap Yard Demolition, Site Preparation, Mobilization (34 days)	Loader	7	10	360	0.36
Block Swap Yard Demolition, Site Preparation, Mobilization (34 days)	Scrapers	30	10	1,051	0.48
Block Swap Yard Demolition, Site Preparation, Mobilization (34 days)	Water Trucks	2	4	376	0.38
Block Swap Yard Mass Grading (94 days)	Dozers	142	10	419	0.40
Block Swap Yard Mass Grading (94 days)	Dump Trucks	172	10	376	0.38
Block Swap Yard Mass Grading (94 days)	Excavators	51	10	450	0.38
Block Swap Yard Mass Grading (94 days)	Generators	4	2	20	0.74
Block Swap Yard Mass Grading (94 days)	Graders	3	10	250	0.41
Block Swap Yard Mass Grading (94 days)	Loaders	66	10	360	0.36

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
Block Swap Yard Mass Grading (94 days)	Rollers	3	10	325	0.38
Block Swap Yard Mass Grading (94 days)	Scrapers	163	10	1,051	0.48
Block Swap Yard Mass Grading (94 days)	Water Trucks	20	10	376	0.38
Block Swap Yard Drainage and Underground (238 days)	Crane	1	1	367	0.29
Block Swap Yard Drainage and Underground (238 days)	Dump Trucks	7	10	376	0.38
Block Swap Yard Drainage and Underground (238 days)	Excavators	3	10	236	0.38
Block Swap Yard Drainage and Underground (238 days)	Generators	4	2	20	0.74
Block Swap Yard Drainage and Underground (238 days)	Loaders	3	10	265	0.36
Block Swap Yard Drainage and Underground (238 days)	Pump Truck	1	1	376	0.38
Block Swap Yard Drainage and Underground (238 days)	Water Trucks	2	10	376	0.38
Block Swap Yard Bridges and Box Culverts (238 days)	Auger Boring Machine	1	9	83	0.50
Block Swap Yard Bridges and Box Culverts (238 days)	Crane	3	10	367	0.29
Block Swap Yard Bridges and Box Culverts (238 days)	Dozer	1	9	190	0.40
Block Swap Yard Bridges and Box Culverts (238 days)	Dump Trucks	8	10	376	0.38
Block Swap Yard Bridges and Box Culverts (238 days)	Excavators	6	10	236	0.38
Block Swap Yard Bridges and Box Culverts (238 days)	Generators	4	2	20	0.74

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
Block Swap Yard Bridges and Box Culverts (238 days)	Grader	1	9	250	0.41
Block Swap Yard Bridges and Box Culverts (238 days)	Light Carts	8	8	20	0.74
Block Swap Yard Bridges and Box Culverts (238 days)	Loaders	5	10	265	0.36
Block Swap Yard Bridges and Box Culverts (238 days)	Pump Truck	1	8	376	0.38
Block Swap Yard Bridges and Box Culverts (238 days)	Roller	1	9	150	0.38
Block Swap Yard Bridges and Box Culverts (238 days)	Skid Steers	2	10	90	0.37
Block Swap Yard Bridges and Box Culverts (238 days)	Water Trucks	2	10	376	0.38
Block Swap Yard Fine Grading, Place Subballast (310 days)	Dozers	11	10	190	0.40
Block Swap Yard Fine Grading, Place Subballast (310 days)	Generators	4	2	20	0.74
Block Swap Yard Fine Grading, Place Subballast (310 days)	Graders	20	10	250	0.41
Block Swap Yard Fine Grading, Place Subballast (310 days)	Loaders	4	10	150	0.36
Block Swap Yard Fine Grading, Place Subballast (310 days)	Rollers	20	10	150	0.38
Block Swap Yard Fine Grading, Place Subballast (310 days)	Trencher	4	10	115	0.50
Block Swap Yard Fine Grading, Place Subballast (310 days)	Water Trucks	20	10	376	0.38
Block Swap Yard Track and Signal (334 days)	Dozers	2	10	190	0.40
Block Swap Yard Track and Signal (334 days)	Dump Truck	1	1	376	0.38

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
Block Swap Yard Track and Signal (334 days)	Excavator	5	10	236	0.38
Block Swap Yard Track and Signal (334 days)	Generators	4	2	20	0.74
Block Swap Yard Track and Signal (334 days)	Grapple Truck	2	10	376	0.38
Block Swap Yard Track and Signal (334 days)	Light Carts	8	8	20	0.74
Block Swap Yard Track and Signal (334 days)	Loaders	5	10	265	0.36
Block Swap Yard Track and Signal (334 days)	Regulator	1	9	82	0.42
Block Swap Yard Track and Signal (334 days)	Skid Steer	1	2	90	0.37
Block Swap Yard Track and Signal (334 days)	Swing Loader	2	10	265	0.36
Block Swap Yard Track and Signal (334 days)	Tamper	1	9	89	0.36
Block Swap Yard Track and Signal (334 days)	Track Laying Machine	2	10	525	0.42
Block Swap Yard Track and Signal (334 days)	Water Trucks	1	10	376	0.38
North Main Demolition, Site Preparation, Mobilization (34 days)	Dozer	1	5	419	0.40
North Main Demolition, Site Preparation, Mobilization (34 days)	Dump Truck	3	10	376	0.38
North Main Demolition, Site Preparation, Mobilization (34 days)	Excavator	1	2	450	0.38
North Main Demolition, Site Preparation, Mobilization (34 days)	Generators	4	2	20	0.74

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
North Main Demolition, Site Preparation, Mobilization (34 days)	Loader	1	2	360	0.36
North Main Demolition, Site Preparation, Mobilization (34 days)	Scrapers	1	8	1,051	0.48
North Main Demolition, Site Preparation, Mobilization (34 days)	Water Trucks	2	4	376	0.38
North Main Mass Grading (94 days)	Dozer	5	10	419	0.40
North Main Mass Grading (94 days)	Dump Trucks	2	10	376	0.38
North Main Mass Grading (94 days)	Excavators	2	10	450	0.38
North Main Mass Grading (94 days)	Generators	4	2	20	0.74
North Main Mass Grading (94 days)	Grader	1	1	250	0.41
North Main Mass Grading (94 days)	Loaders	3	10	360	0.36
North Main Mass Grading (94 days)	Roller	1	1	325	0.38
North Main Mass Grading (94 days)	Scrapers	5	10	1,051	0.48
North Main Mass Grading (94 days)	Water Trucks	20	10	376	0.38
North Main Bridges and Box Culverts (94 days)	Auger Boring Machine	1	8	83	0.50
North Main Bridges and Box Culverts (94 days)	Crane	3	10	367	0.29
North Main Bridges and Box Culverts (94 days)	Dozer	1	8	190	0.40

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
North Main Bridges and Box Culverts (94 days)	Dump Trucks	9	10	376	0.38
North Main Bridges and Box Culverts (94 days)	Excavator	6	10	236	0.38
North Main Bridges and Box Culverts (94 days)	Generators	4	2	20	0.74
North Main Bridges and Box Culverts (94 days)	Grader	1	8	250	0.41
North Main Bridges and Box Culverts (94 days)	Light Carts	8	8	20	0.74
North Main Bridges and Box Culverts (94 days)	Loaders	6	10	265	0.36
North Main Bridges and Box Culverts (94 days)	Pump Truck	1	4	376	0.38
North Main Bridges and Box Culverts (94 days)	Roller	1	8	150	0.38
North Main Bridges and Box Culverts (94 days)	Skid Steers	2	10	90	0.37
North Main Bridges and Box Culverts (94 days)	Water Trucks	2	10	376	0.38
North Main Fine Grading, Place Subballast (46 days)	Dozers	2	10	190	0.40
North Main Fine Grading, Place Subballast (46 days)	Generators	4	2	20	0.74
North Main Fine Grading, Place Subballast (46 days)	Graders	3	10	250	0.41
North Main Fine Grading, Place Subballast (46 days)	Rollers	3	10	150	0.38
North Main Fine Grading, Place Subballast (46 days)	Water Trucks	20	10	376	0.38
North Main Track and Signal (154 days)	Crane	1	4	367	0.29

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
North Main Track and Signal (154 days)	Dozer	1	1	190	0.40
North Main Track and Signal (154 days)	Dump Truck	2	10	376	0.38
North Main Track and Signal (154 days)	Excavator	2	10	236	0.38
North Main Track and Signal (154 days)	Generators	4	2	20	0.74
North Main Track and Signal (154 days)	Grapple/Pump Trucks	3	10	376	0.38
North Main Track and Signal (154 days)	Light Carts	8	8	20	0.74
North Main Track and Signal (154 days)	Loaders	2	10	265	0.36
North Main Track and Signal (154 days)	Regulator	1	1	82	0.42
North Main Track and Signal (154 days)	Skid Steer	1	8	90	0.37
North Main Track and Signal (154 days)	Swing Loader	1	1	265	0.36
North Main Track and Signal (154 days)	Tamper	1	1	89	0.36
North Main Track and Signal (154 days)	Track Laying Machine	1	1	525	0.42
North Main Track and Signal (154 days)	Water Trucks	1	10	376	0.38
Transload Warehouses Warehouse Construction (274 days)	Dozers	3	10	419	0.40
Transload Warehouses Warehouse Construction (274 days)	Dump Trucks	69	10	376	0.38
Transload Warehouses Warehouse Construction (274 days)	Generators	4	2	20	0.74

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
Transload Warehouses Warehouse Construction (274 days)	Graders	3	10	250	0.41
Transload Warehouses Warehouse Construction (274 days)	Light Carts	8	8	20	0.74
Transload Warehouses Warehouse Construction (274 days)	Pump Trucks	4	10	376	0.38
Transload Warehouses Warehouse Construction (274 days)	Roller	3	10	36	0.38
Transload Warehouses Warehouse Construction (274 days)	Water Trucks	2	4	376	0.38
Transload Warehouses Civil Site Improvements (226 days)	Backhoe	1	2	84	0.37
Transload Warehouses Civil Site Improvements (226 days)	Dozer	3	10	419	0.40
Transload Warehouses Civil Site Improvements (226 days)	Dump Trucks	7	10	376	0.38
Transload Warehouses Civil Site Improvements (226 days)	Excavator	3	10	450	0.38
Transload Warehouses Civil Site Improvements (226 days)	Generators	4	2	20	0.74
Transload Warehouses Civil Site Improvements (226 days)	Graders	3	10	250	0.41
Transload Warehouses Civil Site Improvements (226 days)	Light Carts	8	8	20	0.74
Transload Warehouses Civil Site Improvements (226 days)	Loaders	3	10	360	0.36
Transload Warehouses Civil Site Improvements (226 days)	Roller	3	10	325	0.38
Transload Warehouses Civil Site Improvements (226 days)	Trencher	3	10	115	0.50
Transload Warehouses Civil Site Improvements (226 days)	Water Trucks	2	4	376	0.38

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
33KV Transmission Line Construction (516 days)	Auger Boring Machine	1	1	83	0.50
33KV Transmission Line Construction (516 days)	Backhoes	2	10	84	0.37
33KV Transmission Line Construction (516 days)	Boom Trucks	3	10	376	0.38
33KV Transmission Line Construction (516 days)	Crane	1	2	367	0.29
33KV Transmission Line Construction (516 days)	Dump Truck	1	1	376	0.38
33KV Transmission Line Construction (516 days)	Excavators	3	10	450	0.38
33KV Transmission Line Construction (516 days)	Generators	4	2	20	0.74
33KV Transmission Line Construction (516 days)	Boring Machine	1	5	200	0.42
33KV Transmission Line Construction (516 days)	Light Carts	8	8	20	0.74
33KV Transmission Line Construction (516 days)	Skid Steer	1	1	90	0.37
33KV Transmission Line Construction (516 days)	Tampers	3	10	89	0.36
33KV Transmission Line Construction (516 days)	Water Truck	3	10	376	0.38
Solar Farm Construction (296 days)	Backhoe	1	5	84	0.37
Solar Farm Construction (296 days)	Boom Truck	1	5	376	0.38
Solar Farm Construction (296 days)	Crane	1	1	367	0.29
Solar Farm Construction (296 days)	Dozer	1	1	419	0.40

Construction Phase	Equipment[1]	Number	Hours per Day	Horsepower[2]	Load Factor[2]
Solar Farm Construction (296 days)	Excavator	1	8	450	0.38
Solar Farm Construction (296 days)	Flat Bed Truck	1	5	82	0.42
Solar Farm Construction (296 days)	Generators	4	2	20	0.74
Solar Farm Construction (296 days)	Light Carts	8	8	20	0.74
Solar Farm Construction (296 days)	Loader	1	2	360	0.36
Solar Farm Construction (296 days)	Pile Driver	1	1	82	0.42
Solar Farm Construction (296 days)	Skid Steer	1	3	90	0.37
Solar Farm Construction (296 days)	Tamper	1	6	89	0.36
Solar Farm Construction (296 days)	Water Truck	1	6	376	0.38

1. Project construction equipment provided by TranSystems/Burns & McDonnell.
2. Horsepower and load factors based on CalEEMod User Guide Appendix G, *Table G-12, Horsepower and Load Factors for Construction Equipment by Fuel Type* and from equipment specific data provided by the construction contractor.

Demolition and Earthwork

GHG emissions associated with demolition and earthwork would originate from equipment, trucks, concrete batch plants, and rail deliveries. Construction would require the demolition and removal of approximately 150,000 square feet of structures and the removal of 36,000 square feet of concrete slab. Although the CALGreen Code requires 65 percent of construction and demolition materials to be diverted away from the landfill by either recycling or reusing materials, it is currently unknown how much of the demolished material can be recycled and re-used on-site. Therefore, as a conservative estimation of impacts, all demolished materials were assumed to be hauled off-site. Demolition was assumed to occur during the initial stages of the Civil and Site Work phase. Earthwork would follow the demolition stage during the Civil and Site Work phase. Approximately 26,000,000 cubic yards of balanced cut and fill would be required for the Project as well as 2,000,000 cubic yards of subcut.

Concrete and Asphalt Batch Plants

Concrete would also be required for components such as the intermodal facility as well as the construction of bridges and retaining walls. Asphalt would be required for parking areas and roadways/drive aisles. BIG construction would require approximately 1.9 million cubic yards of concrete and 700,000 tons (approximately 345,379 cubic yards) of asphalt for warehouse parking areas. Due to the size of the BIG

footprint, the analysis assumed three batch plants would operate during construction, three concrete batch plants and one asphalt batch plant. The locations of the anticipated batch plants would be determined by the construction contractor and are currently unknown. Concrete batch plants would generate GHGs from burning fossil fuels in off-site power plants to generate electricity and would not consume fuel on-site, such as diesel. In addition, the transport and treatment of water needed to make concrete will be responsible for generating GHGs. GHG emissions from truck trips associated with transporting material to and from the concrete batch plants were included in the mobile source emissions as vendor trips, discussed below.

Construction Trips

Mobile source GHG emissions from worker trips and heavy-duty truck trips were calculated using VMT estimates and appropriate EMFAC emission rates. Construction trips are summarized **Table 6: Construction Trips**. BIG-specific data, including construction equipment lists and construction schedule, were also incorporated into the modeling.

Table 6: Construction Trips

Construction Year	Peak Worker Trips per Day (Passenger Cars)	Peak Truck Trips[1] per Day (Heavy-duty Trucks)
Year 1	2,048	714
Year 2	2,418	1,732
Year 3	1,435	1,065
Year 4	275	239

1. Truck trips during intermodal infrastructure construction include concrete pavement, base course, and warehouse construction material deliveries. Deliveries at various locations for intermodal infrastructure would occur concurrently.

Sources: Kimley-Horn and Associates, Inc., CEQA Assessment – VMT Analysis, Active Transportation, and Public Transit Analysis, November 2025.

Rail Deliveries

Bulk materials, including ballast, and welded rails, and rail ties, could be hauled by rail. Rail emission factors from the U.S. EPA document *Emission Factors for Locomotives* (2009) and the travel distance by rail within the MDAB were used to estimate construction rail delivery emissions. Construction rail delivery emissions were calculated by assuming that locomotives meeting fleet average line-haul emission standards would be used for all rail deliveries.

Concrete rail ties, welded rails, and ballast could be delivered by rail. Construction would require approximately 80 trains for rail tie delivery, 44 trains for welded rail delivery, and 315 trains for ballast delivery for a total of approximately 439 trains over a 10-month construction period (approximately two trains per day). Trains delivering rail ties, welded rails, and ballast were assumed to have one locomotive and 50 cars. Track ballast would be delivered in 100-ton rail ballast cars. Train hauling was conservatively assumed to occur over a one-way distance of 900 miles to account for the potential emissions from Colorado for some construction materials. Additionally, trains were assumed to idle for eight hours per day.

Summary of Construction Assumptions

Table 7: Construction Assumptions Summary summarizes the methodology, models used, and other construction assumptions described above.

Table 7: Construction Assumptions Summary

Emissions Source	Assumptions	Methodology or Model Used
Off-Road Equipment [1]	See **Table 5** for equipment assumptions	CARB OFFROAD
Earthwork (fugitive dust)	26,000,000 cubic yards of balanced cut and fill, truck loading, and storage piles 2,000,000 cubic yards of subcut and soil	U.S. EPA AP-42 §§ 11.9 and 13.2
Electricity from water conveyance for dust suppression	Approximately 2,103 million gallons	CalEEMod Version 2022.1
On-Road Hauling and Worker Vehicle Trips	See **Table 6** for construction trip assumptions. Peak worker trips would occur during building construction and peak truck trips would occur during demolition, site preparation, and mobilization.	CARB EMFAC2021
Demolition	150,000 square feet of structures 36,000 square feet of concrete slab removal	U.S. EPA AP-42 §§ 11.9 and 13.2
Rail Deliveries (Locomotive Hauling and Idling)	• 80 trains for rail tie delivery • 44 trains for welded rail delivery • 315 trains for ballast delivery • Total of approximately 439 trains over a 10-month construction period. • Each train was assumed to idle 8 hours per day. • Approximately 2 trains per day	U.S. EPA, Emission Factors for Locomotives, April 2009
Concrete and Asphalt Batch Plants	2.3 million cubic yards total over a 21-month period Three electrically powered concrete batch plants (1.9 million cubic yards total, approximately 3,500 cubic yards per day). One electrically powered asphalt bath plant Approximately 345,379 cubic yards (approximately 633 cubic yards per day)	U.S. EPA AP-42 § 11.12

1. Includes Demolition, Grading, Bridges and Box Culverts, Building Construction, Track and Signal Work, Solar Farm, and 33 kV Transmission Line.

Operations

BIG operational GHG emissions sources were calculated based on BIG-specific activity levels. Operational GHG emission sources include rail yard equipment, stationary sources, area sources[7], locomotives, heavy-duty truck and employee commute. The following approximate building area was assumed for modeling purposes:

- Intermodal Facility: 150,000 square feet of building area.
- Transload Facility: 9,000,000 square feet of building area.

Operational GHG emission source assumptions were obtained from BNSF. Operational mobile source activity assumptions were based on traffic data within the BIG transportation analysis (including trucks miles traveled analysis (TMT). Typically, intermodal transport grows by approximately two percent per year. However, as discussed above, BIG would introduce a unique cross-dock intermodal operation which

7 Area sources occur from consumer products, architectural coatings, and landscaping that were previously not present on the site.

would present competitive benefits to suppliers compared to long-distance transport via heavy-duty truck. As such, BNSF anticipates that during this "initial transition period" after opening year and while suppliers transition supply chains to use BIG, a higher growth percentage than typical would occur. Following this initial transition period and through horizon year, BIG's growth would continue at the normal approximately 2 percent per year. Therefore, the analysis evaluates BIG's environmental impacts during Opening Year (2028), Interim Year (2033), and Horizon Year (2048) conditions.

Equipment and Stationary Sources

The operational equipment that would be used within the intermodal rail yard is listed in **Table 8: Operational Electric Equipment** and **Table 9: Operational Diesel Equipment**. The operational equipment shown in **Table 8** would all be electric powered and direct GHG emissions from such equipment would not occur. Indirect GHG emissions related to electricity required to power such equipment has been quantified (see Energy Sources below).

Table 8: Operational Electric Equipment

Equipment	Quantity (2028)	Quantity (2033)	Quantity (2048)
Widespan Rail Mounted Gantry (RMG) Cranes	10	12	14
Chassis Stacking Forklifts	2	2	3
Intermodal Facility Forklifts	2	2	3
Top Pick/Side Loaders	2	2	3
Terminal Electric Hostlers	47	62	73
Transload Electric Hostlers	81	107	124
Warehouse Forklifts	540	540	540

Sources: AECOM. (2023). *BNSF Barstow Simulation Analysis*.; and Warehouse forklifts per SCAQMD, High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results, June 2014.

The operational equipment shown in **Table 9** would all use diesel fuel and would release GHG emissions. Cargo handling equipment GHG emissions factors were modeled using CARB's OFFROAD2021 model. Less than five percent of containers handled at BIG would have TRUs. Electrical plug-in facilities would be provided for transportation refrigeration units, and transportation refrigeration unit GHG emissions were only estimated for the short time between arrival of transportation refrigeration units and plug-in.

Table 9: Operational Diesel Equipment

Equipment[1]	2028 Quantity	2028 Hours per Day Per Unit (Peak)	2033 Quantity	2033 Hours per Day Per Unit (Peak)	2048 Quantity	2048 Hours per Day Per Unit (Peak)	Horse-power[2]	Load Factor[2]
Rubber Tired Gantry (RTG) Cranes (Mi-Jack)	7	6.9	8	6.9	10	6.9	165	0.15
Rail Car Wheel Change Machine	2	4	2	4	2	5	160	0.43
Air Compressors	2	2	2	2	2	3	78	0.48
Welders	2	1	2	1	2	2	46	0.45
Truck TRUs[3]	15	4.9	19	4.9	23	4.9	50	0.56
Warehouse Yard Trucks	32	4	32	4	32	4	225	0.39

Equipment[1]	2028 Quantity	2028 Hours per Day Per Unit (Peak)	2033 Quantity	2033 Hours per Day Per Unit (Peak)	2048 Quantity	2048 Hours per Day Per Unit (Peak)	Horse-power[2]	Load Factor[2]
Warehouse Forklifts	540	4	540	4	540	4	106	0.30
EMERGENCY GENERATORS (TESTING, MAINTENANCE, AND TRAINING)								
2000 kW (Intermodal Facility)	10	1	10	1	10	1	2,682	0.74
750 kW (Warehousing)	5	1	5	1	5	1	1,006	0.74
500 kW (Warehousing)	2	1	2	1	2	1	671	0.74
350 kW (Warehousing)	1	1	1	1	1	1	469	0.74
250 kW (Warehousing)	15	1	15	1	15	1	335	0.74
175 kW (Warehousing)	6	1	6	1	6	1	235	0.74

1. Cargo handling equipment and generators and activity/usage hours provided by BNSF and AECOM.
2. Horsepower and load factors from CARB CHE inventory and CARB OFFROAD. The RTG Load Factor is from the Port of Long Beach RTG Crane Load Factor Study, 2009.
3. Truck TRUs are 5 percent of the total one-way trucks and hours per unit are from CARB OFFROAD.

Source: Compiled from discussions with BNSF engineers, 2023.

Area Sources

Area source GHG emissions would be generated through the use of landscaping equipment that were previously not present on the site.[8] Area source GHG emissions were calculated based on generation and GHG emissions factors from the California Emissions Estimator Model (CalEEMod) version 2022 User Guide, Appendix C (GHG Emissions Calculation Details) and Appendix G (Default Data Tables).

Energy Sources

Energy-related GHG emissions occur from electricity and natural gas consumption. BIG would not use natural gas, thus, GHG emissions from natural gas consumptions would be zero. GHG emissions from on-site use of electricity are directly attributable to the BIG footprint. Primary uses of electricity by BIG would be for electric cargo handling equipment, lighting, electric hostler charging, miscellaneous railroad building and transload equipment, space heating and cooling, water heating, lighting, ventilation, appliances, and electronics. Energy GHG emissions are calculated based on consumption rates from BNSF and GHG emissions factors from the CalEEMod 2022 Users Guide.

Solid Waste

Solid waste releases GHG emissions in the form of methane when these materials decompose. Solid waste GHG emissions are calculated based on generation rates and GHG emissions factors from the CalEEMod 2022 Users Guide.

8 Note that area sources including architectural coatings and consumer products are not considered because emissions for these area sources are limited to VOC and would not contribute to GHG emissions.

Water and Wastewater

BIG GHG emissions would be generated from energy consumption associated with water and wastewater conveyance and treatment. Water and wastewater GHG emissions are calculated based on consumption rates and GHG emissions factors from the CalEEMod 2022 Users Guide.

Locomotive Emissions within BIG Footprint

As noted above, baseline train count data is based on actual train data from the last quarter of 2022 and the first three quarters of 2023 as these were the most recent available data at the time the environmental analysis commenced. Growth rates were developed based on looking at historic growth rates for the various container and train types that would utilize BIG and were applied to the existing train counts for future year data. BIG would construct a new mainline immediately north of Main Street. The existing mainline would be reconstructed. GHG Emissions from existing mainline operations have been modeled and deducted from future BIG GHG emissions to estimate the net change in GHG emissions. Future train volumes would be evenly distributed between the new main lines.

Locomotive GHG emissions associated with the intermodal rail yard are from two major categories: switcher locomotive GHG emissions during yard activities (i.e., moving rail cars within the block swap yard or intermodal facility); and line-haul locomotive GHG emissions during transport and idling (arriving and departing locomotives). Locomotive GHG emissions are based on locomotive activity and train profile data from the BIG Corridor Emissions Model (Ensafe, 2025). These emission sources would use diesel fuel and are described below.

Line-haul refers to the movement of cargo over long distances (e.g., cross-country) and occurs within the intermodal rail yard as the initiation or termination of a line-haul trip, as cargo is either picked up or dropped for transport to destinations across the region or country.[9] Line-haul locomotives would access the BIG intermodal facility and block swap yard.

Switching refers to the assembling and disassembling of trains at various locations in the intermodal rail yard, sorting of the cars of inbound cargo trains into contiguous “fragments” for subsequent delivery. Switching locomotives would stay within BIG. Each switching locomotive operates in consists[10] of two locomotives each. Switching would primarily occur at the block swap yard to transfer a block of train cars between trains without re-classification. Switching locomotives would not be needed for intermodal facility operations except for some block swap trains that are switched over to the intermodal facility. This switching activity has been attributed to the block swap yard for modeling purposes. Switching may occur at the intermodal rail yard to break smaller subsets of cars from the larger segments brought in for loading/ unloading (i.e. to remove a single bad car for minor repair). Regular breakdown and build activities of arriving and departing trains at the intermodal facility would occur with line-haul locomotives under self-powered conditions (i.e. not conducted by switch engines).

All switcher and line-haul locomotives are assumed to be equipped with Automatic Engine Start Stop technology, which limits idling time for any single location to 15 minutes per Program 1(b) of the Statewide

[9] CARB categorizes U.S. diesel-electric freight and passenger locomotives into three major groups, primarily based on horsepower and types of operations: (1) interstate line haul (>4,000 horsepower); (2) medium horsepower (MHP) (2,301 to 3,999 horsepower); and (3) Switch (yard) (1,006 to 2,300 horsepower).U.S. EPA defines the smaller switch (yard) locomotive, also called a switcher, to be between 1,006 and 2,300 horsepower. U.S. EPA also defines higher horsepower locomotives as line haul locomotives (i.e., >2,300 horsepower) (40 CFR Part 1033.901).

[10] In railroad terminology, a "consist" refers to the specific arrangement and composition of a train, including the locomotives and railcars.

Rail Agreement.[11] After 15 minutes, the Automatic Engine Start Stop will cause all but one locomotive per train to shut down. All GHG emissions analysis of movements of the line-haul locomotives in breaking down arriving trains and building departing trains assume that only one locomotive per train is operational. The remaining locomotives would only be restarted immediately prior to train departure.

Locomotive GHG emissions were modeled using current BNSF fleet data and locomotive GHG emissions factors from the U.S. EPA document Emission Factors for Locomotives (EPA-420-F-09-025) and from the U.S. EPA's Eastern Regional Technical Advisory Committee (ERTAC) Emissions Modeling Platform Collaborative: Rail – 2017 National Emissions Inventory (U.S. EPA, 2019). GHG emissions from rail yard switcher and line-haul locomotives were modeled using a detailed layout of track segments, and assumptions for the movement of locomotives along track segments based on the proposed track and facility layout, as well as detailed duty cycle data locomotive notch settings. The total switcher locomotive activity consists of two engines operating three shifts per day, seven days per week. **Table 10: Train Operational Assumptions within the BIG Footprint** shows the number of locomotives assumed and **Table 11: Locomotive Fleet Mix** shows the line-haul and switcher locomotive fleet mix.

[11] California Air Resources Board. (2005). *Railroad Statewide Agreement Particulate Emissions Reduction Program at California Rail Yards*.

Table 10: Train Operational Assumptions within the BIG Footprint

Scenario	Existing Average Trains Per Day	Existing Average Locomotives Per Train	2026 Average Trains Per Day	2026 Average Locomotives Per Train	2028 Average Trains Per Day	2028 Average Locomotives Per Train	2033 Average Trains Per Day	2033 Average Locomotives Per Train	2048 Average Trains Per Day	2048 Average Locomotives Per Train
Without BIG										
Mainline (All Trains)	45.3	3.5	47.3	3.5	48.7	3.5	52.4	3.6	66.6	3.6
With BIG										
N. and S. Mainlines[1]	-	-	47.3	3.5	32.0	3.3	34.3	3.4	43.3	3.4
BIG East Lead	-	-	-	-	24.4	3.1	27.6	3.1	35.4	3.1
BIG West Lead	-	-	-	-	19.4	3.9	21.7	3.9	27.3	3.8
Block Swap Yard and Through Trains[2]	-	-	-	-	20.3	3.4	22.6	3.4	28.9	3.3

1. With BIG 2026 mainline trains would occur on the South Main only while the Existing Main is being reconstructed. After BIG opens, some mainline trains would be routed to the Intermodal Facility and Block Swap Yard.
2. The number of trains include through trains that do not stop in the facility.

Source: EnSafe, 2025. Corridor Emissions Report.

Table 11: Locomotive Fleet Mix

U.S. EPA Tier Standard	Line-Haul Locomotives [1, 2, 3] Without BIG and With BIG (2028)	Line-Haul Locomotives [1, 2, 3] Without BIG and With BIG (2033)	Line-Haul Locomotives [1, 2, 3] Without BIG and With BIG (2048)	Line-Haul Locomotives [1, 2, 3] With BIG Dedicated Fleet (All Years)[4]	Switcher Locomotives [1, 2] With BIG 2028	Switcher Locomotives [1, 2] With BIG 2033	Switcher Locomotives [1, 2] With BIG 2048
Uncontrolled (1973-1999)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tier 0 (2000-2001)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tier 0+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tier 1 (2002-2004)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tier 1+	26.48%	22.12%	8.62%	0.0%	0.0%	0.0%	0.0%
Tier 2 (2005-2011)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tier 2+	37.01%	37.27%	38.05%	0.0%	0.0%	0.0%	0.0%
Tier 3 (2012-2014)	27.91%	28.10%	28.69%	0.0%	0.0%	0.0%	0.0%
Tier 4 (2015)	8.60%	12.52%	24.64%	100%	100%	100%	100%

1. Line-haul locomotives are 4,000 horsepower or higher; switcher locomotives are less than 2,300 horsepower.
2. Line-haul locomotive life is assumed to be 40 years; switcher locomotive life is assumed to be 70 years.
3. Future year locomotive projections assume a fleet turnover rate based on actual locomotive purchases over the last five years (i.e., locomotive fleets would add new Tier 4 engines and remove older tier engines over time based on historical purchase and replacement rates).
4. Cross-dock intermodal containers (i.e., those taken by rail from the Ports to BIG's intermodal facility) would be transported using a dedicated fleet of Tier 4 linehaul locomotives.

Source: BNSF locomotive inventory data.

Corridor GHG Emissions in California

BIG trains would travel along a Corridor defined as the rail line operated by BNSF between the San Pedro Ports and Needles Station at approximately the California/Arizona border. BNSF's ownership in the Corridor occurs between downtown Los Angeles and the Needles Station. The rail Corridor traverses both the South Coast Air Basin and Mojave Desert Air Basin. The emissions modeling breaks the Corridor into four segments, including 1) San Pedro Ports to San Bernardino station, 2) San Bernardino station to Summit station, 3) Summit station to Barstow station/BIG, and 4) Barstow station/BIG to Needles station. The following data are used to calculate locomotive GHG emissions on the rail corridor between the Ports and Needles, California, for analysis years 2028, 2033 and 2048 (ENSAFE, 2025):

- Train Profiles: The number of locomotives, locomotive weight, freight weight, direction of travel, and distance traveled for an average train type along the Corridor.
- Train Trips: The number of trips for each train type.
- Fleet Mix: The blend of locomotive types used for each analysis year (locomotive types are classified by the engine tier, ranging from Tier 1 to Tier 4). The locomotive inventory is based on the 1998 Locomotive NO_X Fleet Average Emissions Agreement in the South Coast Air Basin (1998 MOU), signed by CARB, Union Pacific Railroad (UP) and BNSF. As part of BIG, cross-dock intermodal containers (i.e., those taken by rail from the Ports to BIG) would be transported using a dedicated fleet of Tier 4 linehaul locomotives.
- Fuel Blend: The mix of conventional and renewable fuels used for each scenario and analysis year. Starting in BIG opening year 2028, BNSF would increase the renewable diesel composition within the Ports' existing fueling site from 1 percent to 10 percent, a 9-percentage point increase in renewable diesel. This would improve the emissions of all BNSF trains fueling at the Ports, including those BNSF trains that would not stop at BIG. BIG is expected to increase the use of renewable diesel in the locomotives traveling in the eastbound direction (fueled in California). However, it is not expected to increase the use of renewable diesel in westbound travel (fueled outside of California).
- Fuel Efficiency: To estimate the fuel efficiency for the various scenarios and operational years, corridor emissions model incorporates the BNSF Fuel Efficiency Model (FEM), a regression model based on actual 2023 fuel usage data.

Rail emission factors are from the U.S. EPA document *Emission Factors for Locomotives* (2009) and the railroad miles along BNSF's corridor. The GHG emission factors are based on The Climate Registry, 2021 Emissions Factors (2021) and were adjusted to reflect a 62 percent reduction based on the carbon intensity of renewable diesel compared to conventional diesel (CARB, 2025). BIG includes using dedicated Tier 4 locomotives to transport cross-dock intermodal containers from the Ports to BIG's intermodal facility, Tier 4 switcher locomotives, the retirement of all existing switcher locomotives at the existing Barstow classification yard and the addition of six Tier 4 switcher locomotives, and increasing the renewable diesel composition within the BNSF's existing Southern California fueling sites. These would reduce Corridor emissions and are incorporated into the With Project model analysis.

Corridor GHG Emissions Outside of California

Locomotive emissions on railroads outside of California were calculated with the same emission factors described above. The GHG emission rates are from The Climate Registry's 2021 Emissions Factors, which are provided in grams per gallon. Total train gallons were calculated from the average tonnage per train and the gross ton miles per gallon per train. Total train miles were provided by BNSF.

Other Mobile Sources (Employee Transportation)

Mobile sources of GHG emissions will include employee vehicles (passenger cars). However, GHG emissions associated with employee transportation expressly is excluded from SB 149's GHG requirements. Therefore, **Table 12: BIG Passenger Car Trip Generation** is provided for information purposes and GHG emissions from this activity is excluded from further consideration in the analysis.

Table 12: BIG Passenger Car Trip Generation

Land Use	Vehicle Type	2028 Average Daily Vehicle Trips	2033 Average Daily Vehicle Trips	2048 Average Daily Vehicle Trips
Transload Facility	Passenger Cars	6,962	9,204	10,620
Intermodal Facility	Passenger Cars	1,765	2,085	2,325

Source: Kimley-Horn and Associates, Inc., CEQA Assessment – VMT Analysis, Active Transportation, and Public Transit Analysis, November 2025.

Net National Truck Miles Traveled Improvements

As described above, BIG would transport almost all containers with trains instead of heavy-duty trucks, which would eliminate almost all truck trips and TMT.[12] The geographic scope for GHG emissions is global because impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have much longer atmospheric lifetimes of one year to several thousand years that allow them to be dispersed around the globe.[13] Furthermore, State CEQA Guidelines address GHG emissions as a cumulative impact because of the global nature of climate change (P.R.C. § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself" (Cleveland National Forest Foundation v. San Diego Association of Governments, 2017). Therefore, this analysis considers the national GHG reductions from TMT. The net annual truck trips and TMT removed from the national roadway network by BIG are shown above in **Table 12**.

Solar Improvements

BIG includes an on-site solar farm totaling approximately 140 acres, which would generate approximately 21 MW of electricity. Additionally, BIG would comply with CalGreen Code regulations requiring rooftop solar generation to be installed on industrial warehouse rooftops (Title 24, Section 140.10). Based on 9 million SF of transload warehouse, BIG would include approximately 6.4 MW of rooftop solar generation.

Existing Barstow Rail Yard Switchers

Prior to operations, BNSF will voluntarily retire all existing Tier 0/0+/1+ switcher locomotives at the unrelated existing Barstow Classification Yard, and in their place add six Tier 4 switcher locomotives.

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12 Kimley-Horn and Associates, Inc., CEQA Assessment – Vehicle Miles Traveled, Active Transportation, and Public Transit Analysis, November 2025.

13 Geophysical Fluid Dynamics Laboratory, Atmospheric Composition and Air Quality, https://www.gfdl.noaa.gov/atmospheric-composition-and-air-quality/#:~:text=The%20lifetime%20of%20air%20pollutants,regional%2C%20and%20even%20hemispheric%20scales., accessed June 16, 2025.; and California Air Resources Board, GHG Global Warming Potentials, https://ww2.arb.ca.gov/ghg-gwps, accessed June 16, 2025.

Summary of Operational Assumptions

Table 13: Operational Assumptions Summary summarizes the methodology, models used, and other operational assumptions described above for all operational analysis years.

Table 13: Operational Assumptions Summary

GHG Emissions Source	Assumptions	Methodology or Model Used
Equipment and Stationary Sources	See **Table 9** for diesel equipment assumptions	CARB OFFROAD
Energy Sources	Based on 150,000 square feet of intermodal facility buildings and 9,000,000 square feet of warehouse building area and associated electricity and natural gas consumption.	CalEEMod Consumption Rates and Southern California Edison energy intensity factors from the California Energy Commission Annual Power Content Labels. Future years projected based on SB 100 and AB 1279 goals.
Solar Generation	6.4 MW of rooftop solar on transload warehouses to comply with CalGreen Code 21 MW of solar power from the onsite solar farm	Southern California Edison energy intensity factors from the California Energy Commission Annual Power Content Labels. Future years projected based on SB 100 and AB 1279 goals.
Locomotive GHG Emissions	See **Table 10** and **Table 11** for train assumptions. Baseline train count data is based on actual train data from the last quarter of 2022 and the first three quarters of 2023. Growth rates were applied to the existing train counts for future year data.	U.S. EPA Emissions Factors for Locomotives (April 2009)
Rail Corridor Between Ports and Needles Station GHG Emissions	Actual 2022 and 2023 train count data provided by BNSF. Locomotive inventory based on the 1998 MOU annual reporting. For 2028, 2033, and 2048, the net BIG GHG emissions are the increment between the BIG project condition and Without BIG. See **Table 10**.	U.S. EPA Emissions Factors for Locomotives (April 2009) The Climate Registry, 2021 Emissions Factors (2021) CARB, LCFS Pathway Certified Carbon Intensities
National Roadway Network TMT Improvements	See **Table 2** for TMT assumptions	CARB EMFAC2021 (EMFAC2021 emission rates represent a conservative reduction estimate because reductions would be greater without H.J. Res 87 and H.J. Res 89.)
Barstow Yard Switcher Elimination and Replacement	Annual fuel consumption of 50,000 gallons per switcher Six switchers replaced with Tier 4 engines, nine switchers removed	GHG emission factors from The Climate Registry, 2021 Emission Factors, Tables 2.1 and 2.7, 2021
Other (Area Sources, Solid Waste, Water, and Wastewater)	Proposed building area	CalEEMod 2022 Consumption and Emissions Rates

As noted above, EMFAC2021 emissions projections assumed implementation of the ACT Regulation and the Heavy-Duty Low NO_X Omnibus Regulation[14]. These regulations were disapproved by Congressional Resolutions H.J. Res 87 and H.J. Res 89, respectively. Therefore, EMFAC2021 emission rates would be expected to increase without the ACT Regulation and the Heavy-Duty Low NO_X Omnibus Regulation. CARB released off-model adjustment factors for ROG, NO_X, and particulate matter to remove emissions benefits of the disapproved regulations. Off-model adjustment factors for GHG emissions have not yet been provided. CARB plans to release in early 2026 an updated version of the EMFAC that removes the emissions benefits of the targeted regulations. This analysis conservatively does not apply the EMFAC off-model adjustment factors. Applying EMFAC off-model adjustment factors would increase BIG's GHG emissions reductions.

Results

BIG construction will generate temporary construction GHG emissions associated with locomotives, on-road mobile sources, and off-road equipment; see **Table 14: BIG GHG Emissions**. Additionally, operational GHG emissions would occur over the life of BIG. GHG emissions would result from direct sources such as BIG generated vehicular traffic, locomotive activity, cargo handling equipment, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, the energy required to convey water to, and wastewater from BIG, the GHG emissions associated with solid waste generated from BIG, and any fugitive refrigerants from air conditioning or refrigerators. In addition to operational GHG emissions, BIG is designed to eliminate thousands of truck trips a day and reduce millions of TMT annually from the nation's roads and highways. Because of these direct GHG emissions reductions, BIG would result in a net GHG emissions reduction under the unmitigated Project condition for each of the analysis years (i.e., 2028, 2033, and 2048) and, accordingly, meets the GHG requirements for transportation-related projects under SB 149 without mitigation credits. See **Table 14** for a summary of BIG's net GHG emissions. Additionally, **Appendix A** of **Appendix 5.1 BIG-1** of the Draft EIR provides an annualized breakdown of emissions, which shows that BIG would result in a net unmitigated reduction of 475,811 $MTCO_2e$ over a 20-year period (a reduction of approximately 23,791 $MTCO_2e$ per year).

Table 14: BIG GHG Emissions

	Emissions Source	2028 $MTCO_2e$[8]	2033 $MTCO_2e$[8]	2048 $MTCO_2e$[8]
	Unmitigated Construction Amortized Over 30 Years[1]	8,385	8,385	8,385
Locomotives (within BIG Site Boundary)	Mainline (Without BIG)[2]	-21,719	-24,010	-29,979
Locomotives (within BIG Site Boundary)	Mainline (With BIG)[3, 4]	13,817	15,035	19,267
Locomotives (within BIG Site Boundary)	Net Mainline (Through BIG)	-7,902	-8,973	-10,712
Locomotives (within BIG Site Boundary)	BIG Lead Tracks	4,110	4,642	4,847
Locomotives (within BIG Site Boundary)	BIG Block Swap Yard	3,671	4,062	6,171

[14] Although the Heavy-Duty Low NO_X Omnibus Regulation is focused on reducing NO_X emissions, the regulation can also indirectly contribute to lowering GHG emissions from cleaner combustion and improved fuel economy.

	Emissions Source	2028 $MTCO_2e$[8]	2033 $MTCO_2e$[8]	2048 $MTCO_2e$[8]
Locomotives (within BIG Site Boundary)	BIG Intermodal Facility	294	389	444
Locomotives (within BIG Site Boundary)	BIG Maintenance	222	227	299
Locomotives (within BIG Site Boundary)	Locomotives Within BIG Site Boundary Subtotal	395	346	1,049
On-Road Mobile Sources	Passenger Cars[5]	29,909	35,272	36,880
On-Road Mobile Sources	Trucks	17,048	19,008	20,030
On-Road Mobile Sources	On-Road Mobile Source Subtotal	**46,957**	**54,280**	56,911
Equipment, Area, and Energy Sources	Equipment (including generators)	52,097	52,323	52,670
Equipment, Area, and Energy Sources	Energy and Area Sources	70,675	64,605	42,829
Equipment, Area, and Energy Sources	Solar Farm	-9,423	-7,369	0
Equipment, Area, and Energy Sources	Rooftop Solar – Code Compliance	-2,237	-1,749	0
Equipment, Area, and Energy Sources	Equipment, Area, and Energy Source Subtotal	111,111	107,810	95,499
Rail Corridor Emissions	California Rail Corridor Emissions – Without BIG	853,389	916,397	1,158,807
Rail Corridor Emissions	California Rail Corridor Emissions – With BIG	890,796	971,385	1,217,579
Rail Corridor Emissions	Net Corridor Emissions in California[6]	37,408	54,987	58,772
Rail Corridor Emissions	Corridor Emissions Outside of California[6]	115,529	157,860	179,451
Rail Corridor Emissions	Net National Network TMT Reduction[7]	-325,664	-376,761	-372,415
Rail Corridor Emissions	Total BIG Unmitigated Operational Emissions	**-14,265**	**-1,477**	**19,267**
Rail Corridor Emissions	Total Unmitigated Construction and Operational Emissions (BIG and Corridor)	-5,880	6,907	27,652
Rail Corridor Emissions	Total Unmitigated Construction and Operational Emissions (BIG and Corridor) Without Passenger Cars[5]	-35,789	-28,364	-9,229

	Emissions Source	2028 $MTCO_2e$[8]	2033 $MTCO_2e$[8]	2048 $MTCO_2e$[8]
Rail Corridor Emissions	Existing Barstow Yard Switcher Replacement	-522	-522	-522
Rail Corridor Emissions	Net Unmitigated BIG GHG Emissions with Existing Barstow Yard Switcher Replacement	-36,311	-28,887	-9,751
Rail Corridor Emissions	Exceed Zero Net Increase Threshold Without Mitigation	No	No	No
Rail Corridor Emissions	Air Quality Construction Mitigation Reduction	-3,244	-3,244	-3,244
Rail Corridor Emissions	Air Quality Operational Mitigation Reduction	-49,986	-50,213	-50,041
Rail Corridor Emissions	Energy Mitigation Reduction	-5,942	-4,647	0
	Net Mitigated BIG GHG Emissions	**-95,484**	**-86,991**	**-63,036**
	Exceed Zero Net Increase Threshold With Mitigation	No	No	No

$MTCO_2e$ = metric tons of carbon dioxide equivalents, BIG = Barstow International Gateway; TMT = truck miles traveled

1. Construction-related GHG emissions are amortized over 30 years (the conservative operational life of a project). Specifically, total construction emissions are divided by 30 and added to the annual operational emissions to allow for the inclusion of temporary construction emissions into the long-term operational impacts.
2. Mainline (Without BIG) locomotive emissions represent the trains that travel on the existing mainlines today within the future BIG footprint.
3. Mainline (With BIG) locomotive emissions represent the trains that pass through BIG's footprint without stopping at the Block Swap or Intermodal Facility.
4. Mainline (with BIG) includes BIG Dedicated Fleet, which represents locomotive emissions from dedicated fleet of Tier 4 locomotives traveling on the west leads to the Intermodal Facility.
5. GHG emissions associated with employee transportation expressly are excluded from SB 149's GHG requirements.
6. 6EnSafe, 2025. Net corridor emissions on the mainline from the Ports to the west leads, and from the east leads to the California Border (does not include the BIG footprint).
7. Net corridor emissions on the mainline (i.e., train emissions from additional containers moved by train instead of truck) from the California border to eastern destinations.
8. Totals may not add up due to rounding.

Source: Kimley-Horn, 2025.

