

California High-Speed Rail Authority

# Palmdale to Burbank Project Section

PEPD RECORD SET REV01

Burbank Station Area Plans

September 2019

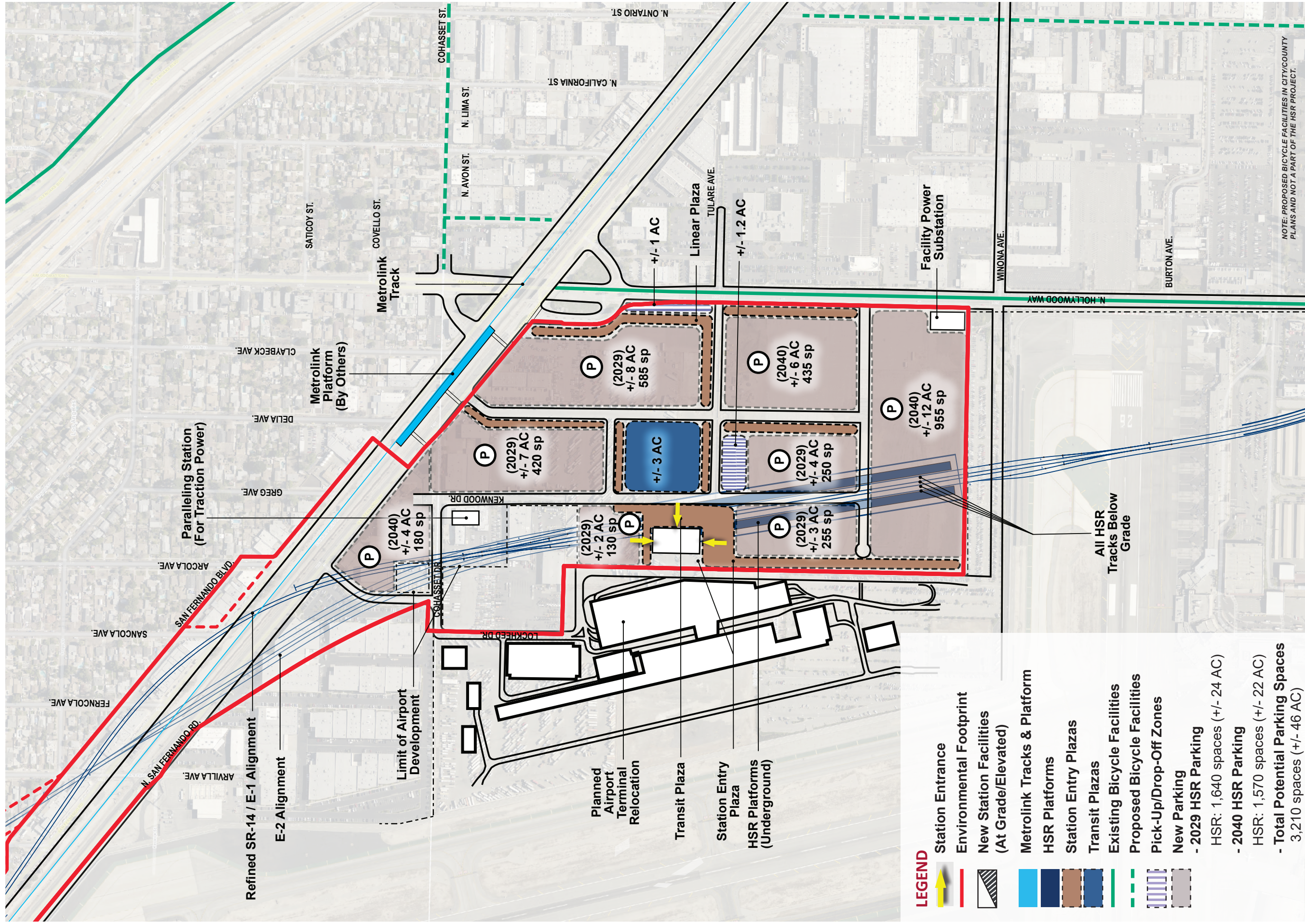


The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.