Under SB 149, with respect to any transportation-related project, the Governor may certify the project pursuant to this chapter only if the project does not result in any net additional emission of GHG, excluding GHG emissions from employee transportation. As shown above, BIG will result in direct GHG emissions reductions in accordance with SB 149's "no net increase" requirement. Although mitigation is not required, BIG will also include various air quality features and air quality mitigation which will further reduce construction and operational GHG emissions. Air quality mitigation and energy measures developed for the EIR will result in additional GHG emissions benefits and are also shown in **Table 14.**

Attachment 3

BIG's Public Benefits and BNSF's Commitments to Mitigating Environmental Impacts to Disadvantaged Communities

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BIG's Public Benefits and BNSF's Commitments to Mitigating Environmental Impacts to Disadvantaged Communities

BIG's Public Benefits

The Barstow International Gateway (BIG) Project would enhance supply chain resiliency, efficiency, and cost-effective goods movement by rail and was identified in the 2024 adopted California State Rail Plan to help build toward an integrated statewide rail and transit network and contribute investments in zero emission infrastructure. BIG would shift cargo from heavy-duty trucking to rail transport at a location away from dense population centers, planned with the City of Barstow (City) as part of the proposed General Plan. BIG would be located on a site proposed for industrial uses on the western edge of the City away from existing and proposed residential uses. BIG would provide economic stimulus and revitalization to the City through higher paying jobs, expansion of local skills training, and improved public services, including fire, police and utility infrastructure.

BNSF anticipates that BIG would create over 20 years: approximately 62,000 direct, indirect and induced construction jobs, including union construction jobs and approximately 15,000 direct, indirect, and induced operation jobs, as estimated in the *Economic and Fiscal Impact Analysis: Barstow International Gateway (AECOM, 2025;* See **Appendix 5.11 BIG-1: Economic Impact Report** of the Draft Environmental Impact Report). In addition, BNSF anticipates the estimated construction economic benefit is approximately $11 billion and operational economic benefit is approximately $7 billion, per the Economic and Fiscal Impact Analysis.

Regarding air quality, the EIR demonstrates that:

- BIG would result in hundreds of millions of fewer truck miles as a result of converting freight movements from trucks to trains (see **Section 5.15: Transportation** of the Draft Environmental Impact Report).
- This substantial reduction in truck trips would in turn result in a net decrease in mitigated greenhouse gas emissions (see **Section 5.8: Greenhouse Gas Emissions** of the Draft EIR).
- BIG would also result in no increase in diesel particulate matter (DPM) in the corridor from the Ports to the BIG site compared to the no project condition, which includes all of South Coast Air Basin (SCAB) and the western portion of the Mojave Desert Air Quality Management District (MDAQMD) (see **Section 5.3: Air Quality** of the Draft EIR). This would benefit DACs along the mainline corridor and in proximity to BIG.
- Mass operational emissions of criteria pollutants in the SCAB would be below the applicable South Coast Air Quality Management District (SCAQMD) thresholds (see **Section 5.3** of the Draft EIR).

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- At the BIG site, localized concentrations of operational criteria pollutants would be below the applicable thresholds (ambient air quality standard) for all pollutants - except NO_2 1-hour (see **Section 5.3** of the Draft EIR).

In addition to the environmental benefits estimated to accrue as a result of BIG described above, BIG is anticipated to provide additional community benefits such as:

- Specifically with regard to the Barstow Unified School District (BUSD), BIG is estimated to provide millions in annual tax revenues, directly benefiting disadvantaged communities, since 74% of BUSD are classified as economically disadvantaged (higher than the California and national averages). Moreover, 12.5% of BUSD students experience homelessness during the school year, triple the California rate and quadruple the national rate. In fact, Barstow Unified currently receives some of the weakest ratings statewide in English language arts (ELA), mathematics and chronic absenteeism. With this influx of funding, BUSD will be able to invest in proven, evidence-based interventions to improve reading and mathematics.

- Barstow Community College will also receive millions in estimated annual tax revenue, helping to fulfill its goal of assisting in training students for jobs in the High Desert (including at BIG). Barstow Community College is already preparing local students through specialized welding training, modern technology programs (including an FAA-certified drone program), mechanical and electrical skills and industry expertise.

At the same time, BIG will also support better access to healthcare. As noted by the CEO of Barstow Community Hospital in his DEIR comment letter, Barstow is currently in a Health Care Professional Shortage Area (HPSA). With the increased economic opportunity and improved community amenities (housing, retail, services) linked to BIG, Barstow will become more attractive to physicians, specialists, allied health providers and technicians, thus reducing staffing shortages.

BNSF Commitments

As part of the CEQA process for BIG, the City is required to adopt feasible mitigation measures needed to reduce or avoid significant environmental impacts, including impacts to disadvantaged communities. Pursuant to Public Resources Code section 21189.82(c)(3), BNSF and the City have committed to entering into a binding and enforceable agreement to avoid or minimize significant environmental impacts in any disadvantaged community, and to implement and comply with all feasible measures imposed by the City to mitigate significant environmental impacts in a disadvantaged community and that all relevant, feasible mitigation measures required will be undertaken in, and directly benefit, the affected community. In the event that the City certifies the Environmental Impact Report (EIR) and approves BIG, BNSF is committed to implementing the environmental commitments and mitigation measures in the Final EIR and would be committed to do so since the Mitigation Monitoring and Reporting Program is an integral part of the Final EIR.

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BNSF is committed to implementing various project components (listed below) and mitigation measures in disadvantaged communities (DACs) to reduce impacts that would occur in these areas, as set forth in PRC Section 21189.82(c). Specifically, potentially significant impacts that may occur in DACs as a result of BIG, respective mitigation measures, and level of significance after mitigation, are listed in Table 1-2 of the Draft EIR and excerpts of which are enclosed with this letter. These measures would be implemented within and directly benefit the affected DACs.

As part of BIG's design, BNSF commits that the project would include substantial public improvements, including:

- Widening Lenwood Channel by between 60 and 100 feet for more than two miles, substantially reducing existing flooding hazards.
- Replacing the existing Main Street low-water crossing over Lenwood Channel with a new four-lane bridge which would be designed for 100-year flood events.
- Replacing the existing Hinkley Road bridge over the Mojave River with a longer bridge to better match the channel width of the Mojave River at that location, reducing flooding compared to existing conditions.
- Expanding Golden State Water Company infrastructure to the western extent of the City, enabling nearby residents to connect to Golden State Water Company water lines.

Other integral features of the project that BNSF commits to which would reduce air quality and other impacts within DACs include the following:

- **Tier 4 Linehaul Locomotives**. Cross-dock intermodal containers (i.e., those taken by rail from the Ports to BIG's intermodal facility) would be transported using a dedicated fleet of Tier 4 linehaul locomotives. These locomotives would be newly-purchased Tier 4 locomotives, not pulled from BNSF's existing national fleet.
- **Tier 4 Switcher Locomotives**. All BIG switcher locomotives would be Tier 4. These locomotives would be newly-purchased Tier 4 locomotives, not pulled from BNSF's existing national fleet.
- **Update Existing Barstow Switchers**. Prior to operations, BNSF will voluntarily retire all existing Tier 0/0+/1+ switcher locomotives at the unrelated existing Barstow Classification Yard, and in their place add six Tier 4 switcher locomotives. These locomotives would be newly-purchased Tier 4 locomotives, not pulled from BNSF's existing national fleet.
- **Renewable Diesel**. Starting in BIG opening year 2028, BNSF would increase the renewable diesel composition within the Ports' existing fueling site from 1 percent to 10 percent, a 900 percent increase in renewable diesel. This would improve the emissions of all BNSF trains fueling at the Ports, including those BNSF trains that would not stop at BIG.

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- **Electric Cargo-Handling Equipment**. BIG would use zero-emission rail-mounted gantry cranes, forklifts, top picks/side loaders, and hostlers. Containers would be transported between the rail yard and transload warehouse center using only electric hostlers, rather than heavy-duty trucks, and only via an onsite/private closed loop roadway to minimize local roadway traffic.
- **Electric Appliances**. The use of all-electric appliances and end uses instead of natural gas.
- **On-Site Solar Generation**. In addition to compliance with Title 24 energy requirements, the BIG Specific Plan includes an approximately 21-MWh from a solar farm and approximately 6.4 MWh from rooftop solar on the transload warehouse center buildings. Additionally, BIG would install on-site rooftop solar generation beyond Title 24 compliance, or approximately 17 megawatts direct current (MWdc) for the total 9 million-square-foot warehouse building area. The solar farm would include a new substation at the northwest corner of the solar farm to route power from the solar farm to the BIG rail yard. Beyond what was analyzed in the DEIR, BNSF will commit to installing solar panels on the solar ready canopies in the Intermodal employee parking lot, increasing our commitment to solar beyond Title 24 needs.
- **Safe Haven Canopies**. BIG includes onsite container safe haven canopies, which are facilities where damaged, leaking, or shifted containers or trailers would be placed to contain spills until they are loaded into an alternative container or trailer, or resecured, as necessary.
- **Traffic Control Plan**. The contractor would prepare a detailed Traffic Control Plan (TCP) in close consultation with the City to minimize the construction-related impacts on adjoining and nearby roadway, bicycle, and pedestrian facilities.
- **Commitment to Test ZE Locomotive Technology:** As described in Attachment 5, BNSF, in cooperation with MDAQMD, will test five hybrid line-haul locomotives that can operate in a zero-emission mode during certain yard and terminal activities at BIG. The test results of these locomotives will be submitted to MDAQMD and the California Air Resources Board (CARB) to assess the viability of replacing the dedicated Tier 4 locomotives that would operate between the Ports and BIG with these hybrid locomotives.

Excerpts from Table 1-2 of the Proposed General Plan and Barstow International Gateway Project EIR
SUMMARY OF POTENTIALLY SIGNIFICANT ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND SIGNIFICANCE AFTER MITIGATION – BIG

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
5.1 Aesthetics	Degrade existing visual character or quality of public views	Concerning visual character or quality of public views in a non-urbanized area, impacts would be significant and unavoidable. BIG would substantially alter the site's character, replacing the desert landscape along Main Street with an intermodal facility and block swap yard, BIG would substantially degrade the site's visual character resulting in a significant unavoidable impact during both construction and operational phases.	Potentially Significant	**MM BIG AES-1: Construction Lighting and Screening Plan**. Prior to any BIG Specific Plan area site clearance or grading activity, the implementing entity shall prepare a Construction Lighting and Screening Plan (CLSP), which shall be submitted to the City of Barstow Planning Department for review and approval. The City shall review the CLSP to verify that it identifies for the construction phase, lighting practices and systems (e.g., shielded and directional lighting oriented toward work areas and to avoid light trespass onto residential or other sensitive receptor properties) that minimize light pollution, glare, and light trespass, while maintaining nighttime safety, visibility, utility, and productivity pursuant to the following: Barstow Code § 19.06.010(e) - Light Trespass and Control of Glare concerning trespass of light onto adjacent properties/light-sensitive uses. (e.g., maximum brightness values not to be exceeded by artificial bulbs, screening around BIG footprint to limit light and glare, use of non-reflective glass, etc.), and prohibiting aiming, directing, and focusing to cause direct light from the luminaire to be directed toward residential buildings on adjacent or nearby land, or to create glare perceptible to persons operating motor vehicles on public ways. Use of the minimum lighting levels approved by the Occupational Safety and Health Administration (OSHA) pursuant to 29 CFR 1926.56 for general construction (i.e., 5 foot-candles or 54 lux). Use remote monitoring systems or other methods to ensure security of the construction site outside of construction hours. The CLSP shall also include specifications requiring that temporary construction fencing be installed along the BIG Specific Plan construction areas where adjacent to residences to screen views of construction activity and promote safety. Construction fencing shall be up to the height permitted by Barstow Code Section 19.18.060 (i.e., 8.0 feet) and include a privacy screen to provide as a safeguard from the surrounding environment, prevent trespassers from entering.	Significant and Unavoidable
5.1 Aesthetics	New source of substantial light or glare	Concerning substantial light or glare, impacts would be significant and unavoidable. Because BIG would create a new source of substantial glare/light pollution that would adversely affect day or nighttime views in the area, a significant unavoidable impact would occur.	Potentially Significant	**MM BIG AES-1: Construction Lighting and Screening Plan.**	Significant and Unavoidable
5.3 Air Quality	Consistency with air quality plans	Concerning conflict with or obstruction of implementation of applicable air quality plan, impacts would be significant and unavoidable. Because BIG would exceed MDAQMD's construction and operational emissions thresholds, BIG would conflict with or delay implementation of an applicable attainment or maintenance plan, BIG would result in a	Potentially Significant	**MM BIG AQ-1: Fugitive Dust Emissions.** **MM BIG AQ-2: Low VOC Paint (Construction and Operations).** **MM BIG AQ-3: Reduce Exhaust Emissions from Off-Road Construction Equipment.** **MM BIG AQ-4: Renewable Diesel (Construction).**	Significant and Unavoidable

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
		cumulatively considerable net increase of criteria pollutants for which the region is in nonattainment under an applicable federal or State AAQS, a significant and unavoidable impact would occur.		**MM BIG AQ-5: Reduce Exhaust Emissions from On-Road Construction Equipment.** **MM BIG AQ-6: Reduce the Potential Impact of Concrete and Asphalt Batch Plants.** **MM BIG AQ-7: Sweep Paved Areas.** **MM BIG AQ-8: Renewable Diesel RTG Cranes.** **MM BIG AQ-9: Truck Idling Limits and Truck Route Signage.** **MM BIG AQ-10: Tier 4 Emergency Back-Up Generators.** **MM BIG AQ-11: Carl Moyer Truck Efficiency Improvements.** **MM BIG AQ-12: EPA Smart Way Program.** **MM BIG AQ-13: Electric Landscape Equipment.** **MM BIG AQ-14: Future EV Charging Infrastructure.**	
5.3 Air Quality	Criteria Pollutant Emissions	Concerning a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable federal or State AAQS, impacts would be significant and unavoidable. Because BIG's construction and operations emissions would still exceed MDAQMD's thresholds despite the implementation of mitigation measures identified in **Section 5.3: Air Quality**, a significant and unavoidable impact would occur.	Potentially Significant	**MM BIG AQ-1: Fugitive Dust Emissions**. During construction, the contractor shall employ the following measures to minimize and control fugitive dust emissions. The contractor shall prepare a fugitive dust control plan that complies with Mojave Desert Air Quality Management (MDAQMD) Rule 403, which, at a minimum, shall describe how each measure would be employed, identify the individual responsible for ensuring implementation, and address the following components unless alternative measures are approved by the MDAQMD. ▪ Water unpaved road surface shall be maintained with adequate moisture. ▪ Limit vehicle travel speed on unpaved roads to 25 miles per hour for loaded haul trucks which may be exceeded if visible fugitive dust is not generated. ▪ Reduce non-essential dust-generating activities when average wind speed exceeds 25 mph. ▪ Stabilize disturbed surface areas, including storage piles, that are not being used for over two weeks, by using water, a chemical stabilizer/suppressant, hydro mulch, or by covering with a tarp or other suitable cover or vegetative ground cover, to control fugitive dust emissions effectively. In areas adjacent to organic farms, the Contractor would use non-chemical means of dust suppression. Use of a water truck during visible dusting episodes is considered sufficient for compliance with this measure. For disturbed surface areas, project-related dust generating activities should be based on the difference between upwind and downwind dust (i.e., the metric should be no more dust than currently existing the site). ▪ For buildings up to 6 stories in height, wet all exterior surfaces of buildings during demolition. **MM BIG AQ-2: Low VOC Paint (Construction and Operations).** During construction and operations, the implementing entity shall utilize "Super-Compliant" low VOC paints. Super-Compliant low VOC paints shall be no more than 10 grams per liter of VOC. Prior to issuance	Significant and Unavoidable

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				of building permits, the City of Barstow Building and Safety Department shall confirm that plans include the following specifications: ▪ All architectural coatings will be super-compliant low VOC paints. ▪ Recycle leftover paint. Take any leftover paint to a hazardous waste center; do not mix leftover water-based and oil-based paints. ▪ Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors. ▪ For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain. Set aside the can of cleanup water and take it to the hazardous waste center (www.cleanup.org). ▪ Use compliant low-VOC cleaning solvents to clean paint application equipment. ▪ Keep all paint- and solvent-laden rags in sealed containers to prevent VOC emissions. ▪ Contractors shall construct/build with materials that do not require painting and use pre-painted construction materials to the extent practicable. ▪ Use high-pressure/low volume paint applicators with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency. **MM BIG AQ-3: Reduce Exhaust Emissions from Off-Road Construction Equipment.** Prior to issuance of construction contracts, BNSF or its designee shall incorporate the following off-road construction equipment exhaust emissions requirements into the contract specifications: ▪ All heavy-duty diesel off-road construction equipment used during the construction phase shall meet Tier 4 Final engine requirements, except for specialized equipment, such as Caterpillar 657 Scrapers, Caterpillar 777 Articulated Off-Highway Trucks, track laying machines, ballast regulators, and other specialized rail equipment that are not commercially available as Tier 4. In the event that non-specialized construction equipment cannot meet Tier 4 Final engine certification, the implementing entity must demonstrate through future documentation with written findings that no Tier 4 equipment of that type is reasonably available. ▪ A copy of each unit's certified tier specification and shall be made available to the City in quarterly reports. **MM BIG AQ-4: Renewable Diesel (Construction).** During construction, the implementing entity shall use renewable diesel fuel to minimize and control exhaust emissions from heavy-duty diesel-fueled construction equipment and off-road heavy diesel trucks, except that traditional diesel can be used where renewable diesel is not available from suppliers within 200 miles of the BIG footprint. Renewable diesel shall meet the most recent ASTM D975 specification for Ultra Low Sulfur Diesel and have a carbon intensity no greater than 50 percent of diesel with the lowest carbon intensity among petroleum fuels sold in California. The implementing entity shall provide the City with quarterly reports of renewable diesel purchase records and equipment and vehicle fuel consumption. The construction contract shall identify the quantity of traditional diesel purchased and fully document the availability and price of renewable diesel to meet BIG demand.	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				MM BIG AQ-5: Reduce Exhaust Emissions from On-Road Construction Equipment. Prior to issuance of construction contracts, the implementing entity shall incorporate the following material-hauling heavy truck fleet mix requirements into the contract specifications: ▪ All on-road trucks used to haul construction materials shall consist of an average fleet mix of equipment model year 2010 or newer, but no less than the average fleet mix for the current calendar year as set forth in the CARB's EMFAC2021 database. ▪ The contractor shall provide documentation to BNSF of efforts to secure such a fleet mix. ▪ The implementing entity shall keep a written record of the fleet mix for on-road construction equipment during BIG construction and provide the City annual reports documenting compliance. **MM BIG AQ-6: Reduce the Potential Impact of Concrete and Asphalt Batch Plants.** Prior to the construction or arrival of a batch plant on site, the implementing entity shall provide the City with documentation demonstrating that batch plants are sited at least 1,000 feet from sensitive receptors, including places such as daycare centers, hospitals, senior care facilities, residences, parks, and other areas where people may congregate. Batch plants shall implement control measures required by MDAQMD as part of the Permit to Construct in order to reduce fugitive dust, such as water sprays, enclosures, hoods, curtains, shrouds, movable and telescoping chutes, central dust collection systems, and other suitable technology, to reduce emissions to be equivalent to the U.S. EPA AP-42 controlled emission factors for batch plants. The implementing entity shall provide a copy of the MDAQMD permit application to the City that each batch plant meets this standard during operation. **MM BIG AQ-7: Sweep Paved Areas.** During operations, paved areas such as parking lots, internal roadways, the container yard, chassis storage area, and cargo handling areas shall be swept at least once every 7 calendar days. **MM BIG AQ-8: Renewable Diesel RTG Cranes.** Rubber Tired Gantry (RTG) cranes shall be powered with renewable diesel. BNSF shall provide the City of Barstow with evidence demonstrating use of renewable diesel for RTG cranes prior to the issuance of certificate of occupancy. **MM BIG AQ-9: Truck Idling Limits and Truck Route Signage.** Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that all truck access gates and loading docks within the BIG site shall have posted signage posted that states: ▪ Truck drivers shall turn off engines when not in use. ▪ Truck drivers shall shut down the engine after two minutes of continuous idling operation. Once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged. ▪ Telephone numbers of the building facilities manager, the South Coast AQMD, and CARB to report violations. ▪ Signs shall also inform truck drivers about the health effects of diesel particulates, the California Air Resources Board diesel idling regulations, and the importance of being a good neighbor by not parking in residential areas. ▪ Clearly mark truck routes with trailblazer signs, so that trucks will not travel next to or near sensitive land uses (e.g., residences, schools, day care centers, etc.).	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				▪ Restrict overnight truck parking in sensitive land uses by providing overnight truck parking inside the proposed Project site. ▪ The implementing entity shall designate an officer to monitor trucks on-site for compliance. Signs and drive aisle pavement markings shall clearly identify the on-site circulation pattern to minimize unnecessary on-site vehicular travel. ▪ Additionally, signs shall be provided at every truck exit driveway showing directional information to the off-site truck route. To the extent feasible, the BIG shall direct trucks away from sensitive receptors. All signage installed as part of BIG shall be legible, durable, and weather-proof. This mitigation measure applies only to tenant improvements and not the building shell approvals. **MM BIG AQ-10: Tier 4 Emergency Back-Up Generators.** Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that the BIG plans and specifications require all standard emergency generators (i.e., non-cold storage generators) to meet California Air Resources Board Tier 4 Final emissions standards. A copy of each unit's Best Available Control Technology (BACT) documentation (certified tier specification) and CARB or Mojave Desert AQMD operating permit (if applicable) shall be provided to the City. This mitigation measure applies only to tenant improvements and not the building shell approvals. **MM BIG AQ-11: Carl Moyer Truck Efficiency Improvements.** Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that tenant lease agreements include specifications that require vendor trucks for the industrial buildings include energy efficiency improvement features through the Carl Moyer Program—including truck modernization, retrofits, and/or aerodynamic kits and low rolling resistance tires— to reduce fuel consumption. This mitigation measure applies only to tenant improvements and not the building shell approvals. **MM BIG AQ-12: EPA Smart Way Program.** Prior to the issuance of a tenant occupancy permit, the Planning Division shall confirm that tenant lease agreements include specifications that require tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and tenants shall be required to use carriers that are SmartWay carriers. This mitigation measure applies only to tenant improvements and not the building shell approvals. **MM BIG AQ-13: Electric Landscape Equipment.** Prior to the issuance of occupancy permits, the implementing entity shall confirm that agreements for landscaping services include contractual language that all handheld landscaping equipment used on-site shall be 100 percent electrically powered. This mitigation measure applies only to tenant permits and not the building shell approvals. **MM BIG AQ-14: Future EV Charging Infrastructure.** Prior to the issuance of a building permit for transload warehouse facility tenant improvements, the implementing entity shall confirm that the BIG transload facility is designed to include the following: ▪ Prior to issuance of a Building Permit for the Shell Design, the buildings' electrical room shall be sufficiently sized to hold additional panels that may be needed to supply power for the future installation of EV truck charging stations on the site. Conduit should be installed from the electrical room to tractor trailer parking spaces in a	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				logical location(s) on the site determined by the implementing entity during construction document plan check, for the purpose of accommodating the future installation of EV truck charging stations at such time this technology becomes commercially available and the buildings are being served by trucks with electric-powered engines. The buildings' electrical room shall be sufficiently sized to hold additional panels that may be needed in the future to supply power to trailers with TRUs during the loading/unloading of refrigerated goods, if required by future tenants who utilize cold storage. Conduit should be installed from the electrical room to the loading docks in a location determined by the tenant as the logical location(s) to receive trailers with TRUs.	
5.3 Air Quality	Expose sensitive receptors to substantial pollutant concentrations	Concerning exposure of sensitive receptors to substantial pollutant concentrations, impacts would be significant and unavoidable. Because BIG's construction emissions would still exceed the PM_{10} and $PM_{2.5}$ federal AAQS and BIG's construction and operations would exceed carcinogenic risk at the maximally exposed individual residential and worker receptors despite the implementation of mitigation identified in **Section 5.3: Air Quality**, a significant and unavoidable impact would occur.	Potentially Significant	**MM BIG AQ-1: Fugitive Dust Emissions.** **MM BIG AQ-2: Low VOC Paint (Construction and Operations).** **MM BIG AQ-3: Reduce Exhaust Emissions from Off-Road Construction Equipment.** **MM BIG AQ-4: Renewable Diesel (Construction).** **MM BIG AQ-5: Reduce Exhaust Emissions from On-Road Construction Equipment.** **MM BIG AQ-6: Reduce the Potential Impact of Concrete and Asphalt Batch Plants.** **MM BIG AQ-7: Sweep Paved Areas.** **MM BIG AQ-8: Renewable Diesel RTG Cranes.** **MM BIG AQ-9: Truck Idling Limits and Truck Route Signage.** **MM BIG AQ-10: Tier 4 Emergency Back-Up Generators.** **MM BIG AQ-11: Carl Moyer Truck Efficiency Improvements.** **MM BIG AQ-12: EPA Smart Way Program.** **MM BIG AQ-13: Electric Landscape Equipment.** **MM BIG AQ-14: Future EV Charging Infrastructure.**	Significant and Unavoidable
5.4 Biological Resources	Habitat modifications or candidate, sensitive or special status species	BIG construction and operation could result in potentially significant impacts to special status species. With implementation of mitigation measures detail in **Section 5.4: Biological Resources**, potentially significant impacts would be reduced to a less than significant level.	Potentially Significant	**MM BIG BIO-1: Worker Environmental Awareness Program and Training.** Prior to construction mobilization, designated biologists shall prepare a Worker Environmental Awareness Program (WEAP), including a training presentation and key fact sheet, to train construction crews to be aware of and recognize sensitive biological resources that may be encountered within, or adjacent to, the BIG footprint as well as measures required to minimize and avoid impacts to such resources. The WEAP training materials shall be submitted to the City for review.	Less than Significant

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				Prior to construction mobilization, the designated biologists or biological monitors shall provide the approved WEAP training materials, including but not limited to the key fact sheet, to all construction personnel. The fact sheet shall be provided to construction personnel in other languages, as necessary, to accommodate non-English speaking workers. Additionally, prior to beginning construction work, all construction personnel shall attend the WEAP training presentation. A refresher WEAP training shall be completed annually thereafter during construction. At a minimum, WEAP training materials reviewed during training shall include the following information: ▪ Key provisions of the FESA, CESA, the MBTA, CFGC § 1600, Porter-Cologne Act, and the CWA as they relate to BIG; ▪ Potential consequences and penalties for violation or noncompliance with these laws, regulations, and associated permits; ▪ General information, identification, and characteristics of special status wildlife and plant species, jurisdictional waters, and sensitive natural communities present on and adjacent to the BIG footprint as well as the required construction footprint boundaries; ▪ A discussion concerning the threat of common ravens (Corvus corax) to desert tortoise and instructions to not feed wildlife or dispose of food waste in a way that could attract and provide food for ravens; ▪ Hazardous substance spill prevention and containment measures; ▪ Contact information for designated biologists and instructions to call in the event of the discovery of a special status species or injured or dead wildlife; and ▪ Relevant mitigation measures and maps showing areas affected by resource-specific measures, as applicable. Upon completion of each WEAP training, each member of the construction personnel shall sign a form stating that they attended the training, understood the information presented, and agree to comply with the WEAP training requirements. The designated biologist or biological monitor shall provide training updates to construction personnel, as needed. **MM BIG BIO-2: Biological Resource Monitoring.** At least 30 days prior to start of construction mobilization activities, the implementing entity shall submit for review and approval by USFWS and CDFW, the designated biologists' and Species-Specific biological monitors name(s) and qualifications retained to oversee biological resource monitoring activities during BIG construction. No vegetation removal or mass grading shall begin until the implementing entity has received written confirmation from USFWS and CDFW that the designated biologists have been approved. A request for designated biologist and Species-Specific biological monitor approval shall be submitted in writing and shall include adequate information regarding the proposed designated biologist and Species-Specific biological monitor qualifications for a reasonable person to determine qualification status. If USFWS and/or CDFW do not respond within 30 days after a verifiable written request for designated biologist and biological monitor approval is submitted, the designated biologist and/or Species-Specific biological monitor shall be deemed approved. Should a new designated biologist and/or Species-Specific biological monitor be necessary, the implementing entity shall seek approval through the same process as above, with the request being deemed approved after 30 days after the written request. Note that the	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				implementing entity's selection of General biological monitors does not require USFWS and CDFW approvals. Designated biologists shall oversee the timely implementation of all biological mitigation measures as outlined in the Mitigation Monitoring and Reporting Program (MMRP) during construction and the applicable post-construction monitoring period as required by the City and CDFW/USFWS for permit validity. The designated biologists shall also be responsible for guiding and directing the biological monitor's work. The designated biologists shall oversee the preparation of quarterly monitoring reports and the post-construction monitoring report summarizing compliance with BIG-specific mitigation measures submitted to the City. Species-Specific biological monitors shall be responsible for implementation of species-specific mitigation measures for the species for which they have been approved and would report directly to a designated biologist. Qualifications for Species-Specific biological monitors can be found in the species-specific mitigation measures. General biological monitors shall be responsible for conducting WEAP training, facilitating implementation of general mitigation measures, except where specified that a specific individual with specific qualifications (such as designated biologist) must implement the mitigation measures, conducting general compliance monitoring, and reporting on compliance monitoring activities. General biological monitors shall perform daily monitoring during initial vegetation removal and construction activities that result in the breaking of the ground surface. Following initial vegetation removal and construction activities, General biological monitors shall perform regular random checks (not less than once per week but could be required more frequently depending on the presence of special status species) to ensure that mitigation measures are implemented. General biological monitors would report directly to a designated biologist. **MM BIG BIO-3: Work Stoppage. During** BIG construction, the implementing entity shall adhere to the following guidelines: ▪ A designated biologist with appropriate qualifications shall be retained to move special status species or other wildlife of low or limited mobility out of harm's way. Movement of wildlife out of harm's way shall be limited to only those individuals that would otherwise be injured or killed from BIG-related activities and shall be moved only as far as necessary to ensure their safety. ▪ If a biological or aquatics resources issue or concern is observed during monitoring (e.g., a special status wildlife species within an active construction area), the designated biologist or biological monitor shall have the authority to stop work as soon as practicable and shall immediately notify the City and the foreman and/or supervisor for the specific activity/area. The foreman/supervisor shall seek a timely resolution of the biological or aquatics resources issue or concern. ▪ If the issue or concern involves special status species, work shall not resume until the species has left the work area, or until a designated biologist implements the appropriate species-specific measures to avoid take, which may involve coordination with USFWS and/or CDFW. ▪ If construction personnel or biological monitor observe a burrowing owl, desert tortoise, American badger, or desert kit fox individual or active burrow within the BIG footprint or in the vicinity of construction activities, the foreman/ supervisor shall contact a designated biologist immediately and all work in the vicinity of the	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				animal/active burrow which could cause disturbance, injury, or mortality, shall cease until a designated biologist or Species-Specific biological monitor provides clearance. ▪ If construction personnel or a biological monitor observe a Mojave fringe-toed lizard within the BIG footprint or in the vicinity of construction activities, the foreman/supervisor shall contact a designated biologist immediately and all work in the vicinity of the lizard which could cause disturbance, injury, or mortality, shall cease until a designated biologist or Species-Specific biological monitor provide clearance. ▪ If adverse impacts on willow flycatcher and/or yellow-billed cuckoo are documented by a Species-Specific biological monitor, all work within 500 feet of occupied habitat, or as deemed necessary by the Species-Specific biological monitor, shall cease until a designated biologist or Species-Specific biological monitor provide clearance. ▪ If a bird nest is discovered by construction personnel, the foreman/supervisor shall contact a designated biologist immediately and all work within 500 feet of the nest shall cease until it can be determined if the nest is active (e.g., eggs, juveniles, and/or adults present) and, if necessary, the biological monitor shall establish an appropriate buffer. ▪ If an injured wildlife species is observed within or adjacent BIG, a designated biologist shall be notified immediately to determine if it is appropriate to release or transport the wildlife species to the nearest CDFW permitted veterinarian or rehabilitation center. The designated biologist shall follow all relevant guidelines for sensitive species. ▪ If entrapped wildlife is discovered within an open excavation, project personnel shall halt work (when safe to do so) and contact a designated biologist. Project personnel shall avoid the area to prevent disturbing the wildlife until a designated biologist or biological monitor provide clearance. ▪ If entrapped wildlife is discovered in any open pipes, culverts, and other similar structures, project personnel shall halt all work (when safe to do so) and contact a designated biologist. Project personnel shall avoid disturbing the wildlife and shall not move the structures until a designated biologist or biological monitor provide clearance. **MM BIG BIO-4: Vehicles and Equipment.** During BIG construction, the implementing entity shall ensure that vehicle traffic within the construction limits is restricted to established roads, construction areas, and other permissible areas. Access routes (ingress and egress to the site) shall be flagged and marked, and measures shall be adopted to prevent off-road vehicle traffic into species habitats beyond the approved project limits. If any vehicle must drive off established routes or cleared construction limits in suitable desert tortoise or burrowing owl habitat, a Species-Specific biological monitor shall walk the vehicle path in search of desert tortoise and/or burrowing owl and confirm the species are absent from the area, prior to use of the path The Species-Specific biological monitor shall visually account for the route or construction site footprint plus a 15-foot buffer on each side. During the construction phase, the implementing entity shall implement the following measures:	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				▪ Vehicles shall not exceed 25 miles per hour. Nighttime vehicle speeds may be reduced at the discretion of the designated biologist and as described in the Nighttime Construction and Lighting Plan to be prepared per MM-BIO 8. ▪ If special status species are present within or near BIG access routes, speed limits shall be reduced at the discretion of a designated biologist. All personnel shall abide by the reduced speed limit within the designated area. ▪ A biological monitor shall oversee the adherence to on-site speed limits within Mojave fringe-toed lizard occupied habitat during species' active periods; for the purposes of this measure the active period is defined as March through September when temperatures are above 70. The biological monitor shall require additional speed limit signs, temporary speed bumps, or additional WEAP training to ensure compliance with this measure. ▪ All BIG and construction personnel shall stop and/or avoid wildlife that are present on roads (if safe to do so). ▪ BIG personnel shall not intentionally harm or harass wildlife that are present on roads. ▪ If wildlife are blocking vehicle and equipment access and do not move of their own volition within 10 minutes, BIG personnel shall contact a designated biologist. ▪ All wildlife vehicle or equipment strikes shall be reported to a designated biologist. ▪ Prior to moving a parked vehicle or staged equipment, all BIG personnel shall check under the vehicles and equipment for special-status wildlife. If wildlife is discovered under vehicles or equipment, project personnel shall halt work and allow wildlife to move safely away prior to moving vehicles or equipment. BIG personnel shall not harm or harass wildlife seeking refuge under vehicles and equipment. If wildlife do not move of their own volition within 10 minutes, project personnel shall contact a designated biologist. ▪ If a vehicle or construction equipment is parked for more than 10 minutes outside of the desert tortoise exclusion fenced area within suitable desert tortoise habitat, the ground under the vehicle shall be inspected for the presence of desert tortoise before the vehicle or equipment is moved. If a desert tortoise is present, the vehicle or equipment shall not be moved until the desert tortoise moves on its own away from the vehicle or equipment. If, during construction, a desert tortoise does not move within 10 minutes, an agency-approved Species-Specific biological monitor shall move the animal out of harm's way to a safe location no greater than 300 meters (984 feet), according to USFWS protocol. ▪ Drip pans shall be placed under parked (for an hour or more) or staged equipment that is near native habitat or aquatic resources that are to be avoided by BIG. ▪ The implementing entity shall ensure that these measures have been properly communicated to all personnel associated with BIG. **MM BIG BIO-5: Compliance Reporting**. A designated biologist shall report any non-compliance or unauthorized take of special-status species to the appropriate agencies within 48 hours of its occurrence. Monitoring reports that document compliance status with the MMs shall be prepared by designated biologists and submitted quarterly and post construction to the City. All mitigation measures shall be implemented as stated herein except for necessary modifications approved by a qualified biologist. Failure to implement mitigation measures shall be reported in monitoring reports.	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				MM BIG BIO-6: Weed Control and Landscaping. Prior to the start of construction mobilization activities, the implementing entity shall prepare and submit to the City for review an Adaptive Weed Control Plan to avoid and minimize the spread of non-native plant species from BIG to adjacent undeveloped lands during construction and operation. BIG landscape plans shall be reviewed by a designated biologist; any invasive plant species, as defined by the California Invasive Plant Council (www.cal-ipc.org), California Native Plant Society (www.cnps.org) or similar, shall be prohibited. Provisions of the Adaptive Weed Control Plan may include the following: a. installation of container plants and/or hydro-seeding areas adjacent to existing, undisturbed native vegetation areas with native plant species that are common within adjacent areas; b. review and screening of proposed plants to identify and avoid potential invasive species; c. weed removal during the initial planting of landscaped areas; d. methods to survey for and treat weeds during BIG construction and operations, particularly in disturbed areas after native vegetation and soils removal where weeds can quickly establish; e. weed controls for heavy equipment that come onto the site, e.g., track outs, all equipment pieces are delivered clean as confirmed via inspection, etc. Any site landscaping shall use water-wise concepts, including drought tolerant vegetation and native vegetation to the greatest extent feasible. To prevent weeds growing as a result of available water (and further ameliorate the water demands of BIG), water efficient and targeted irrigation systems (such as drip irrigation with a smart controller) shall be installed where necessary in lieu of traditional watering methods. Furthermore, the implementing entity shall comply with 49 CFR § 213 which includes prohibitions and requirements regarding vegetation growth within and adjacent to the rail right-of-way. **MM BIG BIO-7: Delineation of Construction Work Limits.** To prevent inadvertent disturbance to areas outside the delineated construction work areas, prior to start of all construction mobilization activities, including equipment staging and maintenance and vegetation removal, the implementing entity shall clearly delineate the construction work limits (e.g., installation of flagging, staking, or other delineation methods approved by a designated biologist), and require construction personnel not to go beyond the delineated areas. All construction work shall be conducted within the delineated construction work limits, which shall be maintained throughout BIG construction. Should temporary visibility construction fencing be installed to delineate the construction work limits, which do not allow for dispersal of wildlife from construction work limits into adjacent undeveloped lands, a biological monitor shall check the perimeter fence at the beginning of each work day. The implementing entity shall consult with approved designated biologists to confirm that marking of construction boundaries are adequate to prevent unauthorized access beyond the limits of work while facilitating wildlife escape from active construction areas. **MM BIG BIO-8: Nighttime Work and Lighting.** Nighttime construction shall minimize impacts on wildlife habitat by using the following methods to be described in a Nighttime Construction and Lighting Plan and submitted to the City for review:	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				▪ Conduct nighttime work only within the boundaries of previously disturbed, cleared and grubbed areas; ▪ Observe slower vehicle speeds at nighttime at the discretion of the designated biologist; ▪ Shield and direct nighttime lighting to avoid illuminating wildlife habitat, including movement corridors and bat roosts; ▪ When work safety considerations allow, use the minimum lighting levels approved by the Occupational Safety and Health Administration (OSHA) pursuant to 29 CFR 1926.56 for general construction (i.e., 5 foot-candles or 54 lux); ▪ Use low beams or turn off headlights when safety considerations permit; and ▪ Minimize the duration of lighting by using remote monitoring systems or other methods to allow security of the construction site during hours it is not in use. **MM BIG BIO-9: Wildlife Entrapment.** At the end of each workday during construction, the implementing entity's construction personnel shall cover all excavated, steep-sided holes or trenches more than eight inches deep and that have sidewalls steeper than 1:1 (45 degree) slope with plywood or similar materials, or provide a minimum of one escape ramp per 100 feet of trenching (with slopes no greater than 3:1) constructed of earth fill or wooden planks. A biological monitor shall thoroughly inspect holes and trenches for trapped animals before they are covered or filled and/ or if the work area is inactive for more than 24 hours. ▪ The implementing entity's construction personnel shall screen, cover, or elevate at least one foot above ground, construction pipe, culverts, or similar structures with a diameter of three inches or greater that are stored outside overnight. These pipes, culverts, and similar structures shall be inspected by the General biological monitor for wildlife before such material is moved, buried, or capped. ▪ Construction pipe, culverts, or similar structures with a diameter greater than three inches that is stored less than eight inches above ground, located outside of desert tortoise exclusion fencing, and left unattended for more than 24 hours when desert tortoise is active (i.e., early March through early June and September through early November) shall be inspected for desert tortoise by an agency-approved Species-Specific biological monitor. As an alternative, all such structures shall be capped or placed on pipe racks. **MM BIG BIO-10: Trash Abatement.** The implementing entity or its contractor shall ensure that fully covered trash receptacles that are animal-proof and weather-proof are used to contain all "micro-trash" (e.g., screws, nuts washers), food scraps, food wrappers, and other miscellaneous trash. Receptacles shall be emptied at least once a week, to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs. **MM BIG BIO-11: Dead Wildlife Disposal**. During construction, and ongoing during operations, the implementing entity shall remove any dead wildlife found on the BIG footprint, as practical, to reduce attraction of opportunistic predators. Dead and injured wildlife shall be promptly reported to a designated biologist and handled and removed in accordance with any applicable project permits and plans. **MM BIG BIO-12: Domestic Dogs.** The implementing entity shall not permit pet dogs in active project areas. Service animals are exempt from this prohibition. **MM BIG BIO-13: Desert Tortoise Clearance Surveys.** Prior to construction mobilization activities, desert tortoise exclusion fencing shall be installed and maintained to avoid take of	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				desert tortoise, including destruction of nests or their potential habitat in the impact footprint, where individuals are known to occur, recent sign has been observed, or construction activities have the potential to result in take. A Species-Specific biological monitor shall be present during exclusion fence installation. Desert tortoise exclusion fencing in desert tortoise habitat shall be constructed to standards outlined in Chapter 8 of the Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii) (USFWS, 2009b) and shall be used to delineate the area. The desert tortoise exclusion fencing shall be maintained and monitored daily during the desert tortoise activity period (i.e., early March through early June and September through early November) to allow for fencing to be maintained in good condition, and to determine if tortoises are "trapped" along the fencing searching for a way to access the other side. Outside of the desert tortoise activity period, fence inspections shall occur at least once weekly by a Species-Specific biological monitor. If failures in the exclusion fence are documented, desert tortoise clearance surveys shall be repeated for affected areas. At the discretion of the designated biologist, desert tortoise exclusion fencing design shall incorporate areas of shade and/or predation protection (e.g., artificial burrows) in the event a desert tortoise becomes trapped along the fence. Desert tortoise guards, or other agency approved design, shall be installed and connected to the exclusionary fencing at construction area entry points to prohibit desert tortoise from crossing into the construction right-of-way. The desert tortoise guard shall have a clear escape route away from construction activity for any desert tortoise that should fall into the guard. The guard shall be inspected daily by a biological monitor for desert tortoise and to ensure the escape route is free of obstruction and debris. Immediately following the installation of desert tortoise exclusion fencing, Species-Specific biological monitors approved by the agencies in accordance with the Desert Tortoise Authorized Biologist Qualifications Form (Section 3.2) of the Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii) (USFWS, 2009b) shall conduct clearance surveys in suitable habitat for desert tortoise. The survey(s) shall be conducted in general accordance with Chapter 6 of the Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii) (USFWS, 2009) or current clearance survey protocol. The survey(s) may be conducted any time of year, but preferably during the desert tortoise active period (i.e., early March through early June, and September through early November). Survey results shall be provided to the City. If active desert tortoise burrows are identified in the impact footprint during desert tortoise clearance surveys and required to be moved off site, a desert tortoise translocation plan will be implemented as approved by USFWS and CDFW. All unoccupied desert tortoise pallets and burrows that are not practical to avoid shall be examined and excavated by hand during the clearance survey by the Species-Specific biological monitors and collapsed to prevent reentry following the procedures and precautions outlined in the Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii) (USFWS, 2009b). **MM BIG BIO-14: Desert Tortoise Relocation and Translocation.** Prior to start of construction mobilization activities, a designated biologist shall prepare a BIG-specific Desert Tortoise Translocation Plan , based on the Translocation of Mojave Desert Tortoises from Project Sites: Plan Development Guidance (USFWS, 2020), Health Assessment Procedures for the Mojave Desert Tortoise (Gopherus agassizii): A Handbook Pertinent to Translocation (USFWS, 2016) and Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii) (USFWS, 2009b) or other current USFWS guidelines and in accordance	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				with applicable Incidental Take Permits and Biological Opinions. The BIG-specific Desert Tortoise Translocation Plan shall identify suitable relocation and translocation sites, provide details on desert tortoise surveys and for moving desert tortoise out of harm's way, and include the methodology for visual desert tortoise body condition assessments. A designated biologist shall provide the BIG-specific Desert Tortoise Translocation Plan to the USFWS and CDFW for review and approval prior to start of translocation. At a minimum, the Desert Tortoise Translocation Plan shall include the following measures: ▪ The Species-Specific biological monitor shall implement the Desert Tortoise Translocation Plan during BIG construction. ▪ Only Species-Specific biological monitors authorized by the USFWS to handle desert tortoise shall move the animal and project-specific ITPs for desert tortoise shall be acquired under CESA and FESA prior to such actions. ▪ Species-Specific biological monitor shall move the desert tortoise found in construction work areas out of danger outside of the potential impact footprint, following the procedures and conditions outlined in the Incidental Take Permit and Biological Opinion. ▪ Prior to the Species-Specific biological monitor moving desert tortoise out of the construction work area, the biological monitor shall survey the relocation and translocation site to confirm that suitable burrows for desert tortoise exist. If few or no burrows are available, artificial burrows and/or shade structures shall be created along the outer perimeter of the desert tortoise exclusion fencing following the guidelines in the Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii) (USFWS 2009b) and Shade Structures for Desert Tortoise Exclusion Fence: Design Guidance (USFWS 2018), or as updated or replaced by the USFWS. ▪ If needed, artificial burrows shall be installed outside of the construction work area (along the outer perimeter of the desert tortoise exclusion fencing if applicable) from where the individual was relocated to provide cover and prevent exposure to predators and dehydration. Prior to excavation of an occupied burrow, artificial burrows shall be installed. **MM BIG BIO-15: Common Raven Management.** Prior to the start of construction mobilization activities, the implementing entity shall prepare a Raven Management Plan to avoid attracting common ravens to BIG by creating food or water subsidies, perch sites, roost sites, or nest sites. The Raven Management Plan may include the following measures to be implemented during construction: ▪ Water used for dust control purposes shall not be wasteful and when used, shall avoid creating unintentional ponded water and eliminate any unintentionally created standing water. ▪ Water tanks shall be sealed and free of leaks. Standing water created from leaks shall be promptly repaired. ▪ Irrigation used during revegetation and landscaping shall be kept to a minimum to avoid standing water, where feasible. ▪ The implementing entity shall coordinate with CDFW and USFWS to remove inactive raven nests and/or other suitable stick nests during the non-breeding season each year of BIG construction. Active raven nests within the BIG footprint shall be reported to USFWS and CDFW.	

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				▪ During BIG construction, a biological monitor with knowledge of common raven identification (including nests) and desert tortoise remains (e.g., carcass, shell and bone fragments) shall conduct one survey per month for presence of common ravens and nests within 100 feet of the BIG footprint in occupied desert tortoise habitat for the purpose of identifying ravens that may prey upon desert tortoise. The location(s) of nest and desert tortoise remains shall be recorded using a GPS unit. Additionally, the implementing entity shall participate in the interagency Raven Monitoring and Management Program to address indirect impacts to desert tortoise related to the potential increase in the raven population. The implementing entity's participation in the program shall be subject to compensation through the payment of a onetime fee not to exceed $150 and no less than $105 per disturbed acre, as established by the Desert Managers Group. Payment shall be made prior to the start of ground disturbance or other project activities that may result in potential take of desert tortoise. Evidence of the USFWS and/or CDFW determination and payment of any required fees shall be submitted to the City. **MM BIG BIO-16: Desert Tortoise Compensatory Mitigation Plan.** Prior to start of construction mobilization activities, the implementing entity shall prepare a Compensatory Mitigation Plan (CMP) in consultation with CDFW and USFWS that describes the compensatory mitigation that shall be provided at a minimum 1:1 ratio to offset permanent and temporary impacts on desert tortoise habitat. The CMP shall describe the following: ▪ A description of desert tortoise and habitat types for which compensatory mitigation is being provided. ▪ A description of the methods used to identify and evaluate mitigation options. Options may include one or more of the following: ○ Purchase of mitigation credits from an agency-approved mitigation bank (e.g., Mojave Desert Tortoise Conservation Bank or other CDFW/USFWS approved mitigation bank). ○ Incidental take permit coverage through an existing agency general conservation plan (e.g., USFWS Desert Tortoise General Conservation Plan). ○ Protection of desert tortoise habitat through acquisition of fee title or conservation easement and funding for long-term management of the habitat. Endowment funds shall be transferred to the applicable agency or entity and conservation easements shall be held by an entity approved in writing by the applicable regulatory agency. In circumstances where BNSF protects habitat through a conservation easement, the terms of the conservation easement shall be subject to approval of the applicable regulatory agencies, and the conservation easement shall identify applicable regulatory agencies as third-party beneficiaries with a right of access to the easement areas. ○ Payment to an existing in-lieu fee program. ▪ A summary of the estimated direct permanent and temporary impacts on desert tortoise and desert tortoise habitat. ▪ A description of the process that shall be used to confirm impacts. Actual impacts on desert tortoise and desert tortoise habitat could differ from estimates. Should this occur, adjustments shall be made to the proposed compensatory mitigation in consultation with CDFW/USFWS.	

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				▪ Adjustments to impact estimates and compensatory mitigation shall occur in the following circumstances: o Impacts on desert tortoise (typically measured as habitat loss) are reduced or increased as a result of changes in BIG design; o Pre-construction site assessments indicate that desert tortoise habitat features are absent (e.g., because of errors in land cover mapping or land cover conversion); o The desert tortoise habitat is determined to be unoccupied based on negative species surveys; or o Impacts initially categorized as permanent qualify as temporary impacts. ▪ An overview of the strategy for mitigating effects on desert tortoise. The overview shall include the ratios to be applied to determine mitigation levels and the resulting mitigation totals. ▪ A description of habitat restoration or enhancement projects, if any, that would contribute to compensatory mitigation commitments. ▪ A description of the success criteria that shall be used to evaluate the performance of habitat restoration or enhancement projects, and a description of the types of monitoring that shall be used to verify that such criteria have been met. ▪ A description of the management actions that shall be used to maintain the habitat on the mitigation sites, and the funding mechanisms for long-term management, if applicable. ▪ A description of adaptive management approaches, if applicable, that shall be used in the management of species habitat. ▪ A description of financial assurances that shall be provided to demonstrate that the funding to implement mitigation is assured. Final compensatory mitigation shall be determined in consultation with USFWS and CDFW. The CMP shall be submitted to the City. **MM BIG BIO-17: Willow Flycatcher and Western Yellow-billed Cuckoo Construction Requirements.** Construction activities within suitable willow flycatcher and western yellow-billed cuckoo nesting habitat should occur outside of the breeding season (generally May 1 through August 31) when feasible. If construction activities must occur within the breeding season, any nesting habitat shall be removed prior to the breeding season. If construction activities must occur within 500 feet of suitable riparian habitat (i.e., near the Mojave River) and within the nesting season for willow flycatcher and western yellow-billed cuckoo, pre-construction surveys shall be conducted prior to construction activities that occur within 500 feet of suitable habitat. Results shall be provided to the City. A Species-Specific biological monitor shall conduct pre-construction surveys for Willow Flycatcher and western yellow-billed cuckoo within 30 days prior to start of construction activities that occur within 500 feet of suitable habitat. The Species-Specific biological monitor shall hold a USFWS recovery permit and be authorized by the agency to conduct pre-construction willow flycatcher surveys and/or western yellow-billed cuckoo surveys. If willow flycatcher or western yellow-billed cuckoo is documented within the BIG footprint during pre-construction surveys, no work shall occur within a 500-foot buffer of the nest and consultation with USFWS and CDFW shall occur and additional measures may be implemented to avoid take. Federal and State Incidental Take Permits may be required for	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				proposed actions that are determined to have adverse effects on willow flycatcher or western yellow-billed cuckoo. If willow flycatcher or western yellow-billed cuckoo nesting behavior and/or breeding territories are documented within 500 feet of construction activities during pre-construction surveys and construction activities must proceed during the nesting season, no work shall occur within a 500-foot buffer of the nest and construction noise shall be monitored and minimized per a Wildlife Noise Study and Monitoring Plan to be implemented with designated biologist oversight. Prior to and during construction, noise monitoring shall be conducted within suitable riparian habitat contiguous with occupied territories at the vegetation limit closest to impact area. Noise limits are only applicable to the occupied nest habitat and suitable contiguous riparian vegetation determined to be part of the nesting territory. Noise monitoring shall be conducted by a qualified noise specialist in coordination with a Species-Specific biological monitor. While conducting noise monitoring, the biological monitor shall monitor the active nests to allow normal breeding behaviors to not be indirectly impacted by noise from construction activities. Construction noise levels shall not exceed pre-construction ambient levels or a 70 dBA hourly average, whichever is greater, in habitat occupied by nesting willow flycatcher and western yellow-billed cuckoo unless authorized by the appropriate regulatory authorities (i.e., CDFW and USFWS). Construction activities that exceeded noise limits in the nest territory would be adjusted to reduce noise to below pre-construction ambient levels, a 70dBA hourly average, or the agency-approved threshold. Alternatively, noise attenuation measures shall be implemented to reduce noise within occupied willow flycatcher and/or western yellow-billed cuckoo breeding territories to below the limit. Measures may include installation of sound barriers or walls, phasing of equipment use, changes in scheduling, and temporary avoidance of certain portions of the impact area. Noise monitoring shall be conducted when attenuation measures are implemented to document a successful or unsuccessful reduction in noise to below the established threshold. If such adjustments or measures are not feasible and noise levels are found to result in average hourly noise levels greater than 70 dBA or pre-construction ambient levels, whichever is greater, work would be postponed until after the breeding season or after the willow flycatcher and/or western yellow-billed cuckoo fledglings are no longer dependent on the affected breeding territory, as confirmed by a qualified biologist unless authorized by the appropriate regulatory authorities (i.e., CDFW and USFWS). A noise level verification report shall be submitted by the implementing entity to CDFW and USFWS every two weeks during work that required noise monitoring for listed species as described above. **MM BIG BIO-18: Nesting Birds.** To comply with CFGC §§ 3503, 3503.5, and 3513 and to avoid potential impacts on nesting birds, vegetation removal activities shall be conducted outside of the bird nesting season (generally February through August) to the greatest extent feasible. Regardless of the time of year, a biological monitor shall conduct a nesting bird survey no more than three days prior to initial construction activities. Results shall be provided to the City. Pre-construction surveys shall focus on evidence of nesting, including nest locations and nesting behavior. The biological monitor shall make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are identified during the nesting bird survey, a biological monitor shall establish suitable exclusion buffers around the nests based on the level of construction activity within the vicinity and sensitivity of the species observed. The buffers shall be	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				avoided until the nests are no longer occupied, and the juvenile birds can survive independently from the nests, as determined by the biological monitor. The biological monitor familiar with the nesting phenology of the nesting species may increase or decrease the buffer based on nest and buffer monitoring results. Active nests and adequacy of the established buffer distance shall be monitored by the biological monitor until the young have fledged or BIG construction has been completed. The biological monitor has the authority to stop work if nesting pairs exhibit signs of distress. If nests are documented during general biological monitoring activities, the biological monitor shall implement exclusion buffers and stop or redirect construction activities to avoid take of nesting birds. If there are time lapses between construction activities, and prior to re-initiation of construction activities, pre-construction nesting bird surveys shall be repeated. **MM BIG BIO-19: Construction Noise.** During all construction, the implementing entity or their contractor shall ensure that noise-generating equipment use is restricted to hours least likely to disrupt wildlife to the maximum extent practicable. The use of generators shall be restricted except for temporary use in emergencies. Power shall be provided via low noise-level sources (e.g., solar photovoltaic systems, cogeneration systems, small hydroelectric systems, or small wind turbine systems). If generators must be temporarily used, noise suppression devices such as mufflers or enclosures for generators shall be used. **MM BIG BIO-20: Swainson's Hawk Construction Requirements.** Swainson's hawk nest surveys shall be conducted and provided to the City for the breeding season immediately prior to start of construction. Surveys shall be conducted within the annual area of BIG construction plus a 0.5-mile buffer by agency-approved Species-Specific biological monitors following the protocol outlined in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee, 2000). The Species-Specific biological monitor shall be familiar with Swainson's hawk identification and life history and be approved to conduct surveys by CDFW. If active Swainson's hawk nests are found during nest surveys, the Species-Specific biological monitor shall establish an appropriate avoidance buffer around each nest in consultation with CDFW based on work activities proposed. The avoidance buffer will remain in place until a Species-Specific biological monitor confirms that the Swainson's hawk young have fledged or the nest is no longer active. **MM BIG BIO-21: Western Burrowing Owl Construction Requirements.** No less than 14 days prior to start of construction mobilization activities within suitable habitat, a Species-Specific biological monitor shall conduct pre-construction surveys for burrowing owl and/or occupied nest burrows within the limits of the BIG construction footprint plus a 500-foot buffer. Additionally, time lapses between BIG construction within suitable habitat shall trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance. The pre-construction surveys shall be repeated if there is a time lapse between construction activities of 14 days or more within previously surveyed areas. All surveys shall be conducted in accordance with the most current CDFW survey methods.	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				If burrowing owl or active burrows are not observed during the pre-construction surveys, no additional conditions shall be required to avoid direct impacts on burrowing owl within the surveyed areas. If burrowing owl is documented during pre-construction surveys, occupied burrowing owl burrows shall not be disturbed during the nesting season (February 1 through August 31) unless an agency-approved Species-Specific biological monitor verifies through non-invasive methods that either the birds have abandoned or failed nesting attempts, or that juveniles from the occupied burrows are foraging independently and capable of independent survival. A Species-Specific biological monitor shall establish exclusion buffers to protect active nests in accordance with the recommendations included in CDFW's Staff Report on Burrowing Owl Mitigation (2012). A Species-Specific biological monitor shall conduct ongoing monitoring during construction activities. If burrowing owl is observed during the non-breeding season (September 1 through January 31) or confirmed to not be nesting during pre-construction surveys, a non-disturbance buffer between construction activities and the occupied burrow shall be installed by a Species-Specific biological monitor in accordance with the recommendations included in the Staff Report on Burrowing Owl Mitigation (CDFW, 2012). The implementing entity shall submit at least one burrowing owl pre-construction survey report for each surveyed area to the satisfaction of CDFW to document compliance with BIG's western burrowing owl mitigation measures. Survey reports shall also be submitted to the City. If avoidance is not possible, either directly or indirectly, an Incidental Take Permit (ITP) under CESA shall be obtained from CDFW and a Burrowing Owl Plan shall be prepared and submitted for approval by CDFW. The plan shall also be submitted to the City. Once approved, the plan shall be implemented to relocate non-breeding burrowing owls from BIG. The plan shall detail methods for relocation of burrowing owls and provide guidance for the monitoring and management of the replacement burrow sites and associated reporting requirements. Details of the Burrowing Owl Plan shall be determined in consultation with CDFW, and is anticipated to include, but may not be limited to, the following: ▪ Seasonal restrictions of relocation efforts – Relocation efforts shall occur during the non-breeding season (September 1 through January 31). Relocation during the breeding season (February 1 through August 31) may only occur if a qualified biologist determines that the birds have not begun egg-laying, or that the fledged juveniles are foraging independently and are capable of independent survival. ▪ Climatic restrictions of relocation efforts – Relocation shall not occur when temperatures exceed 95 degrees Fahrenheit or during rain or high wind. ▪ Monitoring schedule and length – Full-time monitoring shall occur for at least two weeks following passive relocation and periodically thereafter. **MM BIG BIO-22: Western Burrowing Owl Compensatory Mitigation.** Prior to start of construction mobilization activities, the implementing entity shall prepare a Compensatory Mitigation Plan (CMP) in consultation with CDFW that describes the compensatory mitigation that shall be provided at a minimum 1:1 ratio to offset permanent and temporary impacts on burrowing owl habitat. The CMP shall describe the following:	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				▪ A description of burrowing owl and habitat types for which compensatory mitigation is being provided. ▪ A description of the methods used to identify and evaluate mitigation options. Options may include one or more of the following: o Purchase of mitigation credits from an agency-approved mitigation bank (e.g., Mojave Desert Tortoise Conservation Bank or other CDFW approved mitigation bank). o Protection of burrowing owl habitat through acquisition of fee title or conservation easement and funding for long-term management of the habitat. Endowment funds shall be transferred to the applicable agency or entity and conservation easements shall be held by an entity approved in writing by the applicable regulatory agency. In circumstances where the implementing entity protects habitat through a conservation easement, the terms of the conservation easement shall be subject to approval of the applicable regulatory agencies, and the conservation easement shall identify applicable regulatory agencies as third-party beneficiaries with a right of access to the easement areas. o Payment to an existing in-lieu fee program. ▪ A summary of the estimated direct permanent and temporary impacts on burrowing owl and burrowing owl habitat. ▪ A description of the process that shall be used to confirm impacts. Actual impacts on burrowing owl and burrowing habitat could differ from estimates. Should this occur, adjustments shall be made to the proposed compensatory mitigation in consultation with CDFW. The burrowing owl CMP and mitigation requirements shall be submitted to the City for review. If all or any portion of the acquired desert tortoise and/or Mojave fringe-toed lizard compensatory mitigation (MM BIG BIO-16 and MM BIG BIO-24, respectively) or other required compensatory mitigation lands/credits meet the criteria for burrowing owl compensatory mitigation, it may be used to fulfill that portion of the obligation for burrowing owl compensatory mitigation requirements. **MM BIG BIO-23: Mojave Fringe-toed Lizard Construction Requirements.** When possible, construction activities within Mojave fringe-toed lizard suitable habitat shall be conducted during the active season (March 1 – September 30). A Species-Specific biological monitor shall be present during initial construction activities within suitable Mojave fringe-toed lizard dune habitat and shall inspect the impact area daily to confirm the area remains clear of the species. Any observed Mojave fringe-toed lizard shall be relocated outside of active work areas and out of harm's way. If necessary, reports summarizing relocation activities shall be submitted to the CDFW. **MM BIG BIO-24: Mojave Fringe-toed Lizard Compensatory Mitigation.** Prior to construction mobilization activities, the implementing entity shall prepare a compensatory mitigation plan for direct impacts on Mojave fringe-toed lizard and 1,009.1 acres of occupied dune habitat (active desert dunes, stabilized and partially stabilized dunes, disturbed stabilized and partially stabilized dunes). Dune habitat shall be mitigated in-kind through the acquisition and preservation of dune habitat suitable for Mojave fringe-toed	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				lizard at a minimum 1:1 ratio to offset permanent and temporary impacts on Mojave fringe-toed lizard habitat. Land selected for compensatory mitigation must be: ▪ Deposits of aeolian or fine windblown sands associated with dunes, washes, hillsides, margins of dry lakes, and/or sandy hummocks within the Mojave Desert; ▪ Occupied with Mojave fringe-toed lizard or with potential for connectivity to lands occupied by Mojave fringe-toed lizard; ▪ Near land currently under or planned for protection; and ▪ Not characterized as highly disturbed. A long-term management plan and endowment for land acquisition, preservation, and management in perpetuity shall be established by a qualified land manager/ conservancy. All or any portion of the compensatory mitigation lands/credits acquired for impacts on other sensitive resources (i.e., aquatic resources or sensitive vegetation communities) may also be used to fulfill compensatory mitigation requirements for Mojave fringe-toed lizard. For example, compensatory mitigation pursuant to MM BIG BIO-16 and MM BIG BIO-22 may also be used to fulfill compensatory mitigation requirements for Mojave fringe-toed lizard if acquired mitigation lands/credits meet the criteria above. Final compensatory mitigation for Mojave fringe-toed lizard shall be determined in coordination with CDFW. **MM BIG BIO-25: Dry Season Construction.** Construction within the Mojave River corridor shall be restricted to the dry season when there are no observable surface flows within 1,000 feet of the BIG construction footprint, to the extent feasible. If construction must occur outside of the dry season, biological monitors shall conduct daily pre-construction sweeps within 250 feet of direct impact areas occurring within the Mojave River corridor, such as construction associated with the Hinkley Road Bridge. If American beaver is observed, construction cannot be initiated until the species is able to disperse from the area. Construction activities may resume after a biological monitor confirms American beaver is no longer present within direct and indirect impact areas. **MM BIG BIO-26: American Badger and Desert Kit Fox Construction Requirements.** Prior to start of construction mobilization activities within suitable habitat, biological monitors familiar with American badger and desert kit fox shall conduct surveys within the limits of the BIG construction footprint for occupied natal dens. The survey(s) shall occur no more than 48 hours prior to start of ground-disturbing activities in suitable habitat for American badger and desert kit fox within the potential impact footprint. Survey results shall be provided to CDFW and the City. If American badger or desert kit fox natal dens are documented within the survey area, a biological monitor shall establish a no-work exclusion buffer around the den and natal dens shall not be disturbed until a biological monitor verifies through non-invasive methods that either the den is no longer occupied, or that juveniles from the natal den are foraging independently and capable of independent survival. A biological monitor shall monitor the natal den during construction activities approximately every other day. The definitive frequency and duration of monitoring shall be dependent upon the age and behavior of the American badger or desert kit fox pups and the efficacy of the exclusion buffers, as determined by a designated biologist or biological monitor and in coordination with CDFW. Passive relocation methods may be employed for	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				non-natal dens that cannot be avoided by construction activities. For individual, non-natal badger and kit fox dens, a plan for passive relocation, burrow monitoring, and excavation of vacated burrows will be developed in coordination with CDFW. **MM BIG BIO-27: Bat Construction Requirements.** Prior to start of demolition or disturbance of structures suitable for roosting (i.e., bridges), pre-construction surveys for special-status bat species shall be conducted by a biological monitor. Pre-construction surveys shall be conducted no more than 14 days prior to the start of demolition activities. Survey results shall be provided to CDFW and the City. If active bat roosting is documented during pre-construction surveys within structures to be impacted, bat exclusion techniques, consistent with recommendations provided in Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions (H. T. Harvey & Associates, 2019), shall be implemented. If required, exclusion shall be implemented between September 1 and October 15 to the extent feasible. Exclusion shall not occur during the typical bat maternity season (April through August). Prior to demolition and/or improvement of structures that could support roosting bats, including Hinkley Road Bridge, or trees that will be removed, a biologist with expertise in chiropterology (study of bats) shall survey these features and any areas that could provide suitable roosting habitat to confirm they do not contain maternity roosts or special-status bats. If special-status bats and/or maternity roosts are confirmed to be absent, MM BIG BIO-1 above will be followed prior to construction to reduce potential impacts to individual roosting bats to a less than significant level and no further mitigation is required. If a potential maternity roost and/or a special-status bat roost is present, a Bat Avoidance and Mitigation Plan shall be developed in coordination with the City and CDFW, which may include the following measures to reduce potential impacts to special-status bat species to a less than significant level. ▪ Maternity Roosting Season Avoidance. All proposed demolition activities of active roost sites, including bat roost exclusion, shall occur outside the general bat maternity roosting season of March through August to reduce potentially significant impacts to maternity roosting bats. If the maternity roosting season cannot be avoided, then roost exclusion can occur outside the maternity roosting season (September through February) to exclude bats from the demolition area prior to the start of demolition during the maternity roosting season. The measures below shall be required to ensure to avoid impacts to roosting bats during the exclusion process. ▪ Replacement Roost Installation. If there is a potential or known maternity roost within a structure to be demolished, a replacement roost shall be installed outside the maternity roosting season. At least one month prior to the exclusion of bats from a roost, the implementing entity shall procure and install two or more (dependent on colony size) bat boxes from a reputable vendor, such as Bat Conservation and Management, to allow bats sufficient time to acclimate to a new potential roost location. The bat boxes shall be installed within close proximity to the trees and/or structures and in an area that is within close proximity to suitable foraging habitat (i.e., near the Mojave River). Additionally, the bat boxes shall be oriented to the south or southwest, and the area chosen for the bat boxes must receive sufficient sunlight (at least 6 hours) to allow the bat boxes to reach an optimum internal temperature (approximately 90°F) to mimic the existing bat	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				roost. The bat boxes shall be suitable to house crevice-roosting bat species, and large enough to contain a minimum of 50 bats (e.g., Four Chamber Premium Bat House or Bat Bunker Plus). The bat boxes shall be installed on a 20-foot-tall steel pole. ▪ Roost Exclusion. Roost exclusion must only occur during the time when bats are most active (early spring or fall) to increase the potential to exclude all bats from roosts and avoid the maternity roosting season, thereby minimizing the potential for a significant impact to occur. Approximately one month after bat boxes have been installed, exclusion of the existing roost shall occur. The primary exit points for roosting bats shall be identified, and all secondary ingress/egress locations shall be covered with a tarp or wood planks to prevent bats from leaving from other locations. The primary exit point shall remain uncovered to allow exclusion devices to be installed. Exclusion devices shall consist of a screen (poly netting, window screen, or fiberglass screening) with mesh 1/6 of an inch or smaller, installed at the top of the roost location and sealed along the sides and passing 2 feet below the bottom of the primary exit point. The exclusion devices shall be installed at night to increase the potential that bats have already left the roost and are less likely to return. Exclusion devices shall be left in place for a 1-week period to ensure that any remaining bats in the roost are excluded. A passive acoustic monitoring detector shall also be deployed during the exclusion period in order to verify excluded species and monitor if bat activity has decreased during the exclusion period. Periodic monitoring during the exclusion period should also be conducted to observe if any bats are still emerging from additional areas at BIG, and an active monitoring survey conducted on the final night of exclusion to ensure that no bats are emerging and determine that exclusion has been successful. Any continued presence of roosting bats shall require an adjustment to the exclusion devices and schedule. The exclusion devices may remain in place until the start of demolition activities. If any bats are found roosting in any proposed demolition areas prior to demolition, additional exclusion shall be required and follow the same methodology described in this mitigation measure. ▪ Roost Habitat Creation. If sensitive bat species are present within Hinkley Road Bridge or other structures that will persist post BIG construction but require bat displacement for improvements to be made, bat friendly roost designs shall be developed as part of Project plans as feasible. Bat friendly designs shall be developed in coordination with a qualified biologist, the City, and CDFW. **MM BIG BIO-33: Staging, Stockpiles, Materials and Equipment Storage.** During BIG construction, all construction materials, staging, employee parking, storage, dispensing, fueling, maintenance activities, and spoils shall be located only in areas cleared within the previous 48 hours by a designated biologist or a previously disturbed area. For off-site construction activities, staging areas shall be located within permanent impact areas or previously disturbed areas (e.g., developed areas, areas already disturbed by construction). Efforts shall be made to discourage sensitive wildlife inhabitation of spoils, stockpiles, and materials (i.e. covering with secured tarps, spreading out materials, etc.) in consultation with approved designated biologists. Uncovered/ unmanaged spoils and stockpiles left undisturbed for 48 hours or more shall be inspected before being disturbed as determined necessary by the designated biologist.	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				MM BIG BIO-34: Permanent Security Fencing. Prior to final construction design, the designated biologist shall review and approve the fencing plans for portions of the BIG Specific Plan Area that are adjacent to natural habitats to confirm the fences provide a sufficient barrier to restrict wildlife from entering the BIG Specific Plan area. The permanent security fencing shall be enhanced with a barrier (e.g., fine-mesh fencing) that extends at least 12 inches below ground and 12 inches above ground to prevent special status reptile and mammal species, including desert tortoise, from moving through or underneath the fencing and gaining access to the BIG Specific Plan area. Where fencing is proposed between natural habitats and roadway right-of-way, at the 12-inch depth of the below-grade portion fence apron, the barrier shall extend or be bent at an approximately 90-degree angle and oriented outward from the roadway right-of-way a minimum of 12 inches to prevent fossorial (burrowing) mammals and reptiles from digging or tunneling below the security fence and gaining access to BIG. A climber barrier (e.g., rigid curved or bent overhang) shall be installed at the top of the apron to prevent reptiles and mammals from climbing over the apron. The designated biologists shall confirm that the selected apron material and climber barrier do not cause harm, injury, entanglement, or entrapment to wildlife species. The implementing entity shall provide quarterly inspection and repair of the fencing. The specific design and method for installation method of an apron or barrier may vary as required by regulatory permits issued under the FESA or CESA. Prior to start of operations then quarterly, biological monitors shall field-inspect the fencing that is adjacent to natural habitats and confirm appropriate installation and the implementing entity shall carry out repair of the fencing, as needed. Fencing plan review and field inspection shall be documented in a memorandum from the designated biologists and provided to the City. **MM BIG BIO-35 General Avian Safe Design.** Prior to final construction design, the implementing entity shall ensure that fencing, electric lines, communication towers, and buildings are designed to be bird- and raptor-safe in accordance with recommendations presented in Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee [APLIC] 2006) and Reducing Avian Collisions with Power Lines: State of the Art in 2012 (APLIC 2012). The designated biologist shall review the design for areas of high concern (e.g., areas adjacent to suitable raptor nesting habitat) to confirm the safety features provide sufficient protection for birds. Avian safe design features shall be implemented and maintained by the implementing entity during the period of operations. The project shall incorporate the following into the design: ▪ Sufficient spacing of phase conductors to prevent bird electrocution. ▪ Configuration of power lines to reduce vertical spread of lines and/or reductions in the span length if such options are feasible. ▪ Marking of lines and fences (e.g., with Bird Flight Diverters) to increase the visibility of lines and reduce potential collisions. Where fencing is necessary, use of bird-compatible design standards to increase visibility of fences to reduce collision and entanglement. ▪ Metal fence stakes plugged with bolts or other material to prevent raptor talons from becoming entrapped within the bolt holes. ▪ Perch guards to discourage avian presence on and near BIG facilities.	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				▪ Minimizing the use of guywires. Where the use of guywires is necessary, mark the guywires using the best available methods to minimize avian strikes (e.g., line markers). ▪ A monopole or dual-pole design versus a lattice tower design to minimize perching and nesting opportunities. ▪ Communication tower design in conformance with Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning (USFWS, 2021b). ▪ Facility lighting that does not attract birds or their prey to the BIG. This includes using non-steady burning lights (e.g., red, dual red and white strobe, strobe-like flashing lights) to meet Federal Aviation Administration requirements, using motion or heat sensors and switches to reduce the time when lights are illuminated, using appropriate shielding to reduce horizontal or skyward illumination, and avoiding the use of high-intensity lights (e.g., sodium vapor, quartz, and halogen). Prior to start of operations, biological monitors shall field-inspect the avian safe design features and summarize findings in a memorandum to be provided to the City. **MM BIG BIO-36: Nighttime Lighting During Operations.** To address the permanent and intermittent impacts from lighting, the implementing entity shall implement measures to minimize the intensity, direction, and duration of operational lighting of permanent facilities (e.g., traction power facilities, radio sites, and maintenance facilities), as well as intermittent train lighting in compliance with BIG Specific Plan lighting standards (BIG Specific Plan Section 3.6). These shall include the following measures to minimize light trespass into adjacent habitat: ▪ All lights shall be fully cutoff or fully shielded to prevent uplight and limit horizontal spill into adjacent habitat. ▪ Warm lighting (3,000K or lower) shall be used to reduce blue light emissions). ▪ All exterior lighting fixtures shall be directed downward to illuminate pedestrian pathways and parking areas and avoid unnecessary glare and light trespass. ▪ Within the transload warehouse center, pole-mounted or building-mounted lighting fixtures shall be no more than 50 feet in height to limit light trespass. **MM BIG BIO-37: Desert Native Plant Salvage Plan.** Prior to start of construction mobilization activities, the implementing entity shall prepare a Desert Native Plant Salvage Plan for the removal of any plant species regulated under the CDNPA and County Code § 88.01.060. Adequate mitigation for CDNPA/County-protected plants may include the salvage of plants for translocation to a suitable recipient site if removal cannot be avoided. In the case of translocation, the Desert Native Plant Salvage Plan shall be prepared for review and approval by the City. The plan shall include a description and map showing plants to be salvaged, salvage and transport methods, the proposed recipient site, and disposition of the plant specimens at the recipient site. Recipient sites may include existing conservation areas, botanical preserves, museums and zoological societies, among other conservation organizations that provide adequate habitat and management of desert native plants.	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
5.4 Biological Resources	Riparian habitat or other sensitive natural community	BIG construction and operation could result in potentially significant impacts to riparian habitat or sensitive natural communities. With implementation of mitigation measures detail in **Section 5.4: Biological Resources**, potentially significant impacts would be reduced to a less than significant level.	Potentially Significant	**MM BIG BIO-28: Compensatory Mitigation for Sensitive Natural Communities.** Prior to start of construction mobilization activities, the implementing entity shall prepare a compensatory mitigation plan for permanent impacts of 1,014 acres of dune vegetation communities, including high-quality *Dicoria canescens – Abronia villosa – Panicum urvilleanum* sparsely vegetated alliance (e.g., active desert dunes; 551.5 acres), moderate-quality *Dicoria canescens – Abronia villosa – Panicum urvilleanum* sparsely vegetated alliance – partially stabilized (e.g., partially stabilized desert dunes; 7.1 acres), and low-quality *Dicoria canescens – Abronia villosa – Panicum urvilleanum* sparsely vegetated alliance – disturbed/stabilized (e.g., disturbed/stabilized desert dunes; 450.6 acres) at a minimum 1:1 ratio. Dune habitat shall be mitigated in-kind through the acquisition and preservation of dune habitat. If all or any portion of the acquired Mojave fringe-toed lizard (**MM BIG BIO-24**) or other required compensatory mitigation lands/credits meet the criteria above, it may be used to fulfill that portion of the obligation for CDFW sensitive upland vegetation communities.	Less than Significant
5.4 Biological Resources	Removal, filling, or hydrological interruption of State or federally protected wetlands	BIG construction and operation could result in potentially significant impacts to wetlands. With implementation of mitigation measures detail in **Section 5.4: Biological Resources**, potentially significant impacts would be reduced to a less than significant level.	Potentially Significant	**MM BIG BIO-29: Jurisdictional Aquatic Resources Permit Requirement.** Prior to impacting jurisdictional aquatic resources, the implementing entity shall obtain a Clean Water Act (CWA) Section 404 Individual Permit from the U.S. Army Corps of Engineers (USACE) for permanent impacts on non-wetland waters of the U.S., a CWA Section 404 water quality certification (or other required permit) from the Regional Water Quality Control Board (RWQCB) for permanent impacts on non-wetland waters of the U.S./State, and a California Fish and Game Commission (CFGC) Section 1602 Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW) for impacts on vegetated streambed and unvegetated streambed and watercourse jurisdictional by CDFW. The implementing entity shall implement/comply with all permit conditions and mitigation measures required by the resource agencies. Compensatory mitigation to offset impacts on jurisdictional aquatic resources may be implemented through on-site and/or off-site, permittee-responsible mitigation, mitigation bank credit purchase (e.g., purchase of enhancement and/or preservation credits at the Mojave River Watershed Mitigation Bank or other approved mitigation bank), or a combination of these options depending on availability. The proposed mitigation strategy shall prioritize in-kind and in-watershed options per the regulatory agencies' preferences. A minimum compensatory mitigation ratio of 1:1 will be required; final mitigation ratios and credits shall be determined in consultation with USACE, RWQCB, and CDFW based on agency evaluation of current resource functions and values and through each agency's respective permitting process. Should implementing entity-sponsored mitigation be implemented, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared and approved by the agencies in accordance with the proposed program permits. The HMMP shall include but is not limited to a conceptual planting plan including planting zones, grading, and irrigation, as applicable; a conceptual plant palette; a long-term maintenance and monitoring plan; annual reporting requirements; and proposed success criteria. Any off-site applicant-sponsored mitigation shall be conserved and managed in perpetuity. **MM BIO-30: Water Quality Best Management Practices.** Prior to construction mobilization activities, the implementing entity shall prepare a Storm Water Pollution Prevention Plan (SWPPP) in conformance with California Construction Stormwater General Permit Order 2022-0057-DWQ requirements to avoid and minimize impacts associated with erosion,	Less than Significant

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				runoff, and storm water contaminants. The SWPPP shall include best management practices (biological monitors) to avoid and minimize impacts on downstream jurisdictional aquatic resources including, but not limited to: ▪ Vehicles and equipment should not be operated in ponded or flowing water except as described in permits. ▪ Water containing mud, silt, or other pollutants from grading or other activities should not be allowed to enter jurisdictional waters adjacent to BIG or be placed in locations that may be subjected to high storm flows. ▪ Spoil sites should not be located within 30 feet from the boundaries of downstream jurisdictional waters or in locations that may be subject to high storm flows, where spoils might be washed back into drainages adjacent to BIG. ▪ Raw cement/concrete or washings thereof; asphalt, paint or other coating material; oil or other petroleum products; or any other substances that could be hazardous to vegetation or wildlife resources, resulting from BIG construction, should be prevented from contaminating the soil and/or entering avoided jurisdictional waters downstream of BIG. ▪ No equipment maintenance or fueling should be performed within 100 feet of jurisdictional waters downstream of BIG, where petroleum products or other pollutants from the equipment may enter these areas. ▪ Temporary structures, storage of construction materials, and staging/storage of construction equipment should be located outside jurisdictional waters downstream of BIG. **MM BIO-31: Vegetation Removal.** The implementing entity shall ensure that all cut vegetation is hauled out of any waterways and stored, if necessary, where it cannot be washed by rainfall or runoff into waterways. When maintenance activities are completed, any excess vegetation shall be removed from the BIG footprint.	
5.4 Biological Resources	Movement of native resident, migratory fish or wildlife species, or established native resident or migratory wildlife corridors	BIG construction and operation could result in potentially significant impacts to wildlife movement. With implementation of mitigation measures detail in **Section 5.4: Biological Resources**, potentially significant impacts would be reduced to a less than significant level.	Potentially Significant	**MM BIG BIO-1: Worker Environmental Awareness Program and Training.** **MM BIG BIO-2: Biological Resource Monitoring.** **MM BIG BIO-3: Work Stoppage.** **MM BIG BIO-4: Vehicles and Equipment.** **MM BIG BIO-8: Nighttime Work and Lighting.** **MM BIG BIO-18: Nesting Birds.** **MM BIG BIO-19: Construction Noise.** **MM BIG BIO-35: General Avian Safe Design.** **MM BIO-32: Wildlife Crossings.** As part of BIG construction, a wildlife crossing shall be constructed at the Unnamed Stream (Milepost 12.5) below the BNSF tracks and Main Street	Less than Significant

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				to facilitate wildlife movement between areas of natural habitat on either side of the railway and road. This railway crossing feature shall be placed alongside four smaller culverts constructed to convey water: three 36-inch and one 48-inch diameter culverts. The wildlife crossing shall be an 84-inch diameter culvert designed to facilitate passage beneath the rail right-of-way, which would connect open space east of the railway to the Mojave River, thereby maintaining access to existing linkages (i.e., the Rank 4/5 ACE, California Desert Linkage Network, and CEHC Potential Riparian Connection). Design features for facilitating wildlife culvert usage shall include installing inlet and outlet points. A long-term management plan for the wildlife crossing shall be submitted to the City for review prior to start of vegetation removal and/or mass grading. The long-term management plan shall include: ▪ Additional measures to encourage wildlife use include, but are not limited to, maintenance or restoration of native vegetation near, but not obstructing, culvert mouths, and invasive plant removal. ▪ Routine clearing of debris and trash from the culvert shall be completed on a quarterly basis and following large storm events to allow ample space is available for wildlife travel. ▪ Access points to the culvert shall contain rocks or woody refuge sites to attract subterranean wildlife. Habitat quality (i.e., the percentage of invasive versus native plants and level of anthropogenic degradation) within a 200-meter radius surrounding the culvert access points shall be monitored quarterly by a qualified biologist to confirm wildlife corridor functionality. ▪ A mitigation entity responsible for the implementation of the long-term management plan	
5.4 Biological Resources	Consistency with local policies or ordinances concerning biological resources (i.e. tree preservation policy)	BIG construction and operation could result in potentially significant impacts to local policies or ordinances concerning biological resources. With implementation of mitigation measures detail in **Section 5.4: Biological Resources**, potentially significant impacts would be reduced to a less than significant level.	Potentially Significant	**MM BIG BIO-1: Worker Environmental Awareness Program and Training.** **MM BIG BIO-2: Biological Resource Monitoring.** **MM BIG BIO-3: Work Stoppage.** **MM BIG BIO-4: Vehicles and Equipment.** **MM BIG BIO-8: Nighttime Work and Lighting.** **MM BIG BIO-9: Wildlife Entrapment.** **MM BIG BIO-12: Domestic Dogs.** **MM BIG BIO-21: Western Burrowing Owl Construction Requirements.** **MM BIG BIO-22: Western Burrowing Owl Compensatory Mitigation.** **MM BIG BIO-33: Staging, Stockpiles, Materials and Equipment Storage.**	Less than Significant

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
5.5 Cultural Resources	Historical resource	Concerning a substantial adverse change in the significance of a historical resource pursuant to § 15064.5, impacts would be significant and unavoidable. Due to the high likelihood of previously unidentified historical and unique archaeological resources to be impacted by ground-disturbing activities and physical impacts that may cause adverse effects to said resources, despite incorporation of mitigation identified in **Section 5.5: Cultural Resources**, a significant and unavoidable impact during construction would occur.	Potentially Significant	**MM BIG CUL-1: Phase III Data Recovery.** Prior to any ground-disturbing activities, a Phase III Data Recovery Plan for the 19 archaeological sites identified as historical resources and unique archaeological resources shall be planned and implemented. Prior to BIG approval, an archaeologist that meets Secretary of Interior Professional Qualifications in Archaeology and who has at least 10 years of experience in the Mojave Desert for both prehistoric and historic era resources, henceforth identified as the BIG Project Archaeologist, shall prepare a Phase III Data Recovery Plan. Approval of the Plan may be completed after BIG approval, though implementation of the Plan must occur prior to, or concurrent with, installation of fencing for Desert Tortoise that is required as biological resources mitigation. The Plan shall include details related to research design, excavation methodology, and final disposition, and shall be reflective of requirements outlined in BIG CUL mitigation measures. Additionally, the plan shall be reflective of BIG design and proposed ground disturbance, in that if any of the 19 archeological sites or portions of sites that will not be subject to physical impacts should be left in place. The Plan shall be submitted to the Lead Agency, as well as the Cultural Resources Management Department for the Yuhaaviatam of San Manuel Nation and the Tribal Historic Preservation Office for the Morongo Band of Mission Indians, henceforth referred to as the consulting Tribes, for review and comment. Parties shall be provided with a comment period of 20 business days from the date of receipt. Once approved by the City and U.S. Army Corps of Engineers, the plan shall be overseen by the BIG Project Archaeologist, with fieldwork overseen and implemented by archaeological field staff that have demonstrated experience in the Mojave Desert for both prehistoric and historic era resources. The BIG Project Archaeologist and City (or City and U.S. Army Corps of Engineers, as applicable) shall coordinate with consulting Tribes who have elected to place a Native American monitor on-site during data recovery regarding schedule and monitor acquisition. For any consulting Tribe that requires a formal agreement to obtain a Native American monitor, the applicant shall enter into said agreement with the respective Tribe. Data recovery shall require a Tribal monitor. Upon completion of the data recovery field efforts, a draft Phase III Rata Recovery Report shall be compiled and submitted to the implementing entity, City, U.S. Army Corps of Engineers, and consulting Tribes for review and comment no later than 120 days after fieldwork completion. Once approved and considered final by the consulting Tribes, City, and U.S. Army Corps of Engineers, a final copy shall be submitted to the aforementioned recipients, as well as the South Central Coastal Information Center (SCCIC). **MM BIG CUL-2: Cultural Resources Monitoring Plan.** Prior to the installation of fencing for Desert Tortoise that is required as biological resources mitigation, as well as any other ground-disturbing activities connected to BIG, a Cultural Resources Monitoring and Management Plan (CRMMP) must be approved by the City and US Army Corps of Engineers that shall be enforced for all ground-disturbing activities that take place within the BIG footprint after BIG approval. The CRMMP shall be prepared by the BIG Project Archaeologist and be reflective of cultural resources mitigation and outlines requirements for conducting Worker Environmental Awareness Program (WEAP) training, archaeological and Native American monitoring, and inadvertent discoveries of archaeological resources. The CRMMP shall include, but is not limited to, roles and responsibilities, summary description of known and potential cultural resources, monitoring procedures, process for inadvertent discovery of cultural resources, process for determining treatment of cultural resources, and process for inadvertent discovery of human remains. The CRMMP shall also include appendices with	Significant and Unavoidable

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				the approved mitigation measures/conditions of approval, as well as contact information for all relevant parties. The draft CRMMP shall be submitted to the implementing entity, City, US Army Corps of Engineers, and consulting Tribes for review and comment. Parties shall be provided with a comment period of 15 business days from the date of receipt. Once approved by the City and U.S. Army Corps of Engineers, the CRMMP shall be enforced through the duration of all ground-disturbing activities associated with BIG site preparation and construction. **MM BIG CUL-3: Worker's Environmental Awareness Program.** Concurrently with the preparation of the CRMMP, the BIG Project Archaeologist shall prepare a Worker Environmental Awareness Program (WEAP) training for all on-site personnel related to cultural resources for BIG. The draft WEAP training shall be submitted to the implementing entity, City, US Army Corps of Engineers, and consulting Tribes for review and comment. Parties shall be provided with a comment period of 15 business days from the date of receipt. Once approved by the City and US Army Corps of Engineers, the training shall be utilized for all WEAP trainings provided by the BIG Project Archaeologist, or their designee, throughout BIG site preparation and construction. The WEAP shall include an overview of the requirements in the CRMMP, applicable mitigation measures, and information related to cultural resources that may be identified during BIG site preparation and construction, how to identify them, and the process to follow in the case of inadvertent discovery. The consulting Tribes shall be contacted with an invitation to participate in the initial training at least 10 business days prior to the scheduled date. All personnel that access the site during BIG site preparation and construction must undergo this training, to include any personnel that access the BIG footprint after the initial WEAP training is provided but prior to completion of construction. Methods and timing for providing the training may vary throughout BIG construction depending on schedule, though the training itself shall not exceed 1 hour and all participants shall be required to add their name to a sign-in sheet for tracking purposes. **MM BIG CUL-4: Construction Monitoring.** Archaeological monitors shall be present during all ground-disturbing activities. Archaeological monitors shall be designated as either a Crew Chief or Field Technician, with a ratio of no fewer than one Crew Chief for every eight Field Technicians. Crew Chiefs are required to have a bachelor's degree in Anthropology, Archaeology, or a related field and at least 3 years of demonstrated experience in Mojave Desert archaeology. Field Technicians are required to have a bachelor's degree in Anthropology, Archaeology, or a related field. All Field Technicians are required to undergo an Archaeological Resources Training prepared by the BIG Project Archaeologist or their designee prior to accessing the BIG footprint. A sufficient number of archaeological monitors shall be present each workday to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. The monitors would work under the direct supervision of the BIG Project Archaeologist, who shall serve as the Principal Investigator for BIG. In addition, the consulting Tribes shall be contacted with an invitation to provide Native American monitors representing each respective Tribe who shall be present during all ground-disturbing activities. However, ground-disturbing activities shall be permitted to continue on any days that were included in the schedule and for which a Tribal monitor is not provided. "Ground-disturbing activities" mean tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, fence/gate removal and installation, drainage and irrigation removal and installation, and archaeological work. The	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				tribal representative, in coordination with the BIG Project Archaeologist, and review of the CRMMP, may determine that certain ground-disturbing activities are exempt from monitoring. For any consulting Tribe that requires a formal agreement to obtain a Native American monitor, the implementing entity shall enter into said agreement with the respective Tribe. All archaeological and Native American monitors shall have the authority to temporarily divert, redirect, or halt ground-disturbing activities to address potential inadvertent discoveries. **MM BIG CUL-5. Inadvertent Discoveries of Cultural Resources.** In the event that cultural resources are discovered during BIG construction, all earthwork and ground-disturbing activities shall halt within 50 feet of the discovery. The on-site archaeological monitor shall immediately notify the BIG Project Archaeologist, who shall work with both the archaeological monitor to identify if the resource is potentially a Historical Resource and/or Unique Archaeological Resource (i.e., significant). All prehistoric resources shall be considered tribal cultural resources. For any resources that are not potentially significant, or within the boundary of previously recorded site that was identified as ineligible/not significant during BIG environmental review, the BIG Project Archaeologist shall prepare a site record or site record update, as appropriate, and the monitors shall collect the resource for later reburial as treatment for its status as a tribal cultural resource. Work shall continue in the area once this is completed. Should a resource be identified within a previously recorded site that is potentially significant and, therefore, potentially increase the eligibility status of the site from ineligible to eligible, the site shall be treated as a potentially significant resource, and steps A through B below shall be followed. Similarly, for any previously unknown and unrecorded resources that are potentially significant, steps A through B below shall be followed. A. An Archaeological Resource Area (ARA) shall be established around the find plus the 50-foot buffer via the placement of a physical barrier/demarcation, such as fencing or caution tape. This material shall be provided by the implementing entity and put in place by construction personnel in the presence of, and at the direction of, the archaeological and Native American monitors. B. The archaeological monitors shall immediately contact the BIG Project Archaeologist, who shall contact the consulting Tribes, City, and U.S. Army Corps of Engineers within 1 business day to provide notification of the find, details related to the nature of the resource, and evaluation recommendations or recommended effort to support evaluations, such as subsurface testing of the resource. Parties must respond within 1 business day with feedback. Should no response be provided by the City and U.S. Army Corps of Engineers within 1 business day, the evaluation recommendations or recommendations for additional effort to support evaluations shall be considered approved. For resources that require additional effort, implementation of the additional work shall occur within 1 business day of approval or non-response. Upon completion of the additional work, the BIG Project Archaeologist shall submit the evaluation recommendations to the parties. Parties must respond within 1 business day with feedback. Should no response be provided by the City and U.S. Army Corps of Engineers within 1 business day, the evaluation recommendation shall be considered approved. For resources that are evaluated as ineligible, the previously noted steps in this mitigation measure related to recordation and collection shall be followed.	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				a. For significant/eligible cultural resources, the BIG Project Archaeologist shall make recommendations to the City and U.S. Army Corps of Engineers and consulting Tribes regarding the measures that shall be implemented to avoid or mitigate impacts to the resource. Parties must respond within 3 business days with feedback. Should no response be provided by the City and U.S. Army Corps of Engineers within 3 business days, the recommendations shall be considered approved. Treatment measures shall be considered in the following order: i. Preservation in place (i.e., avoidance) is the preferred manner of treatment. In this case, the site shall be recorded on a site record and the established ARA shall remain in place until all ground-disturbing activities are completed within that area of the BIG footprint. ii. If preservation in place is determined to be infeasible by the BIG Project Archaeologist based on input from the implementing entity, City, and U.S. Army Corps of Engineers, treatment may include implementation of archaeological data recovery (i.e., excavations) to remove the resource along with subsequent laboratory processing and analysis. Should this be the case, a Data Recovery Plan shall be prepared by the BIG Project Archaeologist and submitted to the City and consulting Tribes for review and approval. Timelines for review and approval may vary depending on the resource, but all Data Recovery Plans for inadvertent discoveries should be approved within 10 business days of discovery. Upon conclusion of Data Recovery, all findings shall be recorded on site records, as well as included in a report drafted by the BIG Project Archaeologist after the completion of BIG and submitted to the City, U.S. Army Corps of Engineers, and consulting Tribes for review and approval. (i) Prehistoric archaeological material shall be reburied in an area that shall not be impacted by future earth-moving activities and reside in a permanent conservation easement or Deed Restriction. Such an area shall be identified by the Lead Agency in consultation with the applicant, BIG Project Archaeologist, and consulting Tribes. Should reburial be infeasible, the material and associated site records/ reports shall be curated at a Tribal-accredited facility or an American Association of Museums (AAM)-accredited facility within the County or adjacent Counties, as agreed by the consulting Tribes. (ii) Historic archaeological material shall be curated at an American Association of Museums (AAM)-accredited facility within the County or adjacent Counties. If no institution accepts the historic archaeological material, it shall be offered to a local school or historical society in the area for educational purposes. If no one accepts the material, the resource may be destroyed after recordation. **MM BIG CUL-6: Reporting Protocols** Once all ground-disturbing activities are complete and all resources have been appropriately reburied or curated, the BIG Project Archaeologist shall draft a Monitoring Report that includes details related to BIG construction, duration of monitoring, inadvertent discoveries, eligibility evaluations, and final disposition of all inadvertent discoveries. The draft Monitoring Report shall be submitted to the implementing entity, City, U.S. Army Corps of Engineers, and consulting Tribes for review. In addition to the submission of the Phase III Data Recovery Report to the SCCIC, as noted in MM BIG CUL-1, the Monitoring Report, CRMMP, any additional data recovery plans and	