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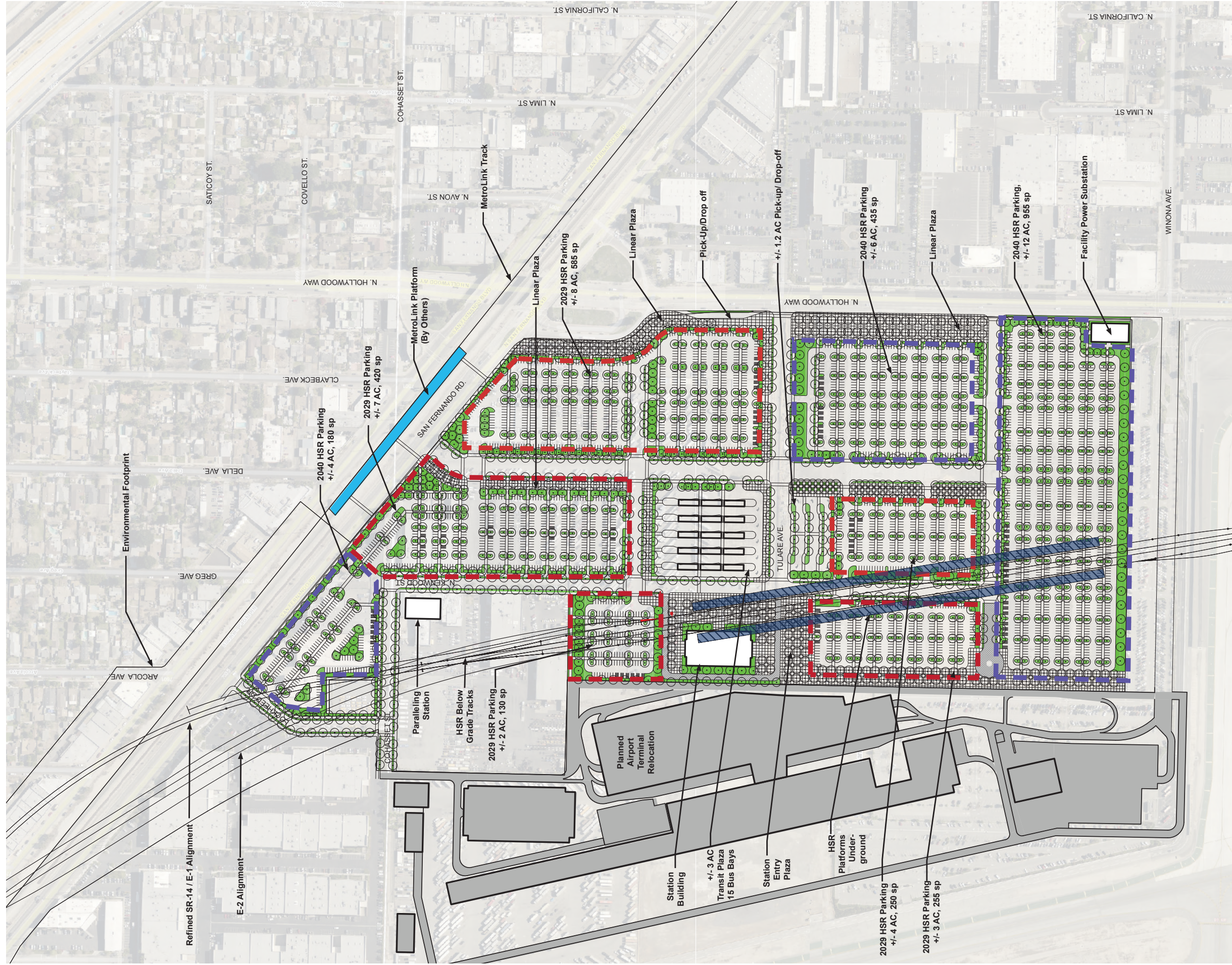
**CALIFORNIA HIGH-SPEED RAIL AUTHORITY  
PALMDALE TO BURBANK PROJECT SECTION  
BURBANK STATION**