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				reports, and all site records shall be submitted to the implementing entity, consulting Tribes, City, U.S. Army Corps of Engineers, and SCCIC once final. **MM BIG CUL-7: Public Education** Once all ground-disturbing activities are complete and all resources have been appropriately reburied or curated for construction of the railyard, the BIG Project Archaeologist shall work with the consulting Tribes to develop a public education program focused on the history and culture of the Serrano people indigenous to the Barstow area. The program shall include broad information related to the archaeological resources identified within the BIG footprint, as appropriate to preserve the confidentiality of archaeological data and as agreed upon by the consulting Tribes, as well as information that demonstrates the long history and connection the Serrano people have to the area. Additionally, the program shall underline the living Serrano communities and their active stewardship of their ancestral lands, including the Barstow area. BNSF shall be responsible for funding, completing, and disseminating the materials. All materials, to include any text, imagery, and format, shall be subject to final approval by the consulting Tribes. The program shall include: A. An educational booklet (10-15 pages) that shall be provided to local museums, libraries, schools, historical societies, and the consulting Tribes. The product shall be primarily geared toward a younger audience and shall be printed and available online. The educational booklet shall be due within one year of railyard construction being completed. B. Outreach to a local museum, library, or a publicly accessible administrative building/community center to identify a location to develop a museum exhibit or mural. Should a property agree to house such an exhibit, the exhibit shall be completed within 5 years of project completion. C. A plaque acknowledging that the City of Barstow and BIG occupy unceded Maara'yam (Serrano) ancestral territory, to be developed in consultation with the consulting Tribes. This plaque shall be displayed in any location identified by the City of Barstow that agrees to do so, as well as on the home page of the BIG project website, within 1 year of railyard construction completion.	
5.5 Cultural Resources	Archaeological resource	Concerning a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5, impacts would be significant and unavoidable. Due to the high likelihood of previously unidentified historical and unique archaeological resources to be impacted by ground-disturbing activities and physical impacts that may cause adverse effects to said resources, despite incorporation of mitigation identified in **Section 5.5: Cultural Resources**, a significant and unavoidable impact during construction would occur.	Potentially Significant	**MM BIG CUL-1: Phase III Data Recovery.** **MM BIG CUL-2: Cultural Resources Monitoring Plan.** **MM BIG CUL-3: Worker's Environmental Awareness Program.** **MM BIG CUL-4: Construction Monitoring.** **MM BIG CUL-5. Inadvertent Discoveries of Cultural Resources.** **MM BIG CUL-6: Reporting Protocols.** **MM BIG CUL-7: Public Education.**	Significant and Unavoidable
5.5 Cultural Resources	Disturb human remains	Due to the high archaeological sensitivity of the BIG footprint and previous instances of human	Potentially Significant	**MM BIG CUL-8: Inadvertent Discoveries of Human Remains.** For discoveries of Native American human remains, PRC § 5097.98 and HSC § 7050.5 shall be followed. If human	Less than Significant

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
		remains, soil-disturbing activities associated with BIG could result in the discovery of previously unidentified human remains. With implementation of mitigation measures detailed in **Section 5.5: Cultural Resources**, potentially significant impacts would be reduced to a less than significant level.		remains are encountered, all ground-disturbing activities shall halt within 100 feet of the find. A Sensitive Resource Area (SRA) shall be established around the site plus the 100-foot buffer via the placement of a physical barrier/demarcation, such as fencing or caution tape. The human remains, along with any associated grave goods and associated burial and sacred items, shall remain in place until the procedures as outlined in PRC § 5097.98 and HSC § 7050.5 are completed. No photographs of the remains or associated funerary objects shall be taken unless specifically requested by the County Coroner as a part of the legal process.	
5.6 Energy	Wasteful, inefficient or unnecessary consumption of energy resources	The BIG Project would require substantial energy, including electricity and diesel fuel, during construction due to lighting and construction equipment. BIG would also require substantial energy throughout operations due to incorporation of electric cargo-handling equipment. BIG's construction and operational energy impacts would be reduced to less than significant levels through compliance with existing regulatory requirements and implementation of mitigation measures detailed in **Section 5.6: Energy**.	Potentially Significant	**MM BIG AQ-1: Fugitive Dust Emissions.** **MM BIG AQ-2: Low VOC Paint (Construction and Operations).** **MM BIG AQ-3: Reduce Exhaust Emissions from Off-Road Construction Equipment.** **MM BIG AQ-4: Renewable Diesel (Construction).** **MM BIG AQ-5: Reduce Exhaust Emissions from On-Road Construction Equipment.** **MM BIG AQ-6: Reduce the Potential Impact of Concrete and Asphalt Batch Plants.** **MM BIG AQ-8: Renewable Diesel RTG Cranes.** **MM BIG AQ-10: Tier 4 Emergency Back-Up Generators.** **MM BIG EN-1: On-site Renewable Electricity Generation**. Prior to the issuance of building permits for intermodal facility structures or transload facilities, BIG shall install on-site rooftop solar generation beyond Title 24 compliance, or approximately 17 megawatts direct current (MWdc) for the total 9 million square-foot warehouse building area. Solar panel installation shall be phased proportionally with buildout of the Transload Warehouse Center (i.e., on-site solar generation shall generally be distributed equally among future buildings and the total 17 MWdc may not be required less than 9 million square feet are not ultimately developed). BIG shall ensure solar photovoltaic (PV) panels or other source of renewable energy generation is incorporated into the design based on the maximum solar roof area available. The maximum solar roof area available will be building specific and dependent on the structural considerations of each building and the ability to maximize the solar zone of each building (as defined in Section 110.10 of the California Energy Code). The solar zone (i.e., the location where solar panels can be installed) shall comply with 2022 California Energy Code, § 110.10, and shall comply with access, pathway, ventilation, and spacing requirements and excluding any skylight area. The final PV generation facility size is dependent on the maximum solar roof area available and shall be approved by Southern California Edison (SCE). SCE's Rule 21 governs operating and metering requirements for any facility connected to SCE's distribution system. Should SCE limit the off-site electricity export, BIG may utilize a battery energy storage system	Less than Significant

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				(BESS) to lower off-site export while maintaining on-site renewable generation to off-set consumption. Each building shall include an electrical system and other infrastructure sufficiently sized to accommodate the PV arrays. The electrical system and infrastructure shall be clearly labeled with noticeable and permanent signage. This mitigation measure applies only to tenant or occupancy permits and not the building shell approvals. **MM BIG EN-2: CALGreen Tier 2.** Prior to the issuance of building permit for intermodal facility structures or transload facilities, the City shall provide documentation to the City of Barstow demonstrating that BIG is designed in a manner consistent with 2025, or then current, CALGreen Tier 2 standards in effect at the time of building permit application.	
5.6 Energy	Consistency with a state or local plan for renewable energy or energy efficiency	Although BIG would require substantial energy demand during construction and operations, through compliance with all applicable regulations and laws regarding sustainability and incorporation of mitigation measures identified in **Section 5.6: Energy**, BIG would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and a less than significant impact would occur.	Potentially Significant	**MM BIG AQ-1: Fugitive Dust Emissions.** **MM BIG AQ-2: Low VOC Paint (Construction and Operations).** **MM BIG AQ-3: Reduce Exhaust Emissions from Off-Road Construction Equipment.** **MM BIG AQ-4: Renewable Diesel (Construction).** **MM BIG AQ-5: Reduce Exhaust Emissions from On-Road Construction Equipment.** **MM BIG AQ-6: Reduce the Potential Impact of Concrete and Asphalt Batch Plants.** **MM BIG AQ-8: Renewable Diesel RTG Cranes.** **MM BIG AQ-10: Tier 4 Emergency Back-Up Generators.** **MM BIG EN-1: On-site Renewable Electricity Generation**. **MM BIG EN-2: CALGreen Tier 2.**	Less than Significant
5.7 Geology, Soils and Mineral Resources	Unique paleontological resource or site or unique geologic feature	Regarding paleontological resources, there are likely undocumented paleontological resources within the BIG footprint which could be disturbed during construction activities. However, with incorporation of mitigation identified in **Section 5.7: Geology, Soils, and Mineral Resources,** impacts would be less than significant.	Potentially Significant	**MM BIG GEO-1:** The implementing entity shall submit a Paleontological Resources Impact Mitigation Program (PRIMP) prepared by a qualified paleontologist to the City of Barstow (City) prior to construction commencing. A qualified paleontologist is defined as an individual with an M.S./M.A. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques, and who is knowledgeable in the geology and paleontology of the area. The PRIMP shall be consistent with the Society of Vertebrate Paleontology 2010 guidelines. The PRIMP shall include, but is not limited to, the requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the BIG footprint based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring, discoveries treatment protocols and timelines, paleontological methods including any sediment sampling, reporting, and collections management/curation. **MM BIG GEO-2:** A qualified paleontologist shall attend preconstruction meetings to consult with the grading and excavation contractors concerning planned depths, excavation	Less than Significant

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				schedules, paleontological field techniques, and safety issues. In addition, all on-site construction personnel shall receive Worker Education and Awareness Program training prior to the commencement of excavation work. All BIG construction occurring within previously undisturbed fossil bearing formations shall be monitored by a qualified paleontologist or qualified paleontological monitor. Detailed narrative and exhibit outlining areas and depths that require monitoring across the BIG footprint shall be included in the Paleontological Resources Impact Mitigation Program (PRIMP). A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials and works under the direction of a qualified paleontologist. If fossils are discovered, the paleontologist (or paleontological monitor) will recover them. In most cases, this fossil salvage can be completed in a short period of time; however, some fossil specimens, such as a complete large mammal skeleton, may require an extended salvage period. In these instances, the paleontologist (or paleontological monitor) will be allowed to temporarily direct, divert, or halt grading in the vicinity to allow recovery of fossil remains in a timely manner, which will be outlined and defined in the PRIMP. Because of the potential for the recovering of small fossil remains, such as isolated mammal teeth, it may be necessary to set up a screen-washing operation on site. **MM BIG GEO-3**: Fossil remains collected during the monitoring and salvage portion of the Paleontological Resources Impact Program (PRIMP) shall be cleaned, repaired, sorted, and catalogued. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, will be deposited (as a donation) in a scientific institution with permanent paleontological collections located within San Bernardino County (or, if no repository is available, adjacent Counties). A final data recovery report shall be completed by a qualified paleontologist that outlines the results of the paleontological monitoring program. This report shall include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils. The report shall be submitted to the implementing entity and City upon completion.	
5.8 Greenhouse Gas Emissions	Direct or indirect greenhouse gas emissions	BIG would have construction-related and operational impacts from GHG emissions but overall would enhance regional goods movement efficiency and would reduce environmental impacts from regional truck and train traffic, in furtherance of the State Rail Plan. Construction would generate greenhouse gas emissions from equipment, vehicle trips, and rail activities, although these temporary impacts would be minimized through incorporation of mitigation measures identified in **Section 5.3: Air Quality**. After completion, operational emissions would occur from rail yard equipment, locomotives, a small number of heavy-duty trucks, and building energy use. However, BIG would reduce truck trips, resulting in reduced greenhouse gas emissions	Potentially Significant	**MM BIG AQ-3: Reduce Exhaust Emissions from Off-Road Construction Equipment.** **MM BIG AQ-4: Renewable Diesel (Construction).** **MM BIG AQ-5: Reduce Exhaust Emissions from On-Road Construction Equipment.** **MM BIG AQ-8: Renewable Diesel RTG Cranes.** **MM BIG AQ-9: Truck Idling Limits and Truck Route Signage.** **MM BIG AQ-10: Tier 4 Emergency Back-Up Generators.** **MM BIG AQ-13: Electric Landscape Equipment.** **MM BIG AQ-14: Future EV Charging Infrastructure.** **MM BIG EN-1: On-site Renewable Electricity Generation**.	Less than Significant

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
		by enhancing rail transport efficiency, and would overall reduce greenhouse gas emissions. Further, through incorporation of mitigation identified in **Section 5.3: Air Quality** and **Section 5.6: Energy**, BIG would result in net reduced GHG emissions and impacts would be less than significant with air quality and energy mitigation incorporated.		**MM BIG EN-2: CALGreen Tier 2.**	
5.8 Greenhouse Gas Emissions	Consistency with applicable plans, policies or regulations that reduce GHGs	BIG would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.	Less than Significant	**MM BIG AQ-3: Reduce Exhaust Emissions from Off-Road Construction Equipment.** **MM BIG AQ-4: Renewable Diesel (Construction).** **MM BIG AQ-5: Reduce Exhaust Emissions from On-Road Construction Equipment.** **MM BIG AQ-8: Renewable Diesel RTG Cranes.** **MM BIG AQ-9: Truck Idling Limits and Truck Route Signage.** **MM BIG AQ-10: Tier 4 Emergency Back-Up Generators.** **MM BIG AQ-13: Electric Landscape Equipment.** **MM BIG AQ-14: Future EV Charging Infrastructure.** **MM BIG EN-1: On-site Renewable Electricity Generation**. **MM BIG EN-2: CALGreen Tier 2.**	Less than Significant
5.9 Hazards, Hazardous Materials, and Wildfire	Hazards concerning routine transport, use, or disposal of hazardous materials	BIG construction could result in temporary significant impacts regarding hazards to the public or environment from routine transport, use, or disposal of hazardous materials; however, impacts would be less than significant with incorporation mitigation identified in **Section 5.9: Hazards, Hazardous Materials, and Wildfire**.	Potentially Significant	**MM BIG HAZ -1: Limited Soil Management Plan**. Prior to construction commencement, the implementing entity shall retain a qualified environmental consultant to prepare a Limited Soil Management Plan (SMP) for only areas considered as RECs within the BIG footprint. The SMP shall establish procedures for identification and management of impacted and clean soil, segregation, and management of impacted soil in accordance with regulatory requirements, transportation of impacted soil to an off-site disposal facility licensed to accept such soil, and identification and management of construction debris during excavation, grading, and construction activities to be completed within the BIG footprint. The SMP shall be submitted to the City of Barstow Building and Safety Division for review and approval. The SMP shall include the following: ▪ Procedures for identification, handling, reporting, and removal of the known or unknown ASTs/USTs, piping, dispensers, or other storage tank components that may be encountered (see MM BIG HAZ-3). ▪ Health and safety measures for when performing demolition, grading, or other construction activities, which may include but are not limited to, personal protective equipment and periodic work breathing zone monitoring for volatile organic	Less than Significant

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. This will be documented through a health and safety plan as it pertains to on-site workers that may come in contact with contaminated soil. ▪ The limited SMP shall be prepared and executed for point source areas based on the Phase I and II ESA reports, which define soil, soil vapor, and groundwater impacts throughout the BIG footprint. The limited SMP shall require the timely testing and sampling of soils so that contaminated soils can be separated from inert soils for proper disposal versus reused on the site. The limited SMP shall specify the testing parameters and sampling frequency as well as transportation and disposal requirements. If groundwater is anticipated to be encountered within collocated areas of the limited SMP, then provisions for groundwater management shall be considered within the limited SMP. ▪ During BIG construction, the implementing entity's contractor shall remove and properly dispose of impacted materials in accordance with the provisions of the limited SMP. If soil is stockpiled prior to disposal, it will be managed in accordance with the SMP and BIG's Storm Water Pollution Prevention Plan, prior to its transfer for treatment and/or disposal.	
5.9 Hazards, Hazardous Materials, and Wildfire	Hazards concerning release of hazardous materials into the environment through reasonably foreseeable upset and accident conditions	BIG construction could create a potentially significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; however, potential impacts would be less than significant with incorporation of mitigation measures identified in **Section 5.3: Air Quality** and **Section 5.9: Hazards, Hazardous Materials, and Wildfire**.	Potentially Significant	**MM BIG AQ-1: Fugitive Dust Emissions.** **MM BIG HAZ -1: Limited Soil Management Plan**. **MM BIG HAZ-2: Water Well Abandonment.** The intent for water well abandonment is to ensure that wells associated with the former residential operations within BIG are properly sealed and abandoned. Well abandonment or reuse treatment will require adherence to State RWQCB and regional Certified Unified Program Agency (CUPA) guidelines for well abandonment if wells are not planned to be used for future development. **MM BIG HAZ-3: AST or UST Removal**. AST and UST removal is intended to provide specific sampling and removal procedures for AST/USTs known or unknown at the start of construction. Prior to demolition permit issuance, the implementing entity shall demonstrate to the Barstow Department of Building and Safety and San Bernardino County Fire Protection District Hazardous Materials Division (CUPA) that a licensed contractor authorized to remove the above ground/USTs has been retained. The ASTs/USTs shall include the required permitting, soil sampling testing, and reporting the CUPA. If soil contamination exists, then impacted soils shall be removed and handled properly according to the Limited Soil Management Plan (see **MM BIG HAZ-1**). If previously unidentified USTs and/or ASTs are discovered during demolition or any ground disturbing activities, all construction within a 30-feet radius exclusion zone of the unidentified USTs and/or ASTs shall stop work. Implementation of proper permitting, cleaning, sampling, and reporting as described above shall be completed. **MM BIG HAZ-4: Data Gaps Requiring Further Environmental Site Assessment.** Prior to the issuance of a grading permit, the Applicant shall conduct assessment in accordance with ASTM standards to address potential environmental concerns identified at PEC sites	Less than Significant

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				identified within the BIG footprint. Documentation shall include clearance or other forms of approval from responsible regulatory agencies, as warranted, confirming that the site conditions are suitable for the intended use and that any potential risks have been mitigated to a level that is safe for construction and future occupancy.	
5.9 Hazards, Hazardous Materials, and Wildfire	Hazardous emissions or handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	BIG would handle hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school; however, there would be no increase in risk over existing conditions. Impacts would be less than significant with incorporation of mitigation measures detailed in **Section 5.9: Hazards and Wildfire**.	Potentially Significant	**MM BIG HAZ -1: Limited Soil Management Plan**. **MM BIG HAZ-2: Water Well Abandonment.** **MM BIG HAZ-3: AST or UST Removal**.	Less than Significant
5.9 Hazards, Hazardous Materials, and Wildfire	Located on a list of hazardous materials sites compiled pursuant to CGC § 65962.5	BIG is located on a site which is included on a list of hazardous materials sites compiled pursuant to CGC § 65962.5. However, with incorporation of mitigation identified in **Section 5.9**, impacts would be less than significant.	Potentially Significant	**MM BIG HAZ-2: Water Well Abandonment.**	Less than Significant
5.12 Noise	Ambient noise levels	BIG would result in a significant and unavoidable impact concerning noise during 33 kV line construction due to temporary noise barrier infeasibility and nighttime construction noise despite incorporation of mitigation measures identified in **Section 5.12: Noise and Vibration**. BIG operational noise would also result in a significant and unavoidable impact, as long-term operational noise levels would exceed applicable exterior/interior noise standards and/or result in a substantial noise increase at nearby sensitive receptors.	Potentially Significant	**MM BIG NOI-1: Construction Noise Logistics Plan.** Prior to construction, the implementing entity shall demonstrate to the satisfaction of the City of Barstow Director of Public Works or City Engineer that BIG includes a Nighttime Construction Noise Logistics Plan. The Construction Noise Logistics Plan shall identify the specific construction activity areas, list of construction equipment to be used during nighttime construction and include noise reduction measures to minimize nighttime construction noise levels at nearby residences to the extent feasible. Noise reduction measures may include, but are not limited to, the following: ▪ Install a temporary construction site sound barrier near the noise source. ▪ Prohibit unnecessary idling of internal combustion engines. Post signs at gates and other places where vehicles may congregate reminding operators of the State's Airborne Toxic Control Measure (ATCM) limiting idling to no more than 5 minutes. ▪ Utilize "quiet" air compressors and other stationary noise sources where technology exists. ▪ Construction contracts specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State required noise attenuation devices. ▪ Property owners and occupants located within 300 feet of BIG footprint shall be mailed a notice, at least 15 days prior to commencement of nighttime construction activities, regarding the construction schedule of BIG. A sign, legible at 50 feet shall also be posted at BIG's construction site. All notices and signs shall be reviewed and approved by the Director of Planning, Building and Code Enforcement or Director's designee, prior to mailing or posting and shall indicate the dates and duration of construction activities, as well as provide a contact name and a telephone number for the Noise Disturbance Coordinator where residents can inquire about the construction process and register complaints.	Significant and Unavoidable

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
				▪ Prior to construction, the implementing entity's contractor shall provide evidence that at all times during construction activities and on-site construction staff member will be designated as a Noise Disturbance Coordinator. The Noise Disturbance Coordinator is responsible for responding to complaints about construction noise. When a complaint is received, the Noise Disturbance Coordinator shall determine the cause (e.g., starting too early, bad muffler, etc.), implement reasonable measures to resolve the complaint, and document actions taken. All notices sent to residential units within 300 feet of the construction site and all signs posted at the construction site, shall include the contact name and the telephone number for the Noise Disturbance Coordinator. **MM BIG NOI-2: Noise Barriers.** The implementing entity shall construct three noise barriers as listed below to mitigate BIG's noise impacts: ▪ A 10-foot-high, approximately 470-foot-long noise barrier surrounding the substation in the northeastern portion of the solar farm (BAR-3); and ▪ A 14-foot-high, approximately 150-foot-long acoustic noise barrier along the eastern and southern boundary the emergency generators in the northeastern portion of the intermodal facility (BAR-5). To be effective, the barriers shall be constructed with a solid material with no gaps in the face of the wall or at the base. Openings or gaps between sound wall materials or the ground substantially reduce the effectiveness of the noise barrier. All noise control barrier walls shall be designed to preclude structural failure due to such factors as winds, shear, shallow soil failure, earthquakes, and erosion. The City Building Official shall review and approve all proposed designs prior to the issuance of a building permit. The approximate locations of the noise barriers are provided in **Figure 5.12 17** and **Figure 5.12 18.**	
5.16 Tribal Cultural Resources	Tribal cultural resource listed or eligible for listing in the California Register or in a local register of historical resources	Impacts to tribal cultural resources that would occur as a result of BIG was assessed through consultation with Native American tribes, with support provided via the Cultural Resources Assessment discussed in **Section 5.5: Cultural Resources**. A total of 68 prehistoric cultural resources were identified within the BIG footprint, 19 of which are recommended eligible for listing in the CRHR/NRHP. The results of consultation indicate that all prehistoric archaeological resources, which include the 19 eligible resources, are tribal cultural resources. Additionally, BIG maintains a high sensitivity for previously unrecorded buried or surface-level tribal cultural resources to be impacted by construction activities. As such, despite	Potentially Significant	**MM BIG CUL-1: Phase III Data Recovery.** **MM BIG CUL-2: Cultural Resources Monitoring Plan.** **MM BIG CUL-3: Worker's Environmental Awareness Program.** **MM BIG CUL-4: Construction Monitoring.** **MM BIG CUL-5. Inadvertent Discoveries of Cultural Resources.** **MM BIG CUL-6: Reporting Protocols.** **MM BIG CUL-7: Public Education.MM BIG CUL-8: Inadvertent Discoveries of Human Remains.** **MM BIG CUL-8: Inadvertent Discoveries of Human Remains.**	Significant and Unavoidable

Resource Area	Topic	Impact	Significance Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
		compliance with the established regulatory framework and implementation of mitigation identified in **Section 5.5: Cultural Resources**, BIG would cause a substantial adverse change in the significance of a tribal cultural resource, and impacts would be significant and unavoidable.			
5.16 Tribal Cultural Resources	Tribal cultural resource that the lead agency considers the significance of to a California Native American tribe	Impacts to tribal cultural resources that would occur as a result of BIG was assessed through consultation with Native American tribes, with support provided via the Cultural Resources Assessment discussed in **Section 5.5: Cultural Resources**. A total of 68 prehistoric cultural resources were identified within the BIG footprint, 19 of which are recommended eligible for listing in the CRHR/NRHP. The results of consultation indicate that all prehistoric archaeological resources, which include the 19 eligible resources, are tribal cultural resources. Additionally, BIG maintains a high sensitivity for previously unrecorded buried or surface-level tribal cultural resources to be impacted by construction activities. As such, despite compliance with the established regulatory framework and implementation of mitigation identified in **Section 5.5: Cultural Resources**, BIG would cause a substantial adverse change in the significance of a tribal cultural resource, and impacts would be significant and unavoidable.	Potentially Significant	**MM BIG CUL-1: Phase III Data Recovery.** **MM BIG CUL-2: Cultural Resources Monitoring Plan.** **MM BIG CUL-3: Worker's Environmental Awareness Program.** **MM BIG CUL-4: Construction Monitoring.** **MM BIG CUL-5. Inadvertent Discoveries of Cultural Resources.** **MM BIG CUL-6: Reporting Protocols.** **MM BIG CUL-7: Public Education.MM BIG CUL-8: Inadvertent Discoveries of Human Remains.** **MM BIG CUL-8: Inadvertent Discoveries of Human Remains.**	Significant and Unavoidable
5.17 Utilities and Service Systems	Relocation or construction of new or expanded water, wastewater/wastewater treatment, electric power, natural gas, or telecommunications facilities	BIG construction and operations would require relocation and construction of new water, wastewater, and stormwater conveyance infrastructure and utility infrastructure, the impacts thereof would result in significant unavoidable impacts despite compliance with the established regulatory framework and implementation of the mitigation measures identified throughout this Draft EIR.	Potentially Significant	Mitigation measures provided in **Section 5.1** through **Section 5.17** are proposed to minimize environmental impacts associated with BIG development inclusive of utility and service system facilities; see **Section 5.1** through **Section 5.17** of this EIR.	Significant and Unavoidable

Attachment 4

BNSF's Commitment to Labor Code Compliance

Lena Kent
General Director, Public Affairs

BNSF Railway
740 E. Carnegie Dr.
San Bernardino, CA 92408
Lena.Kent@bnsf.com

January 30, 2026

VIA EMAIL

Ms. Natalie Kuffel
Deputy Director
Governor's Office of Land Use and Climate Innovation
1400 10th Street
Sacramento, CA 95814
Natalie.kuffel@lci.ca.gov

RE: BNSF's Commitment to Labor Code Compliance

Dear Ms. Kuffel,

In connection with its application for certification of the BIG Project in San Bernardino County, California, as a Transportation-Related Infrastructure Project under SB 149, please note that BNSF operations are governed by the federal Railway Labor Act. BNSF certifies that construction of the transportation-related Project will create high-wage, highly skilled jobs that pay according to the prevailing wage requirements for public works projects under Section 1720 of the Labor Code and comply with applicable provisions of Chapter 1 (commencing with Sections 1720) of Part 7 of Division 2 of the Labor Code. While certain portions of the BIG Project would be constructed by third parties (e.g., utility extensions), all components of the BIG Project constructed by BNSF will comply with the applicable provisions under Section 1720 of the Labor Code or be performed by BNSF union labor in accordance with the federal Railway Labor Act. Although BNSF can't control construction by third parties, the current estimated third party construction cost represents approximately 2% of the total project construction cost. Total construction cost does not include unknown tenant/occupant improvements performed inside the warehouses. Specific tenants/occupants of the warehouses are yet to be identified, and therefore tenant improvements are unknown at this time.

The attached Project Labor Agreements clearly define the labor forces that will be used on the project.

Sincerely,

Lena Kent
General Director Public Affairs

Appendix A – Project Labor Agreements

Lena Kent
General Director, Public Affairs

BNSF Railway
740 E. Carnegie Dr.
San Bernardino, CA 92408
Lena.Kent@bnsf.com

Appendix A
Project Labor Agreements

COMMUNITY WORKFORCE AND TRAINING AGREEMENT

FOR THE

BARSTOW INTERNATIONAL GATEWAY LOGISTICS PROJECT

IN THE

CITY OF BARSTOW AND COUNTY OF SAN BERNARDINO CALIFORNIA

1. INITIAL PROVISIONS

1.1. This Community Workforce and Training Agreement ("Agreement") is entered into by BNSF Railway Company, a Delaware corporation ("Primary Employer"), and UA Plumbers and Pipefitters Union, Local 364, UA Sprinkler Fitters Union, Local 669, International Brotherhood of Electrical Workers Union, Local 477, Sheet Metal Workers Union, Local 105, and the District Council of Ironworkers of the State of California and Vicinity, individually referred to as a "Union" and collectively referred to as the "Unions."

1.2. The Barstow International Gateway Logistics Project is the logistics portion of the Barstow International Gateway Project ('the BIG Project"). The BIG Project proposes the construction of an approximately 4,216-acre integrated rail facility consisting of an intermodal railyard facility and warehouses for transloading freight from international containers to domestic containers. The Barstow International Gateway Logistics Project encompasses all portions of the BIG project other than the rail and railyard facilities covered by the Barstow International Gateway Railyard Project CWTA executed in 2024 and includes approximately 9,000,000-square feet of warehouses and associated infrastructure and related improvements (the "Project"). The Project site is located on approximately 4,216 acres generally bounded by the Mojave River to the north, West Main Street (also referred to as Route 66 & National Trails Highway) to the south, Lenwood Road to the east, and Hinkley Road to the west (Assessor Parcel Numbers: 0421-041-67 through -111; 0421-041-114 through -145; and 0421-041-148 through -335) in the City of Barstow and the County of San Bernardino, California (the "Project Real Property"). BNSF Railway Company, a Delaware corporation ("Owner"), owns the Project Real Property and controls the site at which the Project will be constructed.

1.3. Primary Employer is a railway and logistics corporation responsible for managing the entitlement, development, and construction of the Project through its employees, partners, or agents. Primary Employer is a construction industry employer that both employs construction workers directly and contracts out construction work to subcontractors. Primary Employer will control labor relations on the Project by entering into this Agreement, which establishes the terms and conditions of employment for employees performing Covered Work on the Project, and, consistent with the normal and customary practice of its member companies and individuals, by directly subcontracting construction work, acting as or directing the general contractor on the Project, and by making or directing all decisions within the scope of the general contractor's authority, including, but not limited to, preparing all bid specifications and bid packages for construction work on the Project. Subject to the provisions of this Agreement and the applicable Master Labor Agreements (as defined in Section 1.5), Primary Employer shall retain the right to control and coordinate all project construction work by determining work scheduling, including uniform start times, the necessity for and the times of shift

work, by directly enforcing any drug and alcohol abuse policy which is agreed to by any contractor or subcontractor and the Union, and otherwise directly removing any employee whether employed directly or by any contractor or subcontractor for breach of reasonable rules promulgated by Primary Employer governing conduct on the job. Primary Employer shall have the right upon receipt of the written complaint of any employee to order corrective action necessary to maintain reasonable and lawful standards for workplace health and safety. Primary Employer may act as the coordinator, participate in pre-job conferences and mark-up meetings, and, at its option, participate in the resolution of any grievances. Primary Employer represents and warrants that it has been authorized by the Owner to enter into this Agreement with respect to the Project.

1.4. As provided below, all project managers, construction managers, contractors, subcontractors or other persons or entities assigning, awarding or subcontracting Covered Work, or authorizing another party to assign, award or subcontract Covered Work, or performing Covered Work, will be subject to this Agreement by executing the attached Employer Agreement to be Bound (all of whom, including the Primary Employer, are individually and collectively referred to as "Employer" or "Employers").

1.5. The Unions are labor organizations in the plumbing and pipefitting, electrical, mechanical, sheet metal, sprinkler fitting, and ironworking trades whose members are construction industry employees who generally work in close proximity to one another at construction job sites and whose jobs are closely related and coordinated. Each of the Unions is a party to a multi-employer collective bargaining agreement ("Master Agreement") that covers the geographical area of the Project. Where the term "Master Agreement" is used, it means the existing Master Agreement currently in effect as to each of the Unions.

1.6. It is understood and agreed by and between the parties to this Agreement that the final plans for the Project may be subject to design changes and modifications, or may be revised as a result of the approval by those public agencies possessing lawful approval authority over the Project, and that this Agreement applies to the Project as it is finally approved by such entities and agencies. In addition, the general description and location of the Project Real Property and the Assessor Parcel Numbers described in Section 1.2 are based on the best information available at the time of the execution of this Agreement and shall not limit the scope of the Agreement should the portion of the Project controlled by the Primary Employer, or an assignee or affiliate of the Primary Employer, now or in the future, include additional or different Assessor Parcel Numbers. This Agreement does not apply to future redevelopment at the Project site subsequent to substantial completion of the Project.

2. PURPOSE

2.1. A large labor pool represented by the Unions will be required to execute the work involved in the Project. This Agreement is intended by the parties to ensure that a sufficient supply of skilled craft workers is available at the Project and that all construction work and related work performed by the members of the Unions on this Project shall proceed continuously, without interruption, in a safe and efficient manner, economically, with due consideration for the protection of labor standards, wages and working conditions. In furtherance of these purposes and to secure optimum productivity, harmonious relations between the parties and the orderly performance of the work, the parties have, through collective bargaining, established in this Agreement adequate and fair wage levels and working conditions and measures to secure labor peace that will be binding on all Employers and the Unions during the term of the Agreement.

2.2. A central purpose of the parties in executing this Agreement is to guarantee labor peace on the Project by minimizing the jobsite friction that could arise at a common-situs jobsite when Union employees are required to work alongside non-union employees in their own craft or in those other crafts with which they generally work in close proximity performing work that is closely related and coordinated, and by ensuring there will be no disruption of the work should any non-union workers be present to perform work outside the scope of the Agreement. This Agreement accomplishes these objectives by requiring that all Covered Work be performed by workers who are Union members. For any work that falls outside the scope of this Agreement or that is excluded from Covered Work, as defined herein, the Primary Employer further protects itself from the potential effects of jobsite friction by prohibiting all strikes, picketing or similar activity for any reason whatsoever.

2.3. In the interest of the future of the construction industry in the local area, of which the Unions are a vital part, and to maintain the most efficient and competitive posture possible, the Unions pledge to work and cooperate with the management of the Project to produce the most efficient utilization of labor and equipment in accordance with this Agreement. The Unions and the Employers and contractors submitting bids to work on the Project agree to meet and identify all mutually agreed upon measures that can be taken under the applicable Master Agreements to reduce the labor costs over the costs that would otherwise apply in the absence of such measures. Further, the Unions agree to meet with the Primary Employer to identify and discuss construction cost saving strategies (the measures to be considered shall include, but not be limited to, reducing the ratio of apprentice and journeymen to other workers for the Project to the lowest level permitted by law) in order to achieve Primary Employer's objectives for the cost and quality of the work to the greatest extent possible.

3. SCOPE OF AGREEMENT

3.1. This Agreement covers all on-site construction, alteration or repair of buildings, structures and other works and related activities for the Project which are within the scope of the craft jurisdiction of the Unions and which are a part of the Project and are performed in conjunction with the original construction the Project, all construction or improvements authorized by the public agency approvals granted for the Project, and all on-site fabrication work over which the Primary Employer or other Employer possesses the right of control. On-site fabrication work includes work done for the Project in temporary yards or areas near the Project. All of the work described in this Section that is within the scope of a Union's Master Agreement is within the scope of this Agreement and is referred to hereafter as "Covered Work".

3.2. Exclusions: the following shall not be considered Covered Work ("Non-Covered Work") on the Project:

a. Construction projects that are not within the definition of the Project;

b. Work of non-manual employees, including but not limited to superintendents; supervisors; staff engineers; inspectors; quality control and quality assurance personnel; building official construction inspectors; geologists; timekeepers; mail carriers; clerks; office workers; messengers; guards; safety personnel; emergency medical and first aid technicians; and other professional, engineering, administrative, supervisory and management employees;

c. Except as provided in Section 3.1, all off-site manufacture and handling of materials, equipment or machinery except at dedicated or temporary staging, lay down or storage areas;

d. Design teams (including, but not limited to architects, engineers, and master planners), or any other consultants for the Owner (including, but not limited to, project managers and construction managers and their employees) and their sub-consultants, and other employees of professional service organizations, not performing construction craft labor covered by a Master Agreement;

e. Work performed by state, county, or other governmental bodies or their contractors, or by public utilities, or their contractors;

f. Off-site maintenance of leased equipment;

g. Work performed by employees of an Original Equipment Manufacturer ("OEM") on the OEM's equipment, if required by the standard warranty agreement between the OEM and the Primary Employer in order to maintain the warranty or guarantee on such equipment consistent with industry practice. A copy of such OEM agreement shall be provided to the applicable Union upon request;

h. Work on the Project performed directly by Primary Employer or Owner with their own employees as a result of a threat to life, limb, or property or other emergency or circumstances requiring immediate action;

i. All non-construction support services contracted by any Employer or the Owner in connection with the Project;

j. Tenant improvement work, except for tenant improvements performed or subcontracted by Primary Employer as part of the original construction of the Project;

k. Installation of temporary chain link fence;

1. Installation of towel racks, paper holders, glass shelves, hooks, mirrors, cabinets (including backing and necessary supports) and other similar bathroom, toilet room and shower room non-plumbing accessories;

m. Wood roofs, but not including architectural sheet metal work or structural iron work;

n. Demolition work;

o. All delivery, movement, placement, assembly and installation of movable furniture, fixtures and equipment that do not have a permanent connection to the building but are needed for post-construction occupancy and operations, such as chairs, desks, partitions and the like (FF&E);

p. All jobsite trailer systems; and

q. Landscape and irrigation work.

3.3. The Agreement shall not apply to material suppliers or delivery by any means of material, supplies, or equipment required, to any point of delivery.

3.4. This Agreement is not intended to, and shall not, affect the operation or the maintenance of the Project after it is constructed. The Agreement shall cease to apply, and shall not apply, to any maintenance, operations or similar functions

undertaken by the Owner at the Project work site once the construction work by the Employers covered under the Agreement has been completed and accepted by the Owner, other than warranty, repair, alteration, punch list, and similar work that is the responsibility of, and performed by, an Employer under the original contract for Covered Work.

3.5. There shall be no limitation or restriction upon the choice of materials or upon the full use and installation of equipment, machinery, package units, factory precast, prefabricated, or preassembled materials, tools, or other labor-saving devices. The use of new technology, equipment, machinery, tools and/or labor-saving devices and methods of performing work may be initiated by Employers in their respective discretion from time to time. The Unions agree that they will not in any way restrict the implementation of such new devices or methods of work. If there is any disagreement between an Employer and the Unions, concerning the manner or implementation of such device or method of work, the implementation shall proceed as directed by the Employer and the Unions shall have the right to arbitrate the dispute as set forth in the Agreement.

3.6. Also excluded from the definition of Covered Work under this Agreement is all work on rail and railyard facilities as defined in the Barstow International Gateway Railyard Project CWTA executed in March 2024.

3.7. This Agreement shall be binding only on the signatory Employers, and it shall not apply to their parents, affiliates, or subsidiaries, unless such parent, affiliate or subsidiary meets the definition of Employer set forth in Section 1.4 of this Agreement.

4. SUBCONTRACTING

4.1. Primary Employer and each other Employer, agree that they will contract for the assignment, awarding or subcontracting of Covered Work, or authorize another party to assign, award or subcontract Covered Work, only to a person, firm, corporation, or other entity that, at the time the contract is executed, has become a party to this Agreement by executing Attachment A, the Employer Agreement to be Bound.

4.2. Primary Employer and each other Employer, agree that they will contract for the performance of Covered Work only with a person, firm, corporation, or other entity that is both a party to this Agreement and signatory to the Master Agreement with the Union covering the geographic area of the Project and having traditional and customary jurisdiction over the work performed by that contractor or subcontractor. Any Employer (including the Primary Employer) performing Covered Work on the Project with its own employees shall, as a condition to working on the Project, at the time the work is performed, be signatory to and perform all

work under the terms of this Agreement and the applicable Master Agreement. Employers (other than Primary Employer) shall become a party to this Agreement by executing Attachment A, the Employer Agreement to be Bound.

4.3. Nothing in this Agreement shall in any manner whatsoever limit the rights of the Primary Employer, or any other Employer, to subcontract work or to select its contractors or subcontractors, provided, however, that all Employers, at all tiers, performing Covered Work shall be required to comply with the provisions of this Agreement. Primary Employer and every other Employer shall notify each of its contractors and subcontractors of the provisions of this Agreement, and require as a condition precedent to the award of any construction contract or subcontract for the performance of Covered Work, or allowing any subcontracted Covered Work to be performed, that all such contractors and subcontractors at all tiers become signatory to this Agreement and the applicable Master Agreement. Any Employer that fails to require in a contract or subcontract that an Employer become signatory to this Agreement as required by Section 4.1 or 4.2 shall be liable for any failure of that Employer, or any Employer at a lower tier, to comply with the provisions of this Agreement, including any contributions to any trust funds that the contractor or subcontractor, or any subcontractor to that subcontractor, fails to make.

5. MINIMUM BID REQUIREMENT

5.1. If an Employer hires a contractor or subcontractor directly and that contractor or subcontractor is already signatory to the applicable Master Agreement with the Union having jurisdiction over the work, none of the provisions of Sections 5.2 and 5.3 of Article 5 shall apply to that Employer's hiring of the contractor or subcontractor that is signatory to the Master Agreement with the Union having jurisdiction over the work.

5.2. The provisions of Article 4 shall not apply to the award of Covered Work if the Employer awarding that work does not receive bona fide bids on that work on or before the deadline for receiving such bids from at least three (3) persons, firms, or corporations that are signatory to a Master Agreement with the Union having jurisdiction over the work. For purposes of this Agreement, "bona fide" means a genuine and sincere bid submitted in good faith, without fraud, deceit, or collusion.

5.3. The provisions of Section 5.2 shall not apply unless the Employer seeking to invoke such provisions has strictly complied with all of the following bidding and notice requirements:

5.3.1. Provided written notice of the solicitation of bids to at least three (3) contractors that are signatory to the Master Agreement of the Union that has jurisdiction over the work and to such Union concurrently with the first bid solicitation and at least thirty (30) days in advance of the deadline for receipt of bids. The written notice shall: (a) identify the person to whom requests for bid specifications or other information regarding the bidding process should be directed; and (b) include the following statement in all capital letters: "30-DAY NOTICE OF SOLICITATION OF BIDS FOR THE BARSTOW INTERNATIONAL GATEWAY LOGISTICS PROJECT PURSUANT TO SECTION 5.3.1 OF THE BARSTOW INTERNATIONAL GATEWAY LOGISTICS PROJECT COMMUNITY WORKFORCE AND TRAINING AGREEMENT." The notice to the Union shall also include the names of all Union signatory contractors of the applicable Union that were sent the bid solicitation;

5.3.2. Provided the bid specifications, information and bidding requirements directly to any additional union-signatory contractors that the Union has requested receive the bid specifications and to any other union-signatory contractor requesting the bid specifications in a timely manner following such request;

5.3.3. Established the same bid specifications and requirements for any non-signatory contractor submitting a bid as were established for any union-signatory contractor submitting a bid, whether or not the non-union bid is submitted after the Primary Employer has successfully invoked the provisions of Section 5.2 due to a failure to receive three (3) bids from union-signatory contractors. The awarding Employer shall make such bid specifications and requirements available to any Union upon the request of such Union;

5.3.4. Established bid specifications and requirements that are consistent with the awarding Employer's usual and customary bidding process and requirements for similar projects, and that are also in accordance with standard industry practice in the Project area for such projects;

5.3.5. Provided notice to the Union having jurisdiction over the work at least three (3) business days prior to the deadline for receipt of bids that the Employer has not received bids from three (3) or more persons, firms or corporations signatory to a Master Agreement with the Union having jurisdiction over the work in accordance with Section 5.2. The written notice shall include the following statement in all capital letters: "THREE (3) DAY NOTICE OF FAILURE TO RECEIVE THREE (3) BIDS FOR THE BARSTOW INTERNATIONAL GATEWAY LOGISTICS PROJECT PURSUANT TO SECTION 5.3.5 OF THE

BARSTOW INTERNATIONAL GATEWAY LOGISTICS PROJECT COMMUNITY WORKFORCE AND TRAINING AGREEMENT." The notice shall also include the names of all Union signatory contractors of the applicable Union that have already submitted complete bids.

5.4. In the event that three (3) bids have been received from union-signatory contractors on or before the bid deadline, but the awarding Employer regards one or more of the bids to be incomplete or otherwise not fully in accordance with the bidding requirements, such bid or bids shall be conditionally accepted as meeting the requirements of Section 5.2 pending completion of the bid in accordance with the procedure set forth in this Section. The awarding Employer shall identify in writing the specific information required to complete the bid or otherwise satisfy the bidding requirements ("Incomplete Bid Statement"), and shall provide such Incomplete Bid Statement to the bidding contractor with a copy provided to the applicable Union. The Incomplete Bid Statement shall establish a reasonable time for submission of the additional information not to exceed ten (10) business days. If the bidding contractor has made a diligent effort to develop the requested information, but requires additional time to comply, the awarding Employer shall grant a reasonable extension of the deadline for submission of the additional information. If the bid remains incomplete at the new deadline for submission, the bid shall not be counted toward the three-bid minimum.

5.5. All notices to the Union(s) required under this Article must be given in writing by both: (a) email to the Business Manager of the applicable Union; and (b) by certified or registered mail, return receipt requested, or by a recognized overnight delivery service. The date that notice shall be deemed to have been made for the purpose of determining any deadlines under this Article shall be the date of delivery by mail or overnight delivery, as determined by the written verification of receipt if delivered by overnight delivery, or the date set forth on the return receipt if sent by certified or registered mail. The Employer shall contact the applicable Union to verify the current name, business email and business mailing address of the Union's Business Manager prior to sending notice.

6. WAGES

6.1. All employees performing Covered Work (including foremen and general foremen if covered by the applicable Master Agreements) shall be classified and paid wages and other payments and contributions made on their behalf to multi-employer trust funds, all in accordance with the then current multi-employer Master Agreements of the applicable Unions. If during the term of this Agreement, the Unions enter into a Community Workforce and Training Agreement with another Primary Employer or other Employer on a substantially similar project in San Bernardino County and that Community Workforce and Training Agreement provides for total compensation (wages, all paid benefits and contributions) on work

covered by this Agreement that is more favorable to that Employer than the total compensation contained in this Agreement, the Unions will offer the Primary Employer the opportunity to substitute such more favorable total compensation for that contained in this Agreement for such work.