*Burbank Station General Site Plan*

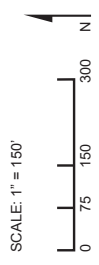


# CALIFORNIA HIGH-SPEED RAIL AUTHORITY PALMDALE TO BURBANK PROJECT SECTION BURBANK STATION

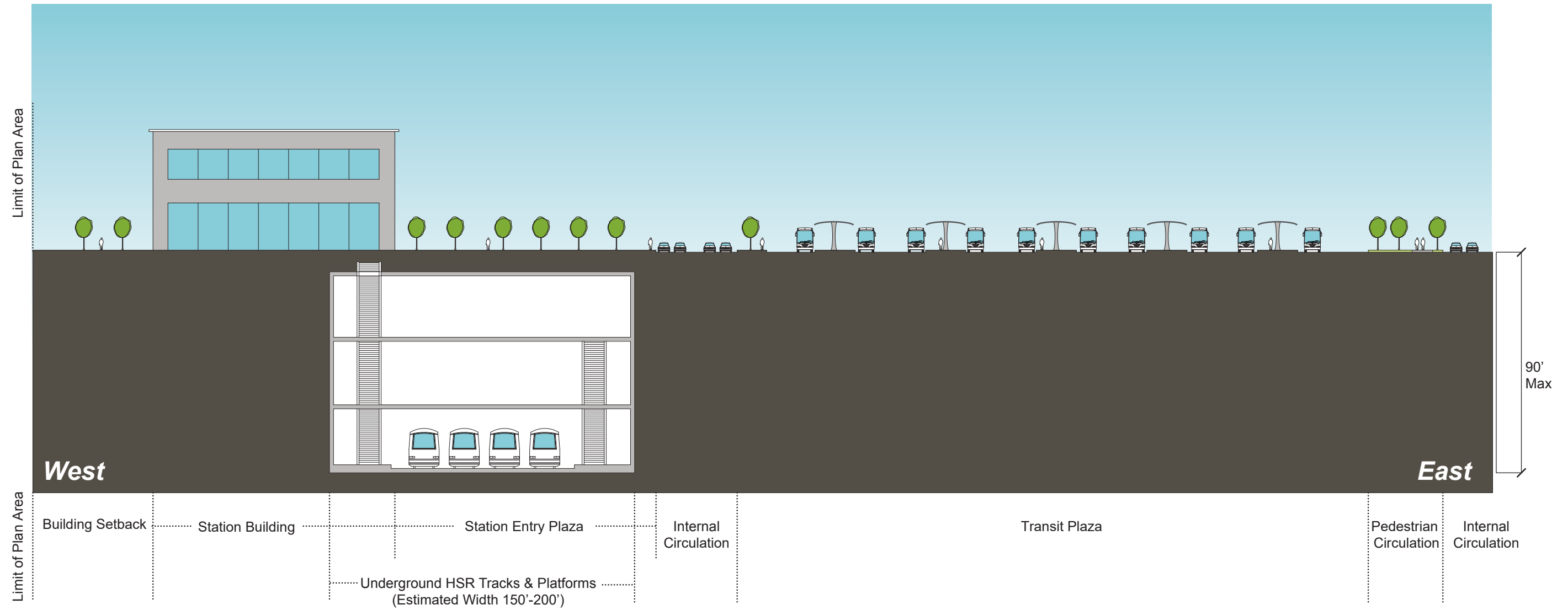


## LEGEND

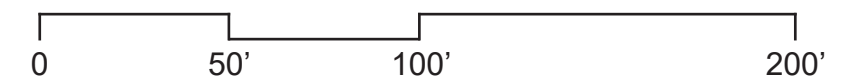
- |  |                                       |  |  |
|--|---------------------------------------|--|--|
|  | <b>2029 HSR Parking</b>               |  | <b>New Station Facilities</b>              |
|  | 1,640 spaces (+/- 24 AC)              |  | <b>MetroLink Platform</b>                  |
|  | <b>2040 HSR Parking</b>               |  | <b>HSR Platform (Underground)</b>          |
|  | 1,570 spaces (+/- 22 AC)              |  | <b>Planned Airport Terminal Relocation</b> |
|  | <b>Total Potential Parking Spaces</b> |  | <b>Landscaping</b>                         |
|  | 3,210 spaces (+/- 46 AC)              |  |  |



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*Burbank Station Cross Section | West-East Site Section Looking North*



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*Burbank Station Massing Model | Perspective A*



**NOT TO SCALE**

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*Burbank Station Massing Model | Perspective B*



**NOT TO SCALE**

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Burbank Station Programming & Area Requirements Table				
Function Name	Description	Formula	Required Area (Net SF) Minimum	Comments
Burbank Daily Peak Ridership Boardings 2040	Long distance + Short Distance Boardings	12,800	12,800	CHSR 2016 Business Plan
P360B	Highest Daily Boardings X Conversation Factor for Boardings=6hour Boardings	Highest Daily Boardings x 0.67=P360B 12,800 x 0.67	8,576	California HSTP Design Criteria, Chapter 14-Stations, Oct 2015, Working Draft, Rev.2 Table 14-1 Passenger Ridership Assumptions Table 14-3 Concourse Circulation and Waiting Areas
P360A	Peak 6 Hour Boardings X Conversation Factor for Alightings =6hour Alightings	P360B x 0.75=P360A 8576 x 0.75	6,432	
P60B	Peak 6 hour Boardings x Peak hour conversion Factor for Boardings=Peak Hour Boardings	P360B x 0.17=P60B 8576 X 0.17	1,458	
P60A	Peak Hour Boardings x Peak Hour Conversion Factor for Alightings=Peak Hour Alightings	P60B x 0.75=P60A 552 x 0.75	1,094	
P30B	Peak Hour Boardings /2 x Surge Factor = Peak 30-minute Boardings	(P60B /2) x 1.2=P30B (1458/2) x 1.2	875	
P30A	Peak 30-minute Boardings x Conversion Factor = Peak 30 minute Alightings	P30B x 0.075=P30A 875 x 0.75	656	
P15B	Peak Hour Boardings / 4 x Surge Factor = Peak 15- minute Boardings	(P60B / 4) x 1.3= P15B (1458 /4) x 1.3	474	
P15A	Peak 15-minute Boardings x Conversion Factor=Peak 15 minute Alightings	P15B x 0.75=P15A 474 x 0.75	356	
P5B	Peak Hour Boardings /12 x Surge Factor = Peak 5-minute Boardings	(P60B / 12) x 1.4= P5B (1458/12) x 1.4	170	
P5A	Peak 5-minute Boardings x Conversion Factor = Peak 5-minute Alightings	P5B x 0.75=P5A 170 x 0.75	128	
P1B	Peak Hour Boardings /60 x Surge Factor=Peak 1 Minute Boardings	(P60B /60) x 1.5=P1B (1458 /60) x 1.5	36	
P1A	Peak 1-minute Boardings x Conversion Factor for Alightings=Peak 1 Minute Alightings	P1Bx0.75 36x0.75	27	
Cf	Unobstructed Net Concourse Free Public Area Circulation Width	(P15B+P15A)/(15x10 people/ft/min) or 16 ft min. (474+356)/(15x10 people/ft/min)	476	
Wf	Net Waiting Area in Concourse Free Public Area	((P15Bx1.1) + (P15Ax0.1))x 14 square feet ((474x1.1) +(356x0.1)) x 14	7,798	
Public Restrooms	Women + Men + Unisex accessible restroom for each group	(P15B+P15A) / 2 (474+356) /2	415	
Passenger Amenity Space Allocation	Station Design Target Year Daily Boardings	More than 10,000	9,000	Table 14-7, Chapter 14 March 2016, corrected as directed Comment 45_3-09-2017
Ticket Windows	Station Quantity	P60B/600 638:600	2	Table 14-5: HST Ticket Sales Facilities
Ticket Vending Machines		P60B/280 638/280	3	
Value Added Machines	2 Per Platform Minimum			
Fare Gates Intermediate		P1B /50 ppm 36/50 One additional gate to be provided if under 10	2	Table 14-6 Fare Gates
Emergency Gates			2	14.3.3.6
Side Platform Station	Peak- hour boarding and fully occupied train alighting	P60B + 900 p	2358	14.3.6.2
Sr	Seating at Concourse Free Waiting Area	((P15B x 1.1) + (P15A x 0.1)) x .25	139	Table 14-22: Station Seating