6.2. All low voltage, sound or communication system work shall be performed pursuant to the most recent Southern California 9th District Sound and Communications Agreement of the International Brotherhood of Electrical Workers and the National Electrical Contractors Association.

7. WORKWEEK AND HOLIDAYS

7.1. The normal workweek shall be governed by the applicable Master Agreement. The workweek may be changed by mutual consent of the Unions and the Primary Employer.

7.2. Recognized holidays shall be as set forth in the applicable Master Agreements. In no event shall work be performed on Labor Day, except in cases involving an immediate threat to life or property. The recognized holidays may be changed by mutual consent of the Unions and the Primary Employer.

8. UNION RECOGNITION

8.1. The Employers recognize the Unions signatory to this Agreement as the sole and exclusive collective bargaining agents for their respective construction craft employees performing Covered Work for the Project, and further recognize the traditional and customary craft jurisdiction of the Unions.

8.2. All employees performing Covered Work shall be, or shall become and then remain, members in good standing of the Unions as a condition of employment on or before the eighth (8th) day of employment, or the eighth (8th) day following the execution of this Agreement, whichever is later.

8.3. It is agreed that the Unions shall be the source of all craft employees for Covered Work for the Project, except as provided in Section 8.5 below. Employers agree to be bound by the hiring hall rules and practices of the Unions and to utilize their registration facilities and referral systems.

8.4. Selection of applicants for referral to jobs shall be on a non-discriminatory basis. There shall be no discrimination against any employee or applicant for employment because of his or her membership or non-membership in the Union or based upon race, creed, color, sex, age or national origin of such employee or applicant.

8.5. If the referral facilities maintained by the Unions are unable to fill the requisition of the Employers for employees within a 48-hour period after such requisition is made (Saturdays, Sundays and holidays excluded), applicants for such requisition may be employed from any source.

8.6. The selection of Foremen and/or General Foremen for Covered Work shall be the responsibility of the Employer. The Employer may require Foremen to be working employees.

9. STRIKES AND LOCKOUTS

9.1. During the life of this Agreement, the Unions, their agents, their representatives and other persons employed by the Unions agree that they shall not incite, encourage, condone or participate in any strike, handbilling, walkout, slowdown, sit-down, stay-in, boycott, sympathy strike, picketing or other work stoppage for any cause whatsoever (including jurisdictional disputes) with respect to this Project; and there shall be no lockout by Primary Employer or any other Employer; and it is expressly agreed that any such action is in violation of this Agreement. In the event of a violation of this provision, any party shall be entitled to seek relief pursuant to the grievance procedures in Article 11.3, specifically including injunctive relief and monetary damages, to restrain any such action on the part of the violating party, and/or any of its agents, representatives, or other persons it employs and to recover damages. In the event of a violation of this provision, and provided that an Arbitrator appointed under Article 11.3 cannot convene a hearing within 48 hours of the violation, any party involved in the violation may seek temporary injunctive relief in court pending a ruling, either preliminary or final, by an Arbitrator, pursuant to the grievance procedures in Article 11.3, who shall have the authority to modify or dissolve any temporary order that has been issued by a court.

9.1.1. The Unions shall not be liable for acts of employees that it does not represent. The principal officer or officers of a Union will immediately instruct, order, and use the best efforts of his office to cause the employees the Union represents to cease any violations of the Article. A Union complying with this obligation shall not be liable for unauthorized acts of employees it represents.

9.2. Notwithstanding the provisions of Section 9.1 above, it is agreed that the Unions retain the right to withhold the services of their members from a particular contractor or subcontractor who fails to make timely payments to the Unions' benefit plans, or fails to timely pay its weekly payroll, in accordance with its agreements with the Unions; provided, however, that in the event the Unions or any of their members withhold their services from such contractor or subcontractor,

Primary Employer shall have the right to replace such contractor or subcontractor with any other contractor or subcontractor who executes the Agreement to be Bound in accordance with Section 4.2.

9.3. In the event that any applicable Master Agreement expires and the parties to that agreement fail to reach agreement on a new contract by the date of expiration, the Unions shall continue to provide employees to the Employers working on the Project under all the terms of the expired agreement until a new agreement is negotiated, at which time all terms and conditions of that new agreement shall be applied to Covered Work at the Project, except to the extent they conflict with any provision of this Agreement. In addition, if the new labor agreement provides for retroactive wage or benefit increases, then any Employer shall pay to its employees who performed Covered Work at the Project during the period between the effective dates of such labor agreements, an amount equal to such wage and benefit increases established by the new labor agreement for such work performed.

10. JOINT LABOR/MANAGEMENT MEETINGS

10.1. A Pre-Job Conference will be held prior to the commencement of work to establish the scope of work in each contractor's contract. When a contract has been let to a contractor(s) covered by this Agreement, a Mark-Up Meeting shall be required upon request of the Unions, contractor, or the Primary Employer.

10.2. The Primary Employer will schedule and may attend all Pre-Job Conferences and Mark-Up Meetings.

11. GRIEVANCE PROCEDURE

11.1. It is mutually agreed that any question arising out of and during the term of this Agreement involving its interpretation and application (other than successorship) shall be considered a grievance. Questions between or among parties signatory to a Master Agreement arising out of or involving the interpretation of a Master Agreement shall be resolved under the grievance procedure provided in that Master Agreement.

11.2. A grievance shall be considered null and void if not brought to the attention of the Employer within ten (10) working days after the incident that initiated the alleged grievance occurred or was discovered, whichever is later.

11.3. Grievances shall be settled according to the following procedure:

Step 1

The Steward and the grievant shall attempt to resolve the grievance with the craft supervisor within five (5) working days after the grievance has been brought to the attention of the Employer.

Step 2

In the event the matter remains unresolved in Step 1 above after five (5) working days, within five (5) working days thereafter, the alleged grievance may be referred in writing to the Business Manager of the Craft Unions and the Labor Relations representative of the Employer for discussion and resolution. A copy of the written grievance shall also be mailed/faxed to the Primary Employer.

Step 3

In the event the matter remains unresolved in Step 2 above within five (5) working days, within five (5) working days thereafter, the grievance may be referred to the representative of the Craft Unions and the Manager of Labor Relations of the Employer or the Manager's designated representative, and the Primary Employer for discussion and resolution.

Step 4

If the grievance is not settled in Step 3 above within five (5) working days of referral, within five (5) working days thereafter, either party may request the dispute be submitted to arbitration or the time may be extended by mutual consent of both parties. The request for arbitration and/or the request for an extension of time must be in writing with a copy to the Primary Employer. Should the parties be unable to mutually agree on the selection of an arbitrator, selection for that given arbitration shall be made by seeking a list of seven (7) labor arbitrators with construction experience from the Federal Mediation and Conciliation Service and alternately striking names from the list of names on the list until the parties agree on an arbitrator or until one name remains. The first party to strike a name from the list shall alternate between the party bringing forth the grievance and the party defending the grievance.

11.4. The Arbitrator selected pursuant to Section 11.3 ("the Arbitrator") shall conduct a hearing at which the parties to the grievance shall be entitled to present testimonial and documentary evidence. Hearings will be transcribed by a certified court reporter. The parties shall be entitled to file written briefs after the close of the hearing and receipt of transcript.

11.5. The Arbitrator's decision shall be submitted in writing and shall be final and binding on all parties signatory to this Agreement. The expense of arbitration, including the cost of the Arbitrator and a court reporter, if any, and the cost of necessary expenses required to pay for facilities for the hearing of cases, shall be borne equally by both parties. The Arbitrator's decision shall be confined to the question posed by the grievance, and the Arbitrator shall not have the authority to modify, amend, alter, add to, or subtract from any provision of this Agreement. The Arbitrator shall have the authority to utilize any equitable or legal remedy to prevent and/or cure any breach or threatened breach of this Agreement. The Arbitrator's decision shall be final and binding as to all parties signatory to this Agreement.

11.6. The Primary Employer and other Employers, as well as the Unions, may bring forth grievances under this Article.

11.7. Either party to a grievance may invite Primary Employer to participate in resolution of a grievance. Primary Employer may, at its own initiative, participate in Steps 1 through 3 of the grievance procedure.

11.8. Any of the time periods set forth in this Article may be extended by mutual, written consent of both parties.

12. JURISDICTIONAL DISPUTES

12.1. The assignment of Covered Work will be solely the responsibility of the Employer performing the work involved; and such work assignments will be in accordance with this Agreement and the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.

12.2. All jurisdictional disputes between or among the Building and Construction Trades Unions and their employees, parties to this Agreement shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding, and conclusive on the Employers and Unions parties to this Agreement.

12.3. All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature, and the Employer's assignment shall be adhered to until the dispute is resolved. Individuals violating this section shall be subject to immediate discharge. Each Employer will conduct a pre-job conference with the Unions prior to commencing work. The Primary Employer and any general contractor will be advised in advance of all such conferences and may participate if they wish. Pre-job conferences for different Employers may be held together.

13. SUCCESSORSHIP AND SURVIVABILITY

13.1. The subcontracting obligations described in Article 4 are independent obligations of Primary Employer ("Obligations") which shall survive any full or partial termination of Primary Employer's involvement in the Project for any reason, including: (i) any full or partial termination or transfer of Primary Employer's right to control and coordinate construction work on the Project Real Property; (ii) any full or partial termination or transfer of a contract, if any, between Primary Employer and any Project owner for any Covered Work; (iii) the sale or other transfer of all or any portion of the Project Real Property or any interest in the Project Real Property by any Project owner; or (iv) any other event that results in the replacement of Primary Employer with another contractor.

13.2. The parties agree that: (i) if Primary Employer's involvement in the Project is terminated as described in Section 13.1; and (ii) Covered Work is performed by a contractor or subcontractor that is not in compliance with the provisions of Article 4, then Primary Employer shall pay liquidated damages in accordance with Section 13.3 to compensate for the actual damages caused by reason thereof. The parties agree that such damages would be unreasonably difficult, costly, inconvenient, or impracticable to calculate and, accordingly, they agree to liquidated damages, which bear a reasonable relationship to the actual harm suffered by the Union and its members, as provided in Section 13.3 ("Liquidated Damages").

13.3. In the event that Liquidated Damages are owed pursuant to Paragraph 13.2 above, Primary Employer shall pay an amount equal to the journeyman total compensation package of the applicable Union for each hour that work was performed on the Project within the scope of this Agreement by employees of contractors or subcontractors who are not signed to this Agreement. The Liquidated Damages shall be paid as follows: one half (1/2) of the total amount to the qualified pension plan and one half (1/2) to the qualified health and welfare plan of the Union having jurisdiction over the work performed by the contractor(s) or subcontractor(s) not signatory to this Agreement. The parties agree that the Unions shall enforce, collect, and receive Liquidated Damages pursuant to Article 13 on behalf of their qualified pension plans and their qualified health and welfare

plans. The qualified pension plans and the qualified health and welfare plans shall have no right to enforce independently the provisions of this Agreement, including, but not limited to, the Liquidated Damages provisions contained in Article 13.

13.4. Primary Employer shall be released from all obligations under this Agreement with respect to all or any portion of the Project, including liability for the payment of Liquidated Damages, and shall have no liability for any breach of this Agreement by a successor, upon Primary Employer's receipt of a fully executed release by the Unions substantially in the form of the release attached to either a "Full Assumption Agreement" (attached hereto as Attachment B(1)) or "Partial Assumption Agreement" (attached hereto as Attachment B(2)) (each, a "Release"). Such Release shall not be withheld if, under all the circumstances, the Unions, in the exercise of their reasonable judgment, determine that the successor has the legal capacity and financial means to complete the Project or portion of the Project and to comply with the successor Primary Employer's obligations and undertakings under this Agreement, including any obligation to pay Liquidated Damages.

13.5. This Article 13 shall be enforceable in any court of competent jurisdiction, and shall not be subject to the grievance procedure set forth in Article 11.

14. GENERAL PROVISIONS

14.1. If any article or provision of this Agreement shall be declared invalid, inoperative, or unenforceable by any competent authority of the executive, legislative, judicial or administrative branch of the federal or state government, the Employers and the Unions shall suspend the operation of such article or provisions during the period of its invalidity and shall negotiate, in its place and stead, an article or provision which will satisfy the objections to its validity and which, to the greatest extent possible, will be in accord with the intent and purpose of the article or provision in question. The new article or provision negotiated by the Primary Employer and the Unions shall be binding on all parties signatory to this Agreement.

14.1.1. If the Primary Employer and the Unions are unable within thirty (30) calendar days to negotiate a substitute article or provision, any of them may at any time thereafter submit the matter directly to arbitration pursuant to procedures set forth in Sections 11.3, Step 4 and 11.4 through 11.8. The Arbitrator shall have the authority to modify, amend and alter the Agreement by providing a substitute article or provision to replace the one(s) that has become invalid, inoperative, or unenforceable. The Arbitrator's decision, and the new article or provision, shall be final and binding on all parties signatory to the Agreement.

14.2. If any article or provision of this Agreement shall be held invalid, inoperative, or unenforceable by operation of law, or by any of the above-mentioned tribunals of competent jurisdiction, the remainder of the Agreement or application of such article or provision to persons or circumstances other than to which it has been held invalid, inoperative, or unenforceable, shall not be affected thereby, so long as the primary purpose of this Agreement is unaffected.

14.3. Except as enumerated in this Agreement, all other terms and conditions of employment described in the Master Agreement shall apply.

14.4. The provisions of this Agreement shall take precedence over conflicting provisions of the applicable Master Agreement.

14.5. Each person executing this Agreement represents and warrants that he or she is authorized to execute this Agreement on behalf of the party or parties indicated.

14.6. This Agreement may be executed in any number of counterparts and each counterpart shall be deemed to be an original document. All executed counterparts together shall constitute one and the same document, and any signature pages may be assembled to form a single original document.

15. TERM

15.1. The term of this Agreement shall commence on the date indicated below after execution by all Parties ("Effective Date"), and shall continue in effect until the Completion of All Covered Work on the Project pursuant to Article 3.

15.2. Notwithstanding any other provision herein, this Agreement shall terminate upon delivery of notice from Primary Employer to the Unions that: (a) the General Plan Amendment, Specific Plan, Prezoning and Annexation, and CEQA Approval for the Project (collectively, the "Key Entitlements") have not been obtained, the applications to the City of Barstow for said Key Entitlements have been completely and irrevocably withdrawn in writing, the City of Barstow has acknowledged receipt of the withdrawal, and a copy of the withdrawal and the acknowledgement of receipt have been delivered to the Unions; or (b) if the Key Entitlements have been completely cancelled or terminated due to the passage of time or other specific terms and conditions governing their issuance so that no commencement of Improvements construction can take place on the Project Real Property without new public hearings to secure the Key Entitlements before the local agencies possessing lawful approval authority over the Project Real Property and written notice has been delivered to the City of Barstow that the then current Project Real Property owners accept the cancellation or termination of the Key Entitlements, and a copy of that acceptance and written acknowledgment of receipt

of such notice by the City of Barstow has been delivered to the Unions; or (c) the City of Barstow has affirmatively denied the applications for the Key Entitlements and such denial is final, non-appealable and not subject to further review either administratively or judicially. Upon any such termination, provided that there is then no pending or threatened breach of Agreement, this Agreement shall have no force or effect and the parties shall have no further obligation to each other by reason thereof.

16. CONFIDENTIALITY

16.1. All parties to this Agreement, including the signatories to the Attachment A, Agreement to be Bound, agree to keep the existence and terms of this Agreement strictly confidential. This Agreement may only be disclosed to the parties to the Agreement and their attorneys, transferees or successors and assigns to the Owner or to Primary Employer, or to prospective purchasers, transferees or successors and assigns who have agreed in writing to keep the Agreement confidential, or to any person or entity contracting for the assignment, awarding or subcontracting of Covered Work, or to the Union signatory contractors bidding or contracting to perform Covered Work in accordance with Article 4, or as needed to comply with, enforce or interpret the provisions of this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed and effective as of March ___, 2024.

PRIMARY EMPLOYER

BNSF RAILWAY COMPANY,
A DELAWARE CORPORATION

By:
Its: A.V.P. of Economic Development

UNIONS

UA PLUMBERS AND PIPEFITTERS UNION, LOCAL 364

By: _____
Business Manager

UA SPRINKLER FITTERS UNION, LOCAL 669

By: _____
Business Manager

INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS UNION, LOCAL 477

By: _____
Business Manager

SHEET METAL WORKERS UNION, LOCAL 105

By: _____
Business Manager

DISTRICT COUNCIL OF IRONWORKERS OF THE STATE OF CALIFORNIA AND VICINITY

By: _____
President

ATTACHMENT A
AGREEMENT TO BE BOUND

COMMUNITY WORKFORCE AND TRAINING AGREEMENT
BARSTOW INTERNATIONAL GATEWAY LOGISTICS PROJECT

The undersigned hereby certifies and agrees that:

1.) It is an Employer as that term is defined in Section 1.4 of the Barstow International Gateway Logistics Project Community Workforce and Training Agreement ("Agreement") because it has been, or will be, awarded a contract or subcontract to assign, award or subcontract Covered Work on the Barstow International Gateway Logistics Project (as defined in Sections 1.2 and 3.1 of the Agreement), or to authorize another party to assign, award or subcontract Covered Work, or to perform Covered Work.

2.) In consideration of the award of such contract or subcontract, and in further consideration of the promises made in the Agreement and all attachments thereto (a copy of which was received and is hereby acknowledged), it accepts and agrees to be bound by the terms and conditions of the Agreement, together with any and all amendments and supplements now existing or which are later made thereto.

3.) It has no commitments or agreements that would preclude its full and complete compliance with the terms and conditions of said Agreement.

4.) It will secure a duly executed Agreement to be Bound, in form identical to this document, from any Employer(s) at any tier or tiers with which it contracts to assign, award, or subcontract Covered Work, or to authorize another party to assign, award or subcontract Covered Work, or to perform Covered Work.

DATED: _____

_____
Name of Employer

_____
(Authorized Officer & Title)

_____

_____
(Address)

ATTACHMENT B(1)

FULL ASSUMPTION AGREEMENT

THIS ASSUMPTION AGREEMENT ("Assumption Agreement") is by and between _____ ("Assignor") and _____ [*NEW PRIMARY EMPLOYER*] ("Assignee").

RECITALS

A. Assignor is the Primary Employer under a certain Barstow International Gateway Logistics Project Community Workforce and Training Agreement dated _____, 2024 (the "CWTA") with the UA Plumbers and Pipefitters Union, Local 364, UA Sprinkler Fitters Union, Local 669, International Brotherhood of Electrical Workers Union, Local 477, Sheet Metal Workers Union, Local 105, and the District Council of Ironworkers of the State of California and Vicinity (collectively the "Unions") concerning the development located in the City of Barstow, San Bernardino County, California, known as the Barstow International Gateway Logistics Project.

B. Assignor desires to assign to Assignee all of its rights and obligations under the CWTA with respect to all of the Project and the Project Real Property as described in the CWTA, and to be released by the Unions, in accordance with Paragraph 13.4 of the CWTA, from all of Assignor's rights and obligations under the CWTA with respect to the Project and the Project Real Property.

C. Assignee desires to assume, for the benefit of the Unions, all rights and obligations of Primary Employer under the CWTA with respect to the Project and the Project Real Property.

AGREEMENTS

FOR VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, Assignor and Assignee agree as follows:

1. Effective [*DATE*] (the "Effective Date"), Assignor hereby assigns to Assignee all of Assignor's right, title, and interest in and to the CWTA with respect to the Project and the Project Real Property. Assignor acknowledges that it has no further interest in the CWTA or the Project and the Project Real Property, and that the Unions may treat the CWTA as if it had been made by Assignee.

2. As of the Effective Date, Assignee hereby assumes all of Assignor's rights and obligations under the CWTA and agrees to perform and is able to perform, as a direct obligation to the Unions, all of the covenants, agreements and conditions contained in the CWTA to be performed by Primary Employer.

3. Assignee expressly warrants and represents that it possesses a valid California general contractor's license, directly employs on-site personnel and is an employer primarily engaged in the building and construction industry. Assignee agrees, and by execution of Exhibit 1 the Unions agree, that damages from the breach of the warranties and representations in this Assumption Agreement would be unreasonably difficult, costly, inconvenient or impracticable to calculate and, accordingly, they agree to Liquidated Damages which bear a reasonable relationship to the actual harm suffered by the Unions and their members, as calculated pursuant to the methodology set forth in Paragraph 13.3. If there is a breach of the warranties and representations of Assignee contained in this Assumption Agreement, and Covered Work is performed by a contractor or subcontractor that is not in compliance with the provisions of Article 4 of the CWTA, then Assignee shall pay Liquidated Damages, calculated pursuant to the methodology set forth in Paragraph 13.3 of the CWTA and to the entities described in Paragraph 13.3 of the CWTA, to compensate for the actual damages.

4. This Assumption Agreement is expressly conditioned upon the Unions' execution and delivery to Assignor of a Release of Assignor's obligations under the CWTA, which Release shall be substantially in the form of Exhibit 1.

5. This Assumption Agreement and all covenants and agreements contained herein shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

6. This Assumption Agreement shall be governed by and construed in accordance with the laws of the State of California, including all matters of construction, validity, performance, and enforcement.

7. In the event of a dispute regarding the interpretation or enforcement of the provisions hereof, the prevailing party shall be entitled to its reasonable attorneys' fees and costs of suit.

8. The address of Assignee for delivery of notices is:

_____
_____
_____

9. Assignor and Assignee each acknowledge that the Unions are third party beneficiaries to this Assumption Agreement and are entitled to rely upon the covenants and representations of Assignee and Assignor contained herein. This Agreement shall not be amended, modified, supplemented, or revised without the prior written consent of the Unions.

10. This Assumption Agreement may be executed in any number of counterparts and each counterpart shall be deemed to be an original document. All executed counterparts together shall constitute one and the same document, and any signature pages may be assembled to form a single original document.

11. This Assumption Agreement constitutes the entire agreement of Assignee and Assignor with respect to the CWTA.

IN WITNESS WHEREOF, Assignor and Assignee have caused this Assumption Agreement to be executed and do each hereby warrant and represent that their respective signatories, whose signatures appear below, have been and are on the date of this Assignment Agreement duly authorized by all necessary and appropriate action to execute this Assignment Agreement.

"ASSIGNOR"	"ASSIGNEE"
	[*NEW PRIMARY EMPLOYER*]
_____	By:_____
_____	Its:_____
Dated: _____	Dated: _____

Exhibit 1 to Attachment B(1)

COMMUNITY WORKFORCE AND TRAINING AGREEMENT
RELEASE OF LIABILITY

This Release of Liability ("Release") is made by UA Plumbers and Pipefitters Union, Local 364, UA Sprinkler Fitters Union, Local 669, International Brotherhood of Electrical Workers Union, Local 477, Sheet Metal Workers Union, Local 105, and the District Council of Ironworkers of the State of California and Vicinity ("Unions").

A. The Unions and BNSF Railway Company, a Delaware corporation, ("Primary Employer") entered into that certain Barstow International Gateway Logistics Project Community Workforce and Training Agreement, dated _____, 2024 (the "CWTA") whereby the parties agreed, in Article 13, that, upon execution and delivery to the Unions of a Full Assumption Agreement by a successor assuming all of Primary Employer's obligations under the CWTA ("Assumption Agreement"), the Unions shall release Primary Employer from all of its obligations under the CWTA.

B. Primary Employer and _____ have executed that certain Assumption Agreement, dated _____.

C. In reliance upon the foregoing, including, but not limited to, the warranties and representations of Assignee contained in this Assumption Agreement, the Unions each acknowledge and agree that Primary Employer has satisfied the successorship criteria of Article 13 of the CWTA. Accordingly, the Unions do hereby, jointly, and severally, release Primary Employer from all subsequent obligations and undertakings of the CWTA, including liability for the payment of Liquidated Damages under Paragraph 13.3.

IN WITNESS WHEREOF, the Unions have caused this Release to be executed and effective from and after _____, 20___.

UNIONS:

By: _____
Business Manager, UA Local 364

By: _____
Business Manager, UA Local 669

By: _____
Business Manager, IBEW Local 447

By: _____
Business Manager, SMW Local 105

By: _____
President, District Council of Ironworkers
of the State of California and Vicinity

ATTACHMENT B(2)
PARTIAL ASSUMPTION AGREEMENT

THIS PARTIAL ASSUMPTION AGREEMENT ("Partial Assumption Agreement") is by and between _____, a California corporation ("Assignor") and _____ **[*NEW PRIMARY EMPLOYER*]** ("Assignee").

RECITALS

A. Assignor is the Primary Employer under a certain Barstow International Gateway Logistics Project Community Workforce and Training Agreement dated _____, 2024 (the "CWTA") with the UA Plumbers and Pipefitters Union, Local 364, UA Sprinkler Fitters Union, Local 669, International Brotherhood of Electrical Workers Union, Local 477, Sheet Metal Workers Union, Local 105, and the District Council of Ironworkers of the State of California and Vicinity (collectively the "Unions") concerning the development project located in the City of Barstow, San Bernardino County, California, known as the Barstow International Gateway Logistics Project (the "Project").

B. Assignor desires to assign to Assignee all of its rights and obligations under the CWTA with respect to the portion of the Project and Property described on Exhibit 2 attached hereto (the "Assignee Project Property"), and to be released by the Unions, in accordance with Paragraph 13.4 of the CWTA, from all of Assignor's rights and obligations under the CWTA with respect to the Assignee Project Property.

C. Assignee desires to assume, for the benefit of the Unions, all rights, and obligations of Primary Employer under the CWTA with respect to the Assignee Project Property.

AGREEMENTS

FOR VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, Assignor and Assignee agree as follows:

1. Effective **[*DATE*]** (the "Effective Date"), Assignor hereby assigns to Assignee all of Assignor's right, title, and interest in and to the CWTA with respect to the Assignee Project Property. Assignor acknowledges that it has no further interest in the CWTA with respect to the Assignee Project Property, and that the Unions may treat the CWTA as if it had been made by Assignee with respect to the Assignee Project Property.

2. As of the Effective Date, Assignee hereby assumes all of Assignor's rights and obligations under the CWTA with respect to the Assignee Project Property, and agrees to perform and is able to perform, as a direct obligation to the Unions, all of the covenants, agreements and conditions contained in the CWTA to be performed by Primary Employer with respect to the Assignee Project Property.

3. Assignee expressly warrants and represents that it possesses a valid California general contractor's license, directly employs on-site personnel and is an employer primarily engaged in the building and construction industry. Assignee agrees, and by execution of Exhibit 1 the Unions agree, that damages from the breach of the warranties and representations in this Partial Assumption Agreement would be unreasonably difficult, costly, inconvenient or impracticable to calculate and, accordingly, they agree to Liquidated Damages which bear a reasonable relationship to the actual harm suffered by the Unions and their members, as calculated pursuant to the methodology set forth in Paragraph 13.3 of the CWTA. If there is a breach of the warranties and representations of Assignee contained in this Assumption Agreement, and Covered Work is performed by a contractor or subcontractor that is not in compliance with the provisions of Article 4 of the CWTA, then Assignee shall pay Liquidated Damages, calculated pursuant to the methodology set forth in Paragraph 13.3 of the CWTA and to the entities described in Paragraph 13.3 of the CWTA, to compensate for the actual damages.

4. This Partial Assumption Agreement is expressly conditioned upon the Unions' execution and delivery to Assignor of a Release of Assignor's obligations under the CWTA with respect to the Assignee Project Property, which Release shall be substantially in the form of Exhibit 1.

5. This Partial Assumption Agreement and all covenants and agreements contained herein shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

6. This Partial Assumption Agreement shall be governed by and construed in accordance with the laws of the State of California, including all matters of construction, validity, performance, and enforcement.

7. In the event of a dispute regarding the interpretation or enforcement of the provisions hereof, the prevailing party shall be entitled to its reasonable attorneys' fees and costs of suit.

8. The address of Assignee for delivery of notices is:

_____
_____
_____

9. Assignor and Assignee each acknowledge that the Unions are third party beneficiaries to this Partial Assumption Agreement and are entitled to rely upon the covenants and representations of Assignee and Assignor contained herein. This Agreement shall not be amended, modified, supplemented, or revised without the prior written consent of the Unions.

10. This Partial Assumption Agreement may be executed in any number of counterparts and each counterpart shall be deemed to be an original document. All executed counterparts together shall constitute one and the same document, and any signature pages may be assembled to form a single original document.

11. This Partial Assumption Agreement constitutes the entire agreement of Assignee and Assignor with respect to the CWTA.

12. All of the obligations of Assignor under the CWTA, with respect to all of the Project Property, except for the Assignee Project Property, shall remain in full force and effect.

IN WITNESS WHEREOF, Assignor and Assignee have caused this Partial Assumption Agreement to be executed and do each hereby warrant and represent that their respective signatories, whose signatures appear below, have been, and are on the date of this Partial Assignment Agreement, duly authorized by all necessary and appropriate action to execute this Partial Assignment Agreement.

"ASSIGNOR"	"ASSIGNEE"
	[*NEW PRIMARY EMPLOYER*]
_____	By: _____
_____	Its: _____
Dated: _____	Dated: _____

<u>Exhibit 1</u> to Attachment B(2)

COMMUNITY WORKFORCE AND TRAINING AGREEMENT
PARTIAL RELEASE OF LIABILITY

This Partial Release of Liability ("Partial Release") is made by UA Plumbers and Pipefitters Union, Local 364, UA Sprinkler Fitters Union, Local 669, International Brotherhood of Electrical Workers Union, Local 477, Sheet Metal Workers Union, Local 105, and the District Council of Ironworkers of the State of California and Vicinity ("Unions").

A. The Unions and BNSF Railway Company, a Delaware corporation, ("Primary Employer") entered into that certain Barstow International Gateway Logistics Project Community Workforce and Training Agreement, dated _____, 2024 (the "CWTA") whereby the parties agreed, in Article 13, that, upon execution and delivery to the Unions of a Partial Assumption Agreement by a successor partially assuming Primary Employer's obligations under the CWTA ("Partial Assumption Agreement"), the Unions shall release Primary Employer from its obligations under the CWTA to the extent that such obligations are transferred to such successor.

B. Primary Employer and _____ have executed that certain Partial Assumption Agreement, dated _____ with respect to the Assignee Project Property described therein, and such agreement is acceptable to the Unions.

C. In reliance upon the foregoing, including, but not limited to, the warranties and representations of Assignee contained in this Assumption Agreement, the Unions each acknowledge and agree that Primary Employer has satisfied the successorship criteria of Article 13 of the CWTA with respect to the Assignee Project Property. Accordingly, the Unions do hereby, jointly, and severally, release Primary Employer from all subsequent obligations and undertakings of the CWTA with respect to the Assignee Project Property, including liability for the payment of Liquidated Damages with respect to the Assignee Project Property under Paragraph 13.3.

D. All obligations of Primary Employer with respect to all of the Project Real Property except for the Assignee Project Property shall remain in full force and effect.

IN WITNESS WHEREOF, the Unions have caused this Partial Release to be executed and effective from and after _____, 20___.

UNIONS:

By: _____
Business Manager, UA Local 364

By: _____
Business Manager, UA Local 669

By: _____
Business Manager, IBEW Local 477

By: _____
Business Manager, SMW Local 105

By: _____
President, District Council of Ironworkers
of the State of California and Vicinity

COMMUNITY WORKFORCE AND TRAINING AGREEMENT

FOR THE

BARSTOW INTERNATIONAL GATEWAY RAILYARD PROJECT

IN THE

CITY OF BARSTOW AND COUNTY OF SAN BERNARDINO CALIFORNIA

1. INITIAL PROVISIONS

1.1. This Community Workforce and Training Agreement ("Agreement") is entered into by BNSF Railway Company, a Delaware corporation ("Primary Employer"), and UA Plumbers and Pipefitters Union, Local 364, International Brotherhood of Electrical Workers Union, Local 477, Sheet Metal Workers Union, Local 105, and the District Council of Ironworkers of the State of California and Vicinity, individually referred to as a "Union" and collectively referred to as the "Unions."

1.2. The Barstow International Gateway Railyard Project is the rail and railyard portion of the Barstow International Gateway Project ('the BIG Project"). The BIG Project proposes the construction of an approximately 4,216-acre integrated rail facility consisting of an intermodal railyard facility and warehouses for transloading freight from international containers to domestic containers. Barstow International Gateway Railyard Project encompasses all rail and railyard facilities with the BIG Project, and associated infrastructure and related improvements (the "Project"). For the purposes of this agreement "rail and railyard facilities" are defined as: the Intermodal Facility ("IMF") and IMF support uses including approximately 147,000 square feet of support buildings and structures for office, administration, and maintenance; Block Swap Yard; and Ancillary Rail Area comprised of a container yard, chassis storage, and maintenance of way. The Project does not include warehouses and other non-railyard facilities that are covered by the Barstow International Gateway Logistics Project CWTA executed in 2024. The Project site is located on approximately 4,216 acres generally bounded by the Mojave River to the north, West Main Street (also referred to as Route 66 & National Trails Highway) to the south, Lenwood Road to the east, and Hinkley Road to the west (Assessor Parcel Numbers: 0421-041-67 through -111; 0421-041-114 through -145; and 0421-041-148 through -335) in the City of Barstow and the County of San Bernardino, California (the "Project Real Property"). BNSF Railway Company, a Delaware corporation ("Owner"), owns the Project Real Property and controls the site at which the Project will be constructed.

1.3. Primary Employer is a railway and logistics corporation responsible for managing the entitlement, development, and construction of the Project through its employees, partners or agents. Primary Employer is a construction industry employer that both employs construction workers directly and contracts out construction work to subcontractors. Primary Employer will control labor relations on the Project by entering into this Agreement, which establishes the terms and conditions of employment for employees performing Covered Work on the Project, and, consistent with the normal and customary practice of its member companies and individuals, by directly subcontracting construction work, acting as or directing the general contractor on the Project, and by making or directing all decisions within the scope of the general contractor's authority, including, but not limited to, preparing all bid specifications and bid packages for construction work on the Project. Subject to the provisions of this Agreement and the applicable Master Labor Agreements (as defined in Section 1.5), Primary Employer shall retain the

right to control and coordinate all project construction work by determining work scheduling, including uniform start times, the necessity for and the times of shift work, by directly enforcing any drug and alcohol abuse policy which is agreed to by any contractor or subcontractor and the Union, and otherwise directly removing any employee whether employed directly or by any contractor or subcontractor for breach of reasonable rules promulgated by Primary Employer governing conduct on the job. Primary Employer shall have the right upon receipt of the written complaint of any employee to order corrective action necessary to maintain reasonable and lawful standards for workplace health and safety. Primary Employer may act as the coordinator, participate in pre-job conferences and mark-up meetings, and, at its option, participate in the resolution of any grievances. Primary Employer represents and warrants that it has been authorized by the Owner to enter into this Agreement with respect to the Project.

1.4. As provided below, all project managers, construction managers, contractors, subcontractors or other persons or entities assigning, awarding or subcontracting Covered Work, or authorizing another party to assign, award or subcontract Covered Work, or performing Covered Work, will be subject to this Agreement by executing the attached Employer Agreement to be Bound (all of whom, including the Primary Employer, are individually and collectively referred to as "Employer" or "Employers").

1.5. The Unions are labor organizations in the plumbing and pipefitting, electrical, mechanical, sheet metal, and ironworking trades whose members are construction industry employees who generally work in close proximity to one another at construction job sites and whose jobs are closely related and coordinated. Each of the Unions is a party to a multi-employer collective bargaining agreement ("Master Agreement") that covers the geographical area of the Project. Where the term "Master Agreement" is used, it means the existing Master Agreement currently in effect as to each of the Unions.

1.6. It is understood and agreed by and between the parties to this Agreement that the final plans for the Project may be subject to design changes and modifications, or may be revised as a result of the approval by those public agencies possessing lawful approval authority over the Project, and that this Agreement applies to the Project as it is finally approved by such entities and agencies. In addition, the general description and location of the Project Real Property and the Assessor Parcel Numbers described in Section 1.2 are based on the best information available at the time of the execution of this Agreement and shall not limit the scope of the Agreement should the portion of the Project controlled by the Primary Employer, or an assignee or affiliate of the Primary Employer, now or in the future, include additional or different Assessor Parcel Numbers. This Agreement does not apply to future redevelopment at the Project site subsequent to completion of the Project.

2. PURPOSE

2.1. A large labor pool represented by the Unions will be required to execute the work involved in the Project. This Agreement is intended by the parties to ensure that a sufficient supply of skilled craft workers is available at the Project and that all construction work and related work performed by the members of the Unions on this Project shall proceed continuously, without interruption, in a safe and efficient manner, economically, with due consideration for the protection of labor standards, wages and working conditions. In furtherance of these purposes and to secure optimum productivity, harmonious relations between the parties and the orderly performance of the work, the parties have, through collective bargaining, established in this Agreement adequate and fair wage levels and working conditions and measures to secure labor peace that will be binding on all Employers and the Unions during the term of the Agreement.

2.2. A central purpose of the parties in executing this Agreement is to guarantee labor peace on the Project by minimizing the jobsite friction that could arise at a common-situs jobsite when Union employees are required to work alongside non-union employees in their own craft or in those other crafts with which they generally work in close proximity performing work that is closely related and coordinated, and by ensuring there will be no disruption of the work should any non-union workers be present to perform work outside the scope of the Agreement. This Agreement accomplishes these objectives by requiring that all Covered Work, as defined herein, be performed by workers who are Union members. For any work that falls outside the scope of this Agreement or that is excluded from Covered Work, as defined herein, the Primary Employer further protects itself from the potential effects of jobsite friction by prohibiting all strikes, picketing or similar activity for any reason whatsoever.

2.3. In the interest of the future of the construction industry in the local area, of which the Unions are a vital part, and to maintain the most efficient and competitive posture possible, the Unions pledge to work and cooperate with the management of the Project to produce the most efficient utilization of labor and equipment in accordance with this Agreement. The Unions and the Employers and contractors submitting bids to work on the Project agree to meet and identify all mutually agreed upon measures that can be taken under the applicable Master Agreements to reduce the labor costs over the costs that would otherwise apply in the absence of such measures. Further, the Unions agree to meet with the Primary Employer to identify and discuss construction cost saving strategies (the measures to be considered shall include, but not limited to, reducing the ratio of apprentice and journeymen to other workers for the Project to the lowest level permitted by law) in order to achieve Primary Employer's objectives for the cost and quality of the work to the greatest extent possible.

3. SCOPE OF AGREEMENT

3.1. This Agreement covers all on-site construction, alteration or repair of buildings, structures and other works and related activities for the Project which are within the scope of the craft jurisdiction of the Unions and which are a part of the Project and are performed in conjunction with the original construction the Project, all construction or improvements authorized by the public agency approvals granted for the Project, and all on-site fabrication work over which the Primary Employer or other Employer possesses the right of control. On-site fabrication work includes work done for the Project in temporary yards or areas near the Project. All of the work described in this Section that is within the scope of a Union's Master Agreement is within the scope of this Agreement and is referred to hereafter as "Covered Work".

3.2. The parties acknowledge that BNSF has a permanent existing, unionized, in-house work force which has the skill set necessary to construct, and which regularly constructs, railroad track to the standards required by the Federal Railroad Administration (FRA) and BNSF Railway. Accordingly, track construction related to the installation of rails, ties, and ballast (specifically identified by task as set out in Exhibit A) shall not be covered by this Agreement.

3.3. The parties further acknowledge that BNSF also has a permanent existing, unionized, in-house telecommunications and signal workforce which regularly performs certain telecommunications work for similar facilities. Accordingly, signal work and telecommunications work specifically identified by tasks as Exhibits B and C, respectively, shall not be covered by this Agreement except as set forth in those Exhibits. All other telecommunications work shall be installed under the terms and conditions of this Agreement.

3.4. Exclusions: the following shall not be considered Covered Work ("Non-Covered Work") on the Project:

a. Construction projects that are not within the definition of the Project;

b. Work of non-manual employees, including but not limited to superintendents; supervisors; staff engineers; inspectors; quality control and quality assurance personnel; building official construction inspectors; geologists; timekeepers; mail carriers; clerks; office workers; messengers; guards; safety personnel; emergency medical and first aid technicians; and other professional, engineering, administrative, supervisory and management employees;

c. Except as provided in Section 3.1, all off-site manufacture and handling of materials, equipment or machinery except at dedicated or temporary staging, lay down or storage areas;

d. Design teams (including, but not limited to architects, engineers, and master planners), or any other consultants for the Owner (including, but not limited to, project managers and construction managers and their employees) and

their sub-consultants, and other employees of professional service organizations, not performing construction craft labor covered by a Master Agreement;

e. Work performed by state, county, or other governmental bodies or their contractors, or by public utilities, or their contractors;

f. Off-site maintenance of leased equipment;

g. Work performed by employees of an Original Equipment Manufacturer ("OEM") on the OEM's equipment, if required by the standard warranty agreement between the OEM and the Primary Employer in order to maintain the warranty or guarantee on such equipment consistent with industry practice. A copy of such OEM agreement shall be provided to the applicable Union upon request;

h. Work on the Project performed directly by Primary Employer or Owner with their own employees as a result of a threat to life, limb, or property or other emergency or circumstances requiring immediate action;

i. All non-construction support services contracted by any Employer or the Owner in connection with the Project;

j. Installation of temporary chain link fence;

k. Installation of towel racks, paper holders, glass shelves, hooks, mirrors, cabinets (including backing and necessary supports) and other similar bathroom, toilet room and shower room non-plumbing accessories;

l. Demolition work;

m. All delivery, movement, placement, assembly and installation of movable furniture, fixtures and equipment that do not have a permanent connection to the building but are needed for post-construction occupancy and operations, such as chairs, desks, partitions and the like (FF&E);

n. All jobsite trailer systems; and

p. Landscape and irrigation work.

3.5. The Agreement shall not apply to material suppliers or delivery by any means of material, supplies, or equipment required, to any point of delivery.

3.6. This Agreement is not intended to, and shall not, affect the operation or the maintenance of the Project after it is constructed. The Agreement shall cease to apply, and shall not apply, to any maintenance, operations or similar functions undertaken by the Owner at the Project work site once the construction work by the Employers covered under the Agreement has been completed and accepted by the

Owner, other than warranty, repair, alteration, punch list, and similar work that is the responsibility of, and performed by, an Employer under the original contract for Covered Work.

3.7. There shall be no limitation or restriction upon the choice of materials or upon the full use and installation of equipment, machinery, package units, factory precast, prefabricated, or preassembled materials, tools, or other labor-saving devices. The use of new technology, equipment, machinery, tools and/or labor-saving devices and methods of performing work may be initiated by Employers in their respective discretion from time to time. The Unions agree that they will not in any way restrict the implementation of such new devices or methods of work. If there is any disagreement between an Employer and the Unions, concerning the manner or implementation of such device or method of work, the implementation shall proceed as directed by the Employer and the Unions shall have the right to arbitrate the dispute as set forth in the Agreement.

3.8. This Agreement shall be binding only on the signatory Employers, and it shall not apply to their parents, affiliates, or subsidiaries, unless such parent, affiliate or subsidiary meets the definition of Employer set forth in Section 1.4 of this Agreement.

3.9. It is understood that the Primary Employer, at its sole option, may terminate, delay and/or suspend any or all portions of the Project at any time.

3.10. This Agreement shall apply only to and is limited to Covered Work performed on the Project during the term of this Agreement. The Primary Employer will only be required to be bound to a collective bargaining agreement with a Union if it performs applicable Covered Work directly rather than subcontracting such work to a signatory to the applicable Union.

4. SUBCONTRACTING

4.1. Primary Employer and each other Employer, agree that they will contract for the assignment, awarding or subcontracting of Covered Work, or authorize another party to assign, award or subcontract Covered Work, only to a person, firm, corporation, or other entity that, at the time the contract is executed, has become a party to this Agreement by executing Attachment A, the Employer Agreement to be Bound.

4.2. Primary Employer and each other Employer, agree that they will contract for the performance of Covered Work only with a person, firm, corporation, or other entity that is both a party to this Agreement and signatory to the Master Agreement with the Union covering the geographic area of the Project and having traditional and customary jurisdiction over the work performed by that contractor or subcontractor. Any Employer (including the Primary Employer) performing Covered Work on the Project with its own employees shall, as a condition to working on the Project, at the time the work is performed, be signatory to and perform all

work under the terms of this Agreement and the applicable Master Agreement. Employers (other than Primary Employer) shall become a party to this Agreement by executing Attachment A, the Employer Agreement to be Bound. Notwithstanding the foregoing, any work set forth in Exhibit C that is not performed by BNSF's own employees (and thus exempt from this Agreement), shall be subject to the subcontracting terms set forth in Exhibit C.

4.3. Nothing in this Agreement shall in any manner whatsoever limit the rights of the Primary Employer, or any other Employer, to subcontract work or to select its contractors or subcontractors, provided, however, that all Employers, at all tiers, performing Covered Work shall be required to comply with the provisions of this Agreement. Primary Employer and every other Employer shall notify each of its contractors and subcontractors of the provisions of this Agreement, and require as a condition precedent to the award of any construction contract or subcontract for the performance of Covered Work, or allowing any subcontracted Covered Work to be performed, that all such contractors and subcontractors at all tiers become signatory to this Agreement and the applicable Master Agreement. Any Employer that fails to require in a contract or subcontract that an Employer become signatory to this Agreement as required by Section 4.1 or 4.2 shall be liable for any failure of that Employer, or any Employer at a lower tier, to comply with the provisions of this Agreement, including any contributions to any trust funds that the contractor or subcontractor, or any subcontractor to that subcontractor, fails to make.

5. MINIMUM BID REQUIREMENT

5.1. If an Employer hires a contractor or subcontractor directly and that contractor or subcontractor is already signatory to the applicable Master Agreement with the Union having jurisdiction over the work, none of the provisions of Sections 5.2 and 5.3 of Article 5 shall apply to that Employer's hiring of the contractor or subcontractor that is signatory to the Master Agreement with the Union having jurisdiction over the work.

5.2. The provisions of Article 4 shall not apply to the award of Covered Work if the Employer awarding that work does not receive bona fide bids on that work on or before the deadline for receiving such bids from at least three (3) persons, firms, or corporations that are signatory to a Master Agreement with the Union having jurisdiction over the work. For purposes of this Agreement, "bona fide" means a genuine and sincere bid submitted in good faith, without fraud, deceit, or collusion.

5.3. The provisions of Section 5.2 shall not apply unless the Employer seeking to invoke such provisions has strictly complied with all of the following bidding and notice requirements:

5.3.1. Provided written notice of the solicitation of bids to at least three (3) contractors that are signatory to the Master Agreement of the Union that has jurisdiction over the work and to such Union concurrently with the first bid

solicitation and at least thirty (30) days in advance of the deadline for receipt of bids. The written notice shall: (a) identify the person to whom requests for bid specifications or other information regarding the bidding process should be directed; and (b) include the following statement in all capital letters: "30-DAY NOTICE OF SOLICITATION OF BIDS FOR THE BARSTOW INTERNATIONAL GATEWAY RAILYARD PROJECT PURSUANT TO SECTION 5.3.1 OF THE BARSTOW INTERNATIONAL GATEWAY RAILYARD PROJECT COMMUNITY WORKFORCE AND TRAINING AGREEMENT." The notice to the Union shall also include the names of all Union signatory contractors of the applicable Union that were sent the bid solicitation;

5.3.2. Provided the bid specifications, information and bidding requirements directly to any additional union-signatory contractors that the Union has requested receive the bid specifications and to any other union-signatory contractor requesting the bid specifications in a timely manner following such request;

5.3.3. Established the same bid specifications and requirements for any non-signatory contractor submitting a bid as were established for any union-signatory contractor submitting a bid, whether or not the non-union bid is submitted after the Primary Employer has successfully invoked the provisions of Section 5.2 due to a failure to receive three (3) bids from union-signatory contractors. The awarding Employer shall make such bid specifications and requirements available to any Union upon the request of such Union;

5.3.4. Established bid specifications and requirements that are consistent with the awarding Employer's usual and customary bidding process and requirements for similar projects, and that are also in accordance with standard industry practice in the Project area for such projects;

5.3.5. Provided notice to the Union having jurisdiction over the work at least three (3) business days prior to the deadline for receipt of bids that the Employer has not received bids from three (3) or more persons, firms or corporations signatory to a Master Agreement with the Union having jurisdiction over the work in accordance with Section 5.2. The written notice shall include the following statement in all capital letters: "THREE (3) DAY NOTICE OF FAILURE TO RECEIVE THREE (3) BIDS FOR THE BARSTOW INTERNATIONAL GATEWAY RAILYARD PROJECT PURSUANT TO SECTION 5.3.5 OF THE BARSTOW INTERNATIONAL GATEWAY RAILYARD PROJECT COMMUNITY WORKFORCE AND TRAINING AGREEMENT." The notice shall also include the names of all Union signatory contractors of the applicable Union that have already submitted complete bids.