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Burbank Station Facility Sizing Table					
Burbank Projected Daily Ridership (2040) 25,600 (12,800 Boardings + 12,800 Alightings), based on CHSR Authority 2016 Business Plan					
STATION TYPE: Intermediate, Full-Service, Large: based on Chapter 14 Stations Design Criteria, Table 14-3					
	Function Name	Required Area (Net SF) Minimum	Formula	Chapter 14:Stations	Comments
Concourse Public Free Areas	Station Concourse (Free Area - Main Hall)	29,050	P15 x 35 SF/person	14.3.5.1	P15 = P15 B + P15 A = 474 + 356 = 830 ,use 35 SF/person
	Entrances	107 Ln.Ft.	(P60B x 1.1)/15 Ln.Ft.	14.3.5.2	P60B=552, 15 ft width at least one entrance
	Mezzanine	0			N/A tracks and platform underground
	Passenger Waiting Area	7,798	((P15B x 1.1)+(P15Ax0.1)) x 14 SF	14.3.5.3.B.C Table 14-3	California HSTP Design Criteria, Chapter 14-Stations, March 2016, Rev 2 and October 2015, Working draft, Rev 2. Table 14-1 Passenger Ridership Assumptions, Table 14-3
	Ticket Vending Machines (TVM)	72	P60B/280	Table 14-5, 14.3.5.6 B	P60B = 1458, 6 TVM, Minimum 2 required
	Concessionaire	9,000		Table 14-7	More than 10,000 Boardings
	Business Lounge	600		14.3.5.7.C	
	Public Restrooms	1,100	CBC 2016, CPC 2016 (P15B + P15A)/2	14.3.5.4	P15 = 830 A-3 Assembly Occupancy, 415 Male, 415 Female: 8 Water Closets, 5 Lavatories Male: 3 Water closets, 4 Urinal, 3 Lavatories Drinking Fountains: 3
	Unisex Restrooms	100		14.3.5.4	1 Unisex (or family) accessible restroom for each group of restrooms
	Janitor Closets	60		14.3.7.1.D	
Staffed Areas	Ticket Office Counter	1		14.3.5.7A	Minimum 1 required
	Ticket Office Window Quality	3	P60B/600	14.3.5.6.B 14.3.5.7A	P60B = 552, Minimum 1 + 1 ADA accessible
Security	Police Office	500		14.3.6.2.A	Includes Lockers
	Janitor Closets	60		14.3.7.1.D	
	Security Guard Office	144		14.3.6.2.B	
Access Facilities	HSR Platform			14.3.2.1	
	Metrolink Platform			14.3.2.1	
	Station Entry Plazas (Total Area)			14.4.4.8	
	Transit Plazas (Total Area)			14.4.2.4	
	Transit Plazas (Sizing Assumptions)			14.4.2.4	
	Pick-up Drop Off (Total Area)			14.4.2.5	
	Pick-up Drop Off (Sizing Assumptions)			14.4.2.5	
	2029 Parking Totals				Sidewalks and landscaping are also included in parking area.
	2040 Parking Totals				Sidewalks and landscaping are also included in parking area.