5.4. In the event that three (3) bids have been received from union-signatory contractors on or before the bid deadline, but the awarding Employer regards one or more of the bids to be incomplete or otherwise not fully in accordance with the bidding requirements, such bid or bids shall be conditionally accepted as

meeting the requirements of Section 5.2 pending completion of the bid in accordance with the procedure set forth in this Section. The awarding Employer shall identify in writing the specific information required to complete the bid or otherwise satisfy the bidding requirements ("Incomplete Bid Statement"), and shall provide such Incomplete Bid Statement to the bidding contractor with a copy provided to the applicable Union. The Incomplete Bid Statement shall establish a reasonable time for submission of the additional information not to exceed ten (10) business days. If the bidding contractor has made a diligent effort to develop the requested information, but requires additional time to comply, the awarding Employer shall grant a reasonable extension of the deadline for submission of the additional information. If the bid remains incomplete at the new deadline for submission, the bid shall not be counted toward the three-bid minimum.

5.5. All notices to the Union(s) required under this Article must be given in writing by both: (a) email to the Business Manager of the applicable Union; and (b) by certified or registered mail, return receipt requested, or by a recognized overnight delivery service. The date that notice shall be deemed to have been made for the purpose of determining any deadlines under this Article shall be the date of delivery by mail or overnight delivery, as determined by the written verification of receipt if delivered by overnight delivery, or the date set forth on the return receipt if sent by certified or registered mail. The Employer shall contact the applicable Union to verify the current name, business email and business mailing address of the Union's Business Manager prior to sending notice.

6. WAGES

6.1. All employees performing Covered Work (including foremen and general foremen if covered by the applicable Master Agreements) shall be classified and paid wages and other payments and contributions made on their behalf to multi-employer trust funds, all in accordance with the then current multi-employer Master Agreements of the applicable Unions. If during the term of this Agreement, the Unions enter into a Community Workforce and Training Agreement with another Primary Employer or other Employer on a substantially similar project in San Bernardino County and that Community Workforce and Training Agreement provides for total compensation (wages, all paid benefits and contributions) on work covered by this Agreement that is more favorable to that Employer than the total compensation contained in this Agreement, the Unions will offer the Primary Employer the opportunity to substitute such more favorable total compensation for that contained in this Agreement for such work.

6.2. All low voltage, sound or communication system work shall be performed pursuant to the most recent Southern California 9th District Sound and Communications Agreement of the International Brotherhood of Electrical Workers and the National Electrical Contractors Association.

7. WORKWEEK AND HOLIDAYS

7.1. The normal workweek shall be governed by the applicable Master Agreement. The workweek may be changed by mutual consent of the Unions and the Primary Employer.

7.2. Recognized holidays shall be as set forth in the applicable Master Agreements. In no event shall work be performed on Labor Day, except in cases involving an immediate threat to life or property. The recognized holidays may be changed by mutual consent of the Unions and the Primary Employer.

8. MANAGEMENT RIGHTS

8.1. The Employers retain full and exclusive authority for the management of the project and shall retain all existing rights of management and all rights conferred by law. Management of the Project including, but not limited to the hiring, promoting, laying off, suspending, disciplining, or discharging for cause, direction of work force, work schedules, and work practices are vested solely in management except as specifically and expressly limited by this Agreement. The Contractor has the unilateral right to establish work rules, including all safety rules, for the Project and distribute such Project rules to each employee so long as such work rules do not conflict with this Agreement.

8.2. Except as otherwise expressly stated in this Agreement, there shall be no limitation or restriction upon the Contractor's choice of materials or design, nor, regardless of source or location, upon the full use and installation of equipment, machinery, package units, pre-cast, prefabricated, pre-finished, or pre-assembled materials, tools, or other labor-saving devices. The Contractor may without restriction install or otherwise use materials, supplies or equipment regardless of their source; provided, however, that the on-site installation or application of such items shall be performed by the craft having jurisdiction over such work.

8.3. It is recognized that certain equipment of a highly technical and specialized nature may be installed at the Barstow International Gateway Railyard Project. The nature of this equipment, together with requirements of manufacturer's guarantee or warranty, dictate that it be prefabricated, pre-piped and/or pre-wired and that it be installed under the supervision and direction of Owner's and/or Vendor's personnel. The Unions agree that non-union employees can provide that supervision and direction, and that such supervision and direction is outside the scope of this Agreement.

8.4. Except as otherwise expressly stated in this Agreement, it is recognized that the use of new technology, equipment, machinery, tools and/or labor-saving devices and methods of performing work will be initiated by the Contractor from time to time during the Project. The Union agrees that it will not in any way restrict the implementation of such new devices or work methods. If there is any disagreement between the Contractor and the Union concerning the manner or implementation of such device or method of work, the implementation shall proceed as directed by the Contractor, and the Union shall have the right to grieve

and/or arbitrate the dispute as set forth in the dispute-resolution procedures under this Agreement.

9. UNION RECOGNITION

9.1. The Employers recognize the Unions signatory to this Agreement as the sole and exclusive collective bargaining agents for their respective construction craft employees performing Covered Work for the Project, and further recognize the traditional and customary craft jurisdiction of the Unions.

9.2. All employees performing Covered Work shall be, or shall become and then remain, members in good standing of the Unions as a condition of employment on or before the eighth (8th) day of employment, or the eighth (8th) day following the execution of this Agreement, whichever is later.

9.3. It is agreed that the Unions shall be the source of all craft employees for Covered Work for the Project, except as provided in Section 9.5 below. Employers agree to be bound by the hiring hall rules and practices of the Unions and to utilize their registration facilities and referral systems.

9.4. Selection of applicants for referral to jobs shall be on a non-discriminatory basis. There shall be no discrimination against any employee or applicant for employment because of his or her membership or non-membership in the Union or based upon race, creed, color, sex, age or national origin of such employee or applicant.

9.5. If the referral facilities maintained by the Unions are unable to fill the requisition of the Employers for employees within a 48-hour period after such requisition is made (Saturdays, Sundays and holidays excluded), applicants for such requisition may be employed from any source.

9.6. The selection of Foremen and/or General Foremen for Covered Work shall be the responsibility of the Employer. The Employer may require Foremen to be working employees.

10. STRIKES AND LOCKOUTS

10.1. During the life of this Agreement, the Unions, their agents, their representatives and other persons employed by the Unions agree that they shall not incite, encourage, condone or participate in any strike, handbilling, walkout, slowdown, sit-down, stay-in, boycott, sympathy strike, picketing or other work stoppage for any cause whatsoever (including jurisdictional disputes) with respect to this Project; and there shall be no lockout by Primary Employer or any other Employer; and it is expressly agreed that any such action is in violation of this Agreement. In the event of a violation of this provision, any party shall be entitled to seek relief pursuant to the grievance procedures in Article 12.3, specifically including injunctive relief and monetary damages, to restrain any such action on the part of the violating party, and/or any of its agents, representatives, or other

persons it employs and to recover damages. In the event of a violation of this provision, and provided that an Arbitrator appointed under Article 12.3 cannot convene a hearing within 48 hours of the violation, any party involved in the violation may seek temporary injunctive relief in court pending a ruling, either preliminary or final, by an Arbitrator, pursuant to the grievance procedures in Article 12.3, who shall have the authority to modify or dissolve any temporary order that has been issued by a court.

10.1.1. The Unions shall not be liable for acts of employees that it does not represent. The principal officer or officers of a Union will immediately instruct, order, and use the best efforts of his office to cause the employees the Union represents to cease any violations of the Article. A Union complying with this obligation shall not be liable for unauthorized acts of employees it represents.

10.2. Notwithstanding the provisions of Section 10.1 above, it is agreed that the Unions retain the right to withhold the services of their members from a particular contractor or subcontractor who fails to make timely payments to the Unions' benefit plans, or fails to timely pay its weekly payroll, in accordance with its agreements with the Unions; provided, however, that in the event the Unions or any of their members withhold their services from such contractor or subcontractor, Primary Employer shall have the right to replace such contractor or subcontractor with any other contractor or subcontractor who executes the Agreement to be Bound in accordance with Section 4.2.

10.3. In the event that any applicable Master Agreement expires and the parties to that agreement fail to reach agreement on a new contract by the date of expiration, the Unions shall continue to provide employees to the Employers working on the Project under all the terms of the expired agreement until a new agreement is negotiated, at which time all terms and conditions of that new agreement shall be applied to Covered Work at the Project, except to the extent they conflict with any provision of this Agreement. In addition, if the new labor agreement provides for retroactive wage or benefit increases, then any Employer shall pay to its employees who performed Covered Work at the Project during the period between the effective dates of such labor agreements, an amount equal to such wage and benefit increases established by the new labor agreement for such work performed.

11. JOINT LABOR/MANAGEMENT MEETINGS

11.1. A Pre-Job Conference will be held prior to the commencement of work to establish the scope of work in each contractor's contract. When a contract has been let to a contractor(s) covered by this Agreement, a Mark-Up Meeting shall be required upon request of the Unions, contractor, or the Primary Employer.

11.2. The Primary Employer will schedule and may attend all Pre-Job Conferences and Mark-Up Meetings.

12. GRIEVANCE PROCEDURE

12.1. It is mutually agreed that any question arising out of and during the term of this Agreement involving its interpretation and application (other than successorship) shall be considered a grievance. Questions between or among parties signatory to a Master Agreement arising out of or involving the interpretation of a Master Agreement shall be resolved under the grievance procedure provided in that Master Agreement.

12.2. A grievance shall be considered null and void if not brought to the attention of the Employer within ten (10) working days after the incident that initiated the alleged grievance occurred or was discovered, whichever is later.

12.3. Grievances shall be settled according to the following procedure:

Step 1

The Steward and the grievant shall attempt to resolve the grievance with the craft supervisor within five (5) working days after the grievance has been brought to the attention of the Employer.

Step 2

In the event the matter remains unresolved in Step 1 above after five (5) working days, within five (5) working days thereafter, the alleged grievance may be referred in writing to the Business Manager of the Craft Unions and the Labor Relations representative of the Employer for discussion and resolution. A copy of the written grievance shall also be mailed/faxed to the Primary Employer.

Step 3

In the event the matter remains unresolved in Step 2 above within five (5) working days, within five (5) working days thereafter, the grievance may be referred to the representative of the Craft Unions and the Manager of Labor Relations of the Employer or the Manager's designated representative, and the Primary Employer for discussion and resolution.

Step 4

If the grievance is not settled in Step 3 above within five (5) working days of referral, within five (5) working days thereafter, either party may request the dispute be submitted to arbitration or the time may be extended by mutual consent of both parties. The request for arbitration and/or the request for an extension of time must be in writing with a copy to the Primary Employer. Should the parties be unable to mutually agree on the selection of an arbitrator, selection for that given arbitration shall be made by seeking a list of seven (7)

labor arbitrators with construction experience from the Federal Mediation and Conciliation Service and alternately striking names from the list of names on the list until the parties agree on an arbitrator or until one name remains. The first party to strike a name from the list shall alternate between the party bringing forth the grievance and the party defending the grievance.

12.4. The Arbitrator selected pursuant to Section 12.3 ("the Arbitrator") shall conduct a hearing at which the parties to the grievance shall be entitled to present testimonial and documentary evidence. Hearings will be transcribed by a certified court reporter. The parties shall be entitled to file written briefs after the close of the hearing and receipt of transcript.

12.5. The Arbitrator's decision shall be submitted in writing and shall be final and binding on all parties signatory to this Agreement. The expense of arbitration, including the cost of the Arbitrator and a court reporter, if any, and the cost of necessary expenses required to pay for facilities for the hearing of cases, shall be borne equally by both parties. The Arbitrator's decision shall be confined to the question posed by the grievance, and the Arbitrator shall not have the authority to modify, amend, alter, add to or subtract from any provision of this Agreement. The Arbitrator shall have the authority to utilize any equitable or legal remedy to prevent and/or cure any breach or threatened breach of this Agreement. The Arbitrator's decision shall be final and binding as to all parties signatory to this Agreement.

12.6. The Primary Employer and other Employers, as well as the Unions, may bring forth grievances under this Article.

12.7. Either party to a grievance may invite Primary Employer to participate in resolution of a grievance. Primary Employer may, at its own initiative, participate in Steps 1 through 3 of the grievance procedure.

12.8. Any of the time periods set forth in this Article may be extended by mutual, written consent of both parties.

13. JURISDICTIONAL DISPUTES

13.1. The assignment of Covered Work will be solely the responsibility of the Employer performing the work involved; and such work assignments will be in accordance with this Agreement and the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.

13.2. All jurisdictional disputes between or among the Building and Construction Trades Unions and their employees, parties to this Agreement shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that

may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding, and conclusive on the Employers and Unions parties to this Agreement.

13.3. All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature, and the Employer's assignment shall be adhered to until the dispute is resolved. Individuals violating this section shall be subject to immediate discharge. Each Employer will conduct a pre-job conference with the Unions prior to commencing work. The Primary Employer and any general contractor will be advised in advance of all such conferences and may participate if they wish. Pre-job conferences for different Employers may be held together.

14. SUCCESSORSHIP AND SURVIVABILITY

14.1. The subcontracting obligations described in Article 4 are independent obligations of Primary Employer ("Obligations") which shall survive any full or partial termination of Primary Employer's involvement in the Project for any reason, including: (i) any full or partial termination or transfer of Primary Employer's right to control and coordinate construction work on the Project Real Property; (ii) any full or partial termination or transfer of a contract, if any, between Primary Employer and any Project owner for any Covered Work; (iii) the sale or other transfer of all or any portion of the Project Real Property or any interest in the Project Real Property by any Project owner; or (iv) any other event that results in the replacement of Primary Employer with another contractor.

14.2. The parties agree that: (i) if Primary Employer's involvement in the Project is terminated as described in Section 14.1; and (ii) Covered Work is performed by a contractor or subcontractor that is not in compliance with the provisions of Article 4, then Primary Employer shall pay liquidated damages in accordance with Section 14.3 to compensate for the actual damages caused by reason thereof. The parties agree that such damages would be unreasonably difficult, costly, inconvenient, or impracticable to calculate and, accordingly, they agree to liquidated damages, which bear a reasonable relationship to the actual harm suffered by the Union and its members, as provided in Section 14.3 ("Liquidated Damages").

14.3. In the event that Liquidated Damages are owed pursuant to Paragraph 14.2 above, Primary Employer shall pay an amount equal to the journeyman total compensation package of the applicable Union for each hour that work was performed on the Project within the scope of this Agreement by employees of contractors or subcontractors who are not signed to this Agreement. The Liquidated Damages shall be paid as follows: one half (1/2) of the total amount to the qualified pension plan and one half (1/2) to the qualified health and welfare plan of the Union having jurisdiction over the work performed by the contractor(s) or subcontractor(s) not signatory to this Agreement. The parties agree that the

Unions shall enforce, collect, and receive Liquidated Damages pursuant to Article 14 on behalf of their qualified pension plans and their qualified health and welfare plans. The qualified pension plans and the qualified health and welfare plans shall have no right to enforce independently the provisions of this Agreement, including, but not limited to, the Liquidated Damages provisions contained in Article 14.

14.4. Primary Employer shall be released from all obligations under this Agreement with respect to all or any portion of the Project, including liability for the payment of Liquidated Damages, and shall have no liability for any breach of this Agreement by a successor, upon Primary Employer's receipt of a fully executed release by the Unions substantially in the form of the release attached to either a "Full Assumption Agreement" (attached hereto as Attachment B(1)) or "Partial Assumption Agreement" (attached hereto as Attachment B(2)) (each, a "Release"). Such Release shall not be withheld if, under all the circumstances, the Unions, in the exercise of their reasonable judgment, determine that the successor has the legal capacity and financial means to complete the Project or portion of the Project and to comply with the successor Primary Employer's obligations and undertakings under this Agreement, including any obligation to pay Liquidated Damages.

14.5. This Article 14 shall be enforceable in any court of competent jurisdiction, and shall not be subject to the grievance procedure set forth in Article 12.

15. GENERAL PROVISIONS

15.1. If any article or provision of this Agreement shall be declared invalid, inoperative, or unenforceable by any competent authority of the executive, legislative, judicial or administrative branch of the federal or state government, the Employers and the Unions shall suspend the operation of such article or provisions during the period of its invalidity and shall negotiate, in its place and stead, an article or provision which will satisfy the objections to its validity and which, to the greatest extent possible, will be in accord with the intent and purpose of the article or provision in question. The new article or provision negotiated by the Primary Employer and the Unions shall be binding on all parties signatory to this Agreement.

15.1.1. If the Primary Employer and the Unions are unable within thirty (30) calendar days to negotiate a substitute article or provision, any of them may at any time thereafter submit the matter directly to arbitration pursuant to procedures set forth in Sections 12.3, Step 4 and 12.4 through 12.8. The Arbitrator shall have the authority to modify, amend and alter the Agreement by providing a substitute article or provision to replace the one(s) that has become invalid, inoperative, or unenforceable. The Arbitrator's decision, and the new article or provision, shall be final and binding on all parties signatory to the Agreement.

15.2. If any article or provision of this Agreement shall be held invalid, inoperative, or unenforceable by operation of law, or by any of the above-mentioned

tribunals of competent jurisdiction, the remainder of the Agreement or application of such article or provision to persons or circumstances other than to which it has been held invalid, inoperative or unenforceable, shall not be affected thereby, so long as the primary purpose of this Agreement is unaffected.

15.3. Except as enumerated in this Agreement, all other terms and conditions of employment described in the Master Agreement shall apply.

15.4. The provisions of this Agreement shall take precedence over conflicting provisions of the applicable Master Agreement.

15.5. Each person executing this Agreement represents and warrants that he or she is authorized to execute this Agreement on behalf of the party or parties indicated.

15.6. This Agreement may be executed in any number of counterparts and each counterpart shall be deemed to be an original document. All executed counterparts together shall constitute one and the same document, and any signature pages may be assembled to form a single original document.

16. TERM

16.1. The term of this Agreement shall commence on the date indicated below after execution by all Parties ("Effective Date"), and shall continue in effect until completion of all Covered Work pursuant to Article 3.

16.2. Notwithstanding any other provision herein, this Agreement shall terminate upon delivery of notice from Primary Employer to the Unions that: (a) the General Plan Amendment, Specific Plan, Prezoning and Annexation, and CEQA Approval for the Project (collectively, the "Key Entitlements") have not been obtained, the applications to the City of Barstow for said Key Entitlements have been completely and irrevocably withdrawn in writing, the City of Barstow has acknowledged receipt of the withdrawal, and a copy of the withdrawal and the acknowledgement of receipt have been delivered to the Unions; or (b) if the Key Entitlements have been completely cancelled or terminated due to the passage of time or other specific terms and conditions governing their issuance so that no commencement of Improvements construction can take place on the Project Real Property without new public hearings to secure the Key Entitlements before the local agencies possessing lawful approval authority over the Project Real Property and written notice has been delivered to the City of Barstow that the then current Project Real Property owners accept the cancellation or termination of the Key Entitlements, and a copy of that acceptance and written acknowledgment of receipt of such notice by the City of Barstow has been delivered to the Unions; or (c) the City of Barstow has affirmatively denied the applications for the Key Entitlements and such denial is final, non-appealable and not subject to further review either administratively or judicially. Upon any such termination, provided that there is then no pending or threatened breach of Agreement, this Agreement shall have no

force or effect and the parties shall have no further obligation to each other by reason thereof.

17. CONFIDENTIALITY

17.1. All parties to this Agreement, including the signatories to the Attachment A, Agreement to be Bound, agree to keep the existence and terms of this Agreement strictly confidential. This Agreement may only be disclosed to the parties to the Agreement and their attorneys, transferees or successors and assigns to the Owner or to Primary Employer, or to prospective purchasers, transferees or successors and assigns who have agreed in writing to keep the Agreement confidential, or to any person or entity contracting for the assignment, awarding or subcontracting of Covered Work, or to the Union signatory contractors bidding or contracting to perform Covered Work in accordance with Article 4, or as needed to comply with, enforce or interpret the provisions of this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed and effective as of March ____, 2024.

PRIMARY EMPLOYER

BNSF RAILWAY COMPANY,
A DELAWARE CORPORATION

By: Craig N. Rasmussen
Its: AVP, Engr Svcs & Structures

UNIONS

UA PLUMBERS AND PIPEFITTERS UNION, LOCAL 364

By: _____
Business Manager

INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS UNION, LOCAL 477

By: _____
Business Manager

SHEET METAL WORKERS UNION, LOCAL 105

By: _____
Business Manager

DISTRICT COUNCIL OF IRONWORKERS OF THE STATE OF CALIFORNIA AND VICINITY

By: _____
President

Exhibit A

This Exhibit A sets forth specific work items that are excluded from the scope of the Barstow International Gateway Railyard Project Community Workforce Trade Agreement ("Agreement"). BNSF and the BMWE may not necessarily agree that all the below work is in the BMWE's scope of agreement, and so inclusion on the list is not any admission by BNSF as to "scope coverage."

- Unload Continuously Welded Rail (CWR) from Rail Train.
- Unload Panelized turnouts from Rail Cars.
- Unload Other Track Material from Railcars and from trucks Distribute Panelized turnouts in proper locations on the site.
- Weld panelized turnout components together using thermite welding method.
- Installation and connection of switch stands to switch.
- Install missing switch ties in assembled turnout panels Distribute CWR in desired position for installation in track.
- If Track-Laying Machine is used for construction, operate TLM to construct track between the turnouts (This work would include placing pads, insulators, and clips on the concrete ties).
- If not using the TLM for construction, distribute crossties on the desired alignment for the track.
- Distribute pads, insulators, and clips for fastening rail to the ties.
- Using a loader or crawler crane, the CWR would be treaded into place on the ties.
- Insulators and clips would need to be installed and clipped.
- Ends of the CWR would be temporarily bolted together to complete the construction of the track.
- Dump ballast from ballast trains into track and turnouts for surface correction.
- Raise and line track and turnouts using mechanized surfacing equipment Redistribute and shape ballast with a ballast regulator and broom.
- Distress rail and weld together all rail ends using thermite welding method.
- Install rail-crossings and approaches to crossings at desired locations, and signalization for any such crossings.
- Construct any culverts, drains and ditching work, necessary to achieve proper drainage for the track.

Exhibit B

This Exhibit B sets out work items related to signal work and telecommunications work that are excluded from the scope of the Barstow International Gateway Railyard Project Community Workforce Trade Agreement. These exclusions apply only to signal work and telecommunications work on the Railyard Project that is performed by BNSF's own employees or per a national agreement with IBEW. BNSF and the BRS may not necessarily agree on what is in the BRS's scope of agreement, and so inclusion on the list is not any admission by BNSF as to "scope coverage." Nor is listing here any admission that this work will necessarily be performed as part of the Barstow International Gateway Railyard Project.

- Non-Solar Power switches.
- Signals governing movement over a set section of track Crossing warning devices.
- Blue light systems involving power derails Advance approach signals.
- Control point construction Electric lock switch.
- Wayside Failed Equipment Detectors such as Dragging Equipment, Hot Box, Derailment, Cold Wheel, and High Wide.
- Track Circuits and Presence Detectors.

Exhibit C

This Exhibit C sets out work items that are excluded from the scope of the Barstow International Gateway Railyard Project Community Workforce Trade Agreement. Exhibit C also sets forth agreed upon subcontracting provisions for Exhibit C work items that are not performed by BNSF's own employees. BNSF and the IBEW may not necessarily agree on what is in BNSF's scope of agreement, and so inclusion on the list is not any admission by BNSF as to "scope coverage."

I. EXHIBIT C EXCLUDED WORK ITEMS

Outside Plant System:
-Site prep and excavation of foundation for telecom building
-Setting of telecommunications building on foundation
-Installation & termination of all grounding cabling and ground rods
-Site prep and excavation of telecommunication tower foundation
-Setting of telecommunication towers on foundation
-Installation & termination of all waveguide, coax, twisted pair, power, and other required cabling on towers
-Installation of two-way and broadcast voice, data, telemetry, and SCADA antenna systems, microwave backhaul and repeater antennas, GPS antennas, WI-FI antennas, and all other radiating device
-Installation of in ground fiber optic cable systems including all conduits, manholes, splice cases, and pull boxes
-Installation and termination of fiber optic cable, terminations, splicing, final test and turn up
-Installation and termination of any copper cabling within a yard or building including station wiring

Inside Plant Systems:
-Installation of all telecom racks, hardware, ladder rack, grounding and cable management
-Installation of any fiber optic cabling, termination of fiber connectors and fiber optic termination panels
-Installation of all IP switches & routers including power and grounding
-Installation of all radio transceiver systems including duplexers, coax, waveguide, lighting protection, power, and grounding
-Installation of all video servers and camera systems including power and grounding
-Installation of all card reader systems including door systems, back office components and wiring including power and grounding
-Installation of all GPS and timing systems including power and grounding
-Installation of all alarming systems including wiring, power and grounding

Power & DC Systems:
-Installation of all chassis, rectifiers, batteries, panels, breakers, racks, and wiring
-Installation of power converters and inverters
-Installation and termination of all wiring systems
-Installation of backup power generators, transfer switches, wiring and grounding

Commissioning of Equipment:

-Verification of configurations and setup of all electronic equipment
-Verification of alarming system functionality
-Final commissioning, testing and turn-up of all electronic equipment
-Ongoing maintenance of all electronic equipment, facilities, components, hardware and wiring systems

II. EXHIBIT C SUBCONTRACTING PROVISIONS

A. Notwithstanding Section 4.2 of the Barstow International Gateway Railyard Project Community Workforce Trade Agreement ("Agreement"), work covered by Exhibit C that is not performed by BNSF's own employees may be awarded to contractors that are not signatory or a party to a national, area or local collective bargaining agreement with a signatory Union. The bidder for this Exhibit C work needs only to be willing, ready, and able to execute the Addendum A Agreement to be Bound and agree to comply with the applicable Master Agreement for the all work that the Contractor performs on the Project.

B, Article 5 of the Agreement, including the three-bid minimum provisions, shall not apply to work covered by Exhibit C.

C. In awarding work under this section, BNSF shall provide Union-signatory contractors an opportunity to bid this work by providing IBEW Local 447 written notice of the solicitation of bids for Exhibit C work at least thirty (30) days in advance of the deadline for receipt of bids and bid specifications, information and bidding requirements directly to any union-signatory contractors that request to receive the bid specifications in a timely manner following such request.

D. A contractor or subcontractor awarded work under the jurisdiction of Local 447 under this Article may request by name, and IBEW Local 447 will honor, referral of such Contractor's "core" employees who have applied to that Union for Project work, and who demonstrate the following qualifications:

(1) Possess any license required by state or federal law for the Project work to be performed;

(2) Have worked a total of at least two thousand (4,000) hours in the construction craft during the prior four (4) years;

(3) Were on the Contractor's active payroll for at least one hundred and eighty (180) out of the two hundred and sixty (260) calendar days prior to the contract award;

(4) Have the ability to perform safely the basic functions of the applicable trade; and

E. The Union will refer to such Contractor one journeyman employee from the hiring hall out-of-work list for the affected trade or craft, and will then refer one of such Contractor's "core" employees as a journeyman and shall repeat the process, one and one, until such Contractor's crew requirements are met or until such Contractor has hired three (3) "core" employees, whichever occurs first. Thereafter, all additional employees in the affected trade or craft shall be hired exclusively from the hiring hall out-of-work list(s). For the duration of the Contractor's work, the ratio shall be maintained and when the Contractor's workforce is reduced, employees shall be reduced in the same ratio of core employees to hiring hall referrals as was applied in the initial hiring.

F. Prior to performing Covered Work, each Contractor shall provide a list of "core" employees to IBEW Local 447. The list shall include each "core" employee's name and qualifications. Following such submittal, Contractors shall not make any changes or substitutions to their respective "core" employee lists for the duration of their work on the Project without prior agreement of the Parties, unless one or more "core" employees retires, changes employers, resigns, is terminated, or is otherwise no longer able to perform Covered Work.

ATTACHMENT A
AGREEMENT TO BE BOUND

COMMUNITY WORKFORCE AND TRAINING AGREEMENT
BARSTOW INTERNATIONAL GATEWAY RAILYARD PROJECT

The undersigned hereby certifies and agrees that:

1.) It is an Employer as that term is defined in Section 1.4 of the Barstow International Gateway Railyard Project Community Workforce and Training Agreement ("Agreement") because it has been, or will be, awarded a contract or subcontract to assign, award or subcontract Covered Work on the Barstow International Gateway Railyard Project (as defined in Sections 1.2 and 3.1 of the Agreement), or to authorize another party to assign, award or subcontract Covered Work, or to perform Covered Work.

2.) In consideration of the award of such contract or subcontract, and in further consideration of the promises made in the Agreement and all attachments thereto (a copy of which was received and is hereby acknowledged), it accepts and agrees to be bound by the terms and conditions of the Agreement, together with any and all amendments and supplements now existing or which are later made thereto.

3.) It has no commitments or agreements that would preclude its full and complete compliance with the terms and conditions of said Agreement.

4.) It will secure a duly executed Agreement to be Bound, in form identical to this document, from any Employer(s) at any tier or tiers with which it contracts to assign, award, or subcontract Covered Work, or to authorize another party to assign, award or subcontract Covered Work, or to perform Covered Work.

DATED: _____

_____
Name of Employer

_____
(Authorized Officer & Title)

_____

_____
(Address)

ATTACHMENT B(1)

FULL ASSUMPTION AGREEMENT

THIS ASSUMPTION AGREEMENT ("Assumption Agreement") is by and between _____ ("Assignor") and _____ [*NEW PRIMARY EMPLOYER*] ("Assignee").

RECITALS

A. Assignor is the Primary Employer under a certain Barstow International Gateway Railyard Project Community Workforce and Training Agreement dated _____, 2024 (the "CWTA") with the UA Plumbers and Pipefitters Union, Local 364, UA Sprinkler Fitters Union, Local 669, International Brotherhood of Electrical Workers Union, Local 477, Sheet Metal Workers Union, Local 105, and District Council of Ironworkers (collectively the "Unions") concerning the development located in the City of Barstow, San Bernardino County, California, known as the Barstow International Gateway Railyard Project.

B. Assignor desires to assign to Assignee all of its rights and obligations under the CWTA with respect to all of the Project and the Project Real Property as described in the CWTA, and to be released by the Unions, in accordance with Paragraph 14.4 of the CWTA, from all of Assignor's rights and obligations under the CWTA with respect to the Project and the Project Real Property.

C. Assignee desires to assume, for the benefit of the Unions, all rights and obligations of Primary Employer under the CWTA with respect to the Project and the Project Real Property.

AGREEMENTS

FOR VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, Assignor and Assignee agree as follows:

1. Effective [*DATE*] (the "Effective Date"), Assignor hereby assigns to Assignee all of Assignor's right, title, and interest in and to the CWTA with respect to the Project and the Project Real Property. Assignor acknowledges that it has no further interest in the CWTA or the Project and the Project Real Property, and that the Unions may treat the CWTA as if it had been made by Assignee.

2. As of the Effective Date, Assignee hereby assumes all of Assignor's rights and obligations under the CWTA and agrees to perform and is able to perform, as a direct obligation to the Unions, all of the covenants, agreements and conditions contained in the CWTA to be performed by Primary Employer.

3. Assignee expressly warrants and represents that it possesses a valid California general contractor's license, directly employs on-site personnel and is an employer primarily engaged in the building and construction industry. Assignee agrees, and by execution of Exhibit 1 the Unions agree, that damages from the breach of the warranties and representations in this Assumption Agreement would be unreasonably difficult, costly, inconvenient or impracticable to calculate and, accordingly, they agree to Liquidated Damages which bear a reasonable relationship to the actual harm suffered by the Unions and their members, as calculated pursuant to the methodology set forth in Paragraph 14.3. If there is a breach of the warranties and representations of Assignee contained in this Assumption Agreement, and Covered Work is performed by a contractor or subcontractor that is not in compliance with the provisions of Article 4 of the CWTA, then Assignee shall pay Liquidated Damages, calculated pursuant to the methodology set forth in Paragraph 14.3 of the CWTA and to the entities described in Paragraph 14.3 of the CWTA, to compensate for the actual damages.

4. This Assumption Agreement is expressly conditioned upon the Unions' execution and delivery to Assignor of a Release of Assignor's obligations under the CWTA, which Release shall be substantially in the form of Exhibit 1.

5. This Assumption Agreement and all covenants and agreements contained herein shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

6. This Assumption Agreement shall be governed by and construed in accordance with the laws of the State of California, including all matters of construction, validity, performance, and enforcement.

7. In the event of a dispute regarding the interpretation or enforcement of the provisions hereof, the prevailing party shall be entitled to its reasonable attorneys' fees and costs of suit.

8. The address of Assignee for delivery of notices is:

_____

_____

_____

9. Assignor and Assignee each acknowledge that the Unions are third party beneficiaries to this Assumption Agreement and are entitled to rely upon the covenants and representations of Assignee and Assignor contained herein. This Agreement shall not be amended, modified, supplemented, or revised without the prior written consent of the Unions.

10. This Assumption Agreement may be executed in any number of counterparts and each counterpart shall be deemed to be an original document. All executed counterparts together shall constitute one and the same document, and any signature pages may be assembled to form a single original document.

11. This Assumption Agreement constitutes the entire agreement of Assignee and Assignor with respect to the CWTA.

IN WITNESS WHEREOF, Assignor and Assignee have caused this Assumption Agreement to be executed and do each hereby warrant and represent that their respective signatories, whose signatures appear below, have been and are on the date of this Assignment Agreement duly authorized by all necessary and appropriate action to execute this Assignment Agreement.

"ASSIGNOR"	"ASSIGNEE"
	[*NEW PRIMARY EMPLOYER*]
_____	By: _____
_____	Its: _____
Dated: _____	Dated: _____

<u>Exhibit 1</u> to Attachment B(1)

COMMUNITY WORKFORCE AND TRAINING AGREEMENT
RELEASE OF LIABILITY

This Release of Liability ("Release") is made by UA Plumbers and Steamfitters Union, Local 78, UA Pipefitters Union, Local 250, UA Sprinkler Fitters Union, Local 709, International Brotherhood of Electrical Workers Union, Local 11, Sheet Metal Workers Union, Local 105, and District Council of Ironworkers ("Unions").

A. The Unions and BNSF Railway Company, a Delaware corporation, ("Primary Employer") entered into that certain Barstow International Gateway Railyard Project Community Workforce and Training Agreement, dated _____, 2024 (the "CWTA") whereby the parties agreed, in Article 14, that, upon execution and delivery to the Unions of a Full Assumption Agreement by a successor assuming all of Primary Employer's obligations under the CWTA ("Assumption Agreement"), the Unions shall release Primary Employer from all of its obligations under the CWTA.

B. Primary Employer and _____ have executed that certain Assumption Agreement, dated _____.

C. In reliance upon the foregoing, including, but not limited to, the warranties and representations of Assignee contained in this Assumption Agreement, the Unions each acknowledge and agree that Primary Employer has satisfied the successorship criteria of Article 14 of the CWTA. Accordingly, the Unions do hereby, jointly, and severally, release Primary Employer from all subsequent obligations and undertakings of the CWTA, including liability for the payment of Liquidated Damages under Paragraph 14.3.

IN WITNESS WHEREOF, the Unions have caused this Release to be executed and effective from and after _____, 20___.

UNIONS:

By: _____
Business Manager, UA Local 364

By: _____
Business Manager, UA Local 669

By: _____
Business Manager, IBEW Local 447

By: _____
Business Manager, SMW Local 105

By: _____
President, District Council of Ironworkers
of the State of California and Vicinity

ATTACHMENT B(2)
PARTIAL ASSUMPTION AGREEMENT

THIS PARTIAL ASSUMPTION AGREEMENT ("Partial Assumption Agreement") is by and between _____, a California corporation ("Assignor") and _____ **[*NEW PRIMARY EMPLOYER*]** ("Assignee").

RECITALS

A. Assignor is the Primary Employer under a certain Barstow International Gateway Railyard Project Community Workforce and Training Agreement dated _____, 2024 (the "CWTA") with the UA Plumbers and Pipefitters Union, Local 364, UA Sprinkler Fitters Union, Local 669, International Brotherhood of Electrical Workers Union, Local 477, Sheet Metal Workers Union, Local 105, and District Council of Ironworkers (collectively the "Unions") concerning the development project located in the City of Barstow, San Bernardino County, California, known as the Barstow International Gateway Railyard Project (the "Project").

B. Assignor desires to assign to Assignee all of its rights and obligations under the CWTA with respect to the portion of the Project and Property described on Exhibit 2 attached hereto (the "Assignee Project Property"), and to be released by the Unions, in accordance with Paragraph 14.4 of the CWTA, from all of Assignor's rights and obligations under the CWTA with respect to the Assignee Project Property.

C. Assignee desires to assume, for the benefit of the Unions, all rights and obligations of Primary Employer under the CWTA with respect to the Assignee Project Property.

AGREEMENTS

FOR VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, Assignor and Assignee agree as follows:

1. Effective **[*DATE*]** (the "Effective Date"), Assignor hereby assigns to Assignee all of Assignor's right, title, and interest in and to the CWTA with respect to the Assignee Project Property. Assignor acknowledges that it has no further interest in the CWTA with respect to the Assignee Project Property, and that the Unions may treat the CWTA as if it had been made by Assignee with respect to the Assignee Project Property.

2. As of the Effective Date, Assignee hereby assumes all of Assignor's rights and obligations under the CWTA with respect to the Assignee Project Property, and agrees to perform and is able to perform, as a direct obligation to the Unions, all of the covenants, agreements and conditions contained in the CWTA to be performed by Primary Employer with respect to the Assignee Project Property.

3. Assignee expressly warrants and represents that it possesses a valid California general contractor's license, directly employs on-site personnel and is an employer primarily engaged in the building and construction industry. Assignee agrees, and by execution of Exhibit 1 the Unions agree, that damages from the breach of the warranties and representations in this Partial Assumption Agreement would be unreasonably difficult, costly, inconvenient or impracticable to calculate and, accordingly, they agree to Liquidated Damages which bear a reasonable relationship to the actual harm suffered by the Unions and their members, as calculated pursuant to the methodology set forth in Paragraph 14.3 of the CWTA. If there is a breach of the warranties and representations of Assignee contained in this Assumption Agreement, and Covered Work is performed by a contractor or subcontractor that is not in compliance with the provisions of Article 4 of the CWTA, then Assignee shall pay Liquidated Damages, calculated pursuant to the methodology set forth in Paragraph 14.3 of the CWTA and to the entities described in Paragraph 14.3 of the CWTA, to compensate for the actual damages.

4. This Partial Assumption Agreement is expressly conditioned upon the Unions' execution and delivery to Assignor of a Release of Assignor's obligations under the CWTA with respect to the Assignee Project Property, which Release shall be substantially in the form of Exhibit 1.

5. This Partial Assumption Agreement and all covenants and agreements contained herein shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

6. This Partial Assumption Agreement shall be governed by and construed in accordance with the laws of the State of California, including all matters of construction, validity, performance, and enforcement.

7. In the event of a dispute regarding the interpretation or enforcement of the provisions hereof, the prevailing party shall be entitled to its reasonable attorneys' fees and costs of suit.

8. The address of Assignee for delivery of notices is:

_____
_____
_____

9. Assignor and Assignee each acknowledge that the Unions are third party beneficiaries to this Partial Assumption Agreement and are entitled to rely upon the covenants and representations of Assignee and Assignor contained herein. This Agreement shall not be amended, modified, supplemented, or revised without the prior written consent of the Unions.

10. This Partial Assumption Agreement may be executed in any number of counterparts and each counterpart shall be deemed to be an original document. All executed counterparts together shall constitute one and the same document, and any signature pages may be assembled to form a single original document.

11. This Partial Assumption Agreement constitutes the entire agreement of Assignee and Assignor with respect to the CWTA.

12. All of the obligations of Assignor under the CWTA, with respect to all of the Project Property, except for the Assignee Project Property, shall remain in full force and effect.

IN WITNESS WHEREOF, Assignor and Assignee have caused this Partial Assumption Agreement to be executed and do each hereby warrant and represent that their respective signatories, whose signatures appear below, have been, and are on the date of this Partial Assignment Agreement, duly authorized by all necessary and appropriate action to execute this Partial Assignment Agreement.

"ASSIGNOR"	"ASSIGNEE"
	[*NEW PRIMARY EMPLOYER*]
_____	By: _____
_____	Its: _____
Dated: _____	Dated: _____

<u>Exhibit 1</u> to Attachment B(2)

COMMUNITY WORKFORCE AND TRAINING AGREEMENT
PARTIAL RELEASE OF LIABILITY

This Partial Release of Liability ("Partial Release") is made by UA Plumbers and Pipefitters Union, Local 364, UA Sprinkler Fitters Union, Local 669, International Brotherhood of Electrical Workers Union, Local 477, Sheet Metal Workers Union, Local 105, and District Council of Ironworkers ("Unions").

A. The Unions and BNSF Railway Company, a Delaware corporation, ("Primary Employer") entered into that certain Barstow International Gateway Railyard Project Community Workforce and Training Agreement, dated _____, 2024 (the "CWTA") whereby the parties agreed, in Article 14, that, upon execution and delivery to the Unions of a Partial Assumption Agreement by a successor partially assuming Primary Employer's obligations under the CWTA ("Partial Assumption Agreement"), the Unions shall release Primary Employer from its obligations under the CWTA to the extent that such obligations are transferred to such successor.

B. Primary Employer and _____ have executed that certain Partial Assumption Agreement, dated _____ with respect to the Assignee Project Property described therein, and such agreement is acceptable to the Unions.

C. In reliance upon the foregoing, including, but not limited to, the warranties and representations of Assignee contained in this Assumption Agreement, the Unions each acknowledge and agree that Primary Employer has satisfied the successorship criteria of Article 14 of the CWTA with respect to the Assignee Project Property. Accordingly, the Unions do hereby, jointly, and severally, release Primary Employer from all subsequent obligations and undertakings of the CWTA with respect to the Assignee Project Property, including liability for the payment of Liquidated Damages with respect to the Assignee Project Property under Paragraph 14.3.

D. All obligations of Primary Employer with respect to all of the Project Real Property except for the Assignee Project Property shall remain in full force and effect.

IN WITNESS WHEREOF, the Unions have caused this Partial Release to be executed and effective from and after _____, 20___.

UNIONS:

By: _____
Business Manager, UA Local 364

By: _____
Business Manager, UA Local 669

By: _____
Business Manager, IBEW Local 477

By: _____
Business Manager, SMW Local 105

By: _____
President, District Council of Ironworkers
of the State of California and Vicinity

MEMORANDUM OF UNDERSTANDING

between
WESTERN STATES REGIONAL COUNCIL OF CARPENTERS

and

BNSF RAILWAY COMPANY

("Warehouse Project")

This Memorandum of Understanding ("MOU" or "Agreement") entered into by and between the WESTERN STATES REGIONAL COUNCIL OF CARPENTERS and its affiliated local unions ("Union"), and BNSF RAILWAY COMPANY, ("Developer". or "Owner") is intended to memorialize the agreement between the parties with respect to the initial construction of industrial warehouse tilt up buildings ("Covered Work") as part of the Barstow International Gateway Project (hereinafter "Gateway Projects") located in Barstow, California as defined in Developer's Notice of Preparation for Draft Environmental Impact Report ("NOP"). The parties hereby agree as follows:

1. In order to avoid any liabilities or labor disputes, this Agreement is intended to establish and foster continued close cooperation among the Developer, contractors of all tiers ("Contractors" or "Employer(s)"), and labor to ensure labor harmony among any and all subcontractors, and among management and labor.

2. In order to ensure that Warehouse Project is built to the highest standard of craftsmanship while also promoting the growth of a skilled workforce, Parties agree to meet the conditions established under California Public Contracts Code Section 2601(d) and (e) for a Skilled and Trained Workforce on all carpenter craft work. The Union agrees that, to the extent that their hiring hall is used to dispatch employees to Warehouse Project Covered Work, and to the extent allowed by law, they will exert their best efforts to refer and/or recruit workers necessary to achieve a goal of staffing thirty-percent (30%) of all carpenter labor and craft positions with graduates of an apprenticeship program for the applicable classification.

3. To further the intentions of the parties hereto, the Developer and the Union have agreed that the Developer will enter into an agreement with a general contractor which is signatory to a collective bargaining agreement with the Western States Regional Council of Carpenters (the "Council") and its affiliated Local Unions ("Signatory General Contractor").

4. The Signatory General Contractor on the Warehouse Project shall be entitled to make use of any special agreements that apply to this market, subject to the terms of this Agreement.

5. In the event that any contractors of whatever tier commit any OSHA violations (state and/or federal), engage in any illegal, fraudulent, willfully or grossly negligent business activities (including without limitation payroll fraud and wage and hour violations), and/or fail to pay area standard wages and benefits, Developer shall have the right to terminate such contractor.

6. The Union agrees to put forth its best effort in support of the Warehouse Project, subject to this Agreement, before governmental bodies and/or community organizations in connection with any and all required government approvals. Such expression of support may include, among other things, as appropriate: sending letters of support to appropriate entities; appearing in support at public hearings and/or community hearings; contacting the mayor and/or other elected or appointed officials to express support; and generally working together with the Developer to obtain full entitlements and approvals for the applicable project to proceed. Any action either public or private in opposition of the Warehouse Project or Developer will be considered a material breach of this agreement.

7. During the term of this Agreement, there shall be no strikes, sympathy strikes, picketing, work stoppages, slow downs, handbilling where the handbilling relates to the Warehouse Project or to the Developer, Signatory General Contractor or other Employer working or providing work on the Warehouse Project, or interference with the work or other disruptive activity of any kind at the Warehouse Project site for any reason by the Union, its agents, representatives, or by any employee, and there shall be no lockout by any Employer. Failure of either the Union or an employee to cross any picket line established at the Developer's project site is a violation of this Paragraph and Section.

a. The Union shall not sanction, aid or abet, encourage, condone or participate in or continue any work stoppage, delay, strike, picketing or any other disruptive activity at the Warehouse Project site and shall undertake all reasonable means to prevent or to terminate any such activity. No employee shall engage in activities which violate this Section. Any employee who participates in or encourages any activities which interfere with the normal operation of the Warehouse Project or which violate this Section, shall be subject to disciplinary action, including discharge, and, if justifiably discharged for the above reasons, shall not be eligible for rehire or further work on the Warehouse Project.

b. The Union shall not be liable for acts of employees that it does not represent. With respect to employees the Union does represent, the principal officer or officers of the Union will immediately instruct, and order and use the best efforts of his office to cause such employees to cease any violations of this Section. The Union complying with this obligation shall not be liable for any unauthorized acts of the employees it represents. The failure of any Employer to exercise its right in any instance shall not be deemed a waiver of its right in any other instance.

c. The Union agrees that if any union or any other persons, whether parties to this Agreement or otherwise, engage in any picketing or work stoppages, the signatory Union shall consider such work stoppage or picketing to be illegal and refuse to honor such picket line or work stoppage.

d. In the event of any work stoppages, strike, sympathy strike, picketing, handbilling or interference with the work or any other disruptive activity at the Warehouse Project site in violation of this Section, the Developer may suspend all or any portion of the Project work affected by such activity at the Developer's discretion and without penalty.

e. In lieu of, or in addition to, any other action at law or equity, any party may institute the following procedure when a breach of this Section is alleged, after the Union has been notified of the fact, understanding that the grieving party has the discretion to opt for resolution of any dispute under this Paragraph.

f. The party invoking this procedure shall notify Guy Prihar, who the parties to this agreement agree shall be the permanent Arbitrator under this procedure. In the event that the permanent Arbitrator is unavailable at any time, the American Arbitration Association shall select an alternative arbitrator within twenty-four (24) hours of notice. Notice to the Arbitrator shall be by the most expeditious means available, with notice by fax or electronic means or any other effective written means to the party alleged to be in violation and the Union.

g. Upon receipt of said notice, the Arbitrator selected above shall set and hold a hearing within twenty-four (24) hours if it is contended that the violation still exists or is threatened to resume.

h. The Arbitrator shall notify the parties by fax or electronic means or any other effective written means of the place and time he has chosen for this hearing. Said hearing shall be completed in one session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an Award by the Arbitrator.

i. The sole issue at the hearing shall be whether or not a violation of this Section has in fact occurred. The Award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without an opinion. If any party desires an opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the Award. The Arbitrator may order cessation of the violation of this Section by the Union, and such Award shall be served on all parties by hand or registered mail or by electronic mail upon issuance. The Union accepts service pursuant to any of the foregoing means of notice and expressly waives notice by more formal means.

j. Such Award may be enforced by any court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to hereinabove in the following manner. The fax or electronic notice of the filing of such enforcement proceedings shall be given to the other party. In the proceeding to obtain a temporary order enforcing the Arbitrator's Award as issued under Paragraph 7(i) of this Section, all parties waive the right to a hearing and agree that such proceedings may be ex parte.

Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Arbitrator's Award shall be served on all parties by hand or by delivery to their last known address or by registered mail or by electronic mail. All parties waive the right to require the issuance of a bond or other security for issuance of an injunction or an appeal to a refusal to issue one under this Section.

k. Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by the parties to whom they accrue.

l. The fees and expenses of the Arbitrator shall be borne by the party or parties found in violation, or in the event no violation is found, such fees and expenses shall be borne by the moving party.

m. If the Arbitrator determines that a violation of Paragraph 7(i) of this Section has occurred, the party or parties found to be in violation shall pay as liquidated damages the following amounts: for the first shift in which the violation occurred, $10,000; for the second shift, $15,000; for the third shift, $20,000; for each shift thereafter on which the craft has not returned to work, $20,000 per shift. The Arbitrator shall retain jurisdiction to determine compliance with this Section.

n. The procedures contained in this Section shall be applicable to alleged violations of this Section. Disputes alleging violation of any other provision of this Agreement, including any underlying disputes alleged to be in justification, explanation or mitigation of any violation of this Section, shall be resolved under the grievance procedures of the applicable Master Agreement between Employers and Union.

o. Notwithstanding the provisions of this Paragraph, it is agreed that with forty eight (48) hours prior written notice to the Owner, the Union retains the right to withhold the services of its members from a particular contractor or subcontractor who fails with respect to work on the Warehouse Project to make timely payments to the Union's benefit plans or to pay timely its weekly payroll in accordance with its agreements with

the Union; provided, however, that in the event the Union or any of its members withhold their services from such contractor or subcontractor, Developer shall have the right to replace such contractor or subcontractor with any other contractor or subcontractor who executes the applicable Master Agreement.

p. In the event that the applicable Master Agreement of a Union expires and the parties to that agreement fail to reach agreement on a new contract by the date of expiration, the Union shall continue to provide employees to the Employers working on the Warehouse Project under all the terms of the expired agreement until a new agreement is negotiated, at which time all terms and conditions of that new agreement shall be applied to Covered Work at the Warehouse Project, except to the extent they conflict with any provision of this Agreement in which case the terms of this Agreement shall govern. In addition, if the new Master Agreement provides for wage or benefit increases, then any Employer shall pay to its employees who perform Covered Work at the Warehouse Project during the hiatus between the effective dates of such labor agreements, an amount equal to any such wage and benefit increases established by the new labor agreement applicable to such work performed during the hiatus.

8. In the event any provision or part of this Agreement is found to be invalid or unenforceable, only that particular provision or part so found, and not the entire Agreement, will be inoperative. Parties further agree that any such court is expressly authorized to modify any such unenforceable provision of this Agreement in lieu of severing such unenforceable provision from this Agreement in its entirety, whether by rewriting the offending provision, deleting any or all of the offending provision, adding additional language to this Agreement or by making such other modifications as it deems warranted to carry out the intent and agreement of the Parties as embodied herein to the maximum extent permitted by law. The party seeking to revise any part of this agreement shall bear all associated costs.

9. In the event that the Developer enters into any other agreement related to a project covered under this Agreement, which requires the payment of prevailing wages on the project, then the prevailing wage rate shall also be enforced on all Carpenter scope work on the project.

10. This Agreement and any supplements or amendments there to, shall be binding upon the parties hereto, their successors, administrators, executors and assigns, including any successors, administrators, executors and assigns on the specific development project covered under the terms of this Agreement. It is the intent of this Agreement that in the event the Developer's ownership interest in the project or their business is, in whole or in part, sold, leased, transferred, or taken over by sale, transfer, lease, assignment, receivership, or bankruptcy proceedings, such business and operation shall continue to be subject to the terms and conditions of this Agreement for the life thereof. It is understood by this provision that the parties hereto shall not use any leasing or other transfer device to a third party to evade this Agreement. The Developer shall give notice of existence of this Agreement and this provision to any purchaser, transferee, lessee, assignee, etc., of the business and operation covered by this Agreement or any part thereof, and shall make acceptance of the terms of this Agreement a requirement of any such purchase, transfer, lease, assignment, etc. Notice shall be provided in writing to the Union, at the time the seller, transferor, or lessor executes a contract or transaction, and shall include a fully executed copy for a successor agreement binding the seller, transferor, or lessor to the terms of this Agreement.

11. The language of this Agreement shall not be interpreted in favor of or against any Party as the drafter of this Agreement.

12. The term of this Agreement shall commence on the date indicated below after execution by all Parties ("Effective Date"), and shall continue in effect until the completion of all Covered Work. Prior to Completion of all Covered Work, upon request from Owner or Employer, the Union shall confirm, in writing, the current status of the Agreement, to include certification that the Agreement has not been modified and is in full force and effect, that there are no known defaults under the Agreement, and such other similar certifications as reasonably requested by Owner or Employer.

13. Notwithstanding any other provisione of this Agreement, this Agreement automatically shall end of its own terms, if (a) the applicable governmental approvals and related CEQA/NEPA certifications and findings (collectively, the "Entitlements") are not obtained by Developer; or (b) if the Entitlements or required CEQA documents have been invalidated by a final court order; or (c) the Warehouse Project is not built by Developer or an affiliate of Developer

and a subsequent project at the same location must, again, submit for an entirely new discretionary review under CEQA or NEPA and the permit approval process. Upon any such termination, this Agreement shall have no force or effect and the parties shall have no further obligation to each other by reason thereof.

BNSF RAILWAY COMPANY

By: _____

Title: AVP Economic Development

Dated: 3/28/24

WESTERN STATES REGIONAL COUNCIL OF CARPENTERS

By: _____

Title: President

Dated: 3/25/24

By: _____

Title: Millwright - Regional Manager

Dated: 3/28/2024

MEMORANDUM OF UNDERSTANDING

between
WESTERN STATES REGIONAL COUNCIL OF CARPENTERS

and

BNSF RAILWAY COMPANY

("Railyard Project")

This Memorandum of Understanding ("MOU" or "Agreement") entered into by and between the WESTERN STATES REGIONAL COUNCIL OF CARPENTERS and its affiliated local unions ("Union"), and BNSF Railway Company, ("Developer" or "Owner") is intended to memorialize the agreement between the parties with respect to the initial construction of the intermodal railyard facility ("Covered Work") being constructed as part of the Barstow International Gateway Logistics Project (hereinafter "Gateway Projects") located in Barstow, California as defined in Developer's Notice of Preparation for Draft Environmental Impact Report ("NOP"). The parties hereby agree as follows:

1. In order to avoid any liabilities or labor disputes, this Agreement is intended to establish and foster continued close cooperation among the Developer, contractors of all tiers ("Contractors" or "Employer(s)"), and labor to ensure labor harmony among any and all subcontractors, and among management and labor.

2. In order to ensure that Railyard Project is built to the highest standard of craftsmanship while also promoting the growth of a skilled workforce, parties agree to meet the conditions established under California Public Contracts Code Section 2601(d) and (e) for a Skilled and Trained Workforce on all carpenter craft work. The Union agrees that, to the extent that their hiring hall is used to dispatch employees to Railyard Project Covered Work, and to the extent allowed by law, they will exert their best efforts to refer and/or recruit workers necessary to achieve a goal of staffing thirty-percent (30%) of all carpenter labor and craft positions with graduates of an apprenticeship program for the applicable classification.

3. To further the intentions of the parties hereto, the Developer and the Union have agreed that the Developer will enter into an agreement with a general contractor which is signatory to a collective bargaining agreement with the Western States Regional Council of Carpenters (the "Council") and its affiliated Local Unions ("Signatory General Contractor").

4. Certain work of a specialized nature as further described in the attached Exhibits A, B, and C will not be covered work under this Agreement.

5. The Signatory General Contractor on the Railyard Project shall be entitled to make use of any special agreements that apply to the work on this Railyard Project.

6. In the event that any contractors of whatever tier commit any OSHA violations (state and/or federal), engage in any illegal, fraudulent, willfully or grossly negligent business activities (including without limitation payroll fraud and wage and hour violations), and/or fail to pay area standard wages and benefits, Developer shall have the right to terminate such contractor.

7. During the term of this Agreement, there shall be no strikes, sympathy strikes, picketing, work stoppages, slow downs, handbilling where the handbilling relates to the Railyard Project or to the Developer, Signatory General Contractor or other Employer working or providing work on the Railyard Project, or interference with the work or other disruptive activity of any kind at the Railyard Project site for any reason by the Union, its agents, representatives, or by any employee, and there shall be no lockout by any Employer. Failure of either the Union or an employee to cross any picket line established at the Developer's project site is a violation of this Paragraph and Section.

a. The Union shall not sanction, aid or abet, encourage, condone or participate in or continue any work stoppage, delay, strike, picketing or any other disruptive activity at the Railyard Project site and shall undertake all reasonable means to prevent or to terminate any such activity. No employee shall engage in activities which violate this Section. Any employee who participates in or encourages any activities which interfere with the normal operation of the Railyard Project or which violate this Paragraph, shall be subject to disciplinary action, including discharge, and, if justifiably discharged for the above reasons, shall not be eligible for rehire or further work on the Railyard Project.

b. The Union shall not be liable for acts of employees that it does not represent. With respect to employees the Union does represent, the principal officer or officers of the Union will immediately instruct, and order and use the best efforts of his office to cause such employees to cease any violations of this Section. The Union complying with this obligation shall not be liable for any unauthorized acts of the employees it represents. The failure of any Employer to exercise its right in any instance shall not be deemed a waiver of its right in any other instance.

c. The Union agrees that if any union or any other persons, whether parties to this Agreement or otherwise, engage in any picketing or work stoppages, the signatory Union shall consider such work stoppage or picketing to be illegal and refuse to honor such picket line or work stoppage.

d. In the event of any work stoppages, strike, sympathy strike, picketing, handbilling or interference with the work or any other disruptive activity at the Railyard Project site in violation of this Section, the Developer may suspend all or any portion of the Railyard Project work affected by such activity at the Developer's discretion and without penalty.

e. In lieu of, or in addition to, any other action at law or equity, any party may institute the following procedure when a breach of this Section is alleged, after the Union has been notified of the fact, understanding that the grieving party has the discretion to opt for resolution of any dispute under this Paragraph.

f. The party invoking this procedure shall notify Guy Prihar, who the parties to this agreement agree shall be the permanent Arbitrator under this procedure. In the event that the permanent Arbitrator is unavailable at any time, the American Arbitration Association shall select an alternative arbitrator within twenty-four (24) hours of notice. Notice to the Arbitrator shall be by the most expeditious means available, with notice by fax or electronic means or any other effective written means to the party alleged to be in violation and the Union.

g. Upon receipt of said notice, the Arbitrator selected above shall set and hold a hearing within twenty-four (24) hours if it is contended that the violation still exists or is threatened to resume.

h. The Arbitrator shall notify the parties by fax or electronic means or any other effective written means of the place and time he has chosen for this hearing. Said hearing shall be completed in one session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an Award by the Arbitrator.

i. The sole issue at the hearing shall be whether or not a violation of this Section has in fact occurred. The Award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without an opinion. If any party desires an opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the Award. The Arbitrator may order cessation of the violation of this Section by the Union, and such Award shall be served on all parties by hand or registered mail or by electronic mail upon issuance. The Union accepts service pursuant to any of the foregoing means of notice and expressly waives notice by more formal means.

j. Such Award may be enforced by any court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to hereinabove in the following manner. The fax or electronic notice of the filing of such enforcement proceedings shall be given to the other party. In the proceeding to obtain a temporary order enforcing the Arbitrator's Award as issued under Paragraph 7(i) of this Section, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Arbitrator's Award shall be served on all parties by hand or by delivery to their last known address or by registered mail or by electronic mail. All parties waive the right to require the issuance of a bond or other security for issuance of an injunction or an appeal to a refusal to issue one under this Section.

k. Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by the parties to whom they accrue.

l. The fees and expenses of the Arbitrator shall be borne by the party or parties found in violation, or in the event no violation is found, such fees and expenses shall be borne by the moving party.

m. If the Arbitrator determines that a violation of Paragraph 7(i) of this Section has occurred, the party or parties found to be in violation shall pay as liquidated damages the following amounts: for the first shift in which the violation occurred, $10,000; for the second shift, $15,000; for the third shift, $20,000; for each shift thereafter on which the craft has not returned to work, $20,000 per shift. The Arbitrator shall retain jurisdiction to determine compliance with this section and this Paragraph.

n. The procedures contained in this Section shall be applicable to alleged violations of this Section. Disputes alleging violation of any other provision of this Agreement, including any underlying disputes alleged to be in justification, explanation or mitigation of any violation of this Section, shall be resolved under the grievance procedures of the applicable Master Agreement between Employers and Union.

o. Notwithstanding the provisions of this Paragraph, it is agreed that with forty eight (48) hours prior written notice to the Owner, the Union retains the right to withhold the services of its members from a particular contractor or subcontractor who fails with respect to work on the Railyard Project to make timely payments to the Union's benefit plans or to pay timely its weekly payroll in accordance with its agreements with the Union; provided, however, that in the event the Union or any of its members withhold their services from such contractor or subcontractor, Developer shall have the right to replace such contractor or subcontractor with any other contractor or subcontractor who executes the applicable Master Agreement.

p. In the event that the applicable Master Agreement of a Union expires and the parties to that agreement fail to reach agreement on a new contract by the date of expiration, the

Union shall continue to provide employees to the Employers working on the Railyard Project under all the terms of the expired agreement until a new agreement is negotiated, at which time all terms and conditions of that new agreement shall be applied to Covered Work at the Railyard Project, except to the extent they conflict with any provision of this Agreement in which case the terms of this Agreement shall govern. In addition, if the new Master Agreement provides for wage or benefit increases, then any Employer shall pay to its employees who perform Covered Work at the Railyard Project during the hiatus between the effective dates of such labor agreements, an amount equal to any such wage and benefit increases established by the new labor agreement applicable to such work performed during the hiatus.

8. The Union agrees to put forth its best effort in support of the Railyard Project, subject to this Agreement, before governmental bodies and/or community organizations in connection with any and all required government approvals. Such expression of support may include, among other things, as appropriate: sending letters of support to appropriate entities; appearing in support at public hearings and/or community hearings; contacting the mayor and/or other elected or appointed officials to express support; and generally working together with the Developer to obtain full entitlements and approvals for the applicable project to proceed. Any action either public or private in opposition of the Railyard Project or Developer will be considered a material breach of this Agreement.

9. In the event any provision or part of this Agreement is found to be invalid or unenforceable, only that particular provision or part so found, and not the entire Agreement, will be inoperative. Parties further agree that any such court is expressly authorized to modify any such unenforceable provision of this Agreement in lieu of severing such unenforceable provision from this Agreement in its entirety, whether by rewriting the offending provision, deleting any or all of the offending provision, adding additional language to this Agreement or by making such other modifications as it deems warranted to carry out the intent and agreement of the parties as embodied herein to the maximum extent permitted by law. The party seeking to revise any part of this agreement shall bear all associated costs.

10. In the event that the Developer enters into any other agreement related to a project covered under this Agreement, which requires the payment of prevailing wages on the project, then the prevailing wage rate shall also be enforced on all Carpenter scope work on the project.

11. This Agreement and any supplements or amendments thereto, shall be binding upon the parties hereto, their successors, administrators, executors and assigns, including any successors, administrators, executors and assigns on the specific development project covered under the terms of this Agreement. It is the intent of this Agreement that in the event the Developer's ownership interest in the project or their business is, in whole or in part, sold, leased, transferred, or taken over by sale, transfer, lease, assignment, receivership, or bankruptcy proceedings, such business and operation shall continue to be subject to the terms and conditions of this Agreement for the life thereof. It is understood by this provision that the parties hereto shall not use any leasing or other transfer device to a third party to evade this Agreement. The Developer shall give notice of existence of this Agreement and this provision to any purchaser, transferee, lessee, assignee, etc., of the business and operation covered by this Agreement or any part thereof, and shall make acceptance of the terms of this Agreement a requirement of any such purchase, transfer, lease, assignment, etc. Notice shall be provided in writing to the Union, at the time the seller, transferor, or lessor executes a contract or transaction, and shall include a fully executed copy for a successor agreement binding the seller, transferor, or lessor to the terms of this Agreement.

12. The language of this Agreement shall not be interpreted in favor of or against any Party as the drafter of this Agreement.

13. The term of this Agreement shall commence on the date indicated below after execution by all parties ("Effective Date"), and shall continue in effect until the completion of all Covered Work on the Railyard Project.

14. Notwithstanding any other provision of this Agreement, this Agreement automatically shall end of its own terms, if (a) the applicable governmental approvals and related CEQA/NEPA certifications and findings (collectively, the "Entitlements") are not obtained by Developer; or (b) if the Entitlements or required CEQA documents have been invalidated by a final court order; or (c) the Railyard Project is not built by Developer or an affiliate of Developer

and a subsequent project at the same location must, again, submit for an entirely new discretionary review under CEQA or NEPA and the permit approval process. Upon any such termination, this Agreement shall have no force or effect and the parties shall have no further obligation to each other by reason thereof.

BNSF RAILWAY COMPANY

By: _____

Title: Assistant Vice President Engr. Services & Structures

Dated: 3-28-24

WESTERN STATES REGIONAL COUNCIL OF CARPENTERS

By: _____

Title: President

Dated: 3/28/24

By: _____

Title: Millwright Regional Manager

Dated: 3/28/2024

Exhibit A

This Exhibit A sets out work items that are excluded from the scope of this Agreement. BNSF and the BMWE may not necessarily agree to be in the Union's scope of agreement, and so inclusion on the list is not any admission by BNSF as to "scope coverage."

- Unload Continuously Welded Rail (CWR) from Rail Train.
- Unload Panelized turnouts from Rail Cars.
- Unload Other Track Material from Railcars and from trucks.
- Distribute Panelized turnouts in proper locations on the site.
- Weld panelized turnout components together using thermite welding or electric flash butt welding methods.
- Installation and connection of switch stands to switch.
- Install missing switch ties in assembled turnout panels.
- Distribute CWR in desired position for installation in track.
- If Track-Laying Machine is used for construction, operate TLM to construct track between the turnouts (this work would include placing pads, insulators, and clips on the concrete ties).
- If not using the TLM for construction, distribute crossties on the desired alignment for the track.
- Distribute pads, insulators, and clips for fastening rail to the ties.
- Using a loader or crawler crane, the CWR would be treaded into place on the ties.
- Insulators and clips would need to be installed and clipped.
- Ends of the CWR would be temporarily bolted together to complete the construction of the track.
- Dump ballast from ballast trains into the track and turnouts for surface correction.
- Raise and line track and turnouts using mechanized surfacing equipment.
- Redistribute and shape ballast with a ballast regulator and broom.
- De-stress rail and weld together all rail ends using thermite or electric flash butt welding methods.
- Install rail-crossings and approaches to crossings at desired locations within mainline and yard trackage, and signalization for any such crossings. All poured-in-place concrete, not directly within mainline and yard trackage, shall be covered by this Agreement.
- Construct any pre-cast culverts, drainage, and ditching work necessary to achieve proper drainage for the track on all mainline and yard trackage. Culverts and drainage infrastructure work unrelated to the track that are part of the railyard and warehouse areas as entitled are covered by this Agreement.

Exhibit B

This Exhibit B sets out work items related to signal work and telecommunications work that are excluded from the scope of the Barstow International Gateway Railyard Project Community Workforce Trade Agreement. These exclusions apply only to signal work and telecommunications work on the Railyard Project that is performed by BNSF's own employees or per a national agreement with IBEW. BNSF and the BRS may not necessarily agree on what is in the Union's scope of agreement, and so inclusion on the list is not any admission by BNSF as to "scope coverage." Nor is listing here any admission that this work will necessarily be performed as part of the Barstow International Gateway Railyard Project.

- Non-Solar Power switches.
- Signals governing movement over a set section of track Crossing warning devices.
- Blue light systems involving power derails Advance approach signals.
- Control point construction Electric lock switch.
- Wayside Failed Equipment Detectors such as Dragging Equipment, Hot Box, Derailment, Cold Wheel, and High Wide.
- Track Circuits and Presence Detectors.

Exhibit C

This Exhibit C sets out work items that are excluded from the scope of this Agreement. BNSF and the IBEW may not necessarily agree on what is in the Union's scope of agreement, and so inclusion on the list is not any admission by BNSF as to "scope coverage."

Outside Plant System:
-Site prep and excavation of foundation for telecom building
-Setting of telecommunications building on foundation
-Installation & termination of all grounding cabling and ground rods
-Site prep and excavation of telecommunication tower foundation
-Setting of telecommunication towers on foundation
-Installation & termination of all waveguide, coax, twisted pair, power, and other required cabling on towers
-Installation of two-way and broadcast voice, data, telemetry, and SCADA antenna systems, microwave backhaul and repeater antennas, GPS antennas, WI-FI antennas, and all other radiating device
-Installation of in ground fiber optic cable systems including all conduits, manholes, splice cases, and pull boxes
-Installation and termination of fiber optic cable, terminations, splicing, final test and turn up
-Installation and termination of any copper cabling within a yard or building including station wiring

Inside Plant Systems:
-Installation of all telecom racks, hardware, ladder rack, grounding and cable management
-Installation of any fiber optic cabling, termination of fiber connectors and fiber optic termination panels
-Installation of all IP switches & routers including power and grounding
-Installation of all radio transceiver systems including duplexers, coax, waveguide, lighting protection, power, and grounding
-Installation of all video servers and camera systems including power and grounding
-Installation of all card reader systems including door systems, back office components and wiring including power and grounding
-Installation of all GPS and timing systems including power and grounding
-Installation of all alarming systems including wiring, power and grounding

Power & DC Systems:
-Installation of all chassis, rectifiers, batteries, panels, breakers, racks, and wiring
-Installation of power converters and inverters
-Installation and termination of all wiring systems
-Installation of backup power generators, transfer switches, wiring and grounding

Commissioning of Equipment:
-Verification of configurations and setup of all electronic equipment
-Verification of alarming system functionality
-Final commissioning, testing and turn-up of all electronic equipment

-Ongoing maintenance of all electronic equipment, facilities, components, hardware and wiring systems

MEMORANDUM OF AGREEMENT

RE BARSTOW INTERNATIONAL GATEWAY RAILROAD PROJECT

This Memorandum of Agreement ("MOA") is entered into by and between BNSF Railway Company ("Owner") and the Southern California District Council of Laborers and its affiliated Local Unions ("Laborers Union"). The Union and Owner shall be referred to collectively as the "Parties."

WHEREAS, Owner intends to construct the Barstow International Gateway Project on 4,500-acres in Barstow, California, which includes, among other things, a transload warehouse center (9,000,000 sq. ft.), and a private utility solar farm; a rail yard facility including a block swap yard (to transfer of blocks of intermodal rail cars between trains), an intermodal facility (to transfer of containers between rail cars and the onsite transload warehouse center via zero-emission electric hostlers), and ancillary rail areas (including container yard, chassis storage, and maintenance of way); approximately 600 acres of various offsite rail and non-rail improvements (e.g., lead track extensions, drainage, utilities, and roadways); and associated infrastructure and related improvements ("Railyard Project"). The Parties acknowledge that the warehouse component of the development is covered in a separate MOA;

WHEREAS, it is understood and agreed by and between the Parties to this MOA that the final plans for the Railyard Project may be subject to modifications and approval by those public agencies possessing lawful approval authority over the Project, and may be modified by the Owner (including, but not limited to, modifications to reduce overall costs), and that this MOA applies to the Project as it is finally approved and modified by such entities, agencies and/or Owner;

WHEREAS, the Parties enter into this MOA to establish a working partnership that will help ensure that the Railyard Project is constructed in a safe, efficient, and environmentally sound way that benefits the community, Owner, and the members of the Union;

WHEREAS, the work undertaken by Owner will require a large pool of skilled and qualified workers to perform the construction work on the Railyard Project, the Union can provide a local, skilled workforce to perform such construction work on the Railyard Project, and the Union's members primarily reside in the Southern California area where the Railyard Project will be built;

WHEREAS, the Parties desire to avoid the tensions that might arise on the Railyard Project if Union and non-union workers of different employers were to work side by side on the Railyard Project performing work within the jurisdiction of the Union, potentially leading to labor disputes that could delay completion of the Railyard Project;

WHEREAS, the Parties desire to protect the Union's wages and labor standards, and agree to an effective and binding methods for the settlement of all misunderstandings, disputes or grievances that may arise so that the Parties are assured of complete continuity of operation, without slowdown or interruption of any kind or for any reason and that labor-management peace is maintained on the Railyard Project; and

WHEREAS, the Railyard Project will protect area standard wages in the area and lead to increased jobs and economic growth in the area where the Railyard Project is built.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree on the Recitals above and as follows:

1. The Parties hereby establish a partnership that will ensure that the Railyard Project is completed on schedule in a high quality and cost-effective manner and that the Union will provide the requisite number of workers represented by the Union to perform the work on the Railyard Project within its craft jurisdiction ("Covered Work").

2. Owner will construct the Railyard Project through the employees of the contractors and subcontractors awarded Covered Work. The general contractor shall be bound to the Southern California Laborers Master Labor Agreement ("MLA").

3. This MOA shall not contain more burdensome economic terms (including wage and fringe benefit rates) than other collective bargaining agreements entered into by the Union for similar work in Southern California effective the date of execution of this MOA. All applicable private work agreements negotiated by the Union in Southern California may be used in the performance of Covered Work.

4. It is understood and agreed by and between the Parties to this MOA that the final plans for the Railyard Project may be subject to modifications and approval by those public agencies possessing lawful approval authority over the Railyard Project, and may be modified by the Owner (including, but not limited to, modifications to reduce overall costs), and that this MOA

applies to the Railyard Project as it is finally approved and modified by such entities, agencies and/or Owner.

5. This MOA shall exclude the work described in Exhibits A, B, and C when the work is performed by employees of BNSF covered by a collective bargaining agreement that pre-existed the effective date of this MOA.

6. This MOA is limited to initial construction, and shall expire after issuance of the temporary Certificate of Occupancy. If the Railyard Project should fail to go forward, this MOA shall not apply to a new project requiring a new discretionary review under CEQA and the permit approval process for entitlements (unless the parties reach an agreement at that time).

7. This MOA shall remain in effect pursuant to the following terms:

a. The MOA shall survive any full or partial termination of Owner's involvement in the Railyard Project for any reason, including without limitation: (1) any full or partial termination of Owner's right to control and coordinate construction work on the Railyard Project; (ii) any full or partial termination or transfer of a contract, if any, between Owner and any general contractor for any Covered Work; (iii) the transfer of all or any portion of the Railyard Project or any interest in the Railyard Project by the Owner; or (iv) any other event that results in replacing Owner with another developer for any part of the Railyard Project.

b. In the event that the Owner sells, transfers, leases, or assigns all or any part of its right, title, or interest in the Railyard Project to another party ("Successor Party"), the Successor Party shall be bound to the terms of this MOA. Owner shall ensure that in any contract involving the sale, transfer, lease or assignment of its right, title, or interest in the Railyard Project, the requirement that the Successor Party be bound to this MOA shall be made a contractual requirement of the Successor Party. Owner shall give the Union written notice of any sale, transfer, lease, or assignment of the Railyard Project within twenty-one (21) business days of any such transaction, to ensure compliance with this paragraph. Upon assignment of any such interest in the Railyard Project, in compliance with this paragraph, Owner shall be relieved of any further obligation and/or liability under this MOA, as to the transferred interest.

c. If Owner fails to comply with Paragraph 7.b. above, or any other provision of this MOA that results in Covered Work not being performed by contractors bound to the terms set forth in this MOA, the parties agree that such violation shall cause harm and result in damages to the Union as representatives of their members who will lose wages by not performing Covered Work on the Railyard Project, and to the Trust Funds established in the Labor Agreement as a result of not receiving contributions that would be due for Covered Work on the Railyard Project. The parties agree that a reasonable amount of damages for Owner's failure to comply with Paragraph 7.b. above, or any other provision of this MOA that results in Covered Work not being performed by contractors signatory to the MLA as required by this MOA, are damages that reasonably compensate the Union for the loss of work opportunities for its members, and the Trust Funds for the loss of contributions to these Funds.

8. During the term of this Agreement, there shall be no strikes, sympathy strikes, picketing, work stoppages, slowdowns, handbilling where the handbilling relates to the Railyard Project or to the Owner, or other Employer working or providing work on the Railyard Project, or interference with the work or other disruptive activity of any kind at the Railyard Project site for any reason by the Union, its agents, representatives, or by any employee, and there shall be no lockout by any Employer. Failure of either the Union or an employee to cross any picket line established at the Owner's project site is a violation of this Paragraph.

a. The Union shall not sanction, aid or abet, encourage, condone or participate in or continue any work stoppage, delay, strike, picketing or any other disruptive activity at the Railyard Project site and shall undertake all reasonable means to prevent or to terminate any such activity. No employee shall engage in activities which violate this Paragraph. Any employee who participates in or encourages any activities which interfere with the normal operation of the Railyard Project or which violate this Paragraph, shall be subject to disciplinary action, including discharge, and, if justifiably discharged for the above reasons, shall not be eligible for rehire or further work on the Railyard Project.

b. The Union shall not be liable for acts of employees that it does not represent. With respect to employees the Union does represent, the principal officer or officers of the

Union will immediately instruct, and order and use the best efforts of his office to cause such employees to cease any violations of this Paragraph. The Union complying with this obligation shall not be liable for any unauthorized acts of the employees it represents. The failure of any Employer to exercise its right in any instance shall not be deemed a waiver of its right in any other instance.

c. The Union agrees that if any union or any other persons, whether parties to this Agreement or otherwise, engage in any picketing or work stoppages, the signatory Union shall consider such work stoppage or picketing to be illegal and refuse to honor such picket line or work stoppage.

d. In the event of any work stoppages, strike, sympathy strike, picketing, handbilling or interference with the work or any other disruptive activity at the Railyard Project site in violation of this Paragraph, the Owner may suspend all or any portion of the Railyard Project work affected by such activity at the Owner's discretion and without penalty.

e. In lieu of, or in addition to, any other action at law or equity, any party may institute the following procedure when a breach of this Paragraph is alleged, after the Union has been notified of the fact, understanding that the grieving party has the discretion to opt for resolution of any dispute under this Paragraph instead.

f. The party invoking this procedure shall notify Guy Prihar, who the parties to this agreement agree shall be the permanent Arbitrator under this procedure. In the event that the permanent Arbitrator is unavailable at any time, the American Arbitration Association shall select an alternative arbitrator within twenty-four (24) hours of notice. Notice to the Arbitrator shall be by the most expeditious means available, with notice by fax or electronic means or any other effective written means to the party alleged to be in violation and the Union.

g. Upon receipt of said notice, the Arbitrator selected above shall set and hold a hearing within twenty-four (24) hours if it is contended that the violation still exists or is threatened to resume.

h. The Arbitrator shall notify the parties by fax or electronic means or any other effective written means of the place and time he has chosen for this hearing. Said hearing shall be completed in one session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an Award by the Arbitrator.

i. The sole issue at the hearing shall be whether or not a violation of this Paragraph has in fact occurred. The Award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without an opinion. If any party desires an opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the Award. The Arbitrator may order cessation of the violation of this Paragraph by the Union, and such Award shall be served on all parties by hand or registered mail or by electronic mail upon issuance. The Union accepts service pursuant to any of the foregoing means of notice and expressly waives notice by more formal means.

j. Such Award may be enforced by any court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to hereinabove in the following manner. The fax or electronic notice of the filing of such enforcement proceedings shall be given to the other party. In the proceeding to obtain a temporary order enforcing the Arbitrator's Award as issued, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Arbitrator's Award shall be served on all parties by hand or by delivery to their last known address or by registered mail or by electronic mail. All parties waive the right to require the issuance of a bond or other security for issuance of an injunction or an appeal to a refusal to issue one under this Paragraph.

k. Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by the parties to whom they accrue.

l. The fees and expenses of the Arbitrator shall be borne by the party or parties found in violation, or in the event no violation is found, such fees and expenses shall be borne by the moving party.

m. If the Arbitrator determines that a violation of this Paragraph has occurred, the party or parties found to be in violation shall pay as liquidated damages the following amounts: for the first shift in which the violation occurred, $10,000; for the second shift, $15,000; for the third shift, $20,000; for each shift thereafter on which the craft has not returned

to work, $20,000 per shift. The Arbitrator shall retain jurisdiction to determine compliance with this section and this Paragraph.

n. The procedures contained in this Paragraph shall be applicable to alleged violations of this Paragraph.

o. Notwithstanding the provisions of this Paragraph, it is agreed that with forty eight (48) hours prior written notice to the Owner, the Union retains the right to withhold the services of its members from a particular contractor or subcontractor who fails with respect to work on the Railyard Project to make timely payments to the Union's benefit plans or to pay timely its weekly payroll in accordance with its agreements with the Union; provided, however, that in the event the Union or any of its members withhold their services from such contractor or subcontractor, Owner shall have the right to replace such contractor or subcontractor with any other contractor or subcontractor who executes the Agreement to be Bound.

p. In the event that the Master Agreement of a Union expires and the parties to that agreement fail to reach agreement on a new contract by the date of expiration, the Union shall continue to provide employees to the Employers working on the Railyard Project under all the terms of the expired agreement until a new agreement is negotiated, at which time all terms and conditions of that new agreement shall be applied to Covered Work at the Railyard Project, except to the extent they conflict with any provision of this Agreement in which case the terms of this Agreement shall govern. In addition, if the new Master Agreement provides for wage or benefit increases, then any Employer shall pay to its employees who perform Covered Work at the Railyard Project during the hiatus between the effective dates of such labor agreements, an amount equal to any such wage and benefit increases established by the new labor agreement applicable to such work performed during the hiatus.

9. The Union shall support Owner in the resolution of any environmental or other concerns or issues that may arise during any future governmental approval processes. The Union agrees that it shall support and encourage the development and construction of the Railyard Project before state and local governmental agencies, as well as before other persons, entities, or groups that Owner may request.

10. The Owner and the Union agree that this MOA is a lawful and binding agreement under all applicable laws, rulings, and regulations, and further agree that neither Party will challenge the validity of this MOA or assist any other person or entity in challenging the validity of this MOA. Owner and the Union agree that if any provision of this MOA is held or determined to be invalid, they will then promptly enter into lawful negotiations concerning the substance thereof.

11. This MOA shall be enforceable in any court of competent jurisdiction.

12. This MOA may be signed in counterparts, such that signatures appear on separate signature pages. A copy or original of this document with all signature pages appended together shall be deemed a fully executed Agreement. Copies, pdf, or facsimiles of signatures are the equivalent of original signatures.

BNSF RAILWAY COMPANY

By _____

Its: _____

_____

[Print Name of Person Signing]

Date: _____

SOUTHERN CALIFORNIA DISTRICT COUNCIL OF LABORERS

By _____

Sergio Rascon, President

By _____

Pedro Santillan, Secretary-Treasurer

By _____

Jon P. Preciado, Business Manager

Date: 04/15/2024

Exhibit A

This Exhibit A sets out work items that are excluded from the scope of the PLA when the work is performed by the employees of BNSF covered by a collective bargaining agreement that pre-existed the effective date of this MOA. BNSF and the BMWE may not necessarily agree to be in the Union's scope of agreement, and so inclusion on the list is not any admission by BNSF as to "scope coverage."

- Unload Continuously Welded Rail (CWR) from Rail Train.
- Unload Panelized turnouts from Rail Cars.
- Unload Other Track Material from Railcars and from trucks.
- Distribute Panelized turnouts in proper locations on the site.
- Weld panelized turnout components together using thermite welding or electric flash butt welding methods.
- Installation and connection of switch stands to switch.
- Install missing switch ties in assembled turnout panels.
- Distribute CWR in desired position for installation in track.
- If Track-Laying Machine is used for construction, operate TLM to construct track between the turnouts (this work would include placing pads, insulators, and clips on the concrete ties).
- If not using the TLM for construction, distribute crossties on the desired alignment for the track.
- Distribute pads, insulators, and clips for fastening rail to the ties.
- Using a loader or crawler crane, the CWR would be treaded into place on the ties.
- Insulators and clips would need to be installed and clipped.
- Ends of the CWR would be temporarily bolted together to complete the construction of the track.
- Dump ballast from ballast trains into the track and turnouts for surface correction.
- Raise and line track and turnouts using mechanized surfacing equipment.
- Redistribute and shape ballast with a ballast regulator and broom.
- De-stress rail and weld together all rail ends using thermite or electric flash butt welding methods.
- Install rail-crossings and approaches to crossings at desired locations, and signalization for any such crossings.
- Construct any pre-cast culverts, drainage, and ditching work necessary to achieve proper drainage for the track on all mainline and yard trackage. Culverts and drainage infrastructure work unrelated to the track that are part of the railyard and warehouse areas as entitled are covered by the PLA.

Exhibit B

This Exhibit B sets out work items related to signal work and telecommunications work that are excluded from the scope of the Barstow International Gateway Railyard Project Community Workforce Trade Agreement. These exclusions apply only to signal work and telecommunications work on the Railyard Project that is performed by BNSF's own employees under a collective bargaining agreement with the IBEW that pre-existed the effective date of this MOA. BNSF and the BRS may not necessarily agree on what is in the Union's scope of agreement, and so inclusion on the list is not any admission by BNSF as to "scope coverage." Nor is listing here any admission that this work will necessarily be performed as part of the Barstow International Gateway Railyard Project.

- Non-Solar Power switches.
- Signals governing movement over a set section of track Crossing warning devices.
- Blue light systems involving power derails Advance approach signals.
- Control point construction Electric lock switch.
- Wayside Failed Equipment Detectors such as Dragging Equipment, Hot Box, Derailment, Cold Wheel, and High Wide.
- Track Circuits and Presence Detectors.

Exhibit C

This Exhibit C sets out work items that are excluded from the scope of the PLA when the work is performed by employees of BNSF covered by a collective bargaining agreement that pre-existed the effective date of this MOA. BNSF and the IBEW may not necessarily agree on what is in the Union's scope of agreement, and so inclusion on the list is not any admission by BNSF as to "scope coverage."

Outside Plant System:

-Site prep and excavation of foundation for telecom building
-Setting of telecommunications building on foundation
-Installation & termination of all grounding cabling and ground rods
-Site prep and excavation of telecommunication tower foundation
-Setting of telecommunication towers on foundation
-Installation & termination of all waveguide, coax, twisted pair, power, and other required cabling on towers
-Installation of two-way and broadcast voice, data, telemetry, and SCADA antenna systems, microwave backhaul and repeater antennas, GPS antennas, WI-FI antennas, and all other radiating device
-Installation of in ground fiber optic cable systems including all conduits, manholes, splice cases, and pull boxes
-Installation and termination of fiber optic cable, terminations, splicing, final test and turn up
-Installation and termination of any copper cabling within a yard or building including station wiring

Inside Plant Systems:

-Installation of all telecom racks, hardware, ladder rack, grounding and cable management
-Installation of any fiber optic cabling, termination of fiber connectors and fiber optic termination panels
-Installation of all IP switches & routers including power and grounding
-Installation of all radio transceiver systems including duplexers, coax, waveguide, lighting protection, power, and grounding
-Installation of all video servers and camera systems including power and grounding
-Installation of all card reader systems including door systems, back office components and wiring including power and grounding
-Installation of all GPS and timing systems including power and grounding
-Installation of all alarming systems including wiring, power and grounding

Power & DC Systems:

-Installation of all chassis, rectifiers, batteries, panels, breakers, racks, and wiring
-Installation of power converters and inverters
-Installation and termination of all wiring systems
-Installation of backup power generators, transfer switches, wiring and grounding

Commissioning of Equipment:

-Verification of configurations and setup of all electronic equipment
-Verification of alarming system functionality
-Final commissioning, testing and turn-up of all electronic equipment
-Ongoing maintenance of all electronic equipment, facilities, components, hardware and wiring systems

MEMORANDUM OF AGREEMENT

RE BARSTOW INTERNATIONAL GATEWAY LOGISTICS PROJECT

This Memorandum of Agreement ("MOA") is entered into by and between BNSF Railway Company ("Owner") and the Southern California District Council of Laborers and its affiliated Local Unions ("Laborers Union"). The Union and Owner shall be referred to collectively as the "Parties."

WHEREAS, Owner intends to build approximately 9,000,000 square feet of industrial tilt-up buildings, and associated infrastructure improvement, adjacent to the international railyard facilities (the "Warehouse Project") in the area depicted on Exhibit A attached hereto, as part of the Barstow International Gateway Project located on 4,500-acres in City of Barstow, County of San Bernardino, California (the "BIG Project");

WHEREAS, the Parties enter into this MOA to establish a working partnership that will help ensure that the construction of the 9,000,000 square feet of industrial tilt-up construction for the Warehouse Project is constructed in a safe, efficient, and environmentally sound way that benefits the community, Owner, and the members of the Union;

WHEREAS, It is understood and agreed by and between the Parties to this MOA that the final plans for the Warehouse Project may be subject to modifications and approval by those public agencies possessing lawful approval authority over the Project, and may be modified by the Owner (including, but not limited to, modifications to reduce overall costs), and that this MOA applies to the Project as it is finally approved and modified by such entities, agencies and/or Owner;

WHEREAS, the work undertaken by Owner will require a large pool of skilled and qualified workers to perform the construction work on the Warehouse Project, the Union can provide a local, skilled workforce to perform such construction work on the Warehouse Project, and the Union's members primarily reside in the Southern California area where the Warehouse Project will be built;

WHEREAS, the Parties desire to avoid the tensions that might arise on the Warehouse Project if Union and non-union workers of different employers were to work side by side on the Warehouse Project performing work within the jurisdiction of the Union, potentially leading to labor disputes that could delay completion of the Warehouse Project;

WHEREAS, the Parties desire to protect the Union's wages and labor standards, and agree to an effective and binding methods for the settlement of all misunderstandings, disputes or grievances that may arise so that the Parties are assured of complete continuity of operation, without slowdown or interruption of any kind or for any reason and that labor-management peace is maintained on the Warehouse Project; and

WHEREAS, the Warehouse Project will protect area standard wages in the area and lead to increased jobs and economic growth in the area where the Warehouse Project is built.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree on the Recitals above and as follows:

1. The Parties hereby establish a working relationship that will ensure that the Warehouse Project is completed on schedule in a high quality and cost-effective manner and that the Union will provide the requisite number of workers represented by the Union to perform all work on the Warehouse Project within its craft jurisdiction as defined in the General Contractors Tilt-Up Agreement and all demolition and remediation work (collectively referred to as "Covered Work").

2. Owner shall require all general contractors performing work on the Warehouse Project to be bound to the General Contractors Tilt-Up Agreement ("Agreement").

3. All Covered Work on the Warehouse Project shall be performed by contractors and subcontractors bound to a collective bargaining agreement with the Union.

4. It is understood and agreed by and between the Parties to this MOA that the final plans for the Warehouse Project may be subject to modifications and approval by those public agencies possessing lawful approval authority over the Warehouse Project, and may be modified by the Owner (including, but not limited to, modifications to reduce overall costs), and that this MOA applies to the Warehouse Project as it is finally approved and modified by such entities, agencies and/or Owner.

5. The term of this Agreement shall commence on the date indicated below after execution by all Parties ("Effective Date"), and shall continue in effect until the Completion of All Covered Work on the Project pursuant to Article 2. "Completion of All Covered Work" shall be defined, on a per building basis, as the first to occur of (i) issuance of the first Certificate of Occupancy, or (ii) the date after which no Covered Work is scheduled to be performed. Upon Completion of All Covered Work, on a per building basis, the Union shall provide Owner or the

Primary Employer written confirmation promptly upon request that the Agreement is no longer in effect. Prior to Completion of All Covered Work, upon request from Owner or the Primary Employer, the Union shall confirm, in writing, the current status of the Agreement, to include certification that the Agreement has not been modified and is in full force and effect, that there are no known defaults under the Agreement, and such other similar certifications as reasonably requested by Owner or the Primary Employer. If the Warehouse Project should fail to go forward, this MOA shall not apply to a new project requiring a new discretionary review under CEQA and the permit approval process for entitlements (unless the parties reach an agreement at that time). In any event this MOA shall terminate upon the construction of All Covered Work or seven (7) years whichever is earlier in time.

6. This MOA shall remain in effect pursuant to the following terms:

a. The MOA shall survive any full or partial termination of Owner's involvement in the Warehouse Project for any reason, including without limitation: (1) any full or partial termination of Owner's right to control and coordinate construction work on the Warehouse Project; (ii) any full or partial termination or transfer of a contract, if any, between Owner and any general contractor for any Covered Work; (iii) the transfer of all or any portion of the Warehouse Project or any interest in the Warehouse Project by the Owner; or (iv) any other event that results in replacing Owner with another developer for any part of the Warehouse Project.

b. In the event that the Owner sells, transfers, leases, or assigns all or any part of its right, title, or interest in the Warehouse Project to another party ("Successor Party"), the Successor Party shall be bound to the terms of this MOA. Owner shall ensure that in any contract involving the sale, transfer, lease or assignment of its right, title, or interest in the Warehouse Project, the requirement that the Successor Party be bound to this MOA shall be made a contractual requirement of the Successor Party. Owner shall give the Union written notice of any sale, transfer, lease, or assignment of the Warehouse Project within twenty-one (21) business days of any such transaction, to ensure compliance with this paragraph. Upon assignment of any such interest in the Warehouse Project, in compliance with this paragraph, Owner shall be relieved of any further obligation and/or liability under this MOA, as to the transferred interest.

c. If Owner fails to comply with Paragraph 7.b. above, or any other provision of this MOA that results in Covered Work not being performed by contractors bound to the terms

set forth in this MOA, the parties agree that such violation shall cause harm and result in damages to the Union as representatives of their members who will lose wages by not performing Covered Work on the Warehouse Project, and to the Trust Funds established in the Labor Agreement as a result of not receiving contributions that would be due for Covered Work on the Warehouse Project. The parties agree that a reasonable amount of damages for Owner's failure to comply with Paragraph 7.b. above, or any other provision of this MOA that results in Covered Work not being performed by contractors signatory to the MLA as required by this MOA, are damages that reasonably compensate the Union for the loss of work opportunities for its members, and the Trust Funds for the loss of contributions to these Funds.