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	Function Name	Required Area (SF) Minimum	Formula	Chapter 14:Stations	Comments
Non-Public Station Staff Only	Ticket Sales Office	225		14.3.5.7.A	75 SF per window , 3 ticket sales windows
	Ticket Admin., Handling & Storage	260		14.3.5.6.B 14.3.5.7 14.3.6.2.C-D	Ticket Administration Office
	Lost & Found & First Aid Room	200		14.3.6.1E-F	
	Station Control Room (SCR)	1,100		14.3.6.2.E	
	SCR Dedicated Computer Room	500		14.3.6.2.F	
	Temporary Incident Command Post (CP)	300		14.3.6.2.G	
	SOR Workroom	1,100		14.3.6.2.H	
	SOR Dedicated Computer Room	500		14.3.6.2.F-H	
	Staff Lockers, Showers, Restrooms	780	CBC 2016, CPC 2016	14.3.6.1.I	2016_ Business Plan Operations and Maintenance Cost Model, Table 20- Station Service Level C, Table 21, Table 24, Table 28. Assumed administration staff, police, security and cleaning personnel 27. B Business Occupancy, 14 Male, 14 Female. Female: 2 Watercloset, 1 Lavatory Male: 1 Watercloset, 1 Urinal, 1 Lavatory 2 Staff Shower Rooms adjacent to Locker rooms and Restrooms
	Janitor Closets	60		14.3.7.1.C	
	Staff Breakroom & Meeting Rooms	675	27/shift x 25SF	14.3.6.1G-H	200 SF min or as req to provide 25 SF /staff
	Station Manager Office	270		14.3.6.1A	270 SF
	Facility Manager's Office	270		14.3.6.1C	
	Admin Office Space	270		14.3.6.1.B	
	Facilities Maintenance Office	330		14.3.6.1.C	
Station General Storage Rooms	200		14.3.7.1.E	Add 60 SF for misc. if required.	
Platform Area Op. Mgt. Booth	200	100 SF x (2)	14.3.6.2.I	OMB shall be provided on each platform, 2 platforms	
Building Services and Plant Rooms	Mech., Elec. & Plumbing Rooms	1,000		14.3.7.2	
	Battery Room	400	200 SF x ( 2 )	14.3.7.4.B	Two rooms req, including one room at each end of station for LV batteries.
	UPS Room	1,800	900 SF x ( 2 )	14.3.7.2.C	Two rooms req., one at each end of station for low voltage (LV) distribution, transforming, EP
	Fire Detection & Protection Rooms	100		14.3.7.2.C	
	Train Control /Communications Room	1,915		14.3.7.2.E	Table 14-8 For the train control and communications equipment
	Entrance Facility Room	240		14.3.7.2.E	Table 14-8 For entry of service cabling into the building. May be co-located with the TCC room.
	3rd Party Telecom Room	120		14.3.7.2.E	Table 14-8
	Communications Closets	390	130 SFx (3)	14.3.7.2.E	Table 14-8 Number TBD. Locate close to center of each 10,000 SF of Station Floor Area
Renewable Energy/Stormwater	0				

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	Function Name	Required Area (SF) Minimum	Formula	Chapter 14:Stations	Comments
Maint. Support Areas	Main Station Building Recycling/Refuse	150		14.3.7.1.A	
	Secondary Station Building Recycling	60		14.3.7.1.C	
	Landscape Maintenance Room	100		14.3.7.1.F	
	Loading Zone and Service Entrance	800		14.3.7.1.G	
	Loading Dock	480	24 Ft wide x 20 Ft deep	14.3.7.1.H	
<b>SUBTOTAL</b>		<b>70,977 SF</b>			
<b>Efficiency Factor</b>		<b>2</b>			
<b>TOTAL AREA- MAIN STATION BUILDING</b>		<b>141,954 SF</b>			
<b>TOTAL AREA-Substation:</b>		<b>10,000 SF</b>			
<b>TOTAL:</b>		<b>151,954 SF</b>			