7. During the term of this Agreement, there shall be no strikes, sympathy strikes, picketing, work stoppages, slow downs, handbilling where the handbilling relates to the Warehouse Project or to the Owner, or other Employer working or providing work on the Warehouse Project, or interference with the work or other disruptive activity of any kind at the Warehouse Project site for any reason by the Union, its agents, representatives, or by any employee, and there shall be no lockout by any Employer. Failure of either the Union or an employee to cross any picket line established at the Owner's project site is a violation of this Paragraph.

a. The Union shall not sanction, aid or abet, encourage, condone or participate in or continue any work stoppage, delay, strike, picketing or any other disruptive activity at the Warehouse Project site and shall undertake all reasonable means to prevent or to terminate any such activity. No employee shall engage in activities which violate this Paragraph. Any employee who participates in or encourages any activities which interfere with the normal operation of the Warehouse Project or which violate this Paragraph, shall be subject to disciplinary action, including discharge, and, if justifiably discharged for the above reasons, shall not be eligible for rehire or further work on the Warehouse Project.

b. The Union shall not be liable for acts of employees that it does not represent. With respect to employees the Union does represent, the principal officer or officers of the Union will immediately instruct, and order and use the best efforts of his office to cause such employees to cease any violations of this Paragraph. The Union complying with this obligation shall not be liable for any unauthorized acts of the employees it

represents. The failure of any Employer to exercise its right in any instance shall not be deemed a waiver of its right in any other instance.

c. The Union agrees that if any union or any other persons, whether parties to this Agreement or otherwise, engage in any picketing or work stoppages, the signatory Union shall consider such work stoppage or picketing to be illegal and refuse to honor such picket line or work stoppage.

d. In the event of any work stoppages, strike, sympathy strike, picketing, handbilling or interference with the work or any other disruptive activity at the Warehouse Project site in violation of this Paragraph, the Owner may suspend all or any portion of the Warehouse Project work affected by such activity at the Owner's discretion and without penalty.

e. In lieu of, or in addition to, any other action at law or equity, any party may institute the following procedure when a breach of this Paragraph is alleged, after the Union has been notified of the fact, understanding that the grieving party has the discretion to opt for resolution of any dispute under this Paragraph instead.

f. The party invoking this procedure shall notify Guy Prihar, who the parties to this agreement agree shall be the permanent Arbitrator under this procedure. In the event that the permanent Arbitrator is unavailable at any time, the American Arbitration Association shall select an alternative arbitrator within twenty-four (24) hours of notice. Notice to the Arbitrator shall be by the most expeditious means available, with notice by fax or electronic means or any other effective written means to the party alleged to be in violation and the Union.

g. Upon receipt of said notice, the Arbitrator selected above shall set and hold a hearing within twenty-four (24) hours if it is contended that the violation still exists or is threatened to resume.

h. The Arbitrator shall notify the parties by fax or electronic means or any other effective written means of the place and time he has chosen for this hearing. Said hearing shall be completed in one session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an Award by the Arbitrator.

i. The sole issue at the hearing shall be whether or not a violation of this Paragraph has in fact occurred. The Award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without an opinion. If any party desires an

opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the Award. The Arbitrator may order cessation of the violation of this Paragraph by the Union, and such Award shall be served on all parties by hand or registered mail or by electronic mail upon issuance. The Union accepts service pursuant to any of the foregoing means of notice and expressly waives notice by more formal means.

j. Such Award may be enforced by any court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to hereinabove in the following manner. The fax or electronic notice of the filing of such enforcement proceedings shall be given to the other party. In the proceeding to obtain a temporary order enforcing the Arbitrator's Award as issued, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Arbitrator's Award shall be served on all parties by hand or by delivery to their last known address or by registered mail or by electronic mail. All parties waive the right to require the issuance of a bond or other security for issuance of an injunction or an appeal to a refusal to issue one under this Paragraph.

k. Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by the parties to whom they accrue.

l. The fees and expenses of the Arbitrator shall be borne by the party or parties found in violation, or in the event no violation is found, such fees and expenses shall be borne by the moving party.

m. If the Arbitrator determines that a violation of this Paragraph has occurred, the party or parties found to be in violation shall pay as liquidated damages the following amounts: for the first shift in which the violation occurred, $10,000; for the second shift, $15,000; for the third shift, $20,000; for each shift thereafter on which the craft has not returned to work, $20,000 per shift. The Arbitrator shall retain jurisdiction to determine compliance with this section and this Paragraph.

n. The procedures contained in this Paragraph shall be applicable to alleged violations of this Paragraph.

o. Notwithstanding the provisions of this Paragraph, it is agreed that with forty eight (48) hours prior written notice to the Owner, the Union retains the right to withhold the services of its members from a particular contractor or subcontractor who fails with respect to work on the Warehouse Project to make timely payments to the Union's benefit plans or to pay timely its weekly payroll in accordance with its agreements with the Union; provided, however, that in the event the Union or any of its members withhold their services from such contractor or subcontractor, Owner shall have the right to replace such contractor or subcontractor with any other contractor or subcontractor who executes the Agreement to be Bound.

p. In the event that the Master Agreement of a Union expires and the parties to that agreement fail to reach agreement on a new contract by the date of expiration, the Union shall continue to provide employees to the Employers working on the Warehouse Project under all the terms of the expired agreement until a new agreement is negotiated, at which time all terms and conditions of that new agreement shall be applied to Covered Work at the Warehouse Project, except to the extent they conflict with any provision of this Agreement in which case the terms of this Agreement shall govern. In addition, if the new Master Agreement provides for wage or benefit increases, then any Employer shall pay to its employees who perform Covered Work at the Warehouse Project during the hiatus between the effective dates of such labor agreements, an amount equal to any such wage and benefit increases established by the new labor agreement applicable to such work performed during the hiatus.

8. The Union shall support Owner in the resolution of any environmental or other concerns or issues that may arise during any future governmental approval processes. The Union agrees that it shall support and encourage the development and construction of the Warehouse Project before state and local governmental agencies, as well as before other persons, entities, or groups that Owner may request.

9. The Owner and the Union agree that this MOA is a lawful and binding agreement under all applicable laws, rulings, and regulations, and further agree that neither Party will challenge the validity of this MOA or assist any other person or entity in challenging the validity of this MOA. Owner and the Union agree that if any provision of this MOA is held or determined to be invalid, they will then promptly enter into lawful negotiations concerning the substance thereof.

10. This MOA shall be enforceable in any court of competent jurisdiction.

11. This MOA may be signed in counterparts, such that signatures appear on separate signature pages. A copy or original of this document with all signature pages appended together shall be deemed a fully executed Agreement. Copies, pdf, or facsimiles of signatures are the equivalent of original signatures.

BNSF RAILWAY COMPANY

By _____

Its: AVP Economic Development

Chris Danos

[Print Name of Person Signing]

Date: _____

SOUTHERN CALIFORNIA DISTRICT COUNCIL OF LABORERS

By _____

Sergio Rascon, President

By _____

Pedro Santillan, Secretary-Treasurer

By _____

Jon P. Preciado, Business Manager

Date: 04/15/2024

10. This MOA shall be enforceable in any court of competent jurisdiction.

11. This MOA may be signed in counterparts, such that signatures appear on separate signature pages. A copy or original of this document with all signature pages appended together shall be deemed a fully executed Agreement. Copies, pdf, or facsimiles of signatures are the equivalent of original signatures.

BNSF RAILWAY COMPANY

By _____

Its: AVP, Economic Development

Chris Danes

[Print Name of Person Signing]

Date: _____

SOUTHERN CALIFORNIA DISTRICT COUNCIL OF LABORERS

By _____

Sergio Rascon, President

By _____

Pedro Santillan, Secretary-Treasurer

By _____

Jon P. Preciado, Business Manager

Date: 04/15/2024

Attachment 5

Memorandum of Understanding (MOU) between BNSF and MDAQMD

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("**MOU**") is entered into as of the 23rd day of February 2026 ("**Effective Date**") by and between the Mojave Desert Air Quality Management District ("**MDAQMD**") and BNSF Railway Company ("**BNSF**") (MDAQMD and BNSF are sometimes collectively referred to herein as the "**Parties**"). The Parties acknowledge and agree that This MOU does not supersede or void the existing Superseding Cooperative Agreement between BNSF and MDAQMD dated as of December 19, 2025.

RECITALS

a. BNSF proposes the Barstow International Gateway ("**BIG**") in the City of Barstow ("**City**") and in the unincorporated County of San Bernardino, California. The BIG project consists of a rail yard with an intermodal facility and "block swap" yard, and a transload warehouse center. BNSF intends to seek all applicable governmental approvals necessary to implement construction and operation of BIG, including review under, and compliance with, the California Environmental Quality Act ("**CEQA**"). The City serves as the lead agency for BIG under CEQA.

b. In January 2025, the California State Transportation Agency's ("**CalSTA**") adopted an updated Climate Action Plan for Transportation Infrastructure ("**CAPTI**") 2024 State Rail Plan, which specifically identified BIG as advancing the CAPTI's critical goal of building toward an integrated, statewide rail and transit network.

c. On July 3, 2025, BNSF submitted a Preliminary Application to the Governor's Office of Land Use and Innovation ("**LCI**") for certification of BIG as a transportation-related infrastructure project under Senate Bill (SB) 149, Public Resources Code ("PRC") Section 21189.81(g)(1), and intends to submit a final Application to LCI in the short-term.

d. On November 10, 2025, The City of Barstow ("**City")** published the City of Barstow General Plan and Barstow International Gateway Project Draft Environmental Impact Report ("**DEIR**"), State Clearinghouse No. 2024020501.

e. As shown in the Preliminary Application, BIG advances (or does not impede) all of the goals set forth in Section 21189.81(g)(1), which goals are set forth in CalSTA's State Rail Plan.

f. As shown in the DEIR, BIG also meets CAPTI's goal of moving towards the development of zero-emission freight transportation system. At the Project footprint, BIG would use zero-emission rail-mounted gantry ("**RMG**") cranes, hybrid rubber-tired gantry ("**RTG**") cranes, as well as zero-emissions forklifts and hostlers. Containers would be transported between the rail yard and transload warehouse center using zero-emissions hostlers, rather than heavy-duty trucks, via an onsite/private closed loop roadway to minimize local roadway traffic. BIG also includes electric plug-in for Transportation Refrigeration Units (TRUs).

g. Additional zero-emission facets to the project were evaluated and determined not to be feasible within a reasonable period of time due to the infeasibility of the technology and lack of availability of sufficient power at the site. BNSF will commit to evaluation of technological, operational and economic feasibility of additional zero-emission technologies that might have potential for implementation at BIG at 5-year intervals until 2048. With regard to the latter, BIG is allotted "power budget" of 66 megawatts (MW) peak energy demand for the facility by Southern California Edison ("**SCE**"), which has been allocated to support the current proposed

electrical demand for the site. Based on expected power demand from widespan electric cranes, battery-electric hostlers, battery-electric forklifts, charging for employee electric vehicles, and lighting, heating, air conditioning, and other typical electrical demands, BIG has already maximized the allocated power budget. Additional zero-emission applications to the project were evaluated and determined not to be feasible within a project horizon due to the infeasibility of the technology and lack of availability of sufficient power at the site. Specifically, SCE has indicated that BIG would be required to add new transmission-level service to supply additional power to the site. This process would take several years for design, permitting approval, and construction by SCE. As such, this delay would fall well outside a feasible window for the successful project implementation. Because BIG would operate 24 hours per day, BIG must consider only power from the grid as the power budget and would supplement this power with energy from solar during daytime.

h. BNSF will incorporate by reference the terms of this MOU into the Development Agreement between BNSF and the City in conjunction with the approval of the Specific Plan for BIG outlined in the DEIR so that City may directly enforce BNSF's commitments in this MOU along with MDAQMD.

TERMS

As part of its Final Application under SB 149, BNSF commits that, in the event the Governor certifies BIG as a transportation-related infrastructure project under SB 149 and the BIG facility secures permits and is built, BNSF will further the development of zero-emission freight rail through the following actions:

A. Demonstration of Zero-Emissions Technology

Hybrid technologies lower greenhouse gas (GHG) and criteria pollutant emissions by reducing engine operation on internal combustion vehicles. These technologies get battery power from regenerative braking and do not require external charging infrastructure. Diesel-electric battery hybrid line haul locomotives consume less fuel and produce less emissions than traditional locomotives in mainline operations and have the potential to operate for short periods of time in zero-emissions mode in and near a yard or terminal. Within ninety (90) days of all federal, state and local approvals for construction of BIG have been obtained and no longer subject to legal challenge or appeal, BNSF will enter negotiations to procure and test at least five (5) hybrid Tier 4 line-haul locomotives across BNSF's system in a variety of operating conditions described below (see: Evaluation Process and Criteria), including dedicating at least two (2) of those locomotives to operations between the Ports and the Intermodal Facility at BIG. It is BNSF's understanding that locomotives can be built and delivered 18 months to 2 years after an order is placed. Assuming acceptable commercial terms can be reached by BNSF and the hybrid locomotive manufacturer, below is the anticipated timeline for locomotive deployment:

(1) Year 1: BIG approvals finalized

(2) Years 2-3: Procurement and manufacturing of Tier 4 hybrid line haul locomotives

(3) Years 4-13: Accumulate 50 locomotive-years of experience testing 5 locomotives across the BNSF network (5 locomotives * 10 years = 50 locomotive-years), with three units deployed systemwide and two units operating between the Ports and the BIG IMF.

(4) Year 14+: Assuming, no pausing or stoppage of the demonstration, advance efforts indicated in the "Success Criteria" section below

Factors governing acceptable commercial terms include: (i) the price is commensurate with the technology

and emission benefit the supplier believes the equipment could achieve, (ii) the supplier bears a commercially reasonable portion of research and development cost, (iii) BNSF is protected from liabilities associated with a catastrophic failure of the system, and (iv) the supplier's delivery time is commensurate with the anticipated timeline.

B. Evaluation of Battery-Electric Switcher Feasibility

BNSF is a partner in the Alameda Beltline Railway ("**ABL**") to compete for the San Pedro Ports rail operating contracts. ABL has submitted a bid for the INVEST CLEAN grant to the South Coast Air Quality Management District ("**SCAQMD**") to test battery-electric locomotive switchers at the Ports of Los Angeles and Long Beach. If ABL is awarded the operating contracts, BNSF will take an active advisory role in the testing and evaluation of battery-electric switcher technology at the Ports of LA and Long Beach. Evaluation Criteria relevant to battery-electric locomotive switchers (and other new locomotive technology) is outlined below (see: Evaluation Process and Criteria). Whether or not the ABL is awarded the Port switching business, BNSF will continue its advanced energy innovation efforts to explore the feasibility of emissions-reduction technologies through market research, supplier outreach, energy modeling, and exploration of grants that are intended to fully support new technology demonstrations.

C. Evaluation Process and Criteria

To deploy new locomotive technology at scale, railroads undergo a comprehensive testing protocol to evaluate the solutions across a variety of facets, including:

1. Safety

Safety is the highest priority at BNSF Railway. Any technology must be proven safe for normal operations (including charging in the case of battery-electric technology), maintenance and inspection, public interaction, cross-industry utilization (through the interoperable process of "interchange"), accident recovery, and more.

2. Technology Viability

Any new technology must be proven capable of performing a standard locomotive duty cycle across all portions of our network. This includes elements such as power output, tractive effort, in-train dynamics, cross platform communications, longevity testing, timely repair and maintenance to support asset availability and reliability requirements. The ability of new technology to "complete the mission" is critical for adoption.

3. Operational Integration

Locomotives are a vital link in an operational chain that also includes personnel, railcars, track, terminals and customer facilities, and freight. Regular locomotive operations include on-track movement, intra-facility shuttling, fueling (charging in the case of battery-electric equipment), daily inspections, periodic maintenance, across thousands of miles of varying infrastructure and terrain, pulling tens of thousands of tons of freight in extremely diverse geographies, spanning significant altitude and grade changes, in a variety of weather conditions. In order to contemplate large purchases of new locomotives, test units must be evaluated for their operational impact (positive or negative) in each of these varying conditions. Because locomotives often operate for 50 years or more, railroads typically pursue 50 locomotive years (e.g. 5 locomotives for 10 years = 50 locomotive-years) of testing to understand the cumulative effect of strenuous operations day-in and day-out for years, if not decades.

4. Fleet applicability

As stated above, locomotives are extremely long-lived assets. With one of the youngest line-haul fleets in North America, BNSF prioritizes solutions that can be applied to our existing fleet of locomotives. Purchasing all-new locomotives is not only economically impractical; it is also environmentally inconsistent with BNSF's sustainability efforts. The embedded carbon associated with the steel production needed to support manufacturing thousands of locomotives is significant. Therefore, it is important to identify solutions that can be implemented on our existing locomotive fleet.

5. Regulatory Approval

The U.S. freight rail safety is regulated by the Federal Railroad Administration (FRA). Canadian rail is regulated by Transport Canada (TC). Both FRA and TC have indicated that any new alternative-fueled technology must be evaluated and approved before mainline operations can begin. The FRA is focused on the safety of the equipment itself as well as the interaction with other rail equipment, other transportation modes, and the general public. As such, any testing is likely to be scrutinized by the FRA and subject to a lengthy review process. Due to the interoperable nature of North American railways in which locomotives and railcars seamlessly transition from one railroad to another, new technologies need to be understood by industry regulators and consortiums to establish policies and best practices for key elements of their operation such as those listed above (Operational Integration) across all six Class I railroads and large Class 2 and 3 "shortline" railroads.

6. Economic Viability

The long-term economic justification for new technology must be accurately assessed and understood. This includes the upfront purchase price of any new equipment as well as the ongoing costs to operate, maintain, overhaul, fuel/charge, and otherwise service the locomotive. Beyond the railroad's economic analysis, the manufacturers of new technology and the associated supply chain participants must also evaluate the feasibility of deploying new technology. Lastly, railroads must consider the highly competitive landscape that exists among railroads, and more significantly, between rail and trucking. Small shifts in premiums can have adverse effects on rail by driving volume to trucks, increasing congestion and emissions across major freight corridors and in cities and towns across the country. And because locomotives have such long operating lives, the economic analysis must take into account a large variety of factors with a significant degree of uncertainty surrounding the future state of our transportation, technology, political, regulatory, and economic systems before making long-term investments. A significant lever that can be used to usher in technology investment is the offering of grant subsidies such as SCAQMD's INVEST CLEAN program, which provided 100% funding for battery-electric locomotives, chargers, and associated electrical infrastructure. BNSF recommends programs with significant grant contribution be explored for the demonstration and thorough evaluation of hybrid linehaul locomotive technology as well.

D. Success Criteria

At the end of each year of testing, and six (6) months after completion of the demonstration project, BNSF will submit a report to the MDAQMD, CARB and SCAQMD that describes performance against the evaluation criteria listed above. All testing will be performed in good faith to determine the viability of the technology. This may yield a result that finds the technology is successful and appropriate for continued escalation or not viable for rail operations. If at any point during testing BNSF concludes that the technology is either (i) unsafe to continue operating in BNSF's normal operations, or (ii) causes more than sporadic delays to BNSF's ability to timely meet its common carrier and other obligations to its customers is endemic to the technology, BNSF will suspend the demonstration and advise MDAQMD and CARB. In such event, BNSF will work in good faith with the supplier to identify whether the equipment can be modified in a commercially reasonable manner that would address either the safety or service issues causing the suspension. BNSF will notify MDAQMD and CARB of the outcome of such efforts. However, if BNSF finds the testing of hybrid

technology sufficiently satisfies each of the evaluation criteria outlined above, BNSF will partner with the MDAQMD on seeking grants to replace the dedicated Tier 4 fleet operating between the Ports and BIG IMF with Tier 4 hybrids at a rate of up to 5 locomotives per year (separate and distinct from BNSF's commitment in Section A above regarding testing of the five (5) hybrid Tier 4 line-haul locomotives for feasibility.

E. Letter of Concurrence

In exchange for BNSF's commitments in this Agreement, MDAQMD agrees to provide a letter of concurrence for BIG that BNSF can provide to the public agencies considering the governmental approvals necessary to implement the BIG Project, included but not limited to certifications related to SB 149. The Parties acknowledge and agree that nothing in this Agreement commits or binds MDAQMD to approve any entitlements, permits, plans or grants without going through the MDAQMD public processes.

IN WITNESS WHEREOF, the Parties have executed this MOU as of the Effective Date.

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

By: _____

Name: BRAD POIRIEZ

Title: EXECUTIVE DIRECTOR / APCO

BNSF RAILWAY COMPANY

By: _____

Name: JOHN LOVENBURG

Title: VP, Environment & Sustainability

Attachment 6

Climate Resiliency Memorandum

Kimley»Horn

TECHNICAL MEMORANDUM

To: Jennifer Ninete, ENV SP, STP, EcoDistricts AP
HDR, Inc.

From: Heidi Rous, CPP
Kimley-Horn and Associates, Inc.

Date: Originally Drafted: May 17, 2024
Revised: February 20, 2026

Subject: Barstow International Gateway: Climate Resiliency Memorandum

Introduction

This memorandum has been prepared to document potential impacts from climate change, and how the Barstow International Gateway project (BIG) design considers these impacts for climate resiliency.

Climate change is a global phenomenon that continues to threaten the livelihood of individuals. According to the Intergovernmental Panel on Climate Change Sixth Assessment Report on climate change, human-caused activities have led to increases in global temperatures by 1.1° Celsius within the last decade since the 20th century.[1] This may cause extreme weather conditions that have adverse impacts such as prolonged heatwaves, heavy precipitation, prolonged drought, intensified wildfires, and flooding.

Climate adaptation and resiliency is the process of understanding how infrastructure is impacted by climate-exacerbated hazards. According to the Environmental Protection Agency, climate resilience and adaptive capacity are generally defined as the capacity of a system to maintain function in the face of stresses imposed by climate change and the ability of a human or natural system to adjust to climate change by moderating potential damages, taking advantage of opportunities, or coping with the consequences.[2]

Project Synopsis

The Barstow International Gateway (BIG) consists of a railyard a transload warehouse center, and a private utility (i.e., a solar farm). The railyard would include a block swap yard, an intermodal facility (IMF), and ancillary rail areas (container yard, chassis storage, and maintenance of way). To serve the proposed railyard and transload warehouse center, BIG proposes approximately 600 acres of various offsite rail and non-rail improvements (e.g., lead track extensions, drainage, utilities, and roadways). A small portion of BIG's offsite rail improvements would extend beyond the City's Sphere of Influence. The total BIG project site is approximately 5,000 acres. Final acreages will be determined based on site survey. Like other railyards, BIG would operate 24 hours per day, 365 days per year.

[1] Intergovernmental Panel on Climate Change. (2023). *Sith Assessment Report.* Retrieved from: https://www.ipcc.ch/assessment-report/ar6/.

[2] United States Environmental Protection Agency. (2024). Resiliency and Adaptive Capacity. Retrieved from: https://www.epa.gov/climate-change-land-and-emergency-management/resiliency-and-adaptive-capacity#:~:text=Climate%20resilience%20and%20adaptative%20capacity,advantage%20of%20opportunities%2C%20or%20coping

Challenges

Rail, roads, and other goods movement infrastructure are vulnerable to environmental stressors that are being caused or worsened by the localized effects of a changing climate. For example, riverine bank erosion, flooding, wildfire, and heat waves can result in trip delays, pause in operations, or complete decommissioning of certain routes. Non-climate factors such as development trends, land use, and resource limitation exacerbate climate hazards that may cause increased damage to rail infrastructure. An increase in paved surfaces may lead to localized increases in the heat index. Increased heat may strain electrical grid systems locally and regionally. Human comfort may also be impacted, leading to employee safety (e.g., heat exhaustion) and lower productivity.

Local Effects of Climate Change

Climate change affects communities all around the world regardless of their contribution to this phenomenon. Jurisdictions across California are expected to experience different climate change effects to varying degrees based on geography, density of urban development, and environmental factors. **Table 1: Climate-Related Effects and Hazards Potentially Applicable to BIG** identifies the direct effects of climate change and the associated secondary effects that are potentially applicable to BIG. Each of these is discussed in detail below.

Table 1: Climate-Related Effects and Hazards Potentially Applicable to BIG

Primary Hazard	Secondary Hazard
Temperature changes - warming	Extreme heat/heat waves
Precipitation changes	Drought, subsidence, riverine flooding, severe rainstorms
Wildfire	Erosion, landslide

Source: Adapted from OPR's *California Adaptation Planning Guide*, June 2020

The projection of the likelihood, timing, and severity of these primary and secondary hazards to impact the BIG footprint is based on the trajectory of greenhouse gas concentrations in the Earth's atmosphere, commonly referred to as Representative Concentration Pathways. Representative Concentration Pathways represent a combination of the historical data and estimates of concentrations through 2100, based on a set of formulated human behaviors. The pathways describe different climate futures, all of which are considered possible depending on the volume of greenhouse gases emitted in the years to come. This assessment focuses on the "high emissions" scenario because it provides a conservative assumption for future climate conditions, and provides a "business-as-usual" projection that is reflective of current trends.

Data from numerous sources, including public agencies, academia, national labs, and private sector research, are brought together under the Cal-Adapt visualization tool.[3] Cal-Adapt was used extensively for this white paper. The climate hazard scenarios below describe a 30-year historical baseline condition versus mid-century (2035-2064) and end-of-the-century (2070-2099) high emissions scenarios (RCP 8.5).[4] Impacts are assessed based on an observed average, providing a snapshot of the most likely outcome over a 30-year period, the climatological normal.

[3] California Energy Commission. (2024). *Cal-Adapt*. Retrieved from: https://cal-adapt.org/about/.

[4] The High Emissions Scenario (RCP 8.5) represents a scenario where CO_2 emissions continue to rise throughout the 21st century.

The U.S. Climate Resilience Toolkit recommends the following steps to address resiliency:

- Understand exposure
- Assess vulnerability & risk
- Investigate options
- Prioritize & Plan
- Take Action

Annual Average Max Temperature: Baseline Conditions & High Emissions Scenario (RCP 8.5)

Baseline conditions show a modeled historical value of 79.2 degrees Fahrenheit (°F) as the average of all hottest daily temperatures in a year. As shown in **Table 2: Annual Average Max Temperature**, by mid-century, average maximum temperatures are expected to increase by approximately 5°F. By the end of the century, average maximum temperatures are expected to increase by approximately 9°F, resulting in an average daily high temperature of approximately 88.1°F.

Table 2: Annual Average Max Temperature

Timeframe	30-Year Average	30-Year Range
Mid-Century (2035-2064)	83.6°F	81.7 – 85.3°F
End-Century (2070-2099)	88.1°F	85.2 – 91.5°F

Source: California Energy Commission. (2024). Cal-Adapt. Retrieved from: https://cal-adapt.org/about/.

Extreme Heat Days: Baseline Conditions & High Emissions Scenario (RCP 8.5)

Extreme heat days are the number of days in a year that the daily maximum temperature is above a threshold temperature.[5] The extreme heat threshold is dependent on location and reflects an extraordinary condition. For Barstow, the extreme heat threshold is 107.7°F. Baseline conditions show a historical average of five days above 107.7°F annually. **Table 3: Average Number of Days over 107.7°F** shows the duration of extreme heat days is expected to increase by 28 days per year by mid-century and 57 days per year by the end-century.

Table 3: Average Number of Days over 107.7°F

Timeframe	30-Year Average	30-Year Range
Mid-Century (2035-2064)	33 days	17-57 days
End-Century (2070-2099)	62 days	45-107 days

Source: California Energy Commission. (2024). Cal-Adapt. Retrieved from: https://cal-adapt.org/about/.

Warm Nights: Baseline Conditions & High Emissions Scenario (RCP 8.5)

Warm nights are defined as the number of nights in a year when the daily minimum temperature is above a threshold temperature, which is specific to the location/region. Baseline conditions show a modeled historical average of six nights above 74°F annually. The duration of warm nights is expected to increase

[5] The threshold temperature used in this tool is location-specific. It is defined as the 98th percentile value of historical daily maximum/minimum temperatures (from 1961–1990, between April and October) observed at a location.

by 23 nights per year by mid-century and 51 nights per year by the end-century, as shown in **Table 4: Average Number of Nights over 74°F**.

Table 4: Average Number of Nights over 74°F

Timeframe	30-Year Average	30-Year Range
Mid-Century (2035-2064)	29 nights	14-43 nights
End-Century (2070-2099)	57 nights	26-79 nights

California Energy Commission. (2024). Cal-Adapt. Retrieved from: https://cal-adapt.org/about/.

Impacts of Extreme Heat and Higher Average Temperatures:

Rail Lines

Extreme heat can affect rail lines by creating sun kinks. Sun kinks are a result of heat-impacted metal that warps, curves, expands, and buckles rail lines due to intense heat. This causes safety concerns as rail operations must pause or detour to prevent derailment. Sun kinks are known to occur when temperatures reach 130 -150°F, which, even with a changing climate, will be rare in Barstow. Because track buckling is a recognized existing risk, caused by three major factors: high compressive forces, weakened track conditions, and vehicle loads,[6] the United States Department of Transportation has conducted in-depth research into the prevention of track buckling. Implementation of the United States Department of Transportation's recommendation would help to minimize or avoid sun kinks from impacting BIG tracks.

Railyard and Transload Operations

Operations at the railyard or transload warehouse center could be impacted directly by higher temperatures and extreme heat (e.g., employee heat stress and sickness, fuel destabilization, equipment malfunctions and maintenance issues, and pavement degradation) and indirectly by loss of grid power reliability (e.g., brown- or black-outs). Exposure to extreme heat can cause employee illnesses, loss of productivity, and missed workdays. Employees working outside in extreme heat may require access to additional fluids, extended rest periods, or modified work schedules. Extreme heat conditions may impact fuel (e.g., diesel and gasoline) stored and used onsite by increasing oxidation, causing fuel to rapidly destabilize and experience higher levels of microbial contamination. Equipment and vehicles may experience increased maintenance costs due to shortened battery life and decreased performance (i.e., to avoid overheating, or shortened run time if powered by rechargeable battery technology). Within the transload warehouse center, impacts would be minimized because the buildings would be air-conditioned. Within the railyard, impacts would be minimized because the majority of employees would be inside electric hostlers, equipment (forklifts, cranes), or buildings, which would have air-conditioning.

The United States Federal Highway Administration recognizes that both flexible and rigid pavement (i.e., asphalt and concrete) may experience more rutting, shoving, and curling from higher average temperatures and higher extreme heat.[7] The United States Federal Highway Administration continues to update its recommendations for technological solutions to these risks, including raising high-temperature asphalt binder grade and/or increasing the use of binder polymerization and/or improved aggregate structure in asphalt mixes, increased age hardening of asphalt binder, and incorporating concrete design

[6] U.S. DOT, *Track Buckling Research*, https://www.volpe.dot.gov/infrastructure-systems-and-technology/structures-and-dynamics/track-buckling-research

[7] FHWA, *Climate Change Adaptation for Pavements*, https://www.fhwa.dot.gov/pavement/sustainability/hif15015.pdf

elements to reduce damage from thermal effects including shorter joint spacing, thicker slabs, less rigid support, and enhanced load transfer.

Utilities

Higher average temperatures, extreme heat days, and warmer nights may increase the demand for grid-provided electricity to accommodate increased air conditioning needs to protect people in the greater region from the dangers of heat stress or stroke. The reliability of the regional power grid may be challenged during these peak demand periods, which will be more frequent and of longer duration in the mid- to end-century time frames. This required BNSF to consider costly redundancy such as fossil-fueled backup generators. BIG includes an onsite solar farm as well as diesel emergency backup generators, thus, considers potential impacts to grid reliability. As discussed above, stored diesel fuel may suffer degradation from heat, and emissions from diesel engines are recognized to be carcinogenic by the California Environmental Protection Agency.

Maximum 1-day Precipitation: Baseline Conditions & High Emissions Scenario (RCP 8.5)

Baseline conditions show a historical annual average maximum daily precipitation of 0.698 inches. As shown in **Table 5: Average Increase in Precipitation by Inches**, the amount of daily rain in the vicinity of BIG is expected to slightly increase by 0.011 inches. However, the range will increase modestly, resulting in more uncertainty in rain predictions.

Table 5: Average Increase in Precipitation by Inches

Timeframe	30-Year Average	30-Year Range
Mid-Century (2035-2064)	0.709 inches	0.505 – 1.108 inches
End-Century (2070-2099)	0.709 inches	0.486 – 1.399 inches

Source: California Energy Commission. (2024). Cal-Adapt. Retrieved from: https://cal-adapt.org/about/

Maximum Length of Dry Spell: Baseline Conditions & High Emissions Scenario (RCP 8.5)

Another measure of precipitation conditions is the maximum number of consecutive days with precipitation less than one millimeter in a calendar year. Baseline conditions show a modeled historical average of 108 days. The number of consecutive days is expected to increase by 11 days by mid-century and 20 days by the end-century, as shown in **Table 6: Average Increase in Dry Spells**.

Table 6: Average Increase in Dry Spells

Timeframe	30-Year Average	30-Year Range
Mid-Century (2035-2064)	119 days	96-142 days
End-Century (2070-2099)	128 days	95-186 days

California Energy Commission. (2024). Cal-Adapt. Retrieved from: https://cal-adapt.org/about/.

Annual Precipitation: Baseline Conditions & High Emissions Scenario (RCP 8.5)

The historical average conditions for Barstow show a total annual precipitation of 4.7 inches. Annual precipitation is expected to decrease by 0.3 inches by mid-century and 0.4 inches by end-century; see **Table 7: Annual Precipitation**. As with other indicators of precipitation, the range expands, bringing more dramatic cycles of drought and abundant rainfall.

Table 7: Annual Precipitation

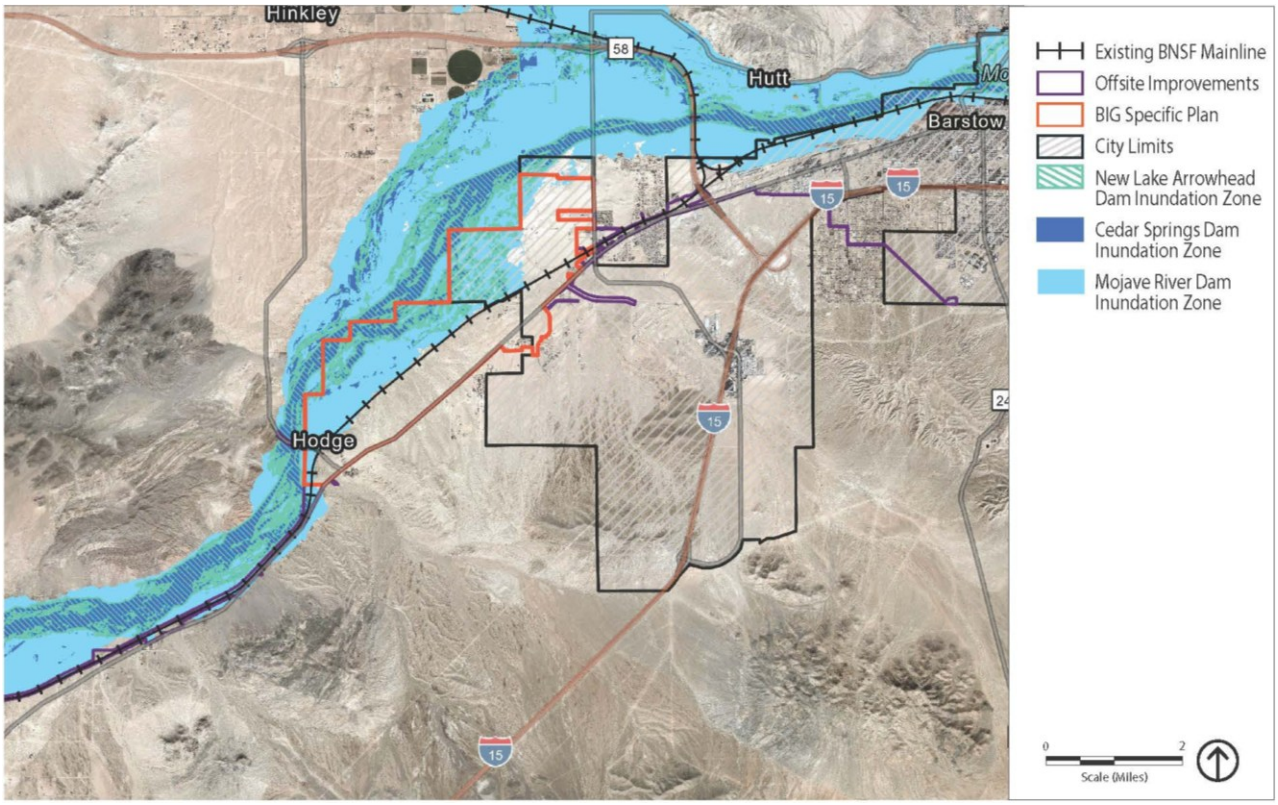
Timeframe	30-Year Average	30-Year Range
Mid-Century (2035-2064)	4.4 inches	3.5 – 5.4 inches
End-Century (2070-2099)	4.3 inches	3.0 – 9.1 inches

California Energy Commission. (2024). Cal-Adapt. Retrieved from: https://cal-adapt.org/about/.

Impacts of Precipitation Changes

Barstow receives an average of 4.7 inches of rainfall annually. As discussed above, rainfall is expected to slightly decrease over the century. However, the amount is negligible and is not expected to materially impact rail infrastructure and operations. However, it is important to note that extreme precipitation events such as atmospheric rivers, cyclones, and El Niño storms are expected to increase in severity within a shorter wet season, resulting in flash floods and riverine erosion that can potentially undermine rail line stability. BIG is downstream of Mojave River Dam, Cedar Springs Dam, and New Lake Arrowhead Dam. Extreme rain events could cause one or multiple of these dams to overtop or fail, resulting in dam inundation. The inundation zones within the BIG footprint prior to construction are displayed in **Figure 1** below.

Figure 1: Dam Inundation within BIG Footprint Prior to Construction



Rail Lines

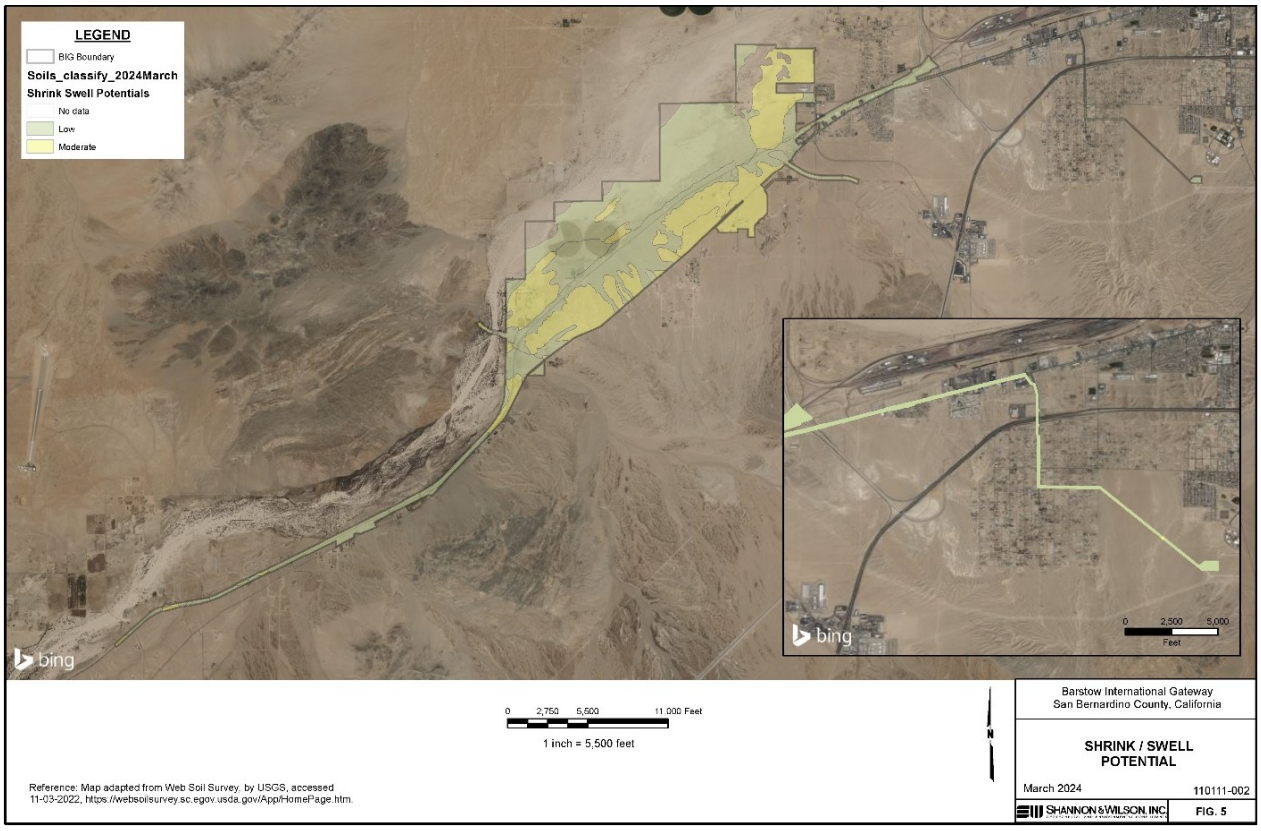
The railyard and transload warehouse center are south of the Mojave River. The river historically experiences flooding following extreme precipitation events. This increased potential should be considered in the design of any bridges or culverts, as well as improvements abutting the Mojave River. Engineering solutions such as raising the grade of buildings and roads to be above the Mojave River would help to limit potential flooding risks. BIG includes widening the Hinkley Road at Mojave River bridge. Widening the bridge at this river crossing helps to reduce velocity of waters as they flow south toward Barstow, thus, BIG design includes measures to reduce potential impacts from flooding. BIG also includes widening Lenwood Channel by between 60 and 100 feet for more than two miles, substantially reducing existing flooding hazards. Finally, BIG includes replacing the existing Main Street low-water crossing over Lenwood Channel with a new four-lane bridge which would be designed for 100-year flood events

Railyard and Transload Operations

BIG construction would increase the amount of impervious surface within BIG's footprint. Although total annual rainfall is predicted to decrease, the severity and frequency of extremely intense rain events are expected to increase during the expected usable lifetime of the facility. Thus, design values for stormwater should take these factors into consideration.

Another effect of drought can be desiccated expansive soils and ground subsidence. These can damage building foundations, retaining walls, bridges, and pavement. Normal seasonal fluctuations in ground moisture levels are typically accommodated without undermining building foundations and roadbeds. However, periods of prolonged drought can cause soil to become desiccated and shrink, to the point of causing cracks and uneven settling of buildings, pavement, and other structures. This damage can be more pronounced in rigid concrete pavement, but asphalt surfaces may also be susceptible. If the soils beneath BIG are found to be expansive soils, the design of building foundations, retaining walls, bridges, and paved surfaces should consider the potentially damaging effects of drought. As shown in **Figure 2**, soils within the BIG footprint are low- to moderate- shrink/swell potential, thus, are not likely to result in damage to buildings or other improvements over time associated with drought.

Figure 2: Expansive Soils within BIG Footprint



Utilities

As discussed above, utility infrastructure can be indirectly impacted by drought, through the undermining of foundations upon which they are located, or flooding, if inundated during extreme rainfall events. Because these concerns are fairly localized, careful placement of utility infrastructure can avoid or greatly minimize these risks. BIG proposes the vast majority of utility improvements underground, unless it is infeasible from an operational or engineering reason. Underground utilities are more protected from erosion, thus, BIG design includes consideration for utility infrastructure associated with increased drought.

Annual Average Area Burned: Baseline Conditions & High Emissions Scenario (RCP 8.5)

One way to measure wildfire risk is to examine the average of the area projected to be at risk of burning in a year. Baseline conditions show a historical average of 22.7 acres at risk of burning from a wildfire in the vicinity of BIG. This is predicted to decrease by 10.5 acres by mid-century and 15.4 acres by end-century, as summarized in **Table 8: Annual Average Area of Wildfire Risk**.

Table 8: Annual Average Area of Wildfire Risk

Timeframe	30-Year Average	30-Year Range
Mid-Century (2035-2064)	12.2 acres	6.8 – 17.2 acres
End-Century (2070-2099)	7.3 acres	4.1 – 14.7 acres

California Energy Commission. (2024). Cal-Adapt. Retrieved from: https://cal-adapt.org/about/.

Keetch-Byram Drought Index (KBDI) > 600: Baseline Conditions & High Emissions Scenario (RCP 8.5)

Drought contributes to wildfire risk. The Keetch-Byram Drought Index (KBDI) was developed to estimate conditions of low soil moisture and dry vegetative detritus. Index values greater than 600 represent "severe drought, extreme wildfire risk, and increased wildfire occurrence." Baseline conditions show a modeled historical average of 282 days with a KBDI greater than 600 in BIG's vicinity. As shown in **Table 9: Keetch-Byram Drought Index (KBDI) > 600**, with climate change, the number of days with increased severe drought and wildfire risk is expected to increase by 27 days by mid-century and 36 days by end-century.

Table 9: Keetch-Byram Drought Index (KBDI) > 600

Timeframe	30-Year Average	30-Year Range
Mid-Century (2035-2064)	309 days	263 – 344 days
End-Century (2070-2099)	318 days	222 – 354 days

California Energy Commission. (2024). Cal-Adapt. Retrieved from: https://cal-adapt.org/about/.

Impacts of Increased Wildfire Risk:

Wildfire risk increases under "perfect storm" conditions, in which several factors provide an environment for wildfire to start and spread. Statewide, future wildfire seasons are predicted to start earlier and feature more extreme fire events with longer durations. Within the BIG footprint, little to no vegetation exists. Wildfires have historically occurred within a localized area of Barstow in the Cajon Pass. The BIG footprint is in a flat desert area near the Mojave River valley and would not be exposed to wildfire risk. BNSF maintains fire suppression equipment in Barstow which would further minimize the effects of a wildfire.[8]

Opportunities

Resiliency measures that are implemented with BIG include:

- Adjusting the timing of track installation and maintenance projects to address the potential for sun kinks. By servicing tracks in temperate months, tracks are more resistant to warping, expansion, and contraction than when installed in the hottest and coldest months.
- Incorporating state-of-the-art solutions to reduce the thermal effects on pavement. BIG is using predominantly "white" concrete pavement rather than "black" asphalt pavement which reduces heat island effects and avoids increased rutting potential during periods of high temperatures.
- Designing and located infrastructure to avoid future flood potential. Upon completion of grading, BIG would be entirely located outside of the 100-year floodplain.
- Installing a solar facility to reduce grid dependency.
- Constructing stormwater infiltration basins throughout the BIG footprint and drainage outlets to the Mojave River that would be designed for 100-year flood events.

[8] BNSF. 2024. *Equipment*. https://www.bnsfhazmat.com/community-responders/community-responders-home/equipment/.

- Widening Lenwood Channel by between 60 and 100 feet for more than two miles, substantially reducing existing flooding hazards.
- Replacing the existing Main Street low-water crossing over Lenwood Channel with a new four-lane bridge which would be designed for 100-year flood events
- Maintaining a vigorous brush-control program to prevent brushfires.